Phase I Environmental Site Assessment

251 to 351 West Imperial Highway,
La Habra, California 90631

January 7, 2020

Prepared for:

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Prepared by:

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Project No.: 185804671

Sign-off Sheet and Signatures of Environmental Professionals

This Phase I Environmental Site Assessment was prepared by Stantec Consulting Services Inc. ("Stantec") for Olson Urban Housing, LLC (the "Client"). The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes.

All information, conclusions, and recommendations provided by Stantec in this document regarding the Phase I ESA have been prepared under the supervision of and reviewed by the professionals whose signatures appear below.

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in § 312.10 of 40 CFR 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Property. I have developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Author _____

(signature)

Alicia Jansen
Associate Scientist

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(signature)

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Reviewer _____

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Managing Principal Geologist

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Abbreviations

AAI	All Appropriate Inquiry
ACM	Asbestos-containing material
AST	Aboveground Storage Tank
ASTM	American Society for Testing and Materials
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulation
CREC	Controlled Recognized Environmental Conditions
EP	Environmental Professional
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
ft msl	Feet above mean sea level
HREC	Historical Recognized Environmental Conditions
LBP	Lead-based paint
LUST	Leaking Underground Storage Tank
NESHAP	National Emissions Standard for Hazardous Air Pollutants
PAHs	Polynuclear Aromatic Hydrocarbons
PCBs	Polychlorinated Biphenyls
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Conditions
SWMU	Solid Waste Management Unit
TSCA	Toxic Substance Control Act
USGS	United States Geological Survey
UST	Underground Storage Tank
VEC	Vapor Encroachment Condition
VOCs	Volatile Organic Compounds

1.0 SUMMARY

Stantec Consulting Services Inc. (Stantec) has completed a Phase I Environmental Site Assessment (ESA) report for the Property located at 251 to 351 West Imperial Highway, in the City of La Habra, County of Orange, California (the "Property"), on behalf of Olson Urban Housing, LLC (the "Client"). Client intends to redevelop the Property for residential use.

The Phase I ESA was conducted in conformance with the requirements of American Society for Testing and Materials (ASTM) Designation E 1527-13, and All Appropriate Inquiry (AAI) as defined by the US-EPA in Title 40 of the Code of Federal Regulations, Part 312, except as may have been modified by the scope of work, and the Master Services Agreement between Stantec and Client (the "MSA"). Any exceptions to, or deletions from, the ASTM or AAI practice are described in Section 2.3.

The Property consists of approximately 4.91-acres of developed land on two parcels (Assessor Parcel Numbers 019-042-21 and 019-042-24). The Property is currently occupied by Pomona Box Company (301 West Imperial Highway), a box manufacturing facility; Mac Auto (351 West Imperial Highway), an automobile sales and repair shop; Eric Will Gymnastics Center (341 West Imperial Highway), a children's gymnasium; a two-story multi-tenant office building (271 West Imperial Highway); Bentley Auto Group (251 West Imperial Highway), an automobile sales facility; and an automotive storage warehouse (261 West Imperial Highway). Surrounding properties consists of a mix of commercial and residential properties. A Property location map is illustrated on Figure 1.
A Property map illustrating the main features of the Property is provided as Figure 2. Photographs taken during the site reconnaissance visit are provided in Appendix A.

Ninyo & Moore prepared a Phase I ESA for the subject Property and issued the report on March 21, 2019. That Phase I ESA identified the following Recognized Environmental Conditions (RECs) (including Historical Recognized Environmental Conditions and Controlled Recognized Environmental Conditions) and vapor encroachment condition (VEC) associated with the Property:

- 251 West Imperial Highway – No removal documentation was found for the underground storage tanks (USTs) and it is unknown if the USTs were still present. Therefore, the historical USTs were considered a historical recognized environmental condition (HREC).
- 261 West Imperial Highway – Outstanding notices of violation for MSU Touchstone Concrete Rock Manufacturing and potential evidence of mismanaged waste (paint stained sink) were considered a REC.
- 301 West Imperial Highway – An unauthorized release from the former UST system is considered a controlled recognized environmental condition (CREC) as the petroleum impacted soil and groundwater was cleaned up to the satisfaction of the Orange County Health Care Agency (OCHCA) based on current site use with residual contamination remaining.
- 351 West Imperial Highway – Surface staining was observed around and beneath the basin outside the northwest side of the building and was considered a REC.

- Site-wide – Based on the results of the vapor encroachment screening matrix and the presence of petroleum hydrocarbon impact to the soil and groundwater at the central southern portion of the site, it is likely that a VEC exists beneath the site.

To address the identified RECs, HREC, CREC, and VEC, Ninyo & Moore (N & M) conducted a limited Phase II ESA and issued the report on September 2019. The limited Phase II ESA also included a site-wide screening of surface soil for the presence of organochlorine pesticides (OCPs) and arsenic due to former site use for agricultural purposes. The scope of work for the limited Phase II ESA included advancing 19 soil borings to depths ranging from 5 to 20 feet bgs for the collection of soil and grab groundwater samples, installation of temporary soil vapor probes, and collection of soil vapor samples. The locations of these borings and soil vapor samples are depicted on Figure 2.

The results of the soil samples analyzed for Title 22 Metals reported no detections exceeding their respective regulatory screening levels, except arsenic. Arsenic detections ranged from 1.3 to 7.45 milligrams per kilogram (mg/kg) and exceeded the EPA Regional Screening Levels (RSLs), DTSC Human and Ecological Risk Office (HERO) Screening Levels, and San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (ESLs). However, the detections of arsenic did not exceed the DTSC's background concentration of 12 mg/kg – and naturally-occurring concentrations of arsenic throughout the State of California typically exceed the regulatory thresholds listed above. Therefore, arsenic was not considered an environmental concern to the Site. Detectable concentrations of organochlorine pesticides (*i.e.* , DDE and DDT) from shallow soil samples were below the EPA RSL for residential soil. Therefore, the concentrations do not represent a human health risk by regulatory agencies based on established human health risk-protective standards. Therefore, the historic agricultural use of the Site was not identified as a REC to the Site and no further work was recommended by N & M. Stantec concurs with that conclusion.

VOCs including ethylbenzene, isopropyl benzene, n-nutylbenzene, n-propylbenzene, naphthalene, and sec-butylbenzene were detected from boring B14 at 15 feet bgs; however, the concentrations were below the EPA RSLs for residential soil and do not represent an environmental concern.

TPH-gasoline was detected at a concentration of 250 mg/kg in boring B17 at 15 feet bgs which exceeds the EPA RSL for residential soil of 82 mg/kg and the ESL of 100 mg/kg. Minor detections of TPH-diesel and TPH-oil were also detected in borings B10, B12, B15, B16 and B19 at concentrations below the corresponding EPA RSL and ESL.

The results of laboratory analysis of grab groundwater samples showed maximum concentrations of benzene at 22 micrograms per liter (ug/l) which exceed the EPA MCL of 5 ug/l and ESL of 0.42 ug/l; ethylbenzene at 380 ug/l which exceeds the ESL of 3.5 ug/l but is below the EPA MCL of 700 ug/l; and naphthalene at 110 ug/l which exceeds the ESL of 0.71 ug/l. Additionally, TPH-gasoline was reported at a maximum concentration of 3,200 milligram per liter (mg/l), which exceeds the current regulatory screening level for gasoline in groundwater.

Multiple VOCs were detected in the soil vapor samples collected across the Site. Concentrations of VOCs detected in soil vapor samples were compared to modified EPA RSLs of ambient air calculated with an attenuation factor of 0.03 for residential/commercial land use and modified DTSC screening levels

ambient air using an attenuation factor of 0.001 for residential land use. Benzene was detected in seven of ten soil vapor samples at concentrations ranging from 12 to 65 micrograms per cubic meter (ug/m3), which exceed the calculated residential RSL of 12 ug/m3. Additionally, ethylbenzene was detected in the same seven soil vapor samples at concentrations ranging from 161 to 259 ug/m3 which exceed the residential RSL of 37 ug/m3. N-butylbenzene was detected in five soil vapor samples but not at concentrations above the screening level.

Based on these results, N & M concluded that the limits of impacted soil, soil vapor, and/or groundwater have not been delineated. However, the impacted area appears generally located within the vicinity of the former USTs. Petroleum hydrocarbons were generally not detected in the upper 10 feet bgs; however, below 10 feet bgs at 301 West Imperial Highway, certain petroleum hydrocarbon concentrations exceeded screening levels for residential land use. N & M recommended that, prior to disturbing soil at the Site, a Soil Management Plan should be prepared.

N & M concluded that soil vapor samples showed contaminant concentrations at levels that were not high enough to justify vapor extraction or remediation; however, development plans should include appropriate human health risk mitigation measures (*i.e.*, vapor barriers). N & M stated that additional vapor probes may be needed to further define limits of recommended vapor mitigation measures.

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E1527 of 251 to 351 West Imperial Highway, in the City of La Habra, County of Orange, California, or the "Property". Any exceptions to, or deletions from, this practice are described in the Data Gaps section of this report. This assessment has revealed evidence of the following Recognized Environmental Conditions (RECs) in connection with the Property (which differs and differences in the conclusion developed by N & M:

- **Soil Vapor Impacts.** Prior assessment of soil vapor at the Property confirmed the presence of VOCs in soil vapor at levels exceeding applicable human health risk screening levels. The VOC impacts to soil vapor appear to be sourced from former gasoline USTs that were located on-site. Further soil vapor assessment is recommended to delineate the impacts to soil vapor and for the purpose of providing recommendations for any appropriate vapor mitigation measures.

- **Former USTs.** Data currently provided in the N & M report does not indicate impact to soil exists in the upper 10 feet at the former locations of the USTs that were present at 251 West Imperial Highway. However, at the location of the UST formerly located at 301 West Imperial Highway, no impact was present at this depth, either, but impacts were detected at greater depths. Therefore, Stantec recommends completing further vertical assessment at this location in order to verify that no impacts to soil or groundwater are present, in order to evaluate whether regulatory closure is warranted without the need for any further action or investigation. In addition, Stantec recommends obtaining regulatory closure from OCHCA in regard to the USTs formerly located at the 251 West Imperial Highway.

- **Soil Vapor Impacts from Sink.** Elevated soil vapor impacts were detected at the acrylic paint sink. Further assessment of soil and soil vapor is recommended in this area to verify no further impacts exist.

In addition, from a regulatory compliance perspective, Stantec recommends completing the following:

- The former UST located at the 301 West Imperial Highway address was closed by the OCHCA under commercial land use. Stantec recommends obtaining confirmation from OCHCA that regulatory closure for the USTs would still apply with respect to residential land use – or to determine whether any further action or investigation is necessary.
- Stantec recommends that N & M's additional assessment data be provided to the OCHCA to confirm that the concentrations of TPH and VOCs in groundwater at the former UST location still meet regulatory closure criteria (or to determine why any further action or investigation is necessary in that regard).

Stantec has identified the following non-ASTM issues:

- **Asbestos-Containing Materials (ACMs) and Lead-Based Paint ("LBP").** Given the age of the existing building on the Property, the presence of ACMs and LBP is considered probable. Stantec recommends conducting a comprehensive, pre-demolition ACM survey in accordance with the sampling protocol of the Asbestos Hazard Emergency Response Act (AHERA) prior to any activities with the potential to disturb building materials to determine whether ACM are present. Further, in the event ACM is detected, Stantec recommends proper removal and disposal of the materials identified prior to any activities with the potential to disturb them. In addition, any LBP at the Property should be removed in accordance with all applicable laws, including OSHA guidelines.

  Additionally, stress-absorbing fabrics, which are commonly known as "Petromat," are sometimes placed between asphalt layers. These fabrics can be coated with mastic or a tack adhesive that may contain asbestos. Stantec recommends coring multiple locations in the asphalt to determine if asbestos containing Petromat is located on the Property and, if so, that the Petromat be removed in accordance with all applicable laws, including OSHA guidelines.

The preceding summary is intended for informational purposes only. Reading of the full body of this report is recommended.

2.0 INTRODUCTION

The objective of this Phase I ESA was to perform All Appropriate Inquiry (AAI) into the past ownership and uses of the Property consistent with good commercial or customary practice as outlined by the ASTM in "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process", Designation E1527-13. "All Appropriate Inquiry" (AAI) is the process for evaluating a property's environmental conditions for the purpose of qualifying for landowner liability protections under CERCLA, following final rule of Part 312 of Title 40, Code of Federal Regulations (40 CFR Part 312). The purpose of this Phase I ESA was to identify adverse environmental conditions, including Recognized Environmental Conditions ("RECs"), associated with the Property.

The ASTM E1527-13 standard indicates that the purpose of the Phase I ESA is to identify RECs, including historical recognized environmental conditions ("HRECs") and controlled recognized environmental conditions ("CRECs"), that may exist at a property. The term "recognized environmental conditions" means the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property:

1. Due to any release to the environment;
2. Under conditions indicative of a release to the environment; or
3. Under conditions that pose a material threat of a future release to the environment.

ASTM defines a "HREC" as a REC that has occurred in connection with a property but has been addressed to the satisfaction of the applicable regulatory authority and meets current unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (*e.g.*, property use restrictions, activity and use limitations, institutional controls, or engineering controls). Before calling the past release a HREC, the environmental professional (EP) must determine whether the past release is a REC when the current Phase I ESA is conducted (e.g., if there has been a change in the regulations). If the EP considers the past release to be a REC at the time the Phase I ESA is conducted, the condition shall be included in the conclusions section of the report as a REC.

ASTM defines a "CREC" as a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (e.g., as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), but with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (e.g., property use restrictions, activity and use limitations, institutional controls, or engineering controls).

As defined by ASTM, RECs can include hazardous substances or petroleum products present under conditions in compliance with laws if that presence represents a material threat of future release. The presence of hazardous substances or petroleum products is, however, not a REC if that presence is a *de minimis* condition. De minimis conditions are minor occurrences of contamination that generally do not present a material risk to human health and would not likely be subject to enforcement action if brought to the attention of governmental agencies.

The scope of work conducted during this Phase I ESA consisted of a visual reconnaissance of the Property, interviews with key individuals, and review of reasonably ascertainable documents. The scope of work did not include an assessment for environmental regulatory compliance of any facility ever operated at the Property (past or present), or sampling and analyzing of environmental media. Stantec was not contracted to perform an independent evaluation of the purchase or lease price of the Property and its relationship to current fair market value. The conclusions presented in this Phase I ESA report are professional opinions based on data described herein. The opinions are subject to the limitations described in Section 2.3.

ASTM E1527-13 notes that the availability of record information varies from source to source. The User or Environmental Professional is not obligated to identify, obtain, or review every possible source that might exist with respect to a property. Instead, ASTM identifies record information that is reasonably ascertainable from standard sources. “Reasonably ascertainable” means:

1. Information that is publicly available;
2. Information that is obtainable from its source within reasonable time and cost constraints; and
3. Information that is practicably reviewable.

2.1 PROPERTY DESCRIPTION

The Property consists of approximately 4.91-acres developed land on two parcels (Assessor Parcel Numbers 019-042-21 and 019-042-24). The Property is currently occupied by Pomona Box Company (301 West Imperial Highway), a box manufacturing facility; Mac Auto (351 West Imperial Highway), an automobile sales and repair shop; Eric Will Gymnastics Center (341 West Imperial Highway), a children’s gymnasium; a two-story multi-tenant office building (271 West Imperial Highway); Bentley Auto Group (251 West Imperial Highway), an automobile sales facility; and an automotive storage warehouse (261 West Imperial Highway). Surrounding properties consists of a mix of commercial and residential properties. A Property location map is illustrated on Figure 1. A Property map illustrating the main features of the Property is provided as Figure 2. Photographs taken during the site reconnaissance visit are provided in Appendix A.

The Property Owner is identified as Votaw Properties, LLC.

2.2 SPECIAL TERMS, CONDITIONS, AND SIGNIFICANT ASSUMPTIONS

There were no special terms, conditions, or significant assumptions associated with this Phase I ESA.

2.3 EXCEPTIONS AND LIMITING CONDITIONS

This report documents work that was performed in accordance with the MSA. No other representations, warranties or guarantees are made concerning the accuracy or completeness of the data or conclusions contained within this report. This report provides an evaluation of specified environmental conditions associated with the identified property that was assessed at the time the work was conducted and is

based on information obtained by and/or provided to Stantec at that time. 40 CFR 312.20(f)(2) requires that the Environmental Professional evaluate the thoroughness and reliability of provided information. Stantec can neither warrant nor guarantee such thoroughness or reliability, however.

Conclusions made within this report consist of Stantec's professional opinion as of the time of the preparation of this report and are based solely on the scope of work described in the report, the limited data available and the results of the work. They are not a certification of the property's environmental condition. Project Specific limiting conditions are provided in Section 2.2.

The conclusions are based on the site conditions encountered by Stantec at the time of the work. Accordingly, additional studies and actions may be required. The identification of non-environmental risks to structures or people on the Property is beyond the scope of this assessment.

Stantec specifically disclaims any responsibility to update the conclusions in this report if new or different information later becomes available or if the conditions or activities on the property subsequently change.

In the event of any conflict between the terms and conditions of this report and the terms and conditions of the MSA, the MSA shall control.

2.4 PERSONNEL QUALIFICATIONS

This Phase I ESA was conducted by, or under the supervision of, an individual that meets the ASTM definition of an Environmental Professional (EP). The credentials of the EP and other key Stantec personnel involved in conducting this Phase I ESA are provided in Appendix B.

3.0 USER-PROVIDED INFORMATION

ASTM E1527-13 describes responsibilities of the User to complete certain tasks in connection with the performance of "All Appropriate Inquiries" into the Property. The ASTM standard requires that the Environmental Professional request information from the User on the results of those tasks because that information can assist in the identification of RECs, CRECs, HRECs, or *de minimis* conditions in connection with the Property. Towards that end, Stantec requested that the User provide the following documents and information:

Description of Information	Provided (Yes / No)	Description and/or Key Findings
User Questionnaire and/or Interview	Yes	The user is aware of past use of the Property for agricultural purposes. The user is also aware that VOCs were identified in a soil vapor survey and that underground storage tanks were removed. The Property Owner is Votaw Properties, LLC.
Environmental Liens or Activity Use Limitations	N/A	No environmental liens and/or activity use limitations were identified in the Preliminary Tile Report dated December 9, 2019. A copy of the title report is provided in Appendix C.
Previous Environmental Permits or Reports Provided by User	Yes	Previous reports were provided by the User and are described in Section 4.4.6.
Purpose of the Phase I ESA	Yes	Due Diligence

Stantec requested information relevant to performance of this Phase I ESA with a written questionnaire submitted to the user of this report. A copy of the Users Questionnaire completed by Mr. Walker Wood, Acquisitions Associate for Olson Urban Housing, LLC, is provided in Appendix C. The significant information provided by Mr. Wood is summarized below.

1. Information on Environmental Cleanup Liens on the Property? – The Client is not aware of any environmental cleanup liens on the Property.
2. Information on Property Activity or Use Limitations (including Institutional and Engineering Controls)? – The Client is not aware of any activity and land use limitations on the Property.
3. Specialized knowledge or experience of the User: - The Client provided no information indicating any specialized knowledge or experience.
4. Commonly known or reasonably ascertainable information about the Property? – The Client is aware of the past use of the Property for agricultural purposes. The user is also aware that VOCs were identified in a soil vapor survey and that underground storage tanks were removed.

5. The degree of obviousness or the presence or likely presence of contamination at the Property, and the ability to detect the contamination by appropriate investigation? -The Client provided no information indicating any obvious or likely present contamination.

3.1 SPECIALIZED KNOWLEDGE OR EXPERIENCE

The Federal AAI rule (40 CFR §312.28) and ASTM E1527-13 require that all appropriate inquiry must take into account relevant and applicable specialized knowledge and experience on the part of the User regarding the Property, the area surrounding the Property, the conditions of adjoining properties, and any other experience relevant to identifying RECs on the Property.

Mr. Wood has no knowledge or experience related to the Property or nearby properties.

3.2 PURCHASE PRICE VS. PROPERTY VALUE

The Federal AAI rule (40 CFR §312.29) and ASTM E1527-13 require that persons seeking defense to or protection from liability under CERCLA must take into account the relationship of the purchase price to the fair market value of the Property if it were not contaminated to assess whether or not the differential is due to the presence of releases or threatened releases of hazardous substances. This portion of the inquiry is the responsibility of the User, and the User has the option of sharing or not sharing this information with the Environmental Professional performing the Phase I ESA.

Stantec has not performed an independent evaluation of the purchase price of the Property and its relationship to fair market value. Stantec submitted a written questionnaire to the User inquiring about the User's knowledge regarding the relationship of the purchase price to the fair market value of the property if it were not contaminated.

Mr. Wood believes the purchase price being paid for the Property reasonably reflects the fair market value.

4.0 RECORDS REVIEW

The objective of consulting historical sources of information is to develop the history of the Property and surrounding area and evaluate if past uses may have resulted in RECs. Physical setting records are evaluated to determine if the physical setting may have contributed to adverse environmental conditions in connection with the Property. During the review of historical records, Stantec attempted to identify uses of the Property from the present to the first developed use of the Property. Stantec's research included the reasonably ascertainable and useful records described in this section.

4.1 PHYSICAL SETTING

A summary of the physical setting of the Property is provided in the table below with additional details in the following subsections

Topography:	The Property is approximately 257 feet above mean sea level (amsl) with a general topographic gradient to the south (EDR, 2019).
Soil/Bedrock Data:	Soil encountered during the Limited Phase II ESA performed by Ninyo & Moore in September 2019 generally consisted of asphalt underlain by a few inches of base materials consisting of various sandy and clayey material up to approximately 10.5 feet thick. In some borings, alluvium (i.e. sands and clays) was encountered beneath the asphalt or concrete.
Estimated Depth to Groundwater/ Estimated Direction of Gradient:	Based on information from the Case Closure Summary for 301 West Imperial Highway from Orange County Health Care Agency dated October 11, 2002, groundwater was found to be present at approximately 10 to 15 feet below ground surface (bgs) with a groundwater flow to the southwest. During the Limited Phase II ESA performed by Ninyo & Moore in September 2019, groundwater was encountered between 17 and 18 feet bgs.
NOTE: Site-specific groundwater flow direction and depth can only be determined by conducting site-specific testing, which Stantec has not conducted.	

4.1.1 Property Topography and Surface Water Flow

The Property is approximately 257 feet amsl with a general topographic gradient to the south (EDR, 2019). During a significant rainfall event, surface runoff is expected to flow south into the curb and gutter system along West Imperial Highway.

4.1.2 Regional and Property Geology

The Property is located in the southern portion of the Peninsular Ranges Geomorphic Province characterized by northwest-southeast trending mountains and faults. The Property is between Puente Hills to the north and Coyote Hills to the southwest, at an elevation of approximately 257 feet amsl. The Property is underlain by alluvium and associated deposits of Recent to Pleistocene age. Soil encountered during the Limited Phase II ESA performed by Ninyo & Moore in September 2019 generally consisted asphalt underlain by a few inches of base materials consisting of various sandy and clayey material up to approximately 10.5 feet thick. In some borings, alluvium (i.e. sands and clays) was encountered beneath the asphalt or concrete.

According to official maps of California, the Property is not located within an Alquist-Priolo (AP) Earthquake Fault Zone boundary or a liquefaction zone (CDMG, 2000). The closest mapped fault is the Whittier section of the Elsinore fault is located 1 mile north of the Property.

4.1.3 Regional and Property Hydrogeology

The Property is located within the Coastal Plain of Orange County (8-001). The basin is bounded on the northwest and the north by the Los Angeles-Orange County line; the Whittier fault zone and consolidated rocks of the Puente Hills and Chino Hills to the northeast; consolidated rocks of the Santa Ana Mountains to the east; and consolidated rocks of the Laguna Hills and San Joaquin Hills to the south. The Pacific Ocean is the southwest extent of the basin. (Department of Water Resources [DWR], 2004).

Based on information from the Case Closure Summary for 301 West Imperial Highway from Orange County Health Care Agency dated October 11, 2002, groundwater was found to be present at approximately 10 to 15 feet below ground surface (bgs) with a groundwater flow to the southwest. During the Limited Phase II ESA performed by Ninyo & Moore in September 2019, groundwater was encountered between 17 and 18 feet bgs.

4.2 FEDERAL, STATE AND TRIBAL ENVIRONMENTAL RECORDS

A regulatory agency database search report was obtained from Environmental Data Resources, Inc. (EDR), a third-party environmental database search firm. A complete copy of the database search report, including the date the report was prepared, the date the information was last updated, and the definition of databases searched, is provided in Appendix D.

Stantec evaluated the information listed within the database relative to potential impacts to the Property, assessing the potential for impacts based in part on the physical setting. As part of this process, inferences have been made regarding the likely groundwater flow direction at or near the Property. As described in 4.1.3, the groundwater flow direction reported for the adjacent property to the north-northwest is variable from northwest to east. Observations about the Property and surrounding properties made during the Property reconnaissance are provided in more detail in Section 5.

4.2.1 Listings for Property

The Property was identified in the environmental database report. The following table summarizes the listings for the addresses associated with the Property:

Listed Facility Name/Address	Database Listing	Distance/Direction from Property	REC? (YES / NO)
Orvin Engineering Corporation 251 West Imperial Highway La Habra, CA	HIST UST	Target Property	**Yes**
The facility is listed as having three underground storage tanks (USTs) including one 5,000-gallon gasoline UST, one 1,000-gallon gasoline UST, and one 2,000-gallon diesel UST installed between 1958 and 1980. Additional information regarding recent subsurface assessment for the former USTs is discussed in Section 4.4.6.			
Pittman Inc Trucking and Rentals 261 West Imperial Highway La Habra, CA	UST	Target Property	**Yes**
The facility is listing in the Underground Storage Tank (UST) database; however, no additional information was provided by EDR. This UST listing is likely in relation to the listing below for Pomona Box Company. Additional information regarding recent subsurface assessment for the former USTs is discussed in Section 4.4.6.			
Pomona Box Company 301 West Imperial Highway La Habra, CA	LUST; UST; HIST UST; NPDES; WDS; CIWQS; CERS	Target Property	**Yes**
Based on the low concentrations and limited extent of residual hydrocarbons in soil and groundwater, the County of Orange Health Care Agency issued a *Remedial Action Completion Certification* dated October 11, 2002 with concurrence with the Regional Water Quality Control Board. Additional information provided by the lead regulatory agency is provided in Section 4.3.5. Also, additional information regarding recent subsurface assessment for the former USTs is discussed in Section 4.4.6.			

4.2.2 Listings for Nearby Sites with Potential to Impact Property

Stantec assessed data presented in the environmental agency database search report to evaluate the potential for conditions on adjacent and nearby sites to pose a REC, CREC, or HREC for the Property. The evaluation included an opinion of the potential for contamination by hazardous substances or petroleum products to migrate to the Property from a nearby property, including by vapor migration or encroachment (*i.e.*, the potential for a vapor encroachment condition [VEC]).

Based on this evaluation, the following individual facilities were identified as the most likely potential sources of impact to the Property. The basis for why each of the following listed databases potentially creates a REC for the property is also provided.

Listed Facility Name/Address	Database Listing	Distance/Direction from Property	REC? (YES / NO)
Goodman Construction 401 West Imperial La Habra, CA	SWEEPS UST; UST; LUST; HAZNET	Adjacent to west	No
The facility received closure from the Orange County Health Care Agency (OCHCA) on June 4, 1992 for a release of diesel fuel to soil during the removal of a 1,000-gallon UST. One 550-gallon steel waste oil UST was removed from the facility on November 3, 1995. Ninety tons of soil were excavated and no petroleum or BTEX compounds detected in any of the confirmation soil samples. The OCHCA requested an additional sample collected in 2002 due to the facility not having tested for methyl tert-butyl ether (MTBE) or other fuel oxygenates. One soil sample was collected on May 29, 2002 and had no detections of petroleum hydrocarbons, BTEX, MTBE, or other fuel oxygenates. Based on these results, the OCHCA issued closure on August 21, 2002. On February 27, 2003, three 10,000-gallon gasoline USTs and associated piping were removed from the facility. High concentrations of TPH-gasoline, BTEX, and MTBE were found in soil samples. On November 3 and 4, 2003, additional soil and groundwater samples were collected for further delineation. Four monitoring wells were installed near the former USTs and dispensers on April 20, 2004. Groundwater monitoring and remediation were conducted between April 2004 and the Fourth Quarter of 2006. Due to the reduced levels of contamination in shallow groundwater and that no threat was posed to the nearest active water production well, the OCHCA issued closure on March 30, 2009. Given the analytical results and the regulatory closure, this listing is not considered an environmental concern and no further investigation appears warranted.			
Pep Boys Store #0997 125 West Imperial Highway La Habra, CA	RCRA NonGen / NLR; CERS HAZ WASTE; HAZNET; CERS	Adjacent to east	No
The facility is listed as having multiple minor violations for failure to complete and/or submit hazardous materials business plans in 2013 and 2019, which appear to be clerical issues and not indicative of any significant releases of hazardous materials. Therefore, this listing is not considered an environmental concern and Stantec recommends no further investigation regarding this issue.			
Best Upholstery & Supplies 415 West Imperial Highway La Habra, CA	EDR Hist Cleaner	Approximately 132 feet / west-southwest	No
The facility is listed as various carpet and upholstery cleaners between 1985 and 2012 with no reported releases. Given there are no reported releases, this facility is considered unlikely to represent an environmental concern and no further investigation is recommended.			
Corbins Auto / Don Votaw / Ray's Richfield / Walgreens #3747 / Votaw Davis Properties 101 West Imperial Highway La Habra, CA	EDR Hist Auto; UST; RCRA-VSQG; EDR Hist Auto; CERS HAZ WASTE; HAZWASTE; LUST; HAZNET	Approximately 259 feet / east-southeast	No

Listed Facility Name/Address	Database Listing	Distance/Direction from Property	REC? (YES / NO)
This facility is listed as various gasoline service stations between 1961 and 1992. The facility is also listed as Walgreens as a conditionally-exempt small quantity generator for hazardous waste. The facility property owner is identified as Votaw Davis Properties (the same as the Subject Property). With approval from the OCHCA, a single remediation system was selected for two sites (301 and 101 West Imperial Highway) since both sites are owned by the same responsible party. The two sites are approximately 400 feet apart and because both sites had similar contamination and had subsurface conditions that could be connected by underground piping, a single treatment system for soil and groundwater remediation was installed and operated. The facility received closure from the OCHCA on April 2, 2004. Further information regarding the previous subsurface assessment and remedial action is discussed in Section 4.4.6. Given the regulatory status, this listing is not considered an environmental concern and no further action is recommended.			

The remaining listings in the database search report provided in Appendix D do not represent a REC to the Property.

4.3 LOCAL/REGIONAL ENVIRONMENTAL RECORDS

Stantec reviewed the following sources to obtain information pertaining to Property use and/or indications of RECs in connection with the Property:

4.3.1 Division of Oil, Gas, and Geothermal Resources, Division 1

Agency Name Contact Information	Finding
Division of Oil, Gas, and Geothermal Resources, Division 1, Department of Conservation 5816 Corporate Avenue, Suite 200 Cypress, CA 90630 Online database: http://www.conservation.ca.gov/ dog/Pages/WellFinder.aspx	Stantec searched for oil wells on the Division of Oil, Gas, and Geothermal Resources (DOGGR) online database. There are no oil wells on the Property. The nearest oil well is a plugged oil well located approximately 1,819 feet to the west-northwest.

4.3.2 Department of Toxic Substances Control (DTSC)

Agency Name Contact Information	Finding
Department of Toxic Substances Control (DTSC) 5796 Corporate Ave., Cypress, CA 90630	Stantec researched the online database Envirostor managed by this agency (envirostor.dtsc.ca.gov). No records were found on the database website for the Property address or adjacent properties.

4.3.3 Fire Department

Agency Name Contact Information	Finding
County of Los Angeles Fire Department Hazardous Materials Division 1320 N. Eastern Avenue Los Angeles, CA 90063 (323) 881-2411	According to an email dated December 20, 2019, the County of Los Angeles Fire Department Hazardous Materials Division (CLAFD) has records for 261 and 301 West Imperial Highway, La Habra, California. The records included hazardous material inventories and multiple official inspection reports with minor violations for improper electronic submissions, missing hazardous material business plans, improper storage, and missing training programs. The CLAFD had no records for the additional Property addresses. Copies of the available records is provided in Appendix F.

4.3.4 California Regional Water Quality Control Board (CRWQCB)

Agency Name, Contact Information	Findings
California State Water Resources Control Board, Santa Ana Region (RWQCB) 3737 Main Street, Suite 500 Riverside, CA 92501 (951) 782-4495 Online database: https://geotracker.waterboards.ca.gov	Stantec searched the RWQCB's online database Geotracker for available documents for the Property. The Pomona Box Co (301 Imperial Highway) was identified as receiving closure on October 11, 2002 from the Orange County Health Care Agency (the Lead Agency) for a release of gasoline to groundwater. No reports or additional information regarding this listing was available on Geotracker. No other records were found on the database website for the other Property addresses.

4.3.5 Orange County Health Care Agency (OCHCA)

Stantec requested available records from the OCHCA on December 12, 2019. OCHCA performed a review of archived records and provided a *Remedial Action Completion Certification* letter dated October 11, 2002 for the UST Case associated with Pomona Box Company which states no further action related to the petroleum release(s) at the site is required.

According to a case closure summary dated August 6, 2002 which was attached to the letter, eight USTs including one 1,000-gallon gasoline UST; two 1,000-gallon diesel UST; two 5,000-gallon gasoline UST; two 1,000-gallon gasoline UST; and one 550-gallon gasoline UST were removed between December 1986 and September 1989. During the excavation to removal impacted soils in 1986, groundwater and free product were encountered at a depth of 13 feet bgs. The excavation was backfilled with contaminated soil and site assessment work was initiated. Soil borings B-1 through B-7 were drilled and completed as groundwater monitoring wells. Free product and dissolved phase hydrocarbons were detected in all the wells and manual free product recovery was initiated in June 1987. An automated recovery system was installed in April 1988.

Seven additional USTs were removed from the western side of the Property on September 1989. Four additional monitoring wells (B-7 through B-10) were installed on-site and one additional well (B-11) was installed in Imperial Highway.

Quarterly groundwater monitoring was conducted between 1988 and 2002. With approval from the Orange County Health Care Agency (OCHCA), a single remediation system was selected for two sites (301 and 101 West Imperial Highway) since both sites are owned by the same responsible party. The two sites are approximately 400 feet apart and because both sites had similar contamination and had subsurface conditions that could be connected by underground piping a single treatment system for soil and groundwater remediation. The remediation system consisted of a vapor extraction system (VES) using a Baker Furnace 500 scfm thermal/catalytic oxidizer and 30 gpm granular activated carbon groundwater extraction system. The dual phase remediation system operated continuously from January 1996 to August 1997. The VES was discontinued in August 1997 and the groundwater extraction system was discontinued in March 1998 due to low influent hydrocarbon concentrations. The VES system was removed from the Property in July 1999.

Post remediation quarterly groundwater monitoring showed that all monitoring wells have either maintained non-detectable levels or have had a significant downward trend. The last quarterly groundwater monitoring event was conducted in the first quarter of 2001.

For the closure assessment, six verification borings/hydropunch samples were taken downgradient to evaluate the dissolved petroleum hydrocarbon concentrations across the Property. The closure soil sample data indicated some localized residual hydrocarbons remain in the soil from 10 to 15 feet bgs at locations between the office and the maintenance shop. Benzene, toluene, ethylbenzene, and xylenes (BTEX) concentrations were very low or non-detect and no methyl-tert butyl ether (MTBE) was found in any of the samples. The groundwater samples were consistent with the groundwater monitoring data. Review of the post-remediation quarterly groundwater data indicated that there was no rebound in the concentrations.

Based on the low concentrations and limited extent of residual hydrocarbons in soil and groundwater, the County of Orange Health Care Agency issued a *Remedial Action Completion Certification* dated October 11, 2002 with the concurrence with the Regional Water Quality Control Board. Additional information regarding recent subsurface assessment for the former USTs is discussed in Section 4.4.6.

However, the former UST located at the 301 West Imperial Highway address was closed by the OCHCA under commercial land use. Verification that closure would still apply to residential land use is recommended.

4.3.6 Local Building and/or Planning Department Records

Agency Name, Contact Information	Findings
City of La Habra Building and Safety Division 110 East La Habra Boulevard La Habra, CA 90631 Phone: (562) 383-4116	Stantec requested available records from the City of La Habra on December 12, 2019. Archived building permits were provided to Stantec for review and included various electrical permits, building permit applications, plumbing permits, sign permits, and certificate of occupancies. Various noise complaints were issued for 341 West Imperial Highway in between 1978 and 1980. A permit and the OCHCA Remedial Action Completion Certification letter for former USTs described above were also included records provided by the City of La Habra. No additional RECs were identified during Stantec's review of archive building records.

4.4 HISTORICAL RECORDS REVIEW

4.4.1 Land Title Records/Deeds

No environmental liens and/or activity use limitations were identified in the Preliminary Tile Report dated December 9, 2019. A copy of the title report is provided in Appendix C. No other land title records were reviewed by Stantec as part of this assessment.

4.4.2 Aerial Photographs

Stantec reviewed historical aerial photographs provided by EDR. The general type of activity on a property and land use changes can often be discerned from the type and layout of structures visible in the photographs. However, specific elements of a facility's operation usually cannot be discerned from aerial photographs alone. The following table summarizes Stantec's observations of the reviewed historical aerial photographs.

Year	Scale	Observations, Property and Adjoining Properties
1928 1938	1=500'	The Property and surrounding properties are used for agricultural purposes (row crops). A road (West Imperial Highway) appears

1947		adjacent to the south.
1953	1=500'	The Property and surrounding area no longer appear to be used for agricultural purposes and are vacant land.
1963	1=500'	The Property has been developed with the existing warehouse buildings and smaller buildings in the center and eastern portions. The western portion of the Property appears to be a nursery/garden center. A residential community appears adjacent to the north. Warehouse buildings appear adjacent to the west. Vacant land appears adjacent to the east. Residential structures appear to the south beyond West Imperial Highway.
1981	1=500'	The Property appears similar to the previous photograph. An additional warehouse structure and smaller building appear in the western portion of the Property. Construction supplies appear along the northern perimeter. Additional commercial development appears adjacent to the east.
1983 1990 1994 2005 2009 2012 2016	1=500'	The Property appears similar to the previous photograph. An additional office building appears along the southeastern perimeter.

Name of aerial photograph source: EDR, 2019

Stantec's interpretation of historical aerial photos indicate the Property and surrounding area was used for agricultural land since at least 1928 until circa 1953. The existing buildings at the Property were constructed between 1963 and 1981.

Based on past agricultural use of the Property, Ninyo & Moore collected shallow soil samples to evaluate whether residual pesticides or heavy metals associated with herbicide applications are present above regulatory screening levels, human health risk criteria or California hazardous waste levels, including for determining the extent to which worker protection measures and/or special off-site disposal measures may be necessary. Results are discussed in Section 4.4.6.

4.4.3 City Directories

Stantec retained a third party (EDR) to research available reverse city directories for the Property, in approximately five-year intervals. The following is a summary of Stantec's review of the city directory listings:

Subject/Adjoining Property	Year	Listed Occupants
Subject Property – 251 West	1967-1982	"Orvin Engineering Corporation" "Shaugnessy

Subject/Adjoining Property	Year	Listed Occupants
Imperial Highway		Engineering Corp”
	2005	“L A Paper Products Inc”
	2000-2010	“MAC Auto Wholesale Inc”
	2014	“California Motors Directcom”
Subject Property – 261 West Imperial Highway	1987-1995	“FAB Center Corp”
	1992-2000	“Pittman Trucking & Rentals”
	2000-2014	“Touchstone Products”
Subject Property – 271 West Imperial Highway	1995	“Prodesign Inc” “Thorton Printing Company”
	2000	“Inland Protective Service”
	2010	“B Rich N Culture” “EFH Property Management LLC”
	2010-2014	“Gilster Co. Inc”
		“Interconnex Solutions”
Subject Property – 301 West Imperial Highway	1967-1975	“Pomona Box Co Inc” “Interstate Spclties”
	1982	“Shaugnessy Wood Products Inc”
	2000	“DJ D Auto”
Subject Property – 341 West Imperial Highway	1992 - 2014	“Will Eric Gymnastics Center”
	2010 - 2014	“Stadlers Booster Club Inc”
Subject Property – 351 West Imperial Highway	1967	“Imperial Garden Center”
	1973-1975	“Leisure Living”
	1982-2010	“Sheppa Inc”
	2014	“MAC Auto Wholesale Inc” “Sheppa Inc”

Name of city directories and source: EDR, 2019

4.4.4 Historical Fire Insurance Maps

Fire insurance maps were developed for use by insurance companies to depict facilities, properties, and their uses for many locations throughout the United States. These maps provide information on the history of prior land use and are useful in assessing whether there may be potential environmental contamination on or near the Property. These maps, which have been periodically updated since the late 19th century, often provide valuable insight into historical Property uses.

Stantec requested fire insurance maps from EDR; however, no coverage exists for the Property. The Sanborn® Map Search Report indicating “no coverage” is presented in Appendix E.

4.4.5 Historical Topographic Maps

Stantec reviewed historical USGS 7.5-minute Topographic Maps of the La Habra, California Quadrangle (scale 1:24,000) to help identify past Property usage and areas of potential environmental concern. Copies of the historical maps are provided in Appendix E. The following table summarizes the maps reviewed and our observations.

Year	Scale	Observations, Property and Adjoining Properties
1896; 1898; 1901; and 1902	1=62,500	The Property is depicted as vacant land in Orange County. No RECs or environmental concerns were noted in the topographic maps.
1927	1=24,000	The Property is not illustrated on the 1927 topographic map.
1935	1=24,000	The Property remains undeveloped. A highway appears adjacent to the south beyond which is a spring.
1942; 1950; and 1950	1=24,000	The Property and surrounding areas are depicted as agricultural land with no structures. An oil field appears approximately ½ mile to the south-southwest.
1964 and 1972	1=24,000	Two warehouse buildings appear on the center and eastern portions of the Property. Urban development appears adjacent to the north and south of West Imperial Highway. Additional structures appear along the northern portion of West Imperial Highway.
1981	1=24,000	Additional structures appear on the western portion of the Property. Commercial development appears north of West Imperial Highway.
2012	1=24,000	No site details are depicted on the Property. Roadways appear to be in their current configuration.

Name of maps and source: EDR, 2019

4.4.6 Other Historical Sources

Ninyo & Moore, 2019, Phase 1 Environmental Site Assessment, 301-351 West Imperial Highway, La Habra, California, dated March 21.

Ninyo & Moore prepared a Phase I ESA which identified the following recognized environmental conditions (RECs) and vapor encroachment condition (VEC) associated with the Property:

- 251 West Imperial Highway – No removal documentation was found for the underground storage tanks (USTs) and it is unknown if the USTs were still present. Therefore, the historical USTs were considered a historical recognized environmental condition (HREC).

- 261 West Imperial Highway – Outstanding notices of violation for MSU Touchstone Concrete Rock Manufacturing and potential evidence of mismanaged waste (paint stained sink) were considered a REC.
- 301 West Imperial Highway – An unauthorized release from the former UST system is considered a controlled recognized environmental condition (CREC) as the petroleum impacted soil and groundwater was cleaned up to the satisfaction of the Orange County Health Care Agency (OCHCA) based on current site use with residual contamination remaining.
- 351 West Imperial Highway – Surface staining was observed around and beneath the basin outside the northwest side of the building and was considered a REC.
- Site-wide – Based on the results of the vapor encroachment screening matrix and the presence of petroleum hydrocarbon impact to the soil and groundwater at the central southern portion of the site, it is likely VEC exists beneath the site.

Additionally, Ninyo & Moore identified historical agricultural use a *de minimis* condition based on the duration since pesticides/herbicides may have been applied (approximately 70 years) and that the Property had been developed. Also, staining on concrete pavement inside buildings 301 and 351 West Imperial Highway represent a *de minimis* condition.

Ninyo & Moore, 2019, Limited Phase II Environmental Site Assessment, 251-351 West Imperial Highway, La Habra, California, dated September 9.

To address the identified RECs, HREC, CREC, and VEC, Ninyo & Moore (N & M) conducted a limited Phase II ESA and issued the report on September 2019. The limited Phase II ESA also included a site-wide screening of surface soil for the presence of organochlorine pesticides (OCPs) and arsenic due to former site use for agricultural purposes. The scope of work for the limited Phase II ESA included advancing 19 soil borings to depths ranging from 5 to 20 feet bgs for the collection of soil and grab groundwater samples, installation of temporary soil vapor probes, and collection of soil vapor samples. The locations of these borings and soil vapor samples are depicted on Figure 2.

The results of the soil samples analyzed for Title 22 Metals reported no detections exceeding their respective regulatory screening levels, except arsenic. Arsenic detections ranged from 1.3 to 7.45 milligrams per kilogram (mg/kg) and exceeded the EPA Regional Screening Levels (RSLs), DTSC Human and Ecological Risk Office (HERO) Screening Levels, and San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (ESLs). However, the detections of arsenic did not exceed the DTSC's background concentration of 12 mg/kg – and naturally-occurring concentrations of arsenic throughout the State of California typically exceed the regulatory thresholds listed above. Therefore, arsenic was not considered an environmental concern to the Site. Detectable concentrations of organochlorine pesticides (*i.e.* , DDE and DDT) from shallow soil samples were below the EPA RSL for residential soil. Therefore, the concentrations do not represent a human health risk by regulatory agencies based on established human health risk-protective standards. Therefore, the historic

agricultural use of the Site was not identified as a REC to the Site and no further work was recommended by N & M. Stantec concurs with that conclusion.

VOCs including ethylbenzene, isopropyl benzene, n-nutylbenzene, n-propylbenzene, naphthalene, and sec-butylbenzene were detected from boring B14 at 15 feet bgs; however, the concentrations were below the EPA RSLs for residential soil and do not represent an environmental concern.

TPH-gasoline was detected at a concentration of 250 mg/kg in boring B17 at 15 feet bgs which exceeds the EPA RSL for residential soil of 82 mg/kg and the ESL of 100 mg/kg. Minor detections of TPH-diesel and TPH-oil were also detected in borings B10, B12, B15, B16 and B19 at concentrations below the corresponding EPA RSL and ESL.

The results of laboratory analysis of grab groundwater samples showed maximum concentrations of benzene at 22 micrograms per liter (ug/l) which exceed the EPA MCL of 5 ug/l and ESL of 0.42 ug/l; ethylbenzene at 380 ug/l which exceeds the ESL of 3.5 ug/l but is below the EPA MCL of 700 ug/l; and naphthalene at 110 ug/l which exceeds the ESL of 0.71 ug/l. Additionally, TPH-gasoline was reported at a maximum concentration of 3,200 milligram per liter (mg/l), which exceeds the current regulatory screening level for gasoline in groundwater.

Multiple VOCs were detected in the soil vapor samples collected across the Site. Concentrations of VOCs detected in soil vapor samples were compared to modified EPA RSLs of ambient air calculated with an attenuation factor of 0.03 for residential/commercial land use and modified DTSC screening levels ambient air using an attenuation factor of 0.001 for residential land use. Benzene was detected in seven of ten soil vapor samples at concentrations ranging from 12 to 65 micrograms per cubic meter (ug/m3), which exceed the calculated residential RSL of 12 ug/m3. Additionally, ethylbenzene was detected in the same seven soil vapor samples at concentrations ranging from 161 to 259 ug/m3 which exceed the residential RSL of 37 ug/m3. N-butylbenzene was detected in five soil vapor samples but not at concentrations above the screening level.

Based on these results, N & M concluded that the limits of impacted soil, soil vapor, and/or groundwater have not been delineated. However, the impacted area appears generally located within the vicinity of the former USTs. Petroleum hydrocarbons were generally not detected in the upper 10 feet bgs; however, below 10 feet bgs at 301 West Imperial Highway, certain petroleum hydrocarbon concentrations exceeded screening levels for residential land use. N & M recommended that, prior to disturbing soil at the Site, a Soil Management Plan should be prepared.

N & M concluded that soil vapor samples showed contaminant concentrations at levels that were not high enough to justify vapor extraction or remediation; however, development plans should include appropriate human health risk mitigation measures (*i.e.*, vapor barriers). N & M stated that additional vapor probes may be needed to further define limits of recommended vapor mitigation measures.

Prior assessment of soil vapor at the Property confirmed the presence of VOCs in soil vapor at levels exceeding applicable human health risk screening levels. The VOC impacts to soil vapor appear to be sourced from former gasoline USTs that were located on-site. Therefore, further soil vapor assessment is

recommended by Stantec to delineate the impacts to soil vapor and for the purpose of providing recommendations for any appropriate vapor mitigation measures.

Data currently provided in the N & M report does not indicate impact to soil exists in the upper 10 feet at the former locations of the USTs that were present at 251 West Imperial Highway. However, at the location of the UST formerly located at 301 West Imperial Highway, no impact was present at this depth, either, but impacts were detected at greater depths. Therefore, Stantec recommends completing further vertical assessment at this location in order to verify that no impacts to soil or groundwater are present, in order to evaluate whether regulatory closure is warranted without the need for any further action or investigation. In addition, Stantec recommends obtaining regulatory closure from OCHCA in regard to the USTs formerly located at the 251 West Imperial Highway.

Additionally, elevated soil vapor impacts were detected at the acrylic paint sink. Further assessment of soil and soil vapor is recommended in this area to verify no further impacts exist.

5.0 SITE RECONNAISSANCE

A visit to the Property and its vicinity was conducted by Ms. Alicia Jansen, Associate Scientist with Stantec, on December 13, 2019. Access to the Property was provided by Mr. Daryl Votaw, Property Owner and representative of Pomona Box Company. Stantec was accompanied by Mr. Votaw during the Property visit. Figure 2 provides information about the Property and adjoining properties and the location of potential areas of environmental concern. Photographs collected during the Property visit are included in Appendix A.

5.1 SITE RECONNAISSANCE METHODOLOGY

The site reconnaissance focused on observation of current conditions and observable indications of past uses and conditions of the Property that may indicate the presence of RECs. The reconnaissance of the Property was conducted on foot and Stantec utilized the following methodology to observe the Property:

- Traverse the outer Property boundary.
- Traverse transects across the Property.
- Inspect interior areas of the building.

Weather conditions during the visit to the Property were clear and sunny. There were no weather-related Property access restrictions encountered during the reconnaissance visit.

5.2 GENERAL DESCRIPTION

Property and Area Description:	The Property is located north of West Imperial Highway in the City of La Habra, County of Orange, California. The surrounding area consists of retail, commercial, and residential structures.
Property Operations.	The Property is currently occupied by Pomona Box Company (301 West Imperial Highway), a box manufacturing facility; Mac Auto (351 West Imperial Highway), an automobile sales and repair shop; Eric Will Gymnastics Center (341 West Imperial Highway), a children's gymnasium; a two-story multi-tenant office building (271 West Imperial Highway); Bentley Auto Group (251 West Imperial Highway), an automobile sales facility; and an automotive storage warehouse (261 West Imperial Highway).
Structures, Roads, Other Improvements:	The Property is developed with six buildings surrounded by asphalt paved parking lots.
Property Size (acres):	Approximately 4.91 acres

Estimated % of Property Covered by Buildings and/or Pavement:	100%
Observed Current Property Use/Operations:	The Property is occupied by two car dealerships (Mac Auto Inc and Bentley Auto Group); a multi-tenant office building; Pomona Box Company; and Eric Will Gymnastics Center.
Observed Evidence of Past Property Use(s):	None observed
Sewage Disposal Method (and age):	City of La Habra
Potable Water Source:	City of La Habra
Electric Utility:	Southern California Edison

5.3 HAZARDOUS SUBSTANCES AND PETROLEUM PRODUCTS

The following table summarizes Stantec's observations during the Property reconnaissance.

Observations	Description/Location
Hazardous Substances and Petroleum Products as Defined by CERCLA 42 U.S.C. § 9601(14):	The maintenance shop associated with the Pomona Box Company located at the southern portion of the Property contained welding gas cylinders (oxygen and acetylene), propane tanks for forklifts, various containers and dispensers of new and used lubricating oils, and 1-gallon containers of paint. The flooring in the maintenance shop appeared in good condition. Small amounts of various lubricants, adhesives, and solvents were observed on a work bench in the auto service department associated with the Mac Auto Dealership. Approximately ten car batteries were observed on metal shelving in the northwestern portion of the warehouse used for auto storage (261 West Imperial Highway). The batteries appeared to be in good condition; however, they should be disposed of in accordance with regulatory requirements.
Drums (≥ 5 gallons):	Two 55-gallon drums of used lubricating oils were observed on wooden pallets in the maintenance shop. The flooring in the maintenance shop appeared in good condition. The Mac Auto Inc dealership had an auto service department in the northern portion of the building which contained

Observations	Description/Location
	approximately ten 55-gallon drums of used oils, antifreeze, new oil, and automatic transmission fluid that were improperly labeled and with no secondary containment. The drums appeared in good condition and the flooring appeared in good condition.
Strong, Pungent, or Noxious Odors:	None observed.
Pools of Liquid:	None observed.
Unidentified Substance Containers:	None observed.
PCB-Containing Equipment:	Pole-mounted transformers were observed along the northern Property boundary and in the southwestern corner. A pad-mounted transformer was also observed along the southwestern corner of the auto storage warehouse (261 West Imperial Highway). No staining or evidence of a release of PCBs was observed.
Other Observed Evidence of Hazardous Substances or Petroleum Products:	An air compressor was observed along the northern exterior of the maintenance shop and an additional air compressor was observed inside the Pomona Box Company warehouse. The air compressors are used to provide air to nail guns used through the warehouse. The ground surface beneath the compressors appeared in good condition without any indication of staining. Additional machinery and equipment for sawing and assembly of wooden boxes and crates were observed throughout the Pomona Box Company warehouse. The machinery appeared to be in good condition without any indication of leaking. Four dual-post aboveground hydraulic lifts were observed in the auto service department of the Mac Auto Inc dealership. The lifts did not have any in-ground features and were in good condition without any indication of leaking.

5.4 INTERIOR OBSERVATIONS

Stantec made the following observations during the Property reconnaissance of the building interiors at the Property and/or identified the following information during the interview or records review portions of the assessment:

Observations	Description
Heating/Cooling Method:	Wall mounted air conditioning units were observed.
Surface Stains or Corrosion:	None observed.

Observations	Description
Floor Drains and Sumps:	None observed.
Other Interior Observations:	A sink was observed in the auto storage warehouse (261 West Imperial Highway) that was stained with paint.

5.5 EXTERIOR OBSERVATIONS

Stantec made the following observations during the site reconnaissance of exterior areas of the Property and/or identified the following information during the interview or records review portions of the assessment:

Observations	Description
On-site Pits, Ponds, or Lagoons:	None observed.
Stained Soil or Pavement:	None observed.
Stressed Vegetation:	None observed.
Waste Streams and Waste Collection Areas:	None observed.
Solid Waste Disposal:	Onsite trash receptacles.
Potential Areas of Fill Placement:	None observed.
Wastewater:	None observed.
Stormwater:	During a significant rainfall event, surface runoff is expected to flow south into curb and gutter system along West Imperial Highway.
Wells:	None observed.
Septic Systems:	None observed.
Other Exterior Observations:	Evidence of recent subsurface investigation (i.e. boreholes) was observed.

5.6 UNDERGROUND STORAGE TANKS/STRUCTURES

Existing USTs:	No visible evidence (fill pipes, vent pipes, dispensers, surface patches), which would indicate the presence of USTs, was discovered during the site reconnaissance.
Former USTs:	Former USTs are described in Section 4.3.
Other Underground Structures:	None observed.

5.7 ABOVEGROUND STORAGE TANKS

Existing ASTs:	No visible evidence (fill pipes, vent pipes, dispensers, surface stains), reports, or other evidence of ASTs was discovered during this Phase I ESA.
Former ASTs:	No visible evidence (fill pipes, vent pipes, dispensers, surface stains), reports, or other evidence of the former presence of ASTs was discovered during this Phase I ESA.

5.8 ADJOINING PROPERTIES

5.8.1 Current Uses of Adjoining Properties

As viewed from the Property and/or from public rights-of-way, Stantec made the following observations about use and activities on adjoining properties:

NORTH	Residential.
SOUTH	West Imperial Highway.
EAST	Pep Boys Auto (125 West Imperial Highway).
WEST	Various commercial business and vacant buildings (409 West Imperial Highway).

5.8.2 Observed Evidence of Past Uses of Adjoining Properties

Observations of adjoining properties providing indications of past use and activities, if any, are described below.

NORTH	None observed
EAST	None observed
SOUTH	None observed
WEST	None observed

5.8.3 Pits, Ponds or Lagoons on Adjoining Properties

As viewed from the Property and/or from public rights-of-way, Stantec made the following observations about the presence of pits, ponds and lagoons on adjoining properties:

NORTH	None observed.
EAST	None observed.
SOUTH	None observed.
WEST	None observed.

5.9 OBSERVED PHYSICAL SETTING

Topography of the Property and Surrounding Area:	The observed Property topography is to the north with a few feet of relief.

6.0 POTENTIAL FOR VAPOR ENCROACHMENT

Additionally, consideration of the migration of hazardous substances and petroleum products in all phases including solid, liquid, or vapor is required by the ASTM E1527-13 standard. As stated in Section 2.1 of ASTM E1527-13:

Vapor migration must be considered no differently than contaminated groundwater migration in the Phase I investigation. While E2600-10 provides and industry consensus methodology to assess vapor migration, use of E2600-10 methodology is not required to achieve compliance with AAI – an EP may use alternative methodology as deemed appropriate, but this must be documented in the Phase I report (i.e., it must be "capable of being reconstructed by an EP other than the EP responsible for the Phase I").

As presented in Section 4.4.6, past assessment of soil vapor at the Property confirmed VOC concentrations exist in soil vapor above health risk screening levels. The VOC soil vapors appear to be sourced from an on-Site from former gasoline USTs. Further soil vapor assessment is recommended to delineate the impacts to soil vapor and provided recommendations for appropriate vapor mitigation measures.

Additionally, elevated soil vapor impacts were detected at the acrylic paint sink. Further assessment of soil and soil vapor is recommended in this area to verify no further impacts exist.

7.0 DATA GAPS

The federal AAI final rule [40 CFR 312.10(a)] and ASTM E1527-13 identify a "data gap" as the lack or inability to obtain information required by the standards and practices of the rule despite good faith efforts by the Environmental Professional or the User.

Any data gaps resulting from the Phase I ESA described in this report are listed and discussed below.

Gap	Discussion
Deletions or Exceptions from Scope of Work Referenced in Section 1.4:	None
Weather-Related Restrictions to Site Reconnaissance:	None
Facility Access Restrictions to Site Reconnaissance:	None
Other Site Reconnaissance Restrictions:	None
Data Gaps from Environmental Records Review:	None
Data Gaps from Historical Records Review:	None
Data Gaps from Interviews:	None
Other Data Gaps:	None

8.0 CONCLUSIONS

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E1527 of 251 to 351 West Imperial Highway, in the City of La Habra, County of Orange, California, or the "Property". Any exceptions to, or deletions from, this practice are described in the Data Gaps section of this report. This assessment has revealed evidence of the following recognized environmental conditions (RECs) in connection with the Property and differences in the conclusion developed by N & M:

- **Soil Vapor Impacts.** Prior assessment of soil vapor at the Property confirmed the presence of VOCs in soil vapor at levels exceeding applicable human health risk screening levels. The VOC impacts to soil vapor appear to be sourced from former gasoline USTs that were located on-site. Further soil vapor assessment is recommended to delineate the impacts to soil vapor and for the purpose of providing recommendations for any appropriate vapor mitigation measures.

- **Former USTs.** Data currently provided in the N & M report does not indicate impact to soil exists in the upper 10 feet at the former locations of the USTs that were present at 251 West Imperial Highway. However, at the location of the UST formerly located at 301 West Imperial Highway, no impact was present at this depth, either, but impacts were detected at greater depths. Therefore, Stantec recommends completing further vertical assessment at this location in order to verify that no impacts to soil or groundwater are present, in order to evaluate whether regulatory closure is warranted without the need for any further action or investigation. In addition, Stantec recommends obtaining regulatory closure from OCHCA in regard to the USTs formerly located at the 251 West Imperial Highway.

- **Soil Vapor Impacts from Sink.** Elevated soil vapor impacts were detected at the acrylic paint sink. Further assessment of soil and soil vapor is recommended in this area to verify no further impacts exist.

In addition, from a regulatory compliance perspective, Stantec recommends completing the following:

- The former UST located at the 301 West Imperial Highway address was closed by the OCHCA under commercial land use. Stantec recommends obtaining confirmation from OCHCA that regulatory closure for the USTs would still apply with respect to residential land use – or to determine whether any further action or investigation is necessary.
- Stantec recommends that N & M's additional assessment data be provided to the OCHCA to confirm that the concentrations of TPH and VOCs in groundwater at the former UST location still meet regulatory closure criteria (or to determine why any further action or investigation is necessary in that regard).

Stantec has identified the following non-ASTM issues:

- **Asbestos-Containing Materials (ACMs) and Lead-Based Paint ("LBP").** Given the age of the existing building on the Property, the presence of ACMs and LBP is considered probable. Stantec recommends conducting a comprehensive, pre-demolition ACM survey in accordance

with the sampling protocol of the Asbestos Hazard Emergency Response Act (AHERA) prior to any activities with the potential to disturb building materials to determine whether ACM are present. Further, in the event ACM is detected, Stantec recommends proper removal and disposal of the materials identified prior to any activities with the potential to disturb them. In addition, any LBP at the Property should be removed in accordance with all applicable laws, including OSHA guidelines.

Additionally, stress-absorbing fabrics, which are commonly known as “Petromat,” are sometimes placed between asphalt layers. These fabrics can be coated with mastic or a tack adhesive that may contain asbestos. Stantec recommends coring multiple locations in the asphalt to determine if asbestos containing Petromat is located on the Property and, if so, that the Petromat be removed in accordance with all applicable laws, including OSHA guidelines.

9.0 NON-SCOPE CONSIDERATIONS

The following ASTM E1527-13 non-scope services were performed as part of this Phase I ESA:

9.1 LEAD-BASED PAINT

Concern for lead-based paint (LBP) is primarily related to residential structures. The EPA's Final Rule on Disclosure of Lead-Based Paint in Housing (40 CFR Part 745) defines LBP as paint or other surface coatings that contain lead equal to or in excess of 1.0 milligram per square centimeter or 0.5 percent by weight.

The risk of lead toxicity in LBP varies based upon the condition of the paint and the year of its application. The U.S. Department of Housing and Urban Development (HUD) has identified the following risk factors:

The age of the dwelling as follows: maximum risk is from paint applied before 1950.

There is severe risk from paint applied before 1960.

There is moderate risk from deteriorated paint applied before 1970.

There is slight risk from the paint that is intact but applied before 1977.

The condition of the painted surfaces.

The presence of children and certain types of households in the building.

Previously reported cases of lead poisoning in the building or area.

Year of Construction	Residential (Yes/No)	Observed Condition of Painted Surfaces
Circa 1963	No	Given the age of the existing building (1963), the presence of lead-based paint ("LBP") is considered likely. Stantec recommends that prior to demolition, an LBP survey be completed to ensure proper removal and disposal. In addition, prior to any activities with the potential to disturb the materials, Stantec recommends that identified LBP be removed in accordance with all applicable laws.

9.2 ASBESTOS

Asbestos can be found in many applications, including sprayed-on or blanket-type insulation, pipe wraps, mastics, floor and ceiling tiles, wallboard, mortar, roofing materials, and a variety of other materials commonly used in construction. The greatest asbestos-related human health risks are associated with

friable asbestos, which is ACM that can be reduced to powder by hand pressure. Friable asbestos can become airborne and inhaled, which has been associated with specific types of respiratory disease. The manufacturing and use of asbestos in most building products was curtailed during the late 1970s.

Stantec makes no warranty as to the possible existence or absence of inaccessible materials or to their evaluation with respect to asbestos content. Samples of suspect ACM should be collected for laboratory analysis of asbestos prior to any renovation or building demolition to be compliant with, EPA National Emission Standard for Hazardous Air Pollutants (NESHAP) regulations.

Given the age of the existing building on the Property (circa 1963), the presence of asbestos-containing materials ("ACM") is considered likely. Stantec recommends that prior to demolition, a comprehensive pre-demolition ACM survey should be completed in accordance with the sampling criteria of the Asbestos Hazard Emergency Response Act ("AHERA"), and that a certified asbestos abatement contractor be retained to remove ACM in accordance with all applicable laws.

In addition, much of the Property is paved with asphalt. Stantec recommends inspecting the asphalt for the presence of Petromat and if observed, sampling Petromat for the presence of asbestos.

9.3 RADON

Radon is a colorless, tasteless radioactive gas with an EPA-specified action level of 4.0 PicoCuries per liter of air (pCi/L) for residential properties. Radon gas has a very short half-life of 3.8 days. The health risk potential of radon is primarily associated with its rate of accumulation within confined areas near or in the ground, such as basements, where vapors can readily transfer to indoor air from the ground through foundation cracks or other pathways. Large, adequately ventilated rooms generally present limited risk for radon exposure. The radon concentrations in buildings and homes depend on many factors, including soil types, temperature, barometric pressure, and building construction (EPA, 1993).

Stantec reviewed regional data published by the EPA on average indoor radon concentrations in the vicinity of the Property (http://www.epa.gov/radon/zonemap.html).

EPA Radon Zones (w/Average Measured Indoor Radon concentrations)		
Zone 1 – High (>4.0 pCi/L)	Zone 2 – Moderate (2 to 4 pCi/L)	Zone 3 – Low (<2 pCi/L)
Normally-occupied sub grade areas present? (i.e., basement apartments, offices, stores, etc.)		
None.		

The Property is located in Zone 3 and is considered to have low potential for radon. Five of the 36 tests completed from zip code 90631 (the zip code of the Property) was above 4 pCi/L. To determine Property-specific radon levels, a radon survey would have to be conducted. However, based on the average first floor reading of 0.763 pCi/L for Orange County, radon appears unlikely to represent an environmental concern to the Property and Stantec recommends no further investigation regarding this issue.

9.4 FLOOD ZONES

According to the Physical Setting summary portion of the EDR report, the Property is not located within a 500-year or 100-year flood plain.

9.5 FORMERLY USED DEFENSE SITES

According to the United States Army Corps of Engineers (USACE) Formerly Used Defense Sites (FUDS) Portal database, the Property is not located within a FUDS.

10.0 REFERENCES

American Society for Testing and Materials, 2015, Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions, Designation E 2600-15.

American Society for Testing and Materials, 2013, Standard Practice for Environmental Site Assessments: Phase 1 Environmental Site Assessment Process, Designation: E 1527-13.

California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOG), 2019, website https://maps.conservation.ca.gov/doggr/wellfinder/

Department of Toxic Substances and Control, 2019, website http://www.envirostor.dtsc.ca.gov/public/

California Geological Survey (CGS), 2002, California Geomorphic Provinces, Note 36.

_____, 2010a, Fault Activity Map of California, adjustable scale, http://www.quake.ca.gov/gmaps/FAM/faultactivitymap.html.

_____, 2010b, Alquist-Priolo Earthquake Fault Zones of California, http://www.quake.ca.gov/gmaps/ap/ap_maps.htm.

Department of Water Resources (DWR), 2004, Groundwater Bulletin 118, updated February 27.

Environmental Data Resources, Inc. (EDR), EDR Radius Map Report with Geocheck, Inquiry Number 5903116.2s, dated December 12, 2019.

_____, Certified Sanborn Map Report, Inquiry Number 5903116.3, dated December 12, 2019.

_____, Historical Topographic Map Report, Inquiry Number 5903116.4, dated December 12, 2019.

_____, Aerial Photo Decade Package, Inquiry Number 5903116.8, dated December 12, 2019.

_____, City Directory Abstract, Inquiry Number 5903116.5, dated December 17, 2019.

State Water Resource Control Board's Geotracker, 2019, website https://geotracker.waterboards.ca.gov/

United States Geological Survey (USGS), 2012, La Habra Quadrangle, 7.5 Minute Topographic Map, Scale 1 inch = 2,000 feet.

Report of Finding and Supplemental Site Investigation Report

251 – 351 West Imperial Highway
La Habra, California 90631

August 18, 2021

Stantec Project Number: 185804671
Envirostor ID: 60003115
Site Code: 401963

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REPORT OF FINDING AND SUPPLEMENTAL SITE INVESTIGATION REPORT

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1.0 INTRODUCTION

On behalf of The Olson Company (Olson), Stantec Consulting Services Inc. (Stantec) has prepared this Supplemental Site Investigation (SSI) for the property located at the addresses 251 – 351 West Imperial Highway, City of La Habra, County or Orange, California (collectively the "Site" or "Property", **Figure 1**) to summarize historical Site investigations, and to present additional recent investigation findings.

Olson entered into a California Land Reuse and Revitalization Act (CLRRA) Agreement (Agreement) with the Department of Toxic Substances Control (DTSC) for the Site as outlined in the Docket No. HSA-FY20/21-125 executed on April 12, 2021.

This Report of Findings and Supplemental Site Investigation Report (Report) provides a summary review of completed investigations, presents the findings of additional investigations performed under the direction of the DTSC, consistent with CLRRA, Health and Safety Code 25395.94 and .95. The Report is divided into the following sections:

- Section 1.0 – Introduction: presents an overview of the project, a Site description and Operations and a description of the Site Geology and Hydrogeology.
- Section 2.0 – Background: This section presents a summary of completed Site investigations and remedial actions.
- Section 3.0 – Supplemental Site Investigations: This section describes the results of supplemental Site investigations conducted under the oversight of DTSC.
- Section 4.0 – Laboratory Services: This section discusses the laboratory analytical tests performed on the media collected during this investigation.
- Section 5.0 – Data Validation: This section validates the collected SSI analytical data.
- Section 6.0 – Investigation Results: This section presents the results of this investigation.
- Section 7.0 – Conclusions and Recommendations: This section presents conclusions and recommendations for the Site.

1.1 SITE DESCRIPTION AND OPERATIONS

The Property consists of approximately 4.91 acres of developed land located on two parcels (Assessor Parcel Numbers 019-042-21 and 019-042-24). The Property is currently occupied by Bentley Auto Group (251 West Imperial Highway), an automobile sales facility; and an automotive storage warehouse (261 West Imperial Highway); a two-story multi-tenant office building (271 West Imperial Highway); Pomona Box Company (301 West Imperial Highway), a box manufacturing facility; Eric Will Gymnastics Center (341 West Imperial Highway), a children's gymnasium; and, Mac Auto (351 West Imperial Highway), an automobile sales and repair shop.

Surrounding properties consist of a mixture of commercial and residential properties. A Property location map is illustrated on **Figure 1**. A Property map illustrating the main features of the Property is provided as **Figure 2**. The Property Owner is identified as Votaw Properties, LLC.

1.2 PROPERTY GEOLOGY AND HYDROGEOLOGY

The Property is located in the southern portion of the Peninsular Ranges Geomorphic Province characterized by northwest-southeast trending mountains and faults. The Property is situated between Puente Hills to the north and Coyote Hills to the southwest, at an elevation of approximately 257 feet above mean sea level (amsl). The Property is underlain by alluvium and associated deposits of Recent to Pleistocene age. Soil encountered during previous investigations (summarized in Section 2.0) generally consisted of interbedded sandy clay and clayey sands.

According to official maps of California, the Property is not located within an Alquist-Priolo (AP) Earthquake Fault Zone boundary or a liquefaction zone (California Department of Mining and Geology [CDMG], 2000). The closest mapped fault is the Whittier section of the Elsinore fault, located approximately 1 mile north of the Property.

The Property is located within the Coastal Plain of Orange County (8-001). The basin is bounded on the northwest and the north by the Los Angeles-Orange County line; the Whittier fault zone and consolidated rocks of the Puente Hills and Chino Hills to the northeast; consolidated rocks of the Santa Ana Mountains to the east; and consolidated rocks of the Laguna Hills and San Joaquin Hills to the south. The Pacific Ocean is the southwest extent of the basin (Department of Water Resources [DWR], 2004).

Based on historical information at the Property, groundwater is documented to be as shallow as 10 to 15 feet below ground surface (bgs) with a groundwater flow to the southwest. During recent investigations, static groundwater was observed to be present at 14-15 feet bgs (Stantec, 2021). Limited Phase II ESA performed by Ninyo & Moore in September 2019, groundwater was encountered between 17 and 18 feet bgs. Current groundwater elevation and flow direction are discussed in **Section 6.2**.

2.0 BACKGROUND

During the late 1980's, several underground storage tanks (USTs) were removed from various locations in the southern portion of the Property. Subsequent to the initial UST removal in 1986, a Leaking Underground Storage Tank (LUST) case was opened with the Orange County Health Care Agency (OCHCA). Files acquired from OCHCA regarding the LUST cases are attached as **Appendix A**. The Site was further investigated by Ninyo & Moore (N&M) and Stantec in 2019 through 2021. The historical investigations and remedial activities, and the recent investigations are discussed below. Recent investigation analytical data is summarized in attached **Tables 1 through 6**. Historical monitoring well locations are depicted on **Figure 2A**, and recent boring locations are depicted on **Figure 2B**.

2.1 HISTORICAL LUST CASE

According to the Case Closure Summary, prepared by OCHCA, dated August 6, 2002, the removed USTs consisted of the following:

Tank No.	Size (Gallons)	Contents	Status	Date
1	1,000	Gasoline	Removed	December 1986
2 & 3	1,000	Diesel	Removed	September 1989
4 & 5	5,000	Gasoline	Removed	September 1989
6 & 7	1,000	Gasoline	Removed	September 1989
8	550	Gasoline	Removed	September 1989

Although the above-table is provided in the OCHCA Case Closure Summary, there is conflicting information in the historical reports regarding the location, size, and capacity of these removed USTs, specifically the details regarding the USTs removed in September 1989 (**Appendix A**). There is no evidence of any remaining UST on the Property.

During removal activities of Tank No. 1 in December 1986, contaminated soils were observed within the tank cavity, and contaminated groundwater and free product were observed at a depth of approximately 13 feet bgs. The excavation was backfilled with the contaminated soil and site assessment activities were initiated. Records held by OCHCA indicate that seven additional USTs were removed in September 1989.

Seven soil borings (B-1 through B-7) were advanced in 1987, and completed as groundwater monitoring wells. Free product and dissolved-phase hydrocarbons were detected in all of these wells. Manual free product recovery was initiated in June 1987, and an automated recovery system was installed in April 1988. Four additional monitoring wells (B-7 through B-10) were installed on-site, and a single monitoring well (B-11) was installed in Imperial Highway. This historical monitoring well locations are depicted on **Figure 2A**.

Quarterly groundwater monitoring was conducted between 1988 and 2002. With approval from OCHCA, a single remediation system was selected for two sites; the adjacent property addressed as 101 West Imperial Highway, and the Subject Property addressed as 301 West Imperial. The two sites are approximately 400 feet apart and because both sites had similar contamination and had subsurface conditions that could be connected by underground piping a single treatment system for soil and groundwater remediation was used to address both releases. The remediation system consisted of a vapor extraction system (VES) using a Baker Furnace 500 scfm thermal/catalytic oxidizer and 30 gpm granular activated carbon groundwater extraction system. The dual phase remediation system operated continuously from January 1996 to August 1997. The VES was discontinued in August 1997 and the groundwater extraction system was discontinued in March 1998 due to low influent hydrocarbon concentrations. The VES system was removed in July 1999.

Post remediation quarterly groundwater monitoring showed that all monitoring wells have either maintained non-detectable levels or had a significant downward trend in residual concentrations. The last quarterly groundwater monitoring event was reportedly conducted in the first quarter of 2001.

For the closure assessment as directed by OCHCA, six verification soil borings/hydropunch groundwater samples (HP-1 through HP-6) were collected downgradient to evaluate the dissolved petroleum hydrocarbon concentrations across the Property. The closure soil sample data indicated some localized residual hydrocarbons remain in the soil from a depth of 10 to 15 feet bgs (capillary fringe zone) at locations between the office and the maintenance shop. Benzene, toluene, ethylbenzene, and xylenes (BTEX) concentrations were very low or non-detect and no methyl-tert butyl ether (MTBE) was detected in any of the soil samples. The groundwater samples were consistent with the groundwater monitoring data. Review of the post-remediation quarterly groundwater data indicated that there was no rebound in the residual groundwater concentrations.

Based on the low concentrations and limited extent of residual hydrocarbons in soil and groundwater, OCHCA issued a Remedial Action Completion Certification for all of the wells dated October 11, 2002, with the concurrence with the California Regional Water Quality Control Board, Santa Ana Region (**Appendix A**).

2.2 PHASE I & II, NINYO & MOORE, 2019

Ninyo & Moore prepared a Phase I ESA for the subject Property and issued the report on March 21, 2019, and identified the following environmental concerns:

- 251 West Imperial Highway – No removal documentation was found for the USTs, and it is unknown if the USTs were still present. Therefore, the historical USTs were considered a historical recognized environmental condition (HREC).
- 261 West Imperial Highway – Outstanding notices of violation for MSU Touchstone Concrete Rock Manufacturing and potential evidence of mismanaged waste (paint-stained sink) were considered a recognized environmental condition (REC).

- 301 West Imperial Highway – An unauthorized release from the former UST system is considered a conditional recognized environmental condition (CREC) as the petroleum-impacted soil and groundwater was cleaned up to the satisfaction of the OCHCA based on current site use with residual contamination remaining.
- 351 West Imperial Highway – Surface staining was observed around and beneath the basin outside the northwest side of the building and was considered a REC.
- Site-wide – Based on the results of the vapor encroachment screening matrix and the presence of petroleum hydrocarbon impact to the soil and groundwater at the central southern portion of the site, it is likely that a Vapor Encroachment Condition (VEC) exists beneath the site.

To address the identified RECs, HREC, CREC, and VEC, N & M conducted a limited Phase II ESA and issued the report on September 2019. The limited Phase II ESA also included a site-wide screening of surface soil for the presence of organochlorine pesticides (OCPs) and arsenic due to former site use for agricultural purposes. The scope of work for the limited Phase II ESA included advancing 19 soil borings to depths ranging from 5 to 20 feet bgs for the collection of soil and grab groundwater samples, installation of temporary soil vapor probes, and collection of soil vapor samples. The locations of these borings and soil vapor samples are depicted on **Figure 3**.

The results of the soil samples analyzed for Title 22 Metals reported no detections exceeding their respective regulatory screening levels, except arsenic. Arsenic detections ranged from 1.3 to 7.45 milligrams per kilogram (mg/kg) and exceeded the United States Environmental Protection Agency (USEPA) Regional Screening Levels (RSLs), DTSC Human and Ecological Risk Office (HERO) Screening Levels, and San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (ESLs). However, the detections of arsenic did not exceed the established DTSC background concentration of 12 mg/kg – and naturally-occurring concentrations of arsenic throughout the State of California typically exceed the screening thresholds listed above. Therefore, arsenic was not considered an environmental concern to the Site. Detectable concentrations of organochlorine pesticides (i.e., DDE and DDT) from shallow soil samples were below the EPA RSL and HERO note 3 screening levels for residential soil. Therefore, the concentrations do not represent a human health risk by regulatory agencies based on established human health risk-protective screening levels; and the historic agricultural use of the Site was not identified as a REC and no further work was recommended by N & M. Stantec concurs with that conclusion.

VOCs in soil matrix including ethylbenzene, isopropyl benzene, n-butylbenzene, n-propylbenzene, naphthalene, and sec-butylbenzene were detected at boring B14 at 15 feet bgs; however, the concentrations were below the EPA RSLs and HERO note 3 screening levels for residential soil and do not represent an environmental concern.

Total petroleum hydrocarbons (TPH) as gasoline (TPHg) were detected at a concentration of 250 mg/kg at boring B17 at 15 feet bgs which exceeds the EPA RSL for residential direct contact of soil of 82 mg/kg and the ESL of 100 mg/kg. Minor detections of TPH as diesel (TPHd) and TPH as oil (TPHo) were also

detected in borings B10, B12, B15, B16 and B19 at concentrations below the corresponding EPA RSL and ESL.

The results of laboratory analysis of grab groundwater samples showed maximum concentrations of benzene at 22 micrograms per liter (µg/L) which exceeds the California maximum contaminant level (MCL) of 1 µg/L; ethylbenzene at 380 µg/L which exceeds the California MCL of 300 µg/L; and naphthalene at 110 µg/L which exceeds the ESL of 0.71 µg/L. Additionally, TPHg was reported at a maximum concentration of 3,200 milligram per liter (mg/L), which exceeds the current screening level for gasoline in groundwater.

Multiple VOCs were detected in the soil vapor samples collected across the Site. Concentrations of VOCs detected in soil vapor samples were compared to the DTSC Modified Indoor Air Screening Levels (MIASLs) using 0.03 and 0.001 attenuation factors (AFs) for residential land use. Benzene was detected in seven of ten soil vapor samples at concentrations ranging from 12 to 65 micrograms per cubic meter (µg/m^3), which exceed the calculated residential screening level with an applied 0.03 attenuation factor. Additionally, ethylbenzene was detected in the same seven soil vapor samples at concentrations ranging from 161 to 259 µg/m^3 which exceed the residential RSL of 37 µg/m^3. N-butylbenzene was detected in five soil vapor samples but not at concentrations above the screening level.

Based on these results, N & M concluded that the limits of impacted soil, soil vapor, and/or groundwater have not been delineated. However, the impacted area appears generally located within the vicinity of the former USTs. Petroleum hydrocarbons were generally not detected in the upper 10 feet bgs; however, below 10 feet bgs at 301 West Imperial Highway, certain petroleum hydrocarbon concentrations exceeded screening levels for residential land use. N & M recommended that, prior to disturbing soil at the Site, a Soil Management Plan should be prepared.

N & M concluded that soil vapor samples showed contaminant concentrations at levels that were not high enough to justify vapor extraction or remediation; however, development plans should include appropriate human health risk mitigation measures (i.e., vapor barriers). N & M stated that additional vapor probes may be needed to further define limits of recommended vapor mitigation measures.

2.3 PHASE I & II ESA, STANTEC 2020

Stantec performed a Phase I ESA for the Property, dated January 7, 2020. That Phase I ESA identified several RECs, including HRECs and CRECs, and VECs associated with the Property. A summary of those RECs and associated historical activities is provided below.

The Phase I ESA completed by Stantec identified evidence of the following RECs in connection with the Property (which differs in the conclusion developed by N &M in prior reports):

- **Soil Vapor Impacts.** Prior assessment of soil vapor at the Property by N & M confirmed the presence of VOCs in soil vapor at levels exceeding applicable human health risk screening levels. The VOC impacts to soil vapor appear to be sourced from former gasoline underground storage tanks (USTs) that were located on-site. Further soil vapor assessment was

recommended to delineate the impacts to soil vapor and for the purpose of providing recommendations for any appropriate vapor mitigation measures.

- **Former USTs.** Data currently provided in the N & M report does not indicate impacts to soil in the upper 10 feet at the former locations of the USTs that were present at 251 West Imperial Highway. However, at the location of the UST formerly located at 301 West Imperial Highway, no impact was present at this depth, but impacts were detected at greater depths. The USTs were closed by the OCHCA. Therefore, Stantec recommended completing further vertical assessment at this location in order to verify that no impacts to soil or groundwater are present, and to evaluate whether residential regulatory closure is warranted. In addition, Stantec recommended provide OCHCA notice of DTSC's jurisdiction over the Site under CLRRA to ensure coordination.
- **Soil Vapor Impacts from Sink.** Elevated soil vapor impacts were detected at the acrylic paint sink. Further assessment of soil and soil vapor was recommended in this area to verify no further impacts exist.

In addition, from a regulatory compliance perspective, Stantec recommends confirming with DTSC that they have exclusive environmental jurisdiction over the Site. Assuming that DTSC concurs, we further recommend requesting that DTSC provide notice of OCHCA that it has assumed jurisdiction, and that OCHCA make a notation on Geotracker and to its files that DTSC is overseeing further Site response actions for a planned residential development.

Phase II ESA, August 2020

To assess the RECs identified above, Stantec completed a Phase II ESA in August 2020. That Phase II ESA identified residual soil impacts of TPHg, TPHd, TPHo, and other petroleum-related VOCs within the former UST cavity located in the southern portion of the Property in the vicinity of soil boring SV3, at a depth of approximately 15 feet. The limits of soil impacts were not defined laterally or vertically in this area by the completed assessment. Similar concentrations were reported by N & M at the 15-17-foot depth interval at other portions of the Property in 2019. Further assessment of this soil impact was recommended. It appeared, based on the data at that time that this impact in soil is the source of the petroleum-based soil vapor impacts detected on the Property thus requiring assessment to evaluate its impact on the detected soil vapor.

Soil vapor assessments identified benzene impacts across the Property at concentrations exceeding the Department of Toxic Substances Control Tier 1 residential screening levels, using an attenuation factor of 0.03. Additionally, localized areas of benzene impact to soil vapor exceed the risk-based residential screening levels using an attenuation factor of 0.001. TPHg impacts to soil vapor exceed the residential use screening level across the Property. Specifically, localized exceedances of TPHg, ethylbenzene, and methylene chloride are located in the area of the former 1,000-gallon UST located in the southern portion of the Property (boring SV3). Further lateral assessment of these soil vapor impacts above the 0.03 screening levels was recommended. Stantec recommended additional lateral soil vapor assessment to further define the lateral limits of impact above the 0.03 attenuation screening levels on the Property and the source of that impact.

Groundwater was present during the August 2020 assessment at approximately 17 feet bgs and was known to be historically impacted with various fuel-related chemicals in the vicinity of SV3 (Ninyo & Moore, 2019). Therefore, the resulting soil impacts in this depth zone are likely attributed to fluctuating groundwater levels, resulting in a “smear zone” (soil that is temporally saturated and unsaturated with groundwater level fluctuations), and soil vapor impacts are likely, in part, attributed to localized groundwater and soil impacts. The lateral limits of this groundwater (and soil impacts) impact were not defined by the assessment completed at that time. Further assessment of the groundwater and soil impacts was recommended to evaluate where soil vapor impacts would most likely be sourced from, and for closure evaluation with the OCHCA and/or DTSC for the change in use from commercial/industrial to residential. It was recommended that at least three wells be installed in the area of the UST cavity to define the peak concentrations associated with the release from the former UST cavity and to define the groundwater flow direction, as well as the lateral limits of soil impacts above the groundwater table.

Additional Phase II ESA, October 2020

Further assessment of the groundwater and soil impacts was recommended to evaluate where soil vapor impacts would most likely be sourced from, and for closure evaluation with the OCHCA and/or DTSC for the change in use from commercial/industrial to residential. To further characterize soil vapor impacts at the Property, and to assess current groundwater conditions, Stantec performed an additional round of investigation in September and October 2020, which included the following:

- Installation, development, and sampling of 3 groundwater monitoring wells at the Property (MW1 through MW3).
- Advancement of 6 temporary soil vapor borings on the Property (SV10 through SV15). Soil vapor sampling probes were installed at the five- and fifteen-foot sampling interval in all locations, with the exception of boreholes SV10 and SV11. Saturated soils were encountered at the fifteen-foot depth interval within SV10 and at the twelve-foot depth interval in SV11. Consequently, the boreholes were sealed with bentonite to approximately two feet above the inferred saturated zone, resulting in the deep probes set at thirteen feet bgs in SV10, and ten feet bgs in SV11.
- Collection of soil vapor samples from locations SV10 through SV15, and abandonment of soil vapor points SV10 through SV15.

Hydrocarbon staining and odors were observed within borehole MW-1 from approximately 3 feet bgs to 13 feet bgs. Hydrocarbon staining and odors were observed in borehole MW-2 from approximately 4.5 feet bgs to 8 feet bgs. No hydrocarbon odors or petroleum hydrocarbon sheen were observed during groundwater well development or during groundwater sampling activities. Groundwater was observed at approximately 17 feet bgs in boreholes MW-1 through MW-3 during drilling. However, static groundwater was measured from 14.44 bgs in MW-2 to 15.02 bgs in MW-1 during the groundwater well gauging and sampling. This interval indicates the presence of groundwater under confined conditions and a layer of low permeable soil or aquitard.

Groundwater elevations were measured from 244.26 feet amsl in MW-2 to 245.30 feet amsl in MW-3. Groundwater was found to flow to the southwest at 202 degrees from north, and at a gradient of 0.0055

feet/foot (ft/ft) using the United States Environmental Protection Agency (USEPA) online hydraulic gradient calculator. Slow groundwater recharge was observed in groundwater wells MW-1 and MW-2 during development activities.

This assessment identified soil impacts of TPHg and TPHd above residential screening levels in the vicinity of the former UST cavity located in the southern portion of the Property at a depth of approximately fifteen feet. The limits of soil impacts were not defined laterally or vertically in this area. Similar concentrations were reported in the previous investigation in this area by N & M at the 15-17-foot depth interval at other portions of the Property in 2019. Groundwater levels were observed at approximately 17 feet bgs during drilling; however, static groundwater levels were measured at approximately 15 feet bgs. Historically, groundwater was reported as shallow as 10 feet bgs with in the former UST cavity. It is interpreted that the identified hydrocarbons impact to soil are within a fluctuating groundwater zone (or “smear zone”). It would appear this impact in soil is the source of the petroleum-based soil vapor impacts detected on the Property, as discussed below.

Soil vapor assessments have identified benzene impacts across the Property at concentrations exceeding the DTSC-SL using an attenuation factor of 0.03. Additionally, localized areas of benzene impact to soil vapor exceed the risk-based residential screening levels using an attenuation factor of 0.001. TPHg impacts to soil vapor exceed the residential use screening level across the Property. Specifically, localized exceedances of TPHg, ethylbenzene, and methylene chloride are located in the area of the former 1,000-gallon UST located in the southern portion of the Property (boring SV3). Tetrachloroethylene (PCE) was also detected at concentrations exceeding the DTSC-SL using an attenuation factor of 0.03 at location SV-14, located in the northeastern portion of the Property.

No oxygen content measurements were collected as part of this assessment. Many petroleum hydrocarbons may naturally biodegrade in the vadose zone through the actions of microorganisms found naturally in soil. When oxygen supply from the atmosphere is sufficient, biodegradation of petroleum hydrocarbons can occur relatively quickly, will generally produce less harmful compounds (i.e., biodegradation products), and can result in substantial attenuation of petroleum hydrocarbon vapors over relatively short distances in the vadose zone (USEPA, 2015). According to the *User’s Guide: Derivation and Application of Environmental Screening Levels* (“ESL User’s Guide”, California Waterboard, 2019) a bio-attenuation zone is considered present if oxygen content exceeds 4 percent by volume in soil vapor. Stantec recommended collecting soil vapor oxygen content data in future soil gas investigations at the Property to confirm a bio-attenuation zone is present at the Property, specifically in areas of elevated VOC concentrations.

Elevated TPHg, benzene, chloroform, ethylbenzene, and naphthalene were reported at location SV12, located in the northwestern portion of the Property. No former USTs, or other subsurface structures, are known to be located in the vicinity of SV12 which would indicate a potential source of vapor impacts in this area. Surface operations in this area include material storage, and associated vehicle parking, for the Pomona Box Company.

Ethylbenzene was detected above the risk-based screening level using an attenuation factor of 0.001 at SV10, located hydraulically down-gradient of the Mac Auto facility in the southwestern portion of the

Property. Stantec recommended performing additional soil and soil vapor investigations related to this facility in attempt to identify potential sources of vapor impacts in this area.

2.4 CONTINUED PHASE II ESA, STANTEC 2021

Stantec performed a continued Phase II ESA on the Property in February and March of 2021 to further characterize the extent of VOC impacts to soil vapor in the area of MAC Auto and beneath the Pomona Box Company warehouse building, and to further characterize the lateral extent of soil impacts in the area of the former 1,000- gallon UST located in the southern portion of the Property.

This assessment identified soil impacts of TPHg and TPHd above residential screening levels in the vicinity of the former UST cavity located in the southern portion of the Property at a depth of approximately fifteen feet. Similar concentrations were reported in the previous investigation in this area by Stantec in 2020, and by N & M at the 15-17-foot depth interval at other portions of the Property in 2019. First encountered groundwater levels were measured at approximately 16 feet bgs during groundwater monitoring conducted during this investigation, consistent with prior sampling events (16 to 17 feet bgs). Static groundwater is located at approximately 15 feet bgs; however, it is noted that groundwater was reported as shallow as 10 feet bgs within the UST cavity, where the low-porosity or aquitard layer had been completely removed. It is interpreted that the identified hydrocarbons impact to soil are within a fluctuating groundwater zone (or “smear zone”). No soil matrix petroleum impacts above residential screening criteria are present above the fifteen-foot depth intervals. It is anticipated that the depth of soil disturbance during the anticipated Property development will be contained to the upper 10 feet. Therefore, it is anticipated that soils disturbance associated with the anticipated development will not contain the elevated levels of TPH, which are present approximately 15 feet bgs. It would appear this impact to soil is the source of the petroleum-based soil vapor impacts detected in this area of the Property, as discussed below. Therefore, it was recommended that this TPH impacted soil proximate to the former UST cavity be removed from the Property as part of remedial actions to eliminate an ongoing source of impact to soil vapor.

High vacuum conditions were encountered during soil vapor sampling activities at the following soil vapor sampling points, resulting in no vapor samples being collected from the following locations: SV-17-12, SV-18-12, SV-19-12, SV-20-12, SV-24-12, SV-25-12, SV-26-5 and -12, SV-27-5 and -12, SV-28-5 and -12, SV-29-12, and SV-30-12.

To investigate the elevated ethylbenzene detected at SV10, located hydraulically down-gradient of the Mac Auto facility in the southwestern portion of the Property, Stantec installed several soil vapor points in the immediate area of the MAC Auto facility (SV-22 through SV-29). Elevated levels of benzene were detected at locations SV-22, SV-23, SV-25, and SV-29 at a maximum concentration of 13.2 µg/m^3, exceeding the DTSC MIASL of 3.2 µg/m^3 using an attenuation factor of 0.03. No further ethylbenzene exceedances were identified in this area during this assessment.

Benzene and TPHg were detected above the 0.03 AF residential screening criteria below the Pomona Box Company warehouse located in the central portion of the Property; however, no benzene or TPHg detections exceeded the 0.001 AF screening levels during this assessment.

Soil vapor assessments have identified benzene impacts across the Property at concentrations exceeding the DTSC-SLs, using an attenuation factor of 0.03. Additionally, localized areas of benzene impact to soil vapor exceed the risk-based residential screening levels using an attenuation factor of 0.001. TPHg impacts to soil vapor exceed the residential use screening level across the Property. Specifically, localized exceedances of TPHg, ethylbenzene, and methylene chloride are located in the area of the former 1,000-gallon UST located in the southern portion of the Property.

According to the ESL User's Guide (California Waterboard, 2019), a bio-attenuation zone is considered present if oxygen content exceeds 4 percent by volume in soil vapor. Oxygen data was collected at locations SV-23, SV-29, and SV-30 and measured at 1.0 %, 3.5 %, and 1.6 % by volume, respectively. Although oxygen is present below the 4% by volume threshold, the Property appears to meet the defining qualifications of a bio-attenuation zone under Scenario 3, Figure A; benzene concentrations are less than 100 µg/L in groundwater at the Property, and combined TPHg and TPHd is less than 100 mg/kg throughout the entire depth of the "bio-attenuation zone" within the upper five feet of soils.

Groundwater is present at approximately fifteen feet bgs and flows to the southwest. Groundwater samples collected from the newly installed on-site groundwater monitoring wells indicate that no groundwater impacts are present in the central portion of the Property, which is consistent with the presence of a confined aquifer and inferred low-porosity soil or aquitard. Additionally, the groundwater data collected from MW-1, located in the vicinity of the former 1,000-gallon UST cavity, indicates that minimal impacts of TPHg are present, above the Tier 1 ESL, but below residential direct-exposure screening levels. Based on the groundwater samples collected from this assessment, and Stantec's October 2020 investigation, no impact to groundwater appeared to exist that would require further assessment at that time.

Various VOCs have been identified in soil vapor throughout the Property exceeding 0.03 attenuation factor screening levels, and localized areas exceeding 0.001 risk levels. It was recommended that a vapor intrusion human health risk assessment (VIHHRA) be completed to evaluate the potential risks posed by the detected soil vapors. The VIHHRA that was recommended should be completed in accordance with the policies of the State of California's low-risk closure policy, given that the release and the impact to soil and soil vapor appear to be sourced from the UST release, as well as the DTSC Vapor Intrusion Guidance (VIG) concerning the other VOCs detected. Based on the results of that VIHHRA a determination could be made if vapor mitigation measures (*i.e.,* vapor barriers and venting) will be needed in portions of or across the Property.

2.5 DTSC ENGAGEMENT, 2021

Olson entered into a California Land Reuse and Revitalization Act (CLRRA) Agreement (Agreement) with the DTSC for the Site as outlined in the Docket No. HSA-FY20/21-125 executed on April 12, 2021. The scope of work for the additional Site Assessment were developed in consultation with DTSC staff (Staff) during a project scoping meeting held on April 23, 2021, a Site visit on May 5, 2021, and a follow-up meeting on May 19, 2021. These meetings were held to review historical assessment data, and to evaluate the presence of any data gaps, or other environmental concerns that warranted further

assessment or consideration. As a results of that review, the following environmental conditions were identified that warranted further Site considerations:

- Pad-Mounted Transformer: A single (1) pad-mounted electrical transformer is located in the central-eastern portion of the Site (**Figure 2**). No assessment has been conducted to evaluate whether any potential unknown historical releases from the transformer has affected the Site. As a result, DTSC indicated that soils in the immediate vicinity of this transformer should be assessed. Given the multiple utilities present in this area, it was determined that this assessment would be conducted at the time of the transformer removal during demolition activities.

- Groundwater Quality: A former 1,000-gallon underground storage tank (UST) was removed from the Property in 1986. Free product was observed within the UST cavity at the time of removal. Subsequent soil and groundwater investigations were performed under the oversight of the OCHCA. The case was closed by the OCHCA in 2002. To investigate current groundwater conditions at the Site, Stantec installed three (3) groundwater monitoring wells on the Site in October 2020. Monitoring well 1 (MW1) is located in the immediate vicinity of a former 1,000-gallon underground storage tank (UST). Monitoring wells 2 and 3 (MW2 and MW3) are located hydraulically cross- and up-gradient from MW1 to investigate potential impacts from the current Site operations. Two rounds of groundwater monitoring have been performed in October 2020 and March 2021, and have identified very low detections of TPHg and TPHd in the immediate vicinity of the former UST (**Table 5**).

- Temporal Soil Vapor Data: Soil vapor samples have been collected and analyzed for VOCs for due-diligence purposes (**Table 4A**). Investigations were conducted over three separate monitoring events in August 2020, September and October 2020, and March 2021. The data collected to-date report multiple petroleum-related and chlorinated VOCs in soil vapor, including benzene, ethylbenzene, naphthalene, and PCE exceeding DTSC Human and Ecologic Risk Office (HERO) Note 3 modified indoor air screening levels (MIASLs) when evaluated using an attenuation factor (AF) of 0.03. Further, limited detections of benzene and ethylbenzene have been detected exceeding MIASLs when evaluated using an attenuation factor of 0.001.

As a result of that review, in consultation with DTSC, Stantec submitted a Site Assessment Plan (SAP) for additional site assessment activities. The findings of that assessment are presented in Section 3.0 of this report.

3.0 SUPPLEMENTAL SITE INVESTIGATIONS

Stantec prepared a Site Assessment Plan (SAP), and associated Quality Assurance Project Plan (QAPP), dated June 28, 2021, for submittal to the DTSC. The DTSC issued a *Conditional Approval of Site Assessment Plan, La Habra (Euclid & Imperial, 251 – 351 West Imperial Highway, La Habra (Site Code: 401963))*, dated July 14, 2021 (Conditional Approval Letter) which included comments provided by the Human and Ecological Risk Office (HERO) and Geologic Services Branch (GSB). Stantec submitted a *Revised SAP*, *Revised QAPP*, and a *Response to Comments (RTC)*, dated July 16, 2021, which incorporated responses to the GSB and HERO comments provided in the Conditional Approval Letter. The Conditional Approval Letter, RTC, and submittal correspondence are provided as **Appendix B**.

3.1 SCOPE OF WORK

The following subsections discuss the scope of work developed to address the concerns outlined in Section 2.5, as presented in the SAP. Drilling, soil sampling, groundwater sampling, and soil vapor sampling procedures are outlined in the SAP. The objectives of these additional investigations and processes are to:

1. Further evaluate groundwater conditions at the Site, specifically down-gradient of the former UST; and,
2. Further evaluate temporal Site soil vapor concentrations to assist in human health risk assessment and risk management decision making.

To fulfill these objectives, this investigation consisted of the following:

- Installation and development of two (2) additional groundwater monitoring wells (MW-4 and MW-5), located hydraulically down-gradient of the former LUST;
- Perform groundwater monitoring of the on-site groundwater wells MW-1 though MW-5;
- Reinstallation of historical soil vapor locations where chemicals were detected exceeding the 0.03 attenuation factor screening level. These locations include: SV1A, SV2A, SV3A, SV4A, SV6A, SV7A, SV8A, SV9A, SV10A, SV11A, SV12A, SV13A, SV14A, and SV15A. Note that chemicals were identified at location SV5 at concentrations exceeding 0.03 attenuation factor screening levels. In consultation with DTSC, it was determined that this location would not be reinstalled.
- Installation of eight (8) supplemental soil vapor locations along the north, east, and southern Property boundaries (SV31 through SV38);
- Installation of four (4) soil vapor locations around the perimeter of the gymnasium building (SV39 through SV42);
- Sampling of newly/reinstalled soil vapor points;

- Resampling of the following soil vapor locations where chemicals were identified exceeding 0.03 attenuation factor screening levels to evaluate seasonal fluctuations: SV16, SV17, SV18, SV22, SV23, SV25, and SV29; and,
- Attempt to resample previous soil vapor locations where “no-flow” or “high-vacuum” conditions were observed: SV26, SV27, and SV28.

Groundwater monitoring well locations are depicted on **Figure 3A**. Soil vapor borings are depicted on **Figure 4**.

3.2 DEVIATIONS

The following deviations from the scope of work, which Stantec believes are not significant, occurred during the implementation of the field investigation:

- During geophysical borehole clearance activities, a utility corridor was identified in the immediate area of the proposed location of groundwater well MW-4. Consequently, MW-4 was relocated approximately fifteen feet west. The location change was observed and approved by DTSC.
- A single soil sample was collected from boring MW-4 at 11.5 feet bgs (MW-4-11.5) during drilling activities for laboratory analyses.
- During soil vapor sampling, several locations were identified as “high vacuum” or “low flow”. Per the SAP and DTSC direction, low-flow sampling techniques were attempted at these locations; however, due to the sustained high vacuum incurred on the sampling train, leak check compound (LCC) was detected in multiple high-vacuum samples. The presence of LCC was reported and discussed with DTSC. It was determined that, given the presence of LCC, the high-vacuum samples would not contribute substantiated data. Consequently, it was determined between DTSC and Stantec that, as soil vapor sampling continued, where high-vacuum conditions were encountered, no sample would be collected.
- Given the soil vapor sample injection volume required to report to 1 $\mu g/m^3$, and the required amount of time to collect high-vacuum samples, in an effort to efficiently manage on-site time, the soil vapor sample volume was decreased, resulting in a laboratory reporting limit of 2 $\mu g/m^3$ on some soil samples. The increased laboratory reporting limit on these samples does not affect the quality of the data collected.

No other deviations from the original scope of work occurred during implementation of the SAP. The deviations from the scope of work augmented the initially planned investigations to provide more substantiated data and did not adversely affect the investigation results.

3.3 PRE-FIELD ACTIVITIES

On July 13, 2021, Stantec marked all proposed boring locations on the Site and notified Underground Service Alert of Southern California (USA). Additionally, all proposed boring locations were cleared by a private utility locating service on this date prior to any ground disturbance activities.

On July 14, 2021, following receipt of the Conditional Approval Letter, Stantec submitted an Application for Well Construction Permit pertaining to the proposed soil vapor probes (Soil Vapor Probe Permit) and an Application for Well Construction Permit pertaining to the proposed groundwater monitoring wells (Groundwater Well Permit) to OCHCA. The OCHCA approved of the permits on July 15, 2021. The approved permits are attached as **Appendix C**.

3.4 FIELD INVESTIGATION

Stantec provided notification to DTSC of the commencement of field activities the week of July 13th, 2021. Field investigations were completed between July 13 and July 27, 2021, in accordance with the scope of work outlined in the DTSC-approved SAP. DTSC Engineering Geologist, Wendy Arano, visited the Site to observe the drilling and installation of groundwater monitoring wells on July 16, and the drilling and installation of soil vapor monitoring points on July 21, 2021. Deviations from the scope of work outlined in the SAP are provided in Section 3.2.

The following measures were performed during the field investigation:

- All proposed boring locations were cleared by a private utility locating service prior to ground disturbance activities;
- Soils were excavated using a hand auger in the upper five feet to collect shallow soil samples, and for additional utility clearance;
- Soil sampling was performed for lithologic description only from the soil vapor and groundwater monitoring well boring locations;
- All soils collected for lithologic description were field screened using a photoionization detector (PID). In the event stained and/or odorous soils were encountered at proposed groundwater monitoring well and soil vapor locations, those soils will be collected using USEPA method 5035 preservation, and submitted to the analytical laboratory for analyses.
- All soil samples collected during this investigation were stored in an ice-chilled cooler pending transport to an off-Site analytical laboratory for potential analyses.
- All soils collected during this investigation were visually examined by Stantec field personnel who logged the soils in accordance with the unified soil classification system (USCS). A photoionization detector (PID), equipped with a 10.6 electron volt (eV) bulb and calibrated to 100 parts per million by volume (ppmV) isobutylene span gas, was used to monitor headspace for VOC vapors in all soil samples collected.

3.4.1 Groundwater Investigation

Two (2) groundwater monitoring wells (MW-4 and MW-5) were installed in the southern portion of the Site, hydraulically down-gradient from the former 1,000-gallon gasoline LUST on July 16, 2021 (**Figure 4A**). Prior to drilling, a hand auger was used to excavate soils to a depth of five feet bgs to clear for utilities. Once a depth of five feet bgs had been reached, the remainder of the borings were drilled with an 8-inch outer diameter hollow stem auger (HAS) drilling rig. Discrete soil sampling commenced at a depth of five feet bgs, and at subsequent five-foot intervals for lithologic description and potential chemical analysis. Soil sampling was performed using a split spoon sampler lined with three 6-inch stainless steel sampling tubes for the primary purpose of observing the depth of saturated soil for proper screening of the wells. At each sampling interval, and sampler will be driven into undisturbed soil using a 140-pound hammer dropping 30 inches until approximately 18 inches of penetration was achieved. The number of blow counts per 6-inch increments will be noted on the boring logs. Boring logs providing the PID measurements and interpreted geology are included in **Appendix D**.

During advancement of boring MW-4, dark grey staining and odors were observed in the 10-11.5 foot soil sample. This material has been observed in other borings across the Site in previous assessments; however, at the request of DTSC, this sample was submitted to the analytical laboratory for analyses of TPH and VOCs to confirm potential soil impacts. No staining or odors were observed in soils collected from boring MW-5.

3.4.1.1 Groundwater Monitoring Well Installation

Given the Site lithology consists predominately of fine-grained soils, determining an accurate groundwater depth during drilling has proven challenging in previous assessments. Therefore, prior to installing the well casing at MW-4 and MW-5, groundwater measurements were collected from the on-Site groundwater monitoring wells to confirm approximate groundwater depth in an effort to assist in determining proper well screening.

Following completion of drilling to the target depth at each location, 2-inch diameter polyvinyl chloride (PVC) well casing and 0.010-inch slotted PVC well screen was installed. The borehole annulus surrounding the screened interval was backfilled with a Monterey #2/12-size sand filter pack installed from the bottom of the boring to approximately one foot above the top of the well screen. The well construction outlined in the SAP consisted of a well screen from 12 – 28 feet bgs; however, in an effort to mitigate the potential of a submerged well screen, monitoring wells MW4 and MW5 were constructed with well screens from 8 – 28 feet bgs. Following the installation of the well screen and filter pack, a two-foot transition seal consisting of hydrated bentonite chips was placed on the top of the filter pack. The remainder of the borehole annulus was filled with a cement grout mixture to within 2 feet of the ground surface. Surface completion consisted of a traffic-rated flush-mount well vault. Well construction details are presented on the borings logs in **Appendix D** and summarized on **Table 1**.

3.4.1.2 Groundwater Monitoring Well Development

After at least 72 hours had passed following the installation of the wells, the wells were developed using surging and/or bailing methods. The wells were developed by repeatedly surging, bailing and/or pumping the wells until a minimum of three saturated well-bore volumes were purged from the well and field monitoring parameter (i.e. pH, specific conductance, temperature, and dissolved oxygen) stabilize, whichever was greater. Copies of the well development logs are included in **Appendix D**.

3.4.1.3 Well Survey

Following installation and development of the groundwater monitoring wells, the wells were surveyed by a State of California licensed surveyor to obtain horizontal and elevation coordinates. A summary of the monitoring well coordinate data is presented on **Table 1**. A copy of the survey data is included in **Appendix D**.

3.4.1.4 Groundwater Sampling

To evaluate temporal trends in groundwater concentrations, flow direction and gradient, groundwater gauging and sampling was performed on July 26, 2021. The depth to groundwater within each well casing was measured to the nearest 0.01 foot using either an electronic Solinst water level indicator or an electronic oil-water interface probe. Wells with known elevation were measured from the top of each well casing as determined in accordance with previous surveys. The wells were purged and sampled following the low-flow (minimum draw down) methods described by Puls and Barcelona (1996) using a submersible pump.

Dedicated ¼ -inch inner-diameter polyethylene tubing was used at each monitoring well to purge and sample the wells. The wells were purged at a low flow rate (*i.e.*, <0.5 L/min) through a flow cell equipped with a Horiba U-53 multi-meter. The flow rate was monitored and recorded throughout purging to ensure the flow rate remained <0.5 L/min. Groundwater samples were collected following three consecutive purge parameters stabilization readings, in accordance with the criteria outlined in Table 1 of *Representative Sampling of Groundwater for Hazardous Substances, Guidance Manual for Groundwater Investigations* (DTSC, 2008):

- Temperature: ± 3% of reading (minimum of ± 0.2o C)
- pH: +/- 0.1
- Specific Electrical Conductance (SEC): +/- 3%
- Oxidation-reduction potential (ORP): +/- 10 millivolts
- Dissolved Oxygen (DO): +/- 10%, down to the level of accuracy at 0.2 milligram per liter
- Turbidity is reduced to below 10 nephelometric turbidity units (NTU), or as low as practicable.

Groundwater samples were transferred directly from the dedicated well tubing into laboratory-provided sample containers with preservative, if required. When transferring samples from the tubing into bottleware, care was taken to minimize contact of the dedicated sample tubing with the sample container. Following collection, each sample was labeled, annotated on chain of custody record, and stored in an

ice-filled cooler for analysis of TPH and VOCs, in accordance with the methods and procedures outlined in the QAPP.

3.4.2 Soil Vapor Investigation

From July 20 through July 22, 2021, Stantec oversaw the advancement and installation of twenty-six (26) dual-nest soil vapor borings, as outlined in Section 3.1, with soil vapor probes set at the five- and ten-foot depth intervals. Prior to drilling, a hand auger was used to excavate soils to a depth of 5.5 feet bgs to clear for utilities. Given the OCHCA Vapor Probe permit requirement of at least 2-inches between the annulus of the borehole and well casing (*i.e.* vapor probe tubing), the resulting diameter of the borehole from surface to 5.5 feet bgs was 6.5-inches.

The remainder of the borings was advanced using a direct push technology (DPT) drilling rig (e.g., Geoprobe). Sampling of soils were conducted using a 48-inch long by 2.25-inch diameter stainless steel sampler lined with a clear acetate sample liner into undisturbed soils using a hydraulic ram on the drilling rig until 48 inches of penetration was achieved. Upon advancement of the sampler to the full 48-inches, the steel sampling rods was extracted from the boring and the sampler removed. The drilling and sampling procedures was repeated until the proposed terminal depth of the boring.

3.4.2.1 Soil Vapor Probe Installation

The monitoring points were constructed by first placing approximately 4 to 6 inches of Monterey No. #3 wash sand, or equivalent, in the bottom of the borehole. A permeable vapor tip (*e.g.*, airstone) connected to 1/4 -inch diameter Nylaflow tubing was then be lowered to the bottom of the borehole and then backfilled with filter sand, until approximately 12-inches of filter pack was placed. A transition seal consisting of approximately 12-inches of dry bentonite was then be placed above the filter pack, followed by an annular seal consisting of hydrated bentonite grout until the next sampling interval was reached. The sequence will then be repeated at the next proposed vapor probe interval, until sealing the borehole to one foot bgs. Surface completion consisted of a traffic-rated flush-mount well vault. Well construction details are presented on the borings logs in **Appendix D.** The soil vapor points were left on-site for potential future seasonal variability evaluation.

3.4.2.2 Soil Vapor Probe Sampling

Soil vapor samples were collected in accordance with the methods and procedures outlined by the DTSC and CRWQCB Advisory – Active Soil Gas Investigations, dated July 2015 a minimum of 48-hours after installation to allow for equilibration on July 26 and 27, 2021. Soil vapor samples were not collected during or within five days of a significant rain event (defined as greater than ½-inch or greater of rainfall during a 24-hour period). It is noted that a brief rain event occurred from the night of July 25 and into the morning of July 26, 2021, resulting in approximately 0.03 inches of rain at the Site. Given the Site is nearly completely hardscaped, the recorded amount of precipitation is not material.

Prior to sampling, a shut-in test was conducted on the sample train to ensure all connections and fittings are airtight. The shut-in test was performed on the sampling train by applying a vacuum of 100 inches of water column (WC) to the sampling train and monitoring magnehelic gauges for a pressure drop for one

minute. If loss of vacuum was observed, fittings were adjusted as needed until no vacuum loss was observed during subsequent shut-in tests.

After the sampling equipment passed the shut-in test, the probe was purged to remove internal air from the sample train (calculated from the internal volume of the tubing and probe tip; the void space of the sand pack around the probe tip; and the void space of the dry bentonite in the annular space). Three internal volumes were purged from each sampling location. Immediately following purging the internal volumes, the soil vapor was collected by connecting a glass syringe to the sampling port with Teflon® or Nylaflow® tubing. A three-compound tracer gas consisting of n-pentane, n-heptane, and n-hexane was placed above the surface seal and along the sampling train to evaluate the integrity of the seal. The samples were collected by the mobile laboratory technician into pre-cleaned glass syringes for analysis for VOCs following USEPA method 8260B at an on-Site mobile laboratory.

Low flow / high vacuum conditions were encountered during previous soil vapor sampling activities at the Site, and encountered during this assessment. Specifically, high vacuum conditions are defined as the inability to maintain an appreciable flow rate (100 mL/min or greater) without applying excessive vacuum, which is considered to be greater than 100 inches of WC. Where high vacuum conditions were encountered, an alternate sampling method, as described in Appendix D of the Advisory, and further outlined in the SAP, was followed. This sampling generally consisted of:

- Where soil conditions prohibit the ability to collect soil vapor samples at a continuous rate, a vacuum of 100 inches of WC was applied to the soil vapor probe, and the probe valve was closed to allow the vacuum to dissipate, and allow soil vapor to slowly enter the sand pack and tubing from the surrounding soils. Following vacuum dissipation, the probe valve was reopened, and another aliquot of sample was collected. Although this procedure was attempted until the soil vapor probe was adequately purged and sampled, no dissipation was observed over an extended duration. Therefore, where high vacuum conditions were observed, a no-purge / grab soil vapor sample was collected.

Soil vapor samples were annotated on a chain-of-custody and included the sample identification, date and time of collection and the sampler's name. Additionally, to further evaluate the presence of oxygen, and to establish criteria of a bioattenuation zone below the Property, all soil vapor probes were field screened for the presence of oxygen using a Landtec GEM 5000. After field screening, select soil vapor locations were samples for the presence of oxygen. Further, methane was detected above background concentrations in select locations; to confirm the methane field measurements, soil vapor samples were collected from those locations and analyzed for the presence of methane.

3.4.3 Quality Assurance / Quality Control

Quality Assurance/ Quality Control Samples (QA/QC) samples were collected during all stages of the investigation in accordance with the QAPP.

The following QA/QC elements were included during the soil vapor sampling:

- A tracer LCC consisting of n-pentane, n-hexane, and n-heptane was placed above the surface seal and along the sampling train to evaluate the integrity of the seal. Tracer compound detections are discussed in Section 4.0, 5.0, and 6.4.
- An ambient air sample (AA) was collected on each day of the soil vapor survey and analyzed by the mobile laboratory prior to collection of the soil vapor samples and analyzed for VOCs. The AA sample results are discussed in section 6.4.
- A soil vapor replicate sample was collected for comparison purposes at a rate of one replicate sample per twenty primary soil vapor samples. The soil vapor replicate data is discussed in Section 6.4.

The following QA/QC elements were included in the groundwater sampling:

- Field duplicates were collected from one sample location during the groundwater monitoring event for laboratory analysis.
- Trip Blanks consisting of laboratory grade de-ionized water provided by the laboratory were placed in the ice-cooler and accompanied the samples during storage and transport, to evaluate cleanliness of the ice-cooler and potential sample cross-contamination. The Trip Blanks were analyzed for the presence of VOCs following EPA method 8260B.

4.0 LABORATORY SERVICES

All chemical analysis was performed at a State of California Certified Laboratory. Collected soil and groundwater samples were analyzed at Environmental Treatment & Technology Inc., dba Advanced Technology Laboratories (ATL) located in Signal Hill, California. Soil vapor samples were collected and analyzed by Jones Environmental Inc. (JEI) using an on-Site mobile laboratory. All samples were managed under strict chain-of-custody. The results are discussed below and presented on **Tables 3 through 6**. Complete laboratory reports, including QA/QC documentation is included in **Appendix E**.

5.0 DATA VALIDATION

Stantec conducted an USEPA Stage 2A data validation (U.S. EPA 2002) on each laboratory report obtained during these Site investigation activities. Stage 2A validation builds on the validation conducted in Stage 1 by the laboratory and at a minimum consists of:

- Requested methods (handling, preparation, cleanup, and analytical) are performed.
- Method dates (including dates, times and duration of analysis if needed) for handling (e.g., Toxicity Characteristic Leaching Procedure), preparation, cleanup and analysis are present, as appropriate.
- Sample-related QC data and QC acceptance criteria (e.g., method blanks, surrogate recoveries, deuterated monitoring compounds (DMC) recoveries, laboratory control sample (LCS) recoveries, duplicate analyses, matrix spike and matrix spike duplicate recoveries, serial dilutions, post digestion spikes, standard reference materials) are provided and linked to the reported field samples (including the field quality control samples such as trip and equipment blanks).
- Requested spike analytes or compounds (e.g., surrogate, DMCs, LCS spikes, post digestion spikes) have been added, as appropriate.
- Sample holding times.
- Frequency of QC samples.

All data were validated in accordance with U.S. EPA guidance for data review (U.S. EPA 2017a and 2017b) and determined to be valid for those Site assessment activities reported herein. Copies of the laboratory data validation reports are included in **Appendix F.**

6.0 INVESTIGATION RESULTS

6.1 FIELD OBSERVATIONS

Subsurface soils encountered during drilling generally consisted of interbedded sandy clays, sandy silts, and clayey sands. Hydrocarbon odors and staining was observed within borehole MW-4 at the 10-foot sample interval, with a PID reading of 84 ppmV. At the request of DTSC, the soil from this sampling interval was submitted for laboratory analyses of TPH and VOCs to confirm if impacts exist in soil at this location. Given the fine-grained nature of soils encountered at location MW-4, saturated soil conditions were observed near the terminal depth of the borehole at approximately 25 feet bgs, and not representative of static groundwater conditions. Groundwater was encountered at approximately 15 feet bgs at location MW-5 during drilling. PID measurements within the soil vapor probe boring locations ranged from 0.0 ppmV up to 19.0 ppmV at location SV3A at 9 feet bgs.

6.2 GROUNDWATER ANALYTICAL RESULTS

The following summarizes the results of groundwater monitoring conducted on July 26, 2021:

- Static groundwater was measured from the on-Site wells at depths ranging from 11.40 to 15.60 feet below top of well casing (BTOC). Corresponding groundwater elevations ranged from 242.26 feet amsl in well MW-4, located in the southern portion of the Site, to 244.58 feet amsl in MW-3, located in the northern portion of the Site. Groundwater was determined to flow in a general southerly direction (approximately 176 degrees from north) at an average hydraulic gradient of 0.0076 feet per foot (ft/ft). However, an increase in the groundwater gradient is observed in the southern portion of the Site in the proximity of well MW-1, MW-2, MW-4, and MW-5. Groundwater elevation data is summarized on **Table 2** and presented on **Figure 3A**.

Groundwater VOC analytical results were compared against the DTSC-Screening Levels (SLs) presented in DTSC's HERO Note 3. Groundwater TPH analytical results were evaluated against SFBRWQCB ESLs. Given the shallow depth of groundwater at the Property, there is potential of chemicals present in groundwater to partition to soil vapor, and potentially create a vapor intrusion risk; therefore, at the request of DTSC HERO, groundwater analytical results were also compared to Risk-Based Screening Levels (RBSLs). Groundwater RBSLs were calculated by applying the chemical specific Henry's law constant and DTSC default GW attenuation factor (0.001) to the target indoor air concentration screening levels. The application of the default GW attenuation factor, in light of the tight, fine grained soils that underlie the Site, is considered to be a conservative assumption. Given that no Henry's Law Constant are available for cumulative TPH fraction ranges (gasoline range, diesel range, and oil range) and/or no indoor air screening levels exist for some VOCs, RBSLs were not calculated for those compounds. Groundwater data are summarized in **Table 6**.

- No TPH or VOCs were detected in groundwater monitoring wells MW-1, MW-2, MW-3, or MW-5 above laboratory reporting limits (*i.e.*, the results were non-detect) during this investigation. Stantec

notes that, the reporting limit for benzene of 0.50 ug/L is slightly above the RBSL, but is below the State of California Maximum Contaminant Level (MCL) of 1.0 ug/L.

- Several compounds were detected in groundwater monitoring well MW-4 including:
  - TPHg at 340 µg/L
  - TPHd at 340 µg/L
  - Benzene at 8.5 µg/L

The detected TPHg concentration in well MW-4 is below the direct exposure human health risk level ESL of 760 µg/L. The detected TPHd concentration in well MW-5 is slightly above the direct exposure human health risk level ESL of 200 µg/L. The detected benzene concentration exceeds the MCL of 1 µg/L, and the RBSL of 0.43 µg/L. Other VOCs detected at low concentrations do not exceed their respective screening levels or MCLs where published values existed for detected compounds.

6.3 SOIL ANALYTICAL RESULTS

Soil analytical results from this investigation is summarized and incorporated into **Table 3**. A single soil sample was collected from boring MW-4 at 11.5 feet bgs and analyzed for TPH and VOCs. No TPH or VOCs were detected above laboratory reporting limits (*i.e.*, the results were non-detect) in this soil sample.

6.4 SOIL VAPOR ANALYTICAL RESULTS

Soil vapor VOC analytical results from this investigation are reported and discussed in units of µg/m^3, summarized on **Table 5A**, and incorporated into the historical **Table 4** for context. Soil vapor concentrations are evaluated using modified indoor air screening levels (MIASLs) using a 0.03 attenuation factor, and risk-based screening levels using an attenuation factor of 0.001. TPH analytical results were evaluated using the residential vapor intrusion human health risk SFBRWQCB ESL. The following summarizes the soil vapor results from this investigation:

- Low flow / high vacuum conditions were encountered at several soil vapor locations during this investigation. High vacuum sampling, as described in Section 3.4.2.2, was attempted at these locations. Grab, or no-purge, samples were collected from location SV1A-10, SV11A-5, SV13A-10, SV15A-10, SV18-5, SV22-5, SV25-5 and -12, SV26-12, SV29-5 and -12, SV32-10, SV41-10, SV42-10. Given the high percentage of LCC detected in the samples collected using high vacuum sampling techniques, no samples were collected from the following locations in consultation with DTSC, as discussed in **Section 3.2**: SV8A-10, SV9A-10, SV14A-10, SV17-12, SV18-12, SV28-12, SV26-10.

- TPHg: <500 to 895,000 µg/m^3 at location SV4A-10. A total of 24 soil vapor samples exceed the 0.03 AF MIASL of 20,000 µg/m^3, and 3 soil vapor samples exceed the 0.001 AF MIASL (SV4A-10, and SV11A-5 and -10).

- Benzene: <1.0 to 90.9 µg/m^3 at location SV7A-5. All detected benzene concentrations were below the 0.001 AF MIASL.

- Chloroform: <1.0 to 36.4 µg/m^3 at location SV38-5. All detected chloroform concentrations were below the 0.001 AF MIASL.
- Ethylbenzene: <1.0 to 17.7 µg/m^3 at location SV12A-10. All detected ethylbenzene concentrations were below the 0.03 and 0.001 AF MIASL.
- Methylene Chloride: <1.0 to 63.9 µg/m^3 at location SV25A-12. All methylene chloride concentrations were below the 0.001 AF MIASL.
- PCE: <1.0 to 289 µg/m^3 at location SV11A-5. All detected PCE concentrations were below the 0.001 AF MIASL.
- Other VOCs: several other VOCs including 4-isopropyltoluene, styrene, TCE, toluene, 1,2,4- and 1,3,5-TMB, n-butylbenzene, sec-butylbenzene, tert-butylbenzene, isopropylbenzene (cumene), xylenes, carbon tetrachloride, Freon 113, bromodichloromethane, dibromochloromethane, and cis-1,2-dichloroethene (cis-1,2-DCE) were reported above laboratory reporting limits. However, all these compounds were detected at concentrations below the respective 0.03 AF MIASLs.
- Tracer Compound: LCC was identified in several soil vapor samples in the preliminary soil vapor sampling results (field data). However, after review of the analytical data, a limited amount of soil vapor samples were identified as containing LCC: SV15A-10, SV38-5 and -10, and SV40-5 and -10. The following measures were performed prior to the recollection of samples SV38-5 and -10, and SV40-5 and -10: borehole surface seals were rehydrated, a water-trap was constructed at the borehole surface seal, sample train fittings were rechecked, and the shut-in test was performed for a longer duration to identify potential fitting connection leaks.

Current soil vapor VOC concentrations are presented on **Figure 4A** Temporal soil vapor data exceeding the 0.03 AF MIASL is presented on **Figure 4B** and **Figure 4C**.

Fixed gases, including oxygen and methane, were field screening from the soil vapor probes evaluated during this investigation (**Table 5B**). Oxygen was field screening at concentrations ranging from 2.7 percent by volume (% vol.) up to 21.5 % vol. To confirm the measured oxygen presence, soil vapor samples were collected from select soil vapor locations across the Property (SV2A-10, SV3A-5, SV14A-5, SV17-5, SV31-5, and SV39-5) and submitted for analyses of oxygen by ASTM 1946. Oxygen was detected at 0.27 % vol. at location SV2A-10, compared to the field screening measurements of 14.1 % vol. at this location, and up to 9.92 % vol. at location SV31-5, compared to the field screening measurement of 19.3 % vol. at this location.

During field screening, methane was identified generally within background levels, with a peak concentration of 1.3 % vol. detected at location SV2A-10. To confirm this anomalous methane detection, a soil vapor samples was collected from this location and submitted for analyses of methane by method ASTM 1946D. For further qualification, other soil vapor locations throughout the Site were selected for methane evaluation (SV3A-5, SV14A-5, SV17-5, SV31-5, and SV39-5). Methane was detected at 2.13 % vol. at location SV2A-10, at 0.11 % vol. at location SV31-5, and below laboratory detection limits at locations SV3A-5, SV14A-5, and SV39-5.

6.5 QA / QC SAMPLES

Ambient air samples were collected each day of the soil vapor survey for comparative purposes. No TPHg or VOCs were detected above the laboratory reporting limit, with the exception of dichlorodifluoromethane (Freon 12), detected at a concentration of 4.0 µg/m^3 in each ambient air sample. The ambient air sample results are summarized on **Table 5A**.

A duplicate groundwater sample was collected from monitoring well MW-5 (BD01-20210726) during groundwater sampling for comparative purposes and analyzed for the same compounds as the primary sample from this location (MW-5-20210720). The duplicate sample reported consistent results as the primary sample (no detections of TPH or VOCs above the laboratory reporting limits).

A trip blank sample, consisting of laboratory grade de-ionized water provided by the laboratory, was submitted along with the groundwater samples to evaluate cleanliness of the sample storage container and potential sample cross-contamination. The trip blank was analyzed for the presence of VOCs following EPA method 8260B. The sample results reported non-detect concentrations of VOCs.

7.0 CONCLUSIONS & RECOMMENDATIONS

The results of this Report of Findings and previous investigations reported in Stantec's previous reporting for the Site, have evaluated soil, soil vapor, and groundwater conditions at the Property, specifically, related to the historical presence of several USTs.

Groundwater is present at approximately fifteen feet bgs (approximately 242 feet amsl) and flows to the south-southeast. Groundwater samples collected from the on-site groundwater monitoring well network indicate that no groundwater impacts are present in the central, western, or northern portions of the Property. However, minimal impacts of TPHg, TPHd, and benzene were detected in the southern portion of the Site in MW-4 at concentrations of 340 µg/L, 340 µg/L, and 8.5 µg/L, respectively. The detected TPHd and benzene concentrations slightly exceed the MCL for direct exposure MCLs for these contaminants. Further, the detected benzene concentration exceeds the calculated RBSL of 0.42 µg/L.

Evaluation of extensive Site soil vapor data in August through October 2020, March 2021, and July 2021 (reported herein) have identified several VOCs and TPHg constituents at detectable concentrations in soil vapor. Generally, benzene, chloroform, ethylbenzene, methylene chloride, naphthalene, PCE, TCE, and TPHg have been identified in soil vapor exceeding the 0.03 AF MIASL. Historically, benzene, ethylbenzene, methylene chloride, and TPHg was identified exceeding the 0.001 AF MIASL in the immediate area of the former LUST (SV3); however, during this investigation, those compounds were found at concentrations below the 0.001 AF MIASL. Further, benzene was historically identified exceeding the 0.001 AF MIASL at locations SV1-5, SV6-5, SV7-5; however, during re-evaluation of these locations during this assessment, benzene was detected below the 0.001 AF MIASL at all these locations. Similar trends are apparent through the dataset, generally consisting of a reduction of VOC concentrations across the Site between the August and October 2020 and July 2021 monitoring events. These temporal variation trends indicate that concentrations have generally decreased across the Site, when compared to data collected almost one-year prior in 2020. Temporal variations reported over monitoring events conducted in March and July 2021 indicate the concentrations have remained generally consistent (SV16, SV17, SV18, SV22, SV23, SV29).

Concentrations of TPHg are variable across the Site when compared to previous assessment data. Specifically, there appears to be a large reduction in TPHg in the immediate area of the former LUST (SV3/3A) with concentrations reducing from over 15,000 µg/m^3 at five-feet bgs in August 2020 to below 500 µg/m^3 during this investigation. The peak TPHg detection at the site was at fifteen-feet bgs at SV3 at 6,710,000 µg/m^3 in August 2020; data collected at ten-feet bgs during this investigation from SV3A report TPHg at 471,00 µg/m^3. TPHg was detected exceeding the 0.001 AF MIASL of 600,000 µg/m^3 at fifteen feet bgs at location SV4A at 895,000 µg/m^3 and at five- and ten-feet bgs at location SV11A at 781,000 µg/m^3 and 723,000 µg/m^3, respectively. No VOCs were detected exceeding the 0.001 AF MIASLs at these locations.

Methane was measured at 1.3 % vol during field screening of SV2A-10. To confirm this measurement, a soil vapor sample was collected for laboratory analyses. The analytical concentration of methane was reported at 2.13 % vol. at location SV2A-10. This is below the lower explosive limit (LEL) of 5 % vol.

Given this was the peak methane measurement on the Site during this assessment, and the analytical data indicates methane is below the LEL of 5%, no additional investigation regarding methane on the Site is recommended at this time.

According to the Low-Threat Underground Storage Tank Case Closure Policy (LTCP) (California Water Board, 2012), a bio-attenuation zone is considered present if oxygen content exceeds 4 % vol. within the vadose zone. Oxygen data was collected at locations SV-23, SV-29, and SV-30 in March 2021 was measured at 1.0 %, 3.5 %, and 1.6 % by volume, respectively. Further, oxygen data was collected at locations SV2A-10, SV3A-5, SV14A-5, SV17-5, SV31-5, and SV39-5 and measured by analytical method ASTM 1946D and reported oxygen at 0.27 %, 7.55 %, 3.89 %, 0.35 %, 9.92 %, and 3.89 %, respectively. Oxygen was field screened from all soil vapor locations during this assessment, and was detected up to 21 % by volume. Although oxygen is present below the 4% vol. threshold in portions of Property, the Site appears to meet the defining qualifications of a bio-attenuation zone under Scenario 3, Figure A of the LTCP; benzene concentrations are less than 100 µg/L in groundwater at the Property, and combined TPHg and TPHd is less than 100 mg/kg throughout the entire depth of the “bio-attenuation zone” within the upper five feet of soils. Therefore, it appears that VOCs in portions of the Property are susceptible to bioattenuation. The lack of oxygen, and the presence of carbon dioxide, within the vadose zone is indicative that some degree of aerobic degradation has or is occurring in Site soils. Further, the presence of methane is indicative of anaerobic degradation of petroleum hydrocarbons (USEPA, 2015), specifically in the southern portion of the Property.

Although benzene was detected in groundwater in the southern portion of the Site (MW-4) at concentrations slightly exceeding the MCL, there appears to be a bioattenuation zone present in this area (oxygen field screening at approximately 16 % vol. at location SV32, located approximately 35 feet east and hydraulically downgradient of MW-4). Therefore, it appears that these minimal groundwater impacts would not require further assessment.

Various VOCs have been identified in soil vapor throughout the Property exceeding 0.03 attenuation factor screening levels, and localized areas historically exceeding 0.001 AF MIASL risk levels. Stantec recommends that a vapor intrusion human health risk assessment (VIHHRA) be completed to evaluate the potential risks posed by the chemicals detected in soil vapor below the Site, including a Conceptual Site Model (CSM), with the omission of those data where LCC is detected in the sample. The VIHHRA should be completed in accordance with the policies of the State of California’s low-risk closure policy, and the USEPA Technical Guidance For Addressing Petroleum Vapor Intrusion At Leaking Underground Storage Tank Sites (USEPA, 2015), given that the release and the impact to soil and soil vapor appear to be sourced from the UST release, as well as the DTSC Vapor Intrusion Guidance (VIG) concerning the other VOCs detected. Based on the results of that VIHHRA a determination could be made if vapor mitigation measures (*i.e.,* vapor barriers and venting) will be needed in portions of or across the Property.

8.0 LIMITATIONS

Stantec's investigation has been performed with the degree of skill generally exercised by practicing engineers and geologists in the environmental field. Stantec makes no other warranty, either expressed or implied, concerning the conclusions and professional advice that is contained within the body of this report.

Inherent in most projects performed in a heterogeneous subsurface environment, continuing excavation and assessments may reveal findings that are different than those presented herein. This facet of the environmental profession should be considered when formulating professional opinions on the limited data collected on these projects.

This report has been issued with the clear understanding that it is the responsibility of the owner, or their representative, to make appropriate notifications to regulatory agencies. It is specifically not the responsibility of Stantec to conduct appropriate notifications as specified by current regulations.

The information presented in this report is valid as of the date our exploration was performed. Site conditions may change with time or with further investigation; consequently, the findings presented herein are subject to change.

9.0 REFERENCES

California Water Boards, 2019, San Francisco Bay Regional Water Quality Control Board, Environmental Screening Levels, Revision 2.

Department of Toxic Substances Control (DTSC), 2011, Guidance for The Evaluation and Mitigation of Subsurface Vapor Intrusion to indoor Air (Vapor Intrusion Guidance) – Final, dated October.

_____, 2015, Advisory – Active Soil Gas Investigations, dated July.

DTSC, Human and Ecologic Risk Office (HERO), 2020, Note 3, dated June.

Ninyo & Moore, 2019a, Phase 1 Environmental Site Assessment, 301-351 West Imperial Highway, La Habra, California, dated March 21.

_____, 2019b, Limited Phase II Environmental Site Assessment, 251-351 West imperial Highway, La Habra, California, dated September 9.

Orange County Health Care Agency (OCHCA), 2002, Case Closure Summary, 301 West Imperial Highway, La Habra, California 90631, dated October 11.

_____, 2004, Case Closure Summary 101 West Imperial Highway, La Habra, California, dated March 9.

Stantec Consulting Services Inc, 2020a, Phase I Environmental Site Assessment, dated January 7.

_____, 2020b, Limited Phase II Environmental Site Assessment, dated October 5.

_____, 2020c, Additional Phase II Environmental Site Assessment, dated November 12.

_____, 2021a, Continued Phase II Environmental Site Assessment, dated March 25.

_____, 2021b, Revised Site Assessment Plan, dated July 16, 2021.

_____, 2021c, Response to Department of Toxic Substances Control, Human and Ecological Risk Office and Geologic Services Branch Comments Provided in Conditional Approval of Site Assessment Plan, La Habra, dated July 16.

United States Environmental Protection Agency (USEPA), 2015, Technical Guide for Addressing Petroleum Vapor Intrusion At Leaking Underground Storage Tank Sites, dated June.

_____, 2015, OSWER Technical Guide for Assessing and Mitigating the Vapor Pathway From Subsurface Vapor Sources to Indoor Air, dated June.

_____, 2021, Regional Screening Levels, Region 9, dated May.

TABLES

Table 1
Summary of Well Construction and Location
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Well ID	Installation Date	Top of Well Elevation (ft AMSL)	Latitude (DD)	Longitude (DD)	Boring Depth (ft bgs)	Casing Type	Screen Interval (feet bgs)	Screen Slot Size (inches)
MW-1 (1)	10/21/2020	259.29	33.91770976	-117.94820955	28	2" SCH 40 PVC	12 - 27	0.010
MW-2 (1)	10/21/2020	258.70	33.91782606	-117.94857174	28	2" SCH 40 PVC	12 - 27	0.010
MW-3 (1)	10/21/2020	260.02	33.91824137	-117.94816515	28	2" SCH 40 PVC	12 - 27	0.010
MW-4 (2)	7/16/2021	253.77	33.91749802	-117.94844536	28	2" SCH 40 PVC	8 - 28	0.010
MW-5 (2)	7/16/2021	254.48	33.91757474	-117.94895840	28	2" SCH 40 PVC	8 - 28	0.010

Notes:

Survey data is plotted in NAD83 datum.

(1) Elevations are measured in feet above mean sea level (AMSL), survey performed by Aero Tech Surveys on October 26, 2020

(1) Elevations are measured in feet above mean sea level (AMSL), survey performed by Aero Tech Surveys on July 30, 2021

bgs - Below Ground Surface

DD - decimal degrees

ft - feet

PVC - poly vinyl chloride

TOC - Top of Casing

Table 2
Summary of Groundwater Elevation Data
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Well ID	Surveyed Top of Well Elevation[1] (ft AMSL)	Date	Depth to Static Water (ft bgs)	Apparent LPH Thickness (feet)	Groundwater Elevation (ft AMSL)
MW-1	259.29	10/29/2020	15.02	0	244.27
		3/2/2021	15.30	0	243.99
		7/26/2021	15.60	0	243.69
MW-2	258.70	10/29/2020	14.44	0	244.26
		3/2/2021	14.74	0	243.96
		7/26/2021	15.03	0	243.67
MW-3	260.02	10/29/2020	14.72	0	245.30
		3/2/2021	15.06	0	244.96
		7/26/2021	15.44	0	244.58
MW-4	253.77	7/26/2021	11.51	0	242.26
MW-5	254.48	7/26/2021	11.40	0	243.08

Notes:
Groundwater Elevation in feet AMSL = Surveyed Well Elevation-Depth to Static Water from TOC + 0.75*(Measured LPH Thickness) assuming a specific gravity of 0.75 for LPH.

(1) Elevations are measured in feet above mean sea level (AMSL)

bgs - Below Ground Surface

ft - feet

LPH - Liquid phase hydrocarbons

"--" - Not Measured

TOC - Top of Casing

Table 3
Summary of Soil Analytical Results - TPH and VOCs
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth (feet)	Sample Date	TPH by 8015			VOC by 8260						
			GRO	DRO	ORO	Benzene	Toluene	Ethylbenzene	Naphthalene	n-Butylbenzene	n-Propylbenzene	Various
Residential Screening Levels [(1)]			***430*** [(2)]	***260*** [(2)]	***12,000***	***0.33***	***1,100***	***5.8***	***2.0***	***3,900***	***NE***	***Various***
B9-0.5'	0.5	8/16/2019	<2.13	<10	<10	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<varies
B9-5'	5	8/16/2019	<2.25	<10	<10	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<varies
B10-10'	10	8/16/2019	<2.67	<10	<10	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<varies
B10-5'	5	8/16/2019	<2.28	<10	<10	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<varies
DUP-8	5	8/16/2019	<2.37	<10	**10**	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<varies
B11-0.5'	0.5	8/16/2019	<2.73	<10	<10	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<0.0055	<varies
B11-5'	5	8/16/2019	<2.16	<10	<10	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<varies
B12-0.5'	0.5	8/15/2019	<2.34	<10	**36**	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<varies
B12-10'	10	8/15/2019	<2.64	<20	**96**	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<varies
B13-0.5'	0.5	8/15/2019	<2.49	<20	170	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<varies
B13-10'	10	8/15/2019	<2.37	<10	<10	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<varies
B14-10'	10	8/15/2019	<2.46	<10	<10	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<varies
B14-15'	15	8/15/2019	**250**	<10	<10	<0.1925	<0.1925	**3.7**	**2.3**	**1.2**	**2.7**	**Isopropylbenzene: 0.650** **sec-Butylbenzene: 0.390**
B15-10'	10	8/15/2019	<2.22	<10	<10	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<varies
B15-5'	5	8/15/2019	<2.49	<10	<10	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<varies
DUP-4	5	8/15/2019	<2.22	<10	**55**	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<varies
B16-0.5'	0.5	8/16/2019	<2.64	**29**	**110**	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<varies
DUP-7	0.5	8/16/2019	<2.31	**17**	**66**	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<varies
B16-5'	5	8/16/2019	<2.37	<10	<10	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<varies
B17-10'	10	8/16/2019	<2.28	<10	<10	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<varies
B17-15'	15	8/16/2019	<2.1	<10	<10	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<varies
B18-5'	5	8/16/2019	<2.43	<10	<10	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<varies
B18-10'	10	8/16/2019	<2.49	<10	<10	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<0.0045	<varies
DUP-6	10	8/16/2019	<2.22	<10	<10	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<varies
B19-0.5'	0.5	8/16/2019	<2.04	<10	<10	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<0.0035	<varies
B19-5'	5	8/16/2019	<2.16	<10	11	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<varies
MW1-10	10	10/21/20	<1.0	<10	<10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
MW1-15	15	10/21/20	**560**	**290**	**62**	<0.250	<0.250	<0.250	<0.250	**2.800**	**4.800**	**Isopropylbenzene: 1.2** **sec-Butylbenzene: 1.3**
MW2-5	5	10/21/20	<1.0	<10	<10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
MW2-15	15	10/21/20	<1.0	<10	<10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
MW3-5	5	10/21/20	<1.0	<10	<10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
MW3-15	15	10/21/20	<1.0	<10	<10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
MW-4-11.5	11.5	7/16/21	<1.0	<5.0	<5.0	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SV2-15	15	7/30/20	**25**	**61**	<10	<0.005	<0.005	**0.019**	**0.032**	**0.070**	**0.120**	**sec-Butylbenzene: 0.028**
SV3-15	15	7/30/20	**260**	**180**	**28**	<0.005	<0.005	**0.006**	**0.088**	**0.170**	**0.250**	**Isopropylbenzene: 0.130** **sec-Butylbenzene: 0.110**
SV-17-4	4	2/11/21	<1.0	**31**	**34**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SV-19-5	5	2/11/21	<1.0	**40**	**31**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SV-19-10	10	2/11/21	<1.0	**34**	**27**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SV-19-15	15	2/11/21	<1.0	**36**	**26**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SV-21-8	8	2/11/21	<1.0	**22**	**33**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SV-23-8	8	2/12/21	<1.0	**50**	**34**	NA	NA	NA	NA	NA	NA	NA
SV-26-10	10	2/12/21	<1.0	**35**	**39**	NA	NA	NA	NA	NA	NA	NA
SV-28-7	7	2/12/21	<1.0	**57**	**45**	NA	NA	NA	NA	NA	NA	NA

Table 3
Summary of Soil Analytical Results - TPH and VOCs
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth (feet)	Sample Date	TPH by 8015			VOC by 8260						
			GRO	DRO	ORO	Benzene	Toluene	Ethylbenzene	Naphthalene	n-Butylbenzene	n-Propylbenzene	Various
Residential Screening Levels [1]			***430*** [2]	***260*** [2]	***12,000***	***0.33***	***1,100***	***5.8***	***2.0***	***3,900***	***NE***	***Various***
SB-1-5	5	2/11/21	<1.0	<10	<10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-1-10	10	2/11/21	<1.0	**51**	**35**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-1-15	15	2/11/21	<1.0	<10	<10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-2-5	5	2/17/2021	<1.0	**32**	**23**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-2-10	10	2/17/2021	<1.0	<10	<10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-2-15	15	2/17/2021	<1.0	<10	<10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-3-5	5	2/17/2021	<1.0	**44**	**26**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-3-10	10	2/17/2021	<1.0	<10	<10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-3-15	15	2/17/2021	**1.2**	<10	<10	<0.005	<0.005	<0.005	<0.005	<0.005	0.0071	<varies
SB-4-5	5	2/17/2021	<1.0	**57**	**42**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-4-10	10	2/17/2021	<1.0	<10	<10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-4-15	15	2/17/2021	**570**	**240**	**79**	<0.005	<0.005	<0.005	**8.6**	**2.8**	**5.3**	**Isopropylbenzene: 1.2** **Sec-Butylbenzene: 1.2**
SB-5-5	5	2/17/2021	<1.0	**68**	**90**	<0.005	<0.005	0.0074	<0.005	<0.005	<0.005	**m,p-Xylenes: 0.032** **o-Xylene: 0.0096**
SB-5-10	10	2/17/2021	<1.0	<10	<10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-5-15	15	2/17/2021	<1.0	**58**	**33**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-6-5	5	2/17/2021	<1.0	**190**	**250**	<0.005	<0.005	0.018	<0.005	<0.005	<0.005	**m,p-Xylenes: 0.085** **o-Xylene: 0.033**
SB-6-10	10	2/17/2021	<1.0	<10	<10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-6-15	15	2/17/2021	<1.0	<10	<10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-7-5	5	2/17/2021	<1.0	**61**	**52**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-7-10	10	2/17/2021	<1.0	**57**	**50**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-7-15	15	2/17/2021	<1.0	**66**	**92**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-8-5	5	2/17/2021	<1.0	**78**	**68**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-8-10	10	2/17/2021	<1.0	**49**	**42**	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-8-15	15	2/17/2021	**1.7**	<10	<10	<0.005	<0.005	0.047	<0.005	0.0066	0.02	**Isopropylbenzene: 0.0054**
SB-9-5	5	2/17/2021	<1.0	<10	<10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-9-10	10	2/17/2021	<1.0	<10	<10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies
SB-9-15	15	2/17/2021	<1.0	<10	<10	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<varies

Notes:

All concentrations reported in milligrams per kilogram (mg/kg).

(1) - More conservative screening level between USEPA Region 9 RSL (May, 2020) and DTSC HERO Note 3 (June, 2020).

(2) - SFBRWQCB ESLs used for TPH screening.

DRO - Diesel Range Organic

DTSC - Department of Toxic

ESL - Environmental Screening Level

HERO HHRA - Human and Ecological Risk Office Human Health Risk Assessment

GRO - Gasoline Range Organic

MTBE - methyl-tertiary butyl ether

NA - Not Analyzed

NE - Not Established

ORO - Oil Range Organic

RSL - Regional Screening Level

SFBRWQCB - San Francisco Bay Regional Water Quality Control Board

TBA - Tertiary butyl-alcohol

TMB - Trimethylbenzene

USEPA - United States Environmental Protection Agency

VOC - Volatile Organic Compounds

BOLD Denotes analyte was detected above the laboratory reporting limit

< - Denotes analyte was not detected above the laboratory reporting limit

Green shading indicates value above the residential screening level.

Table 4
Summary of Soil Vapor Analytical Results
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth [1]	Sample Date	TPH-GRO	Benzene	Chloroform	Dichloro difluoromethane (F12)	Ethylbenzene	Methylene Chloride	Naphthalene	4-Isopropyl toluene	Styrene	PCE	TCE	Toluene	TCFM (F11)
Residential Screening Level (0.03 AF) [2]			***20,000***	***3.2***	***4.0***	***3,333***	***37***	***33.3***	***2.8***	*NE*	***31,333***	***15.3***	***16***	***10,333***	***43,333***
Residential Screening Level (0.001 AF) [2]			***600,000***	***97***	***120***	***100,000***	***1,100***	***1,000***	***84***	*NE*	***940,000***	***460***	***480***	***310,000***	***1,300,000***
B-9	5	8/19/2019	NA	**61**	<8	**8**	**179**	<8	<40	**13**	<8	12	<8	**748**	<16
B-9-REP	5	8/19/2019	NA	**60**	<8	<8	**161**	<8	<40	**11**	<8	<8	<8	**727**	<16
B-10	5	8/19/2019	NA	**57**	<8	<8	<8	<8	<40	<8	<8	<8	<8	**10**	<16
B-11	5	8/19/2019	NA	**43**	<8	<8	<8	<8	<40	<8	<8	<8	<8	**13**	<16
B-12	5	8/19/2019	NA	<8	<8	<8	<8	<8	<40	**48**	<8	<8	<8	**37**	<16
B-13	5	8/19/2019	NA	<8	<8	<8	<8	<8	<40	<8	<8	<8	<8	<8	<16
B-15	5	8/19/2019	NA	<8	<8	<8	<8	<8	<40	<8	<8	<8	<8	**420**	<16
B-16	5	8/19/2019	NA	**12**	<8	<8	**214**	<8	<40	**10**	<8	<8	<8	**292**	<16
B-16-REP	5	8/19/2019	NA	**13**	<8	<8	**198**	<8	<40	**8**	<8	<8	<8	**289**	<16
B-17	5	8/19/2019	NA	**27**	<8	<8	**259**	<8	<40	<8	<8	<8	<8	**338**	<16
B-18	5	8/19/2019	NA	**39**	<8	<8	**253**	<8	<40	**10**	<8	<8	<8	**353**	<16
B-19	5	8/19/2019	NA	**65**	<8	<8	**178**	<8	<40	<8	<8	<8	<8	**807**	<16
SV1-5	5	8/3/2020	**9,900**	**116**	**1.9**	**2.3**	**6.0**	**7.9**	<1.0	**25.1**	**1.0**	**3.1**	20.9	**10.6**	<1.0
SV1-15	15	8/3/2020	**No Flow (Water) - No Sample Collected**												
SV1A-5	5	7/26/2021	**47,000**	**22.5**	<2.0	<2.0	**4.1**	<2.0	<2.0	**52.4**	<2.0	**21.1**	<2.0	**21.1**	<2.0
SV1A-5 REP	5	7/26/2021	**79,500**	**20.2**	<2.0	<2.0	**3.7**	<2.0	<2.0	**45.6**	<2.0	**17.9**	<2.0	**18.1**	<2.0
SV1A-10 *	10	7/26/2021	**16,100**	**19.3**	<2.0	<2.0	**5.1**	**28.6**	<2.0	**19.4**	<2.0	**71.8**	<2.0	**32.2**	<2.0
SV2-5	5	8/3/2020	**1,660**	**26.0**	**0.6**	**6.5**	**0.9**	**6.0**	<1.0	**4.9**	**0.5**	**1.1**	**3.4**	**2.2**	<1.0
SV2-15	15	8/3/2020	**No Flow (Water) - No Sample Collected**												
SV2A-5 REP	5	7/26/2021	**59,400**	**5.5**	<2.0	**5.1**	<2.0	**5.2**	<2.0	**13.2**	<2.0	<2.0	<2.0	**4.4**	<2.0
SV2A-10	10	7/26/2021	**High Vacuum - No Sample Collected**												
SV3-5	5	8/3/2020	**15,900**	**16.3**	**0.8**	**4.3**	2.2	3.3	<1.0	**6.6**	**3.9**	**3.0**	**2.5**	**2.0**	<1.0
SV3-5 REP	5	8/3/2020	**18,200**	**17.0**	**0.8**	4.3	**1.9**	**5.7**	<1.0	**6.1**	**3.6**	**3.2**	**2.3**	**1.6**	<1.0
SV3-15	15	8/3/2020	**6,710,000**	**2,830**	<0.5	**766**	**16,800**	**1,450**	<1.0	**500**	**340**	<0.5	<0.5	**944**	**124**
SV3A-5	5	7/27/2021	<500	<1.0	<1.0	**3.8**	<1.0	<1.0	<1.0	**3.0**	<1.0	**9.0**	<1.0	**2.9**	<1.0
SV3A-10	10	7/27/2021	**471,000**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**9.6**	<1.0	<1.0	<1.0
SV4-5	5	8/3/2020	**52,500**	**95.0**	**5.8**	**6.0**	**11.5**	**18.0**	<1.0	**10.8**	**1.1**	**3.5**	**27.1**	**5.2**	**1.0**
SV4A-5	5	7/27/2021	**88,900**	**17.2**	<1.0	**2.4**	**5.4**	<1.0	<1.0	**73.1**	<1.0	**73.0**	<1.0	**75.4**	<1.0
SV4A-10	10	7/27/2021	**895,000**	**12.9**	<1.0	<1.0	**6.9**	<1.0	<1.0	**783**	**2.9**	<1.0	<1.0	**42.3**	<1.0

Table 4
Summary of Soil Vapor Analytical Results
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth (1)	Sample Date	1,2,4-TMB	1,3,5-TMB	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene	o-Xylene	LCC			Other VOCs
											n-Pentane	n-Hexane	n-Heptane	
Residential Screening Level (0.03 AF) (2)			***2,100***	***2,100***	***7,000***	***14,000***	***14,000***	***14,000***	***3,333***	***3,333***	***NE***	***NE***	***NE***	***various***
Residential Screening Level (0.001 AF) (2)			***63,000***	***63,000***	***210,000***	***420,000***	***420,000***	***420,000***	***100,000***	***100,000***	***NE***	***NE***	***NE***	***various***
B-9	5	8/19/2019	**707**	**322**	**12**	<12	<12	<8	**948**	**298**	<80	<80	<80	<varies
B-9-REP	5	8/19/2019	**657**	**297**	**12**	<12	<12	<8	**913**	**282**	<80	<80	<80	<varies
B-10	5	8/19/2019	<8	<8	<12	<12	<12	<8	<16	<8	<80	<80	<80	<varies
B-11	5	8/19/2019	<8	<8	<12	<12	<12	<8	<16	<8	<80	<80	<80	<varies
B-12	5	8/19/2019	<8	<8	<12	<12	<12	<8	<16	<8	<80	<80	<80	<varies
B-13	5	8/19/2019	<8	<8	<12	<12	<12	<8	<16	<8	<80	<80	<80	<varies
B-15	5	8/19/2019	<8	<8	<12	<12	<12	<8	<16	<8	<80	<80	<80	<varies
B-16	5	8/19/2019	**770**	**132**	**34**	<12	<12	**20**	**1,260**	446	<80	<80	<80	<varies
B-16-REP	5	8/19/2019	**625**	**126**	**31**	<12	<12	**18**	**1,150**	378	<80	<80	<80	<varies
B-17	5	8/19/2019	**460**	**149**	**26**	<12	<12	**20**	**1,630**	341	<80	<80	<80	<varies
B-18	5	8/19/2019	**507**	**174**	**42**	<12	<12	**24**	**1,110**	376	<80	<80	<80	<varies
B-19	5	8/19/2019	**115**	**27**	<12	<12	<12	<8	**784**	163	<80	<80	<80	<varies
SV1-5	5	8/3/2020	**4.5**	<0.5	<0.8	**8.5**	**2.7**	**5.1**	**11.1**	**10.3**	<5	<5	<5	**4-Chlorotoluene: 4.9**
SV1-15	15	8/3/2020	**No Flow (Water) - No Sample Collected**											
SV1A-5	5	7/26/2021	**7.9**	<2.0	<2.0	**6.9**	<2.0	<2.0	**11.8**	**7.2**	<20	<20	<20	<varies
SV1A-5 REP	5	7/26/2021	**6.8**	<2.0	<2.0	**6.4**	<2.0	<2.0	**12.7**	**6.0**	<20	<20	<20	<varies
SV1A-10 *	10	7/26/2021	**4.5**	**2.4**	<2.0	<2.0	**4.2**	**3.6**	**16.0**	**5.6**	<20	<20	<20	<varies
SV2-5	5	8/3/2020	**1.0**	<0.5	**0.8**	<0.8	<0.8	**1.3**	**1.1**	**0.6**	<5	<5	<5	**Carbon Tetrachloride: 1.3** **Freon 113: 2.3** **n-Propylbenzene: 0.8**
SV2-15	15	8/3/2020	**No Flow (Water) - No Sample Collected**											
SV2A-5 REP	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	**Carbon tetrachloride: 12.8** **Freon 113: 9.2**
SV2A-10	10	7/26/2021	**High Vacuum - No Sample Collected**											
SV3-5	5	8/3/2020	**84.3**	**234**	**50.6**	**2.4**	**1.4**	**5.6**	**8.8**	**115**	<5	<5	<5	**n-Propylbenzene: 2.2**
SV3-5 REP	5	8/3/2020	**85.7**	**237**	**56.0**	**1.9**	**1.2**	**4.6**	**6.1**	**106**	<5	<5	<5	**n-Propylbenzene: 1.7**
SV3-15	15	8/3/2020	**1,840**	**2,340**	**17,100**	**8,470**	**133**	**14,500**	**1,270**	**750**	<5	<5	<5	**n-Propylbenzene: 55,600**
SV3A-5	5	7/27/2021	**1.1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**1.4**	<10	<10	<10	<varies
SV3A-10	10	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<varies
SV4-5	5	8/3/2020	**5.7**	**3.2**	**15.7**	**5.3**	<0.8	**10.8**	**13.5**	**12**	<5	<5	<5	**Carbon Tetrachloride: 1.8** **Freon 113: 2.1**
SV4A-5	5	7/27/2021	**13.6**	<1.0	<1.0	<1.0	<1.0	**3.5**	<1.0	**4.2**	<10	<10	<10	<varies
SV4A-10	10	7/27/2021	**34.3**	<1.0	<1.0	<1.0	<1.0	**37.3**	**17.7**	**10.4**	<10	<10	<10	**n-Propylbenzene: 2.4**

Table 4
Summary of Soil Vapor Analytical Results
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth [1]	Sample Date	TPH-GRO	Benzene	Chloroform	Dichloro difluoromethane (F12)	Ethylbenzene	Methylene Chloride	Naphthalene	4-Isopropyl toluene	Styrene	PCE	TCE	Toluene	TCFM (F11)
Residential Screening Level (0.03 AF) [2]			***20,000***	***3.2***	***4.0***	***3,333***	***37***	***33.3***	***2.8***	*NE*	***31,333***	***15.3***	***16***	***10,333***	***43,333***
Residential Screening Level (0.001 AF) [2]			***600,000***	***97***	***120***	***100,000***	***1,100***	***1,000***	***84***	*NE*	***940,000***	***460***	***480***	***310,000***	***1,300,000***
SV5-5	5	9/18/2020	**5,830**	**3.8**	**5.1**	<1.0	<1.0	<1.0	**1.9**	**3.5**	<1.0	**3.7**	<1.0	**31.3**	<1.0
SV5-15	15	9/18/2020	<2000	**11**	<8	<8	**25**	<8	<1.0	<8	<8	<8	<8	**88**	<16
SV6-5	5	8/3/2020	**12,900**	**222**	**0.9**	**6.8**	**86.9**	**12.3**	<1.0	**33.9**	**6.2**	**6.1**	**25.7**	**157**	**1.8**
SV6-15	15	8/3/2020	**4,890**	**14.1**	**3.4**	**6.2**	**10.2**	**7.9**	<1.0	**4.0**	**1.4**	**0.8**	**4.6**	**7.9**	**1.2**
SV6A-5	5	7/27/2021	**130,000**	**14.1**	**20.8**	**3.8**	**2.6**	**2.6**	<1.0	**5.7**	<1.0	**65.6**	<1.0	**28.9**	<1.0
SV6A-10	10	7/27/2021	**9,930**	**20.7**	<1.0	<1.0	**1.9**	<1.0	<1.0	**3.8**	**2.3**	**9.0**	<1.0	**12.7**	<1.0
SV6A-10 REP	10	7/27/2021	**10,100**	**21.5**	<1.0	<1.0	**1.6**	<1.0	<1.0	**3.5**	**2.2**	**8.4**	<1.0	**13.1**	<1.0
SV7-5	5	8/3/2020	**4,470**	**111**	**0.6**	**2.0**	**18.6**	**4.8**	<1.0	**8.6**	**2.7**	**1.4**	**14.9**	**26.0**	<1.0
SV7-15	15	8/3/2020	**10,500**	**28.4**	**6.5**	**5.7**	**21.6**	<0.5	<1.0	**2.8**	**1.3**	**2.1**	**5.9**	**4.7**	**1.1**
SV7A-5	5	7/27/2021	**202,000**	**90.9**	<1.0	<1.0	**14.0**	<1.0	<1.0	**69.5**	<1.0	**46.7**	<1.0	**74.0**	<1.0
SV7A-10	10	7/27/2021	**47,200**	**84.9**	<1.0	<1.0	**9.2**	**2.3**	<1.0	**43.6**	<1.0	**53.3**	<1.0	**53.4**	<1.0
SV8-5	5	8/3/2020	**5,190**	**92.1**	**0.9**	**3.6**	**5.2**	**5.2**	<1.0	**288**	**1.3**	**0.8**	**8.2**	**5.1**	<0.5
SV8-15	15	8/3/2020	**6,430**	**32.3**	**3.1**	**6.3**	**25.6**	**5.0**	<1.0	**272**	**2.5**	**0.7**	**10.7**	**18.8**	**1.9**
SV8A-5	5	7/27/2021	**12,000**	**7.5**	**5.4**	<1.0	**7.1**	**1.1**	<1.0	**8.0**	<1.0	**5.5**	<1.0	**28.7**	<1.0
SV8A-10	10	7/27/2021	**High Vacuum - No Sample Collected**												

Table 4
Summary of Soil Vapor Analytical Results
251 to 351 West Imperial Highway
La Habra, California
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Sample ID	Sample Depth (1)	Sample Date	1,2,4-TMB	1,3,5-TMB	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene	o-Xylene	LCC			Other VOCs
											n-Pentane	n-Hexane	n-Heptane	
Residential Screening Level (0.03 AF) (2)			***2,100***	***2,100***	***7,000***	***14,000***	***14,000***	***14,000***	***3,333***	***3,333***	***NE***	***NE***	***NE***	***various***
Residential Screening Level (0.001 AF) (2)			***63,000***	***63,000***	***210,000***	***420,000***	***420,000***	***420,000***	***100,000***	***100,000***	***NE***	***NE***	***NE***	***various***
SV5-5	5	9/18/2020	**47.8**	**14.1**	<1.0	<1.0	<1.0	<1.0	**62.4**	**18.4**	<10	<10	<10	**Acetone: 20.7** **Bromodichloromethane: 3.2** **MEK: 6.9** **Carbon Disulfide: 13.0** **Cyclohexane: 2.5** **4-Ethyltoluene: 27.1** **Isopropanol: 2.3** **n-Propylbenzene: 5.3** **Propylene: 23.8**
SV5-15	15	9/18/2020	**66**	**44**	<12	<12	<12	<8	**105**	**39**	<80	<80	<80	**n-Propylbenzene: 9**
SV6-5	5	8/3/2020	**105**	**57.8**	**12.9**	**5.1**	<0.8	**33.9**	**138**	**183**	**333**	**648**	**441**	**Carbon Tetrachloride: 2.5** **Freon 113: 4.9**
SV6-15	15	8/3/2020	**8.1**	**3.7**	**6.2**	**2.0**	<0.8	**4.0**	**12.9**	**11.8**	**413**	**551**	**344**	**Carbon Tetrachloride: 1.1** **Freon 113: 2.0**
SV6A-5	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	**Bromodichloromethane: 11.1**
SV6A-10	10	7/27/2021	**3.0**	<1.0	<1.0	<1.0	<1.0	**1.3**	**9.1**	**7.6**	<10	<10	<10	<varies
SV6A-10 REP	10	7/27/2021	**2.9**	<1.0	<1.0	<1.0	<1.0	**1.4**	**9.3**	**7.6**	<10	<10	<10	<varies
SV7-5	5	8/3/2020	**43.9**	**13.9**	**6.0**	**2.0**	<0.8	**8.6**	**35.4**	**55.0**	<5	<5	<5	<varies
SV7-15	15	8/3/2020	**7.8**	**4.5**	**11.6**	**7.1**	<0.8	**2.8**	**9.0**	**15.5**	<5	<5	<5	**Carbon Tetrachloride: 0.7** **Freon 113: 1.3**
SV7A-5	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**18.6**	**25.9**	<10	<10	<10	<varies
SV7A-10	10	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**11.0**	**11.5**	<10	<10	<10	<varies
SV8-5	5	8/3/2020	<0.5	**1.4**	**2.9**	**2.8**	<0.8	**11.2**	**10.0**	**11.2**	<5	<5	<5	**n-Propylbenzene: 5.0**
SV8-15	15	8/3/2020	<0.5	**1.3**	**3.1**	**3.1**	**1.3**	**23.1**	**45.9**	**37.7**	<5	<5	<5	**Carbon Tetrachloride: 1.9** **Chlorobenzene: 1.0** **Freon 113: 4.5** **n-Propylbenzene: 5.2**
SV8A-5	5	7/27/2021	**11.0**	<1.0	**3.7**	<1.0	<1.0	<1.0	**25.7**	**13.9**	<10	<10	<10	**n-Propylbenzene: 2.2**
SV8A-10	10	7/27/2021	**High Vacuum - No Sample Collected**											

Table 4
Summary of Soil Vapor Analytical Results
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth [1]	Sample Date	TPH-GRO	Benzene	Chloroform	Dichloro difluoromethane (F12)	Ethylbenzene	Methylene Chloride	Naphthalene	4-Isopropyl toluene	Styrene	PCE	TCE	Toluene	TCFM (F11)
Residential Screening Level (0.03 AF) [2]			***20,000***	***3.2***	***4.0***	***3,333***	***37***	***33.3***	***2.8***	*NE*	***31,333***	***15.3***	***16***	***10,333***	***43,333***
Residential Screening Level (0.001 AF) [2]			***600,000***	***97***	***120***	***100,000***	***1,100***	***1,000***	***84***	*NE*	***940,000***	***460***	***480***	***310,000***	***1,300,000***
SV9-5	5	9/11/2020	**90,800**	**34.7**	<1.0	<1.0	<1.0	<1.0	<1.0	**1.7**	<1.0	<1.0	<1.0	**6.8**	<1.0
SV9-15	15	9/11/2020	<1000	**5.3**	<1.0	**2.3**	<1.0	**1.4**	<1.0	<1.0	<1.0	<1.0	<1.0	**18.6**	<1.0
SV9A-5	5	7/27/2021	**8,120**	**39.6**	**2.5**	<1.0	**6.9**	<1.0	<1.0	**50.1**	<1.0	**8.5**	<1.0	**37.4**	<1.0
SV9A-10	10	7/27/2021	**High Vacuum - No Sample Collected**												
SV10-5	5	10/29/2020	**47,300**	**25.3**	**26.0**	<1.0	**1,520**	**3.2**	<1.0	**129**	<1.0	**7.6**	<1.0	**53.9**	**6.7**
SV10-13	13	10/29/2020	**16,600**	**29.9**	**5.3**	<1.0	**671**	**2.6**	<1.0	**49.4**	<1.0	**4.0**	<1.0	**52.8**	<1.0
SV10A-5	5	7/26/2021	**136,000**	**3.8**	<2.0	**4.5**	**5.5**	<2.0	<2.0	**82.3**	<2.0	**28.3**	<2.0	**14.0**	<2.0
SV10A-10	10	7/26/2021	**454,000**	**41.8**	<2.0	<2.0	<2.0	**4.8**	<2.0	**39.6**	<2.0	**127**	**2.1**	**37.5**	<2.0

Table 4
Summary of Soil Vapor Analytical Results
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Sample ID	Sample Depth (1)	Sample Date	1,2,4-TMB	1,3,5-TMB	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene	o-Xylene	LCC			Other VOCs
											n-Pentane	n-Hexane	n-Heptane	
Residential Screening Level (0.03 AF) (2)			***2,100***	***2,100***	***7,000***	***14,000***	***14,000***	***14,000***	***3,333***	***3,333***	***NE***	***NE***	***NE***	***various***
Residential Screening Level (0.001 AF) (2)			***63,000***	***63,000***	***210,000***	***420,000***	***420,000***	***420,000***	***100,000***	***100,000***	***NE***	***NE***	***NE***	***various***
SV9-5	5	9/11/2020	**51.1**	**15.4**	<1.0	<1.0	<1.0	**1.3**	**11.4**	**5.1**	**90.2**	**52.5**	**11.9**	**Acetone: 61.1 Carbon Disulfide: 1.4 MEK: 27.3 Cyclohexane: 10.6 cis-1,2-DCE: 2.5 4-Ethyltoluene: 28.3 Isopropanol: 14.7 MIBK: 2.8 n-Propylbenzene: 4.1 Propylene: 88.6**
SV9-15	15	9/11/2020	**4.7**	**1.3**	<1.0	<1.0	<1.0	<1.0	**12.0**	**3.6**	**29.3**	**35.0**	<10	**Acetone: 63.6 MEK: 6.5 Cyclohexane: 7.8 Ethyl Acetate: 1.5 4-Ethyl Toluene: 4.1 Isopropanol: 9.3 MIBK: 1.1 Propylene: 15.4**
SV9A-5	5	7/27/2021	**11.7**	**4.5**	<1.0	<1.0	**8.2**	**1.4**	**27.6**	**9.4**	<10	<10	<10	**n-Propylbenzene: 2.1 cis-1,2-DCE: 3.0**
SV9A-10	10	7/27/2021	**High Vacuum - No Sample Collected**											
SV10-5	5	10/29/2020	**14.8**	**4.2**	<1.0	<1.0	<1.0	<1.0	**3,220**	**1,110**	**165**	**56**	**769**	**Acetone: 46.7 Bromodichloromethane: 22.9 Bromoform: 6.5 n-Propylbenzene: 6.8 Carbon disulfide: 198 Ethyl Acetate: 2.3 4-Ethyltoluene: 8.4 Freon 113: 5.4 Propylene: 868**
SV10-13	13	10/29/2020	**14.4**	**4.0**	<1.0	<1.0	<1.0	<1.0	**2,680**	**611.0**	**91.3**	**69.9**	**95.1**	**Acetone: 117 Bromoform: 1.0 Carbon disulfide: 26.5 4-Ethyltoluene: 7.6 n-Propylbenzene: 4.3 Propylene: 637**
SV10A-5	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**8.1**	**7.4**	<80	<80	<80	<varies
SV10A-10	10	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<80	<80	<80	<varies

Table 4
Summary of Soil Vapor Analytical Results
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La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth [1]	Sample Date	TPH-GRO	Benzene	Chloroform	Dichloro difluoromethane (F12)	Ethylbenzene	Methylene Chloride	Naphthalene	4-Isopropyl toluene	Styrene	PCE	TCE	Toluene	TCFM (F11)
Residential Screening Level (0.03 AF) [2]			***20,000***	***3.2***	***4.0***	***3,333***	***37***	***33.3***	***2.8***	*NE*	***31,333***	***15.3***	***16***	***10,333***	***43,333***
Residential Screening Level (0.001 AF) [2]			***600,000***	***97***	***120***	***100,000***	***1,100***	***1,000***	***84***	*NE*	***940,000***	***460***	***480***	***310,000***	***1,300,000***
SV11-5	5	10/29/2020	**13,300**	**33.7**	**132**	<1.0	**19.5**	**7.0**	<1.0	**48.1**	<1.0	**8.1**	<1.0	**177**	**2.6**
SV11-10	10	10/29/2020	**6,070**	**36.7**	**7.7**	<1.0	**7.3**	<1.0	<1.0	**33.8**	<1.0	**4.0**	<1.0	**31.9**	**5.8**
SV11A-5 *	5	7/26/2021	**781,000**	**65.1**	**30.5**	<2.0	**15.3**	**7.1**	<2.0	**23.2**	<2.0	**289**	<2.0	**102**	<2.0
SV11A-10	10	7/26/2021	**723,000**	**70.0**	**4.2**	<2.0	**13.8**	<2.0	<2.0	**21.3**	<2.0	**263**	<2.0	**69**	<2.0
SV12-5	5	10/29/2020	**9,270**	**13.6**	**34.1**	<1.0	**197**	**3.0**	**5.3**	**28.3**	<1.0	**13.4**	<1.0	**146**	**2.6**

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Summary of Soil Vapor Analytical Results
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Sample ID	Sample Depth [1]	Sample Date	1,2,4-TMB	1,3,5-TMB	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene	o-Xylene	LCC			Other VOCs
											n-Pentane	n-Hexane	n-Heptane	
Residential Screening Level (0.03 AF) [2]			***2,100***	***2,100***	***7,000***	***14,000***	***14,000***	***14,000***	***3,333***	***3,333***	***NE***	***NE***	***NE***	***various***
Residential Screening Level (0.001 AF) [2]			***63,000***	***63,000***	***210,000***	***420,000***	***420,000***	***420,000***	***100,000***	***100,000***	***NE***	***NE***	***NE***	***various***
SV11-5	5	10/29/2020	**10.6**	**3.2**	<1.0	<1.0	<1.0	<1.0	**76.4**	**35.2**	**424**	**45.8**	**69**	**Acetone: 9.5** **Bromodichloromethane: 45.5** **Bromoform: 10.2** **Carbon disulfide: 279** **Dibromochloromethane: 17.7** **4-Ethyltoluene:4.8** **Freon 113: 3.8** **n-Propylbenzene: 2.4** **Propylene: 844**
SV11-10	10	10/29/2020	**15.4**	**14.2**	<1.0	<1.0	<1.0	<1.0	**23**	**13.9**	**387**	**364**	**559**	**Acetone: 120** **Bromoform: 2.3** **Carbon Tetrachloride: 10.5** **Carbon disulfide: 267** **4-Ethyltoluene: 5.9** **Isopropanol: 16.3** **MIBK: 2.2** **n-Propylbenzene: 2.4** **Propylene: 3200**
SV11A-5 *	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<80	<80	<80	<varies
SV11A-10	10	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**10.2**	<80	<80	<80	<varies
SV12-5	5	10/29/2020	**12.1**	**3.5**	<1.0	<1.0	<1.0	<1.0	**761**	**256**	**46.6**	**37.2**	**49.9**	**Acetone: 33.2** **Bromoform: 5.9** **Carbon Tetrachloride: 4.4** **Carbon disulfide: 222** **Cyclohexane: 6.6** **Dibromochloromethane: 13.8** **Ethyl Acetate: 4.6** **4-Ethyltoluene: 5.7** **Freon 113: 2.2** **MBK: 28.5** **n-Propylbenzene: 2.7** **Propylene: 167**

Table 4
Summary of Soil Vapor Analytical Results
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Sample ID	Sample Depth [1]	Sample Date	TPH-GRO	Benzene	Chloroform	Dichloro difluoromethane (F12)	Ethylbenzene	Methylene Chloride	Naphthalene	4-Isopropyl toluene	Styrene	PCE	TCE	Toluene	TCFM (F11)
Residential Screening Level (0.03 AF) [2]			***20,000***	***3.2***	***4.0***	***3,333***	***37***	***33.3***	***2.8***	*NE*	***31,333***	***15.3***	***16***	***10,333***	***43,333***
Residential Screening Level (0.001 AF) [2]			***600,000***	***97***	***120***	***100,000***	***1,100***	***1,000***	***84***	*NE*	***940,000***	***460***	***480***	***310,000***	***1,300,000***
SV12-15	15	10/29/2020	**35,600**	**41.3**	**12.7**	**3.9**	**985**	<1.0	**5.2**	**12.9**	<1.0	**4.4**	<1.0	**50.4**	**5.2**
SV12A-5	5	7/26/2021	**52,600**	**27.6**	**6.7**	<2.0	**10.8**	<2.0	<2.0	**10.5**	<2.0	**102**	<2.0	**91.4**	<2.0
SV12A-10	10	7/26/2021	**63,800**	**49.0**	**3.3**	<2.0	**17.7**	**2.2**	<2.0	**22.1**	<2.0	**102**	<2.0	**106.0**	<2.0
SV13-5	5	10/29/2020	**6,040**	**3.8**	**8.4**	**2.3**	**19.7**	**2.6**	<1.0	**45.1**	<1.0	**15.3**	<1.0	**17.8**	<1.0
SV13-15	15	10/29/2020	**6,420**	**58.9**	<1.0	**4.3**	**48.2**	<1.0	<1.0	**3.4**	<1.0	**7.3**	<1.0	**67.2**	**5.8**
SV13A-5	5	7/26/2021	<500	<2.0	<2.0	6.0	<2.0	<2.0	<2.0	<2.0	<2.0	**10.9**	<2.0	<2.0	<2.0
SV-13A-10 *	10	7/26/2021	**25,200**	**6.4**	<2.0	<2.0	<2.0	**44.1**	<2.0	<2.0	<2.0	**3.7**	<2.0	**6.1**	<2.0

Table 4
Summary of Soil Vapor Analytical Results
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La Habra, California
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Sample ID	Sample Depth [1]	Sample Date	1,2,4-TMB	1,3,5-TMB	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene	o-Xylene	LCC			Other VOCs
											n-Pentane	n-Hexane	n-Heptane	
Residential Screening Level (0.03 AF) [2]			***2,100***	***2,100***	***7,000***	***14,000***	***14,000***	***14,000***	***3,333***	***3,333***	***NE***	***NE***	***NE***	***various***
Residential Screening Level (0.001 AF) [2]			***63,000***	***63,000***	***210,000***	***420,000***	***420,000***	***420,000***	***100,000***	***100,000***	***NE***	***NE***	***NE***	***various***
SV12-15	15	10/29/2020	**6.8**	**10.3**	<1.0	<1.0	<1.0	<1.0	**4,030**	**968**	**357**	**196**	**696**	**Acetone: 77.6** **Carbon Tetrachloride: 6.8** **Carbon disulfide: 2810** **Cyclohexane: 18.6** **Ethyl Acetate: 9.3** **4-Ethyltoluene: 5.7** **Freon 113: 4.8** **MBK: 401** **MIBK: 101** **n-Propylbenzene: 3.7** **Propylene: 3020**
SV12A-5	5	7/26/2021	**4.4**	<2.0	<2.0	<2.0	<2.0	<2.0	**28**	**13**	<2.0	<2.0	<2.0	**Bromodichloromethane: 8.2**
SV12A-10	10	7/26/2021	**14.6**	<2.0	<2.0	<2.0	<2.0	<2.0	**46**	**20**	<2.0	<2.0	<2.0	<varies
SV13-5	5	10/29/2020	<1.0	**2.5**	<1.0	<1.0	<1.0	<1.0	**90.8**	**41.5**	<10	<10	<10	**Acetone: 16.1** **Bromodichloromethane: 2.7** **Carbon disulfide: 13.0** **Ethyl Acetate: 2.2** **4-Ethyltoluene: 5.5** **n-Propylbenzene: 1.6** **Propylene: 7.0**
SV13-15	15	10/29/2020	**5.5**	**1.3**	<1.0	<1.0	<1.0	<1.0	**208**	**45.0**	**824**	**340**	**348**	**Acetone: 26.8** **Carbon tetrachloride: 8.1** **Carbon disulfide: 151** **Cyclohexane: 33.9** **4-Ethyltoluene: 2.6** **Freon 113: 8.0** **MBK: 14.3** **Isopropanol: 6.0** **n-Propylbenzene: 1.2** **Propylene: 8670**
SV13A-5	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<varies
SV-13A-10 *	10	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**4.2**	<2.0	<2.0	<2.0	**Freon 113: 15.4**

Table 4
Summary of Soil Vapor Analytical Results
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth [1]	Sample Date	TPH-GRO	Benzene	Chloroform	Dichloro difluoromethane (F12)	Ethylbenzene	Methylene Chloride	Naphthalene	4-Isopropyl toluene	Styrene	PCE	TCE	Toluene	TCFM (F11)
Residential Screening Level (0.03 AF) [2]			***20,000***	***3.2***	***4.0***	***3,333***	***37***	***33.3***	***2.8***	*NE*	***31,333***	***15.3***	***16***	***10,333***	***43,333***
Residential Screening Level (0.001 AF) [2]			***600,000***	***97***	***120***	***100,000***	***1,100***	***1,000***	***84***	*NE*	***940,000***	***460***	***480***	***310,000***	***1,300,000***
SV14-5	5	10/29/2020	**17,200**	**15.9**	**13.7**	**9.8**	**382**	**4.6**	**27.7**	**22.7**	<1.0	**28.5**	<1.0	**81.5**	**76.1**
SV14-15	15	10/29/2020	**17,100**	**25.5**	**15.3**	**5.3**	**387**	**6.0**	<1.0	**5.1**	<1.0	**58.9**	<1.0	**67.4**	**20.5**
SV14A-15	5	7/27/2021	**3,320**	**3.9**	**4.8**	**14.4**	**10**	**1.1**	ND	**119**	**2.9**	**27.4**	ND	**54.4**	**98.8**
SV14A-10	10	7/27/2021	**No Flow - High Vacuum (No Sample Collected)**												

Table 4
Summary of Soil Vapor Analytical Results
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth (1)	Sample Date	1,2,4-TMB	1,3,5-TMB	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene	o-Xylene	LCC			Other VOCs
											n-Pentane	n-Hexane	n-Heptane	
Residential Screening Level (0.03 AF) (2)			*2,100*	*2,100*	*7,000*	*14,000*	*14,000*	*14,000*	*3,333*	*3,333*	*NE*	*NE*	*NE*	*various*
Residential Screening Level (0.001 AF) (2)			*63,000*	*63,000*	*210,000*	*420,000*	*420,000*	*420,000*	*100,000*	*100,000*	*NE*	*NE*	*NE*	*various*
SV14-5	5	10/29/2020	**10.8**	**8.3**	<1.0	<1.0	<1.0	<1.0	**1,690**	**507**	**241**	**66.4**	**173**	**Acetone: 23.5** **Bromoform: 18.7** **Carbon Tetrachloride: 10.2** **Carbon disulfide: 78.1** **Cyclohexane: 11.3** **Ethyl Acetate: 2.7** **4-Ethyltoluene: 5.6** **Freon 113: 8.9** **Freon 114: 1.3** **MBK: 160** **n-Propylbenzene: 3.5** **Propylene: 988**
SV14-15	15	10/29/2020	**6.3**	**1.5**	<1.0	<1.0	<1.0	<1.0	**1,640**	**430**	**578**	**311**	**506**	**Acetone: 57.0** **Bromoform: 1.8** **Carbon tetrachloride: 10.1** **Carbon disulfide: 294** **Cyclohexane: 20.6** **4-Ethyltoluene: 2.9** **Freon 113: 6.9** **MBK: 170** **n-Propylbenzene: 1.9** **Propylene: 5010** **Vinyl Chloride: 3.0**
SV14A-15	5	7/27/2021	**21.5**	**7.8**	ND	ND	ND	**2.2**	**41**	**12**	ND	ND	ND	**n-Propylbenzene: 5.5** **Bromodichloromethane: 6.2** **Dichloromethane: 6.4** **Freon 113: 8.4**
SV14A-10	10	7/27/2021	**No Flow - High Vacuum (No Sample Collected)**											

Table 4
Summary of Soil Vapor Analytical Results
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth [1]	Sample Date	TPH-GRO	Benzene	Chloroform	Dichloro difluoromethane (F12)	Ethylbenzene	Methylene Chloride	Naphthalene	4-Isopropyl toluene	Styrene	PCE	TCE	Toluene	TCFM (F11)
Residential Screening Level (0.03 AF) [2]			***20,000***	***3.2***	***4.0***	***3,333***	***37***	***33.3***	***2.8***	*NE*	***31,333***	***15.3***	***16***	***10,333***	***43,333***
Residential Screening Level (0.001 AF) [2]			***600,000***	***97***	***120***	***100,000***	***1,100***	***1,000***	***84***	*NE*	***940,000***	***460***	***480***	***310,000***	***1,300,000***
SV15-5	5	10/29/2020	<1000	<1.0	**1.1**	<1.0	**5.9**	<1.0	<1.0	**21.3**	<1.0	**7.1**	<1.0	**8.8**	<1.0
SV15-15	15	10/29/2020	**18,300**	**32.2**	<1.0	**3.6**	**130**	<1.0	<1.0	**7.8**	<1.0	**13.4**	<1.0	**66.6**	**2.8**
SV15A-5	5	7/27/2021	**13,100**	<1.0	<1.0	**3.1**	<1.0	<1.0	<1.0	**93.0**	<1.0	**20.8**	<1.0	**1.4**	<1.0
SV15A-5 REP	5	7/27/2021	**12,800**	<1.0	<1.0	**3.6**	<1.0	<1.0	<1.0	**89.7**	<1.0	**21.0**	<1.0	**1.4**	<1.0
SV15A-10 *	10	7/27/2021	**81,400**	**28.8**	**7.3**	**2.7**	**3.7**	**45.2**	<1.0	**31.4**	<1.0	**43.2**	<1.0	**33.6**	<1.0
SV-16-5	5	3/2/2021	<100	**2.1**	**1.4**	**3.0**	**0.5**	<0.4	<0.4	<0.4	<0.4	**0.9**	**6.1**	**4.1**	<0.4
SV-16-12	12	3/2/2021	**734**	**8.9**	**3.4**	**2.2**	**2.8**	**5.3**	<0.4	<0.4	**0.6**	**1.7**	**12.4**	**701**	<0.4
SV16-5	5	7/27/2021	<500	<1.0	<1.0	**2.4**	<1.0	<1.0	<1.0	<1.0	<1.0	**1.2**	<1.0	**1.1**	<1.0
SV16-12	12	7/27/2021	<500	**5.1**	<1.0	<1.0	<1.0	**2.9**	<1.0	<1.0	<1.0	**1.7**	**5.6**	**87.2**	<1.0
SV-17-5	5	3/2/2021	<100	**11.4**			**0.4**						1.4	**12.2**	
SV-17-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**												
SV17-5	5	7/27/2021	<500	**17.8**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**1.2**	**3.1**	<1.0
SV17-12	12	7/27/2021	**High Vacuum - No Sample Collected**												
SV-18-5	5	3/2/2021	**5,520**	**2.8**	**9.6**	**4.6**	<0.4	<0.4	<0.4	<0.4	<0.4	**0.8**	**8.2**	**6.5**	<0.4
SV-18-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**												
SV18-5 *	5	8/13/2021	<250	<1.0	<1.0	**3.2**	<1.0	**32.8**	<1.0	<1.0	<1.0	**3.7**	**3.2**	**23.3**	<2.0
SV18-12	12	7/27/2021	**High Vacuum - No Sample Collected**												
SV-19-5	5	3/2/2021	<100	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4	<0.4
SV-19-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**												

Table 4
Summary of Soil Vapor Analytical Results
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth (1)	Sample Date	1,2,4-TMB	1,3,5-TMB	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene	o-Xylene	LCC			Other VOCs
											n-Pentane	n-Hexane	n-Heptane	
Residential Screening Level (0.03 AF) (2)			***2,100***	***2,100***	***7,000***	***14,000***	***14,000***	***14,000***	***3,333***	***3,333***	***NE***	***NE***	***NE***	***various***
Residential Screening Level (0.001 AF) (2)			***63,000***	***63,000***	***210,000***	***420,000***	***420,000***	***420,000***	***100,000***	***100,000***	***NE***	***NE***	***NE***	***various***
SV15-5	5	10/29/2020	**4.1**	<1.0	<1.0	<1.0	<1.0	<1.0	**35.0**	**14.7**	**11.4**	<10	<10	**Acetone: 16.6** **Carbon disulfide: 3.3** **Cyclohexane: 1.0** **Ethyl acetate: 4.2** **4-Ethyltoluene: 1.8** **MIBK: 3.7** **Propylene: 17.4**
SV15-15	15	10/29/2020	**5.6**	**1.7**	<1.0	<1.0	<1.0	<1.0	**532**	**140**	**1,310**	**409**	**175**	**Acetone: 17.7** **Carbon disulfide: 188** **Cyclohexane: 30.0** **4-Ethyltoluene: 2.9** **n-propylbenzene: 1.5** **Propylene: 11,400** **Vinyl Chloride: 3.7**
SV15A-5	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**1.2**	<10	<10	<10	<varies
SV15A-5 REP	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**1.3**	<10	<10	<10	<varies
SV15A-10 *	10	7/27/2021	**3.8**	<1.0	<1.0	<1.0	**6.9**	<1.0	**15.0**	**4.4**	**2,790**	**3,040**	**3,310**	<varies
SV-16-5	5	3/2/2021	<4.0	<4.0	<0.8	<0.8	<0.8	**1.5**	**1.3**	<0.4	<4.0	<4.0	<4.0	**Bromodichloromethane: 0.9** **Carbon tetrachloride: 0.8** **4-Isopropyltoluene: 5.6**
SV-16-12	12	3/2/2021	<4.0	<4.0	<0.8	<0.8	<0.8	<0.4	**8.6**	**3.3**	<4.0	<4.0	<4.0	**Bromodichloromethane: 0.5** **Dibromochloromethane: 0.4** **4-Isopropyltoluene: 6.4**
SV16-5	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<varies
SV16-12	12	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<varies
SV-17-5	5	3/2/2021						**0.7**	**1.2**	**0.9**	<4.0	<4.0	<4.0	**4-Isopropyltoluene: 2.4**
SV-17-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**											
SV17-5	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**2.1**	<10	<10	<10	<varies
SV17-12	12	7/27/2021	**High Vacuum - No Sample Collected**											
SV-18-5	5	3/2/2021	<4.0	<4.0	<0.8	<0.8	<0.8	**1.4**	**1.5**	<0.4	<4.0	<4.0	<4.0	**Bromodichloromethane: 2.1** **Carbon tetrachloride: 4.4** **Freon 113: 1.4** **4-Isopropyltoluene: 5.4**
SV-18-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**											
SV18-5 *	5	8/13/2021	<1.0	<1.0	<1.5	<1.5	<1.5	<1.0	<2.0	<1.0	<20	<20	<20	<varies
SV18-12	12	7/27/2021	**High Vacuum - No Sample Collected**											
SV-19-5	5	3/2/2021	<0.4	<0.4	<0.8	<0.8	<0.8	<0.4	<0.4	<0.4	<4.0	<4.0	<4.0	<varies
SV-19-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**											

Table 4
Summary of Soil Vapor Analytical Results
251 to 351 West Imperial Highway
La Habra, California
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Sample ID	Sample Depth [1]	Sample Date	TPH-GRO	Benzene	Chloroform	Dichloro difluoromethane (F12)	Ethylbenzene	Methylene Chloride	Naphthalene	4-Isopropyl toluene	Styrene	PCE	TCE	Toluene	TCFM (F11)
Residential Screening Level (0.03 AF) [2]			***20,000***	***3.2***	***4.0***	***3,333***	***37***	***33.3***	***2.8***	*NE*	***31,333***	***15.3***	***16***	***10,333***	***43,333***
Residential Screening Level (0.001 AF) [2]			***600,000***	***97***	***120***	***100,000***	***1,100***	***1,000***	***84***	*NE*	***940,000***	***460***	***480***	***310,000***	***1,300,000***
SV-20-5	5	3/2/2021	<100	**1.5**	**2.9**	**1.1**	<0.4	**2.4**	<0.4	<0.4	<0.4	**0.6**	**2.1**	**3.7**	<0.4
SV-20-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**												
SV-21-5	5	3/2/2021	<100	**2.0**	**0.5**	<0.4	**0.6**	**2.7**	<0.4	<0.4	<0.4	**0.5**	3.8	**6.1**	<0.4
SV-21-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**												
SV-22-5	5	3/2/2021	<100	**6.7**	**2.1**	**3.5**	**0.7**	<0.4	<0.4	<0.4	<0.4	**1.7**	**13.6**	**8.0**	**1.2**
SV-22-12	12	3/2/2021	<100	**3.0**	**1.1**	<0.4	**0.8**	**1.5**	<0.4	<0.4	<0.4	**0.9**	**4.6**	**12.3**	<0.4
SV22-5 *	5	7/26/2021	**6,620**	**6.8**	<2.0	<2.0	<2.0	**12.4**	<2.0	<2.0	<2.0	**15.7**	**3.2**	**31.4**	<2.0
SV22-12	12	7/26/2021	<500	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**2.4**	<2.0
SV-23-5	5	3/2/2021	**167,000**	**4.0**	<0.4	<0.4	<0.4	**13.1**	<0.4	<0.4	<0.4	**0.7**	**7.6**	**5.0**	<0.4
SV-23-12	12	3/2/2021	**4,610**	**2.4**	**2.0**	**0.5**	<0.4	<0.4	<0.4	<0.4	<0.4	**0.9**	**3.4**	**6.4**	<0.4
SV23-5 *	5	7/26/2021	**135,000**	**9.9**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**13.5**	**2.2**	**17.4**	<2.0
SV23-12	12	7/26/2021	<500	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**2.4**	<2.0	<2.0	<2.0
SV-24-5	5	3/2/2021	<100	**0.8**	**2.7**	**4.2**	<0.4	<0.4	<0.4	**5.0**	<0.4	**0.7**	**1.1**	**1.7**	<0.4
SV-24-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**												
SV-25-5	5	3/2/2021	**5,360**	**4.3**	**3.1**	**5.2**	**2.1**	<0.4	<0.4	**145**	<0.4	**3.1**	**4.4**	**15.4**	**0.8**
SV-25-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**												
SV25-5 *	5	7/26/2021	<500	**5.7**	<2.0	**4.6**	<2.0	**5.3**	<2.0	<2.0	<2.0	**3.2**	<2.0	**5.6**	<2.0
SV25-12 *	12	7/26/2021	**5,480**	**9.4**	<2.0	**6.5**	**2.7**	**63.9**	<2.0	**9.5**	**2.1**	**17.2**	**2.5**	**147**	<2.0
SV-26-5	5	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**												
SV-26-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**												
SV26-5	5	7/26/2021	**High Vacuum - No Sample Collected**												
SV26-12 *	12	7/26/2021	**4,700**	<2.0	<2.0	<2.0	<2.0	**25.0**	<2.0	<2.0	<2.0	**2.9**	<2.0	**12.2**	<2.0
SV-27-5	5	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**												
SV-27-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**												
SV27-5	5	7/26/2021	**4,050**	<2.0	<2.0	<2.0	<2.0	**20.8**	<2.0	**3.7**	<2.0	**2.6**	<2.0	**10.1**	<2.0
SV27-12	12	7/26/2021	<500	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**2.2**	**2.1**	**4.2**	<2.0	**4.9**	<2.0

Table 4
Summary of Soil Vapor Analytical Results
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth (1)	Sample Date	1,2,4-TMB	1,3,5-TMB	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene	o-Xylene	LCC			Other VOCs
											n-Pentane	n-Hexane	n-Heptane	
Residential Screening Level (0.03 AF) (2)			***2,100***	***2,100***	***7,000***	***14,000***	***14,000***	***14,000***	***3,333***	***3,333***	***NE***	***NE***	***NE***	***various***
Residential Screening Level (0.001 AF) (2)			***63,000***	***63,000***	***210,000***	***420,000***	***420,000***	***420,000***	***100,000***	***100,000***	***NE***	***NE***	***NE***	***various***
SV-20-5	5	3/2/2021	<4.0	<4.0	<0.8	<0.8	<0.8	**9.1**	**1.6**	**0.6**	<4.0	<4.0	<4.0	**Carbon tetrachloride: 0.4** **Freon 113: 0.4** **4-Isopropyltoluene: 39.6**
SV-20-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**											
SV-21-5	5	3/2/2021	<4.0	<4.0	<0.8	<0.8	<0.8	**5.3**	**2.6**	**0.6**	<4.0	<4.0	<4.0	**4-Isopropyltoluene: 15.2**
SV-21-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**											
SV-22-5	5	3/2/2021	<4.0	<4.0	<0.8	<0.8	<0.8	**3.0**	**2.3**	**0.7**	<4.0	<4.0	<4.0	**Bromochloromethane: 0.7** **Carbon Tetrachloride: 1.0** **4-Isopropyltoluene: 12.3**
SV-22-12	12	3/2/2021	<4.0	<4.0	<0.8	<0.8	<0.8	**2.4**	**4.7**	**3.6**	<4.0	<4.0	<4.0	**Carbon tetrachloride: 0.5** **Freon 113: 0.5** **4-Isopropyltoluene: 9.1**
SV22-5 *	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**2.8**	<20	<20	<20	<varies
SV22-12	12	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV-23-5	5	3/2/2021	<4.0	<4.0	<0.8	<0.8	<0.8	**7.2**	**1.9**	<0.4	<4.0	<4.0	<4.0	**Carbon tetrachloride: 0.6** **4-Isopropyltoluene: 15.9**
SV-23-12	12	3/2/2021	<4.0	<4.0	<0.8	<0.8	<0.8	**2.4**	**1.9**	**0.4**	<4.0	<4.0	<4.0	**Carbon tetrachloride: 1.2** **4-Isopropyltoluene: 10.4**
SV23-5 *	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**2.2**	<20	<20	<20	<varies
SV23-12	12	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV-24-5	5	3/2/2021	<4.0	<4.0	<0.8	<0.8	<0.8	**0.8**	**1.0**	<0.4	<4.0	<4.0	<4.0	**Carbon tetrachloride: 0.6** **Freon 113: 0.5**
SV-24-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**											
SV-25-5	5	3/2/2021	**4.4**	<4.0	<0.8	**1.9**	**4.4**	**18.7**	**5.3**	**3.1**	<4.0	<4.0	<4.0	**Bromodichloromethane: 2.4** **Carbon tetrachloride: 0.5** **Freon 113: 0.4**
SV-25-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**											
SV25-5 *	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**4.4**	<20	<20	<20	<varies
SV25-12 *	12	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**4.0**	**3.1**	<20	<20	<20	<varies
SV-26-5	5	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**											
SV-26-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**											
SV26-5	5	7/26/2021	**High Vacuum - No Sample Collected**											
SV26-12 *	12	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	**2.1**	<2.0	<2.0	<20	<20	<20	<varies
SV-27-5	5	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**											
SV-27-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**											
SV27-5	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**2.2**	<20	<20	<20	<varies
SV27-12	12	7/26/2021	**2.4**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies

Table 4
Summary of Soil Vapor Analytical Results
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth (1)	Sample Date	TPH-GRO	Benzene	Chloroform	Dichloro difluoromethane (F12)	Ethylbenzene	Methylene Chloride	Naphthalene	4-Isopropyl toluene	Styrene	PCE	TCE	Toluene	TCFM (F11)
Residential Screening Level (0.03 AF) (2)			***20,000***	***3.2***	***4.0***	***3,333***	***37***	***33.3***	***2.8***	*NE*	***31,333***	***15.3***	***16***	***10,333***	***43,333***
Residential Screening Level (0.001 AF) (2)			***600,000***	***97***	***120***	***100,000***	***1,100***	***1,000***	***84***	*NE*	***940,000***	***460***	***480***	***310,000***	***1,300,000***
SV-28-5	5	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**												
SV-28-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**												
SV28-5	5	7/26/2021	**3,240**	**3.6**	<2.0	<2.0	<2.0	**3.6**	<2.0	**2.9**	<2.0	**7.8**	<2.0	**12.7**	<2.0
SV28-12	12	7/26/2021	**High Vacuum - No Sample Collected**												
SV-29-5	5	3/2/2021	<100	**13.2**	**3.8**	<0.4	**0.6**	**4.4**	<0.4	<0.4	<0.4	**0.8**	**7.8**	**7.9**	<0.4
SV-29-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**												
SV29-5 *	5	7/26/2021	<500	**8.1**	<2.0	<2.0	<2.0	**4.0**	<2.0	<2.0	<2.0	**2.1**	<2.0	**8.8**	<2.0
SV29-12 *	5	7/26/2021	**4,110**	**4.2**	<2.0	<2.0	<2.0	**6.4**	<2.0	<2.0	<2.0	**6.5**	**7.7**	**64.2**	<2.0
SV-30-5	5	3/2/2021	<100	**1.5**	**3.8**	**2.0**	<0.4	**1.2**	<0.4	<0.4	<0.4	**0.8**	**4.2**	**3.9**	**1.6**
SV-30-5 REP	5	3/2/2021	<100	**1.6**	**3.7**	**2.1**	**0.5**	**1.1**	<0.4	<0.4	<0.4	**0.6**	**3.1**	**4.1**	**1.4**
SV-30-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**												
SV31-5	5	7/26/2021	**5,490**	**6.9**	**28.8**	**4.6**	<2.0	<2.0	<2.0	**3.5**	<2.0	**16.0**	<2.0	**3.3**	<2.0
SV31-10	10	7/26/2021	**3,970**	**6.8**	<2.0	<2.0	<2.0	<2.0	<2.0	**3.9**	<2.0	**4.4**	<2.0	**7.7**	<2.0
SV32-5	5	7/27/2021	**1,310**	**2.2**	<1.0	**3.8**	**1.2**	**1.6**	<1.0	**18.8**	<1.0	**36.6**	<1.0	**8.0**	<1.0
SV32-10 *	10	7/27/2021	<500	**15.9**	<1.0	**6.5**	<1.0	<1.0	<1.0	**13.9**	<1.0	**42.2**	<1.0	**7.5**	<1.0
SV33-5	5	7/27/2021	<500	<1.0	<1.0	**4.9**	<1.0	<1.0	<1.0	**5.3**	<1.0	**7.8**	<1.0	**2.2**	<1.0
SV33-10	10	7/27/2021	**118,000**	**44.9**	<1.0	**4.4**	**13.6**	**1.1**	<1.0	**302.0**	<1.0	**83.3**	<1.0	**93.6**	<1.0
SV34-5	5	7/27/2021	<500	**1.8**	<1.0	**4.7**	**1.4**	<1.0	<1.0	**48.0**	<1.0	**21.9**	<1.0	**9.6**	<1.0
SV34-10	10	7/27/2021	**39,100**	**37.2**	<1.0	**4.8**	**5.4**	**2.4**	<1.0	**34.4**	<1.0	**60.8**	<1.0	**69.0**	<1.0
SV35-5	5	7/27/2021	**1,800**	**2.6**	**2.3**	**7.9**	**8.5**	<1.0	<1.0	**106.0**	**2.7**	**35.9**	<1.0	**42.0**	**112**
SV35-10 *	10	7/27/2021	**2,430**	**8.6**	**1.4**	**3.2**	**5.1**	**1.5**	<1.0	**30.7**	**1.5**	**20.2**	<1.0	**54.8**	**6.4**
SV36-5	5	7/27/2021	**4,260**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**1.7**	**19.6**	<1.0	**3.3**	**4.2**
SV36-10	10	7/27/2021	**High Vacuum - No Sample Collected**												
SV37-5	5	7/27/2021	**13,600**	<1.0	<1.0	**2.5**	**2.1**	**1.9**	<1.0	**18.2**	<1.0	**9.2**	<1.0	**6.5**	<1.0
SV37-10	10	7/27/2021	**102,000**	**56.5**	**6.6**	**2.8**	**7.5**	**1.3**	<1.0	**54.2**	<1.0	**81.7**	<1.0	**61.1**	<1.0
SV38-5	5	7/27/2021	**9,080**	**7.4**	**36.4**	**7.1**	<1.0	**1.5**	<1.0	<1.0	**1.2**	**1.1**	<1.0	**3.8**	<1.0
SV38-5 Tracer RR	5	7/27/2021	**6,190**	**3.8**	**14.0**	**2.9**	<1.0	<1.0	<1.0	**1.2**	<1.0	**1.1**	<1.0	**4.5**	<1.0
SV38-10	10	7/27/2021	**4,710**	**1.6**	<1.0	**2.9**	<1.0	**2.2**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
SV38-10 Tracer RR	10	7/27/2021	**2,220**	**1.2**	<1.0	<1.0	<1.0	<1.0	<1.0	**1.4**	<1.0	**1.0**	<1.0	<1.0	<1.0
SV39-5	5	7/26/2021	<500	<2.0	**3.5**	<2.0	<2.0	**2.9**	<2.0	<2.0	<2.0	**2.7**	<2.0	**3.9**	<2.0
SV39-10	10	7/26/2021	<500	**4.2**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**13.3**	<2.0	**14.9**	<2.0

Table 4
Summary of Soil Vapor Analytical Results
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth (1)	Sample Date	1,2,4-TMB	1,3,5-TMB	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene	o-Xylene	LCC			Other VOCs
											n-Pentane	n-Hexane	n-Heptane	
Residential Screening Level (0.03 AF) (2)			***2,100***	***2,100***	***7,000***	***14,000***	***14,000***	***14,000***	***3,333***	***3,333***	***NE***	***NE***	***NE***	***various***
Residential Screening Level (0.001 AF) (2)			***63,000***	***63,000***	***210,000***	***420,000***	***420,000***	***420,000***	***100,000***	***100,000***	***NE***	***NE***	***NE***	***various***
SV-28-5	5	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**											
SV-28-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**											
SV28-5	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**5.4**	<20	<20	<20	<varies
SV28-12	12	7/26/2021	**High Vacuum - No Sample Collected**											
SV-29-5	5	3/2/2021	<4.0	<4.0	<0.8	<0.8	<0.8	3.6	**1.7**	<0.4	<4.0	<4.0	<4.0	**4-Isopropyltoluene: 17.2**
SV-29-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**											
SV29-5 *	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV29-12 *	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV-30-5	5	3/2/2021	<4.0	<4.0	<0.8	<0.8	<0.8	**0.4**	**0.8**	<0.4	<4.0	<4.0	<4.0	**Carbon tetrachloride: 2.9** **Freon 113: 1.8** **4-Isopropyltoluene: 4.1**
SV-30-5 REP	5	3/2/2021	<4.0	<4.0	<0.8	<0.8	<0.8	**5.6**	**1.0**	<0.4	<4.0	<4.0	<4.0	**Carbon tetrachloride: 2.6** **Freon 113: 1.5** **4-Isopropyltoluene: 4.1**
SV-30-12	12	3/2/2021	**No Flow - High Vacuum (No Sample Collected)**											
SV31-5	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV31-10	10	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**2.3**	<20	<20	<20	<varies
SV32-5	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**2.2**	**2.0**	<10	<10	<10	<varies
SV32-10 *	10	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<varies
SV33-5	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<varies
SV33-10	10	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**14.7**	**12.1**	<10	<10	<10	<varies
SV34-5	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**2.1**	<1.0	<10	<10	<10	<varies
SV34-10	10	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**6.9**	**6.2**	<10	<10	<10	<varies
SV35-5	5	7/27/2021	**13.5**	**4.5**	<1.0	<1.0	**14.7**	<1.0	**38.2**	**13.0**	<10	<10	<10	**n-Propylbenzene: 2.1** **Bromodichloromethane: 2.3**
SV35-10 *	10	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**17.8**	**5.1**	<10	<10	<10	<varies
SV36-5	5	7/27/2021	**2.4**	<1.0	<1.0	<1.0	<1.0	<1.0	**6.4**	**4.2**	<10	<10	<10	**Bromodichloromethane: 2.0**
SV36-10	10	7/27/2021	**High Vacuum - No Sample Collected**											
SV37-5	5	7/27/2021	**2.1**	<1.0	<1.0	<1.0	<1.0	<1.0	**7.8**	**5.5**	<10	<10	<10	**Bromodichloromethane: 1.5**
SV37-10	10	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	**13.0**	**21.9**	**8.6**	<10	<10	<10	<varies
SV38-5	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	**1.5**	**2.3**	<1.0	**230,000**	**87,700**	**48,500**	**Bromodichloromethane: 26.9** **Carbon tetrachloride: 3.7**
SV38-5 Tracer RR	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**18,900**	**17,800**	**8,930**	**Bromodichloromethane: 12.0** **Dibromochloromethane: 3.9**
SV38-10	10	7/27/2021	**1.7**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**9,840**	**490**	<10	**Carbon tetrachloride: 4.5**
SV38-10 Tracer RR	10	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	**1.3**	<1.0	<1.0	**58,900**	**17,600**	**382**	<varies
SV39-5	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV39-10	10	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies

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251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth [1]	Sample Date	TPH-GRO	Benzene	Chloroform	Dichloro difluoromethane (F12)	Ethylbenzene	Methylene Chloride	Naphthalene	4-Isopropyl toluene	Styrene	PCE	TCE	Toluene	TCFM (F11)
Residential Screening Level (0.03 AF) [2]			***20,000***	***3.2***	***4.0***	***3,333***	***37***	***33.3***	***2.8***	*NE*	***31,333***	***15.3***	***16***	***10,333***	***43,333***
Residential Screening Level (0.001 AF) [2]			***600,000***	***97***	***120***	***100,000***	***1,100***	***1,000***	***84***	*NE*	***940,000***	***460***	***480***	***310,000***	***1,300,000***
SV40-5	5	7/26/2021	<500	**3.8**	**7.1**	**7.0**	<2.0	**3.5**	<2.0	<2.0	<2.0	**8.5**	<2.0	**7.3**	<2.0
SV40-5 TRACER RR	5	7/27/2021	<500	**1.7**	<1.0	**5.7**	<1.0	<1.0	<1.0	<1.0	<1.0	**9.2**	<1.0	**1.9**	<1.0
SV40-10	10	7/26/2021	**3,100**	**2.8**	**4.1**	<2.0	<2.0	**8.1**	<2.0	**2.1**	<2.0	<2.0	<2.0	**2.7**	<2.0
SV40-10 TRACER RR	10	7/27/2021	<500	**3.8**	<1.0	**6.8**	<1.0	**6.6**	<1.0	**2.0**	<1.0	**1.7**	<1.0	**2.4**	**2.1**
SV41-5	5	7/26/2021	**95,400**	<2.0	<2.0	**6.0**	<2.0	<2.0	<2.0	<2.0	<2.0	**31.5**	<2.0	**7.5**	<2.0
SV41-10 *	10	7/26/2021	**421,000**	**60.9**	<2.0	**7.4**	<2.0	**43.3**	<2.0	<2.0	<2.0	**86.3**	<2.0	**57.3**	<2.0
SV42-5	5	7/26/2021	**6,110**	**17.3**	**20.1**	<2.0	**3.1**	<2.0	<2.0	**110**	<2.0	**20.7**	<2.0	**51.2**	<2.0
SV42-10 *	10	7/26/2021	**13,300**	**34.0**	<2.0	**4.4**	**5.6**	**9.6**	<2.0	**19.7**	**3.0**	**17.6**	<2.0	**60.2**	<2.0
AA1-210726	Ambient Air	7/26/2021	<2.0	<2.0	<2.0	4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AA2-210727	Ambient Air	7/27/2021	<1.0	<1.0	<1.0	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0

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La Habra, California
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Sample ID	Sample Depth (1)	Sample Date	1,2,4-TMB	1,3,5-TMB	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene	o-Xylene	LCC			Other VOCs
											n-Pentane	n-Hexane	n-Heptane	
Residential Screening Level (0.03 AF) (2)			***2,100***	***2,100***	***7,000***	***14,000***	***14,000***	***14,000***	***3,333***	***3,333***	***NE***	***NE***	***NE***	***various***
Residential Screening Level (0.001 AF) (2)			***63,000***	***63,000***	***210,000***	***420,000***	***420,000***	***420,000***	***100,000***	***100,000***	***NE***	***NE***	***NE***	***various***
SV40-5	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**387,000**	**91,000**	**43,800**	<varies
SV40-5 TRACER RR	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**85**	**118**	**315**	<varies
SV40-10	10	7/26/2021	**2.1**	<2.0	<2.0	<2.0	<2.0	<2.0	**6.0**	**5.8**	<20	<20	<20	**Carbon tetrachloride: 2.8**
SV40-10 TRACER RR	10	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**2.7**	**5,850**	**3,700**	**519**	**Carbon tetrachloride: 2.2**
SV41-5	5	7/26/2021	**4.5**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV41-10 *	10	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV42-5	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	**3.9**	**8.9**	**3.9**	<20	<20	<20	**Bromodichloromethane: 3.7** **Dibromochloromethane: 3.4**
SV42-10 *	10	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	**17.7**	**15.1**	**8.7**	<20	<20	<20	<varies
AA1-210726	Ambient Air	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<varies
AA2-210727	Ambient Air	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<varies

Notes:

All concentrations reported in microgram per cubic meter (μg/m^3)

(1) - Reported as feet below original grade.

(2) - More conservative screening level between USEPA Region 9 RSL (May, 2020) and DTSC HERO Note 3 (June, 2020); San Francisco Bay Regional Water Quality Control Board ESLs (January 2019) used for TPH screening.

* - Grab sample, no purge. Refer to data validation sheet rgarding these sample results.

"<" - Results reported below Laboratory Reporting Limit.

BOLD - Analyte reported above the laboratory reporting limit.

Green shading indicates value above the RSLs or HERO Note 3 residential screening level (0.03 attenuation factor)

Orange shading indicates value above the RSLs or HERO Note 3 residential risk level (0.001 attenuation factor)

cis-1,2-DCE - cis-1,2-dichloroethene

DTSC - Department of Toxic Substance Control

EPA - United States Environmental Protection Agency

HERO - Human and Ecological Risk Office

HHRA - Human Health Risk Assessment

LCC - Leak Check Compound

MEK - 2-Butanone

MIBK - 4-Methyl-2-Pentanone

NE - Not Established

PCE - Tetrachloroethene

TCE - Trichloroethene

TCFM (F11) - Trichlorofluoromethane (Freon 11)

1,2,4-TMB - 1,2,4-Trimethylbenzene

1,3,5-TMB - 1,3,5-Trimethylbenzene

VOCs - Volatile Organic Compounds

Table 5A
Summary of Current Soil Vapor Analytical Results - VOCs
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth (1)	Sample Date	TPH-GRO	Benzene	Chloroform	Dichloro difluoromethane (F12)	Ethylbenzene	Methylene Chloride	Naphthalene	4-Isopropyl toluene	Styrene	PCE	TCE	Toluene	TCFM (F11)
Residential Screening Level (0.03 AF) (2)			***20,000***	***3.2***	***4.0***	***3,333***	***37***	***33.3***	***2.8***	***NE***	***31,333***	***15.3***	***16***	***10,333***	***43,333***
Residential Screening Level (0.001 AF) (2)			***600,000***	***97***	***120***	***100,000***	***1,100***	***1,000***	***84***	***NE***	***940,000***	***460***	***480***	***310,000***	***1,300,000***
AA1-210726	--	7/26/2021	<500	<2.0	<2.0	**4.0**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
AA2-210727	--	7/27/2021	<500	<2.0	<2.0	**4.0**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**1.2**	<2.0
SV1A-5	5	7/26/2021	**47,000**	**22.5**	<2.0	<2.0	**4.1**	<2.0	<2.0	**52.4**	<2.0	**21.1**	<2.0	**21.1**	<2.0
SV1A-5 REP	5	7/26/2021	**79,500**	**20.2**	<2.0	<2.0	**3.7**	<2.0	<2.0	**45.6**	<2.0	**17.9**	<2.0	**18.1**	<2.0
SV1A-10 *	10	7/26/2021	**16,100**	**19.3**	<2.0	<2.0	**5.1**	**28.6**	<2.0	**19.4**	<2.0	**71.8**	<2.0	**32.2**	<2.0
SV2A-5	5	7/26/2021	**45,400**	**4.5**	<2.0	**5.0**	<2.0	**4.8**	<2.0	**11.0**	<2.0	<2.0	<2.0	**4.7**	<2.0
SV2A-5 REP	5	7/26/2021	**59,400**	**5.5**	<2.0	**5.1**	<2.0	**5.2**	<2.0	**13.2**	<2.0	<2.0	<2.0	**4.4**	<2.0
SV2A-10	10	7/26/2021	**High Vacuum - No Sample Collected**												
SV3A-5	5	7/27/2021	<500	<1.0	<1.0	**3.8**	<1.0	<1.0	<1.0	**3.0**	<1.0	**9.0**	<1.0	**2.9**	<1.0
SV3A-10	10	7/27/2021	**471,000**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**9.6**	<1.0	<1.0	<1.0
SV4A-5	5	7/27/2021	**88,900**	**17.2**	<1.0	**2.4**	**5.4**	<1.0	<1.0	**73.1**	<1.0	**73.0**	<1.0	**75.4**	<1.0
SV4A-10	10	7/27/2021	**895,000**	**12.9**	<1.0	<1.0	**6.9**	<1.0	<1.0	**783**	**2.9**	<1.0	<1.0	**42.3**	<1.0
SV6A-5	5	7/27/2021	**130,000**	**14.1**	**20.8**	**3.8**	**2.6**	**2.6**	<1.0	**5.7**	<1.0	**65.6**	<1.0	**28.9**	<1.0
SV6A-10	10	7/27/2021	**9,930**	**20.7**	<1.0	<1.0	**1.9**	<1.0	<1.0	**3.8**	**2.3**	**9.0**	<1.0	**12.7**	<1.0
SV6A-10 REP	10	7/27/2021	**10,100**	**21.5**	<1.0	<1.0	**1.6**	<1.0	<1.0	**3.5**	**2.2**	**8.4**	<1.0	**13.1**	<1.0
SV7A-5	5	7/27/2021	**202,000**	**90.9**	<1.0	<1.0	**14.0**	<1.0	<1.0	**69.5**	<1.0	**46.7**	<1.0	**74.0**	<1.0
SV7A-10	10	7/27/2021	**47,200**	**84.9**	<1.0	<1.0	**9.2**	**2.3**	<1.0	**43.6**	<1.0	**53.3**	<1.0	**53.4**	<1.0
SV8A-5	5	7/27/2021	**12,000**	**7.5**	**5.4**	<1.0	**7.1**	**1.1**	<1.0	**8.0**	<1.0	**5.5**	<1.0	**28.7**	<1.0
SV8A-10	10	7/27/2021	**High Vacuum - No Sample Collected**												
SV9A-5	5	7/27/2021	**8,120**	**39.6**	**2.5**	<1.0	**6.9**	<1.0	<1.0	**50.1**	<1.0	**8.5**	<1.0	**37.4**	<1.0
SV9A-10	10	7/27/2021	**High Vacuum - No Sample Collected**												
SV10A-5	5	7/26/2021	**136,000**	**3.8**	<2.0	**4.5**	**5.5**	<2.0	<2.0	**82.3**	<2.0	**28.3**	<2.0	**14.0**	<2.0
SV10A-10	10	7/26/2021	**454,000**	**41.8**	<2.0	<2.0	<2.0	**4.8**	<2.0	**39.6**	<2.0	**127**	**2.1**	**37.5**	<2.0
SV11A-5 *	5	7/26/2021	**781,000**	**65.1**	**30.5**	<2.0	**15.3**	**7.1**	<2.0	**23.2**	<2.0	**289**	<2.0	**102**	<2.0
SV11A-10	10	7/26/2021	**723,000**	**70.0**	**4.2**	<2.0	**13.8**	<2.0	<2.0	**21.3**	<2.0	**263**	<2.0	**69.0**	<2.0
SV12A-5	5	7/26/2021	**52,600**	**27.6**	**6.7**	<2.0	**10.8**	<2.0	<2.0	**10.5**	<2.0	**102**	<2.0	**91.4**	<2.0
SV12A-10	10	7/26/2021	**63,800**	**49.0**	**3.3**	<2.0	**17.7**	**2.2**	<2.0	**22.1**	<2.0	**102**	<2.0	**106**	<2.0
SV13A-5	5	7/26/2021	<500	<2.0	<2.0	**6.0**	<2.0	<2.0	<2.0	<2.0	<2.0	**10.9**	<2.0	<2.0	<2.0
SV13A-10 *	10	7/26/2021	**25,200**	**6.4**	<2.0	<2.0	<2.0	**44.1**	<2.0	<2.0	<2.0	**3.7**	<2.0	**6.1**	<2.0
SV14A-5	5	7/27/2021	**3,320**	**3.9**	**4.8**	**14.4**	**10.4**	**1.1**	<1.0	**119**	**2.9**	**27.4**	<1.0	**54.4**	**98.8**
SV14A-10	10	7/27/2021	**High Vacuum - No Sample Collected**												

Table 5A
Summary of Current Soil Vapor Analytical Results - VOCs
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth (1)	Sample Date	1,2,4-TMB	1,3,5-TMB	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene	o-Xylene	LCC			Other VOCs
											n-Pentane	n-Hexane	n-Heptane	
Residential Screening Level (0.03 AF) (2)			***2,100***	***2,100***	***7,000***	***14,000***	***14,000***	***14,000***	***3,333***	***3,333***	***NE***	***NE***	***NE***	***various***
Residential Screening Level (0.001 AF) (2)			***63,000***	***63,000***	***210,000***	***420,000***	***420,000***	***420,000***	***100,000***	***100,000***	***NE***	***NE***	***NE***	***various***
AA1-210726	--	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
AA2-210727	--	7/27/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV1A-5	5	7/26/2021	**7.9**	<2.0	<2.0	**6.9**	<2.0	<2.0	**11.8**	**7.2**	<20	<20	<20	<varies
SV1A-5 REP	5	7/26/2021	**6.8**	<2.0	<2.0	**6.4**	<2.0	<2.0	**12.7**	**6.0**	<20	<20	<20	<varies
SV1A-10 *	10	7/26/2021	**4.5**	**2.4**	<2.0	<2.0	**4.2**	**3.6**	**16.0**	**5.6**	<20	<20	<20	<varies
SV2A-5	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	**Carbon tetrachloride: 13.3** **Freon 113: 9.4**
SV2A-5 REP	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	**Carbon tetrachloride: 12.8** **Freon 113: 9.2**
SV2A-10	10	7/26/2021	**High Vacuum - No Sample Collected**											
SV3A-5	5	7/27/2021	**1.1**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**1.4**	<10	<10	<10	<varies
SV3A-10	10	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<varies
SV4A-5	5	7/27/2021	**13.6**	<1.0	<1.0	<1.0	<1.0	**3.5**	<1.0	**4.2**	<10	<10	<10	<varies
SV4A-10	10	7/27/2021	**34.3**	<1.0	<1.0	<1.0	<1.0	**37.3**	**17.7**	**10.4**	<10	<10	<10	**n-Propylbenzene: 2.4**
SV6A-5	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	**Bromodichloromethane: 11.1**
SV6A-10	10	7/27/2021	**3.0**	<1.0	<1.0	<1.0	<1.0	**1.3**	**9.1**	**7.6**	<10	<10	<10	<varies
SV6A-10 REP	10	7/27/2021	**2.9**	<1.0	<1.0	<1.0	<1.0	**1.4**	**9.3**	**7.6**	<10	<10	<10	<varies
SV7A-5	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**18.6**	**25.9**	<10	<10	<10	<varies
SV7A-10	10	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**11.0**	**11.5**	<10	<10	<10	<varies
SV8A-5	5	7/27/2021	**11.0**	<1.0	**3.7**	<1.0	<1.0	<1.0	**25.7**	**13.9**	<10	<10	<10	**n-Propylbenzene: 2.2**
SV8A-10	10	7/27/2021	**High Vacuum - No Sample Collected**											
SV9A-5	5	7/27/2021	**11.7**	**4.5**	<1.0	<1.0	**8.2**	**1.4**	**27.6**	**9.4**	<10	<10	<10	**n-Propylbenzene: 2.1** **cis-1,2-DCE: 3.0**
SV9A-10	10	7/27/2021	**High Vacuum - No Sample Collected**											
SV10A-5	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**8.1**	**7.4**	<20	<20	<20	<varies
SV10A-10	10	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV11A-5 *	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV11A-10	10	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**10.2**	<20	<20	<20	<varies
SV12A-5	5	7/26/2021	**4.4**	<2.0	<2.0	<2.0	<2.0	<2.0	**27.8**	**13.4**	<20	<20	<20	**Bromodichloromethane: 8.2**
SV12A-10	10	7/26/2021	**14.6**	<2.0	<2.0	<2.0	<2.0	<2.0	**46.2**	**20.1**	<20	<20	<20	<varies
SV13A-5	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV13A-10 *	10	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**4.2**	<20	<20	<20	**n-Propylbenzene: 5.5** **Bromodichloromethane: 6.2** **Dibromochloromethane: 6.4** **Freon 113: 15.4**
SV14A-5	5	7/27/2021	**21.5**	**7.8**	<1.0	<1.0	<1.0	**2.2**	**41.1**	**11.7**	<10	<10	<10	<varies
SV14A-10	10	7/27/2021	**High Vacuum - No Sample Collected**											

Table 5A
Summary of Current Soil Vapor Analytical Results - VOCs
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth (1)	Sample Date	TPH-GRO	Benzene	Chloroform	Dichloro difluoromethane (F12)	Ethylbenzene	Methylene Chloride	Naphthalene	4-Isopropyl toluene	Styrene	PCE	TCE	Toluene	TCFM (F11)
Residential Screening Level (0.03 AF) (2)			***20,000***	***3.2***	***4.0***	***3,333***	***37***	***33.3***	***2.8***	***NE***	***31,333***	***15.3***	***16***	***10,333***	***43,333***
Residential Screening Level (0.001 AF) (2)			***600,000***	***97***	***120***	***100,000***	***1,100***	***1,000***	***84***	***NE***	***940,000***	***460***	***480***	***310,000***	***1,300,000***
SV15A-5	5	7/27/2021	**13,100**	<1.0	<1.0	**3.1**	<1.0	<1.0	<1.0	**93.0**	<1.0	**20.8**	<1.0	**1.4**	<1.0
SV15A-5 REP	5	7/27/2021	**12,800**	<1.0	<1.0	**3.6**	<1.0	<1.0	<1.0	**89.7**	<1.0	**21.0**	<1.0	**1.4**	<1.0
SV15A-10 *	10	7/27/2021	**81,400**	**28.8**	**7.3**	**2.7**	**3.7**	**45.2**	<1.0	**31.4**	<1.0	**43.2**	<1.0	**33.6**	<1.0
SV16-5	5	7/27/2021	<500	<1.0	<1.0	**2.4**	<1.0	<1.0	<1.0	<1.0	<1.0	**1.2**	<1.0	**1.1**	<1.0
SV16-12	12	7/27/2021	<500	**5.1**	<1.0	<1.0	<1.0	**2.9**	<1.0	<1.0	<1.0	**1.7**	**5.6**	**87.2**	<1.0
SV17-5	5	7/27/2021	<500	**17.8**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**1.2**	**3.1**	<1.0
SV17-12	12	7/27/2021	**High Vacuum - No Sample Collected**												
SV18-5 *	5	8/13/2021	<250	<1.0	<1.0	**3.2**	<1.0	**32.8**	<1.0	<1.0	<1.0	**3.7**	**3.2**	**23.3**	<2.0
SV18-12	12	7/27/2021	**High Vacuum - No Sample Collected**												
SV22-5 *	5	7/26/2021	**6,620**	**6.8**	<2.0	<2.0	<2.0	**12.4**	<2.0	<2.0	<2.0	**15.7**	**3.2**	**31.4**	<2.0
SV22-12	12	7/26/2021	<500	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**2.4**	<2.0
SV23-5 *	5	7/26/2021	**135,000**	**9.9**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**13.5**	**2.2**	**17.4**	<2.0
SV23-12	12	7/26/2021	<500	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**2.4**	<2.0	<2.0	<2.0
SV25-5 *	5	7/26/2021	<500	**5.7**	<2.0	**4.6**	<2.0	**5.3**	<2.0	<2.0	<2.0	**3.2**	<2.0	**5.6**	<2.0
SV25-12 *	12	7/26/2021	**5,480**	**9.4**	<2.0	**6.5**	**2.7**	**63.9**	<2.0	**9.5**	**2.1**	**17.2**	**2.5**	**147**	<2.0
SV26-5	5	7/26/2021	**High Vacuum - No Sample Collected**												
SV26-12 *	12	7/26/2021	**4,700**	<2.0	<2.0	<2.0	<2.0	**25.0**	<2.0	<2.0	<2.0	**2.9**	<2.0	**12.2**	<2.0
SV27-5	5	7/26/2021	**4,050**	<2.0	<2.0	<2.0	<2.0	**20.8**	<2.0	**3.7**	<2.0	**2.6**	<2.0	**10.1**	<2.0
SV27-12	12	7/26/2021	<500	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**2.2**	**2.1**	**4.2**	<2.0	**4.9**	<2.0
SV28-5	5	7/26/2021	**3,240**	**3.6**	<2.0	<2.0	<2.0	**3.6**	<2.0	**2.9**	<2.0	**7.8**	<2.0	**12.7**	<2.0
SV28-12	12	7/26/2021	**High Vacuum - No Sample Collected**												
SV29-5 *	5	7/26/2021	<500	**8.1**	<2.0	<2.0	<2.0	**4.0**	<2.0	<2.0	<2.0	**2.1**	<2.0	**8.8**	<2.0
SV29-12 *	5	7/26/2021	**4,110**	**4.2**	<2.0	<2.0	<2.0	**6.4**	<2.0	<2.0	<2.0	**6.5**	**7.7**	**64.2**	<2.0
SV31-5	5	7/26/2021	**5,490**	**6.9**	**28.8**	**4.6**	<2.0	<2.0	<2.0	**3.5**	<2.0	**16.0**	<2.0	**3.3**	<2.0
SV31-10	10	7/26/2021	**3,970**	**6.8**	<2.0	<2.0	<2.0	<2.0	<2.0	**3.9**	<2.0	**4.4**	<2.0	**7.7**	<2.0
SV32-5	5	7/27/2021	**1,310**	**2.2**	<1.0	**3.8**	**1.2**	**1.6**	<1.0	**18.8**	<1.0	**36.6**	<1.0	**8.0**	<1.0
SV32-10 *	10	7/27/2021	<500	**15.9**	<1.0	**6.5**	<1.0	<1.0	<1.0	**13.9**	<1.0	**42.2**	<1.0	**7.5**	<1.0
SV33-5	5	7/27/2021	<500	<1.0	<1.0	**4.9**	<1.0	<1.0	<1.0	**5.3**	<1.0	**7.8**	<1.0	**2.2**	<1.0
SV33-10	10	7/27/2021	**118,000**	**44.9**	<1.0	**4.4**	**13.6**	**1.1**	<1.0	**302.0**	<1.0	**83.3**	<1.0	**93.6**	<1.0
SV34-5	5	7/27/2021	<500	**1.8**	<1.0	**4.7**	**1.4**	<1.0	<1.0	**48.0**	<1.0	**21.9**	<1.0	**9.6**	<1.0
SV34-10	10	7/27/2021	**39,100**	**37.2**	<1.0	**4.8**	**5.4**	**2.4**	<1.0	**34.4**	<1.0	**60.8**	<1.0	**69.0**	<1.0
SV35-5	5	7/27/2021	**1,800**	**2.6**	**2.3**	**7.9**	**8.5**	<1.0	<1.0	**106.0**	**2.7**	**35.9**	<1.0	**42.0**	**112**
SV35-10 *	10	7/27/2021	**2,430**	**8.6**	**1.4**	**3.2**	**5.1**	**1.5**	<1.0	**30.7**	**1.5**	**20.2**	<1.0	**54.8**	**6.4**
SV36-5	5	7/27/2021	**4,260**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**1.7**	**19.6**	<1.0	**3.3**	**4.2**
SV36-10	10	7/27/2021	**High Vacuum - No Sample Collected**												
SV37-5	5	7/27/2021	**13,600**	<1.0	<1.0	**2.5**	**2.1**	**1.9**	<1.0	**18.2**	<1.0	**9.2**	<1.0	**6.5**	<1.0
SV37-10	10	7/27/2021	**102,000**	**56.5**	**6.6**	**2.8**	**7.5**	**1.3**	<1.0	**54.2**	<1.0	**81.7**	<1.0	**61.1**	<1.0

Table 5A
Summary of Current Soil Vapor Analytical Results - VOCs
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth (1)	Sample Date	1,2,4-TMB	1,3,5-TMB	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene	o-Xylene	LCC			Other VOCs
											n-Pentane	n-Hexane	n-Heptane	
Residential Screening Level (0.03 AF) (2)			***2,100***	***2,100***	***7,000***	***14,000***	***14,000***	***14,000***	***3,333***	***3,333***	***NE***	***NE***	***NE***	***various***
Residential Screening Level (0.001 AF) (2)			***63,000***	***63,000***	***210,000***	***420,000***	***420,000***	***420,000***	***100,000***	***100,000***	***NE***	***NE***	***NE***	***various***
SV15A-5	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**1.2**	<10	<10	<10	<varies
SV15A-5 REP	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**1.3**	<10	<10	<10	<varies
SV15A-10 *	10	7/27/2021	**3.8**	<1.0	<1.0	<1.0	**6.9**	<1.0	**15.0**	**4.4**	**2,790**	**3,040**	**3,310**	<varies
SV16-5	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<varies
SV16-12	12	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<varies
SV17-5	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**2.1**	<10	<10	<10	<varies
SV17-12	12	7/27/2021	**High Vacuum - No Sample Collected**											
SV18-5 *	5	8/13/2021	<1.0	<1.0	<1.5	<1.5	<1.5	<1.0	<2.0	<1.0	<20	<20	<20	<varies
SV18-12	12	7/27/2021	**High Vacuum - No Sample Collected**											
SV22-5 *	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**2.8**	<20	<20	<20	<varies
SV22-12	12	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV23-5 *	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**2.2**	<20	<20	<20	<varies
SV23-12	12	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV25-5 *	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**4.4**	<20	<20	<20	<varies
SV25-12 *	12	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**4.0**	**3.1**	<20	<20	<20	<varies
SV26-5	5	7/26/2021	**High Vacuum - No Sample Collected**											
SV26-12 *	12	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	**2.1**	<2.0	<2.0	<20	<20	<20	<varies
SV27-5	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**2.2**	<20	<20	<20	<varies
SV27-12	12	7/26/2021	**2.4**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV28-5	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**5.4**	<20	<20	<20	<varies
SV28-12	12	7/26/2021	**High Vacuum - No Sample Collected**											
SV29-5 *	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV29-12 *	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV31-5	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV31-10	10	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**2.3**	<20	<20	<20	<varies
SV32-5	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**2.2**	**2.0**	<10	<10	<10	<varies
SV32-10 *	10	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<varies
SV33-5	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<10	<10	<varies
SV33-10	10	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**14.7**	**12.1**	<10	<10	<10	<varies
SV34-5	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**2.1**	<1.0	<10	<10	<10	<varies
SV34-10	10	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**6.9**	**6.2**	<10	<10	<10	<varies
SV35-5	5	7/27/2021	**13.5**	**4.5**	<1.0	<1.0	**14.7**	<1.0	**38.2**	**13.0**	<10	<10	<10	**n-Propylbenzene: 2.1** **Bromodichloromethane: 2.3**
SV35-10 *	10	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**17.8**	**5.1**	<10	<10	<10	<varies
SV36-5	5	7/27/2021	**2.4**	<1.0	<1.0	<1.0	<1.0	<1.0	**6.4**	**4.2**	<10	<10	<10	**Bromodichloromethane: 2.0**
SV36-10	10	7/27/2021	**High Vacuum - No Sample Collected**											
SV37-5	5	7/27/2021	**2.1**	<1.0	<1.0	<1.0	<1.0	<1.0	**7.8**	**5.5**	<10	<10	<10	**Bromodichloromethane: 1.5**
SV37-10	10	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	**13.0**	**21.9**	**8.6**	<10	<10	<10	<varies

Table 5A
Summary of Current Soil Vapor Analytical Results - VOCs
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth (1)	Sample Date	TPH-GRO	Benzene	Chloroform	Dichloro difluoromethane (F12)	Ethylbenzene	Methylene Chloride	Naphthalene	4-Isopropyl toluene	Styrene	PCE	TCE	Toluene	TCFM (F11)
Residential Screening Level (0.03 AF) (2)			***20,000***	***3.2***	***4.0***	***3,333***	***37***	***33.3***	***2.8***	***NE***	***31,333***	***15.3***	***16***	***10,333***	***43,333***
Residential Screening Level (0.001 AF) (2)			***600,000***	***97***	***120***	***100,000***	***1,100***	***1,000***	***84***	***NE***	***940,000***	***460***	***480***	***310,000***	***1,300,000***
SV38-5	5	7/27/2021	**9,080**	**7.4**	**36.4**	**7.1**	<1.0	**1.5**	<1.0	<1.0	**1.2**	**1.1**	<1.0	**3.8**	<1.0
SV38-5 Tracer RR	5	7/27/2021	**6,190**	**3.8**	**14.0**	**2.9**	<1.0	<1.0	<1.0	**1.2**	<1.0	**1.1**	<1.0	**4.5**	<1.0
SV38-10	10	7/27/2021	**4,710**	**1.6**	<1.0	**2.9**	<1.0	**2.2**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
SV38-10 Tracer RR	10	7/27/2021	**2,220**	**1.2**	<1.0	<1.0	<1.0	<1.0	<1.0	**1.4**	<1.0	**1.0**	<1.0	<1.0	<1.0
SV39-5	5	7/26/2021	<500	<2.0	**3.5**	<2.0	<2.0	**2.9**	<2.0	<2.0	<2.0	**2.7**	<2.0	**3.9**	<2.0
SV39-10	10	7/26/2021	<500	**4.2**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**13.3**	<2.0	**14.9**	<2.0
SV40-5	5	7/26/2021	<500	**3.8**	**7.1**	**7.0**	<2.0	**3.5**	<2.0	<2.0	<2.0	**8.5**	<2.0	**7.3**	<2.0
SV40-5 TRACER RR	5	7/27/2021	<500	**1.7**	<1.0	**5.7**	<1.0	<1.0	<1.0	<1.0	<1.0	**9.2**	<1.0	**1.9**	<1.0
SV40-10	10	7/26/2021	**3,100**	**2.8**	**4.1**	<2.0	<2.0	**8.1**	<2.0	**2.1**	<2.0	<2.0	<2.0	**2.7**	<2.0
SV40-10 TRACER RR	10	7/27/2021	<500	**3.8**	<1.0	**6.8**	<1.0	**6.6**	<1.0	**2.0**	<1.0	**1.7**	<1.0	**2.4**	**2.1**
SV41-5	5	7/26/2021	**95,400**	<2.0	<2.0	**6.0**	<2.0	<2.0	<2.0	<2.0	<2.0	**31.5**	<2.0	**7.5**	<2.0
SV41-10 *	10	7/26/2021	**421,000**	**60.9**	<2.0	**7.4**	<2.0	**43.3**	<2.0	<2.0	<2.0	**86.3**	<2.0	**57.3**	<2.0
SV42-5	5	7/26/2021	**6,110**	**17.3**	**20.1**	<2.0	**3.1**	<2.0	<2.0	**110**	<2.0	**20.7**	<2.0	**51.2**	<2.0
SV42-10 *	10	7/26/2021	**13,300**	**34.0**	<2.0	**4.4**	**5.6**	**9.6**	<2.0	**19.7**	**3.0**	**17.6**	<2.0	**60.2**	<2.0

Table 5A
Summary of Current Soil Vapor Analytical Results - VOCs
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth (1)	Sample Date	1,2,4-TMB	1,3,5-TMB	n-Butylbenzene	sec-Butylbenzene	tert-Butylbenzene	Isopropylbenzene (Cumene)	m,p-Xylene	o-Xylene	LCC			Other VOCs
											n-Pentane	n-Hexane	n-Heptane	
Residential Screening Level (0.03 AF) (2)			***2,100***	***2,100***	***7,000***	***14,000***	***14,000***	***14,000***	***3,333***	***3,333***	***NE***	***NE***	***NE***	***various***
Residential Screening Level (0.001 AF) (2)			***63,000***	***63,000***	***210,000***	***420,000***	***420,000***	***420,000***	***100,000***	***100,000***	***NE***	***NE***	***NE***	***various***
~~SV38-5~~	~~5~~	~~7/27/2021~~	<1.0	<1.0	<1.0	<1.0	<1.0	**1.5**	**2.3**	<1.0	**230,000**	**87,700**	**48,500**	**Bromodichloromethane: 26.9** **Carbon tetrachloride: 3.7**
SV38-5 Tracer RR	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**18,900**	**17,800**	**8,930**	**Bromodichloromethane: 12.0** **Dibromochloromethane: 3.9**
SV38-10	10	7/27/2021	**1.7**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**9,840**	**490**	<10	**Carbon tetrachloride: 4.5**
SV38-10 Tracer RR	10	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	**1.3**	<1.0	<1.0	**58,900**	**17,600**	**382**	<varies
SV39-5	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV39-10	10	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV40-5	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	**387,000**	**91,000**	**43,800**	<varies
SV40-5 TRACER RR	5	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**85**	**118**	**315**	<varies
SV40-10	10	7/26/2021	**2.1**	<2.0	<2.0	<2.0	<2.0	<2.0	**6.0**	**5.8**	<20	<20	<20	**Carbon tetrachloride: 2.8**
SV40-10 TRACER RR	10	7/27/2021	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**2.7**	**5,850**	**3,700**	**519**	**Carbon tetrachloride: 2.2**
SV41-5	5	7/26/2021	**4.5**	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV41-10 *	10	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<20	<20	<20	<varies
SV42-5	5	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	**3.9**	**8.9**	**3.9**	<20	<20	<20	**Bromodichloromethane: 3.7** **Dibromochloromethane: 3.4**
SV42-10 *	10	7/26/2021	<2.0	<2.0	<2.0	<2.0	<2.0	**17.7**	**15.1**	**8.7**	<20	<20	<20	<varies

Notes:

All concentrations reported in microgram per cubic meter (µg/m^3)

(1) - Reported as feet below original grade.

(2) - More conservative screening level between USEPA Region 9 RSL (May, 2020) and DTSC HERO Note 3 (June, 2020); San Francisco Bay Regional Water Quality Control Board ESLs (January 2019) used for TPH screening.

* - Grab sample, no purge. Refer to data validation sheet rgarding these sample results.

"<" - Results reported below Laboratory Reporting Limit.

BOLD - Analyte reported above the laboratory reporting limit.

Green shading indicates value above the RSLs or HERO Note 3 residential screening level (0.03 attenuation factor)

Orange shading indicates value above the RSLs or HERO Note 3 residential risk level (0.001 attenuation factor)

cis-1,2-DCE - cis-1,2-dichloroethene

DTSC - Department of Toxic Substance Control

EPA - United States Environmental Protection Agency

HERO - Human and Ecological Risk Office

HHRA - Human Health Risk Assessment

LCC - Leak Check Compound

MEK - 2-Butanone

MIBK - 4-Methyl-2-Pentanone

NE - Not Established

PCE - Tetrachloroethene

TCE - Trichloroethene

TCFM (F11) - Trichlorofluoromethane (Freon 11)

1,2,4-TMB - 1,2,4-Trimethylbenzene

1,3,5-TMB - 1,3,5-Trimethylbenzene

VOCs - Volatile Organic Compounds

Table 5B
Summary of Current Soil Vapor Analytical Results - Fixed Gases
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth (1)	Sample Date	CH4 (% vol)		CO2 (% vol)	O2 (% vol)		H2S (ppm)	CO (ppm)
			GEM (2)	ASTM 1946D (3)		GEM (2)	ASTM 1946D (3)		
SV1A-5	5	7/26/2021	0.3	--	18.6	6.0	--	0	0
SV1A-10	10	7/26/2021	0.0	--	0.1	20.7	--	0	0
SV2A-5	5	7/26/2021	0.0	--	0.3	18.0	--	0	1
SV2A-10	10	7/26/2021	1.3	2.13	7.4	14.1	0.27	0	1
SV3A-5	5	7/27/2021	0.0	<0.023	8.3	12.1	7.55	0	2
SV3A-10	10	7/27/2021	0.0	--	9.1	11.3	--	0	2
SV4A-5	5	7/27/2021	0.0	--	1.1	19.8	--	0	2
SV4A-10	10	7/27/2021	0.0	--	9.7	11.4	--	0	2
SV6A-5	5	7/27/2021	0.0	--	0.0	21.0	--	0	0
SV6A-10	10	7/27/2021	0.0	--	5.3	16.4	--	0	0
SV7A-5	5	7/27/2021	0.0	--	6.7	14.5	--	0	0
SV7A-10	10	7/27/2021	0.0	--	11.8	10.3	--	0	1
SV8A-5	5	7/27/2021	0.0	--	0.3	20.6	--	0	0
SV8A-10	10	7/27/2021	0.0	--	0.0	21.3	--	0	0
SV9A-5	5	7/27/2021	0.0	--	9.1	7.2	--	0	1
SV9A-10	10	7/27/2021	0.0	--	0.0	21.3	--	0	1
SV10A-5	5	7/26/2021	0.0	--	9.0	11.8	--	0	0
SV10A-10	10	7/26/2021	0.0	--	0.1	20.2	--	0	0
SV11A-5	5	7/26/2021	0.0	--	0.1	20.7	--	0	0
SV11A-10	10	7/26/2021	0.0	--	0.1	20.6	--	0	0
SV12A-5	5	7/26/2021	0.0	--	1.3	16.9	--	0	0
SV12A-10	10	7/26/2021	0.0	--	0.6	18.4	--	0	2
SV13A-5	5	7/26/2021	0.0	--	9.6	7.2	--	0	1
SV13A-10	10	7/26/2021	0.0	--	0.0	21.0	--	0	0
SV14A-5	5	7/27/2021	0.0	<0.023	3.6	10.6	3.89	0	2
SV14A-10	10	7/27/2021	0.0	--	0.0	21.3	--	0	0
SV15A-5	5	7/27/2021	0.0	--	10.0	8.4	--	0	1
SV15A-10	10	7/27/2021	0.0	--	0.0	21.2	--	0	1
SV16-5	5	7/27/2021	0.0	--	3.9	16.6	--	0	0
SV16-12	12	7/27/2021	0.0	--	1.6	18.9	--	0	0
SV17-5	5	7/27/2021	0.0	0.32	10.3	9.4	0.35	3	1
SV17-12	12	7/27/2021	0.0	--	0.0	20.8	--	0	0
SV18-5	5	8/13/2021	0.0	--	0.2	20.7	--	0	0
SV18-12	12	7/27/2021	0.0	--	0.0	21.0	--	0	0
SV22-5	5	7/26/2021	0.0	--	0.0	20.6	--	0	1
SV22-12	12	7/26/2021	0.0	--	0.9	19.3	--	0	0
SV23-5	5	7/26/2021	0.0	--	0.0	20.8	--	0	0
SV23-12	12	7/26/2021	0.0	--	2.2	17.1	--	0	0
SV25-5	5	7/26/2021	0.0	--	0.2	20.1	--	0	0
SV25-12	12	7/26/2021	0.0	--	0.0	20.3	--	0	0
SV26-5	5	7/26/2021	0.0	--	0.0	20.7	--	0	0
SV26-12	12	7/26/2021	0.0	--	0.1	20.6	--	0	0
SV27-5	5	7/26/2021	0.0	--	0.0	20.5	--	0	0
SV27-12	12	7/26/2021	0.0	--	0.0	20.5	--	0	0

Table 5B
Summary of Current Soil Vapor Analytical Results - Fixed Gases
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Sample ID	Sample Depth (1)	Sample Date	CH4 (% vol)		CO2 (% vol)	O2 (% vol)		H2S (ppm)	CO (ppm)
			GEM (2)	ASTM 1946D (3)		GEM (2)	ASTM 1946D (3)		
SV28-5	5	7/26/2021	0.0	--	0.1	20.5	--	0	0
SV28-12	12	7/26/2021	0.0	--	0.0	20.5	--	0	0
SV29-5	5	7/26/2021	0.0	--	10.9	4.2	--	0	7
SV29-12	5	7/26/2021	0.0	--	0.0	20.1	--	0	1
SV31-5	5	7/26/2021	0.0	0.11	1.2	19.3	9.92	0	1
SV31-10	10	7/26/2021	0.0	--	10.4	2.7	--	0	1
SV32-5	5	7/27/2021	0.0	--	5.0	16.3	--	0	2
SV32-10	10	7/27/2021	0.0	--	0.0	21.5	--	0	2
SV33-5	5	7/27/2021	0.0	--	2.5	18.5	--	0	0
SV33-10	10	7/27/2021	0.0	--	4.2	16.8	--	0	2
SV34-5	5	7/27/2021	0.0	--	10.9	3.6	--	0	1
SV34-10	10	7/27/2021	0.0	--	0.1	21.0	--	0	1
SV35-5	5	7/27/2021	0.0	--	9.3	8.6	--	0	1
SV35-10	10	7/27/2021	0.0	--	0.1	21.1	--	0	0
SV36-5	5	7/27/2021	0.0	--	7.2	12.1	--	0	0
SV36-10	10	7/27/2021	0.0	--	0.0	19.5	--	0	1
SV37-5	5	7/27/2021	0.0	--	3.6	16.7	--	0	0
SV37-10	10	7/27/2021	0.0	--	0.6	19.1	--	0	0
SV38-5	5	7/27/2021	0.0	--	0.4	20.2	--	0	0
SV38-10	10	7/27/2021	0.0	--	0.1	20.5	--	0	1
SV39-5	5	7/26/2021	0.0	<0.023	7.1	9.7	3.98	0	1
SV39-10	10	7/26/2021	0.0	--	6.9	11.2	--	0	1
SV40-5	5	7/26/2021	0.0	--	9.3	8.2	--	0	1
SV40-10	10	7/26/2021	0.0	--	1.9	7.2	--	0	6
SV41-5	5	7/26/2021	0.0	--	2.0	16.3	--	0	0
SV41-10	10	7/26/2021	0.0	--	2.0	16.3	--	0	0
SV42-5	5	7/26/2021	0.0	--	11.3	7.9	--	0	1
SV42-10	10	7/26/2021	0.0	--	0.0	21.2	--	0	0

Notes:
(1) - Reported as feet below original grade.
(2) - Field measurements collected using Lantec GEM 5000
(3) - Analytical method ASTM 1946D
ppm - parts per million by volume
% vol - percent by volume

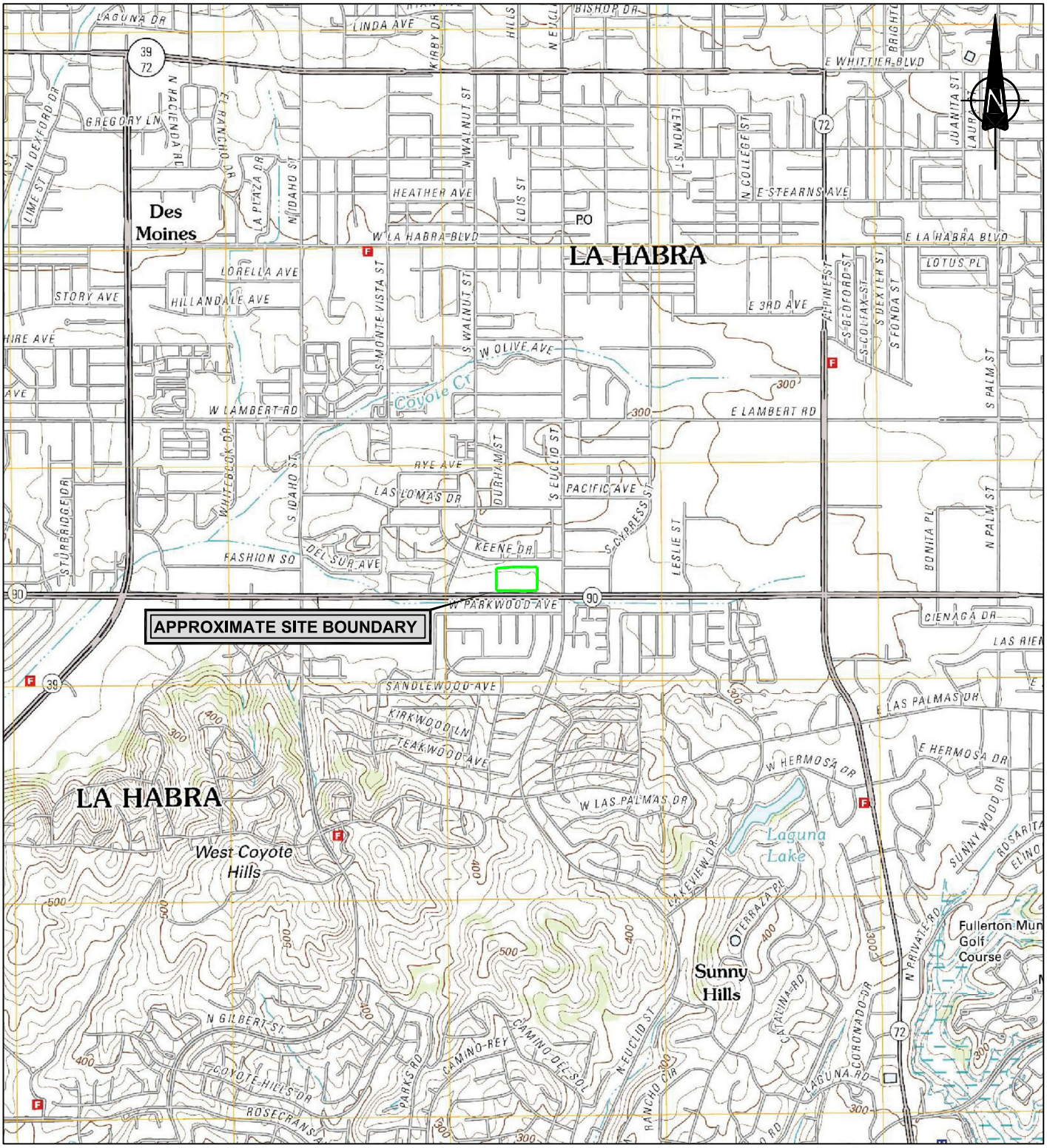
Table 6
Summary of Groundwater Analytical Results
251 to 351 West Imperial Highway
La Habra, California
Stantec Project Number: 185804671

Well ID	Date	EPA Method 8015			EPA Method 8260B						
		TPHg	TPHd	TPHo	Benzene	Ethylbenzene	Isopropylbenzene	n-Butylbenzene	n-Propylbenzene	Naphthalene	All Other VOCs
California MCL		**760 (1)**	**200 (1)**	**--**	**1.0**	**300**	**--**	**--**	**--**	**4.6 (2)**	**varies**
RBSL (3)		**--**	**--**	**--**	**0.42**	**3.41**	**--**	**--**	**--**	**4.32**	
B13A-GW (4)	8/16/2019	<50000	<236	<354	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<varies
DUP-9 (4)	8/16/2019	<50000	<200	<300	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<varies
B13-GW (4)	8/15/2019	<50000	<1176	<1764	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<varies
B14-GW (4)	8/15/2019	**1800000**	<1000	<1500	**36**	**200**	**16**	**8.8**	**42**	**41**	<varies
DUP-5 (4)	8/15/2019	**3200000**	<910	<1365	**22**	**380**	**33**	<25	**100**	**110**	<varies
B18-GW (4)	8/16/2019	<50000	<246	<369	<1.0	<5.0	<5.0	<5.0	<5.0	<5.0	<varies
MW-1	10/29/2020	130 j	<200	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<varies
	3/2/2021	**510**	**120**	**100**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<varies
	7/26/2021	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<varies
MW-2	10/29/2020	<200	<200	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<varies
	3/2/2021	<200	<200	<200	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<varies
	7/26/2021	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<varies
MW-3	10/29/2020	<200	<200	<200	<5.0	<5.0	<5.0	<5.0	<5.0	<0.5	<varies
	3/2/2021	<200	<200	<200	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<varies
	7/26/2021	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<varies
MW-4	7/26/2021	**340**	**340**	<50	**8.5**	**0.60**	**1.4**	<0.5	<0.5	**3.7**	**1,2,4-TMB: 1.6** **1,3,5-TMB: 1.9** **1,2-DCA: 0.7** **4-Isoproyptoluene: 1.6** **Bromodichloromethane: 0.77** **Di-Isopropyl Ether: 1.0** **Dichloromethane: 0.72** **m,p-xylenes: 4.1** **o-xylenes: 1.9** **tert-butanol: 13**
MW-5	7/26/2021	<50	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<varies

Notes:
Numbers in BOLD FONT exceed laboratory reporting limit
All results reported in micrograms per liter (µg/L)
< - Concentration less than the indicated Laboratory Reporting Limit.
j - indicates analyte was detected above the method detection limit, but below the practical quantitative limit
(1) - SFRWQCB ESL, Direct Expose
(2) - SFRWQCB ESL, Groundwater Vapor Intrusion Residential Cancer Risk
(3) RBSL, calculated by applying chemical-specific Henry's Law constant and DTSC default groundwater attenuation factor 0.001 to target indoor air concentration screening level
(4) - Grab groundwater sample collected by Ninyo & Moore
Compound exceeds screening level

Abbreviations:
ESL - Environmental Screening Level
MCL - Maximum Contaminant Levels updated January 2015.
RBSL - Risk-Based Screening Level,
SFBRWQCB - San Francisco Regional Water Quality Control Board
TMB - Trimethylbenzene
TPHg - Total Petroleum Hydrocarbons as Gasoline
TPHd - Total Petroleum Hydrocarbons as Diesel
TPHo - Total Petroleum Hydrocarbons as Oil
USEPA - United States Environmental Protection Agency

FIGURES



NOTE: THIS DRAWING ILLUSTRATES SUPPORTING INFORMATION SPECIFIC TO A STANTEC SERVICES INC. REPORT AND MUST NOT BE USED FOR OTHER PURPOSES.

PROPERTY LOCATION MAP PHASE I ESA 251 TO 351 WEST IMPERIAL HIGHWAY, LA HABRA, CA	Project No.: 185804671	Fig. No.:	Stantec
	Scale: AS SHOWN	1	
	Date: 19/12/19		
	Dwn. By: CD VM SC2019120023		
Client: THE OLSON COMPANY	App'd By: KE		

LEGEND:

PROPERTY BOUNDARY

N

0 50 100

APPROXIMATE SCALE (FEET)

Stantec

735 EAST CARNEGIE DRIVE, SUITE 280
SAN BERNARDINO, CALIFORNIA
PH (909) 335-6116 FAX (909) 335-6120

FOR:
OLSON URBAN HOUSING
251 TO 351 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA

PROPERTY MAP

FIGURE: **2**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185804671	JS	AJ	KE	11/2/2020

FILEPATH:V:\1858\active\185804671\05_report_deliv\drawings_design\cad_fig\olson_la_habra_figures.dwg modified by jsargent on Aug 15, 2021 at 10:51

SOURCE: GOOGLE EARTH PROFESSIONAL, 2020. GROUNDWATER MONITORING WELL LOCATIONS PLOTTED FROM WAYNE PERRY, 1989.

LEGEND:

PROPERTY BOUNDARY

APPROXIMATE FORMER GROUNDWATER WELL LOCATION

N

0 50 100

APPROXIMATE SCALE (FEET)

Stantec

735 EAST CARNEGIE DRIVE, SUITE 280
SAN BERNARDINO, CALIFORNIA
PH (909) 335-6116 FAX (909) 335-6120

FOR:
OLSON URBAN HOUSING
251 TO 351 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA

HISTORICAL MONITORING WELL LOCATION MAP

FIGURE: **2A**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185804671	JS	AJ	KE	08/13/2021

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LEGEND:

- PROPERTY BOUNDARY
- SOIL BORING (NINYO&MOORE, 2019)
- SOIL/SOIL VAPOR BORING, ABANDONED (NINYO&MOORE, 2019)
- GROUNDWATER BORING LOCATION (NINYO&MOORE, 2019)
- SOIL VAPOR BORING (STANTEC, 2021)
- SOIL VAPOR BORING, ABANDONED (STANTEC, 2020)
- SOIL BORING (STANTEC, 2021)
- GROUNDWATER WELL LOCATION (STANTEC, 2020)

N

0 50 100

APPROXIMATE SCALE (FEET)

Stantec
735 EAST CARNEGIE DRIVE, SUITE 280
SAN BERNARDINO, CALIFORNIA
PH (909) 335-6116 FAX (909) 335-6120

FOR:
OLSON URBAN HOUSING
251 TO 351 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA

PREVIOUS ASSESSMENT BORING LOCATION MAP

FIGURE: **2B**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185804671	JS	AJ	KE	08/13/2021

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LEGEND:

- PROPERTY BOUNDARY
- GROUNDWATER WELL LOCATION (STANTEC, 2020)
- GROUNDWATER CONTOUR (FEET ABOVE MEAN SEA LEVEL)

N

0 50 100

APPROXIMATE SCALE (FEET)

Stantec
735 EAST CARNEGIE DRIVE, SUITE 280
SAN BERNARDINO, CALIFORNIA
PH (909) 335-6116 FAX (909) 335-6120

FOR:
OLSON URBAN HOUSING
251 TO 351 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA

GROUNDWATER MONITORING WELL LOCATION AND GRADIENT MAP

FIGURE: **3A**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185804671	JS	AJ	KE	8/13/2021

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MW-3				
DATE	TPHg	TPHd	TPHo	VOCs
10/29/2020	<200	<200	<200	<varies
3/02/2021	<200	<200	<200	<varies
7/26/2021	<50	<50	<50	<varies

MW-2				
DATE	TPHg	TPHd	TPHo	VOCs
10/29/2020	<200	<200	<200	<varies
3/02/2021	<200	<200	<200	<varies
7/26/2021	<50	<50	<50	<varies

MW-1				
DATE	TPHg	TPHd	TPHo	VOCs
10/29/2020	130 j	<200	<200	<varies
3/02/2021	**510**	**120**	**100**	<varies
7/26/2021	<50	<50	<50	<varies

MW-5				
DATE	TPHg	TPHd	TPHo	VOCs
7/26/2021	<50	<50	<50	<varies

MW-4				
DATE	TPHg	TPHd	TPHo	BENZENE
7/26/2021	**340**	**340**	<50	**8.5**

LEGEND:

PROPERTY BOUNDARY

GROUNDWATER WELL LOCATION (STANTEC, 2020)

N

0 50 100

APPROXIMATE SCALE (FEET)

MW-1				
DATE	TPHG	TPHd	TPHo	VOCs
10/29/2020	130 j	<200	<200	<varies
3/02/2021	**510**	**120**	**100**	<varies

MONITORING WELL LOCATION
TPHg - TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
TPHd - TOTAL PETROLEUM HYDROCARBONS AS DIESEL
TPHo - TOTAL PETROLEUM HYDROCARBONS AS OIL
VOCs - VOLATILE ORGANIC COMPOUNTS
CONCENTRATIONS REPORTED IN MICROGRAM PER LITER (ug/L)
BOLD - ANALYTE DETECTED ABOVE LABORATORY REPORTING LIMIT
j - ANALYTE DETECTED BETWEEN METHOD DETECTION LIMIT AND LABORATORY REPORTING LIMIT
GREEN SHADING INDICATES ANALYTE DETECTED ABOVE MAXIMUM CONTAMINANT LEVEL

Stantec
735 EAST CARNEGIE DRIVE, SUITE 280
SAN BERNARDINO, CALIFORNIA
PH (909) 335-6116 FAX (909) 335-6120

FOR:
OLSON URBAN HOUSING
251 TO 351 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA

SUMMARY OF GROUNDWATER ANALYTICAL DATA

FIGURE: **3B**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185804671	JS	AJ	KE	08/13/2021

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LEGEND:

- PROPERTY BOUNDARY
- SOIIL VAPOR BORING (STANTEC, 2021)
- SOIIL VAPOR BORING, ABANDONED (STANTEC, 2020)
- SOIL VAPOR REINSTALL OR RESAMPLE

N

0 50 100

APPROXIMATE SCALE (FEET)

Stantec

735 EAST CARNEGIE DRIVE, SUITE 280
SAN BERNARDINO, CALIFORNIA
PH (909) 335-6116 FAX (909) 335-6120

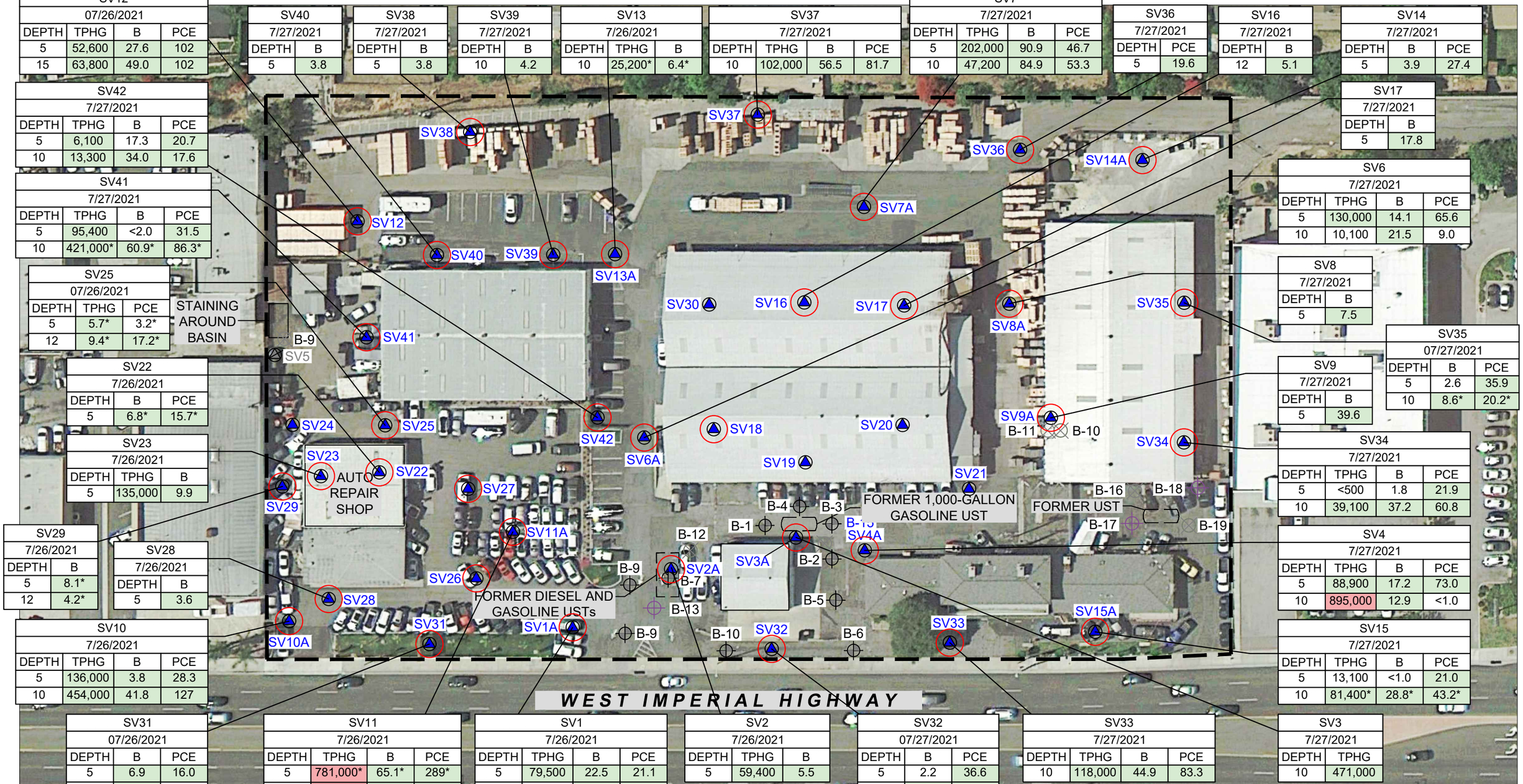
FOR:
OLSON URBAN HOUSING
251 TO 351 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA

SOIL VAPOR BORING LOCATION MAP

FIGURE: **4**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185804671	JS	AJ	KE	08/13/2021

FILEPATH:V:\1858\active\185804671\05_report_deliv\drawings_design\cad_fig\olson_la_habra_figures.dwg modified by jsargent on Aug 15, 2021 at 14:39



SV12			
07/26/2021			
DEPTH	TPHG	B	PCE
5	52,600	27.6	102
15	63,800	49.0	102

SV40	
7/27/2021	
DEPTH	B
5	3.8

SV38	
7/27/2021	
DEPTH	B
5	3.8

SV39	
7/27/2021	
DEPTH	B
10	4.2

SV13		
7/26/2021		
DEPTH	TPHG	B
10	25,200*	6.4*

SV37			
7/27/2021			
DEPTH	TPHG	B	PCE
10	102,000	56.5	81.7

SV7			
7/27/2021			
DEPTH	TPHG	B	PCE
5	202,000	90.9	46.7
10	47,200	84.9	53.3

SV36	
7/27/2021	
DEPTH	PCE
5	19.6

SV16	
7/27/2021	
DEPTH	B
12	5.1

SV14		
7/27/2021		
DEPTH	B	PCE
5	3.9	27.4

SV17	
7/27/2021	
DEPTH	B
5	17.8

SV42			
7/27/2021			
DEPTH	TPHG	B	PCE
5	6,100	17.3	20.7
10	13,300	34.0	17.6

SV41			
7/27/2021			
DEPTH	TPHG	B	PCE
5	95,400	<2.0	31.5
10	421,000*	60.9*	86.3*

SV6			
7/27/2021			
DEPTH	TPHG	B	PCE
5	130,000	14.1	65.6
10	10,100	21.5	9.0

SV8	
7/27/2021	
DEPTH	B
5	7.5

SV25		
07/26/2021		
DEPTH	TPHG	PCE
5	5.7*	3.2*
12	9.4*	17.2*

SV35		
07/27/2021		
DEPTH	B	PCE
5	2.6	35.9
10	8.6*	20.2*

SV9	
7/27/2021	
DEPTH	B
5	39.6

SV22		
7/26/2021		
DEPTH	B	PCE
5	6.8*	15.7*

SV34			
7/27/2021			
DEPTH	TPHG	B	PCE
5	<500	1.8	21.9
10	39,100	37.2	60.8

SV23		
7/26/2021		
DEPTH	TPHG	B
5	135,000	9.9

SV29	
7/26/2021	
DEPTH	B
5	8.1*
12	4.2*

SV28	
7/26/2021	
DEPTH	B
5	3.6

SV4			
7/27/2021			
DEPTH	TPHG	B	PCE
5	88,900	17.2	73.0
10	895,000	12.9	<1.0

SV10			
7/26/2021			
DEPTH	TPHG	B	PCE
5	136,000	3.8	28.3
10	454,000	41.8	127

SV15			
7/27/2021			
DEPTH	TPHG	B	PCE
5	13,100	<1.0	21.0
10	81,400*	28.8*	43.2*

SV31		
07/26/2021		
DEPTH	B	PCE
5	6.9	16.0
10	6.8	4.4

SV11			
7/26/2021			
DEPTH	TPHG	B	PCE
5	781,000*	65.1*	289*
10	723,000	70.0	263

SV1			
7/26/2021			
DEPTH	TPHG	B	PCE
5	79,500	22.5	21.1
10	16,100*	19.3*	71.8*

SV2		
7/26/2021		
DEPTH	TPHG	B
5	59,400	5.5

SV32		
07/27/2021		
DEPTH	B	PCE
5	2.2	36.6
10	15.9*	42.2*

SV33			
7/27/2021			
DEPTH	TPHG	B	PCE
10	118,000	44.9	83.3

SV3	
7/27/2021	
DEPTH	TPHG
10	471,000

LEGEND:

- PROPERTY BOUNDARY
- SOIL/SOIL VAPOR BORING, ABANDONED (NINYO&MOORE, 2019)
- GROUNDWATER/SOIL VAPOR BORING, ABANDONED (NINYO&MOORE, 2019)
- SOIL VAPOR BORING (STANTEC, 2021)
- SOIL VAPOR BORING, ABANDONED (STANTEC, 2020)
- SOIL VAPOR REINSTALL OR RESAMPLE

SV31		
07/26/2021		
DEPTH	B	PCE
5	6.9	16.0
10	6.8	4.4

SOIL VAPOR PROBE LOCATION
DATE SAMPLED
B - BENZENE
E - ETHYLBENZENE
N - NAPHTHALENE
NF - NO FLOW
CONCENTRATIONS REPORTED IN MICROGRAM PER CUBIC METER (ug/m^3)
GREEN SHADING - CONCENTRATION EXCEEDS 0.03 AF SCREENING LEVEL (TABLE 4)
RED SHADING - CONCENTRATION EXCEEDS 0.001 AF SCREENING LEVEL (TABLE 4)
* - INDICATES A GRAB / NO PURGE SAMPLE RESULT

0 60 120
APPROXIMATE SCALE (FEET)

N

Stantec
735 EAST CARNEGIE DRIVE, SUITE 280
SAN BERNARDINO, CALIFORNIA
PH (909) 335-6116 FAX (909) 335-6120

FOR:
OLSON URBAN HOUSING
251 TO 351 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA

CURRENT SOIL VAPOR EXCEEDENCE SUMMARY

FIGURE: **4A**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185804671	JS	AJ	KE	08/18/2021

FILEPATH:C:\Users\SAguinaldo\Desktop\2021\SB\185804671_FIG 5_olson_la_habra_figures.dwg modified by SAguinaldo on Aug 19, 2021 at 12:07

SV37			
7/27/2021			
DEPTH	TPHG	B	PCE
10	102,000	56.5	81.7

SV7		
8/3/2020		
DEPTH	TPHg	B
5	4,470	111
15	10,500	28.4
7/27/2021		
5	202,000	90.9
10	47,200	84.9

SV16		
3/2/2021		
DEPTH	TPHG	B
12	734	8.9
7/27/2021		
5	<500	<1.0
12	<500	5.1

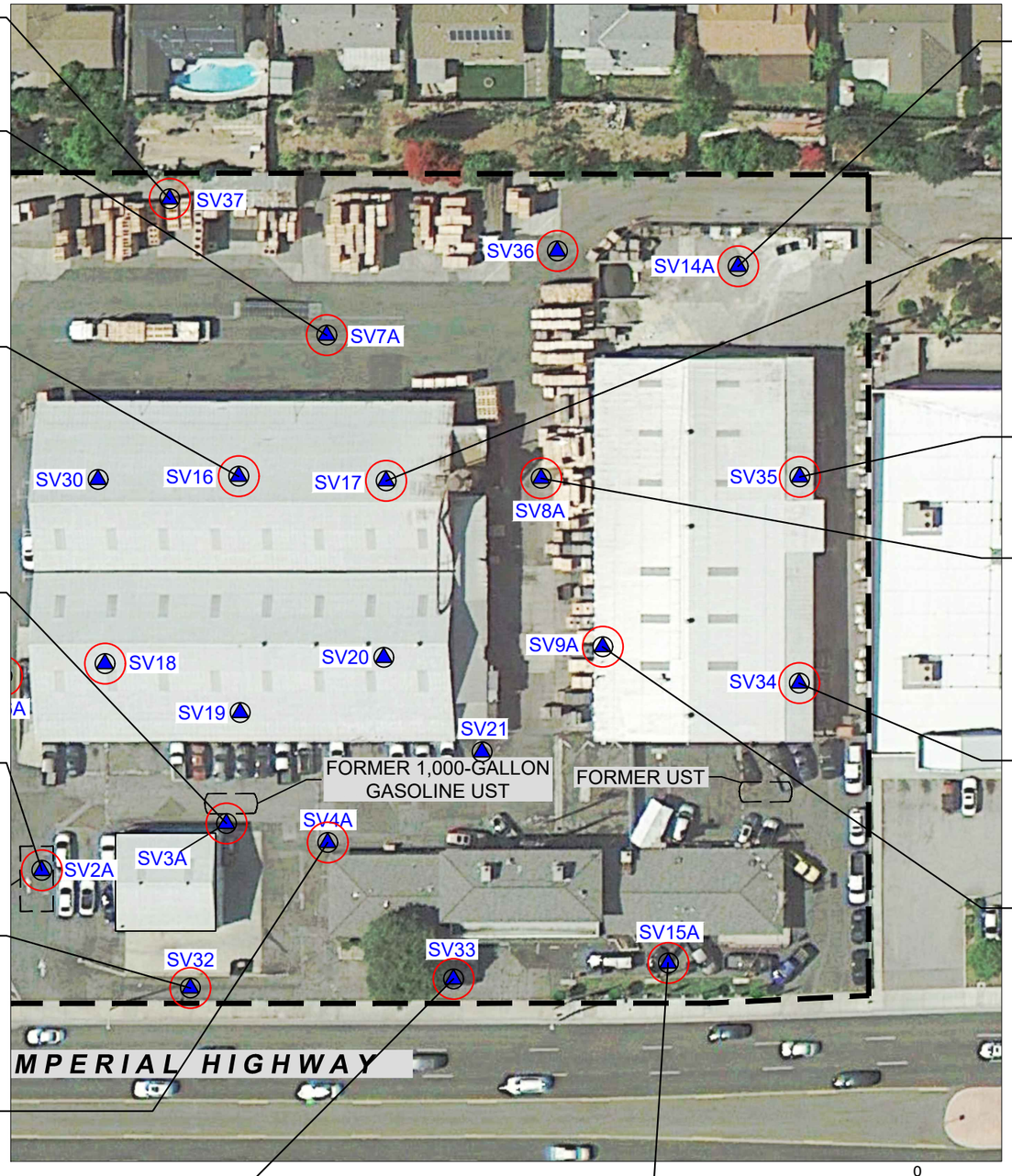
SV3			
8/3/2020			
DEPTH	TPHG	B	E
5	18,200	17.0	2.2
15	6,710,000	2,830	16,800
7/27/2021			
5	<500	<1.0	<1.0
12	471,000	<1.0	<1.0

SV2		
8/3/2020		
DEPTH	TPHG	B
5	1,660	26.0
7/26/2021		
5	59,900	5.5

SV32		
7/27/2021		
DEPTH	B	PCE
5	2.2	36.6
10	15.9*	42.2*

SV4		
8/3/2020		
DEPTH	TPHG	B
5	52,500	95.0
7/27/2021		
5	88,900	17.2
12	895,000	12.9

SV33			
7/27/2021			
DEPTH	TPHG	B	PCE
5	<500	<1.0	7.8
10	118,000	44.9	83.3



SV15				
10/29/2020				
DEPTH	TPHG	B	E	PCE
15	18,300	32.2	130	13.4
7/27/2021				
5	13,100	<1.0	<1.0	21.0
10	81,400*	28.8*	3.7*	43.2*

SV14				
10/29/2020				
DEPTH	B	E	N	PCE
5	15.9	382	27.7	28.5
15	25.5	387	<1.0	58.9
7/27/2021				
5	3.9	10	<1.0	27.4

SV17		
3/2/2021		
DEPTH	TPHG	B
5	<100	11.4
7/27/2021		
5	<500	17.8

SV35		
7/27/2021		
DEPTH	B	PCE
5	2.6	35.9
10	8.6*	20.2*

SV8	
8/3/2020	
DEPTH	B
5	92.1
15	32.3
7/27/2021	
5	7.5

SV34			
7/27/2021			
DEPTH	TPHG	B	PCE
5	<500	1.8	21.9
10	39,100	37.2	60.8

SV9		
9/11/2020		
DEPTH	TPHG	B
5	90,800	34.7
12	<1000	5.3
7/27/2021		
5	8,120	39.6

LEGEND:

- PROPERTY BOUNDARY
- SOIIL VAPOR BORING (STANTEC, 2021)
- SOIIL VAPOR BORING, ABANDONED (STANTEC, 2020)
- SOIL VAPOR REINSTALL OR RESAMPLE

SV3				
8/3/2020				
DEPTH	TPHG	B	E	N
5	18,200	17.0	2.2	<1.0
15	6,710,000	2,830	16,800	<1.0

DATE SAMPLED
SOIL VAPOR PROBE LOCATION
B - BENZENE
E - ETHYLBENZENE
N - NAPHTHALENE
PCE - TETRACHLOROETHYLENE
CONCENTRATIONS REPORTED IN MICROGRAM PER CUBIC METER (ug/m^3)
GREEN SHADING - CONCENTRATION EXCEEDS 0.03 AF SCREENING LEVEL
RED SHADING - CONCENTRATION EXCEEDS 0.001 AF SCREENING LEVEL
* INDICATES A GRAB / NO PURGE SAMPLE RESULT

0 60 120
APPROXIMATE SCALE (FEET)

N

Stantec
735 EAST CARNEGIE DRIVE, SUITE 280
SAN BERNARDINO, CALIFORNIA
PH (909) 335-6116 FAX (909) 335-6120

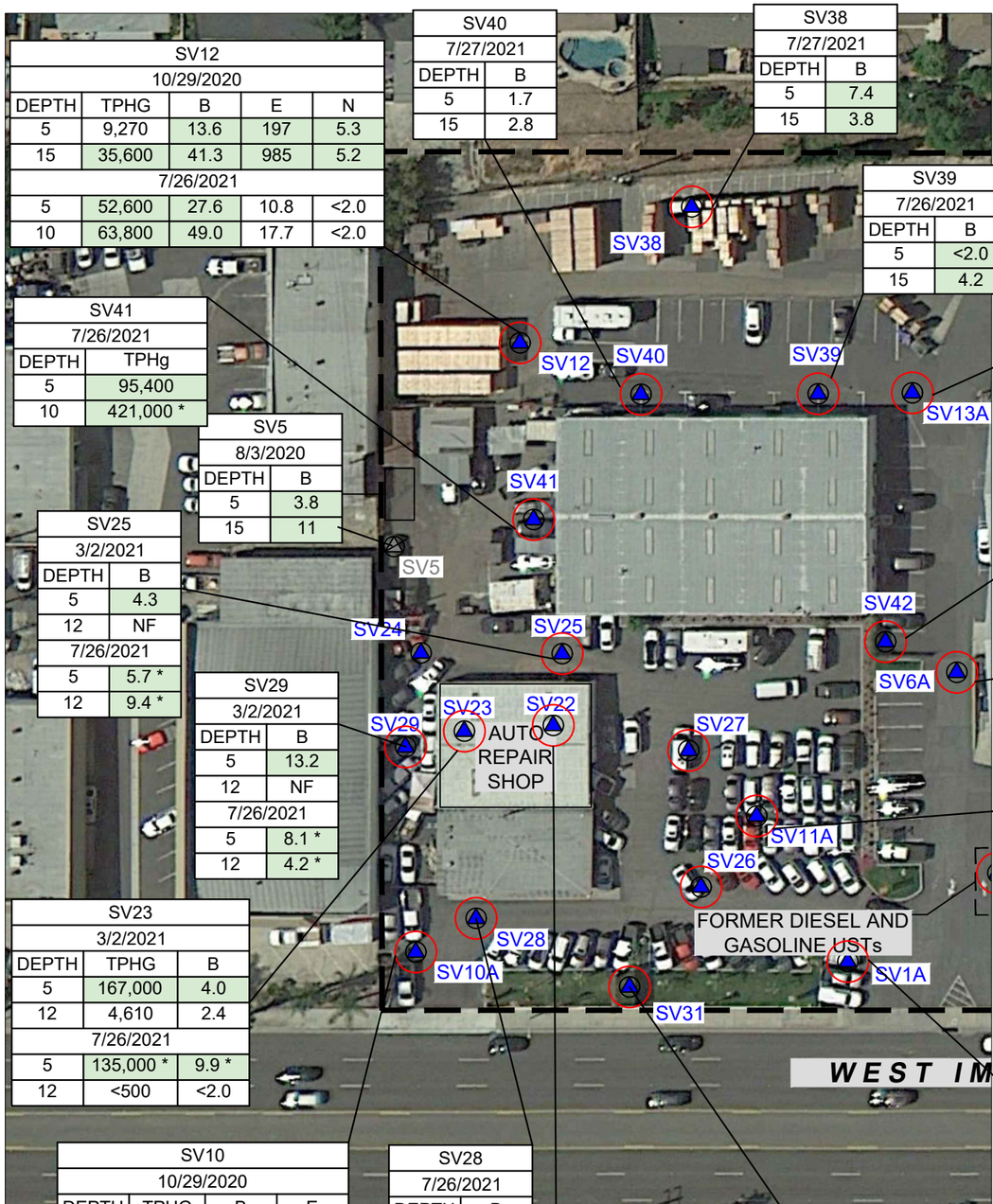
FOR:
OLSON URBAN HOUSING
251 TO 351 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA

SOIL VAPOR EXCEEDENCE SUMMARY - EAST

FIGURE: **4B**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185804671	JS	AJ	KE	08/19/2021

FILEPATH:C:\Users\SAguinaldo\Desktop\2021\SB\185804671_FIG 5_olson_la_habra_figures.dwg modified by SAguinaldo on Aug 20, 2021 at 14:12



SV12				
10/29/2020				
DEPTH	TPHG	B	E	N
5	9,270	13.6	197	5.3
15	35,600	41.3	985	5.2
7/26/2021				
5	52,600	27.6	10.8	<2.0
10	63,800	49.0	17.7	<2.0

SV40	
7/27/2021	
DEPTH	B
5	1.7
15	2.8

SV38	
7/27/2021	
DEPTH	B
5	7.4
15	3.8

SV39	
7/26/2021	
DEPTH	B
5	<2.0
15	4.2

SV13			
10/29/2020			
DEPTH	TPHg	B	E
5	6,040	3.8	19.7
15	6,420	58.9	48.2
7/26/2021			
5	<500	<2.0	<2.0
10	25,200	6.4	<2.0

SV41	
7/26/2021	
DEPTH	TPHg
5	95,400
10	421,000 *

SV5	
8/3/2020	
DEPTH	B
5	3.8
15	11

SV42		
7/26/2021		
DEPTH	B	P
5	17.3	20.71
15	34.0	7.6

SV25	
3/2/2021	
DEPTH	B
5	4.3
12	NF
7/26/2021	
5	5.7 *
12	9.4 *

SV6		
8/3/2020		
DEPTH	TPHG	B
5	12,900	222
15	4,890	14.1
8/3/2020		
5	130,000	14.1
10	10,100	21.5

SV29	
3/2/2021	
DEPTH	B
5	13.2
12	NF
7/26/2021	
5	8.1 *
12	4.2 *

SV11			
10/29/2020			
DEPTH	TPHg	B	P
5	13,300	33.7	8.1
10	6,070	36.7	4.0
7/26/2021			
5	781,000*	65.1*	289*
10	723,000	70.0	263

SV23		
3/2/2021		
DEPTH	TPHG	B
5	167,000	4.0
12	4,610	2.4
7/26/2021		
5	135,000 *	9.9 *
12	<500	<2.0

SV1			
8/3/2020			
DEPTH	TPHg	B	P
5	9,900	116	3.1
15	NF		
8/3/2020			
5	79,500	22.5	21.1
10	16,100*	19.3*	71.8*

SV10			
10/29/2020			
DEPTH	TPHG	B	E
5	47,300	25.3	1,520
13	16,600	29.9	671
7/26/2021			
5	136,000	3.8	28.3
12	454,000	41.8	127

SV28	
7/26/2021	
DEPTH	B
5	3.6
10	NF

SV22		
3/2/2021		
DEPTH	B	P
5	6.7	1.7
12	3.0	0.9
7/26/2021		
5	6.8 *	15.7 *
12	<2.0	<2.0

SV31		
DEPTH	B	P
7/26/2021		
5	6.9	16.0
10	6.8	4.4

LEGEND:

- PROPERTY BOUNDARY
- SOIIL VAPOR BORING (STANTEC, 2021)
- SOIIL VAPOR BORING, ABANDONED (STANTEC, 2020)
- SOIL VAPOR REINSTALL OR RESAMPLE

SV3				
8/3/2020				
DEPTH	TPHG	B	E	N
5	18,200	17.0	2.2	<1.0
15	6,710,000	2,830	16,800	<1.0

DATE SAMPLED
SOIL VAPOR PROBE LOCATION
B - BENZENE
E - ETHYLBENZENE
N - NAPHTHALENE
PCE - TETRACHLOROETHYLENE
CONCENTRATIONS REPORTED IN MICROGRAM PER CUBIC METER (ug/m^3)
GREEN SHADING - CONCENTRATION EXCEEDS 0.03 AF SCREENING LEVEL
RED SHADING - CONCENTRATION EXCEEDS 0.001 AF SCREENING LEVEL
* INDICATES A GRAB / NO PURGE SAMPLE RESULT

0 60 120
APPROXIMATE SCALE (FEET)

N

Stantec
735 EAST CARNEGIE DRIVE, SUITE 280
SAN BERNARDINO, CALIFORNIA
PH (909) 335-6116 FAX (909) 335-6120

FOR:
OLSON URBAN HOUSING
251 TO 351 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA

SOIL VAPOR EXCEEDENCE SUMMARY - WEST

FIGURE: **4C**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185804671	JS	AJ	KE	06/21/2021

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APPENDIX A

Historical Agency Files

UNDERGROUND WaynePerry CONSTRUCTION INC. SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

Project No. 86.252

January 8, 1987

Pomona Box Company
301 W. Imperial Highwayt
La Habra, California

Attention: Mr. Don Votaw

Subject: Proposed Work Plan
Pomona Box Company
301 W. Imperial Highway
La Habra, California

Gentlemen:

Enclosed is an outline of the proposed site investigation for the Pomona Box Company located at 301 W. Imperial Highway in the city of La Habra. The purpose of this investigation is to define the geologic conditions,ground water characteristrics, and the limits of contamination in the soil and ground water.

BACKGROUND

On December 1, 1986, a single 1000 gallon gasoline storage tank was removed. As part of the removal procedure, soil samples were obtained from the bottom of the tank excavation by a representative of the County of Orange Health Care Agency. The samples were tested for total hydrocarbons using EPA method 8015 and benzene, toluene, ethyl benzene and xylenes. Of the two samples obtained, one showed no contamination while the other showed significant levels of hydrocarbon contamination. The sample showing contamination was obtained from the fill end of the tank. Based on the information available, it was believed that the contamination was localized and could easily be excavated and disposed of. On December 8, 1986, work was begun to remove the contaminated soils. During excavation, ground water was encountered at a depth of approximately feet. Separate phase hydrocarbons were observed on the ground water surface. The excavation was immediately backfilled and the findings reported to the County of Orange Health Care Agency. Based in the field

BACKGROUND, continued

observations site characterization work was required by the local agency.

PROPOSED WORK PLAN

The site will be explored by drilling a minimum of three borings around the old tank zone. Additional borings will be drilled and sampled if field conditions deem them appropriate. All borings will be logged by our geologist. Undisturbed soil samples will be obtained at five foot intervals for laboratory analysis. Samples will be stored in three inch stainless steel tubes. The ends will be covered with aluminum foil, capped with plastic end caps, and placed in an ice chest to reduce the potential for volatization. All the sampling equipment will be washed and double rinsed in distilled water to reduce the effects of cross contamination. All the soil samples will be tested for total hydrocarbons using EPA method 8015. Soil samples with total hydrocarbon levels over 100 mg/kg, will also be tested for benzene, toluene, xylenes and ethyl benzene using EPA method 8020. Contaminated soils encountered during drilling will be containerized and disposed of at a licensed facility. In addition, soil samples will be qualitatively analyzed in the field using a portable vapor meter.

Based on field observations made during excavation of the contaminated soils, the depth to ground water is approximately feet. Ground water monitoring wells will be installed in allthe borings. the wells will consist of four inch diameter, flush threaded PVC casing. The bottom thirty feet of casing will be slotted. A graded sand pack will be placed around the slotted section of casing. The remainder of the well will be sealed with bentonite pellets and bentonite grout. A concrete access box will be constructed at the surface. Details of the well construction are presented in Detail A: Typical Monitoring Well Construction, Figure 1.

The ground water monitoring wells will be developed and sampled for evidence of contamination. A minimum of five borehole volumes will be pumped from the well with an air lift pump to develop them. Prior to sampling, three casing volumes will be pumped from the well to assure obtaining a representative sample. The water from well development and purging prior to sampling will be containerized and disposed of at an approved facility. After purging, water samples will be obtained using a Teflon bailor and placed in VOA bottles with Teflon septums. The samples will be stored on ice for transport to the laboratory. Ground water samples will be tested for total hydrocarbons (EPA 8015), benzene, toluene, and xylene (EPA 602). Water level data will be otained for each well to determine the ground water gradient.

PROPOSED WORK PLAN, continued

Based on the field and laboratory data, a report will be generated which will include: discussions of geologic and hydrogeologic conditions; copies of labaoratory testing reports for the soil and ground water samples obtained; recommendations for additional work if appropriate.

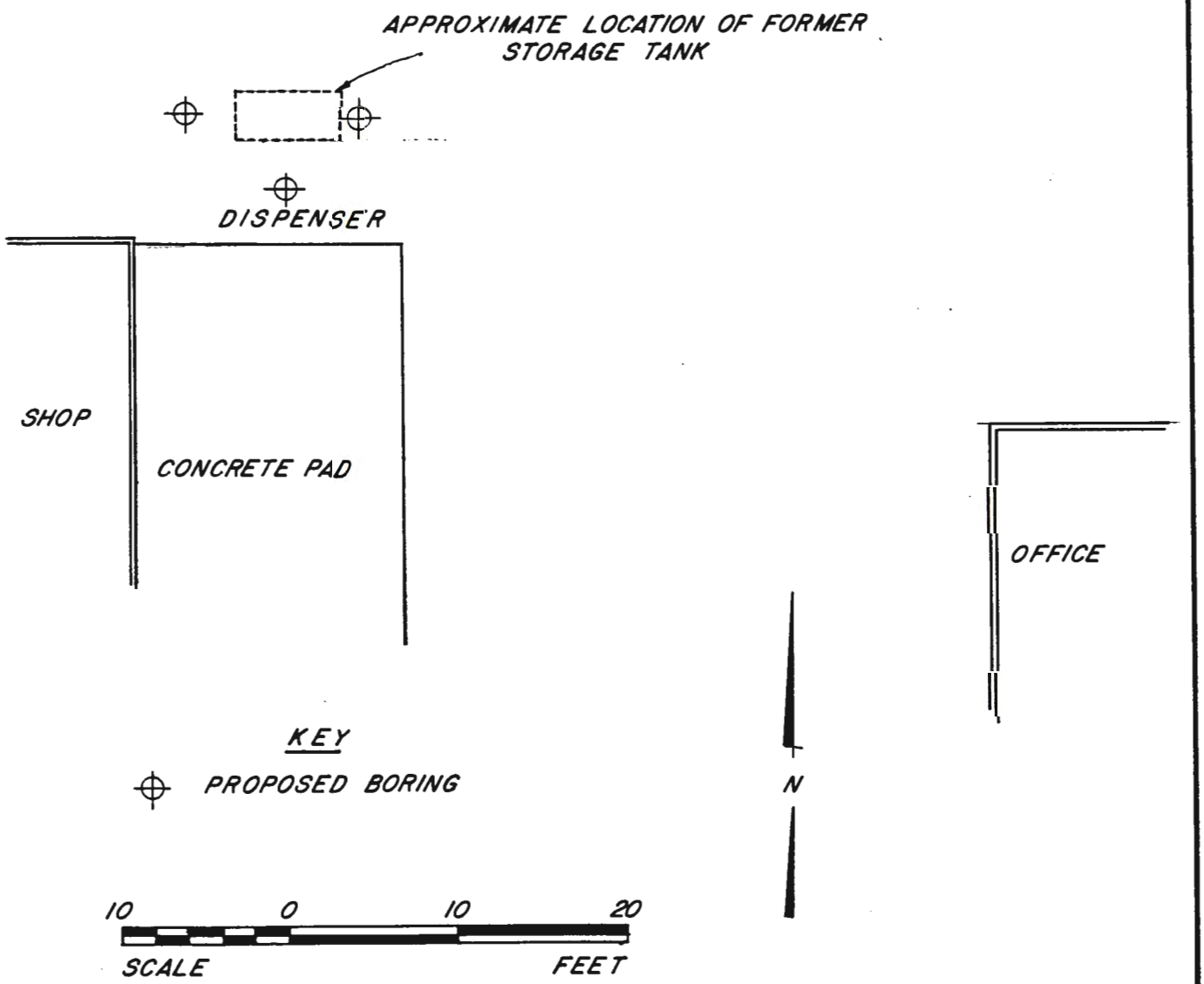
The opportunity to be of service is sincerely appreciated. If you have any questions, or if we can be of further assistance, please call.

Very truly yours,

David M. Henry

David M. Henry
Registered Geologist 4085

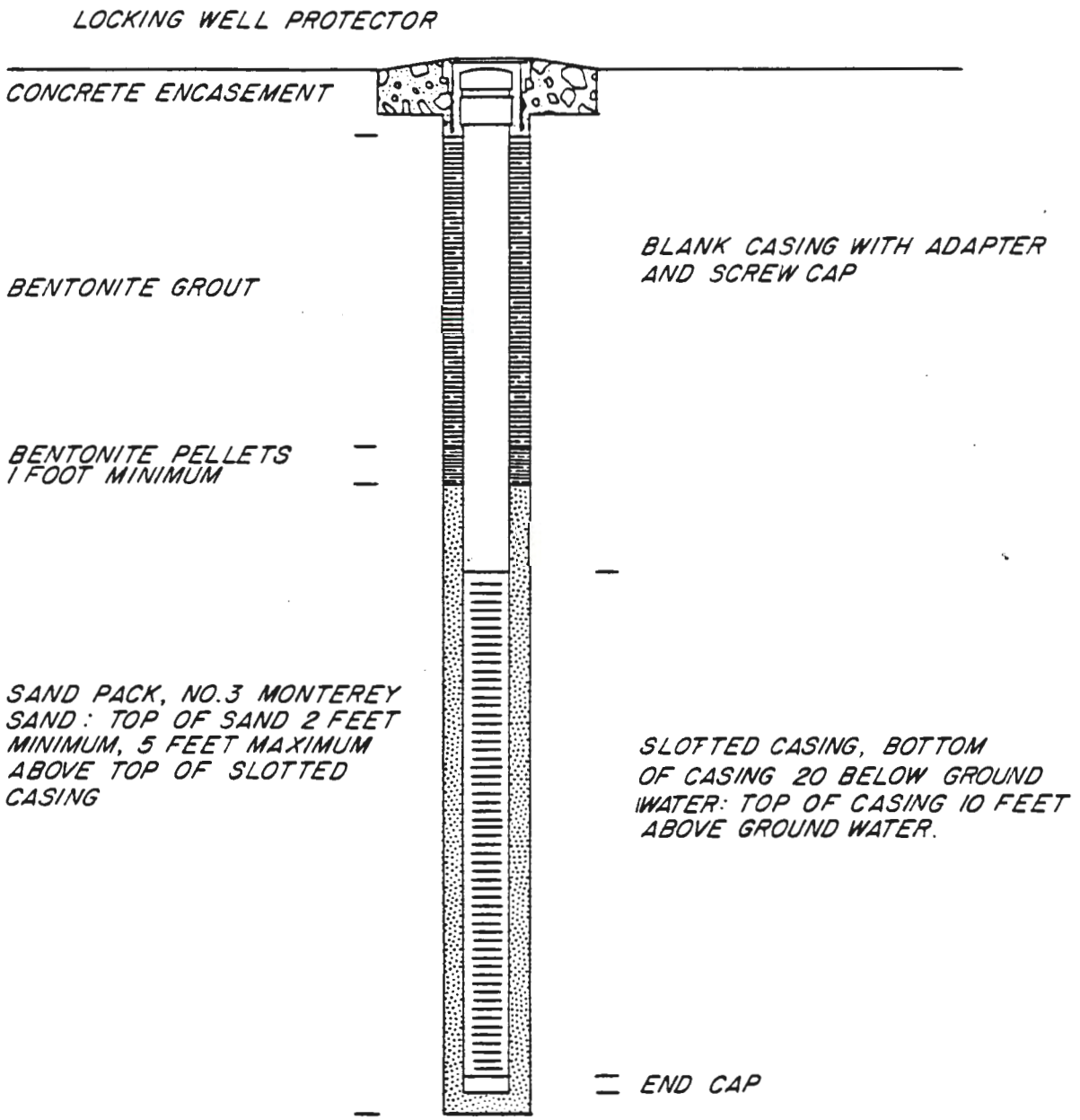
PLOT PLAN



POMONA BOX COMPANY
301 W. IMPERIAL HWY.
LA HABRA

PROJECT NO.	FIGURE NO.
86.252	1

DETAIL A: TYPICAL MONITORING WELL CONSTRUCTION



NOTES:

1. ALL CASING IS 4 INCH DIAMETER, SCHEDULE 40, FLUSH THREADED PVC PIPE.
2. CONSTRUCTION OF WELL VARY FROM TYPICAL DESIGN DUE TO ACTUAL FIELD CONDITIONS.
3. DRAWING NOT TO SCALE.

	Pomona Box Company 301 W. Imperial, La Habra	
	PROJECT NO. 86.252	FIGURE NO. 2

UNDERGROUND
WaynePerry
CONSTRUCTION INC.
SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

Project No. 86.252

March 25, 1987

Pomona Box Company
301 West Imperial Highway
La Habra, California

Attention: Mr. Don Votaw

Subject: Site Assessment
Pomona Box Company
301 West Imperial Highway
La Habra, California

Gentlemen:

Enclosed are the results of our investigation for the Pomona Box Company located at 301 West Imperial Highway in the city of La Habra. The purpose of this investigation is to define the geologic and hydrogeologic conditions, and the limits of soil and possible ground water contamination.

BACKGROUND

On December 1, 1986, a single 1000 gallon gasoline storage tank was removed. As part of the removal procedure, soil samples were obtained from the bottom of the tank excavation by a representative of the County of Orange Health Care Agency. The samples were tested for total hydrocarbons using EPA Method 8015 and benzene, toluene, ethyl benzene and xylenes. Of the two samples obtained, one showed no contamination while the other showed significant levels of hydrocarbon contamination. The sample showing contamination was obtained from the fill end of the tank. Based on the information available, it was believed that the contamination was localized and could easily be excavated and disposed of. On December 8, 1986, work was begun to remove the contaminated soils. During excavation, ground water was encountered at a depth of approximately 13 feet. Separate phase hydrocarbons were observed on the ground water surface. The excavation was immediately backfilled and the findings reported to the County of Orange Health Care Agency. Based on the field observations site characterization work was required by the local agency.

SITE INVESTIGATION

The site was explored on January 28 and 29, 1987 by drilling three borings. The locations of the borings are shown on the Plot Plan, Figure 5 in Appendix A. A detailed log of the soils encountered during drilling was compiled by our geologist. The logs are designated B-1 through B-3 and are presented in Appendix A, Figures 2 through 4.

Undisturbed soil samples were obtained at five foot intervals for laboratory analysis of total hydrocarbons using EPA method 8015. Samples with total hydrocarbon levels exceeding 100 mg/kg were also tested for benzene, toluene, xylenes, and ethyl benzene using EPA method 8020. The results of the laboratory analyses are presented in the Summary of Laboratory Test Results, Table 1. All the samples were obtained, stored, and tested by the methods and techniques outlined by the Environmental Protection Agency.

Ground water monitoring wells were installed in all the borings. The details of the well construction are presented in the Monitoring Well Construction Logs, Figures 5 through 7 in Appendix A. Because free product was observed in all the borings, ground water samples for laboratory analysis were not obtained during this portion of the investigation.

SUMMARY OF LABORATORY TEST RESULTS

Table 1, Total Petroleum Hydrocarbons

Boring No.	Depth, Feet	Total Hydrocarbons mg/kg	Benzene mg/kg	Toluene mg/kg	Total Xylenes mg/kg	Ethyl Benzene mg/kg
B-1	15'	7306	ND	ND	11.1	1.1
	20'	ND	NT	NT	NT	NT
B-2	15'	12720	44	310	911	172
	24'	ND	NT	NT	NT	NT
B-3	15'	6237	5	19	123	18
	20'	ND	NT	NT	NT	NT

Notes:
1. ND - none detected, below limits of detection.
2. Limits of detection: total hydrocarbons <10 mg/kg
   benzene <0.05 mg/kg
   toluene <0.05 mg/kg
3. NT - not tested

SUBSURFACE CONDITIONS

Based on the materials observed during drilling and sampling the site is underlain by alluvium of Recent Age. The alluvium consists of sandy clay, silty clay, silty sand, clayey sand, and clayey silt.

Ground water was encountered in all of the borings at depths ranging from 14.29 to 14.39 feet. Free product was observed in all the wells. The thickness of product varied from a trace(<0.125 inches) in B-3 to 4.5 inches in B-2. Based on the ground water elevation data obtained during monitoring of the wells, the direction of ground water flow is to the southeast.

CONCLUSIONS

Based on the laboratory test results and the field observations, it is apparent that the ground water and soil have been affected by hydrocarbon contamination. It is our opinion that the limits of the contamination are relatively localized in the vicinity of the tank zone. However, the exact limits of the contamination cannot be determined with the available data. Additional borings and ground water monitoring wells will be required to define the extent of the soil and ground water contamination, and the free product.

As an interim remedial measure, the existing wells should be manually pumped to reduce the amount of free hydrocarbon on the ground water. The frequency of pumping will be determined during the initial week of pumping and based upon the recovery rate of gasoline in the wells. The pumping will be performed regularly until either all the product is removed or a an approved treatment system is installed.

The opportunity to be of service is sincerely appreciated. If you have any questions, or if we can be of further assistance, please call.

Very truly yours,

David M. Henry

David M. Henry
Registered Geologist 4085

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			GROUP SYMBOLS	DESCRIPTIONS
COARSE GRAINED SOILS (More than 50% of material is LARGER than No. 200 sieve size.)	GRAVELS (More than 50% of coarse fraction is LARGER than the No. 4 sieve size.)	CLEAN GRAVELS (Little or no fines)	GW	Well graded gravels, gravel-sand mixtures, little or no fines.
			GP	Poorly graded gravels or gravel-sand mixtures, little or no fines.
		GRAVELS WITH FINES (Appreciable amount of fines)	GM	Silty gravels, gravel-sand-silt mixtures.
			GC	Clayey gravels, gravel-sand-clay mixtures.
	SANDS (More than 50% of coarse fraction is SMALLER than the No. 4 sieve size.)	CLEAN SANDS (Little or no fines)	SW	Well graded sands, gravelly sands, little or no fines.
			SP	Poorly graded sands or gravelly sands, little or no fines.
		SANDS WITH FINES (Appreciable amount of fines)	SM	Silty sands, sand-silt mixtures.
			SC	Clayey sands, sand-clay mixtures.
FINE GRAINED SOILS (More than 50% of material is SMALLER than No. 200 sieve size.)	SILTS AND CLAYS (Liquid limit LESS than 50)		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
			OL	Organic silts and organic silty clays of low plasticity.
	SILTS AND CLAYS (Liquid limit GREATER than 50)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
			CH	Inorganic clays of high plasticity, fat clays.
			OH	Organic clays of medium to high plasticity, organic silts.
HIGHLY ORGANIC SOILS			Pt	Peat and other highly organic soils.

BOUNDARY CLASSIFICATIONS: Soils possessing characteristics of two groups are designated by combinations of group symbols.

PARTICLE SIZE LIMITS

SILT or CLAY	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE		

No. 200 — No. 40 — No. 10 — No. 4 — 3/4 in. — 3 in. — 12 in.

U. S. STANDARD SIEVE SIZE

FIGURE NO: 1

Pomona Box Company
Project No. 86.252

APPENDIX A

Boring Logs, Figures 2 through 4
Monitoring Well Construction Logs, Figures 5 through 7
Plot Plan, Figure 8

LOG OF BORING

Drill Rig: CME-75	Boring Diameter: 10 inch	Boring Elevation:	Boring Number
Date Drilled: 1/28/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-1

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC
					AB
		5		CL	Sandy CLAY: red brown, moist, firm; color change to gray brown at 6 feet.
		10			ALLUVIUM
		15		SC	Clayey SAND: fine-to medium-grained, red brown, moist to very moist, dense.
					ALLUVIUM
		20		CL	Sandy CLAY: red brown, moist to saturated, stiff.
					ALLUVIUM
		25			
		30			
		35			
		40			
		45			
		50			

Notes:
1. Bottom of boring at 24 feet.
2. Ground water encountered at 20 feet.
3. Casing set to 24 feet.

Pomona Box Company
301 W. Imperial Highway, La Habra

Project No.: 86.252

Figure No.: 2

LOG OF BORING

Drill Rig: CME-75	Boring Diameter: 10 inch	Boring Elevation:	Boring Number
Date Drilled: 1/28/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-2

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC AB
		5 10		CL	Sandy CLAY: red brown, moist, firm; slightly plastic; color changes to gray brown at 4.5 feet. ALLUVIUM
		15		SC	Clayey SAND: fine-to medium-grained, gray, very moist to saturated, dense. ALLUVIUM
		20		CL	Sandy CLAY: red brown, saturated, firm to stiff; slightly plastic. ALLUVIUM
		25 30 35 40 45 50			

Notes:
1. Bottom of boring at 24 feet.
2. Groundwater encountered at 21 feet.
3. Casing set to 24 feet.

Pomona Box Company
301 W. Imperial Highway, La Habra

Project No.: 86.252

Figure No.: 3

LOG OF BORING

Drill Rig: CME-75	Boring Diameter: 10 inch	Boring Elevation:	Boring Number
Date Drilled: 1/29/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-3

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC
				CL	AB
		5		SC	Silty CLAY: light brown, damp, firm; occasional coarse-grained sand; some decaying organics. ALLUVIUM
		10		ML	Clayey SAND: coarse-grained, yellow brown, damp, very dense; occasional gravel. ALLUVIUM
		15			Clayey SILT: gray very moist to firm. ALLUVIUM
		20		SM	Silty SAND: medium-to coarse-grained, yellow brown, saturated, dense; occasional gravel and clayey sand. ALLUVIUM
		25			
		30			
		35			
		40			
		45			
		50			

Notes:

1. Bottom of boring at 24 feet.
2. Ground water encountered at 16.5 feet.
3. Casing set to 24 feet.

Pomona Box Company
301 W. Imperial Highway, La Habra

Project No.: 86.252	Figure No.: 4

Boring No. B-1

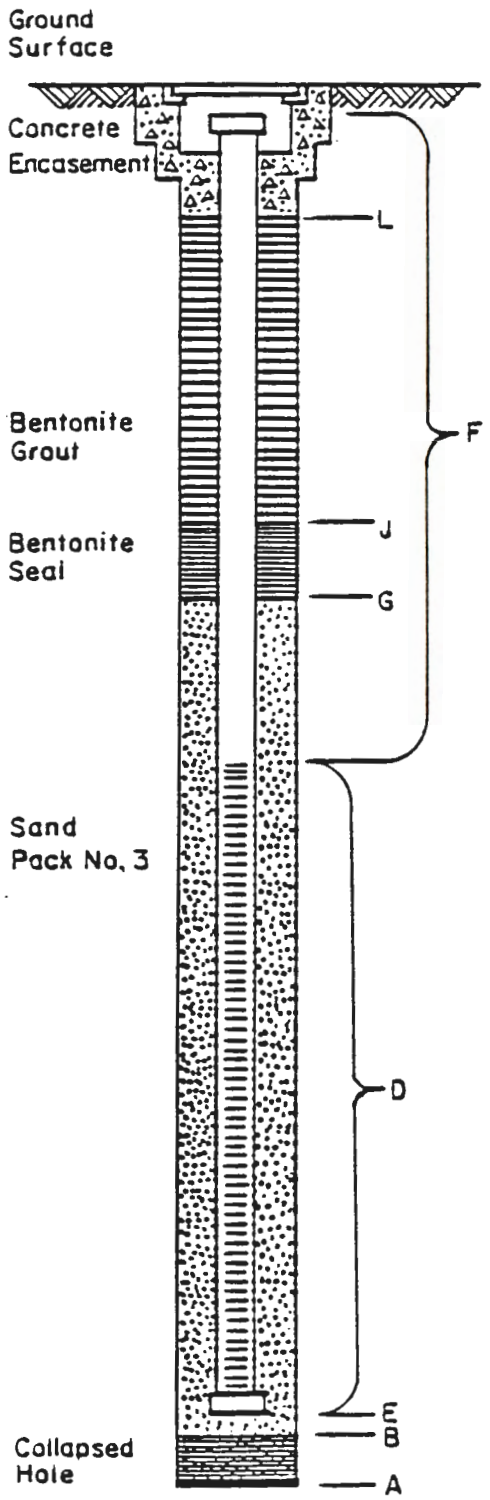
Location Pomona Box Co.

301 W. Imperial Hwy

Date 1/28/87

Logger's initials RJB

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	24	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	0	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	20	
E Depth of bottom of casing	(E)	24	
F. Length of blank casing	(F)	4	
G. Depth to top of gravel/sand fill	(G)	2	
H. Footage of gravel sand fill	(H) = B-F		26
I. Bags of gravel sand used	(I)	8	
J. Depth to top of bentonite seal	(J)	1	
K. Thickness of bentonite seal	(K) = I-G		1
L. Depth to top of bentonite grout	(L)	NA	
M. Thickness of bentonite grout	(M) = L-J		NA
N. Thickness of concrete encasement	(N) = L-Ø		NA

Depth to water	14.39
Type of casing	4" PVC Sch. 40
Type of access box used	DWP Well Protector
Top of casing elevation	256.87
Date surveyed	2/27/87
Ground water elevation	242.48

Pomona Box Company
301 W. Imperial Hwy., La Habra

PROJECT NO. 86.252 | FIGURE NO. 5

Boring No. B-2

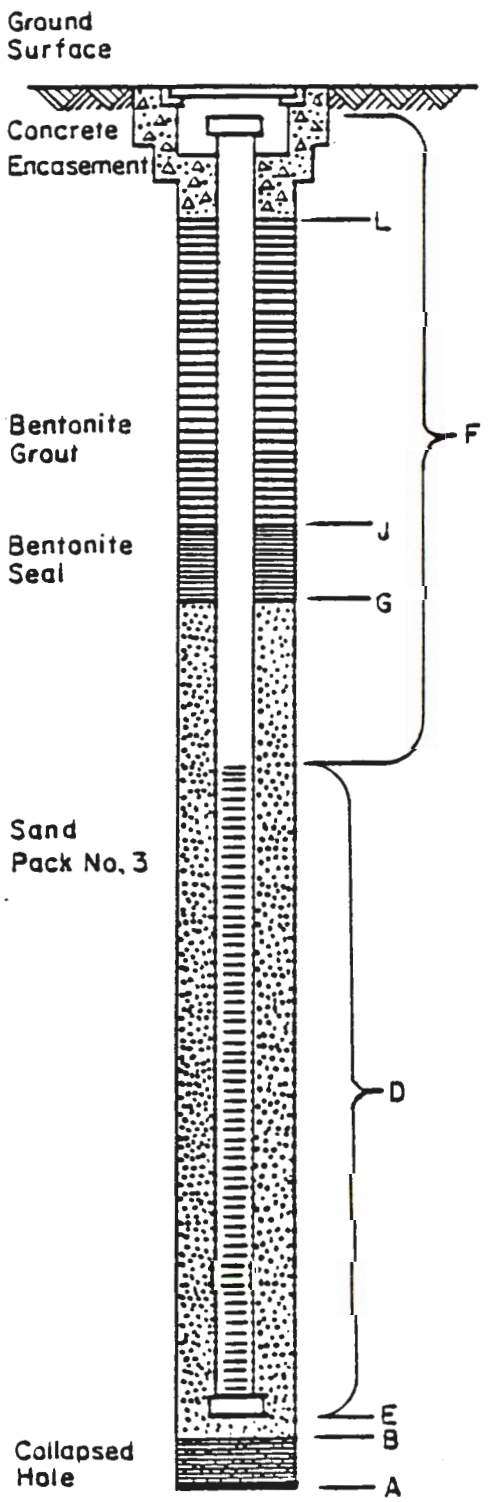
Location Pomona Box Company

301 W. Imperial Highway

Date 1/28/87

Logger's initials RJB

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	24	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	0	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	20	
E Depth of bottom of casing	(E)	24	
F. Length of blank casing	(F)	4	
G. Depth to top of gravel/sand fill	(G)	2	
H. Footage of gravel sand fill	(H) = B-F		26
I. Bags of gravel sand used	(I)	8	
J. Depth to top of bentonite seal	(J)	1	
K. Thickness of bentonite seal	(K) = I-G		1
L. Depth to top of bentonite grout	(L)	NA	
M. Thickness of bentonite grout	(M) = L-J		NA
N. Thickness of concrete encasement	(N) = L-Ø		NA

Depth to water	14.29
Type of casing	4" PVC Sch. 40
Type of access box used	DWP Well Protector
Top of casing elevation	256.83
Date surveyed	2/27/87
Ground water elevation	242.54

Pomona Box Company
301 W. Imperial Hwy., La Habra

PROJECT NO. 86.252

FIGURE NO. 6

Boring No. B-3

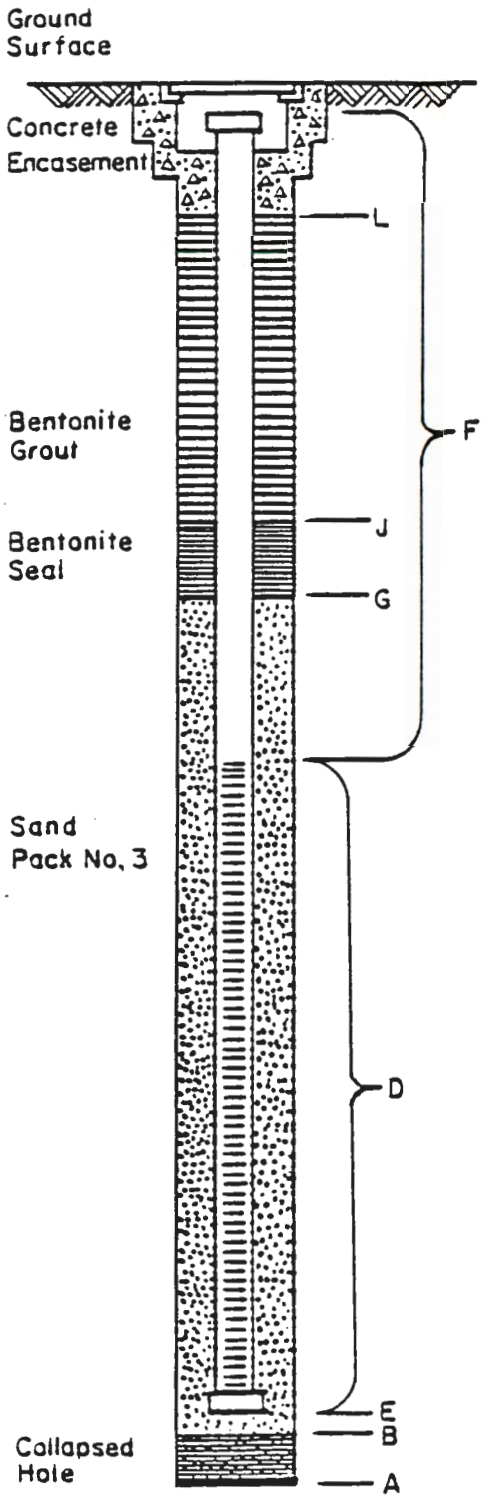
Location Pomona Box Company

301 W. Imperial Hwy.

Date 1/29/87

Logger's initials RW

MONITORING WELL



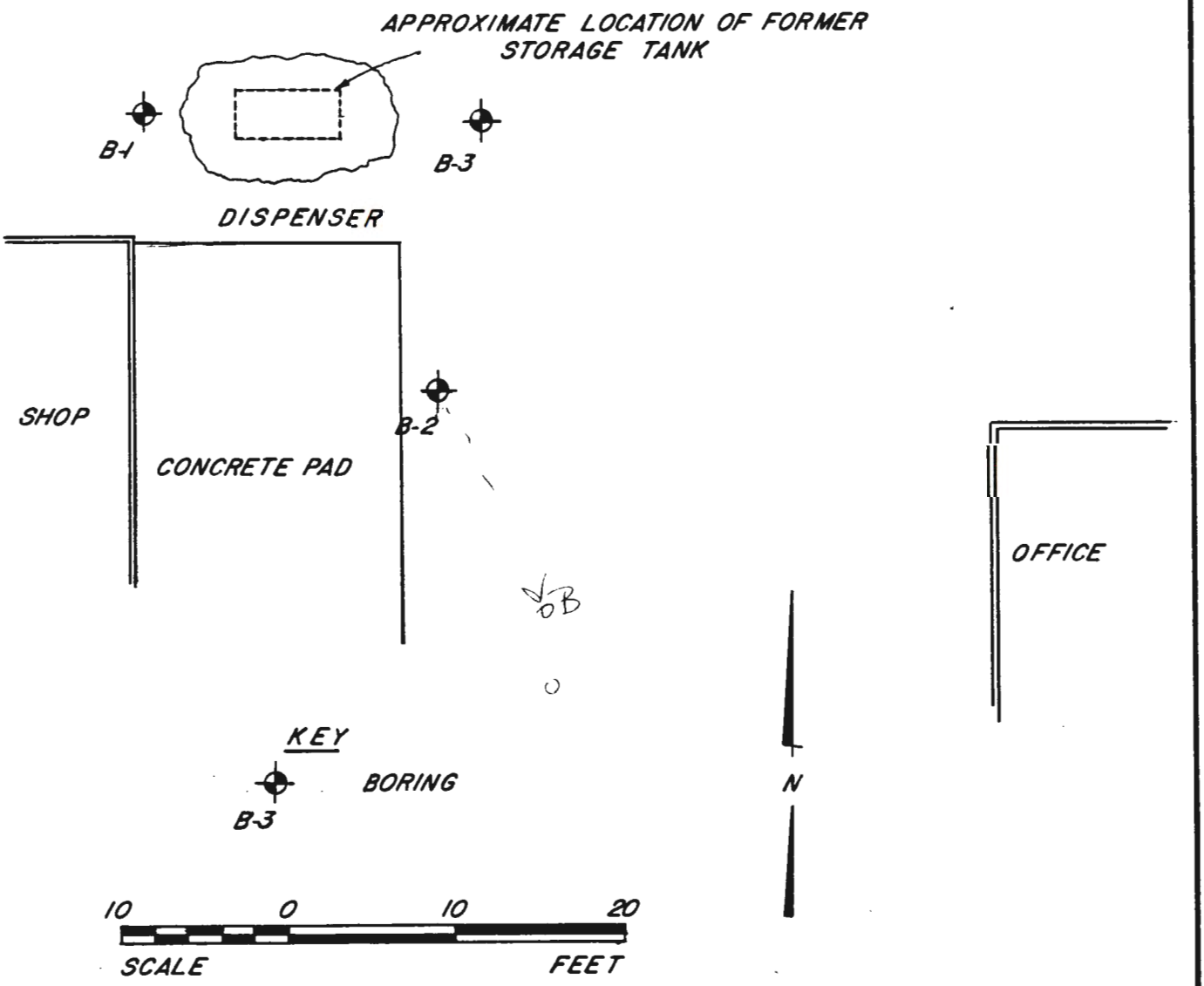
		Measurements	Calculations
A. Total depth drilled	(A)	24	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	24	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	20	
E Depth of bottom of casing	(E)	20	
F. Length of blank casing	(F)	4	
G. Depth to top of gravel/sand fill	(G)	4	
H. Footage of gravel sand fill	(H) = B-F		20
I. Bags of gravel sand used	(I)	7	
J. Depth to top of bentonite seal	(J)	1	
K. Thickness of bentonite seal	(K) = I-G		3
L. Depth to top of bentonite grout	(L)	NA	
M. Thickness of bentonite grout	(M) = L-J		NA
N. Thickness of concrete encasement	(N) = L-Ø		NA

Depth to water	14.33
Type of casing	4" PVC Sch. 40
Type of access box used	DWP Well Protector
Top of casing elevation	256.79
Date surveyed	2/27/87
Ground water elevation	242.46

Pomona Box Company
301 W. Imperial Hwy., La Habra

PROJECT NO. 86.252 | FIGURE NO. 7

PLOT PLAN



POMONA BOX COMPANY 301 W. IMPERIAL HWY. LA HABRA	
PROJECT NO. 86.252	FIGURE NO. 8

APPENDIX B

Laboratory Test Results

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92668 - 714/771-6900

CLIENT
WAYNE PERRY CONSTRUCTION
8301 West Commonwealth Avenue
Buena Park, CA 90621

LAB NO. F26897-1

REPORTED 2/25/87

SAMPLE Soil

RECEIVED 1/29/87

IDENTIFICATION Pomona Box Co. 301 W. Imperial Hwy.
Job #86-252

BASED ON SAMPLE As Submitted

	B-1 @ 15'	B-1 @ 20'	B-2 @ 15'
Total Hydrocarbons (8015) (mg/kg)	7,306	ND<10	12,720
Benzene (mg/kg)	ND< 0.05	---	44
Toluene (mg/kg)	ND< 0.05	---	310
Ethyl Benzene (mg/kg)	1.1	---	172
Xylene - Para	1.6	---	228
(8020) - Meta	4.7	---	370
(mg/kg)- Ortho	4.8	---	313

ASSOCIATED LABORATORIES

Edward S. Behare, Ph.D.

ESB/ql

RECEIVED
FEB 2 1987
Ans'd.....

TESTING & CONSULTING
Chemical •
Microbiological •
Environmental •

1 10M

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92668 - 714/771-6900

CLIENT
WAYNE PERRY CONSTRUCTION
8301 West Commonwealth Avenue
Buena Park, CA 90621

LAB NO. F26897-2

REPORTED 2/25/87

SAMPLE Soil

RECEIVED 1/29/87

IDENTIFICATION Pomona Box Co. 301 W. Imperial Hwy.
Job #86-252

BASED ON SAMPLE As Submitted

	B-2 @ 24'	B-3 @ 15'	B-3 @ 20'
Total Hydrocarbons (8015) (mg/kg)	ND<10	6,237	ND<10
Benzene (mg/kg)	---	5	---
Toluene (mg/kg)	---	19	---
Ethyl Benzene (mg/kg)	---	18	---
Xylene - Para	---	33	---
(8020) - Meta	---	56	---
(mg/kg)- Ortho	---	34	---

ASSOCIATED LABORATORIES

Edward S. Behare, Ph.D.

ESB/ql

RECEIVED
FEB 27 1987
Ans'd.....

TESTING & CONSULTING
Chemical •
Microbiological •
Environmental •

10M

Pomona Box Company
Project No. 86.252

APPENDIX C

Ground Water Elevation Data

Pomona Box Company
Project No. 86.252

Date of survey: 02/27/87

Benchmark: location - southwest corner of the intersection of Euclid Street and Imperial Highway, identification number 2B3870.

elevation - 259.45

Well Number	Depth of Well	Top of Casing Elevation	Depth to Liquid	Depth to Water
B-1	25.0	256.87	14.39	14.52
B-2	25.0	256.83	14.29	14.67
B-3	25.0	256.79	14.33	14.33

Note: Trace of gasoline in B-3, less than 0.125 inches.

UNDERGROUND
WaynePerry
CONSTRUCTION INC.
SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

Project No. 89.151

September 27, 1989

Pomona Box Company
301 W. Imperial Highway
La Habra, CA 90631

Subject: Tank Removal Inspection
Pomona Box and Adjacent Sites
301 W. Imperial Highway
La Habra, CA

Gentlemen:

Enclosed are the results of our tank removal inspection for the Pomona Box Facility located at 301 W. Imperial Highway in La Habra, California. The purpose of this report is to satisfy the requirements established by the County of Orange Health Care Agency for the closure of hazardous materials underground storage tanks.

On September 12, 1989, two 5000 gallon capacity gasoline storage tanks, two 1000 gallon capacity gasoline storage tanks, two 1000 gallon capacity diesel storage tanks, and one 550 gallon capacity gasoline storage tank were removed from the subject site by Wayne Perry Construction, Inc. Prior to removal, the tank contents were siphoned into vacuum tank trucks provided by Crosby and Overton Transportation Company of Long Beach, California.

The tanks were triple rinsed and transported as non-hazardous material by AMR Transportation Company. The rinsate was siphoned into vacuum tank trucks provided by Crosby and Overton Transportation Company of Long Beach, California, and transported under a hazardous waste manifest. Copies of the rinsate and tank disposition manifests are included in Appendix A. The tanks were "dry iced" with 15 pounds/1000 gallon capacity to insure that the oxygen content of the tank atmosphere was equal to or less than 50.0 % of the oxygen amount required to support combustion. The above procedures were witnessed by Inspector Sandie Hastings of the La Habra Fire Department.

OBSERVATIONS

The general site layout, as well as the storage tank locations are shown on the Plot Plan, Figure 1, in Appendix A. Information regarding these tanks is listed in Table 1. Visual inspection of the tanks upon removal showed light to moderate corrosion, but no pitting or signs of failure. The soils surrounding and beneath the tanks showed no visible or field detectable signs of contamination.

TABLE 1

Tank Number	Capacity (gallons)	Construction	Age (yrs)	Contents
1	1,000	Carbon Steel	25	Diesel
2	5,000	" "	"	Gasoline
3	5,000	" "	"	Gasoline
4	1,000	" "	"	Diesel
5	1,000	" "	"	Gasoline
6	1,000	" "	"	Gasoline
7	550	" "	"	Gasoline

SAMPLING PROCEDURE

A backhoe was used to dig holes approximately 2 feet below the end of each tank. As directed by Mr. Jay Gassner of Orange County Environmental Health Department, assisted by Khairy Aref, soil samples were taken from beneath each end of the removed tanks and from selected soil stock piles. The location of the samples taken are shown on the Plot Plan in Appendix A. Soil samples were obtained from the last bucketfull of soil removed from each hole and packed in brass tubes. The tube ends were covered with aluminum foil and capped with plastic end caps. Security tapes were placed on each sample by a representative of Orange County Hazardous Waste Department. The samples were placed on ice to reduce the potential for volatilization.

The soil samples obtained were transported to a certified laboratory for analysis under strict chain-of-custody procedures. The soil samples were analyzed for California Department of Health Services Test Method and for volatile aromatic hydrocarbons using EPA Test Method 8020. The results of the soil analyses are presented in the Summary of Laboratory Test Results, Table 2.

SUMMARY OF LABORATORY TEST RESULTS

Table 2, Soil Analyses - 9/13/89

Sample Number	Total Hydrocarbons mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Total Xylenes mg/kg
1 NF1	3.0	ND	ND	ND	0.1
1 SB	ND	ND	ND	ND	ND
2 FW	7.0	ND	ND	ND	0.6
2 EB	6.0	ND	ND	ND	ND
SP 2	1.0	ND	ND	ND	ND
3 FW	80.0	0.1	0.6	1.0	10.0
3 EB	40.0	ND	ND	0.7 > 0.680	2.0 > 1.750 Diesel
SP 3	5.0	ND	ND	ND	ND
4 EB	10.0	ND	ND	ND	ND
4 FW	15.0	ND	ND	ND	ND
SP 4	7.0	ND	ND	ND	ND
5 FB	ND	ND	ND	ND	ND
5 EB	ND	ND	ND	ND	ND
6 FB	ND	ND	ND	ND	ND
7 FB	ND	ND	ND	ND	ND
7 BN	ND	ND	ND	ND	ND

Notes: 1. ND - none detected, below limits of detection
2. Limits of detection:

total hydrocarbons	<1.0	mg/kg
benzene	<0.1	mg/kg
toluene	<0.1	mg/kg
ethyl benzene	<0.1	mg/kg
total xylenes	<0.1	mg/kg

SUBSURFACE CONDITIONS

Based on the materials observed in the tank excavations, the site is underlain by alluvium of recent age. The alluvium consists of light to dark brown silty sand, interbedded with thin layers of dark gray to brown clay. Groundwater was not encountered in the excavations. Ground water depth in the vicinity of the site is approximately 15 feet.

shallowest depth
11.5' as of Jan '90 [See report for Pom. Box #1 (86UT224)]
14.8' & 15.3' as of 9/90 (for B2 and B5, resp.)

CONCLUSIONS

Based on the laboratory test results and the field observations, it is our opinion that significant hydrocarbon contamination is not present in the soils beneath either the gasoline or diesel tanks.

CONCLUSIONS, continued

It is our opinion that the levels of contamination revealed by this investigation are insignificant and will not pose a threat to either the local groundwater or the public health. Based on the site conditions, we do not believe that further site assessment work or remedial action is required as it pertains to the removal of the subject tanks at this site.

The opportunity to be of service is sincerely appreciated. If you have any questions, or if we can be of further assistance, please call.

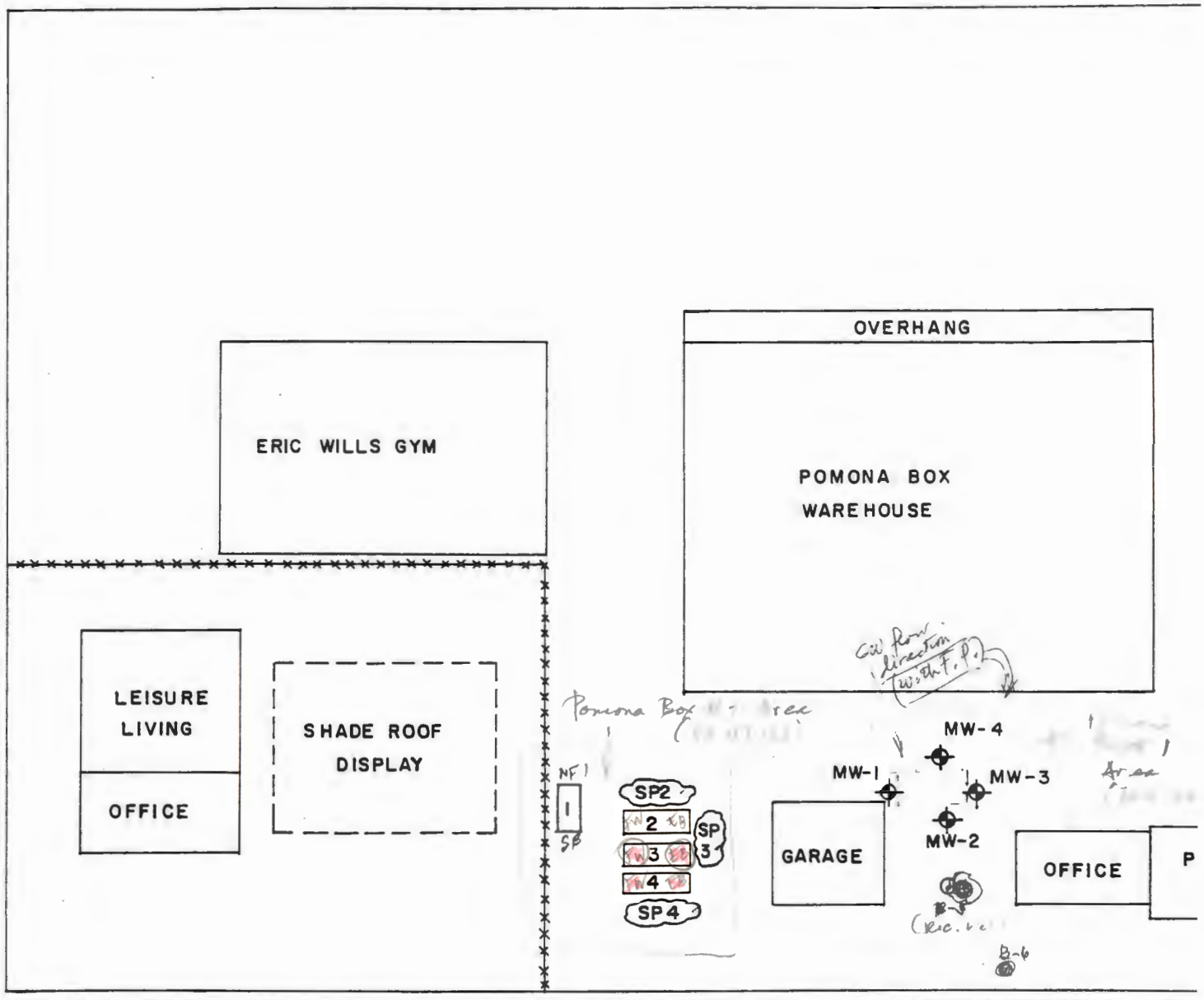
Very truly yours,

Thomas D. Rivers
Staff Geologist

David M. Henry
Registered Geologist 4085

APPENDIX A

Plot Plan
Laboratory Test Results
Chain-of Custody Form
Uniform Hazardous Waste Manifest



IMPERIAL HIGH

N

KEY

MW-4 — MONITORING WELL

4 — TANK LOCATION/NUMBER

SP5 — SPOIL PILE

Enseco

Enseco - CRL / South Coast
7440 Lincoln Way • Garden Grove, CA 92641
(714) 898-6370 • (213) 598-0458 • (800) LAB-1-CRL
FAX: (714) 891-5917

September 18, 1989

WAYNE PERRY CONST
8301 W. COMMONWEALTH AVE
BUENA PARK, CA 90621
ATTN: MR. LORA MINDER

Analysis No.: G-8925533-001/016
Date Sampled: 12-SEP-1989
Date Sample Rec'd: 12-SEP-1989
Project: POMONA BOX CO.

Enclosed with this letter is the report on the chemical and physical analyses on the samples from ANALYSIS NO: G-8925533-001/016 shown above.

The samples were received by CRL in a chilled state, intact and with the chain-of-custody record attached.

Please note that ND( ) means not detected at the detection limit expressed within the parentheses.

Solid samples are reported on "as received" basis.

Preliminary data were provided on September 15, 1989 at 5:25 P.M.

TS

Reviewed

Approved

Enseco

Enseco - CRL / South Coast
7440 Lincoln Way • Garden Grove, CA 92641
(714) 898-6370 • (213) 598-0458 • (800) LAB-1-CRL
FAX: (714) 891-5917

Laboratory Report

WAYNE PERRY CONSTRUCTION
8301 West Commonwealth Avenue
Buena Park, CA 90621
ATTN: MS. LORA MINDER

Analysis No.: G-8925533-001/016
Date Sampled: 12-SEP-1989
Date Sample Rec'd: 12-SEP-1989
Date Analyzed: 13-SEP-1989
Sample Type: SOLID

Project: POMONA BOX CO.

Sample ID	Benzene mg/kg EPA 8020	Toluene mg/kg EPA 8020	Ethylbenzene mg/kg EPA 8020	Xylenes, Total mg/kg EPA 8020
#1 NF1	ND(0.1)	ND(0.1)	ND(0.1)	0.1
#1 SB	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
#3 FW	0.1	0.6	1.	10.
#3 EB	ND(0.1)	ND(0.1)	0.7	2.
SP 4	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
SP 3	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
#4 FW	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
#4 EB	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
#2 FW	ND(0.1)	ND(0.1)	ND(0.1)	0.6
#2 EB	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
SP2	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
#5 EB	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
#5 FB	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
#6 FB	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
#7 FB	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
#7 BN	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Blank	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)

Enseco - CRL / South Coast
7440 Lincoln Way • Garden Grove, CA 92641
(714) 898-6370 • (213) 598-0458 • (800) LAB-1-CRL
FAX: (714) 891-5917

Enseco

Laboratory Report

WAYNE PERRY CONSTRUCTION
8301 West Commonwealth Avenue
Buena Park, CA 90621
ATTN: MS. LORA MINDER

Analysis No.: G-8925533-001/016
Date Sampled: 12-SEP-1989
Date Sample Rec'd: 12-SEP-1989
Date Analyzed: 13-SEP-1989
Sample Type: SOLID

Project: POMONA BOX CO.

Sample ID	TPH, Volatile mg/kg EPA 8015	TPH, Extractable mg/kg EPA 8015
#1 NFl		3.*
#1 SB		ND(1.)
#3 FW		80.*
#3 EB		40.*
SP 4		7.*
SP 3		5.*
#4 FW		15.*
#4 EB		10.*
#2 FW	7.	
#2 EB	6.	
SP2	1.	
#5 EB	ND(1.)	
#5 FB	ND(1.)	
#6 FB	ND(1.)	
#7 FB	ND(1.)	
#7 BN	ND(1.)	
Blank	ND(1.)	ND(1.)

*Chromatographic fingerprint most closely matches that of diesel fuel.
Quantitation based upon diesel standard.

Enseco - CRL / South Coast
7440 Lincoln Way • Garden Grove, CA 92641
(714) 898-6370 • (213) 598-0458 • (800) LAB-1-CRL
FAX: (714) 891-5917

Enseco

Laboratory Report

WAYNE PERRY CONSTRUCTION
8301 West Commonwealth Avenue
Buena Park, CA 90621
ATTN: MS. LORA MINDER
Project: POMONA BOX CO.

Analysis No.: G-8925533-001/016
Date Sampled: 12-SEP-1989
Date Sample Rec'd: 12-SEP-1989
Sample Type: SOLID

QA/QC Summary

Date	Parameter (Method)	QC Type	Average Spike Recovery	Acceptable Range	Relative Percent Difference	Acceptable Range
13-SEP-1989	TPH, EXTRACTABLE (EPA 8015)	M	89	60-120	15.	40
13-SEP-1989	TPH, EXTRACTABLE (EPA 8015)	M	75	60-120	11.	40
13-SEP-1989	TPH, VOLATILE (EPA 8015)	L	129	70-130	2.	40
13-SEP-1989	TOLUENE (EPA 8020)	M	87	60-120	1.	40
13-SEP-1989	ETHYLBENZENE (EPA 8020)	M	90	60-120	0.	40
13-SEP-1989	XYLENES, TOTAL (EPA 8020)	M	83	60-120	1.	40

M = Matrix Spike
L = Laboratory Control Sample Spike

page 1 of 4
Wayne Perry Cons
ATTN: LORA MINDL

JNTY OF ORANGE/HEALTH CARE AGEN
ENVIRONMENTAL HEALTH (714) 834-8020
1725 WEST 17TH STREET, P.O. BOX 355
SANTA ANA, CA 92702
WASTE MANAGEMENT SECTION

CHAIN OF CUSTODY

1. ALL SAMPLES ARE TO BE HANDLED AS COURT EVIDENCE, AND ARE TO BE PROPERLY STORED IN A SECURE LOCATION.

2. PLEASE WRITE LEGIBLY.

3. ATTACH THIS FORM TO THE ORIGINAL REPORT OF THE ANALYTICAL RESULTS AND RETURN THEM TO THIS OFFICE. LABORATORY RESULTS RECEIVED WITHOUT PROPER CHAIN OF CUSTODY DOCUMENTATION WILL NOT BE ACCEPTED.

4. TO BE COMPLETED BY LABORATORY ANALYST

LAB NO.: 925533
DATE RECEIVED: 9/12/89 6:00 pm
SAMPLE(S) CONDITION (PLEASE CHECK):
CHILLED: ✓ COUNTY SEAL(S) INTACT: ✓
CONTAINER IN GOOD CONDITION: ✓
DATE ANALYSIS COMPLETED: 9-18-89
ANALYST: D

5. TO BE COMPLETED BY SAMPLE COLLECTOR

SAMPLE LOCATION: Carson Bar Co.
301 W. Imperial Hwy.
La Habra
DATE OF COLLECTION: 9/12/89
SAMPLE COLLECTOR: Tom Rivers
TELEPHONE NO.: 714-826-0352

6. SAMPLE INFORMATION

SAMPLE NUMBER	DETERMINATION REQUESTED	SAMPLE DESCRIPTION/COMMENTS
#1 NK1	DHS Approved * mailed to ~~[illegible]~~ Diesel	Sandy, Moist Clay
# SB	Diesel *	
#2 FW	GAS *	
#2 EB	GAS *	Rush all samples
#3 FW	diesel *	
#3 EB	diesel *	Run TPH + 8020
		* Run For 8020

7. CHAIN OF CUSTODY

	SIGNATURE	TITLE	INCLUSIVE DATES
1.	[signature]	Hazwaste Specialist	9/12/89 - 9/12/89
2.	[signature]	STAFF GEOLOGIST	9-12-89 -
3.	[signature]	SAMPLE CONTROL	9/12/89 -
4.			-
5.			-
6.			-

page 2 of 4
Wayne Perry

JNTY OF ORANGE/HEALTH CARE AGEI
ENVIRONMENTAL HEALTH (714) 834-8020
1725 WEST 17TH STREET, P.O. BOX 355
SANTA ANA, CA 92702
WASTE MANAGEMENT SECTION

CHAIN OF CUSTODY

1. ALL SAMPLES ARE TO BE HANDLED AS COURT EVIDENCE, AND ARE TO BE PROPERLY STORED IN A SECURE LOCATION.

2. PLEASE WRITE LEGIBLY.

3. ATTACH THIS FORM TO THE ORIGINAL REPORT OF THE ANALYTICAL RESULTS AND RETURN THEM TO THIS OFFICE. LABORATORY RESULTS RECEIVED WITHOUT PROPER CHAIN OF CUSTODY DOCUMENTATION WILL NOT BE ACCEPTED.

4. TO BE COMPLETED BY LABORATORY ANALYST

LAB NO.: 925533
DATE RECEIVED: 9/12/89 6:00 pm
SAMPLE(S) CONDITION (PLEASE CHECK):
CHILLED: ✓ COUNTY SEAL(S) INTACT: ✓
CONTAINER IN GOOD CONDITION: ✓
DATE ANALYSIS COMPLETED: 9-18-89
ANALYST: IS

5. TO BE COMPLETED BY SAMPLE COLLECTOR

SAMPLE LOCATION: Cannon Oil Co.
301 W. Imperial Hwy
La Habra
DATE OF COLLECTION: 9/12/89
SAMPLE COLLECTOR: Tom Rivers
TELEPHONE NO.: 714-826-0352

6. SAMPLE INFORMATION

SAMPLE NUMBER	DETERMINATION REQUESTED	SAMPLE DESCRIPTION/COMMENTS
	OHS approved method for gas *	Sand Moist Clay
	*	
	*	
SP 4	Metal *	
SP 3	~~Metal~~ Diesel *	
SP 2	GAS *	
		* Run for 8020

7. CHAIN OF CUSTODY

	SIGNATURE	TITLE	INCLUSIVE DATES
1.	[signature]	Haz Waste Specialist	9/12/89 - 9/12/89
2.	[signature]	STAFF GEOLOGIST	9-12-89 -
3.	[signature]	SAMPLE CONTROL	9/12/89 -
4.			-
5.			-
6.			-

JNTY OF ORANGE/HEALTH CARE AGEI
ENVIRONMENTAL HEALTH (714) 834-8020
1725 WEST 17TH STREET, P.O. BOX 355
SANTA ANA, CA 92702
WASTE MANAGEMENT SECTION

page 3 of 4
Wayne Perry

CHAIN OF CUSTODY

1. ALL SAMPLES ARE TO BE HANDLED AS COURT EVIDENCE, AND ARE TO BE PROPERLY STORED IN A SECURE LOCATION.

2. PLEASE WRITE LEGIBLY.

3. ATTACH THIS FORM TO THE ORIGINAL REPORT OF THE ANALYTICAL RESULTS AND RETURN THEM TO THIS OFFICE. LABORATORY RESULTS RECEIVED WITHOUT PROPER CHAIN OF CUSTODY DOCUMENTATION WILL NOT BE ACCEPTED.

4. TO BE COMPLETED BY LABORATORY ANALYST

LAB NO.: 925533
DATE RECEIVED: 9/12/89 6:50 p
SAMPLE(S) CONDITION (PLEASE CHECK):
CHILLED: ✓ COUNTY SEAL(S) INTACT: ✓
CONTAINER IN GOOD CONDITION: ✓
DATE ANALYSIS COMPLETED: 9-14-89
ANALYST:

5. TO BE COMPLETED BY SAMPLE COLLECTOR

SAMPLE LOCATION: Brown Box Co.
301 W. Imperial Hwy
La Habra
DATE OF COLLECTION: 9/12/89
SAMPLE COLLECTOR: Tom Rivers
TELEPHONE NO.: 714-826-0352

6. SAMPLE INFORMATION

SAMPLE NUMBER	DETERMINATION REQUESTED	SAMPLE DESCRIPTION/COMMENTS
#4 EV	DHS Approved 8020 method to GAS *	Sandy Moist Clay
#4 EB	[redacted]/GAS *	
#5 EB	[redacted]/GAS *	
#5 FB	[redacted]/GAS *	
#6 FB	GAS *	
[redacted]	*	
		* Run for 8020

7. CHAIN OF CUSTODY

	SIGNATURE	TITLE	INCLUSIVE DATES
1.	[signature]	Haz Waste Specialist	9/12/89 - 9/12/89
2.	[signature]	STAFF GEOLOGIST	9/12/89 -
3.	[signature]	SAMPLE CONTROL	9/12/89 -
4.			-
5.			-
6.			-

page 4 of 4
Wayne Perry

JNTY OF ORANGE/HEALTH CARE AGEN
ENVIRONMENTAL HEALTH (714) 834-8020
1725 WEST 17TH STREET, P.O. BOX 355
SANTA ANA, CA 92702
WASTE MANAGEMENT SECTION

CHAIN OF CUSTODY

1. ALL SAMPLES ARE TO BE HANDLED AS COURT EVIDENCE, AND ARE TO BE PROPERLY STORED IN A SECURE LOCATION.

2. PLEASE WRITE LEGIBLY.

3. ATTACH THIS FORM TO THE ORIGINAL REPORT OF THE ANALYTICAL RESULTS AND RETURN THEM TO THIS OFFICE. LABORATORY RESULTS RECEIVED WITHOUT PROPER CHAIN OF CUSTODY DOCUMENTATION WILL NOT BE ACCEPTED.

4. TO BE COMPLETED BY LABORATORY ANALYST

LAB NO.: 925533
DATE RECEIVED: 9/12/89 6:00 pm
SAMPLE(S) CONDITION (PLEASE CHECK):
CHILLED: ✓ COUNTY SEAL(S) INTACT: ✓
CONTAINER IN GOOD CONDITION: ✓
DATE ANALYSIS COMPLETED: 9-18-89
ANALYST: [illegible]

5. TO BE COMPLETED BY SAMPLE COLLECTOR

SAMPLE LOCATION: Pacific Box Co
301 W. Imperial, La Habra
DATE OF COLLECTION: 9/12/89
SAMPLE COLLECTOR: Tom Rivers
TELEPHONE NO.: 714-826-0352

6. SAMPLE INFORMATION

SAMPLE NUMBER	DETERMINATION REQUESTED	SAMPLE DESCRIPTION/COMMENTS
#7 FA	Appropriate method for gas *	Dirt Sand
#7 BN	*	
		* Run for 8020

7. CHAIN OF CUSTODY

	SIGNATURE	TITLE	INCLUSIVE DATES
1.	[illegible]	Haz Waste Specialist	9/12/89 - 9/12/89
2.	Kenneth W. Rivers	STAFF GEOLOGIST	9-12-89 -
3.	[illegible]	SAMPLE CONTROL	9/12/89 -
4.			-
5.			-
6.			-

SIGNATURE TITLE INCLUSIVE DATES

[illegible] COPY TO ENVIRONMENTAL HEALTH SANITY LABORATORY COPY

State of California—Health and Welfare Agency
Form Approved OMB No. 2050—0039 (Expires 9-30-91)
Please print or type. *(Form designed for use on elite (12-pitch typewriter).*

Department of Health Services
Toxic Substances Control Division
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No.

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

A. State Manifest Document Number: 88217406

B. State Generator's ID

5. Transporter 1 Company Name | 6. US EPA ID Number

C. State Transporter's ID

D. Transporter's Phone

7. Transporter 2 Company Name | 8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address | 10. US EPA ID Number

G. State Facility's ID

H. Facility's Phone

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste Flammable Liquid NOS 9001113	001	TT	015000	G	State / EPA/Other
b.					State / EPA/Other
c.					State / EPA/Other
d.					State / EPA/Other

J. Additional Descriptions for Materials Listed Above
Water - 98%
Gas - 1%
Diesel - 1%

K. Handling Codes for Wastes Listed Above
a. b. c. d.

15. Special Handling Instructions and Additional Information
Avoid Contact W. The Eyes

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name | Signature | Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | Month Day Year

GENERATOR

TRANSPORTER

FACILITY

IN CASE OF AN EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA CALL 1-800-852-7550

08217406

DHS 8022 A (1/88)
EPA 8700—22
Rev. 9-88) Previous editions are obsolete.

Do Not Write Below This Line

YELLOW: GENERATOR RETAINS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
PHONE (714) 826-0352 ■ FAX ADM. & CONST. (714) 523-7880 ■ FAX GEO. & ENG. (714) 523-7541

Project No. 86.252

October 29, 1987

Pomona Box Company
301 West Imperial Highway
La Habra, CA

COPY
5/4/92
STAFF GEOL.

Attention: Mr. Don Votaw

Subject: Supplementary Site Assessment
Pomona Box Company
301 West Imperial Highway
La Habra, CA

86 U T 224

Gentlemen:

Enclosed are the results of our investigation for the Pomona Box Company located at 301 West Imperial Highway in the city of La Habra. The purpose of this investigation is to define the geologic and hydrogeologic conditions, and the limits of soil and groundwater contamination.

BACKGROUND

On December 1, 1986, a single 1000 gallon gasoline storage tank was removed. As part of the removal procedure, soil samples were obtained from the bottom of the tank excavation by a representative of the County of Orange Health Care Agency. The samples were tested for total hydrocarbons and aromatic volatile organic compounds. Of the two samples obtained, one showed no contamination while the other showed significant levels of hydrocarbon contamination. The sample showing contamination was obtained from the fill end of the tank. Based on the information available, it was believed that the contamination was localized and could easily be excavated and disposed of.

On December 8, 1986, work was begun to remove the contaminated soils. During excavation, groundwater was encountered at a depth of approximately 13 feet. Separate phase hydrocarbons were observed on the groundwater surface. The excavation was immediately backfilled and the findings reported to the County of Orange Health Care Agency. Based on the field observations site characterization work was required by the local agency.

BACKGROUND, continued

The site was explored initially on January 28 and 29, 1987 by drilling and installing three groundwater monitoring wells. Soil and groundwater samples obtained during this initial phase of the investigation showed very high levels of hydrocarbon contamination, however, the exact limits of the contamination were not determined were not determined at that time. In addition, free product was observed in all the wells. Based on the available groundwater data, the direction of groundwater and contaminant flow was determined to be to the south and southeast. Because the limits of the contamination was not defined, the California Regional Water Quality Control Board requested that additional site characterization work be performed.

SITE INVESTIGATION

The site was explored on September 2, 1987, by drilling three additional borings. The boring locations are shown on the Plot Plan, Figure 1 in Appendix A. Detailed logs of the soils encountered during drilling were compiled by our geologist. The logs are designated B-4 through B-6 and are presented in Appendix A, Figures 3 through 5.

Undisturbed soil samples were obtained at five foot intervals for laboratory analysis of total hydrocarbons using EPA Method 8015. Samples with total hydrocarbon levels exceeding 100 **mg/kg** were also tested for aromatic volatile organic compounds using EPA Method 8020. The results of the laboratory analyses are presented in the Summary of Laboratory Test Results, Table 1. All the samples were obtained, stored,and tested by the methods and techniques outlined by the Environmental Protection Agency.

At the completion of drilling and sampling, groundwater monitoring wells were installed in all the borings. The details of the well construction are presented in the Monitoring Well Construction Logs, Figures 6 through 8 in Appendix A.

All the wells were surveyed to a benchmark with an assumed elevation of 260 feet above mean sea level. The survey data is presented in Appendix A. The wells were gauged to obtain depth to groundwater and determine if there was free product in the wells. Based on the groundwater elevation data, a groundwater contour map was generated and is presented in Appendix A, Figure 9. A product thickness map was also generated and is presented in Appendix A, Figure 10.

Because free product was observed in monitoring wells B-1, B-2, B-3, and B-5, groundwater samples for laboratory analyses were only obtained from monitoring wells B-4 and B-6. The samples were tested for total hydrocarbons using EPA Method 8015, and purgeable

SITE INVESTIGATION, continued

aromatics using EPA Method 602. The results of the laboratory analyses are presented in the Summary of Laboratory Test Results, Table 2.

SUMMARY OF LABORATORY TEST RESULTS

Table 1, Total Petroleum Hydrocarbons

Boring Depth	Total Hydrocarbons mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Total Xylenes mg/kg
B-4 5'	ND	NT	NT	NT	NT
10'	ND	NT	NT	NT	NT
15'	1,290	0.3	0.9	0.8	5.2
B-5 5'	12	NT	NT	NT	NT
10'	23	NT	NT	NT	NT
15'	2,940	0.5	13.1	11.7	78.1
20'	16	NT	NT	NT	NT
B-6 5'	ND	NT	NT	NT	NT
10'	ND	NT	NT	NT	NT
15'	ND	NT	NT	NT	NT

Notes:
1. ND - none detected; below limits of detection.
2. Limits of detection:

total hydrocarbons	<10.0 mg/kg
benzene	<0.05 mg/kg
toluene	<0.05 mg/kg
ethyl benzene	<0.1 mg/kg
total xylenes	<0.1 mg/kg

3. NT - not tested.

Table 2, Groundwater Analyses

Boring	Total Hydrocarbons mg/l	Benzene mg/l	Toluene mg/l	Ethyl Benzene mg/l	Total Xylenes mg/l
B-4	1.5	0.12	0.29	0.02	0.28
B-6	50.1	ND	ND	ND	ND

SUMMARY OF LABORATORY TEST RESULTS, continued

Notes: 1. ND - none detected.
2. Limits of detection:

total hydrocarbons	<1.0 mg/l
benzene	<0.0005 mg/l
toluene	<0.001 mg/l
ethyl benzene	<0.002 mg/l
total xylenes	<0.002 mg/l

SUBSURFACE CONDITIONS

Based on the materials observed during drilling and sampling the site is underlain by alluvium of Recent age. The alluvium consists of sandy clay, sandy silt, and fine- to coarse-grained silty sand.

Groundwater was encountered in all of the borings at depths ranging from 11.67 to 15.10 feet. Free product was observed in monitoring wells B-1, B-2, B-3, and B-5. The thickness of the product varied from a trace (<0.125 inches) in wells B-3 and B-4 to 6.30 feet in well B-5. Based on the groundwater elevation data obtained during monitoring of the wells, the direction of groundwater flow is to the southeast.

EXTENT OF CONTAMINATION

The soil analyses from both phases of the investigation show that the contamination is concentrated in the capillary zone at a depth of approximately 15 feet. The contamination outside of the tank zone is a result of the free product within the capillary zone. The exact lateral limits of the contamination can only be estimated. It appears that the soil contamination is confined to the area between the shop and the office buildings and extends from the tank zone area down to B-5. It is estimated that the area of contaminated soil covers approximately 1,800 square feet.

The extent of the free product plume is basically the same as that of the soil contamination. The bulk of the free product appears to be concentrated in the vicinity of B-2 and B-5. The greater product thickness in B-5 likely represents the main body of product which is moving to the south towards Imperial Highway. Based on the fact that no free product has been observed in well B-6, it does not appear that the free product has migrated off-site.

Because of spatial limitations at this site, and the fact that most of the wells have free product in them, the dissolved hydrocarbon plume cannot be accurately defined. However, it does appear that the dissolved plume may extend off-site to the south beneath Imperial Highway.

GASOLINE RECOVERY OPERATIONS

Recovery of free product was initiated in February of 1987 and was performed sporadically from February through August. Manual pumping is currently being performed on a weekly basis. A total of 100 gallons of gasoline have been recovered thus far.

CONCLUSIONS

The site is underlain by alluvial deposits of Recent age consisting of interbedded layers of sandy clay, sandy silt, and fine- to coarse-grained silty sand.

Groundwater was encountered at depths ranging from 11.67 to 15.10 feet. The groundwater contour map indicates that the direction of groundwater flow is to the south and southeast towards Imperial Highway. Preliminary data appears to indicate that the groundwater velocity is relatively low.

The laboratory analyses shows that the soil contamination is primarily confined to the saturated zone as a result of the free product. Based on the analyses from the tank pull, the soils beneath the tank zone are significantly contaminated, particularly at the western end of the tank zone. The area of the contaminated soils is estimated to cover approximately 1,800 square feet and is confined to an area between the shop and office buildings in the east-west direction and between the tank zone and well B-5 in the north-south direction.

It is assumed that the limits of the free product plume covers approximately the same area as that of the soil contamination. The thickness of the gasoline in the wells varies from less than 0.125 feet in well B-3 to 6.3 feet in well B-5. The free product has migrated to the south and southeast parallel to the direction of groundwater flow. At this time, the free product has not migrated off-site. To date, 100 gallons of gasoline have been recovered at this location.

The extent of the dissolved hydrocarbon plume can only be approximated. The majority of the plume is assumed to be held on-site. The plume does appear to extend off-site to the south beneath Imperial Highway.

Based on the laboratory and field data, it is apparent that remedial measures are require at this site to remove the free product from the groundwater surface and to reduce the levels of hydrocarbons in the soil and groundwater.

RECOMMENDATIONS

As an interim measure, manual pumping of the wells should be continued to remove the free hydrocarbons from the groundwater surface. Based on the quantities of gasoline currently being recovered using this method, the frequency of pumping should be no less than once every week. The pumping should be concentrated on well B-5 where the greatest thickness of hydrocarbons has been observed. Manual pumping should be performed until either a suitable automated recovery system can be installed or all the free product has been removed. It should be noted that the manual pumping operation is designed to be a temporary measure and is not intended to be used as a permanent gasoline recovery or groundwater treatment system.

In order to design a suitable recovery/treatment system, a groundwater pump test will have to be performed to obtain data regarding the aquifer characteristics. The pump test data will be used to determine the transmissivity, velocity of flow, and hydraulic conductivity. This data, combined with the existing groundwater analyses will be used to determine which one of the available treatment technologies is best suited for this site and to design an appropriate treatment system.

Since the soil contamination is basically confined to the capillary zone, it is our opinion that remediation of the soil and groundwater should be performed simultaneously. The soil treatment system design will be included with groundwater treatment system design.

It is our opinion that the additional work should be completed as soon as possible to limit further migration of the free product and dissolved hydrocarbon plumes. Substantial delays in performing the work will most likely result in greater cleanup costs as a result of spreading of the contamination.

The opportunity to be of service is sincerely appreciated. If you have any questions, or if we can be of further assistance, please call.

Very truly yours,

Pete T. Christianson
Staff Geologist

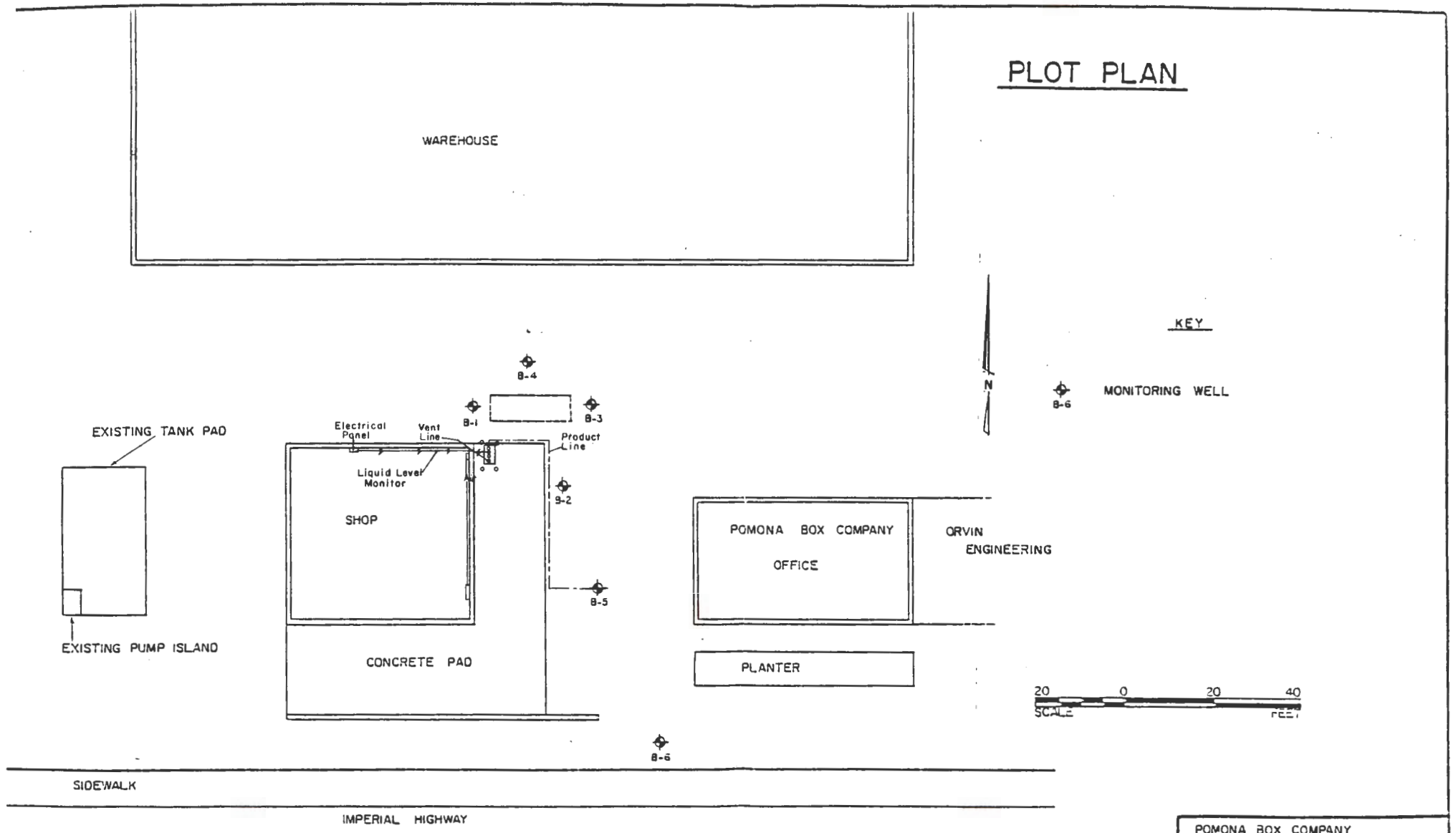
David M. Henry
Registered Geologist 4085

Oct. 29/87
Suppl. Site Assessment Report

APPENDIX A

Plot Plan, Figure 1
Soil Classification Chart, Figure 2
Boring Logs, Figures 3 through 5
Monitoring Well Construction Logs, Figures 6 through 8
Groundwater Contour Map, Figure 9
Product Thickness Map, Figure 10
Well Survey Data

PLOT PLAN



POMONA BOX COMPANY 301 W IMPERIAL HIGHWAY LA HABRA, CA	
PROJECT NO. 88.003	FIGURE NO. 1

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			GROUP SYMBOLS	DESCRIPTIONS
COARSE GRAINED SOILS (More than 50% of material is LARGER than No. 200 sieve size.)	GRAVELS (More than 50% of coarse fraction is LARGER than the No. 4 sieve size.)	CLEAN GRAVELS (Little or no fines)	GW	Well graded gravels, gravel-sand mixtures, little or no fines.
			GP	Poorly graded gravels or gravel-sand mixtures, little or no fines.
		GRAVELS WITH FINES (Appreciable amount of fines)	GM	Silty gravels, gravel-sand-silt mixtures.
			GC	Clayey gravels, gravel-sand-clay mixtures.
	SANDS (More than 50% of coarse fraction is SMALLER than the No. 4 sieve size.)	CLEAN SANDS (Little or no fines)	SW	Well graded sands, gravelly sands, little or no fines.
			SP	Poorly graded sands or gravelly sands, little or no fines.
		SANDS WITH FINES (Appreciable amount of fines)	SM	Silty sands, sand-silt mixtures.
			SC	Clayey sands, sand-clay mixtures.
FINE GRAINED SOILS (More than 50% of material is SMALLER than No. 200 sieve size.)	SILTS AND CLAYS (Liquid limit LESS than 50)		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
			OL	Organic silts and organic silty clays of low plasticity.
	SILTS AND CLAYS (Liquid limit GREATER than 50)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
			CH	Inorganic clays of high plasticity, fat clays.
			OH	Organic clays of medium to high plasticity, organic silts.
HIGHLY ORGANIC SOILS			Pt	Peat and other highly organic soils.

BOUNDARY CLASSIFICATIONS: Soils possessing characteristics of two groups are designated by combinations of group symbols.

PARTICLE SIZE LIMITS

SILT or CLAY	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE		

No.200 No.40 No.10 No.4 3/4 in. 3 in. 12 in.

U. S. STANDARD SIEVE SIZE

FIGURE NO:

2

LOG OF BORING

Drill Rig: B-61	Boring Diameter: 11 inch	Boring Elevation:	Boring Number
Date Drilled: 10/2/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-4

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC AB
		5		CL	Sandy CLAY: gray brown, damp, stiff, mottled. ALLUVIUM
		10		ML	Sandy SILT: dark brown, wet, firm, hydrocarbon odor at 7 feet. ALLUVIUM
		15		SM	Silty SAND: fine- to coarse-grained, brown to dark brown, saturated, medium dense, strong hydrocarbon odor. ALLUVIUM
		20		ML	Sandy SILT: light brown, saturated, very firm.
		25			
		30			ALLUVIUM
		35			
		40			
		45			
		50			

Notes:
1. Bottom of boring at 35 feet.
2. Groundwater encountered at 17 feet.
3. Casing set to 35 feet.

Pomona Box Company
301 W. Imperial Hwy., La Habra

Project No.: 86.252 | Figure No.: 3

LOG OF BORING

Drill Rig: B-61	Boring Diameter: 11 inch	Boring Elevation:	Boring Number
Date Drilled: 10/2/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-5

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC AB
		5		CL	Sandy CLAY: brown, moist, medium stiff, mottled. ALLUVIUM
		10			
		15		SM	Silty SAND: fine- to coarse-grained, brown, wet, medium dense, trace of gravel, hydrocarbon odor.
	▼	20			
		25			
		30			ALLUVIUM
		35			
		40			
		45			
		50			

Notes:
1. Bottom of boring at 35 feet.
2. Groundwater encountered at 17 feet.
3. Casing set to 35 feet.

Pomona Box Company
301 W. Imperial Hwy., La Habra

Project No.: 86.252

Figure No.: 4

LOG OF BORING

Drill Rig: B-61	Boring Diameter: 11 inch	Boring Elevation:	Boring Number
Date Drilled: 10/2/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-6

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC AB
		5 10		CL	Sandy CLAY: dark brown, damp, stiff. ALLUVIUM
	▼	15 20 25 30 35		SM	Silty SAND: fine- to medium-grained, brown, moist, medium dense. ALLUVIUM
		40 45 50			

Notes:
1. Bottom of boring at 35 feet.
2. Groundwater encountered at 16 feet.
3. Casing set to 35 feet.

Pomona Box Company
301 W. Imperial Hwy., La Habra

Project No.: 86.252

Figure No.: 5

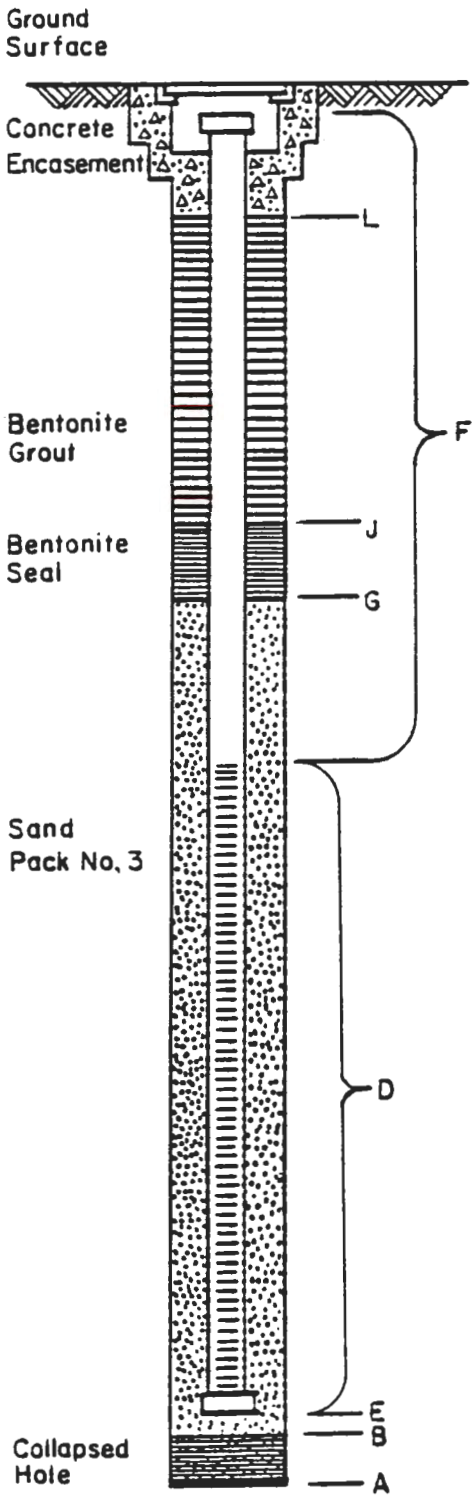
Boring No. B-4

Location 301 W. Imperial, La Habra

Date 10/2/87

Logger's initials PTC

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	36	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	35	
C. Footage of hole collapsed	(C) = A-B =		1
D. Length of slotted casing installed	(D)	30	
E Depth of bottom of casing	(E)	35	
F. Length of blank casing	(F)	5	
G. Depth to top of gravel/sand fill	(G)	4	
H. Footage of gravel sand fill	(H) = B-F		31
I. Bags of gravel sand used	(I)	16	
J. Depth to top of bentonite seal	(J)	2	
K. Thickness of bentonite seal	(K) = I-G		2
L. Depth to top of bentonite grout	(L)	N/A	
M. Thickness of bentonite grout	(M) = L-J		N/A
N. Thickness of concrete encasement	(N) = L-Ø		2

Depth to water	15.10
Type of casing	4" PVC Sch. 40
Type of access box used	DWP Well Protector
Top of casing elevation	261.56
Date surveyed	10/9/87
Ground water elevation	246.46

Pomona Box Company
301 W. Imperial Hwy., La Habra

PROJECT NO. 86.252 | FIGURE NO. 6

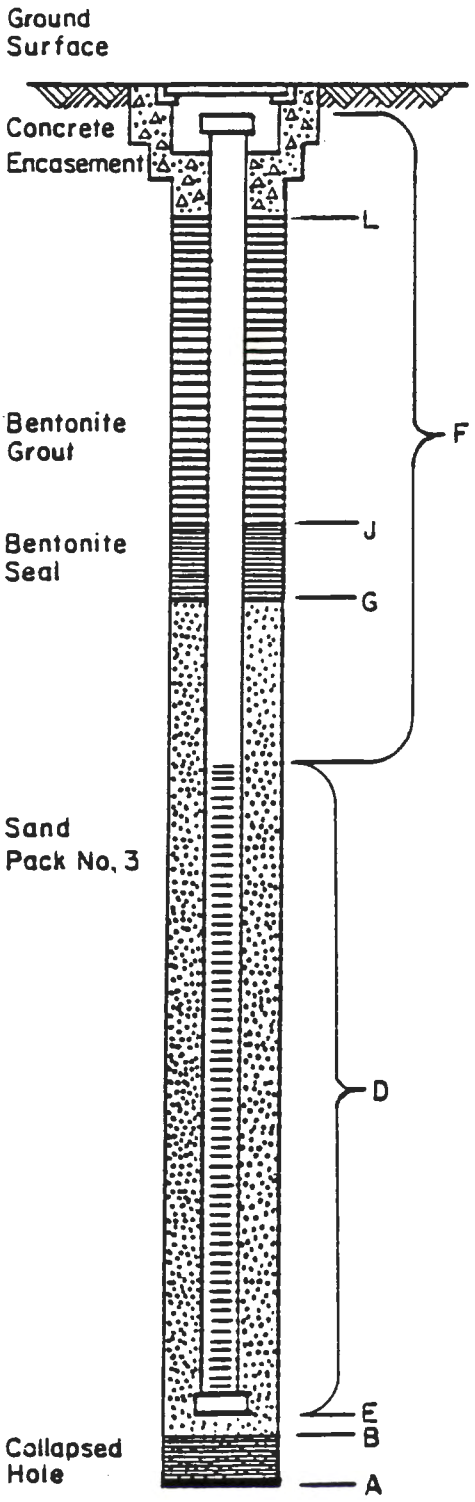
Boring No. B-5

Location 301 W. Imperial, La Habra

Date 10/2/87

Logger's initials PTC

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	35	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	35	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	30	
E Depth of bottom of casing	(E)	35	
F. Length of blank casing	(F)	5	
G. Depth to top of gravel/sand fill	(G)	4	
H. Footage of gravel sand fill	(H) = B-F		31
I. Bags of gravel sand used	(I)	16	
J. Depth to top of bentonite seal	(J)	1	
K. Thickness of bentonite seal	(K) = I-G		3
L. Depth to top of bentonite grout	(L)	N/A	
M. Thickness of bentonite grout	(M) = L-J		N/A
N. Thickness of concrete encasement	(N) = L-Ø		1

Depth to water	20.49
Type of casing	4" PVC Sch. 40
Type of access box used	DWP Well Protector
Top of casing elevation	260.68
Date surveyed	10/9/87
Ground water elevation	244.92

Pomona Box Company
301 W. Imperial Hwy., La Habra

PROJECT NO. 86.252 | FIGURE NO. 7

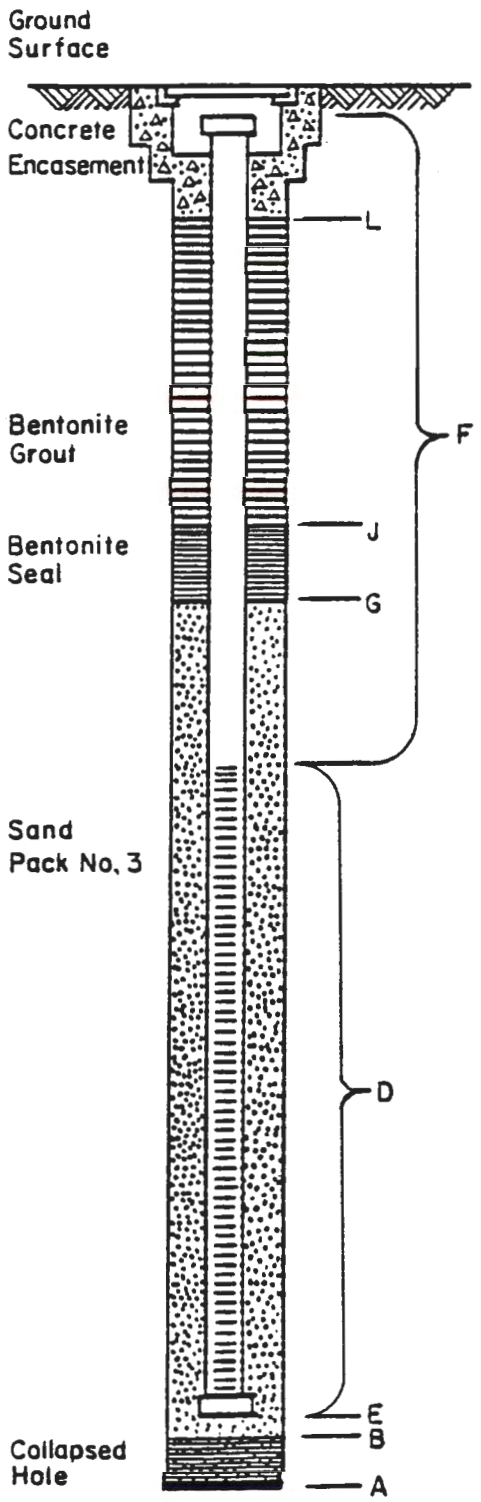
Boring No. B-6

Location 301 W. Imperial
La Habra

Date 10/2/87

Logger's initials PTC

MONITORING WELL



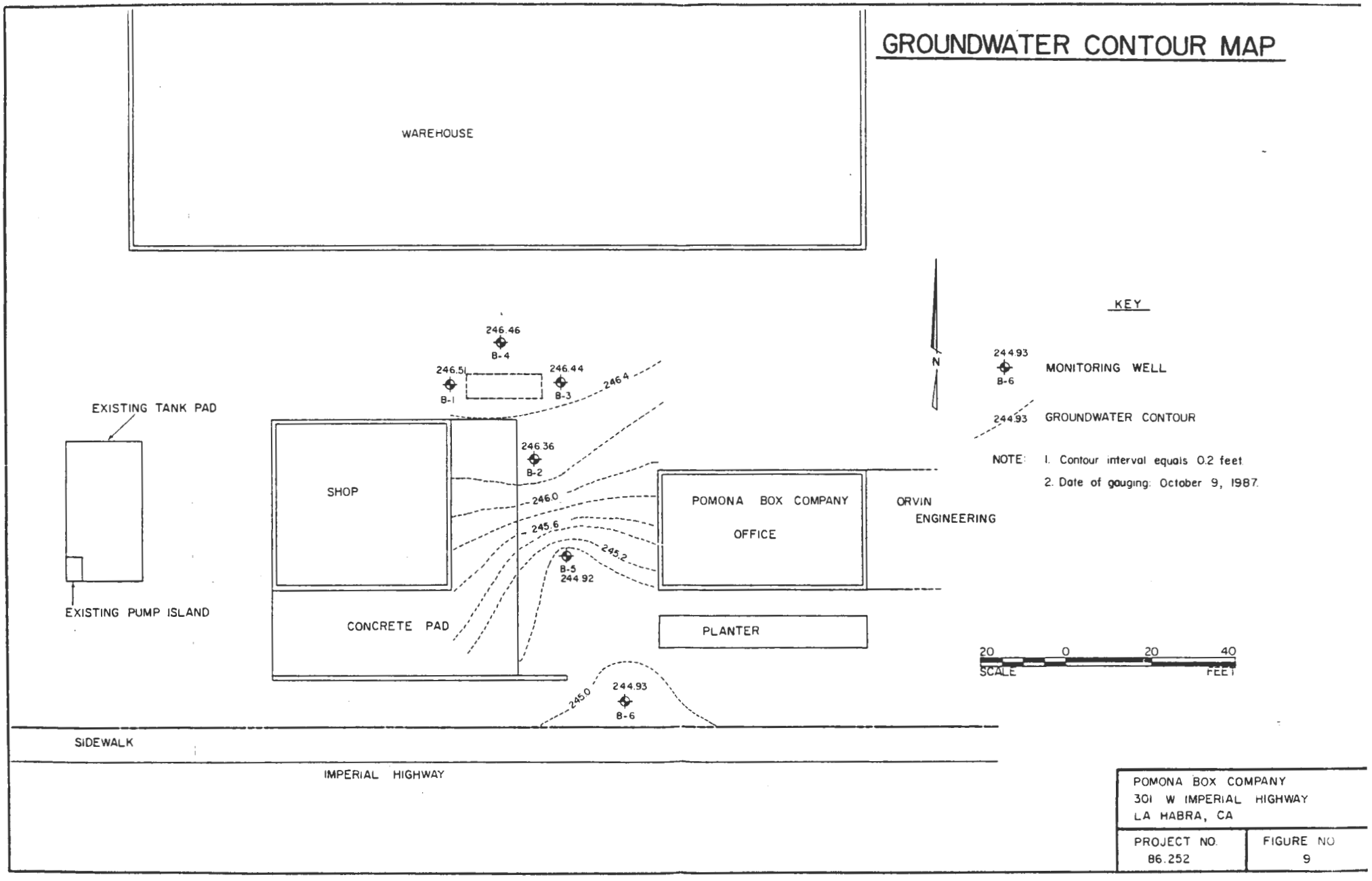
		Measurements	Calculations
A. Total depth drilled	(A)	35	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	35	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	30	
E Depth of bottom of casing	(E)	35	
F. Length of blank casing	(F)	5	
G. Depth to top of gravel/sand fill	(G)	4	
H. Footage of gravel sand fill	(H) = B-F		31
I. Bags of gravel sand used	(I)	16	
J. Depth to top of bentonite seal	(J)	2	
K. Thickness of bentonite seal	(K) = I-G		2
L. Depth to top of bentonite grout	(L)	N/A	
M. Thickness of bentonite grout	(M) = L-J		N/A
N. Thickness of concrete encasement	(N) = L-Ø		2

Depth to water	11.67
Type of casing	4" PVC Sch. 40
Type of access box used	256.60
Top of casing elevation	10/9/87
Date surveyed	244.93
Ground water elevation	

Pomona Box Company
301 W. Imperial Hwy., La Habra

PROJECT NO.: 86.252 FIGURE NO.: 8

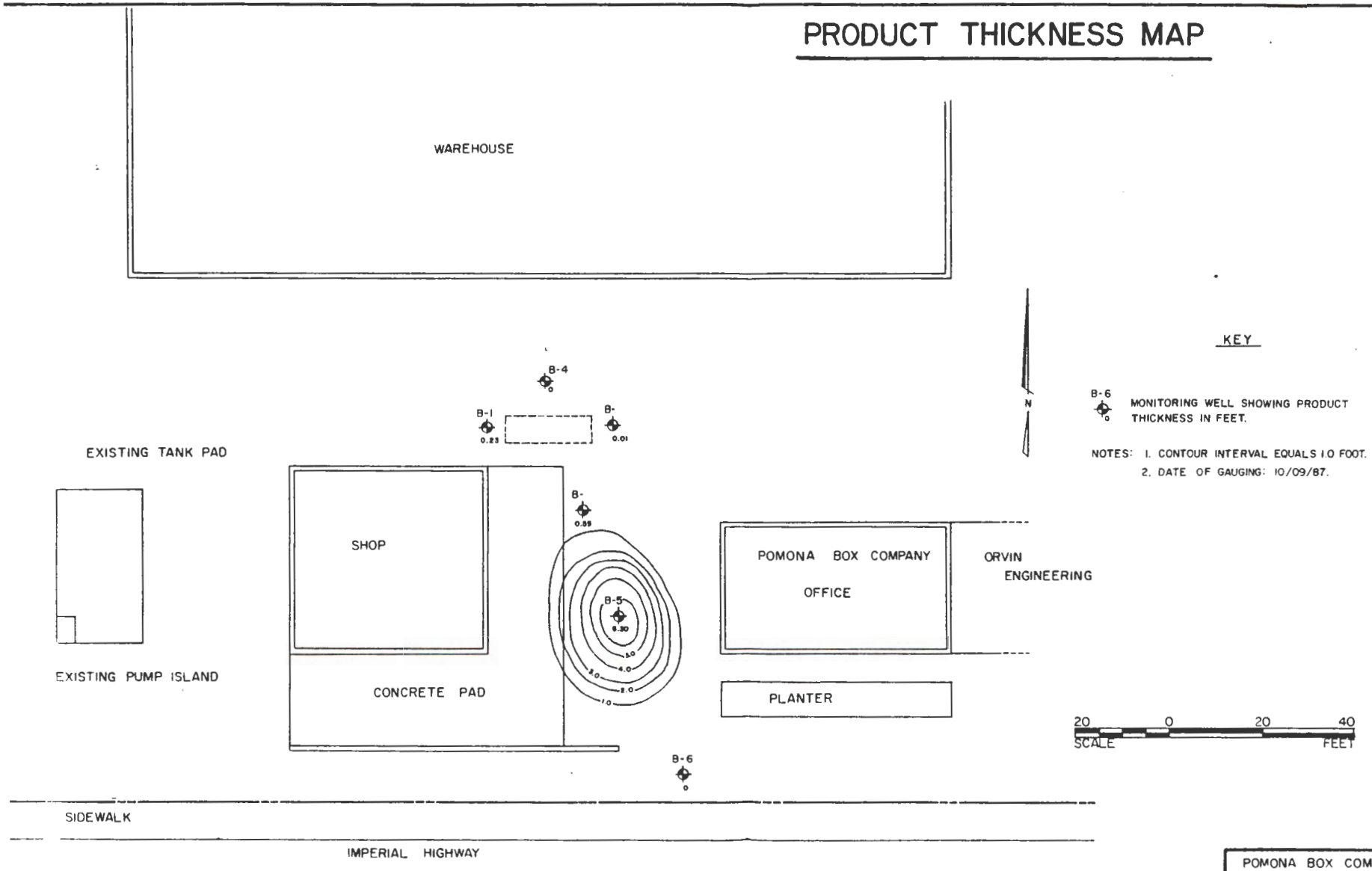
GROUNDWATER CONTOUR MAP



POMONA BOX COMPANY
301 W IMPERIAL HIGHWAY
LA HABRA, CA

PROJECT NO.	FIGURE NO
86.252	9

PRODUCT THICKNESS MAP



POMONA BOX COMPANY
301 W IMPERIAL HIGHWAY
LA HABRA, CA

PROJECT NO.	FIGURE NO
86.252	10

WELL SURVEY DATA

Project No.: 86.252

Project Location: Pomona Box Company
301 West Imperial Highway
La Habra

Date of survey: 10/09/87

Benchmark: assumed elevation of 260.00 feet above mean sea level.

Well ID.	Top of Casing Elevation	Depth to Liquid	Depth to Water	Hydrocarbon Thickness	Groundwater Elevation
B-1	261.04	14.53	14.76	0.23	246.04
B-2	261.03	14.55	15.01	0.55	246.36
B-3	260.89	14.45	14.45	0	246.44
B-4	261.56	15.10	15.10	0	246.46
B-5	260.68	14.19	20.49	6.30	244.92
B-6	256.60	11.67	11.67	0	244.93

Note: Trace of gasoline in well B-3, less than 0.01 feet.

APPENDIX B

Laboratory Test Results

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92668 - 714/771-6900

CLIENT
Wayne Perry Construction Co. (1365)
8301 West Commonwealth Avenue
Buena Park, CA 90621
Attn: Wayne Perry

LAB NO F39589-1
REPORTED 10/12/87

SAMPLE Soil
RECEIVED 10/05/87

IDENTIFICATION Pomona Box Co. 301 W. Imperial Hwy.
Job #86-252
As Submitted

BASED ON SAMPLE

	Total Hydrocarbons (8015) (mg/kg)
Barrel #1	202
Barrel #2	142
Barrel #3	96
Barrel #4	116
Barrel #5	214
B-4 @ 5'	ND<10
B-4 @ 10'	ND<10
B-4 @ 15'	1,290
B-5 @ 5'	12
B-5 @ 10'	23
B-5 @ 15'	2,940
B-5 @ 20'	16
B-6 @ 5'	ND<10
B-6 @ 10'	ND<10
B-6 @ 15'	ND<10

ASSOCIATED LABORATORIES

Edward S. Behare, Ph.D.

RECEIVED
OCT 13 1987
Ans'd.....

ESB/ql

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

TESTING & CONSULTING
Chemical •
Microbiological •
Environmental •

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92668 - 714/771-6900

CLIENT
Wayne Perry Construction Co. (1365)
8301 West Commonwealth Avenue
Buena Park, CA 90621
Attn: Wayne Perry

LAB NO F39589-2
REPORTED 10/12/87

SAMPLE Soil
RECEIVED 10/05/87

IDENTIFICATION Pomona Box Co. 301 W. Imperial Hwy.
Job #86-252
BASED ON SAMPLE As Submitted

	Barrel #1	Barrel #2	Barrel #4
Benzene (8020) (mg/kg)	1.7	0.3	ND<0.05
Toluene (mg/kg)	13.3	0.2	ND<0.05
Ethyl Benzene (mg/kg)	5.1	0.4	ND<0.1
Xylene - Para	6.8	0.4	ND<0.1
- Meta	14.9	0.8	ND<0.1
- Ortho	7.4	0.6	ND<0.1

ASSOCIATED LABORATORIES

Edward S. Behare, Ph.D.

ESB/ql

RECEIVED
OCT 13 1987
Ans'd.....

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

TESTING & CONSULTING
Chemical •
Microbiological •
Environmental •

C-1 10M

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92668 - 714/771-6900

CLIENT
Wayne Perry Construction Co. (1365)
8301 West Commonwealth Avenue
Buena Park, CA 90621
Attn: Wayne Perry

LAB NO F39589-3
REPORTED 10/12/87

SAMPLE Soil
RECEIVED 10/05/87

IDENTIFICATION Pomona Box Co. 301 W. Imperial Hwy.
Job #86-252
As Submitted

BASED ON SAMPLE

	Barrel #5	B-4 @ 15'	B-5 @ 15'
Benzene (8020) (mg/kg)	1.0	0.3	0.5
Toluene (mg/kg)	3.0	0.9	13.1
Ethyl Benzene (mg/kg)	1.2	0.8	11.7
Xylene - Para	1.7	1.2	14.0
- Meta	3.4	2.8	40.2
- Ortho	1.9	1.2	23.9

ASSOCIATED LABORATORIES

Edward S. Behare, Ph.D.

RECEIVED
OCT 13 1987
Ans'd.....

ESB/ql

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

TESTING & CONSULTING
Chemical •
Microbiological •
Environmental •

C-1 10M

NO. 86-252

PRIORITY: 10/12/87

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ▪ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

LAB TAKEN TO: ASSOC. DATE TAKEN: 10/2/87 NUMBER OF SAMPLES: 15

TYPE OF SAMPLE: LIQUID (SOIL) SLUDGE OTHER

TESTS REQUESTED: 8015 AND IF OVER 100 mg/kg ON
8015, RUN 8020

LOCATION: POMONA BOX CO
301 W. TAMPLEM HWY

AGENCY REQUESTING TEST: O.C. HEALTH

ATTN: PETE CHRISTIANSON COPY TO:

ORIGINAL OF THIS FORM AND RESULTS SHOULD BE RETURNED TO:

WAYNE PERRY CONSTRUCTION INC.

SAMPLE TRANSFER

1	RELINQUISHED BY:	Pete Christiansen (NAME)	WPC (ORGANIZATION)	10/5/87 (DATE)
	RECEIVED BY:	Carl Anderson	WPC	10/5/87 (DATE)
2	RELINQUISHED BY:	Carl Anderson (NAME)	WPC (ORGANIZATION)	10/5/87 (DATE)
	RECEIVED BY:	E. Hall	ASSOC. LAB	10/5/87 (DATE)
3	RELINQUISHED BY:	(NAME)	(ORGANIZATION)	/ / (DATE)
	RECEIVED BY:			RECEIVED OCT 13 1987

WHITE — SAMPLE CANARY — LAB PINK — W.P.C. GOLDENROD — GENERATOR

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92668 - 714/771-6900

CLIENT
Wayne Perry Construction Co. (1365)
8301 West Commonwealth Avenue
Buena Park, CA 90621
Attn: Wayne Perry

LAB NO F39929
REPORTED 10/20/87

SAMPLE Water
RECEIVED 10/09/87

IDENTIFICATION Pomona Box Co., Imperial Hwy.
Job #86-252
As Submitted

BASED ON SAMPLE

	B-4	B-6
Total Hydrocarbons (8015) (mg/l)	1.5	50.1
Benzene (602) (mg/l)	0.12	ND<0.0005
Toluene (mg/l)	0.29	ND<0.001
Ethyl Benzene (mg/10	0.02	ND<0.002
Xylene - Para (mg/l)	0.06	ND<0.002
- Meta	0.13	ND<0.002
- Ortho	0.09	ND<0.002

ASSOCIATED LABORATORIES

Edward S. Behare, Ph.D.

ESB/ql

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

RECEIVED
OCT 20 1987
MS

TESTING & CONSULTING
Chemical •
Microbiological •
Environmental •

C-1 10M

PERRY JOB NO. 86.252

PRIORITY: NEED BY 10/~~18~~/87 17

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ▪ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

LAB TAKEN TO: ASSOC. DATE TAKEN: 10 / 8 / 87 NUMBER OF SAMPLES: 2

TYPE OF SAMPLE: (LIQUID) SOIL SLUDGE OTHER

TESTS REQUESTED: 8015 AND 602

LOCATION: FOMONA EDA CO.
301 W. FOREST HWY.

AGENCY REQUESTING TEST:

ATTN: PETE CHRISTIANSON COPY TO:

ORIGINAL OF THIS FORM AND RESULTS SHOULD BE RETURNED TO:

WAYNE PERRY CONSTRUCTION INC.

SAMPLE TRANSFER

1	RELINQUISHED BY: Pete Christian	WPC	10/8/87	
		NAME	ORGANIZATION	DATE
	RECEIVED BY:			DATE
2	RELINQUISHED BY:		/ /	
		NAME	ORGANIZATION	DATE
	RECEIVED BY:			DATE
3	RELINQUISHED BY:		/ /	
		NAME	ORGANIZATION	DATE
	RECEIVED BY:			DATE

WHITE — SAMPLE CANARY — LAB PINK — W.P.C. GOLDENROD — GENERATOR

UNDERGROUND
WaynePerry
CONSTRUCTION INC.
SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

Project No. 89.151

June 8, 1990

Pomona Box Company
301 West Imperial Highway
La Habra, California

Attention: Mr. Daryl Votaw

Subject: Proposed Work Plan
Pomona Box Company
301 West Imperial Highway
La Habra, California

Gentlemen:

Enclosed is an outline of proposed additional work for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. The purpose of the proposed work is to define the limits of soil contamination and to determine whether groundwater has been impacted.

BACKGROUND

On September 12, 1989, seven underground storage tanks were removed from three separate tank zones on the subject site. The tank locations are shown on the Plot Plan, Figure 1 in Appendix A. Soil samples were obtained beneath each tank for laboratory analyses. Results of the laboratory analyses showed non-detected to low concentrations of hydrocarbon contamination in the southwestern tank location. A review of the chromatograms indicates that the contaminant of interest was diesel fuel. Analytical results from the remaining tank zones showed no detectable hydrocarbon contamination.

Based on the laboratory analyses, [it was concluded that] the Orange County Health Care Agency requested that site characterization work be performed in order to assess the extent and significance of the contamination at this location.

PROPOSED WORK PLAN

Because hydrocarbons were found only in the tank zone at the southwest corner of the site, site characterization work will be concentrated in this area. The site will be explored by drilling a minimum of three borings. The proposed boring locations are shown on the Plot Plan, Figure 1. Additional borings will be drilled and sampled if field conditions deem them appropriate. All borings will be logged by a geologist.

Undisturbed soil samples will be obtained at five foot intervals down to the saturated zone for laboratory analysis. Samples will be obtained using a modified California split spoon sampler and will be retained in three inch stainless steel tubes. Upon removal from the sampler, the ends of the tubes will be covered with aluminum foil and capped with plastic end caps. The samples will be labeled in the field according to boring number and depth and placed in an ice chest to reduce the potential for volatilization. All the sampling equipment will be washed and double rinsed in distilled water between samples to reduce the effects of cross contamination. All the soil samples will be tested for total hydrocarbons using Department of Health Services Test Method for diesel and for aromatic volatile organic compounds using EPA Test Method 8020. Contaminated soils encountered during drilling will be placed in approved containers and disposed of at a licensed facility according to all state and local guidelines.

11.5' as of 9/96

Based on information obtained during previous site investigation, depth to groundwater is approximately 15 feet. Therefore, groundwater monitoring wells will be installed in all of the borings upon completion of drilling and sampling. The wells will consist of four inch diameter, flush threaded PVC casing. The bottom thirty feet of casing will be slotted. A graded sand pack will be placed around the slotted section of casing. The remainder of the well will be sealed with bentonite pellets and bentonite grout. A concrete access box will be constructed at the surface. Details of the well construction are presented in Detail A: Typical Monitoring Well Construction, Figure 2.

All the wells will be surveyed to a benchmark of known elevation. The wells will also be gauged in order to obtain water level data and determine if there is free product present in the wells.

The groundwater monitoring wells will be developed and sampled for evidence of hydrocarbon contamination. A minimum of five borehole volumes will be pumped from each well with an air lift pump to develop them. Prior to sampling, three casing volumes will be bailed from the well to assure obtaining a representative sample. The water from well development and purging prior to sampling will be paced in approved containers and disposed of at an approved facility. After purging, water samples will be obtained using a

PROPOSED WORK PLAN, continued

Teflon bailer and placed in VOA bottles with Teflon septums. The samples will be stored on ice for transport to the laboratory. Groundwater samples will be tested for total hydrocarbons using Department of Health Services Test Method and purgeable organic compounds using EPA Test Method 602.

Based on the field and laboratory data, a report will be generated which will include: discussions of geologic and hydrogeologic conditions; copies of laboratory testing reports for the soil and groundwater samples; discussion of potential impacts of contamination; and recommendations for additional work if appropriate.

The opportunity to be of service is sincerely appreciated. If you have any questions, or if we can be of further assistance, please call.

Very truly yours,

David M. Henry

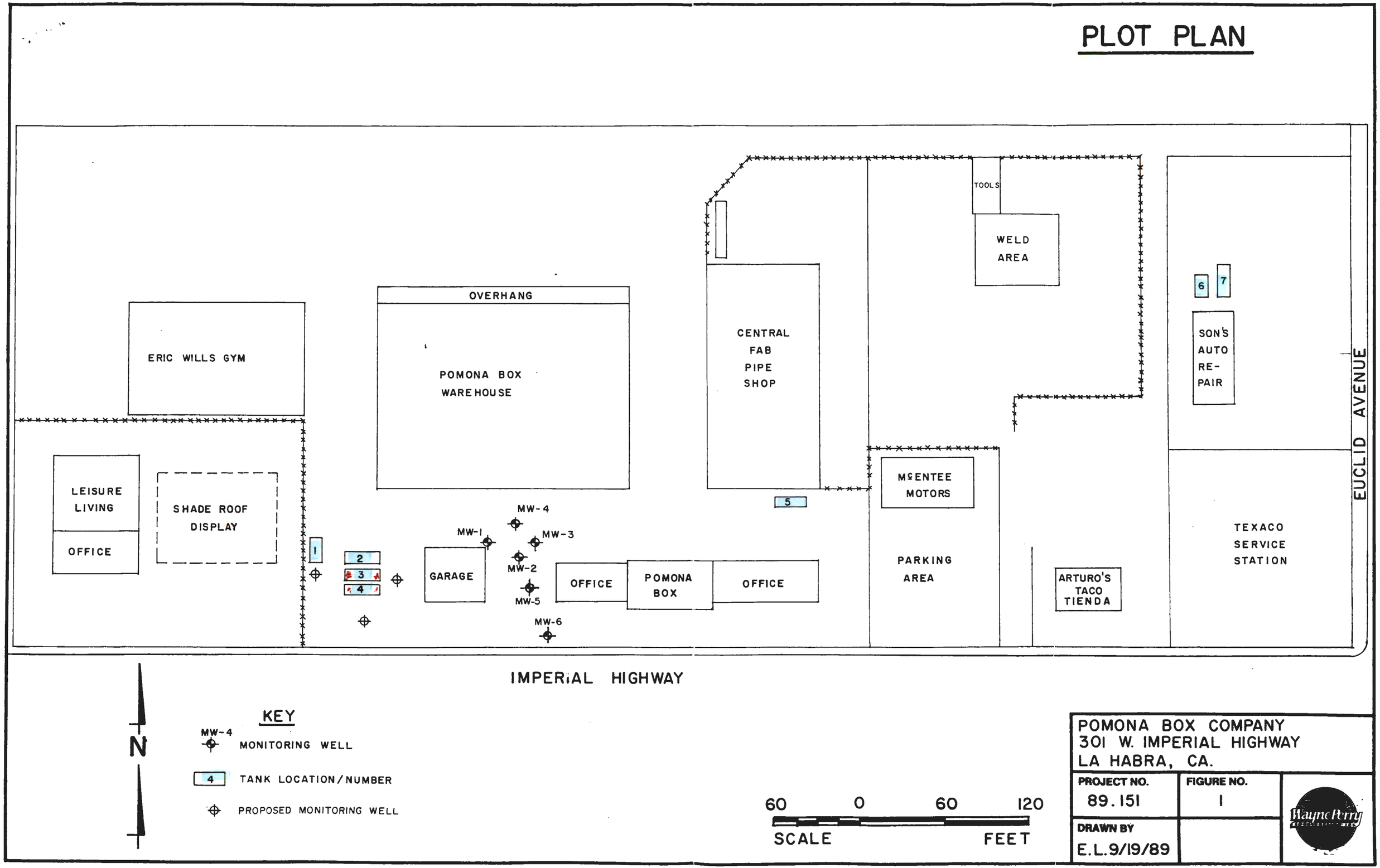
David M. Henry
Registered Geologist 4085

Pomona Box Company
Project No. 89.151

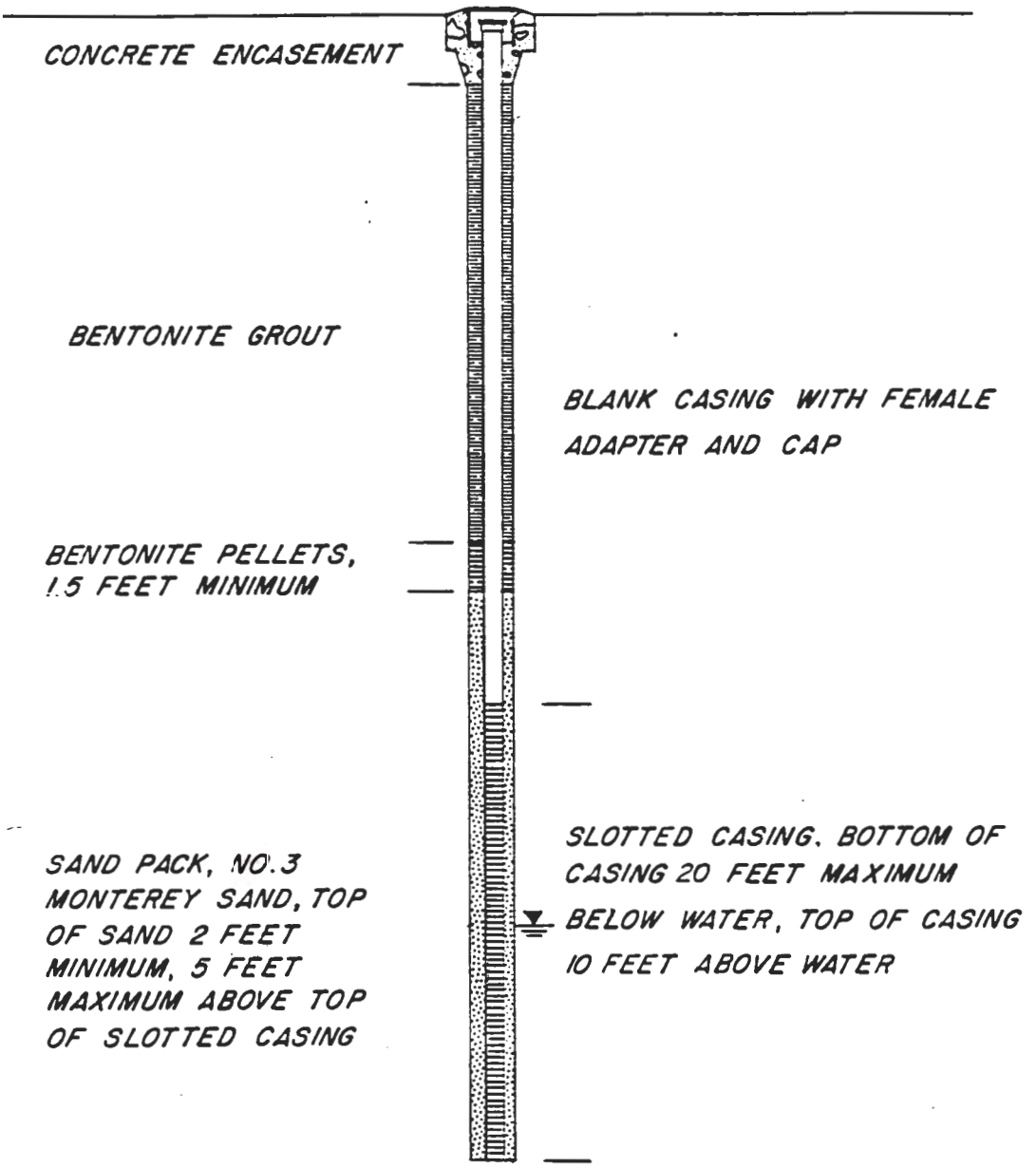
APPENDIX A

Plot Plan, Figure 1
Detail A: Typical Monitoring Well Construction, Figure 2

PLOT PLAN


ERIC WILLS GYM
LEISURE LIVING
OFFICE
SHADE ROOF DISPLAY
OVERHANG
POMONA BOX WAREHOUSE
CENTRAL FAB PIPE SHOP
TOOLS
WELD AREA
6
7
SON'S AUTO RE-PAIR
EUCLID AVENUE
McENTEE MOTORS
5
1
2
3
4
MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
GARAGE
OFFICE
POMONA BOX
OFFICE
PARKING AREA
ARTURO'S TACO TIENDA
TEXACO SERVICE STATION
IMPERIAL HIGHWAY
N
KEY
MW-4 MONITORING WELL
4 TANK LOCATION/NUMBER
PROPOSED MONITORING WELL
60 0 60 120
SCALE FEET
POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA.
PROJECT NO.
89.151
FIGURE NO.
1
DRAWN BY
E.L.9/19/89
Wayne Perry

DETAIL A: TYPICAL GROUND WATER MONITORING WELL CONSTRUCTION



NOTES:
1. ALL CASING IS 4 INCH DIAMETER, SCHEDULE 40, FLUSH THREADED, PVC.
2. ACTUAL CONSTRUCTION MAY VARY FROM TYPICAL DESIGN DUE TO FIELD CONDITIONS
3. DRAWING NOT TO SCALE.

Pomona Box Company 301 W. Imperial Hwy., La Habra	
PROJECT NO.: 89.151	FIGURE NO.: 2

UNDERGROUND
WaynePerry
CONSTRUCTION INC.
SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

Project No. 89.151

April 25, 1991

Pomona Box Company
301 West Imperial Highway
La Habra, California

Attention: Mr. Daryl Votaw

Subject: Supplemental Site Investigation
Pomona Box Company
301 West Imperial Highway
La Habra, California

EXECUTIVE SUMMARY

Enclosed are the results of supplemental site investigation performed at the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. The purpose of this investigation was to determine whether groundwater has been impacted in the vicinity of former underground fuel storage tanks.

Groundwater monitoring well B-7 was drilled and installed in the approximate center of the former storage tank area near the southwest corner of the site. Laboratory analyses of soil samples indicate progressively elevated levels of total petroleum hydrocarbons and aromatic volatile organic compounds from a depth of five feet to fifteen feet. Groundwater was encountered at a depth of eighteen feet. Laboratory analyses of the groundwater sample from well B-7 indicate the presence of dissolved hydrocarbons.

Gauging data indicate the direction of groundwater flow is toward the southwest.

BACKGROUND

On September 12, 1989, seven underground storage tanks were removed. Soil samples were obtained beneath each tank for laboratory analyses. Results of the laboratory analyses showed non-detected to low concentrations of hydrocarbon contamination in the southwestern tank location. A review of the chromatograms indicated that the contaminant of interest was diesel fuel. Analytical results from the remaining tank zones showed no detectable hydrocarbon contamination.

SUPPLEMENTAL SITE INVESTIGATION

A supplemental site investigation was conducted on March 21, 1991 by drilling and installing one groundwater monitoring well in the approximate center of the abandoned southwestern tank zone. The well location is shown on the Plot Plan, Figure 1 in Appendix A.

A detailed log of the lithologies encountered during drilling and sampling was compiled and is presented in Appendix A as Figure 4. Details of the groundwater monitoring well construction are presented as Figure 5 in Appendix A.

Undisturbed soil samples were obtained at five foot intervals to a depth of 20 feet, and one sample was taken at total depth of 40 feet. Each soil sample was monitored with an OVA meter to make field determinations of possible petroleum contamination. All samples to the depth of 20 feet were submitted for laboratory analyses. Details of the soil sampling procedure are presented in Appendix C. Results of the soil analyses are presented in the Summary of Laboratory Test Results, Table 1.

On April 16, 1991, groundwater samples were obtained from well B-7 for laboratory analyses. Details of the sampling procedure are presented in Appendix C. The groundwater samples were analyzed for total petroleum hydrocarbons using the California Department of Health Services Test Method 8015-M and for volatile organic compounds using EPA Test Method 602. Results of the groundwater analyses are presented in the Summary of Laboratory Test Results, Table 2.

SUMMARY OF LABORATORY TEST RESULTS

Table 1, Soil Analyses, 3/26/91

Boring/ Depth	Total Hydrocarbons mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Total Xylenes mg/kg
B-7 5	12	ND	ND	ND	ND
10	44	0.2	ND	ND	3.4
15	323	3.6	3.4	6.9	9.7
20	ND	ND	ND	ND	ND

Notes: 1. ND - none detected, below limits of detection.
2. Limits of detection:

total hydrocarbons	<	10 mg/kg
benzene	<	0.1 mg/kg
toluene	<	0.1 mg/kg
ethyl benzene	<	0.1 mg/kg
total xylenes	<	0.1 mg/kg

SUMMARY OF LABORATORY TEST RESULTS

Table 2, Groundwater Analyses, 4/18/91

Well Number	Total Hydrocarbons mg/l	Benzene mg/l	Toluene mg/l	Ethyl Benzene mg/l	Total Xylenes mg/l
B-7	1.6	0.2	0.02	0.02	0.2

Notes: 1.ND - none detected, below limits of detection.
2.Limits of detection:

total hydrocarbons	<	0.05 mg/l
benzene	<	0.0005 mg/l
toluene	<	0.001 mg/l
ethyl benzene	<	0.002 mg/l
total xylenes	<	0.002 mg/l

SUBSURFACE CONDITIONS

Based on the materials encountered during drilling and sampling, the site is underlain by alluvium of Recent age. The alluvium consists of fine-to coarse-grained sand interbedded with stiff-to-dense, silty clay. Overlying the alluvium in the former tank zone area is artificial fill consisting of fine-grained sand and clayey sand.

SUBSURFACE CONDITIONS, continued

Groundwater was encountered at a measured depth of 18 feet. Based upon surveyed groundwater elevations, a groundwater contour map was constructed. The groundwater contour map is presented in Appendix A, Figure 2. The direction of groundwater flow across the site is toward the southwest.

CONCLUSIONS

Laboratory analyses indicate elevated concentrations of petroleum hydrocarbons were present in soil samples to a depth of 15 feet. Petroleum hydrocarbon concentrations increased with depth to maximum levels immediately above groundwater.

Laboratory analyses also indicate dissolved hydrocarbons were present in the groundwater sample obtained from well B-7. The levels of dissolved hydrocarbons detected in the groundwater sample were above state action levels.

The opportunity to be of service is sincerely appreciated. If you have any questions, or if we can be of service, please call.

Very truly yours,

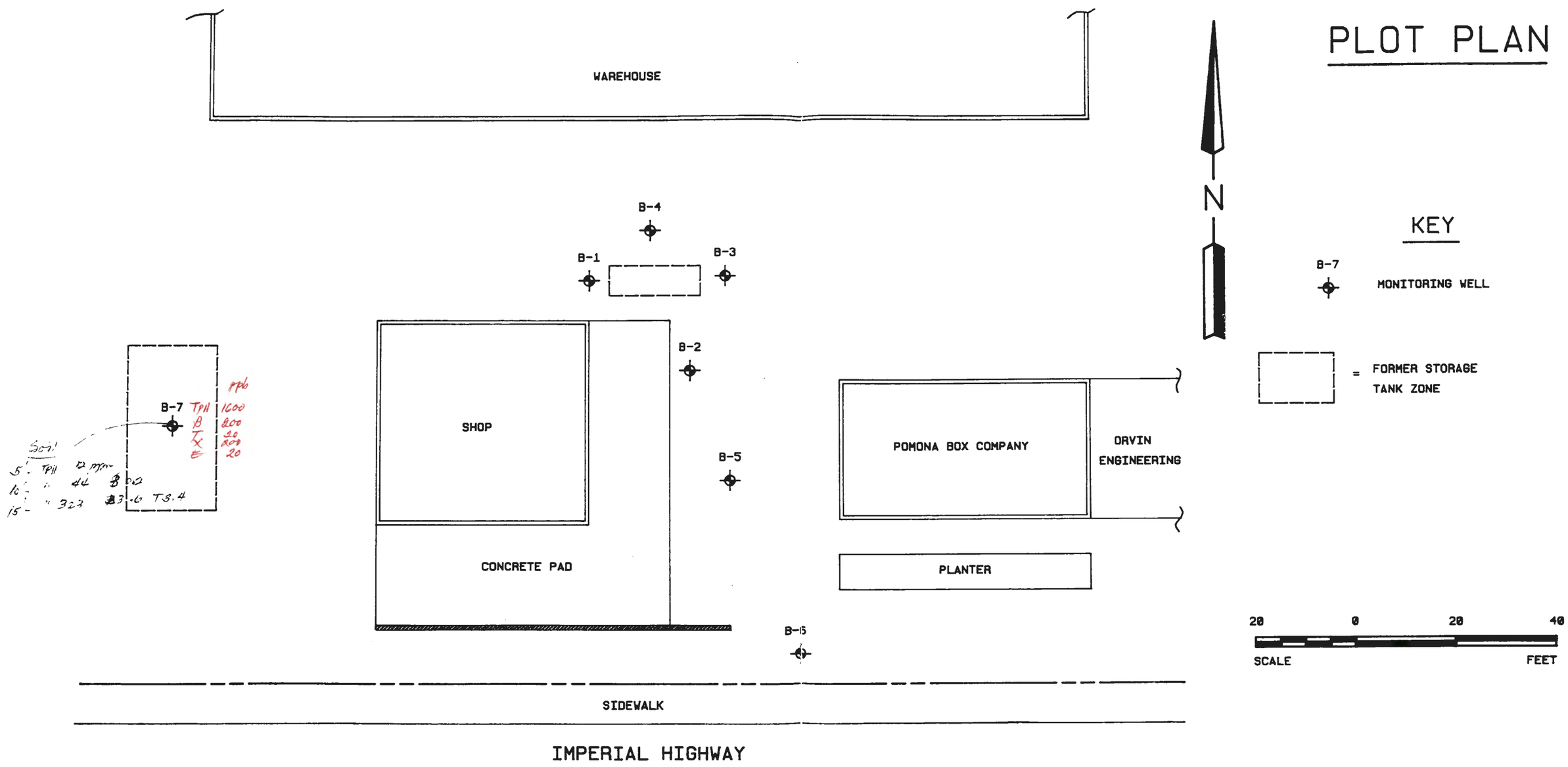
Thomas D. Rivers
Staff Geologist

David M. Henry
Registered Geologist 4085

APPENDIX A

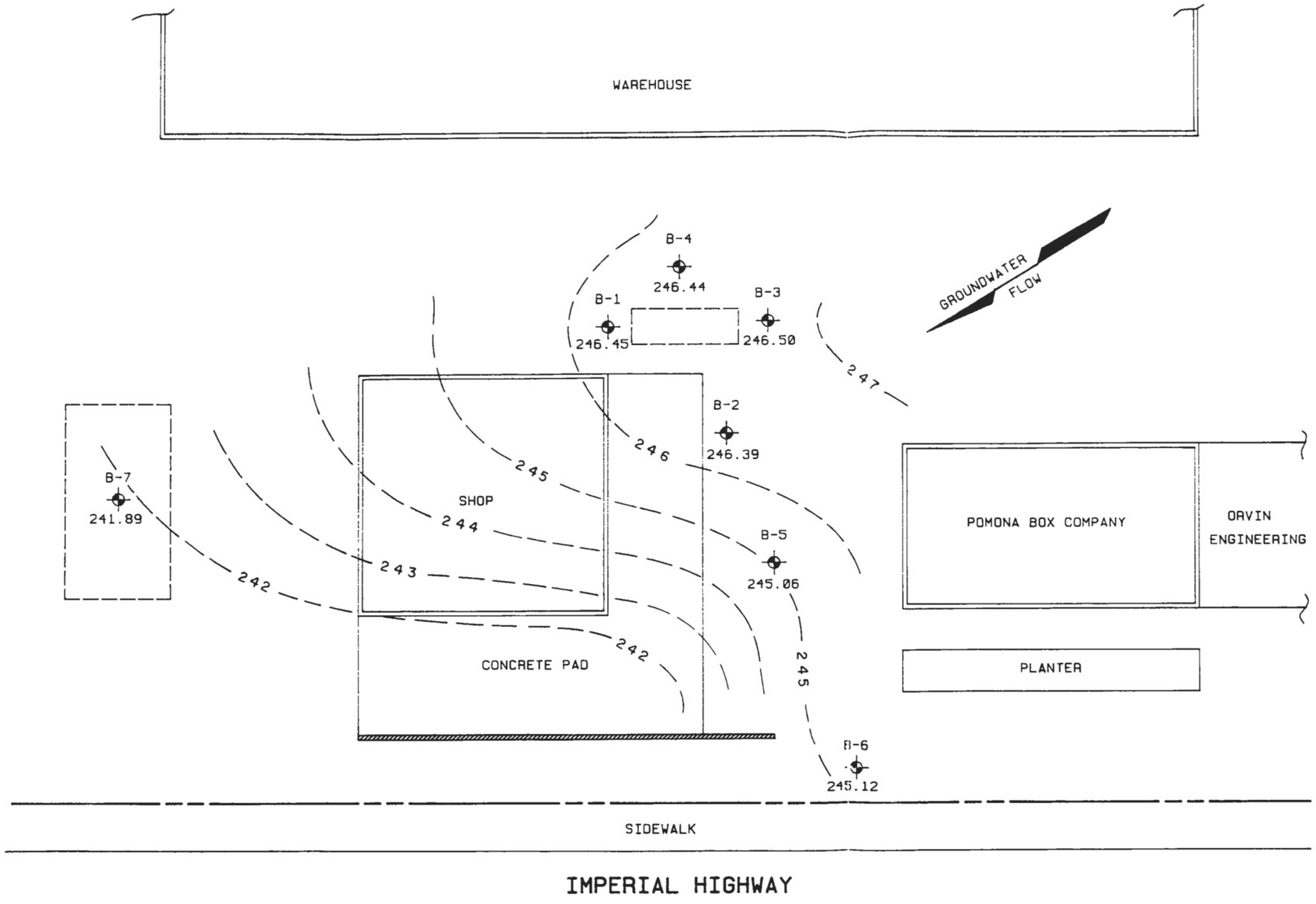
Plot Plan, Figure 1
Groundwater Contour Map, Figure 2
Universal Soil Classification System, Figure 3
Boring Log, Figure 4
Well Construction Log, Figure 5

PLOT PLAN



POMONA BOX COMPANY 301 W. IMPERIAL HIGHWAY LA HABRA, CA.		
PROJECT NO. 89.151	FIGURE NO. 1	Wayne Perry
DRAWN BY EL 3/31/91		

GROUNDWATER CONTOUR MAP



N

KEY

B-7 — MONITORING WELL

241.89 = AVERAGE GROUNDWATER ELEVATION IN FEET ABOVE SEA LEVEL FOR PERIOD 1/09/91 - 4/16/91.

246 = GROUNDWATER CONTOUR
CONTOUR INTERVAL = 1.0 FEET

= FORMER STORAGE TANK ZONE

20 0 20 40
SCALE FEET

POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA.

PROJECT NO.	FIGURE NO.
89.151	2
DRAWN BY	
EL 4/24/91	

Wayne Perry

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			GROUP SYMBOLS	DESCRIPTIONS
COARSE GRAINED SOILS (More than 50% of material is LARGER than No. 200 sieve size.)	GRAVELS (More than 50% of coarse fraction is LARGER than the No. 4 sieve size.)	CLEAN GRAVELS (Little or no fines)	GW	Well graded gravels, gravel-sand mixtures, little or no fines.
			GP	Poorly graded gravels or gravel-sand mixtures, little or no fines.
		GRAVELS WITH FINES (Appreciable amount of fines)	GM	Silty gravels, gravel-sand-silt mixtures.
			GC	Clayey gravels, gravel-sand-clay mixtures.
	SANDS (More than 50% of coarse fraction is SMALLER than the No. 4 sieve size.)	CLEAN SANDS (Little or no fines)	SW	Well graded sands, gravelly sands, little or no fines.
			SP	Poorly graded sands or gravelly sands, little or no fines.
		SANDS WITH FINES (Appreciable amount of fines)	SM	Silty sands, sand-silt mixtures.
			SC	Clayey sands, sand-clay mixtures.
FINE GRAINED SOILS (More than 50% of material is SMALLER than No. 200 sieve size.)	SILTS AND CLAYS (Liquid limit LESS than 50)		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
			OL	Organic silts and organic silty clays of low plasticity.
	SILTS AND CLAYS (Liquid limit GREATER than 50)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
			CH	Inorganic clays of high plasticity, fat clays.
			OH	Organic clays of medium to high plasticity, organic silts.
HIGHLY ORGANIC SOILS			Pt	Peat and other highly organic soils.

BOUNDARY CLASSIFICATIONS: Soils possessing characteristics of two groups are designated by combinations of group symbols.

PARTICLE SIZE LIMITS

SILT or CLAY	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE		

No. 200 No. 40 No. 10 No. 4 3/4 in. 3 in. 12 in.

U. S. STANDARD SIEVE SIZE

POMONA BOX COMPANY
301 West Imperial Highway

FIGURE NO: 3

LOG OF BORING

Drill Rig: CME 75	Boring Diameter: 8"	Boring Elevation: 254.69	Boring Number
Date Drilled: 3-21-91	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-7

Sample Depth	Vapor Reading PPM/LEL	Time	Blow Counts	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
							ASPHALT PAVING
						SP	SAND: light brown, fine- to medium-grained, moist, loose. BACKFILL MATERIAL
	10/0	9:35	2/3/4	5			
	235/2	9:43	3/3/4	10		SC	Clayey SAND: light gray, fine to medium-grained sand intermixed with clay, soft to firm, moist. BACKFILL MATERIAL
	60/0	9:46	2/5/7	15			
						CL	CLAY: light brown, silty, moist, stiff, slightly plastic. ALLUVIUM
	15/0	9:50	3/7/11	20			
	15/0	10:10	3/8/17	25		SC	Clayey SAND: light brown, interbedded fine- to coarse-grained sands and silty clay, saturated, plastic, stiff to dense.
				30			
				35			No in-place samples; auger return observation, only.
			18/13/21	40			ALLUVIUM
				45			
				50			
				55			
				60			

Notes:
1. Boring depth 43 feet.
2. Groundwater encountered at 18 feet.
3. Installed groundwater monitor well at 40 feet.

Pomona Box Company
301 Imperial Highway

Project No.: 89.151

Figure No.: 4

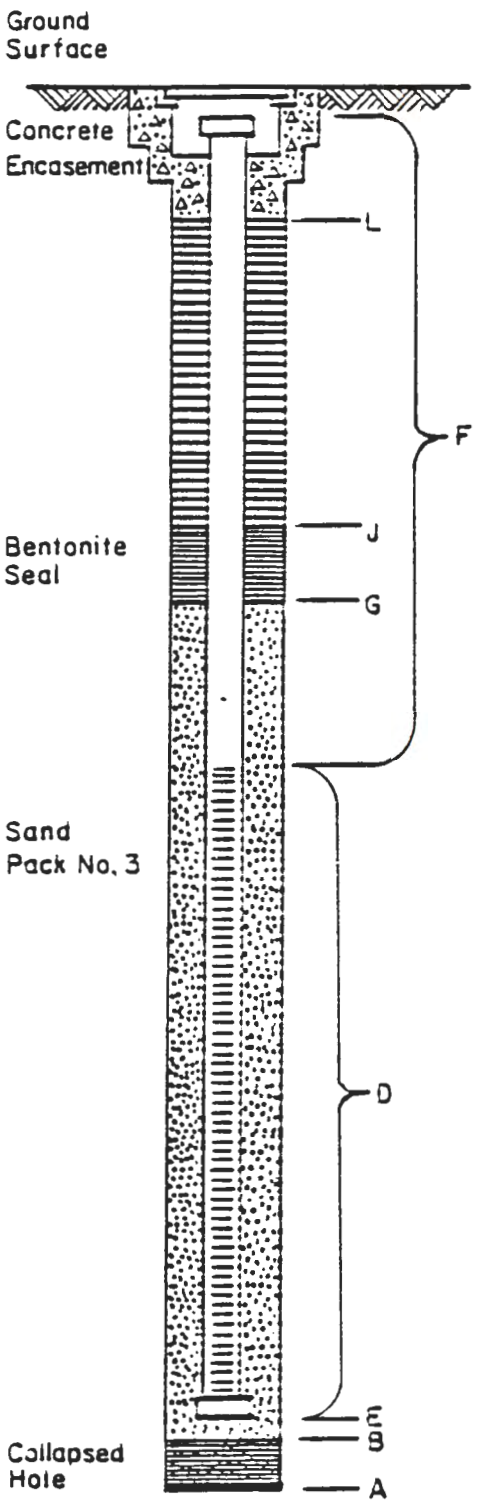
Boring No. B-7

Location C FORMER UNDER-GROUND STORAGE TANK ZONE

Date 3-21-91

Logger's initials TDR

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	43'	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	43'	
C. Footage of hole collapsed	(C) = A-B =		0'
D. Length of slotted casing installed	(D)	40'	
E Depth of bottom of casing	(E)	40'	
F. Length of blank casing	(F)	10'	
G. Depth to top of gravel/sand fill	(G)	8'	
H. Footage of gravel sand fill	(H) = B-G		35'
I. Bags of gravel sand used	(I)	14'	
J. Depth to top of bentonite seal	(J)	1	
K. Thickness of bentonite seal	(K) = G-J		7'
L. Depth to top of bentonite grout	(L)	NA	
M. Thickness of bentonite grout	(M) = J-L		NA
N. Thickness of concrete encasement	(N) = L-Ø		1'

Depth to water	18'
Type of casing	4" Diam. PVC
Type of access box used	DIVERSIFIED BOX/LTD
Top of casing elevation	254.69.
Date surveyed	3/27/91
Ground water elevation	

POMONA BOX COMPANY
301 IMPERIAL HIGHWAY

PROJECT NO. 89.151 | FIGURE NO. 5

Pomona Box Company
Project No. 89.151

APPENDIX B

Gauging Data

Pomona Box

88.003 W. Imperial Hwy (La Habra) 1987 - 1991

Product Recovery - Gallons

	Manual Pumping			Automatic System Recovery				
Date	Total Liquid	Water	Product	Total Liquid	Water	Product	Recovered Product	Comments
06/04/87	88	85	3				3	
08/04/87	23	15	8				8	
08/20/87	135	131	4				4	
10/05/87	35	20	15				15	
10/08/87	157	150	7				7	
10/23/87	428	412	16				16	
10/27/87	92	60	32				32	
10/29/87	37	22	15				15	
11/03/87	65	47	18				18	
11/05/87	81	66	15				15	
11/09/87	108	86	22				22	
11/11/87	336	322	14				14	
11/17/87	108	90	18				18	
11/19/87	139	117	22				22	
11/23/87	80	64	16				16	
11/25/87	84	65	19				19	
11/30/87	83	68	15				15	
12/03/87	79	66	13				13	
12/09/87	75	68	7				7	
12/11/87	46	32	14				14	
12/15/87	34	30	4				4	
12/16/87	50	43	7				7	
87' Total	2,363	2,059	304				304	
01/05/88	0	0	0				0	Gauge Only (1/5 - 2/23)
05/23/88	229	104	125				125	Pumped Recovery Tank ?
06/13/88				82	6	76		
06/30/88				112	6	106		
07/13/88				121.75	3.25	118.5		
07/31/88				131.5	3.25	128.25		
08/01/88				138	3.25	134.75		
08/09/88				138	3.25	134.75		
08/16/88				189	70.5	118.5		
09/01/88				243	118	125		
09/03/88	246	99	147				147	Pumped Recovery Tank
09/03/88				2	0	2		
09/07/88				2	0	2		
09/13/88				9.5	2	7.5		
09/19/88				9.5	2	7.5		
09/27/88				38	19	19		
10/05/88				42.5	23	19.5		
10/13/88				42.5	23	19.5		
10/18/88				61	17	44		

Pomona Box

88.003 W. Imperial Hwy (La Habra) 1987 - 1991

Product Recovery - Gallons

	Manual Pumping			Automatic System Recovery				
Date	Total Liquid	Water	Product	Total Liquid	Water	Product	Recovered Product	Comments
10/26/88				222.5	203	19.5		
11/02/88				243	203	40		
11/02/88	254	227	27				27	Pumped Recovery Tank
11/04/88				9.5	6	3.5		
11/08/88				25	21	4		
11/17/88				66	56	10		
11/28/88				100	76	24		
12/08/88				163	138	25		
12/14/88				176	150	26		
12/20/88				176	150	26		
12/20/88	179	157	22				22	Pumped Recovery Tank
88' Total	908	587	321				321	
01/05/89				66	47	19		
01/11/89				88	76	12		
01/20/89				144	125	19		
01/25/89				163	138	25		
02/02/89				257	176	81		
03/15/89				216	125	91		
03/27/89				216	125	91		
04/19/89				216	125	91		
04/22/89	227	139	88				88	Pumped Recovery Tank
05/11/89				88	76	12		
05/25/89				156.5	125	31.5		
06/12/89				216	163	53		
06/22/89				229	176	53		
07/12/89				243	189	54		
07/14/89	227	209	18				18	Pumped Recovery Tank
08/09/89				100	76	24		
08/21/89				150	125	25		
09/08/89				209.5	4	205.5		
09/22/89				216	203	13		
09/23/89	222	213	9				9	Pumped Recovery Tank
10/09/89				94	88	6		
10/20/89				164.5	161	3.5		
11/08/89				222	220	2		
11/20/89	227	222	5				5	Pumped Recovery Tank
12/01/89				54	52	2		
12/15/89				112	106	6		
12/29/89				154.5	153.25	1.25		
89' Total	903	783	120				120	

Pomona Box

88.003 W. Imperial Hwy (La Habra) 1987 - 1991

Product Recovery - Gallons

	Manual Pumping			Automatic System Recovery				
Date	Total Liquid	Water	Product	Total Liquid	Water	Product	Recovered Product	Comments
01/11/90				229	216	13		
02/16/90				229	229	0		
03/02/90				229	229	0		
03/05/90	227	227	0				0	Pumped tank. Traces of HC
03/14/90				43	43	0		
03/28/90				97	93	4		
04/13/90				157.5	157.5	0		
04/27/90	213	209	4				4	Pump recovery tank
05/17/90				88	88	0		
06/01/90				144	144	0		
06/21/90				216	216	0		
06/22/90	236	236	0				0	Pump recovery tank
07/17/90				97	97	0		
08/20/90				196	196	0		
08/22/90	272	272	0				0	Pump recovery tank
09/12/90				106	106	0		
09/28/90				203	189	14		
10/12/90				216	212.75	3.25		
10/16/90	226	226	0				0	Pump recovery tank - traces
10/26/90				51.5	51.5	0		
11/28/90				203	203	0		
12/13/90	227	227	0	229	229	0	0	Pump recovery tank
90' Total	1.401	1.397	4				4	
01/09/91				71	66	5		
01/18/91								Gauge only
02/08/91				196	196	0		Gauge only
02/28/91	217	203	14				14	Pump recovery tank
03/04/91				13	13	0		Gauge only
04/03/91	73	73	0				0	Develop new well B-7
04/16/91	23	23	0					Gauge & pump for samples
91' Total	313	299	14				14	
Site Total	5.888	5.125	763				763	

Pomona Bo
28.003 W. Imperial Hwy La Habra 1988 - 1991

DATE	WELL	DEPTH TO WATER	HYDRO-CARBON THICKNESS 100ths/ft	DEPTH TO LIQUID	GROUND-WATER ELEVATION	TOP OF CASING	DEPTH OF WELL	TOTAL HYDRO-CARBONS	BENZENE	TOLUENE	ETHYL BENZENE	XYLENE	COMMENTS
		0.00	0.000	0.00	0.00								
01/05/88	B-1					261.04							Interface probe not work
01/12/88	B-1	14.80	0.000	14.80	246.24	261.04	22.08						
01/22/88	B-1	14.80	0.000	14.80	246.24	261.04	22.20						
02/04/88	B-1	14.75	0.000	14.75	246.29	261.04	21.65						
02/23/88	B-1	14.79	0.000	14.79	246.25	261.04	21.66						
05/23/88	B-1	14.65	0.000	14.65	246.39	261.04							
06/13/88	B-1	14.62	0.000	14.62	246.42	261.04							
06/30/88	B-1	14.63	0.000	14.63	246.41	261.04							
07/13/88	B-1	14.60	0.000	14.60	246.44	261.04							
07/21/88	B-1	14.60	0.000	14.60	246.44	261.04							
08/01/88	B-1	14.55	0.000	14.55	246.49	261.04							
08/09/88	B-1	14.61	0.000	14.61	246.43	261.04							
08/16/88	B-1	14.61	0.000	14.61	246.43	261.04							
09/01/88	B-1	14.65	0.000	14.65	246.39	261.04							
09/07/88	B-1	14.64	0.000	14.64	246.40	261.04							
09/13/88	B-1	14.69	0.000	14.69	246.35	261.04							
09/27/88	B-1	14.72	0.000	14.72	246.32	261.04							
10/05/88	B-1	14.74	0.000	14.74	246.30	261.04							
10/07/88	B-1					261.04							
10/13/88	B-1	14.73	0.000	14.73	246.31	261.04							
10/18/88	B-1	14.74	0.000	14.74	246.30	261.04							
10/26/88	B-1	14.73	0.000	14.73	246.31	261.04							
11/04/88	B-1	14.76	0.000	14.76	246.28	261.04							
11/08/88	B-1	14.75	0.000	14.75	246.29	261.04							
11/17/88	B-1	14.72	0.000	14.72	246.32	261.04							
11/23/88	B-1	14.73	0.000	14.73	246.31	261.04							
12/08/88	B-1	15.37	0.000	15.37	245.67	261.04							
12/14/88	B-1	15.11	0.000	15.11	245.93	261.04	23.9						
12/20/88	B-1	14.60	0.000	14.60	246.44	261.04							
01/05/89	B-1	14.60	0.000	14.60	246.44	261.04							
01/11/89	B-1	14.51	0.000	14.51	246.53	261.04							
01/20/89	B-1	14.57	0.000	14.57	246.47	261.04							
01/25/89	B-1	14.63	0.000	14.63	246.41	261.04							
02/20/89	B-1	14.49	0.000	14.49	246.55	261.04							
03/15/89	B-1	14.50	0.000	14.50	246.54	261.04							
03/27/89	B-1	14.50	0.000	14.50	246.54	261.04							
04/19/89	B-1	14.50	0.000	14.50	246.54	261.04							
05/11/89	B-1	14.53	0.000	14.53	246.51	261.04							
05/25/89	B-1	14.56	0.000	14.56	246.48	261.04							
06/12/89	B-1	14.55	0.000	14.55	246.49	261.04							
06/22/89	B-1	14.56	0.000	14.56	246.48	261.04							
07/12/89	B-1	14.60	0.000	14.60	246.44	261.04							
08/09/89	B-1	14.62	0.000	14.62	246.42	261.04							
08/21/89	B-1	14.60	0.000	14.60	246.44	261.04							
09/08/89	B-1	14.67	0.000	14.67	246.37	261.04							
09/22/89	B-1	14.61	0.000	14.61	246.43	261.04							
10/09/89	B-1	14.67	0.000	14.67	246.37	261.04							
10/20/89	B-1	14.68	0.000	14.68	246.36	261.04							

Pomona Box
22,003 W. Imperial Hwy (La Habra) 1988 - 1991

DATE	WELL	DEPTH TO WATER	HYDRO-CARBON THICKNESS	DEPTH TO LIQUID	GROUND-WATER ELEVATION	TOP OF CASING	DEPTH OF WELL	TOTAL HYDRO-CARBONS	BENZENE	TOLUENE	ETHYL BENZENE	XYLENE	COMMENTS
			100ths/ft					mg/L					
		0.00	0.000	0.00	0.00								
11/08/89	B-1	14.70	0.005	14.70	246.34	261.04							
12/01/89	B-1	14.74	0.000	14.74	246.30	261.04							
12/15/89	B-1	14.77	0.000	14.77	246.27	261.04							
12/29/89	B-1	14.78	0.005	14.78	246.26	261.04							
01/11/90	B-1	14.78	0.005	14.78	246.26	261.04							
02/16/90	B-1	14.74	0.000	14.74	246.30	261.04							
03/02/90	B-1	14.62	0.000	14.62	246.52	261.04							
03/14/90	B-1	14.62	0.000	14.62	246.42	261.04							
03/28/90	B-1	14.65	0.000	14.65	246.39	261.04							
04/13/90	B-1	14.67	0.000	14.67	246.37	261.04							
04/27/90	B-1	14.68	0.000	14.68	246.36	261.04	22.09						
05/17/90	B-1	14.70	0.000	14.70	246.34	261.04							
06/01/90	B-1	14.62	0.000	14.62	246.42	261.04							
06/21/90	B-1					261.04							
07/17/90	B-1	14.74	0.000	14.74	246.30	261.04							
08/20/90	B-1	14.73	0.000	14.73	246.31	261.04							
09/13/90	B-1	14.76	0.000	14.76	246.28	261.04							
09/28/90	B-1	14.74	0.005	14.74	246.30	261.04							
10/12/90	B-1	14.80	0.000	14.80	246.24	261.04							
10/26/90	B-1	14.78	0.000	14.78	246.26	261.04							
11/28/90	B-1	14.87	0.005	14.87	246.18	261.04							
12/12/90	B-1	14.88	0.005	14.88	246.16	261.04							
01/09/91	B-1	14.71	0.000	14.71	246.33	261.04							
01/18/91	B-1	14.79	0.000	14.79	246.25	261.04	22.15						
02/08/91	B-1	14.87	0.000	14.87	246.17	261.04							
03/04/91	B-1	14.28	0.000	14.28	246.76	261.04							
04/16/91	B-1	14.31	0.000	14.31	246.73	261.04	22.53						
01/05/88	B-2			14.75		261.03							reading product
01/12/88	B-2	14.69	0.125	14.56	246.44	261.03	22.95						
01/22/88	B-2	14.77	0.167	14.60	246.39	261.03	23.43						
02/04/88	B-2	14.80	0.104	14.70	246.30	261.03	22.35						
02/23/88	B-2	14.86	0.125	14.73	246.27	261.03	2.35						
05/23/88	B-2	14.73	0.000	14.73	246.30	261.03							
06/13/88	B-2	14.75	0.100	14.65	246.35	261.03							
06/30/88	B-2	14.68	0.000	14.68	246.35	261.03							
07/13/88	B-2	14.65	0.010	14.64	246.39	261.03							
07/21/88	B-2	14.65	0.000	14.65	246.38	261.03							
08/01/88	B-2	14.63	0.000	14.63	246.40	261.03							
08/09/88	B-2	14.68	0.000	14.68	246.35	261.03							
08/16/88	B-2	14.66	0.000	14.66	246.37	261.03							
09/01/88	B-2	15.20	0.000	15.20	245.83	261.03							
09/07/88	B-2	14.52	0.000	14.52	246.51	261.03							
09/13/88	B-2	14.72	0.000	14.72	246.31	261.03							
09/27/88	B-2	14.75	0.000	14.75	246.28	261.03							
10/05/88	B-2	14.68	0.000	14.68	246.35	261.03							
10/07/88	B-2					261.03							
10/13/88	B-2	14.77	0.000	14.77	246.26	261.03							

UNDERGROUND WaynePerry CONSTRUCTION INC. SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

Project No. 89.151

July 10, 1991

Pomona Box Company
301 West Imperial Highway
La Habra, California

Attention: Mr. Daryl Votaw

Subject: Proposed Work Plan
Pomona Box Company
301 West Imperial Highway
La Habra, California

89-163

EXECUTIVE SUMMARY

Enclosed is a proposed work plan for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. The purpose of the proposed work is to further define the limits of soil contamination and to determine the extent of dissolved hydrocarbons in groundwater at this locality.

One boring will be drilled and sampled. At the completion of drilling and sampling, a groundwater well will be installed in the boring. Soil and groundwater samples will be obtained for laboratory analyses.

BACKGROUND

On September 12, 1989, seven underground storage tanks were removed from three separate tank zones on the subject site. The tank locations are shown on the Plot Plan, Figure 1 in Appendix A. Soil samples were obtained beneath each tank for laboratory analyses. Results of the laboratory analyses showed non-detected to low concentrations of hydrocarbon contamination in the southwestern tank location. A review of the chromatograms indicated that the contaminant of interest was diesel fuel. Analytical results from the remaining tank zones showed no detectable hydrocarbon contamination.

BACKGROUND, continued

Based on the laboratory analyses, the Orange County Health Care Agency requested that site characterization work be performed in order to assess the extent and significance of the contamination at this location. In compliance with the stated request, a site investigation was conducted on March 21, 1991 by drilling and installing one groundwater monitoring well in the approximate center of the abandoned southwestern tank zone. The well location is shown on the Plot Plan, Figure 2 in Appendix A. Laboratory analyses showed elevated levels of petroleum hydrocarbons in soil samples and the presence of dissolved hydrocarbons in a groundwater sample.

PROPOSED WORK PLAN

Because the presence of hydrocarbons have been confirmed only in the tank zone at the southwest corner of the site, additional characterization work will be concentrated in this area. The area will be explored by drilling one additional boring southwest of the former storage tank area. The proposed boring location is shown on Figure 2. The borings will be logged by a geologist. At the completion of drilling and sampling, a groundwater monitoring well will be installed in the boring.

Undisturbed soil samples will be obtained at five foot intervals down to the saturated zone for laboratory analysis. Samples will be obtained using a modified California split spoon sampler and will be retained in six inch stainless steel or brass tubes. Upon removal from the sampler, the ends of the tubes will be covered with aluminum foil and capped with plastic end caps. Samples will be labeled in the field according to boring number and depth then placed in an ice chest to reduce the potential for volatilization. All sampling equipment will be washed and double rinsed in distilled water between uses to reduce the effects of cross contamination. All soil samples will be tested for total hydrocarbons using Department of Health Services Test Method for diesel and for aromatic volatile organic compounds using EPA Test Method 8020. Contaminated soils encountered during drilling will be placed in approved containers and disposed of at a licensed facility according to all state and local guidelines.

The well will consist of four inch diameter, flush threaded PVC casing to a depth of 35 feet. The bottom thirty feet of casing will be slotted. A graded sand pack will be placed around the slotted section of casing. The remainder of the well will be sealed with bentonite pellets and bentonite grout. A concrete access box will be constructed at the surface. Details of the well construction are presented in Detail A: Typical Monitoring Well Construction, Figure 2.

PROPOSED WORK PLAN, continued

The well will be surveyed to a benchmark of known elevation. The well will also be gauged in order to obtain water level data and determine if there is free product present.

The well will be developed and sampled for evidence of hydrocarbon contamination. A minimum of five borehole volumes will be pumped from the well with an air lift pump to develop it. Prior to sampling, three casing volumes will be bailed from the well to assure obtaining a representative sample. The water from well development and purging prior to sampling will be placed in approved containers and disposed of at an approved facility. After purging, water samples will be obtained using a Teflon bailer and placed in VOA bottles with Teflon septums. The samples will be stored on ice for transport to the laboratory. Groundwater samples will be tested for total hydrocarbons using Department of Health Services Test Method and purgeable organic compounds using EPA Test Method 602.

Based on field and laboratory data, a report will be generated which will include: discussions of geologic and hydrogeologic conditions: copies of laboratory testing reports for the soil and groundwater samples: discussion of potential impacts of contamination: and recommendations for additional work if appropriate.

The opportunity to be of service is sincerely appreciated. If you have any questions, or if we can be of further assistance, please call.

Very truly yours,

Thomas D. Rivers
Staff Geologist

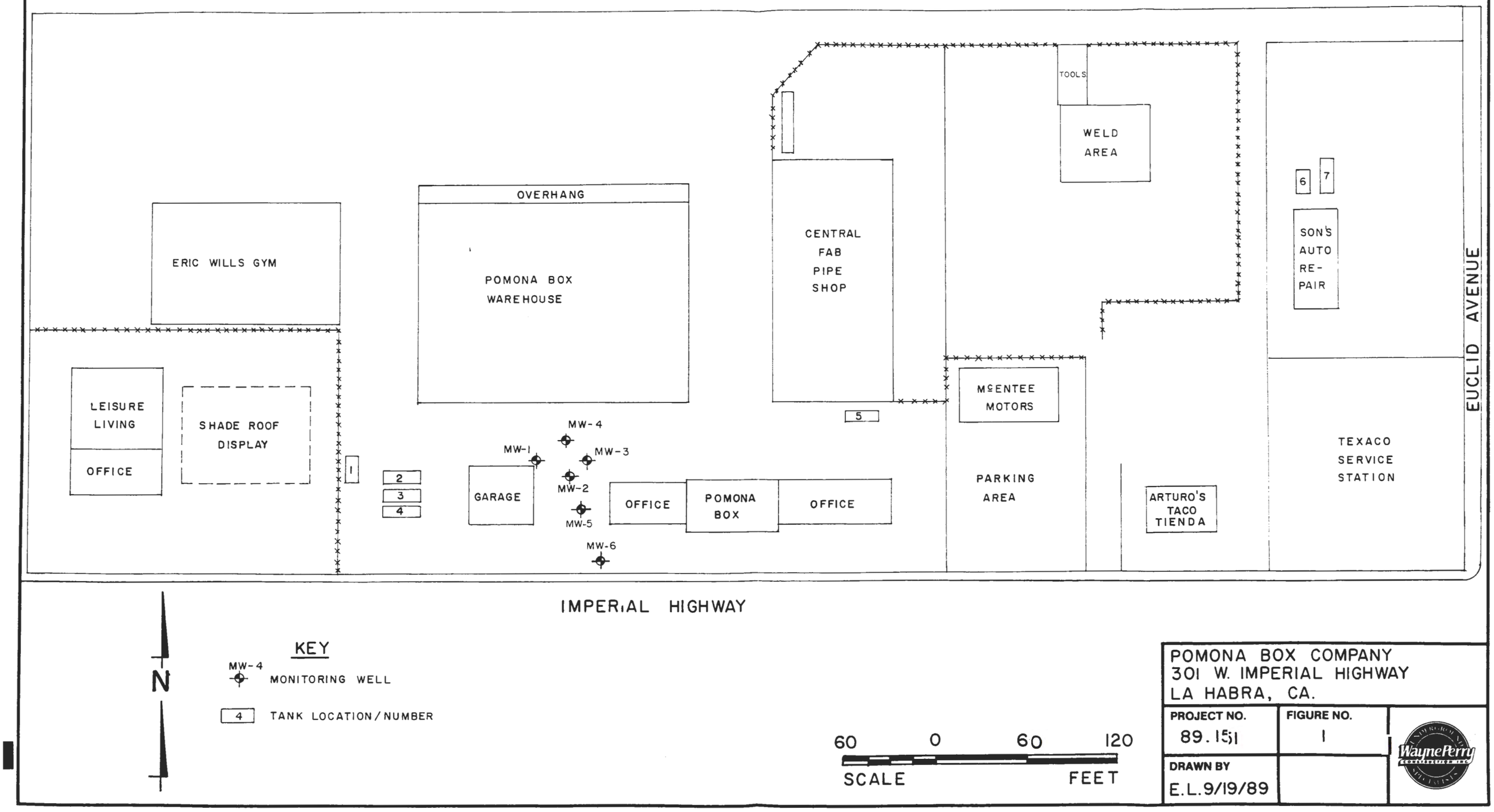
David M. Henry
Registered Geologist 4085

Pomona Box Company
Project No. 89.151

APPENDIX A

Plot Plan, Figure 1
Plot Plan, Figure 2
Detail A: Typical Monitoring Well Construction, Figure 3

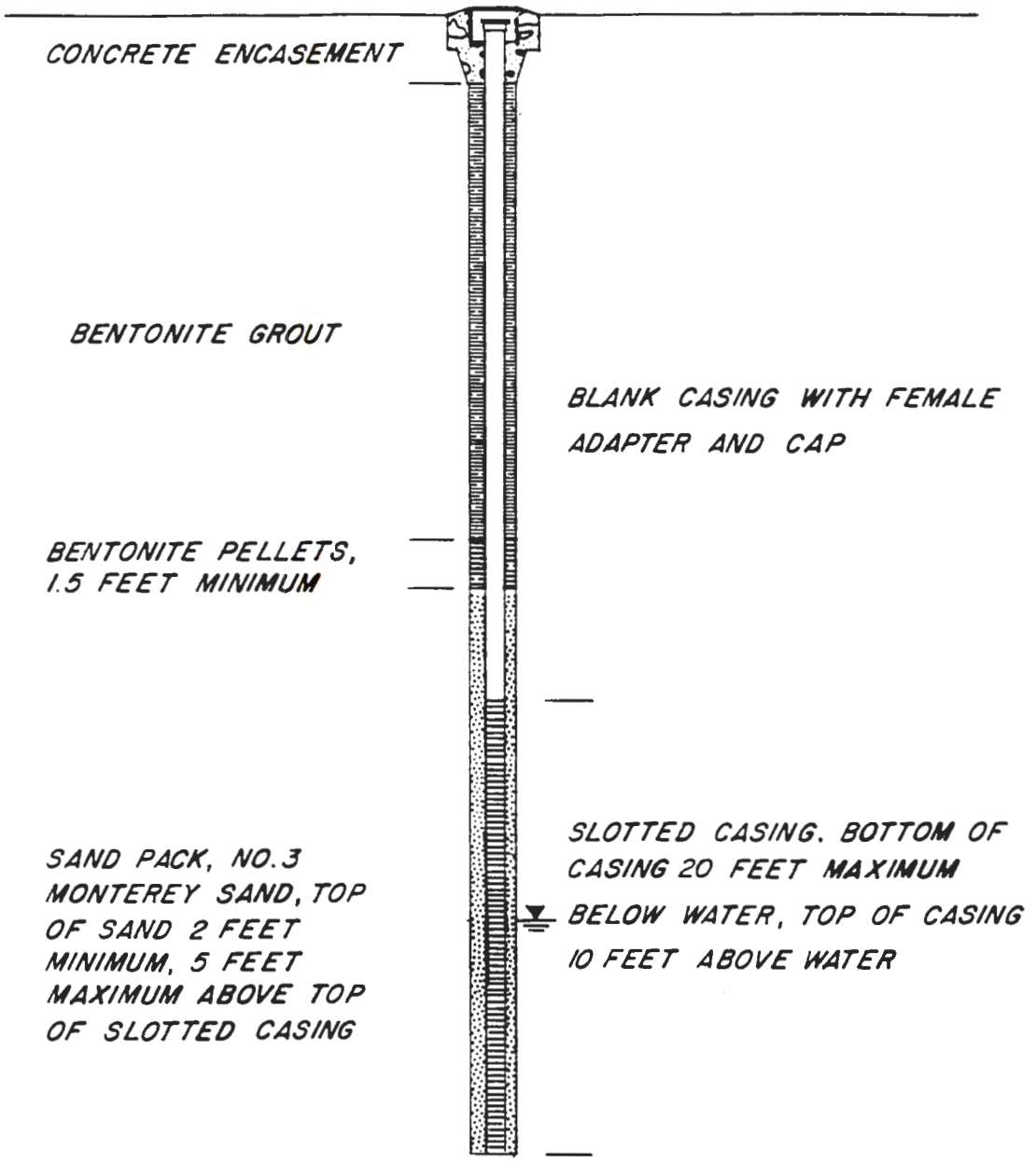
PLOT PLAN



POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA.

PROJECT NO.	FIGURE NO.
89.151	1
DRAWN BY E.L.9/19/89	

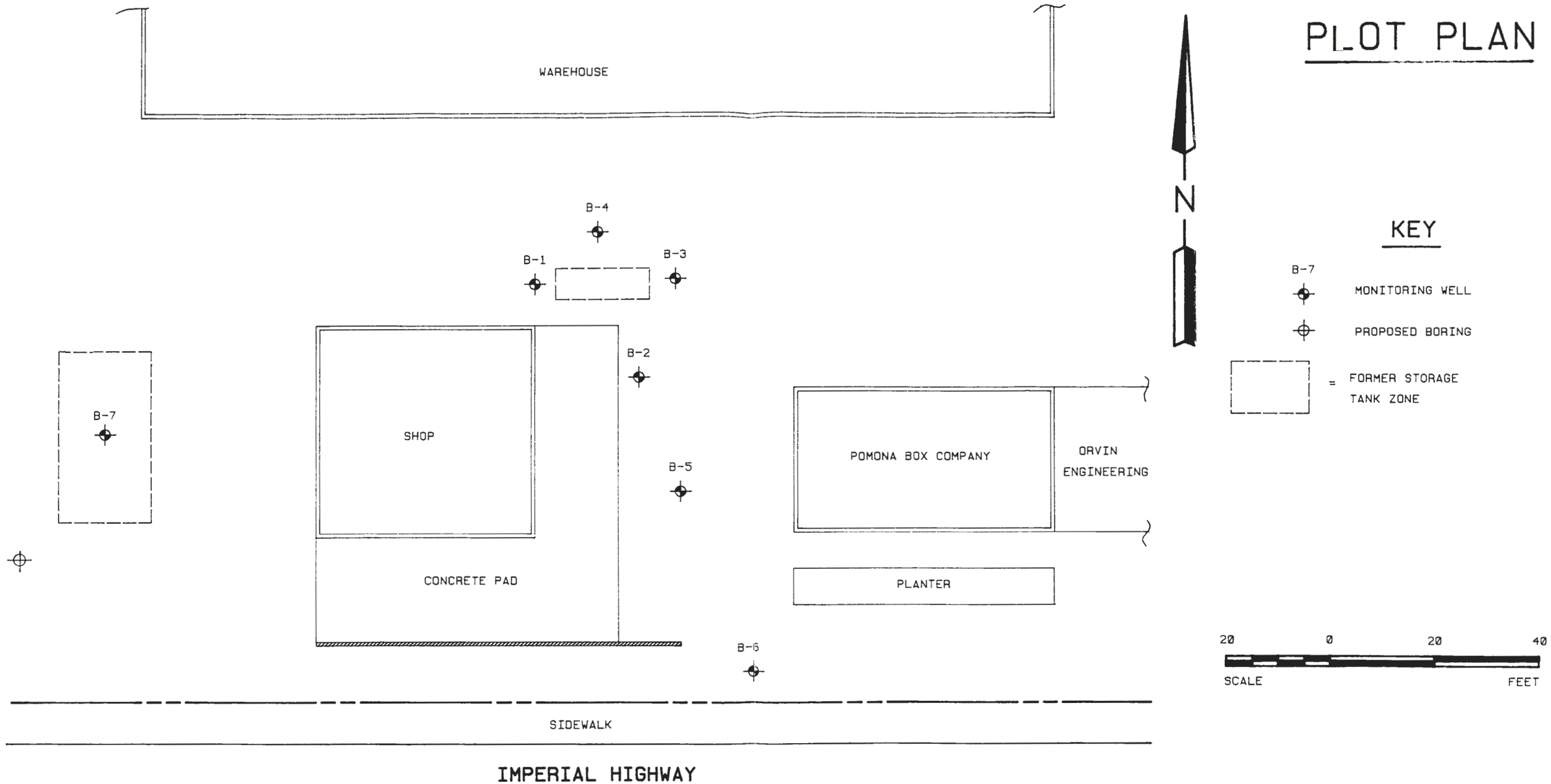
DETAIL A: TYPICAL GROUND WATER MONITORING WELL CONSTRUCTION



NOTES:
1. ALL CASING IS 4 INCH DIAMETER, SCHEDULE 40, FLUSH THREADED, PVC.
2. ACTUAL CONSTRUCTION MAY VARY FROM TYPICAL DESIGN DUE TO FIELD CONDITIONS
3. DRAWING NOT TO SCALE.

PROJECT NO.:	FIGURE NO.:
89.151	3

PLOT PLAN



POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA.

PROJECT NO.	FIGURE NO.
89.151	2
DRAWN BY	REVISED ADDED PROPOSED BORING 7/11/91
EL 3/31/91	

UNDERGROUND WaynePerry CONSTRUCTION INC. SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

Project No. 89.151

O.C.H.C.A. Case No. 86UT224

August 19, 1991

Pomona Box Company
301 West Imperial Highway
La Habra, California

Attention: Mr. Daryl Votaw

Subject: Supplemental Site Investigation
Pomona Box Company
301 West Imperial Highway
La Habra, California

89-163

EXECUTIVE SUMMARY

Enclosed are the results of a supplemental site investigation performed at the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. The purpose of this investigation was to determine whether groundwater has been impacted in the vicinity of the southwestern tank zone.

Groundwater monitoring well B-8 was drilled and installed southwest of the southwestern tank zones. Laboratory analyses indicate petroleum hydrocarbon contamination was not present in either soil or groundwater samples obtained from well B-8. Groundwater was encountered at a depth of 15 feet and the direction of groundwater flow is toward the southwest.

Review of available data indicates dissolved hydrocarbons present in samples from well B-7 do not extend down gradient to well B-8.

BACKGROUND

On September 12, 1989, seven underground storage tanks were removed. Soil samples were obtained beneath each tank for laboratory analyses. Results of the laboratory analyses showed non-detectable to low concentrations of hydrocarbon contamination in soils from the southwestern tank location. A review of the chromatograms indicated that the primary contaminant was diesel fuel.

BACKGROUND, continued

Laboratory analyses of samples from the remaining tank zones showed non detectable concentrations of petroleum hydrocarbons in soils.

As part of a supplemental site investigation conducted on March 21, 1991, one groundwater monitoring well was installed in the approximate center of the abandoned southwestern tank zone. Laboratory analyses of soil samples indicated progressively elevated levels of total petroleum hydrocarbons and aromatic volatile organic compounds between five to fifteen feet below the surface. Laboratory analyses of groundwater samples showed concentrations of aromatic volatile organic constituents exceeded state action levels.

SUPPLEMENTAL SITE INVESTIGATION

Supplemental site investigation was conducted on July 24, 1991, by drilling and installing one groundwater monitoring well installed southwest of the southwestern tank zone. The boring was drilled to a depth of 37 feet with a truck mounted, hollow stem auger drill rig. The well location is shown on the Plot Plan, Figure 1 in Appendix A. A detailed log of the materials encountered during drilling and sampling was compiled by a geologist and is presented in Appendix A as Figure 3. Details of the groundwater monitoring well construction are presented as Figure 4 in Appendix A.

Undisturbed soil samples were obtained at five foot intervals to a depth of 20 feet. Soil samples obtained at 5 and 15 foot depths were submitted for laboratory analyses. Details of the soil sampling procedure are presented in Appendix B. Soil samples were analyzed for total hydrocarbons using the Department of Health Services Test Method 8015-M and aromatic volatile organic compounds using EPA Test Method 8020. Results of the soil analyses are presented in the Summary of Laboratory Test Results, Table 1.

On July 29, 1991, a groundwater sample was obtained from well B-8 for laboratory analyses. Details of the groundwater sampling procedure are presented in Appendix B. The groundwater sample was analyzed for total petroleum hydrocarbons using the California Department of Health Services Test Method 8015-M and for volatile organic compounds using EPA Test Method 602. Results of the groundwater analyses are presented in the Summary of Laboratory Test Results, Table 2.

SUMMARY OF LABORATORY TEST RESULTS

Table 1, Soil Analyses, 7/24/91

Boring/ Depth	Total Hydrocarbons mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Total Xylenes mg/kg
B-8 5	ND	ND	ND	ND	ND
15	ND	ND	ND	ND	ND

Notes: 1. ND - none detected, below limits of detection.
2. Limits of detection:

total hydrocarbons	<	10 mg/kg
benzene	<	0.1 mg/kg
toluene	<	0.1 mg/kg
ethyl benzene	<	0.1 mg/kg
total xylenes	<	0.1 mg/kg

Table 2, Groundwater Analyses, 8/05/91

Well Number	Total Hydrocarbons mg/l	Benzene mg/l	Toluene mg/l	Ethyl Benzene mg/l	Total Xylenes mg/l
B-8	ND	ND	ND	ND	ND

Notes: 1.ND - none detected, below limits of detection.
2.Limits of detection:

total hydrocarbons	<	0.05 mg/l
benzene	<	0.0005 mg/l
toluene	<	0.001 mg/l
ethyl benzene	<	0.002 mg/l
total xylenes	<	0.002 mg/l

SUBSURFACE CONDITIONS

Based on the materials encountered during drilling and sampling, the site is underlain by alluvium of Recent Age. The alluvium consists of sandy silt interbedded with silty sandy clay, and fine-to-medium grained clayey sands with thin beds of gravel.

Groundwater was encountered at a depth of 15 feet. A groundwater contour map was derived and is presented in Appendix A as Figure 5.

CONCLUSIONS

Laboratory analyses indicate petroleum hydrocarbon contamination was not present in either soil or groundwater samples obtained from well B-8.

Groundwater was encountered at a depth of 15 feet and the direction of groundwater flow is toward the southwest.

Review of available data indicates dissolved hydrocarbons present in samples from well B-7 do not extend down gradient to well B-8.

The opportunity to be of service is sincerely appreciated. If you have any questions, or if we can be of service, please call.

Very truly yours,

Richard V. Smith
Thomas D. Rivers
Staff Geologist

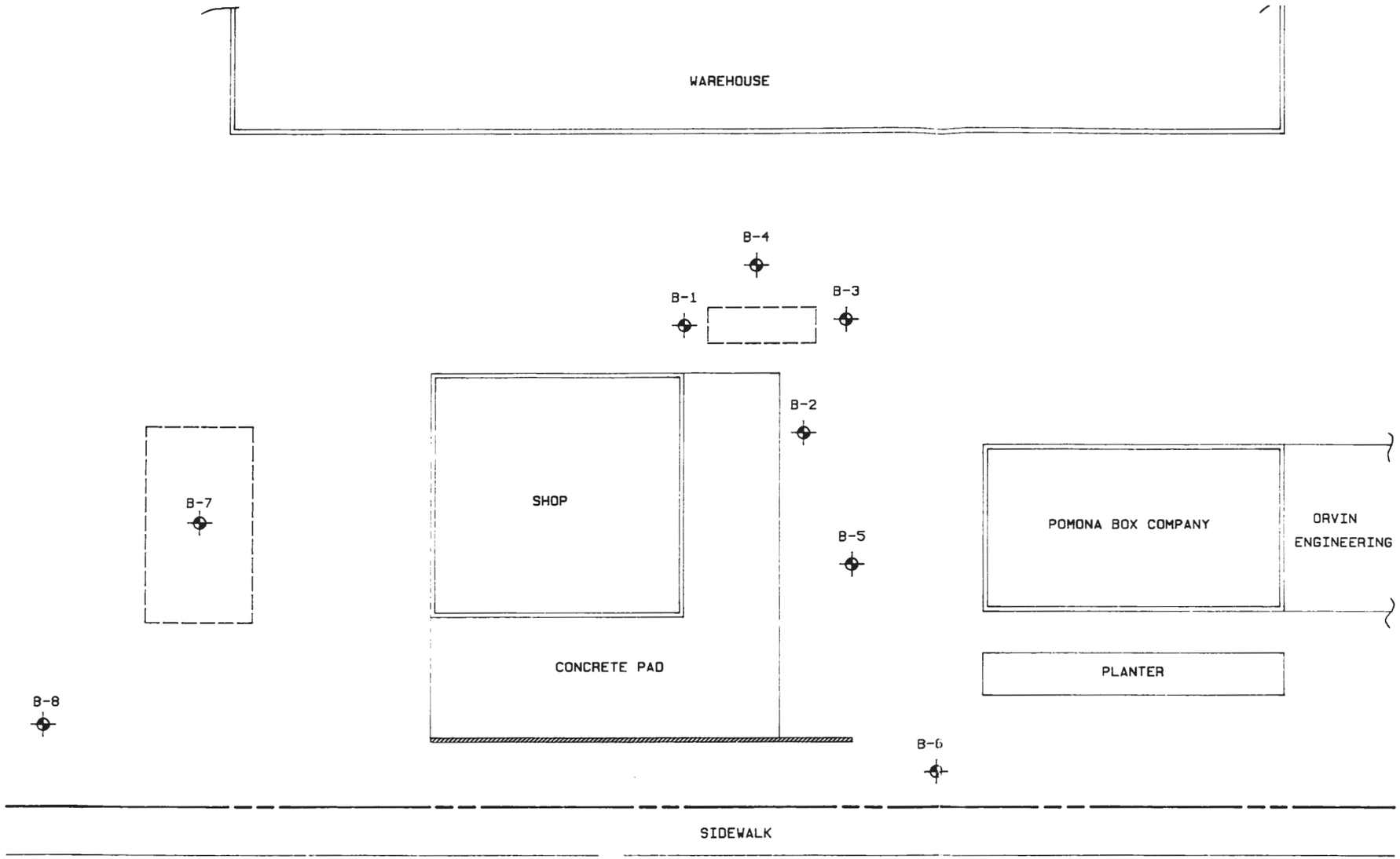
David M. Henry
David M. Henry
Registered Geologist 4085

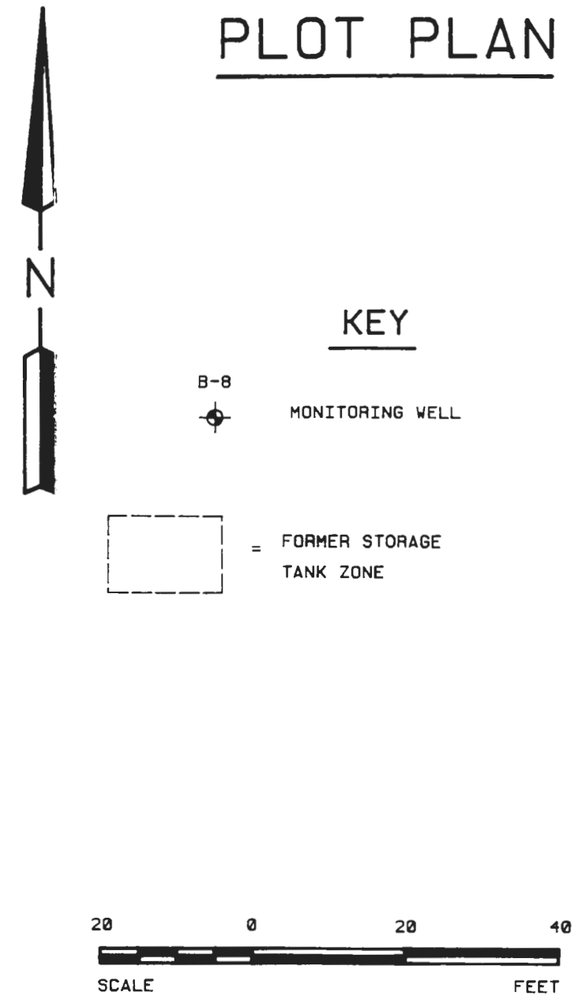
Pomona Box Company
Project No. 89.151

APPENDIX A

Plot Plan, Figure 1
Unified Soil Classification System, Figure 2
Boring Log, Figure 3
Well Construction Log, Figure 4
Groundwater Contour Map, Figure 5

PLOT PLAN





POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA.

PROJECT NO.	FIGURE NO.
89.151	1
DRAWN BY	REVISED
EL 7/31/91	ADDED MONIT. WELL B-8

Wayne Perry

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			GROUP SYMBOLS	DESCRIPTIONS
COARSE GRAINED SOILS (More than 50% of material is LARGER than No. 200 sieve size.)	GRAVELS (More than 50% of coarse fraction is LARGER than the No. 4 sieve size.)	CLEAN GRAVELS (Little or no fines)	GW	Well graded gravels, gravel-sand mixtures, little or no fines.
			GP	Poorly graded gravels or gravel-sand mixtures, little or no fines.
		GRAVELS WITH FINES (Appreciable amount of fines)	GM	Silty gravels, gravel-sand-silt mixtures.
			GC	Clayey gravels, gravel-sand-clay mixtures.
	SANDS (More than 50% of coarse fraction is SMALLER than the No. 4 sieve size.)	CLEAN SANDS (Little or no fines)	SW	Well graded sands, gravelly sands, little or no fines.
			SP	Poorly graded sands or gravelly sands, little or no fines.
		SANDS WITH FINES (Appreciable amount of fines)	SM	Silty sands, sand-silt mixtures.
			SC	Clayey sands, sand-clay mixtures.
FINE GRAINED SOILS (More than 50% of material is SMALLER than No. 200 sieve size.)	SILTS AND CLAYS (Liquid limit LESS than 50)		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
			OL	Organic silts and organic silty clays of low plasticity.
	SILTS AND CLAYS (Liquid limit GREATER than 50)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
			CH	Inorganic clays of high plasticity, fat clays.
			OH	Organic clays of medium to high plasticity, organic silts.
HIGHLY ORGANIC SOILS			Pt	Peat and other highly organic soils.

BOUNDARY CLASSIFICATIONS: Soils possessing characteristics of two groups are designated by combinations of group symbols.

PARTICLE SIZE LIMITS

SILT or CLAY	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE		

No.200 No.40 No.10 No.4 3/4 in. 3 in. 12 in.

U. S. STANDARD SIEVE SIZE

FIGURE NO: 2

LOG OF BORING

Drill Rig: CME-55	Boring Diameter: 8¼"	Boring Elevation:	Boring Number
Date Drilled: 7/24/91	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-8

Sample Depth	Vapor Reading PPM/LEL	Time	Blow Counts	Depth Feet	Soil/ Rock Symbol	Soil/ Rock Type	Description and Remarks
	250/2	9:15	3/6/6	5		ML	Sandy SILT: light gray to black, moist, firm to stiff.
	50/0	9:20	5/11/18	10			ALLUVIUM
	25/0	9:24	4/7/13	15		CL	Sandy CLAY: light brown to gray, very moist, stiff; slightly mottled; slightly plastic; saturated below 15 feet.
	20/0	9:30	7/14/21	20			ALLUVIUM
				25		SC	Clayey SAND: fine- to medium-grained, light brown to gray, saturated, dense; thin layer of gravel at approximately 30 feet.
				30			
				35			ALLUVIUM
				40			
				45			
				50			
				55			
				60			

Notes:
1. Boring depth 37 feet.
2. Groundwater encountered at 15 feet.
3. Installed groundwater monitoring well at 35 feet.

Pomona Box Co.
301 West Imperial Hwy.

Project No.: 89.151

Figure No.: 3

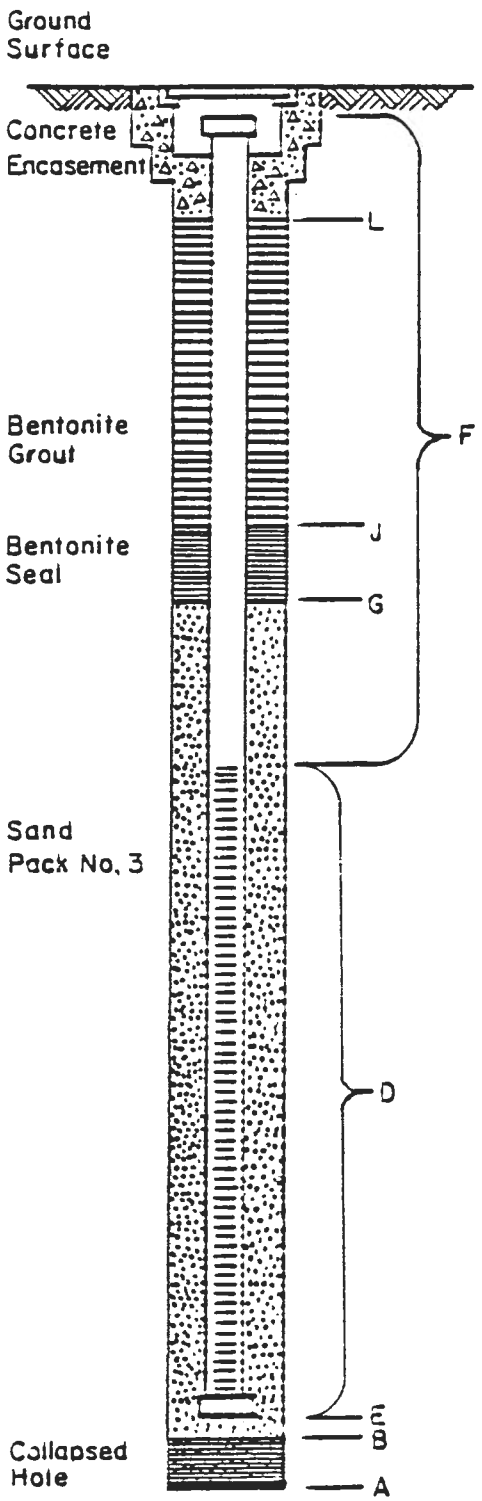
Boring No. B-8

Location 301 W. Imperial Hwy., La Habra, California

Date 7-24-91

Logger's initials TDR

MONITORING WELL



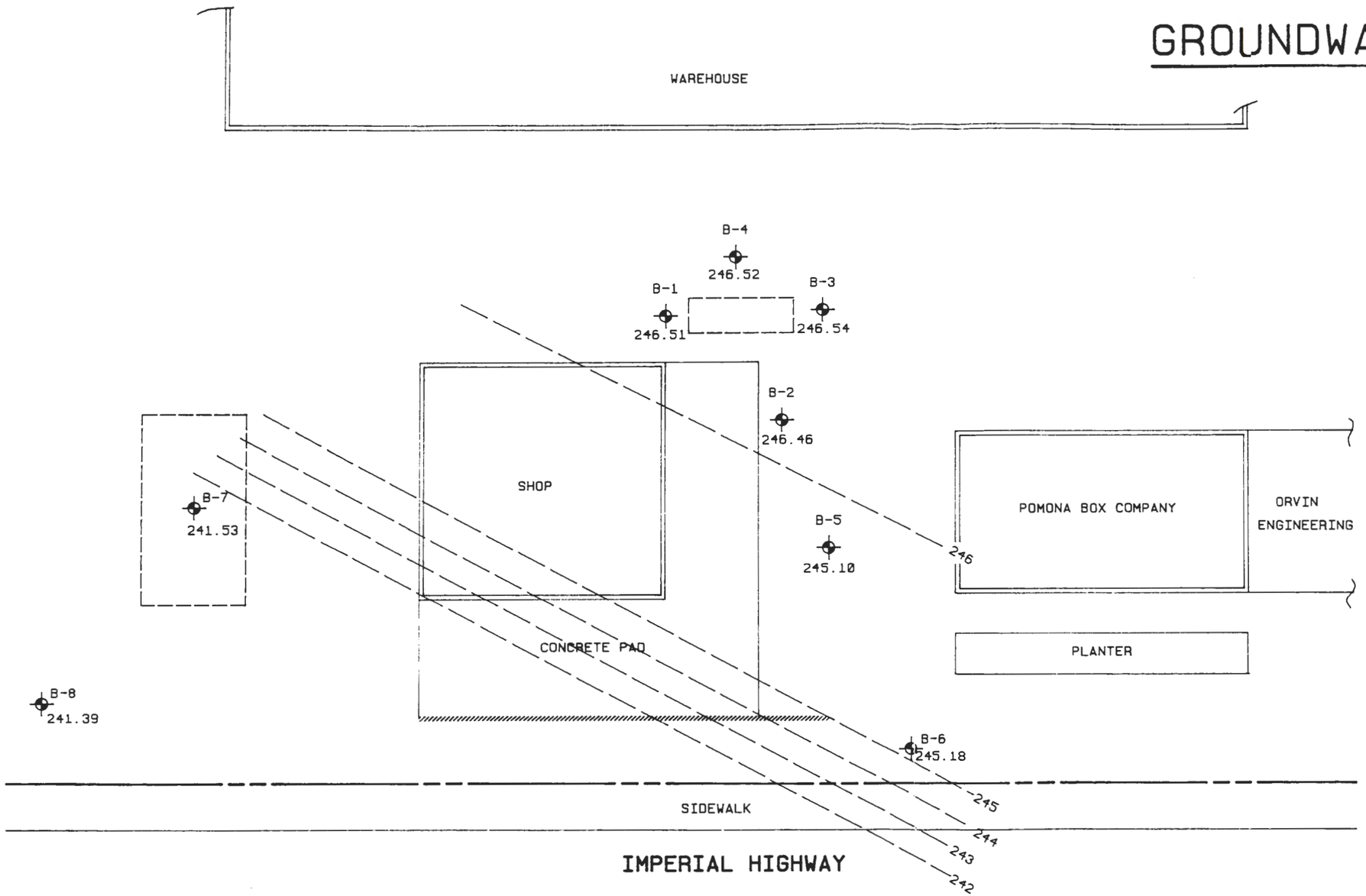
		Measurements	Calculations
A. Total depth drilled	(A)	37	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	37	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	30	
E Depth of bottom of casing	(E)	35	
F. Length of blank casing	(F)	5	
G. Depth to top of gravel/sand fill	(G)	9	
H. Footage of gravel sand fill	(H) = B-G		28
I. Bags of gravel sand used	(I)	16	
J. Depth to top of bentonite seal	(J)	1.5	
K. Thickness of bentonite seal	(K) = G-J		7.5
L. Depth to top of bentonite grout	(L)	1.5	
M. Thickness of bentonite grout	(M) = J-L		7.5
N. Thickness of concrete encasement	(N) = L-Ø		1.5

Depth to water	15
Type of casing	4" Diam. PVC.
Type of access box used	Diversified
Top of casing elevation	250.87 A.S.L.
Date surveyed	7/29/91
Ground water elevation	241.39

Pomona Box Co.
301 West Imperial Hwy., La Habra, California

PROJECT NO. 89.151 | FIGURE NO. 4

GROUNDWATER CONTOUR MAP



KEY

= FORMER STORAGE TANK ZONE

B-8
241.39 = MONITORING WELL
GROUNDWATER ELEVATION
IN FEET ABOVE MEAN SEA LEVEL.

246 — GROUNDWATER CONTOUR
CONTOUR INTERVAL = 1.0 FEET
BASED ON GAUGE DATA: 7/26/91

20 0 20 40
SCALE FEET

POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA.

PROJECT NO.	FIGURE NO.	
89.151	5	Wayne Perry
DRAWN BY EL 8/22/91		89151RG1

Pomona Box Company
Project No. 89.151

APPENDIX B

Soil and Groundwater Sampling Procedures
Laboratory Test Results - Soils
Chain-of-Custody
Laboratory Test Results - Groundwater
Chain-of-Custody

Pomona Box Company
Project No. 89.151

SOIL SAMPLING PROCEDURES

Undisturbed soil samples were obtained at five foot intervals from all the borings and submitted to a laboratory for analysis. The samples were obtained with a 2.5 inch I.D., split barrel sampler. Soils were retained in 6 inch long brass tubes. Upon removal from the sampler, the tube ends were immediately sealed with aluminum foil and capped with plastic end caps. All of the soil samples were placed on ice to reduce the potential for volatilization.

The sampling equipment was washed in non-phosphate soap and double rinsed with distilled water prior to each use for the purpose of preventing cross contamination. Duplicate samples were capped, allowed to develop a head space and were analyzed in the field with a Gastech organic vapor detector. The vapor readings were recorded on the boring logs and were used as a guide in determining the degree of soil contamination in the field. Soil samples were delivered to a certified analytical laboratory for analysis and documented with strict chain-of-custody procedures.

GROUNDWATER SAMPLING PROCEDURES

The groundwater monitoring wells were purged of approximately three casing volumes of water prior to sampling by bailing with a stainless steel bailer. The water samples were obtained using a teflon bailer equipped with a bottom emptying device and placed in VOA vials with teflon septums. All sampling and purging equipment was washed in non-phosphate soap and double rinsed in distilled water prior to each use. The samples were placed on ice to reduce the potential for volatilization. In addition to the samples from the wells, a trip blank, and a rinsate blank were prepared to verify the integrity of the sampling and laboratory procedures. The water samples were delivered to a certified analytical laboratory for analysis and documented with strict chain-of-custody procedures. The water samples were tested for total petroleum hydrocarbons using California Department of Health Services TPH Test Method and volatile aromatic compounds using EPA Test Method 602.

Geochem ENVIRONMENTAL LABORATORY
Mobile Laboratories Certified by California Dept. of Health Services
Phone:(714)373-5955
FAX:(714)373-5957

Wayne Perry Construction
8301 W. Commonwealth Ave.
Buena Park, Calif. 90621

Attn: Mr. Tom Rivers

********** L A B O R A T O R Y R E P O R T **********

PROJECT: POMONA BOX COMPANY

SAMPLE INFORMATION:

Date Sampled: 07/24/91
Date Received: 07/24/91
Date Tested: 07/24/91

Matrix: SOIL
Batch No: D-918
Geochem I.D: D072491.1-2

The samples were received by Geochem Environmental Laboratory in chilled state,intact with chain of custody record attached.

QUALITY CONTROL STATUS:

Tests	% Recovery Spike 1	% Recovery Spike 2	Relative % Difference	Status
8015E/TPH-diesel	85	94	10	pass
8020 benzene	92	98	6	pass
toluene	90	94	4	pass
ethylbenzene	86	92	7	pass
xylenes	88	96	9	pass

Please see the following page for the test results as well as the detection limit of each test.

Geochem ENVIRONMENTAL LABORATORY
Mobile Laboratories Certified by California Dept. of Health Services
Phone:(714)373-5955
FAX:(714)373-5957

ANALYTICAL RESULTS

Client: Wayne Perry
Project: #89.151/POMONA BOX COMPANY

Concentrations are reported in mg/kg(ppm) unless otherwise specified.

"ND" means "not detected" at indicated detection limit.

B: benzene, T: toluene, E: ethylbenzene & X: total xylenes.

MATRIX: SOIL

SAMPLE ID	8015m/TPH diesel	8020 B / T / E / X
DETECTION LIMIT	10 ppm	0.1 ppm
B-8 @ 5'	ND	ND/ ND/ ND/ ND
B-8 @ 15'	ND	ND/ ND/ ND/ ND

Reviewed and approved by George Tsai July 26, 1991
George Tsai
Laboratory Director

15211 Springdale Street, Huntington Beach, CA 92649

8301 W. COMMONWEALTH AVE.
BUENA PARK, CALIFORNIA 90621

WaynePerry UNDERGROUND CONSTRUCTION INC SPECIALISTS

C.S.C. LIC. 300345
E.P.A. CAD 053841102

(714)826-0352

CHAIN-OF-CUSTODY RECORD

CLIENT: POMONA BOX CO.	PROJECT NO. 89.151
SITE ADDRESS: 301 W. IMPERIAL HIGHWAY	LABORATORY: GECCHEM ENVIRON. LAB.
LA HABRA, CA	SAMPLED BY: TOM RIVERS
	RESULTS BY: 7/31/91

STATION NUMBER	DEPTH	LOCATION DESCRIPTION	DATE	TIME	SAMPLE TYPE SOIL	WATER	AIR	NUMBER OF CONTAINERS	TEST REQUIRED
B-8	5		7/24		✓			1	TPH = DHS (DIESEL) BTEX = EPA 8020
	15				✓			1	}

RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:
D. Rivera		7/24/91	2:10
RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:
RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:
RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92668 - 714/771-6900 FAX 714/538-1209

CLIENT

Wayne Perry Construction Co. (1365)
8301 West Commonwealth Avenue
Buena Park, CA 90621

LAB NO. G13427

REPORTED 08/05/91

SAMPLE Water

RECEIVED 07/31/91

IDENTIFICATION Pomona Box, Imperial Hwy
Project #89.151

BASED ON SAMPLE As Submitted

B-8

Total Hydrocarbons (TPH DHS)	ND<0.05	mg/l
Benzene (602)	ND<0.0005	mg/l
Toluene	ND<0.001	mg/l
Ethylbenzene	ND<0.002	mg/l
Total Xylenes	ND<0.002	mg/l

Date Analyzed: 08/02/91

ASSOCIATED LABORATORIES, by:

Edward S. Behare, Ph.D.
Vice President

ESB/ql

	ACT	INFO		ACT	INFO
UMH					
CEP			AUG 6		
IRF					
TCR				FILE	
RJB					

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

TESTING & CONSULTING
Chemical •
Microbiological •
Environmental •

C-1 10M

ASSOCIATED LABORATORIES

* COMMITMENT TO QUALITY *

QUALITY CONTROL /QUALITY ASSURANCE REPORT G13427

QA/QC CONTROL NO. G13426-4 INSTRUMENT LOGBOOK PT #3

DATE G13426-4 ANALYZED Jul 31 1991 I.L.B. PAGE LOCATION 61

DATE G13427 ANALYZED Aug 2 1991 SAMPLE LOG PAGE LOCATION 417

EPA 8020 REPORTING UNITS mcg/l SAMPLE MATRIX water

COMPOUND	SR	SR1	RPD	S.A.	SSR	SSR1	%RE	%RE1	RPD	BLK
BENZENE	0	0	0	20	18.48	19.22	92.4	96	3.7	0
TOLUENE	0	0	0	20	17.40	18.28	87.0	91.4	4.4	0
ETHYLBENZENE	0	0	0	20	18.26	18.82	91.3	94	2.8	0
XYLENES	0	0	0	60	54.02	55.48	90	92.5	2.5	0
CHLOROBENZENE										
1,2-DICHLOROBENZENE										
1,3-DICHLOROBENZENE										
1,4-DICHLOROBENZENE										
AVERAGE			0				90.2	93.5	3.3	

SR—— SAMPLE
SR1—— SAMPLE DUPLICATE
RPD—— RELATIVE PERCENT DIFFERENCE
S.A.—— ANALYTE SPIKE IN SAMPLE MATRIX
SSR—— SPIKE RECOVERED AND SAMPLE 'SR'
SSR1—— SPIKE RECOVERED AND SAMPLE 'SR1'
%RE—— PERCENT RECOVERY OF SPIKE IN 'SR'
%RE1—— PERCENT RECOVERY OF SPIKE IN 'SR1'
BLK—— ANALYTE CONCENTRATION DETECTED IN LAB BLANK
99%—— UPPER/LOWER CONTROL LIMIT
95%—— UPPER/LOWER WARNING LIMIT
s—— STANDARD DEVIATION
2s—— 2 x STANDARD DEVIATION (WARNING LIMIT)
3s—— 3 x STANDARD DEVIATION (CONTROL LIMIT)
MEAN-- TIME WEIGHTED AVERAGE OF SPIKE RECOVERY

	ACT	INFO			ACT	INFO
GMH				MSW		
DEP			AUG 6 1991			

SURROGATE SPIKE DATE
BENZENYL FLUORIDE SPIKE CONCENTRATION OF
WITH A RECOVERY OF
BENZENYL FLUORIDE RECOVERY LIMITS OF TO

PASS / NO PASS Pass DATE TYPED Aug 2 1991 A133201

ACTION TAKEN

SPIKE SOURCE EPA Repository Dil. STANDARD LOT NO. BTX 6591

ANALYST Quat Do QA / QC COMPILER

ASSOCIATED LABORATORIES

* COMMITMENT TO QUALITY *

QUALITY CONTROL /QUALITY ASSURANCE REPORT G13427

QA/QC CONTROL NO. G13426-4 INSTRUMENT LOGBOOK PT #3

DATE G13426-4 ANALYZED Jul 31 1991 I.L.B. PAGE LOCATION 61

DATE G13427 ANALYZED Aug 2 1991 SAMPLE LOG PAGE LOCATION 417

EPA 8015M/D.H.S. L.U.F.T. REPORTING UNITS mcg/l SAMPLE MATRIX water

COMPOUND	SR	SR1	RPD	S.A.	SSR	SSR1	%RE	%RE1	RPD	BLK
GASOLINE	0	0	0	400	396.24	422.68	99	105.7	6.6	0
DIESEL										
AVERAGE			0				99	105.7	6.6	
							X	O		

SR—— SAMPLE
SR1—— SAMPLE DUPLICATE
RPD—— RELATIVE PERCENT DIFFERENCE
S.A.—— ANALYTE SPIKE IN SAMPLE MATRIX
SSR—— SPIKE RECOVERED AND SAMPLE 'SR'
SSR1—— SPIKE RECOVERED AND SAMPLE 'SR1'
%RE—— PERCENT RECOVERY OF SPIKE IN 'SR'
%RE1—— PERCENT RECOVERY OF SPIKE IN 'SR1'
BLK—— ANALYTE CONCENTRATION DETECTED IN LAB BLANK
99%—— UPPER/LOWER CONTROL LIMIT
95%—— UPPER/LOWER WARNING LIMIT
s—— STANDARD DEVIATION
2s—— 2 x STANDARD DEVIATION (WARNING LIMIT)
3s—— 3 x STANDARD DEVIATION (CONTROL LIMIT)
MEAN-- TIME WEIGHTED AVERAGE OF SPIKE RECOVERY

	ACT	INFO	GEOLOGICAL DEPARTMENT		ACT	INFO
DMH						
DEP			AUG	JLC		
JRF				FILE		
DR				FILE		
RJB						

SURROGATE SPIKE DATE
BENZENYL FLUORIDE SPIKE CONCENTRATION OF
WITH A RECOVERY OF
BENZENYL FLUORIDE RECOVERY LIMITS OF TO

PASS / NO PASS pass DATE TYPED Aug 2 1991 B133201

ACTION TAKEN

SPIKE SOURCE SH-R STANDARD LOT NO. Gas 5891

ANALYST Quat Do QA / QC COMPILER

8301 W. COMMONWEALTH AVE
BUENA PARK, CALIFORNIA 90621

UNDERGROUND WaynePerry CONSTRUCTION INC SPECIALISTS

C.S.C. LIC. 300345
E.P.A. CAD 053841102

(714)826-0352

CHAIN-OF-CUSTODY RECORD

CLIENT: POMONA BOX	PROJECT NO. 89.151
SITE ADDRESS: IMPERIAL HWY	LABORATORY: ASSOCIATED
LA HABRA	SAMPLED BY: MARCOS RODRIGUEZ
LOC. WIC. # ENGINEER:	RESULTS BY: 8-5-91

STATION NUMBER	DEPTH	LOCATION DESCRIPTION	DATE	TIME	SAMPLE TYPE SOIL	WATER	AIR	NUMBER OF CONTAINERS	TEST REQUIRED
		B-8	7-29-91	1:55		✓		3 EPA	DHS 8015-M = TPH EPA 602 = BTEX

RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:
Marcos Rodriguez	Mario R.	7-29-91	2:25
RELINQUISHED BY: Mario R.	RECEIVED BY: Valentin Sodoy	DATE: 7-31-91	TIME: 6:00
RELINQUISHED BY: Valentin Sodoy	RECEIVED BY: R. Malisoki	DATE: 7/31/91	TIME: 1:20
RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
PHONE (714) 826-0352 ■ FAX ADM. & CONST. (714) 523-7880 ■ FAX GEO. & ENG. (714) 523-7541

Project No. 88.03

86 UT 224 and
89 UT 163

December 10, 1992

Pomona Box Company
301 West Imperial Highway
La Habra, California

Attention: Mr. Daryl Votaw

Subject: Work Plan for Proposed
Supplemental Site Assessment
Pomona Box Company
301 West Imperial Highway
La Habra, California

EXECUTIVE SUMMARY

Enclosed is a work plan for proposed supplemental site assessment at the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. The purpose of the proposed work is to more precisely define the extent of soil and groundwater contamination at this location.

Two borings will be drilled and sampled. At the completion of drilling and sampling, groundwater monitoring wells will be installed in both borings. Soil and groundwater samples will be obtained for laboratory analyses.

Following well installation, it is recommended that aquifer and soil vapor extraction tests be conducted to obtain data for assessing and designing appropriate remediation systems.

BACKGROUND

In December 1986, a single 1,000 gallon underground storage tank was removed at this location. Soil samples were obtained and analyzed as part of the removal procedure. Results of the laboratory analyses indicated a localized area of hydrocarbon contaminated soil was present in the bottom of the excavation. During additional excavation to remove the contaminated soils, groundwater and free product were encountered at a depth of

BACKGROUND, continued

approximately 13 feet. The excavation was backfilled and the information reported to the local regulatory agency. Accordingly, site assessment work was required by the regulatory agency to define the extent of contamination.

Between January and September 1987, six borings were drilled and sampled. All the borings were converted to groundwater monitoring wells. Well locations are shown on the Plot Plan, Figure 1 in Appendix A. Dissolved or free phase hydrocarbons were detected in all the wells.

Manual recovery of free hydrocarbons was initiated in June 1987. An automated recovery system was installed and became operational in April 1988.

In September 1989, seven additional underground storage tanks were removed at this location. Approximate tank locations are shown on the Plot Plan, Figure 1 in Appendix A. Results of laboratory analyses performed as part of the removal procedure indicated petroleum hydrocarbons were present. As a result, two borings were drilled and sampled in this area in March and June 1991. Both borings were converted to groundwater monitoring wells. Well locations are shown on the Plot Plan, Figure 1 in Appendix A.

PROPOSED WORK PLAN

Two borings will be drilled and sampled south and southwest of the former gasoline tank zone. Proposed boring locations are shown on the Plot Plan, Figure 1 in Appendix A. Materials encountered during drilling and sampling will be logged by a geologist. At the completion of drilling and sampling, groundwater monitoring wells will be installed in both borings. Details of the monitoring well construction are shown on Figure 2 in Appendix A.

Undisturbed soil samples will be obtained at five foot intervals to the saturated zone. Samples will be stored in six-inch brass tubes. The ends will be covered with aluminum foil and capped with plastic end caps. Samples will be placed in an ice chest to reduce the potential for volatilization. All sampling equipment will be washed and double rinsed in distilled water between uses to reduce the effects of cross contamination. Samples will be tested for total hydrocarbons using California Department of Health Services Modified Method 8015 and aromatic volatile organic compounds using EPA Test Method 8020. Contaminated soils encountered during drilling will be placed in approved containers and disposed of according to local codes and regulations at a licensed facility.

PROPOSED WORK PLAN, continued

Groundwater monitoring wells will be developed and sampled for evidence of hydrocarbon contamination. Wells will be developed by surging and bailing. Prior to sampling, four casing volumes will be bailed from each well to assure obtaining a representative sample. Water from well development and purging prior to sampling will be disposed of at an approved facility. After purging, water samples will be obtained using a Teflon bailer and placed in VOA bottles with Teflon septums. Samples will be stored on ice for transport to the laboratory. Groundwater samples will be tested for total hydrocarbons using California Department of Health Services Modified Method 8015 and purgeable aromatic compounds using EPA Test Method 602.

Based on the laboratory and field data, a report will be generated to include: discussion of geologic and hydrogeologic conditions, lithologic logs (described using the Unified Soil Classification System), copies of laboratory test data for the soil and groundwater samples, a groundwater contour map, conclusions and recommendations for additional work or remedial action, if necessary.

RECOMMENDATIONS

Following well installation, it is recommended that aquifer and soil vapor extraction testing be conducted to obtain data for assessing and designing appropriate remediation systems.

The opportunity to be of service is sincerely appreciated. If you have any questions, or if I can be of further assistance, please call.

Very truly yours,

Richard V. Smith

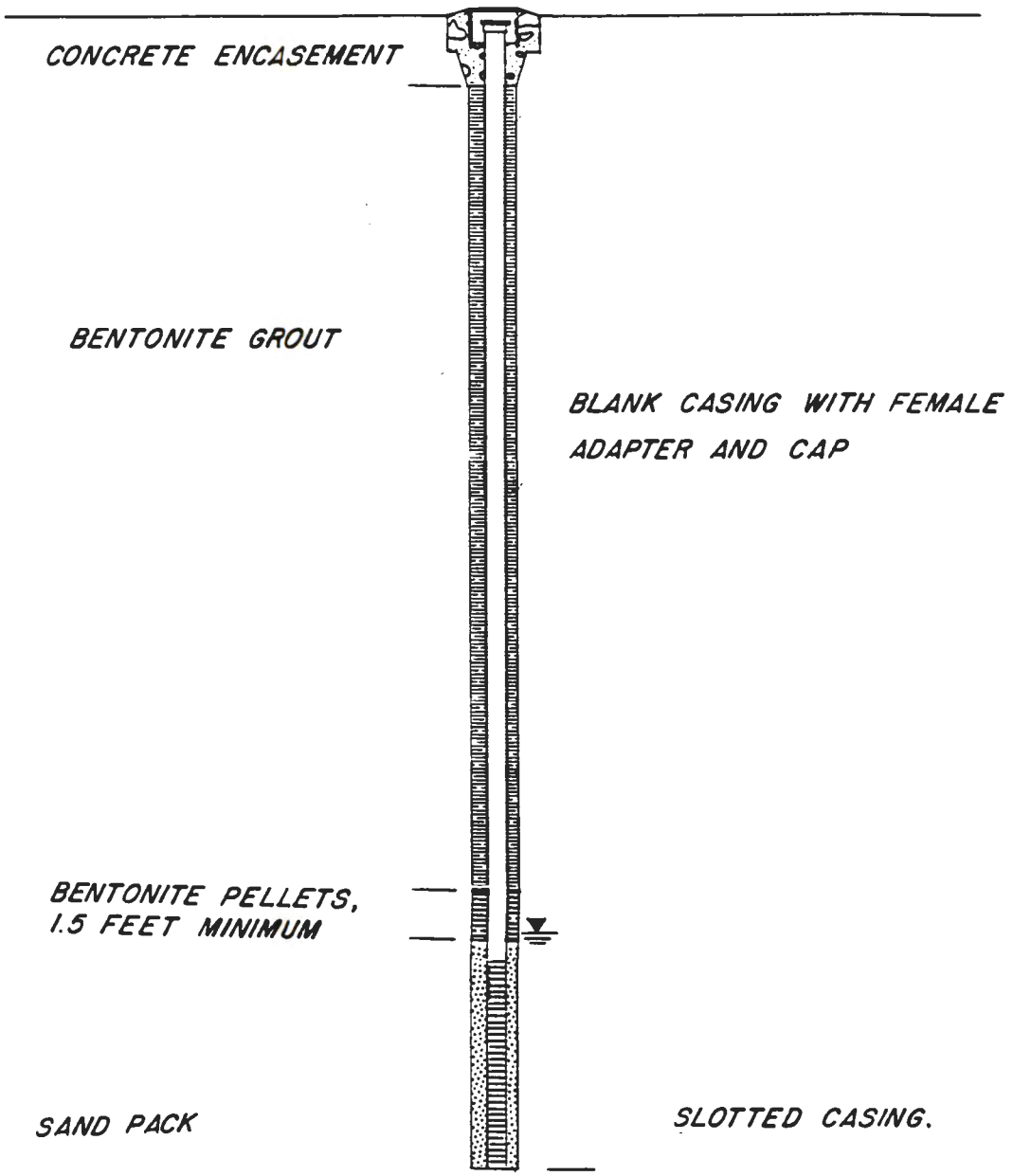
Richard V. Smith
Registered Geologist 5014

Pomona Box Company
Project No. 88.3

APPENDIX A

Plot Plan, Figure 1
Typical Monitoring Well Construction, Figure 2

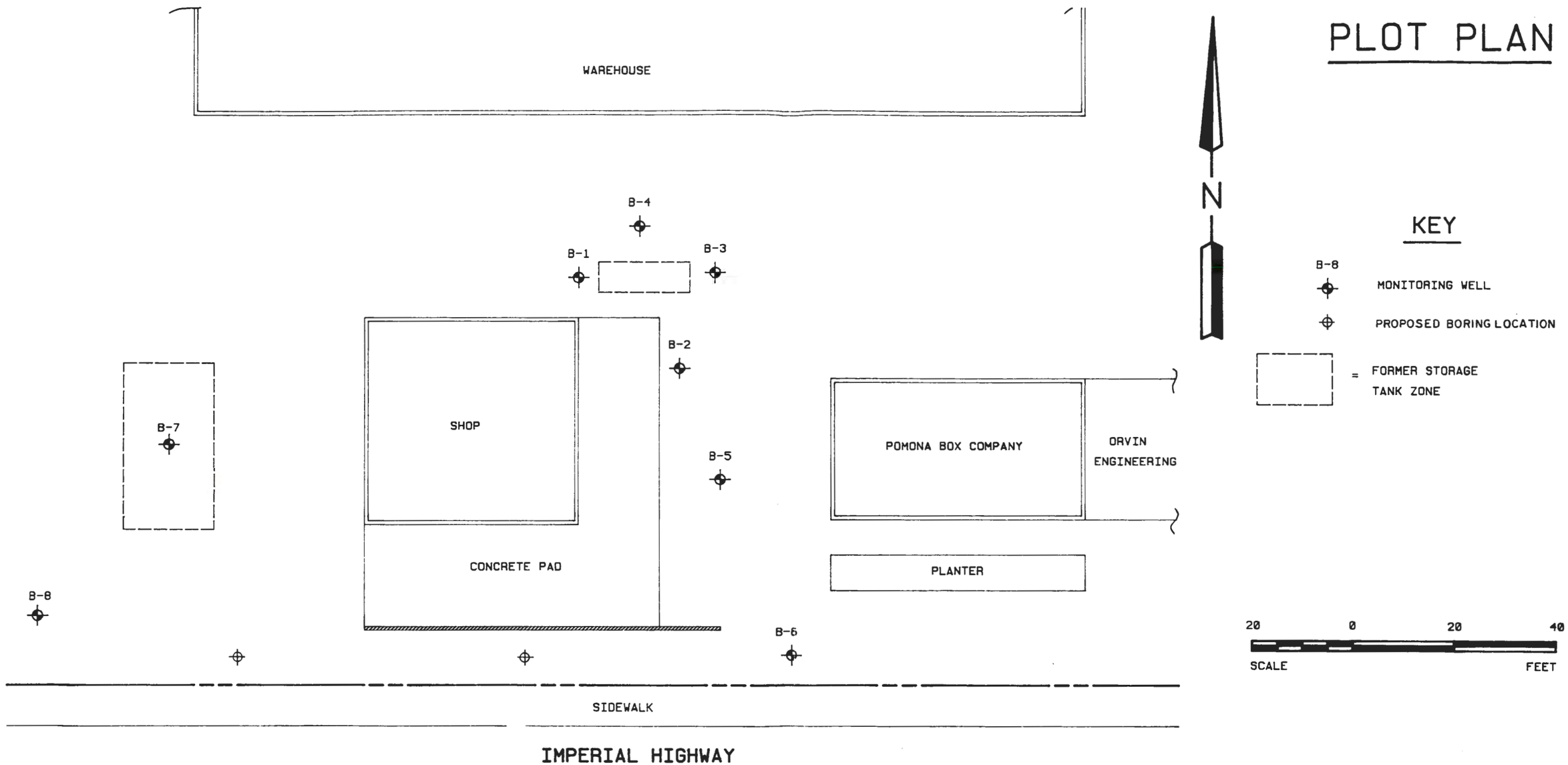
DETAIL A: TYPICAL WELL CONSTRUCTION



NOTES:
1. ALL CASING IS 4 INCH DIAMETER, SCHEDULE 40, FLUSH THREADED, PVC.
2. ACTUAL CONSTRUCTION MAY VARY FROM TYPICAL DESIGN DUE TO FIELD CONDITIONS
3. DRAWING NOT TO SCALE.

Pomona Box Company 301 West Imperial Highway La Habra, California	
PROJECT NO.: 88.03	FIGURE NO.: 2

PLOT PLAN



POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA.

PROJECT NO.	FIGURE NO.
89.151	1
DRAWN BY	REVISED
EL 7/31/91	ADDED MONIT. WELL B-8

Wayne Perry

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
PHONE (714) 826-0352 ■ FAX ADM. & CONST. (714) 523-7880 ■ FAX GEO. & ENG. (714) 523-7541

Project No. 88.03

April 27, 1993

Pomona Box Company
301 West Imperial Highway
La Habra, California

Attention: Mr. Daryl Votaw

Subject: Supplemental Site Investigation Report
Pomona Box Company
301 West Imperial Highway
La Habra, California

EXECUTIVE SUMMARY

Enclosed are the results of the supplemental site investigation for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. The purpose of this investigation was to more accurately define groundwater conditions at the subject site.

On February 26, 1993, two borings, B-9 and B-10 were drilled, sampled, and completed as groundwater monitoring wells.

Laboratory analyses of soil samples showed total petroleum hydrocarbons and purgeable aromatic hydrocarbons to be below laboratory detection limits with the the exception of samples obtained from boring B-9 at five feet and boring B-10 at 10 feet. The sample from boring B-9 at five feet showed very low concentrations of ethyl benzene (0.02 mg/kg) and total xylenes (0.025 mg/kg). The sample from boring B-10 at 10 feet showed low concentrations of total xylenes (0.02 mg/kg).

EXECUTIVE SUMMARY, continued

Laboratory analyses of groundwater samples indicate dissolved hydrocarbons were present in samples from wells B-1 through B-4, B-6, B-7, B-9, and B-10. Dissolved hydrocarbons were not detected in the sample from well B-8.

Based on the distribution of dissolved hydrocarbons at this location, the extent of the dissolved hydrocarbon plume remains undefined.

Based on groundwater elevation data, the direction of groundwater flow is generally to the southwest.

SITE DESCRIPTION

The site is occupied by an operating box manufacturing company located on the north side of Imperial Highway west of the intersection of Imperial Highway and Euclid Avenue in the city of La Habra.

The site location and general geographic relationships are shown on the Location Map, Figure 1.

The site is occupied by an office building, a manufacturing building, and a mechanics shed. Site relationships are shown on the Plot Plan, Figure 2.

BACKGROUND

In December 1986, a single 1,000 gallon underground storage tank was removed at this location. Soil samples were obtained and analyzed as part of the removal procedure. Results of the laboratory analyses indicated a localized area of hydrocarbon contaminated soil was present in the bottom of the excavation. During additional excavation to remove the contaminated soils, groundwater and free product were encountered at a depth of approximately 13 feet. The excavation was backfilled and the information reported to the local regulatory agency. Accordingly, site assessment work was required by the regulatory agency to define the extent of contamination.

Between January and September 1987, six borings were drilled and sampled. All the borings were converted to groundwater monitoring wells. Well locations are shown on the Plot Plan, Figure 1 in Appendix A. Dissolved or free phase hydrocarbons were detected in all the wells.

BACKGROUND, continued

Manual recovery of free hydrocarbons was initiated in June 1987. An automated recovery system was installed and became operational in April 1988.

In September 1989, seven additional underground storage tanks were removed at this location. The approximate tank locations are shown on the Plot Plan, Figure 2 in Appendix A. Results of laboratory analyses performed as part of the removal procedure indicated petroleum hydrocarbons were present. As a result, two borings were drilled and sampled in this area in March and June 1991. Both borings were converted to groundwater monitoring wells. Well locations are shown on the Plot Plan, Figure 2 in Appendix A.

SITE INVESTIGATION

Two borings, designated B-9 and B-10, were drilled and sampled on February 26, 1993 using a hollow stem auger drill rig. Boring locations are shown on the Plot Plan, Figure 1. Detailed logs of the materials encountered during drilling and sampling were compiled by a geologist, and are presented in Appendix A as Figure 3 and Figure 4. At the completion of drilling and sampling, the borings were completed as groundwater monitoring wells. Well Construction details are presented on the Groundwater Monitoring Well Construction Logs, Figure 5 and Figure 6 in Appendix A.

Undisturbed soil samples were obtained from the borings for analyses. Details of the soil sampling procedure are provided in Appendix B. Soil samples were tested for total petroleum hydrocarbons using the California Department of Health Services Test Method 8015-m and aromatic volatile organic compounds using EPA Test Method 8020. Results of the laboratory analyses are presented in the Summary of Laboratory Test Results, Table 1. Copies of the laboratory data sheets and chain-of-custody forms are presented in Appendix B.

Groundwater samples were obtained from wells B-1 through B-4 and B-6 through B-10 on March 15, 1993. Monitoring well B-5 was not sampled due to the presence of a recovery pump. Details of the groundwater sampling procedures are given in Appendix B. Samples were analyzed for total petroleum hydrocarbons using the California Department of Health Services Test Method 8015-m and aromatic volatile organic compounds using EPA Test Method 602. Results of the groundwater analyses are presented in the Summary of Laboratory Test Results, Table 2 and on the Dissolved Hydrocarbon Concentration Map, Figure 8 in Appendix A. Copies of the laboratory data sheets with chain-of-custody forms and a comparison of laboratory test results are presented in Appendix B.

SUPPLEMENTAL SITE, continued

Groundwater monitoring wells B-9 and B-10 were surveyed to establish vertical control and gauged on March 12, 1993. Monitoring wells B-1 through B-4 and B-6 through B-10 were gauged on March 15, 1993. Well B-5 was not gauged due to the presence of a recovery pump. Survey and gauging data are presented in Appendix C. Based on the survey and gauging data, groundwater elevations were calculated for each well. Using the elevation data, a groundwater elevation map was generated and is presented as Figure 9 in Appendix A.

SUMMARY OF LABORATORY TEST RESULTS

Table 1, Soil Analyses, February 26, 1993

Boring/ Depth ft.	Total Hydrocarbons mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Total Xylenes mg/kg
B-9 5	ND	ND	ND	0.02	0.025
10	ND	ND	ND	ND	ND
B-10 5	ND	ND	ND	ND	ND
10	ND	ND	ND	ND	0.02
Limits of detection:	<10	<0.005	<0.005	<0.005	<0.015

Note: 1. ND - none detected, below limits of detection.

Table 2, Groundwater Analyses 3/15/93 (10/12/92)

Well Number	Total Hydrocarbons mg/l		Benzene mg/l		Toluene mg/l		Ethyl Benzene mg/l		Total Xylenes mg/l	
	3/93	10/92	3/93	10/92	3/93	10/92	3/93	10/92	3/93	10/92
B-1	27	FP	5.4	FP	1.7		0.7		2.6	
B-2	31	FP	5.5	FP	4.7	FP	0.9	FP	3.3	FP
B-3	7.5	FP	0.2	FP	0.2		0.4		0.6	
B-4	15	FP	1.0	FP	2.2		0.4		2.4	
B-6	2.4	3.0	0.7	0.15	0.1	0.2	0.06	0.08	0.2	0.25
B-7	4	0.6	0.2	0.005	0.01	0.002	0.5	0.5	0.3	[illegible]
B-8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
B-9	0.9	-	0.1		0.005	-	0.3	-	ND	-
B-10	6	-	0.5	-	0.5		0.3	-	1.1	-
Limits of Detection	<0.05		<0.0003		<0.0003		<0.0003		<0.0006	

Notes: 1. ND - none detected, below the limits of detection

SUBSURFACE CONDITIONS

Based on the materials observed during drilling and sampling, the site is underlain by alluvium of Recent Age. The alluvium consists of sandy clay, sandy silt, sand, clayey sand, and clayey silt to a depth of 35 feet.

Groundwater and saturated soils were encountered at a depth of 12 feet during drilling operations. Subsequent gauging of the wells indicates groundwater is present at depths of 7 to 12 feet below surface grade.

CONCLUSIONS

Laboratory analyses of soil samples showed total petroleum hydrocarbons and aromatic constituents to be below laboratory detection limits, with the the exception of samples from boring B-9 at five feet and B-10 at 10 feet. The sample from boring B-9 at five feet showed very low concentrations of ethyl benzene (0.02 mg/kg) and total xylenes (0.025 mg/kg). The sample from boring B-10 at 10 feet showed low concentrations of total xylenes (0.02 mg/kg).

The low concentrations of ethyl benzene and total xylenes in the five foot sample from boring B-9 and total xylenes in the ten foot sample from boring B-10 indicate soils in the vicinity of these borings have not been significantly impacted by petroleum hydrocarbons.

Laboratory analyses of groundwater samples indicate dissolved hydrocarbons were present in samples from wells B-1 through B-4, B-6, B-7, B-9, and B-10. Dissolved hydrocarbons were not detected in the sample from well B-8.

Concentrations of total dissolved hydrocarbons ranged from 31 mg/kg in the sample from well B-1 to 0.9 mg/kg in the sample from boring B-9.

The presence of dissolved hydrocarbons in the groundwater sample from well B-9 indicate the dissolved hydrocarbons extend westward toward well B-9.

The elevated concentrations of dissolved hydrocarbons detected in groundwater samples from wells B-6 and B-10 indicate the dissolved hydrocarbon plume extends to the southern property boundary.

Groundwater elevation data indicate the direction of groundwater flow is generally to the southwest.

CONCLUSIONS, continued

Based on the distribution of dissolved hydrocarbons at this location, the extent of the dissolved hydrocarbon plume remains undefined.

The opportunity to be of service is sincerely appreciated. If you have any questions, or if we can be of further assistance, please call.

Very truly yours,

Michael S. Wielenga
Environmental Geologist

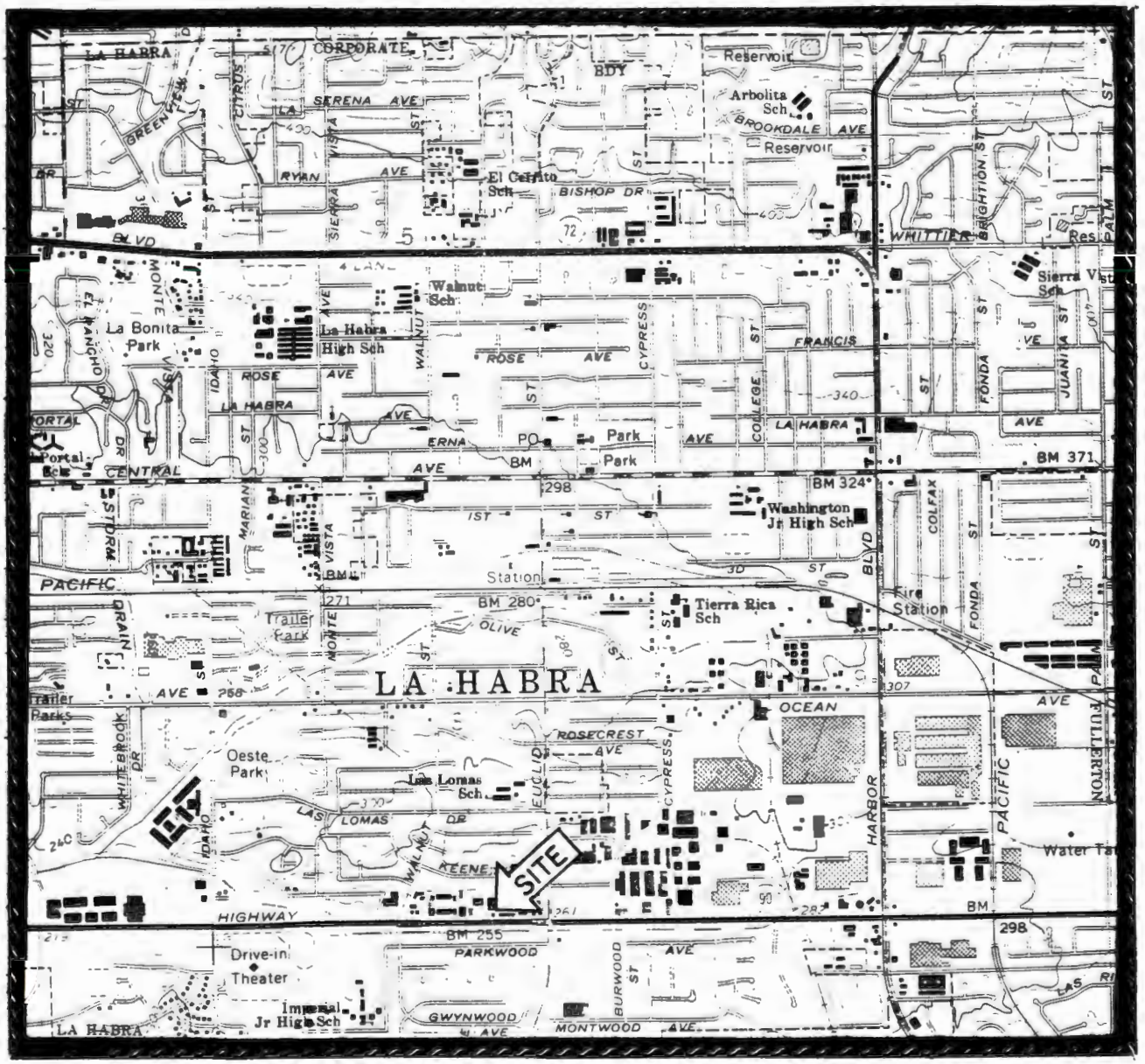
David M. Henry
Registered Geologist 4085

Pomona Box Company
Project No. 88.03

APPENDIX A

Vicinity Map, Figure 1
Plot Plan, Figure 2
USCS Sheet. Figure 3
Boring Logs, Figures 4 and 5
Well Construction Logs, Figures 6 and 7
Dissolved Hydrocarbon Concentration Map, Figure 8
Groundwater Contour Map, Figure 9

SITE LOCATION MAP

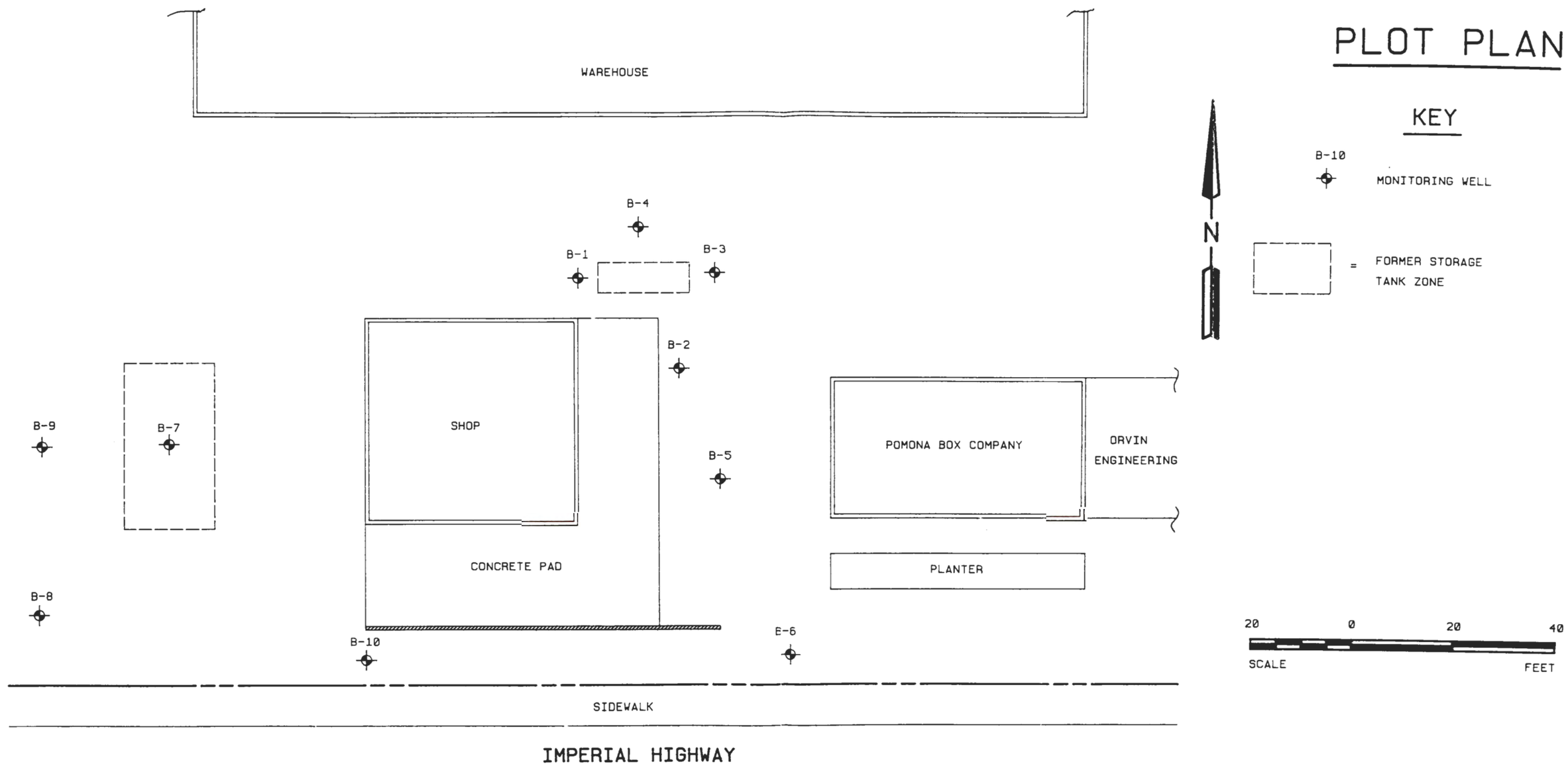


BASE MAP: La Habra Quadrangle

Pomona Box
301 W. Imperial Highway
La Habra, California

PROJECT NO.	FIGURE NO.
88.3X	1
DRAWN BY	

PLOT PLAN



POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA.

PROJECT NO.	FIGURE NO.
88.3X	2
DRAWN BY EL 4/22/93	REVISED ADD B-9,B-10 EL 4/22/93

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			GROUP SYMBOLS	DESCRIPTIONS
COARSE GRAINED SOILS (More than 50% of material is LARGER than No. 200 sieve size.)	GRAVELS (More than 50% of coarse fraction is LARGER than the No. 4 sieve size.)	CLEAN GRAVELS (Little or no fines)	GW	Well graded gravels, gravel-sand mixtures, little or no fines.
			GP	Poorly graded gravels or gravel-sand mixtures, little or no fines.
		GRAVELS WITH FINES (Appreciable amount of fines)	GM	Silty gravels, gravel-sand-silt mixtures.
			GC	Clayey gravels, gravel-sand-clay mixtures.
	SANDS (More than 50% of coarse fraction is SMALLER than the No. 4 sieve size.)	CLEAN SANDS (Little or no fines)	SW	Well graded sands, gravelly sands, little or no fines.
			SP	Poorly graded sands or gravelly sands, little or no fines.
		SANDS WITH FINES (Appreciable amount of fines)	SM	Silty sands, sand-silt mixtures.
			SC	Clayey sands, sand-clay mixtures.
FINE GRAINED SOILS (More than 50% of material is SMALLER than No. 200 sieve size.)	SILTS AND CLAYS (Liquid limit LESS than 50)		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
			OL	Organic silts and organic silty clays of low plasticity.
	SILTS AND CLAYS (Liquid limit GREATER than 50)		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.
			CH	Inorganic clays of high plasticity, fat clays.
			OH	Organic clays of medium to high plasticity, organic silts.
HIGHLY ORGANIC SOILS			Pt	Peat and other highly organic soils.

BOUNDARY CLASSIFICATIONS: Soils possessing characteristics of two groups are designated by combinations of group symbols.

PARTICLE SIZE LIMITS

SILT or CLAY	SAND			GRAVEL		COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE		

No.200 No.40 No.10 No.4 3/4 in. 3 in. 12 in.

U. S. STANDARD SIEVE SIZE

FIGURE NO:

LOG OF BORING

Drill Rig: B-61	Boring Diameter: 11"	Boring Elevation:	Boring Number
Date Drilled: 2/26/93	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-9

Sample Depth	Vapor Reading PPM/LEL	Time	Blow Counts	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
							AC/AB
						CL	Sandy CLAY: brown to grey, moist, stiff, plastic, trace debris
				5			FILL
	110	8:15	7/12/18				Sandy SILT: grey, moist, stiff; occasional thin clayey silt lenses
	70	8:30	6/12/21	10		SM	
						SC	Clayey SAND: fine- to medium-grained, brown, saturated, dense; occasional thin sand lenses
				15		SP	SAND: fine- to coarse-grained, brown, saturated, dense
				20		ML	
						CL	Clayey SILT: grey, saturated, stiff
				25			Sandy CLAY: brown, very moist, stiff, plastic
				30			
				35			
				40			
				45			
				50			
				55			
				60			

Notes:
1. Bottom of boring at 23.5 feet.
2. Groundwater encountered at 12 feet.
3. Well set to 23.5 feet.

Pomona Box
301 W. Imperial Hwy
La Habra

Project No.: 88.03X

Figure No.: 4

LOG OF BORING

Drill Rig: B-61	Boring Diameter: 11"	Boring Elevation:	Boring Number
Date Drilled: 2/26/93	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-10

Sample Depth	Vapor Reading PPM/LEL	Time	Blow Counts	Depth Feet	Soil/ Rock Symbol	Soil/ Rock Type	Description and Remarks
						CL	AC/AB
							Silty CLAY: dark grey, moist, stiff
	60	11:00	6/9/13	5			
						ML	Sandy SILT: dark, gray, moist, stiff; occasional silty sand lenses
	400	11:15	13/18/31	10			
							becomes saturated at 12 feet
				15			
				20		SC	Clayey SAND: fine- to coarse-grained, very moist, dense
				25			
				30			
				35			
				40			
				45			
				50			
				55			
				60			

Notes:
1. Bottom of boring at 25 feet.
2. Saturated conditions encountered at 12 feet.
3. Well set to 25 feet.

Pomona Box
301 W. Imperial Hwy
La Habra

Project No.: 88.03X

Figure No.: 5

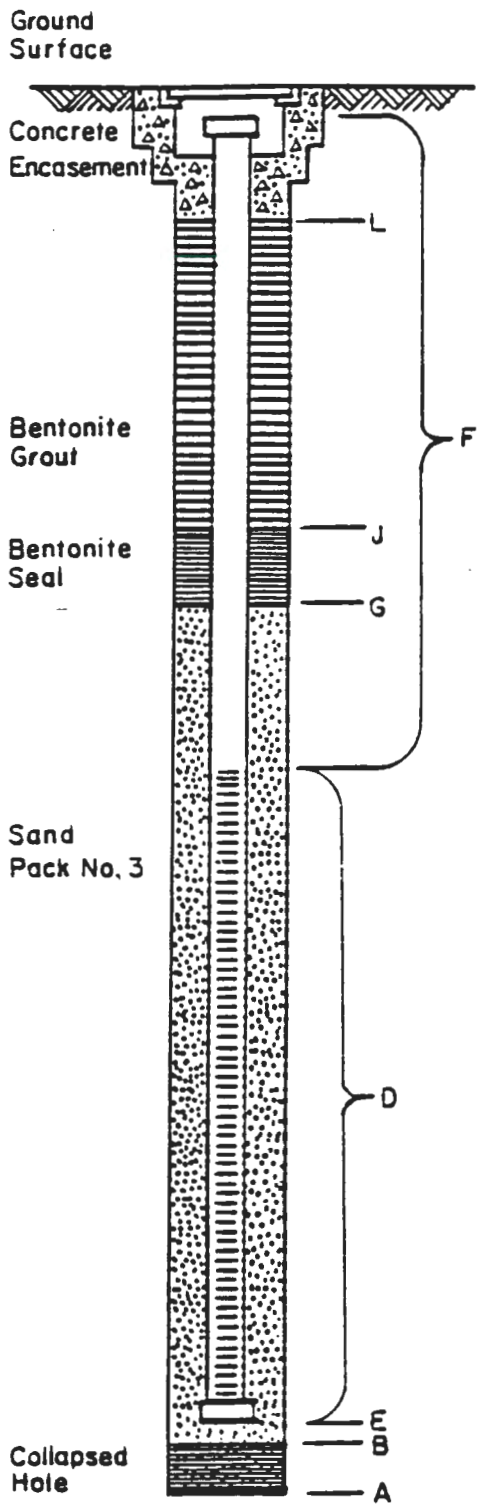
Boring No. B-9

Location West of B-7

Date 2/26/93

Logger's initials MSW

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	23.5	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	23.5	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	15	
E Depth of bottom of casing	(E)	23.5	
F. Length of blank casing	(F)	8.5	
G. Depth to top of gravel/sand fill	(G)	6.5	
H. Footage of gravel sand fill	(H) = B-G		17
I. Bags of gravel sand used	(I)	7	
J. Depth to top of bentonite seal	(J)	1	
K. Thickness of bentonite seal	(K) = G-J		5.5
L. Depth to top of bentonite grout	(L)	N/A	
M. Thickness of bentonite grout	(M) = J-L		N/A
N. Thickness of concrete encasement	(N) = L-Ø		1

Depth to water	9.79
Type of casing	4 inch PVC
Type of access box used	Flush Mount
Top of casing elevation	253.72
Date surveyed	3/12/93
Ground water elevation	243.93

Pomona Box
301 W. Imperial Hwy, La Habra

PROJECT NO.: 88.03X

FIGURE NO.: 6

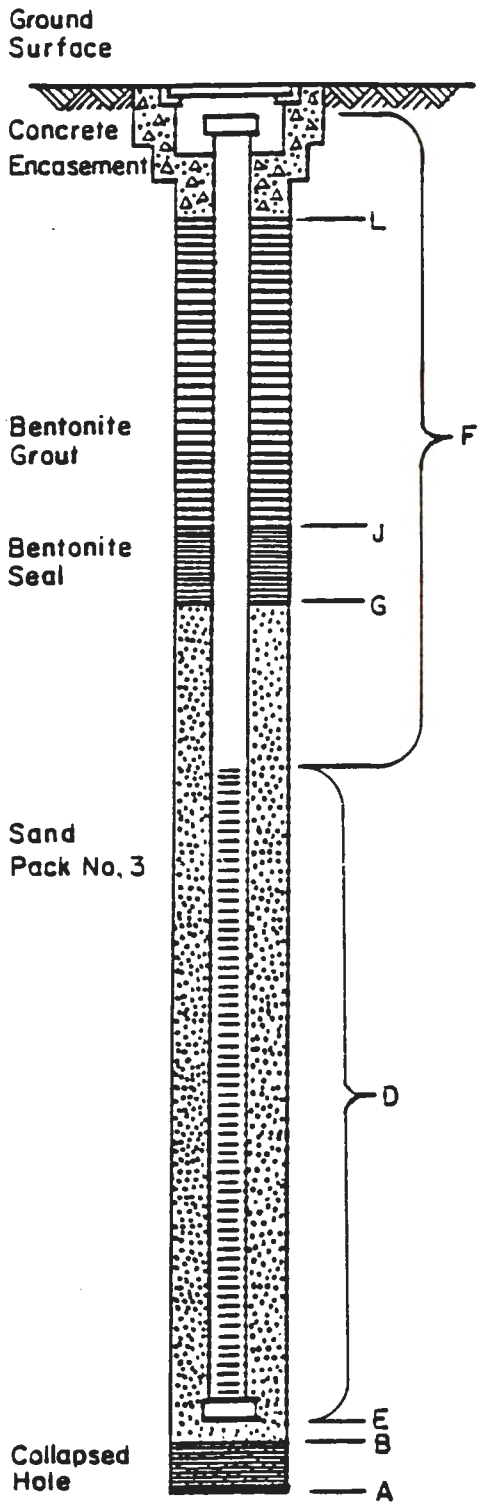
Boring No. B-10

Location South property boundary

Date 2/26/93

Logger's initials MSW

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	25	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	25	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	20	
E Depth of bottom of casing	(E)	25	
F. Length of blank casing	(F)	5	
G. Depth to top of gravel/sand fill	(G)	4	
H. Footage of gravel sand fill	(H) = B-G		21
I. Bags of gravel sand used	(I)	10	
J. Depth to top of bentonite seal	(J)	1	
K. Thickness of bentonite seal	(K) = G-J		3
L. Depth to top of bentonite grout	(L)	N/A	
M. Thickness of bentonite grout	(M) = J-L		N/A
N. Thickness of concrete encasement	(N) = L-Ø		1

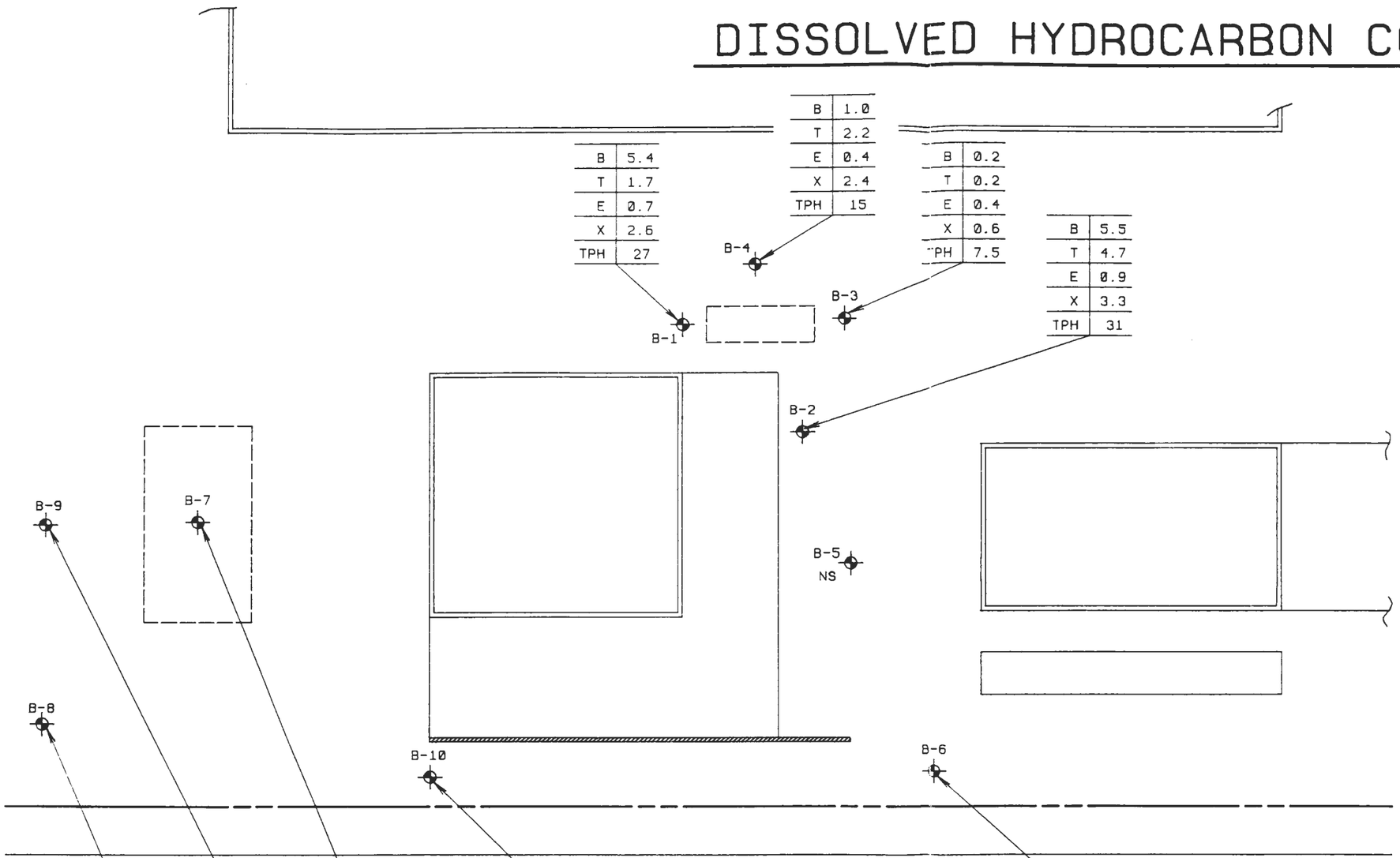
Depth to water	9.14
Type of casing	4 inch PVC
Type of access box used	Flush Mount
Top of casing elevation	250.90
Date surveyed	3/22/93
Ground water elevation	241.76

Pomona Box
301 W. Imperial Hwy, La Habra

PROJECT NO.: 88.03X

FIGURE NO.: 7

DISSOLVED HYDROCARBON CONCENTRATION MAP



KEY

B-10 — MONITORING WELL SHOWING CONCENTRATION OF DISSOLVED HYDROCARBONS IN MG/L.

N

NOTES: 1. DATE OF SAMPLING 3/15/93.
2. NS - NOT SAMPLED, PUMP WELL

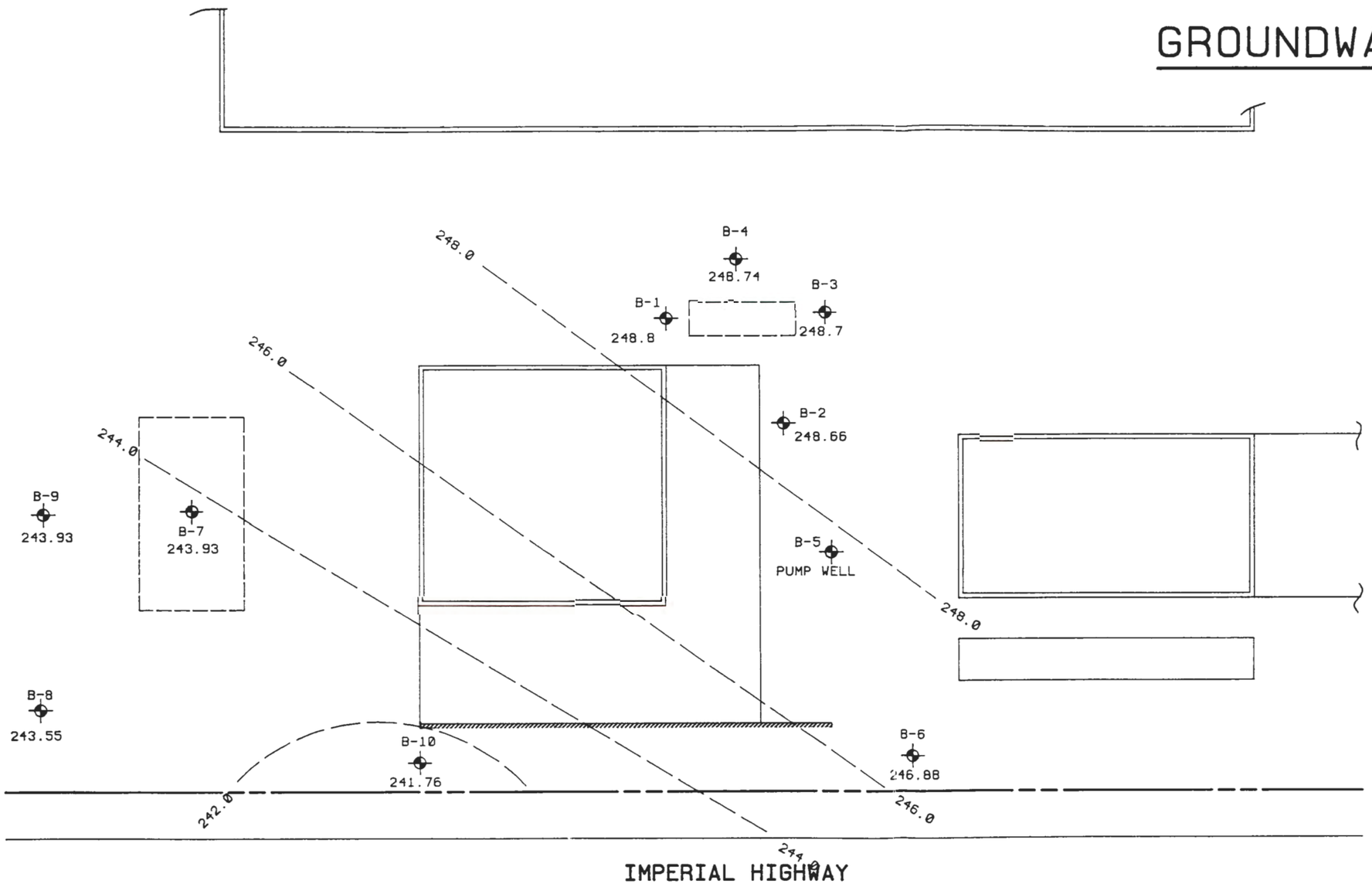
20 0 20 40
SCALE FEET

POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA.

PROJECT NO.	FIGURE NO.
88.3X	8
DRAWN BY	
EL 4/22/93	

Wayne Perry Construction Inc. Environmental Specialists

GROUNDWATER CONTOUR MAP



KEY

N

= FORMER STORAGE TANK ZONE

B-8
241.76

MONITORING WELL SHOWING GROUNDWATER ELEVATION IN FEET RELATIVE TO AN ASSUMED BENCHMARK ON 3/15/93.

248.0 — GROUNDWATER CONTOUR
CONTOUR INTERVAL = 2.0 FEET

20 0 20 40
SCALE FEET

POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA.

PROJECT NO.	FIGURE NO.
88.3X	9
DRAWN BY	
EL 4/22/93	

WaynePerry ENVIRONMENTAL CONSTRUCTION INC. SPECIALISTS

Pomona Box Company
Project No. 88.03

APPENDIX B

Soil Sampling Procedures
Groundwater Sampling Procedures
Laboratory Test Results
Field Test Data

Pomona Box Company
Project No. 88.03

SOIL SAMPLING PROCEDURES

Boring samples were obtained with a 2.5 inch I.D., split barrel sampler. Soils were retained in 3 inch long stainless steel tubes. The tube ends were immediately sealed with aluminum foil and capped with plastic end caps upon removal from the sampler. All of the soil samples were placed on ice to reduce the potential for volatilization. All sampling equipment was washed in non-phosphate soap and double rinsed with distilled water prior to each use in order to reduce the potential for cross contamination. Duplicate samples were capped, allowed to develop a head space and were analyzed in the field with a Photvac Microtip organic vapor detector. The vapor readings were used as a guide in determining the degree of soil contamination in the field. Soil samples were delivered to a certified analytical laboratory for analysis and documented with strict chain-of-custody procedures.

Pomona Box Company
Project No. 88.03

GROUNDWATER SAMPLING PROCEDURES

Prior to sampling wells were, purged of water using a stainless steel bailer. Fast recharging wells were purged of four casing volumes of water. Slow recharging wells were purged until dry and allowed to recover for two hours before sampling. Each casing volume of water was field tested for temperature, pH, conductivity, and turbidity. The last casing volume of water was field tested for dissolved oxygen. Field testing data, are included in this Appendix.

Water samples were obtained using a teflon bailer equipped with a bottom emptying device and placed in VOA vials with Teflon septums. The samples were placed on ice to reduce the potential for volatilization. In addition to the samples from the wells, a trip blank, rinsate blank, and a sample duplicate were prepared to verify the integrity of the sampling and laboratory procedures.

The water samples were delivered to a certified analytical laboratory for analysis and documented with strict chain-of-custody procedures.

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92668 - 714/771-6900
FAX 714/538-1209

CLIENT

Wayne Perry Construction Co. (1365)
8301 West Commonwealth Avenue
Buena Park, CA 90621

LAB NO. G48711

REPORTED 03/09/93

SAMPLE Soil

IDENTIFICATION Project #88.03
Pomona Box

BASED ON SAMPLE 301 W. Imperial, La Habra
As Submitted

RECEIVED 03/02/93

	B-9 @ 5'	B-9 @ 10'	B-10 @ 5'	B-10 @ 10'
Total Hydrocarbons (TPH DHS) (mg/kg)	ND< 5	ND< 5	ND< 5	ND< 5
Benzene (mg/kg)	ND< 0.005	ND< 0.005	ND< 0.005	ND< 0.005
Toluene (mg/kg)	ND< 0.005	ND< 0.005	ND< 0.005	ND< 0.005
Ethylbenzene (mg/kg)	0.02	ND< 0.005	ND< 0.005	ND< 0.005
Total Xylenes (8020) (mg/kg)	0.025	ND< 0.015	ND< 0.015	0.02

Date Analyzed: 03/08/93

ASSOCIATED LABORATORIES, by:

Edward S. Behare, Ph.D.
Vice President

ESB/ql

MAR 13 1993

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

TESTING & CONSULTING
Chemical •
Microbiological •
Environmental •

C-1 10M

ASSOCIATED LABORATORIES

" COMMITMENT TO QUALITY "

QUALITY CONTROL /QUALITY ASSURANCE REPORT G48711

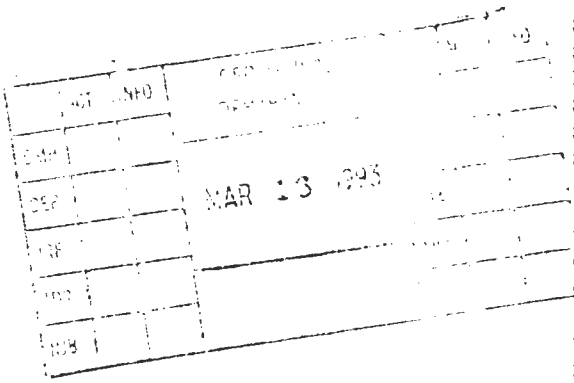
QA/QC CONTROL NO. G48711-2 INSTRUMENT LOGBOOK Hyd 1-4

DATE G48711-2 ANALYZED Mar 4 1993 I.L.B. PAGE LOCATION 129

DATE G48711 ANALYZED Mar 4 1993 SAMPLE LOG PAGE LOCATION 7

EPA 8015M/D.H.S. L.U.F.T. REPORTING UNITS mg/kg SAMPLE MATRIX soil

COMPOUND	SR	SR1	RPD	S.A.	SSR	SSR1	%RE	%RE1	RPD	BLK
GASOLINE	0	0	0	5	4.7	5.3	94	106	12	0
DIESEL										
AVERAGE			0				94	106	12	
							X	O		



SR------ SAMPLE
SR1---- SAMPLE DUPLICATE
RPD--- RELATIVE PERCENT DIFFERENCE
S.A.--- ANALYTE SPIKE IN SAMPLE MATRIX
SSR---- SPIKE RECOVERED AND SAMPLE 'SR'
SSR1--- SPIKE RECOVERED AND SAMPLE 'SR1'
%RE--- PERCENT RECOVERY OF SPIKE IN 'SR'
%RE1-- PERCENT RECOVERY OF SPIKE IN 'SR1'
BLK---- ANALYTE CONCENTRATION DETECTED IN LAB BLANK
99%---- UPPER/LOWER CONTROL LIMIT
95%---- UPPER/LOWER WARNING LIMIT
s------- STANDARD DEVIATION
2s------ 2 x STANDARD DEVIATION (WARNING LIMIT)
3s------ 3 x STANDARD DEVIATION (CONTROL LIMIT)
MEAN-- TIME WEIGHTED AVERAGE OF SPIKE RECOVERY

SURROGATE SPIKE DATE
BENZENYL FLUORIDE SPIKE CONCENTRATION OF
WITH A RECOVERY OF
BENZENYL FLUORIDE RECOVERY LIMITS OF TO

PASS / NO PASS pass DATE TYPED Mar 5 1993 B133201

ACTION TAKEN

SPIKE SOURCE SH-R STANDARD LOT NO. Gas 22892

ANALYST Danielle Lujan QA / QC COMPILER

ASSOCIATED LABORATORIES

" COMMITMENT TO QUALITY "

QUALITY CONTROL /QUALITY ASSURANCE REPORT G48711

QA/QC CONTROL NO. G48711-2 INSTRUMENT LOGBOOK Hyd 1-4

DATE G48711-2 ANALYZED Mar 4 1993 I.L.B. PAGE LOCATION 129

DATE G48711 ANALYZED Mar 4 1993 SAMPLE LOG PAGE LOCATION 5

EPA 8020 REPORTING UNITS mg/kg SAMPLE MATRIX soil

COMPOUND	SR	SR1	RPD	S.A.	SSR	SSR1	%RE	%RE1	RPD	BLK
BENZENE	0	0	0	0.05	0.05	0.05	108.0	98	10	0
TOLUENE	0	0	0	0.05	0.05	0.05	108.0	100	8	0
ETHYLBENZENE	0	0	0	0.05	0.05	0.05	100.0	96	4	0
XYLENES	0	0	0	0.15	0.15	0.14	98	95	3	0
CHLOROBENZENE										
1,2-DICHLOROBENZENE										
1,3-DICHLOROBENZENE										
1,4-DICHLOROBENZENE										
AVERAGE			0				104	97	6	

SR—— SAMPLE
SR1---- SAMPLE DUPLICATE
RPD— RELATIVE PERCENT DIFFERENCE
S.A.--- ANALYTE SPIKE IN SAMPLE MATRIX
SSR—— SPIKE RECOVERED AND SAMPLE 'SR'
SSR1--- SPIKE RECOVERED AND SAMPLE 'SR1'
%RE--- PERCENT RECOVERY OF SPIKE IN 'SR'
%RE1-- PERCENT RECOVERY OF SPIKE IN 'SR1'
BLK---- ANALYTE CONCENTRATION DETECTED IN LAB BLANK
99%---- UPPER/LOWER CONTROL LIMIT
95%---- UPPER/LOWER WARNING LIMIT
s------ STANDARD DEVIATION
2s------ 2 x STANDARD DEVIATION (WARNING LIMIT)
3s------- 3 x STANDARD DEVIATION (CONTROL LIMIT)
MEAN-- TIME WEIGHTED AVERAGE OF SPIKE RECOVERY

SURROGATE SPIKE DATE
BENZENYL FLUORIDE SPIKE CONCENTRATION OF 150 ng
WITH A RECOVERY OF 108 %
BENZENYL FLUORIDE RECOVERY LIMITS OF81 % TO 129 %

PASS / NO PASS Pass DATE TYPED Mar 5 1993 A133201

ACTION TAKEN

SPIKE SOURCE EPA Repository Dil. STANDARD LOT NO. BTX 32092

ANALYST Danielle Lujan QA / QC COMPILER

8301 W. COMMONWEALTH AVE.
BUENA PARK, CALIFORNIA 90621

UNDERGROUND WaynePerry CONSTRUCTION INC SPECIALISTS

C.S.C. LIC. 300345
E.P.A. CAD 053841102

(714)826-0352

CHAIN-OF-CUSTODY RECORD

CLIENT: Pomona BOX	PROJECT NO. 58.03
SITE ADDRESS: 301 W. Imperial Hwy La Habra CA	LABORATORY: Associated
	SAMPLED BY: MS Wielenga
LOC. WIC. # ENGINEER:	RESULTS BY: 3/3/93

STATION NUMBER	DEPTH	LOCATION DESCRIPTION	DATE	TIME	SAMPLE TYPE SOIL	WATER	AIR	NUMBER OF CONTAINERS	TEST REQUIRED
6.7	5	West wall		815	✓			1	8015m, 8020
	10	soil samples		830	✓			1	
6.10	5	East wall soil		1110	✓			1	
	10	samples		1115	✓			1	

RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:
MS Wielenga	[illegible]	11:20	3/2/93
RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:
RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:
RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:

ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92668 - 714/771-6900
FAX 714/538-1209

CLIENT

Wayne Perry Construction Co. (1365)
8301 West Commonwealth Avenue
Buena Park, CA 90621

LAB NO. G49591-01

REPORTED 03/19/93

SAMPLE Water

RECEIVED 03/16/93

IDENTIFICATION Pomona Box

BASED ON SAMPLE Imperial Hwy - Project #88.3x
As Submitted

	B-1	B-2	B-3
Total Hydrocarbons (TPH DHS) (mg/l)	27	31	7.5
Benzene (mg/l)	5.4	5.5	0.2
Toluene (mg/l)	1.7	4.7	0.2
Ethylbenzene (mg/l)	0.7	0.9	0.4
Total Xylenes (602) (mg/l)	2.6	3.3	0.6

Date Analyzed: 03/16/93

ASSOCIATED LABORATORIES, by:

Edward S. Behare, Ph.D.
Vice President

ESB/ql

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

TESTING & CONSULTING
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ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92668 - 714/771-6900 FAX 714/538-1209

CLIENT

Wayne Perry Construction Co. (1365)
8301 West Commonwealth Avenue
Buena Park, CA 90621

LAB NO. G49591-02

REPORTED 03/19/93

SAMPLE Water

RECEIVED 03/16/93

IDENTIFICATION Pomona Box

BASED ON SAMPLE Imperial Hwy - Project #88.3x
As Submitted

	B-4	B-6	B-7
Total Hydrocarbons (TPH DHS) (mg/l)	15	2.4	4
Benzene (mg/l)	1.0	0.7	0.2
Toluene (mg/l)	2.2	0.1	0.01
Ethylbenzene (mg/l)	0.4	0.06	0.5
Total Xylenes (602) (mg/l)	2.4	0.2	0.3

Date Analyzed: 03/16/93

ASSOCIATED LABORATORIES, by:

Edward S. Behare, Ph.D.
Vice President

ESB/ql

GEOLOGICAL DEPARTMENT
MAR 25 1993

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

TESTING & CONSULTING
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ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92668 - 714/771-6900 FAX 714/538-1209

CLIENT

Wayne Perry Construction Co. (1365)
8301 West Commonwealth Avenue
Buena Park, CA 90621

LAB NO. G49591-03

REPORTED 03/19/93

SAMPLE Water

RECEIVED 03/16/93

IDENTIFICATION Pomona Box
Imperial Hwy - Project #88.3x

BASED ON SAMPLE As Submitted

	B-8	B-9	B-10
Total Hydrocarbons (TPH DHS) (mg/l)	ND<0.05	0.9	6
Benzene (mg/l)	ND<0.0003	0.1	0.5
Toluene (mg/l)	ND<0.0003	0.005	0.5
Ethylbenzene (mg/l)	ND<0.0003	0.3	0.3
Total Xylenes (602) (mg/l)	ND<0.0006	ND<0.0006	1.1

Date Analyzed: 03/16/93

ASSOCIATED LABORATORIES, by:

Edward S. Behare, Ph.D.
Vice President

ESB/ql

MAR 25 1993

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

TESTING & CONSULTING
Chemical •
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Environmental •

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ASSOCIATED LABORATORIES
806 North Batavia - Orange, California 92668 - 714/771-6900 FAX 714/538-1209

CLIENT

Wayne Perry Construction Co. (1365)
8301 West Commonwealth Avenue
Buena Park, CA 90621

LAB NO. G49591-04

REPORTED 03/19/93

SAMPLE Water

RECEIVED 03/16/93

IDENTIFICATION Pomona Box

BASED ON SAMPLE Imperial Hwy - Project #88.3x
As Submitted

	Trip Blank	Duplicate
Total Hydrocarbons (TPH DHS) (mg/l)	ND<0.05	4
Benzene (mg/l)	ND<0.0003	0.2
Toluene (mg/l)	ND<0.0003	0.01
Ethylbenzene (mg/l)	ND<0.0003	0.4
Total Xylenes (602) (mg/l)	ND<0.0006	0.3

Date Analyzed: 03/16/93

ASSOCIATED LABORATORIES, by:

Edward S. Behare, Ph.D.
Vice President

ESB/ql

NOTE: Unless notified in writing, all samples will be discarded by appropriate disposal protocol 30 days from date reported.

TESTING & CONSULTING
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Microbiological •
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ASSOCIATED LABORATORIES

* COMMITMENT TO QUALITY *

QUALITY CONTROL /QUALITY ASSURANCE REPORT G49591

QA/QC CONTROL NO. G49591-7 INSTRUMENT LOGBOOK PT #3

DATE G49591-7 ANALYZED Mar 16 1993 I.L.B. PAGE LOCATION 264

DATE G49591 ANALYZED Mar 16 1993 SAMPLE LOG PAGE LOCATION 6

EPA 8020 REPORTING UNITS mg/l SAMPLE MATRIX water

COMPOUND	SR	SR1	RPD	S.A.	SSR	SSR1	%RE	%RE1	RPD	BLK
BENZENE	0	0	0	0.01	0.01	0.01	103.2	105	1.8	0
TOLUENE	0	0	0	0.01	0.01	0.01	108.6	108.2	0.4	0
ETHYLBENZENE	0	0	0	0.01	0.01	0.01	1142.0	104.4	9.8	0
XYLENES	0	0	0	0.03	0.03	0.03	95.5	96.099	0.6	0
CHLOROBENZENE										
1,2-DICHLOROBENZENE										
1,3-DICHLOROBENZENE										
1,4-DICHLOROBENZENE										
AVERAGE			0				105.4	103.4	2	

SR------ SAMPLE
SR1---- SAMPLE DUPLICATE
RPD--- RELATIVE PERCENT DIFFERENCE
S.A.--- ANALYTE SPIKE IN SAMPLE MATRIX
SSR---- SPIKE RECOVERED AND SAMPLE 'SR'
SSR1--- SPIKE RECOVERED AND SAMPLE 'SR1'
%RE--- PERCENT RECOVERY OF SPIKE IN 'SR'
%RE1-- PERCENT RECOVERY OF SPIKE IN 'SR1'
BLK---- ANALYTE CONCENTRATION DETECTED IN LAB BLANK
99%---- UPPER/LOWER CONTROL LIMIT
95%---- UPPER/LOWER WARNING LIMIT
s------- STANDARD DEVIATION
2s------ 2 x STANDARD DEVIATION (WARNING LIMIT)
3s------ 3 x STANDARD DEVIATION (CONTROL LIMIT)
MEAN-- TIME WEIGHTED AVERAGE OF SPIKE RECOVERY

SURROGATE SPIKE DATE
BENZENYL FLUORIDE SPIKE CONCENTRATION OF
WITH A RECOVERY OF
BENZENYL FLUORIDE RECOVERY LIMITS OF TO

PASS / NO PASS Pass DATE TYPED Mar 18 1993 A133201

ACTION TAKEN

SPIKE SOURCE EPA Repository Dil. STANDARD LOT NO. BTX 102092

ANALYST Quat Do QA / QC COMPILER Mgr

ASSOCIATED LABORATORIES

• COMMITMENT TO QUALITY •

QUALITY CONTROL /QUALITY ASSURANCE REPORT G49591

QA/QC CONTROL NO. G49572-3 INSTRUMENT LOGBOOK PT #3

DATE G49572-3 ANALYZED Mar 16 1993 I.L.B. PAGE LOCATION 264

DATE G49591 ANALYZED Mar 16 1993 SAMPLE LOG PAGE LOCATION 6

EPA 8020 REPORTING UNITS mg/l SAMPLE MATRIX water

COMPOUND	*SR*	*SR1*	*RPD*	*S.A.*	*SSR*	*SSR1*	*%RE*	*%RE1*	*RPD*	*BLK*
BENZENE	*0*	*0*	*0*	*0.01*	*0.01*	*0.01*	*100.4*	*103.2*	*2.8*	*0*
TOLUENE	*0*	*0*	*0*	*0.01*	*0.01*	*0.01*	*102.6*	*108.6*	*2*	*0*
ETHYLBENZENE	*0*	*0*	*0*	*0.01*	*0.01*	*0.01*	*110.0*	*114.2*	*4.2*	*0*
XYLENES	*0*	*0*	*0*	*0.03*	*0.03*	*0.03*	*92.3*	*95.5*	*3.2*	*0*
CHLOROBENZENE										
1,2-DICHLOROBENZENE										
1,3-DICHLOROBENZENE										
1,4-DICHLOROBENZENE										
AVERAGE			*0*				*101.3*	*105.4*	*4.1*	

SR------ SAMPLE
SR1----- SAMPLE DUPLICATE
RPD---- RELATIVE PERCENT DIFFERENCE
S.A.---- ANALYTE SPIKE IN SAMPLE MATRIX
SSR----- SPIKE RECOVERED AND SAMPLE 'SR'
SSR1---- SPIKE RECOVERED AND SAMPLE 'SR1'
%RE---- PERCENT RECOVERY OF SPIKE IN 'SR'
%RE1--- PERCENT RECOVERY OF SPIKE IN 'SR1'
BLK---- ANALYTE CONCENTRATION DETECTED IN LAB BLANK
99%---- UPPER/LOWER CONTROL LIMIT
95%---- UPPER/LOWER WARNING LIMIT
s-------- STANDARD DEVIATION
2s------- 2 x STANDARD DEVIATION (WARNING LIMIT)
3s------- 3 x STANDARD DEVIATION (CONTROL LIMIT)
MEAN-- TIME WEIGHTED AVERAGE OF SPIKE RECOVERY

SURROGATE SPIKE DATE
BENZENYL FLUORIDE SPIKE CONCENTRATION OF
WITH A RECOVERY OF
BENZENYL FLUORIDE RECOVERY LIMITS OF TO

PASS / NO PASS _____ DATE TYPED Mar 18 1993 A133201

ACTION TAKEN _____

SPIKE SOURCE EPA Repository Dil. STANDARD LOT NO. BTX 102092

ANALYST Quat Do QA / QC COMPILER _____

ASSOCIATED LABORATORIES

" COMMITMENT TO QUALITY "

QUALITY CONTROL /QUALITY ASSURANCE REPORT G49591

QA/QC CONTROL NO. G49572-3 INSTRUMENT LOGBOOK PT #3

DATE G49572-3 ANALYZED Mar 16 1993 I.L.B. PAGE LOCATION 264

DATE G49591 ANALYZED Mar 16 1993 SAMPLE LOG PAGE LOCATION 6

EPA 8015M/D.H.S. L.U.F.T. REPORTING UNITS mg/l SAMPLE MATRIX water

COMPOUND	*SR*	*SR1*	*RPD*	*S.A.*	*SSR*	*SSR1*	*%RE*	*%RE1*	*RPD*	*BLK*
GASOLINE	*0*	*0*	*0*	*0.4*	*0.4114*	*0.3795*	*102.9*	*94.9*	*8*	*0*
DIESEL										
AVERAGE			*0*				*102.9*	*94.9*	*8*	

X *O*

SR------ SAMPLE
SR1----- SAMPLE DUPLICATE
RPD---- RELATIVE PERCENT DIFFERENCE
S.A.---- ANALYTE SPIKE IN SAMPLE MATRIX
SSR----- SPIKE RECOVERED AND SAMPLE 'SR'
SSR1---- SPIKE RECOVERED AND SAMPLE 'SR1'
%RE---- PERCENT RECOVERY OF SPIKE IN 'SR'
%RE1--- PERCENT RECOVERY OF SPIKE IN 'SR1'
BLK----- ANALYTE CONCENTRATION DETECTED IN LAB BLANK
99%----- UPPER/LOWER CONTROL LIMIT
95%----- UPPER/LOWER WARNING LIMIT
s------- STANDARD DEVIATION
2s------- 2 x STANDARD DEVIATION (WARNING LIMIT)
3s------- 3 x STANDARD DEVIATION (CONTROL LIMIT)
MEAN-- TIME WEIGHTED AVERAGE OF SPIKE RECOVERY

SURROGATE SPIKE DATE
BENZENYL FLUORIDE SPIKE CONCENTRATION OF
WITH A RECOVERY OF
BENZENYL FLUORIDE RECOVERY LIMITS OF TO

PASS / NO PASS DATE TYPED Mar 18 1993 B133201

ACTION TAKEN

SPIKE SOURCE SH-R STANDARD LOT NO. Gas 042092

ANALYST Quat Do QA / QC COMPILER

ASSOCIATED LABORATORIES

• COMMITMENT TO QUALITY •

QUALITY CONTROL /QUALITY ASSURANCE REPORT G49591

QA/QC CONTROL NO. G49591-7 INSTRUMENT LOGBOOK PT #3

DATE G49591-7 ANALYZED Mar 16 1993 I.L.B. PAGE LOCATION 264

DATE G49591 ANALYZED Mar 16 1993 SAMPLE LOG PAGE LOCATION 8

EPA 8015M/D.H.S. L.U.F.T. REPORTING UNITS mg/l SAMPLE MATRIX water

COMPOUND	SR	SR1	RPD	S.A.	SSR	SSR1	%RE	%RE1	RPD	BLK
GASOLINE	0	0	0	0.4	0.3795	0.3547	94.9	88.7	6.2	0
DIESEL										
AVERAGE			0				94.9	88.7	6.2	

X O

SR------- SAMPLE
SR1----- SAMPLE DUPLICATE
RPD---- RELATIVE PERCENT DIFFERENCE
S.A.---- ANALYTE SPIKE IN SAMPLE MATRIX
SSR----- SPIKE RECOVERED AND SAMPLE 'SR'
SSR1---- SPIKE RECOVERED AND SAMPLE 'SR1'
%RE---- PERCENT RECOVERY OF SPIKE IN 'SR'
%RE1--- PERCENT RECOVERY OF SPIKE IN 'SR1'
BLK----- ANALYTE CONCENTRATION DETECTED IN LAB BLANK
99%----- UPPER/LOWER CONTROL LIMIT
95%----- UPPER/LOWER WARNING LIMIT
s-------- STANDARD DEVIATION
2s------- 2 x STANDARD DEVIATION (WARNING LIMIT)
3s------- 3 x STANDARD DEVIATION (CONTROL LIMIT)
MEAN-- TIME WEIGHTED AVERAGE OF SPIKE RECOVERY

SURROGATE SPIKE DATE
BENZENYL FLUORIDE SPIKE CONCENTRATION OF
WITH A RECOVERY OF
BENZENYL FLUORIDE RECOVERY LIMITS OF TO

PASS / NO PASS Pass DATE TYPED Mar 18 1993 B133201

ACTION TAKEN

SPIKE SOURCE SH-R STANDARD LOT NO. Gas 042092

ANALYST Quat Do QA / QC COMPILER

8301 W. COMMONWEALTH AVE.
BUENA PARK, CALIFORNIA 90621

UNDERGROUND WaynePerry CONSTRUCTION INC. SPECIALISTS

C.S.C. LIC. 300345
E.P.A. CAD 053841102

(714)826-0352

CHAIN-OF-CUSTODY RECORD

CLIENT: Pomona Box

PROJECT NO. 88.3 x

SITE ADDRESS: Furpoial Hwy

LABORATORY: ASSOCIATED

SAMPLED BY: Jorge Gonzalez

LOC. WIC. #

ENGINEER:

RESULTS BY: 1 week

STATION NUMBER	DEPTH	LOCATION DESCRIPTION	DATE	TIME	SAMPLE TYPE SOIL	WATER	AIR	NUMBER OF CONTAINERS	TEST REQUIRED
		B-1	3-15-93			✓		3	602, 8015
		B-2	3-15-93			✓		3	602, 8015
		B-3	3-15-93			✓		3	602, 8015
		B-4	3-15-93			✓		3	602, 8015
		B-6	3-15-93			✓		3	602, 8015
		B-7	3-15-93			✓		3	602, 8015
		B-8	3-15-93			✓		3	602, 8015
		B-9	3-15-93			✓		3	602, 8015
		B-10	3-15-93			✓		3	602, 8015
		Trip Blank	3-15-93			✓		3	602, 8015
		Duplicate	3-15-93			✓		3	602, 8015

RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:
Jorge Gonzalez	[illegible]	3-16-93	10:30
RELINQUISHED BY: [illegible]	RECEIVED BY: [illegible]	DATE: 3/16/93	TIME: 10:55
RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:
RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:

8301 W. COMMONWEALTH AVE.
BUENA PARK, CALIFORNIA 90621

WaynePerry UNDERGROUND CONSTRUCTION INC SPECIALISTS

C.S.C. LIC. 300345
E.P.A. CAD 053841102

(714)826-0352

CHAIN-OF-CUSTODY RECORD

CLIENT: Pomona Box	PROJECT NO. 88.3A
SITE ADDRESS: Imperial Hwy	LABORATORY: Associated
	SAMPLED BY: Jorge Gonzalez
LOC. WIC. # ENGINEER:	RESULTS BY: 1 week

STATION NUMBER	DEPTH	LOCATION DESCRIPTION	DATE	TIME	SAMPLE TYPE SOIL	WATER	AIR	NUMBER OF CONTAINERS	TEST REQUIRED
		B-1	3-15-93			✓		3	602, 8015
		B-2	3-15-93			✓		3	602, 8015
		B-3	3-15-93			✓		3	602, 8015
		B-4	3-15-93			✓		3	602, 8015
		B-6	3-15-93			✓		3	602, 8015
		B-7	3-15-93			✓		3	602, 8015
		B-8	3-15-93			✓		3	602, 8015
		B-9	3-15-93			✓		3	602, 8015
		B-10	3-15-93			✓		3	602, 8015
		Trip Blank	3-15-93			✓		3	602, 8015
		Duplicate	3-15-93			✓		3	602, 8015

RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:
Jorge Gonzalez	[illegible]	3-16-93	10:30
RELINQUISHED BY: [illegible]	RECEIVED BY: [illegible]	DATE: 3/16/93	TIME: 10:5
RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:
RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:

omona Box
8.3x Imperial Hwy

Field Temperature, Conductivity, pH
urbidity, and Dissolved Oxygen Data Sheet

Date	Well	Casing Volume	Casing Vol 1	Casing Vol 2	Casing Vol 3	Casing Vol 4	Sample	Comments
3/15/93	B-7							
		58.5	19.5	19.5	19.5			
Temperature			75	74	74			
onductivity			1.60	1.60	1.60			
H			6.90	6.90	7.00			
Turbidity							4.57	
issolved Oxygen								
3/15/93	B-9							
		20	10	10				Well dry after second casing volume
Temperature			74	74				
onductivity			2.20	2.3				
H			6.9	6.9				
Turbidity							5.88	
issolved Oxygen								
3/15/93	B-8							
		54	18	18	18			
Temperature			74	74	74			
onductivity			1.70	1.90	2.10			
H			7.1	6.9	6.9			
Turbidity							1.91	
issolved Oxygen								

Pomona Box
38.3x Imperial Hwy.

Field Temperature, Conductivity, pH
Turbidity, and Dissolved Oxygen Data Sheet

Date	Well	Casing Volume	Casing Vol 1	Casing Vol 2	Casing Vol 3	Casing Vol 4	Sample	Comments
03/15/93	B-10							
		21	10.5	10.5				Well dry after second casing volume
Temperature			74	74				
Conductivity			2.30	2.60				
pH			6.70	6.40				
Turbidity								
Dissolved Oxygen							4.61	
03/15/93	B-6							
		46.5	15.5	15.5	15.5			
Temperature			73	73	73			
Conductivity			2.40	2.30	2.30			
pH			6.8	6.8	6.8			
Turbidity								
Dissolved Oxygen							19.1	
03/15/93	B-1							
		21	7	7	7			
Temperature			70	70	70			
Conductivity			1.60	2.20	2.20			
pH			6.9	6.9	7.0			
Turbidity								
Dissolved Oxygen							13.1	

Pomona Box
38.3x Imperial Hwy.

Field Temperature, Conductivity, pH
Turbidity, and Dissolved Oxygen Data Sheet

Date	Well	Casing Volume	Casing Vol 1	Casing Vol 2	Casing Vol 3	Casing Vol 4	Sample	Comments
03/15/93	B-4							
		42	14	14	14			
Temperature			69	68	69			
Conductivity			2.20	2.30	2.40			
pH			6.90	6.90	6.90			
Turbidity								
Dissolved Oxygen							5.12	
03/15/93	B-3							
		21	7	7	7			
Temperature			68	68	68			
Conductivity			0.70	1.10	1.60			
pH			7.1	7.0	7.0			
Turbidity								
Dissolved Oxygen							7.97	
03/15/93	B-2							
		19.5	6.5	6.5	6.5			
Temperature			68	69	69			
Conductivity			2.20	2.30	2.30			
pH			6.9	6.9	6.9			
Turbidity								
Dissolved Oxygen							9.32	

Pomona Box Company
Project No. 88.03

APPENDIX C
Gauging and Survey Data

Pomona Box
.003 W. Imperial Hwy (La Habra) 1988 - 1993

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING	DEPTH OF WELL	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
		0.00	0.000	0.00	0.00								
01/05/88	B-01					261.04							Interface probe not worki
01/12/88	B-01	14.80	0.000	14.80	246.24	261.04	22.08						
01/22/88	B-01	14.80	0.000	14.80	246.24	261.04	22.20						
02/04/88	B-01	14.75	0.000	14.75	246.29	261.04	21.65						
02/23/88	B-01	14.79	0.000	14.79	246.25	261.04	21.65						
05/23/88	B-01	14.65	0.000	14.65	246.39	261.04							
06/13/88	B-01	14.62	0.000	14.62	246.42	261.04							
06/30/88	B-01	14.63	0.000	14.63	246.41	261.04							
07/13/88	B-01	14.60	0.000	14.60	246.44	261.04							
07/21/88	B-01	14.60	0.000	14.60	246.44	261.04							
08/01/88	B-01	14.55	0.000	14.55	246.49	261.04							
08/09/88	B-01	14.61	0.000	14.61	246.43	261.04							
08/16/88	B-01	14.61	0.000	14.61	246.43	261.04							
09/01/88	B-01	14.65	0.000	14.65	246.39	261.04							
09/07/88	B-01	14.64	0.000	14.64	246.40	261.04							
09/13/88	B-01	14.69	0.000	14.69	246.35	261.04							
09/27/88	B-01	14.72	0.000	14.72	246.32	261.04							
10/05/88	B-01	14.74	0.000	14.74	246.30	261.04							
10/07/88	B-01					261.04							
10/13/88	B-01	14.73	0.000	14.73	246.31	261.04							
10/18/88	B-01	14.74	0.000	14.74	246.30	261.04							
10/26/88	B-01	14.73	0.000	14.73	246.31	261.04							
11/04/88	B-01	14.76	0.000	14.76	246.28	261.04							
11/08/88	B-01	14.75	0.000	14.75	246.29	261.04							
11/17/88	B-01	14.72	0.000	14.72	246.32	261.04							
11/23/88	B-01	14.73	0.000	14.73	246.31	261.04							
12/08/88	B-01	15.37	0.000	15.37	245.67	261.04							
12/14/88	B-01	15.11	0.000	15.11	245.93	261.04	23.9						
12/20/88	B-01	14.60	0.000	14.60	246.44	261.04							
01/05/89	B-01	14.60	0.000	14.60	246.44	261.04							
01/11/89	B-01	14.51	0.000	14.51	246.53	261.04							
01/20/89	B-01	14.57	0.000	14.57	246.47	261.04							
01/25/89	B-01	14.63	0.000	14.63	246.41	261.04							
02/20/89	B-01	14.49	0.000	14.49	246.55	261.04							
03/15/89	B-01	14.50	0.000	14.50	246.54	261.04							
03/27/89	B-01	14.50	0.000	14.50	246.54	261.04							
04/19/89	B-01	14.50	0.000	14.50	246.54	261.04							
05/11/89	B-01	14.53	0.000	14.53	246.51	261.04							
05/25/89	B-01	14.56	0.000	14.56	246.48	261.04							
06/12/89	B-01	14.55	0.000	14.55	246.49	261.04							
06/22/89	B-01	14.56	0.000	14.56	246.48	261.04							
07/12/89	B-01	14.60	0.000	14.60	246.44	261.04							
08/09/89	B-01	14.62	0.000	14.62	246.42	261.04							
08/21/89	B-01	14.60	0.000	14.60	246.44	261.04							
09/08/89	B-01	14.67	0.000	14.67	246.37	261.04							
09/22/89	B-01	14.61	0.000	14.61	246.43	261.04							
10/09/89	B-01	14.67	0.000	14.67	246.37	261.04							

Pomona Box
.003 W. Imperial Hwy (La Habra) 1988 - 1993

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING	DEPTH OF WELL	TOTAL HYDRO-CARBONS (mg/L)	BENZENE	TOLUENE	ETHYL BENZENE	XYLENE	COMMENTS
		0.00	0.000	0.00	0.00								
10/20/89	B-01	14.68	0.000	14.68	246.36	261.04							
11/08/89	B-01	14.70	0.005	14.70	246.34	261.04							
12/01/89	B-01	14.74	0.000	14.74	246.30	261.04							
12/15/89	B-01	14.77	0.000	14.77	246.27	261.04							
12/29/89	B-01	14.78	0.005	14.78	246.26	261.04							
01/11/90	B-01	14.78	0.005	14.78	246.26	261.04							
02/16/90	B-01	14.74	0.000	14.74	246.30	261.04							
03/02/90	B-01	14.52	0.000	14.52	246.52	261.04							
03/14/90	B-01	14.62	0.000	14.62	246.42	261.04							
03/28/90	B-01	14.65	0.000	14.65	246.39	261.04							
04/13/90	B-01	14.67	0.000	14.67	246.37	261.04							
04/27/90	B-01	14.68	0.000	14.68	246.36	261.04	22.09						
05/17/90	B-01	14.70	0.000	14.70	246.34	261.04							
06/01/90	B-01	14.62	0.000	14.62	246.42	261.04							
06/21/90	B-01					261.04							
07/17/90	B-01	14.74	0.000	14.74	246.30	261.04							
08/20/90	B-01	14.73	0.000	14.73	246.31	261.04							
09/13/90	B-01	14.76	0.000	14.76	246.28	261.04							
09/28/90	B-01	14.74	0.005	14.74	246.30	261.04							
10/12/90	B-01	14.80	0.000	14.80	246.24	261.04							
10/26/90	B-01	14.78	0.000	14.78	246.26	261.04							
11/28/90	B-01	14.87	0.005	14.87	246.18	261.04							
12/12/90	B-01	14.88	0.005	14.88	246.16	261.04							
01/09/91	B-01	14.71	0.000	14.71	246.33	261.04							
01/18/91	B-01	14.79	0.000	14.79	246.25	261.04	22.15						
02/08/91	B-01	14.87	0.000	14.87	246.17	261.04							
03/04/91	B-01	14.28	0.000	14.28	246.76	261.04							
04/16/91	B-01	14.31	0.000	14.31	246.73	261.04	22.53						
05/23/91	B-01	14.45	0.000	14.45	246.59	261.04							
07/16/91	B-01	14.53	0.000	14.53	246.51	261.04	30.24						
07/19/91	B-01	14.53	0.000	14.53	246.51	261.04	22.22						
07/29/91	B-01	14.51	0.000	14.51	246.53	261.04	22.31						
09/04/91	B-01	14.60	0.000	14.60	246.44	261.04	22.38						Product while bailing
09/25/91	B-01	14.66	0.000	14.66	246.38	261.04	22.54						
10/15/91	B-01	14.67	0.000	14.67	246.37	261.04	22.31						Product while bailing
11/13/91	B-01	14.96	0.005	14.96	246.08	261.04							
12/04/91	B-01	14.99	0.005	14.99	246.05	261.04							
01/30/92	B-01	14.87	0.005	14.87	246.17	261.04	23.45						
04/21/92	B-01	14.02	0.005	14.02	247.02	261.04	23.25						
04/30/92	B-01	14.08	0.005	14.08	246.96	261.04	22.57						
07/02/92	B-01	14.14	0.005	14.14	246.90	261.04	23.45						
10/13/92	B-01	14.22	0.005	14.22	246.82	261.04	23.50						
03/15/93	B-01	12.24	0.000	12.24	248.80	261.04	23.44	27	5.4	1.7	0.7	2.6	
01/05/88	B-02			14.75		261.03							reading product
01/12/88	B-02	14.69	0.125	14.56	246.44	261.03	22.95						
01/22/88	B-02	14.77	0.167	14.60	246.39	261.03	23.43						
02/04/88	B-02	14.80	0.104	14.70	246.30	261.03	22.35						

Pomona Box
.003 W. Imperial Hwy (La Habra) 1988 - 1993

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING	DEPTH OF WELL	TOTAL HYDRO-CARBONS	BENZENE	TOLUENE	ETHYL BENZENE	XYLENE	COMMENTS
								(mg/L)					
		0.00	0.000	0.00	0.00								
02/23/88	B-02	14.86	0.125	14.73	246.27	261.03	2.35						
05/23/88	B-02	14.73	0.000	14.73	246.30	261.03							
06/13/88	B-02	14.75	0.100	14.65	246.35	261.03							
06/30/88	B-02	14.68	0.000	14.68	246.35	261.03							
07/13/88	B-02	14.65	0.010	14.64	246.39	261.03							
07/21/88	B-02	14.65	0.000	14.65	246.38	261.03							
08/01/88	B-02	14.63	0.000	14.63	246.40	261.03							
08/09/88	B-02	14.68	0.000	14.68	246.35	261.03							
08/16/88	B-02	14.66	0.000	14.66	246.37	261.03							
09/01/88	B-02	15.20	0.000	15.20	245.83	261.03							
09/07/88	B-02	14.52	0.000	14.52	246.51	261.03							
09/13/88	B-02	14.72	0.000	14.72	246.31	261.03							
09/27/88	B-02	14.75	0.000	14.75	246.28	261.03							
10/05/88	B-02	14.68	0.000	14.68	246.35	261.03							
10/07/88	B-02					261.03							
10/13/88	B-02	14.77	0.000	14.77	246.26	261.03							
10/18/88	B-02	14.78	0.000	14.78	246.25	261.03							
10/26/88	B-02	14.78	0.000	14.78	246.25	261.03							
11/04/88	B-02	14.83	0.000	14.83	246.20	261.03							
11/08/88	B-02	14.80	0.000	14.80	246.23	261.03							
11/17/88	B-02	14.77	0.000	14.77	246.26	261.03							
11/23/88	B-02	14.77	0.000	14.77	246.26	261.03							
12/08/88	B-02	15.20	0.000	15.20	245.83	261.03							
12/14/88	B-02	14.84	0.000	14.84	246.19	261.03	23.1						
12/20/88	B-02					261.03							
01/05/89	B-02	14.55	0.000	14.55	246.48	261.03							
01/11/89	B-02	14.57	0.000	14.57	246.46	261.03							
01/20/89	B-02	14.62	0.000	14.62	246.41	261.03							
01/25/89	B-02	14.68	0.000	14.68	246.35	261.03							
02/20/89	B-02	14.56	0.000	14.56	246.47	261.03							
03/15/89	B-02	14.55	0.000	14.55	246.48	261.03							
03/27/89	B-02	14.55	0.000	14.55	246.48	261.03							
04/19/89	B-02	14.57	0.000	14.57	246.46	261.03							
05/11/89	B-02	14.60	0.000	14.60	246.43	261.03							
05/25/89	B-02	14.60	0.000	14.60	246.43	261.03							
06/12/89	B-02	14.59	0.000	14.59	246.44	261.03							
06/22/89	B-02	14.75	0.000	14.75	246.28	261.03							
07/12/89	B-02	14.64	0.000	14.64	246.39	261.03							
08/09/89	B-02	14.69	0.000	14.69	246.34	261.03							
08/21/89	B-02	14.66	0.000	14.66	246.37	261.03							
09/08/89	B-02	14.68	0.000	14.68	246.35	261.03							
09/22/89	B-02	14.65	0.000	14.65	246.38	261.03							
10/09/89	B-02	14.73	0.005	14.73	246.30	261.03							
10/20/89	B-02	14.70	0.000	14.70	246.33	261.03							
11/08/89	B-02	14.75	0.005	14.75	246.28	261.03							
12/01/89	B-02	14.79	0.000	14.79	246.24	261.03							
12/15/89	B-02	14.81	0.005	14.81	246.22	261.03							
12/29/89	B-02	14.84	0.005	14.84	246.19	261.03							

Pomona Box
.003 W. Imperial Hwy (La Habra) 1988 - 1993

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING	DEPTH OF WELL	TOTAL HYDRO-CARBONS	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
		0.00	0.000	0.00	0.00								
01/11/90	B-02	14.83	0.000	14.83	246.20	261.03							
02/16/90	B-02	14.79	0.000	14.79	246.24	261.03							
03/02/90	B-02	15.57	0.000	14.57	245.46	261.03							
03/14/90	B-02	14.69	0.000	14.69	246.34	261.03							
03/28/90	B-02	14.69	0.000	14.69	246.34	261.03							
04/13/90	B-02	14.64	0.000	14.64	246.39	261.03							
04/27/90	B-02	14.73	0.000	14.73	246.30	261.03	22.27						
05/17/90	B-02	14.74	0.000	14.74	246.29	261.03							
06/01/90	B-02	14.64	0.000	14.64	246.39	261.03							
06/21/90	B-02	14.73	0.000	14.73	246.30	261.03							
07/17/90	B-02	14.80	0.000	14.80	246.23	261.03							
08/20/90	B-02	14.76	0.000	14.76	246.27	261.03							
09/13/90	B-02	14.80	0.000	14.80	246.23	261.03							
09/28/90	B-02	14.80	0.005	14.80	246.23	261.03							
10/12/90	B-02	14.84	0.000	14.84	246.19	261.03							
10/26/90	B-02	14.82	0.000	14.82	246.21	261.03							
11/28/90	B-02	14.91	0.005	14.91	246.12	261.03							
12/12/90	B-02	14.92	0.005	14.91	246.12	261.03							
01/09/91	B-02	14.76	0.005	14.76	246.27	261.03							
01/18/91	B-02	14.85	0.000	14.85	246.18	261.03	22.87						
02/08/91	B-02	14.91	0.000	14.91	246.12	261.03							
03/04/91	B-02	14.30	0.000	14.30	246.73	261.03							
04/16/91	B-02	14.37	0.000	14.37	246.66	261.03	23.36						
05/23/91	B-02	14.49	0.005	14.49	246.54	261.03							
07/16/91	B-02	14.58	0.000	14.58	246.45	261.03	30.88						
07/19/91	B-02	14.57	0.000	14.57	246.46	261.03	23.05						
07/29/91	B-02	14.56	0.000	14.56	246.47	261.03	23.29						
09/04/91	B-02	14.66	0.000	14.66	246.37	261.03	22.55						Product while bailing
09/25/91	B-02	14.70	0.000	14.70	246.33	261.03	23.45						
10/15/91	B-02	14.72	0.000	14.72	246.31	261.03	23.10						Product while bailing
11/13/91	B-02	15.00	0.005	15.00	246.03	261.03							
12/04/91	B-02	15.03	0.005	15.03	246.00	261.03							
01/30/92	B-02	14.91	0.005	14.91	246.12	261.03	23.37						
04/21/92	B-02	14.08	0.005	14.08	246.95	261.03	22.30						
04/30/92	B-02	14.14	0.000	14.14	246.89	261.03	21.74						
07/02/92	B-02	14.20	0.005	14.20	246.83	261.03	22.61						
10/13/92	B-02	14.41	0.000	14.41	246.62	261.03	22.55						
03/15/93	B-02	12.37	0.000	12.37	248.66	261.03	22.47	31	5.5	4.7	0.9	3.3	
01/05/88	B-03			11.65		260.89							thickness
01/12/88	B-03	14.56	0.000	14.56	246.33	260.89	23.00						
01/22/88	B-03	14.40	0.000	14.40	246.49	260.89	23.13						
02/04/88	B-03	14.50	0.000	14.50	246.39	260.89	23.01						
02/23/88	B-03	14.56	0.000	14.56	246.33	260.89	23.01						
05/23/88	B-03	14.47	0.000	14.47	246.42	260.89							
06/13/88	B-03	14.46	0.000	14.46	246.43	260.89							
06/30/88	B-03	14.47	0.000	14.47	246.42	260.89							
07/13/88	B-03	14.42	0.000	14.42	246.47	260.89							

Pomona Box
.003 W. Imperial Hwy (La Habra) 1988 - 1993

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING	DEPTH OF WELL	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
		0.00	0.000	0.00	0.00								
07/21/88	B-03	14.43	0.000	14.43	246.46	260.89							
08/01/88	B-03	14.40	0.000	14.40	246.49	260.89							
08/09/88	B-03	14.45	0.000	14.45	246.44	260.89							
08/16/88	B-03	14.45	0.000	14.45	246.44	260.89							
09/01/88	B-03	14.50	0.000	14.50	246.39	260.89							
09/07/88	B-03	15.18	0.000	15.18	245.71	260.89							
09/13/88	B-03	14.50	0.000	14.50	246.39	260.89							
09/27/88	B-03	14.52	0.000	14.52	246.37	260.89							
10/05/88	B-03	14.52	0.000	14.52	246.37	260.89							
10/07/88	B-03					260.89							
10/13/88	B-03	14.59	0.000	14.59	246.30	260.89							
10/18/88	B-03	14.63	0.000	14.63	246.26	260.89							
10/26/88	B-03	14.58	0.000	14.58	246.31	260.89							
11/04/88	B-03	14.64	0.000	14.64	246.25	260.89							
11/08/88	B-03	14.58	0.000	14.58	246.31	260.89							
11/17/88	B-03	14.54	0.000	14.54	246.35	260.89							
11/23/88	B-03	14.57	0.000	14.57	246.32	260.89							
12/08/88	B-03	14.82	0.000	14.82	246.07	260.89							
12/14/88	B-03	14.65	0.000	14.65	246.24	260.89	23.1						
12/20/88	B-03	14.45	0.000	14.45	246.44	260.89							
01/05/89	B-03	14.50	0.000	14.50	246.39	260.89							
01/11/89	B-03	14.33	0.000	14.33	246.56	260.89							
01/20/89	B-03	14.40	0.000	14.40	246.49	260.89							
01/25/89	B-03	14.45	0.000	14.45	246.44	260.89							
02/20/89	B-03	14.35	0.000	14.35	246.54	260.89							
03/15/89	B-03	14.35	0.000	14.35	246.54	260.89							
03/27/89	B-03	14.31	0.000	14.31	246.58	260.89							
04/19/89	B-03	14.35	0.000	14.35	246.54	260.89							
05/11/89	B-03	14.39	0.000	14.39	246.50	260.89							
05/25/89	B-03	14.37	0.000	14.37	246.52	260.89							
06/12/89	B-03	14.38	0.000	14.38	246.51	260.89							
06/22/89	B-03	14.40	0.000	14.40	246.49	260.89							
07/12/89	B-03	14.41	0.000	14.41	246.48	260.89							
08/09/89	B-03	14.46	0.000	14.46	246.43	260.89							
08/21/89	B-03	14.45	0.000	14.45	246.44	260.89							
09/08/89	B-03	14.47	0.000	14.47	246.42	260.89							
09/22/89	B-03	14.44	0.005	14.44	246.45	260.89							
10/09/89	B-03	14.52	0.000	14.52	246.37	260.89							
10/20/89	B-03	14.50	0.000	14.50	246.39	260.89							
11/08/89	B-03	14.53	0.000	14.53	246.36	260.89							
12/01/89	B-03	14.59	0.000	14.59	246.30	260.89							
12/15/89	B-03	14.59	0.000	14.59	246.30	260.89							
12/29/89	B-03	14.62	0.000	14.62	246.27	260.89							
01/11/90	B-03	14.62	0.005	14.62	246.27	260.89							
02/16/90	B-03	14.57	0.000	14.57	246.32	260.89							
03/02/90	B-03	14.35	0.000	14.35	246.54	260.89							
03/14/90	B-03	14.46	0.000	14.46	246.43	260.89							
03/28/90	B-03	14.46	0.000	14.46	246.43	260.89							

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DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING	DEPTH OF WELL	TOTAL HYDRO-CARBONS	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
		0.00	0.000	0.00	0.00								
04/13/90	B-03	14.49	0.000	14.49	246.40	260.89							
04/27/90	B-03	14.51	0.000	14.51	246.38	260.89	22.28						
05/17/90	B-03	14.54	0.000	14.54	246.35	260.89							
06/01/90	B-03	14.45	0.000	14.45	246.44	260.89							
06/21/90	B-03	14.53	0.000	14.53	246.36	260.89							
07/17/90	B-03	14.59	0.000	14.59	246.30	260.89							
08/20/90	B-03	14.56	0.000	14.56	246.33	260.89							
09/13/90	B-03	14.59	0.000	14.59	246.30	260.89							
09/28/90	B-03	14.58	0.000	14.58	246.31	260.89							
10/12/90	B-03	14.63	0.000	14.63	246.26	260.89							
10/26/90	B-03	14.61	0.000	14.61	246.28	260.89							
11/28/90	B-03	14.70	0.000	14.70	246.19	260.89							
12/12/90	B-03	14.70	0.000	14.70	246.19	260.89							
01/09/91	B-03	14.36	0.000	14.36	246.54	260.89							
01/18/91	B-03	14.64	0.000	14.64	246.25	260.89	22.92						
02/08/91	B-03	14.70	0.000	14.70	246.19	260.89							
03/04/91	B-03	14.09	0.000	14.09	246.80	260.89							
04/16/91	B-03	14.17	0.000	14.17	246.72	260.89	23.35						
05/23/91	B-03	14.28	0.000	14.28	246.61	260.89							
07/16/91	B-03	14.37	0.000	14.37	246.52	260.89	30.56						
07/19/91	B-03	14.35	0.000	14.35	246.54	260.89	23.04						
07/29/91	B-03	14.35	0.000	14.35	246.54	260.89	23.02						
09/04/91	B-03	14.45	0.000	14.45	246.44	260.89	23.09						Product while bailing
09/25/91	B-03	14.50	0.000	14.50	246.39	260.89	23.26						
10/15/91	B-03	14.51	0.000	14.51	246.38	260.89	23.16						Product while bailing
11/13/91	B-03	14.80	0.005	14.80	246.10	260.89							
12/04/91	B-03	14.83	0.010	14.82	246.07	260.89							
01/30/92	B-03	14.72	0.005	14.72	246.17	260.89	23.20						
04/21/92	B-03	13.87	0.005	13.87	247.02	260.89	23.00						
04/30/92	B-03	13.93	0.000	13.93	246.96	260.89	22.30						
07/02/92	B-03	14.00	0.005	14.00	246.89	260.89	23.20						
10/13/92	B-03	14.21	0.000	14.21	246.68	260.89	23.17						
03/15/93	B-03	12.19	0.000	12.19	248.70	260.89	23.19	7.5	0.2	0.2	0.4	0.6	
01/05/88	B-04					261.56							
01/12/88	B-04	15.19	0.000	15.19	246.37	261.56	35.04						
01/22/88	B-04	15.11	0.000	15.11	246.45	261.56	35.10						
02/04/88	B-04	15.20	0.000	15.20	246.36	261.56	35.00						
02/23/88	B-04	15.36	0.000	15.36	246.20	261.56	35.00						
05/23/88	B-04	15.17	0.000	15.17	246.39	261.56							
06/13/88	B-04	15.20	0.000	15.20	246.36	261.56							
06/30/88	B-04	15.17	0.000	15.17	246.39	261.56							
07/13/88	B-04	15.11	0.000	15.11	246.45	261.56							
07/21/88	B-04	15.13	0.000	15.13	246.43	261.56							
08/01/88	B-04	15.12	0.000	15.12	246.44	261.56							
08/09/88	B-04	15.15	0.000	15.15	246.41	261.56							
08/16/88	B-04	15.14	0.000	15.14	246.42	261.56							
09/01/88	B-04	15.20	0.000	15.20	246.36	261.56							

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DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING	DEPTH OF WELL	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
		0.00	0.000	0.00	0.00								
09/07/88	B-04	14.62	0.000	14.62	246.94	261.56							
09/13/88	B-04	15.20	0.000	15.20	246.36	261.56							
09/27/88	B-04	15.23	0.000	15.23	246.33	261.56							
10/05/88	B-04	15.18	0.000	15.18	246.38	261.56							
10/07/88	B-04					261.56							
10/13/88	B-04	15.26	0.000	15.26	246.30	261.56							
10/18/88	B-04	15.27	0.000	15.27	246.29	261.56							
10/26/88	B-04	15.25	0.000	15.25	246.31	261.56							
11/04/88	B-04	15.30	0.000	15.30	246.26	261.56							
11/08/88	B-04	15.27	0.000	15.27	246.29	261.56							
11/17/88	B-04	15.23	0.000	15.23	246.33	261.56							
11/23/88	B-04	15.26	0.000	15.26	246.30	261.56							
12/08/88	B-04	14.48	0.000	14.48	247.08	261.56							
12/14/88	B-04	15.34	0.000	15.34	246.22	261.56	35.7						
12/20/88	B-04	15.13	0.000	15.13	246.43	261.56							
01/05/89	B-04	15.10	0.000	15.10	246.46	261.56							
01/11/89	B-04	15.04	0.000	15.04	246.52	261.56							
01/20/89	B-04	15.09	0.000	15.09	246.47	261.56							
01/25/89	B-04	15.17	0.000	15.17	246.39	261.56							
02/20/89	B-04	15.03	0.000	15.03	246.53	261.56							
03/15/89	B-04	15.03	0.000	15.03	246.53	261.56							
03/27/89	B-04	15.00	0.000	15.00	246.56	261.56							
04/19/89	B-04	15.03	0.000	15.03	246.53	261.56							
05/11/89	B-04	15.06	0.000	15.06	246.50	261.56							
05/25/89	B-04	15.10	0.000	15.10	246.46	261.56							
06/12/89	B-04	15.07	0.000	15.07	246.49	261.56							
06/22/89	B-04	15.15	0.000	15.15	246.41	261.56							
07/12/89	B-04	15.12	0.000	15.12	246.44	261.56							
08/09/89	B-04	15.15	0.000	15.15	246.41	261.56							
08/21/89	B-04	15.15	0.000	15.15	246.41	261.56							
09/08/89	B-04	15.15	0.000	15.15	246.41	261.56							
09/22/89	B-04	15.13	0.005	15.13	246.43	261.56							
10/09/89	B-04	15.19	0.000	15.19	246.37	261.56							
10/20/89	B-04	15.19	0.000	15.19	246.37	261.56							
11/08/89	B-04	15.23	0.000	15.23	246.33	261.56							
12/01/89	B-04	15.27	0.000	15.27	246.29	261.56							
12/15/89	B-04	15.29	0.000	15.29	246.27	261.56							
12/29/89	B-04	15.30	0.000	15.30	246.26	261.56							
01/11/90	B-04	15.31	0.000	15.31	246.25	261.56							
02/16/90	B-04	15.26	0.000	15.26	246.30	261.56							
03/02/90	B-04	15.06	0.000	15.06	246.50	261.56							
03/14/90	B-04	15.16	0.000	15.16	246.40	261.56							
03/28/90	B-04	15.15	0.000	15.15	246.41	261.56							
04/13/90	B-04	15.19	0.000	15.19	246.37	261.56							
04/27/90	B-04	15.20	0.000	15.20	246.36	261.56	34.90						
05/17/90	B-04	15.27	0.000	15.27	246.29	261.56							
06/01/90	B-04	15.15	0.000	15.15	246.41	261.56							
06/21/90	B-04	14.68	0.000	14.68	246.88	261.56							

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DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING	DEPTH OF WELL	TOTAL HYDRO-CARBONS	BENZENE	TOLUENE	ETHYL BENZENE	XYLENE	COMMENTS
								(mg/L)					
		0.00	0.000	0.00	0.00								
07/17/90	B-04	15.29	0.000	15.29	246.27	261.56							
08/20/90	B-04	15.25	0.000	15.25	246.31	261.56							
09/13/90	B-04	15.27	0.000	15.27	246.29	261.56							
09/28/90	B-04	15.28	0.000	15.28	246.28	261.56							
10/12/90	B-04	15.33	0.000	15.33	246.23	261.56							
10/26/90	B-04	15.31	0.000	15.31	246.25	261.56							
11/28/90	B-04	15.39	0.000	15.39	246.17	261.56							
12/12/90	B-04	15.40	0.000	15.40	246.17	261.56							
01/09/91	B-04	15.25	0.000	15.25	246.32	261.56							
01/18/91	B-04	15.33	0.000	15.33	246.23	261.56	34.96						
02/08/91	B-04	15.39	0.000	15.39	246.17	261.56							
03/04/91	B-04	14.78	0.000	14.78	246.78	261.56							
04/16/91	B-04	14.85	0.000	14.85	246.71	261.56	35.35						
05/23/91	B-04	14.97	0.000	14.97	246.59	261.56							
07/16/91	B-04	15.07	0.000	15.07	246.50	261.56	42.89						
07/19/91	B-04	15.04	0.000	15.04	246.52	261.56	35.04						
07/29/91	B-04	15.04	0.000	15.04	246.52	261.56	35.04						
09/04/91	B-04	15.15	0.000	15.15	246.41	261.56	35.90	0.8	0.1	0.02	0	0.08	Traces while bailing
09/25/91	B-04	15.18	0.000	15.18	246.38	261.56	35.18						
10/15/91	B-04	15.20	0.000	15.20	246.36	261.56	35.08	4.5	0.7	0.5	0.04	0.5	
11/13/91	B-04	15.58	0.130	15.45	246.08	261.56							
12/04/91	B-04	15.83	0.410	15.42	246.04	261.56							
01/30/92	B-04	15.61	0.280	15.33	246.16	261.56	35.05						
04/21/92	B-04	14.58	0.005	14.58	246.98	261.56	34.64						
04/30/92	B-04	14.63	0.010	14.62	246.94	261.56	34.74						
07/02/92	B-04	14.69	0.005	14.69	246.87	261.56	35.11						
10/13/92	B-04	14.91	0.005	14.91	246.65	261.56	35.10						
03/15/93	B-04	12.82	0.000	12.82	248.74	261.56	34.83	15	1	2.2	0.4	2.4	
01/05/88	B-05			14.50		260.68							
01/12/88	B-05	19.73	5.292	14.44	244.92	260.68	34.00						
01/22/88	B-05	19.91	5.583	14.33	244.95	260.68	34.03						
02/04/88	B-05	19.45	5.250	14.20	245.17	260.68	34.07						
02/23/88	B-05	19.53	5.125	14.40	245.00	260.68	34.07						
05/23/88	B-05					260.68							
06/13/88	B-05	14.70	0.330	14.37	246.23	260.68							
06/30/88	B-05	14.95	0.150	14.80	245.84	260.68							
07/13/88	B-05	15.02	0.260	14.76	245.86	260.68							
07/21/88	B-05	16.75	1.490	15.26	245.05	260.68							
08/01/88	B-05	15.08	0.050	15.03	245.64	260.68							
08/09/88	B-05	15.30	0.000	15.30	245.38	260.68							Dry to top of pump
08/16/88	B-05	15.60	0.300	15.30	245.31	260.68							
09/01/88	B-05	16.35	1.680	14.67	245.59	260.68							
09/07/88	B-05	16.26	1.680	14.58	245.68	260.68							
09/13/88	B-05	14.69	0.000	14.69	245.99	260.68							Dry to top of pump
09/27/88	B-05	14.65	0.070	14.58	246.08	260.68							
10/05/88	B-05	14.65	0.000	14.65	246.03	260.68							Dry
10/07/88	B-05	14.68	0.010	14.67	246.01	260.68	30.5						

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DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING	DEPTH OF WELL	TOTAL HYDRO-CARBONS	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
		0.00	0.000	0.00	0.00								
10/13/88	B-05	16.25	0.550	15.70	244.84	260.68							
10/18/88	B-05	16.87	1.270	15.60	245.08	260.68							
10/26/88	B-05	16.35	0.600	15.75	244.78	260.68							
11/04/88	B-05	16.85	1.250	15.60	244.77	260.68							
11/08/88	B-05	16.60	1.100	15.50	244.91	260.68							
11/17/88	B-05	17.45	2.030	15.42	244.75	260.68							
11/23/88	B-05	16.26	0.590	15.67	244.86	260.68							
12/08/88	B-05	15.60	0.130	15.47	245.18	260.68							
12/14/88	B-05					260.68							No access to well
12/20/88	B-05	15.22	0.000	15.22	245.46	260.68							
01/05/89	B-05	15.75	0.005	15.75	244.93	260.68							
01/11/89	B-05	16.68	0.005	16.68	244.00	260.68							
01/20/89	B-05	16.90	0.005	16.90	243.78	260.68							
01/25/89	B-05	15.80	0.005	15.80	244.88	260.68							
02/20/89	B-05	16.02	0.870	15.15	245.31	260.68							
03/15/89	B-05	15.57	0.005	15.57	245.11	260.68							
03/27/89	B-05	14.64	0.005	14.64	246.04	260.68							
04/19/89	B-05	18.25	3.700	14.55	245.21	260.68							
05/11/89	B-05	16.20	0.540	15.66	244.89	260.68							
05/25/89	B-05	16.20	0.550	15.65	244.89	260.68							
06/12/89	B-05	15.48	0.000	15.48	245.20	260.68							
06/22/89	B-05	16.70	1.700	15.00	245.26	260.68							
07/12/89	B-05	18.00	2.850	15.15	244.82	260.68							
08/09/89	B-05	15.83	0.000	15.83	244.85	260.68							
08/21/89	B-05	16.39	0.590	15.80	244.73	260.68							
09/08/89	B-05	15.72	0.005	15.72	244.96	260.68							
09/22/89	B-05	16.43	1.080	15.35	245.06	260.68							
10/09/89	B-05	15.73	0.005	15.73	244.95	260.68							
10/20/89	B-05	15.95	0.005	15.95	244.73	260.68							
11/08/89	B-05	16.18	0.550	15.63	244.91	260.68							
12/01/89	B-05	15.88	0.005	15.88	244.80	260.68							
12/15/89	B-05	15.95	0.005	15.95	244.73	260.68							
12/29/89	B-05	16.05	0.100	15.95	244.71	260.68							
01/11/90	B-05	15.59	0.200	15.39	245.24	260.68							
02/16/90	B-05	15.68	0.420	15.26	245.32	260.68							
03/02/90	B-05	15.62	0.570	15.05	245.49	260.68							
03/14/90	B-05	15.47	0.130	15.34	245.31	260.68							
03/28/90	B-05	15.24	0.005	15.24	245.44	260.68							
04/13/90	B-05	15.95	0.005	15.95	244.73	260.68							
04/27/90	B-05	15.65	0.050	15.60	245.07	260.68	33.66						Pump well
05/17/90	B-05	16.00	0.005	16.00	244.68	260.68							
06/01/90	B-05	15.23	0.000	15.23	245.45	260.68							Gas to top of pump
06/21/90	B-05	15.90	0.005	15.90	244.78	260.68							
07/17/90	B-05	16.00	0.005	16.00	244.68	260.68							
08/20/90	B-05	15.80	0.005	15.80	244.88	260.68							
09/13/90	B-05	15.30	0.000	15.30	245.38	260.68							
09/28/90	B-05	15.34	0.005	15.34	245.34	260.68							
10/12/90	B-05	15.32	0.005	15.32	245.36	260.68							

Pomona Box
.003 W. Imperial Hwy (La Habra) 1988 - 1993

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING	DEPTH OF WELL	TOTAL HYDRO-CARBONS (mg/L)	BENZENE	TOLUENE	ETHYL BENZENE	XYLENE	COMMENTS
		0.00	0.000	0.00	0.00								
10/26/90	B-05	15.33	0.005	15.33	245.35	260.68							
11/28/90	B-05	15.96	0.240	15.72	244.90	260.68							Approx. -Skimmer off
12/12/90	B-05	16.15	0.290	15.86	244.75	260.68							Approx.-pulled pump
01/09/91	B-05	15.57	0.020	15.55	245.13	260.68							
01/18/91	B-05	15.61	0.005	15.61	245.07	260.68	33.70						Pump well
02/08/91	B-05	16.02	0.005	16.02	244.66	260.68							
03/04/91	B-05	15.54	0.005	15.54	245.14	260.68							Pump out of well
04/16/91	B-05	15.62	0.320	15.30	245.30	260.68	34.13						
05/23/91	B-05	15.75	0.000	15.75	244.93	260.68							
07/16/91	B-05	15.57	0.115	15.46	245.20	260.68	41.66						
07/19/91	B-05	15.69	0.140	15.55	245.10	260.68	33.75						
07/29/91	B-05					260.68							
09/04/91	B-05	15.85	0.080	15.77	244.89	260.68	33.83						
09/25/91	B-05	15.92	0.070	15.85	244.81	260.68	33.80						
10/15/91	B-05	15.88	0.030	15.85	244.82	260.68	33.85						
11/13/91	B-05	15.65	0.170	15.48	245.16	260.68							
12/04/91	B-05	15.64	0.070	15.57	245.09	260.68							Pump well
01/30/92	B-05	15.08	0.005	15.08	245.60	260.68							Pump well
04/21/92	B-05					260.68							
04/30/92	B-05					260.68							
07/02/92	B-05	15.75	0.005	15.75	244.93	260.68	33.85						Pump set to 16 ft.
10/13/92	B-05	15.80	0.005	15.80	244.88	260.68	33.87						
03/15/93	B-05					260.68							Pump well
01/05/88	B-06			11.34		256.60							
01/12/88	B-06	11.87	0.000	11.87	244.73	256.60	34.07						
01/22/88	B-06	11.68	0.000	11.68	244.92	256.60	34.12						
02/04/88	B-06	11.70	0.000	11.70	244.90	256.60	34.35						
02/23/88	B-06	11.75	0.000	11.75	244.85	256.60	34.35						
05/23/88	B-06	11.57	0.000	11.57	245.03	256.60							
06/13/88	B-06	11.59	0.000	11.59	245.01	256.60							
06/30/88	B-06	11.66	0.000	11.66	244.94	256.60							
07/13/88	B-06	11.58	0.000	11.58	245.02	256.60							
07/21/88	B-06	11.54	0.000	11.54	245.06	256.60							
08/01/88	B-06	11.50	0.000	11.50	245.10	256.60							
08/09/88	B-06	11.52	0.000	11.52	245.08	256.60							
08/16/88	B-06	11.55	0.000	11.55	245.05	256.60							
09/01/88	B-06	11.64	0.000	11.64	244.96	256.60							
09/07/88	B-06	11.60	0.000	11.60	245.00	256.60							
09/13/88	B-06	11.61	0.000	11.61	244.99	256.60							
09/27/88	B-06	11.65	0.000	11.65	244.95	256.60							
10/05/88	B-06	11.66	0.000	11.66	244.94	256.60							
10/07/88	B-06					256.60							
10/13/88	B-06	11.67	0.000	11.67	244.93	256.60							
10/18/88	B-06	11.68	0.000	11.68	244.92	256.60							
10/26/88	B-06	11.65	0.000	11.65	244.95	256.60							
11/04/88	B-06	11.67	0.000	11.67	244.93	256.60							
11/08/88	B-06	11.66	0.000	11.66	244.94	256.60							

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DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING	DEPTH OF WELL	TOTAL HYDRO-CARBONS	BENZENE	TOLUENE	ETHYL BENZENE	XYLENE	COMMENTS
									(mg/L)				
		0.00	0.000	0.00	0.00								
11/17/88	B-06	11.65	0.000	11.65	244.95	256.60							
11/23/88	B-06	11.65	0.000	11.65	244.95	256.60							
12/08/88	B-06	11.42	0.000	11.42	245.18	256.60							
12/14/88	B-06	11.75	0.000	11.75	244.85	256.60	34.4						
12/20/88	B-06	11.57	0.000	11.57	245.03	256.60							
01/05/89	B-06	11.47	0.000	11.47	245.13	256.60							
01/11/89	B-06	11.52	0.000	11.52	245.08	256.60							
01/20/89	B-06	11.55	0.000	11.55	245.05	256.60							
01/25/89	B-06	11.60	0.000	11.60	245.00	256.60							
02/20/89	B-06	11.47	0.000	11.47	245.13	256.60							
03/15/89	B-06	11.50	0.000	11.50	245.10	256.60							
03/27/89	B-06	11.45	0.000	11.45	245.15	256.60							
04/19/89	B-06	11.45	0.000	11.45	245.15	256.60							
05/11/89	B-06	11.55	0.000	11.55	245.05	256.60							
05/25/89	B-06	11.55	0.000	11.55	245.05	256.60							
06/12/89	B-06	11.45	0.000	11.45	245.15	256.60							
06/22/89	B-06	11.53	0.000	11.53	245.07	256.60							
07/12/89	B-06	11.51	0.000	11.51	245.09	256.60							
08/09/89	B-06	11.57	0.000	11.57	245.03	256.60							
08/21/89	B-06	11.55	0.000	11.55	245.05	256.60							
09/08/89	B-06	11.55	0.000	11.55	245.05	256.60							
09/22/89	B-06	11.56	0.000	11.56	245.04	256.60							
10/09/89	B-06	11.63	0.000	11.63	244.97	256.60							
10/20/89	B-06	11.65	0.000	11.65	244.95	256.60							
11/08/89	B-06	11.68	0.000	11.68	244.92	256.60							
12/01/89	B-06	11.67	0.000	11.67	244.93	256.60							
12/15/89	B-06	11.66	0.000	11.66	244.94	256.60							
12/29/89	B-06	11.70	0.000	11.70	244.90	256.60							
01/11/90	B-06	11.70	0.000	11.70	244.90	256.60							
02/16/90	B-06	11.66	0.000	11.66	244.94	256.60							
03/02/90	B-06	11.46	0.000	11.46	245.14	256.60							
03/14/90	B-06	11.63	0.000	11.63	244.97	256.60							
03/28/90	B-06	11.55	0.000	11.55	245.05	256.60							
04/13/90	B-06	11.71	0.000	11.71	244.89	256.60							
04/27/90	B-06	11.61	0.000	11.61	244.99	256.60	33.92						
05/17/90	B-06	11.67	0.000	11.67	244.93	256.60							
06/01/90	B-06	11.52	0.000	11.52	245.08	256.60							
06/21/90	B-06	11.56	0.000	11.56	245.04	256.60							
07/17/90	B-06	11.68	0.000	11.68	244.92	256.60							
08/20/90	B-06	11.60	0.000	11.60	245.00	256.60							
09/13/90	B-06	11.59	0.000	11.59	245.01	256.60							
09/28/90	B-06	11.69	0.000	11.69	244.91	256.60							
10/12/90	B-06	11.65	0.000	11.65	244.95	256.60							
10/26/90	B-06	11.68	0.000	11.68	244.92	256.60							
11/28/90	B-06	11.78	0.000	11.78	244.82	256.60							
12/12/90	B-06	11.79	0.000	11.79	244.81	256.60							
01/09/91	B-06	11.46	0.000	11.46	245.15	256.60							
01/18/91	B-06	11.75	0.000	11.75	244.85	256.60	33.98						

Pomona Box
.003 W. Imperial Hwy (La Habra) 1988 - 1993

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING	DEPTH OF WELL	TOTAL HYDRO-CARBONS	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
		0.00	0.000	0.00	0.00								
02/08/91	B-06	11.78	0.000	11.78	244.82	256.60							
03/04/91	B-06	11.15	0.000	11.15	245.45	256.60							
04/16/91	B-06	11.26	0.000	11.26	245.34	256.60	34.45						
05/23/91	B-06	11.35	0.000	11.35	245.25	256.60							
07/16/91	B-06	11.43	0.000	11.43	245.17	256.60	41.99						
07/19/91	B-06	11.42	0.000	11.42	245.18	256.60	34.04						
07/29/91	B-06	11.40	0.000	11.40	245.20	256.60	34.04						
09/04/91	B-06	11.50	0.000	11.50	245.10	256.60	34.07	0	0	0	0	0	
09/25/91	B-06	11.53	0.000	11.53	245.07	256.60	34.18						
10/15/91	B-06	11.55	0.000	11.55	245.05	256.60	34.13	0.09	0.03	0	0	0	
11/13/91	B-06	11.78	0.000	11.78	244.83	256.60							
12/04/91	B-06	11.83	0.000	11.83	244.77	256.60							
01/30/92	B-06	11.72	0.000	11.72	244.88	256.60	34.04	0	0	0	0	0	
04/21/92	B-06	11.03	0.000	11.03	245.57	256.60	33.44	1.1	0.24	0.1	0.03	0.14	
04/30/92	B-06	11.08	0.000	11.08	245.52	256.60	33.23						
07/02/92	B-06	11.14	0.000	11.14	245.46	256.60	34.10	1.9	0.1	0.03	0	0.09	
10/13/92	B-06	11.31	0.000	11.31	245.29	256.60	33.72	3	0.5	0.2	0.08	0.25	
03/15/93	B-06	9.72	0.000	9.72	246.88	256.60	33.85	2.4	0.7	0.1	0.06	0.2	
04/03/91	B-07	12.56	0.000	12.56	242.13	254.69	42.60						Instal. 3/21, Devel. 4/3
04/16/91	B-07	13.04	0.000	13.04	241.65	254.69	40.90	1.6	0.2	0.02	0.02	0.2	Survey data 3/27/91
05/23/91	B-07	13.32	0.000	13.32	241.84	254.69							
07/16/91	B-07	13.18	0.000	13.18	241.51	254.69	48.47						
07/19/91	B-07	13.16	0.000	13.16	241.53	254.69	40.65						
07/29/91	B-07	13.15	0.000	13.15	241.54	254.69	40.60						
09/04/91	B-07	13.27	0.000	13.27	241.42	254.69	40.69	1.6	0.01	0	0.1	0.1	
09/25/91	B-07	13.26	0.000	13.26	241.43	254.69	40.75						
10/15/91	B-07	13.28	0.000	13.28	241.41	254.69	40.65	0.9	0.2	0	0.07	0.5	
11/13/91	B-07	13.60	0.000	13.60	241.10	254.69							
12/04/91	B-07	13.62	0.000	13.62	241.07	254.69							
01/30/92	B-07	13.50	0.000	13.50	241.19	254.69	40.62	0.34	0.09	0	0.015	0	
04/21/92	B-07	12.59	0.000	12.59	242.10	254.69	40.28	2.1	0.35	0.08	0.24	0.24	
04/30/92	B-07	12.61	0.000	12.61	242.08	254.69	39.83						
07/02/92	B-07	12.64	0.000	12.64	242.05	254.69	40.55	0.87	0	0	0	0.005	
10/13/92	B-07	12.90	0.000	12.90	241.79	254.69	40.71	0.6	0.08	0.002	0.2	0	
03/15/93	B-07	10.70	0.000	10.70	243.99	254.69	40.71	4	0.2	0.01	0.5	0.3	
07/26/91	B-08	9.48	0.000	9.48	241.39	250.87	33.41						Develop well
07/29/91	B-08	9.46	0.000	9.46	241.41	250.87	35.44	0	0	0	0	0	Survey data 7/29/91
09/04/91	B-08	9.00	0.000	9.00	241.87	250.87	35.48	0	0	0	0	0	
09/25/91	B-08	9.59	0.000	9.59	241.28	250.87	35.57						
10/15/91	B-08	9.60	0.000	9.60	241.27	250.87	35.47	0	0	0	0	0	
11/13/91	B-08	9.86	0.000	9.86	241.01	250.87							
12/04/91	B-08	9.89	0.000	9.89	240.98	250.87							
01/30/92	B-08	9.76	0.000	9.76	241.11	250.87	35.48	0	0	0	0	0	
04/21/92	B-08	8.98	0.000	8.98	241.89	250.87	35.06	0	0	0	0	0	
04/30/92	B-08	9.01	0.000	9.01	241.86	250.87	34.62						
07/02/92	B-08	9.10	0.000	9.10	241.77	250.87	35.51	0	0	0	0	0	

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DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING	DEPTH OF WELL	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
		0.00	0.000	0.00	0.00								
10/13/92	B-08	9.33	0.000	9.33	241.54	250.87	35.50	0	0	0	0	0	
03/15/93	B-08	7.34	0.000	7.34	243.53	250.87	35.49	0	0	0	0	0	
03/15/93	B-09	9.79	0.000	9.79	243.93	253.72	25.04	0.9	0.1	0.005	0.3	0	
03/15/93	B-10	9.14	0.000	9.14	241.76	250.90	25.47	6	0.5	0.5	0.3	1.1	

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
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Project No. 88.003

November 22, 1993

Pomona Box Company
301 West Imperial Highway
La Habra, California

Attention: Mr. Don Votaw

Subject: Aquifer Test Analyses
Pomona Box Company
301 West Imperial Highway
La Habra, California

EXECUTIVE SUMMARY

Enclosed are the results of the 24-hour aquifer test for the subject site. The purpose of this report is to summarize the hydrologic parameters of the shallow aquifer at this location.

On October 7 and 8, 1993, a 24-hour aquifer test was performed at this location. Based on the results of the aquifer test, transmissivities at the site ranged from 389 to 995 gallons per day per foot (gpd/ft) with a mean transmissivity of 618 gpd/ft.

SITE DESCRIPTION

The site is occupied by an operating box manufacturing company located on the north side of Imperial Highway west of the intersection of Imperial Highway and Euclid Avenue in the city of La Habra.

The site location and general geographic relationships are shown on the Site Location Map, Figure 1.

SITE DESCRIPTION, continued

The site is occupied by an office building, a manufacturing building, and a mechanic's shed. Site relationships are shown on the Plot Plan, Figure 2.

BACKGROUND

In December 1986, a single 1,000 gallon underground storage tank was removed at this location. Soil samples were obtained and analyzed as part of the removal procedure. Results of the laboratory analyses indicated a localized area of hydrocarbon contaminated soil was present in the bottom of the excavation. During additional excavation to remove the contaminated soils, groundwater and free product were encountered at a depth of approximately 13 feet. The excavation was backfilled and the information reported to the local regulatory agency. Accordingly, site assessment work was required by the regulatory agency to define the extent of contamination.

Between January and September 1987, six borings were drilled and sampled. All the borings were converted to groundwater monitoring wells. Well locations are shown on the Plot Plan, Figure 2 in Appendix A. Dissolved or free phase hydrocarbons were detected in all the wells.

Manual recovery of free hydrocarbons was initiated in June 1987. An automated recovery system was installed and became operational in April 1988.

In September 1989, seven additional underground storage tanks were removed at this location. The approximate tank locations are shown on the Plot Plan, Figure 2 in Appendix A. Results of laboratory analyses performed as part of the removal procedure indicated petroleum hydrocarbons were present. As a result, two borings were drilled and sampled in this area in March and June 1991. Both borings were converted to groundwater monitoring wells. Well locations are shown on the Plot Plan, Figure 2 in Appendix A.

Two additional borings, designated B-9 and B-10, were drilled and sampled on February 26, 1993. Both borings were converted to groundwater monitoring wells.

SUBSURFACE CONDITIONS

Based on the materials observed during drilling and sampling, the site is underlain by alluvium of Recent Age. The alluvium consists of sandy clay, sandy silt, sand, clayey sand, and clayey silt to a depth of 35 feet. Boring logs indicate soil type in the saturated interval varies across the site.

Groundwater and saturated soils were encountered at a depth of 12 feet during drilling operations. Subsequent gauging of the wells indicates groundwater is present at depths of 7 to 12 feet below surface grade.

AQUIFER PUMP TEST

On October 7 and 8, 1993, a 24-hour aquifer test was performed on selected monitoring wells performed at this location. The objective of the aquifer test was to determine hydraulic characteristics of the shallow aquifer.

Monitoring well B-6 was pumped at an initial flow rate of 0.5 gallons per minute (gpm). Because adequate drawdown was not observed in the pump well, the flow rate was increased to 1.0 at 150 minutes into the test. The flow rate remained at 1.0 gpm for the remainder of the test (21.5 hours). Wells B-1 through B-4 and B-7 through B-10 were measured for drawdown during the test. The Plot Plan, Figure 2 in Appendix A, shows the location of the pump well and observation wells.

Drawdown in wells B-1 and B-2 were measured by pressure transducers and recorded by a two-channel data logger. Drawdown in the remaining wells was measured by an electronic interface probe. The amount of drawdown observed was 0.21 feet in well B-3 located 75 feet away from the pump well.

Drawdown data from wells B-2, B-3, B-4, and B-10 were analyzed using Aquix 1-2-3 produced by Interpex Limited. Aquix 1-2-3 is a computerized curve matching program designed to analyze aquifer test data. A description of the Aquix 1-2-3 program is presented in Appendix C. Results of the individual well analyses are presented in Table 1. Aquifer test data are presented in Appendix B

SUMMARY OF AQUIFER TEST ANALYSIS

Table 1, Individual Transmissivity Analysis, October 7, 1993

Well Number	Transmissivity gpd/ft	Storage Coefficient	Specific Yield
B-2	520	0.00047	0.0176
B-3	995	0.00138	0.0080
B-4	822	0.00675	0.0041
B-10	389	0.00224	0.0186
Average	681	0.00271	0.0121

CONCLUSIONS

Results of the aquifer test indicate transmissivities range from 389 gpd/ft in the vicinity of well B-10 to 995 gpd/ft in the vicinity well B-3. Mean transmissivity at the site is 681 gpd/ft. Storage coefficients ranged from 0.00047 in well B-2 to 0.00675 in well B-4. The mean storage coefficient at the site was 0.00271.

The opportunity to be of service is sincerely appreciated. If you have any questions or if we can be of further assistance, please call.

Very truly yours,

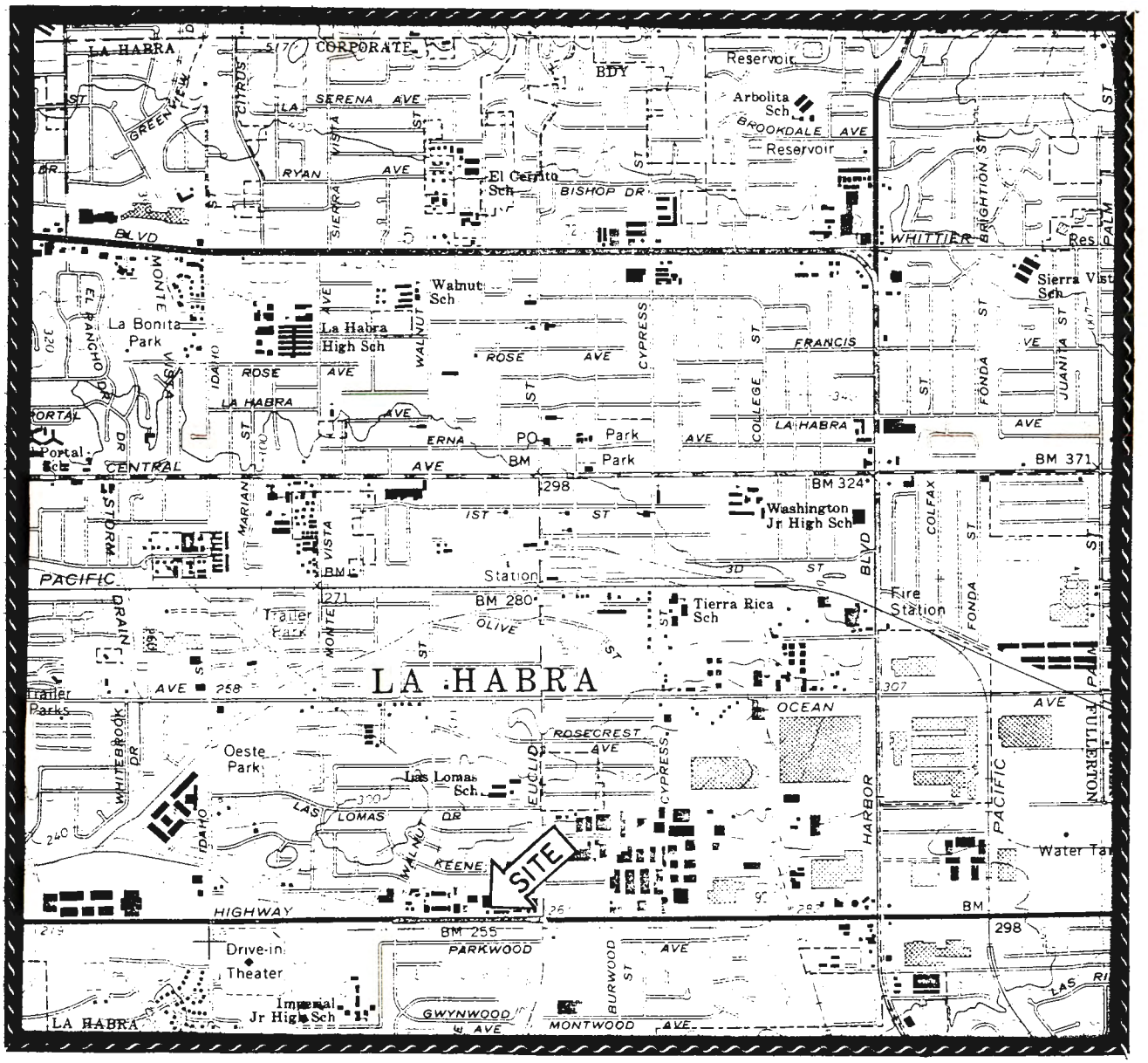
Michael S. Wielenga
Environmental Geologist

Richard V. Smith
Registered Geologist 5014

APPENDIX A

Site Location Map, Figure 1
Plot Plan, Figure 2

SITE LOCATION MAP



2000 0 2000 4000

SCALE FEET

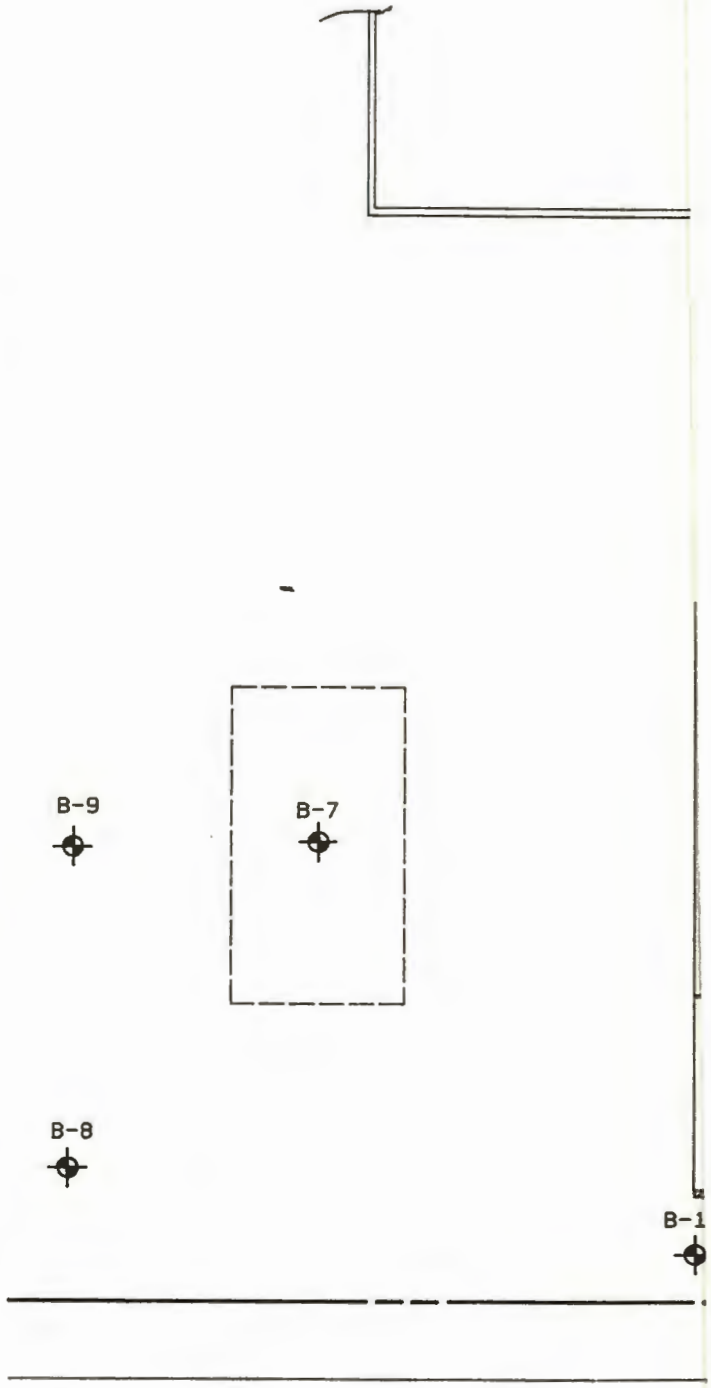
NORTH

BASE MAP: La Habra Quadrangle

Pomona Box
301 W. Imperial Highway
La Habra, California

PROJECT NO.	FIGURE NO.
88.3X	1
DRAWN BY	

WaynePerry ENVIRONMENTAL CONSTRUCTION INC SPECIALISTS



PLOT PLAN

KEY

B-10 MONITORING WELL

= FORMER STORAGE TANK ZONE

20 0 20 40

SCALE FEET

POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA.

PROJECT NO.	FIGURE NO.
88.3X	2
DRAWN BY	REVISED
EL 4/22/93	ADD B-9,B-10 EL 4/22/93

WaynePerry ENVIRONMENTAL CONSTRUCTION INC. SPECIALISTS

Pomona Box Company
Project No. 88.003

APPENDIX B

Aquifer Test Data

DATA SET: 8803B2

CLIENT: Pomona Box Company
LOCATION: 200 East Imperial Highway
COUNTY: Orange County
PROJECT: Aquifer Pump Test
AQUIFER: Shallow Aquifer
WATER TABLE: 11.00 feet

DATE: 10/7/93
WELL NO.: B-2
FLOW RATE: 1.00 gal/min
WELL DEPTH: 23.18 feet
THICKNESS: 23.00 feet

PUMPING WELL No: B-6 RADIUS FROM PUMPED WELL: 60.00 feet
RADIUS OF WELL CASING: 0.167 feet
The following depths are from top of Aquifer:
PUMPING WELL: SCREENED FROM 0.00 TO 23.00 feet
OBSERVATION WELL: SCREENED FROM 0.00 TO 13.00 feet

FITTING ERROR: 14.633 PERCENT

Neuman, 1975: Par. Pen. Unconfined Aquifer

MODEL PARAMETERS:

STORAGE COEF: 4.718E-04 TRANSM: 519.782gal/feet/day
FREE FREE
ANISOTROPY [SQRT(Kz/Kr)]: 106.05085
FREE
SPECIFIC YIELD: 1.769E-02
FREE

No.	TIME (min)	DRAWDOWN (feet) DATA	SYNTHETIC	DIFFERENCE (percent)
1	229.0	0.0100	0.0190	-90.55
2	239.0	0.0200	0.0210	-4.99
3	249.0	0.0100	0.0230	-130.0
4	259.0	0.0300	0.0250	16.46
5	269.0	0.0100	0.0271	-171.6
6	279.0	0.0200	0.0293	-46.59
7	289.0	0.0400	0.0315	21.23
8	329.0	0.0400	0.0405	-1.27
9	339.0	0.0500	0.0427	14.41
10	379.0	0.0500	0.0518	-3.75
11	389.0	0.0600	0.0541	9.80
12	419.0	0.0600	0.0607	-1.25
13	429.0	0.0800	0.0629	21.32
14	489.0	0.0800	0.0757	5.31

No.	TIME (min)	DRAWDOWN (feet) DATA	SYNTHETIC	DIFFERENCE (percent)
15	509.0	0.0900	0.0799	11.21
16	529.0	0.0900	0.0840	6.66
17	539.0	0.100	0.0860	13.97
18	549.0	0.100	0.0880	11.95
19	609.0	0.100	0.0998	0.190
20	629.0	0.100	0.103	-3.61
21	639.0	0.110	0.105	4.09
22	669.0	0.110	0.111	-0.965
23	689.0	0.120	0.114	4.41
24	709.0	0.120	0.118	1.42
25	719.0	0.120	0.120	-0.0496
26	749.0	0.120	0.125	-4.41
27	769.0	0.130	0.128	0.978
28	789.0	0.130	0.132	-1.62
29	799.0	0.140	0.133	4.44
30	809.0	0.130	0.135	-4.18
31	849.0	0.130	0.141	-9.18
32	859.0	0.140	0.143	-2.53
33	869.0	0.150	0.145	3.24
34	899.0	0.150	0.149	0.119
35	959.0	0.150	0.158	-5.93
36	999.0	0.150	0.164	-9.82
37	1059.0	0.150	0.173	-15.45
38	1119.0	0.160	0.181	-13.29
39	1179.0	0.180	0.189	-5.01
40	1239.0	0.180	0.196	-9.14
41	1299.0	0.210	0.203	3.06
42	1359.0	0.200	0.210	-5.20
43	1419.0	0.210	0.216	-3.31

PARAMETER RESOLUTION MATRIX:
"*" INDICATES FIXED PARAMETER

	S	T	B	A
S	0.00			
T	0.00	1.00		
B	0.03	0.00	1.00	
A	0.00	0.00	0.00	0.00

DATA SET: 8803B03

CLIENT: Pomona Box Company
DATE: 10/7/93
LOCATION: 200 East Imperial Highway
WELL NO.: B-3
COUNTY: Orange County
FLOW RATE: 1.00 gal/min
PROJECT: Aquifer Pump Test
WELL DEPTH: 23.18 feet
AQUIFER: Shallow Aquifer
THICKNESS: 23.00 feet
WATER TABLE: 11.00 feet
PUMPING WELL No: B-6
RADIUS FROM PUMPED WELL: 75.00 feet
RADIUS OF WELL CASING: 0.167 feet
The following depths are from top of Aquifer:
PUMPING WELL: SCREENED FROM 0.00 TO 23.00 feet
OBSERVATION WELL: SCREENED FROM 0.00 TO 23.00 feet

FITTING ERROR: 6.324 PERCENT

Neuman, 1975: Par. Pen. Unconfined Aquifer

MODEL PARAMETERS:

STORAGE COEF: 1.381E-03 TRANSM: 995.281gal/feet/day
FREE FREE
ANISOTROPY [SQRT(Kz/Kr)]: 22.48557
FREE
SPECIFIC YIELD: 8.023E-03
FREE

No.	TIME (min)	DRAWDOWN (feet) DATA	SYNTHETIC	DIFFERENCE (percent)
1	180.0	0.0300	0.0337	-12.47
2	210.0	0.0400	0.0418	-4.66
3	240.0	0.0500	0.0497	0.556
4	300.0	0.0700	0.0644	7.94
5	360.0	0.0800	0.0776	2.88
6	420.0	0.0900	0.0896	0.375
7	480.0	0.110	0.100	8.56
8	540.0	0.120	0.110	7.82
9	600.0	0.130	0.119	7.80
10	660.0	0.140	0.128	8.26
11	720.0	0.150	0.136	9.06
12	780.0	0.150	0.143	4.07
13	840.0	0.150	0.150	-0.609
14	900.0	0.150	0.157	-5.02

No.	TIME (min)	DRAWDOWN (feet) DATA	SYNTHETIC	DIFFERENCE (percent)
15	960.0	0.160	0.163	-2.36
16	1020.0	0.160	0.169	-6.05
17	1080.0	0.160	0.175	-9.50
18	1140.0	0.170	0.180	-6.26
19	1200.0	0.180	0.185	-3.21
20	1260.0	0.190	0.190	-0.275
21	1320.0	0.190	0.195	-2.86
22	1380.0	0.190	0.199	-5.24
23	1440.0	0.200	0.204	-2.16

PARAMETER RESOLUTION MATRIX:
"*" INDICATES FIXED PARAMETER

S	0.07			
T	0.01	1.00		
B	0.22	0.06	0.95	
A	0.00	0.00	0.00	0.00
	S	T	B	A

DATA SET: 8803B04

CLIENT: Pomona Box Company DATE: 10/7/93
LOCATION: 200 East Imperial Highway WELL NO.: B-4
COUNTY: Orange County FLOW RATE: 1.00 gal/min
PROJECT: Aquifer Pump Test WELL DEPTH: 35.00 feet
AQUIFER: Shallow Aquifer THICKNESS: 23.00 feet
WATER TABLE: 14.00 feet
PUMPING WELL No: B-6 RADIUS FROM PUMPED WELL: 80.00 feet
RADIUS OF WELL CASING: 0.167 feet
The following depths are from top of Aquifer:
PUMPING WELL: SCREENED FROM 0.00 TO 23.00 feet
OBSERVATION WELL: SCREENED FROM 0.00 TO 21.00 feet

FITTING ERROR: 11.798 PERCENT

Neuman, 1975: Par. Pen. Unconfined Aquifer

MODEL PARAMETERS:

STORAGE COEF: 8.748E-03 TRANSM: 821.854gal/feet/day
FREE FREE
ANISOTROPY [SQRT(Kz/Kr)]: 1.72507
FREE
SPECIFIC YIELD: 4.134E-03
FREE

No.	TIME (min)	DRAWDOWN (feet) DATA	SYNTHETIC	DIFFERENCE (percent)
1	80.00	0.0100	0.00112	88.82
2	240.0	0.0200	0.0157	21.05
3	300.0	0.0200	0.0235	-17.91
4	360.0	0.0300	0.0315	-5.25
5	420.0	0.0400	0.0394	1.27
6	480.0	0.0500	0.0472	5.55
7	540.0	0.0700	0.0546	21.87
8	600.0	0.0800	0.0618	22.69
9	660.0	0.0800	0.0687	14.12
10	720.0	0.0900	0.0752	16.37
11	780.0	0.0900	0.0815	9.37
12	840.0	0.0900	0.0875	2.68
13	900.0	0.1000	0.0933	6.63
14	960.0	0.1000	0.0989	1.09

No.	TIME (min)	DRAWDOWN (feet) DATA	SYNTHETIC	DIFFERENCE (percent)
15	1020.0	0.1000	0.104	-4.23
16	1080.0	0.1000	0.109	-9.34
17	1140.0	0.110	0.114	-3.88
18	1200.0	0.120	0.119	0.816
19	1260.0	0.120	0.123	-3.00
20	1320.0	0.130	0.128	1.50
21	1380.0	0.140	0.132	5.46
22	1440.0	0.130	0.136	-5.01

PARAMETER RESOLUTION MATRIX:
"*" INDICATES FIXED PARAMETER

S	0.03			
T	0.01	0.08		
B	-0.14	-0.11	0.92	
A	-0.09	0.12	0.04	0.94
	S	T	B	A

DATA SET: 8803B10

CLIENT: Pomona Box Company DATE: 10/7/93
LOCATION: 200 East Imperial Highway WELL NO.: B-10
COUNTY: Orange County FLOW RATE: 1.00 gal/min
PROJECT: Aquifer Pump Test WELL DEPTH: 25.00 feet
AQUIFER: Shallow Aquifer THICKNESS: 23.00 feet
WATER TABLE: 10.00 feet
PUMPING WELL No: B-6 RADIUS FROM PUMPED WELL: 85.00 feet
RADIUS OF WELL CASING: 0.167 feet
The following depths are from top of Aquifer:
PUMPING WELL: SCREENED FROM 0.00 TO 23.00 feet
OBSERVATION WELL: SCREENED FROM 0.00 TO 15.00 feet

FITTING ERROR: 13.817 PERCENT

Neuman, 1975: Par. Pen. Unconfined Aquifer

MODEL PARAMETERS:

STORAGE COEF: 2.245E-03 TRANSM: 389.087gal/feet/day
FREE FREE
ANISOTROPY [SQRT(Kz/Kr)]: 23.33507
FREE
SPECIFIC YIELD: 1.865E-02
FREE

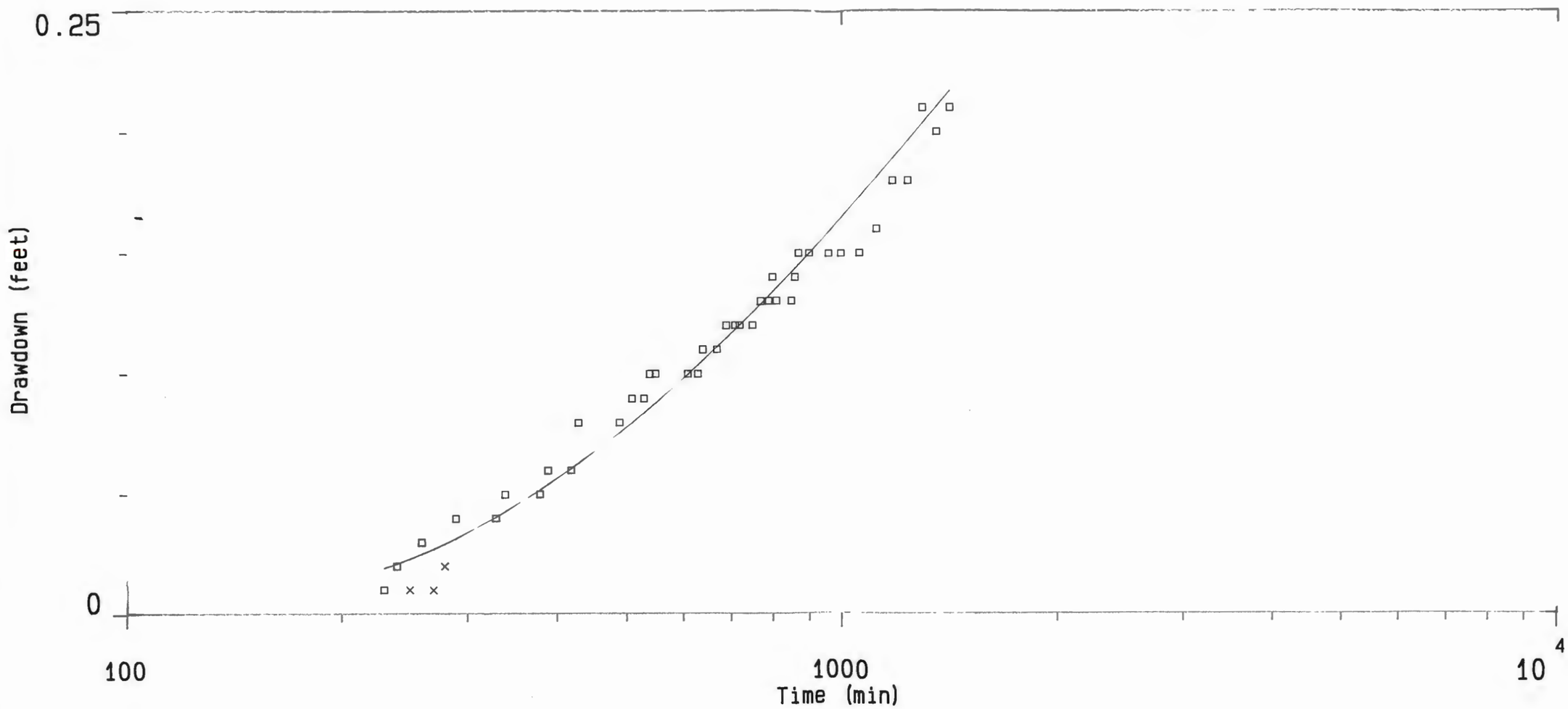
No.	TIME (min)	DRAWDOWN (feet) DATA	SYNTHETIC	DIFFERENCE (percent)
1	480.0	0.0100	0.0100	-0.859
2	540.0	0.0100	0.0140	-40.43
3	600.0	0.0200	0.0186	6.79
4	660.0	0.0300	0.0237	20.87
5	720.0	0.0300	0.0291	2.72
6	780.0	0.0400	0.0348	12.91
7	840.0	0.0500	0.0406	18.80
8	900.0	0.0500	0.0464	7.10
9	960.0	0.0500	0.0523	-4.71
10	1020.0	0.0500	0.0583	-16.62
11	1080.0	0.0600	0.0642	-7.15
12	1140.0	0.0700	0.0702	-0.393
13	1200.0	0.0700	0.0762	-8.92
14	1260.0	0.0800	0.0821	-2.72

No.	TIME (min)	DRAWDOWN (feet) DATA	SYNTHETIC	DIFFERENCE (percent)
15	1320.0	0.0900	0.0880	2.13
16	1380.0	0.0900	0.0939	-4.36
17	1440.0	0.100	0.0997	0.276

PARAMETER RESOLUTION MATRIX:
"*" INDICATES FIXED PARAMETER

S	0.02			
T	0.01	1.00		
B	0.15	0.00	0.98	
A	0.00	0.00	0.00	0.00

S T B A



MODEL PARAMETERS			
S	T (gal/feet/day)	SPC YLD	ANISOT.
.000472	520.	.0176	106.

PUMPING RATE: 1.00 (gal/min)

for: Pomona Box Company

by: Wayne Perry Construction Inc.

Aquifer: Shallow Aquifer

Thickness: 23.0 Depth: 23.1 feet

Screen: Base: 23.0 Top: 0.00 feet

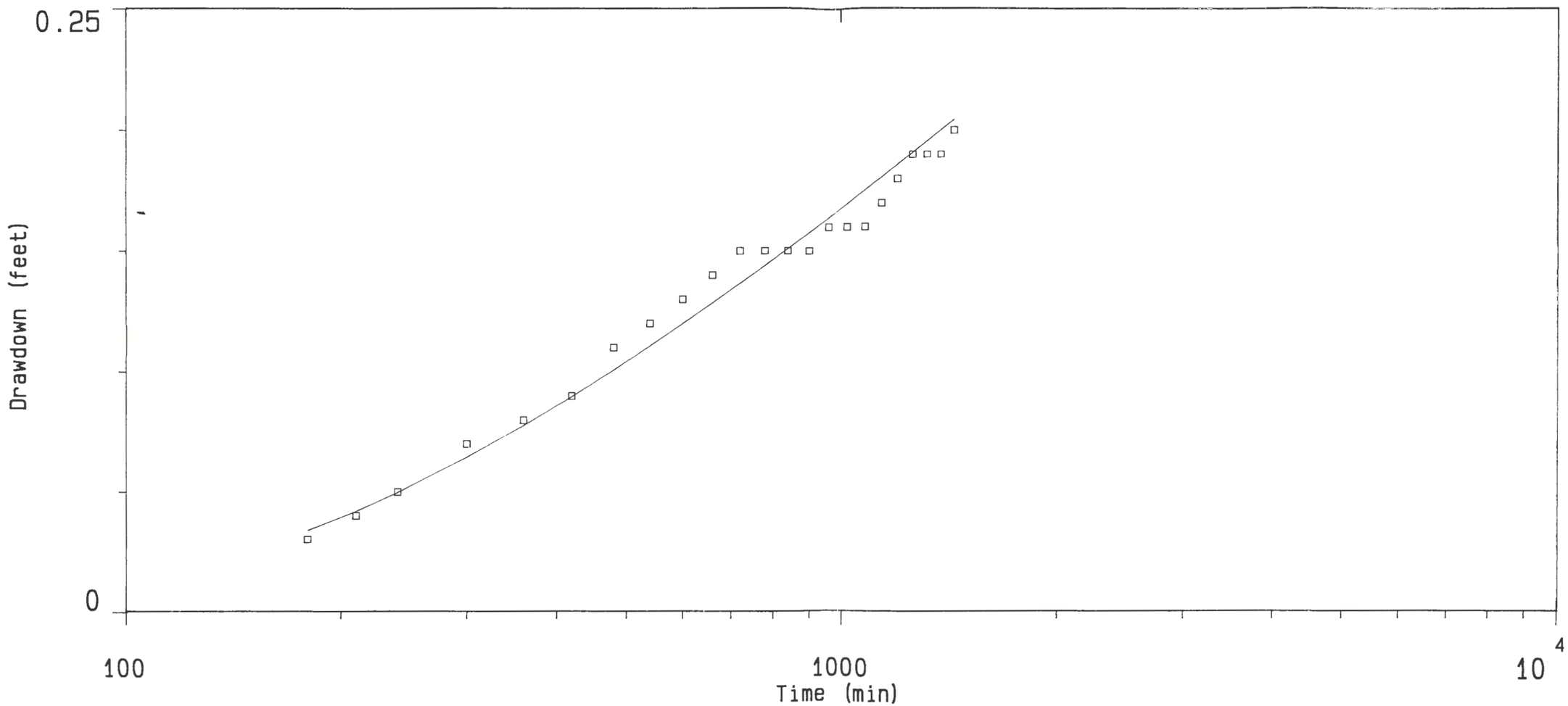
Distance: 60.0 feet Pumping well: B-6

Aquifer Pump Test

200 East Imperial Highway

Orange County

Date: 10/7/93 | Well No.: B-2



MODEL PARAMETERS			
S	T (gal/feet/day)	SPC YLD	ANISOT.
.00138	995.	.00802	22.4

PUMPING RATE: 1.00 (gal/min)

for: Pomona Box Company

by: Wayne Perry Construction Inc.

Aquifer: Shallow Aquifer

Thickness: 23.0 Depth: 23.1 feet

Screen: Base: 23.0 Top: 0.00 feet

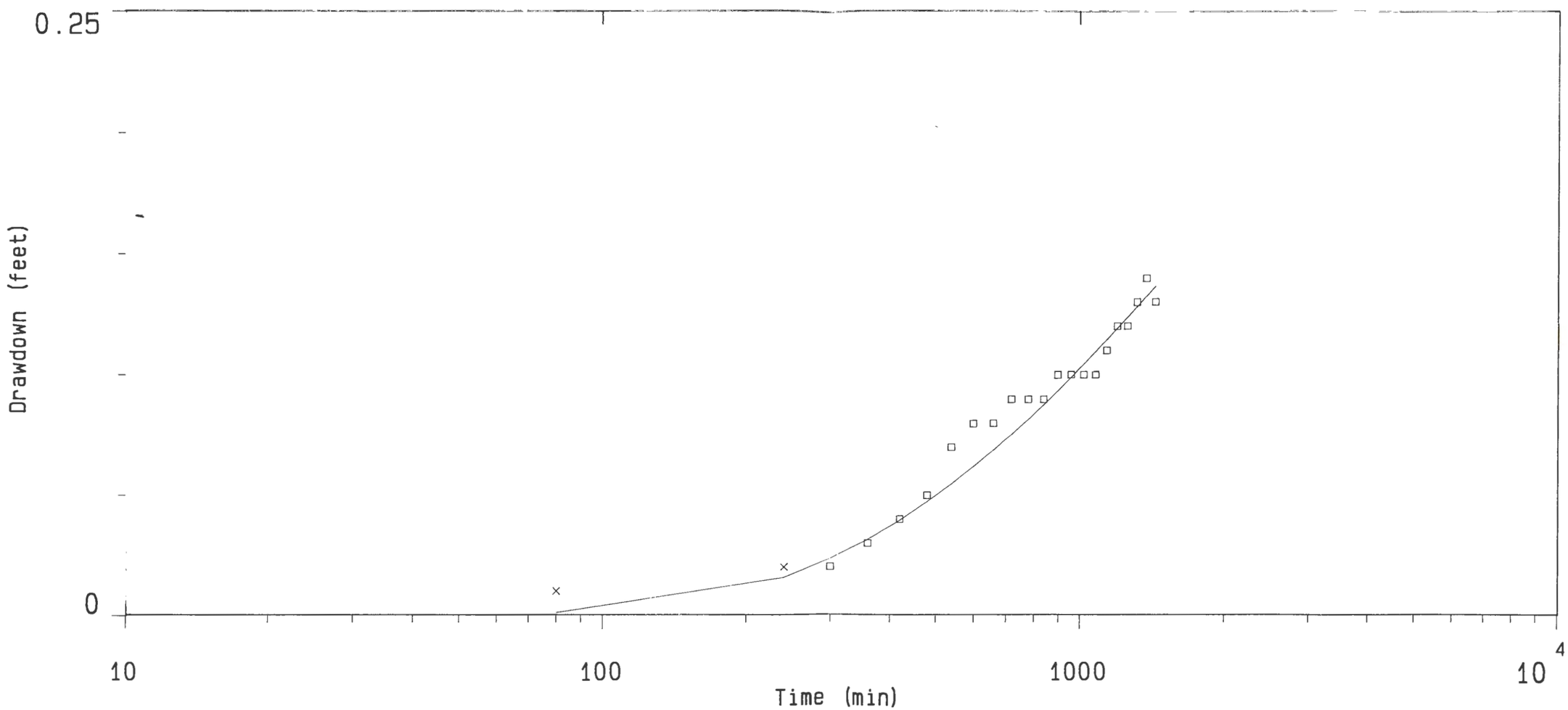
Distance: 75.0 feet Pumping well: B-6

Aquifer Pump Test

200 East Imperial Highway

Orange County

Date: 10/7/93 | Well No.: B-3



MODEL PARAMETERS			
S	T (gal/feet/day)	SPC YLD	ANISOT.
.00675	822.	.00419	1.72

PUMPING RATE: 1.00 (gal/min)

for: Pomona Box Company

by: Wayne Perry Construction Inc.

Aquifer: Shallow Aquifer

Thickness: 23.0 Depth: 35.0 feet

Screen: Base: 23.0 Top: 0.00 feet

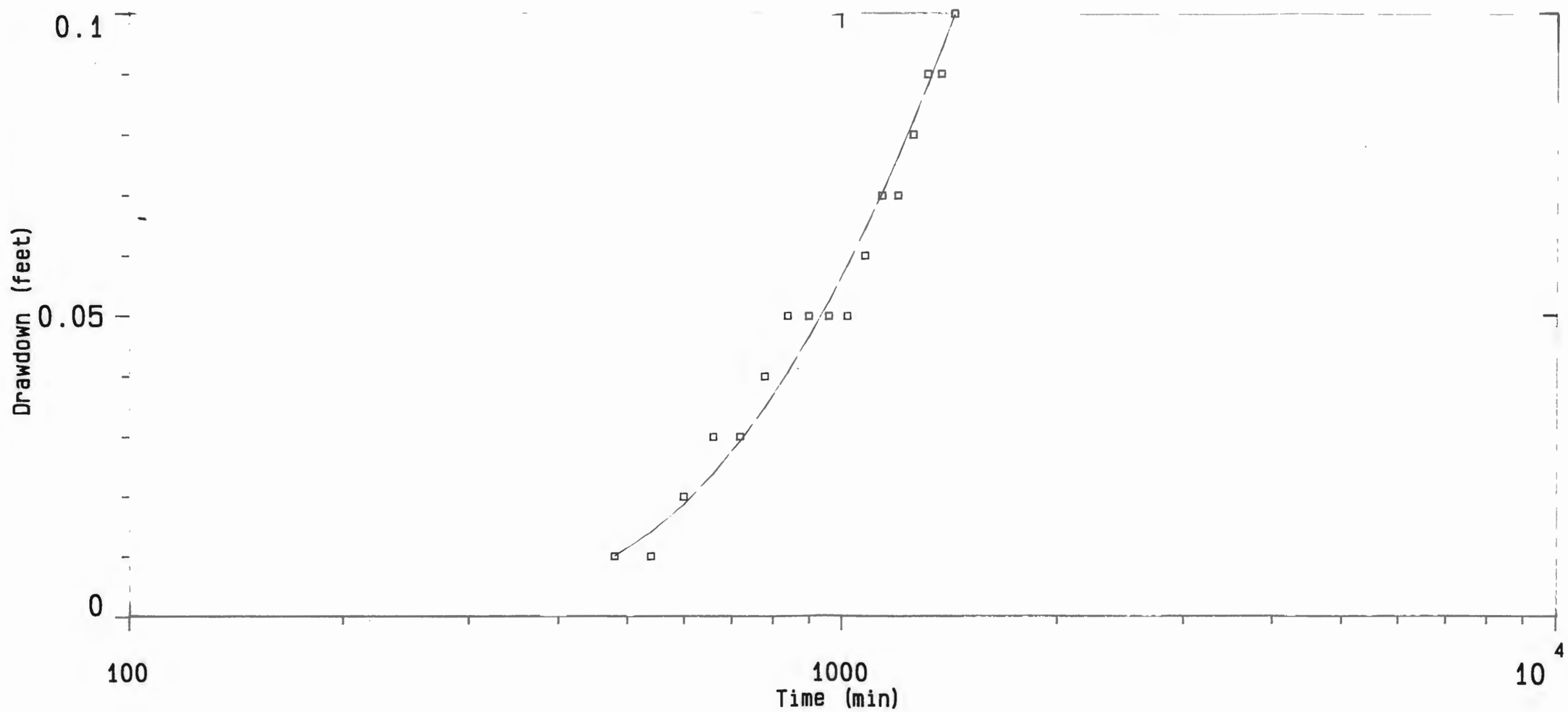
Distance: 89.0 feet Pumping well: B-6

Aquifer Pump Test

200 East Imperial Highway

Orange County

Date: 10/7/93 Well No.: B-4



MODEL PARAMETERS			
S	T (gal/feet/day)	SPC YLD	ANISOT.
.00224	389.	.0186	23.3

PUMPING RATE: 1.00 (gal/min)

for: Pomona Box Company

by: Wayne Perry Construction Inc.

Aquifer: Shallow Aquifer

Thickness: 23.0 Depth: 25.0 feet

Screen: Base: 23.0 Top: 0.00 feet

Distance: 85.0 feet Pumping well: B-6

Aquifer Pump Test

200 East Imperial Highway

Orange County

Date: 10/7/93 | Well No.: B-10

APPENDIX C

Description of AQUIX 1-2-3 Program

AQUIX 1-2-3™

USER'S MANUAL

December, 1988

CHAPTER 1

AN OVERVIEW

The following is an overview of AQUIX. It contains a description of the program, a discussion of the user responsibilities and a guide to the use of this manual. The program description describes the mathematical theory upon which the program is founded, and references pertinent articles in the hydrological literature.

The section on user responsibilities points out some of the limits of the AQUIX software series, the concerns of the user in acquiring flow test data, and the responsibility of the interpreter in using AQUIX to interpret the data.

The last part of this chapter suggests ways of using this manual, depending on the experience level of the user.

Program Description

AQUIX is a forward and inverse modeling program for interpreting hydrological pumping or flow test data taken to determine the properties of the aquifer under test. The user must specify a set of starting parameters for

transmissivity, storage coefficient, leakage factor, anisotropy and specific yield, as appropriate for the model approach used. Aquifers are assumed to be homogeneous and of infinite lateral extent. AQUIX supports constant flow, constant drawdown and variable flow tests. Either pumping or recovery tests can be modeled.

Forward modeling allows the user to calculate synthetic flow curves for the chosen model. Flow rate or drawdown curves are calculated using the methods described by Theis (1935), Hantush (1960), Hantush (1964) or Neuman (1975), depending on the version of AQUIX which is purchased by the user.

Graphic displays are presented as bilogarithmic, semilogarithmic or linear plots versus time, and the vertical axis can increase either in the upward or downward direction. Hardcopy output can be in simple plot form or can utilize the plate plotting capability of AQUIX to produce report ready graphic displays.

Inverse modeling allows the user to obtain a set of parameters which best fits the data in a least squares sense. This is done using ridge regression (Inman, 1975) to adjust the parameters of a starting model supplied by the user in an iterative manner. The user can constrain selected parameters of the starting model so they will not be adjusted by the inversion scheme.

Equivalence analysis allows the user to generate a set of equivalent models, that is, alternative models which fit the data nearly as well as the best fit model, but differ from this model. This also determines the allowable range of each of the model parameters.

Results from forward or inverse modeling can be directed to a printer and/or plotter for report ready hard copy output. They can also be saved in a binary random access disk file for later retrieval. Inverse modeling can be carried out in an unattended batch mode.

User Responsibilities

AQUIX is simply a tool provided by Interpex for assisting in the interpretation of hydrological pumping or flow test data. Like all tools, it is the responsibility of the user to use it properly. With a modeling program like AQUIX, the user must understand the principles behind aquifer test data interpretation and have some idea as to what is a realistically acceptable solution.

AQUIX is designed to interpret hydrological test data in terms of an aquifer of infinite horizontal extent. If this is not the case, the results of this interpretation may not relate to the actual aquifer parameters. It is the user's responsibility to determine

whether or not the infinite model interpretation is appropriate for each data set which is interpreted with AQUIX. This must be done through an understanding of the general geologic and hydrologic conditions of the area being tested.

How to Use this Manual

This manual is designed as a reference to the features of AQUIX. The chapter entitled SOFTWARE INSTALLATION should be read by anyone who is not familiar with Interpex software. The chapter entitled GETTING STARTED serves as a brief tutorial and should be read by the new user. MENU/COMMAND DEFINITIONS should be used as a reference to the AQUIX command language. EXAMPLE INTERPRETATIONS illustrates the use of the program by way of examples. Following this chapter step by step is the best way to learn how to use AQUIX effectively. Finally, ADVANCED TOPICS will allow the user with some experience to get the most out of the software.

References

Hantush, M. S., 1960, Modificaton of the theory of leaky aquifers: Jour. Geophys. Research, v. 65, N. 11, pp 3713-3725.

Hantush, M. S., 1964, Hydraulics of Wells, in Chow, Ven Te, ed., Advances in hydroscience, Volume 1: New York, Academic Press, p 281-442.

Inman, J. R., 1975, Resistivity inversion with ridge regression: Geophysics, 40, 798-817.

Lohman, S. W., 1979, Ground water hydraulics: U.S.G.S. Professional Paper 708, 98 p.

Neuman, S. P., 1975, Analysis of pumping test data from anisotropic unconfined aquifers considering delayed gravity response: Water Resources Research, v. 11, n. 2, pp 329-342.

Theis, C. V., 1935, The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using ground water storage: Am Geophys Union Trans., v 16, pp 519-524.

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
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Project No. 88.003

December 7, 1993

Pomona Box Company
301 West Imperial Highway
La Habra, California

Attention: Mr. Don Votaw

Subject: Remedial Action Plan for Groundwater
Pomona Box Company
301 West Imperial Highway
La Habra, California

EXECUTIVE SUMMARY

Enclosed is a proposed work plan for groundwater remediation at the Pomona Box facility located at 301 West Imperial Highway in the city of La Habra.

Groundwater will be recovered from four wells, using activated carbon to remove dissolved hydrocarbons, and discharged to the storm drain under an NPDES permit.

SITE DESCRIPTION

The site is occupied by an operating box manufacturing company located on the north side of Imperial Highway west of the intersection of Imperial Highway and Euclid Avenue in the city of La Habra. The site location and general geographic relationships are shown on the Location Map, Figure 1.

Located on the site is an office building, manufacturing building, and mechanics shed. Site relationships are shown on the Plot Plan, Figure 2.

BACKGROUND

In December 1986, a single 1,000 gallon underground storage tank was removed at this location. Soil samples were obtained and analyzed as part of the removal procedure. Results of the laboratory analyses indicated a localized area of hydrocarbon contaminated soil was present in the bottom of the excavation. During additional excavation to remove the contaminated soils, groundwater and free product were encountered at a depth of approximately 13 feet. The excavation was backfilled and the information reported to the local regulatory agency. Accordingly, site assessment work was required by the Orange County Health Care Agency to define the extent of contamination.

Between January and September 1987, six borings, B-1 through B-6, were drilled and sampled. All the borings were converted to groundwater monitoring wells. Well locations are shown on the Plot Plan, Figure 2, in Appendix A. Dissolved or separate phase hydrocarbons were detected in all the wells.

Manual recovery of separate phase hydrocarbons was initiated in June 1987. An automated recovery system was installed and became operational in April 1988.

In September 1989, seven additional underground storage tanks were removed at this location. The approximate tank locations are shown on Figure 2 in Appendix A. Results of laboratory analyses performed as part of the removal procedure indicated petroleum hydrocarbons were present. Subsequently, four borings were drilled and sampled as part of supplemental site investigations between March 1991 and February 1993. The four borings were converted to groundwater monitoring wells B-7 through B-10. Well locations are shown on the Plot Plan, Figure 2 in Appendix A.

SUBSURFACE CONDITIONS

Based on the materials observed during drilling and sampling, the site is underlain by alluvium of Recent Age. The alluvium consists of sandy clay, sandy silt, sand, clayey sand, and clayey silt to a depth of 35 feet.

Groundwater occurs between nine and 14 feet below the surface. The direction of groundwater flow is toward the southwest.

STATEMENT OF PROBLEM

Review of groundwater analyses indicate the persistent occurrence of separate phase hydrocarbons in well B-5 and elevated concentrations of dissolved hydrocarbons in wells B-1 through B-4, B-6, B-7, B-9, and B-10. The occurrence of separate phase and dissolved hydrocarbons is shown on the Dissolved Hydrocarbon Concentration Map, Figure 3.

GROUNDWATER EXTRACTION PLAN

Continuous groundwater withdrawal will be conducted from four wells to depress the groundwater surface and recover dissolved hydrocarbons. One well will be installed in the former tank zone north of the shop building and one well will be installed in an interceptor trench to be constructed along the southern property line adjacent to Imperial Highway. Pumps will also be installed in existing monitoring wells B-5 and B-9.

Results of a 24-hour aquifer test indicated a relatively low mean transmissivity of 618 gallons per day per foot is present at this location. Accordingly, it was determined that installation of an interceptor trench along the southern property line adjacent to Imperial Highway would serve to enhance the effectiveness of groundwater remediation by creating an artificial reservoir with increased capacity to capture groundwater than individual wells and thus, allow a larger area of influence to develop.

The dimensions of the interceptor trench will be two feet wide, 17 feet deep, and 120 feet long. A coarse sand pack will be placed from the bottom of the trench to a depth of 5 feet followed by clean backfill to the surface. Wells installed in the trench will be sealed with a bentonite cement slurry from the top of the sand pack to the surface.

Aquifer testing indicated the three wells located outside the trench will sustain a pumping rate of 0.5 gallons per minute. Whereas, it is anticipated that the well located within the interceptor trench will sustain a pumping rate of four gallons per minute. The interceptor trench, recovery wells, and treatment compound are shown on Figure 4.

A line drawing showing the water flow through the system is provided as Figure 5. Figure 6 shows major equipment details. Four pumps are used to extract groundwater and separate phase hydrocarbons from recovery wells at an average rate of 1.5 gallons per minute (gpm) from each well. The groundwater and separate phase hydrocarbons will flow via underground piping into an oil/water separator with a total fluid capacity of 230 gallons and a free product capacity of 80 gallons. The rated capacity of the separator is 15 gpm and it removes oil and grease down to 10 ppm or less. Separate phase hydrocarbons are removed from the separator by an adjustable oil skimmer and stored in an above-ground holding tank.

The remaining water passes out of the separator by gravity feed into a surge tank. When the surge tank is full of water, a liquid level sensor activates a transfer pump that feeds water from the surge tank through bag-type filters into the first of two carbon canisters connected in a series. The first canister (lead canister) removed the bulk of the dissolved hydrocarbons while the second (polishing canister) ensures that the water is treated to NPDES requirements. The canisters are manufactured by Westates Carbon and each contains 1,200 pounds of activated carbon.

Water exiting the second canister passes through a vertical loop that insures the canisters remain hydraulically filled at all times. The loop contains a vent that prevents water siphoning from the canisters.

Several safety features will be built into the system to prevent an unauthorized release of recovered gasoline and/or untreated water:

1. High level sensors in the double walled underground product holding tank and in the surge tank will shut off the groundwater pumps to prevent overflow.

2. The underground product holding tank is equipped with a gasoline leak detector within the interstitial space.

3. The system will be surrounded completely (including the top) by a locked cyclone fence to prevent entry of unauthorized personnel.

∞ O ∞

This report has been prepared for the exclusive use of Pomona Box Company as it pertains to their site located at 301 West Imperial Highway, La Habra, California. No warranty, expressed or implied, is made as to the professional advice in this report.

The opportunity to be of service is sincerely appreciated. If you have any questions, or if I can be of further assistance, please call.

Sincerely,

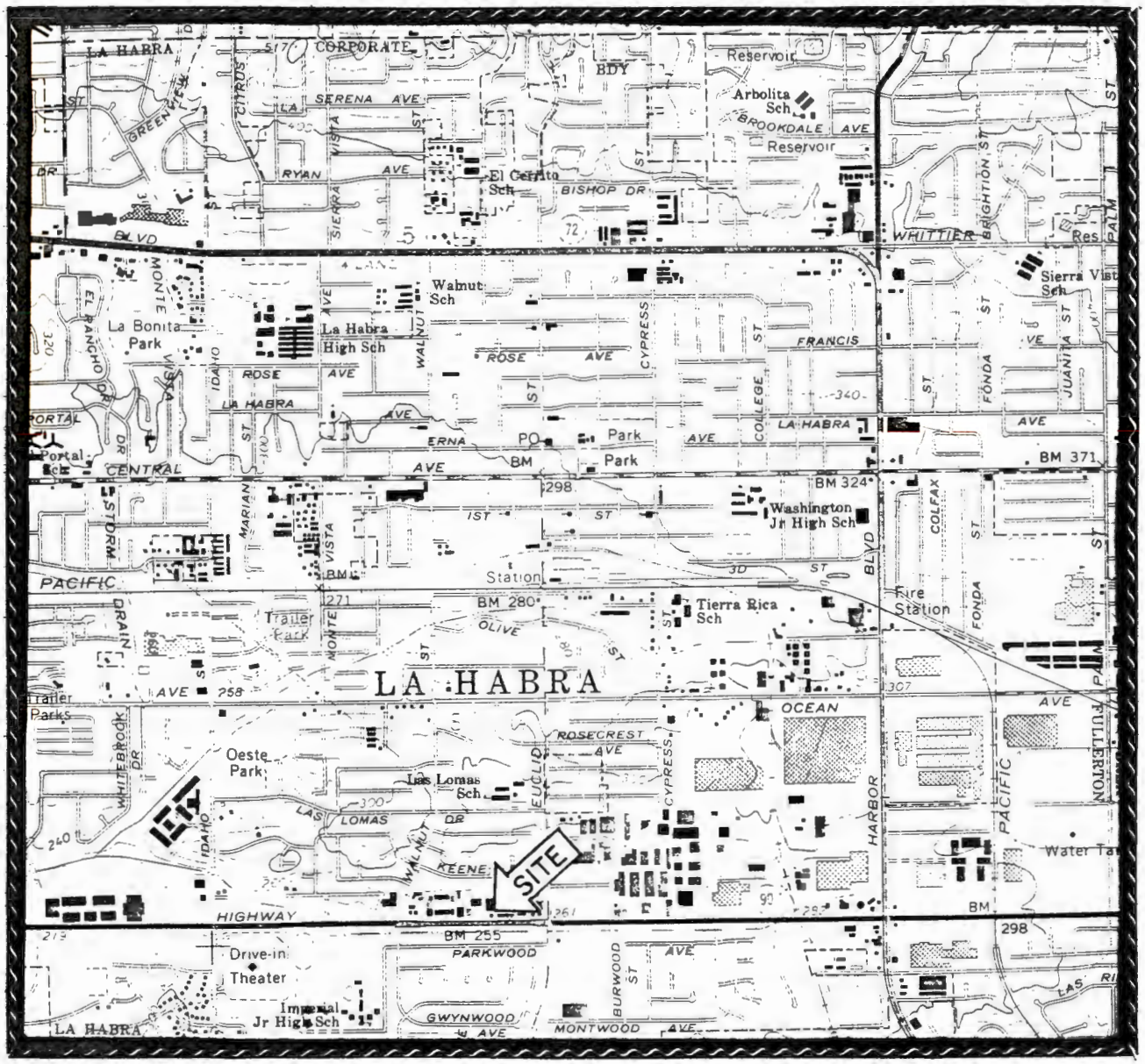
Richard V. Smith

Richard V. Smith
Registered Geologist 5014

APPENDIX A

Site Location Map, Figure 1
Plot Plan, Figure 2
Dissolved Hydrocarbon Concentration Map, Figure 3
Plan View of Interceptor Trench, Recovery Wells, and Treatment Compound, Figure 4
Schematic of Water Flow, Figure 5
Schematic of Treatment System, Figure 6

SITE LOCATION MAP



2000 0 2000 4000

SCALE FEET

NORTH

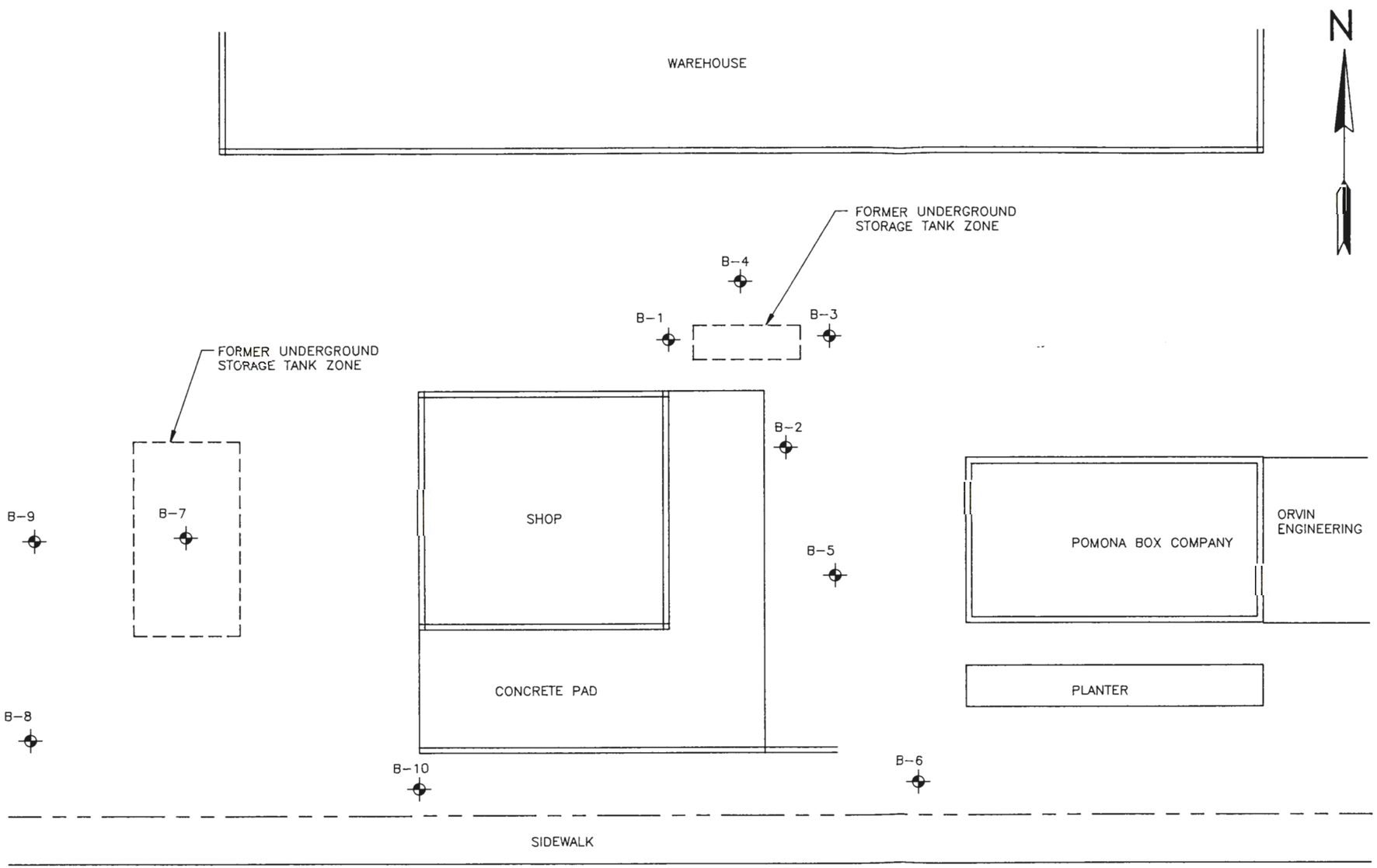
BASE MAP: La Habra Quadrangle

Pomona Box
301 W. Imperial Highway
La Habra, California

PROJECT NO.	FIGURE NO.
88.3X	1
DRAWN BY	

Waynepenny Environmental Construction Inc. Specialists

PLOT PLAN



KEY

B-10 GROUNDWATER MONITORING WELL

20' 0 20' 40'
SCALE FEET

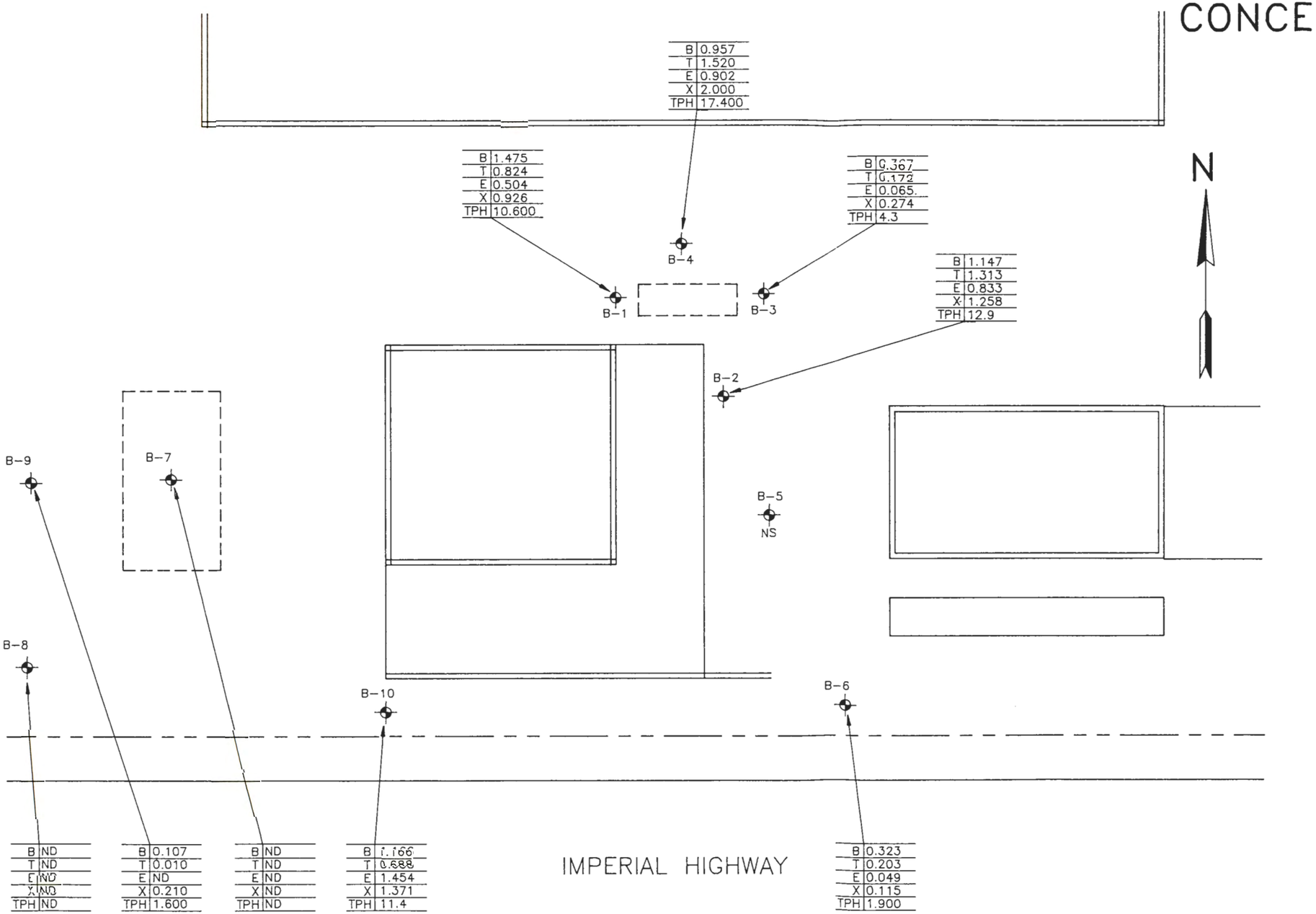
POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA

00300001

PROJ. NO.	FIG. NO.
88.003	2
DRAWN BY	DATE
Ward Provance	12/8/93

WaynePerry ENVIRONMENTAL SPECIALISTS

DISSOLVED HYDROCARBON CONCENTRATION MAP



KEY

B-10 — GROUNDWATER MONITORING WELL SHOWING CONCENTRATIONS OF DISSOLVED HYDROCARBONS IN ug/L.

NOTES :

1. DATE OF SAMPLING – 7/26/93
2. ND – NOT DETECTED
3. NS – NOT SAMPLED, PUMP WELL

20' 0 20' 40'
SCALE FEET

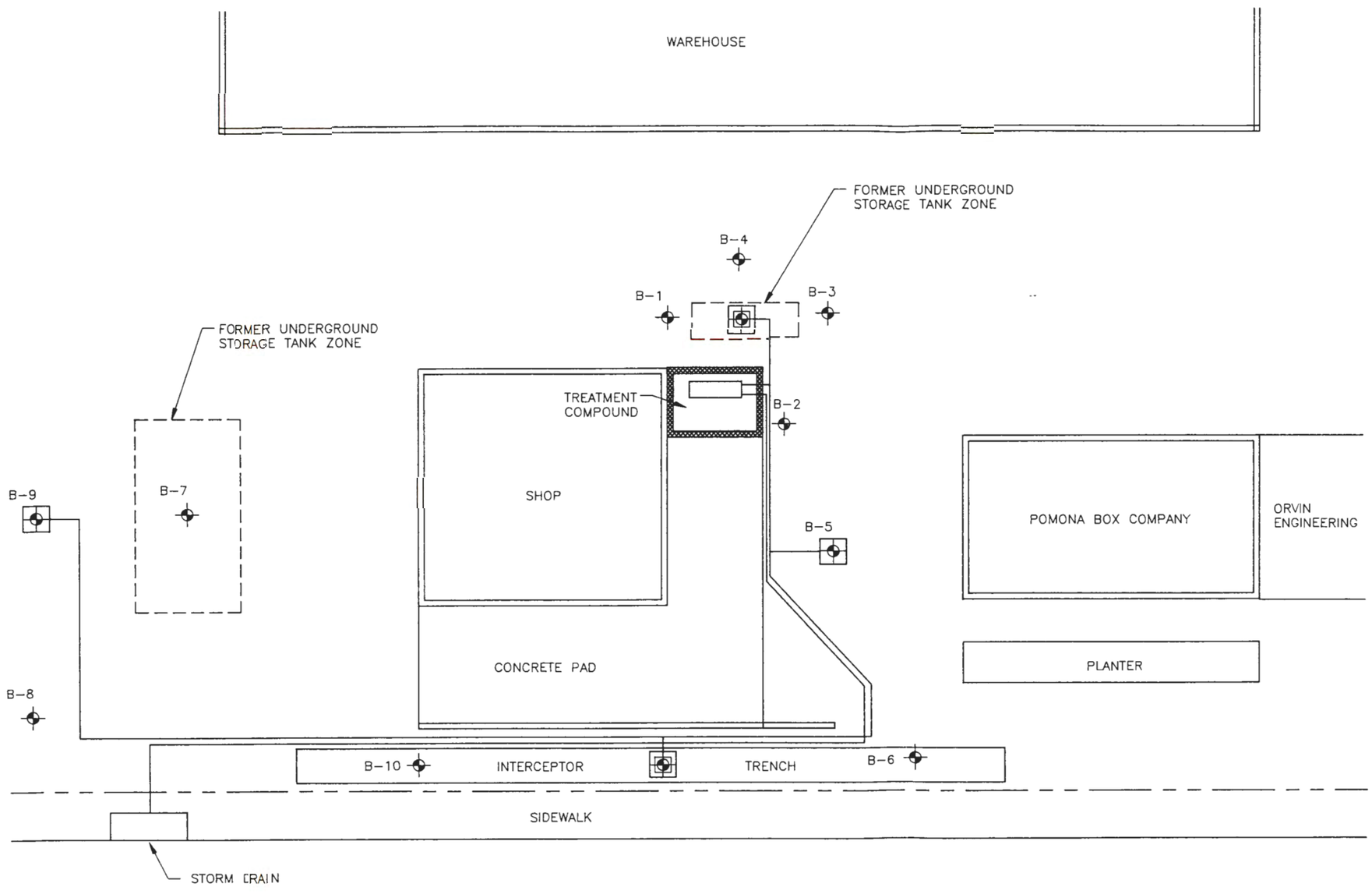
POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA

00300002

PROJ. NO.	FIG. NO.
88.003	3
DRAWN BY Ward Provance	DATE 12/8/93

WaynePerry ENVIRONMENTAL SPECIALISTS

PLAN VIEW OF INTERCEPTOR TRENCH, RECOVERY WELLS, AND TREATMENT COMPOUND



KEY

B-10 GROUNDWATER MONITORING WELL

B-9 PROPOSED RECOVERY WELL

N

20' 0 20' 40'
SCALE FEET

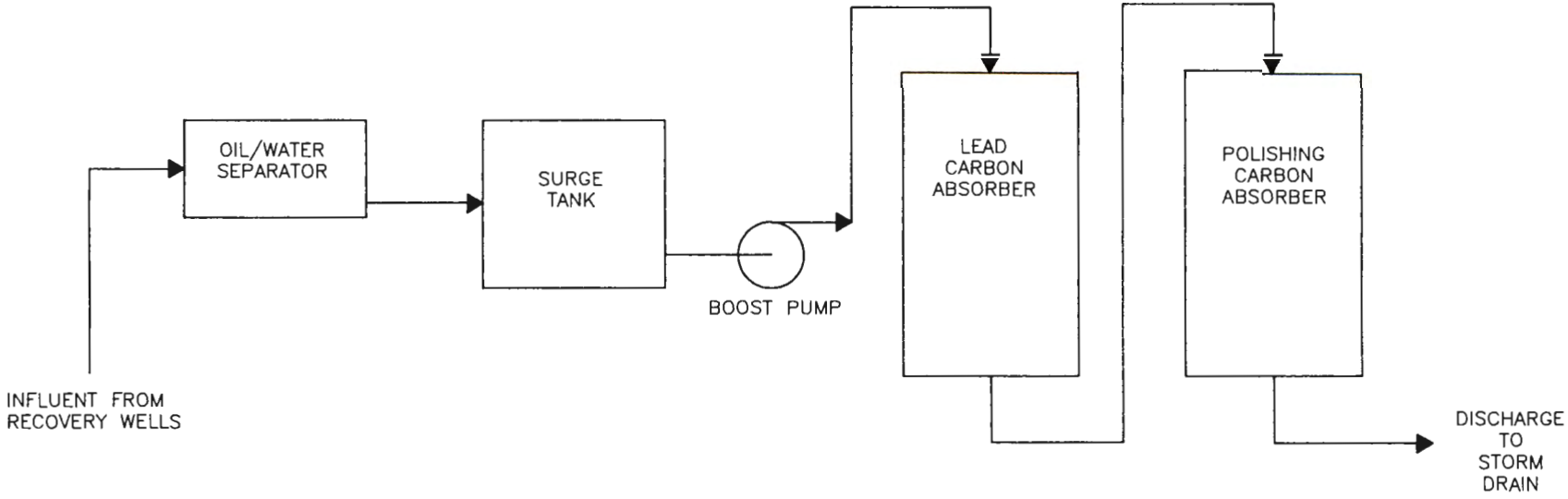
POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA

00300003

PROJ. NO.	FIG. NO.
88.003	4
DRAWN BY	DATE
Ward Provance	12/8/93

ENVIRONMENTAL SPECIALISTS Wayne Perry

SCHEMATIC OF WATER FLOW



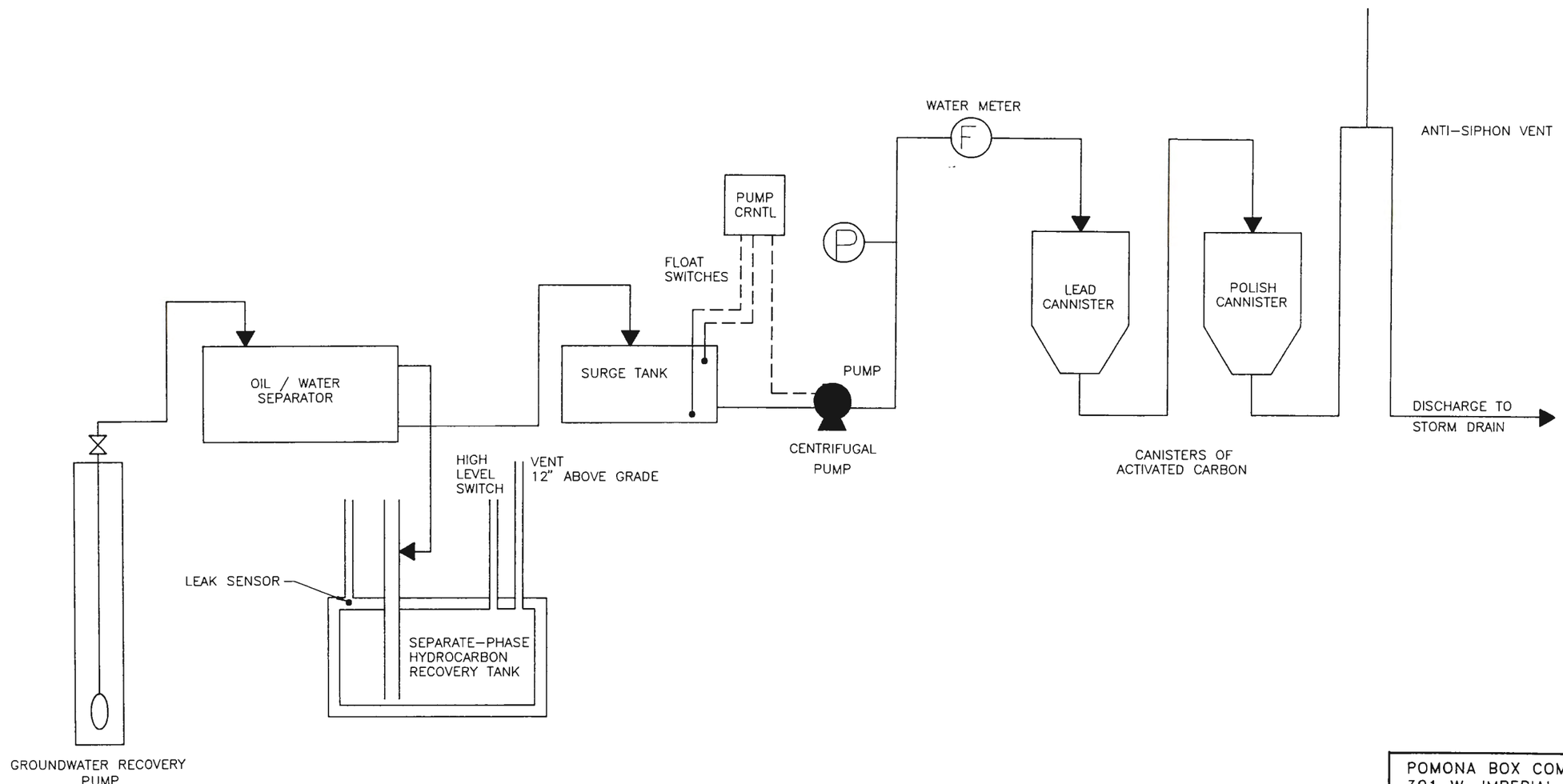
POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA

A0000007

PROJ. NO.	FIG. NO.
88.003	5
DRAWN BY	DATE
Ward Provance	12/8/93

ENVIRONMENTAL WaynePerry SPECIALISTS

GROUNDWATER TREATMENT SYSTEM



POMONA BOX COMPANY
301 W. IMPERIAL AVE.
LA HABRA, CA

A0000006

PROJ. NO.	FIG. NO.
88.003	6
DRAWN BY Ward Provance	DATE 12/8/93

ENVIRONMENTAL SPECIALISTS Wayne Perry

PREPARED FOR: MR. DON VOTAW
POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA 90631

VAPOR EXTRACTION TEST REPORT
POMONA BOX COMPANY
301 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA

PREPARED BY: WAYNE PERRY CONSTRUCTION, INC.
8281 Commonwealth Avenue
Buena Park, California 90621

January 31, 1994

WRITTEN BY:

David E. Potts
Registered Chemical
Engineer No.4270

REVIEWED BY:

Richard V. Smith
Registered Geologist
No. 5014

TABLE OF CONTENTS

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LIST OF FIGURES

LIST OF APPENDICES

SUMMARY

A one-day vapor extraction test was completed on January 13, 1994. A V.R. Systems Model V-3 soil venting engine was used to apply vacuum on an individual basis to five groundwater monitoring wells located on the subject property. Testing was conducted at low levels of applied vacuum to avoid excessive upwelling of groundwater.

During the test, well gas samples obtained from individual wells contained total hydrocarbon levels ranging from 4 ppmv to 4600 ppmv, as measured with a Foxboro Model 128 organic vapor analyzer calibrated with methane.

Maximum volumetric extraction rate was approximately 2 standard cubic feet per minute (SCFM) from well B-7. Wellhead vacuum to achieve this flow rate was approximately 10 inches w.c. (water column). Application of higher vacuum at this site causes upwelling of shallow groundwater and therefore does not result in higher flow.

During the test, the maximum hydrocarbon extraction rate ranged from less than 0.001 pounds per hour in wells B-2 and B-3 to approximately 0.1 pounds per hour in well B-7.

Laboratory testing of a soil gas samples taken from wells B-1, B-5 and B-7 indicated total petroleum hydrocarbons ranging from 110 to 344 ppmv (ASTM Method 3416M), and benzene ranging from 81 to 270 ppbv (EPA Method TO-14). Methane was present in concentrations ranging from 4 to 986 ppmv (ASTM Method 3416M).

Vacuum was not detected in any of the observation wells during the vapor extraction test. This indicates the effective radius of vacuum influence from each extraction well was less than 20 feet.

Based on the low volumetric extraction rates and hydrocarbon vapor concentrations obtained during the test, this site is not suitable for remediation using vapor extraction technology alone. Further evaluation of vapor extraction for this site should include a mechanism for extraction of groundwater from the test wells.

SITE DESCRIPTION

The site is occupied by an operating box manufacturing company located on the north side of Imperial Highway west of the intersection of Imperial Highway and Euclid Avenue in the city of La Habra. The site location and general geographic relationships are shown on the Location Map, Figure 1.

Located on the site is an office building, manufacturing building, and mechanics shed. Site relationships are shown on the Plot Plan, Figure 2.

BACKGROUND

In December 1986, a single 1,000 gallon underground storage tank was removed at this location. Soil samples were obtained and analyzed as part of the removal procedure. Results of the laboratory analyses indicated a localized area of hydrocarbon contaminated soil was present in the bottom of the excavation. During additional excavation to remove the contaminated soils, groundwater and free product were encountered at a depth of approximately 13 feet. The excavation was backfilled and the information reported to the Orange County Health Care Agency. Accordingly, site assessment work was required by the regulatory agency to define the extent of contamination.

Between January and September 1987, six borings, B-1 through B-6, were drilled and sampled. All the borings were converted to groundwater monitoring wells. Well locations are shwon on the Plot Plan, Figure 2 in Appendix A. Dissolved or separate phase hydrocarbons were detected in all the wells.

Manual recovery of free hydrocarbons was initiated in June 1987. An automated recovery system was installed and became operational in April 1988.

In September 1989, seven additional underground storage tanks were removed at this location. The approximate tank locations are shown on Figure 2. Results of laboratory analyses performed as part of the removal procedure indicated petroleum hydrocarbons were present. Subsequently, four borings were drilled and sampled as part of supplemental site investigations between March 1991 and February 1993. The four borings were converted to groundwater monitoring wells B-7 through B-10. Well locations are shown on the Plot Plan, Figure 2.

BACKGROUND, continued

In October 1993, a 24-hour aquifer test was performed on selected monitoring wells. The objective of the aquifer test was to determine hydraulic characteristics of the shallow aquifer. Results of the test indicate mean transmissivity at the site is 681 gpd/ft. The mean storage coefficient at the site was 0.00271.

A summary of laboratory soil analyses from previous site investigation is included as Table 4.

SITE GEOLOGY AND HYDROGEOLOGY

Lithologies encountered during drilling and sampling indicate the site is underlain by alluvium consisting of sandy clay, sandy silt, sand, clayey sand, and clayey silt to a depth of 35 feet. Boring logs indicate soil type in the saturated interval varies across the site. Copies of the boring logs are included in Appendix A.

Groundwater is present at depths ranging from 7 to 14 feet below grade. The direction of groundwater flow is to the southwest.

DESCRIPTION OF VAPOR EXTRACTION WELLS

Monitoring wells used for vapor extraction during the pilot test are constructed of 4 inch diameter PVC and extend to a total depth ranging from 23 to 40 feet. Wells B-1 through B-5 are slotted from four or five feet below the surface to total depth. Approximately ten feet of slotted casing extends above the water table in these wells. Well B-7 is slotted from ten feet below the surface to maximum well depth. Approximately two feet of slotted casing extends above the water table in this well.

Copies of the well construction logs are included in Appendix A.

DESCRIPTION OF PILOT TEST

A V.R. Systems Model V-3 soil venting engine (Ford 460 c.i.d.) was used to apply vacuum to wells B-1 through B-3, B-5, and B-7 on an individual basis. As indicated on Figure 2, wells B-1 through B-3, and B-5 are located east and north of the machine shop in the vicinity of the original tank excavation. Well B-7 is located west of the machine shop, in the vicinity of the second tank excavation.

Because of the shallow depth to water and limited soil permeability, applied vacuum was maintained at a very low level (ranging from one to 20 inches w.c.). The engine was operated for a time period ranging from 15 minutes to four hours on each well. The engine operating data are included in Table 1.

During each period, measurements were taken of inlet hydrocarbon concentration, flow rate, and vacuum. In addition, wellhead vacuum reading were made at the respective observation wells to determine radius of influence.

Hydrocarbon concentration was measured using a Foxboro 128 organic vapor analyzer (f.i.d.) calibrated with 1% v/v methane and equipped with a dilution apparatus. Flow rate was measured using a Kurz Model 490 mini-anemometer. Flow rate was calculated from measured velocity and the cross sectional area of the extraction piping.

PILOT TEST RESULTS

Operating data and field measurements covering the duration of the test are summarized in Tables 1 and 2. The maximum volumetric extraction rate (corrected for pressure) obtained with the V-3 engine was approximately 2 standard cubic feet per minute from well B-7 at a maximum influent concentration of 4600 ppmv, as measured with the Foxboro analyzer. This corresponds to a hydrocarbon extraction rate of approximately 3 lb/day.

PILOT TEST RESULTS, continued

Vacuum readings were made at each test well and at appropriate observation wells surrounding each test well. Measurements of volumetric extraction rate are plotted vs. applied vacuum for well B-7 in Figure No. 3. Vacuum readings, combined with flow rate measurements, are normally used to calculate soil permeability and radius of vacuum influence. Vacuum was not detected in any of the observation wells, as shown in Table 2. Calculation of soil permeability and radius of influence is not possible with the available data. Detection limit for vacuum was approximately 0.02 inches w.c.

During testing of wells B-1, B-5 and B-7, soil gas samples were collected in Tedlar bags and submitted to Calscience Environmental Laboratories, Inc. for analyses. Laboratory results are presented as Table 3. Copies of the laboratory report and chain of custody are included as Appendix A.

DISCUSSION AND CONCLUSIONS

Based on the results of field testing and laboratory analyses, concentrations of gasoline-range hydrocarbon vapors (less than 200 ppmv) and volatile aromatic hydrocarbons (less than 250 ppb benzene; less than 1000 ppb xylenes) are presently available for vacuum extraction in the vicinity of the original tank zone excavation located north and east of the machine shop. Methane is also present in soils underlying this area in concentrations ranging from approximately 4 to 90 ppmv.

Similar concentrations of gasoline-range hydrocarbon vapors (344 ppmv) and volatile aromatic hydrocarbons (270 ppb benzene; 710 ppb xylenes) are present in soils underlying the second tank zone excavation located west of the machine shop. Substantially higher concentrations of methane (986 ppmv) are present in this area; the reason for the elevated methane concentration is not obvious.

Volumetric extraction rate at this site was very low (less than 2 SCFM) because of low permeability soils and the presence of a shallow water table. Figure 3 indicates that volumetric extraction rate cannot be increased by increasing vacuum. Application of vacuum causes groundwater level in the well casing to rise, reducing the length of slotted casing available for air flow.

DISCUSSION AND CONCLUSIONS, continued

As indicated in Table 4, concentrations of total petroleum hydrocarbons ranging from approximately 3,000 mg/kg to 13,000 mg/kg were previously detected in the 15 foot soil samples from borings B-1 through B-3, and B-5 (located in the vicinity of the original tank excavation). Depth to water in these wells is currently approximately 14 feet; the hydrocarbon-impacted soils cannot be remediated using vapor extraction technology alone.

Table 4 also indicates that approximately 300 mg/kg total petroleum hydrocarbons were present in the 15 foot soil sample from boring B-7. Depth to water in B-7 is currently approximately 12 feet; therefore, hydrocarbon-impacted soils in the vicinity of the second tank excavation cannot be remediated by vapor extraction alone.

In order to remediate soils currently below the water table using vapor extraction, it will be necessary to lower the water level in the extraction wells using submersible pumps or by other means.

o o O o o

This letter has been prepared for the exclusive use of Pomona Box Company as it pertains to their site located at 301 West Imperial Highway, La Habra, California. No warranty, expressed or implied, is made as to the professional advice in this letter. Please contact the undersigned if you have any questions or if we can be of further assistance.

TABLE 1

Engine Operating Data

Date	Time	Well No.	Inlet HC ppmv*	Flow SCFM	Well Vac. in. w.c.	Well Gas lb/hr
01/13	0800	B-7	Begin Test			
	0835	"	--	0.5	1.0	
	0845	"	180	0.5	1.0	0.001
	0900	"	160	0.5	1.0	0.001
	0905	"		0.75	2.0	
	0910	"	1,000	0.75	2.0	0.01
	0920	"	2,200	0.75	2.0	0.03
	0925	"	2,600	0.75	2.0	0.03
	0935	"			2.0	
	0940	"		1.1	3.0	
	0950	"	2,500	1.1	3.0	0.04
	1010	"	3,000	1.1	3.0	0.05
	1015	"			5.0	
	1020	"	3,400	1.6	5.0	0.08
	1035	"	2,100	1.6	5.0	0.05
	1045	"	2,000	1.6	5.0	0.05
	1050	"		2.3	10.0	
	1055	"	4,600	1.8	10.0	0.13
	1105	"	2,600	1.8	10.0	0.07
	1115	"	2,000	1.8	10.0	0.06
	1150	"	1,800	1.8	10.0	0.05
01/13	1255	B-3		0.5	2.0	
	1300	"	15		2.0	<0.001
	1315	"	9	0.5	2.0	<0.001
	1320	"		1.1	5.0	
	1330	"	7	1.1	5.0	
	1335	"		1.7	10.0	<0.001
	1345	"	6	1.7	10.0	<0.001
	1350	"		2.2	20.0	<0.001
	1355	"	4	2.2	20.0	<0.001

TABLE 1, continued

Engine Operating Data

Date	Time	Well No.	Inlet HC ppmv*	Flow SCFM	Well Vac. in. w.c.	Well Gas lb/hr
01/13	1400	B-1		1.6	5.0	
	1405	"	250	1.5	5.0	0.006
	1415	"	100	1.5	5.0	0.002
	1425	"	100	1.5	5.0	0.002
01/13	1430	B-2		1.5	5.0	
	1435	"	6	1.5	5.0	<0.001
	1445	"	5	1.5	5.0	<0.001
01/13	1500	B-5		0.2	5.0	
	1505	"		0.3	10.0	
	1510	"		1.6	20.0	
	1520	"	240	1.6	20.0	0.006
	1530	"	60	1.6	20.0	0.001
	1535	"		1.6	20.0	
	1600	"	50	1.6	20.0	0.001

TABLE 2

Vacuum Radius of Influence Measurements

[----------Test Well----------]			[---------Observation Well---------]		
Well No.	Extr. Rate CFM	Well Vac. in. w.c.	Well No.	Dist. to Test Well	Well Vac. in. w.c.
B-1	1.5	5.0	B-2	27'	ND <0.02
			B-3	27'	ND <0.02
			B-4	15'	ND <0.02
B-2	1.5	5.0	B-3	21'	ND <0.02
			B-5	23'	ND <0.02
			B-1	27'	ND <0.02
B-3	2.2	20.0	B-1	27'	ND <0.02
			B-2	21'	ND <0.02
			B-4	17'	ND <0.02
B-5	1.6	20.0	B-2	23'	ND <0.02
			B-6	38'	ND <0.02
			B-3	40'	ND <0.02
B-7	1.8	10.0	B-8	43'	ND <0.02
			B-9	25'	ND <0.02
			B-10	58'	ND <0.02

TABLE 3

SUMMARY OF LABORATORY TEST RESULTS

Soil Gas Analyses, 01/13/94

Well No.	Methane, ppmv	Non-Methane HC, ppmv	Benzene, ppbv	Toluene, ppbv	Ethyl Benzene, ppbv	Xylenes, ppbv
B-1	90.7	110	230	365	52.5	705
B-5	3.8	171	80.8	412	138	978
B-7	986	344	270	185	725	710

TABLE 4

SUMMARY OF SOIL ANALYSES

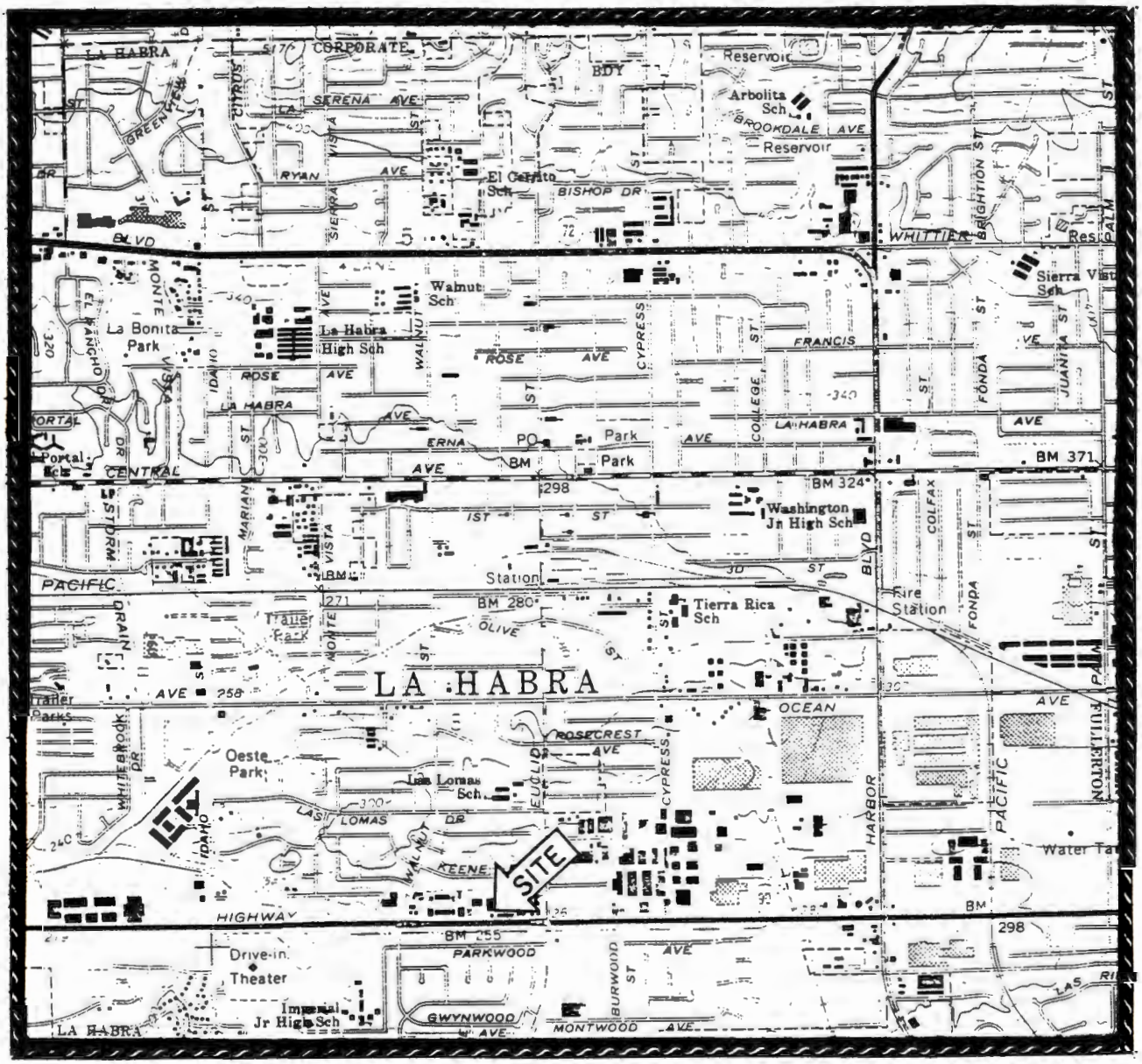
Boring No.	Date Drilled	Depth, Feet	TPH mg/kg	Benzene mg/kg	Toluene mg/kg	E.Benzene mg/kg	Xylenes mg/kg
B-1	01/28/87	15	7,306	ND	ND	1.1	11.1
		20	ND	NT	NT	NT	NT
B-2	01/28/87	15	12,720	44	310	172	911
		24	ND	NT	NT	NT	NT
B-3	01/28/87	15	6,237	5	19	18	123
		20	ND	NT	NT	NT	NT
B-4	10/02/87	5	ND	NT	NT	NT	NT
		10	ND	NT	NT	NT	NT
		15	1,290	0.3	0.9	0.8	5.2
B-5	10/02/87	5	12	NT	NT	NT	NT
		10	23	NT	NT	NT	NT
		15	2,940	0.5	13.1	11.7	78.1
		20	16	NT	NT	NT	NT
B-6	10/02/87	5	ND	NT	NT	NT	NT
		10	ND	NT	NT	NT	NT
		15	ND	NT	NT	NT	NT
B-7	03/26/91	5	12	ND	ND	ND	ND
		10	44	0.2	ND	ND	3.4
		15	323	3.6	3.4	6.9	9.7
		20	ND	ND	ND	ND	ND

TABLE 4, continued

SUMMARY OF SOIL ANALYSES

Boring No.	Date Drilled	Depth, Feet	TPH mg/kg	Benzene mg/kg	Toluene mg/kg	E.Benzene mg/kg	Xylenes mg/kg
B-8	07/24/91	5	ND	ND	ND	ND	ND
		15	ND	ND	ND	ND	ND
B-9	02/26/93	5	ND	ND	ND	0.02	0.025
		10	ND	ND	ND	ND	ND
B-10	02/26/93	5	ND	ND	ND	ND	ND
		10	ND	ND	ND	ND	0.02

SITE LOCATION MAP



2000 0 2000 4000

SCALE FEET

NORTH

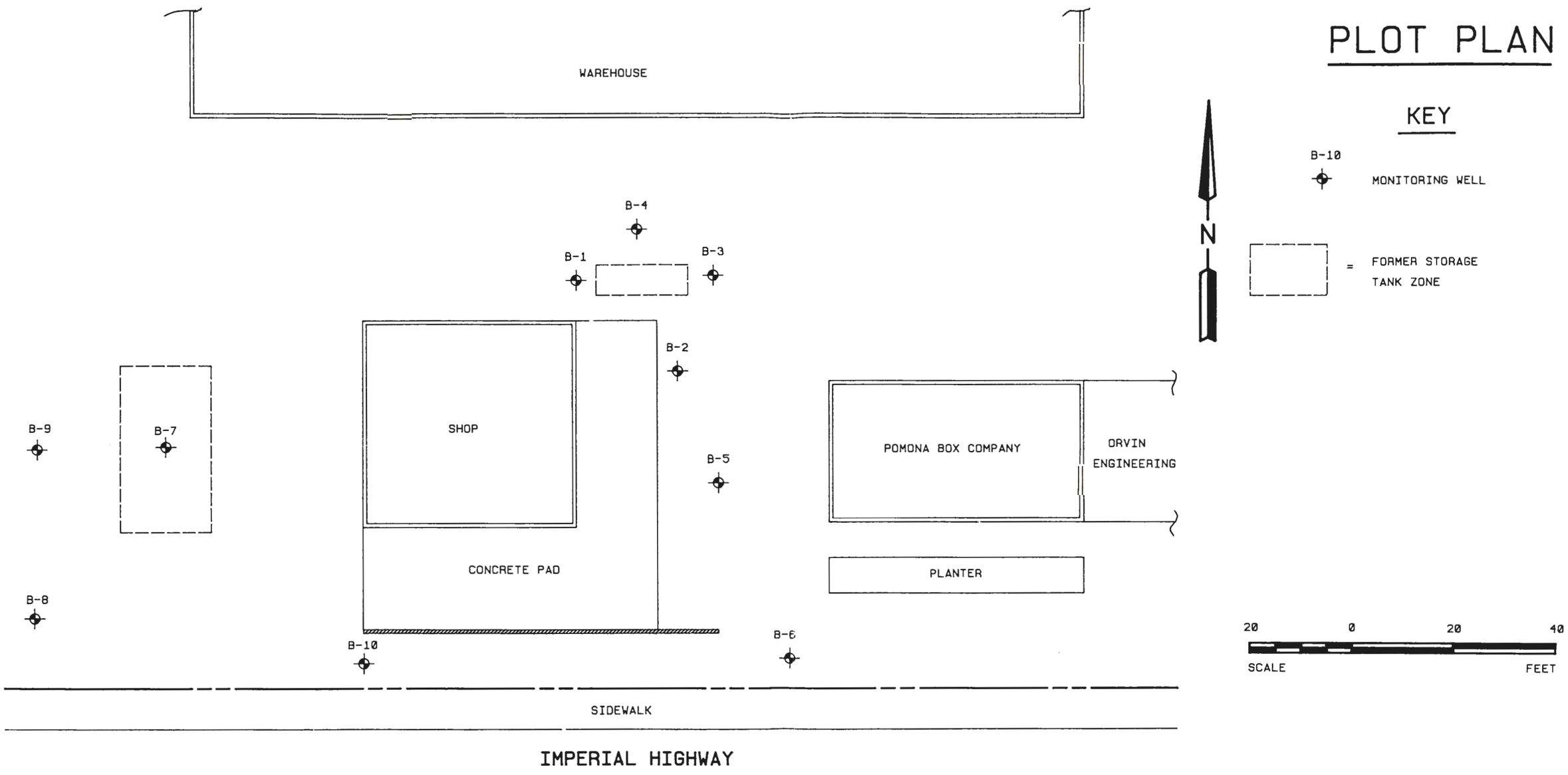
BASE MAP: La Habra Quadrangle

Pomona Box
301 W. Imperial Highway
La Habra, California

PROJECT NO.	FIGURE NO.
88.3X	1
DRAWN BY	

Wayne Perry Construction Inc. Environmental Specialists

PLOT PLAN



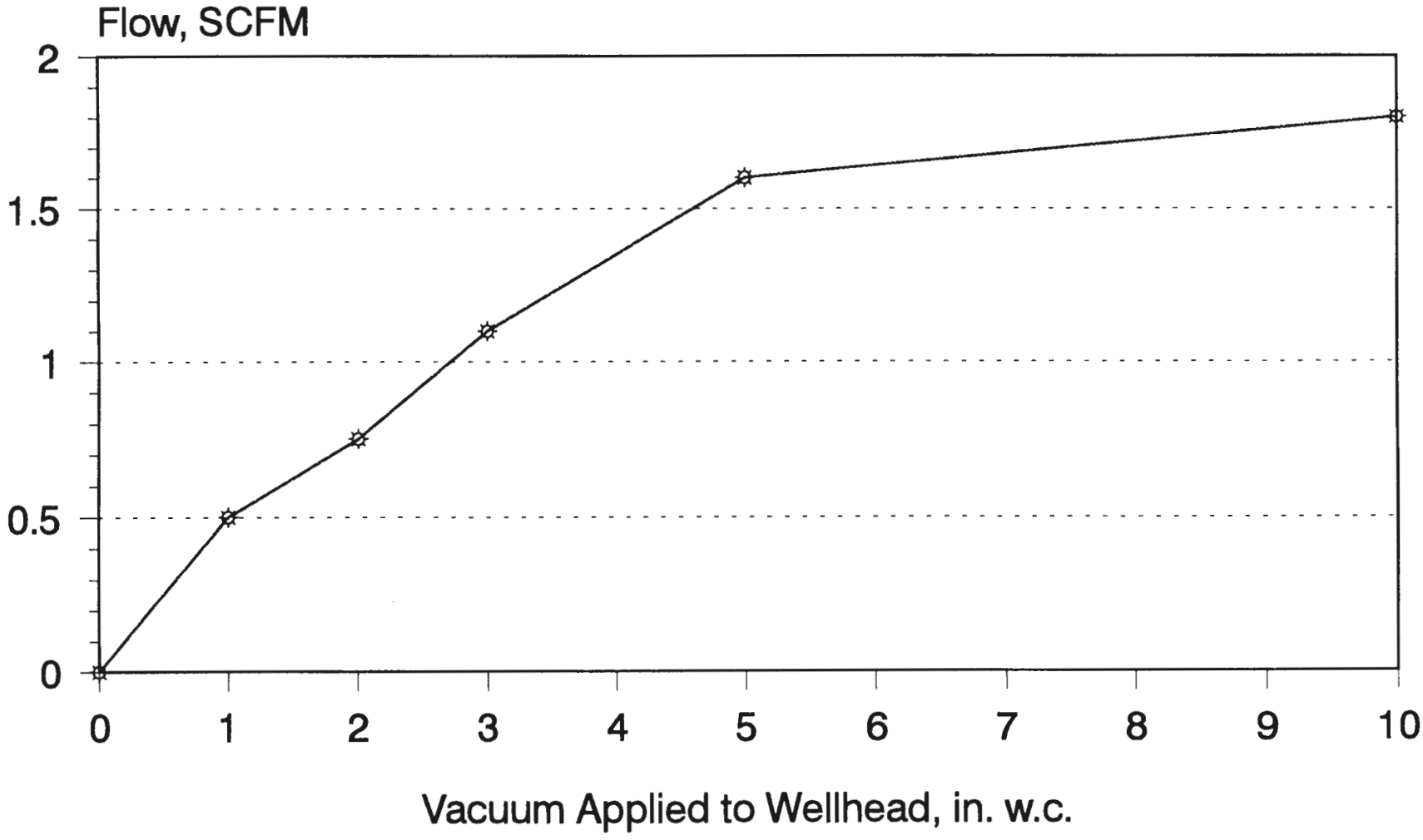
POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA.

PROJECT NO.	FIGURE NO.
88.3X	2
DRAWN BY EL 4/22/93	REVISED ADD B-9,B-10 EL 4/22/93

Wayne Perry Environmental Construction Inc. Specialists

POMONA BOX COMPANY

FLOW VS. APPLIED VACUUM - WELL B-7



Test Date: 01/13/94

Figure No. 3

Pomona Box Company
Project No. 88.003

APPENDIX A

Boring Logs

Well Construction Logs

LOG OF BORING

Drill Rig: CME-75	Boring Diameter: 10 inch	Boring Elevation:	Boring Number
Date Drilled: 1/28/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-1

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC
					AB
		5		CL	Sandy CLAY: red brown, moist, firm; color change to gray brown at 6 feet.
		10			ALLUVIUM
		15		SC	Clayey SAND: fine-to medium-grained, red brown, moist to very moist, dense.
					ALLUVIUM
		20		CL	Sandy CLAY: red brown, moist to saturated, stiff.
					ALLUVIUM
		25			
		30			
		35			
		40			
		45			
		50			

Notes:
1. Bottom of boring at 24 feet.
2. Ground water encountered at 20 feet.
3. Casing set to 24 feet.

Pomona Box Company
301 W. Imperial Highway, La Habra

Project No.: 86.252

Figure No.: 2

LOG OF BORING

Drill Rig: CME-75	Boring Diameter: 10 inch	Boring Elevation:	Boring Number
Date Drilled: 1/28/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-2

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC AB
		5 10		CL	Sandy CLAY: red brown, moist, firm; slightly plastic; color changes to gray brown at 4.5 feet. ALLUVIUM
		15		SC	Clayey SAND: fine-to medium-grained, gray, very moist to saturated, dense. ALLUVIUM
		20		CL	Sandy CLAY: red brown, saturated, firm to stiff; slightly plastic. ALLUVIUM
		25 30 35 40 45 50			

Notes:
1. Bottom of boring at 24 feet.
2. Groundwater encountered at 21 feet.
3. Casing set to 24 feet.

Pomona Box Company
301 W. Imperial Highway, La Habra

Project No.: 86.252

Figure No.: 3

LOG OF BORING

Drill Rig: CME-75	Boring Diameter: 10 inch	Boring Elevation:	Boring Number
Date Drilled: 1/29/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-3

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC
				CL	AB
		5		SC	Silty CLAY: light brown, damp, firm; occasional coarse-grained sand; some decaying organics. ALLUVIUM
		10		ML	Clayey SAND: coarse-grained, yellow brown, damp, very dense; occasional gravel. ALLUVIUM
		15			Clayey SILT: gray very moist to firm. ALLUVIUM
		20		SM	Silty SAND: medium-to coarse-grained, yellow brown, saturated, dense; occasional gravel and clayey sand. ALLUVIUM
		25			
		30			
		35			
		40			
		45			
		50			

Notes:

1. Bottom of boring at 24 feet.
2. Ground water encountered at 16.5 feet.
3. Casing set to 24 feet.

Pomona Box Company
301 W. Imperial Highway, La Habra

Project No.: 86.252

Figure No.: 4

LOG OF BORING

Drill Rig: B-61	Boring Diameter: 11 inch	Boring Elevation:	Boring Number
Date Drilled: 10/2/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-5

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC AB
		5 10		CL	Sandy CLAY: brown, moist, medium stiff, mottled. ALLUVIUM
	▼	15 20 25 30 35		SM	Silty SAND: fine- to coarse-grained, brown, wet, medium dense, trace of gravel, hydrocarbon odor. ALLUVIUM
		40 45 50			

Notes:
1. Bottom of boring at 35 feet.
2. Groundwater encountered at 17 feet.
3. Casing set to 35 feet.

Pomona Box Company
301 W. Imperial Hwy., La Habra

Project No.: 86.252

Figure No.: 4

LOG OF BORING

Drill Rig: B-61	Boring Diameter: 11 inch	Boring Elevation:	Boring Number
Date Drilled: 10/2/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-6

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC AB
		5 10		CL	Sandy CLAY: dark brown, damp, stiff. ALLUVIUM
	▼	15 20 25 30 35		SM	Silty SAND: fine- to medium-grained, brown, moist, medium dense. ALLUVIUM
		40 45 50			

Notes:
1. Bottom of boring at 35 feet.
2. Groundwater encountered at 16 feet.
3. Casing set to 35 feet.

Pomona Box Company
301 W. Imperial Hwy., La Habra

Project No.: 86.252

Figure No.: 5

LOG OF BORING

Drill Rig: B-61	Boring Diameter: 11"	Boring Elevation:	Boring Number
Date Drilled: 2/26/93	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-10

Sample Depth	Vapor Reading PPM/LEL	Time	Blow Counts	Depth Feet	Soil/ Rock Symbol	Soil/ Rock Type	Description and Remarks
						CL	AC/AB
							Silty CLAY: dark grey, moist, stiff
	60	11:00	6/9/13	5			
						ML	Sandy SILT: dark, gray, moist, stiff; occasional silty sand lenses
	400	11:15	13/18/31	10			
							becomes saturated at 12 feet
				15			
				20		SC	Clayey SAND: fine- to coarse-grained, very moist, dense
				25			
				30			
				35			
				40			
				45			
				50			
				55			
				60			

Notes:
1. Bottom of boring at 25 feet.
2. Saturated conditions encountered at 12 feet.
3. Well set to 25 feet.

Pomona Box
301 W. Imperial Hwy
La Habra

Project No.: 88.03X

Figure No.: 5

Boring No. B-1

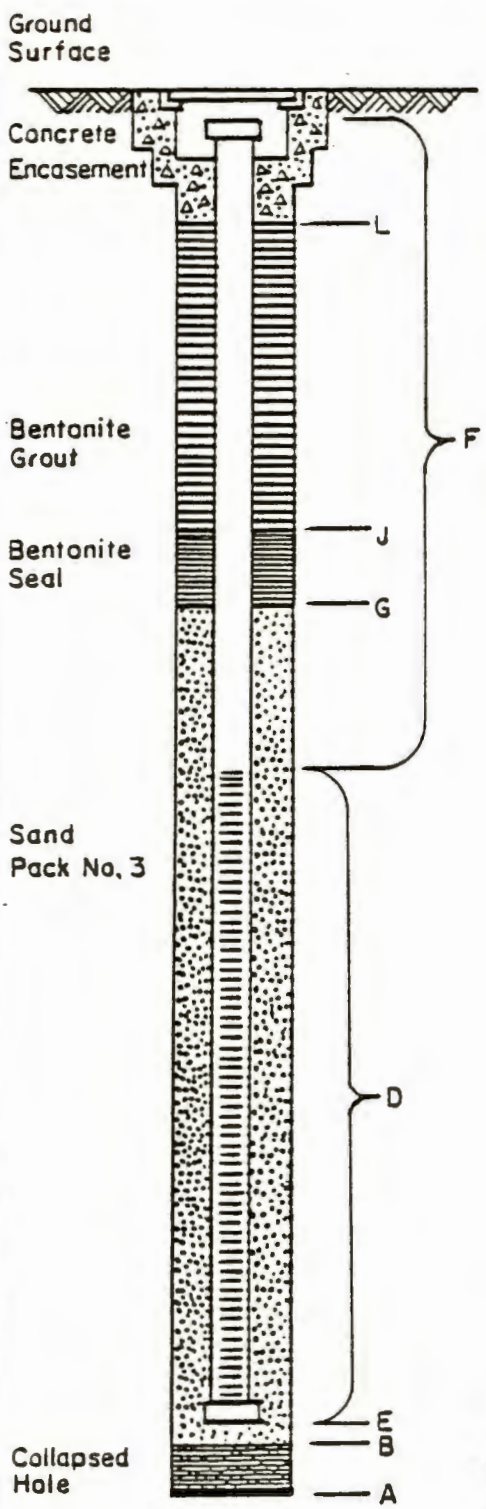
Location Pomona Box Co.

301 W. Imperial Hwy

Date 1/28/87

Logger's initials RJB

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	24	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	0	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	20	
E Depth of bottom of casing	(E)	24	
F. Length of blank casing	(F)	4	
G. Depth to top of gravel/sand fill	(G)	2	
H. Footage of gravel sand fill	(H) = B-F		26
I. Bags of gravel sand used	(I)	8	
J. Depth to top of bentonite seal	(J)	1	
K. Thickness of bentonite seal	(K) = I-G		1
L. Depth to top of bentonite grout	(L)	NA	
M. Thickness of bentonite grout	(M) = L-J		NA
N. Thickness of concrete encasement	(N) = L-Ø		NA

Depth to water	14.39
Type of casing	4" PVC Sch. 40
Type of access box used	DWP Well Protector
Top of casing elevation	256.87
Date surveyed	2/27/87
Ground water elevation	242.48

Pomona Box Company
301 W. Imperial Hwy., La Habra

PROJECT NO.: 86.252 | FIGURE NO.: 5

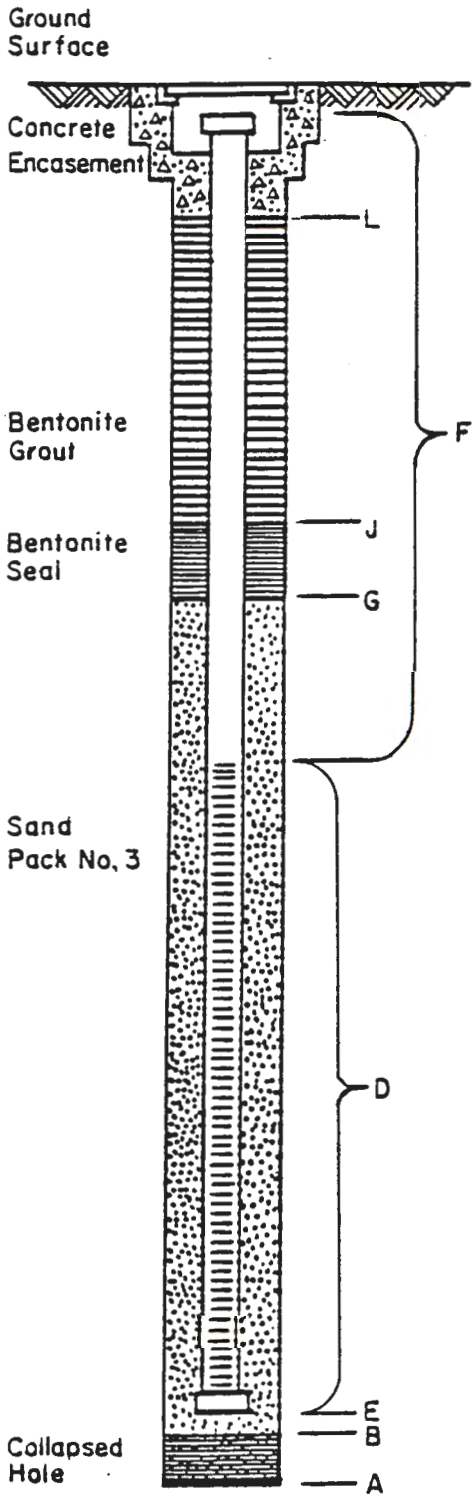
Boring No. B-4

Location 301 W. Imperial, La Habra

Date 10/2/87

Logger's initials PTC

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	36	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	35	
C. Footage of hole collapsed	(C) = A-B =		1
D. Length of slotted casing installed	(D)	30	
E Depth of bottom of casing	(E)	35	
F. Length of blank casing	(F)	5	
G. Depth to top of gravel/sand fill	(G)	4	
H. Footage of gravel sand fill	(H) = B-F		31
I. Bags of gravel sand used	(I)	16	
J. Depth to top of bentonite seal	(J)	2	
K. Thickness of bentonite seal	(K) = I-G		2
L. Depth to top of bentonite grout	(L)	N/A	
M. Thickness of bentonite grout	(M) = L-J		N/A
N. Thickness of concrete encasement	(N) = L-Ø		2

Depth to water	15.10
Type of casing	4" PVC Sch. 40
Type of access box used	DWP Well Protector
Top of casing elevation	261.56
Date surveyed	10/9/87
Ground water elevation	246.46

Pomona Box Company
301 W. Imperial Hwy., La Habra

PROJECT NO. 86.252 | FIGURE NO. 6

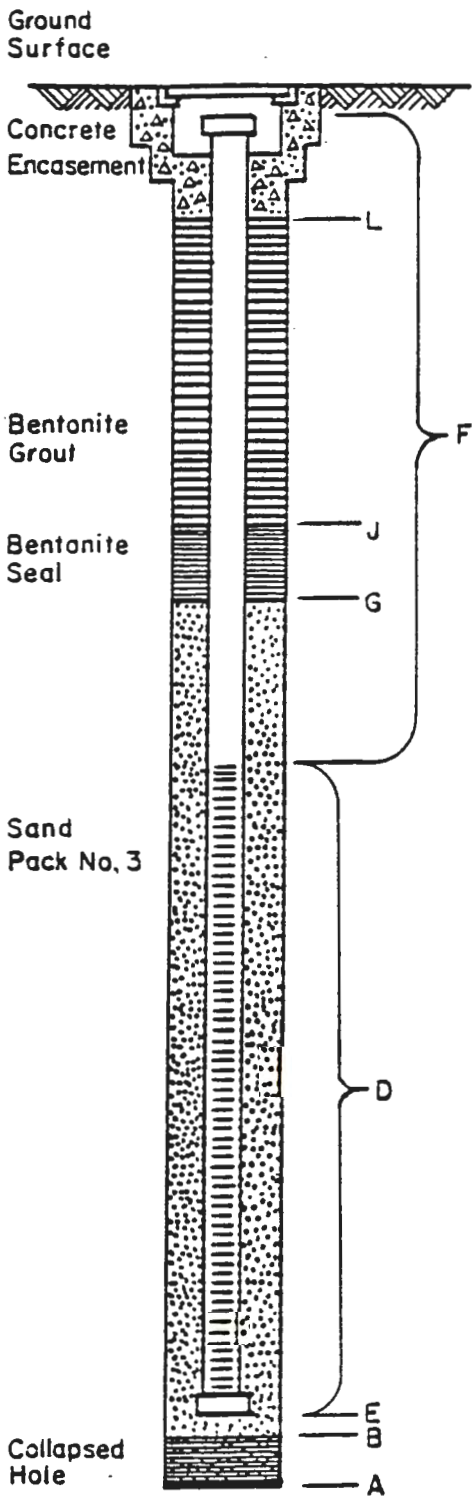
Boring No. B-5

Location 301 W. Imperial, La Habra

Date 10/2/87

Logger's initials PTC

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	35	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	35	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	30	
E Depth of bottom of casing	(E)	35	
F. Length of blank casing	(F)	5	
G. Depth to top of gravel/sand fill	(G)	4	
H. Footage of gravel sand fill	(H) = B-F		31
I. Bags of gravel sand used	(I)	16	
J. Depth to top of bentonite seal	(J)	1	
K. Thickness of bentonite seal	(K) = I-G		3
L. Depth to top of bentonite grout	(L)	N/A	
M. Thickness of bentonite grout	(M) = L-J		N/A
N. Thickness of concrete encasement	(N) = L-Ø		1

Depth to water	20.49
Type of casing	4" PVC Sch. 40
Type of access box used	DWP Well Protector
Top of casing elevation	260.68
Date surveyed	10/9/87
Ground water elevation	244.92

Pomona Box Company
301 W. Imperial Hwy., La Habra

PROJECT NO. 86.252 | FIGURE NO. 7

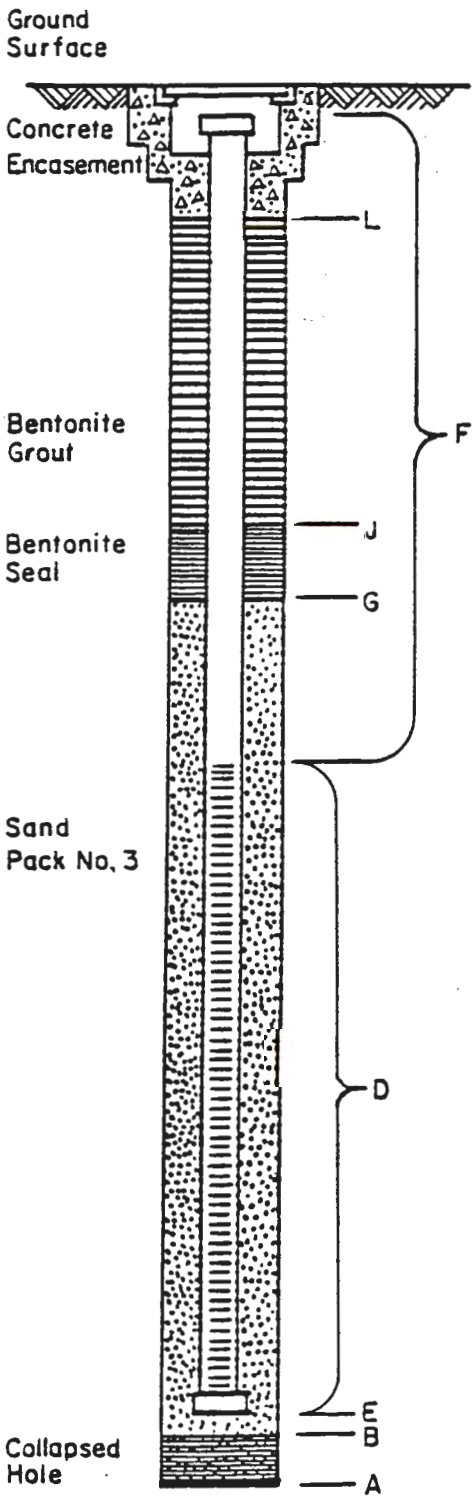
Boring No. B-6

Location 301 W. Imperial
La Habra

Date 10/2/87

Logger's initials PTC

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	35	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	35	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	30	
E Depth of bottom of casing	(E)	35	
F. Length of blank casing	(F)	5	
G. Depth to top of gravel/sand fill	(G)	4	
H. Footage of gravel sand fill	(H) = B-F		31
I. Bags of gravel sand used	(I)	16	
J. Depth to top of bentonite seal	(J)	2	
K. Thickness of bentonite seal	(K) = I-G		2
L. Depth to top of bentonite grout	(L)	N/A	
M. Thickness of bentonite grout	(M) = L-J		N/A
N. Thickness of concrete encasement	(N) = L-Ø		2

Depth to water	11.67
Type of casing	4" PVC Sch. 40
Type of access box used	256.60
Top of casing elevation	10/9/87
Date surveyed	244.93
Ground water elevation	

Pomona Box Company
301 W. Imperial Hwy., La Habra

PROJECT NO. 86.252 | FIGURE NO. 8

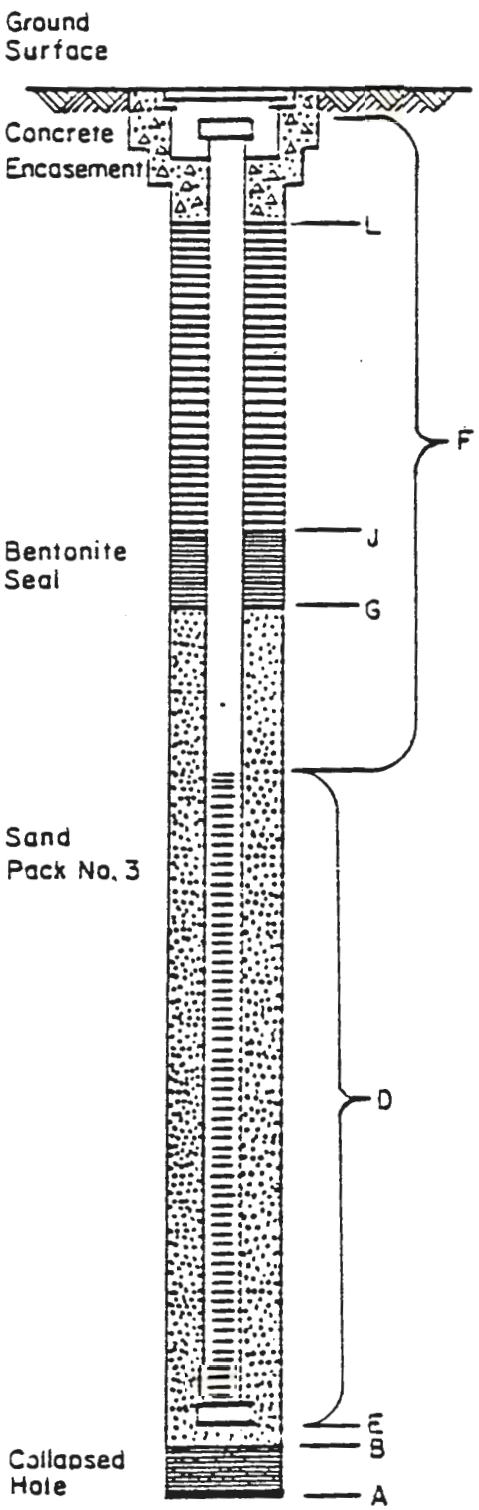
Boring No. B-7

Location C FORMER UNDER-GROUND STORAGE TANK ZONE

Date 3-21-91

Logger's initials TDR

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	43'	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	43'	
C. Footage of hole collapsed	(C) = A-B =		0'
D. Length of slotted casing installed	(D)	40'	
E Depth of bottom of casing	(E)	40'	
F. Length of blank casing	(F)	10'	
G. Depth to top of gravel/sand fill	(G)	8'	
H. Footage of gravel sand fill	(H) = B-G		35'
I. Bags of gravel sand used	(I)	14'	
J. Depth to top of bentonite seal	(J)	1	
K. Thickness of bentonite seal	(K) = G-J		7'
L. Depth to top of bentonite grout	(L)	NA	
M. Thickness of bentonite grout	(M) = J-L		NA
N. Thickness of concrete encasement	(N) = L-Ø		1'

Depth to water	18'
Type of casing	4" Diam. PVC
Type of access box used	DIVERSIFIED BOX/LTD
Top of casing elevation	254.69
Date surveyed	3/27/91
Ground water elevation	

POMONA BOX COMPANY
301 IMPERIAL HIGHWAY

PROJECT NO. 89.151 | FIGURE NO. 5

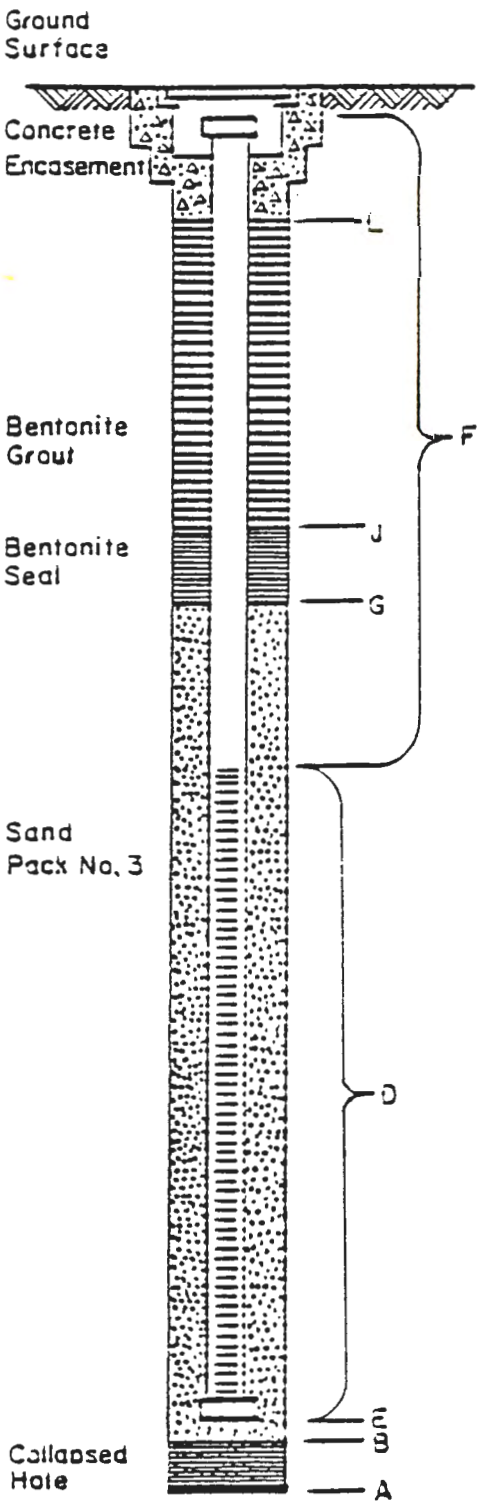
Boring No. B-8

Location 301 W. Imperial Hwy., La Habra, California

Date 7-24-91

Logger's initials TDR

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	37	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	37	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	30	
E Depth of bottom of casing	(E)	35	
F. Length of blank casing	(F)	5	
G. Depth to top of gravel/sand fill	(G)	9	
H. Footage of gravel sand fill	(H) = B-G		28
I. Bags of gravel sand used	(I)	16	
J. Depth to top of bentonite seal	(J)	1.5	
K. Thickness of bentonite seal	(K) = G-J		7.5
L. Depth to top of bentonite grout	(L)	1.5	
M. Thickness of bentonite grout	(M) = J-L		7.5
N. Thickness of concrete encasement	(N) = L-Ø		1.5

Depth to water	15
Type of casing	4" Diam. PVC.
Type of access box used	Diversified
Top of casing elevation	250.87 A.S.L.
Date surveyed	7/29/91
Ground water elevation	241.39

Pomona Box Co.
301 West Imperial Hwy., La Habra, California

PROJECT NO. 89.151 | FIGURE NO. 4

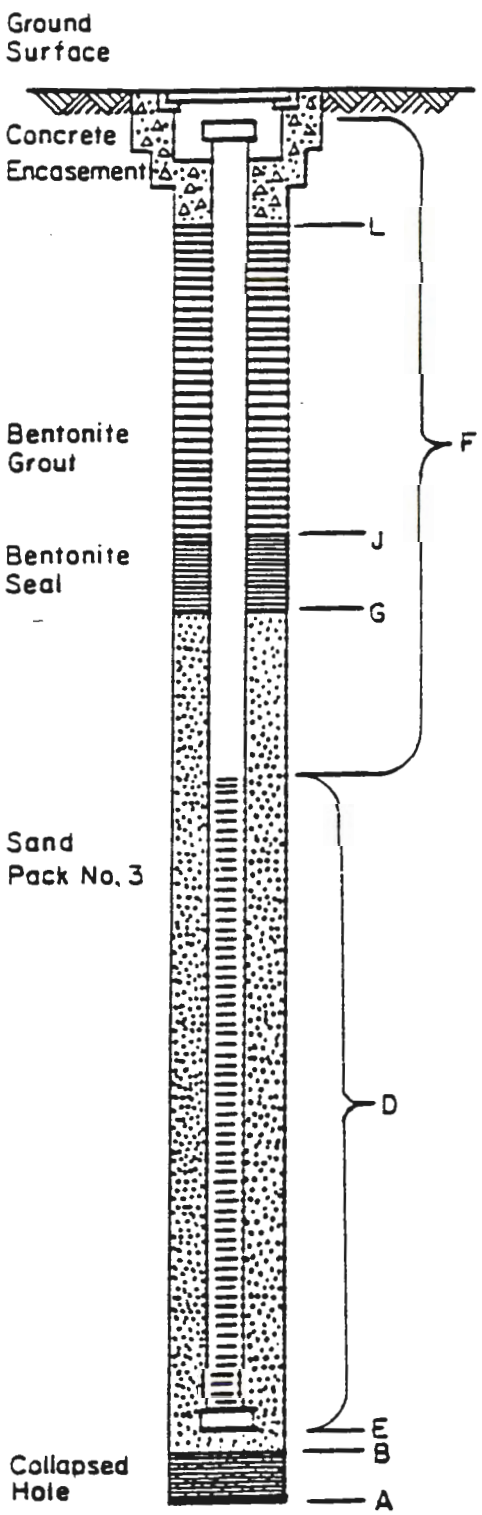
Boring No. B-9

Location West of B-7

Date 2/26/93

Logger's initials MSW

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	23.5	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	23.5	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	15	
E Depth of bottom of casing	(E)	23.5	
F. Length of blank casing	(F)	8.5	
G. Depth to top of gravel/sand fill	(G)	6.5	
H. Footage of gravel sand fill	(H) = B-G		17
I. Bags of gravel sand used	(I)	7	
J. Depth to top of bentonite seal	(J)	1	
K. Thickness of bentonite seal	(K) = G-J		5.5
L. Depth to top of bentonite grout	(L)	N/A	
M. Thickness of bentonite grout	(M) = J-L		N/A
N. Thickness of concrete encasement	(N) = L-Ø		1

Depth to water	9.79
Type of casing	4 inch PVC
Type of access box used	Flush Mount
Top of casing elevation	253.72
Date surveyed	3/12/93
Ground water elevation	243.93

Pomona Box
301 W. Imperial Hwy, La Habra

PROJECT NO.: 88.03X

FIGURE NO.: 6

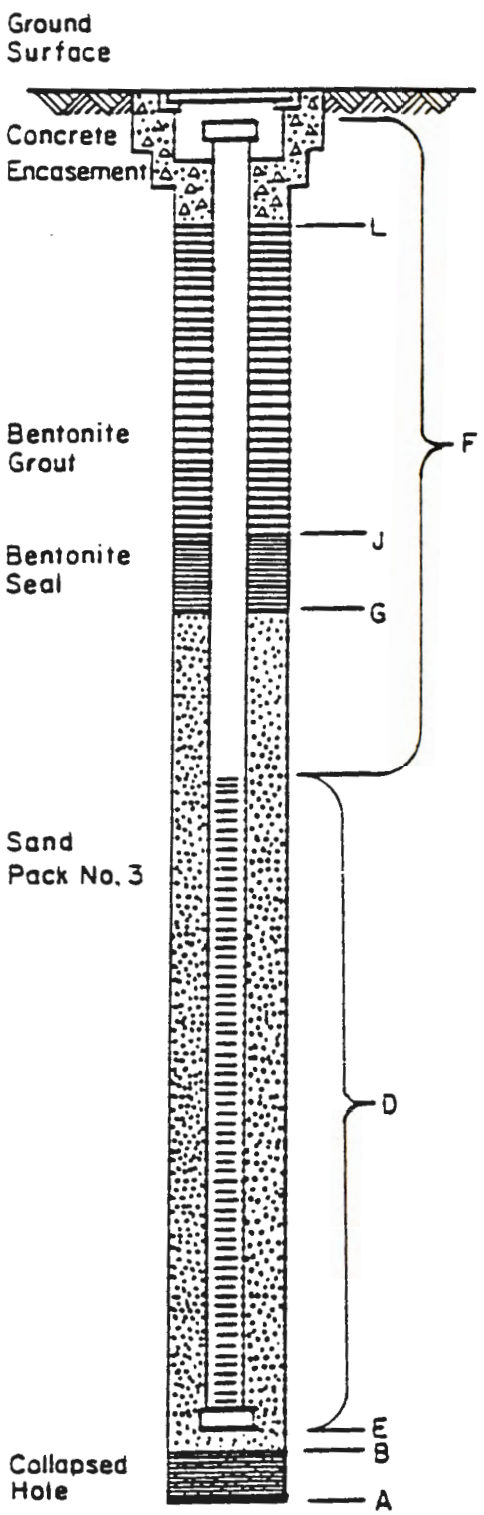
Boring No. B-10

Location South property boundary

Date 2/26/93

Logger's initials MSW

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	25	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	25	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	20	
E Depth of bottom of casing	(E)	25	
F. Length of blank casing	(F)	5	
G. Depth to top of gravel/sand fill	(G)	4	
H. Footage of gravel sand fill	(H) = B-G		21
I. Bags of gravel sand used	(I)	10	
J. Depth to top of bentonite seal	(J)	1	
K. Thickness of bentonite seal	(K) = G-J		3
L. Depth to top of bentonite grout	(L)	N/A	
M. Thickness of bentonite grout	(M) = J-L		N/A
N. Thickness of concrete encasement	(N) = L-Ø		1

Depth to water	9.14
Type of casing	4 inch PVC
Type of access box used	Flush Mount
Top of casing elevation	250.90
Date surveyed	3/22/93
Ground water elevation	241.76

Pomona Box
301 W. Imperial Hwy, La Habra

PROJECT NO.: 88.03X

FIGURE NO.: 7

Pomona Box Company
Project No. 88.003

APPENDIX B

Laboratory Data Sheets

Chain-of-Custody-Form

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Wayne Perry Construction		Date Sampled:	01/13/94
8281 Commonwealth		Date Received:	01/13/94
Buena Park, CA 90621		Date Analyzed:	01/14/94
		Work Order No.:	94-01-184
Attn: Dave Potts		Method:	ASTM 3416M
RE: 88.003X/Pomona Box, La Habra		Page 1 of 1	

Methane and total non-methane hydrocarbon concentration values contained herein are reported "as methane" and "as gasoline", respectively, in ppm (v/v).

Sample Number	CH_4 Concentration	Non-CH_4HC Concentration	Reportable Limit
Well B-7	986	344	3
Well B-1	90.7	110	3
Well B-5	3.76	171	3
Method Blank	ND	ND	3

QA/QC

Sample Number: Well B-7

Analyte	Sample Conc.	Dup. Conc.	%RPD	Control Limits (%)
CH_4	986	978	0.81	0-30
Non-CH_4HC	344	331	3.85	0-30

Reviewed and Approved William H Christensen on 01/21/1994
William H. Christensen
Deliverables Manager

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

11631 Seaboard Circle, Stanton, CA 90680 • TEL: (714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Wayne Perry Construction	Date Sampled: 01/13/94
8281 Commonwealth	Date Received: 01/13/94
Buena Park, CA 90621	Date Analyzed: 01/15/94
	Work Order No.: 94-01-184
Attn: Dave Potts	Method: EPA TO-14 (BTEX)
RE: 88.003X/Pomona Box, La Habra	Page 1 of 2

All concentrations are reported in ppb (v/v).

Analyte	Concentration	Reportable Limit
Sample Number: Well B-7		
Benzene	270	100
Toluene	185	100
Ethylbenzene	725	100
Total Xylenes	710	100
Sample Number: Well B-1		
Benzene	230	50
Toluene	365	50
Ethylbenzene	52.5	50
Total Xylenes	705	100
Sample Number: Well B-5		
Benzene	80.8	50
Toluene	412	50
Ethylbenzene	138	50
Total Xylenes	978	100

11631 Seaboard Circle, Stanton, CA 90680 • TEL: (714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Wayne Perry Construction	Date Sampled: 01/13/94
8281 Commonwealth	Date Received: 01/13/94
Buena Park, CA 90621	Date Analyzed: 01/15/94
	Work Order No.: 94-01-184
Attn: Dave Potts	Method: EPA TO-14 (BTEX)
RE: 88.003X/Pomona Box, La Habra	Page 2 of 2

All concentrations are reported in ppb (v/v).

Analyte	Concentration	Reportable Limit
Sample Number: Method Blank		
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	4

QA/QC

Sample Number: 94-01-202-1 (Duplicate)

Analyte	Sample Conc.	Dup. Conc.	RPD%	Control Limits (%)
Benzene	8690	9050	4.06	0-30
Toluene	20900	21100	0.95	0-30
Ethylbenzene	1880	1980	5.18	0-03
Total Xylenes	29200	31500	7.58	0-30

Reviewed and Approved William H. Christensen on 01/21/1994
William H. Christensen
Deliverables Manager

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

184

CHAIN OF CUSTODY RECORD

Serial No:

Date: 01/13/94

Page 1 of 1

Site Address: POMONA BOX 301 W. IMPERIAL HWY LA HABRA

WIC#:

Engineer: Phone No.: Fax #:

Consultant Name & Address: Wayne Perry Const. 8301 Commonwealth, Buena Park, CA

Consultant Contact: Dave Potts Phone No.: 714 826-0352 Fax #:

Comments: Invoice Wayne Perry Job # 88-093X

Sampled by: David E Potts

Printed Name: DAVID E POTTS

Analysis Required

LAB: Calscience

CHECK ONE (1) BOX ONLY		CT/DT
G.W. Monitoring	☐	4461
Site Investigation	☐	4441
Soil Classify/Disposal	☐	4442
Water Classify/Disposal	☐	4443
Soil/Air Rem. or Sys. O & M	☐	4452
Water Rem. or Sys. O & M	☐	4453
Other	☐	

TURN AROUND TIME: 24 hours ☐ 48 hours ☐ 15 days ☒ (Normal) Other ☐ ____

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: OCHCA

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
Well B-7	1/13				✓	1	X		X										1L Tedlar	0940 Hrs
Well B-1	↓				✓	1	X		X										"	1420 Hrs
Well B-5	↓				✓	1	X		X										"	1530 Hrs

Relinquished By (signature):	Printed Name:	Date:	Received (signature):	Printed Name:	Date:
David E Potts	DAVID E POTTS	01/13 Time: 1650			Time:
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature):	Printed Name:	Date: Time:
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature):	Printed Name: JAY PATEL	Date: 1/13/94 Time: 5:50 pm

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev. 1/13/93

Shell Oil Chn. of Custody

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
PHONE (714) 826-0352 ■ FAX ADM. & CONST. (714) 523-7880 ■ FAX GEO. & ENG. (714) 523-7541

Project No. 88.003

August 9, 1994

Pomona Box Company
301 West Imperial Highway
La Habra, California

Attention: Mr. Don Votaw

Subject: Remedial Action Plan for Groundwater
Pomona Box Company
301 West Imperial Highway
La Habra, California

EXECUTIVE SUMMARY

Enclosed is a proposed work plan for soil and groundwater remediation at the Pomona Box facility located at 301 West Imperial Highway in the city of La Habra.

Groundwater will be recovered from four wells, treated by activated carbon adsorption to remove dissolved hydrocarbons, and discharged to the storm drain under an NPDES permit. Soil remediation will be addressed by installation of a soil vapor extraction system, operating concurrently with the groundwater recovery system. Soil gas will be vacuum extracted from seven wells, treated by activated carbon adsorption to remove hydrocarbon vapors, and discharged under a permit from the South Coast Air Quality Management District.

SITE DESCRIPTION

The site is occupied by an operating box manufacturing company located on the north side of Imperial Highway west of the intersection of Imperial Highway and Euclid Avenue in the city of La Habra. The site location and general geographic relationships are shown on the Location Map, Figure 1.

Located on the site is an office building, manufacturing building, and mechanics shed. Site relationships are shown on the Plot Plan, Figure 2.

BACKGROUND

In December 1986, a single 1,000 gallon underground storage tank was removed at this location. Soil samples were obtained and analyzed as part of the removal procedure. Results of the laboratory analyses indicated a localized area of hydrocarbon contaminated soil was present in the bottom of the excavation. During additional excavation to remove the contaminated soils, groundwater and free product were encountered at a depth of approximately 13 feet. The excavation was backfilled and the information reported to the local regulatory agency. Accordingly, site assessment work was required by the Orange County Health Care Agency to define the extent of contamination.

Between January and September 1987, six borings, B-1 through B-6, were drilled and sampled. All the borings were converted to groundwater monitoring wells. Well locations are shown on the Plot Plan, Figure 2, in Appendix A. Dissolved or separate phase hydrocarbons were detected in all the wells.

Manual recovery of separate phase hydrocarbons was initiated in June 1987. An automated recovery system was installed and became operational in April 1988.

In September 1989, seven additional underground storage tanks were removed at this location. The approximate tank locations are shown on Figure 2 in Appendix A. Results of laboratory analyses performed as part of the removal procedure indicated petroleum hydrocarbons were present. Subsequently, four borings were drilled and sampled as part of supplemental site investigations between March 1991 and February 1993. The four borings were converted to groundwater monitoring wells B-7 through B-10. Well locations are shown on the Plot Plan, Figure 2 in Appendix A.

A one-day vapor extraction test was completed on January 13, 1994. A V.R. Systems Model V-3 soil venting engine was used to apply vacuum on an individual basis to five groundwater monitoring wells located on the property. Testing was conducted at low levels of applied vacuum to avoid excessive upwelling of groundwater. During the test, well gas samples obtained from individual wells contained total hydrocarbon levels ranging from 4 ppmv to 4,600 ppmv. Maximum volumetric extraction rate was approximately 2 standard cubic feet per minute (SCFM) from well B-7. Wellhead vacuum to achieve this flow rate was approximately 10 inches w.c. (water column).

Laboratory testing of a soil gas samples obtained during the vapor extraction test indicated total petroleum hydrocarbons ranging from 110 to 344 ppmv (ASTM Method 3416M), and benzene ranging from 81 to 270 ppbv (EPA Method TO-14). Methane was present in concentrations ranging from 4 to 986 ppmv (ASTM Method 3416M).

SUBSURFACE CONDITIONS

Based on the materials observed during drilling and sampling, the site is underlain by alluvium of Recent Age. The alluvium consists of sandy clay, sandy silt, sand, clayey sand, and clayey silt to a depth of 35 feet.

Groundwater occurs between nine and 14 feet below the surface. The direction of groundwater flow is toward the southwest.

STATEMENT OF PROBLEM

Review of groundwater analyses indicate the persistent occurrence of separate phase hydrocarbons in well B-5 and elevated concentrations of dissolved hydrocarbons in wells B-1 through B-4, B-6, B-7, B-9, and B-10. The occurrence of separate phase and dissolved hydrocarbons is shown on the Dissolved Hydrocarbon Concentration Map, Figure 3.

Review of available soil analyses indicates elevated levels of petroleum hydrocarbons (maximum 12,720 mg/kg) and benzene (maximum 44 mg/kg) are present in the vicinity of the former underground storage tank zones. The highest levels of petroleum hydrocarbons have been encountered at a depth of approximately 15 feet, slightly below the present groundwater surface.

GROUNDWATER EXTRACTION PLAN

Continuous groundwater withdrawal will be conducted from four wells to depress the groundwater surface and recover dissolved hydrocarbons. One well will be installed in the former tank zone north of the shop building and one well will be installed in an interceptor trench to be constructed along the southern property line adjacent to Imperial Highway. Pumps will also be installed in existing monitoring wells B-5 and B-9.

Results of a 24-hour aquifer test indicated a relatively low mean transmissivity of 618 gallons per day per foot is present at this location. Accordingly, it was determined that installation of an interceptor trench along the southern property line adjacent to Imperial Highway would serve to enhance the effectiveness of groundwater remediation by creating an artificial reservoir with increased capacity to capture groundwater than individual wells and thus, allow a larger area of influence to develop.

The dimensions of the interceptor trench will be two feet wide, 17 feet deep, and 120 feet long. A coarse sand pack will be placed from the bottom of the trench to a depth of 5 feet followed by clean backfill to the surface. Wells installed in the trench will be sealed with a bentonite cement slurry from the top of the sand pack to the surface.

GROUNDWATER EXTRACTION PLAN, continued

Aquifer testing indicated the three wells located outside the trench will sustain a pumping rate of 0.5 gallons per minute. Whereas, it is anticipated that the well located within the interceptor trench will sustain a pumping rate of four gallons per minute. The interceptor trench, recovery wells, and treatment compound are shown on Figure 4.

A line drawing showing the water flow through the system is provided as Figure 5. Figure 6 shows major equipment details. Four pumps are used to extract groundwater and separate phase hydrocarbons from recovery wells at an average rate of 1.5 gallons per minute (gpm) from each well. The groundwater and separate phase hydrocarbons will flow via underground piping into an oil/water separator with a total fluid capacity of 230 gallons and a free product capacity of 80 gallons. The rated capacity of the separator is 15 gpm and it removes oil and grease down to 10 ppm or less. Separate phase hydrocarbons are removed from the separator by an adjustable oil skimmer and stored in an above-ground holding tank.

The remaining water passes out of the separator by gravity feed into a surge tank. When the surge tank is full of water, a liquid level sensor activates a transfer pump that feeds water from the surge tank through bag-type filters into the first of two carbon canisters connected in a series. The first canister (lead canister) removed the bulk of the dissolved hydrocarbons while the second (polishing canister) ensures that the water is treated to NPDES requirements. The canisters each contain 1,200 pounds of activated carbon.

Water exiting the second canister passes through a vertical loop that insures the canisters remain hydraulically filled at all times. The loop contains a vent that prevents water siphoning from the canisters.

Several safety features will be built into the system to prevent an unauthorized release of recovered gasoline and/or untreated water:

1. A high level sensor in the product holding tank will shut off the groundwater pumps to prevent overflow.

2. The product holding tank is equipped with a gasoline leak detector within the interstitial space.

3. The system will be surrounded completely (including the top) by a locked cyclone fence to prevent entry of unauthorized personnel.

VAPOR EXTRACTION PLAN

Soil vapors will be extracted from each of the four proposed groundwater recovery wells by means of a vacuum blower installed in the remediation compound. Three additional groundwater monitoring wells not equipped for groundwater recovery, B-1, B-2 and B-7, will also be piped for vapor extraction. Locations of all seven proposed vapor recovery wells are shown on Figure 4.

Wellheads of the four groundwater recovery wells will be modified to permit simultaneous groundwater pumping and vapor extraction. The efficiency of hydrocarbon vapor extraction from these wells will be enhanced by lowering of the groundwater surface, which will expose hydrocarbon-impacted soils previously encountered at a depth of 15 feet. Simultaneous groundwater pumping is expected to enhance both volumetric well gas flow rate and initial hydrocarbon vapor concentration when compared to the flow rates and concentrations measured during the vapor extraction pilot test.

Well B-2 and the four groundwater recovery/vapor extraction wells (B-5, B-9, and two proposed new wells) will be connected via separate underground PVC pipes to a well gas manifold located in the remediation compound. Wells B-1 and B-7 will share underground piping with the nearest groundwater recovery/vapor extraction well. Valves installed in the well boxes will permit independent selection of these wells for vapor extraction.

A schematic drawing of the vapor extraction system, showing all well piping, is provided as Figure 7. Soil gas containing hydrocarbon vapors passes through a filter/water knockout vessel, into the vacuum blower. Soil gas exhausts from the blower into the first of two, 2,000 pound capacity activated carbon canisters connected in series. After passing through the second canister, the purified soil gas is discharged via a stack at approximately nine feet above grade. The vacuum blower will be sized to provide a maximum flow rate of 50 standard cubic feet per minute. Prior to startup, a permit will be obtained for the vapor extraction system from the South Coast Air Quality Management System.

Several safety features will be built into the vapor extraction system.

1. A temperature sensor will be installed in the outlet of the first canister. A temperature controller will shut down the blower in the event air temperature exceeds 300 degrees F.

2. The vacuum blower will be equipped with an oil level sensor. The blower motor will automatically stop in the event of low oil level.

3. The system will be surrounded completely (including the top) by a locked cyclone fence to prevent entry of unauthorized personnel.

∞ O ∞

This report has been prepared for the exclusive use of Pomona Box Company as it pertains to their site located at 301 West Imperial Highway, La Habra, California. No warranty, expressed or implied, is made as to the professional advice in this report.

The opportunity to be of service is sincerely appreciated. If you have any questions, or if I can be of further assistance, please call.

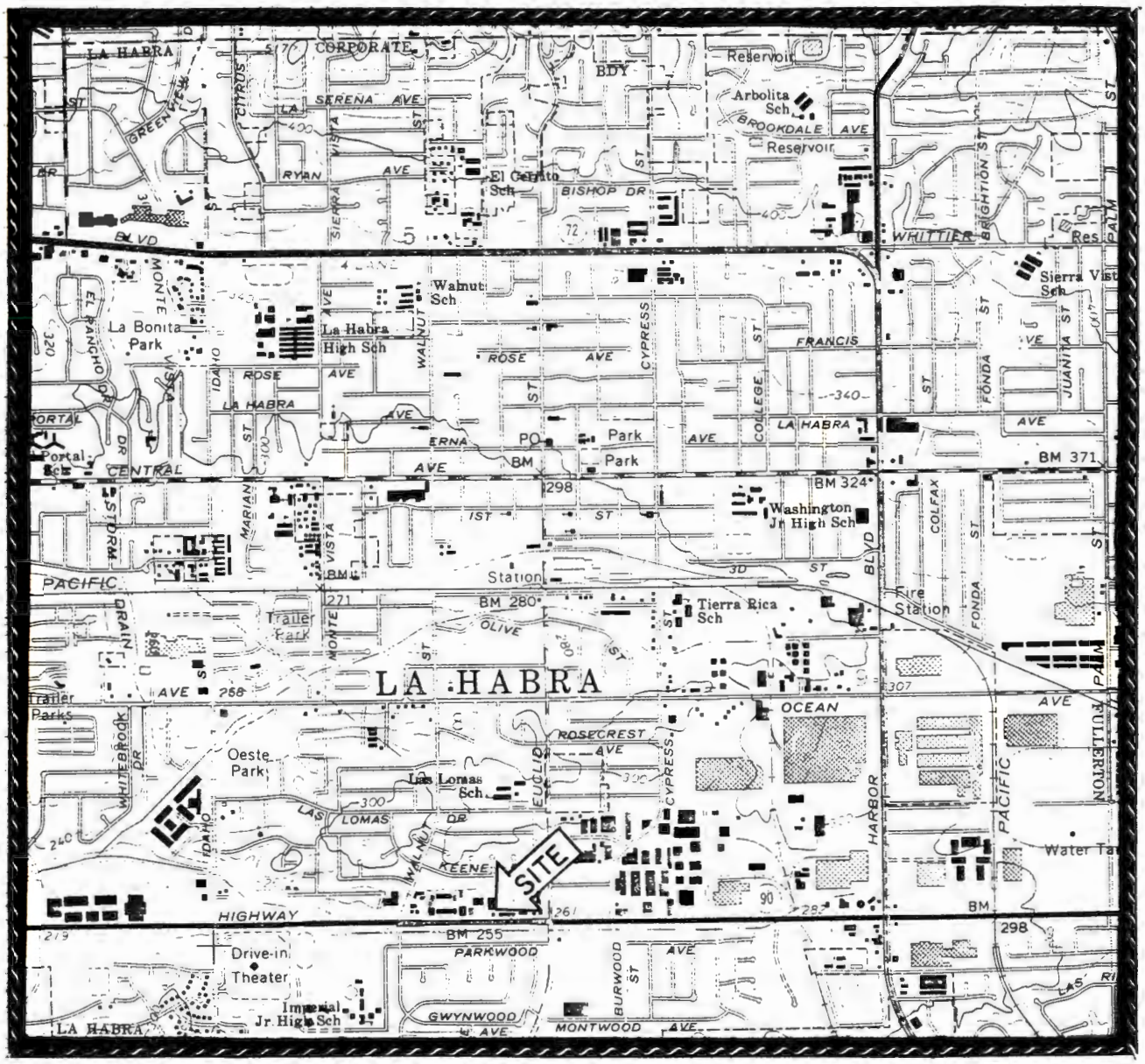
Sincerely,

Richard V. Smith
Registered Geologist 5014

APPENDIX A

Site Location Map, Figure 1
Plot Plan, Figure 2
Dissolved Hydrocarbon Concentration Map, Figure 3
Plan View of Interceptor Trench, Recovery Wells, and Treatment Compound, Figure 4
Schematic of Water Flow, Figure 5
Schematic of Water Treatment System, Figure 6
Schematic of Soil Vapor Treatment System, Figure 7

SITE LOCATION MAP



2000 0 2000 4000

SCALE FEET

NORTH

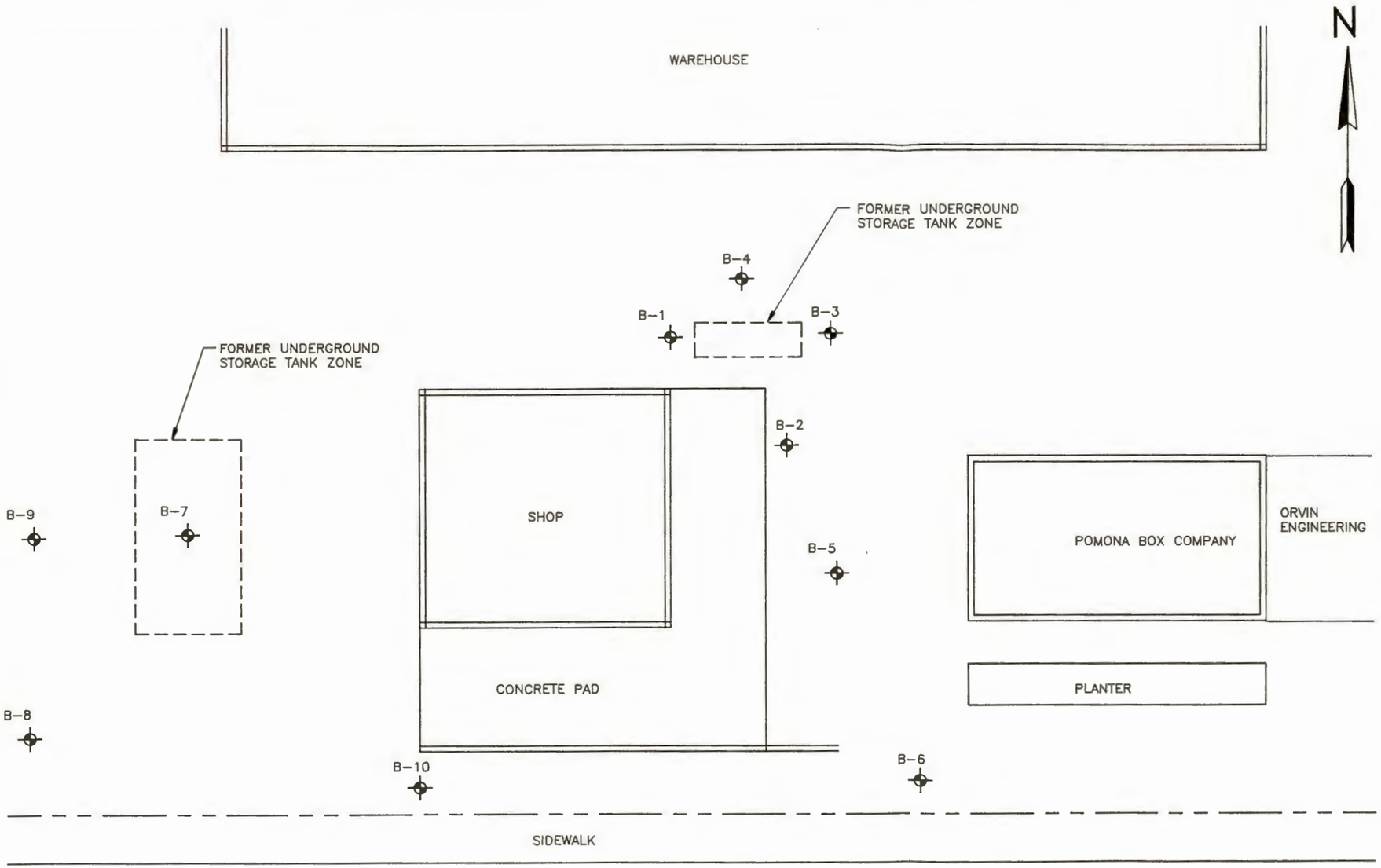
BASE MAP: La Habra Quadrangle

Pomona Box
301 W. Imperial Highway
La Habra, California

PROJECT NO.	FIGURE NO.
88.3X	1
DRAWN BY	

WaynePerry ENVIRONMENTAL CONSTRUCTION INC. SPECIALISTS

PLOT PLAN



KEY

B-10 GROUNDWATER MONITORING WELL

20' 0 20' 40'
SCALE FEET

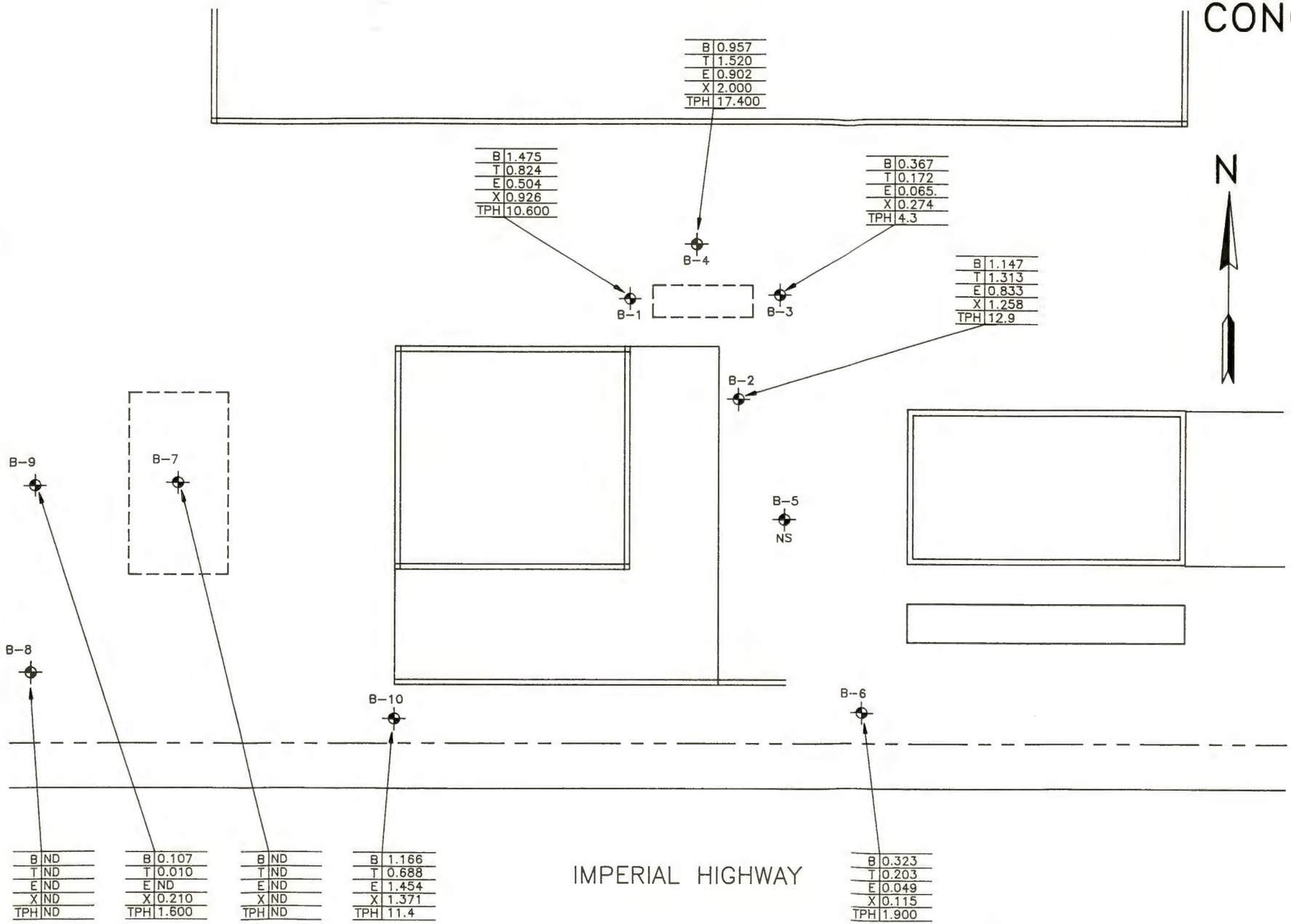
POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA

00300001

PROJ. NO.	FIG. NO.
88.003	2
DRAWN BY Ward Provance	DATE 12/8/93

ENVIRONMENTAL SPECIALISTS WaynePerry

DISSOLVED HYDROCARBON CONCENTRATION MAP



KEY

B-10 — GROUNDWATER MONITORING WELL SHOWING CONCENTRATIONS OF DISSOLVED HYDROCARBONS IN ug/L.

NOTES :

1. DATE OF SAMPLING – 7/26/93
2. ND – NOT DETECTED
3. NS – NOT SAMPLED, PUMP WELL

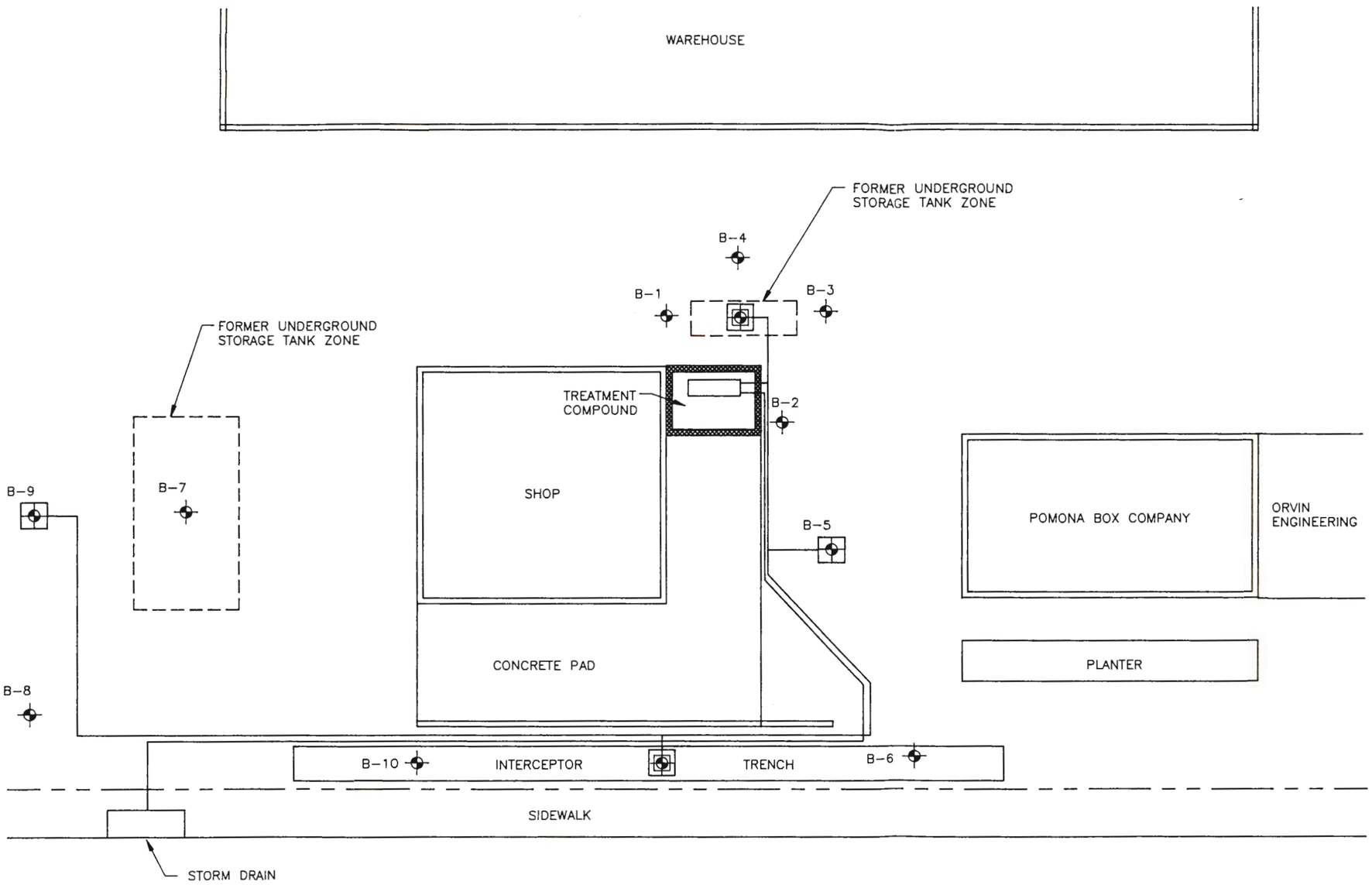
POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA

00300002

PROJ. NO.	FIG. NO.
88.003	3
DRAWN BY Ward Provance	DATE 12/8/93

WaynePerry ENVIRONMENTAL SPECIALISTS

PLAN VIEW OF INTERCEPTOR TRENCH, RECOVERY WELLS, AND TREATMENT COMPOUND



KEY

B-10 GROUNDWATER MONITORING WELL

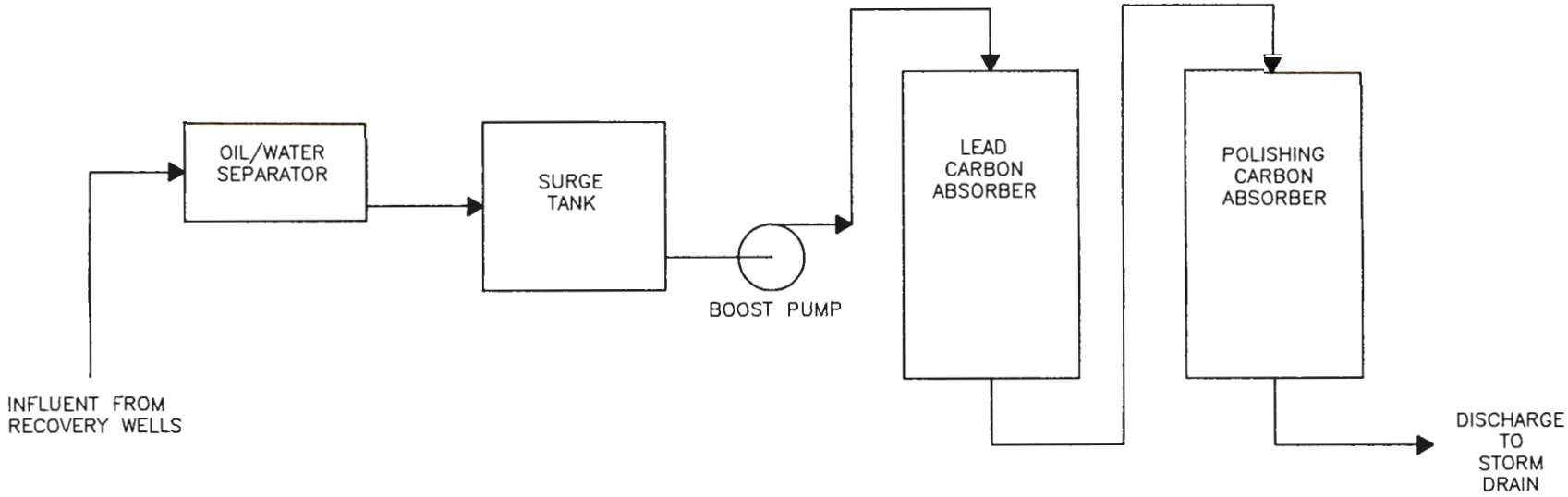
B-9 PROPOSED RECOVERY WELL

N

20' 0 20' 40'
SCALE FEET

POMONA BOX COMPANY 301 W. IMPERIAL HIGHWAY LA HABRA, CA 00300003		
PROJ. NO. 88.003	FIG. NO. 4	WaynePerry ENVIRONMENTAL SPECIALISTS
DRAWN BY Ward Provance	DATE 12/8/93	

SCHEMATIC OF WATER FLOW



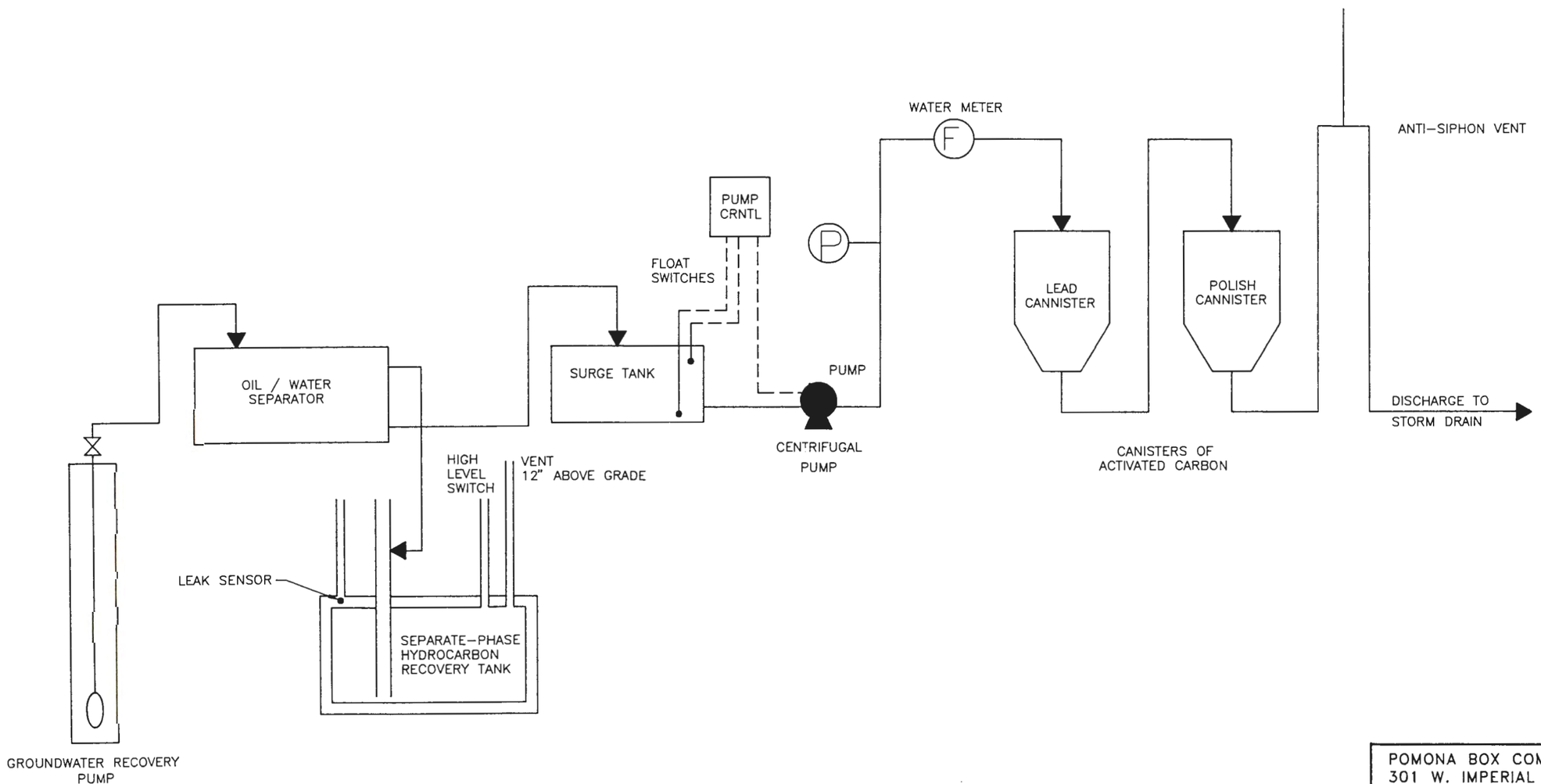
POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA

A0000007

PROJ. NO.	FIG. NO.
88.003	5
DRAWN BY	DATE
Ward Provance	12/8/93

ENVIRONMENTAL WaynePerry SPECIALISTS

GROUNDWATER TREATMENT SYSTEM

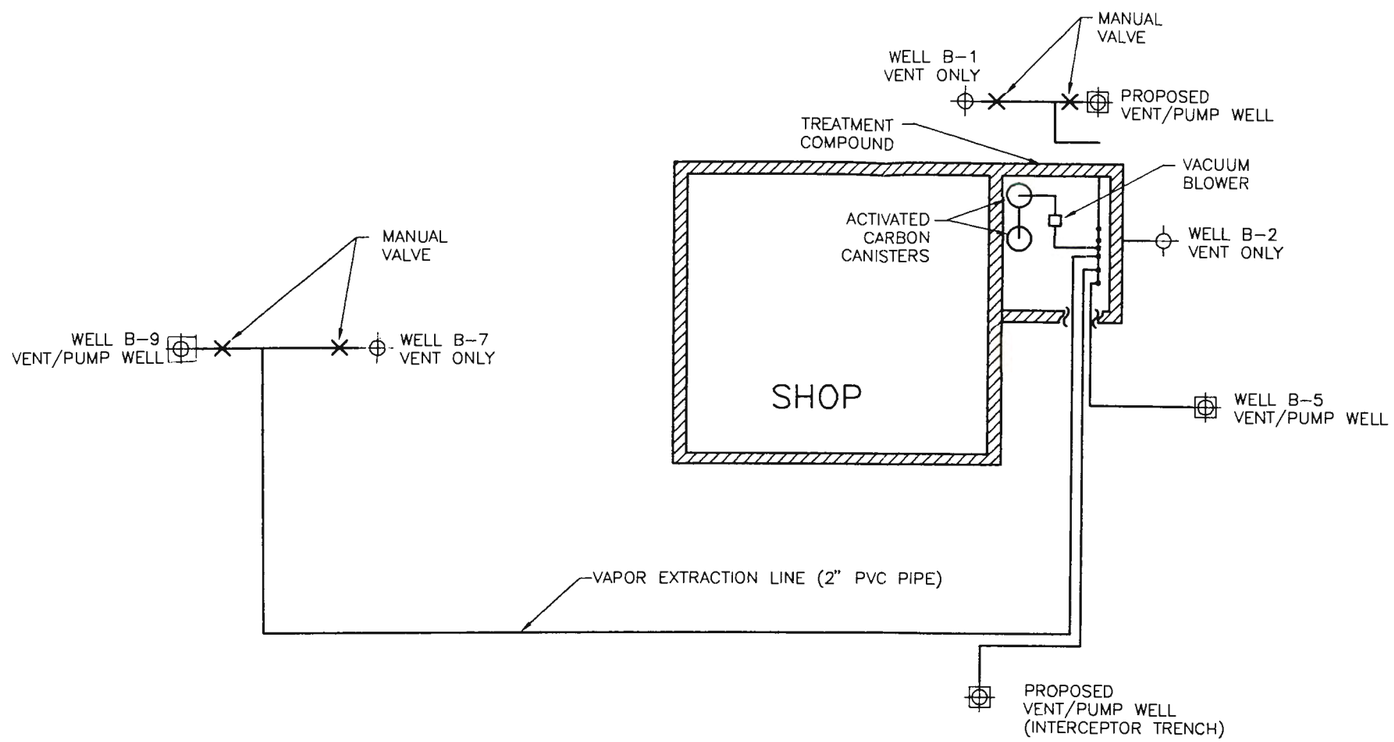


POMONA BOX COMPANY
301 W. IMPERIAL AVE.
LA HABRA, CA

A0000006

PROJ. NO.	FIG. NO.
88.003	6
DRAWN BY	DATE
Ward Provance	12/8/93

Wayne Perry ENVIRONMENTAL SPECIALISTS



POMONA BOX COMPANY
301 W. IMPERIAL HWY.
LA HABRA, CA

SCHEMATIC OF SOIL VAPOR EXTRACTION SYSTEM

ENVIRONMENTAL Wayne Perry SPECIALISTS	DWG. NO. A0000027	CHKD. BY
	PROJ. NO. 88.003	DRAWN BY PROVANCE
	FIG. NO. 7	DATE 8/3/94

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
PHONE (714) 826-0352 ■ FAX ADM. & CONST. (714) 523-7880 ■ FAX GEO. & ENG. (714) 523-7541

Project No. 88.003

October 6, 1994

Pomona Box Company
301 West Imperial Highway
La Habra, California

Attention: Mr. Don Votaw

Subject: Revised Remedial Action Plan for Soil and Groundwater
Pomona Box Company
301 West Imperial Highway
La Habra, California

EXECUTIVE SUMMARY

Enclosed is a proposed work plan for soil and groundwater remediation at the Pomona Box facility located at 301 West Imperial Highway in the city of La Habra.

Groundwater will be recovered from four wells, treated by activated carbon adsorption to remove dissolved hydrocarbons, and discharged to the storm drain under an NPDES permit. Soil remediation will be addressed by installation of a soil vapor extraction system, operating concurrently with the groundwater recovery system. Soil gas will be vacuum extracted from seven wells, treated by activated carbon adsorption to remove hydrocarbon vapors, and discharged under a permit from the South Coast Air Quality Management District.

SITE DESCRIPTION

The site is occupied by an operating box manufacturing company located on the north side of Imperial Highway west of the intersection of Imperial Highway and Euclid Avenue in the city of La Habra. The site location and general geographic relationships are shown on the Location Map, Figure 1.

Located on the site is an office building, manufacturing building, and mechanics shed. Site relationships are shown on the Plot Plan, Figure 2.

BACKGROUND

In December 1986, a single 1,000 gallon underground storage tank was removed at this location. Soil samples were obtained and analyzed as part of the removal procedure. Results of the laboratory analyses indicated a localized area of hydrocarbon contaminated soil was present in the bottom of the excavation. During additional excavation to remove the contaminated soils, groundwater and free product were encountered at a depth of approximately 13 feet. The excavation was backfilled and the information reported to the local regulatory agency. Accordingly, site assessment work was required by the Orange County Health Care Agency to define the extent of contamination.

Between January and September 1987, six borings, B-1 through B-6, were drilled and sampled. All the borings were converted to groundwater monitoring wells. Well locations are shown on the Plot Plan, Figure 2, in Appendix A. Dissolved or separate phase hydrocarbons were detected in all the wells.

Manual recovery of separate phase hydrocarbons was initiated in June 1987. An automated recovery system was installed and became operational in April 1988.

In September 1989, seven additional underground storage tanks were removed at this location. The approximate tank locations are shown on Figure 2 in Appendix A. Results of laboratory analyses performed as part of the removal procedure indicated petroleum hydrocarbons were present. Subsequently, four borings were drilled and sampled as part of supplemental site investigations between March 1991 and February 1993. The four borings were converted to groundwater monitoring wells B-7 through B-10. Well locations are shown on the Plot Plan, Figure 2 in Appendix A.

A one-day vapor extraction test was completed on January 13, 1994. A V.R. Systems Model V-3 soil venting engine was used to apply vacuum on an individual basis to five groundwater monitoring wells located on the property. Testing was conducted at low levels of applied vacuum to avoid excessive upwelling of groundwater. During the test, well gas samples obtained from individual wells contained total hydrocarbon levels ranging from 4 ppmv to 4,600 ppmv. Maximum volumetric extraction rate was approximately 2 standard cubic feet per minute (SCFM) from well B-7. Wellhead vacuum to achieve this flow rate was approximately 10 inches w.c. (water column).

Laboratory testing of a soil gas samples obtained during the vapor extraction test indicated total petroleum hydrocarbons ranging from 110 to 344 ppmv (ASTM Method 3416M), and benzene ranging from 81 to 270 ppbv (EPA Method TO-14). Methane was present in concentrations ranging from 4 to 986 ppmv (ASTM Method 3416M).

SUBSURFACE CONDITIONS

Based on the materials observed during drilling and sampling, the site is underlain by alluvium of Recent Age. The alluvium consists of sandy clay, sandy silt, sand, clayey sand, and clayey silt to a depth of 35 feet.

Groundwater occurs between nine and 14 feet below the surface. The direction of groundwater flow is toward the southwest.

ASSESSMENT OF IMPACTS

Review of groundwater analyses indicate the persistent occurrence of separate phase hydrocarbons in well B-5 and elevated concentrations of dissolved hydrocarbons in wells B-1 through B-4, B-6, B-7, B-9, and B-10. The occurrence of separate phase and dissolved hydrocarbons is shown on the Dissolved Hydrocarbon Concentration Map, Figure 3.

Review of available soil analyses indicates elevated levels of petroleum hydrocarbons (maximum 12,720 mg/kg) and benzene (maximum 44 mg/kg) are present in the vicinity of the former underground storage tank zones. The highest levels of petroleum hydrocarbons have been encountered at a depth of approximately 15 feet, slightly below the present groundwater surface.

FEASIBILITY OF REMEDIATION ALTERNATIVES

Three alternatives were evaluated for the remediation of soil and groundwater at the subject property. A summary of the evaluation is presented in Table 1 on page 8. Vapor extraction (Alternative 1) and groundwater extraction (Alternative 1) were selected as the most feasible methods for remediating soils and groundwater at this location.

GROUNDWATER EXTRACTION PLAN

Continuous groundwater withdrawal will be conducted from four wells to depress the groundwater surface and recover dissolved hydrocarbons. One well will be installed in the former tank zone north of the shop building and one well will be installed in an interceptor trench to be constructed along the southern property line adjacent to Imperial Highway. Pumps will also be installed in existing monitoring wells B-5 and B-9.

Results of a 24-hour aquifer test indicated a relatively low mean transmissivity of 618 gallons per day per foot is present at this location. Accordingly, it was determined that installation of an interceptor trench along the southern property line adjacent to Imperial Highway would serve to enhance the effectiveness of groundwater remediation by creating an artificial reservoir with increased capacity to capture groundwater than individual wells and thus, allow a larger area of influence to develop.

GROUNDWATER EXTRACTION PLAN, continued

The dimensions of the interceptor trench will be two feet wide, 17 feet deep, and 120 feet long. A coarse sand pack will be placed from the bottom of the trench to a depth of 5 feet followed by clean backfill to the surface. Wells installed in the trench will be sealed with a bentonite cement slurry from the top of the sand pack to the surface.

Aquifer testing indicated the three wells located outside the trench will sustain a pumping rate of 0.5 gallons per minute. Whereas, it is anticipated that the well located within the interceptor trench will sustain a pumping rate of four gallons per minute. The interceptor trench, recovery wells, and treatment compound are shown on Figure 4.

A line drawing showing the water flow through the system is provided as Figure 5. Figure 6 shows major equipment details. Four pumps are used to extract groundwater and separate phase hydrocarbons from recovery wells at an average rate of 1.5 gallons per minute (gpm) from each well. The groundwater and separate phase hydrocarbons will flow via underground piping into an oil/water separator with a total fluid capacity of 230 gallons and a free product capacity of 80 gallons. The rated capacity of the separator is 15 gpm and it removes oil and grease down to 10 ppm or less. Separate phase hydrocarbons are removed from the separator by an adjustable oil skimmer and stored in an above-ground holding tank.

The remaining water passes out of the separator by gravity feed into a surge tank. When the surge tank is full of water, a liquid level sensor activates a transfer pump that feeds water from the surge tank through bag-type filters into the first of two carbon canisters connected in a series. The first canister (lead canister) removed the bulk of the dissolved hydrocarbons while the second (polishing canister) ensures that the water is treated to NPDES requirements. The canisters each contain 1,200 pounds of activated carbon.

Water exiting the second canister passes through a vertical loop that insures the canisters remain hydraulically filled at all times. The loop contains a vent that prevents water siphoning from the canisters.

Several safety features will be built into the system to prevent an unauthorized release of recovered gasoline and/or untreated water:

1. A high level sensor in the product holding tank will shut off the groundwater pumps to prevent overflow.

2. The product holding tank is equipped with a gasoline leak detector within the interstitial space.

3. The system will be surrounded completely (including the top) by a locked cyclone fence to prevent entry of unauthorized personnel.

VAPOR EXTRACTION PLAN

Soil vapors will be extracted from each of the four proposed groundwater recovery wells by means of a vacuum blower installed in the remediation compound. Three additional groundwater monitoring wells not equipped for groundwater recovery, B-1, B-2 and B-7, will also be piped for vapor extraction. Locations of all seven proposed vapor recovery wells are shown on Figure 4.

Wellheads of the four groundwater recovery wells will be modified to permit simultaneous groundwater pumping and vapor extraction. The efficiency of hydrocarbon vapor extraction from these wells will be enhanced by lowering of the groundwater surface, which will expose hydrocarbon-impacted soils previously encountered at a depth of 15 feet. Simultaneous groundwater pumping is expected to enhance both volumetric well gas flow rate and initial hydrocarbon vapor concentration when compared to the flow rates and concentrations measured during the vapor extraction pilot test.

Well B-2 and the four groundwater recovery/vapor extraction wells (B-5, B-9, and two proposed new wells) will be connected via separate underground PVC pipes to a well gas manifold located in the remediation compound. Wells B-1 and B-7 will share underground piping with the nearest groundwater recovery/vapor extraction well. Valves installed in the well boxes will permit independent selection of these wells for vapor extraction.

A schematic drawing of the vapor extraction system, showing all well piping, is provided as Figure 7. Soil gas containing hydrocarbon vapors passes through a filter/water knockout vessel, into the vacuum blower. Soil gas exhausts from the blower into the first of two, 2,000 pound capacity activated carbon canisters connected in series. After passing through the second canister, the purified soil gas is discharged via a stack at approximately nine feet above grade. The vacuum blower will be sized to provide a maximum flow rate of 50 standard cubic feet per minute. Prior to startup, a permit will be obtained for the vapor extraction system from the South Coast Air Quality Management System.

Several safety features will be built into the vapor extraction system.

1. A temperature sensor will be installed in the outlet of the first canister. A temperature controller will shut down the blower in the event air temperature exceeds 300 degrees F.

2. The vacuum blower will be equipped with an oil level sensor. The blower motor will automatically stop in the event of low oil level.

3. The system will be surrounded completely (including the top) by a locked cyclone fence to prevent entry of unauthorized personnel.

VAPOR EXTRACTION MONITORING SCHEDULE

Weekly monitoring of the vapor extraction system will be performed in order to comply with South Coast AQMD permit requirements and to monitor the progress of soil remediation. Field measurements of soil vapor concentrations (TPH) will be made using a Foxboro Model 128 organic vapor analyzer (flame ionization detector) calibrated to a methane standard. Concentrations will be expressed as hexane. Other parameters that will be monitored include system flow rate and vacuum. System monitoring will be conducted as follows:

Weekly:

Influent TPH to vapor treatment system before dilution (Foxboro OVA)
Influent TPH to vapor treatment system after dilution (Foxboro OVA)
Effluent TPH from first activated carbon canister (Foxboro OVA)
Effluent TPH from second activated carbon canister (Foxboro OVA)
System flow rate and vacuum

Monthly:

Vapor concentrations (TPH) in individual vapor extraction wells (Foxboro OVA)

Quarterly:

Influent TPH and BTEX to vapor treatment system (Tedlar Bag - Laboratory)
Effluent benzene* from second activated carbon canister (Tedlar Bag - Laboratory)

*Note: effluent benzene will be measured only if required by AQMD permit.

SCHEDULE FOR IMPLEMENTATION OF CAP

The Corrective Action Plan will be implemented sequentially as detailed in the following table. The exact date of equipment startup cannot be estimated until all approvals and permits have been obtained so that construction can begin.

Event	Estimated Time Required
Approval of CAP by OCHCA	1 month
Prepare and submit NPDES and AQMD Permit Packages	2 months
Obtain NPDES and AQMD Permits	12 months
Obtain city building permits	2 months
Order and ship materials and equipment	3 months
Assemble vapor extraction skid	2 months
Construct system on site	2 months
Start up testing	2 weeks

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This report has been prepared for the exclusive use of Pomona Box Company as it pertains to their site located at 301 West Imperial Highway, La Habra, California. No warranty, expressed or implied, is made as to the professional advice in this report.

The opportunity to be of service is sincerely appreciated. If you have any questions, or if I can be of further assistance, please call.

Sincerely,

Richard V. Smith
Registered Geologist 5014

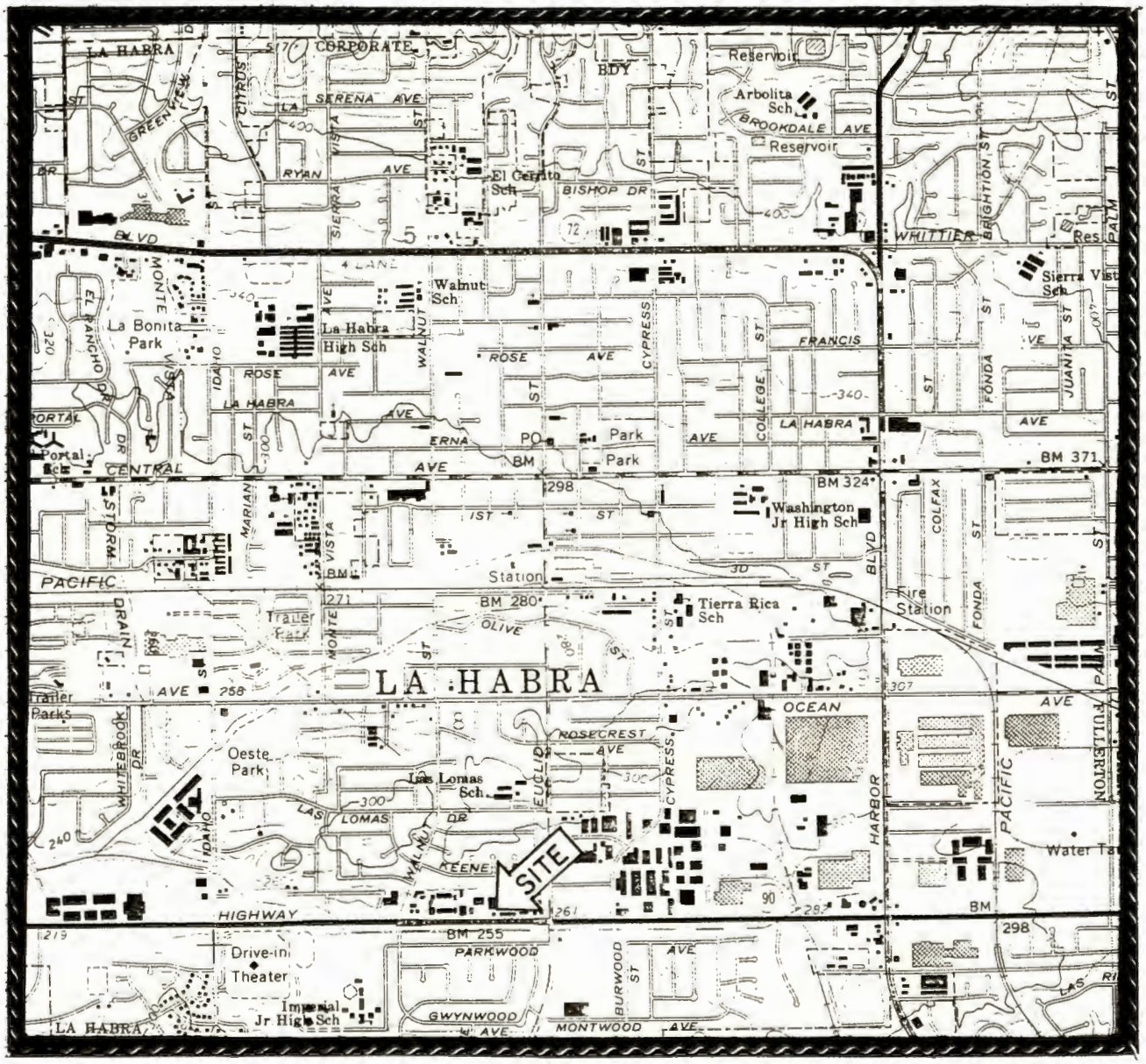
Table 1. Evaluation of Remediation Alternatives

SOIL REMEDIATION METHODS					
ALTERNATIVE	PUBLIC HEALTH CONCERNS	ENVIRON-MENTAL CONCERNS	TECHNICAL CONSIDERA-TIONS	REGULATORY CONCERNS	OWNER CONCERNS
1. Vapor Extraction	No Known Risk	No Known Risk	Effectiveness in Silt and Clay	Effectiveness in Silt and Clay	No Known Concerns
2. Excavation	Air Quality Impact	Air Quality Impact	Shoring Requirements and Removal of Shop Building	Clean Backfill Soil may be Contaminated by Groundwater	Removal of Shop Building
-Above Ground Treatment			Limited Space Available for Stockpiled Soil		
-Disposal	Proximity to Major Thorough-fares Transportation Risk		Possible Need for Containerization		
3. Bioremediation (in-situ)	No Known Risk	No Known Risk	Non-Uniform Distribution of Treatment Solution	Question of Effectiveness and Plume Control	Length of Program
GROUNDWATER REMEDIATION METHODS					
ALTERNATIVE	PUBLIC HEALTH CONCERNS	ENVIRON-MENTAL CONCERNS	TECHNICAL CONSIDERA-TIONS	REGULATORY CONCERNS	OWNER CONCERNS
1. Extraction Wells	No Known Risk	No Known Risk	Pump Rate and Radius of Influence must be Adequate	Effectiveness in Silt and Clay	Location of Pumping and Monitoring Wells
2. Excavation	Air Quality Impact	Air Quality Impact	Shoring Requirements and Removal of Shop Building	Question of Effectiveness	Removal of Shop Building
3. Bioremediation (in-situ)	No Known Risk	Boundary Control	Non-Unform Distribution of Treatment Solution	Question of Effectiveness	Length of Program

APPENDIX A

Site Location Map, Figure 1
Plot Plan, Figure 2
Dissolved Hydrocarbon Concentration Map, Figure 3
Plan View of Interceptor Trench, Recovery Wells, and Treatment Compound, Figure 4
Schematic of Water Flow, Figure 5
Schematic of Water Treatment System, Figure 6
Schematic of Soil Vapor Treatment System, Figure 7

SITE LOCATION MAP



2000 0 2000 4000

SCALE FEET

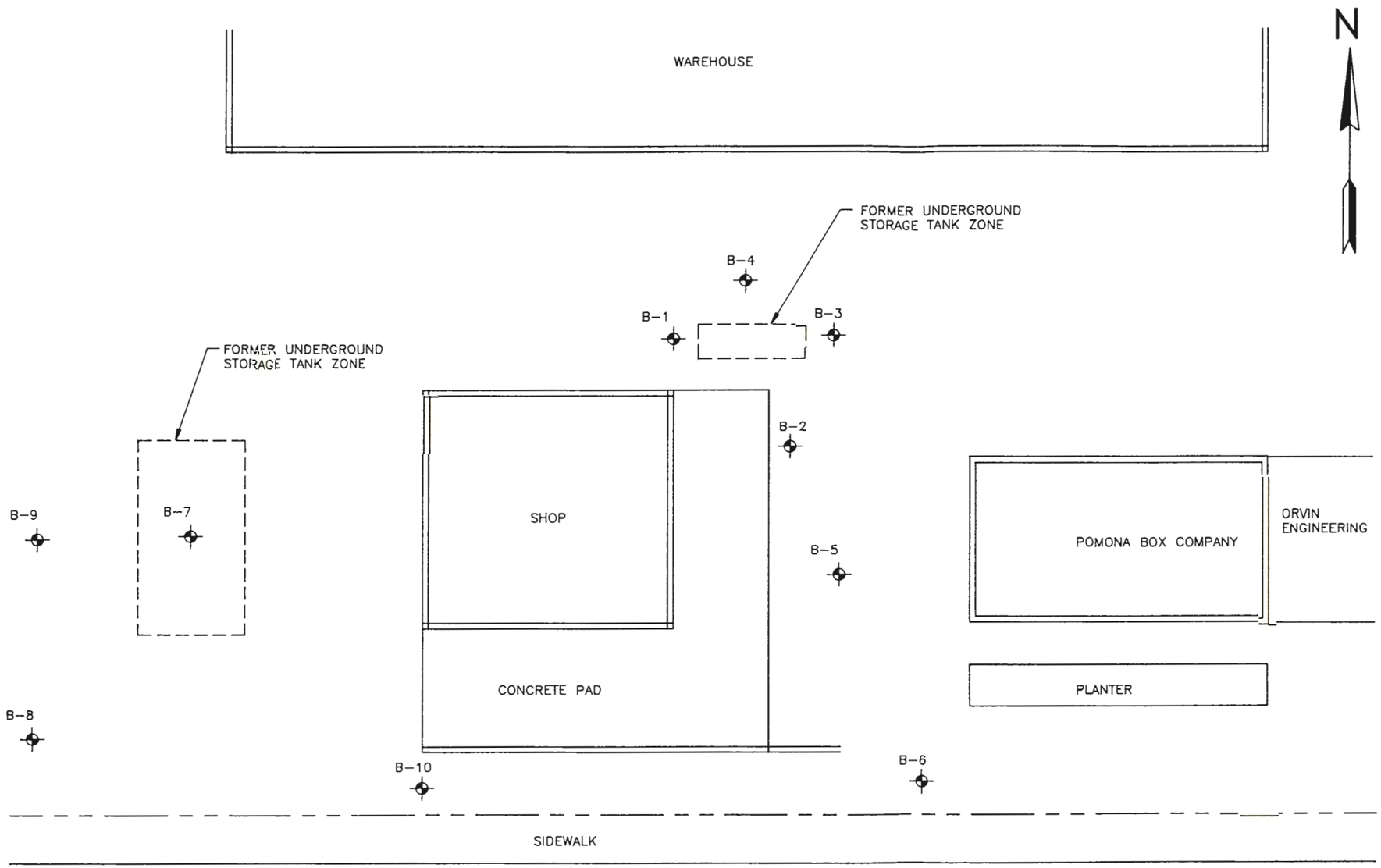
NORTH

BASE MAP: La Habra Quadrangle

Pomona Box
301 W. Imperial Highway
La Habra, California

PROJECT NO.	FIGURE NO.
88.3X	1
DRAWN BY	

PLOT PLAN



KEY

B-10 GROUNDWATER MONITORING WELL

20' 0 20' 40'
SCALE FEET

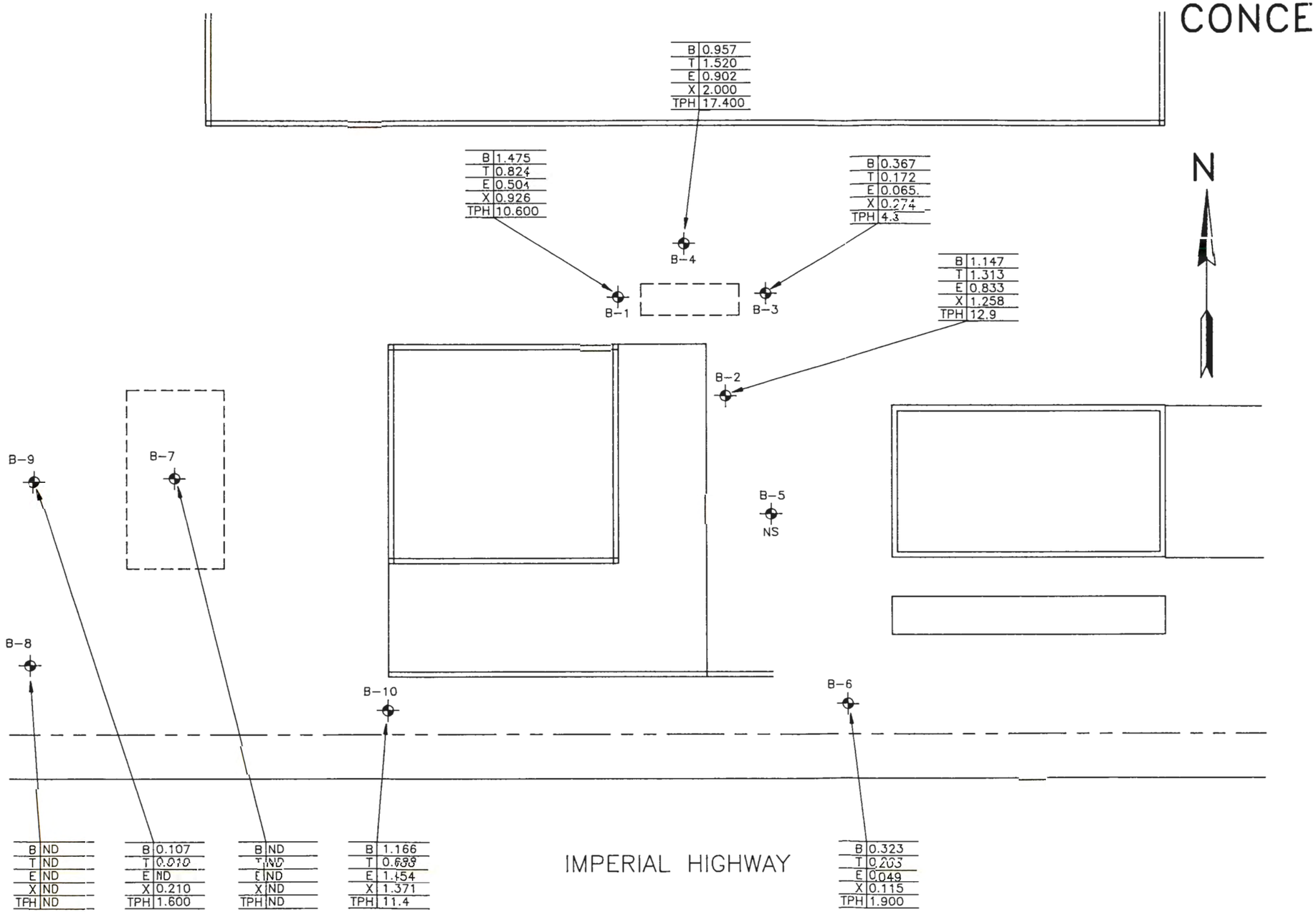
POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA

00300001

PROJ. NO.	FIG. NO.
88.003	2
DRAWN BY	DATE
Ward Provance	12/8/93

Wayne Perry ENVIRONMENTAL SPECIALISTS

DISSOLVED HYDROCARBON CONCENTRATION MAP



KEY

B-10 — GROUNDWATER MONITORING WELL SHOWING CONCENTRATIONS OF DISSOLVED HYDROCARBONS IN ug/L.

NOTES :

1. DATE OF SAMPLING – 7/26/93
2. ND – NOT DETECTED
3. NS – NOT SAMPLED, PUMP WELL

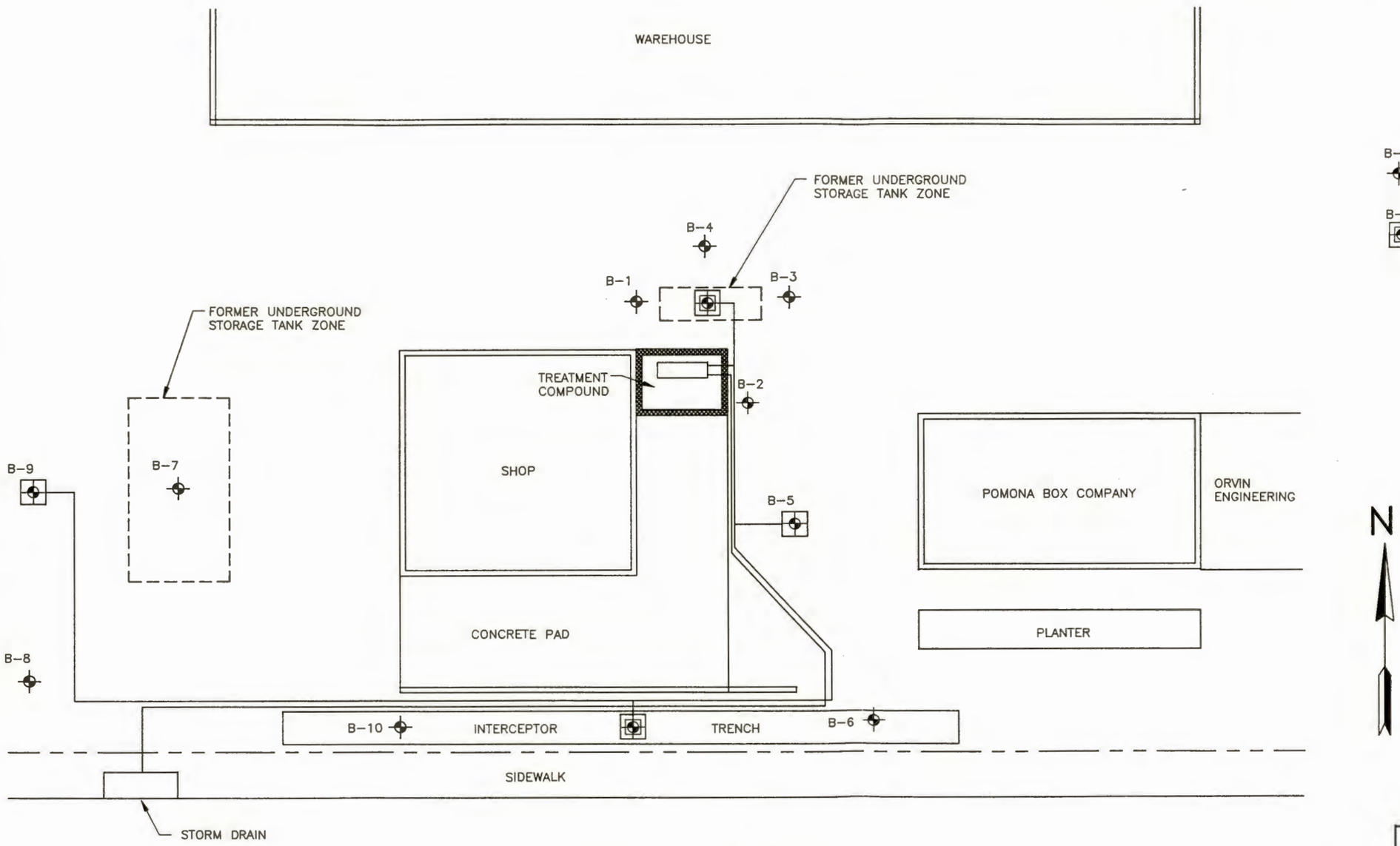
POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA

00300002

PROJ. NO.	FIG. NO.
88.003	3
DRAWN BY Ward Provance	DATE 12/8/93

Wayne Perry ENVIRONMENTAL SPECIALISTS

PLAN VIEW OF INTERCEPTOR TRENCH, RECOVERY WELLS, AND TREATMENT COMPOUND



KEY

B-10 GROUNDWATER MONITORING WELL

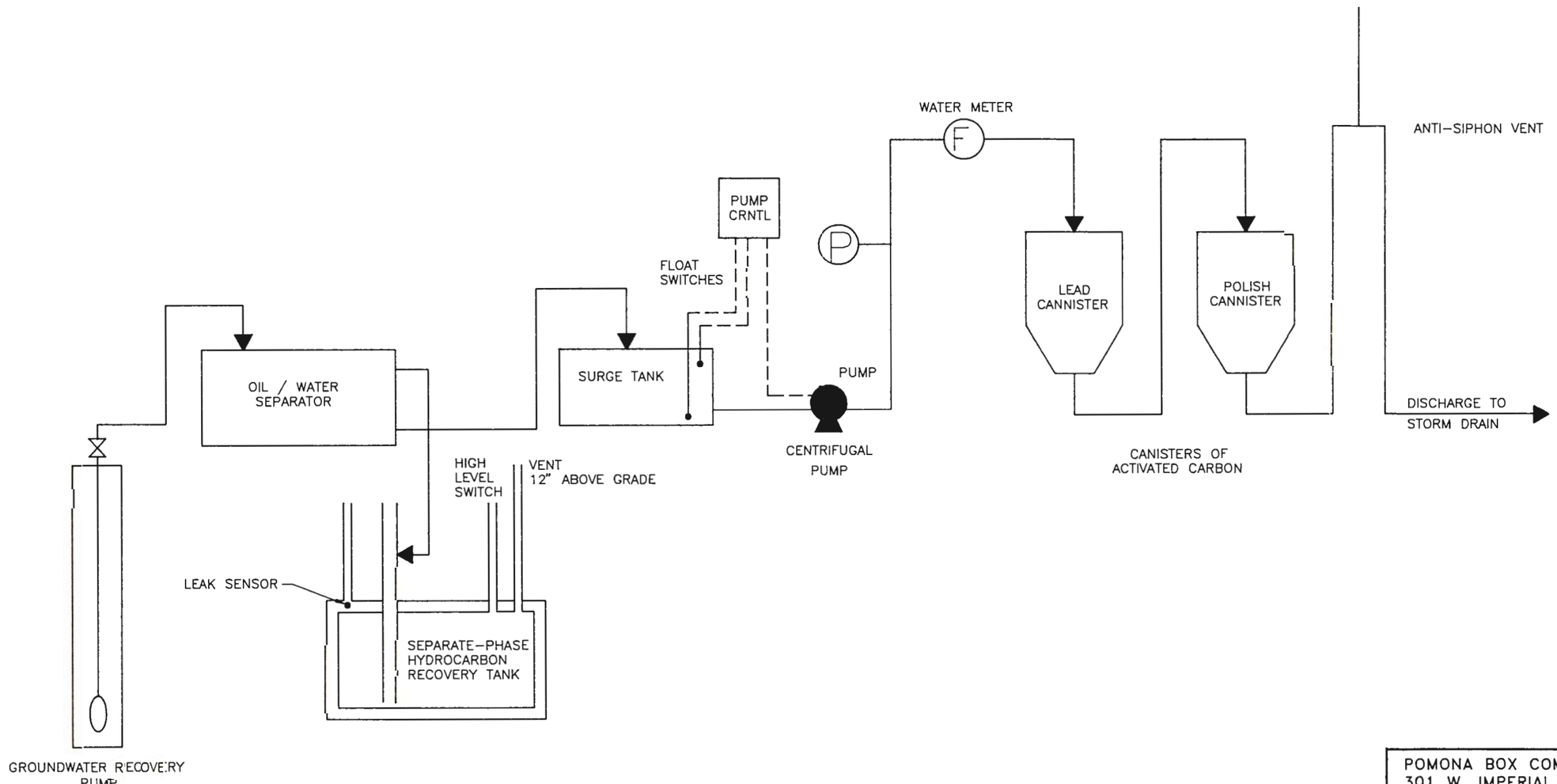
B-9 PROPOSED RECOVERY WELL

N

20' 0 20' 40'
SCALE FEET

POMONA BOX COMPANY 301 W. IMPERIAL HIGHWAY LA HABRA, CA		00300003
PROJ. NO. 88.003	FIG. NO. 4	
DRAWN BY Ward Provance	DATE 12/8/93	

GROUNDWATER TREATMENT SYSTEM



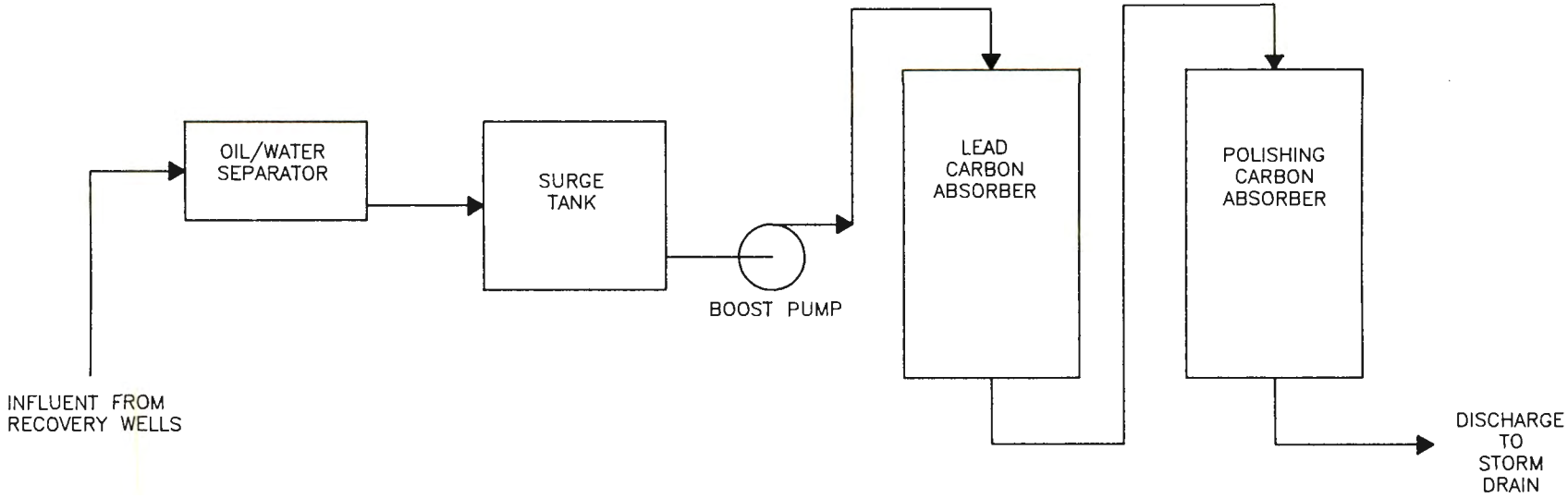
POMONA BOX COMPANY
301 W. IMPERIAL AVE.
LA HABRA, CA

A0000006

PROJ. NO.	FIG. NO.
88.003	6
DRAWN BY	DATE
Ward Provance	12/8/93

ENVIRONMENTAL SPECIALISTS
Wayne Perry

SCHEMATIC OF WATER FLOW

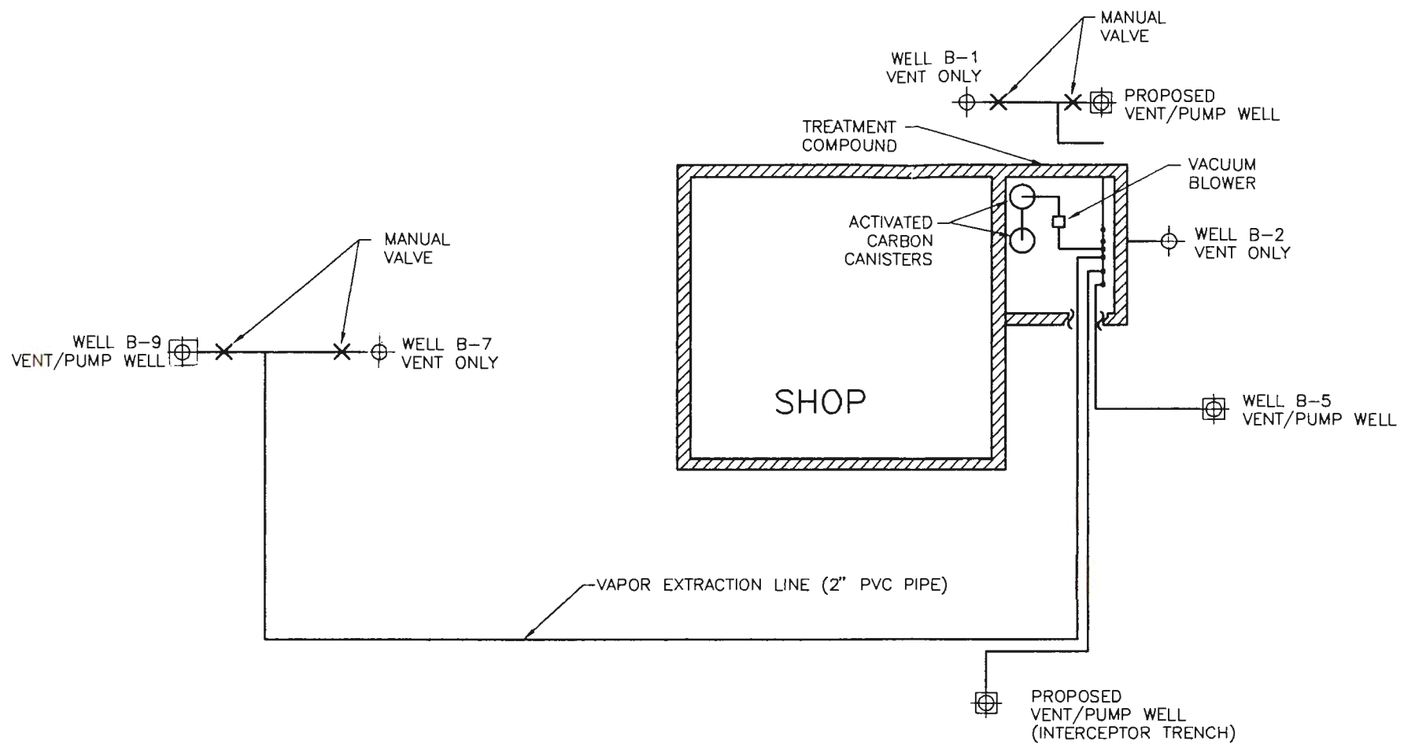


POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA

A0000007

PROJ. NO.	FIG. NO.
88.003	5
DRAWN BY	DATE
Ward Provance	12/8/93

ENVIRONMENTAL WaynePerry SPECIALISTS



POMONA BOX COMPANY
301 W. IMPERIAL HWY.
LA HABRA, CA

SCHEMATIC OF SOIL VAPOR EXTRACTION SYSTEM

ENVIRONMENTAL WaynePerry SPECIALISTS	DWG. NO. A0000027	CHKD. BY
	PROJ. NO. 88.003	DRAWN BY PROVANCE
	FIG. NO. 7	DATE 8/3/94

Complete
Scan

CORRECTIVE ACTION PLAN
Pomona Box Company
301 West Imperial Highway
La Habra, California

Prepared for:
Mr. Don Votaw
Pomona Box Company
301 West Imperial Highway
La Habra, California

Prepared by:
W. W. Irwin, Inc.
2750 Signal Parkway
Long Beach, California 90806

January 13, 1995

CORRECTIVE ACTION PLAN
Pomona Box Company
301 West Imperial Highway
La Habra, California

INTRODUCTION

The site is located on the north side of Imperial Highway west of the intersection of Imperial Highway and Euclid Avenue in the city of La Habra (Figure 1). The site is occupied by an operating box manufacturing company, which consists of an office building, manufacturing building, and a mechanics shed (Figure 2).

A revised Corrective Action Plan (CAP) has been prepared to address the hydrocarbon impacted soil and groundwater at the facility. Soil vapor extraction and groundwater pump and treat technologies are proposed based on the subsurface characteristics of the site. The vapor extraction system will consist of five vapor extraction wells (dual purpose wells) and a catalytic oxidizer for the treatment of extracted vapors. Treated vapors will be discharged to the atmosphere under a South Coast Air Quality Management District (SCAQMD) permit. The groundwater system will consist of the five dual purpose wells, an air stripper, and activated carbon for treatment of the extracted groundwater. Treated groundwater will be discharged to the storm drain under an NPDES permit.

BACKGROUND

One 1,000 gallon underground storage tank (UST) was removed in December 1986. Soil samples were collected from the tank excavation and analyzed for the presence of hydrocarbons. Results indicated an area of hydrocarbon contamination at the bottom of the excavation. The excavation was extended to 13 feet below ground surface (bgs) in an attempt to remove the soil contamination, and free phase hydrocarbons were discovered. The excavation was backfilled and the Orange County Health Care Agency (OCHCA) requested additional assessment.

Six soil borings (B-1 through B-6) were installed between January and September 1987 to comply with OCHCA's request. Each of the borings were converted to groundwater monitoring wells. Dissolved or free phase hydrocarbons were detected in the wells.

Seven additional USTs were removed from the site in September 1989. Analysis of soil samples collected from the tank excavations indicated the presence of petroleum hydrocarbons. As a result, four soil borings (B-7 through B-10) were installed between March 1991 and February 1993 to further assess the site. The four borings were converted to groundwater monitoring wells (Figure 2).

SITE GEOLOGY/HYDROGEOLOGY

According to information obtained by Wayne Perry Construction Inc. during previous drilling activities, soils beneath the site are comprised of sandy clay, sandy silt, sand, clayey sand, and clayey silt to a depth of 35 feet bgs. Copies of the boring logs are included as Appendix I.

According to the third quarter 1994 groundwater monitoring data (data was not available for the fourth quarter 1994), groundwater occurs between 8.82 and 15.7 feet bgs and flows to the southwest (Figure 3).

VAPOR EXTRACTION TEST RESULTS

A soil vapor extraction test was conducted at the site on January 13, 1994. An internal combustion engine was used to apply vacuum to each of five groundwater monitoring wells used for testing purposes (B-1, B-2, B-3, B-5, and B-7). Total hydrocarbon vapor concentrations extracted from the test wells ranged from 4 to 4,600 ppmv. Laboratory testing of soil gas samples taken from B-1, B-5, and B-7 yielded TPH concentrations ranging from 110 to 344 ppmv and benzene ranging from 81 to 270 ppbv. The maximum volumetric flow rate was extracted from well B-7 at 2 standard cubic feet per minute (scfm). The corresponding vacuum was 10 inches water column (w.c.). The maximum flow rate was potentially limited by the need to keep the vacuum low to prevent the uptake of water into the test wells. A copy of the vapor extraction test report is provided as Appendix II.

AQUIFER PUMP TEST RESULTS

A 24-hour aquifer pump test was conducted at the site on October 7 and 8, 1994. Well B-6 was used as the pumping well and wells B-1 through B-4 and B-7 through B-10 were used as observation wells. Drawdown was measured with pressure transducers in wells B-1 and B-2, and with an electronic interface probe in the remaining wells. The observed drawdown in well B-3, located approximately 75 feet away from the pumping well (B-6), was 0.21 feet. A copy of the aquifer pump test report is included as Appendix III.

DISTRIBUTION OF CONTAMINANTS

Based on the results of previous site investigations, the extent of soil contamination appears laterally limited to the vicinity of the former USTs. The highest levels of hydrocarbons were detected in samples collected at a depth of 15 feet bgs, which is slightly below the surface of the groundwater. The maximum total petroleum hydrocarbon concentration encountered was 12,720 mg/kg and the maximum benzene concentration was 44 mg/kg (Table 1).

Groundwater monitoring activities conducted over the course of several quarters have indicated the presence of dissolved hydrocarbons in most of the monitoring wells. The most recent data available (third quarter 1994) indicates the presence of dissolved hydrocarbons in all the wells, with a maximum benzene concentration of 27.9 mg/l in well B-5 (Table 2).

SOIL REMEDIATION

Five existing wells (B-1, B-2, B-4, B-5, and B-10) will be used as dual purpose wells for soil vapor and groundwater extraction activities. These wells will serve to extract groundwater for treatment purposes and to depress the groundwater table, thus exposing the capillary fringe for vapor extraction purposes. These wells were selected based on the known extent of contamination (primarily within the capillary fringe) and the anticipated radius of influence. Although the results of the vent test indicate a very limited radius of influence, this data may be erroneous due to problems associated with the test. Based on previous experience at sites with similar lithologies, a larger radius of influence can be achieved with depression of the groundwater. The primary zone of contamination, the capillary zone, is basically comprised

sands and silts, which are relatively permeable and conducive to vapor extraction technology. Data from the vent test did not pertain to the capillary fringe as this zone was not influenced by air flow due to the intake of water during the test.

The vapor lines of the dual purpose wells would be manifolded together and the combined vapor flow would be routed to a vapor processing unit. Treated vapors would then be discharged to the atmosphere in accordance with a South Coast Air Quality Management District (SCAQMD) permit. A thermal oxidation unit fitted with a catalyst module is recommended for treatment of extracted hydrocarbon vapors. The initial vapor concentrations anticipated are high enough to warrant the use of a thermal oxidizer to begin with. Starting with a catalyst module would require the use of dilution air, which would limit the flow of hydrocarbons and lengthen the duration of the project. Conversion to the catalyst module will be appropriate once vapor concentrations decline such that supplemental fuel costs are prohibitive.

A vacuum blower capable of extracting a minimum of 200 scfm at a minimum vacuum of 10 inches water is recommended. However, a different capacity blower could be used to optimize equipment usage. Specifically, if equipment previously used at another site was to be moved to the Pomona Box site, adjustments could be made to maximize efficiency of the available equipment.

The vapor extraction system emissions will be monitored weekly with a flame ionization detector (FID) hydrocarbon analyzer for soil vapor concentrations to insure compliance with SCAQMD requirements. Each of the individual vapor extraction wells will be monitored monthly to evaluate the flow rate, vacuum, and decline of hydrocarbon concentrations. This information will be used to develop a soil vapor concentration decline curve to evaluate the progress of soil remediation.

GROUNDWATER REMEDIATION

The five dual purpose wells (B-1, B-2, B-4, B-5, and B-10) will also be used to recover dissolved phase hydrocarbons and to depress the groundwater table. Results from the aquifer pump test conducted at the site indicated that each extraction well will sustain a pumping rate of approximately 0.5 gpm. A pneumatic pump will be placed in each well, and extracted groundwater will be transported via underground PVC piping to the treatment compound. At the compound, extracted groundwater from all the wells will flow through an oil/water separator. Although the most recent groundwater monitoring results indicate the absence of any free product, an oil/water separator is recommended as a precautionary measure. Any recovered free product would be contained in an aboveground holding tank for subsequent offsite disposal.

Water from the oil/water separator will flow through an air stripper, a carbon canister for polishing, and then discharged to the storm drain under an NPDES permit. All groundwater equipment will be designed to accommodate a total daily flow rate of approximately 3600 gallons per day (gpd), based on an estimated sustained flow rate of 0.5 gpm from each well. Hydrocarbon laden vapors stripped from the groundwater will be treated by the catalytic oxidation unit utilized for soil remediation purposes.

The water treatment system will be monitored on a weekly basis by a W. W. Irwin field technician. A report summarizing the operation and maintenance activities and the results of the NPDES compliance sampling will be submitted quarterly to the RWQCB.

QUARTERLY GROUNDWATER MONITORING PROGRAM

The 10 existing groundwater wells will be monitored each quarter for the presence of free product and depth to water. Water samples will be collected from each well following accepted State of California sampling protocol and analyzed for TPH and BTEX. A report will be prepared for the Orange County Health Care Agency each quarter summarizing the procedures and presenting the findings of each monitoring event.

PERMITS

In addition to the SCAQMD and the NPDES permits, local building department permits will be obtained as necessary.

SITE SAFETY

A site specific health and safety plan will be provided to all employees prior to commencing field activities and a copy will be kept on site. All field employees will be 40-hour HAZWOPER trained and will be required to understand and follow all safety procedures that are described.

VERIFICATION OF CLEANUP

As soil remediation activities near completion, soil samples will be collected from confirmation borings advanced in the previously contaminated areas of the site. Undisturbed soil samples will be collected every five feet during drilling. The samples will be analyzed for TPH and BTEX by a State-certified laboratory. Strict sample handling and chain-of-custody procedures will be followed.

After remedial operations have been discontinued, groundwater quality will continue to be monitored quarterly for a minimum of one year. Groundwater remediation will be considered complete when dissolved hydrocarbon concentrations are below drinking water standards for four consecutive quarterly groundwater sampling events.

SCHEDULE

Within one month after the approval of the CAP by the OCHCA, requests for proposals for the remediation system installation and operation will be sent to at least three contractors as required by the State Cleanup Fund. The job will be awarded within six weeks of the date the request for proposals were sent out. Remediation system installation and permitting will commence within one month after the job has been awarded. It is estimated that permitting and installation will require approximately six weeks.

TABLES AND FIGURES

TABLE 1 - SUMMARY OF ANALYTICAL SOIL RESULTS

Pomona Box Company
301 West Imperial Highway
La Habra, California

Well ID	Sample Depth (ft)	TPH (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-benzene (mg/kg)	Xylenes (mg/kg)
B-1	15	7306	ND	ND	1.1	11.1
B-1	20	ND	NT	NT	NT	NT
B-2	15	12720	44	310	172	911
B-2	24	ND	NT	NT	NT	NT
B-3	15	6237	5	19	18	123
B-3	20	ND	NT	NT	NT	NT
B-4	5	ND	NT	NT	NT	NT
B-4	10	ND	NT	NT	NT	NT
B-4	15	1290	0.3	0.9	0.8	5.2
B-5	5	12	NT	NT	NT	NT
B-5	10	23	NT	NT	NT	NT
B-5	15	2940	0.5	13.1	11.7	78.1
B-5	20	16	NT	NT	NT	NT
B-6	5	ND	NT	NT	NT	NT
B-6	10	ND	NT	NT	NT	NT
B-6	15	ND	NT	NT	NT	NT
B-7	5	12	ND	ND	ND	ND
B-7	10	44	0.2	ND	ND	3.4
B-7	15	323	3.6	3.4	6.9	9.7
B-7	20	ND	ND	ND	ND	ND
B-8	5	ND	ND	ND	ND	ND

B-8	15	ND	ND	ND	ND	ND
B-9	5	ND	ND	ND	0.02	0.025
B-9	10	ND	ND	ND	ND	ND
B-10	5	ND	ND	ND	ND	ND
B-10	10	ND	ND	ND	ND	0.02

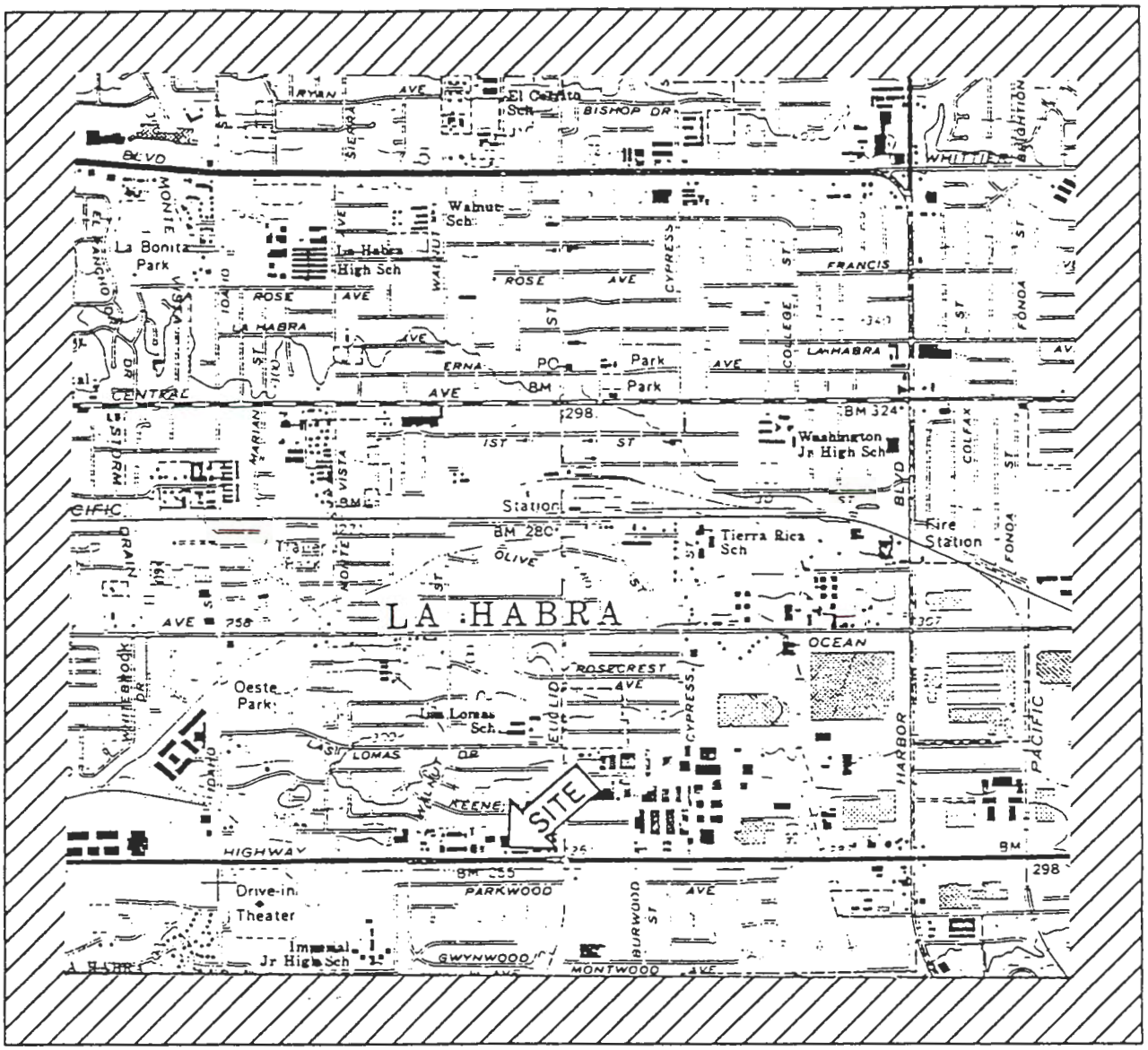
Refer to specific reports for method detection limits.

TABLE 2 - SUMMARY OF ANALYTICAL GROUNDWATER RESULTS

(Third Quarter 1994)

Pomona Box Company
301 West Imperial Highway
La Habra, California

Well Number	Total Hydrocarbons mg/l	Benzene mg/l	Toluene mg/l	Ethyl Benzene mg/l	Total Xylenes mg/l
B-1	9.9	0.7875	0.3690	0.2649	0.7391
B-2	20.3	7.6777	5.4200	0.8343	2.4478
B-3	0.7	0.0541	0.0263	0.0198	0.0343
B-4	12.2	1.3376	1.2914	0.6686	0.7074
B-5	83.7	27.9057	20.0200	3.2743	9.2335
B-6	3.9	0.3919	0.3290	0.1113	0.3892
B-7	0.4	0.0164	0.0013	ND	0.0333
B-8	ND	0.0012	0.0005	0.0003	0.0021
B-9	1.4	0.0370	0.0034	0.0003	0.0981
B-10	5.2	0.5395	0.2423	0.4414	0.5731
Limits of Detection:	ND<0.1	ND<0.0003	ND<0.0003	ND<0.0003	ND<0.0005



2000' 0 2000' 4000'

SCALE FEET

SOURCE :

7.5 MINUTE U.S.G.S.

QUADRANGLE :

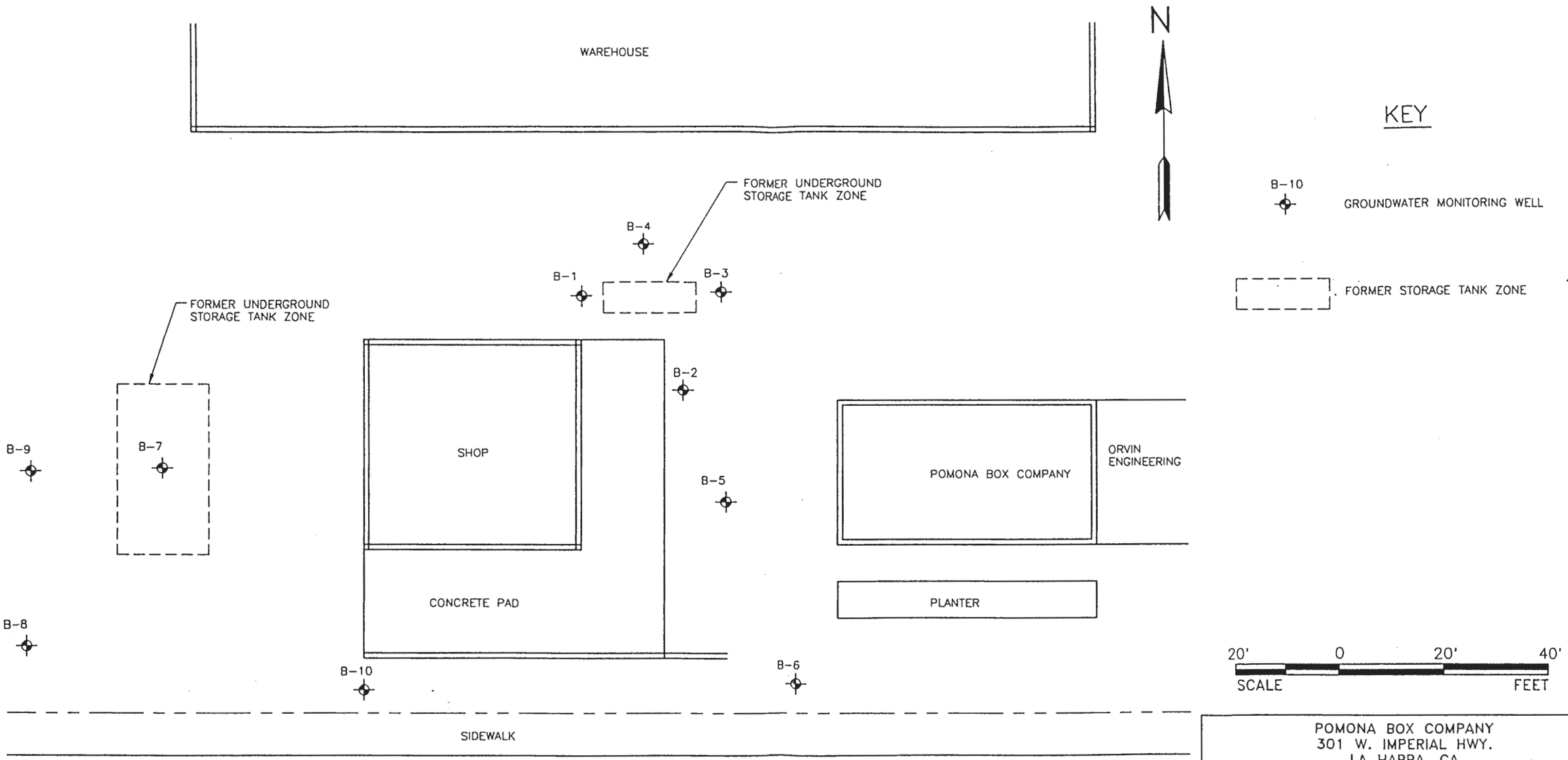
LA HABRA

N

POMONA BOX COMPANY
301 W. IMPERIAL HWY.
LA HABRA, CA

SITE LOCATION MAP

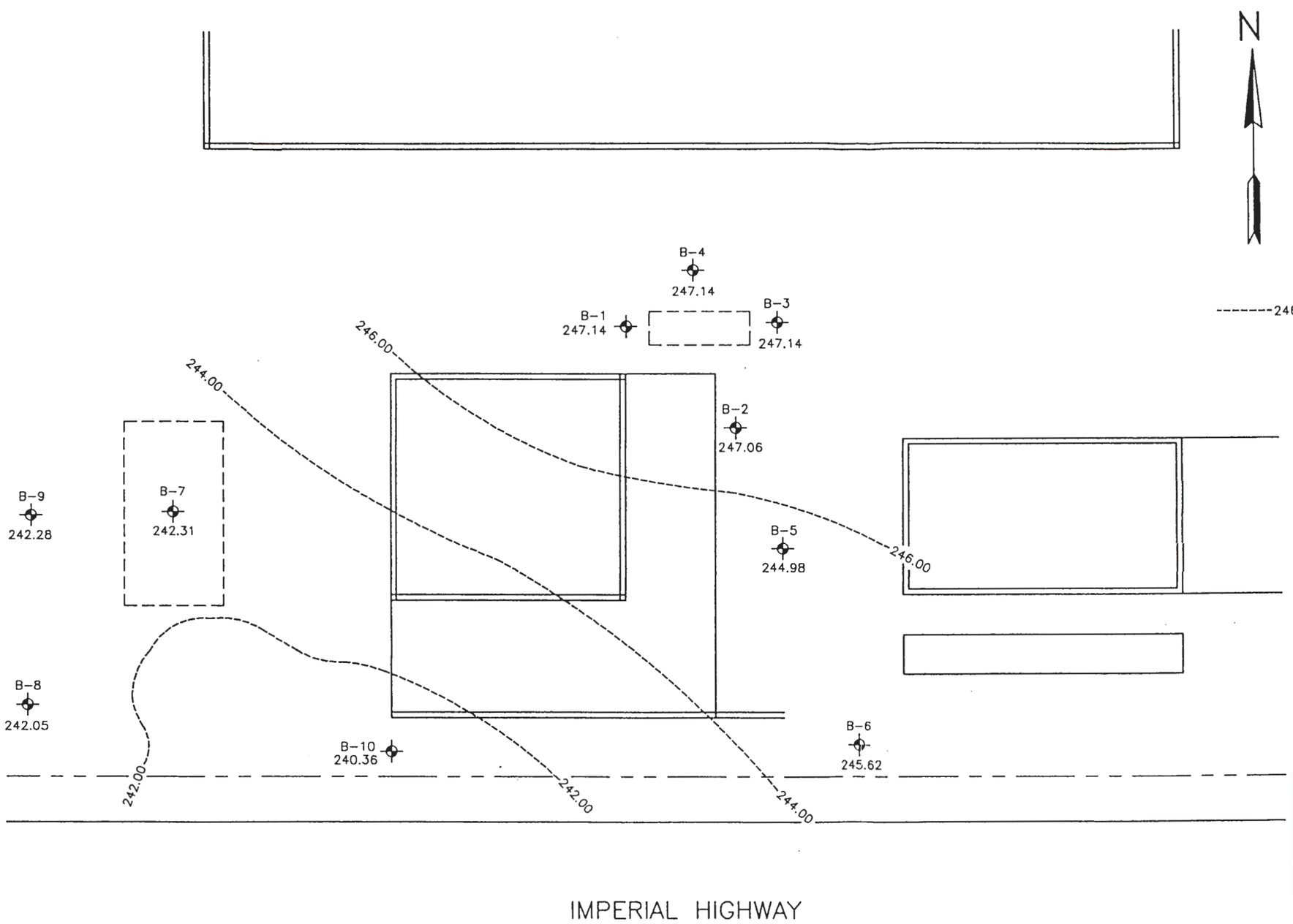
ENVIRONMENTAL Wayne Perry SPECIALISTS	DWG. NO. 003000SL	CHKD. BY
	PROJ. NO. 88.003	DRAWN BY PROVANCE
	FIG. NO. 1	DATE



POMONA BOX COMPANY
301 W. IMPERIAL HWY.
LA HABRA, CA

PLOT PLAN

Wayne Perry Environmental Specialists	DWG. NO. 00300001	CHKD. BY
	PROJ. NO. 88.003	DRAWN BY PROVANCE
	FIG. NO. 2	DATE 10/8/94



KEY

B-10 240.36 — MONITORING WELL SHOWING GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL FOR JULY THROUGH SEPTEMBER 1994.

-------246.00------- GROUNDWATER CONTOUR

CONTOUR INTERVAL = 2.00 FEET

20' 0 20' 40'
SCALE FEET

POMONA BOX COMPANY
301 W. IMPERIAL HWY.
LA HABRA, CA

GROUNDWATER CONTOUR MAP

WaynePerry ENVIRONMENTAL SPECIALISTS	DWG. NO. 00300005	CHKD. BY
	PROJ. NO. 88.003	DRAWN BY PROVANCE
	FIG. NO. 3	DATE 10/8/94

APPENDIX I

BORING LOGS

LOG OF BORING

Drill Rig: CME-75	Boring Diameter: 10 inch	Boring Elevation:	Boring Number
Date Drilled: 1/28/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-1

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC AB
		5 10		CL	Sandy CLAY: red brown, moist, firm; color change to gray brown at 6 feet. ALLUVIUM
		15		SC	Clayey SAND: fine-to medium-grained, red brown, moist to very moist, dense. ALLUVIUM
		20		CL	Sandy CLAY: red brown, moist to saturated, stiff. ALLUVIUM
		25 30 35 40 45 50			

Notes:
1. Bottom of boring at 24 feet.
2. Ground water encountered at 20 feet.
3. Casing set to 24 feet.

Pomona Box Company
301 W. Imperial Highway, La Habra

Project No.: 86.252	Figure No.: 2

LOG OF BORING

Drill Rig: CME-75	Boring Diameter: 10 inch	Boring Elevation:	Boring Number
Date Drilled: 1/28/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-2

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC AB
		5 10		CL	Sandy CLAY: red brown, moist, firm; slightly plastic; color changes to gray brown at 4.5 feet. ALLUVIUM
		15		SC	Clayey SAND: fine-to medium-grained, gray, very moist to saturated, dense. ALLUVIUM
		20		CL	Sandy CLAY: red brown, saturated, firm to stiff; slightly plastic. ALLUVIUM
		25 30 35 40 45 50			

Notes:
1. Bottom of boring at 24 feet.
2. Groundwater encountered at 21 feet.
3. Casing set to 24 feet.

Pomona Box Company
301 W. Imperial Highway, La Habra

Project No.: 86.252

Figure No.: 3

LOG OF BORING

Drill Rig: CME-75	Boring Diameter: 10 inch	Boring Elevation:	Boring Number
Date Drilled: 1/29/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-3

Sample Tube	Sample Bulk	Depth Feet	Soil/ Rock Symbol	Soil/ Rock Type	Description and Remarks
					AC
				CL	AB
		5		SC	Silty CLAY: light brown, damp, firm; occasional coarse-grained sand; some decaying organics. ALLUVIUM
		10		ML	Clayey SAND: coarse-grained, yellow brown, damp, very dense; occasional gravel. ALLUVIUM
		15			Clayey SILT: gray very moist to firm. ALLUVIUM
		20		SM	Silty SAND: medium-to coarse-grained, yellow brown, saturated, dense; occasional gravel and clayey sand. ALLUVIUM
		25			
		30			
		35			
		40			
		45			
		50			

Notes:

1. Bottom of boring at 24 feet.
2. Ground water encountered at 16.5 feet.
3. Casing set to 24 feet.

Pomona Box Company
301 W. Imperial Highway, La Habra

Project No.: 86.252	Figure No.: 4

LOG OF BORING

Drill Rig: B-61	Boring Diameter: 11 inch	Boring Elevation:	Boring Number
Date Drilled: 10/2/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-4

Sample Tube	Sample Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC
					AB
		5		CL	Sandy CLAY: gray brown, damp, stiff, mottled. ALLUVIUM
		10		ML	Sandy SILT: dark brown, wet, firm, hydrocarbon odor at 7 feet. ALLUVIUM
	▼	15		SM	Silty SAND: fine- to coarse-grained, brown to dark brown, saturated, medium dense, strong hydrocarbon odor. ALLUVIUM
		20		ML	Sandy SILT: light brown, saturated, very firm.
		25			
		30			ALLUVIUM
		35			
		40			
		45			
		50			

Notes:
1. Bottom of boring at 35 feet.
2. Groundwater encountered at 17±feet.
3. Casing set to 35 feet.

Pomona Box Company
301 W. Imperial Hwy., La Habra

Project No.: 86.252 | Figure No.: 3

LOG OF BORING

Drill Rig: B-61	Boring Diameter: 11 inch	Boring Elevation:	Boring Number
Date Drilled: 10/2/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-5

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC AB
		5		CL	Sandy CLAY: brown, moist, medium stiff, mottled. ALLUVIUM
		10			
		15		SM	Silty SAND: fine- to coarse-grained, brown, wet, medium dense, trace of gravel, hydrocarbon odor.
	▼	20			
		25			
		30			ALLUVIUM
		35			
		40			
		45			
		50			

Notes:
1. Bottom of boring at 35 feet.
2. Groundwater encountered at 17 feet.
3. Casing set to 35 feet.

Pomona Box Company
301 W. Imperial Hwy., La Habra

Project No.: 86.252

Figure No.: 4

LOG OF BORING

Drill Rig: B-61	Boring Diameter: 11 inch	Boring Elevation:	Boring Number
Date Drilled: 10/2/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-6

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC AB
		5 10		CL	Sandy CLAY: dark brown, damp, stiff. ALLUVIUM
	▼	15 20 25 30 35		SM	Silty SAND: fine- to medium-grained, brown, moist, medium dense. ALLUVIUM
		40 45 50			

Notes:
1. Bottom of boring at 35 feet.
2. Groundwater encountered at 16 feet.
3. Casing set to 35 feet.

Pomona Box Company
301 W. Imperial Hwy., La Habra

Project No.: 86.252

Figure No.: 5

LOG OF BORING

Drill Rig: CME 75	Boring Diameter: 8"	Boring Elevation: 254.69	Boring Number
Date Drilled: 3-21-91	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-7

Sample Depth	Vapor Reading PPM/LEL	Time	Blow Counts	Depth Feet	Soil/ Rock Symbol	Soil/ Rock Type	Description and Remarks
							ASPHALT PAVING
						SP	SAND: light brown, fine- to medium-grained, moist, loose. BACKFILL MATERIAL
	10/0	9:35	2/3/4	5			
	235/2	9:43	3/3/4	10		SC	Clayey SAND: light gray, fine to medium-grained sand intermixed with clay, soft to firm, moist. BACKFILL MATERIAL
	60/0	9:46	2/5/7	15		CL	CLAY: light brown, silty, moist, stiff, slightly plastic. ALLUVIUM
	15/0	9:50	3/7/11	20			
	15/0	10:10	3/8/17	25		SC	Clayey SAND: light brown, interbedded fine- to coarse-grained sands and silty clay, saturated, plastic, stiff to dense.
				30			
				35			No in-place samples; auger return observation, only.
			18/13/21	40			ALLUVIUM
				45			
				50			
				55			
				60			

Notes:
1. Boring depth 43 feet.
2. Groundwater encountered at 18 feet.
3. Installed groundwater monitor well at 40 feet.

Pomona Box Company
301 Imperial Highway

Project No.: 89.151

Figure No.: 4

LOG OF BORING

Drill Rig: CME-55	Boring Diameter: 8¼"	Boring Elevation:	Boring Number
Date Drilled: 7/24/91	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-8

Sample Depth	Vapor Reading PPM/LEL	Time	Blow Counts	Depth Feet	Soil/ Rock Symbol	Soil/ Rock Type	Description and Remarks
	250/2	9:15	3/6/6	5		ML	Sandy SILT: light gray to black, moist, firm to stiff.
	50/0	9:20	5/11/18	10			ALLUVIUM
	25/0	9:24	4/7/13	15		CL	Sandy CLAY: light brown to gray, very moist, stiff; slightly mottled; slightly plastic; saturated below 15 feet.
	20/0	9:30	7/14/21	20			ALLUVIUM
				25		SC	Clayey SAND: fine- to medium-grained, light brown to gray, saturated, dense; thin layer of gravel at approximately 30 feet.
				30			
				35			ALLUVIUM
				40			
				45			
				50			
				55			
				60			

Notes:
1. Boring depth 37 feet.
2. Groundwater encountered at 15 feet.
3. Installed groundwater monitoring well at 35 feet.

Pomona Box Co.
301 West Imperial Hwy.

Project No.: 89.151

Figure No.: 3

LOG OF BORING

Drill Rig: B-61	Boring Diameter: 11"	Boring Elevation:	Boring Number B-9
Date Drilled: 2/26/93	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		

Sample Depth	Vapor Reading PPM/LEL	Time	Blow Counts	Depth Feet	Soil/ Rock Symbol	Soil/ Rock Type	Description and Remarks
							AC/AB
						CL	Sandy CLAY: brown to grey, moist, stiff, plastic, trace debris
				5			FILL
	110	8:15	7/12/18				Sandy SILT: grey, moist, stiff; occasional thin clayey silt lenses
	70	8:30	6/12/21	10		SM	
						SC	Clayey SAND: fine- to medium-grained, brown, saturated, dense; occasional thin sand lenses
				15		SP	SAND: fine- to coarse-grained, brown, saturated, dense
				20		ML	
						CL	Clayey SILT: grey, saturated, stiff
				25			Sandy CLAY: brown, very moist, stiff, plastic
				30			
				35			
				40			
				45			
				50			
				55			
				60			

Notes:
1. Bottom of boring at 23.5 feet.
2. Groundwater encountered at 12 feet.
3. Well set to 23.5 feet.

Pomona Box
301 W. Imperial Hwy
La Habra

Project No.: 88.03X

Figure No.: 4

LOG OF BORING

Drill Rig: B-61	Boring Diameter: 11"	Boring Elevation:	Boring Number
Date Drilled: 2/26/93	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-10

Sample Depth	Vapor Reading PPM/LEL	Time	Blow Counts	Depth Feet	Soil/ Rock Symbol	Soil/ Rock Type	Description and Remarks
						CL	AC/AB
							Silty CLAY: dark grey, moist, stiff
	60	11:00	6/9/13	5			
						ML	Sandy SILT: dark, gray, moist, stiff; occasional silty sand lenses
	400	11:15	13/18/31	10			
							becomes saturated at 12 feet
				15			
				20		SC	Clayey SAND: fine- to coarse-grained, very moist, dense
				25			
				30			
				35			
				40			
				45			
				50			
				55			
				60			

Notes:
1. Bottom of boring at 25 feet.
2. Saturated conditions encountered at 12 feet.
3. Well set to 25 feet.

Pomona Box
301 W. Imperial Hwy
La Habra

Project No.: 88.03X

Figure No.: 5

APPENDIX II

VAPOR EXTRACTION TEST REPORT

PREPARED FOR: MR. DON VOTAW
POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA 90631

VAPOR EXTRACTION TEST REPORT
POMONA BOX COMPANY
301 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA

PREPARED BY: WAYNE PERRY CONSTRUCTION, INC.
8281 Commonwealth Avenue
Buena Park, California 90621

January 31, 1994

WRITTEN BY:

David E. Potts
Registered Chemical
Engineer No.4270

REVIEWED BY:

Richard V. Smith
Registered Geologist
No. 5014

Vapor Extraction Test Report
Pomona Box Company
La Habra, CA

Project No. 88.003

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SUMMARY

A one-day vapor extraction test was completed on January 13, 1994. A V.R. Systems Model V-3 soil venting engine was used to apply vacuum on an individual basis to five groundwater monitoring wells located on the subject property. Testing was conducted at low levels of applied vacuum to avoid excessive upwelling of groundwater.

During the test, well gas samples obtained from individual wells contained total hydrocarbon levels ranging from 4 ppmv to 4600 ppmv, as measured with a Foxboro Model 128 organic vapor analyzer calibrated with methane.

Maximum volumetric extraction rate was approximately 2 standard cubic feet per minute (SCFM) from well B-7. Wellhead vacuum to achieve this flow rate was approximately 10 inches w.c. (water column). Application of higher vacuum at this site causes upwelling of shallow groundwater and therefore does not result in higher flow.

During the test, the maximum hydrocarbon extraction rate ranged from less than 0.001 pounds per hour in wells B-2 and B-3 to approximately 0.1 pounds per hour in well B-7.

Laboratory testing of a soil gas samples taken from wells B-1, B-5 and B-7 indicated total petroleum hydrocarbons ranging from 110 to 344 ppmv (ASTM Method 3416M), and benzene ranging from 81 to 270 ppbv (EPA Method TO-14). Methane was present in concentrations ranging from 4 to 986 ppmv (ASTM Method 3416M).

Vacuum was not detected in any of the observation wells during the vapor extraction test. This indicates the effective radius of vacuum influence from each extraction well was less than 20 feet.

Based on the low volumetric extraction rates and hydrocarbon vapor concentrations obtained during the test, this site is not suitable for remediation using vapor extraction technology alone. Further evaluation of vapor extraction for this site should include a mechanism for extraction of groundwater from the test wells.

SITE DESCRIPTION

The site is occupied by an operating box manufacturing company located on the north side of Imperial Highway west of the intersection of Imperial Highway and Euclid Avenue in the city of La Habra. The site location and general geographic relationships are shown on the Location Map, Figure 1.

Located on the site is an office building, manufacturing building, and mechanics shed. Site relationships are shown on the Plot Plan, Figure 2.

BACKGROUND

In December 1986, a single 1,000 gallon underground storage tank was removed at this location. Soil samples were obtained and analyzed as part of the removal procedure. Results of the laboratory analyses indicated a localized area of hydrocarbon contaminated soil was present in the bottom of the excavation. During additional excavation to remove the contaminated soils, groundwater and free product were encountered at a depth of approximately 13 feet. The excavation was backfilled and the information reported to the Orange County Health Care Agency. Accordingly, site assessment work was required by the regulatory agency to define the extent of contamination.

Between January and September 1987, six borings, B-1 through B-6, were drilled and sampled. All the borings were converted to groundwater monitoring wells. Well locations are shwon on the Plot Plan, Figure 2 in Appendix A. Dissolved or separate phase hydrocarbons were detected in all the wells.

Manual recovery of free hydrocarbons was initiated in June 1987. An automated recovery system was installed and became operational in April 1988.

In September 1989, seven additional underground storage tanks were removed at this location. The approximate tank locations are shown on Figure 2. Results of laboratory analyses performed as part of the removal procedure indicated petroleum hydrocarbons were present. Subsequently, four borings were drilled and sampled as part of supplemental site investigations between March 1991 and February 1993. The four borings were converted to groundwater monitoring wells B-7 through B-10. Well locations are shown on the Plot Plan, Figure 2.

BACKGROUND, continued

In October 1993, a 24-hour aquifer test was performed on selected monitoring wells. The objective of the aquifer test was to determine hydraulic characteristics of the shallow aquifer. Results of the test indicate mean transmissivity at the site is 681 gpd/ft. The mean storage coefficient at the site was 0.00271.

A summary of laboratory soil analyses from previous site investigation is included as Table 4.

SITE GEOLOGY AND HYDROGEOLOGY

Lithologies encountered during drilling and sampling indicate the site is underlain by alluvium consisting of sandy clay, sandy silt, sand, clayey sand, and clayey silt to a depth of 35 feet. Boring logs indicate soil type in the saturated interval varies across the site. Copies of the boring logs are included in Appendix A.

Groundwater is present at depths ranging from 7 to 14 feet below grade. The direction of groundwater flow is to the southwest.

DESCRIPTION OF VAPOR EXTRACTION WELLS

Monitoring wells used for vapor extraction during the pilot test are constructed of 4 inch diameter PVC and extend to a total depth ranging from 23 to 40 feet. Wells B-1 through B-5 are slotted from four or five feet below the surface to total depth. Approximately ten feet of slotted casing extends above the water table in these wells. Well B-7 is slotted from ten feet below the surface to maximum well depth. Approximately two feet of slotted casing extends above the water table in this well.

Copies of the well construction logs are included in Appendix A.

DESCRIPTION OF PILOT TEST

A V.R. Systems Model V-3 soil venting engine (Ford 460 c.i.d.) was used to apply vacuum to wells B-1 through B-3, B-5, and B-7 on an individual basis. As indicated on Figure 2, wells B-1 through B-3, and B-5 are located east and north of the machine shop in the vicinity of the original tank excavation. Well B-7 is located west of the machine shop, in the vicinity of the second tank excavation.

Because of the shallow depth to water and limited soil permeability, applied vacuum was maintained at a very low level (ranging from one to 20 inches w.c.). The engine was operated for a time period ranging from 15 minutes to four hours on each well. The engine operating data are included in Table 1.

During each period, measurements were taken of inlet hydrocarbon concentration, flow rate, and vacuum. In addition, wellhead vacuum reading were made at the respective observation wells to determine radius of influence.

Hydrocarbon concentration was measured using a Foxboro 128 organic vapor analyzer (f.i.d.) calibrated with 1% v/v methane and equipped with a dilution apparatus. Flow rate was measured using a Kurz Model 490 mini-anemometer. Flow rate was calculated from measured velocity and the cross sectional area of the extraction piping.

PILOT TEST RESULTS

Operating data and field measurements covering the duration of the test are summarized in Tables 1 and 2. The maximum volumetric extraction rate (corrected for pressure) obtained with the V-3 engine was approximately 2 standard cubic feet per minute from well B-7 at a maximum influent concentration of 4600 ppmv, as measured with the Foxboro analyzer. This corresponds to a hydrocarbon extraction rate of approximately 3 lb/day.

PILOT TEST RESULTS, continued

Vacuum readings were made at each test well and at appropriate observation wells surrounding each test well. Measurements of volumetric extraction rate are plotted vs. applied vacuum for well B-7 in Figure No. 3. Vacuum readings, combined with flow rate measurements, are normally used to calculate soil permeability and radius of vacuum influence. Vacuum was not detected in any of the observation wells, as shown in Table 2. Calculation of soil permeability and radius of influence is not possible with the available data. Detection limit for vacuum was approximately 0.02 inches w.c.

During testing of wells B-1, B-5 and B-7, soil gas samples were collected in Tedlar bags and submitted to Calscience Environmental Laboratories, Inc. for analyses. Laboratory results are presented as Table 3. Copies of the laboratory report and chain of custody are included as Appendix A.

DISCUSSION AND CONCLUSIONS

Based on the results of field testing and laboratory analyses, concentrations of gasoline-range hydrocarbon vapors (less than 200 ppmv) and volatile aromatic hydrocarbons (less than 250 ppb benzene; less than 1000 ppb xylenes) are presently available for vacuum extraction in the vicinity of the original tank zone excavation located north and east of the machine shop. Methane is also present in soils underlying this area in concentrations ranging from approximately 4 to 90 ppmv.

Similar concentrations of gasoline-range hydrocarbon vapors (344 ppmv) and volatile aromatic hydrocarbons (270 ppb benzene; 710 ppb xylenes) are present in soils underlying the second tank zone excavation located west of the machine shop. Substantially higher concentrations of methane (986 ppmv) are present in this area; the reason for the elevated methane concentration is not obvious.

Volumetric extraction rate at this site was very low (less than 2 SCFM) because of low permeability soils and the presence of a shallow water table. Figure 3 indicates that volumetric extraction rate cannot be increased by increasing vacuum. Application of vacuum causes groundwater level in the well casing to rise, reducing the length of slotted casing available for air flow.

DISCUSSION AND CONCLUSIONS, continued

As indicated in Table 4, concentrations of total petroleum hydrocarbons ranging from approximately 3,000 mg/kg to 13,000 mg/kg were previously detected in the 15 foot soil samples from borings B-1 through B-3, and B-5 (located in the vicinity of the original tank excavation). Depth to water in these wells is currently approximately 14 feet; the hydrocarbon-impacted soils cannot be remediated using vapor extraction technology alone.

Table 4 also indicates that approximately 300 mg/kg total petroleum hydrocarbons were present in the 15 foot soil sample from boring B-7. Depth to water in B-7 is currently approximately 12 feet; therefore, hydrocarbon-impacted soils in the vicinity of the second tank excavation cannot be remediated by vapor extraction alone.

In order to remediate soils currently below the water table using vapor extraction, it will be necessary to lower the water level in the extraction wells using submersible pumps or by other means.

o o O o o

This letter has been prepared for the exclusive use of Pomona Box Company as it pertains to their site located at 301 West Imperial Highway, La Habra, California. No warranty, expressed or implied, is made as to the professional advice in this letter. Please contact the undersigned if you have any questions or if we can be of further assistance.

TABLE 1

Engine Operating Data

Date	Time	Well No.	Inlet HC ppmv*	Flow SCFM	Well Vac. in. w.c.	Well Gas lb/hr
01/13	0800	B-7	Begin Test			
	0835	"	--	0.5	1.0	
	0845	"	180	0.5	1.0	0.001
	0900	"	160	0.5	1.0	0.001
	0905	"		0.75	2.0	
	0910	"	1,000	0.75	2.0	0.01
	0920	"	2,200	0.75	2.0	0.03
	0925	"	2,600	0.75	2.0	0.03
	0935	"			2.0	
	0940	"		1.1	3.0	
	0950	"	2,500	1.1	3.0	0.04
	1010	"	3,000	1.1	3.0	0.05
	1015	"			5.0	
	1020	"	3,400	1.6	5.0	0.08
	1035	"	2,100	1.6	5.0	0.05
	1045	"	2,000	1.6	5.0	0.05
	1050	"		2.3	10.0	
	1055	"	4,600	1.8	10.0	0.13
	1105	"	2,600	1.8	10.0	0.07
	1115	"	2,000	1.8	10.0	0.06
	1150	"	1,800	1.8	10.0	0.05
01/13	1255	B-3		0.5	2.0	
	1300	"	15		2.0	<0.001
	1315	"	9	0.5	2.0	<0.001
	1320	"		1.1	5.0	
	1330	"	7	1.1	5.0	
	1335	"		1.7	10.0	<0.001
	1345	"	6	1.7	10.0	<0.001
	1350	"		2.2	20.0	<0.001
	1355	"	4	2.2	20.0	<0.001

TABLE 1, continued

Engine Operating Data

Date	Time	Well No.	Inlet HC ppmv*	Flow SCFM	Well Vac. in. w.c.	Well Gas lb/hr
01/13	1400	B-1		1.6	5.0	
	1405	"	250	1.5	5.0	0.006
	1415	"	100	1.5	5.0	0.002
	1425	"	100	1.5	5.0	0.002
01/13	1430	B-2		1.5	5.0	
	1435	"	6	1.5	5.0	<0.001
	1445	"	5	1.5	5.0	<0.001
01/13	1500	B-5		0.2	5.0	
	1505	"		0.3	10.0	
	1510	"		1.6	20.0	
	1520	"	240	1.6	20.0	0.006
	1530	"	60	1.6	20.0	0.001
	1535	"		1.6	20.0	
	1600	"	50	1.6	20.0	0.001

TABLE 2

Vacuum Radius of Influence Measurements

[----------Test Well----------]			[---------Observation Well---------]		
Well No.	Extr. Rate CFM	Well Vac. in. w.c.	Well No.	Dist. to Test Well	Well Vac. in. w.c.
B-1	1.5	5.0	B-2	27'	ND <0.02
			B-3	27'	ND <0.02
			B-4	15'	ND <0.02
B-2	1.5	5.0	B-3	21'	ND <0.02
			B-5	23'	ND <0.02
			B-1	27'	ND <0.02
B-3	2.2	20.0	B-1	27'	ND <0.02
			B-2	21'	ND <0.02
			B-4	17'	ND <0.02
B-5	1.6	20.0	B-2	23'	ND <0.02
			B-6	38'	ND <0.02
			B-3	40'	ND <0.02
B-7	1.8	10.0	B-8	43'	ND <0.02
			B-9	25'	ND <0.02
			B-10	58'	ND <0.02

TABLE 3

SUMMARY OF LABORATORY TEST RESULTS

Soil Gas Analyses, 01/13/94

Well No.	Methane, ppmv	Non-Methane HC, ppmv	Benzene, ppbv	Toluene, ppbv	Ethyl Benzene, ppbv	Xylenes, ppbv
B-1	90.7	110	230	365	52.5	705
B-5	3.8	171	80.8	412	138	978
B-7	986	344	270	185	725	710

TABLE 4

SUMMARY OF SOIL ANALYSES

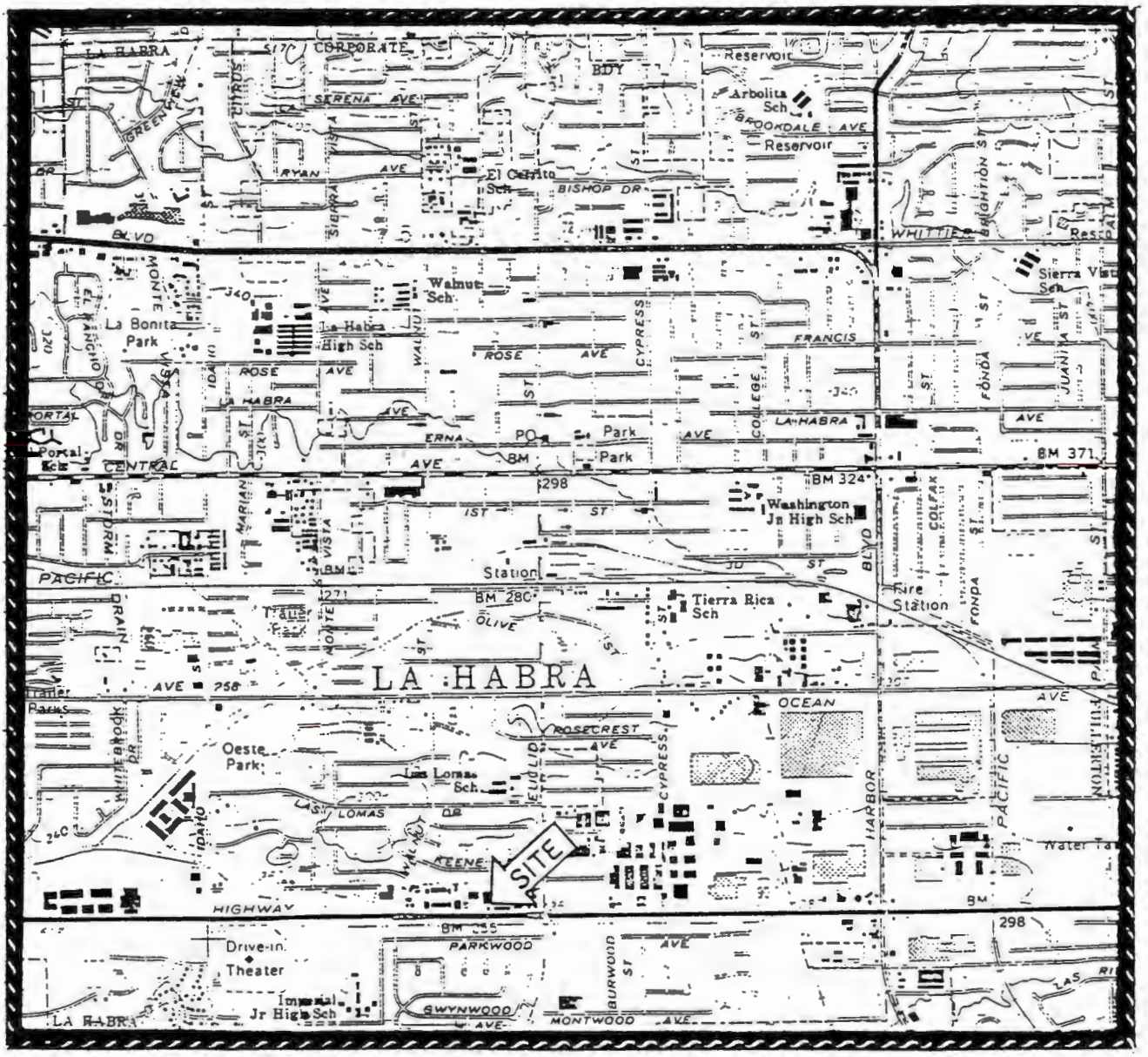
Boring No.	Date Drilled	Depth, Feet	TPH mg/kg	Benzene mg/kg	Toluene mg/kg	E.Benzene mg/kg	Xylenes mg/kg
B-1	01/28/87	15	7,306	ND	ND	1.1	11.1
		20	ND	NT	NT	NT	NT
B-2	01/28/87	15	12,720	44	310	172	911
		24	ND	NT	NT	NT	NT
B-3	01/28/87	15	6,237	5	19	18	123
		20	ND	NT	NT	NT	NT
B-4	10/02/87	5	ND	NT	NT	NT	NT
		10	ND	NT	NT	NT	NT
		15	1,290	0.3	0.9	0.8	5.2
B-5	10/02/87	5	12	NT	NT	NT	NT
		10	23	NT	NT	NT	NT
		15	2,940	0.5	13.1	11.7	78.1
		20	16	NT	NT	NT	NT
B-6	10/02/87	5	ND	NT	NT	NT	NT
		10	ND	NT	NT	NT	NT
		15	ND	NT	NT	NT	NT
B-7	03/26/91	5	12	ND	ND	ND	ND
		10	44	0.2	ND	ND	3.4
		15	323	3.6	3.4	6.9	9.7
		20	ND	ND	ND	ND	ND

TABLE 4, continued

SUMMARY OF SOIL ANALYSES

Boring No.	Date Drilled	Depth, Feet	TPH mg/kg	Benzene mg/kg	Toluene mg/kg	E.Benzene mg/kg	Xylenes mg/kg
B-8	07/24/91	5	ND	ND	ND	ND	ND
		15	ND	ND	ND	ND	ND
B-9	02/26/93	5	ND	ND	ND	0.02	0.025
		10	ND	ND	ND	ND	ND
B-10	02/26/93	5	ND	ND	ND	ND	ND
		10	ND	ND	ND	ND	0.02

SITE LOCATION MAP



2000 0 2000 4000

SCALE FEET

NORTH

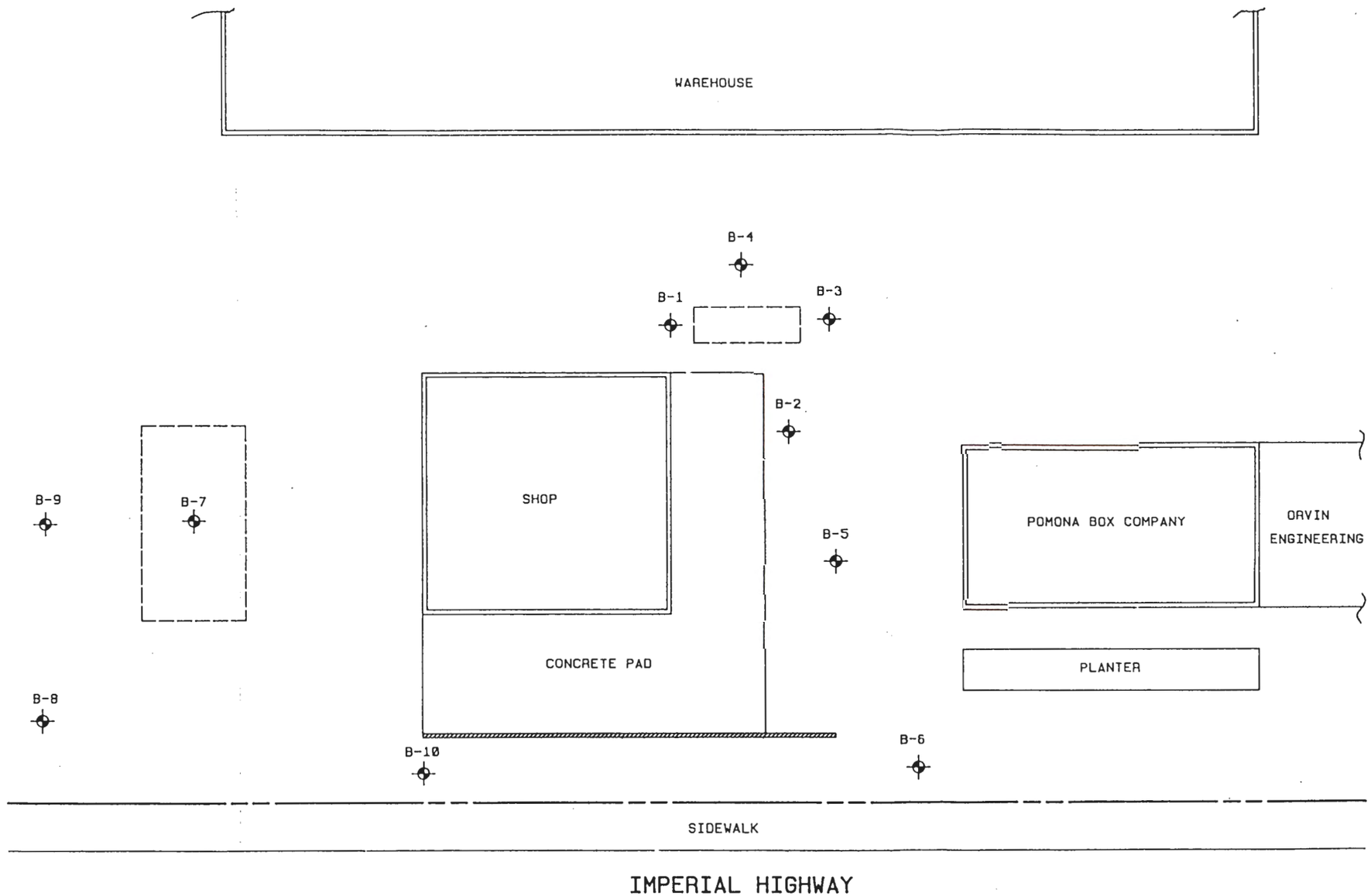
BASE MAP: La Habra Quadrangle

Pomona Box
301 W. Imperial Highway
La Habra, California

PROJECT NO.	FIGURE NO.
88.3X	1
DRAWN BY	

Wayne Perry

PLOT PLAN



KEY

B-10 — MONITORING WELL

= FORMER STORAGE TANK ZONE

N

20 0 20 40

SCALE FEET

POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA.

PROJECT NO.	FIGURE NO.
88.3X	2
DRAWN BY EL 4/22/93	REVISED ADD B-9,B-10 EL 4/22/93

WaynePerry ENVIRONMENTAL CONSTRUCTION INC. SPECIALISTS

Pomona Box Company
Project No. 88.003

APPENDIX A

Boring Logs

Well Construction Logs

ANY

VELL B-7

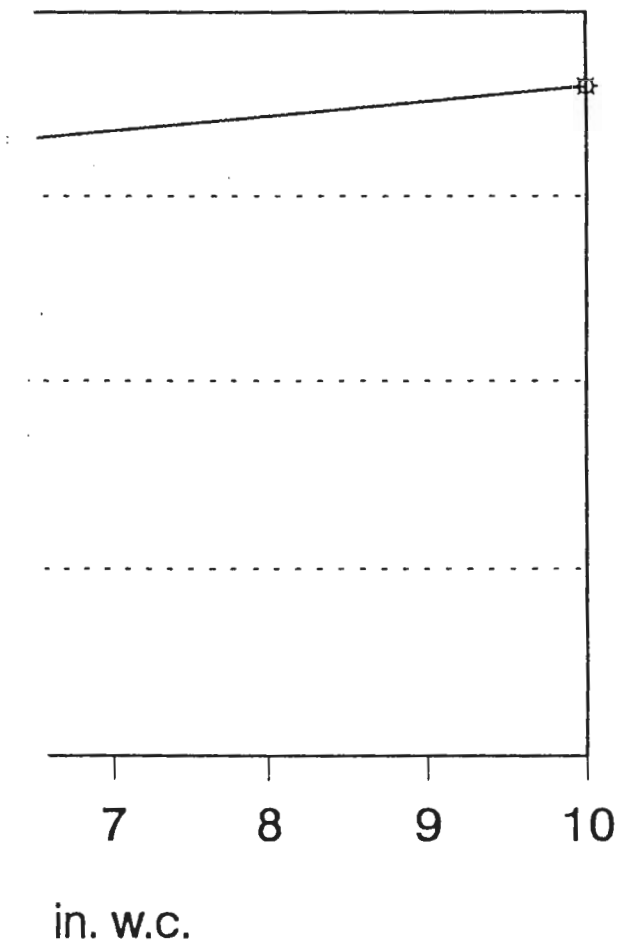


Figure No. 3

LOG OF BORING

Drill Rig: B-61	Boring Diameter: 11 inch	Boring Elevation:	Boring Number
Date Drilled: 10/2/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-5

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC AB
		5 10		CL	Sandy CLAY: brown, moist, medium stiff, mottled. ALLUVIUM
	▼	15 20 25 30 35		SM	Silty SAND: fine- to coarse-grained, brown, wet, medium dense, trace of gravel, hydrocarbon odor. ALLUVIUM
		40 45 50			

Notes:
1. Bottom of boring at 35 feet.
2. Groundwater encountered at 17 feet.
3. Casing set to 35 feet.

Pomona Box Company
301 W. Imperial Hwy., La Habra

Project No.: 86.252 | Figure No.: 4

LOG OF BORING

Drill Rig: B-61	Boring Diameter: 11 inch	Boring Elevation:	Boring Number
Date Drilled: 10/2/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-6

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC AB
		5 10		CL	Sandy CLAY: dark brown, damp, stiff. ALLUVIUM
	▼	15 20 25 30 35		SM	Silty SAND: fine- to medium-grained, brown, moist, medium dense. ALLUVIUM
		40 45 50			

Notes:
1. Bottom of boring at 35 feet.
2. Groundwater encountered at 16 feet.
3. Casing set to 35 feet.

Pomona Box Company
301 W. Imperial Hwy., La Habra

Project No.: 86.252

Figure No.: 5

LOG OF BORING

Drill Rig: CME 75	Boring Diameter: 8"	Boring Elevation: 254.69	Boring Number
Date Drilled: 3-21-91	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-7

Sample Depth	Vapor Reading PPM/LEL	Time	Blow Counts	Depth Feet	Soil/ Rock Symbol	Soil/ Rock Type	Description and Remarks
							ASPHALT PAVING
						SP	SAND: light brown, fine- to medium-grained, moist, loose. BACKFILL MATERIAL
	10/0	9:35	2/3/4	5			
	235/2	9:43	3/3/4	10		SC	Clayey SAND: light gray, fine to medium-grained sand intermixed with clay, soft to firm, moist. BACKFILL MATERIAL
	60/0	9:46	2/5/7	15		CL	CLAY: light brown, silty, moist, stiff, slightly plastic. ALLUVIUM
	15/0	9:50	3/7/11	20		SC	Clayey SAND: light brown, interbedded fine- to coarse-grained sands and silty clay, saturated, plastic, stiff to dense.
	15/0	10:10	3/8/17	25			
				30			
				35			No in-place samples; auger return observation, only.
			18/13/21	40			ALLUVIUM
				45			
				50			
				55			
				60			

Notes:
1. Boring depth 43 feet.
2. Groundwater encountered at 18 feet.
3. Installed groundwater monitor well at 40 feet.

Pomona Box Company
301 Imperial Highway

Project No.: 89.151

Figure No.: 4

LOG OF BORING

Drill Rig: CME-55	Boring Diameter: 8¼"	Boring Elevation:	Boring Number
Date Drilled: 7/24/91	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-8

Sample Depth	Vapor Reading PPM/LEL	Time	Blow Counts	Depth Feet	Soil/ Rock Symbol	Soil/ Rock Type	Description and Remarks
	250/2	9:15	3/6/6	5		ML	Sandy SILT: light gray to black, moist, firm to stiff.
	50/0	9:20	5/11/18	10			ALLUVIUM
	25/0	9:24	4/7/13	15		CL	Sandy CLAY: light brown to gray, very moist, stiff; slightly mottled; slightly plastic; saturated below 15 feet.
	20/0	9:30	7/14/21	20			ALLUVIUM
				25		SC	Clayey SAND: fine- to medium-grained, light brown to gray, saturated, dense; thin layer of gravel at approximately 30 feet.
				30			
				35			ALLUVIUM
				40			
				45			
				50			
				55			
				60			

Notes:
1. Boring depth 37 feet.
2. Groundwater encountered at 15 feet.
3. Installed groundwater monitoring well at 35 feet.

Pomona Box Co.
301 West Imperial Hwy.

Project No.: 89.151

Figure No.: 3

LOG OF BORING

Drill Rig: B-61	Boring Diameter: 11"	Boring Elevation:	Boring Number B-9
Date Drilled: 2/26/93	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		

Sample Depth	Vapor Reading PPM/LEL	Time	Blow Counts	Depth Feet	Soil/ Rock Symbol	Soil/ Rock Type	Description and Remarks
							AC/AB
						CL	Sandy CLAY: brown to grey, moist, stiff, plastic, trace debris
	110	8:15	7/12/18	5			FILL
	70	8:30	6/12/21	10		SM	Sandy SILT: grey, moist, stiff; occasional thin clayey silt lenses
						SC	Clayey SAND: fine- to medium-grained, brown, saturated, dense; occasional thin sand lenses
				15		SP	SAND: fine- to coarse-grained, brown, saturated, dense
				20		ML	
						CL	Clayey SILT: grey, saturated, stiff
				25			Sandy CLAY: brown, very moist, stiff, plastic
				30			
				35			
				40			
				45			
				50			
				55			
				60			

Notes:
1. Bottom of boring at 23.5 feet.
2. Groundwater encountered at 12 feet.
3. Well set to 23.5 feet.

Pomona Box
301 W. Imperial Hwy
La Habra

Project No.: 88.03X

Figure No.: 4

LOG OF BORING

Drill Rig: B-61	Boring Diameter: 11"	Boring Elevation:	Boring Number
Date Drilled: 2/26/93	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-10

Sample Depth	Vapor Reading PPM/LEL	Time	Blow Counts	Depth Feet	Soil/ Rock Symbol	Soil/ Rock Type	Description and Remarks
						CL	AC/AB
							Silty CLAY: dark grey, moist, stiff
	60	11:00	6/9/13	5			
						ML	Sandy SILT: dark, gray, moist, stiff; occasional silty sand lenses
	400	11:15	13/18/31	10			
							becomes saturated at 12 feet
				15			
				20		SC	Clayey SAND: fine- to coarse-grained, very moist, dense
				25			
				30			
				35			
				40			
				45			
				50			
				55			
				60			

Notes:
1. Bottom of boring at 25 feet.
2. Saturated conditions encountered at 12 feet.
3. Well set to 25 feet.

Pomona Box
301 W. Imperial Hwy
La Habra

Project No.: 88.03X

Figure No.: 5

Boring No. B-1

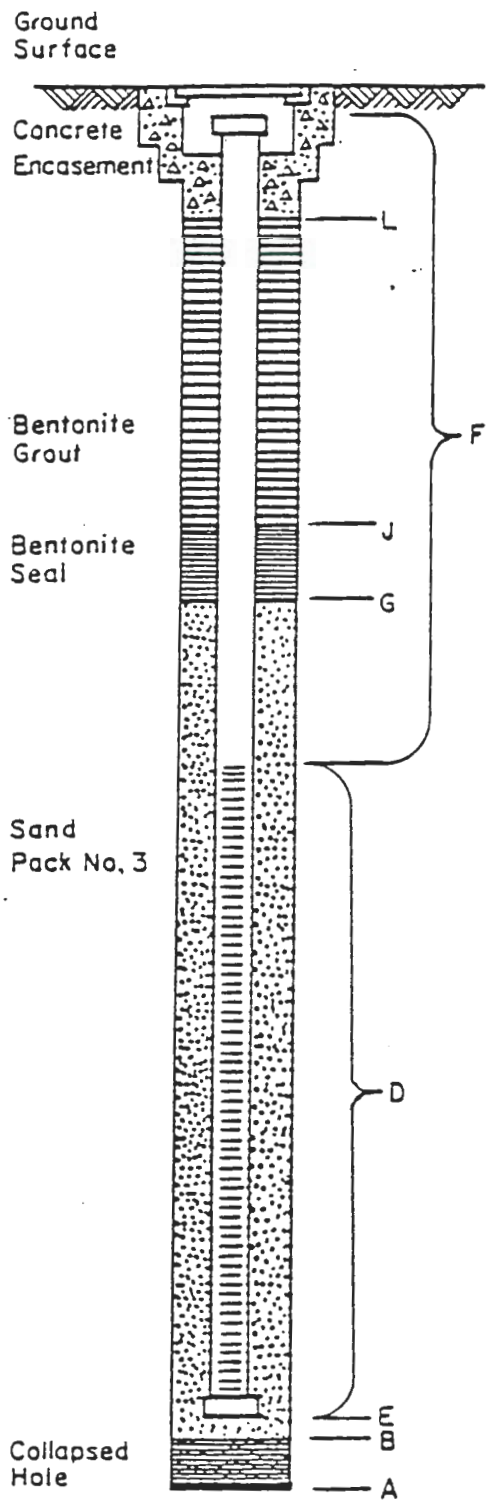
Location Pomona Box Co.

301 W. Imperial Hwy

Date 1/28/87

Logger's initials RJB

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	24	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	0	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	20	
E Depth of bottom of casing	(E)	24	
F. Length of blank casing	(F)	4	
G. Depth to top of gravel/sand fill	(G)	2	
H. Footage of gravel sand fill	(H) = B-F		26
I. Bags of gravel sand used	(I)	8	
J. Depth to top of bentonite seal	(J)	1	
K. Thickness of bentonite seal	(K) = I-G		1
L. Depth to top of bentonite grout	(L)	NA	
M. Thickness of bentonite grout	(M) = L-J		NA
N. Thickness of concrete encasement	(N) = L-Ø		NA

Depth to water	14.39
Type of casing	4" PVC Sch. 40
Type of access box used	DWP Well Protector
Top of casing elevation	256.87
Date surveyed	2/27/87
Ground water elevation	242.48

Pomona Box Company
301 W. Imperial Hwy., La Habra

PROJECT NO.: 86.252 | FIGURE NO.: 5

Boring No. B-2

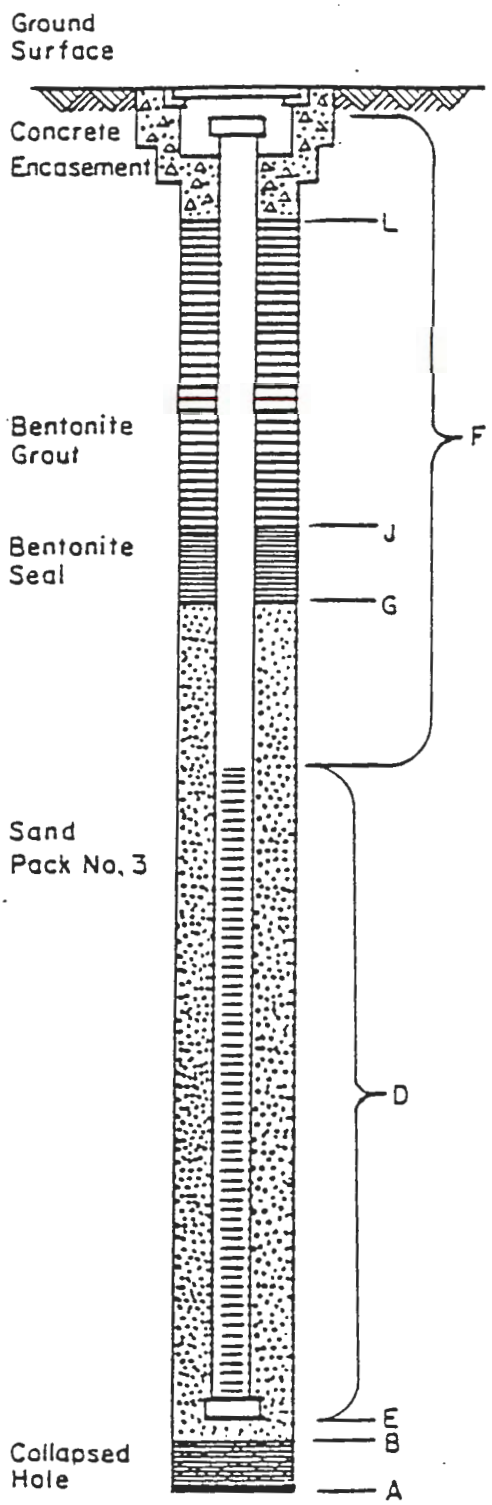
Location Pomona Box Company

301 W. Imperial Highway

Date 1/28/87

Logger's initials RJB

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	24	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	0	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	20	
E Depth of bottom of casing	(E)	24	
F. Length of blank casing	(F)	4	
G. Depth to top of gravel/sand fill	(G)	2	
H. Footage of gravel sand fill	(H) = B-F		26
I. Bags of gravel sand used	(I)	8	
J. Depth to top of bentonite seal	(J)	1	
K. Thickness of bentonite seal	(K) = I-G		1
L. Depth to top of bentonite grout	(L)	NA	
M. Thickness of bentonite grout	(M) = L-J		NA
N. Thickness of concrete encasement	(N) = L-Ø		NA

Depth to water	14.29
Type of casing	4" PVC Sch. 40
Type of access box used	DWP Well Protector
Top of casing elevation	256.83
Date surveyed	2/27/87
Ground water elevation	242.54

Pomona Box Company
301 W. Imperial Hwy., La Habra

PROJECT NO. 86.252

FIGURE NO. 6

Boring No. B-3

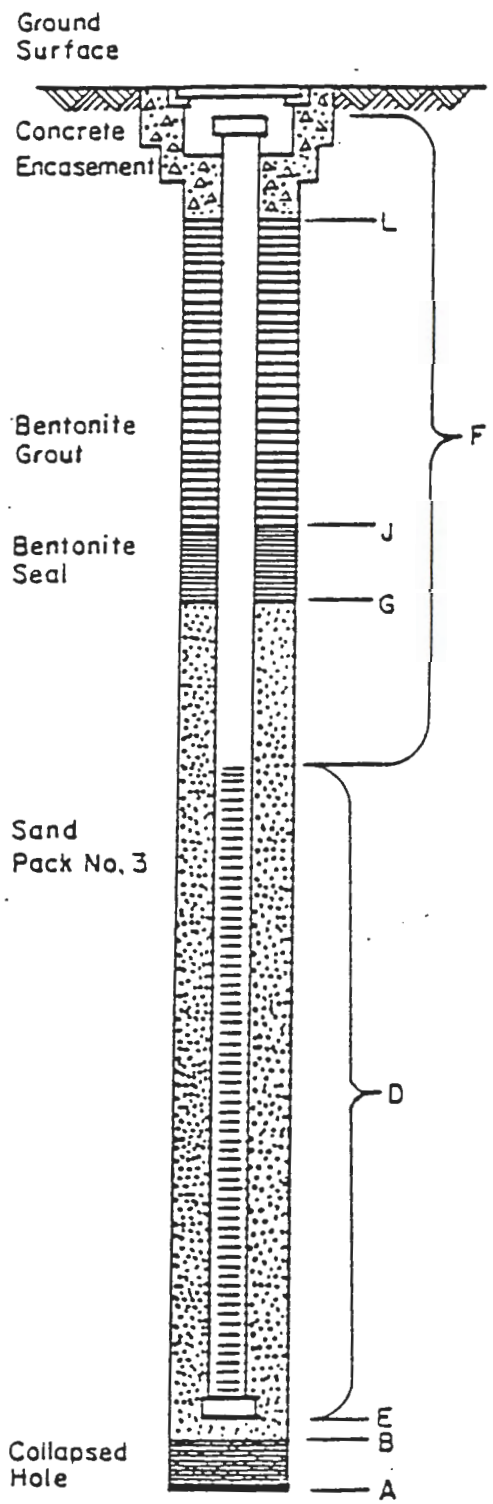
Location Pomona Box Company

301 W. Imperial Hwy.

Date 1/29/87

Logger's initials RW

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	24	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	24	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	20	
E Depth of bottom of casing	(E)	20	
F. Length of blank casing	(F)	4	
G. Depth to top of gravel/sand fill	(G)	4	
H. Footage of gravel sand fill	(H) = B-F		20
I. Bags of gravel sand used	(I)	7	
J. Depth to top of bentonite seal	(J)	1	
K. Thickness of bentonite seal	(K) = I-G		3
L. Depth to top of bentonite grout	(L)	NA	
M. Thickness of bentonite grout	(M) = L-J		NA
N. Thickness of concrete encasement	(N) = L-Ø		NA

Depth to water	14.33
Type of casing	4" PVC Sch. 40
Type of access box used	DWP Well Protector
Top of casing elevation	256.79
Date surveyed	2/27/87
Ground water elevation	242.46

Pomona Box Company
301 W. Imperial Hwy., La Habra

PROJECT NO. 86.252 | FIGURE NO. 7

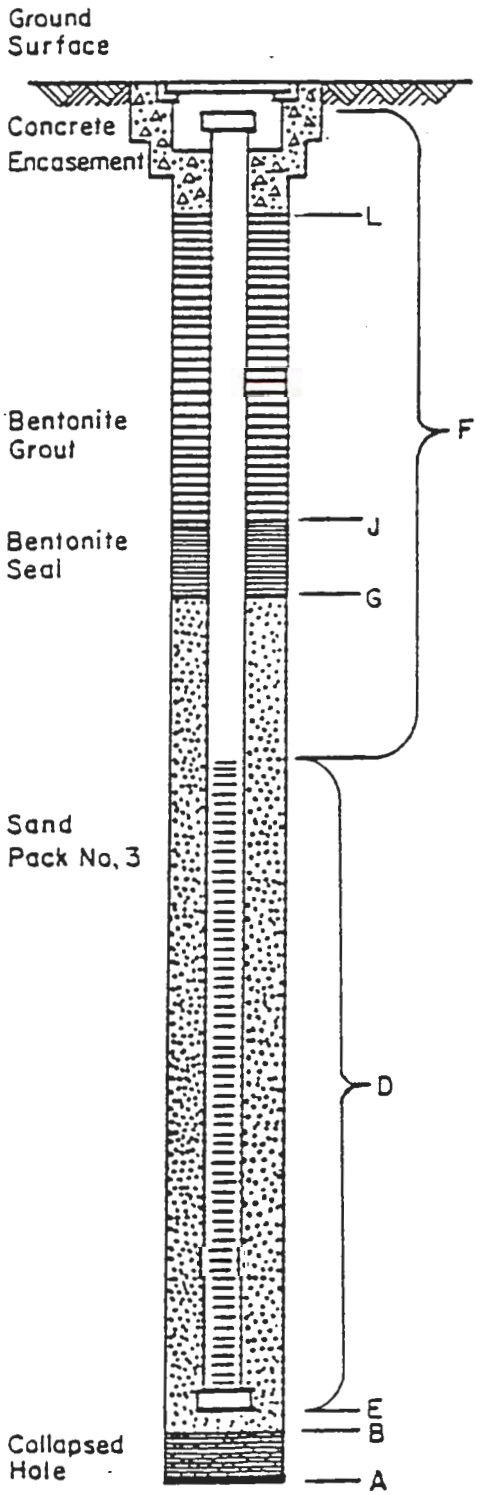
Boring No. B-4

Location 301 W. Imperial, La Habra

Date 10/2/87

Logger's initials PTC

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	36	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	35	
C. Footage of hole collapsed	(C) = A-B =		1
D. Length of slotted casing installed	(D)	30	
E Depth of bottom of casing	(E)	35	
F. Length of blank casing	(F)	5	
G. Depth to top of gravel/sand fill	(G)	4	
H. Footage of gravel sand fill	(H) = B-F		31
I. Bags of gravel sand used	(I)	16	
J. Depth to top of bentonite seal	(J)	2	
K. Thickness of bentonite seal	(K) = I-G		2
L. Depth to top of bentonite grout	(L)	N/A	
M. Thickness of bentonite grout	(M) = L-J		N/A
N. Thickness of concrete encasement	(N) = L-Ø		2

Depth to water	15.10
Type of casing	4" PVC Sch. 40
Type of access box used	DWP Well Protector
Top of casing elevation	261.56
Date surveyed	10/9/87
Ground water elevation	246.46

Pomona Box Company
301 W. Imperial Hwy., La Habra

PROJECT NO.: 86.252

FIGURE NO.: 6

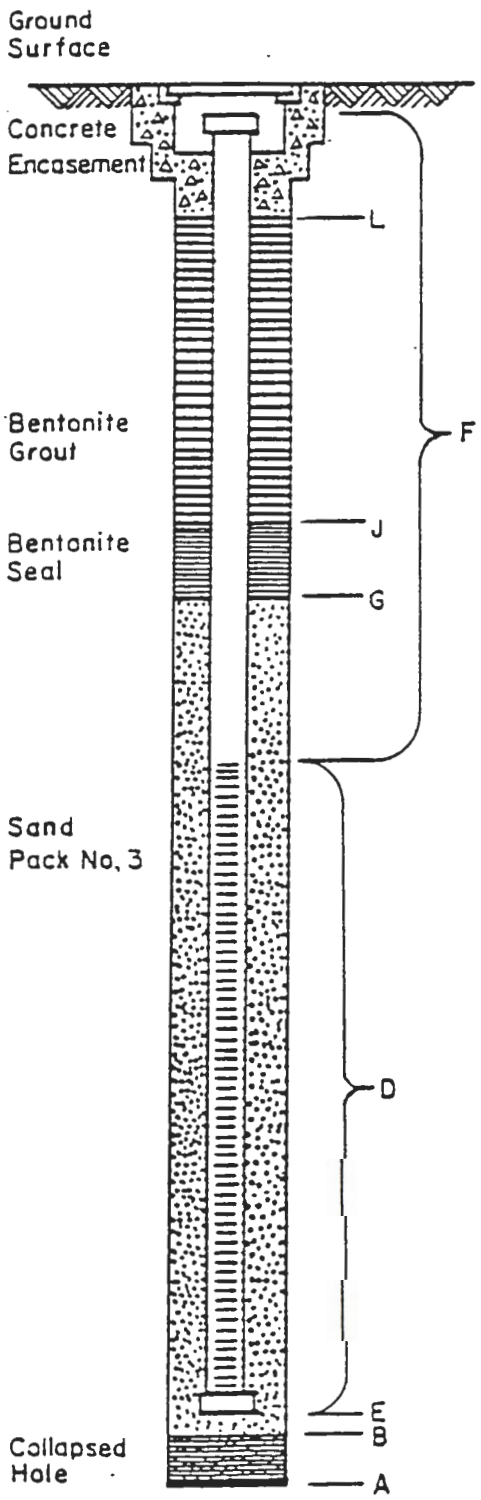
Boring No. B-5

Location 301 W. Imperial, LaHabra

Date 10/2/87

Logger's initials PTC

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	35	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	35	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	30	
E Depth of bottom of casing	(E)	35	
F. Length of blank casing	(F)	5	
G. Depth to top of gravel/sand fill	(G)	4	
H. Footage of gravel sand fill	(H) = B-F		31
I. Bags of gravel sand used	(I)	16	
J. Depth to top of bentonite seal	(J)	1	
K. Thickness of bentonite seal	(K) = I-G		3
L. Depth to top of bentonite grout	(L)	N/A	
M. Thickness of bentonite grout	(M) = L-J		N/A
N. Thickness of concrete encasement	(N) = L-Ø		1

Depth to water	20.49
Type of casing	4" PVC Sch. 40
Type of access box used	DWP Well Protector
Top of casing elevation	260.68
Date surveyed	10/9/87
Ground water elevation	244.92

Pomona Box Company
301 W. Imperial Hwy., La Habra

PROJECT NO.: 86.252 | FIGURE NO.: 7

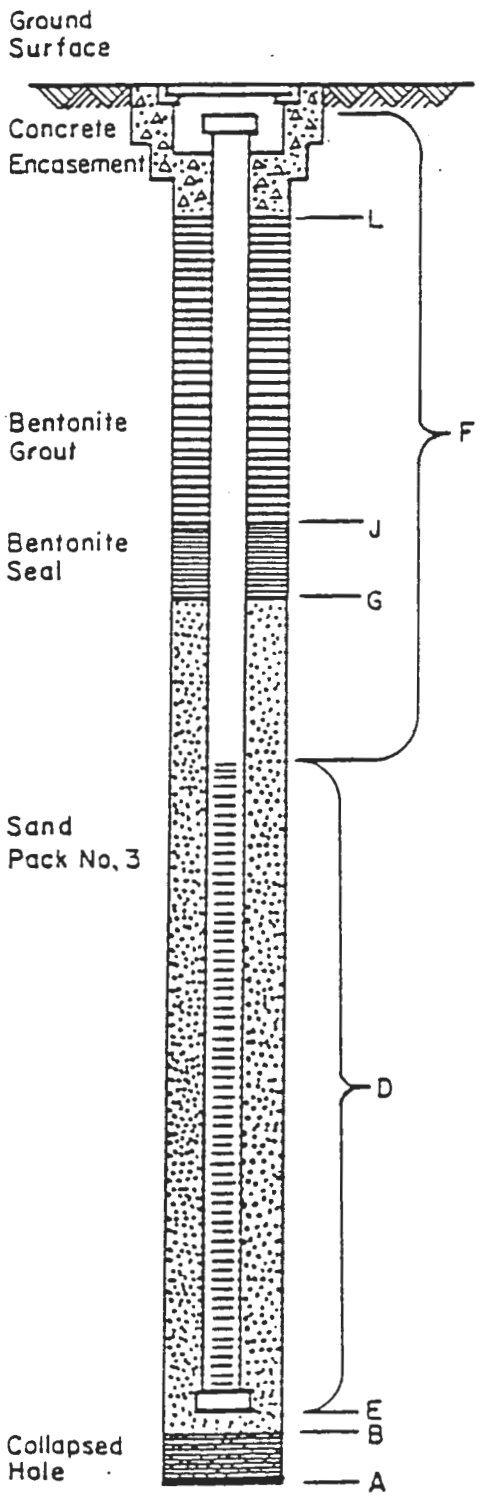
Boring No. B-6

Location 301 W. Imperial
La Habra

Date 10/2/87

Logger's initials PTC

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	35	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	35	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	30	
E Depth of bottom of casing	(E)	35	
F. Length of blank casing	(F)	5	
G. Depth to top of gravel/sand fill	(G)	4	
H. Footage of gravel sand fill	(H) = B-F		31
I. Bags of gravel sand used	(I)	16	
J. Depth to top of bentonite seal	(J)	2	
K. Thickness of bentonite seal	(K) = I-G		2
L. Depth to top of bentonite grout	(L)	N/A	
M. Thickness of bentonite grout	(M) = L-J		N/A
N. Thickness of concrete encasement	(N) = L-Ø		2

Depth to water	11.67
Type of casing	4" PVC Sch. 40
Type of access box used	256.60
Top of casing elevation	10/9/87
Date surveyed	244.93
Ground water elevation	

Pomona Box Company
301 W. Imperial Hwy., La Habra

PROJECT NO.: 86.252 FIGURE NO.: 8

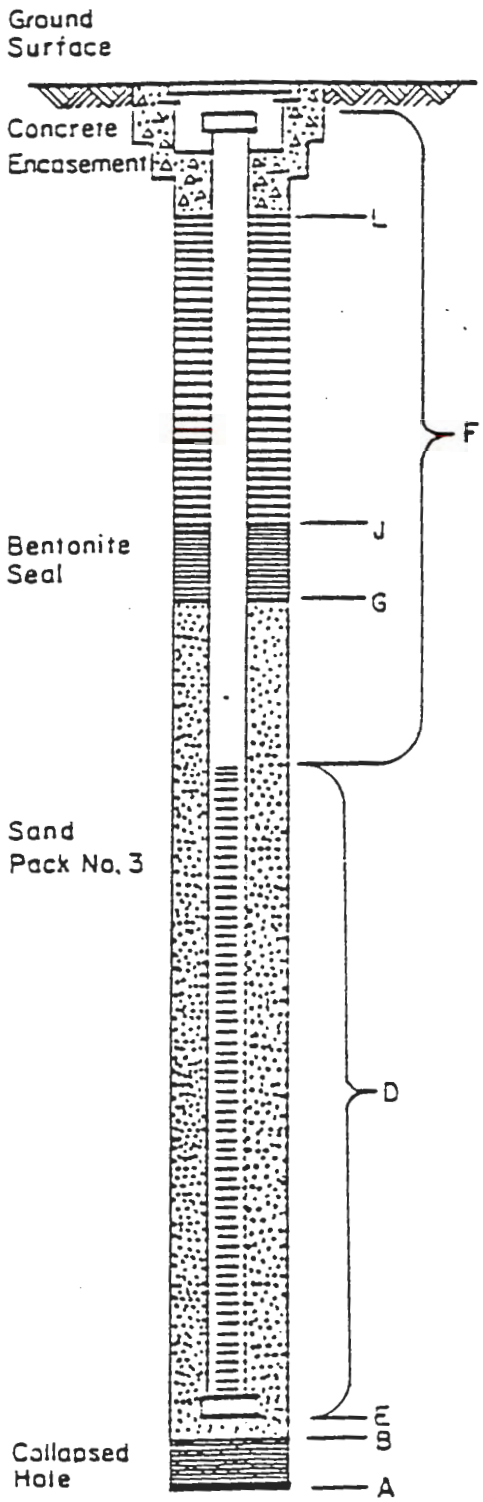
Boring No. B-7

Location C FORMER UNDER-GROUND STORAGE TANK ZONE

Date 3-21-91

Logger's initials TDR

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	43'	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	43'	
C. Footage of hole collapsed	(C) = A-B =		0'
D. Length of slotted casing installed	(D)	40'	
E Depth of bottom of casing	(E)	40'	
F. Length of blank casing	(F)	10'	
G. Depth to top of gravel/sand fill	(G)	8'	
H. Footage of gravel sand fill	(H) = B-G		35'
I. Bags of gravel sand used	(I)	14'	
J. Depth to top of bentonite seal	(J)	1	
K. Thickness of bentonite seal	(K) = G-J		7'
L. Depth to top of bentonite grout	(L)	NA	
M. Thickness of bentonite grout	(M) = J-L		NA
N. Thickness of concrete encasement	(N) = L-Ø		1'

Depth to water	18'
Type of casing	4" Diam. PVC
Type of access box used	DIVERSIFIED BOX/LTD
Top of casing elevation	254.69
Date surveyed	3/27/91
Ground water elevation	

POMONA BOX COMPANY
301 IMPERIAL HIGHWAY

PROJECT NO. 89.151 | FIGURE NO. 5

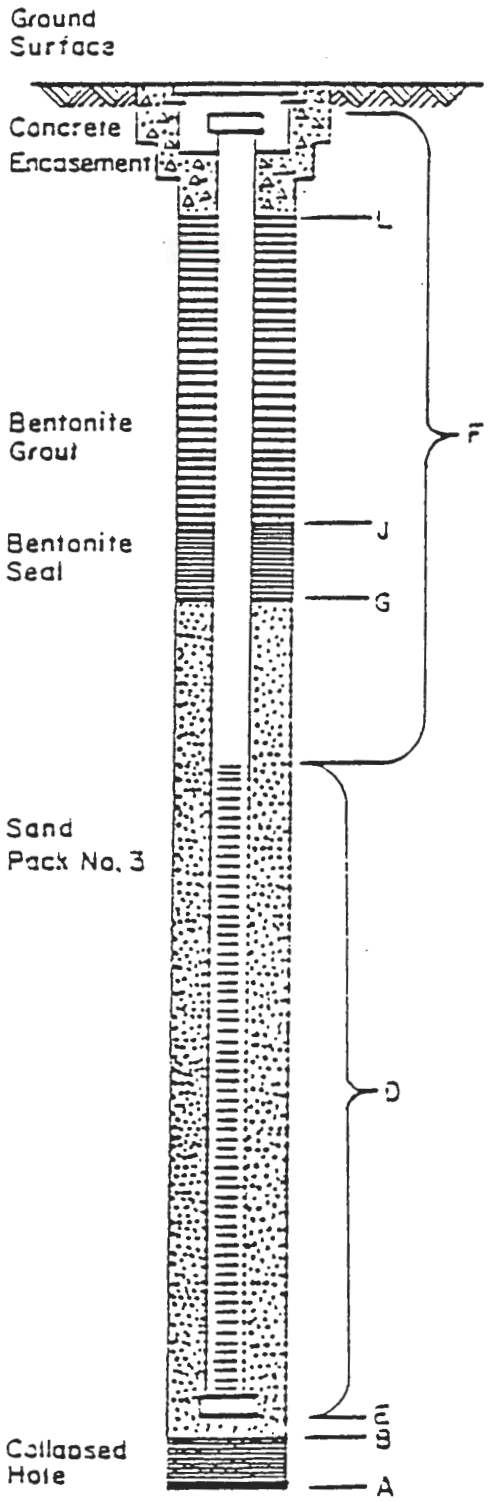
Boring No. B-8

Location 301 W. Imperial Hwy., La Habra, California

Date 7-24-91

Logger's initials TDR

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	37	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	37	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	30	
E Depth of bottom of casing	(E)	35	
F. Length of blank casing	(F)	5	
G. Depth to top of gravel/sand fill	(G)	9	
H. Footage of gravel sand fill	(H) = B-G		28
I. Bags of gravel sand used	(I)	16	
J. Depth to top of bentonite seal	(J)	1.5	
K. Thickness of bentonite seal	(K) = G-J		7.5
L. Depth to top of bentonite grout	(L)	1.5	
M. Thickness of bentonite grout	(M) = J-L		7.5
N. Thickness of concrete encasement	(N) = L-Ø		1.5

Depth to water	15
Type of casing	4" Diam. PVC.
Type of access box used	Diversified
Top of casing elevation	250.87 A.S.L.
Date surveyed	7/29/91
Ground water elevation	241.39

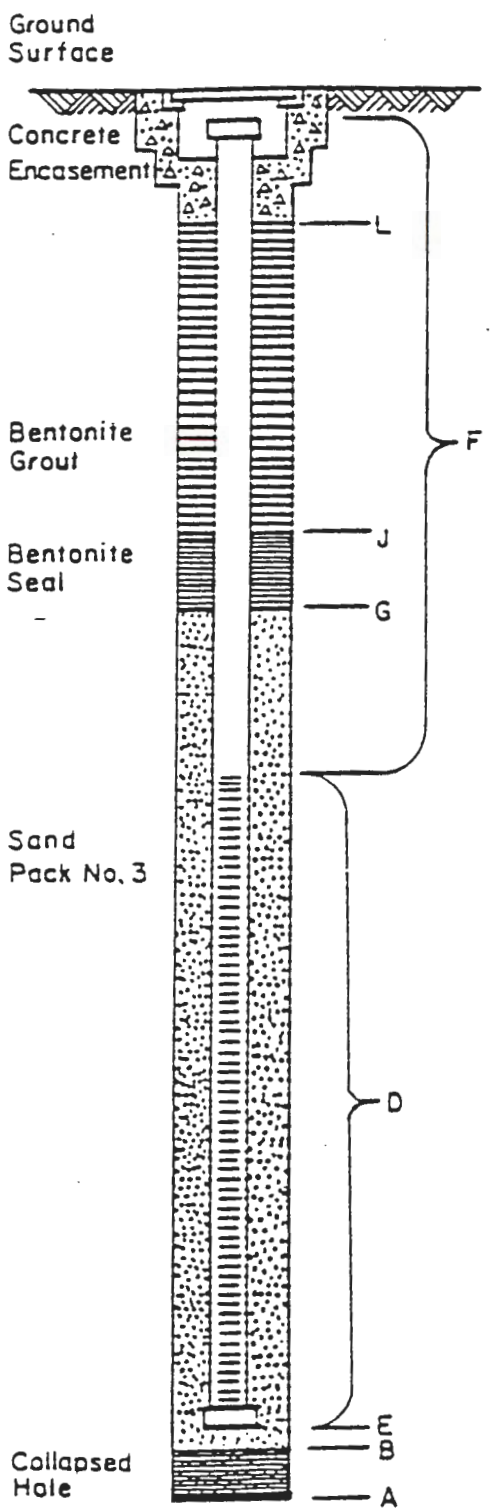
Pomona Box Co.
301 West Imperial Hwy., La Habra, California

PROJECT NO. 89.151 | FIGURE NO. 4

MONITORING WELL

Boring No. B-9
Location West of B-7

Date 2/26/93
Logger's initials MSW



		Measurements	Calculations
A. Total depth drilled	(A)	23.5	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	23.5	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	15	
E Depth of bottom of casing	(E)	23.5	
F. Length of blank casing	(F)	8.5	
G. Depth to top of gravel/sand fill	(G)	6.5	
H. Footage of gravel sand fill	(H) = B-G		17
I. Bags of gravel sand used	(I)	7	
J. Depth to top of bentonite seal	(J)	1	
K. Thickness of bentonite seal	(K) = G-J		5.5
L. Depth to top of bentonite grout	(L)	N/A	
M. Thickness of bentonite grout	(M) = J-L		N/A
N. Thickness of concrete encasement	(N) = L-Ø		1

Depth to water	9.79
Type of casing	4 inch PVC
Type of access box used	Flush Mount
Top of casing elevation	253.72
Date surveyed	3/12/93
Ground water elevation	243.93

Pomona Box
301 W. Imperial Hwy, La Habra

PROJECT NO.: 88.03X

FIGURE NO.: 6

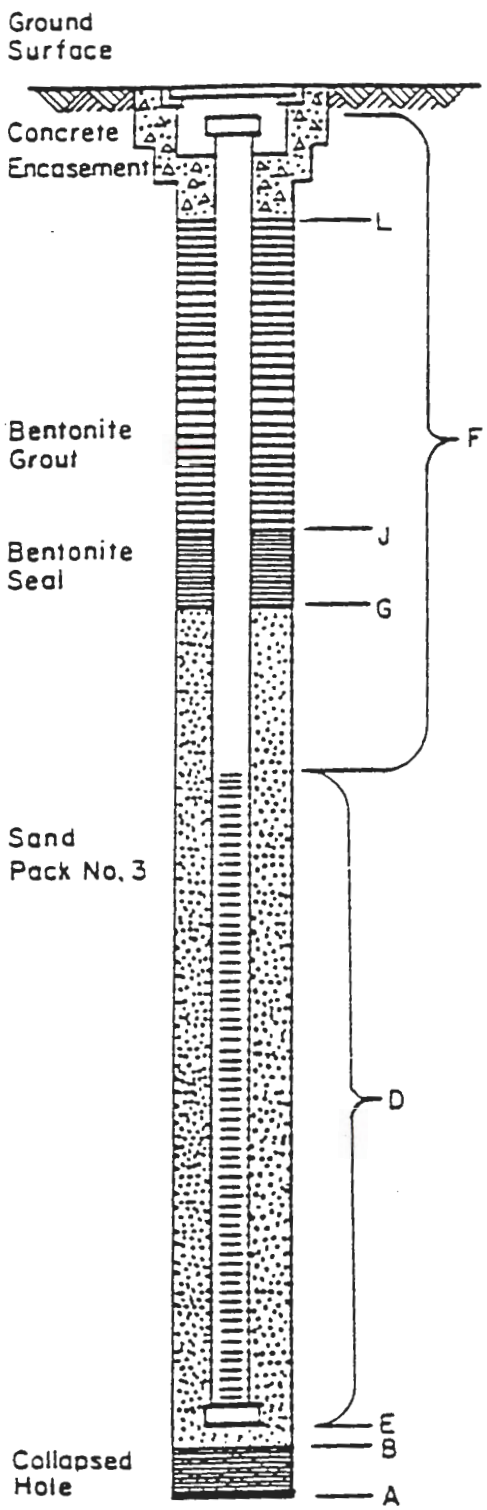
Boring No. B-10

Location South property boundary

Date 2/26/93

Logger's initials MSW

MONITORING WELL



		Measurements	Calculations
A. Total depth drilled	(A)	25	
B. Depth of open hole (if no caving occurs as augers are raised, value will be same as A)	(B)	25	
C. Footage of hole collapsed	(C) = A-B =		0
D. Length of slotted casing installed	(D)	20	
E Depth of bottom of casing	(E)	25	
F. Length of blank casing	(F)	5	
G. Depth to top of gravel/sand fill	(G)	4	
H. Footage of gravel sand fill	(H) = B-G		21
I. Bags of gravel sand used	(I)	10	
J. Depth to top of bentonite seal	(J)	1	
K. Thickness of bentonite seal	(K) = G-J		3
L. Depth to top of bentonite grout	(L)	N/A	
M. Thickness of bentonite grout	(M) = J-L		N/A
N. Thickness of concrete encasement	(N) = L-Ø		1

Depth to water	9.14
Type of casing	4 inch PVC
Type of access box used	Flush Mount
Top of casing elevation	250.90
Date surveyed	3/22/93
Ground water elevation	241.76

Pomona Box
301 W. Imperial Hwy, La Habra

PROJECT NO.: 88.03X

FIGURE NO.: 7

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Wayne Perry Construction		Date Sampled:	01/13/94
8281 Commonwealth		Date Received:	01/13/94
Buena Park, CA 90621		Date Analyzed:	01/14/94
		Work Order No.:	94-01-184
Attn: Dave Potts		Method:	ASTM 3416M
RE: 88.003X/Pomona Box, La Habra		Page 1 of 1	

Methane and total non-methane hydrocarbon concentration values contained herein are reported "as methane" and "as gasoline", respectively, in ppm (v/v).

Sample Number	CH_4 Concentration	Non-CH_4HC Concentration	Reportable Limit
Well B-7	986	344	3
Well B-1	90.7	110	3
Well B-5	3.76	171	3
Method Blank	ND	ND	3

QA/QC

Sample Number: Well B-7

Analyte	Sample Conc.	Dup. Conc.	%RPD	Control Limits (%)
CH_4	986	978	0.81	0-30
Non-CH_4HC	344	331	3.85	0-30

Reviewed and Approved William H. Christensen on 01/21/1994
William H. Christensen
Deliverables Manager

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

11631 Seaboard Circle, Stanton, CA 90680 • TEL: (714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Wayne Perry Construction		Date Sampled:	01/13/94
8281 Commonwealth		Date Received:	01/13/94
Buena Park, CA 90621		Date Analyzed:	01/15/94
		Work Order No.:	94-01-184
Attn: Dave Potts		Method:	EPA TO-14 (BTEX)
RE: 88.003X/Pomona Box, La Habra		Page 1 of 2	

All concentrations are reported in ppb (v/v).

Analyte	Concentration	Reportable Limit
Sample Number: Well B-7		
Benzene	270	100
Toluene	185	100
Ethylbenzene	725	100
Total Xylenes	710	100
Sample Number: Well B-1		
Benzene	230	50
Toluene	365	50
Ethylbenzene	52.5	50
Total Xylenes	705	100
Sample Number: Well B-5		
Benzene	80.8	50
Toluene	412	50
Ethylbenzene	138	50
Total Xylenes	978	100

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

Wayne Perry Construction		Date Sampled:	01/13/94
8281 Commonwealth		Date Received:	01/13/94
Buena Park, CA 90621		Date Analyzed:	01/15/94
		Work Order No.:	94-01-184
Attn: Dave Potts		Method:	EPA TO-14 (BTEX)
RE: 88.003X/Pomona Box, La Habra		Page 2 of 2	

All concentrations are reported in ppb (v/v).

Analyte	Concentration	Reportable Limit
Sample Number: Method Blank		
Benzene	ND	2
Toluene	ND	2
Ethylbenzene	ND	2
Total Xylenes	ND	4

QA/QC

Sample Number: 94-01-202-1 (Duplicate)

Analyte	Sample Conc.	Dup. Conc.	RPD%	Control Limits (%)
Benzene	8690	9050	4.06	0-30
Toluene	20900	21100	0.95	0-30
Ethylbenzene	1880	1980	5.18	0-03
Total Xylenes	29200	31500	7.58	0-30

Reviewed and Approved William H. Christensen on 01/21/1994
William H. Christensen
Deliverables Manager

ND denotes not detected at indicated reportable limit.

Each sample was received by CEL chilled, intact, and with chain-of-custody attached.

11631 Seaboard Circle, Stanton, CA 90680 • TEL: (714) 895-5494 • FAX: (714) 894-7501

(184)

CHAIN OF CUSTODY RECORD

Serial No:

Date: 01/13/94
Page 1 of 1

Site Address: POMONA BOX
301 W. IMPERIAL HWY LA HABRA

WIC#:

Engineer: Phone No.:
Fax #:

Consultant Name & Address: Wayne Perry Const.
8301 Commonwealth, Buena Park, CA

Consultant Contact: Dave Potts Phone No.: 714 826-0352
Fax #:

Comments: Invoice Wayne Perry
Job # 88.093X

Sampled by: David E Potts

Printed Name: DAVID E POTTS

LAB: Calscience

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020			Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
Well B-7	1/13				✓	1	X		X										1" Tedlar	0940 Hrs
Well B-1	↓				✓	1	X		X										"	1420 Hrs
Well B-5	↓				✓	1	X		X										"	1530 Hrs

CHECK ONE (1) BOX ONLY		CT/DT
G.W. Monitoring	[ ]	4461
Site Investigation	[ ]	4441
Soil Classify/Disposal	[ ]	4442
Water Classify/Disposal	[ ]	4443
Soil/Air Rem. or Sys. O & M	[ ]	4452
Water Rem. or Sys. O & M	[ ]	4453
Other	[ ]	

TURN AROUND TIME
- 24 hours [ ]
- 48 hours [ ]
- 15 days [X] (Normal)
- Other [ ] _____

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: OCHCA

Relinquished By (signature):	Printed Name:	Date:	Received (signature):	Printed Name:	Date:
David E Potts	DAVID E POTTS	01/13 Time: 1650			Time:
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature):	Printed Name:	Date: Time:
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature):	Printed Name: JAY PATEL	Date: 1/13/94 Time: 5:50 pm

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev 1/11/93

Bird Chain of Custody

APPENDIX III

AQUIFER TEST ANALYSES REPORT

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
PHONE (714) 826-0352 ■ FAX ADM. & CONST. (714) 523-7880 ■ FAX GEO. & ENG. (714) 523-7541

Project No. 88.003

November 22, 1993

Pomona Box Company
301 West Imperial Highway
La Habra, California

Attention: Mr. Don Votaw

Subject: Aquifer Test Analyses
Pomona Box Company
301 West Imperial Highway
La Habra, California

EXECUTIVE SUMMARY

Enclosed are the results of the 24-hour aquifer test for the subject site. The purpose of this report is to summarize the hydrologic parameters of the shallow aquifer at this location.

On October 7 and 8, 1993, a 24-hour aquifer test was performed at this location. Based on the results of the aquifer test, transmissivities at the site ranged from 389 to 995 gallons per day per foot (gpd/ft) with a mean transmissivity of 618 gpd/ft.

SITE DESCRIPTION

The site is occupied by an operating box manufacturing company located on the north side of Imperial Highway west of the intersection of Imperial Highway and Euclid Avenue in the city of La Habra.

The site location and general geographic relationships are shown on the Site Location Map, Figure 1.

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
PHONE (714) 826-0352 ■ (800) 883-0352 ■ FAX (714) 523-7880

Project No. 88.003

March 9, 1995

Pomona Box Company
301 West Imperial Highway
La Habra, California

Attention: Mr. Daryl Votaw

Subject: **STATUS REPORT**
JANUARY THROUGH MARCH 1995
Pomona Box Company
301 West Imperial Highway
La Habra, California

EXECUTIVE SUMMARY

Enclosed is the quarterly report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. The purpose of this report is to update product recovery and groundwater monitoring activities conducted between January 1 and March 31, 1995.

Separate phase hydrocarbons were present in well B-5 (0.02 foot). Measurable amounts of product were not recovered during the monitoring period.

Dissolved hydrocarbons were present in samples from wells B-1 through B-4, B-6, B-7, B-9, and B-10. Concentrations of dissolved hydrocarbons decreased in samples from wells B-1, B-2, B-6, and B-9 and increased in samples from wells B-3, B-4, B-7, and B-10 as compared to the previous monitoring period. Dissolved hydrocarbons continued to be below detection limits in the sample from well B-8.

Groundwater elevations increased in comparison to the previous monitoring period. The direction of groundwater flow was southerly.

SITE DESCRIPTION

The site is occupied by an operating box manufacturing company located on the north side of Imperial Highway west of the intersection of Imperial Highway and Euclid Avenue in the city of La Habra. The site location and general geographic relationships are shown on the Location Map, Figure 1.

Located on the site is an office building, manufacturing building, and mechanics shed. Site relationships are shown on the Plot Plan, Figure 2.

BACKGROUND

In December 1986, a single 1,000 gallon underground storage tank was removed at this location. Soil samples were obtained and analyzed as part of the removal procedure. Results of the laboratory analyses indicated a localized area of hydrocarbon contaminated soil was present in the bottom of the excavation. During additional excavation to remove the contaminated soils, groundwater and separate phase hydrocarbons were encountered at a depth of approximately 13 feet. The excavation was backfilled and the information reported to the local regulatory agency. Accordingly, site assessment work was required by the regulatory agency to define the extent of contamination.

Between January and September 1987, six borings, B-1 through B-6, were drilled and sampled. All the borings were converted to groundwater monitoring wells. Well locations are shown on the Plot Plan, Figure 2 in Appendix A. Dissolved or separate phase hydrocarbons were detected in all the wells.

Manual recovery of free hydrocarbons was initiated in June 1987. An automated recovery system was installed and became operational in April 1988.

In September 1989, seven additional underground storage tanks were removed at this location. The approximate tank locations are shown on the Plot Plan, Figure 2 in Appendix A. Results of laboratory analyses performed as part of the removal procedure indicated petroleum hydrocarbons were present. Subsequently, four borings were drilled and sampled as part of supplemental site investigations between March 1991 and February 1993. The four borings were converted to groundwater monitoring wells B-7 through B-10. Well locations are shown on the Plot Plan, Figure 2 in Appendix A.

On October 7 and 8, 1993, a 24-hour aquifer test was performed. Results of the aquifer testing indicate transmissivities at the site range from 389 to 495 gallons per day per foot (gpd/ft) with a mean transmissivity of 618 gpd/ft.

A revised remedial action plan for soils and groundwater was submitted and approved by the Orange County Health Care Agency during the fourth quarter 1994.

GROUNDWATER GAUGING

Groundwater gauging was performed once during the report period. Groundwater gauging data are presented in Appendix B. Measurements of depth to groundwater and free product thickness were obtained from the wells. Groundwater gauging data are presented in Appendix B. Gauging data were utilized to determine groundwater elevations and generate the Groundwater Contour Map, Figure 3 in Appendix A.

Groundwater elevations increased and the direction of groundwater flow was southerly.

PRODUCT RECOVERY

Separate phase hydrocarbons (product) were present in well B-5 (0.02 foot). Measurable amounts of product were not recovered during the monitoring period. To date, 763 gallons of gasoline have been recovered at this location. The recovery records for this location are included in Appendix B. Gasoline and water from product recovery are transported to the Crosby and Overton Facility in Carson, California where the mixture is separated for treatment and disposal.

GROUNDWATER SAMPLING

Groundwater samples were obtained on February 16, 1995, from wells B-1 through B-4 and B-6 through B-10. Groundwater sampling procedures are presented in Appendix C. Groundwater samples were analyzed for total petroleum hydrocarbons using the California Department of Health Services Test Method 8015-m and purgeable aromatic compounds using EPA Test Method 602. Results of the groundwater analyses are presented in Table 1.

Table 1, Groundwater Analyses, 2/16/95

Well Number	Total Hydrocarbons mg/l	Benzene mg/l	Toluene mg/l	Ethyl Benzene mg/l	Total Xylenes mg/l
B-1	6.1	0.4542	0.3053	0.0939	0.5686
B-2	18.9	3.8089	3.0267	0.5520	1.5876
B-3	0.6	0.0374	0.0200	0.0278	0.0551
B-4	9.8	0.6940	0.5570	0.3186	1.1775
B-6	0.7	0.1435	0.0470	0.0111	0.0405
B-7	0.6	0.0473	0.0075	0.1891	0.0256
B-8	ND	ND	ND	ND	ND
B-9	0.4	0.0142	0.0023	0.2153	0.0047
B-10	7.6	0.9072	0.3091	0.6831	0.7139
Limits of Detection:	ND<0.1	ND<0.0003	ND<0.0003	ND<0.0003	ND<0.0005

Dissolved hydrocarbons were present in samples from wells B-1 through B-4, B-6, B-7, B-9, and B-10. Concentrations of dissolved hydrocarbons decreased in samples from wells B-1, B-2, B-6, and B-9 and increased in samples from wells B-3, B-4, B-7, and B-10 as compared to the previous monitoring period. Dissolved hydrocarbons continued to be below detection limits in the sample from well B-8.

oo O oo

This report has been prepared for the exclusive use of Pomona Box as it pertains to the site located at 301 West Imperial Highway, La Habra, California. No warranty, expressed or implied, is made as to the professional advice or opinion presented in this report. If you have any questions, or if I can be of service, please call.

Very truly yours,

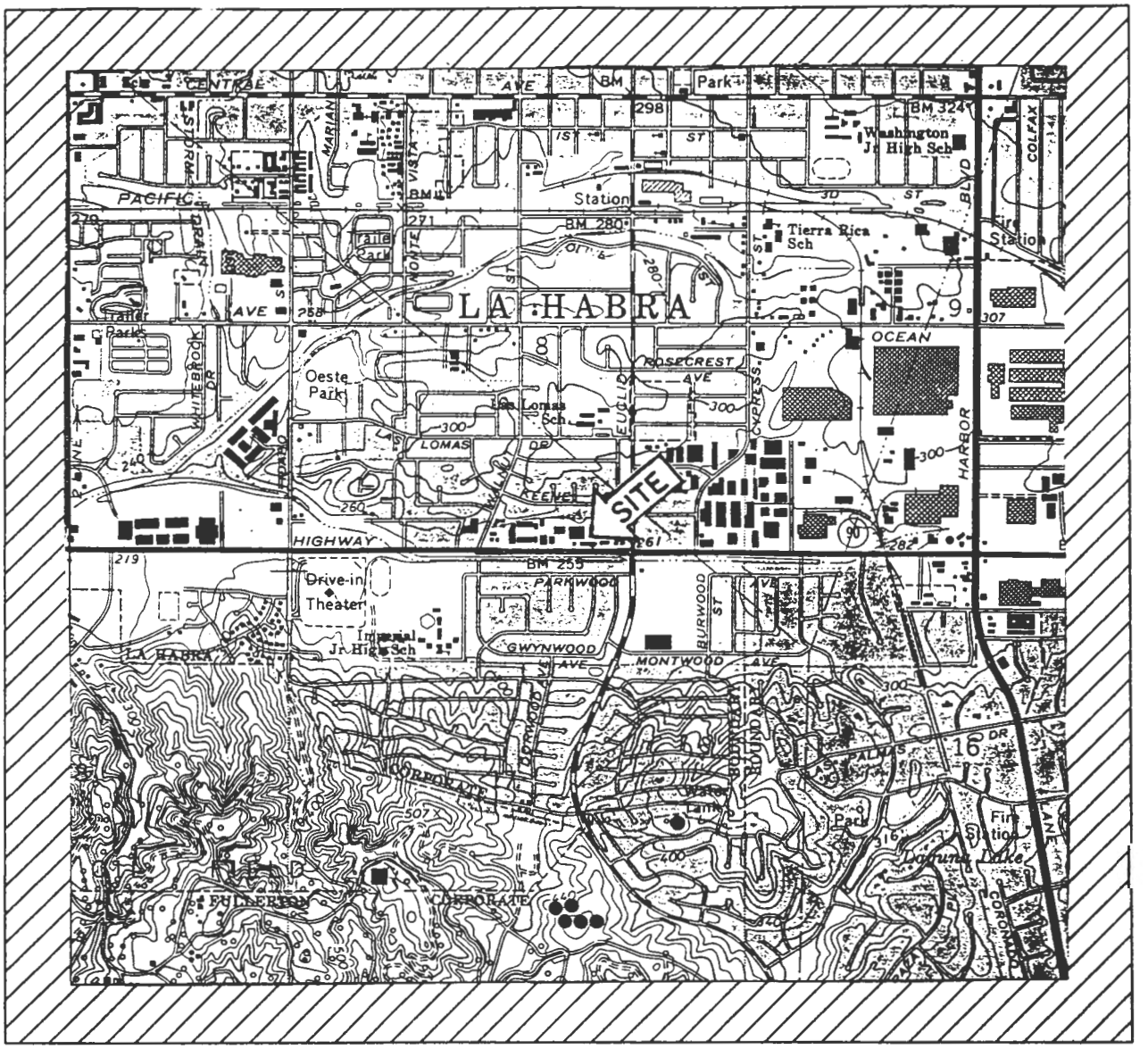
David M. Henry

David M. Henry
Registered Geologist 4085

Pomona Box Company
Project No. 88.003

APPENDIX A

Site Location Map, Figure 1
Plot Plan, Figure 2
Groundwater Contour Map, Figure 3



2000' 0 2000' 4000'

SCALE FEET

SOURCE :

7.5 MINUTE U.S.G.S.

QUADRANGLE :

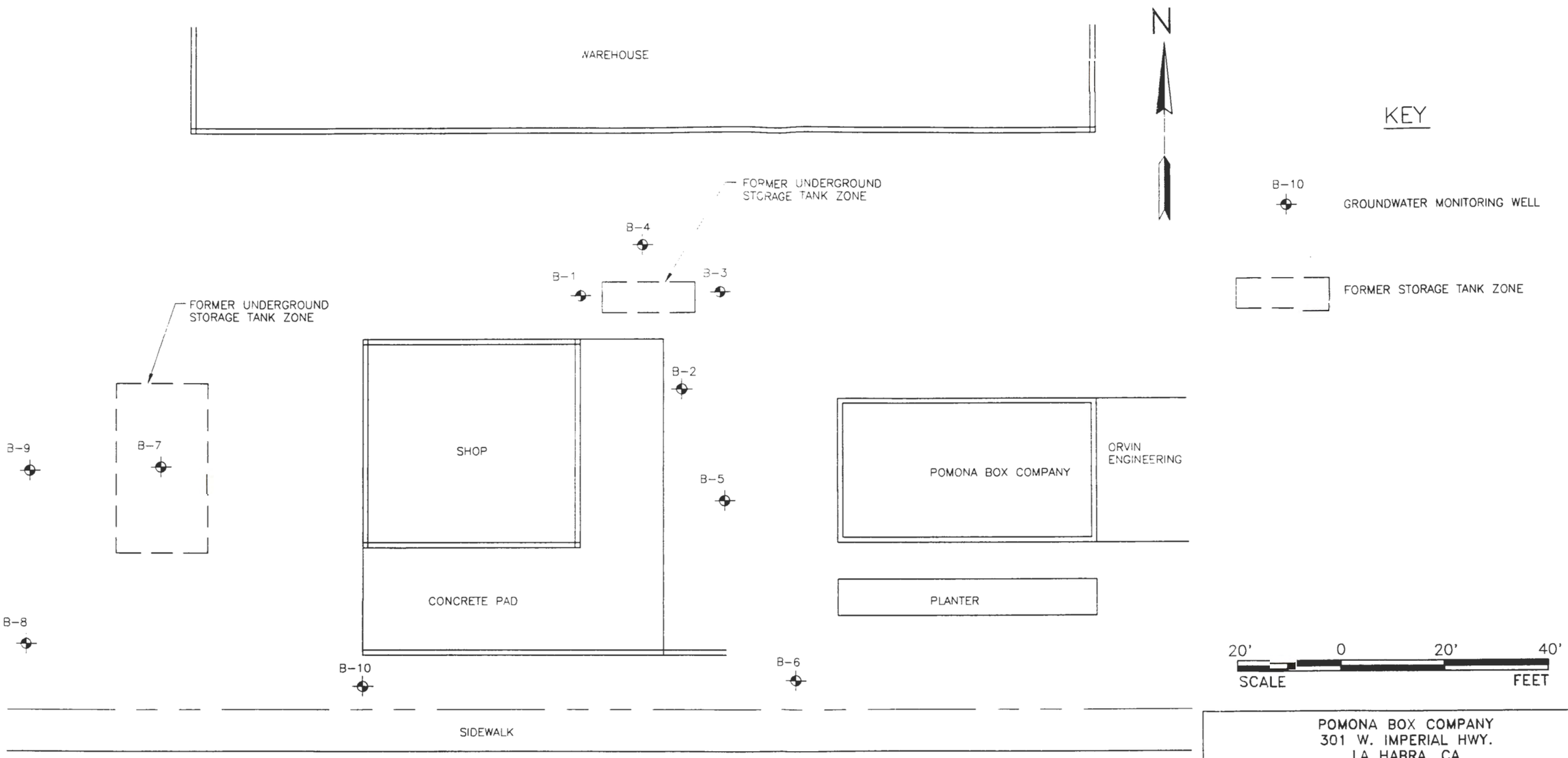
LA HABRA

N

POMONA BOX COMPANY
301 W. IMPERIAL HWY.
LA HABRA, CA

SITE LOCATION MAP

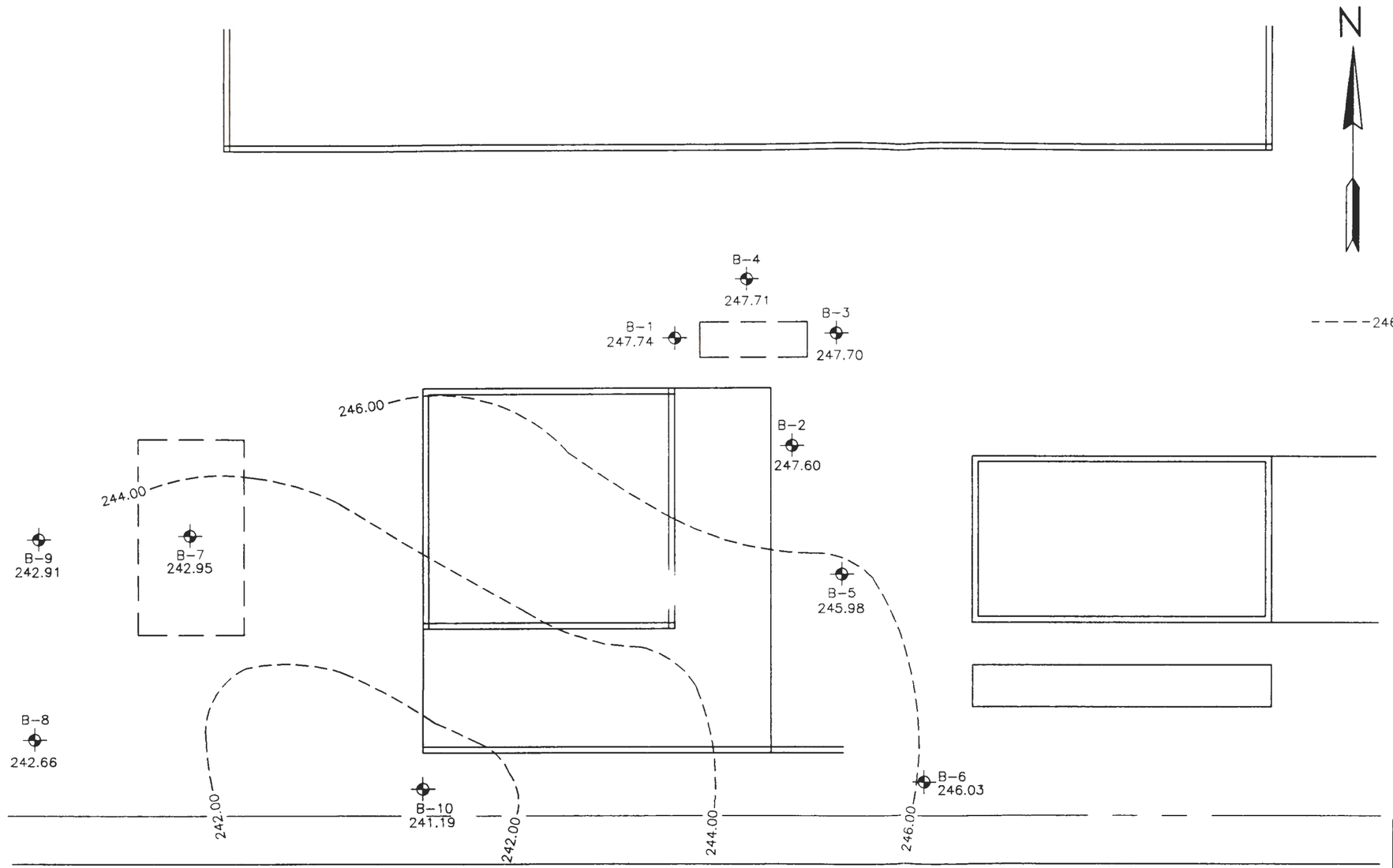
Wayne Perry Environmental Specialists	DWG. NO. 003000SL	CHKD. BY
	PROJ. NO. 88.003	DRAWN BY PROVANCE
	FIG. NO. 1	DATE



POMONA BOX COMPANY
301 W. IMPERIAL HWY.
LA HABRA, CA

PLOT PLAN

WaynePerry ENVIRONMENTAL SPECIALISTS	DWG. NO. 00300001	CHKD. BY
	PROJ. NO. 88.003	DRAWN BY PROVANCE
	FIG. NO. 2	DATE 10/8/94



KEY

B-10
241.19

MONITORING WELL SHOWING GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL FOR JANUARY THROUGH MARCH 1995.

- - - - 246.00 - - - - GROUNDWATER CONTOUR

CONTOUR INTERVAL = 2.00 FEET

20' 0 20' 40'
SCALE FEET

POMONA BOX COMPANY
301 W. IMPERIAL HWY.
LA HABRA, CA

GROUNDWATER CONTOUR MAP

Wayne Perry Environmental Specialists	DWG. NO. 00300005	CHKD. BY
	PROJ. NO. 88.003	DRAWN BY PROVANCE
	FIG. NO. 3	DATE 3/16/95

Pomona Box Company
Project No. 88.003

APPENDIX B

Summary of Gauging and Laboratory Analyses
Recovery Data

Summary of Gauging Data and Laboratory Analyses
Pomona Box
88.003 W. Imperial Hwy (La Habra)

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
01/05/88	B-01					261.04							Interface probe not working
01/12/88	B-01	14.80	0.00	14.80	246.24	261.04	22.08						
01/22/88	B-01	14.80	0.00	14.80	246.24	261.04	22.20						
02/04/88	B-01	14.75	0.00	14.75	246.29	261.04	21.65						
02/23/88	B-01	14.79	0.00	14.79	246.25	261.04	21.65						
05/23/88	B-01	14.65	0.00	14.65	246.39	261.04							
06/13/88	B-01	14.62	0.00	14.62	246.42	261.04							
06/30/88	B-01	14.63	0.00	14.63	246.41	261.04							
07/13/88	B-01	14.60	0.00	14.60	246.44	261.04							
07/21/88	B-01	14.60	0.00	14.60	246.44	261.04							
08/01/88	B-01	14.55	0.00	14.55	246.49	261.04							
08/09/88	B-01	14.61	0.00	14.61	246.43	261.04							
08/16/88	B-01	14.61	0.00	14.61	246.43	261.04							
09/01/88	B-01	14.65	0.00	14.65	246.39	261.04							
09/07/88	B-01	14.64	0.00	14.64	246.40	261.04							
09/13/88	B-01	14.69	0.00	14.69	246.35	261.04							
09/27/88	B-01	14.72	0.00	14.72	246.32	261.04							
10/05/88	B-01	14.74	0.00	14.74	246.30	261.04							
10/07/88	B-01					261.04							
10/13/88	B-01	14.73	0.00	14.73	246.31	261.04							
10/18/88	B-01	14.74	0.00	14.74	246.30	261.04							
10/26/88	B-01	14.73	0.00	14.73	246.31	261.04							
11/04/88	B-01	14.76	0.00	14.76	246.28	261.04							
11/08/88	B-01	14.75	0.00	14.75	246.29	261.04							
11/17/88	B-01	14.72	0.00	14.72	246.32	261.04							
11/23/88	B-01	14.73	0.00	14.73	246.31	261.04							
12/08/88	B-01	15.37	0.00	15.37	245.67	261.04							
12/14/88	B-01	15.11	0.00	15.11	245.93	261.04	23.90						
12/20/88	B-01	14.60	0.00	14.60	246.44	261.04							
01/05/89	B-01	14.60	0.00	14.60	246.44	261.04							
01/11/89	B-01	14.51	0.00	14.51	246.53	261.04							
01/20/89	B-01	14.57	0.00	14.57	246.47	261.04							
01/25/89	B-01	14.63	0.00	14.63	246.41	261.04							
02/20/89	B-01	14.49	0.00	14.49	246.55	261.04							
03/15/89	B-01	14.50	0.00	14.50	246.54	261.04							
03/27/89	B-01	14.50	0.00	14.50	246.54	261.04							
04/19/89	B-01	14.50	0.00	14.50	246.54	261.04							
05/11/89	B-01	14.53	0.00	14.53	246.51	261.04							
05/25/89	B-01	14.56	0.00	14.56	246.48	261.04							
06/12/89	B-01	14.55	0.00	14.55	246.49	261.04							
06/22/89	B-01	14.56	0.00	14.56	246.48	261.04							
07/12/89	B-01	14.60	0.00	14.60	246.44	261.04							
08/09/89	B-01	14.62	0.00	14.62	246.42	261.04							
08/21/89	B-01	14.60	0.00	14.60	246.44	261.04							
09/08/89	B-01	14.67	0.00	14.67	246.37	261.04							
09/22/89	B-01	14.61	0.00	14.61	246.43	261.04							
10/09/89	B-01	14.67	0.00	14.67	246.37	261.04							
10/20/89	B-01	14.68	0.00	14.68	246.36	261.04							
11/08/89	B-01	14.70	0.01	14.70	246.34	261.04							
12/01/89	B-01	14.74	0.00	14.74	246.30	261.04							
12/15/89	B-01	14.77	0.00	14.77	246.27	261.04							
12/29/89	B-01	14.78	0.01	14.78	246.26	261.04							
01/11/90	B-01	14.78	0.01	14.78	246.26	261.04							
02/16/90	B-01	14.74	0.00	14.74	246.30	261.04							
03/02/90	B-01	14.52	0.00	14.52	246.52	261.04							
03/14/90	B-01	14.62	0.00	14.62	246.42	261.04							
03/28/90	B-01	14.65	0.00	14.65	246.39	261.04							
04/13/90	B-01	14.67	0.00	14.67	246.37	261.04							
04/27/90	B-01	14.68	0.00	14.68	246.36	261.04	22.09						
05/17/90	B-01	14.70	0.00	14.70	246.34	261.04							
06/01/90	B-01	14.62	0.00	14.62	246.42	261.04							
06/21/90	B-01					261.04							
07/17/90	B-01	14.74	0.00	14.74	246.30	261.04							
08/20/90	B-01	14.73	0.00	14.73	246.31	261.04							
09/13/90	B-01	14.76	0.00	14.76	246.28	261.04							
09/28/90	B-01	14.74	0.01	14.74	246.30	261.04							
10/12/90	B-01	14.80	0.00	14.80	246.24	261.04							
10/26/90	B-01	14.78	0.00	14.78	246.26	261.04							
11/28/90	B-01	14.87	0.01	14.87	246.17	261.04							
12/12/90	B-01	14.88	0.01	14.88	246.16	261.04							
01/09/91	B-01	14.71	0.00	14.71	246.33	261.04							
01/18/91	B-01	14.79	0.00	14.79	246.25	261.04	22.15						
02/08/91	B-01	14.87	0.00	14.87	246.17	261.04							
03/04/91	B-01	14.28	0.00	14.28	246.76	261.04							
04/16/91	B-01	14.31	0.00	14.31	246.73	261.04	22.53						
05/23/91	B-01	14.45	0.00	14.45	246.59	261.04							
07/16/91	B-01	14.53	0.00	14.53	246.51	261.04	30.24						
07/19/91	B-01	14.53	0.00	14.53	246.51	261.04	22.22						
07/29/91	B-01	14.51	0.00	14.51	246.53	261.04	22.31						
09/04/91	B-01	14.60	0.00	14.60	246.44	261.04	22.38						Product while bailing
09/25/91	B-01	14.66	0.00	14.66	246.38	261.04	22.54						
10/15/91	B-01	14.67	0.00	14.67	246.37	261.04	22.31						Product while bailing

Summary of Gauging Data and Laboratory Analyses
Pomona Box
88.003 W. Imperial Hwy (La Habra)

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
11/13/91	B-01	14.96	0.01	14.96	246.08	261.04							
12/04/91	B-01	14.99	0.01	14.99	246.05	261.04							
01/30/92	B-01	14.87	0.01	14.87	246.17	261.04	23.45						
04/21/92	B-01	14.02	0.01	14.02	247.02	261.04	23.25						
04/30/92	B-01	14.08	0.01	14.08	246.96	261.04	22.57						
07/02/92	B-01	14.14	0.01	14.14	246.90	261.04	23.45						
10/13/92	B-01	14.22	0.01	14.22	246.82	261.04	23.50						
03/15/93	B-01	12.24	0.00	12.24	248.80	261.04	23.44	27	5.4	1.7	0.7	2.6	
05/05/93	B-01	12.41	0.00	12.41	248.63	261.04	23.27	27	3.5	0.05	0.7	3.3	
07/26/93	B-01	12.92	0.00	12.92	248.12	261.04	23.45	10.6	1.475	0.624	0.504	0.926	
11/30/93	B-01	13.80	0.00	13.80	247.24	261.04	23.45	5.1	0.7664	0.3053	2.056	0.4284	
03/01/94	B-01	13.65	0.00	13.65	247.39	261.04	23.44	9.1	1.1421	0.4079	0.2493	0.5714	
05/04/94	B-01	13.90	0.00	13.90	247.14	261.04	23.45	4.9	1.3403	0.6588	0.2601	0.4864	
07/18/94	B-01	13.90	0.00	13.90	247.14	261.04	23.40	9.9	0.7875	0.3690	0.2649	0.7391	
11/29/94	B-01	14.23	0.00	14.23	246.81	261.04	23.43	5.3	0.5752	0.3318	0.2591	0.4047	
02/16/95	B-01	13.30	0.00	13.30	247.74	261.04	23.50	6.1	0.4542	0.3053	0.0939	0.5686	
01/05/88	B-02			14.75		261.03							reading product
01/12/88	B-02	14.69	0.13	14.56	246.44	261.03	22.95						
01/22/88	B-02	14.77	0.17	14.60	246.39	261.03	23.43						
02/04/88	B-02	14.80	0.10	14.70	246.30	261.03	22.35						
02/23/88	B-02	14.86	0.13	14.73	246.27	261.03	2.35						
05/23/88	B-02	14.73	0.00	14.73	246.30	261.03							
06/13/88	B-02	14.75	0.10	14.65	246.36	261.03							
06/30/88	B-02	14.68	0.00	14.68	246.35	261.03							
07/13/88	B-02	14.65	0.01	14.64	246.39	261.03							
07/21/88	B-02	14.65	0.00	14.65	246.38	261.03							
08/01/88	B-02	14.63	0.00	14.63	246.40	261.03							
08/09/88	B-02	14.68	0.00	14.68	246.35	261.03							
08/16/88	B-02	14.66	0.00	14.66	246.37	261.03							
09/01/88	B-02	15.20	0.00	15.20	245.83	261.03							
09/07/88	B-02	14.52	0.00	14.52	246.51	261.03							
09/13/88	B-02	14.72	0.00	14.72	246.31	261.03							
09/27/88	B-02	14.75	0.00	14.75	246.28	261.03							
10/05/88	B-02	14.68	0.00	14.68	246.35	261.03							
10/07/88	B-02					261.03							
10/13/88	B-02	14.77	0.00	14.77	246.26	261.03							
10/18/88	B-02	14.78	0.00	14.78	246.25	261.03							
10/26/88	B-02	14.78	0.00	14.78	246.25	261.03							
11/04/88	B-02	14.83	0.00	14.83	246.20	261.03							
11/08/88	B-02	14.80	0.00	14.80	246.23	261.03							
11/17/88	B-02	14.77	0.00	14.77	246.26	261.03							
11/23/88	B-02	14.77	0.00	14.77	246.26	261.03							
12/08/88	B-02	15.20	0.00	15.20	245.83	261.03							
12/14/88	B-02	14.84	0.00	14.84	246.19	261.03	23.10						
12/20/88	B-02					261.03							
01/05/89	B-02	14.55	0.00	14.55	246.48	261.03							
01/11/89	B-02	14.57	0.00	14.57	246.46	261.03							
01/20/89	B-02	14.62	0.00	14.62	246.41	261.03							
01/25/89	B-02	14.68	0.00	14.68	246.35	261.03							
02/20/89	B-02	14.56	0.00	14.56	246.47	261.03							
03/15/89	B-02	14.55	0.00	14.55	246.48	261.03							
03/27/89	B-02	14.55	0.00	14.55	246.48	261.03							
04/19/89	B-02	14.57	0.00	14.57	246.46	261.03							
05/11/89	B-02	14.60	0.00	14.60	246.43	261.03							
05/25/89	B-02	14.60	0.00	14.60	246.43	261.03							
06/12/89	B-02	14.59	0.00	14.59	246.44	261.03							
06/22/89	B-02	14.75	0.00	14.75	246.28	261.03							
07/12/89	B-02	14.64	0.00	14.64	246.39	261.03							
08/09/89	B-02	14.69	0.00	14.69	246.34	261.03							
08/21/89	B-02	14.66	0.00	14.66	246.37	261.03							
09/08/89	B-02	14.68	0.00	14.68	246.35	261.03							
09/22/89	B-02	14.65	0.00	14.65	246.38	261.03							
10/09/89	B-02	14.73	0.01	14.73	246.30	261.03							
10/20/89	B-02	14.70	0.00	14.70	246.33	261.03							
11/08/89	B-02	14.75	0.01	14.75	246.28	261.03							
12/01/89	B-02	14.79	0.00	14.79	246.24	261.03							
12/15/89	B-02	14.81	0.01	14.81	246.22	261.03							
12/29/89	B-02	14.84	0.01	14.84	246.19	261.03							
01/11/90	B-02	14.83	0.00	14.83	246.20	261.03							
02/16/90	B-02	14.79	0.00	14.79	246.24	261.03							
03/02/90	B-02	14.57	0.00	14.57	246.46	261.03							
03/14/90	B-02	14.69	0.00	14.69	246.34	261.03							
03/28/90	B-02	14.69	0.00	14.69	246.34	261.03							
04/13/90	B-02	14.64	0.00	14.64	246.39	261.03							
04/27/90	B-02	14.73	0.00	14.73	246.30	261.03	22.27						
05/17/90	B-02	14.74	0.00	14.74	246.29	261.03							
06/01/90	B-02	14.64	0.00	14.64	246.39	261.03							
06/21/90	B-02	14.73	0.00	14.73	246.30	261.03							
07/17/90	B-02	14.80	0.00	14.80	246.23	261.03							
08/20/90	B-02	14.76	0.00	14.76	246.27	261.03							
09/13/90	B-02	14.80	0.00	14.80	246.23	261.03							

Summary of Gauging Data and Laboratory Analyses
Pomona Box
88.003 W. Imperial Hwy (La Habra)

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
09/28/90	B-02	14.80	0.01	14.80	246.23	261.03							
10/12/90	B-02	14.84	0.00	14.84	246.19	261.03							
10/26/90	B-02	14.82	0.00	14.82	246.21	261.03							
11/28/90	B-02	14.91	0.01	14.91	246.12	261.03							
12/12/90	B-02	14.92	0.01	14.91	246.12	261.03							
01/09/91	B-02	14.76	0.01	14.76	246.27	261.03							
01/18/91	B-02	14.85	0.00	14.85	246.18	261.03	22.87						
02/08/91	B-02	14.91	0.00	14.91	246.12	261.03							
03/04/91	B-02	14.30	0.00	14.30	246.74	261.03							
04/16/91	B-02	14.37	0.00	14.37	246.66	261.03	23.36						
05/23/91	B-02	14.49	0.01	14.49	246.54	261.03							
07/16/91	B-02	14.58	0.00	14.58	246.46	261.03	30.88						
07/19/91	B-02	14.57	0.00	14.57	246.46	261.03	23.05						
07/29/91	B-02	14.56	0.00	14.56	246.47	261.03	23.29						
09/04/91	B-02	14.66	0.00	14.66	246.37	261.03	22.55						Product while bailing
09/25/91	B-02	14.70	0.00	14.70	246.33	261.03	23.45						
10/15/91	B-02	14.72	0.00	14.72	246.31	261.03	23.10						Product while bailing
11/13/91	B-02	15.00	0.01	15.00	246.03	261.03							
12/04/91	B-02	15.03	0.01	15.03	246.00	261.03							
01/30/92	B-02	14.91	0.01	14.91	246.12	261.03	23.37						
04/21/92	B-02	14.08	0.01	14.08	246.95	261.03	22.30						
04/30/92	B-02	14.14	0.00	14.14	246.89	261.03	21.74						
07/02/92	B-02	14.20	0.01	14.20	246.83	261.03	22.61						
10/13/92	B-02	14.41	0.00	14.41	246.62	261.03	22.55						
03/15/93	B-02	12.37	0.00	12.37	248.66	261.03	22.47	31	5.5	4.7	0.9	3.3	
05/05/93	B-02	12.54	0.00	12.54	248.49	261.03	22.43	62	4	4	7	2	
07/26/93	B-02	13.03	0.00	13.03	248.00	261.03	23.10	12.9	1.147	1.313	0.833	1.258	
11/30/93	B-02	13.75	0.00	13.75	247.28	261.03	23.05	15.2	3.5841	2.7430	0.5481	1.2833	
03/01/94	B-02	13.73	0.00	13.73	247.30	261.03	23.26	16.8	3.7849	2.4644	0.4799	1.1632	
05/04/94	B-02	13.90	0.00	13.90	247.13	261.03	22.50	18.2	7.0141	4.4719	0.6200	1.6159	
07/18/94	B-02	13.97	0.00	13.97	247.06	261.03	22.98	20.3	7.6777	5.4200	0.8343	2.4478	
11/29/94	B-02	14.30	0.00	14.30	246.73	261.03	23.02	23.3	4.5126	3.1854	0.5314	1.6205	
02/16/95	B-02	13.43	0.00	13.43	247.60	261.03	22.53	18.9	3.8089	3.0267	0.5520	1.5876	
01/05/88	B-03			11.65		260.89							thickness
01/12/88	B-03	14.56	0.00	14.56	246.33	260.89	23.00						
01/22/88	B-03	14.40	0.00	14.40	246.49	260.89	23.13						
02/04/88	B-03	14.50	0.00	14.50	246.39	260.89	23.01						
02/23/88	B-03	14.56	0.00	14.56	246.33	260.89	23.01						
05/23/88	B-03	14.47	0.00	14.47	246.42	260.89							
06/13/88	B-03	14.46	0.00	14.46	246.43	260.89							
06/30/88	B-03	14.47	0.00	14.47	246.42	260.89							
07/13/88	B-03	14.42	0.00	14.42	246.47	260.89							
07/21/88	B-03	14.43	0.00	14.43	246.46	260.89							
08/01/88	B-03	14.40	0.00	14.40	246.49	260.89							
08/09/88	B-03	14.45	0.00	14.45	246.44	260.89							
08/16/88	B-03	14.45	0.00	14.45	246.44	260.89							
09/01/88	B-03	14.50	0.00	14.50	246.39	260.89							
09/07/88	B-03	15.18	0.00	15.18	245.71	260.89							
09/13/88	B-03	14.50	0.00	14.50	246.39	260.89							
09/27/88	B-03	14.52	0.00	14.52	246.37	260.89							
10/05/88	B-03	14.52	0.00	14.52	246.37	260.89							
10/07/88	B-03					260.89							
10/13/88	B-03	14.59	0.00	14.59	246.30	260.89							
10/18/88	B-03	14.63	0.00	14.63	246.26	260.89							
10/26/88	B-03	14.58	0.00	14.58	246.31	260.89							
11/04/88	B-03	14.64	0.00	14.64	246.25	260.89							
11/08/88	B-03	14.58	0.00	14.58	246.31	260.89							
11/17/88	B-03	14.54	0.00	14.54	246.35	260.89							
11/23/88	B-03	14.57	0.00	14.57	246.32	260.89							
12/08/88	B-03	14.82	0.00	14.82	246.07	260.89							
12/14/88	B-03	14.65	0.00	14.65	246.24	260.89	23.13						
12/20/88	B-03	14.45	0.00	14.45	246.44	260.89							
01/05/89	B-03	14.50	0.00	14.50	246.39	260.89							
01/11/89	B-03	14.33	0.00	14.33	246.56	260.89							
01/20/89	B-03	14.40	0.00	14.40	246.49	260.89							
01/25/89	B-03	14.45	0.00	14.45	246.44	260.89							
02/20/89	B-03	14.35	0.00	14.35	246.54	260.89							
03/15/89	B-03	14.35	0.00	14.35	246.54	260.89							
03/27/89	B-03	14.31	0.00	14.31	246.58	260.89							
04/19/89	B-03	14.35	0.00	14.35	246.54	260.89							
05/11/89	B-03	14.39	0.00	14.39	246.50	260.89							
05/25/89	B-03	14.37	0.00	14.37	246.52	260.89							
06/12/89	B-03	14.38	0.00	14.38	246.51	260.89							
06/22/89	B-03	14.40	0.00	14.40	246.49	260.89							
07/12/89	B-03	14.41	0.00	14.41	246.48	260.89							
08/09/89	B-03	14.46	0.00	14.46	246.43	260.89							
08/21/89	B-03	14.45	0.00	14.45	246.44	260.89							
09/08/89	B-03	14.47	0.00	14.47	246.42	260.89							
09/22/89	B-03	14.44	0.01	14.44	246.45	260.89							
10/09/89	B-03	14.52	0.00	14.52	246.37	260.89							
10/20/89	B-03	14.50	0.00	14.50	246.39	260.89							

Summary of Gauging Data and Laboratory Analyses
Pomona Box
88.003 W. Imperial Hwy (La Habra)

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
11/08/89	B-03	14.53	0.00	14.53	246.36	260.89							
12/01/89	B-03	14.59	0.00	14.59	246.30	260.89							
12/15/89	B-03	14.59	0.00	14.59	246.30	260.89							
12/29/89	B-03	14.62	0.00	14.62	246.27	260.89							
01/11/90	B-03	14.62	0.01	14.62	246.27	260.89							
02/16/90	B-03	14.57	0.00	14.57	246.32	260.89							
03/02/90	B-03	14.35	0.00	14.35	246.54	260.89							
03/14/90	B-03	14.46	0.00	14.46	246.43	260.89							
03/28/90	B-03	14.46	0.00	14.46	246.43	260.89							
04/13/90	B-03	14.49	0.00	14.49	246.40	260.89							
04/27/90	B-03	14.51	0.00	14.51	246.38	260.89	22.28						
05/17/90	B-03	14.54	0.00	14.54	246.35	260.89							
06/01/90	B-03	14.45	0.00	14.45	246.44	260.89							
06/21/90	B-03	14.53	0.00	14.53	246.36	260.89							
07/17/90	B-03	14.59	0.00	14.59	246.30	260.89							
08/20/90	B-03	14.56	0.00	14.56	246.33	260.89							
09/13/90	B-03	14.59	0.00	14.59	246.30	260.89							
09/28/90	B-03	14.58	0.00	14.58	246.31	260.89							
10/12/90	B-03	14.63	0.00	14.63	246.26	260.89							
10/26/90	B-03	14.61	0.00	14.61	246.28	260.89							
11/28/90	B-03	14.70	0.00	14.70	246.19	260.89							
12/12/90	B-03	14.70	0.00	14.70	246.19	260.89							
01/09/91	B-03	14.36	0.00	14.36	246.54	260.89							
01/18/91	B-03	14.64	0.00	14.64	246.25	260.89	22.92						
02/08/91	B-03	14.70	0.00	14.70	246.19	260.89							
03/04/91	B-03	14.09	0.00	14.09	246.80	260.89							
04/16/91	B-03	14.17	0.00	14.17	246.72	260.89	23.35						
05/23/91	B-03	14.28	0.00	14.28	246.61	260.89							
07/16/91	B-03	14.37	0.00	14.37	246.53	260.89	30.56						
07/19/91	B-03	14.35	0.00	14.35	246.54	260.89	23.04						
07/29/91	B-03	14.35	0.00	14.35	246.54	260.89	23.02						
09/04/91	B-03	14.45	0.00	14.45	246.44	260.89	23.09						Product while bailing
09/25/91	B-03	14.50	0.00	14.50	246.39	260.89	23.26						
10/15/91	B-03	14.51	0.00	14.51	246.38	260.89	23.16						Product while bailing
11/13/91	B-03	14.80	0.01	14.80	246.09	260.89							
12/04/91	B-03	14.83	0.01	14.82	246.07	260.89							
01/30/92	B-03	14.72	0.01	14.72	246.17	260.89	23.20						
04/21/92	B-03	13.87	0.01	13.87	247.02	260.89	23.00						
04/30/92	B-03	13.93	0.00	13.93	246.96	260.89	22.30						
07/02/92	B-03	14.00	0.01	14.00	246.89	260.89	23.20						
10/13/92	B-03	14.21	0.00	14.21	246.68	260.89	23.17						
03/15/93	B-03	12.19	0.00	12.19	248.70	260.89	23.19	7.5	0.2	0.2	0.4	0.6	
05/05/93	B-03	12.32	0.00	12.32	248.57	260.89	23.03	4.5	0.2	0.06	ND	0.4	
07/26/93	B-03	12.80	0.00	12.80	248.09	260.89	23.08	4.3	0.367	0.172	0.065	0.274	
11/30/93	B-03	13.60	0.00	13.60	247.29	260.89	23.16	0.8	0.1277	0.0424	0.0485	0.0810	
03/01/94	B-03	13.53	0.00	13.53	247.36	260.89	23.19	0.8	0.0910	0.0277	0.0366	0.0437	
05/04/94	B-03	13.62	0.00	13.62	247.27	260.89	23.17	0.4	0.0830	0.0336	0.0265	0.0381	
07/18/94	B-03	13.75	0.00	13.75	247.14	260.89	23.16	0.7	0.0541	0.0263	0.0198	0.0343	
11/29/94	B-03	14.09	0.00	14.09	246.80	260.89	23.16	0.4	0.0662	0.0227	0.0117	0.0347	
02/16/95	B-03	13.19	0.00	13.19	247.70	260.89	23.22	0.6	0.0374	0.0200	0.0278	0.0551	
01/05/88	B-04					261.56							
01/12/88	B-04	15.19	0.00	15.19	246.37	261.56	35.04						
01/22/88	B-04	15.11	0.00	15.11	246.45	261.56	35.10						
02/04/88	B-04	15.20	0.00	15.20	246.36	261.56	35.00						
02/23/88	B-04	15.36	0.00	15.36	246.20	261.56	35.00						
05/23/88	B-04	15.17	0.00	15.17	246.39	261.56							
06/13/88	B-04	15.20	0.00	15.20	246.36	261.56							
06/30/88	B-04	15.17	0.00	15.17	246.39	261.56							
07/13/88	B-04	15.11	0.00	15.11	246.45	261.56							
07/21/88	B-04	15.13	0.00	15.13	246.43	261.56							
08/01/88	B-04	15.12	0.00	15.12	246.44	261.56							
08/09/88	B-04	15.15	0.00	15.15	246.41	261.56							
08/16/88	B-04	15.14	0.00	15.14	246.42	261.56							
09/01/88	B-04	15.20	0.00	15.20	246.36	261.56							
09/07/88	B-04	14.62	0.00	14.62	246.94	261.56							
09/13/88	B-04	15.20	0.00	15.20	246.36	261.56							
09/27/88	B-04	15.23	0.00	15.23	246.33	261.56							
10/05/88	B-04	15.18	0.00	15.18	246.38	261.56							
10/07/88	B-04					261.56							
10/13/88	B-04	15.26	0.00	15.26	246.30	261.56							
10/18/88	B-04	15.27	0.00	15.27	246.29	261.56							
10/26/88	B-04	15.25	0.00	15.25	246.31	261.56							
11/04/88	B-04	15.30	0.00	15.30	246.26	261.56							
11/08/88	B-04	15.27	0.00	15.27	246.29	261.56							
11/17/88	B-04	15.23	0.00	15.23	246.33	261.56							
11/23/88	B-04	15.26	0.00	15.26	246.30	261.56							
12/08/88	B-04	14.48	0.00	14.48	247.08	261.56							
12/14/88	B-04	15.34	0.00	15.34	246.22	261.56	35.70						
12/20/88	B-04	15.13	0.00	15.13	246.43	261.56							
01/05/89	B-04	15.10	0.00	15.10	246.46	261.56							
01/11/89	B-04	15.04	0.00	15.04	246.52	261.56							

Summary of Gauging Data and Laboratory Analyses
Pomona Box
88.003 W. Imperial Hwy (La Habra)

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
01/20/89	B-04	15.09	0.00	15.09	246.47	261.56							
01/25/89	B-04	15.17	0.00	15.17	246.39	261.56							
02/20/89	B-04	15.03	0.00	15.03	246.53	261.56							
03/15/89	B-04	15.03	0.00	15.03	246.53	261.56							
03/27/89	B-04	15.00	0.00	15.00	246.56	261.56							
04/19/89	B-04	15.03	0.00	15.03	246.53	261.56							
05/11/89	B-04	15.06	0.00	15.06	246.50	261.56							
05/25/89	B-04	15.10	0.00	15.10	246.46	261.56							
06/12/89	B-04	15.07	0.00	15.07	246.49	261.56							
06/22/89	B-04	15.15	0.00	15.15	246.41	261.56							
07/12/89	B-04	15.12	0.00	15.12	246.44	261.56							
08/09/89	B-04	15.15	0.00	15.15	246.41	261.56							
08/21/89	B-04	15.15	0.00	15.15	246.41	261.56							
09/08/89	B-04	15.15	0.00	15.15	246.41	261.56							
09/22/89	B-04	15.13	0.01	15.13	246.43	261.56							
10/09/89	B-04	15.19	0.00	15.19	246.37	261.56							
10/20/89	B-04	15.19	0.00	15.19	246.37	261.56							
11/08/89	B-04	15.23	0.00	15.23	246.33	261.56							
12/01/89	B-04	15.27	0.00	15.27	246.29	261.56							
12/15/89	B-04	15.29	0.00	15.29	246.27	261.56							
12/29/89	B-04	15.30	0.00	15.30	246.26	261.56							
01/11/90	B-04	15.31	0.00	15.31	246.25	261.56							
02/16/90	B-04	15.26	0.00	15.26	246.30	261.56							
03/02/90	B-04	15.06	0.00	15.06	246.50	261.56							
03/14/90	B-04	15.16	0.00	15.16	246.40	261.56							
03/28/90	B-04	15.15	0.00	15.15	246.41	261.56							
04/13/90	B-04	15.19	0.00	15.19	246.37	261.56							
04/27/90	B-04	15.20	0.00	15.20	246.36	261.56	34.90						
05/17/90	B-04	15.27	0.00	15.27	246.29	261.56							
06/01/90	B-04	15.15	0.00	15.15	246.41	261.56							
06/21/90	B-04	14.68	0.00	14.68	246.88	261.56							
07/17/90	B-04	15.29	0.00	15.29	246.27	261.56							
08/20/90	B-04	15.25	0.00	15.25	246.31	261.56							
09/13/90	B-04	15.27	0.00	15.27	246.29	261.56							
09/28/90	B-04	15.28	0.00	15.28	246.28	261.56							
10/1[illegible]	B-04	15.33	0.00	15.33	246.23	261.56							
10/2[illegible]	B-04	15.31	0.00	15.31	246.25	261.56							
11/28/90	B-04	15.39	0.00	15.39	246.17	261.56							
12/12/90	B-04	15.40	0.00	15.40	246.17	261.56							
01/09/91	B-04	15.25	0.00	15.25	246.32	261.56							
01/18/91	B-04	15.33	0.00	15.33	246.23	261.56	34.96						
02/08/91	B-04	15.39	0.00	15.39	246.17	261.56							
03/04/91	B-04	14.78	0.00	14.78	246.78	261.56							
04/16/91	B-04	14.85	0.00	14.85	246.71	261.56	35.35						
05/23/91	B-04	14.97	0.00	14.97	246.59	261.56							
07/16/91	B-04	15.07	0.00	15.07	246.50	261.56	42.89						
07/19/91	B-04	15.04	0.00	15.04	246.52	261.56	35.04						
07/29/91	B-04	15.04	0.00	15.04	246.52	261.56	35.04						
09/04/91	B-04	15.15	0.00	15.15	246.41	261.56	35.90	0.8	0.1	0.02	ND	0.08	
09/25/91	B-04	15.18	0.00	15.18	246.38	261.56	35.18						
10/15/91	B-04	15.20	0.00	15.20	246.36	261.56	35.08	4.5	0.7	0.5	0.04	0.5	
11/13/91	B-04	15.58	0.13	15.45	246.08	261.56							
12/04/91	B-04	15.83	0.41	15.42	246.04	261.56							
01/30/92	B-04	15.61	0.28	15.33	246.16	261.56	35.05						
04/21/92	B-04	14.58	0.01	14.58	246.98	261.56	34.64						
04/30/92	B-04	14.63	0.01	14.62	246.94	261.56	34.74						
07/02/92	B-04	14.69	0.01	14.69	246.87	261.56	35.11						
10/13/92	B-04	14.91	0.01	14.91	246.65	261.56	35.10						
03/15/93	B-04	12.82	0.00	12.82	248.74	261.56	34.83	15	1	2.2	0.4	2.4	
05/05/93	B-04	12.97	0.00	12.97	248.59	261.56	34.92	18	0.7	2	3	1	
07/26/93	B-04	13.95	0.00	13.95	247.61	261.56	35.08	17.4	0.957	1.52	0.902	2	
11/30/93	B-04	14.28	0.00	14.28	247.28	261.56	35.00	14.9	0.9260	1.1777	0.9560	2.6082	
03/01/94	B-04	14.18	0.00	14.18	247.38	261.56	35.08	30.7	2.3478	1.8433	1.0737	3.3780	
05/04/94	B-04	14.26	0.00	14.26	247.30	261.56	34.67	15.1	1.5346	1.4445	0.8311	2.7198	
07/18/94	B-04	14.42	0.00	14.42	247.14	261.56	35.04	12.2	1.3376	1.2914	0.6686	2.7074	
11/29/94	B-04	14.76	0.00	14.76	246.80	261.56	35.08	5.8	0.4815	0.2936	0.3605	0.5690	
02/16/95	B-04	13.85	0.00	13.85	247.71	261.56	35.12	9.8	0.6940	0.5570	0.3186	1.1775	
01/05/88	B-05			14.50		260.68							
01/12/88	B-05	19.73	5.29	14.44	244.92	260.68	34.00						
01/22/88	B-05	19.91	5.58	14.33	244.95	260.68	34.03						
02/04/88	B-05	19.45	5.25	14.20	245.17	260.68	34.07						
02/23/88	B-05	19.53	5.13	14.40	245.00	260.68	34.07						
05/23/88	B-05					260.68							
06/13/88	B-05	14.70	0.33	14.37	246.23	260.68							
06/30/88	B-05	14.95	0.15	14.80	245.84	260.68							
07/13/88	B-05	15.02	0.26	14.76	245.86	260.68							
07/21/88	B-05	16.75	1.49	15.26	245.05	260.68							
08/01/88	B-05	15.08	0.05	15.03	245.64	260.68							
08/09/88	B-05	15.30	0.00	15.30	245.38	260.68							Dry to top of pump
08/16/88	B-05	15.60	0.30	15.30	245.31	260.68							
09/01/88	B-05	16.35	1.68	14.67	245.59	260.68							

Summary of Gauging Data and Laboratory Analyses
Pomona Box
88.003 W. Imperial Hwy (La Habra)

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
09/07/88	B-05	16.26	1.68	14.58	245.68	260.68							
09/13/88	B-05	14.69	0.00	14.69	245.99	260.68							Dry to top of pump
09/27/88	B-05	14.65	0.07	14.58	246.08	260.68							
10/05/88	B-05	14.65	0.00	14.65	246.03	260.68							Dry
10/07/88	B-05	14.68	0.01	14.67	246.01	260.68	30.46						
10/13/88	B-05	16.25	0.55	15.70	244.84	260.68							
10/18/88	B-05	16.87	1.27	15.60	244.76	260.68							
10/26/88	B-05	16.35	0.60	15.75	244.78	260.68							
11/04/88	B-05	16.85	1.25	15.60	244.77	260.68							
11/08/88	B-05	16.60	1.10	15.50	244.91	260.68							
11/17/88	B-05	17.45	2.03	15.42	244.75	260.68							
11/23/88	B-05	16.26	0.59	15.67	244.86	260.68							
12/08/88	B-05	15.60	0.13	15.47	245.18	260.68							
12/14/88	B-05					260.68							No access to well
12/20/88	B-05	15.22	0.00	15.22	245.46	260.68							
01/05/89	B-05	15.75	0.01	15.75	244.93	260.68							
01/11/89	B-05	16.68	0.01	16.68	244.00	260.68							
01/20/89	B-05	16.90	0.01	16.90	243.78	260.68							
01/25/89	B-05	15.80	0.01	15.80	244.88	260.68							
02/20/89	B-05	16.02	0.87	15.15	245.31	260.68							
03/15/89	B-05	15.57	0.01	15.57	245.11	260.68							
03/27/89	B-05	14.64	0.01	14.64	246.04	260.68							
04/19/89	B-05	18.25	3.70	14.55	245.21	260.68							
05/11/89	B-05	16.20	0.54	15.66	244.89	260.68							
05/25/89	B-05	16.20	0.55	15.65	244.89	260.68							
06/12/89	B-05	15.48	0.00	15.48	245.20	260.68							
06/22/89	B-05	16.70	1.70	15.00	245.26	260.68							
07/12/89	B-05	18.00	2.85	15.15	244.82	260.68							
08/09/89	B-05	15.83	0.00	15.83	244.85	260.68							
08/21/89	B-05	16.39	0.59	15.80	244.73	260.68							
09/08/89	B-05	15.72	0.01	15.72	244.96	260.68							
09/22/89	B-05	16.43	1.08	15.35	245.06	260.68							
10/09/89	B-05	15.73	0.01	15.73	244.95	260.68							
10/20/89	B-05	15.95	0.01	15.95	244.73	260.68							
11/08/89	B-05	16.18	0.55	15.63	244.91	260.68							
12/01/89	B-05	15.88	0.01	15.88	244.80	260.68							
12/15/89	B-05	15.95	0.01	15.95	244.73	260.68							
12/29/89	B-05	16.05	0.10	15.95	244.71	260.68							
01/11/90	B-05	15.59	0.20	15.39	245.24	260.68							
02/16/90	B-05	15.68	0.42	15.26	245.32	260.68							
03/02/90	B-05	15.62	0.57	15.05	245.49	260.68							
03/14/90	B-05	15.47	0.13	15.34	245.31	260.68							
03/28/90	B-05	15.24	0.01	15.24	245.44	260.68							
04/13/90	B-05	15.95	0.01	15.95	244.73	260.68							
04/27/90	B-05	15.65	0.05	15.60	245.07	260.68	33.66						Pump well
05/17/90	B-05	16.00	0.01	16.00	244.68	260.68							
06/01/90	B-05	15.23	0.00	15.23	245.45	260.68							Gas to top of pump
06/21/90	B-05	15.90	0.01	15.90	244.78	260.68							
07/17/90	B-05	16.00	0.01	16.00	244.68	260.68							
08/20/90	B-05	15.80	0.01	15.80	244.88	260.68							
09/13/90	B-05	15.30	0.00	15.30	245.38	260.68							
09/28/90	B-05	15.34	0.01	15.34	245.34	260.68							
10/12/90	B-05	15.32	0.01	15.32	245.36	260.68							
10/26/90	B-05	15.33	0.01	15.33	245.35	260.68							
11/28/90	B-05	15.96	0.24	15.72	244.90	260.68							Approx. -Skimmer off
12/12/90	B-05	16.15	0.29	15.86	244.75	260.68							Approx.-pulled pump
01/09/91	B-05	15.57	0.02	15.55	245.13	260.68							
01/18/91	B-05	15.61	0.01	15.61	245.07	260.68	33.70						Pump well
02/08/91	B-05	16.02	0.01	16.02	244.66	260.68							
03/04/91	B-05	15.54	0.01	15.54	245.14	260.68							Pump out of well
04/16/91	B-05	15.62	0.32	15.30	245.30	260.68	34.13						
05/23/91	B-05	15.75	0.00	15.75	244.93	260.68							
07/16/91	B-05	15.57	0.11	15.46	245.20	260.68	41.66						
07/19/91	B-05	15.69	0.14	15.55	245.10	260.68	33.75						
07/29/91	B-05					260.68							
09/04/91	B-05	15.85	0.08	15.77	244.89	260.68	33.83						
09/25/91	B-05	15.92	0.07	15.85	244.81	260.68	33.80						
10/15/91	B-05	15.88	0.03	15.85	244.82	260.68	33.85						
11/13/91	B-05	15.65	0.17	15.48	245.16	260.68							
12/04/91	B-05	15.64	0.07	15.57	245.09	260.68							Pump well
01/30/92	B-05	15.08	0.01	15.08	245.60	260.68							Pump well
04/21/92	B-05					260.68							
04/30/92	B-05					260.68							
07/02/92	B-05	15.75	0.01	15.75	244.93	260.68	33.85						Pump set to 16 ft.
10/13/92	B-05	15.80	0.01	15.80	244.88	260.68	33.87						
03/15/93	B-05					260.68							Pump in well
05/05/93	B-05	13.47	0.03	13.44	247.23	260.68							
07/26/93	B-05	13.89	0.00	13.89	246.79	260.68							
11/30/93	B-05	15.05	0.00	15.05	245.63	260.68							Pump in well
03/01/94	B-05	14.68	0.00	14.68	246.00	260.68	33.34						Pump in well
05/04/94	B-05					260.68							Pump in well
07/18/94	B-05	15.70	0.00	15.70	244.98	260.68	33.71	83.7	27.9057	20.0200	3.2743	9.2335	Pump in well

Summary of Gauging Data and Laboratory Analyses
Pomona Box
88.003 W. Imperial Hwy (La Habra)

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
11/29/94	B-05	16.61	0.02	16.59	244.09	260.68	33.79						
02/16/95	B-05	14.72	0.02	14.70	245.98	260.68	33.55						
01/05/88	B-06			11.34		256.60							
01/12/88	B-06	11.87	0.00	11.87	244.73	256.60	34.07						
01/22/88	B-06	11.68	0.00	11.68	244.92	256.60	34.12						
02/04/88	B-06	11.70	0.00	11.70	244.90	256.60	34.35						
02/23/88	B-06	11.75	0.00	11.75	244.85	256.60	34.35						
05/23/88	B-06	11.57	0.00	11.57	245.03	256.60							
06/13/88	B-06	11.59	0.00	11.59	245.01	256.60							
06/30/88	B-06	11.66	0.00	11.66	244.94	256.60							
07/13/88	B-06	11.58	0.00	11.58	245.02	256.60							
07/21/88	B-06	11.54	0.00	11.54	245.06	256.60							
08/01/88	B-06	11.50	0.00	11.50	245.10	256.60							
08/09/88	B-06	11.52	0.00	11.52	245.08	256.60							
08/16/88	B-06	11.55	0.00	11.55	245.05	256.60							
09/01/88	B-06	11.64	0.00	11.64	244.96	256.60							
09/07/88	B-06	11.60	0.00	11.60	245.00	256.60							
09/13/88	B-06	11.61	0.00	11.61	244.99	256.60							
09/27/88	B-06	11.65	0.00	11.65	244.95	256.60							
10/05/88	B-06	11.66	0.00	11.66	244.94	256.60							
10/07/88	B-06					256.60							
10/13/88	B-06	11.67	0.00	11.67	244.93	256.60							
10/18/88	B-06	11.68	0.00	11.68	244.92	256.60							
10/26/88	B-06	11.65	0.00	11.65	244.95	256.60							
11/04/88	B-06	11.67	0.00	11.67	244.93	256.60							
11/08/88	B-06	11.66	0.00	11.66	244.94	256.60							
11/17/88	B-06	11.65	0.00	11.65	244.95	256.60							
11/23/88	B-06	11.65	0.00	11.65	244.95	256.60							
12/08/88	B-06	11.42	0.00	11.42	245.18	256.60							
12/14/88	B-06	11.75	0.00	11.75	244.85	256.60	34.40						
12/20/88	B-06	11.57	0.00	11.57	245.03	256.60							
01/05/89	B-06	11.47	0.00	11.47	245.13	256.60							
01/11/89	B-06	11.52	0.00	11.52	245.08	256.60							
01/20/89	B-06	11.55	0.00	11.55	245.05	256.60							
01/25/89	B-06	11.60	0.00	11.60	245.00	256.60							
02/20/89	B-06	11.47	0.00	11.47	245.13	256.60							
03/15/89	B-06	11.50	0.00	11.50	245.10	256.60							
03/27/89	B-06	11.45	0.00	11.45	245.15	256.60							
04/19/89	B-06	11.45	0.00	11.45	245.15	256.60							
05/11/89	B-06	11.55	0.00	11.55	245.05	256.60							
05/25/89	B-06	11.55	0.00	11.55	245.05	256.60							
06/12/89	B-06	11.45	0.00	11.45	245.15	256.60							
06/22/89	B-06	11.53	0.00	11.53	245.07	256.60							
07/12/89	B-06	11.51	0.00	11.51	245.09	256.60							
08/09/89	B-06	11.57	0.00	11.57	245.03	256.60							
08/21/89	B-06	11.55	0.00	11.55	245.05	256.60							
09/08/89	B-06	11.55	0.00	11.55	245.05	256.60							
09/22/89	B-06	11.56	0.00	11.56	245.04	256.60							
10/09/89	B-06	11.63	0.00	11.63	244.97	256.60							
10/20/89	B-06	11.65	0.00	11.65	244.95	256.60							
11/08/89	B-06	11.68	0.00	11.68	244.92	256.60							
12/01/89	B-06	11.67	0.00	11.67	244.93	256.60							
12/15/89	B-06	11.66	0.00	11.66	244.94	256.60							
12/29/89	B-06	11.70	0.00	11.70	244.90	256.60							
01/11/90	B-06	11.70	0.00	11.70	244.90	256.60							
02/16/90	B-06	11.66	0.00	11.66	244.94	256.60							
03/02/90	B-06	11.46	0.00	11.46	245.14	256.60							
03/14/90	B-06	11.63	0.00	11.63	244.97	256.60							
03/28/90	B-06	11.55	0.00	11.55	245.05	256.60							
04/13/90	B-06	11.71	0.00	11.71	244.89	256.60							
04/27/90	B-06	11.61	0.00	11.61	244.99	256.60	33.92						
05/17/90	B-06	11.67	0.00	11.67	244.93	256.60							
06/01/90	B-06	11.52	0.00	11.52	245.08	256.60							
06/21/90	B-06	11.56	0.00	11.56	245.04	256.60							
07/17/90	B-06	11.68	0.00	11.68	244.92	256.60							
08/20/90	B-06	11.60	0.00	11.60	245.00	256.60							
09/13/90	B-06	11.59	0.00	11.59	245.01	256.60							
09/28/90	B-06	11.69	0.00	11.69	244.91	256.60							
10/12/90	B-06	11.65	0.00	11.65	244.95	256.60							
10/26/90	B-06	11.68	0.00	11.68	244.92	256.60							
11/28/90	B-06	11.78	0.00	11.78	244.82	256.60							
12/12/90	B-06	11.79	0.00	11.79	244.81	256.60							
01/09/91	B-06	11.46	0.00	11.46	245.15	256.60							
01/18/91	B-06	11.75	0.00	11.75	244.85	256.60	33.98						
02/08/91	B-06	11.78	0.00	11.78	244.82	256.60							
03/04/91	B-06	11.15	0.00	11.15	245.45	256.60							
04/16/91	B-06	11.26	0.00	11.26	245.34	256.60	34.45						
05/23/91	B-06	11.35	0.00	11.35	245.25	256.60							
07/16/91	B-06	11.43	0.00	11.43	245.17	256.60	41.99						
07/19/91	B-06	11.42	0.00	11.42	245.18	256.60	34.04						
07/29/91	B-06	11.40	0.00	11.40	245.20	256.60	34.04						

Summary of Gauging Data and Laboratory Analyses
Pomona Box
88.003 W. Imperial Hwy (La Habra)

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
09/04/91	B-06	11.50	0.00	11.50	245.10	256.60	34.07	ND	ND	ND	ND	ND	
09/25/91	B-06	11.53	0.00	11.53	245.07	256.60	34.18						
10/15/91	B-06	11.55	0.00	11.55	245.05	256.60	34.13	0.09	0.03	ND	ND	ND	
11/13/91	B-06	11.78	0.00	11.78	244.83	256.60							
12/04/91	B-06	11.83	0.00	11.83	244.77	256.60							
01/30/92	B-06	11.72	0.00	11.72	244.88	256.60	34.04	ND	ND	ND	ND	ND	
04/21/92	B-06	11.03	0.00	11.03	245.57	256.60	33.44	1.1	0.24	0.1	0.03	0.14	
04/30/92	B-06	11.08	0.00	11.08	245.52	256.60	33.23						
07/02/92	B-06	11.14	0.00	11.14	245.46	256.60	34.10	1.9	0.1	0.03	0	0.09	
10/13/92	B-06	11.31	0.00	11.31	245.29	256.60	33.72	3	0.5	0.2	0.08	0.25	
03/15/93	B-06	9.72	0.00	9.72	246.88	256.60	33.85	2.4	0.7	0.1	0.06	0.2	
05/05/93	B-06	9.87	0.00	9.87	246.73	256.60	33.89	2	0.3	0.2	0.06	0.2	
07/26/93	B-06	10.26	0.00	10.26	246.34	256.60	34.12	1.9	0.323	0.203	0.049	0.115	
11/30/93	B-06	10.80	0.00	10.80	245.80	256.60	33.90	2.1	0.1579	0.1295	0.0406	0.1182	
03/01/94	B-06	10.73	0.00	10.73	245.87	256.60	34.08	1.9	0.3526	0.1577	0.0447	0.1047	
05/04/94	B-06	10.80	0.00	10.80	245.80	256.60	34.00	0.4	0.0975	0.0541	0.0120	0.0321	
07/18/94	B-06	10.98	0.00	10.98	245.62	256.60	34.09	3.9	0.3919	0.3290	0.1113	0.3892	
11/29/94	B-06	11.29	0.00	11.29	245.31	256.60	34.12	0.8	0.1041	0.0458	0.0411	0.0813	
02/16/95	B-06	10.57	0.00	10.57	246.03	256.60	34.20	0.7	0.1435	0.0470	0.0111	0.0405	
04/03/91	B-07	12.56	0.00	12.56	242.13	254.69	42.60						Instal. 3/21, Devel. 4/3
04/16/91	B-07	13.04	0.00	13.04	241.65	254.69	40.90	1.6	0.2	0.02	0.02	0.2	Survey data 3/27/91
05/23/91	B-07	13.32	0.00	13.32	241.37	254.69							
07/16/91	B-07	13.18	0.00	13.18	241.51	254.69	48.47						
07/19/91	B-07	13.16	0.00	13.16	241.53	254.69	40.65						
07/29/91	B-07	13.15	0.00	13.15	241.54	254.69	40.60						
09/04/91	B-07	13.27	0.00	13.27	241.42	254.69	40.69	1.6	0.01	ND	0.1	0.1	
09/25/91	B-07	13.26	0.00	13.26	241.43	254.69	40.75						
10/15/91	B-07	13.28	0.00	13.28	241.41	254.69	40.65	0.9	0.2	ND	0.07	0.5	
11/13/91	B-07	13.60	0.00	13.60	241.10	254.69							
12/04/91	B-07	13.62	0.00	13.62	241.07	254.69							
01/30/92	B-07	13.50	0.00	13.50	241.19	254.69	40.62	0.34	0.09	ND	0.015	ND	
04/21/92	B-07	12.59	0.00	12.59	242.10	254.69	40.28	2.1	0.35	0.08	0.24	0.24	
04/30/92	B-07	12.61	0.00	12.61	242.08	254.69	39.83						
07/02/92	B-07	12.64	0.00	12.64	242.05	254.69	40.55	0.87	ND	ND	ND	0.005	
10/13/92	B-07	12.90	0.00	12.90	241.79	254.69	40.71	0.6	0.08	0.002	0.2	ND	
03/15/93	B-07	10.70	0.00	10.70	243.99	254.69	40.71	4	0.2	0.01	0.5	0.3	
05/05/93	B-07	10.94	0.00	10.94	243.75	254.69	40.58	0.5	0.04	ND	0.07	0.04	
07/26/93	B-07	11.46	0.00	11.46	243.23	254.69	40.75	ND	ND	ND	ND	ND	
11/30/93	B-07	12.16	0.00	12.16	242.53	254.69	40.77	ND	0.0045	0.0023	ND	0.0056	
03/01/94	B-07	12.10	0.00	12.10	242.59	254.69	40.74	0.1	0.0204	ND	0.0460	ND	
05/04/94	B-07	12.27	0.00	12.27	242.42	254.69	40.75	ND	ND	ND	ND	ND	
07/18/94	B-07	12.38	0.00	12.38	242.31	254.69	40.70	0.4	0.0164	0.0013	ND	0.0333	
11/29/94	B-07	12.72	0.00	12.72	241.97	254.69	40.73	0.3	0.0141	0.0033	ND	0.0267	
02/16/95	B-07	11.74	0.00	11.74	242.95	254.69	40.80	0.6	0.0473	0.0075	0.1891	0.0256	
07/26/91	B-08	9.48	0.00	9.48	241.39	250.87	33.41						Develop well
07/29/91	B-08	9.46	0.00	9.46	241.41	250.87	35.44	ND	ND	ND	ND	ND	Survey data 7/29/91
09/04/91	B-08	9.00	0.00	9.00	241.87	250.87	35.48	ND	ND	ND	ND	ND	
09/25/91	B-08	9.59	0.00	9.59	241.28	250.87	35.57						
10/15/91	B-08	9.60	0.00	9.60	241.27	250.87	35.47	ND	ND	ND	ND	ND	
11/13/91	B-08	9.86	0.00	9.86	241.01	250.87							
12/04/91	B-08	9.89	0.00	9.89	240.98	250.87							
01/30/92	B-08	9.76	0.00	9.76	241.11	250.87	35.48	ND	ND	ND	ND	ND	
04/21/92	B-08	8.98	0.00	8.98	241.89	250.87	35.06	ND	ND	ND	ND	ND	
04/30/92	B-08	9.01	0.00	9.01	241.86	250.87	34.62						
07/02/92	B-08	9.10	0.00	9.10	241.77	250.87	35.51	ND	ND	ND	ND	ND	
10/13/92	B-08	9.33	0.00	9.33	241.54	250.87	35.50	ND	ND	ND	ND	ND	
03/15/93	B-08	7.34	0.00	7.34	243.53	250.87	35.49	ND	ND	ND	ND	ND	
05/05/93	B-08	7.50	0.00	7.50	243.37	250.87	35.31	ND	ND	ND	ND	ND	
07/26/93	B-08	7.92	0.00	7.92	242.95	250.87	35.51	ND	ND	ND	ND	ND	
11/30/93	B-08	8.56	0.00	8.56	242.31	250.87	35.46	ND	ND	ND	ND	ND	
03/01/94	B-08	8.57	0.00	8.57	242.30	250.87	35.50	ND	ND	ND	ND	ND	
05/04/94	B-08	8.62	0.00	8.62	242.25	250.87	35.43	0.5	0.0365	0.0077	0.0824	ND	
07/18/94	B-08	8.82	0.00	8.82	242.05	250.87	35.43	ND	0.0012	0.0005	0.0003	0.0021	
11/29/94	B-08	9.14	0.00	9.14	241.73	250.87	35.48	ND	ND	ND	ND	ND	
02/16/95	B-08	8.21	0.00	8.21	242.66	250.87	35.55	ND	ND	ND	ND	ND	
03/15/93	B-09	9.79	0.00	9.79	243.93	253.72	25.04	0.9	0.1	0.005	0.3	ND	
05/05/93	B-09	9.95	0.00	9.95	243.77	253.72	22.85	2	0.2	0.003	0.5	0.01	
07/26/93	B-09	10.44	0.00	10.44	243.28	253.72	23.05	1.6	0.107	0.01	ND	0.21	
11/30/93	B-09	11.23	0.00	11.23	242.49	253.72	23.05	1.6	0.0764	0.0190	ND	0.1138	
03/01/94	B-09	11.17	0.00	11.17	242.55	253.72	23.03	0.8	0.0418	0.0064	0.4429	0.0114	
05/04/94	B-09	11.34	0.00	11.34	242.38	253.72	23.06	0.5	0.0034	0.0013	0.2485	0.0043	
07/18/94	B-09	11.44	0.00	11.44	242.28	253.72	23.01	1.4	0.0370	0.0034	0.0003	0.0981	
11/29/94	B-09	11.78	0.00	11.78	241.94	253.72	23.03	0.8	0.0247	0.0031	0.3304	0.0061	
02/16/95	B-09	10.81	0.00	10.81	242.91	253.72	23.10	0.4	0.0142	0.0023	0.2153	0.0047	
03/15/93	B-10	9.14	0.00	9.14	241.76	250.90	25.47	6	0.5	0.5	0.3	1.1	
05/05/93	B-10	9.40	0.00	9.40	241.50	250.90	25.30	31	1	1	4.5	1	
07/26/93	B-10	9.86	0.00	9.86	241.04	250.90	25.48	11.4	1.166	0.688	1.454	1.371	
11/30/93	B-10	10.56	0.00	10.56	240.34	250.90	25.48	6.4	0.2809	0.1761	0.2023	0.3413	

Summary of Gauging Data and Laboratory Analyses
Pomona Box
88.003 W. Imperial Hwy (La Habra)

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
03/01/94	B-10	10.18	0.00	10.18	240.72	250.90	25.47	8.5	0.9157	0.5070	0.6573	0.8576	
05/04/94	B-10	10.21	0.00	10.21	240.69	250.90	25.50	6.3	1.2758	0.5860	0.7835	1.0392	
07/18/94	B-10	10.54	0.00	10.54	240.36	250.90	25.44	5.2	0.5395	0.2423	0.4414	0.5731	
11/29/94	B-10	10.94	0.00	10.94	239.96	250.90	25.48	3.9	0.6176	0.0931	0.6091	0.1514	
02/16/95	B-10	9.71	0.00	9.71	241.19	250.90	25.53	7.6	0.9072	0.3091	0.6831	0.7139	

Pomona Box

88.003 W. Imperial Hwy (La Habra) 1987 - 1994

Hydrocarbon Recovery - Gallons

	Manual Pumping			Automatic System Recovery				
Date	Total Liquid	Water	Product	Total Liquid	Water	Product	Recovered Product	Comments
01/09/91				71	66	5		
01/18/91								Gauge only
02/08/91				196	196	0		Gauge only
02/28/91	217	203	14				14	Pump recovery tank
03/04/91				13	13	0		Gauge only
04/03/91	73	73	0				0	Develop new well B-7
04/16/91	23	23	0				0	Gauge & pump for samples
05/23/91				216	216	0		Traces
06/04/91	218	218	0				0	Pump recovery tank - Traces
07/16/91				179.25				Mixed
09/04/91	106	106	0				0	Gauge & pump for samples
09/25/91								Gauge only
10/15/91	128	128	0				0	Gauge & pump for samples
11/19/91	229	229	0				0	Pump recovery tank
91' Total	994	980	14				14	
01/30/92	113	113	0				0	Gauge/pump for samples- traces
02/25/92	553	553	0				0	Pump holding tank
04/21/92	146	146	0	222.5	222.5	0	0	Gauge/pump for samples
04/30/92	192	192	0				0	Pump holding tank -traces
07/02/92	128	128	0				0	Gauge/pump for samples
10/13/92	106	106	0				0	Gauge/pump for samples
92' Total	1,238	1,238	0				0	
03/15/93	299	299	0				0	Gauge/pump for samples
05/05/93	226	226	0				0	Gauge/pump for samples
07/26/93	263	263	0				0	Gauge/pump for samples
11/30/93	200	200	0				0	Gauge/pump for samples
93' Total	988	988	0				0	
03/01/94	279	279	0				0	Gauge/pump for samples
05/04/94	275	275	0				0	Gauge/pump for samples
07/18/94	279	279	0				0	Gauge/pump for samples
11/29/94	200	200	0				0	Gauge/pump for samples
94' Total	1,033	1,033	0				0	
02/16/95	245	245	0				0	Gauge/pump for samples
95' Total	245	245	0				0	
Site Total	10,073	9,310	763				763.01	

Pomona Box Company
Project No. 88.003

APPENDIX C

Groundwater Sampling Procedures
Laboratory Test Results
Chain-of-Custody Form
Field Testing Data

Pomona Box Company
Project No. 88.003

GROUNDWATER SAMPLING PROCEDURES

Prior to sampling, each well was purged of water using a stainless steel bailer. Fast recharging wells were purged of three casing volumes of water. Slow recharging wells were purged until dry and allowed to recover for two hours before sampling. Each casing volume was field tested for temperature, conductivity, and pH. Turbidity was measured after the last or third casing volume.

Water samples were obtained using a Teflon bailer equipped with a bottom emptying device and placed in VOA vials with Teflon septums. Samples were placed on ice to reduce the potential for volatilization and for preservation. In addition to samples from the wells, a trip blank and sample duplicate were prepared to verify the integrity of the sampling and laboratory procedures.

Water samples were delivered to a certified analytical laboratory for analyses and documented with chain-of-custody procedures. Groundwater samples were tested for total petroleum hydrocarbons using the California Department of Health Services Modified Test and purgeable aromatic compounds using EPA Test Method 602.

CHEMICAL & ENVIRONMENTAL LABORATORIES, INC.

February 23, 1995

MAR 2 5 '95

Ms. Truedi Balsitis
Wayne Perry Construction Inc.
8301 W. Commonwealth Ave.
Buena Park, CA 90621

Dear Ms. Balsitis:

Enclosed please find the analytical report for the samples received on 2–16–95. The samples were received in a chilled state and analyzed as indicated on the chain–of–custody attached. In the report, the results are summarized in total of two pages.

Chemical & Environmental Laboratory is a DHS certified Laboratory (certificate number: 1597). If you have any questions concerning these results and our service, please call me.

Sincerely,

Larry Zhang

Larry Zhang, Ph.D.
Laboratory Director

14096 E. Firestone Blvd., Santa Fe Springs, CA 90670 Tel: 310 921-8123, Fax: 310 921-7974

CHEMICAL & ENVIRONMENTAL LABORATORIES, INC.

ANALYTICAL REPORT

---M8015(Gasoline)/M602(BTEX)---

Client Name: Wayne Perry Construction, Inc.
Project Manager: Truedi Balsitis
Project Number: 88.3X

Date Sampled: 2-16-95
Date Analyzed: 2-17-95
Date Reported: 2-20-95

Sample Identification		Result (mg/L or ppm)				
C&E ID	Sample ID	M8015 Gasoline	M602 Benzene	M602 Toluene	M602 Ethylbenzene	M602 Xylenes
50216D-1	B-1	6.1	0.4542	0.3053	0.0939	0.5686
50216D-2	B-2	18.9	3.8089	3.0267	0.5520	1.5876
50216D-3	B-3	0.6	0.0374	0.0200	0.0278	0.0551
50216D-4	B-4	9.8	0.6940	0.5570	0.3186	1.1775
50216D-5	B-6	0.7	0.1435	0.0470	0.0111	0.0405
50216D-6	B-7	0.6	0.0473	0.0075	0.1891	0.0256
50216D-7	B-8	ND	ND	ND	ND	ND
50216D-8	B-9	0.4	0.0142	0.0023	0.2153	0.0047
50216D-9	B-10	7.6	0.9072	0.3091	0.6831	0.7139
50216D-10	Trip Blank	ND	ND	ND	ND	ND
50216D-11	Duplicate	7.7	0.9342	0.3460	0.6889	0.7340
Detection Limit:		0.1	0.0003	0.0003	0.0003	0.0005

ND = Not detected at the indicated detection limit.

RECEIVED
MAR 25 1995
By

14096 E. Firestone Blvd., Santa Fe Springs, CA 90670 Tel: 310 921-8123, Fax: 310 921-7974

CHEMICAL & ENVIRONMENTAL LABORATORIES, INC.

QA/QC REPORT

--- M8015(G)/M602 ---

I. Matrix Spike (MS)/Matrix Spike Duplicate(MSD)

Date Performed: 2-17-95
Batch #: 856
Lab Sample I.D.: 50216D

Unit: mg/L

ANALYTE	SPK CONC	MS (mg/L)	MS %	MSD (mg/L)	MSD %	RPD	ACP %MS	ACP RPD
Benzene	0.0200	0.0181	91	0.0189	95	4.3	80-120	20
Toluene	0.0200	0.0171	86	0.0183	92	6.8	80-120	20
Ethylbenzene	0.0200	0.0219	110	0.0231	116	5.3	80-120	20
Xylenes	0.0200	0.0214	107	0.0233	117	8.5	80-120	20
Gasoline	1	0.93	93	0.86	86	7.8	70-120	20

II. Laboratory Quality Control Check Sample

ANALYTE	SPK CONC	RESULT	%RECOVERY	ACP %
Benzene	0.020	0.0182	91	80-120
Toluene	0.020	0.0186	93	80-120
Ethylbenzene	0.020	0.0180	90	80-120
Xylenes	0.020	0.0193	97	80-120
Gasoline	1	0.83	83	80-120

14096 E. Firestone Blvd., Santa Fe Springs, CA 90670 Tel: 310 921-8123, Fax: 310 921-7974

8301 W. COMMONWEALTH AVE
BUENA PARK, CALIFORNIA 90621

UNDERGROUND WaynePerry CONSTRUCTION INC. SPECIALISTS

C.S.C. LIC. 300345
E.P.A. CAD 053841102

(714)826-0352

50216 D

CHAIN-OF-CUSTODY RECORD

CLIENT: POMONA BOX	PROJECT NO. 88-3X
SITE ADDRESS: IMPERIAL HWY	LABORATORY: C & E.
LA HABRA CA	SAMPLED BY: Eduardo Sanchez
LOC. WIC. # ENGINEER:	RESULTS BY: 1 week

STATION NUMBER	DEPTH	LOCATION DESCRIPTION	DATE	TIME	SAMPLE TYPE SOIL	WATER	AIR	NUMBER OF CONTAINERS	TEST REQUIRED
	✓	B-1	2-16-95			✓		2	TPH / BTEX
	✓	B-2				✓		2	
	✓	B-3				✓		2	
	✓	B-4				✓		2	
	✓	B-6				✓		2	
	✓	B-7				✓		2	
	✓	B-8				✓		2	
	✓	B-9				✓		2	
	✓	B-10				✓		2	
	✓	TRIP BLANK				✓		2	
	✓	DUPLICATE				✓		2	
									Not preserved

RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:
Eduardo Sánchez	Trudi Balsitis	2/16/95	1400
RELINQUISHED BY: Trudi Balsitis	RECEIVED BY: Lay 350	DATE: 2/16/95	TIME: 17:00
RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:
RELINQUISHED BY:	RECEIVED BY:	DATE:	TIME:

MAR 25 1995

Pomona Box
88.003 W. Imperial Hwy. (La Habra)
February 16, 1995

Field Temperature, Conductivity, pH, and Turbidity Data

Sampled by: Eduardo Sanchez

Well	Casing Volume	Casing Vol 1	Casing Vol 2	Casing Vol 3	Sample	Comments	
B-10						Well dry after second casing volume	
Purged Water (gal.)	20.4	10.2	10.2			Duplicate sample obtained	
Temperature (∘ F)		76	76			Begin purge time:	10:20
Conductivity (us/cm)		0.30	0.30			End Sampling time:	13:00
pH		7.0	7.0			Total time:	02:40
Turbidity (NTU)					8.36		
B-8						Well dry after second casing volume	
Purged Water (gal.)	35.4	17.7	17.7				
Temperature (F)		76	75			Begin purge time:	10:30
Conductivity (us/cm)		0.30	0.30			End Sampling time:	13:10
pH		7.1	7.1			Total time:	02:40
Turbidity (NTU)					8.31		
B-9						Well dry after first casing volume	
Purged Water (gal.)	8	8					
Temperature (F)		75				Begin purge time:	10:40
Conductivity (us/cm)		0.30				End Sampling time:	13:15
pH		7.0				Total time:	02:35
Turbidity (NTU)					17.64		
B-7							
Purged Water (gal.)	56.4	18.8	18.8	18.8			
Temperature (F)		76	75	75		Begin purge time:	10:50
Conductivity (us/cm)		0.30	0.30	0.30		End Sampling time:	13:20
pH		7.0	7.1	7.1		Total time:	02:30
Turbidity (NTU)					7.64		
B-1						Well dry after second casing volume	
Purged Water (gal.)	13.2	6.6	6.6				
Temperature (F)		73	73			Begin purge time:	11:05
Conductivity (us/cm)		0.10	0.10			End Sampling time:	13:25
pH		7.1	7.1			Total time:	02:20
Turbidity (NTU)					12.85		
B-4							
Purged Water (gal.)	41.4	13.8	13.8	13.8			
Temperature (F)		74	74	74		Begin purge time:	11:15
Conductivity (us/cm)		0.30	0.30	0.30		End Sampling time:	13:30
pH		7.0	7.1	7.1		Total time:	02:15
Turbidity (NTU)					7.54		
B-3						Well dry after second casing volume	
Purged Water (gal.)	13	6.5	6.5				
Temperature (F)		74	75			Begin purge time:	11:30
Conductivity (us/cm)		0.20	0.20			End Sampling time:	13:35
pH		7.1	7.1			Total time:	02:05
Turbidity (NTU)					50.2		

Pomona Box
88.003 W. Imperial Hwy. (La Habra)
February 16, 1995

Field Temperature, Conductivity, pH, and Turbidity Data

Sampled by: Eduardo Sanchez

Well	Casing Volume	Casing Vol 1	Casing Vol 2	Casing Vol 3	Sample	Comments	
B-2						Well dry after second casing volume	
Purged Water (gal.)	11.4	5.7	5.7				
Temperature (F)		75	75			Begin purge time:	11:40
Conductivity (us/cm)		0.30	0.30			End Sampling time:	13:40
pH		7.0	7.1			Total time:	02:00
Turbidity (NTU)					12.57		
B-6							
Purged Water (gal.)	45.9	15.3	15.3	15.3			
Temperature (F)		74	74	74		Begin purge time:	11:50
Conductivity (us/cm)		0.30	0.30	0.40		End Sampling time:	13:45
pH		7.1	7.1	7.1		Total time:	01:55
Turbidity (NTU)					4.39		

Since 1968
WAYNE PERRY, INC.
Environmental Remediation, Construction and Consulting

September 26, 1995

Pomona Box Company
301 West Imperial Highway
La Habra, California

Attention: Mr. Don Votaw

Subject: **REVISED REMEDIAL ACTION PLAN**
POMONA BOX COMPANY
301 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA
ORANGE COUNTY HEALTH CARE AGENCY FILE NO
WPI PROJECT NO. 88.003

Wayne Perry Inc., is pleased to submit this revised remedial action plan for treatment of petroleum hydrocarbon impacted soil and groundwater at this location. Remedial action plans were submitted previously in December 1993 and October 1994. Changes in this proposed plan pertain mainly to the number of wells and the treatment system to be utilized.

BACKGROUND

Site Description

The site is occupied by an operating box manufacturing company located on the north site of Imperial Highway west of the intersection of Imperial Highway and Euclid Avenue in the City of La Habra (Figures 1 and 2).

8281 Commonwealth Ave. Buena Park, California 90621 Phone (714) 826-0352 (800) 883-0352 Fax (714) 523-7880

Site History

In December 1986, a single 1,000-gallon steel underground storage tank was removed at this location. As part of the tank removal procedure, soil samples were obtained from the bottom of the tank excavation and analyzed. Results of the laboratory analyses indicated a localized area of petroleum hydrocarbon impacted soil was present in the bottom of the excavation. Analytical results are presented in Table 1. During additional excavation to removal the impacted soil, groundwater and separate-phase hydrocarbons were encountered at a depth of approximately 13 feet. The excavation was backfilled and the information reported to the Orange County Health Care Agency. Accordingly, site assessment work was required to determine the extent of petroleum hydrocarbons in the soil and groundwater.

Between January and September 1987, borings B-1 through B-6 were drilled and sampled. All the borings were converted to groundwater monitoring wells. Well locations are shown on Figure 2. Petroleum hydrocarbons were present in soil samples from borings B-1 through B-5. Subsequent gauging of the groundwater monitoring wells indicated separate-phase hydrocarbons were present in well B-5. Groundwater gauging data is presented in Appendix A.

Manual recovery of separate-phase hydrocarbons was initiated in June 1987. An automated product recovery system was installed and became operational in April 1988.

In September 1989, seven additional underground storage tanks were removed at this location. The approximate tank locations are shown on Figure 2. Soil samples analyzed as part of the removal procedure indicated petroleum hydrocarbons were present in soil beneath the former tanks. Analytical data from the tank removal is presented in Table 3. Borings B-7 through B-10 were drilled and sampled between March 1991 and February 1993 to determine the extent of petroleum hydrocarbons in this area. All four borings were converted to groundwater monitoring wells. Well locations are shown on Figure 2.

Regular groundwater gauging and sampling was initiated in September 1991 and has continued to the present.

A 1-day vapor extraction test was performed in January 1994. A V.R. Systems Model V-3 internal combustion engine was used to apply a vacuum on an individual basis to five groundwater monitoring wells on the property. Testing was conducted at a low level of applied vacuum to avoid excessive upwelling of groundwater. During the test, well gas samples obtained from individual wells contained total petroleum hydrocarbon levels

ranging from 4 ppmv to 4,600 ppmv. Maximum volumetric extraction rate was approximately 2 standard cubic feet per minute from well B-7. Wellhead vacuum to achieve this flow rate was approximately 10 inches of water column.

Laboratory testing of soil gas samples obtained during the vapor extraction test indicated total petroleum hydrocarbon ranged from 110 to 344 ppmv and benzene ranged from 81 to 270 ppbv. Methane was present at 4 to 986 ppmv.

SUBSURFACE CONDITIONS

Based on materials encountered during the various phases of site assessment, the site is underlain by alluvium of Recent Age consisting of sandy clay, sandy silt, clayey silt, and fine- to medium-grained silty sand, clayey sand, and sand.

Gauging data indicates groundwater occurs at depths ranging from 9 to 14 feet. Based on the Groundwater Contour Map, Figure 3, groundwater flow is toward the southwest.

ASSESSMENT OF HYDROCARBON IMPACTS

Review of groundwater gauging and analytical data indicate the persistent occurrence of separate-phase hydrocarbons in wells B-2, B-4, and B-5 and elevated concentrations of dissolved hydrocarbons in groundwater samples from wells B-1 through B-4, B-6, B-7, B-9, and B-10. Data indicates separate-phase hydrocarbons have decreased in thickness overtime and currently does not occur in any of the wells. Dissolved hydrocarbon concentration have remained relatively constant over time. The extent of dissolved phase hydrocarbons is shown on Figure 4.

Review of the available soil analytical data indicates petroleum hydrocarbons are present in the vicinity of the former tank zones. The highest levels of petroleum hydrocarbons have been encountered at a depth of approximately 15 feet, slightly below the present groundwater surface. Distribution of petroleum hydrocarbons in the soil is shown on Figure 5.

PROPOSED SITE REMEDIATION

W. W. Irwin, Inc. is currently under contract to remediate the property located at 101 West Imperial Highway, approximately 450 feet west of the Pomona Box facility. On August 3, 1995, Mr. Don Votaw of Pomona Box Company requested that the possibility of using one treatment unit to remediate the properties at 101 and 301 West Imperial

Highway be evaluated. Discussions were held on August 9, 1995 between representatives of Pomona Box Company, Wayne Perry Inc., and W. W. Irwin, Inc., the consultant for the 101 West Imperial Highway property. Results of the discussions indicated that substantial cost savings would be realized if one treatment unit for both properties was to be constructed and maintained. It was therefore decided that a single treatment unit would be constructed and maintained by W. W. Irwin, Inc. for soil and groundwater remediation activities for the properties at 101 and 301 West Imperial Highway.

Groundwater Extraction Plan

Continuous groundwater withdrawl will be conducted from four wells to depress the groundwater surface and recover dissolved phase hydrocarbons. Initially wells B-2, B-5, B-9, and B-10 will be used for groundwater extraction. It should be noted that piping has been installed to all wells making it possible for additional wells to be utilized for groundwater extraction in the future if it is deemed appropriate. An interceptor trench has been installed along the southern property boundary adjacent to Imperial Highway. Groundwater in the interceptor trench will flow toward well B-10 for removal to the treatment system. The interceptor trench, recovery well, and treatment compound locations are shown on Figure 6.

A line drawing showing water flow through the system and major equipment details is provided as Figure 7. Four pumps will be used to extract groundwater at an average rate of approximately 2 gallons per minute from all four wells. Groundwater will flow via underground piping into a surge tank. When the surge tank is full, a liquid-level sensor will activate a transfer pump that feeds water from the surge tank, through bag type filters, into the first of two carbon canisters connected in series. The first canister (lead canister) will remove the bulk of the dissolved hydrocarbons while the second (polishing canister) ensures that the water is treated to NPDES requirements. The canisters will each contain 1,000 pounds of activated carbon.

Water exiting the second canister will pass through a vertical loop that insures the canister remain hydraulically full at all times. The loop contains a vent that prevents water siphoning from the canisters. The treated waster will be discharged to the storm drain in accordance with NPDES Discharge Permit Number CAG918001.

Vapor Extraction Plan

The efficiency of hydrocarbon vapor extraction from the wells will be enhanced by lowering of the groundwater table to expose hydrocarbon-impacted soils at a depth of approximately 15 feet. Simultaneous groundwater pumping is expected to enhance both volumetric well-gas flow rates and initial hydrocarbon vapor concentration when compared to the flow rates and concentrations measured during the vapor extraction pilot test.

All the on-site wells have been piped to allow for vapor extraction operations. Initially, wells B-1 through B-5 and B-10 will be utilized for vapor extraction operations. Well locations are shown on Figure 6. Selection of wells to be used during vapor extraction operations will vary with time in order to ensure that optimum system performance is maintained. Well heads of all the wells have been modified to permit simultaneous groundwater and vapor extraction. Valves installed in the well boxes will permit independent selection of these wells for vapor extraction.

A schematic drawing of the vapor extraction system is presented on Figure 7. Soil gas containing hydrocarbon vapors will pass through a filter/water knock out vessel and into a thermal oxidizer before discharge to the atmosphere. The unit is capable of handling 500 standard cubic feet per minute air flow. The unit will be operated in accordance with a South Coast Air Quality Management District various locations permit issued for the unit. During the first 90 days of operation, an application for change of conditions will be submitted to modify the permit to a site specific permit.

TREATMENT SYSTEM OPERATION/MAINTENANCE

Operation and maintenance of the soil and groundwater treatment systems will be performed by representatives of W. W. Irwin, Inc. in accordance with NPDES Discharge Permit No. CAG918001 (water) and South Coast Air Quality Management District Permit to Construct No. various locations/site specific permit (vapor extraction). Wayne Perry Inc. personnel will review system data on a regular basis to ensure that the systems are operating at optimum levels with respect to the Pomona Box facility.

SCHEDULE FOR IMPLEMENTATION OF REMEDIAL ACTION PLAN

The treatment systems are currently under construction and are anticipated to be completed in October 1995. Prior to initiation of remediation activities at 301 West Imperial Highway, the remediation system must be approved by the City of La Habra Building Department. An application will be made in September and it is anticipated that approval will be obtained in early October 1995. At this time, it is anticipated that the treatment systems will be activated in November 1995.

CONFIRMATION SAMPLING

Soil

Vapor extraction operations will be performed until influent vapor concentrations are below 100 ppmv non-methane hydrocarbons or until asymptotic hydrocarbon reduction levels are reached for a period of three months.

After the vapor extraction system has been shut down, seven borings will be drilled and sampled to verify the effectiveness of remediation activities. The proposed boring locations are shown on Figure 8. Detailed logs of the materials encountered during drilling/sampling will be obtained by a representative of Wayne Perry, Inc.

Undisturbed soil samples will be obtained at 5-foot intervals to a depth of 20 feet using a hollow stem auger drill rig. Samples will be obtained using a modified California split-spoon sampler and retained in brass tubes. Upon removal from the sampler, the ends of the tubes will be covered with Teflon sheets and capped with plastic end caps. Samples will be identified in the field according to boring number and depth, then placed in an ice chest and chilled. All sampling equipment will be washed in non-phosphate soap and double rinsed in distilled water between uses.

Soils samples will be delivered to a state certified laboratory under chain-of-custody procedures. All samples will be analyzed for total petroleum hydrocarbons as gasoline using EPA Test Method 8015 modified and benzene, toluene, ethyl benzene, and xylenes using EPA Test Method 8020.

A report will be generated presenting the results of the soil analyses with appropriate recommendations for the site.

Groundwater

Groundwater remediation will be performed until dissolved hydrocarbon concentrations in groundwater samples from the individual wells are below maximum contaminant levels (MCL) established for each constituent by the State of California EPA for two consecutive monitoring periods or until asymptotic hydrocarbon reduction levels are reached for a period of three consecutive monitoring episodes.

Upon shut-down of the remediation system, all the site wells will be monitored on a quarterly basis for a minimum period of two years to evaluate the effectiveness of remediation activities. If dissolved hydrocarbon concentration increase during this two year period, additional remediation may be performed including renewed vapor extraction. Groundwater samples will be obtained using currently acceptable methods and analyzed for total petroleum hydrocarbons as gasoline using EPA Test Method 8015 modified and benzene, toluene, ethyl benzene, and xylenes using EPA Test Method 8020.

At the completion of a successful two year post remediation monitoring period, a formal request for site closure will be submitted which will include a summary of site assessment and remediation activities and a summary of all analytical results for soil and groundwater.

This report has been prepared for the exclusive use of Pomona Box Company as it pertains to their site at 301 West Imperial Highway, La Habra, California. No warranty, expressed or implied, is made as to the professional advice present in this report. If you have any question or comments regarding this report, please call the undersigned at (714)826-0352.

Sincerely,

David M. Henry
Registered Geologist 4085

Michael J. Huggins
Registered Geologist 5042

TABLES

TABLE 1, SUMMARY OF SOIL ANALYSES
TANK REMOVAL, DECEMBER 1, 1986

Sample ID.	Total Hydrocarbons mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Xylenes mg/kg
1	777	6	34	12	72
2	ND	ND	ND	ND	ND
Limits of Detection	<10	<0.05	<0.05	<0.1	<0.1

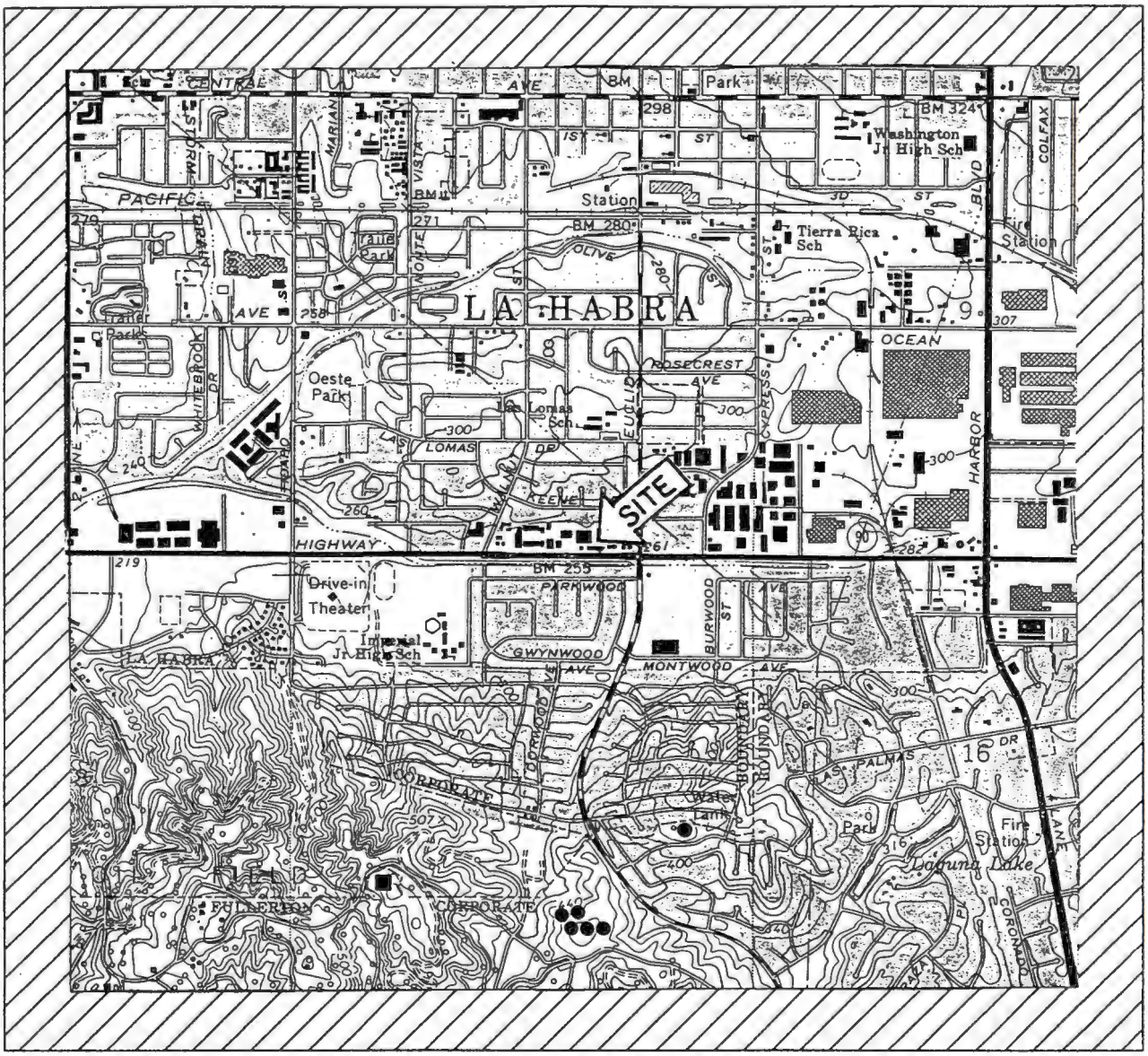
TABLE 2, SUMMARY OF SOIL ANALYSES
BORINGS B-1 THROUGH B-10

Boring Number	Date Drilled	Depth feet	Total Hydrocarbons mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Xylenes mg/kg
B-1	01/28/86	15	7,306	ND	ND	ND	ND
		20	ND	NT	NT	NT	NT
B-2	01/28/86	15	12,720	44	310	172	911
		24	ND	NT	NT	NT	NT
B-3	01/28/86	15	6,237	5	19	18	123
		20	ND	NT	NT	NT	NT
B-4	10/02/87	5	ND	NT	NT	NT	NT
		10	ND	NT	NT	NT	NT
		15	1,290	0.3	0.9	0.8	5.2
B-5	10/02/87	5	12	NT	NT	NT	NT
		10	23	NT	NT	NT	NT
		15	2,940	0.5	13.1	11.7	78.1
		20	16	NT	NT	NT	NT
B-6	10/02/87	5	ND	NT	NT	NT	NT
		10	ND	NT	NT	NT	NT
		15	ND	NT	NT	NT	NT
B-7	03/26/91	5	12	ND	ND	ND	ND
		10	44	0.2	ND	ND	3.4
		15	323	3.6	3.4	6.9	9.7
		20	ND	ND	ND	ND	ND
B-8	07/24/94	5	ND	ND	ND	ND	ND
		15	ND	ND	ND	ND	ND
B-9	02/26/93	5	ND	ND	ND	0.02	0.025
		15	ND	ND	ND	ND	ND
B-10	02/26/95	5	ND	ND	ND	ND	ND
		10	ND	ND	ND	ND	0.02

TABLE 3, SUMMARY OF SOIL ANALYSES
TANK REMOVAL, SEPTEMBER 13, 1989

Sample ID.	Total Hydrocarbons mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Xylenes mg/kg
1 NF1	3.0	ND	ND	ND	0.1
1 SB	ND	ND	ND	ND	ND
2 FW	7	ND	ND	ND	0.6
2EB	6	ND	ND	ND	ND
3FW	80	0.1	0.6	1.0	10.0
3EB	40	ND	ND	0.7	2.0
4 EB	10	ND	ND	ND	ND
4FW	15	ND	ND	ND	ND
5 FB	ND	ND	ND	ND	ND
5 EB	ND	ND	ND	ND	ND
6 FB	ND	ND	ND	ND	ND
7 FB	ND	ND	ND	ND	ND
7 FN	ND	ND	ND	ND	ND

FIGURES



2000' 0 2000' 4000'

SCALE FEET

SOURCE :

7.5 MINUTE U.S.G.S.

QUADRANGLE :

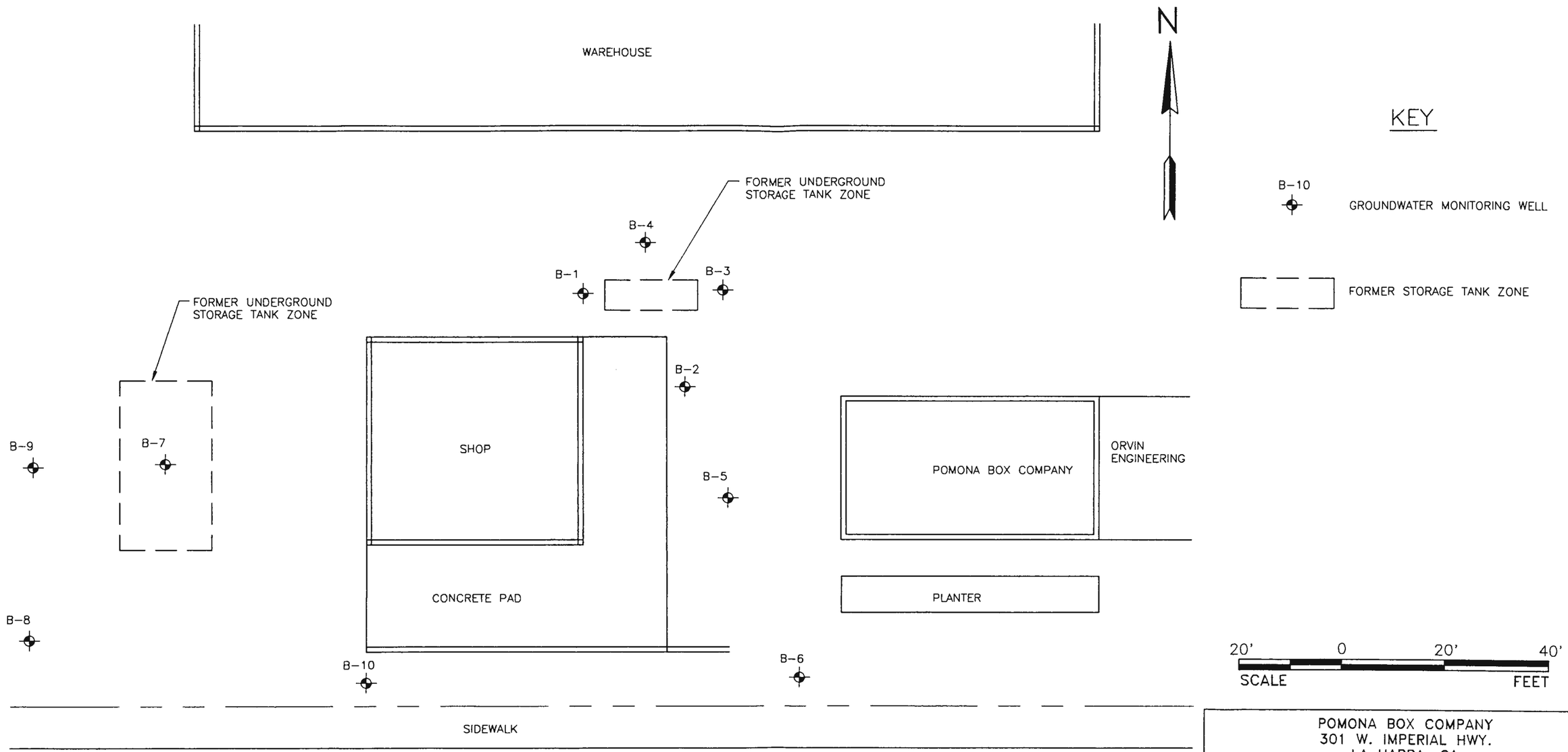
LA HABRA

N

POMONA BOX COMPANY
301 W. IMPERIAL HWY.
LA HABRA, CA

SITE LOCATION MAP

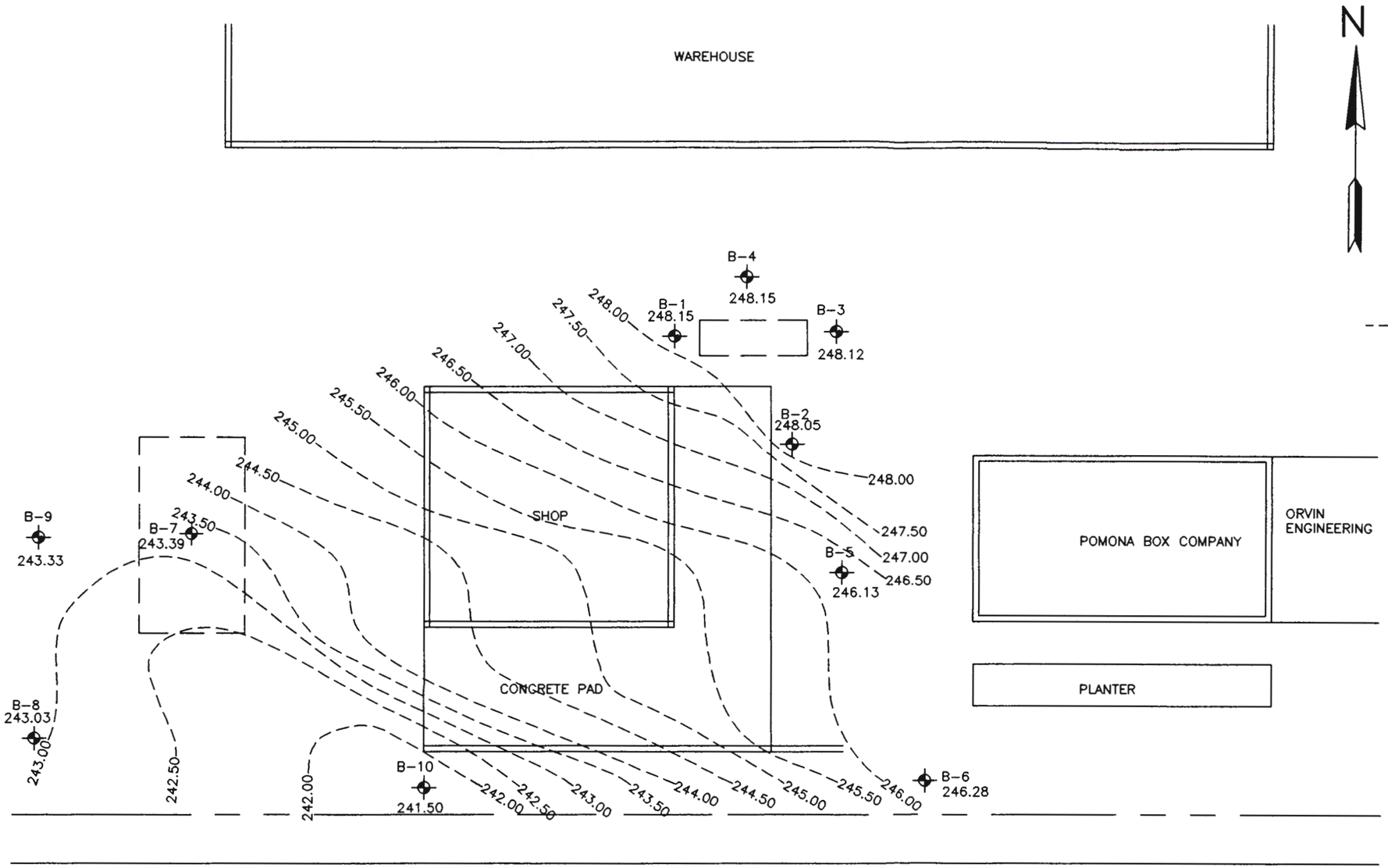
Wayne Perry Environmental Specialists	DWG. NO. 003000SL	CHKD. BY
	PROJ. NO. 88.003	DRAWN BY PROVANCE
	FIG. NO. 1	DATE



POMONA BOX COMPANY
301 W. IMPERIAL HWY.
LA HABRA, CA

PLOT PLAN

WaynePetry ENVIRONMENTAL SPECIALISTS	DWG. NO. 00300001	CHKD. BY
	PROJ. NO. 88.003	DRAWN BY PROVANCE
	FIG. NO. 2	DATE 10/8/94



KEY

B-10 241.50 — MONITORING WELL SHOWING GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL.

---248.00--- GROUNDWATER CONTOUR

CONTOUR INTERVAL = 0.50 FOOT

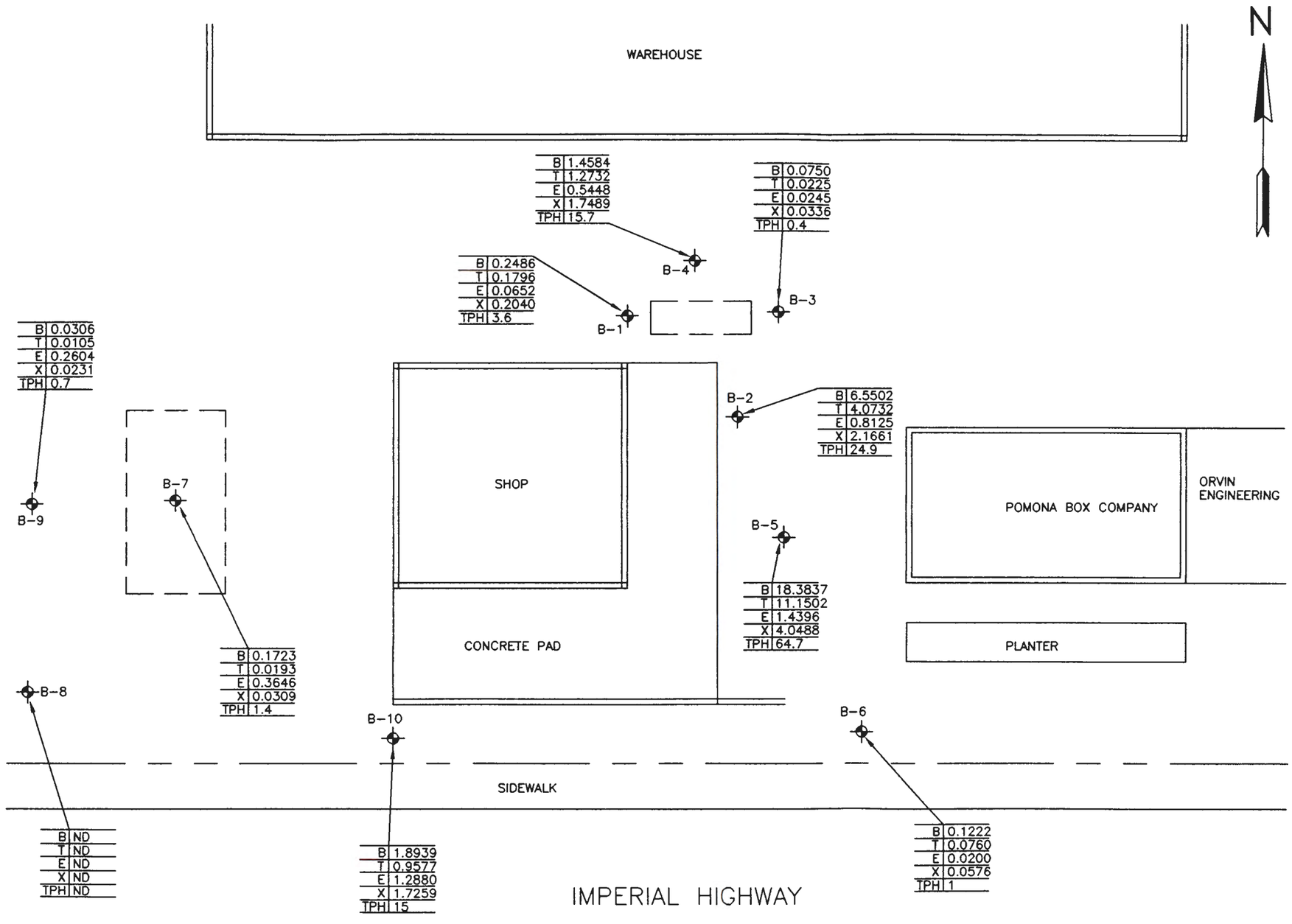
20' 0 20' 40'
SCALE FEET

POMONA BOX COMPANY
301 W. IMPERIAL HWY.
LA HABRA, CA

GROUNDWATER CONTOUR MAP

JUNE 28, 1995

WaynePerry ENVIRONMENTAL SPECIALISTS	DWG. NO. 00300006	CHKD. BY
	PROJ. NO. 88.003	DRAWN BY PROVANCE
	FIG. NO. 3	DATE 9/28/95



KEY

B-10 — GROUNDWATER MONITORING WELL SHOWING DISSOLVED HYDROCARBON CONCENTRATIONS IN mg/L .

NOTE :

1. DATE OF SAMPLING – 7/28/95

B – BENZENE

T – TOLUENE

E – ETHYLBENZENE

X – TOTAL XYLENES

TPH – TOTAL PETROLEUM HYDROCARBONS

FORMER STORAGE TANK ZONE

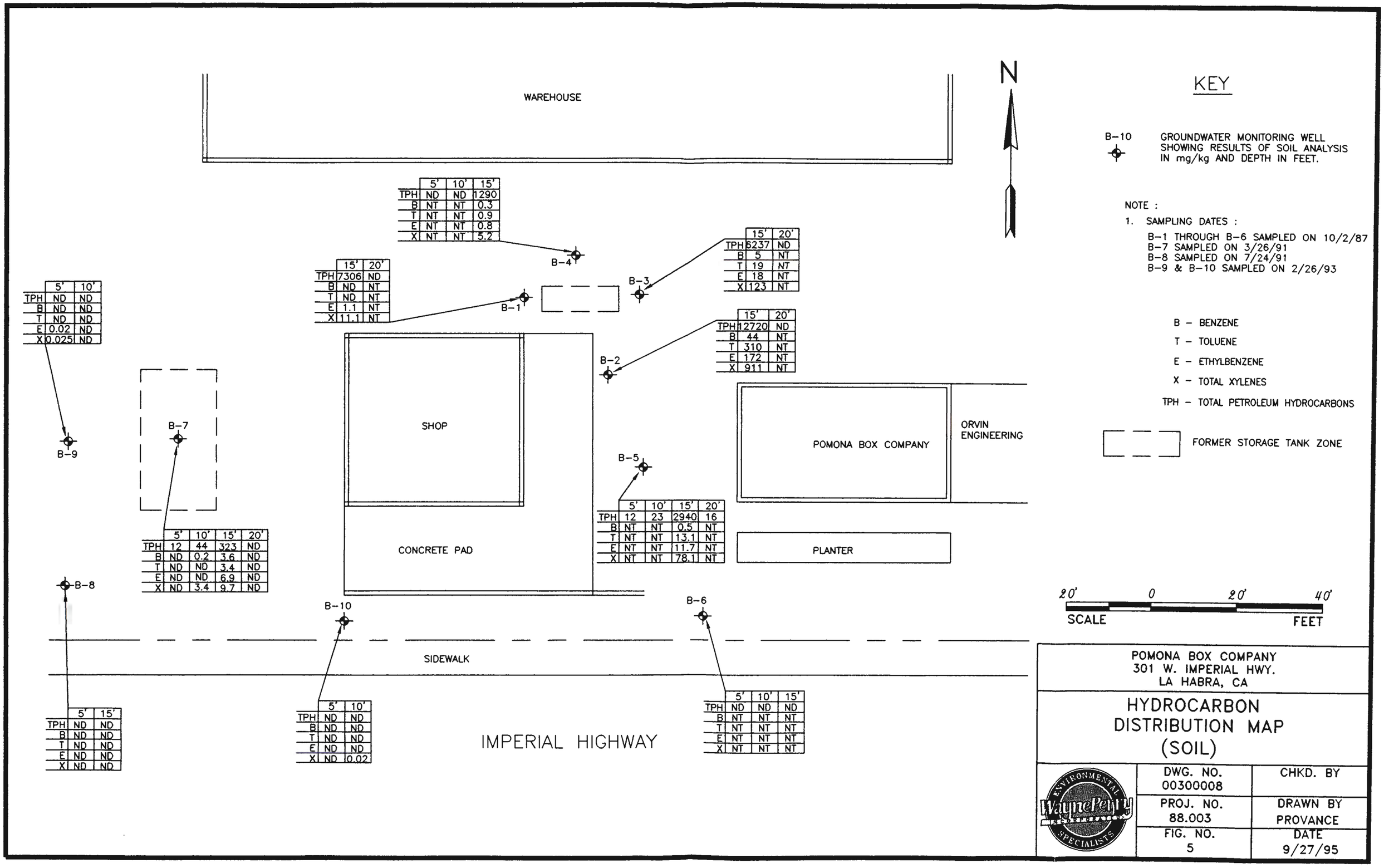
20' 0 20' 40'

SCALE FEET

POMONA BOX COMPANY
301 W. IMPERIAL HWY.
LA HABRA, CA

DISSOLVED HYDROCARBON CONCENTRATION MAP

Wayne Perry Environmental Specialists	DWG. NO. 00300005	CHKD. BY
	PROJ. NO. 88.003	DRAWN BY PROVANCE
	FIG. NO. 4	DATE 9/27/95



	5'	10'	15'
TPH	ND	ND	1290
B	NT	NT	0.3
T	NT	NT	0.9
E	NT	NT	0.8
X	NT	NT	5.2

	15'	20'
TPH	7306	ND
B	ND	NT
T	ND	NT
E	1.1	NT
X	11.1	NT

	15'	20'
TPH	6237	ND
B	5	NT
T	19	NT
E	18	NT
X	123	NT

	15'	20'
TPH	12720	ND
B	44	NT
T	310	NT
E	172	NT
X	911	NT

	5'	10'
TPH	ND	ND
B	ND	ND
T	ND	ND
E	0.02	ND
X	0.025	ND

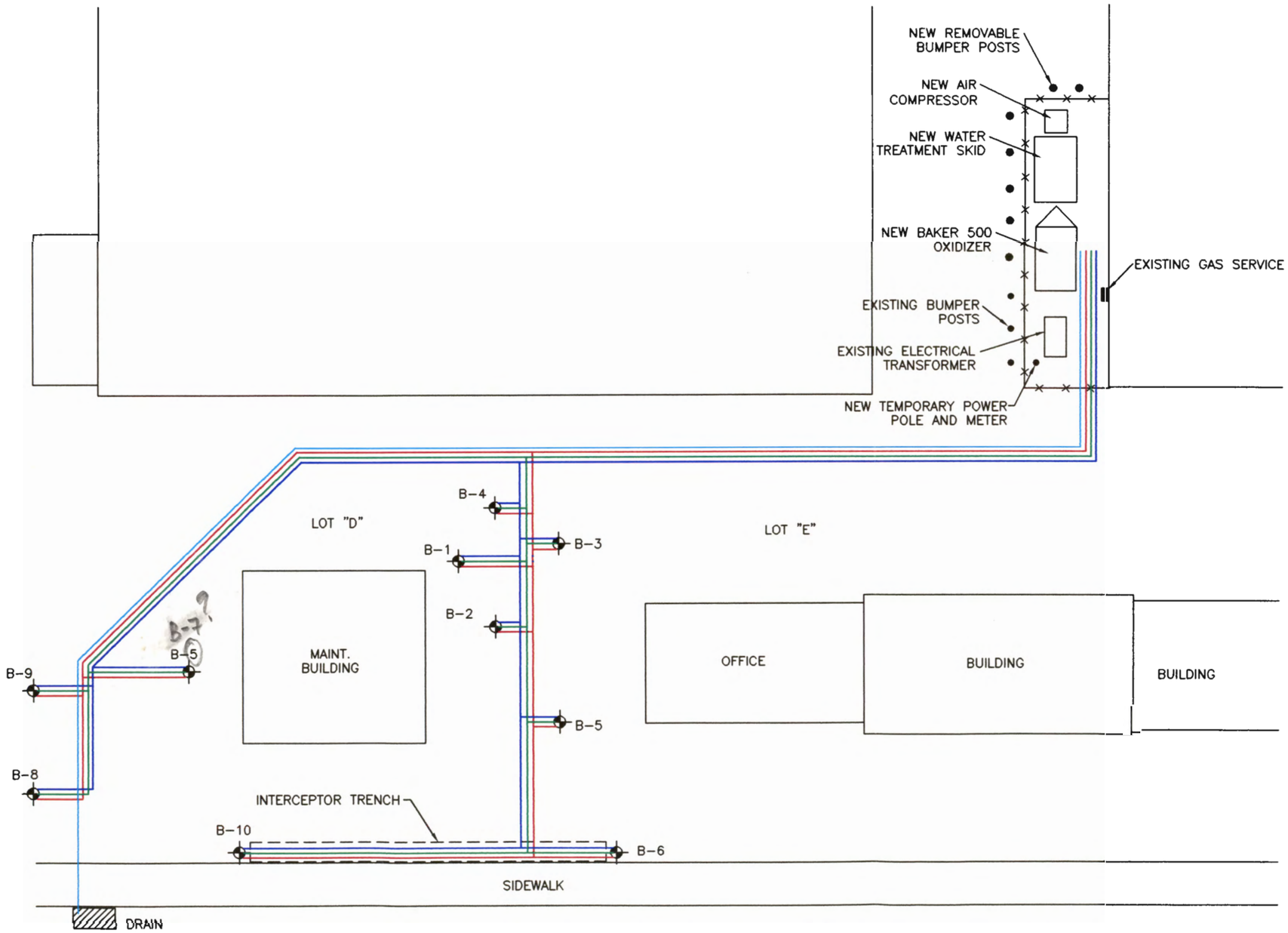
	5'	10'	15'	20'
TPH	12	23	2940	16
B	NT	NT	0.5	NT
T	NT	NT	13.1	NT
E	NT	NT	11.7	NT
X	NT	NT	78.1	NT

	5'	10'	15'	20'
TPH	12	44	323	ND
B	ND	0.2	3.6	ND
T	ND	ND	3.4	ND
E	ND	ND	6.9	ND
X	ND	3.4	9.7	ND

	5'	15'
TPH	ND	ND
B	ND	ND
T	ND	ND
E	ND	ND
X	ND	ND

	5'	10'
TPH	ND	ND
B	ND	ND
T	ND	ND
E	ND	ND
X	ND	0.02

	5'	10'	15'
TPH	ND	ND	ND
B	NT	NT	NT
T	NT	NT	NT
E	NT	NT	NT
X	NT	NT	NT



KEY

B-10 GROUNDWATER / VAPOR EXTRACTION WELL

TREATED WATER DRAIN PIPING

COMPRESSED AIR PIPING

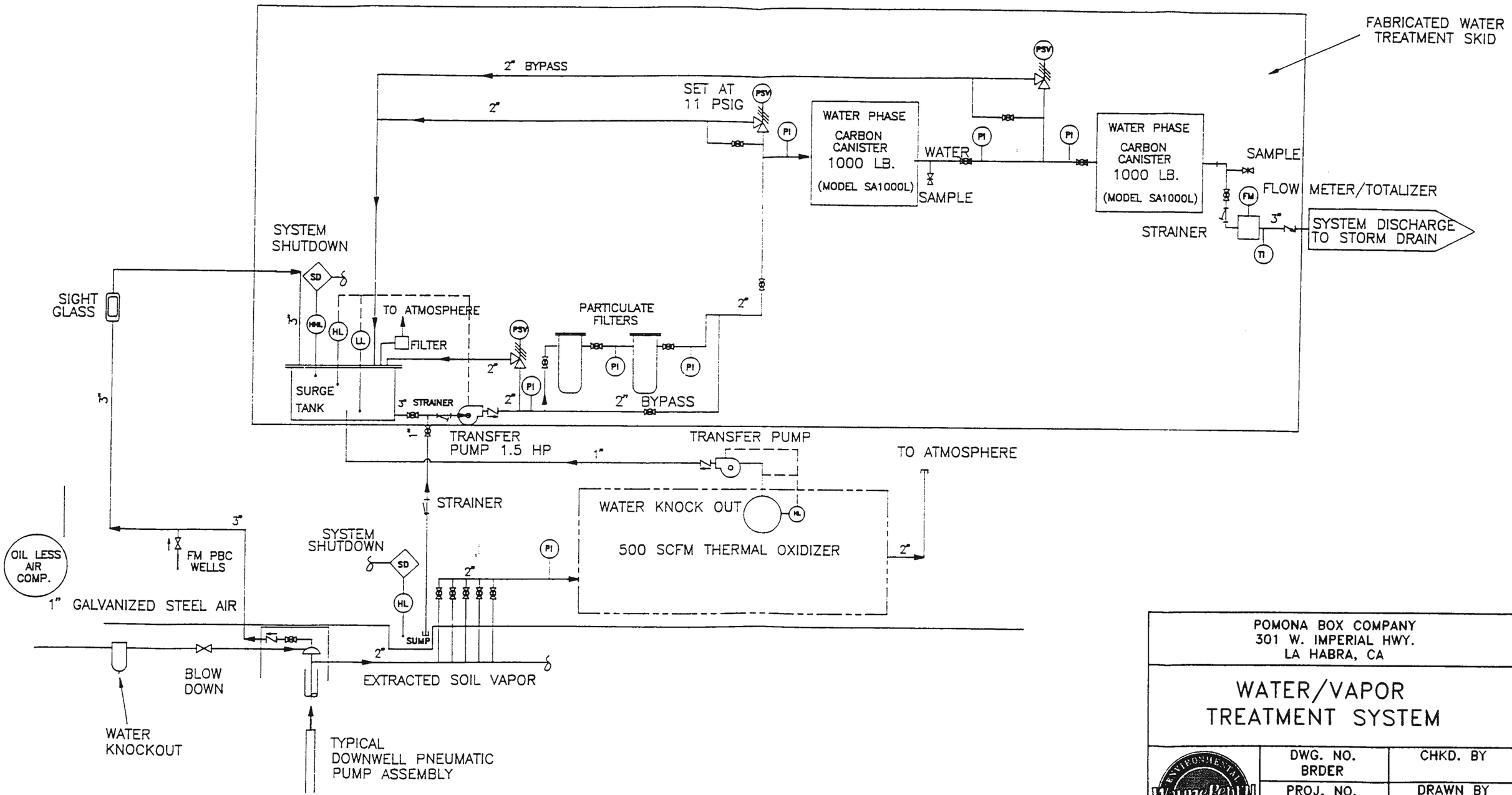
WASTE WATER PIPING

VAPOR EXTRACTION PIPING

POMONA BOX COMPANY
301 W. IMPERIAL HWY.
LA HABRA, CA

WATER/VAPOR TREATMENT SYSTEM

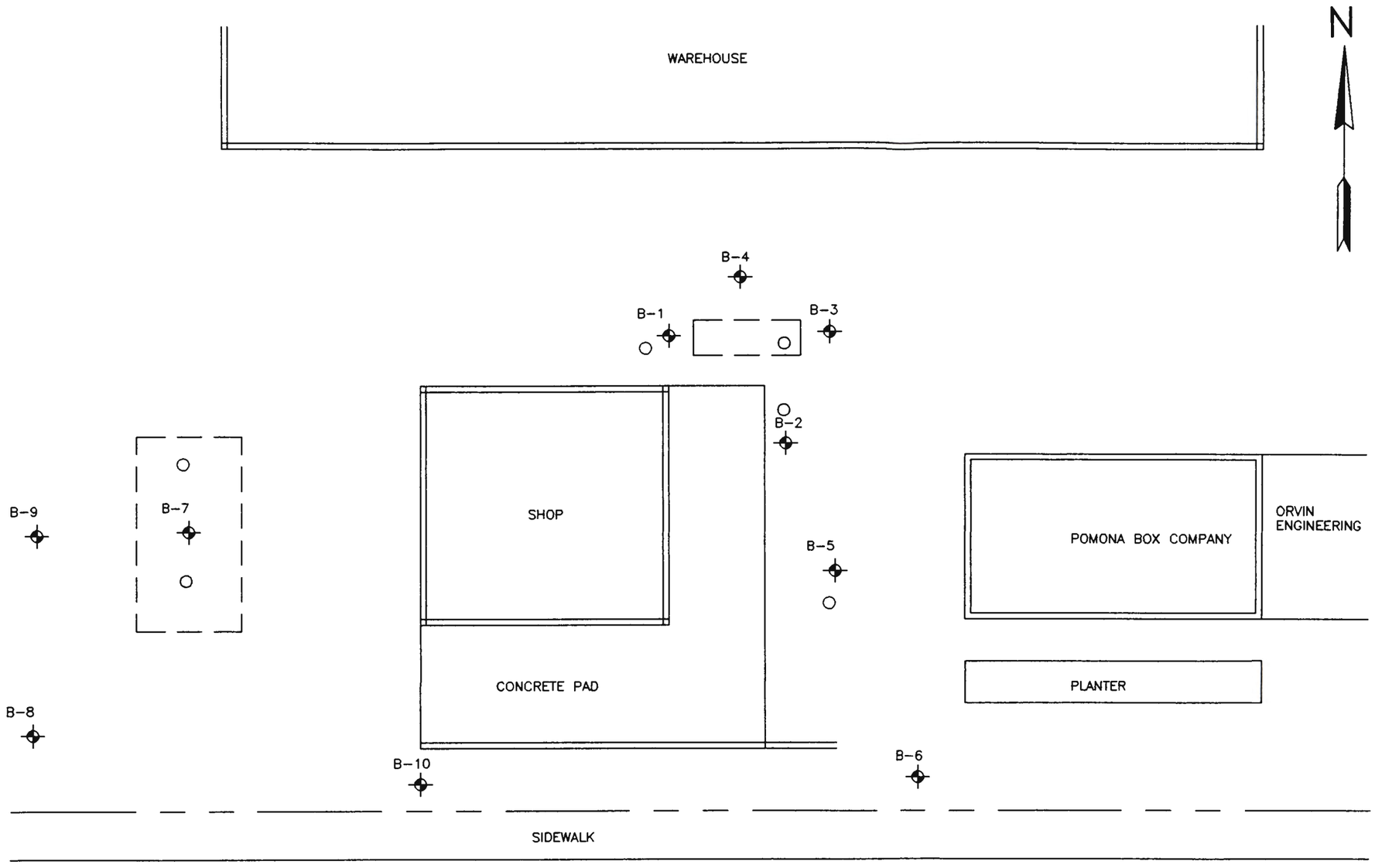
Wayne Perry Inc. Environmental Specialists	DWG. NO. 00300009	CHKD. BY
	PROJ. NO. 88.003	DRAWN BY PROVANCE
	FIG. NO. 6	DATE 9/27/95



POMONA BOX COMPANY
301 W. IMPERIAL HWY.
LA HABRA, CA

WATER/VAPOR TREATMENT SYSTEM

Wayne Perry Environmental Specialists	DWG. NO. BRDER	CHKD. BY
	PROJ. NO. 88.003	DRAWN BY PROVANCE
	FIG. NO. 7	DATE 9/27/95



KEY

B-10 GROUNDWATER MONITORING WELL

PROPOSED VERIFICATION BORING

FORMER STORAGE TANK ZONE

20' 0 20' 40'
SCALE FEET

POMONA BOX COMPANY
301 W. IMPERIAL HWY.
LA HABRA, CA

PLOT PLAN

SHOWING PROPOSED
VERIFICATION BORINGS

Wayne Perry ENVIRONMENTAL SPECIALISTS	DWG. NO. 00300001	CHKD. BY
	PROJ. NO. 88.003	DRAWN BY PROVANCE
	FIG. NO. 8	DATE 9/28/95

APPENDIX A

Groundwater Gauging/Analytical Data

Summary of Gauging Data and Laboratory Analyses
Pomona Box
88.003 W. Imperial Hwy (La Habra)

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
01/05/88	B-01					261.04							Interface probe not working
01/12/88	B-01	14.80	0.00	14.80	246.24	261.04	22.08						
01/22/88	B-01	14.80	0.00	14.80	246.24	261.04	22.20						
02/04/88	B-01	14.75	0.00	14.75	246.29	261.04	21.65						
02/23/88	B-01	14.79	0.00	14.79	246.25	261.04	21.65						
05/23/88	B-01	14.65	0.00	14.65	246.39	261.04							
06/13/88	B-01	14.62	0.00	14.62	246.42	261.04							
06/30/88	B-01	14.63	0.00	14.63	246.41	261.04							
07/13/88	B-01	14.60	0.00	14.60	246.44	261.04							
07/21/88	B-01	14.60	0.00	14.60	246.44	261.04							
08/01/88	B-01	14.55	0.00	14.55	246.49	261.04							
08/09/88	B-01	14.61	0.00	14.61	246.43	261.04							
08/16/88	B-01	14.61	0.00	14.61	246.43	261.04							
09/01/88	B-01	14.65	0.00	14.65	246.39	261.04							
09/07/88	B-01	14.64	0.00	14.64	246.40	261.04							
09/13/88	B-01	14.69	0.00	14.69	246.35	261.04							
09/27/88	B-01	14.72	0.00	14.72	246.32	261.04							
10/05/88	B-01	14.74	0.00	14.74	246.30	261.04							
10/07/88	B-01					261.04							
10/13/88	B-01	14.73	0.00	14.73	246.31	261.04							
10/18/88	B-01	14.74	0.00	14.74	246.30	261.04							
10/26/88	B-01	14.73	0.00	14.73	246.31	261.04							
11/04/88	B-01	14.76	0.00	14.76	246.28	261.04							
11/08/88	B-01	14.75	0.00	14.75	246.29	261.04							
11/17/88	B-01	14.72	0.00	14.72	246.32	261.04							
11/23/88	B-01	14.73	0.00	14.73	246.31	261.04							
12/08/88	B-01	15.37	0.00	15.37	245.67	261.04							
12/14/88	B-01	15.11	0.00	15.11	245.93	261.04	23.90						
12/20/88	B-01	14.60	0.00	14.60	246.44	261.04							
01/05/89	B-01	14.60	0.00	14.60	246.44	261.04							
01/11/89	B-01	14.51	0.00	14.51	246.53	261.04							
01/20/89	B-01	14.57	0.00	14.57	246.47	261.04							
01/25/89	B-01	14.63	0.00	14.63	246.41	261.04							
02/20/89	B-01	14.49	0.00	14.49	246.55	261.04							
03/15/89	B-01	14.50	0.00	14.50	246.54	261.04							
03/27/89	B-01	14.50	0.00	14.50	246.54	261.04							
04/19/89	B-01	14.50	0.00	14.50	246.54	261.04							
05/11/89	B-01	14.53	0.00	14.53	246.51	261.04							
05/25/89	B-01	14.56	0.00	14.56	246.48	261.04							
06/12/89	B-01	14.55	0.00	14.55	246.49	261.04							
06/22/89	B-01	14.56	0.00	14.56	246.48	261.04							
07/12/89	B-01	14.60	0.00	14.60	246.44	261.04							
08/09/89	B-01	14.62	0.00	14.62	246.42	261.04							
08/21/89	B-01	14.60	0.00	14.60	246.44	261.04							
09/08/89	B-01	14.67	0.00	14.67	246.37	261.04							
09/22/89	B-01	14.61	0.00	14.61	246.43	261.04							
10/09/89	B-01	14.67	0.00	14.67	246.37	261.04							
10/20/89	B-01	14.68	0.00	14.68	246.36	261.04							
11/08/89	B-01	14.70	0.01	14.70	246.34	261.04							
12/01/89	B-01	14.74	0.00	14.74	246.30	261.04							
12/15/89	B-01	14.77	0.00	14.77	246.27	261.04							
12/29/89	B-01	14.78	0.01	14.78	246.26	261.04							
01/11/90	B-01	14.78	0.01	14.78	246.26	261.04							
02/16/90	B-01	14.74	0.00	14.74	246.30	261.04							
03/02/90	B-01	14.52	0.00	14.52	246.52	261.04							
03/14/90	B-01	14.62	0.00	14.62	246.42	261.04							
03/28/90	B-01	14.65	0.00	14.65	246.39	261.04							
04/13/90	B-01	14.67	0.00	14.67	246.37	261.04							
04/27/90	B-01	14.68	0.00	14.68	246.36	261.04	22.09						
05/17/90	B-01	14.70	0.00	14.70	246.34	261.04							
06/01/90	B-01	14.62	0.00	14.62	246.42	261.04							
06/21/90	B-01					261.04							
07/17/90	B-01	14.74	0.00	14.74	246.30	261.04							
08/20/90	B-01	14.73	0.00	14.73	246.31	261.04							
09/13/90	B-01	14.76	0.00	14.76	246.28	261.04							
09/28/90	B-01	14.74	0.01	14.74	246.30	261.04							
10/12/90	B-01	14.80	0.00	14.80	246.24	261.04							
10/26/90	B-01	14.78	0.00	14.78	246.26	261.04							
11/28/90	B-01	14.87	0.01	14.87	246.17	261.04							
12/12/90	B-01	14.88	0.01	14.88	246.16	261.04							
01/09/91	B-01	14.71	0.00	14.71	246.33	261.04							
01/18/91	B-01	14.79	0.00	14.79	246.25	261.04	22.15						
02/08/91	B-01	14.87	0.00	14.87	246.17	261.04							
03/04/91	B-01	14.28	0.00	14.28	246.76	261.04							

Summary of Gauging Data and Laboratory Analyses
Pomona Box
88.003 W. Imperial Hwy (La Habra)

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
04/16/91	B-01	14.31	0.00	14.31	246.73	261.04	22.53						
05/23/91	B-01	14.45	0.00	14.45	246.59	261.04							
07/16/91	B-01	14.53	0.00	14.53	246.51	261.04	30.24						
07/19/91	B-01	14.53	0.00	14.53	246.51	261.04	22.22						
07/29/91	B-01	14.51	0.00	14.51	246.53	261.04	22.31						
09/04/91	B-01	14.60	0.00	14.60	246.44	261.04	22.38						Product while bailing
09/25/91	B-01	14.66	0.00	14.66	246.38	261.04	22.54						
10/15/91	B-01	14.67	0.00	14.67	246.37	261.04	22.31						Product while bailing
11/13/91	B-01	14.96	0.01	14.96	246.08	261.04							
12/04/91	B-01	14.99	0.01	14.99	246.05	261.04							
01/30/92	B-01	14.87	0.01	14.87	246.17	261.04	23.45						
04/21/92	B-01	14.02	0.01	14.02	247.02	261.04	23.25						
04/30/92	B-01	14.08	0.01	14.08	246.96	261.04	22.57						
07/02/92	B-01	14.14	0.01	14.14	246.90	261.04	23.45						
10/13/92	B-01	14.22	0.01	14.22	246.82	261.04	23.50						
03/15/93	B-01	12.24	0.00	12.24	248.80	261.04	23.44	27	5.4	1.7	0.7	2.6	
05/05/93	B-01	12.41	0.00	12.41	248.63	261.04	23.27	27	3.5	0.05	0.7	3.3	
07/26/93	B-01	12.92	0.00	12.92	248.12	261.04	23.45	10.6	1.475	0.624	0.504	0.926	
11/30/93	B-01	13.80	0.00	13.80	247.24	261.04	23.45	5.1	0.7664	0.3053	2.056	0.4284	
03/01/94	B-01	13.65	0.00	13.65	247.39	261.04	23.44	9.1	1.1421	0.4079	0.2493	0.5714	
05/04/94	B-01	13.90	0.00	13.90	247.14	261.04	23.45	4.9	1.3403	0.6588	0.2601	0.4864	
07/18/94	B-01	13.90	0.00	13.90	247.14	261.04	23.40	9.9	0.7875	0.3690	0.2649	0.7391	
11/29/94	B-01	14.23	0.00	14.23	246.81	261.04	23.43	5.3	0.5752	0.3318	0.2591	0.4047	
02/16/95	B-01	13.30	0.00	13.30	247.74	261.04	23.50	6.1	0.4542	0.3053	0.0939	0.5686	
05/17/95	B-01	12.71	0.00	12.71	248.33	261.04	23.49	4.3	0.2964	0.1913	0.0945	0.3070	
07/28/95	B-01	12.89	0.00	12.89	248.15	261.04	23.48	3.6	0.2486	0.1796	0.0652	0.2040	
01/05/88	B-02			14.75		261.03							reading product
01/12/88	B-02	14.69	0.13	14.56	246.44	261.03	22.95						
01/22/88	B-02	14.77	0.17	14.60	246.39	261.03	23.43						
02/04/88	B-02	14.80	0.10	14.70	246.30	261.03	22.35						
02/23/88	B-02	14.86	0.13	14.73	246.27	261.03	2.35						
05/23/88	B-02	14.73	0.00	14.73	246.30	261.03							
06/13/88	B-02	14.75	0.10	14.65	246.36	261.03							
06/30/88	B-02	14.68	0.00	14.68	246.35	261.03							
07/13/88	B-02	14.65	0.01	14.64	246.39	261.03							
07/21/88	B-02	14.65	0.00	14.65	246.38	261.03							
08/01/88	B-02	14.63	0.00	14.63	246.40	261.03							
08/09/88	B-02	14.68	0.00	14.68	246.35	261.03							
08/16/88	B-02	14.66	0.00	14.66	246.37	261.03							
09/01/88	B-02	15.20	0.00	15.20	245.83	261.03							
09/07/88	B-02	14.52	0.00	14.52	246.51	261.03							
09/13/88	B-02	14.72	0.00	14.72	246.31	261.03							
09/27/88	B-02	14.75	0.00	14.75	246.28	261.03							
10/05/88	B-02	14.68	0.00	14.68	246.35	261.03							
10/07/88	B-02					261.03							
10/13/88	B-02	14.77	0.00	14.77	246.26	261.03							
10/18/88	B-02	14.78	0.00	14.78	246.25	261.03							
10/26/88	B-02	14.78	0.00	14.78	246.25	261.03							
11/04/88	B-02	14.83	0.00	14.83	246.20	261.03							
11/08/88	B-02	14.80	0.00	14.80	246.23	261.03							
11/17/88	B-02	14.77	0.00	14.77	246.26	261.03							
11/23/88	B-02	14.77	0.00	14.77	246.26	261.03							
12/08/88	B-02	15.20	0.00	15.20	245.83	261.03							
12/14/88	B-02	14.84	0.00	14.84	246.19	261.03	23.10						
12/20/88	B-02					261.03							
01/05/89	B-02	14.55	0.00	14.55	246.48	261.03							
01/11/89	B-02	14.57	0.00	14.57	246.46	261.03							
01/20/89	B-02	14.62	0.00	14.62	246.41	261.03							
01/25/89	B-02	14.68	0.00	14.68	246.35	261.03							
02/20/89	B-02	14.56	0.00	14.56	246.47	261.03							
03/15/89	B-02	14.55	0.00	14.55	246.48	261.03							
03/27/89	B-02	14.55	0.00	14.55	246.48	261.03							
04/19/89	B-02	14.57	0.00	14.57	246.46	261.03							
05/11/89	B-02	14.60	0.00	14.60	246.43	261.03							
05/25/89	B-02	14.60	0.00	14.60	246.43	261.03							
06/12/89	B-02	14.59	0.00	14.59	246.44	261.03							
06/22/89	B-02	14.75	0.00	14.75	246.28	261.03							
07/12/89	B-02	14.64	0.00	14.64	246.39	261.03							
08/09/89	B-02	14.69	0.00	14.69	246.34	261.03							
08/21/89	B-02	14.66	0.00	14.66	246.37	261.03							
09/08/89	B-02	14.68	0.00	14.68	246.35	261.03							
09/22/89	B-02	14.65	0.00	14.65	246.38	261.03							
10/09/89	B-02	14.73	0.01	14.73	246.30	261.03							

Summary of Gauging Data and Laboratory Analyses
Pomona Box
88.003 W. Imperial Hwy (La Habra)

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
10/20/89	B-02	14.70	0.00	14.70	246.33	261.03							
11/08/89	B-02	14.75	0.01	14.75	246.28	261.03							
12/01/89	B-02	14.79	0.00	14.79	246.24	261.03							
12/15/89	B-02	14.81	0.01	14.81	246.22	261.03							
12/29/89	B-02	14.84	0.01	14.84	246.19	261.03							
01/11/90	B-02	14.83	0.00	14.83	246.20	261.03							
02/16/90	B-02	14.79	0.00	14.79	246.24	261.03							
03/02/90	B-02	14.57	0.00	14.57	246.46	261.03							
03/14/90	B-02	14.69	0.00	14.69	246.34	261.03							
03/28/90	B-02	14.69	0.00	14.69	246.34	261.03							
04/13/90	B-02	14.64	0.00	14.64	246.39	261.03							
04/27/90	B-02	14.73	0.00	14.73	246.30	261.03	22.27						
05/17/90	B-02	14.74	0.00	14.74	246.29	261.03							
06/01/90	B-02	14.64	0.00	14.64	246.39	261.03							
06/21/90	B-02	14.73	0.00	14.73	246.30	261.03							
07/17/90	B-02	14.80	0.00	14.80	246.23	261.03							
08/20/90	B-02	14.76	0.00	14.76	246.27	261.03							
09/13/90	B-02	14.80	0.00	14.80	246.23	261.03							
09/28/90	B-02	14.80	0.01	14.80	246.23	261.03							
10/12/90	B-02	14.84	0.00	14.84	246.19	261.03							
10/26/90	B-02	14.82	0.00	14.82	246.21	261.03							
11/28/90	B-02	14.91	0.01	14.91	246.12	261.03							
12/12/90	B-02	14.92	0.00	14.91	246.12	261.03							
01/09/91	B-02	14.76	0.01	14.76	246.27	261.03							
01/18/91	B-02	14.85	0.00	14.85	246.18	261.03	22.87						
02/08/91	B-02	14.91	0.00	14.91	246.12	261.03							
03/04/91	B-02	14.30	0.00	14.30	246.74	261.03							
04/16/91	B-02	14.37	0.00	14.37	246.66	261.03	23.36						
05/23/91	B-02	14.49	0.01	14.49	246.54	261.03							
07/16/91	B-02	14.58	0.00	14.58	246.46	261.03	30.88						
07/19/91	B-02	14.57	0.00	14.57	246.46	261.03	23.05						
07/29/91	B-02	14.56	0.00	14.56	246.47	261.03	23.29						
09/04/91	B-02	14.66	0.00	14.66	246.37	261.03	22.55						Product while bailing
09/25/91	B-02	14.70	0.00	14.70	246.33	261.03	23.45						
10/15/91	B-02	14.72	0.00	14.72	246.31	261.03	23.10						Product while bailing
11/13/91	B-02	15.00	0.01	15.00	246.03	261.03							
12/04/91	B-02	15.03	0.01	15.03	246.00	261.03							
01/30/92	B-02	14.91	0.01	14.91	246.12	261.03	23.37						
04/21/92	B-02	14.08	0.01	14.08	246.95	261.03	22.30						
04/30/92	B-02	14.14	0.00	14.14	246.89	261.03	21.74						
07/02/92	B-02	14.20	0.01	14.20	246.83	261.03	22.61						
10/13/92	B-02	14.41	0.00	14.41	246.62	261.03	22.55						
03/15/93	B-02	12.37	0.00	12.37	248.66	261.03	22.47	31	5.5	4.7	0.9	3.3	
05/05/93	B-02	12.54	0.00	12.54	248.49	261.03	22.43	62	4	4	7	2	
07/26/93	B-02	13.03	0.00	13.03	248.00	261.03	23.10	12.9	1.147	1.313	0.833	1.258	
11/30/93	B-02	13.75	0.00	13.75	247.28	261.03	23.05	15.2	3.5841	2.7430	0.5481	1.2833	
03/01/94	B-02	13.73	0.00	13.73	247.30	261.03	23.26	16.8	3.7849	2.4644	0.4799	1.1632	
05/04/94	B-02	13.90	0.00	13.90	247.13	261.03	22.50	18.2	7.0141	4.4719	0.6200	1.6159	
07/18/94	B-02	13.97	0.00	13.97	247.06	261.03	22.98	20.3	7.6777	5.4200	0.8343	2.4478	
11/29/94	B-02	14.30	0.00	14.30	246.73	261.03	23.02	23.3	4.5126	3.1854	0.5314	1.6205	
02/16/95	B-02	13.43	0.00	13.43	247.60	261.03	22.53	18.9	3.8089	3.0267	0.5520	1.5876	
05/17/95	B-02	12.81	0.00	12.81	248.22	261.03	23.03	20.6	4.7441	3.3548	0.5610	1.9770	
07/28/95	B-02	12.98	0.00	12.98	248.05	261.03	22.52	24.9	6.5502	4.0732	0.8125	2.1661	
01/05/88	B-03			11.65		260.89							thickness
01/12/88	B-03	14.56	0.00	14.56	246.33	260.89	23.00						
01/22/88	B-03	14.40	0.00	14.40	246.49	260.89	23.13						
02/04/88	B-03	14.50	0.00	14.50	246.39	260.89	23.01						
02/23/88	B-03	14.56	0.00	14.56	246.33	260.89	23.01						
05/23/88	B-03	14.47	0.00	14.47	246.42	260.89							
06/13/88	B-03	14.46	0.00	14.46	246.43	260.89							
06/30/88	B-03	14.47	0.00	14.47	246.42	260.89							
07/13/88	B-03	14.42	0.00	14.42	246.47	260.89							
07/21/88	B-03	14.43	0.00	14.43	246.46	260.89							
08/01/88	B-03	14.40	0.00	14.40	246.49	260.89							
08/09/88	B-03	14.45	0.00	14.45	246.44	260.89							
08/16/88	B-03	14.45	0.00	14.45	246.44	260.89							
09/01/88	B-03	14.50	0.00	14.50	246.39	260.89							
09/07/88	B-03	15.18	0.00	15.18	245.71	260.89							
09/13/88	B-03	14.50	0.00	14.50	246.39	260.89							
09/27/88	B-03	14.52	0.00	14.52	246.37	260.89							
10/05/88	B-03	14.52	0.00	14.52	246.37	260.89							
10/07/88	B-03					260.89							
10/13/88	B-03	14.59	0.00	14.59	246.30	260.89							

Summary of Gauging Data and Laboratory Analyses
Pomona Box
88.003 W. Imperial Hwy (La Habra)

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
10/18/88	B-03	14.63	0.00	14.63	246.26	260.89							
10/26/88	B-03	14.58	0.00	14.58	246.31	260.89							
11/04/88	B-03	14.64	0.00	14.64	246.25	260.89							
11/08/88	B-03	14.58	0.00	14.58	246.31	260.89							
11/17/88	B-03	14.54	0.00	14.54	246.35	260.89							
11/23/88	B-03	14.57	0.00	14.57	246.32	260.89							
12/08/88	B-03	14.82	0.00	14.82	246.07	260.89							
12/14/88	B-03	14.65	0.00	14.65	246.24	260.89	23.13						
12/20/88	B-03	14.45	0.00	14.45	246.44	260.89							
01/05/89	B-03	14.50	0.00	14.50	246.39	260.89							
01/11/89	B-03	14.33	0.00	14.33	246.56	260.89							
01/20/89	B-03	14.40	0.00	14.40	246.49	260.89							
01/25/89	B-03	14.45	0.00	14.45	246.44	260.89							
02/20/89	B-03	14.35	0.00	14.35	246.54	260.89							
03/15/89	B-03	14.35	0.00	14.35	246.54	260.89							
03/27/89	B-03	14.31	0.00	14.31	246.58	260.89							
04/19/89	B-03	14.35	0.00	14.35	246.54	260.89							
05/11/89	B-03	14.39	0.00	14.39	246.50	260.89							
05/25/89	B-03	14.37	0.00	14.37	246.52	260.89							
06/12/89	B-03	14.38	0.00	14.38	246.51	260.89							
06/22/89	B-03	14.40	0.00	14.40	246.49	260.89							
07/12/89	B-03	14.41	0.00	14.41	246.48	260.89							
08/09/89	B-03	14.46	0.00	14.46	246.43	260.89							
08/21/89	B-03	14.45	0.00	14.45	246.44	260.89							
09/08/89	B-03	14.47	0.00	14.47	246.42	260.89							
09/22/89	B-03	14.44	0.01	14.44	246.45	260.89							
10/09/89	B-03	14.52	0.00	14.52	246.37	260.89							
10/20/89	B-03	14.50	0.00	14.50	246.39	260.89							
11/08/89	B-03	14.53	0.00	14.53	246.36	260.89							
12/01/89	B-03	14.59	0.00	14.59	246.30	260.89							
12/15/89	B-03	14.59	0.00	14.59	246.30	260.89							
12/29/89	B-03	14.62	0.00	14.62	246.27	260.89							
01/11/90	B-03	14.62	0.01	14.62	246.27	260.89							
02/16/90	B-03	14.57	0.00	14.57	246.32	260.89							
03/02/90	B-03	14.35	0.00	14.35	246.54	260.89							
03/14/90	B-03	14.46	0.00	14.46	246.43	260.89							
03/28/90	B-03	14.46	0.00	14.46	246.43	260.89							
04/13/90	B-03	14.49	0.00	14.49	246.40	260.89							
04/27/90	B-03	14.51	0.00	14.51	246.38	260.89	22.28						
05/17/90	B-03	14.54	0.00	14.54	246.35	260.89							
06/01/90	B-03	14.45	0.00	14.45	246.44	260.89							
06/21/90	B-03	14.53	0.00	14.53	246.36	260.89							
07/17/90	B-03	14.59	0.00	14.59	246.30	260.89							
08/20/90	B-03	14.56	0.00	14.56	246.33	260.89							
09/13/90	B-03	14.59	0.00	14.59	246.30	260.89							
09/28/90	B-03	14.58	0.00	14.58	246.31	260.89							
10/12/90	B-03	14.63	0.00	14.63	246.26	260.89							
10/26/90	B-03	14.61	0.00	14.61	246.28	260.89							
11/28/90	B-03	14.70	0.00	14.70	246.19	260.89							
12/12/90	B-03	14.70	0.00	14.70	246.19	260.89							
01/09/91	B-03	14.36	0.00	14.36	246.54	260.89							
01/18/91	B-03	14.64	0.00	14.64	246.25	260.89	22.92						
02/08/91	B-03	14.70	0.00	14.70	246.19	260.89							
03/04/91	B-03	14.09	0.00	14.09	246.80	260.89							
04/16/91	B-03	14.17	0.00	14.17	246.72	260.89	23.35						
05/23/91	B-03	14.28	0.00	14.28	246.61	260.89							
07/16/91	B-03	14.37	0.00	14.37	246.53	260.89	30.56						
07/19/91	B-03	14.35	0.00	14.35	246.54	260.89	23.04						
07/29/91	B-03	14.35	0.00	14.35	246.54	260.89	23.02						
09/04/91	B-03	14.45	0.00	14.45	246.44	260.89	23.09						Product while bailing
09/25/91	B-03	14.50	0.00	14.50	246.39	260.89	23.26						
10/15/91	B-03	14.51	0.00	14.51	246.38	260.89	23.16						Product while bailing
11/13/91	B-03	14.80	0.01	14.80	246.09	260.89							
12/04/91	B-03	14.83	0.01	14.82	246.07	260.89							
01/30/92	B-03	14.72	0.01	14.72	246.17	260.89	23.20						
04/21/92	B-03	13.87	0.01	13.87	247.02	260.89	23.00						
04/30/92	B-03	13.93	0.00	13.93	246.96	260.89	22.30						
07/02/92	B-03	14.00	0.01	14.00	246.89	260.89	23.20						
10/13/92	B-03	14.21	0.00	14.21	246.68	260.89	23.17						
03/15/93	B-03	12.19	0.00	12.19	248.70	260.89	23.19	7.5	0.2	0.2	0.4	0.6	
05/05/93	B-03	12.32	0.00	12.32	248.57	260.89	23.03	4.5	0.2	0.06	ND	0.4	
07/26/93	B-03	12.80	0.00	12.80	248.09	260.89	23.08	4.3	0.367	0.172	0.065	0.274	
11/30/93	B-03	13.60	0.00	13.60	247.29	260.89	23.16	0.8	0.1277	0.0424	0.0485	0.0810	
03/01/94	B-03	13.53	0.00	13.53	247.36	260.89	23.19	0.8	0.0910	0.0277	0.0366	0.0437	

Summary of Gauging Data and Laboratory Analyses
Pomona Box
88.003 W. Imperial Hwy (La Habra)

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
05/04/94	B-03	13.62	0.00	13.62	247.27	260.89	23.17	0.4	0.0830	0.0336	0.0265	0.0381	
07/18/94	B-03	13.75	0.00	13.75	247.14	260.89	23.16	0.7	0.0541	0.0263	0.0198	0.0343	
11/29/94	B-03	14.09	0.00	14.09	246.80	260.89	23.16	0.4	0.0662	0.0227	0.0117	0.0347	
02/16/95	B-03	13.19	0.00	13.19	247.70	260.89	23.22	0.6	0.0374	0.0200	0.0278	0.0551	
05/17/95	B-03	12.61	0.00	12.61	248.28	260.89	24.12	0.5	0.1040	0.0181	0.0213	0.0279	
07/28/95	B-03	12.77	0.00	12.77	248.12	260.89	23.20	0.4	0.0750	0.0225	0.0245	0.0336	
01/05/88	B-04					261.56							
01/12/88	B-04	15.19	0.00	15.19	246.37	261.56	35.04						
01/22/88	B-04	15.11	0.00	15.11	246.45	261.56	35.10						
02/04/88	B-04	15.20	0.00	15.20	246.36	261.56	35.00						
02/23/88	B-04	15.36	0.00	15.36	246.20	261.56	35.00						
05/23/88	B-04	15.17	0.00	15.17	246.39	261.56							
06/13/88	B-04	15.20	0.00	15.20	246.36	261.56							
06/30/88	B-04	15.17	0.00	15.17	246.39	261.56							
07/13/88	B-04	15.11	0.00	15.11	246.45	261.56							
07/21/86	B-04	15.13	0.00	15.13	246.43	261.56							
08/01/88	B-04	15.12	0.00	15.12	246.44	261.56							
08/09/88	B-04	15.15	0.00	15.15	246.41	261.56							
08/16/88	B-04	15.14	0.00	15.14	246.42	261.56							
09/01/88	B-04	15.20	0.00	15.20	246.36	261.56							
09/07/88	B-04	14.62	0.00	14.62	246.94	261.56							
09/13/88	B-04	15.20	0.00	15.20	246.36	261.56							
09/27/88	B-04	15.23	0.00	15.23	246.33	261.56							
10/05/88	B-04	15.18	0.00	15.18	246.38	261.56							
10/07/88	B-04					261.56							
10/13/88	B-04	15.26	0.00	15.26	246.30	261.56							
10/18/88	B-04	15.27	0.00	15.27	246.29	261.56							
10/26/88	B-04	15.25	0.00	15.25	246.31	261.56							
11/04/88	B-04	15.30	0.00	15.30	246.26	261.56							
11/08/88	B-04	15.27	0.00	15.27	246.29	261.56							
11/17/88	B-04	15.23	0.00	15.23	246.33	261.56							
11/23/88	B-04	15.26	0.00	15.26	246.30	261.56							
12/08/88	B-04	14.48	0.00	14.48	247.08	261.56							
12/14/88	B-04	15.34	0.00	15.34	246.22	261.56	35.70						
12/20/88	B-04	15.13	0.00	15.13	246.43	261.56							
01/05/89	B-04	15.10	0.00	15.10	246.46	261.56							
01/11/89	B-04	15.04	0.00	15.04	246.52	261.56							
01/20/89	B-04	15.09	0.00	15.09	246.47	261.56							
01/25/89	B-04	15.17	0.00	15.17	246.39	261.56							
02/20/89	B-04	15.03	0.00	15.03	246.53	261.56							
03/15/89	B-04	15.03	0.00	15.03	246.53	261.56							
03/27/89	B-04	15.00	0.00	15.00	246.56	261.56							
04/19/89	B-04	15.03	0.00	15.03	246.53	261.56							
05/11/89	B-04	15.06	0.00	15.06	246.50	261.56							
05/25/89	B-04	15.10	0.00	15.10	246.46	261.56							
06/12/89	B-04	15.07	0.00	15.07	246.49	261.56							
06/22/89	B-04	15.15	0.00	15.15	246.41	261.56							
07/12/89	B-04	15.12	0.00	15.12	246.44	261.56							
08/09/89	B-04	15.15	0.00	15.15	246.41	261.56							
08/21/89	B-04	15.15	0.00	15.15	246.41	261.56							
09/08/89	B-04	15.15	0.00	15.15	246.41	261.56							
09/22/89	B-04	15.13	0.01	15.13	246.43	261.56							
10/09/89	B-04	15.19	0.00	15.19	246.37	261.56							
10/20/89	B-04	15.19	0.00	15.19	246.37	261.56							
11/08/89	B-04	15.23	0.00	15.23	246.33	261.56							
12/01/89	B-04	15.27	0.00	15.27	246.29	261.56							
12/15/89	B-04	15.29	0.00	15.29	248.27	261.56							
12/29/89	B-04	15.30	0.00	15.30	246.26	261.56							
01/11/90	B-04	15.31	0.00	15.31	246.25	261.56							
02/16/90	B-04	15.26	0.00	15.26	246.30	261.56							
03/02/90	B-04	15.06	0.00	15.06	246.50	261.56							
03/14/90	B-04	15.16	0.00	15.16	246.40	261.56							
03/28/90	B-04	15.15	0.00	15.15	246.41	261.56							
04/13/90	B-04	15.19	0.00	15.19	246.37	261.56							
04/27/90	B-04	15.20	0.00	15.20	246.36	261.56	34.90						
05/17/90	B-04	15.27	0.00	15.27	246.29	261.56							
06/01/90	B-04	15.15	0.00	15.15	246.41	261.56							
06/21/90	B-04	14.68	0.00	14.68	246.88	261.56							
07/17/90	B-04	15.29	0.00	15.29	246.27	261.56							
08/20/90	B-04	15.25	0.00	15.25	246.31	261.56							
09/13/90	B-04	15.27	0.00	15.27	246.29	261.56							
09/28/90	B-04	15.28	0.00	15.28	246.28	261.56							
10/12/90	B-04	15.33	0.00	15.33	246.23	261.56							

Summary of Gauging Data and Laboratory Analyses
Pomona Box
88.003 W. Imperial Hwy (La Habra)

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
10/26/90	B-04	15.31	0.00	15.31	246.25	261.56							
11/28/90	B-04	15.39	0.00	15.39	246.17	261.56							
12/12/90	B-04	15.40	0.00	15.40	246.17	261.56							
01/09/91	B-04	15.25	0.00	15.25	246.32	261.56							
01/18/91	B-04	15.33	0.00	15.33	246.23	261.56	34.96						
02/08/91	B-04	15.39	0.00	15.39	246.17	261.56							
03/04/91	B-04	14.78	0.00	14.78	246.78	261.56							
04/16/91	B-04	14.85	0.00	14.85	246.71	261.56	35.35						
05/23/91	B-04	14.97	0.00	14.97	246.59	261.56							
07/16/91	B-04	15.07	0.00	15.07	246.50	261.56	42.89						
07/19/91	B-04	15.04	0.00	15.04	246.52	261.56	35.04						
07/29/91	B-04	15.04	0.00	15.04	246.52	261.56	35.04						
09/04/91	B-04	15.15	0.00	15.15	246.41	261.56	35.90	0.8	0.1	0.02	ND	0.08	
09/25/91	B-04	15.18	0.00	15.18	246.38	261.56	35.18						
10/15/91	B-04	15.20	0.00	15.20	246.36	261.56	35.08	4.5	0.7	0.5	0.04	0.5	
11/13/91	B-04	15.58	0.13	15.45	246.08	261.56							
12/04/91	B-04	15.83	0.41	15.42	246.04	261.56							
01/30/92	B-04	15.61	0.28	15.33	246.16	261.56	35.05						
04/21/92	B-04	14.58	0.01	14.58	246.98	261.56	34.64						
04/30/92	B-04	14.63	0.01	14.62	246.94	261.56	34.74						
07/02/92	B-04	14.69	0.01	14.69	246.87	261.56	35.11						
10/13/92	B-04	14.91	0.01	14.91	246.65	261.56	35.10						
03/15/93	B-04	12.82	0.00	12.82	248.74	261.56	34.83	15	1	2.2	0.4	2.4	
05/05/93	B-04	12.97	0.00	12.97	248.59	261.56	34.92	18	0.7	2	3	1	
07/26/93	B-04	13.95	0.00	13.95	247.61	261.56	35.08	17.4	0.957	1.52	0.902	2	
11/30/93	B-04	14.28	0.00	14.28	247.28	261.56	35.00	14.9	0.9260	1.1777	0.9560	2.6082	
03/01/94	B-04	14.18	0.00	14.18	247.38	261.56	35.08	30.7	2.3478	1.8433	1.0737	3.3780	
05/04/94	B-04	14.26	0.00	14.26	247.30	261.56	34.67	15.1	1.5346	1.4445	0.8311	2.7198	
07/18/94	B-04	14.42	0.00	14.42	247.14	261.56	35.04	12.2	1.3376	1.2914	0.6686	2.7074	
11/29/94	B-04	14.76	0.00	14.76	246.80	261.56	35.08	5.8	0.4815	0.2936	0.3605	0.5690	
02/16/95	B-04	13.85	0.00	13.85	247.71	261.56	35.12	9.8	0.6940	0.5570	0.3186	1.1775	
05/17/95	B-04	13.25	0.00	13.25	248.31	261.56	35.12	15.1	0.9119	0.7052	0.3335	1.6899	
07/28/95	B-04	13.41	0.00	13.41	248.15	261.56	35.12	15.7	1.4584	1.2732	0.5448	1.7489	
01/05/88	B-05			14.50		260.68							
01/12/88	B-05	19.73	5.29	14.44	244.92	260.68	34.00						
01/22/88	B-05	19.91	5.58	14.33	244.95	260.68	34.03						
02/04/88	B-05	19.45	5.25	14.20	245.17	260.68	34.07						
02/23/88	B-05	19.53	5.13	14.40	245.00	260.68	34.07						
05/23/88	B-05					260.68							
06/13/88	B-05	14.70	0.33	14.37	246.23	260.68							
06/30/88	B-05	14.95	0.15	14.80	245.84	260.68							
07/13/88	B-05	15.02	0.26	14.76	245.86	260.68							
07/21/88	B-05	16.75	1.49	15.26	245.05	260.68							
08/01/88	B-05	15.08	0.05	15.03	245.64	260.68							
08/09/88	B-05	15.30	0.00	15.30	245.38	260.68							Dry to top of pump
08/16/88	B-05	15.60	0.30	15.30	245.31	260.68							
09/01/88	B-05	16.35	1.68	14.67	245.59	260.68							
09/07/88	B-05	16.26	1.68	14.58	245.68	260.68							
09/13/88	B-05	14.69	0.00	14.69	245.99	260.68							Dry to top of pump
09/27/88	B-05	14.65	0.07	14.58	246.08	260.68							
10/05/88	B-05	14.65	0.00	14.65	246.03	260.68							Dry
10/07/88	B-05	14.68	0.01	14.67	246.01	260.68	30.46						
10/13/88	B-05	16.25	0.55	15.70	244.84	260.68							
10/18/88	B-05	16.87	1.27	15.60	244.76	260.68							
10/26/88	B-05	16.35	0.60	15.75	244.78	260.68							
11/04/88	B-05	16.85	1.25	15.60	244.77	260.68							
11/08/88	B-05	16.60	1.10	15.50	244.91	260.68							
11/17/88	B-05	17.45	2.03	15.42	244.75	260.68							
11/23/88	B-05	16.26	0.59	15.67	244.86	260.68							
12/08/88	B-05	15.60	0.13	15.47	245.18	260.68							
12/14/88	B-05					260.68							No access to well
12/20/88	B-05	15.22	0.00	15.22	245.46	260.68							
01/05/89	B-05	15.75	0.01	15.75	244.93	260.68							
01/11/89	B-05	16.68	0.01	16.68	244.00	260.68							
01/20/89	B-05	16.90	0.01	16.90	243.78	260.68							
01/25/89	B-05	15.80	0.01	15.80	244.88	260.68							
02/20/89	B-05	16.02	0.87	15.15	245.31	260.68							
03/15/89	B-05	15.57	0.01	15.57	245.11	260.68							
03/27/89	B-05	14.64	0.01	14.64	246.04	260.68							
04/19/89	B-05	18.25	3.70	14.55	245.21	260.68							
05/11/89	B-05	16.20	0.54	15.66	244.89	260.68							
05/25/89	B-05	16.20	0.55	15.65	244.89	260.68							
06/12/89	B-05	15.48	0.00	15.48	245.20	260.68							

Summary of Gauging Data and Laboratory Analyses
Pomona Box
88.003 W. Imperial Hwy (La Habra)

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
06/22/89	B-05	16.70	1.70	15.00	245.26	260.68							
07/12/89	B-05	18.00	2.85	15.15	244.82	260.68							
08/09/89	B-05	15.83	0.00	15.83	244.85	260.68							
08/21/89	B-05	16.39	0.59	15.80	244.73	260.68							
09/08/89	B-05	15.72	0.01	15.72	244.96	260.68							
09/22/89	B-05	16.43	1.08	15.35	245.06	260.68							
10/09/89	B-05	15.73	0.01	15.73	244.95	260.68							
10/20/89	B-05	15.95	0.01	15.95	244.73	260.68							
11/08/89	B-05	16.18	0.55	15.63	244.91	260.68							
12/01/89	B-05	15.88	0.01	15.88	244.80	260.68							
12/15/89	B-05	15.95	0.01	15.95	244.73	260.68							
12/29/89	B-05	16.05	0.10	15.95	244.71	260.68							
01/11/90	B-05	15.59	0.20	15.39	245.24	260.68							
02/16/90	B-05	15.68	0.42	15.26	245.32	260.68							
03/02/90	B-05	15.62	0.57	15.05	245.49	260.68							
03/14/90	B-05	15.47	0.13	15.34	245.31	260.68							
03/28/90	B-05	15.24	0.01	15.24	245.44	260.68							
04/13/90	B-05	15.95	0.01	15.95	244.73	260.68							
04/27/90	B-05	15.65	0.05	15.60	245.07	260.68	33.66						Pump well
05/17/90	B-05	16.00	0.01	16.00	244.68	260.68							
06/01/90	B-05	15.23	0.00	15.23	245.45	260.68							Gas to top of pump
06/21/90	B-05	15.90	0.01	15.90	244.78	260.68							
07/17/90	B-05	16.00	0.01	16.00	244.68	260.68							
08/20/90	B-05	15.80	0.01	15.80	244.88	260.68							
09/13/90	B-05	15.30	0.00	15.30	245.38	260.68							
09/28/90	B-05	15.34	0.01	15.34	245.34	260.68							
10/12/90	B-05	15.32	0.01	15.32	245.36	260.68							
10/26/90	B-05	15.33	0.01	15.33	245.35	260.68							
11/28/90	B-05	15.96	0.24	15.72	244.90	260.68							Approx. -Skimmer off
12/12/90	B-05	16.15	0.29	15.86	244.75	260.68							Approx.-pulled pump
01/09/91	B-05	15.57	0.02	15.55	245.13	260.68							
01/18/91	B-05	15.61	0.01	15.61	245.07	260.68	33.70						Pump well
02/08/91	B-05	16.02	0.01	16.02	244.66	260.68							
03/04/91	B-05	15.54	0.01	15.54	245.14	260.68							Pump out of well
04/16/91	B-05	15.62	0.32	15.30	245.30	260.68	34.13						
05/23/91	B-05	15.75	0.00	15.75	244.93	260.68							
07/16/91	B-05	15.57	0.12	15.46	245.20	260.68	41.66						
07/19/91	B-05	15.69	0.14	15.55	245.10	260.68	33.75						
07/29/91	B-05					260.68							
09/04/91	B-05	15.85	0.08	15.77	244.89	260.68	33.83						
09/25/91	B-05	15.92	0.07	15.85	244.81	260.68	33.80						
10/15/91	B-05	15.88	0.03	15.85	244.82	260.68	33.85						
11/13/91	B-05	15.65	0.17	15.48	245.16	260.68							
12/04/91	B-05	15.64	0.07	15.57	245.09	260.68							Pump well
01/30/92	B-05	15.08	0.01	15.08	245.60	260.68							Pump well
04/21/92	B-05					260.68							
04/30/92	B-05					260.68							
07/02/92	B-05	15.75	0.01	15.75	244.93	260.68	33.85						Pump set to 16 ft.
10/13/92	B-05	15.80	0.01	15.80	244.88	260.68	33.87						
03/15/93	B-05					260.68							Pump in well
05/05/93	B-05	13.47	0.03	13.44	247.23	260.68							
07/26/93	B-05	13.89	0.00	13.89	246.79	260.68							
11/30/93	B-05	15.05	0.00	15.05	245.63	260.68							Pump in well
03/01/94	B-05	14.68	0.00	14.68	246.00	260.68	33.34						Pump in well
05/04/94	B-05					260.68							Pump in well
07/18/94	B-05	15.70	0.00	15.70	244.98	260.68	33.71	83.7	27.9057	20.0200	3.2743	9.2335	Pump in well
11/29/94	B-05	16.61	0.02	16.59	244.09	260.68	33.79						
02/16/95	B-05	14.72	0.02	14.70	245.98	260.68	33.55						
05/17/95	B-05					260.68							Pump in well
07/28/95	B-05	14.55	0.00	14.55	246.13	260.68	33.52	64.7	18.3837	11.1502	1.4396	4.0488	
01/05/88	B-06			11.34		256.60							
01/12/88	B-06	11.87	0.00	11.87	244.73	256.60	34.07						
01/22/88	B-06	11.68	0.00	11.68	244.92	256.60	34.12						
02/04/88	B-06	11.70	0.00	11.70	244.90	256.60	34.35						
02/23/88	B-06	11.75	0.00	11.75	244.85	256.60	34.35						
05/23/88	B-06	11.57	0.00	11.57	245.03	256.60							
06/13/88	B-06	11.59	0.00	11.59	245.01	256.60							
06/30/88	B-06	11.66	0.00	11.66	244.94	256.60							
07/13/88	B-06	11.58	0.00	11.58	245.02	256.60							
07/21/88	B-06	11.54	0.00	11.54	245.06	256.60							
08/01/88	B-06	11.50	0.00	11.50	245.10	256.60							
08/09/88	B-06	11.52	0.00	11.52	245.08	256.60							
08/16/88	B-06	11.55	0.00	11.55	245.05	256.60							

Summary of Gauging Data and Laboratory Analyses
Pomona Box
88.003 W. Imperial Hwy (La Habra)

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
09/01/88	B-06	11.64	0.00	11.64	244.96	256.60							
09/07/88	B-06	11.60	0.00	11.60	245.00	256.60							
09/13/88	B-06	11.61	0.00	11.61	244.99	256.60							
09/27/88	B-06	11.65	0.00	11.65	244.95	256.60							
10/05/88	B-06	11.66	0.00	11.66	244.94	256.60							
10/07/88	B-06					256.60							
10/13/88	B-06	11.67	0.00	11.67	244.93	256.60							
10/18/88	B-06	11.68	0.00	11.68	244.92	256.60							
10/26/88	B-06	11.65	0.00	11.65	244.95	256.60							
11/04/88	B-06	11.67	0.00	11.67	244.93	256.60							
11/08/88	B-06	11.66	0.00	11.66	244.94	256.60							
11/17/88	B-06	11.65	0.00	11.65	244.95	256.60							
11/23/88	B-06	11.65	0.00	11.65	244.95	256.60							
12/08/88	B-06	11.42	0.00	11.42	245.18	256.60							
12/14/88	B-06	11.75	0.00	11.75	244.85	256.60	34.40						
12/20/88	B-06	11.57	0.00	11.57	245.03	256.60							
01/05/89	B-06	11.47	0.00	11.47	245.13	256.60							
01/11/89	B-06	11.52	0.00	11.52	245.08	256.60							
01/20/89	B-06	11.55	0.00	11.55	245.05	256.60							
01/25/89	B-06	11.60	0.00	11.60	245.00	256.60							
02/20/89	B-06	11.47	0.00	11.47	245.13	256.60							
03/15/89	B-06	11.50	0.00	11.50	245.10	256.60							
03/27/89	B-06	11.45	0.00	11.45	245.15	256.60							
04/19/89	B-06	11.45	0.00	11.45	245.15	256.60							
05/11/89	B-06	11.55	0.00	11.55	245.05	256.60							
05/25/89	B-06	11.55	0.00	11.55	245.05	256.60							
06/12/89	B-06	11.45	0.00	11.45	245.15	256.60							
06/22/89	B-06	11.53	0.00	11.53	245.07	256.60							
07/12/89	B-06	11.51	0.00	11.51	245.09	256.60							
08/09/89	B-06	11.57	0.00	11.57	245.03	256.60							
08/21/89	B-06	11.55	0.00	11.55	245.05	256.60							
09/08/89	B-06	11.55	0.00	11.55	245.05	256.60							
09/22/89	B-06	11.56	0.00	11.56	245.04	256.60							
10/09/89	B-06	11.63	0.00	11.63	244.97	256.60							
10/20/89	B-06	11.65	0.00	11.65	244.95	256.60							
11/08/89	B-06	11.68	0.00	11.68	244.92	256.60							
12/01/89	B-06	11.67	0.00	11.67	244.93	256.60							
12/15/89	B-06	11.66	0.00	11.66	244.94	256.60							
12/29/89	B-06	11.70	0.00	11.70	244.90	256.60							
01/11/90	B-06	11.70	0.00	11.70	244.90	256.60							
02/16/90	B-06	11.66	0.00	11.66	244.94	256.60							
03/02/90	B-06	11.46	0.00	11.46	245.14	256.60							
03/14/90	B-06	11.63	0.00	11.63	244.97	256.60							
03/28/90	B-06	11.55	0.00	11.55	245.05	256.60							
04/13/90	B-06	11.71	0.00	11.71	244.89	256.60							
04/27/90	B-06	11.61	0.00	11.61	244.99	256.60	33.92						
05/17/90	B-06	11.67	0.00	11.67	244.93	256.60							
06/01/90	B-06	11.52	0.00	11.52	245.08	256.60							
06/21/90	B-06	11.56	0.00	11.56	245.04	256.60							
07/17/90	B-06	11.68	0.00	11.68	244.92	256.60							
08/20/90	B-06	11.60	0.00	11.60	245.00	256.60							
09/13/90	B-06	11.59	0.00	11.59	245.01	256.60							
09/28/90	B-06	11.69	0.00	11.69	244.91	256.60							
10/12/90	B-06	11.65	0.00	11.65	244.95	256.60							
10/26/90	B-06	11.68	0.00	11.68	244.92	256.60							
11/28/90	B-06	11.78	0.00	11.78	244.82	256.60							
12/12/90	B-06	11.79	0.00	11.79	244.81	256.60							
01/09/91	B-06	11.46	0.00	11.46	245.15	256.60							
01/18/91	B-06	11.75	0.00	11.75	244.85	256.60	33.98						
02/08/91	B-06	11.78	0.00	11.78	244.82	256.60							
03/04/91	B-06	11.15	0.00	11.15	245.45	256.60							
04/16/91	B-06	11.26	0.00	11.26	245.34	256.60	34.45						
05/23/91	B-06	11.35	0.00	11.35	245.25	256.60							
07/16/91	B-06	11.43	0.00	11.43	245.17	256.60	41.99						
07/19/91	B-06	11.42	0.00	11.42	245.18	256.60	34.04						
07/29/91	B-06	11.40	0.00	11.40	245.20	256.60	34.04						
09/04/91	B-06	11.50	0.00	11.50	245.10	256.60	34.07	ND	ND	ND	ND	ND	
09/25/91	B-06	11.53	0.00	11.53	245.07	256.60	34.18						
10/15/91	B-06	11.55	0.00	11.55	245.05	256.60	34.13	0.09	0.03	ND	ND	ND	
11/13/91	B-06	11.78	0.00	11.78	244.83	256.60							
12/04/91	B-06	11.83	0.00	11.83	244.77	256.60							
01/30/92	B-06	11.72	0.00	11.72	244.88	256.60	34.04	ND	ND	ND	ND	ND	
04/21/92	B-06	11.03	0.00	11.03	245.57	256.60	33.44	1.1	0.24	0.1	0.03	0.14	
04/30/92	B-06	11.08	0.00	11.08	245.52	256.60	33.23						

Summary of Gauging Data and Laboratory Analyses
Pomona Box
88.003 W. Imperial Hwy (La Habra)

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
07/02/92	B-06	11.14	0.00	11.14	245.46	256.60	34.10	1.9	0.1	0.03	0	0.09	
10/13/92	B-06	11.31	0.00	11.31	245.29	256.60	33.72	3	0.5	0.2	0.08	0.25	
03/15/93	B-06	9.72	0.00	9.72	246.88	256.60	33.85	2.4	0.7	0.1	0.06	0.2	
05/05/93	B-06	9.87	0.00	9.87	246.73	256.60	33.89	2	0.3	0.2	0.06	0.2	
07/26/93	B-06	10.26	0.00	10.26	246.34	256.60	34.12	1.9	0.323	0.203	0.049	0.115	
11/30/93	B-06	10.80	0.00	10.80	245.80	256.60	33.90	2.1	0.1579	0.1295	0.0406	0.1182	
03/01/94	B-06	10.73	0.00	10.73	245.87	256.60	34.08	1.9	0.3526	0.1577	0.0447	0.1047	
05/04/94	B-06	10.80	0.00	10.80	245.80	256.60	34.00	0.4	0.0975	0.0541	0.0120	0.0321	
07/18/94	B-06	10.98	0.00	10.98	245.62	256.60	34.09	3.9	0.3919	0.3290	0.1113	0.3892	
11/29/94	B-06	11.29	0.00	11.29	245.31	256.60	34.12	0.8	0.1041	0.0458	0.0411	0.0813	
02/16/95	B-06	10.57	0.00	10.57	246.03	256.60	34.20	0.7	0.1435	0.0470	0.0111	0.0405	
05/17/95	B-06	10.21	0.00	10.21	246.39	256.60	34.15	1.3	0.1136	0.0552	0.0345	0.0580	
07/28/95	B-06	10.32	0.00	10.32	246.28	256.60	34.12	1	0.1222	0.0760	0.0200	0.0576	
04/03/91	B-07	12.56	0.00	12.56	242.13	254.69	42.60						Instal. 3/21, Devel. 4/3
04/16/91	B-07	13.04	0.00	13.04	241.65	254.69	40.90	1.6	0.2	0.02	0.02	0.2	Survey data 3/27/91
05/23/91	B-07	13.32	0.00	13.32	241.37	254.69							
07/16/91	B-07	13.18	0.00	13.18	241.51	254.69	48.47						
07/19/91	B-07	13.16	0.00	13.16	241.53	254.69	40.65						
07/29/91	B-07	13.15	0.00	13.15	241.54	254.69	40.60						
09/04/91	B-07	13.27	0.00	13.27	241.42	254.69	40.69	1.6	0.01	ND	0.1	0.1	
09/25/91	B-07	13.26	0.00	13.26	241.43	254.69	40.75						
10/15/91	B-07	13.28	0.00	13.28	241.41	254.69	40.65	0.9	0.2	ND	0.07	0.5	
11/13/91	B-07	13.60	0.00	13.60	241.10	254.69							
12/04/91	B-07	13.62	0.00	13.62	241.07	254.69							
01/30/92	B-07	13.50	0.00	13.50	241.19	254.69	40.62	0.34	0.09	ND	0.015	ND	
04/21/92	B-07	12.59	0.00	12.59	242.10	254.69	40.28	2.1	0.35	0.08	0.24	0.24	
04/30/92	B-07	12.61	0.00	12.61	242.08	254.69	39.83						
07/02/92	B-07	12.64	0.00	12.64	242.05	254.69	40.55	0.87	ND	ND	ND	0.005	
10/13/92	B-07	12.90	0.00	12.90	241.79	254.69	40.71	0.6	0.08	0.002	0.2	ND	
03/15/93	B-07	10.70	0.00	10.70	243.99	254.69	40.71	4	0.2	0.01	0.5	0.3	
05/05/93	B-07	10.94	0.00	10.94	243.75	254.69	40.58	0.5	0.04	ND	0.07	0.04	
07/26/93	B-07	11.46	0.00	11.46	243.23	254.69	40.75	ND	ND	ND	ND	ND	
11/30/93	B-07	12.16	0.00	12.16	242.53	254.69	40.77	ND	0.0045	0.0023	ND	0.0056	
03/01/94	B-07	12.10	0.00	12.10	242.59	254.69	40.74	0.1	0.0204	ND	0.0460	ND	
05/04/94	B-07	12.27	0.00	12.27	242.42	254.69	40.75	ND	ND	ND	ND	ND	
07/18/94	B-07	12.38	0.00	12.38	242.31	254.69	40.70	0.4	0.0164	0.0013	ND	0.0333	
11/29/94	B-07	12.72	0.00	12.72	241.97	254.69	40.73	0.3	0.0141	0.0033	ND	0.0267	
02/16/95	B-07	11.74	0.00	11.74	242.95	254.69	40.80	0.6	0.0473	0.0075	0.1891	0.0256	
05/17/95	B-07	11.10	0.00	11.10	243.59	254.69	40.80	0.8	0.0478	0.0036	0.3333	0.0262	
07/28/95	B-07	11.30	0.00	11.30	243.39	254.69	40.75	1.4	0.1723	0.0193	0.3646	0.0304	
07/26/91	B-08	9.48	0.00	9.48	241.39	250.87	33 41						Develop well
07/29/91	B-08	9.46	0.00	9.46	241.41	250.87	35.44	ND	ND	ND	ND	ND	Survey data 7/29/91
09/04/91	B-08	9.00	0.00	9.00	241.87	250.87	35.48	ND	ND	ND	ND	ND	
09/25/91	B-08	9.59	0.00	9.59	241.28	250.87	35.57						
10/15/91	B-08	9.60	0.00	9.60	241.27	250.87	35.47	ND	ND	ND	ND	ND	
11/13/91	B-08	9.86	0.00	9.86	241.01	250.87							
12/04/91	B-08	9.89	0.00	9.89	240.98	250.87							
01/30/92	B-08	9.76	0.00	9.76	241.11	250.87	35.48	ND	ND	ND	ND	ND	
04/21/92	B-08	8.98	0.00	8.98	241.89	250.87	35.06	ND	ND	ND	ND	ND	
04/30/92	B-08	9.01	0.00	9.01	241.86	250.87	34.62						
07/02/92	B-08	9.10	0.00	9.10	241.77	250.87	35.51	ND	ND	ND	ND	ND	
10/13/92	B-08	9.33	0.00	9.33	241.54	250.87	35.50	ND	ND	ND	ND	ND	
03/15/93	B-08	7.34	0.00	7.34	243.53	250.87	35.49	ND	ND	ND	ND	ND	
05/05/93	B-08	7.50	0.00	7.50	243.37	250.87	35.31	ND	ND	ND	ND	ND	
07/26/93	B-08	7.92	0.00	7.92	242.95	250.87	35.51	ND	ND	ND	ND	ND	
11/30/93	B-08	8.56	0.00	8.56	242.31	250.87	35.46	ND	ND	ND	ND	ND	
03/01/94	B-08	8.57	0.00	8.57	242.30	250.87	35.50	ND	ND	ND	ND	ND	
05/04/94	B-08	8.62	0.00	8.62	242.25	250.87	35.43	0.5	0.0365	0.0077	0.0824	ND	
07/18/94	B-08	8.82	0.00	8.82	242.05	250.87	35.43	ND	0.0012	0.0005	0.0003	0.0021	
11/29/94	B-08	9.14	0.00	9.14	241.73	250.87	35.48	ND	ND	ND	ND	ND	
02/16/95	B-08	8.21	0.00	8.21	242.66	250.87	35.55	ND	ND	ND	ND	ND	
05/17/95	B-08	8.65	0.00	8.65	242.22	250.87	35.52	ND	ND	ND	ND	ND	
07/28/95	B-08	7.84	0.00	7.84	243.03	250.87	35.51	ND	ND	ND	ND	ND	
03/15/93	B-09	9.79	0.00	9.79	243.93	253.72	25.04	0.9	0.1	0.005	0.3	ND	
05/05/93	B-09	9.95	0.00	9.95	243.77	253.72	22.85	2	0.2	0.003	0.5	0.01	
07/26/93	B-09	10.44	0.00	10.44	243.28	253.72	23.05	1.6	0.107	0.01	ND	0.21	
11/30/93	B-09	11.23	0.00	11.23	242.49	253.72	23.05	1.6	0.0764	0.0190	ND	0.1138	
03/01/94	B-09	11.17	0.00	11.17	242.55	253.72	23.03	0.8	0.0418	0.0064	0.4429	0.0114	
05/04/94	B-09	11.34	0.00	11.34	242.38	253.72	23.06	0.5	0.0034	0.0013	0.2485	0.0043	
07/18/94	B-09	11.44	0.00	11.44	242.28	253.72	23.01	1.4	0.0370	0.0034	0.0003	0.0981	
11/29/94	B-09	11.78	0.00	11.78	241.94	253.72	23.03	0.8	0.0247	0.0031	0.3304	0.0061	

Summary of Gauging Data and Laboratory Analyses
Pomona Box
88.003 W. Imperial Hwy (La Habra)

DATE	WELL	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	DEPTH TO LIQUID (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	COMMENTS
02/16/95	B-09	10.81	0.00	10.81	242.91	253.72	23.10	0.4	0.0142	0.0023	0.2153	0.0047	
05/17/95	B-09	10.17	0.00	10.17	243.55	253.72	23.07	0.6	0.0201	0.0031	0.2535	0.0132	
07/28/95	B-09	10.39	0.00	10.39	243.33	253.72	23.07	0.7	0.0306	0.0105	0.2604	0.0231	
03/15/93	B-10	9.14	0.00	9.14	241.76	250.90	25.47	6	0.5	0.5	0.3	1.1	
05/05/93	B-10	9.40	0.00	9.40	241.50	250.90	25.30	31	1	1	4.5	1	
07/26/93	B-10	9.86	0.00	9.86	241.04	250.90	25.48	11.4	1.166	0.688	1.454	1.371	
11/30/93	B-10	10.56	0.00	10.56	240.34	250.90	25.48	6.4	0.2809	0.1761	0.2023	0.3413	
03/01/94	B-10	10.18	0.00	10.18	240.72	250.90	25.47	8.5	0.9157	0.5070	0.6573	0.8576	
05/04/94	B-10	10.21	0.00	10.21	240.69	250.90	25.50	6.3	1.2758	0.5860	0.7835	1.0392	
07/18/94	B-10	10.54	0.00	10.54	240.36	250.90	25.44	5.2	0.5395	0.2423	0.4414	0.5731	
11/29/94	B-10	10.94	0.00	10.94	239.96	250.90	25.48	3.9	0.6176	0.0931	0.6091	0.1514	
02/16/95	B-10	9.71	0.00	9.71	241.19	250.90	25.53	7.6	0.9072	0.3091	0.6831	0.7139	
05/17/95	B-10	9.37	0.00	9.37	241.53	250.90	25.47	9.5	1.0854	0.5001	0.8704	0.9505	
07/28/95	B-10	9.40	0.00	9.40	241.50	250.90	25.50	15	1.8939	0.9577	1.2880	1.7259	

Since 1968
WAYNE PERRY, INC.
Environmental Remediation, Construction and Consulting

April 30, 1999

Orange County Health Care Agency
Environmental Health Division
2009 Edinger Avenue
Santa Ana, California

Attention: Mr. Anthony Martinez

Subject: **Transmittal of Groundwater Monitoring Report**
Pomona Box Company
301 West Imperial Highway
La Habra, California
WPI Project No. 88.003

Dear Mr. Martinez:

On behalf of Pomona Box Company, attached is a copy of the first quarter 1999 groundwater monitoring report for the above referenced location.

Wells B-1 through B-11 were gauged and sampled on February 10, 1999. TPH-G/BTEX/MTBE analyses were performed on samples from all the wells.

Gauging and sampling for the second quarter 1999 pending based upon a request for site closure.

If you have any questions regarding groundwater monitoring activities performed at this location, contact the undersigned at (714) 826-0352.

Sincerely,

David M. Henry

David M. Henry
Registered Geologist 4085

cc: Don Votaw - Pomona Box Company.
Carl Bernhardt - California Regional Water Quality Control Board

8281 Commonwealth Ave. Buena Park, California 90621 Phone (714) 826-0352 (800) 883-0352 Fax (714)

Date: April 30, 1999

POMONA BOX COMPANY
QUARTERLY GROUNDWATER MONITORING REPORT
JANUARY 1 THROUGH MARCH 30, 1999

Location: 301 West Imperial Highway, La Habra

Pomona Box Company Contact/Phone:	Don Votaw / (714) 871-0932
Primary Consultant/Contact Person/Phone:	RETAC / John Teravskis / (310) 522-9550
Well Monitoring Contr. /Contact Person/Phone:	Wayne Perry, Inc. / David Henry / (714) 826-0352
Wayne Perry Inc. Project No.:	88.003
Lead Agency/Contact Person:	Orange County Health Care Agency / Anthony Martinez
Agency File No.:	86UT224
Other Agencies to Receive Copies:	Regional Water Quality Control Board - Santa Ana Region

WORK PERFORMED THIS QUARTER

1. Gauged and sampled groundwater wells B-1 through B-11 on February 10, 1999.

WORK PROPOSED FOR NEXT QUARTER

1. Pending based on request for site closure.

MONITORING RESULTS

Current Phase of Project: ☐Site Assessment ☐Remediation ■Post Remediation Monitoring

Frequency of monitoring/sampling:	Quarterly
Wells Gauged/Sampled this Quarter:	B-1 through B-11
Depth of Groundwater:	9.69 through 14.87 feet
Groundwater Flow Direction/Gradient:	Southwesterly / 0.1 foot per foot
Is flow consistent with previous quarter:	Yes
TPH-g Concentration Range:	<100 ug/l through 6441 ug/l
Benzene Concentration Range:	<0.3 ug/l to 248.1 ug/l
Well with highest benzene concentration:	B-4

Separate Phase Hydrocarbons Present: ☐Yes ■No

Wells:	
Separate Phase Hydrocarbon Thickness:	NA

Remediation Techniques: ☐Pump/Treat ☐Vapor Extraction ☐Manual Product Recovery ■Not Applicable

Gallons of Separate Phase Hydrocarbons Recovered:	NA
Gallons of Groundwater Purged this Quarter:	Wells sampled without purging
Disposal/Recycling Facility:	

Summary of Unusual Activities:

Agencies Directive Requirements:

REVIEWED BY: David M. Henry DATE: April 30, 1999

David M. Henry, Registered Geologist 4085

ATTACHMENTS:

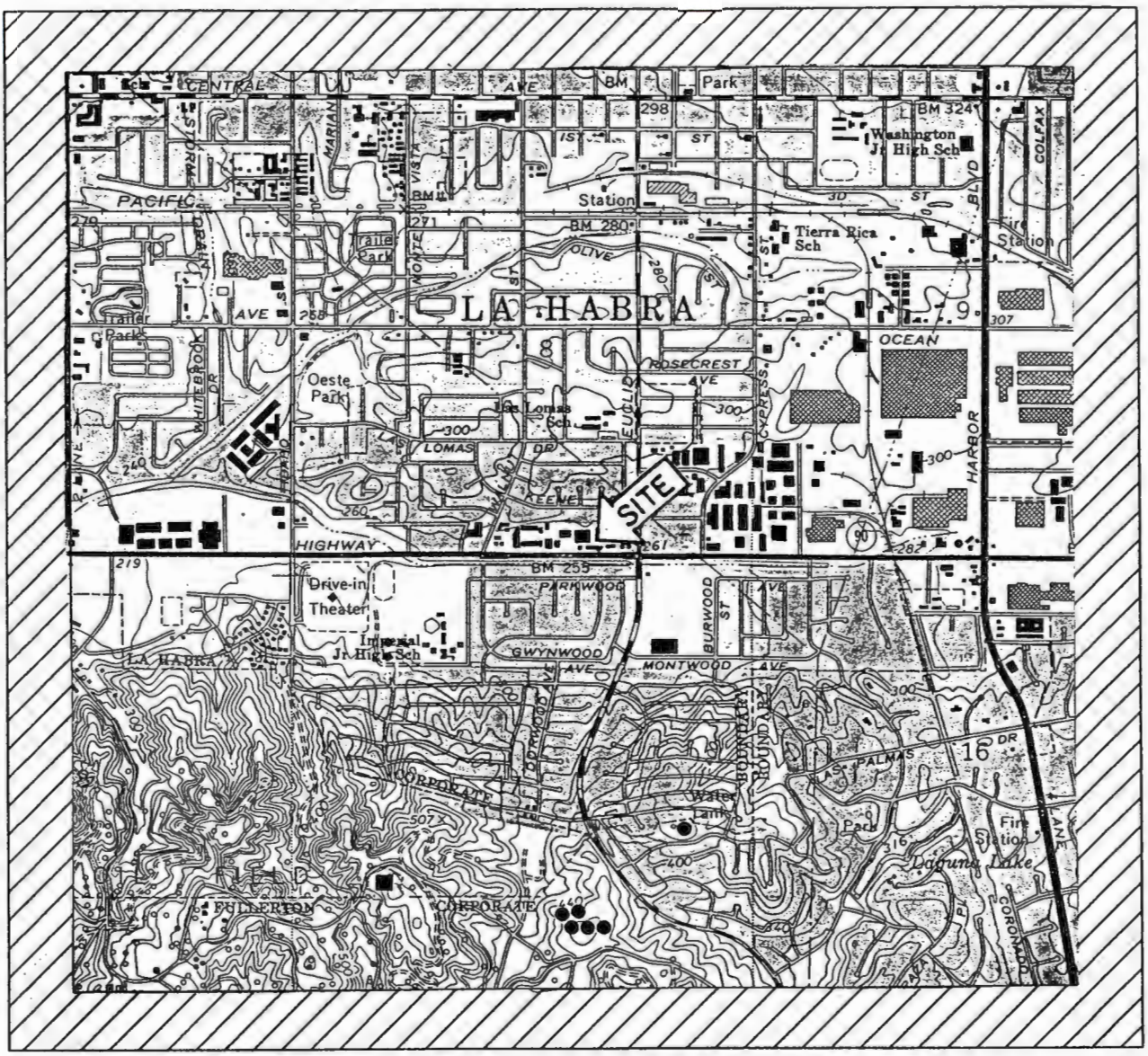
- Site Location Map (Figure 1)
- Plot Plan (Figure 2)
- Groundwater Contour (Figure 3)
- Dissolved Hydrocarbon Concentration Map (Figure 4)
- Table 1, Current Groundwater Gauging/Analytical Data
- Table 2, Historical Groundwater Gauging/Analytical Data
- Graphs 1 through 10, Benzene Concentration/Groundwater Elevation vs. Time
- Laboratory Report and Chain-of-Custody
- Groundwater Monitoring Procedures
- Groundwater Sampling Field Data Sheets

Pomona Box Company
301 West Imperial Highway
La Habra, California

ATTACHMENTS

Site Location Map (Figure 1)
Plot Plan (Figure 2)
Groundwater Contour and Hydrocarbon Concentration Map (Figure 3)
Dissolved Hydrocarbon Concentration Map (Figure 4)

Table 1, Current Groundwater Gauging/Analytical Data
Table 2, Historical Groundwater Gauging/Analytical Data
Graphs of Groundwater Elevation/Benzene Concentration vs. Time (Graphs 1 through 10)
Laboratory Report and Chain-of-Custody
Groundwater Monitoring Procedures
Groundwater Sampling Field Data Sheets



2000' 0 2000' 4000'

SCALE FEET

SOURCE :

7.5 MINUTE U.S.G.S.

QUADRANGLE :

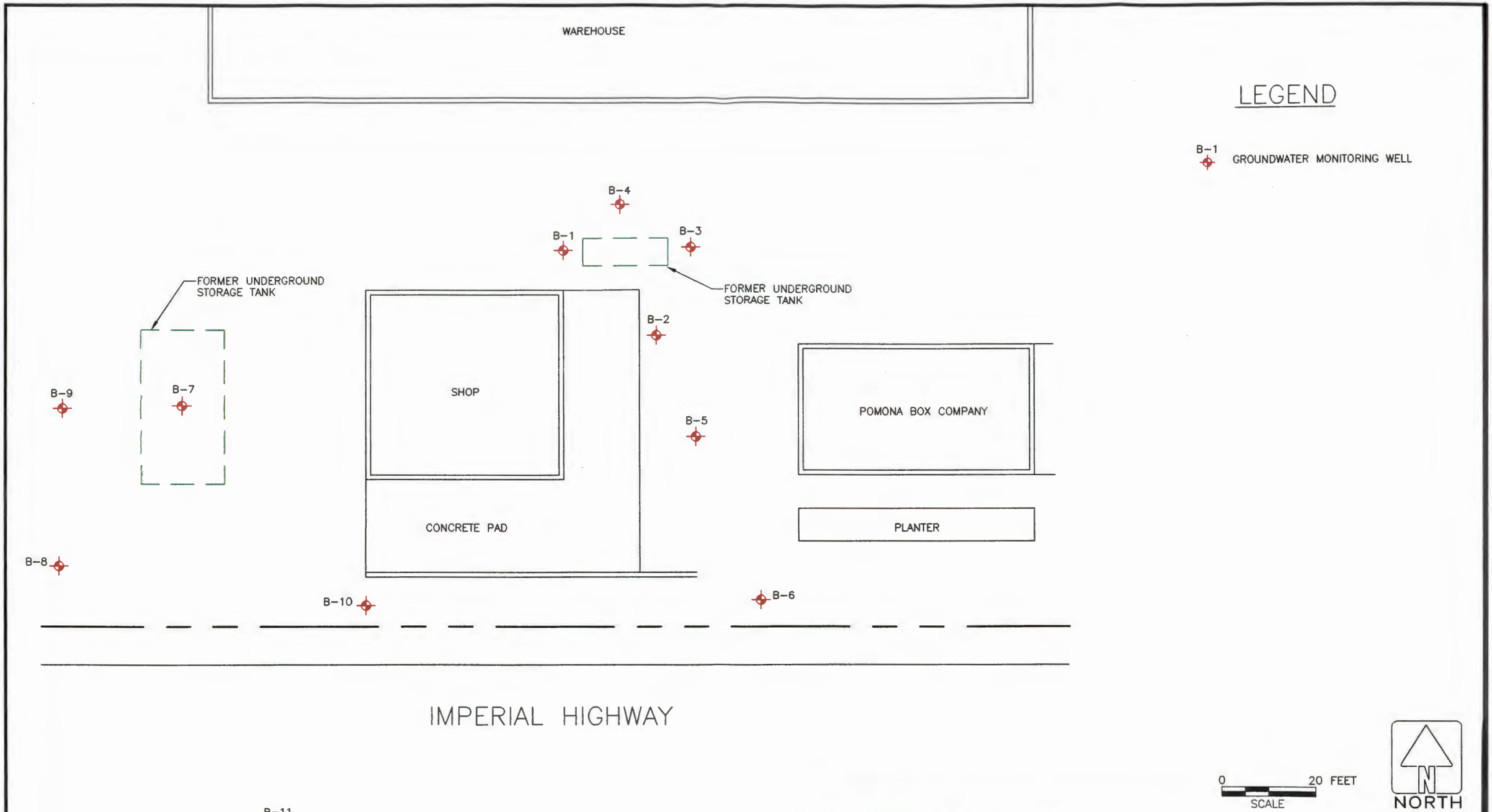
LA HABRA

N

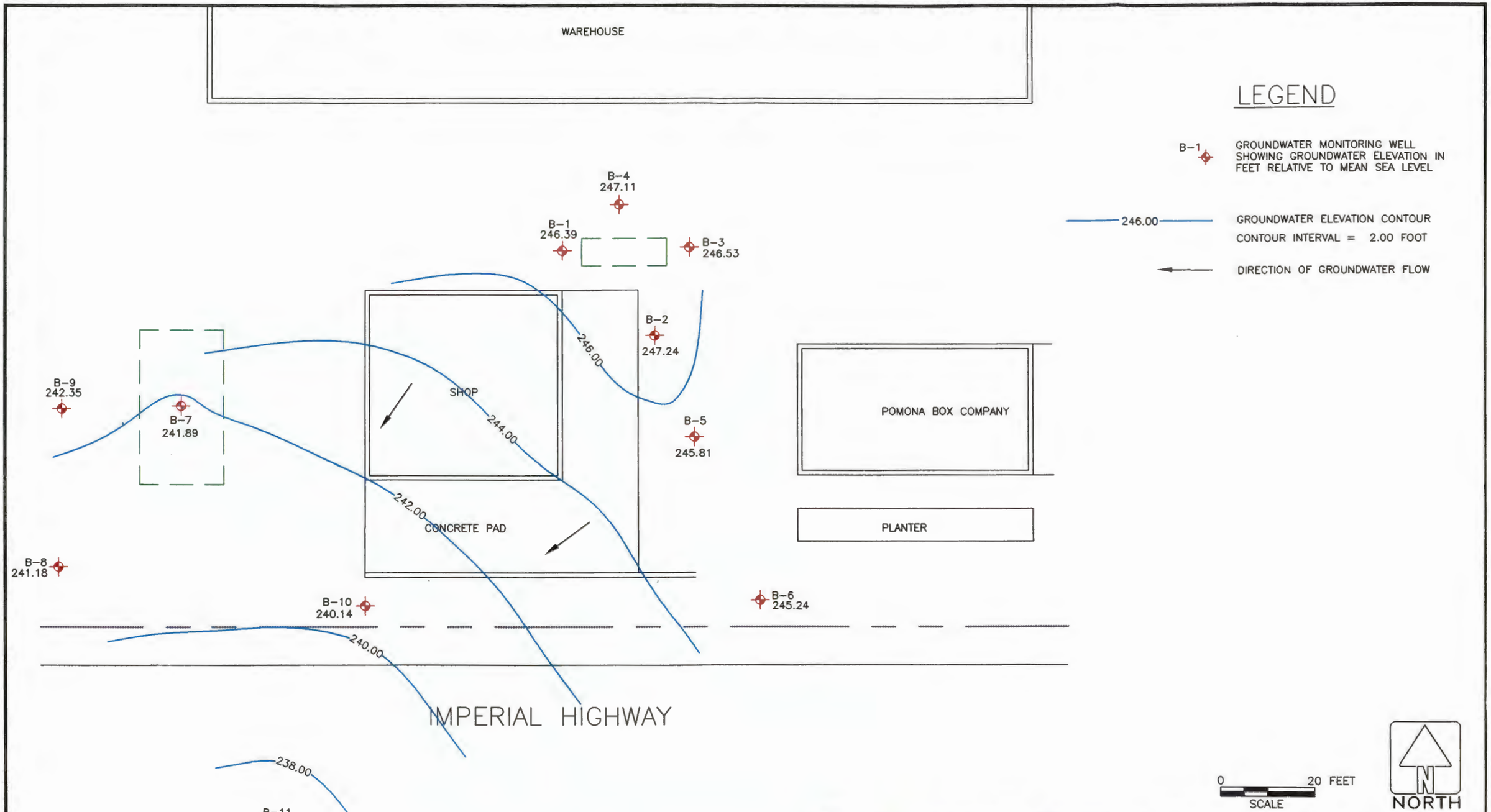
POMONA BOX COMPANY
301 W. IMPERIAL HWY.
LA HABRA, CA

SITE LOCATION MAP

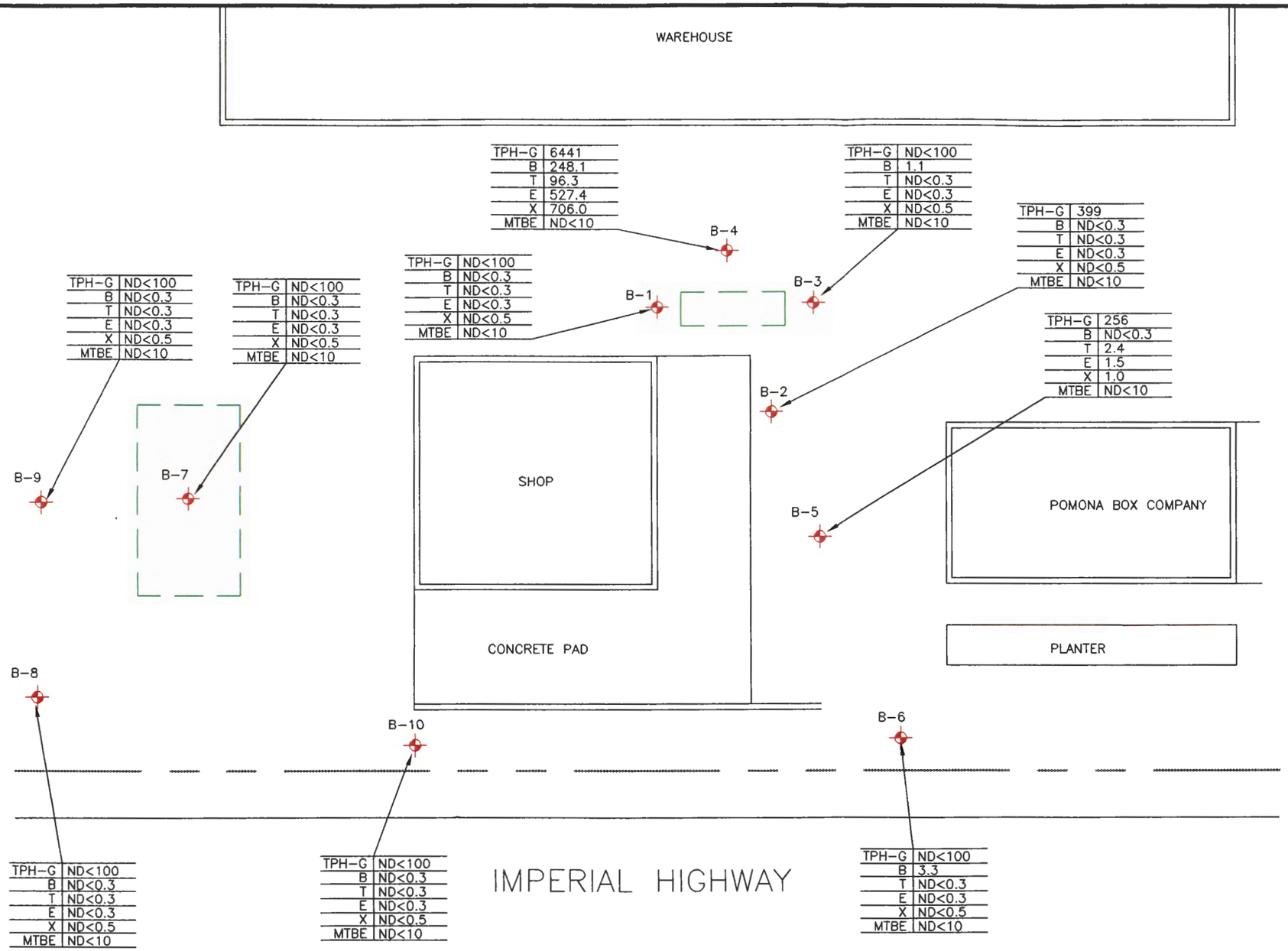
WaynePerry ENVIRONMENTAL SPECIALISTS	DWG. NO. 003000SL	CHKD. BY
	PROJ. NO. 88.003	DRAWN BY PROVANCE
	FIG. NO. 1	DATE



Wayne Perry Environmental Specialists Incorporated	DATE 1/4/99	PLOT PLAN	FIGURE NO. 2
	REVISED	POMONA BOX 301 W. IMPERIAL HWY. LA HABRA, CA	
	CAD FILE 00300001		PROJECT NO. 88.003



WaynePerry ENVIRONMENTAL INCORPORATED SPECIALISTS	DATE 04/30/99	GROUNDWATER CONTOUR MAP FEBRUARY 10, 1999	FIGURE NO. 3
	REVISED WP	POMONA BOX 301 W. IMPERIAL HWY./POMONA BOX LA HABRA, CA	
	CAD FILE 003000GW		PROJECT NO. 88.003



LEGEND

B-1 MONITORING WELL SHOWING PETROLEUM HYDROCARBON CONCENTRATIONS IN ug/L.

NOTES :

1. ND – NOT DETECTED

TPH-G – TOTAL PETROLEUM HYDROCARBONS (GASOLINE)

B – BENZENE

T – TOLUENE

E – ETHYLBENZENE

X – TOTAL XYLENES

MTBE – METHYL TERTIARY-BUTYL ETHER (EPA 8020)

0 20 FEET
SCALE

NORTH

WaynePerry ENVIRONMENTAL INCORPORATED SPECIALISTS	DATE 04/30/99	HYDROCARBON DISTRIBUTION MAP FEBRUARY 10, 1999	FIGURE NO. 4
	REVISED WP	POMONA BOX 301 W. IMPERIAL HWY. LA HABRA, CA	
	CAD FILE 003000BZ		PROJECT NO. 88.003

Table 1, Current Gauging and Laboratory Data
Pomona Box
88.003 W. Imperial Hwy (La Habra)

WELL	DATE	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	MTBE (mg/l)	COMMENTS
B-1	02/10/99	14.65	0.00	246.39	261.04	23.58	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
B-2	02/10/99	13.79	0.00	247.24	261.03	21.98	399	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
B-3	02/10/99	14.36	0.00	246.53	260.89	23.35	ND<100	1.1	ND<0.3	ND<0.3	ND<0.5	ND<10	
B-4	02/10/99	14.45	0.00	247.11	261.56	34.68	6441	248.1	96.3	527.4	706.0	ND<10	
B-5	02/10/99	14.87	0.00	245.81	260.68	33.24	256	ND<0.3	2.4	1.5	1.0	ND<10	
B-6	02/10/99	11.36	0.00	245.24	256.60	33.47	ND<100	3.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
B-7	02/10/99	12.80	0.00	241.89	254.69	40.83	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
B-8	02/10/99	9.69	0.00	241.18	250.87	32.35	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
B-9	02/10/99	11.37	0.00	242.35	253.72	21.98	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
B-10	02/10/99	10.76	0.00	240.14	250.90	25.40	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
B-11	02/10/99	13.58	0.00	237.00	250.58	32.80	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	

Table 2, Summary of Gauging and Laboratory Data
Pomona Box
88.003 W. Imperial Hwy (La Habra)

WELL	DATE	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	MTBE (mg/l)	COMMENTS
B-1	01/05/88				261.04								Interface probe not working
	01/12/88	14.80	0.00	246.24	261.04	22.08							
	01/22/88	14.80	0.00	246.24	261.04	22.20							
	02/04/88	14.75	0.00	246.29	261.04	21.65							
	02/23/88	14.79	0.00	246.25	261.04	21.65							
	05/23/88	14.65	0.00	246.39	261.04								
	06/13/88	14.62	0.00	246.42	261.04								
	06/30/88	14.63	0.00	246.41	261.04								
	07/13/88	14.60	0.00	246.44	261.04								
	07/21/88	14.60	0.00	246.44	261.04								
	08/01/88	14.55	0.00	246.49	261.04								
	08/09/88	14.61	0.00	246.43	261.04								
	08/16/88	14.61	0.00	246.43	261.04								
	09/01/88	14.65	0.00	246.39	261.04								
	09/07/88	14.64	0.00	246.40	261.04								
	09/13/88	14.69	0.00	246.35	261.04								
	09/27/88	14.72	0.00	246.32	261.04								
	10/05/88	14.74	0.00	246.30	261.04								
	10/13/88	14.73	0.00	246.31	261.04								
	10/18/88	14.74	0.00	246.30	261.04								
	10/26/88	14.73	0.00	246.31	261.04								
	11/04/88	14.76	0.00	246.28	261.04								
	11/08/88	14.75	0.00	246.29	261.04								
	11/17/88	14.72	0.00	246.32	261.04								
	11/23/88	14.73	0.00	246.31	261.04								
	12/08/88	15.37	0.00	245.67	261.04								
	12/14/88	15.11	0.00	245.93	261.04	23.90							
	12/20/88	14.60	0.00	246.44	261.04								
	01/05/89	14.60	0.00	246.44	261.04								
	01/11/89	14.51	0.00	246.53	261.04								
	01/20/89	14.57	0.00	246.47	261.04								
	01/25/89	14.63	0.00	246.41	261.04								
	02/20/89	14.49	0.00	246.55	261.04								
	03/15/89	14.50	0.00	246.54	261.04								
	03/27/89	14.50	0.00	246.54	261.04								
	04/19/89	14.50	0.00	246.54	261.04								
	05/11/89	14.53	0.00	246.51	261.04								
	05/25/89	14.56	0.00	246.48	261.04								
	06/12/89	14.55	0.00	246.49	261.04								
	06/22/89	14.56	0.00	246.48	261.04								
	07/12/89	14.60	0.00	246.44	261.04								
	08/09/89	14.62	0.00	246.42	261.04								
	08/21/89	14.60	0.00	246.44	261.04								
	09/08/89	14.67	0.00	246.37	261.04								
	09/22/89	14.61	0.00	246.43	261.04								
	10/09/89	14.67	0.00	246.37	261.04								
	10/20/89	14.68	0.00	246.36	261.04								
	11/08/89	14.70	0.01	246.34	261.04								
	12/01/89	14.74	0.00	246.30	261.04								

Table 2, Summary of Gauging and Laboratory Data
Pomona Box
88.003 W. Imperial Hwy (La Habra)

WELL	DATE	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	MTBE (mg/l)	COMMENTS
B-1	12/15/89	14.77	0.00	246.27	261.04								
cont.	12/29/89	14.78	0.01	246.26	261.04								
	01/11/90	14.78	0.01	246.26	261.04								
	02/16/90	14.74	0.00	246.30	261.04								
	03/02/90	14.52	0.00	246.52	261.04								
	03/14/90	14.62	0.00	246.42	261.04								
	03/28/90	14.65	0.00	246.39	261.04								
	04/13/90	14.67	0.00	246.37	261.04								
	04/27/90	14.68	0.00	246.36	261.04	22.09							
	05/17/90	14.70	0.00	246.34	261.04								
	06/01/90	14.62	0.00	246.42	261.04								
	06/21/90				261.04								
	07/17/90	14.74	0.00	246.30	261.04								
	08/20/90	14.73	0.00	246.31	261.04								
	09/13/90	14.76	0.00	246.28	261.04								
	09/28/90	14.74	0.01	246.30	261.04								
	10/12/90	14.80	0.00	246.24	261.04								
	10/26/90	14.78	0.00	246.26	261.04								
	11/28/90	14.87	0.01	246.17	261.04								
	12/12/90	14.88	0.01	246.16	261.04								
	01/09/91	14.71	0.00	246.33	261.04								
	01/18/91	14.79	0.00	246.25	261.04	22.15							
	02/08/91	14.87	0.00	246.17	261.04								
	03/04/91	14.28	0.00	246.76	261.04								
	04/16/91	14.31	0.00	246.73	261.04	22.53							
	05/23/91	14.45	0.00	246.59	261.04								
	07/16/91	14.53	0.00	246.51	261.04	30.24							
	07/19/91	14.53	0.00	246.51	261.04	22.22							
	07/29/91	14.51	0.00	246.53	261.04	22.31							
	09/04/91	14.60	0.00	246.44	261.04	22.38							Product while bailing
	09/25/91	14.66	0.00	246.38	261.04	22.54							
	10/15/91	14.67	0.00	246.37	261.04	22.31							Product while bailing
	11/13/91	14.96	0.01	246.08	261.04								
	12/04/91	14.99	0.01	246.05	261.04								
	01/30/92	14.87	0.01	246.17	261.04	23.45							
	04/21/92	14.02	0.01	247.02	261.04	23.25							
	04/30/92	14.08	0.01	246.96	261.04	22.57							
	07/02/92	14.14	0.01	246.90	261.04	23.45							
	10/13/92	14.22	0.01	246.82	261.04	23.50							
	03/15/93	12.24	0.00	248.80	261.04	23.44	27000	5400	1700	700	2600		
	05/05/93	12.41	0.00	248.63	261.04	23.27	27000	3500	50	700	3300		
	07/26/93	12.92	0.00	248.12	261.04	23.45	10600	1475	624	504	926		
	11/30/93	13.80	0.00	247.24	261.04	23.45	5100	766	305	2056	428		
	03/01/94	13.65	0.00	247.39	261.04	23.44	9100	1142	408	249	571		
	05/04/94	13.90	0.00	247.14	261.04	23.45	4900	1340	659	260	486		
	07/18/94	13.90	0.00	247.14	261.04	23.40	9900	788	369	265	739		
	11/29/94	14.23	0.00	246.81	261.04	23.43	5300	575	332	259	405		
	02/16/95	13.30	0.00	247.74	261.04	23.50	6100	454	305	94	569		
	05/17/95	12.71	0.00	248.33	261.04	23.49	4300	296	191	95	307		

Table 2, Summary of Gauging and Laboratory Data
Pomona Box
88.003 W. Imperial Hwy (La Habra)

WELL	DATE	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	MTBE (mg/l)	COMMENTS
B-1	07/28/95	12.89	0.00	248.15	261.04	23.48	3600	249	180	65	204		
cont.	12/06/95	14.69	0.00	246.35	261.04	23.52	3200	440	302	83	294		
	03/13/96				261.04								Pump in well
	05/14/96	12.52	0.00	248.52	261.04	23.30	1900	70	55	2	33	70	
	09/06/96	13.27	0.00	247.77	261.04	23.25	4160	596	974	100	601	ND<10	
	12/06/96	14.87	0.00	246.17	261.04	23.39	1210	130	165	53	141	ND<10	
	03/13/97	13.22	0.00	247.82	261.04	23.42	1502	802	260	60	186	ND<10	
	05/27/97	13.70	0.00	247.34	261.04	23.35	1650	63	258	74	207	ND<10	
	08/22/97	14.40	0.00	246.64	261.04	23.40	1236	60	231	58	194	ND<10	
	12/22/97	13.95	0.00	247.09	261.04	23.43	623	52	126	35	96	ND<10	
	03/16/98	12.15	0.00	248.89	261.04	23.44	255	ND<0.3	ND<0.3	ND<0.3	42	ND<10	
	09/15/98	14.13	0.00	246.91	261.04	23.43	502	23	40	31	58	ND<10	
	11/25/98	14.53	0.00	246.51	261.04	23.60	448	ND<0.3	ND<0.3	6	14	ND<10	
	02/10/99	14.65	0.00	246.39	261.04	23.58	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
B-2	01/05/88				261.03								
	01/12/88	14.69	0.13	246.44	261.03	22.95							
	01/22/88	14.77	0.17	246.39	261.03	23.43							
	02/04/88	14.80	0.10	246.30	261.03	22.35							
	02/23/88	14.86	0.13	246.27	261.03	22.35							
	05/23/88	14.73	0.00	246.30	261.03								
	06/13/88	14.75	0.10	246.36	261.03								
	06/30/88	14.68	0.00	246.35	261.03								
	07/13/88	14.65	0.01	246.39	261.03								
	07/21/88	14.65	0.00	246.38	261.03								
	08/01/88	14.63	0.00	246.40	261.03								
	08/09/88	14.68	0.00	246.35	261.03								
	08/16/88	14.66	0.00	246.37	261.03								
	09/01/88	15.20	0.00	245.83	261.03								
	09/07/88	14.52	0.00	246.51	261.03								
	09/13/88	14.72	0.00	246.31	261.03								
	09/27/88	14.75	0.00	246.28	261.03								
	10/05/88	14.68	0.00	246.35	261.03								
	10/07/88				261.03								
	10/13/88	14.77	0.00	246.26	261.03								
	10/18/88	14.78	0.00	246.25	261.03								
	10/26/88	14.78	0.00	246.25	261.03								
	11/04/88	14.83	0.00	246.20	261.03								
	11/08/88	14.80	0.00	246.23	261.03								
	11/17/88	14.77	0.00	246.26	261.03								
	11/23/88	14.77	0.00	246.26	261.03								
	12/08/88	15.20	0.00	245.83	261.03								
	12/14/88	14.84	0.00	246.19	261.03	23.10							
	12/20/88				261.03								
	01/05/89	14.55	0.00	246.48	261.03								
	01/11/89	14.57	0.00	246.46	261.03								
	01/20/89	14.62	0.00	246.41	261.03								
	01/25/89	14.68	0.00	246.35	261.03								
	02/20/89	14.56	0.00	246.47	261.03								

Table 2, Summary of Gauging and Laboratory Data
Pomona Box
88.003 W. Imperial Hwy (La Habra)

WELL	DATE	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	MTBE (mg/l)	COMMENTS
B-2	03/15/89	14.55	0.00	246.48	261.03								
cont.	03/27/89	14.55	0.00	246.48	261.03								
	04/19/89	14.57	0.00	246.46	261.03								
	05/11/89	14.60	0.00	246.43	261.03								
	05/25/89	14.60	0.00	246.43	261.03								
	06/12/89	14.59	0.00	246.44	261.03								
	06/22/89	14.75	0.00	246.28	261.03								
	07/12/89	14.64	0.00	246.39	261.03								
	08/09/89	14.69	0.00	246.34	261.03								
	08/21/89	14.66	0.00	246.37	261.03								
	09/08/89	14.68	0.00	246.35	261.03								
	09/22/89	14.65	0.00	246.38	261.03								
	10/09/89	14.73	0.01	246.30	261.03								
	10/20/89	14.70	0.00	246.33	261.03								
	11/08/89	14.75	0.01	246.28	261.03								
	12/01/89	14.79	0.00	246.24	261.03								
	12/15/89	14.81	0.01	246.22	261.03								
	12/29/89	14.84	0.01	246.19	261.03								
	01/11/90	14.83	0.00	246.20	261.03								
	02/16/90	14.79	0.00	246.24	261.03								
	03/02/90	14.57	0.00	246.46	261.03								
	03/14/90	14.69	0.00	246.34	261.03								
	03/28/90	14.69	0.00	246.34	261.03								
	04/13/90	14.64	0.00	246.39	261.03								
	04/27/90	14.73	0.00	246.30	261.03	22.27							
	05/17/90	14.74	0.00	246.29	261.03								
	06/01/90	14.64	0.00	246.39	261.03								
	06/21/90	14.73	0.00	246.30	261.03								
	07/17/90	14.80	0.00	246.23	261.03								
	08/20/90	14.76	0.00	246.27	261.03								
	09/13/90	14.80	0.00	246.23	261.03								
	09/28/90	14.80	0.01	246.23	261.03								
	10/12/90	14.84	0.00	246.19	261.03								
	10/26/90	14.82	0.00	246.21	261.03								
	11/28/90	14.91	0.01	246.12	261.03								
	12/12/90	14.92	0.00	246.12	261.03								
	01/09/91	14.76	0.01	246.27	261.03								
	01/18/91	14.85	0.00	246.18	261.03	22.87							
	02/08/91	14.91	0.00	246.12	261.03								
	03/04/91	14.30	0.00	246.74	261.03								
	04/16/91	14.37	0.00	246.66	261.03	23.36							
	05/23/91	14.49	0.01	246.54	261.03								
	07/16/91	14.58	0.00	246.46	261.03	30.88							
	07/19/91	14.57	0.00	246.46	261.03	23.05							
	07/29/91	14.56	0.00	246.47	261.03	23.29							
	09/04/91	14.66	0.00	246.37	261.03	22.55							Product while bailing
	09/25/91	14.70	0.00	246.33	261.03	23.45							
	10/15/91	14.72	0.00	246.31	261.03	23.10							Product while bailing
	11/13/91	15.00	0.01	246.03	261.03								

Table 2, Summary of Gauging and Laboratory Data
Pomona Box
88.003 W. Imperial Hwy (La Habra)

WELL	DATE	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	MTBE (mg/l)	COMMENTS
B-2	12/04/91	15.03	0.01	246.00	261.03								
cont.	01/30/92	14.91	0.01	246.12	261.03	23.37							
	04/21/92	14.08	0.01	246.95	261.03	22.30							
	04/30/92	14.14	0.00	246.89	261.03	21.74							
	07/02/92	14.20	0.01	246.83	261.03	22.61							
	10/13/92	14.41	0.00	246.62	261.03	22.55							
	03/15/93	12.37	0.00	248.66	261.03	22.47	31000	5500	4700	900	3300		
	05/05/93	12.54	0.00	248.49	261.03	22.43	62000	4000	4000	7000	2000		
	07/26/93	13.03	0.00	248.00	261.03	23.10	12900	1147	1313	833	1258		
	11/30/93	13.75	0.00	247.28	261.03	23.05	15200	3584.1	2743	548.1	1283.3		
	03/01/94	13.73	0.00	247.30	261.03	23.26	16800	3784.9	2464.4	479.9	1163.2		
	05/04/94	13.90	0.00	247.13	261.03	22.50	18200	7014.1	4471.9	620	1615.9		
	07/18/94	13.97	0.00	247.06	261.03	22.98	20300	7677.7	5420	834.3	2447.8		
	11/29/94	14.30	0.00	246.73	261.03	23.02	23300	4512.6	3185.4	531.4	1620.5		
	02/16/95	13.43	0.00	247.60	261.03	22.53	18900	3808.9	3026.7	552	1587.6		
	05/17/95	12.81	0.00	248.22	261.03	23.03	20600	4744.1	3354.8	561	1977		
	07/28/95	12.98	0.00	248.05	261.03	22.52	24900	6550.2	4073.2	812.5	2166.1		
	12/06/95				261.03								Pump in well
	03/13/96				261.03								Pump in well
	05/14/96				261.03								Pump in well
	09/06/96												Pump in well
	12/06/96				261.03								Pump in well
	03/13/97				261.03								Pump in well
	05/27/97				261.03								Pump in well
	08/22/97				261.03		4192	221	39.7	303	546.8	ND<10	Not gauged, pump in well
	12/22/97				261.03								Pump in well
	03/16/98	12.25	0.00	248.78	261.03	22.13	311	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	09/15/98	15.08	0.00	245.95	261.03	22.18	952	82.7	3.3	98.5	45	ND<10	
	11/25/98	14.81	0.00	246.22	261.03	21.99	3730	121.4	11.7	202.5	88.7	ND<10	
	02/10/99	13.79	0.00	247.24	261.03	21.98	399	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
B-3	01/05/88				260.89								
	01/12/88	14.56	0.00	246.33	260.89	23.00							
	01/22/88	14.40	0.00	246.49	260.89	23.13							
	02/04/88	14.50	0.00	246.39	260.89	23.01							
	02/23/88	14.56	0.00	246.33	260.89	23.01							
	05/23/88	14.47	0.00	246.42	260.89								
	06/13/88	14.46	0.00	246.43	260.89								
	06/30/88	14.47	0.00	246.42	260.89								
	07/13/88	14.42	0.00	246.47	260.89								
	07/21/88	14.43	0.00	246.46	260.89								
	08/01/88	14.40	0.00	246.49	260.89								
	08/09/88	14.45	0.00	246.44	260.89								
	08/16/88	14.45	0.00	246.44	260.89								
	09/01/88	14.50	0.00	246.39	260.89								
	09/07/88	15.18	0.00	245.71	260.89								
	09/13/88	14.50	0.00	246.39	260.89								
	09/27/88	14.52	0.00	246.37	260.89								
	10/05/88	14.52	0.00	246.37	260.89								

Table 2, Summary of Gauging and Laboratory Data
Pomona Box
88.003 W. Imperial Hwy (La Habra)

WELL	DATE	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	MTBE (mg/l)	COMMENTS
B-3	10/07/88				260.89								
cont.	10/13/88	14.59	0.00	246.30	260.89								
	10/18/88	14.63	0.00	246.26	260.89								
	10/26/88	14.58	0.00	246.31	260.89								
	11/04/88	14.64	0.00	246.25	260.89								
	11/08/88	14.58	0.00	246.31	260.89								
	11/17/88	14.54	0.00	246.35	260.89								
	11/23/88	14.57	0.00	246.32	260.89								
	12/08/88	14.82	0.00	246.07	260.89								
	12/14/88	14.65	0.00	246.24	260.89	23.13							
	12/20/88	14.45	0.00	246.44	260.89								
	01/05/89	14.50	0.00	246.39	260.89								
	01/11/89	14.33	0.00	246.56	260.89								
	01/20/89	14.40	0.00	246.49	260.89								
	01/25/89	14.45	0.00	246.44	260.89								
	02/20/89	14.35	0.00	246.54	260.89								
	03/15/89	14.35	0.00	246.54	260.89								
	03/27/89	14.31	0.00	246.58	260.89								
	04/19/89	14.35	0.00	246.54	260.89								
	05/11/89	14.39	0.00	246.50	260.89								
	05/25/89	14.37	0.00	246.52	260.89								
	06/12/89	14.38	0.00	246.51	260.89								
	06/22/89	14.40	0.00	246.49	260.89								
	07/12/89	14.41	0.00	246.48	260.89								
	08/09/89	14.46	0.00	246.43	260.89								
	08/21/89	14.45	0.00	246.44	260.89								
	09/08/89	14.47	0.00	246.42	260.89								
	09/22/89	14.44	0.01	246.45	260.89								
	10/09/89	14.52	0.00	246.37	260.89								
	10/20/89	14.50	0.00	246.39	260.89								
	11/08/89	14.53	0.00	246.36	260.89								
	12/01/89	14.59	0.00	246.30	260.89								
	12/15/89	14.59	0.00	246.30	260.89								
	12/29/89	14.62	0.00	246.27	260.89								
	01/11/90	14.62	0.01	246.27	260.89								
	02/16/90	14.57	0.00	246.32	260.89								
	03/02/90	14.35	0.00	246.54	260.89								
	03/14/90	14.46	0.00	246.43	260.89								
	03/28/90	14.46	0.00	246.43	260.89								
	04/13/90	14.49	0.00	246.40	260.89								
	04/27/90	14.51	0.00	246.38	260.89	22.28							
	05/17/90	14.54	0.00	246.35	260.89								
	06/01/90	14.45	0.00	246.44	260.89								
	06/21/90	14.53	0.00	246.36	260.89								
	07/17/90	14.59	0.00	246.30	260.89								
	08/20/90	14.56	0.00	246.33	260.89								
	09/13/90	14.59	0.00	246.30	260.89								
	09/28/90	14.58	0.00	246.31	260.89								
	10/12/90	14.63	0.00	246.26	260.89								

Table 2, Summary of Gauging and Laboratory Data
Pomona Box
88.003 W. Imperial Hwy (La Habra)

WELL	DATE	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	MTBE (mg/l)	COMMENTS
B-3	10/26/90	14.61	0.00	246.28	260.89								
cont.	11/28/90	14.70	0.00	246.19	260.89								
	12/12/90	14.70	0.00	246.19	260.89								
	01/09/91	14.36	0.00	246.54	260.89								
	01/18/91	14.64	0.00	246.25	260.89	22.92							
	02/08/91	14.70	0.00	246.19	260.89								
	03/04/91	14.09	0.00	246.80	260.89								
	04/16/91	14.17	0.00	246.72	260.89	23.35							
	05/23/91	14.28	0.00	246.61	260.89								
	07/16/91	14.37	0.00	246.53	260.89	30.56							
	07/19/91	14.35	0.00	246.54	260.89	23.04							
	07/29/91	14.35	0.00	246.54	260.89	23.02							
	09/04/91	14.45	0.00	246.44	260.89	23.09							Product while bailing
	09/25/91	14.50	0.00	246.39	260.89	23.26							
	10/15/91	14.51	0.00	246.38	260.89	23.16							Product while bailing
	11/13/91	14.80	0.01	246.09	260.89								
	12/04/91	14.83	0.01	246.07	260.89								
	01/30/92	14.72	0.01	246.17	260.89	23.20							
	04/21/92	13.87	0.01	247.02	260.89	23.00							
	04/30/92	13.93	0.00	246.96	260.89	22.30							
	07/02/92	14.00	0.01	246.89	260.89	23.20							
	10/13/92	14.21	0.00	246.68	260.89	23.17							
	03/15/93	12.19	0.00	248.70	260.89	23.19	7500	200	200	400	600		
	05/05/93	12.32	0.00	248.57	260.89	23.03	4500	200	60	ND<0.3	400		
	07/26/93	12.80	0.00	248.09	260.89	23.08	4300	367	172	65	274		
	11/30/93	13.60	0.00	247.29	260.89	23.16	800	127.7	42.4	48.5	81		
	03/01/94	13.53	0.00	247.36	260.89	23.19	800	91	27.7	36.6	43.7		
	05/04/94	13.62	0.00	247.27	260.89	23.17	400	83	33.6	26.5	38.1		
	07/18/94	13.75	0.00	247.14	260.89	23.16	700	54.1	26.3	19.8	34.3		
	11/29/94	14.09	0.00	246.80	260.89	23.16	400	66.2	22.7	11.7	34.7		
	02/16/95	13.19	0.00	247.70	260.89	23.22	600	37.4	20	27.8	55.1		
	05/17/95	12.61	0.00	248.28	260.89	24.12	500	104	18.1	21.3	27.9		
	07/28/95	12.77	0.00	248.12	260.89	23.20	400	75	22.5	24.5	33.6		
	12/06/95	14.74	0.00	246.15	260.89	23.16	900	169.2	31.7	5.3	79.8		
	03/13/96	13.24	0.00	247.65	260.89	23.24	300	42.3	29.7	13.2	349		
	05/14/96	13.52	0.00	247.37	260.89	23.31	200	30.9	10.8	6	11.8	ND<10	
	09/06/96	13.68	0.00	247.21	260.89	23.25	203	39.8	14	3.4	42.9	ND<10	
	12/06/96	14.86	0.00	246.03	260.89	23.22	250	25.4	8.1	5.4	29.4	ND<10	
	03/13/97	14.27	0.00	246.62	260.89	23.29	156	20	6.3	6.4	26.4	ND<10	
	05/27/97	13.57	0.00	247.32	260.89	23.25	189	28.9	6.1	9.9	24.3	ND<10	
	08/22/97	14.34	0.00	246.55	260.89	23.31	206	13.5	5.4	8.6	44.2	ND<10	
	12/22/97	13.84	0.00	247.05	260.89	23.29	ND<100	2.9	1.6	1.4	5.5	ND<10	
	03/16/98	12.09	0.00	248.80	260.89	23.30	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	09/15/98	14.23	0.00	246.66	260.89	23.34	102	18	0.9	8.6	7.8	ND<10	
	11/25/98	14.44	0.00	246.45	260.89	23.41	218	1.9	ND<0.3	2.2	1.8	ND<10	
	02/10/99	14.36	0.00	246.53	260.89	23.35	ND<100	1.1	ND<0.3	ND<0.3	ND<0.5	ND<10	

Table 2, Summary of Gauging and Laboratory Data
Pomona Box
88.003 W. Imperial Hwy (La Habra)

WELL	DATE	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	MTBE (mg/l)	COMMENTS
B-4	01/05/88				261.56								
	01/12/88	15.19	0.00	246.37	261.56	35.04							
	01/22/88	15.11	0.00	246.45	261.56	35.10							
	02/04/88	15.20	0.00	246.36	261.56	35.00							
	02/23/88	15.36	0.00	246.20	261.56	35.00							
	05/23/88	15.17	0.00	246.39	261.56								
	06/13/88	15.20	0.00	246.36	261.56								
	06/30/88	15.17	0.00	246.39	261.56								
	07/13/88	15.11	0.00	246.45	261.56								
	07/21/88	15.13	0.00	246.43	261.56								
	08/01/88	15.12	0.00	246.44	261.56								
	08/09/88	15.15	0.00	246.41	261.56								
	08/16/88	15.14	0.00	246.42	261.56								
	09/01/88	15.20	0.00	246.36	261.56								
	09/07/88	14.62	0.00	246.94	261.56								
	09/13/88	15.20	0.00	246.36	261.56								
	09/27/88	15.23	0.00	246.33	261.56								
	10/05/88	15.18	0.00	246.38	261.56								
	10/07/88				261.56								
	10/13/88	15.26	0.00	246.30	261.56								
	10/18/88	15.27	0.00	246.29	261.56								
	10/26/88	15.25	0.00	246.31	261.56								
	11/04/88	15.30	0.00	246.26	261.56								
	11/08/88	15.27	0.00	246.29	261.56								
	11/17/88	15.23	0.00	246.33	261.56								
	11/23/88	15.26	0.00	246.30	261.56								
	12/08/88	14.48	0.00	247.08	261.56								
	12/14/88	15.34	0.00	246.22	261.56	35.70							
	12/20/88	15.13	0.00	246.43	261.56								
	01/05/89	15.10	0.00	246.46	261.56								
	01/11/89	15.04	0.00	246.52	261.56								
	01/20/89	15.09	0.00	246.47	261.56								
	01/25/89	15.17	0.00	246.39	261.56								
	02/20/89	15.03	0.00	246.53	261.56								
	03/15/89	15.03	0.00	246.53	261.56								
	03/27/89	15.00	0.00	246.56	261.56								
	04/19/89	15.03	0.00	246.53	261.56								
	05/11/89	15.06	0.00	246.50	261.56								
	05/25/89	15.10	0.00	246.46	261.56								
	06/12/89	15.07	0.00	246.49	261.56								
	06/22/89	15.15	0.00	246.41	261.56								
	07/12/89	15.12	0.00	246.44	261.56								
	08/09/89	15.15	0.00	246.41	261.56								
	08/21/89	15.15	0.00	246.41	261.56								
	09/08/89	15.15	0.00	246.41	261.56								
	09/22/89	15.13	0.01	246.43	261.56								
	10/09/89	15.19	0.00	246.37	261.56								
	10/20/89	15.19	0.00	246.37	261.56								
	11/08/89	15.23	0.00	246.33	261.56								

Table 2, Summary of Gauging and Laboratory Data
Pomona Box
88.003 W. Imperial Hwy (La Habra)

WELL	DATE	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	MTBE (mg/l)	COMMENTS
B-4	12/01/89	15.27	0.00	246.29	261.56								
cont.	12/15/89	15.29	0.00	246.27	261.56								
	12/29/89	15.30	0.00	246.26	261.56								
	01/11/90	15.31	0.00	246.25	261.56								
	02/16/90	15.26	0.00	246.30	261.56								
	03/02/90	15.06	0.00	246.50	261.56								
	03/14/90	15.16	0.00	246.40	261.56								
	03/28/90	15.15	0.00	246.41	261.56								
	04/13/90	15.19	0.00	246.37	261.56								
	04/27/90	15.20	0.00	246.36	261.56	34.90							
	05/17/90	15.27	0.00	246.29	261.56								
	06/01/90	15.15	0.00	246.41	261.56								
	06/21/90	14.68	0.00	246.88	261.56								
	07/17/90	15.29	0.00	246.27	261.56								
	08/20/90	15.25	0.00	246.31	261.56								
	09/13/90	15.27	0.00	246.29	261.56								
	09/28/90	15.28	0.00	246.28	261.56								
	10/12/90	15.33	0.00	246.23	261.56								
	10/26/90	15.31	0.00	246.25	261.56								
	11/28/90	15.39	0.00	246.17	261.56								
	12/12/90	15.40	0.00	246.17	261.56								
	01/09/91	15.25	0.00	246.32	261.56								
	01/18/91	15.33	0.00	246.23	261.56	34.96							
	02/08/91	15.39	0.00	246.17	261.56								
	03/04/91	14.78	0.00	246.78	261.56								
	04/16/91	14.85	0.00	246.71	261.56	35.35							
	05/23/91	14.97	0.00	246.59	261.56								
	07/16/91	15.07	0.00	246.50	261.56	42.89							
	07/19/91	15.04	0.00	246.52	261.56	35.04							
	07/29/91	15.04	0.00	246.52	261.56	35.04							
	09/04/91	15.15	0.00	246.41	261.56	35.90	800	100	20	ND<0.3	80		
	09/25/91	15.18	0.00	246.38	261.56	35.18							
	10/15/91	15.20	0.00	246.36	261.56	35.08	4500	700	500	40	500		
	11/13/91	15.58	0.13	246.08	261.56								
	12/04/91	15.83	0.41	246.04	261.56								
	01/30/92	15.61	0.28	246.16	261.56	35.05							
	04/21/92	14.58	0.01	246.98	261.56	34.64							
	04/30/92	14.63	0.01	246.94	261.56	34.74							
	07/02/92	14.69	0.01	246.87	261.56	35.11							
	10/13/92	14.91	0.01	246.65	261.56	35.10							
	03/15/93	12.82	0.00	248.74	261.56	34.83	15000	1000	2200	400	2400		
	05/05/93	12.97	0.00	248.59	261.56	34.92	18000	700	2000	3000	1000		
	07/26/93	13.95	0.00	247.61	261.56	35.08	17400	957	1520	902	2000		
	11/30/93	14.28	0.00	247.28	261.56	35.00	14900	926	1178	956	2608		
	03/01/94	14.18	0.00	247.38	261.56	35.08	30700	2348	1843	1074	3378		
	05/04/94	14.26	0.00	247.30	261.56	34.67	15100	1535	1445	831	2720		
	07/18/94	14.42	0.00	247.14	261.56	35.04	12200	1338	1291	669	2707		
	11/29/94	14.76	0.00	246.80	261.56	35.08	5800	482	294	361	569		
	02/16/95	13.85	0.00	247.71	261.56	35.12	9800	694	557	319	1178		

Table 2, Summary of Gauging and Laboratory Data
Pomona Box
88.003 W. Imperial Hwy (La Habra)

WELL	DATE	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	MTBE (mg/l)	COMMENTS
B-4	05/17/95	13.25	0.00	248.31	261.56	35.12	15100	912	705	334	1690		
cont.	07/28/95	13.41	0.00	248.15	261.56	35.12	15700	1458	1273	545	1749		
	12/06/95	14.56	0.00	247.00	261.56	34.53	8900	833	814	219	806		
	03/13/96	13.14	0.00	248.42	261.56	34.56	4500	425	260	67	449		
	05/14/96	13.51	0.00	248.05	261.56	34.65	10400	559	679	383	994	120	
	09/06/96	14.38	0.00	247.18	261.56	34.57	4832	247	250	ND<0.3	828	ND<10	
	12/06/96	14.79	0.00	246.77	261.56	34.58	2343	128	259	84	361	ND<10	
	03/13/97	14.03	0.00	247.53	261.56	34.63	2764	81	147	14	491	ND<10	
	05/27/97	13.67	0.00	247.89	261.56	34.64	3735	117	201	150	386	ND<10	
	08/22/97	14.35	0.00	247.21	261.56	34.67	5175	127	298	234	762	ND<10	
	12/22/97	13.89	0.00	247.67	261.56	34.60	2461	87	162	0.138.8	0.371.9	ND<10	
	03/16/98	12.17	0.00	249.39	261.56	34.62	3496	111	104	36	460	ND<10	
	09/15/98	14.15	0.00	247.41	261.56	34.62	1975	56	51	133	295	ND<10	
	11/25/98	14.49	0.00	247.07	261.56	34.68	7961	309.3	137.8	369.3	601.5	ND<10	
	02/10/99	14.45	0.00	247.11	261.56	34.68	6441	248.1	96.3	527.4	706.0	ND<10	
B-5	01/05/88				260.68								
	01/12/88	19.73	5.29	244.92	260.68	34.00							
	01/22/88	19.91	5.58	244.95	260.68	34.03							
	02/04/88	19.45	5.25	245.17	260.68	34.07							
	02/23/88	19.53	5.13	245.00	260.68	34.07							
	05/23/88				260.68								
	06/13/88	14.70	0.33	246.23	260.68								
	06/30/88	14.95	0.15	245.84	260.68								
	07/13/88	15.02	0.26	245.86	260.68								
	07/21/88	16.75	1.49	245.05	260.68								
	08/01/88	15.08	0.05	245.64	260.68								
	08/09/88	15.30	0.00	245.38	260.68								Dry to top of pump
	08/16/88	15.60	0.30	245.31	260.68								
	09/01/88	16.35	1.68	245.59	260.68								
	09/07/88	16.26	1.68	245.68	260.68								
	09/13/88	14.69	0.00	245.99	260.68								Dry to top of pump
	09/27/88	14.65	0.07	246.08	260.68								
	10/05/88	14.65	0.00	246.03	260.68								Dry
	10/07/88	14.68	0.01	246.01	260.68	30.46							
	10/13/88	16.25	0.55	244.84	260.68								
	10/18/88	16.87	1.27	244.76	260.68								
	10/26/88	16.35	0.60	244.78	260.68								
	11/04/88	16.85	1.25	244.77	260.68								
	11/08/88	16.60	1.10	244.91	260.68								
	11/17/88	17.45	2.03	244.75	260.68								
	11/23/88	16.26	0.59	244.86	260.68								
	12/08/88	15.60	0.13	245.18	260.68								
	12/14/88				260.68								No access to well
	12/20/88	15.22	0.00	245.46	260.68								
	01/05/89	15.75	0.01	244.93	260.68								
	01/11/89	16.68	0.01	244.00	260.68								
	01/20/89	16.90	0.01	243.78	260.68								
	01/25/89	15.80	0.01	244.88	260.68								

Table 2, Summary of Gauging and Laboratory Data
Pomona Box
88.003 W. Imperial Hwy (La Habra)

WELL	DATE	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	MTBE (mg/l)	COMMENTS
B-5	02/20/89	16.02	0.87	245.31	260.68								
cont.	03/15/89	15.57	0.01	245.11	260.68								
	03/27/89	14.64	0.01	246.04	260.68								
	04/19/89	18.25	3.70	245.21	260.68								
	05/11/89	16.20	0.54	244.89	260.68								
	05/25/89	16.20	0.55	244.89	260.68								
	06/12/89	15.48	0.00	245.20	260.68								
	06/22/89	16.70	1.70	245.26	260.68								
	07/12/89	18.00	2.85	244.82	260.68								
	08/09/89	15.83	0.00	244.85	260.68								
	08/21/89	16.39	0.59	244.73	260.68								
	09/08/89	15.72	0.01	244.96	260.68								
	09/22/89	16.43	1.08	245.06	260.68								
	10/09/89	15.73	0.01	244.95	260.68								
	10/20/89	15.95	0.01	244.73	260.68								
	11/08/89	16.18	0.55	244.91	260.68								
	12/01/89	15.88	0.01	244.80	260.68								
	12/15/89	15.95	0.01	244.73	260.68								
	12/29/89	16.05	0.10	244.71	260.68								
	01/11/90	15.59	0.20	245.24	260.68								
	02/16/90	15.68	0.42	245.32	260.68								
	03/02/90	15.62	0.57	245.49	260.68								
	03/14/90	15.47	0.13	245.31	260.68								
	03/28/90	15.24	0.01	245.44	260.68								
	04/13/90	15.95	0.01	244.73	260.68								
	04/27/90	15.65	0.05	245.07	260.68	33.66							Pump in well
	05/17/90	16.00	0.01	244.68	260.68								
	06/01/90	15.23	0.00	245.45	260.68								Gas to top of pump
	06/21/90	15.90	0.01	244.78	260.68								
	07/17/90	16.00	0.01	244.68	260.68								
	08/20/90	15.80	0.01	244.88	260.68								
	09/13/90	15.30	0.00	245.38	260.68								
	09/28/90	15.34	0.01	245.34	260.68								
	10/12/90	15.32	0.01	245.36	260.68								
	10/26/90	15.33	0.01	245.35	260.68								
	11/28/90	15.96	0.24	244.90	260.68								Approx. -Skimmer off
	12/12/90	16.15	0.29	244.75	260.68								Approx.-pulled pump
	01/09/91	15.57	0.02	245.13	260.68								
	01/18/91	15.61	0.01	245.07	260.68	33.70							Pump in well
	02/08/91	16.02	0.01	244.66	260.68								
	03/04/91	15.54	0.01	245.14	260.68								Pump out of well
	04/16/91	15.62	0.32	245.30	260.68	34.13							
	05/23/91	15.75	0.00	244.93	260.68								
	07/16/91	15.57	0.12	245.20	260.68	41.66							
	07/19/91	15.69	0.14	245.10	260.68	33.75							
	07/29/91				260.68								
	09/04/91	15.85	0.08	244.89	260.68	33.83							
	09/25/91	15.92	0.07	244.81	260.68	33.80							
	10/15/91	15.88	0.03	244.82	260.68	33.85							

Table 2, Summary of Gauging and Laboratory Data
Pomona Box
88.003 W. Imperial Hwy (La Habra)

WELL	DATE	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	MTBE (mg/l)	COMMENTS
B-5	11/13/91	15.65	0.17	245.16	260.68								
cont.	12/04/91	15.64	0.07	245.09	260.68								Pump in well
	01/30/92	15.08	0.01	245.60	260.68								Pump in well
	04/21/92				260.68								
	04/30/92				260.68								
	07/02/92	15.75	0.01	244.93	260.68	33.85							Pump set to 16 ft.
	10/13/92	15.80	0.01	244.88	260.68	33.87							
	03/15/93				260.68								Pump in well
	05/05/93	13.47	0.03	247.23	260.68								
	07/26/93	13.89	0.00	246.79	260.68								
	11/30/93	15.05	0.00	245.63	260.68								Pump in well
	03/01/94	14.68	0.00	246.00	260.68	33.34							Pump in well
	05/04/94				260.68								Pump in well
	07/18/94	15.70	0.00	244.98	260.68	33.71	83700	27905.7	20020	3274.3	9233.5		
	11/29/94	16.61	0.02	244.09	260.68	33.79							
	02/16/95	14.72	0.02	245.98	260.68	33.55							
	05/17/95				260.68								Pump in well
	07/28/95	14.55	0.00	246.13	260.68	33.52	64700	18383.7	11150.2	1439.6	4048.8		
	12/06/95				260.68								Pump in well
	03/13/96				260.68								Pump in well
	05/14/96				260.68								Pump in well
	09/06/96				260.68								Pump in well
	12/06/96				260.68								Pump in well
	03/13/97				260.68								Pump in well
	05/27/97				260.68								Pump in well
	08/22/97				260.68		ND<100	9.4	ND<0.3	ND<0.3	ND<0.5	ND<10	Not gauged, pump in well
	12/22/97				260.68								Pump in well
	03/16/98	14.72	0.00	245.96	260.68	33.17	237	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	09/15/98	16.18	0.00	244.50	260.68	33.18	996	323.5	3.4	25.6	8.8	ND<10	
	11/25/98	15.85	0.00	244.83	260.68	33.27	1476	397.9	7.8	16.8	10.8	ND<10	
	02/10/99	14.87	0.00	245.81	260.68	33.24	256	ND<0.3	2.4	1.5	1.0	ND<10	
B-6	01/05/88				256.60								
	01/12/88	11.87	0.00	244.73	256.60	34.07							
	01/22/88	11.68	0.00	244.92	256.60	34.12							
	02/04/88	11.70	0.00	244.90	256.60	34.35							
	02/23/88	11.75	0.00	244.85	256.60	34.35							
	05/23/88	11.57	0.00	245.03	256.60								
	06/13/88	11.59	0.00	245.01	256.60								
	06/30/88	11.66	0.00	244.94	256.60								
	07/13/88	11.58	0.00	245.02	256.60								
	07/21/88	11.54	0.00	245.06	256.60								
	08/01/88	11.50	0.00	245.10	256.60								
	08/09/88	11.52	0.00	245.08	256.60								
	08/16/88	11.55	0.00	245.05	256.60								
	09/01/88	11.64	0.00	244.96	256.60								
	09/07/88	11.60	0.00	245.00	256.60								
	09/13/88	11.61	0.00	244.99	256.60								
	09/27/88	11.65	0.00	244.95	256.60								

Table 2, Summary of Gauging and Laboratory Data
Pomona Box
88.003 W. Imperial Hwy (La Habra)

WELL	DATE	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	MTBE (mg/l)	COMMENTS
B-6	10/05/88	11.66	0.00	244.94	256.60								
cont.	10/07/88				256.60								
	10/13/88	11.67	0.00	244.93	256.60								
	10/18/88	11.68	0.00	244.92	256.60								
	10/26/88	11.65	0.00	244.95	256.60								
	11/04/88	11.67	0.00	244.93	256.60								
	11/08/88	11.66	0.00	244.94	256.60								
	11/17/88	11.65	0.00	244.95	256.60								
	11/23/88	11.65	0.00	244.95	256.60								
	12/08/88	11.42	0.00	245.18	256.60								
	12/14/88	11.75	0.00	244.85	256.60	34.40							
	12/20/88	11.57	0.00	245.03	256.60								
	01/05/89	11.47	0.00	245.13	256.60								
	01/11/89	11.52	0.00	245.08	256.60								
	01/20/89	11.55	0.00	245.05	256.60								
	01/25/89	11.60	0.00	245.00	256.60								
	02/20/89	11.47	0.00	245.13	256.60								
	03/15/89	11.50	0.00	245.10	256.60								
	03/27/89	11.45	0.00	245.15	256.60								
	04/19/89	11.45	0.00	245.15	256.60								
	05/11/89	11.55	0.00	245.05	256.60								
	05/25/89	11.55	0.00	245.05	256.60								
	06/12/89	11.45	0.00	245.15	256.60								
	06/22/89	11.53	0.00	245.07	256.60								
	07/12/89	11.51	0.00	245.09	256.60								
	08/09/89	11.57	0.00	245.03	256.60								
	08/21/89	11.55	0.00	245.05	256.60								
	09/08/89	11.55	0.00	245.05	256.60								
	09/22/89	11.56	0.00	245.04	256.60								
	10/09/89	11.63	0.00	244.97	256.60								
	10/20/89	11.65	0.00	244.95	256.60								
	11/08/89	11.68	0.00	244.92	256.60								
	12/01/89	11.67	0.00	244.93	256.60								
	12/15/89	11.66	0.00	244.94	256.60								
	12/29/89	11.70	0.00	244.90	256.60								
	01/11/90	11.70	0.00	244.90	256.60								
	02/16/90	11.66	0.00	244.94	256.60								
	03/02/90	11.46	0.00	245.14	256.60								
	03/14/90	11.63	0.00	244.97	256.60								
	03/28/90	11.55	0.00	245.05	256.60								
	04/13/90	11.71	0.00	244.89	256.60								
	04/27/90	11.61	0.00	244.99	256.60	33.92							
	05/17/90	11.67	0.00	244.93	256.60								
	06/01/90	11.52	0.00	245.08	256.60								
	06/21/90	11.56	0.00	245.04	256.60								
	07/17/90	11.68	0.00	244.92	256.60								
	08/20/90	11.60	0.00	245.00	256.60								
	09/13/90	11.59	0.00	245.01	256.60								
	09/28/90	11.69	0.00	244.91	256.60								

Table 2, Summary of Gauging and Laboratory Data
Pomona Box
88.003 W. Imperial Hwy (La Habra)

WELL	DATE	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	MTBE (mg/l)	COMMENTS
B-6	10/12/90	11.65	0.00	244.95	256.60								
cont.	10/26/90	11.68	0.00	244.92	256.60								
	11/28/90	11.78	0.00	244.82	256.60								
	12/12/90	11.79	0.00	244.81	256.60								
	01/09/91	11.46	0.00	245.15	256.60								
	01/18/91	11.75	0.00	244.85	256.60	33.98							
	02/08/91	11.78	0.00	244.82	256.60								
	03/04/91	11.15	0.00	245.45	256.60								
	04/16/91	11.26	0.00	245.34	256.60	34.45							
	05/23/91	11.35	0.00	245.25	256.60								
	07/16/91	11.43	0.00	245.17	256.60	41.99							
	07/19/91	11.42	0.00	245.18	256.60	34.04							
	07/29/91	11.40	0.00	245.20	256.60	34.04							
	09/04/91	11.50	0.00	245.10	256.60	34.07	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		
	09/25/91	11.53	0.00	245.07	256.60	34.18							
	10/15/91	11.55	0.00	245.05	256.60	34.13	90	30	ND<0.3	ND<0.3	ND<0.5		
	11/13/91	11.78	0.00	244.83	256.60								
	12/04/91	11.83	0.00	244.77	256.60								
	01/30/92	11.72	0.00	244.88	256.60	34.04	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		
	04/21/92	11.03	0.00	245.57	256.60	33.44	1100	240	100	30	140		
	04/30/92	11.08	0.00	245.52	256.60	33.23							
	07/02/92	11.14	0.00	245.46	256.60	34.10	1900	100	30	0	90		
	10/13/92	11.31	0.00	245.29	256.60	33.72	3000	500	200	80	250		
	03/15/93	9.72	0.00	246.88	256.60	33.85	2400	700	100	60	200		
	05/05/93	9.87	0.00	246.73	256.60	33.89	2000	300	200	60	200		
	07/26/93	10.26	0.00	246.34	256.60	34.12	1900	323	203	49	115		
	11/30/93	10.80	0.00	245.80	256.60	33.90	2100	157.9	129.5	40.6	118.2		
	03/01/94	10.73	0.00	245.87	256.60	34.08	1900	352.6	157.7	44.7	104.7		
	05/04/94	10.80	0.00	245.80	256.60	34.00	400	97.5	54.1	12	32.1		
	07/18/94	10.98	0.00	245.62	256.60	34.09	3900	391.9	329	111.3	389.2		
	11/29/94	11.29	0.00	245.31	256.60	34.12	800	104.1	45.8	41.1	81.3		
	02/16/95	10.57	0.00	246.03	256.60	34.20	700	143.5	47	11.1	40.5		
	05/17/95	10.21	0.00	246.39	256.60	34.15	1300	113.6	55.2	34.5	58		
	07/28/95	10.32	0.00	246.28	256.60	34.12	1000	122.2	76	20	57.6		
	12/06/95				256.60								Pump in well
	03/13/96				256.60								Pump in well
	05/14/96				256.60								Pump in well
	09/06/96				256.60								Pump in well
	12/06/96				256.60								Pump in well
	03/13/97				256.60								Pump in well
	05/27/97				256.60								Pump in well
	08/22/97				256.60								Pump in well
	12/22/97				256.60								Pump in well
	03/16/98	10.83	0.00	245.77	256.60	33.35	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	09/15/98	12.32	0.00	244.28	256.60	33.34	ND<100	9.5	3.8	3.4	6.2	ND<10	
	11/25/98	12.13	0.00	244.47	256.60	33.47	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	02/10/99	11.36	0.00	245.24	256.60	33.47	ND<100	3.3	ND<0.3	ND<0.3	ND<0.5	ND<10	

Table 2, Summary of Gauging and Laboratory Data
Pomona Box
88.003 W. Imperial Hwy (La Habra)

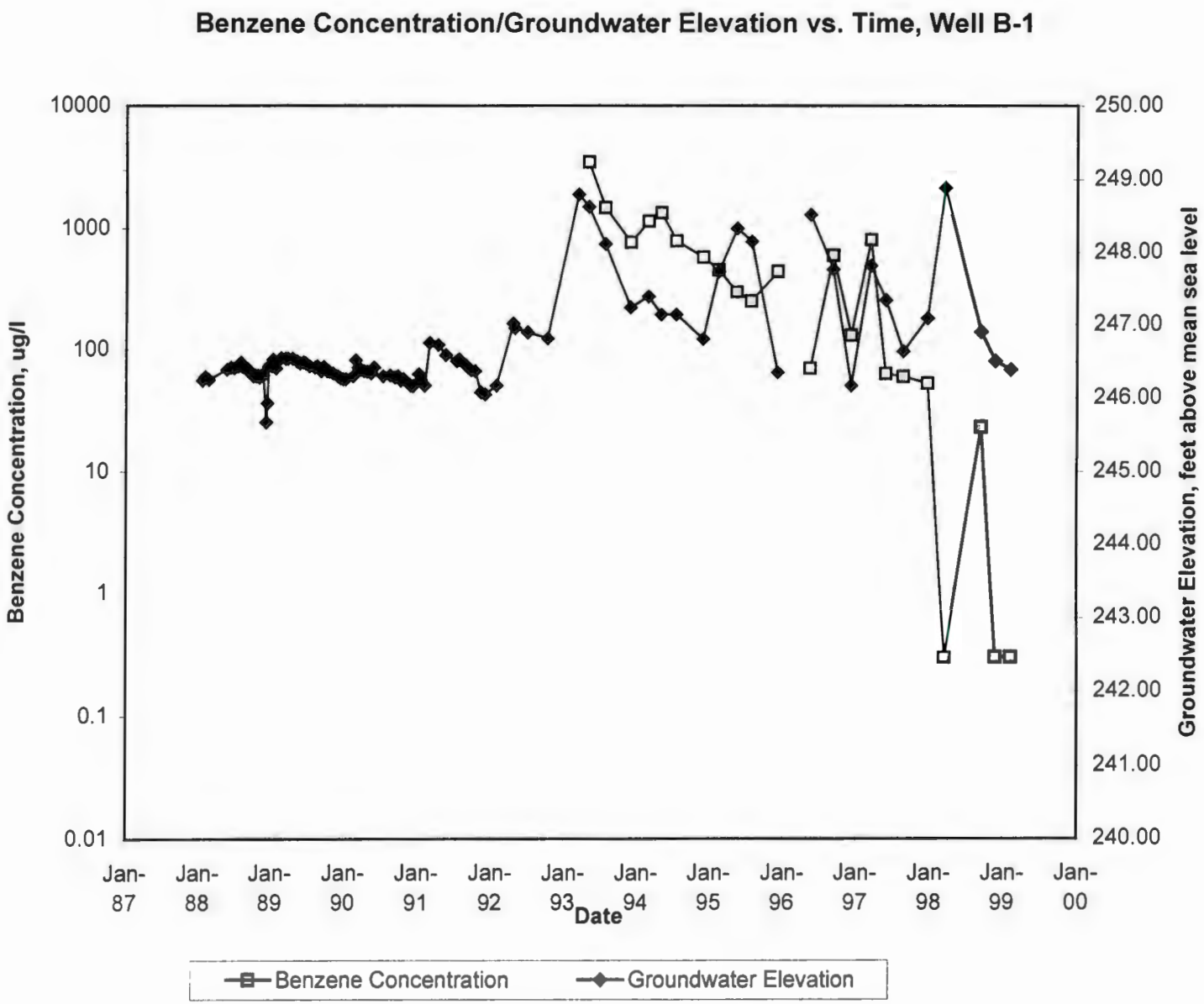
WELL	DATE	DEPTH TO WATER (feet)	HYDRO CARBON THICKNESS (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	MTBE (mg/l)	COMMENTS
B-7	04/03/91	12.56	0.00	242.13	254.69	42.60							Instal. 3/21, Devel. 4/3
	04/16/91	13.04	0.00	241.65	254.69	40.90	1600	200	20	20	200		Survey data 3/27/91
	05/23/91	13.32	0.00	241.37	254.69								
	07/16/91	13.18	0.00	241.51	254.69	48.47							
	07/19/91	13.16	0.00	241.53	254.69	40.65							
	07/29/91	13.15	0.00	241.54	254.69	40.60							
	09/04/91	13.27	0.00	241.42	254.69	40.69	1600	10	ND<0.3	100	100		
	09/25/91	13.26	0.00	241.43	254.69	40.75							
	10/15/91	13.28	0.00	241.41	254.69	40.65	900	200	ND<0.3	70	500		
	11/13/91	13.60	0.00	241.10	254.69								
	12/04/91	13.62	0.00	241.07	254.69								
	01/30/92	13.50	0.00	241.19	254.69	40.62	340	90	ND<0.3	15	ND<0.5		
	04/21/92	12.59	0.00	242.10	254.69	40.28	2100	350	80	240	240		
	04/30/92	12.61	0.00	242.08	254.69	39.83							
	07/02/92	12.64	0.00	242.05	254.69	40.55	870	ND<0.3	ND<0.3	ND<0.3	5		
	10/13/92	12.90	0.00	241.79	254.69	40.71	600	80	2	200	ND<0.5		
	03/15/93	10.70	0.00	243.99	254.69	40.71	4000	200	10	500	300		
	05/05/93	10.94	0.00	243.75	254.69	40.58	500	40	ND<0.3	70	40		
	07/26/93	11.46	0.00	243.23	254.69	40.75	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		
	11/30/93	12.16	0.00	242.53	254.69	40.77	ND<100	4.5	2.3	ND<0.3	5.6		
	03/01/94	12.10	0.00	242.59	254.69	40.74	100	20.4	ND<0.3	46	ND<0.5		
	05/04/94	12.27	0.00	242.42	254.69	40.75	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		
	07/18/94	12.38	0.00	242.31	254.69	40.70	400	16.4	1.3	ND<0.3	33.3		
	11/29/94	12.72	0.00	241.97	254.69	40.73	300	14.1	3.3	ND<0.3	26.7		
	02/16/95	11.74	0.00	242.95	254.69	40.80	600	47.3	7.5	189.1	25.6		
	05/17/95	11.10	0.00	243.59	254.69	40.80	800	47.8	3.6	333.3	26.2		
	07/28/95	11.30	0.00	243.39	254.69	40.75	1400	172.3	19.3	364.6	30.4		
	12/06/95	12.73	0.00	241.96	254.69	40.71	700	27.7	1.9	122.8	5.3		
	03/13/96	11.74	0.00	242.95	254.69	40.76	600	30.9	1	75.2	10.7		
	05/14/96	12.31	0.00	242.38	254.69	40.84	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	09/06/96	12.68	0.00	242.01	254.69	40.77	187	5.8	ND<0.3	43.9	0.8	ND<10	
	12/06/96	13.17	0.00	241.52	254.69	40.75	372	8.7	1.3	96.2	3.5	ND<10	
	03/13/97	12.78	0.00	241.91	254.69	40.80	147	4.2	0.4	21.9	0.8	ND<10	
	05/27/97	12.14	0.00	242.55	254.69	40.84	434	ND<0.3	0.6	55.6	2.6	ND<10	
	08/22/97	13.24	0.00	241.45	254.69	40.89	323	7.6	1	27	3.1	ND<10	
	12/22/97	12.36	0.00	242.33	254.69	40.83	244	5.8	ND<0.3	15.8	0.9	ND<10	
	03/16/98	10.49	0.00	244.20	254.69	40.80	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	09/15/98	12.43	0.00	242.26	254.69	40.80	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	11/25/98	12.86	0.00	241.83	254.69	40.81	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	02/10/99	12.80	0.00	241.89	254.69	40.83	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
B-8	07/26/91	9.48	0.00	241.39	250.87	33.41							Develop well
	07/29/91	9.46	0.00	241.41	250.87	35.44	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		Survey data 7/29/91
	09/04/91	9.00	0.00	241.87	250.87	35.48	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		
	09/25/91	9.59	0.00	241.28	250.87	35.57							
	10/15/91	9.60	0.00	241.27	250.87	35.47	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		
	11/13/91	9.86	0.00	241.01	250.87								
	12/04/91	9.89	0.00	240.98	250.87								
	01/30/92	9.76	0.00	241.11	250.87	35.48	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		

Table 2, Summary of Gauging and Laboratory Data
Pomona Box
88.003 W. Imperial Hwy (La Habra)

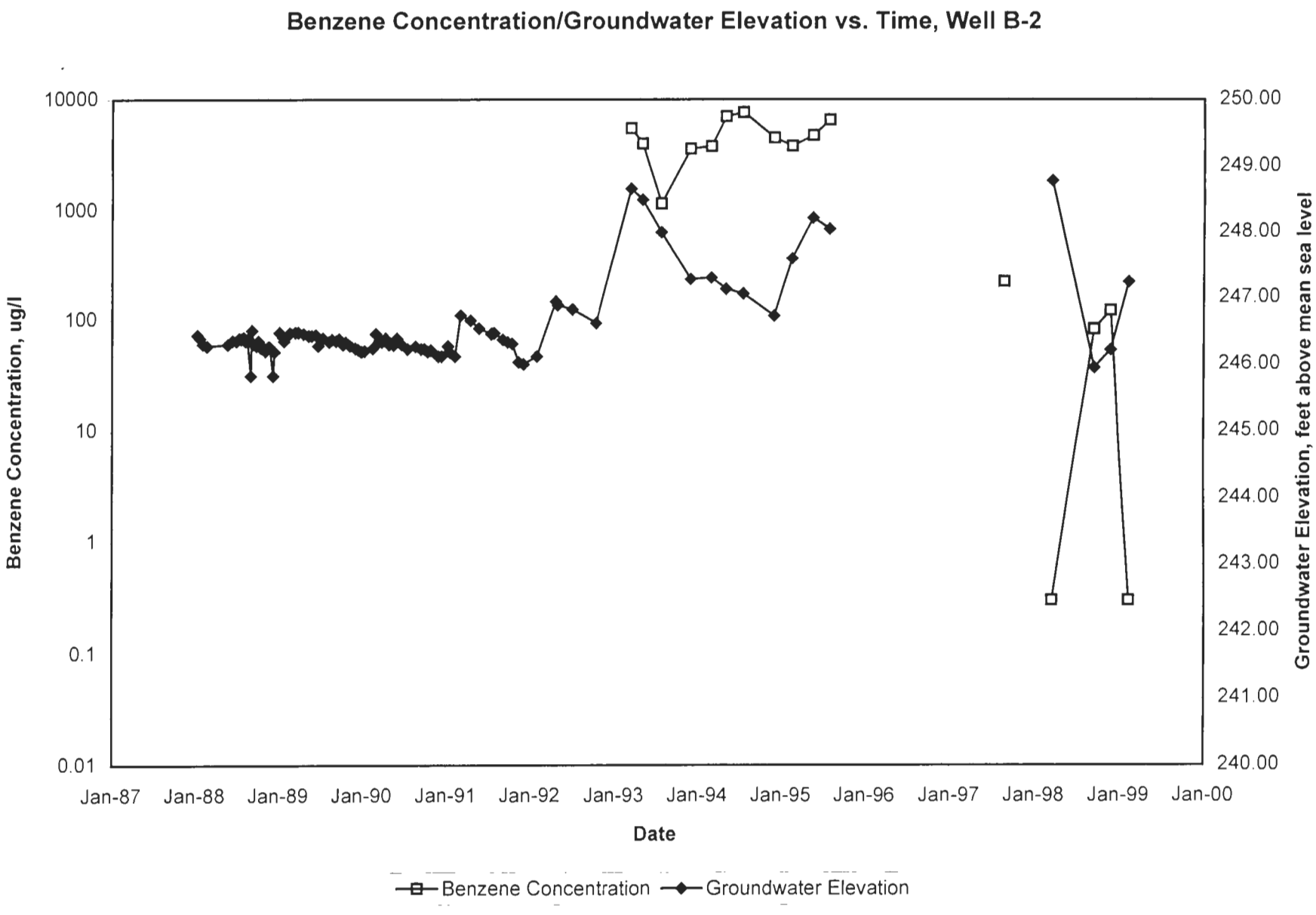
WELL	DATE	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	MTBE (mg/l)	COMMENTS
B-8	04/21/92	8.98	0.00	241.89	250.87	35.06	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		
cont.	04/30/92	9.01	0.00	241.86	250.87	34.62							
	07/02/92	9.10	0.00	241.77	250.87	35.51	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		
	10/13/92	9.33	0.00	241.54	250.87	35.50	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		
	03/15/93	7.34	0.00	243.53	250.87	35.49	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		
	05/05/93	7.50	0.00	243.37	250.87	35.31	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		
	07/26/93	7.92	0.00	242.95	250.87	35.51	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		
	11/30/93	8.56	0.00	242.31	250.87	35.46	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		
	03/01/94	8.57	0.00	242.30	250.87	35.50	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		
	05/04/94	8.62	0.00	242.25	250.87	35.43	500	36.5	7.7	82.4	ND<0.5		
	07/18/94	8.82	0.00	242.05	250.87	35.43	ND<100	1.2	0.5	0.3	2.1		
	11/29/94	9.14	0.00	241.73	250.87	35.48	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		
	02/16/95	8.21	0.00	242.66	250.87	35.55	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		
	05/17/95	8.65	0.00	242.22	250.87	35.52	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		
	07/28/95	7.84	0.00	243.03	250.87	35.51	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		
	12/06/95	9.44	0.00	241.43	250.87	32.20	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		
	03/13/96	8.92	0.00	241.95	250.87	32.56	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5		
	05/14/96	9.03	0.00	241.84	250.87	32.63	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	09/06/96	9.18	0.00	241.69	250.87	32.56	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	12/06/96	10.03	0.00	240.84	250.87	32.58	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	03/13/97	9.41	0.00	241.46	250.87	32.60	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	05/27/97	9.06	0.00	241.81	250.87	32.23	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	08/22/97	10.22	0.00	240.65	250.87	32.50	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	12/22/97	9.24	0.00	241.63	250.87	32.26	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	03/16/98	7.65	0.00	243.22	250.87	32.26	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	09/15/98	9.33	0.00	241.54	250.87	32.26	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	11/25/98	9.76	0.00	241.11	250.87	32.36	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	02/10/99	9.69	0.00	241.18	250.87	32.35	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
B-9	03/15/93	9.79	0.00	243.93	253.72	25.04	900	100	5	300	ND<0.5		
	05/05/93	9.95	0.00	243.77	253.72	22.85	2000	200	3	500	10		
	07/26/93	10.44	0.00	243.28	253.72	23.05	1600	107	10	ND<0.3	210		
	11/30/93	11.23	0.00	242.49	253.72	23.05	1600	76.4	19	ND<0.3	113.8		
	03/01/94	11.17	0.00	242.55	253.72	23.03	800	41.8	6.4	442.9	11.4		
	05/04/94	11.34	0.00	242.38	253.72	23.06	500	3.4	1.3	248.5	4.3		
	07/18/94	11.44	0.00	242.28	253.72	23.01	1400	37	3.4	0.3	98.1		
	11/29/94	11.78	0.00	241.94	253.72	23.03	800	24.7	3.1	330.4	6.1		
	02/16/95	10.81	0.00	242.91	253.72	23.10	400	14.2	2.3	215.3	4.7		
	05/17/95	10.17	0.00	243.55	253.72	23.07	600	20.1	3.1	253.5	13.2		
	07/28/95	10.39	0.00	243.33	253.72	23.07	700	30.6	10.5	260.4	23.1		
	12/06/95				253.72								Pump in well
	03/13/96				253.72								Pump in well
	05/14/96				253.72								Pump in well
	09/06/96				253.72								Pump in well
	12/06/96				253.72								Pump in well
	03/13/97				253.72								Pump in well
	05/27/97				253.72								Pump in well
	08/22/97				253.72								Pump in well
	12/22/97				253.72								Pump in well

Table 2, Summary of Gauging and Laboratory Data
Pomona Box
88.003 W. Imperial Hwy (La Habra)

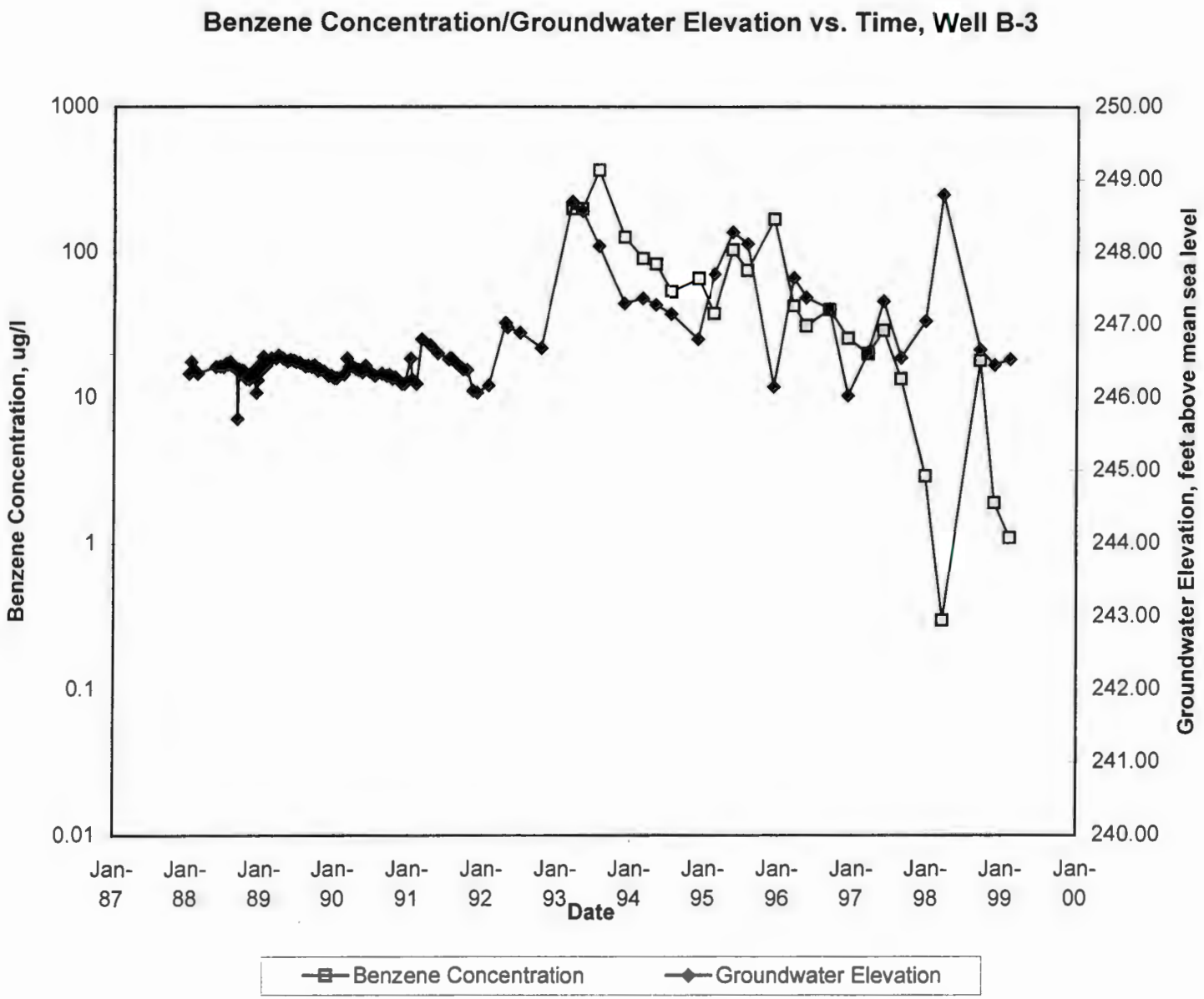
WELL	DATE	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (mg/L)	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	XYLENE (mg/L)	MTBE (mg/l)	COMMENTS
B-9	03/16/98	9.22	0.00	244.50	253.72	21.97	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
cont.	09/15/98	11.20	0.00	242.52	253.72	21.98	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	11/25/98	11.54	0.00	242.18	253.72	22.02	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	02/10/99	11.37	0.00	242.35	253.72	21.98	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
B-10	03/15/93	9.14	0.00	241.76	250.90	25.47	6000	500	500	300	1100		
	05/05/93	9.40	0.00	241.50	250.90	25.30	31000	1000	1000	4500	1000		
	07/26/93	9.86	0.00	241.04	250.90	25.48	11400	1166	688	1454	1371		
	11/30/93	10.56	0.00	240.34	250.90	25.48	6400	280.9	176.1	202.3	341.3		
	03/01/94	10.18	0.00	240.72	250.90	25.47	8500	915.7	507	657.3	857.6		
	05/04/94	10.21	0.00	240.69	250.90	25.50	6300	1275.8	586	783.5	1039.2		
	07/18/94	10.54	0.00	240.36	250.90	25.44	5200	539.5	242.3	441.4	573.1		
	11/29/94	10.94	0.00	239.96	250.90	25.48	3900	617.6	93.1	609.1	151.4		
	02/16/95	9.71	0.00	241.19	250.90	25.53	7600	907.2	309.1	683.1	713.9		
	05/17/95	9.37	0.00	241.53	250.90	25.47	9500	1085.4	500.1	870.4	950.5		
	07/28/95	9.40	0.00	241.50	250.90	25.50	15000	1893.9	957.7	1288	1725.9		
	12/06/95				250.90								Pump in well
	03/13/96				250.90								Pump in well
	05/14/96				250.90								Pump in well
	09/06/96				250.90								Pump in well
	12/06/96				250.90								Pump in well
	03/13/97				250.90								Pump in well
	05/27/97				250.90								Pump in well
	08/22/97				250.90								Pump in well
	12/22/97				250.90								Pump in well
	03/16/98	10.85	0.00	240.05	250.90	25.37	118	20.7	ND<0.3	7.1	9.2	ND<10	
	09/15/98	12.17	0.00	238.73	250.90	25.38	ND<100	18.1	ND<0.3	ND<0.3	ND<0.5	ND<10	
	11/25/98	12.48	0.00	238.42	250.90	25.39	ND<100	21	ND<0.3	ND<0.3	ND<0.5	ND<10	
	02/10/99	10.76	0.00	240.14	250.90	25.40	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
B-11	05/27/97	13.48	0.00	237.10	250.58	32.77	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	08/22/97	13.94	0.00	236.64	250.58	32.78	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	12/22/97	13.91	0.00	236.67	250.58	32.77	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	03/16/98	13.12	0.00	237.46	250.58	32.77	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	
	09/15/98				250.58								Not gauged/sampled
	11/25/98	0.00	0.00	250.58	250.58								Not gauged/sampled
	02/10/99	13.58	0.00	237.00	250.58	32.80	ND<100	ND<0.3	ND<0.3	ND<0.3	ND<0.5	ND<10	


Benzene Concentration/Groundwater Elevation vs. Time, Well B-1
Benzene Concentration, ug/l
10000
1000
100
10
1
0.1
0.01
Groundwater Elevation, feet above mean sea level
250.00
249.00
248.00
247.00
246.00
245.00
244.00
243.00
242.00
241.00
240.00
Jan-87
Jan-88
Jan-89
Jan-90
Jan-91
Jan-92
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Date
Benzene Concentration
Groundwater Elevation

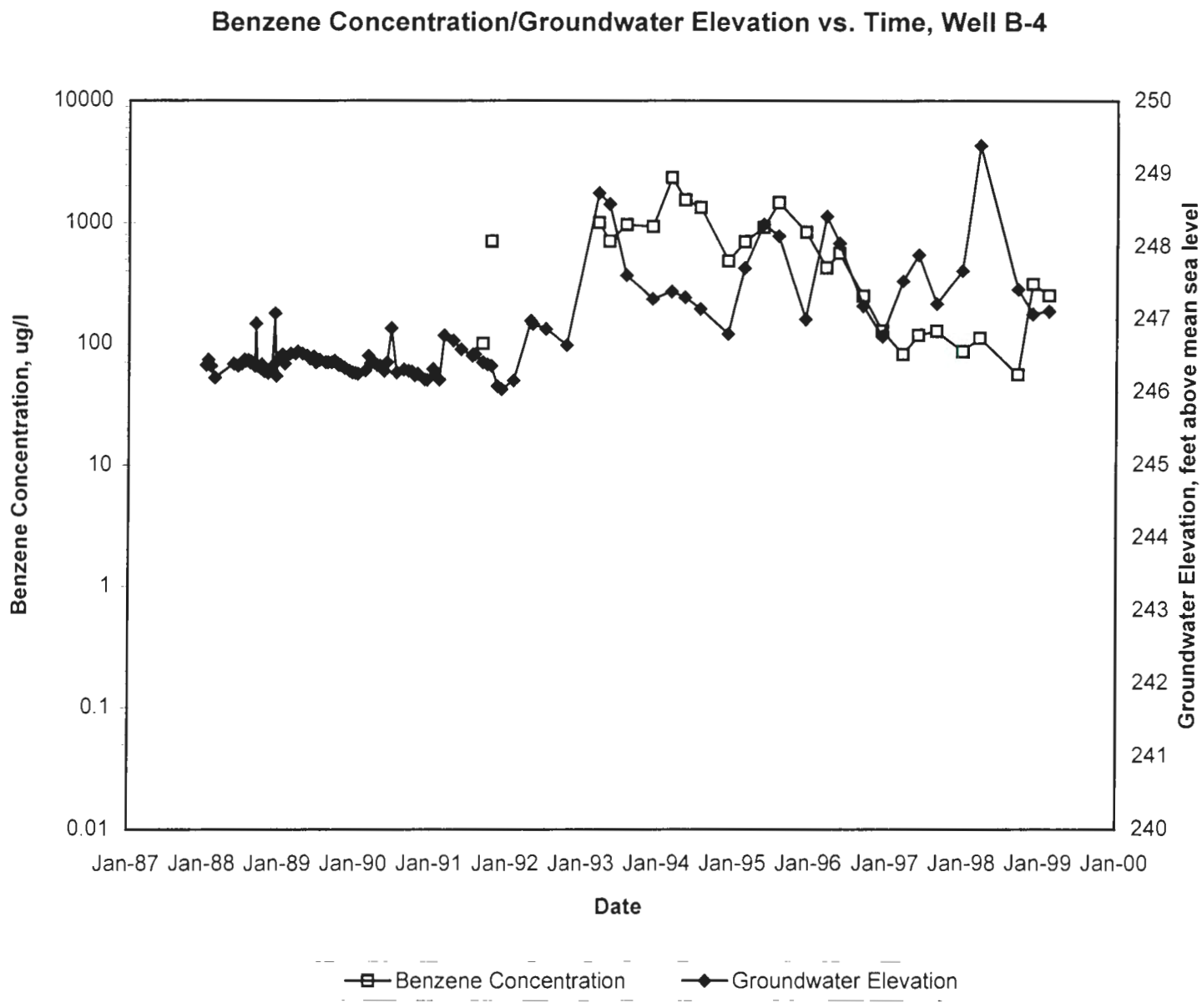
Graph 1


Benzene Concentration/Groundwater Elevation vs. Time, Well B-2
Benzene Concentration, ug/l
10000
1000
100
10
1
0.1
0.01
Groundwater Elevation, feet above mean sea level
250.00
249.00
248.00
247.00
246.00
245.00
244.00
243.00
242.00
241.00
240.00
Jan-87
Jan-88
Jan-89
Jan-90
Jan-91
Jan-92
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Date
Benzene Concentration
Groundwater Elevation

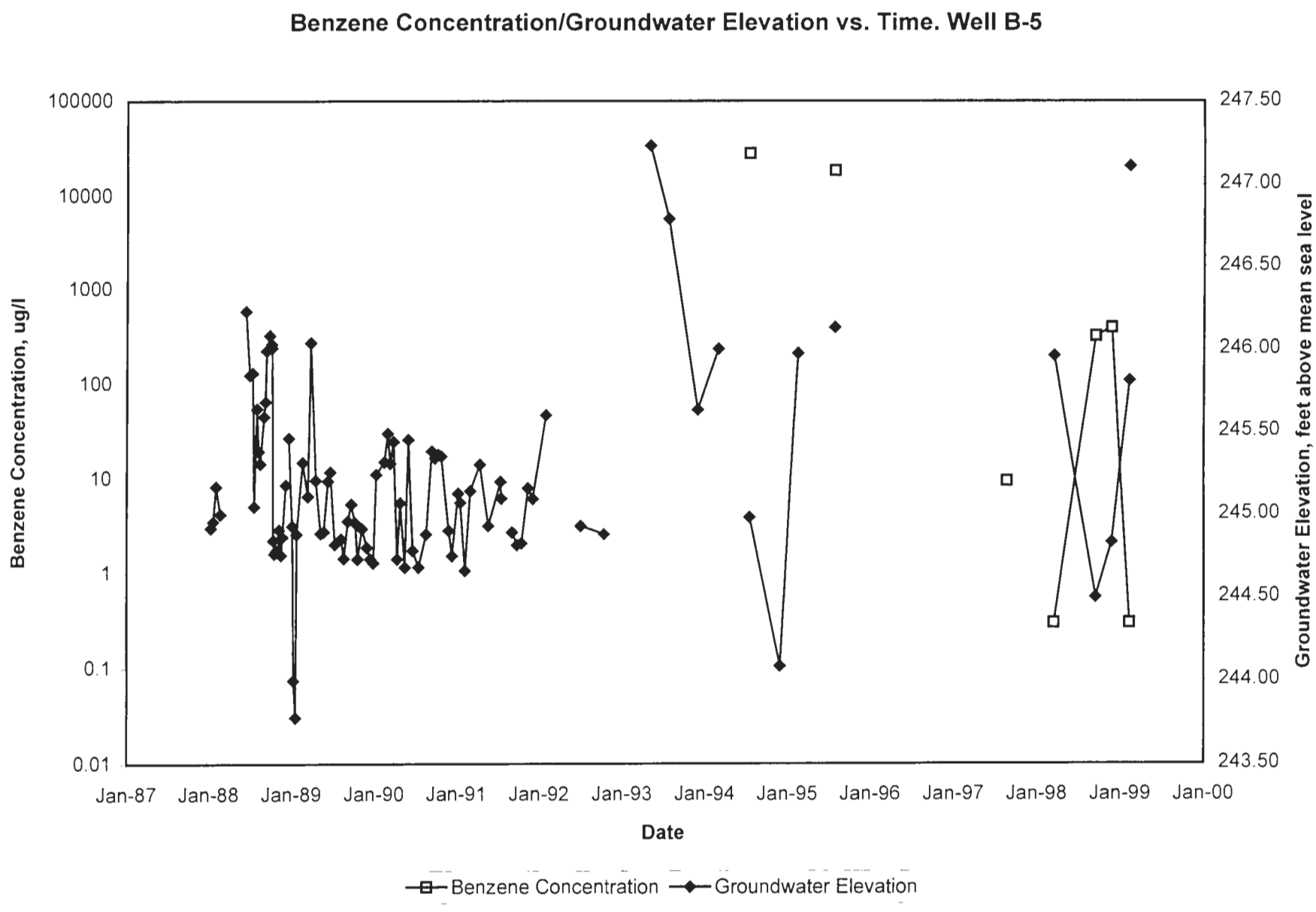
Graph 2


Benzene Concentration/Groundwater Elevation vs. Time, Well B-3
Benzene Concentration, ug/l
1000
100
10
1
0.1
0.01
Groundwater Elevation, feet above mean sea level
250.00
249.00
248.00
247.00
246.00
245.00
244.00
243.00
242.00
241.00
240.00
Jan-87
Jan-88
Jan-89
Jan-90
Jan-91
Jan-92
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Date
Benzene Concentration
Groundwater Elevation

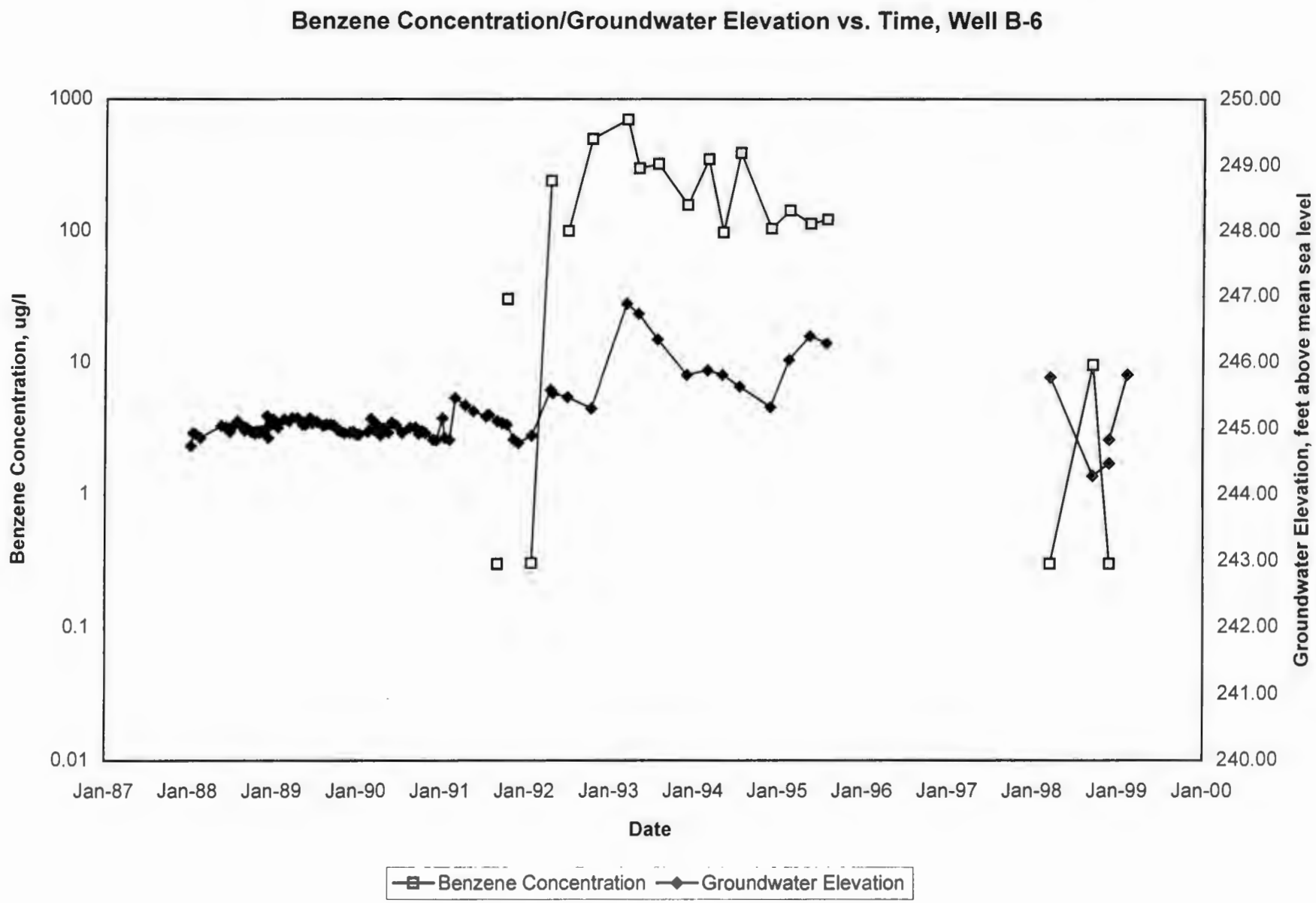
Graph 3


Benzene Concentration/Groundwater Elevation vs. Time, Well B-4
10000
1000
100
10
1
0.1
0.01
Benzene Concentration, ug/l
250
249
248
247
246
245
244
243
242
241
240
Groundwater Elevation, feet above mean sea level
Jan-87 Jan-88 Jan-89 Jan-90 Jan-91 Jan-92 Jan-93 Jan-94 Jan-95 Jan-96 Jan-97 Jan-98 Jan-99 Jan-00
Date
Benzene Concentration
Groundwater Elevation

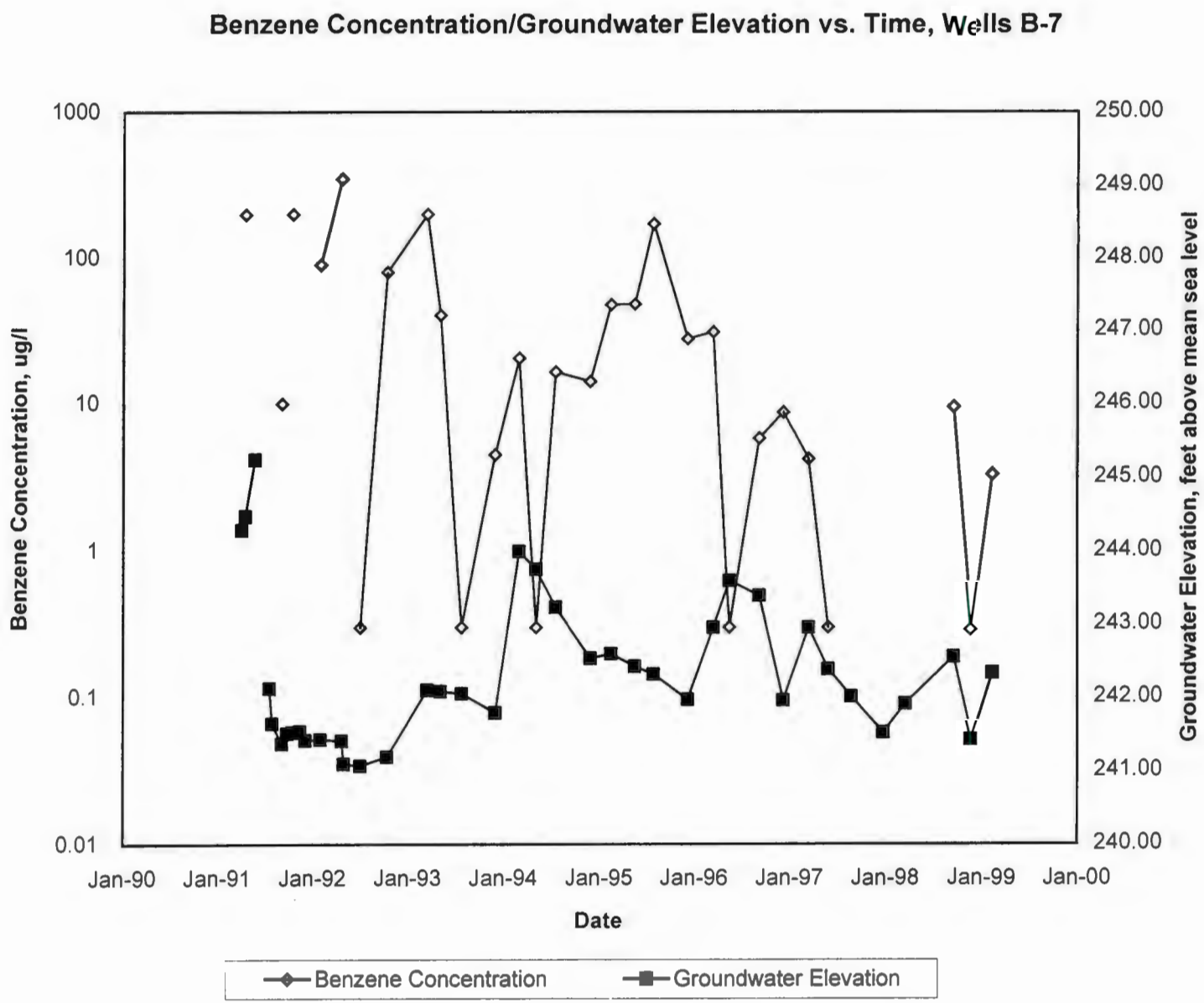
Graph 4


Benzene Concentration/Groundwater Elevation vs. Time. Well B-5
Benzene Concentration, ug/l
100000
10000
1000
100
10
1
0.1
0.01
Groundwater Elevation, feet above mean sea level
247.50
247.00
246.50
246.00
245.50
245.00
244.50
244.00
243.50
Jan-87
Jan-88
Jan-89
Jan-90
Jan-91
Jan-92
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Date
Benzene Concentration
Groundwater Elevation

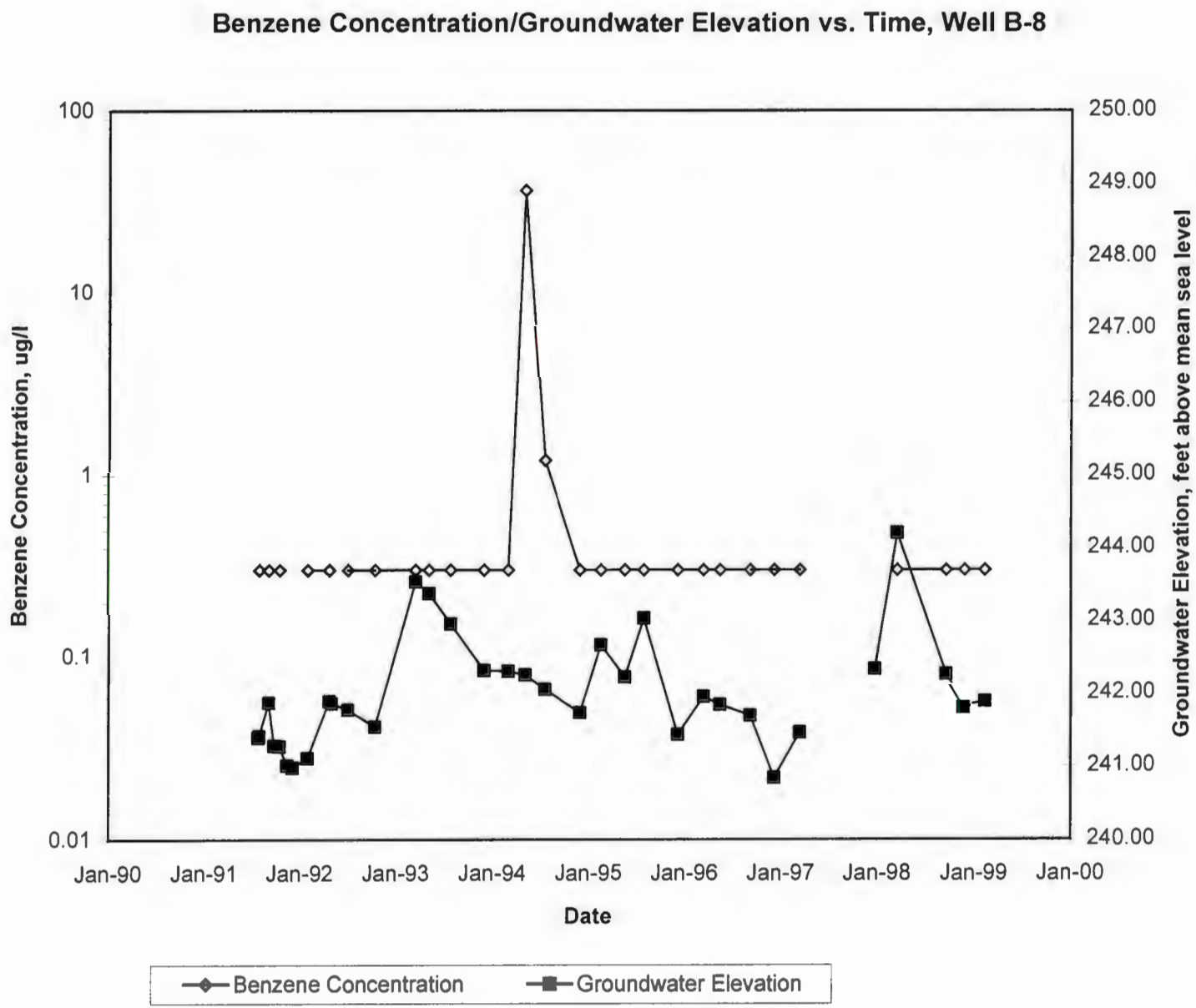
Graph 5


Benzene Concentration/Groundwater Elevation vs. Time, Well B-6
Benzene Concentration, ug/l
1000
100
10
1
0.1
0.01
Groundwater Elevation, feet above mean sea level
250.00
249.00
248.00
247.00
246.00
245.00
244.00
243.00
242.00
241.00
240.00
Jan-87
Jan-88
Jan-89
Jan-90
Jan-91
Jan-92
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Date
Benzene Concentration
Groundwater Elevation

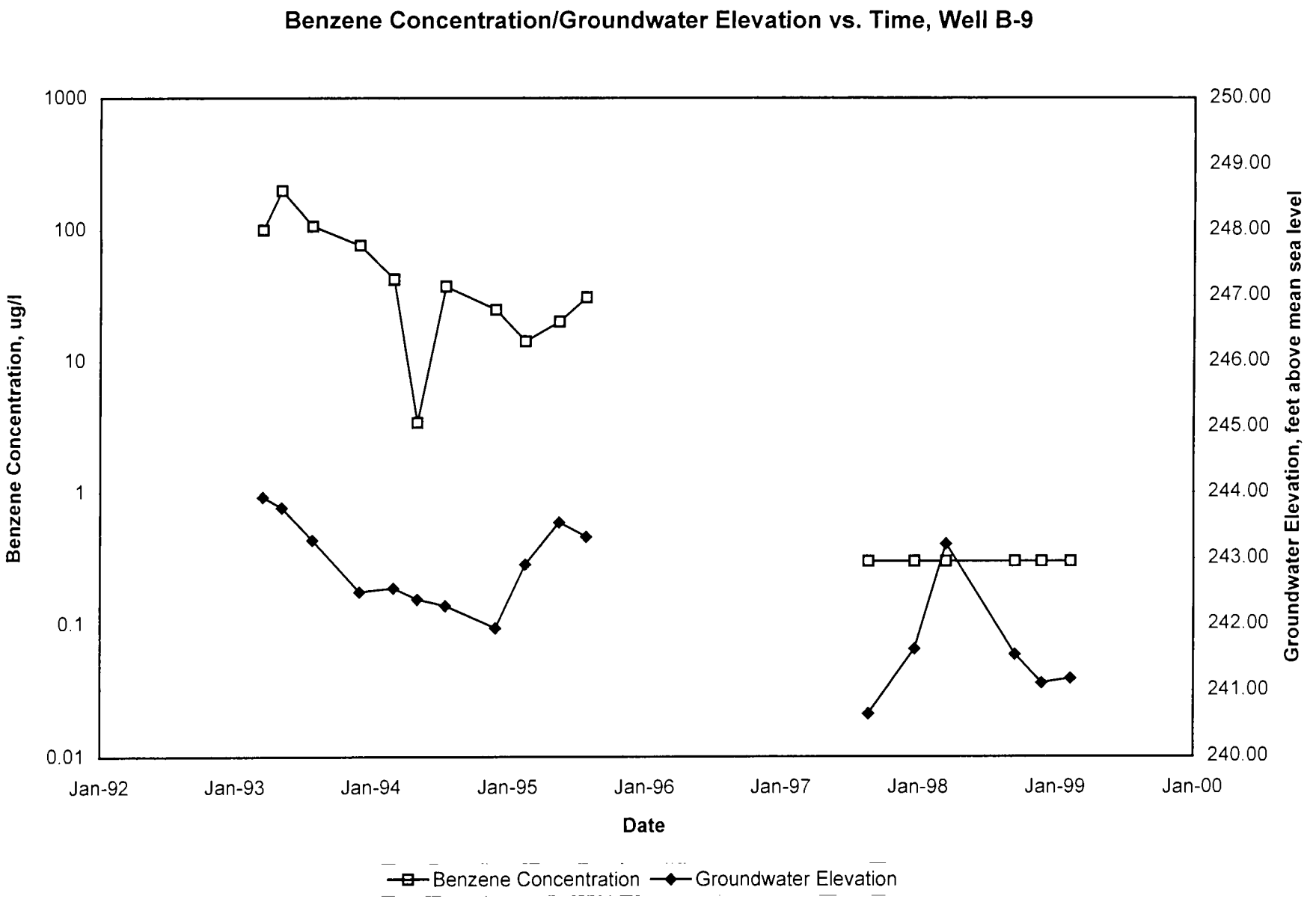
Graph 6


Benzene Concentration/Groundwater Elevation vs. Time, Wells B-7
1000
100
10
1
0.1
0.01
Benzene Concentration, ug/l
250.00
249.00
248.00
247.00
246.00
245.00
244.00
243.00
242.00
241.00
240.00
Groundwater Elevation, feet above mean sea level
Jan-90
Jan-91
Jan-92
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Date
Benzene Concentration
Groundwater Elevation

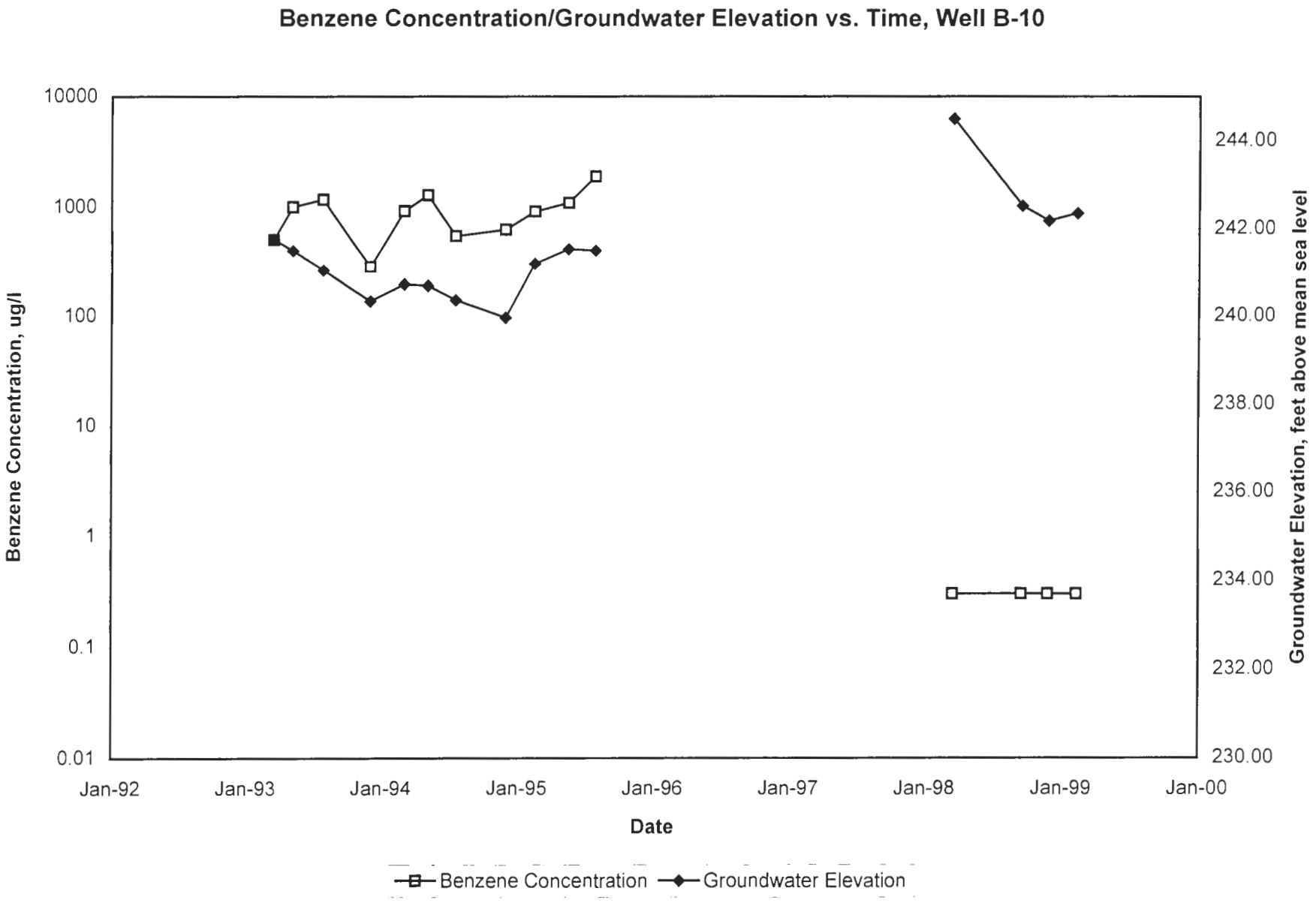
Graph 7


Benzene Concentration/Groundwater Elevation vs. Time, Well B-8
Benzene Concentration, ug/l
100
10
1
0.1
0.01
Groundwater Elevation, feet above mean sea level
250.00
249.00
248.00
247.00
246.00
245.00
244.00
243.00
242.00
241.00
240.00
Jan-90
Jan-91
Jan-92
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Date
Benzene Concentration
Groundwater Elevation

Graph 8


Benzene Concentration/Groundwater Elevation vs. Time, Well B-9
1000
100
10
1
0.1
0.01
Benzene Concentration, ug/l
250.00
249.00
248.00
247.00
246.00
245.00
244.00
243.00
242.00
241.00
240.00
Groundwater Elevation, feet above mean sea level
Jan-92
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Date
Benzene Concentration
Groundwater Elevation

Graph 9


Benzene Concentration/Groundwater Elevation vs. Time, Well B-10
10000
1000
100
10
1
0.1
0.01
Benzene Concentration, ug/l
244.00
242.00
240.00
238.00
236.00
234.00
232.00
230.00
Groundwater Elevation, feet above mean sea level
Jan-92
Jan-93
Jan-94
Jan-95
Jan-96
Jan-97
Jan-98
Jan-99
Jan-00
Date
Benzene Concentration
Groundwater Elevation

Graph 10

CHEMICAL & ENVIRONMENTAL LABORATORIES, INC.

February 16, 1999 Certificate No.: 2268

Ms. Truedi Balsitis
Wayne Perry, Inc.
8281 Commonwealth Ave.
Buena Park, CA 90621

Project: 88.3X

Dear Ms. Balsitis:

Enclosed please find the report for the sample(s) received by Chemical & Environmental Laboratories and analyzed as indicated in the chain-of-custody attached.

We appreciate the opportunity to service the needs of your company. Please call me at (562) 921-8123 if you have any questions.

Sincerely,

Larry Zhang

Larry Zhang, Ph.D.
Laboratory Director

14148 E. Firestone Blvd., Santa Fe Springs, CA 90670 Tel: 562 921-8123, Fax: 562 921-7974

CHEMICAL & ENVIRONMENTAL LABORATORIES, INC.

ANALYTICAL REPORT

---M8015(Gasoline)/602(BTEX,MTBE)---

Client Name: Wayne Perry, Inc.
Project Manager: Truedi Balsitis
Project Name: 88.3X

Date Sampled: 02/10/99
Date Analyzed: 02/12/99
Date Reported: 02/15/99

SAMPLE IDENTIFICATION		RESULT (ug/L or ppb)					
C&E ID	Sample ID	M8015 Gasoline	602 Benzene	602 Toluene	602 Ethylbenz	602 Xylenes	602 MTBE
90210H-1	B-10	ND	ND	ND	ND	ND	ND
90210H-2	B-8	ND	ND	ND	ND	ND	ND
90210H-3	B-9	ND	ND	ND	ND	ND	ND
90210H-4	B-7	ND	ND	ND	ND	ND	ND
90210H-5	B-6	ND	3.3	ND	ND	ND	ND
90210H-6	B-5	256	ND	2.4	1.5	1.0	ND
90210H-7	B-2	399	ND	ND	ND	ND	ND
90210H-8	B-3	ND	1.1	ND	ND	ND	ND
90210H-9	B-4	6441	248.4	96.3	527.4	706.0	ND
90210H-10	B-1	ND	ND	ND	ND	ND	ND
90210H-11	B-11	ND	ND	ND	ND	ND	ND
90210H-12	TRIP-BLANK	ND	ND	ND	ND	ND	ND
Detection Limit:		100	0.3	0.3	0.3	0.5	10

ND = Not detected at the indicated detection limit.

FEB 1 8 1999

14148 E. Firestone Blvd., Santa Fe Springs, CA 90670 Tel: 562 921-8123, Fax: 562 921-7974

CHEMICAL & ENVIRONMENTAL LABORATORIES, INC.

QA/QC REPORT

--- M8015(G)/602 ---

I. Matrix Spike (MS)/Matrix Spike Duplicate(MSD)

Date Performed: 02/12/99
Lab Sample I.D.: 90210H

Unit: ug/L

ANALYTE	SPK CONC	MS (ug/L)	MS %	MSD (ug/L)	MSD %	RPD	ACP %MS	ACP RPD
Benzene	20	19.1	96	18.0	90	5.9	80-120	20
Toluene	20	17.0	85	18.9	95	10.6	80-120	20
Ethylbenzene	20	17.1	86	19.0	95	10.5	80-120	20
Xylenes	20	18.1	91	19.1	96	5.4	80-120	20
Gasoline	1000	995	100	943	94	5.4	70-120	20

II. Laboratory Quality Control Check Sample

ANALYTE	SPK CONC	RESULT	%RECOVERY	ACP %
Benzene	20	17.6	88	80-120
Toluene	20	17.5	88	80-120
Ethylbenzene	20	17.9	90	80-120
Xylenes	20	17.6	88	80-120
Gasoline	1000	916	92	80-120

FEB 1 8 1999

14148 E. Firestone Blvd., Santa Fe Springs, CA 90670 Tel: 562 921-8123, Fax: 562 921-7974

WAYNE PERRY, INC.

8281 Commonwealth Avenue
Buena Park, California 90621
(714) 826-0352
C.S.C Lic. 300345 E.P.A. CAD 053841102

90210A

CHAIN OF CUSTODY RECORD

Client: Pomona Box Company	Project Number: 88.3X
Site Address: 301 W. Imperial Hwy	Laboratory: C & E
LA Habra, CA.	Sampled By: Jorge Gonzalez
Client Id #:	Results By: 1 Week

	Sample Name	Depth	Location Description	Date	Time	Sample Type: Soil	Water	Air	Number of Containers	Test Required
1	B-10		Groundwater	2-10-99	07:55		X		3	TPH/BTEX/MTBE
2	B-8			2-10-99	08:00		X		3	
3	B-9			2-10-99	08:05		X		3	
4	B-7			2-10-99	08:10		X		3	
5	B-6			2-10-99	08:38		X		3	
6	B-5			2-10-99	08:43		X		3	
7	B-2			2-10-99	08:48		X		3	
8	B-3			2-10-99	09:07		X		3	
9	B-4			2-10-99	09:12		X		3	
10	B-1			2-10-99	09:25		X		3	
11	B-11			2-10-99	09:43		X		3	
12	Trip-Blank			2-10-99			X		3	

Relinquished By:	Received By:	Date:	Time:
Jorge Gonzalez 2-10-99	Mudi Balsitis	2/10/99	14:06
Mudi Balsitis	[illegible]	2-10-99	3:18p

Pomona Box Company
301 West Imperial Highway
La Habra, California

GROUNDWATER MONITORING PROCEDURES

Monitoring wells were measured for depth of well, depth to water and separate-phase hydrocarbon thickness using an electronic interface probe calibrated to one hundredth of a foot. The interface probe was washed in non-phosphate soap and triple rinsed in distilled water to prevent cross contamination between wells..

The wells were sampled without purging. Groundwater samples were obtained using a Teflon bailer equipped with a bottom emptying device and placed in VOA bottles with Teflon septums. All sampling equipment was washed in non-phosphate soap and triple rinsed in distilled water between wells to reduce the potential for cross contamination. Each sample was field tested for temperature, pH, conductivity, and turbidity. Field testing data are included in this appendix.

In addition to the samples obtained from the wells, a trip blank was prepared to verify the integrity of field and laboratory procedures. Samples were placed on ice to reduce the potential for volatilization. Samples were transported to a certified laboratory for analyses following chain-of-custody procedures.

All groundwater samples were tested for total petroleum hydrocarbon as gasoline using EPA Test Method 8015-Modified and benzene, toluene, ethylbenzene, xylenes, and methyl tertiary butyl ether using EPA Test Method 602.

WAYNE PERRY CONSTRUCTION, INC.

Gauging Sheet
Recovery Record

For: Pomona Box

Job Number: 88.3X

Location: Imperial Hwy

Date: 2-10-99

Well No.	Depth of Well	To Liquid	To Water	Total Liquid in Well	Product Thickness	Comments
B - 10	25.40	10.76			Ø 4"	Pump in well
- 8	32.35	9.69			Ø 4"	
- 9	21.98	11.37			Ø 4"	Pump in well
- 7	40.83	12.80			Ø 4"	
- 1	23.58	14.65			Ø 4"	
- 4	34.68	14.45			Ø 4"	
- 3	23.35	14.36			Ø 4"	
- 2	21.98	13.79			Ø 4"	Pump in well
- 5	33.24	14.87			Ø 4"	Pump in well
- 6	33.47	11.36			Ø 4"	Pump in well
- 11	32.80	13.58			Ø 4"	

Portable Pumping Recovery Record

Tank size: _____

	Total Liquid		Water		Product	
	Inches	Gallons	Inches	Gallons	Inches	Gallons
After pumping						
Before pumping						
Site total						

Automatic System Recovery Record

Tank size: _____

	Inches	Gallons
Total Liquid		
Water		
Product		

Notes: G.S. "No Purging."

Gauged by: Jorge

Pomona Box

①

Field Temperature, Conductivity, pH, and Turbidity Data Sheet

Cross Street: Imperial Hwy

Project No: 88.3x
Date: 2-10-99

Well # B-10	Casing 1	Casing 2	Casing 3	Total Purged	Sample	Comments
Start Time	07:55					NPS
Purged Water (gal.)				0		
Temperature (° F)	71.0					Begin purge time:
Conductivity (us/cm)	1.90					End Sampling time:
pH	7.01					Total time: 00:00
Turbidity (NTU)	06.1					Recharge Level:

Well # B-8	Casing 1	Casing 2	Casing 3	Total Purged	Sample	Comments
Start Time	08:00					NPS
Purged Water (gal.)				0		
Temperature (° F)	70.5					Begin purge time:
Conductivity (us/cm)	1.40					End Sampling time:
pH	6.99					Total time: 00:00
Turbidity (NTU)	02.9					Recharge Level:

Well # B-9	Casing 1	Casing 2	Casing 3	Total Purged	Sample	Comments
Start Time	08:05					NPS
Purged Water (gal.)				0		
Temperature (° F)	70.5					Begin purge time:
Conductivity (us/cm)	1.00					End Sampling time:
pH	7.08					Total time: 00:00
Turbidity (NTU)	22.6					Recharge Level:

Well # B-7	Casing 1	Casing 2	Casing 3	Total Purged	Sample	Comments
Start Time	08:10					NPS
Purged Water (gal.)				0		
Temperature (° F)	72.5					Begin purge time:
Conductivity (us/cm)	1.10					End Sampling time:
pH	6.98					Total time: 00:00
Turbidity (NTU)	08.7					Recharge Level:

Completed By: [illegible]

Pomona Box

②

Field Temperature, Conductivity, pH, and Turbidity Data Sheet

Cross Street: Imperial Hwy

Project No: 88.3X
Date: 2-10-99

Well # B-6	Casing 1	Casing 2	Casing 3	Total Purged	Sample	Comments
Start Time	08:38					NPS
Purged Water (gal.)				0		
Temperature (° F)	67.1					Begin purge time:
Conductivity (us/cm)	1.00					End Sampling time:
pH	6.94					Total time: 00:00
Turbidity (NTU)	166.6					Recharge Level:

Well # B-5	Casing 1	Casing 2	Casing 3	Total Purged	Sample	Comments
Start Time	08:43					NPS
Purged Water (gal.)				0		
Temperature (° F)	68.7					Begin purge time:
Conductivity (us/cm)	0.50					End Sampling time:
pH	7.22					Total time: 00:00
Turbidity (NTU)	36.0					Recharge Level:

Well # B-2	Casing 1	Casing 2	Casing 3	Total Purged	Sample	Comments
Start Time	08:48					NPS
Purged Water (gal.)				0		
Temperature (° F)	70.4					Begin purge time:
Conductivity (us/cm)	0.40					End Sampling time:
pH	6.89					Total time: 00:00
Turbidity (NTU)	20.1					Recharge Level:

Well # B-3	Casing 1	Casing 2	Casing 3	Total Purged	Sample	Comments
Start Time	09:07					NPS
Purged Water (gal.)				0		
Temperature (° F)	70.5					Begin purge time:
Conductivity (us/cm)	1.10					End Sampling time:
pH	6.88					Total time: 00:00
Turbidity (NTU)	08.1					Recharge Level:

Completed By:

Pomona Box

(3)

Field Temperature, Conductivity, pH, and Turbidity Data Sheet

Cross Street: Imperial Hwy

Project No: 88.37
Date: 2-10-99

Well # B-4	Casing 1	Casing 2	Casing 3	Total Purged	Sample	Comments
Start Time	09:12					NPS
Purged Water (gal.)				0		
Temperature (° F)	69.4					Begin purge time:
Conductivity (us/cm)	1.10					End Sampling time:
pH	6.96					Total time: 00:00
Turbidity (NTU)	10.8					Recharge Level:

Well # B-1	Casing 1	Casing 2	Casing 3	Total Purged	Sample	Comments
Start Time	09:25					NPS
Purged Water (gal.)				0		
Temperature (° F)	68.4					Begin purge time:
Conductivity (us/cm)	1.10					End Sampling time:
pH	7.07					Total time: 00:00
Turbidity (NTU)	03.4					Recharge Level:

Well # B-11	Casing 1	Casing 2	Casing 3	Total Purged	Sample	Comments
Start Time	09:43					NPS
Purged Water (gal.)				0		
Temperature (° F)	69.8					Begin purge time:
Conductivity (us/cm)	0.90					End Sampling time:
pH	7.02					Total time: 00:00
Turbidity (NTU)	01.5					Recharge Level:

Well #	Casing 1	Casing 2	Casing 3	Total Purged	Sample	Comments
Start Time						
Purged Water (gal.)				0		
Temperature (° F)						Begin purge time:
Conductivity (us/cm)						End Sampling time:
pH						Total time: 00:00
Turbidity (NTU)						Recharge Level:

Completed By:

WELL GAUGING/SAMPLING CHECKLIST

PROJECT NO.: 88-3X

LOCATION: Imperial Hwy - Pomona Box Co.
La Habra Ca.

DATE OF GAUGING/SAMPLING:
2-10-99

TASK CHECKLIST

- ☑ Well cap secured
- ☐ Well cap locked
- ☑ Well box cleaned and free of water
- ☑ Traffic cover secured

WELL REPAIRS

SITE OBSERVATIONS

DRUMS

☐ YES ☒ NO

GENERATOR:

DATE OF ORIGIN

CONTENTS:

☐ WATER ☐ SOIL ☐ GASOLINE ☐ OTHER

TECHNICIAN: Jorge Gu

HELPER: None

86-224

CLOSURE CONFIRMATIONAL ASSESSMENT WORK PLAN

Former UST Location
Pomona Box Company
301 W. Imperial Highway
La Habra, California

November 29, 1999

WGR Southwest, Inc. Project No. 051.PRI.00

PREPARED FOR

Mr. D. E. Votaw
Votaw / Davis Properties
P.O. Box 536
La Habra, CA 90631

BY

WGR
Southwest, Inc.
11021 Winners Circle, Suite 101
Los Alamitos, CA 90720

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INTRODUCTION

The site is a facility that formerly had leaking underground fuel storage tanks (USTs) and is located at 301 W. Imperial Highway, in the City of La Habra (**Figure 1**). The site is situated on the north side of Imperial Highway, approximately 500 feet west of Euclid Street. The site is occupied by an operating box manufacturing company, which consists of an office building, manufacturing building, and a mechanics shed.

One 1,000 gallon UST was removed in December 1986 by Wayne Perry Construction, Inc. Soil samples were collected from the tank excavation and analyzed for the presence of hydrocarbons. Results indicated an area of hydrocarbon contamination at the bottom of the excavation. The excavation was extended to 13 feet below ground surface (bgs) in an attempt to remove the soil contamination, and free phase hydrocarbons were discovered. The excavation was backfilled and the Orange County Health Care Agency (OCHCA) requested additional assessment. Six soil borings (B-1 through B-6) were installed between January and September 1987 to comply with OCHCA's request. Each of the borings was converted to a groundwater monitoring well. Dissolved or free phase hydrocarbons were detected in the wells.

Seven additional USTs were removed from the site in September 1989. Analysis of soil samples collected from the tank excavations indicated the presence of petroleum hydrocarbons. As a result, four soil borings (B-7 through B-10) were installed between March 1991 and February 1993 to further assess the site. The four borings were converted to groundwater monitoring wells.

The former UST locations and the monitoring wells are shown in **Figure 2**.

Based on the site investigation, the extent of the soil contamination appeared laterally limited to the vicinity of the former USTs. The highest levels of hydrocarbons were detected in samples collected at a depth of 15 feet bgs, which is slightly below the surface of the groundwater. The maximum total petroleum hydrocarbon concentration encountered was 12,720 mg/Kg and the maximum benzene concentration was 44 mg/Kg. Free phase hydrocarbons were detected in significant thicknesses in monitoring wells B-2, B-4, and B-5. The dissolved plume was interpreted to extend south to southwest of the former tank pits and possibly beneath Imperial

Highway. However, samples collected from monitoring well B-11, which was installed in the center of Imperial Highway in May 1997, have not had any detections of BTEX, TPH, or MTBE above their respective method detection limits.

Wayne Perry, Inc. commenced manual free product recovery operations in June 1987. An automated recovery system was installed and became operational in April 1988. Recovery operations were discontinued in August 1992 due to free phase hydrocarbons no longer being present in the wells.

Subsequent to performing a vapor extraction test and an aquifer pump test, a corrective action plan (CAP) was prepared and submitted to OCHCA by Wayne Perry, Inc. in August 1994 and revised in October 1994. OCHCA approved the CAP on December 8, 1994. In August 1995, in a meeting with Don Votaw, and representatives of Wayne Perry, Inc. and W. W. Irwin, Inc., a decision was made to remediate the two Votaw sites (101 W. & 301 W. Imperial Highway) with the same remediation system. In December 1995, a remediation system, consisting of a vapor extraction system using a Baker Furnace™ 500 scfm unit and an activated carbon groundwater pump and treatment system, was installed at the Pomona Box Company at 301 W. Imperial Highway. The remediation system commenced operation in January 1996 and operated continuously until August 1997, except for periods of equipment repair and maintenance downtimes. In August 1997, operation of the vapor extraction system was discontinued due to low influent soil vapor concentrations. In March 1998, the groundwater extraction system operation was discontinued because of low inlet dissolved hydrocarbon concentrations pumped from the groundwater extraction wells. In July 1999, the vapor extraction equipment was removed from the site with the approval of Mr. Anthony Martinez of OCHCA.

Since March 1998, seven quarterly groundwater monitoring and sampling events have been performed at the site. All of the monitoring wells have either maintained non-detectable concentrations or have had a significant downward trend in TPH and benzene dissolved concentrations. The lingering dissolved hydrocarbons are present only in the immediate area of wells B-1 through B-5 and do not appear to be moving offsite. No MTBE was detected in any of the wells during the last quarterly groundwater monitoring and sampling event on August 20, 1999.

PURPOSE AND SCOPE OF WORK

The purpose of this proposed scope of confirmational assessment work is to demonstrate the viability of site closure. The placement of the boring/hydropunch locations will confirm the dissolved concentrations south - southwest (down gradient) of the wells with the highest dissolved concentrations (B-1 through B-5) and will also measure the effectiveness of the soil

remedial efforts near the former tank pits.

The additional assessment activities will be conducted in compliance with the State Hazardous Waste and Underground Storage Tanks Laws and Regulations (Health and Safety Code, Division 20, Chapters 6.5 and 6.7, and California Administrative Code, Title 22, Division 4, Chapter 30, and Title 23, Subchapter 16).

SITE SETTING

The site is located in a mixed commercial/retail and residential area of La Habra, California, on the north side of Imperial Highway, approximately 500 feet west of Euclid Street. The site is an operating wood and cardboard box and pallet manufacturing company. Residential areas are located adjacent to the facility to the north and across Imperial Highway to the south. Schools are also located north and south of Imperial Highway within one half mile of the site.

SITE GEOLOGY

The site is located in the La Habra-Brea basin between the Puente Hills to the north and the Coyote Hills to the south. The Whittier fault zone extends along the southern margin of the Puente Hills and passes the site location approximately four miles to the northeast. One of the upper tributaries of the Coyote Creek flows to the west approximately two hundred feet south of the site along the far side of Imperial Highway. In general, Coyote Creek handles runoff from the Puente Hills and flows southwestward. The area is underlain by sediments of the La Habra Formation, which generally consist of non-indurated to poorly indurated, nonmarine deposits of silty and clayey sand, sandy and silty clay, sandstone, mudstone and conglomerate. Sediments underlying the site to a depth of 30 feet consist primarily of interbedded clays, silty clays and clayey silts. Some interbeds of fine sand, silty sand and clayey sand are also present locally, (DWR 1961).

SITE HYDROGEOLOGY

The site lies within the La Habra-Yorba Linda hydrogeographic basin. This groundwater basin has a small capacity for storage in comparison to other basins in the Southern California region. The configuration of the groundwater reservoir in the area is complex, reflecting the influence of the widespread faulting associated with folding of the La Habra syncline and the Puente and Coyote Hills anticlines. According to city officials, only one well is maintained by the City of La Habra for domestic water production. This well is

located approximately one mile northwest of the site near the intersection of Lambert Road and Idaho Street. The depth to static water level of the producing aquifer (Silverado Aquifer of San Pedro Formation) within this well is reported at approximately 275 feet below ground surface (bgs) with drawdown increasing the depth to water to approximately 450 feet (DWR, 1961).

Depth to first water is somewhat variable within the region due to the complex nature of the subsurface. On site, groundwater was noted at approximately 13 feet bgs during the tank removal operations in 1986 and 1989, and is now present at between ten and fifteen feet bgs in the monitoring wells. Other monitoring wells in the area report first water at depths ranging from 4 to 53 feet bgs. The groundwater encountered at this site is believed to be a thin perched zone as evidenced from repeated observations of unsaturated soil samples collected below this zone. It is believed that the perched water originates from residential irrigation uphill of the site (to the north) and is migrating southward to the Coyote Creek tributary in a laterally discontinuous manner. During the rain season, groundwater seeps out of the asphalt along the southern part of the property.

DRILL SITE CLEARANCE

The confirmational boring locations will be marked with white paint and Underground Service Alert (USA) will be contacted to identify any potential subsurface obstructions and/or conflicts. Any identified utilities will be marked and the proposed investigation locations will be modified. In order to further insure that no underground utilities or obstructions exist at the proposed boring locations, the initial five feet of drilling will be advanced utilizing hand auger techniques.

HEALTH AND SAFETY PLAN

A site specific Health and Safety Plan detailing all known or potential hazards and emergency response procedures will be prepared prior to field operations. All on-site personnel will review the plan and conduct a "tailgate" safety meeting prior to initiation of field activities. The plan will be maintained on-site throughout the duration of field activities. The plan will be modified if warranted due to on-site conditions.

PROPOSED FIELD ACTIVITIES

Six Hydropunch™ locations (HP-1 through HP-6) are proposed in the locations indicated on **Figure 2**. The proposed locations are situated in areas down gradient to the former on-site source areas. The locations will be drilled to a total depth of approximately 20 feet BSG with a truck mounted hydraulically operated push rig. Pre-cleaned drill rods will be used throughout the drilling operation to prevent potential cross contamination. Upon termination of the boring, the drill rods will be removed and the annular space will be filled with a bentonite/portland slurry. The surface shall be completed to match the surrounding grade surface.

SOIL SAMPLING AND ANALYSIS

Undisturbed soil samples will be collected for analysis at approximately 5 feet bsg, 10 feet bsg, 15 feet bsg, and 20 feet bsg. Groundwater interface is anticipated at approximately 10 feet bsg but most likely as in past site experiences, soil samples will not be saturated nor will there be sufficient water to grab a water sample until the boring is advanced to a depth between 15 and 20 feet bgs.

Undisturbed soil samples will be collected during the investigation utilizing a 48-inch long, 1.75-inch I.D. barrel sampler utilizing polyethylene sample sleeves. All sampling equipment will be decontaminated between sampling episodes utilizing a triple rinse method consisting of a wash with trisodium phosphate (TSP), rinsed with potable water followed by a final rinse with distilled water.

Immediately upon collection of soil samples, each end of the selected sample will be covered with Teflon film and capped with a polyethylene lid. The lids will be sealed with toluene free polyethylene tape and an identification label with all pertinent sampling information will be affixed to the tube. The sample will then placed immediately on ice and chilled to 4°C for storage and subsequent delivery to the analyzing laboratory.

Soil samples will be described in the field using the Unified Soil Classification System (USCS). Other information that will be recorded in the field and transcribed onto the soil-boring log includes soil type, sample and headspace volatile organic compound (VOC) concentration, sample collection depth, blow count, odor, description, and borehole completion information. The work will be performed under the direct supervision of a California Registered Geologist.

WATER SAMPLING

Depth discrete groundwater samples will be collected from the exploratory boring locations indicated on **Figure 2**. Groundwater samples will be collected utilizing a Hydropunch™ groundwater-sampling device. This device will be advanced through the soil column to predetermined depths below the groundwater interface. At the desired depth, the sampler will be opened and formation water will hydrostatically flow into the sampling device. A pre-cleaned stainless steel bailer will be utilized to collect the water sample. The sample will be removed, the device closed and removed from the borehole. The equipment will be decontaminated, reinstalled into the borehole and advanced to the next interval. The process will then be repeated and the deeper samples will be collected.

Groundwater samples will be collected approximately 2 feet below the saturated groundwater interface. Immediately subsequent to collection, the water sample will be transferred to 40-ml volumetric vials, leaving no head space and immediately be placed in a cooler with ice and protected so the samples do not freeze by separating samples with an inert divider. A travel blank will be filled on site from a sealed container of deionized water, using the same type of sample container as the other samples taken. The travel blank will be handled in the same manner as the sample vials.

All samples will be handled in accordance with the chain-of-custody record guidelines. Samples will be preserved in the field as appropriate for the analyses scheduled to be performed, and analyzed within EPA holding times established for each analysis. Samples will be shipped to the laboratory on the same day collected, unless otherwise noted. Samples will be stored and transported in a cooler maintained at approximately 4 degrees centigrade.

LABORATORY ANALYSES

Soil samples will be submitted to a State certified laboratory for analysis by California DHS modified EPA Method 8015 for gasoline and by EPA Method 8021B for BTEX and MTBE components. The following soil detection limits are proposed; TPHg-0.5 mg/Kg, Benzene-0.005 mg/Kg, Toluene-0.005 mg/Kg, Ethylbenzene-0.005 mg/Kg, Total Xylenes-0.01 mg/Kg, and MTBE-0.025 mg/Kg.

Each of the groundwater samples will be analyzed for TPH-G by the CDHS-approved method (modified EPA Method 8015) and for BTEX components (benzene, toluene, ethylbenzene, total xylenes and MTBE) by EPA Method 8021B. In the event MTBE concentrations are detected by method 8021B, confirmation testing by EPA method 8260 with a detection limit of 5 ug/L is

proposed. The following water detection limits are proposed; TPHg-500 µg/L, Benzene-0.3 µg/L, Toluene-0.3 µg/L, Ethylbenzene-0.3 µg/L, Total Xylenes-0.6 µg/L, and MTBE-5 µg/L.

DISPOSITION OF DRILL CUTTINGS AND WASTE WATER

Any drill cuttings generated during the drilling operation and any waste water generated by during the investigation will be stored on site in 55-gallon DOT-approved steel drums pending characterization. Each drum will be labeled with the site name and address, generation date, and type and source of the material it contains. Within 30 days of the generation date, the drummed soil and water will be transported to an appropriate facility for disposal.

CLOSURE CONFIRMATIONAL ASSESSMENT REPORT

Upon completion of field activities, a report documenting the work will be submitted. The report will include a detailed description of the field activities, a summary of the analytical data, analytical reports with QA/QC documentation, soil boring logs, and investigation findings and conclusions. Dependent upon the results of the confirmational assessment, WGR will also include in the report either a case for site closure or recommendations for additional remedial activities.

WGR Southwest, Inc.

REGISTERED GEOLOGIST
J. GRAYDON MARTZ
No. 4841
STATE OF CALIFORNIA

John M. Teravskis, Project Manager
REA I No. 06085

J Graydon Martz, Supervising Geologist
CA Registered Geologist No. 4841

REFERENCES

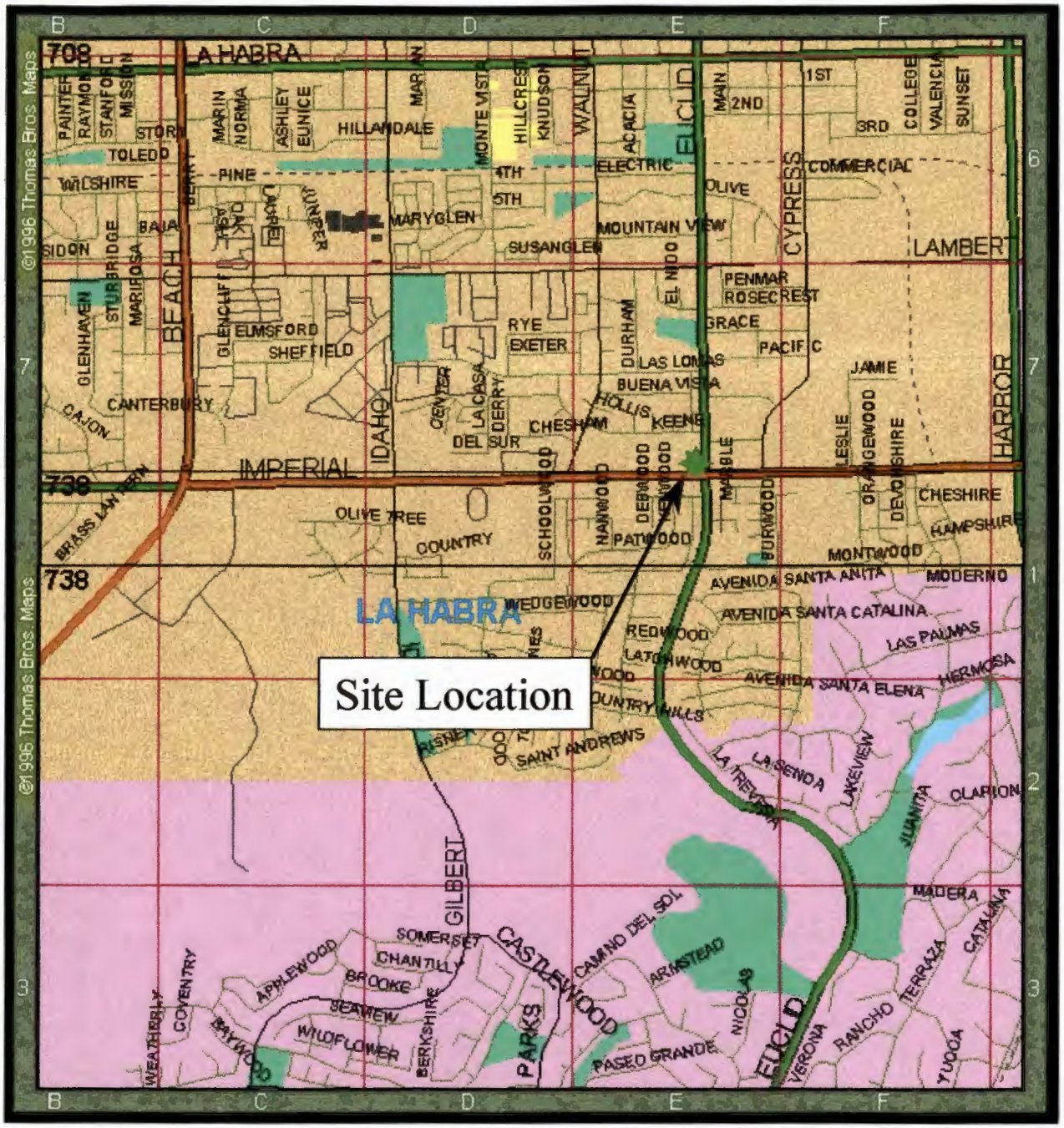
State of California Department of Water Resources (DWR), 1961, Southern District, Bulletin No. 104.

W. W. Irwin, Inc., Corrective Action Plan, January 13, 1995.

Wayne Perry, Inc., Third Quarter 1998 Groundwater Monitoring Report, October 30, 1998.

WGR Southwest, Inc., Third Quarter 1999 Groundwater Monitoring & Remediation System Operation Report, October 6, 1999.

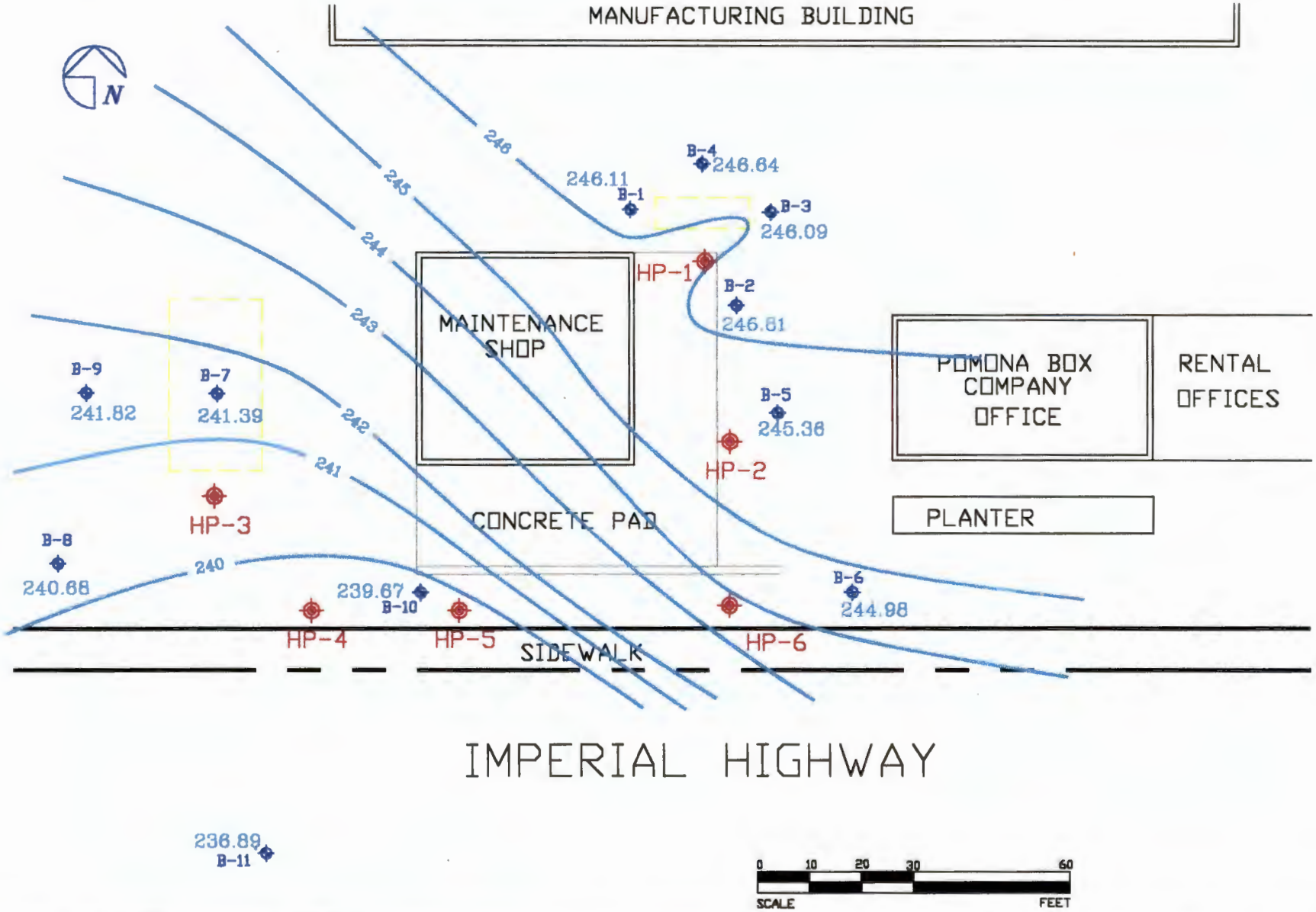
FIGURES



N

Legend

WGR Southwest, Inc. 11021 Winners Circle, Suite 101 Los Alamitos, CA 90720	Pomona Box Company Site Vicinity Map 301 W. Imperial Hwy. La Habra, CA	Figure 1
	DATE 8/16/99 / PROJECT NUMBER 051.PRI.00 / DWN BY JMT / DWG #	



Legend

- B-11 Groundwater Monitoring Well
- Former UST Location
- HP-6 Hydropunch confirmation Boring

WGR Southwest, Inc.
11021 Winners Circle, Suite 101
Los Alamitos, CA 90720

POMONA BOX COMPANY				Figure
PROPOSED CONFIRMATIONAL HYDROPUNCH LOCATIONS (Shown with 8/20/99 Groundwater Elevations and Gradient)				2
301 W. IMPERIAL HWY. LA HABRA, CA				
DATE 11/24/99	PROJECT NUMBER 051.PRI.00	DWN BY JMT	DWG #	

REVISED
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DRILL SITE CLEARANCE

The confirmational boring locations will be marked with white paint and Underground Service Alert (USA) will be contacted to identify any potential subsurface obstructions and/or conflicts. Any identified utilities will be marked and the proposed investigation locations will be modified. In order to further insure that no underground utilities or obstructions exist at the proposed boring locations, the initial five feet of drilling will be advanced utilizing hand auger techniques.

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PROPOSED FIELD ACTIVITIES

Six Hydropunch™ locations (HP-1 through HP-6) are proposed in the locations indicated on **Figure 2**. The proposed locations are situated in areas down gradient to the former on-site source areas. The locations will be drilled to a total depth of approximately 20 feet BSG with a truck mounted hydraulically operated push rig. **Drilling depth will be extended if obvious signs of contamination are detected in samples collected at 20 feet.** Pre-cleaned drill rods will be used throughout the drilling operation to prevent potential cross contamination. Upon termination of the boring, the drill rods will be removed and the annular space will be filled with a bentonite/portland slurry. The surface shall be completed to match the surrounding grade surface.

SOIL SAMPLING AND ANALYSIS

Undisturbed soil samples will be collected for analysis at approximately 5 feet bsg, 10 feet bsg, 15 feet bsg, and 20 feet bsg. **Should obvious signs of contamination be encountered in the 20-foot soil samples, additional soil samples will be collected at 25 feet bsg and at every 5-foot depth interval thereafter until no indications of contamination are noted in the deepest sample.** Groundwater interface is anticipated at approximately 10 feet bsg but most likely as in past site experiences, soil samples will not be saturated nor will there be sufficient water to grab a water sample until the boring is advanced to a depth between 15 and 20 feet bgs.

Undisturbed soil samples will be collected during the investigation utilizing a 48-inch long, 1.75-inch I.D. barrel sampler utilizing polyethylene sample sleeves. All sampling equipment will be decontaminated between sampling episodes utilizing a triple rinse method consisting of a wash with trisodium phosphate (TSP), rinsed with potable water followed by a final rinse with distilled water.

Immediately upon collection of soil samples, each end of the selected sample will be covered with Teflon film and capped with a polyethylene lid. The lids will be sealed with toluene free polyethylene tape and an identification label with all pertinent sampling information will be affixed to the tube. The sample will then placed immediately on ice and chilled to 4°C for storage and subsequent delivery to the analyzing laboratory.

Soil samples will be described in the field using the Unified Soil Classification System (USCS). Other information that will be recorded in the field and transcribed onto the soil-boring log includes soil type, sample and headspace volatile organic compound (VOC) concentration, sample collection depth, blow count, odor, description, and borehole completion information.

The work will be performed under the direct supervision of a California Registered Geologist.

WATER SAMPLING

Depth discrete groundwater samples will be collected from the exploratory boring locations indicated on **Figure 2**. Groundwater samples will be collected utilizing a Hydropunch™ groundwater-sampling device. This device will be advanced through the soil column to predetermined depths below the groundwater interface. At the desired depth, the sampler will be opened and formation water will hydrostatically flow into the sampling device. A pre-cleaned stainless steel bailer will be utilized to collect the water sample. The sample will be removed, the device closed and removed from the borehole. The equipment will be decontaminated, reinstalled into the borehole and advanced to the next interval. The process will then be repeated and the deeper samples will be collected.

Groundwater samples will be collected approximately 2 feet below the saturated groundwater interface. Immediately subsequent to collection, the water sample will be transferred to 40-ml volumetric vials, leaving no head space and immediately be placed in a cooler with ice and protected so the samples do not freeze by separating samples with an inert divider. A travel blank will be filled on site from a sealed container of deionized water, using the same type of sample container as the other samples taken. The travel blank will be handled in the same manner as the sample vials.

All samples will be handled in accordance with the chain-of-custody record guidelines. Samples will be preserved in the field as appropriate for the analyses scheduled to be performed, and analyzed within EPA holding times established for each analysis. Samples will be shipped to the laboratory on the same day collected, unless otherwise noted. Samples will be stored and transported in a cooler maintained at approximately 4 degrees centigrade.

LABORATORY ANALYSES

Soil samples will be submitted to a State certified laboratory for analysis by California DHS modified EPA Method 8015 for gasoline and by EPA Method 8021B for BTEX and MTBE components. The following soil detection limits are proposed; TPHg-0.5 mg/Kg, Benzene-0.005 mg/Kg, Toluene-0.005 mg/Kg, Ethylbenzene-0.005 mg/Kg, Total Xylenes-0.01 mg/Kg, and MTBE-0.025 mg/Kg. **The soil sample from each boring with the highest MTBE concentration will be further analyzed by full scan EPA Method 8260B analysis, including all ether oxygenates and their breakdown products.**

Each of the groundwater samples will be analyzed for TPH-G by the CDHS-approved method (modified EPA Method 8015) **and for volatile organics including benzene, toluene, ethylbenzene, total xylenes, and MTBE by EPA method 8260B.** The following water detection limits are proposed; TPHg-500 µg/L, Benzene-0.3 µg/L, Toluene-0.3 µg/L, Ethylbenzene-0.3 µg/L, Total Xylenes-0.6 µg/L, and MTBE-5 µg/L.

DISPOSITION OF DRILL CUTTINGS AND WASTE WATER

Any drill cuttings generated during the drilling operation and any waste water generated by during the investigation will be stored on site in 55-gallon DOT-approved steel drums pending characterization. Each drum will be labeled with the site name and address, generation date, and type and source of the material it contains. Within 30 days of the generation date, the drummed soil and water will be transported to an appropriate facility for disposal.

CLOSURE CONFIRMATIONAL ASSESSMENT REPORT

Upon completion of field activities, a report documenting the work will be submitted. The report will include a detailed description of the field activities, a summary of the analytical data, analytical reports with QA/QC documentation, soil boring logs, and investigation findings and conclusions. Dependent upon the results of the confirmational assessment, WGR will also include in the report either a case for site closure or recommendations for additional remedial activities.

WGR Southwest, Inc.

REGISTERED GEOLOGIST
J. GRAYDON MARTZ
No. 4841
STATE OF CALIFORNIA

John M. Teravskis, Project Manager
REA I No. 06085

J Graydon Martz, Supervising Geologist
CA Registered Geologist No. 4841

References

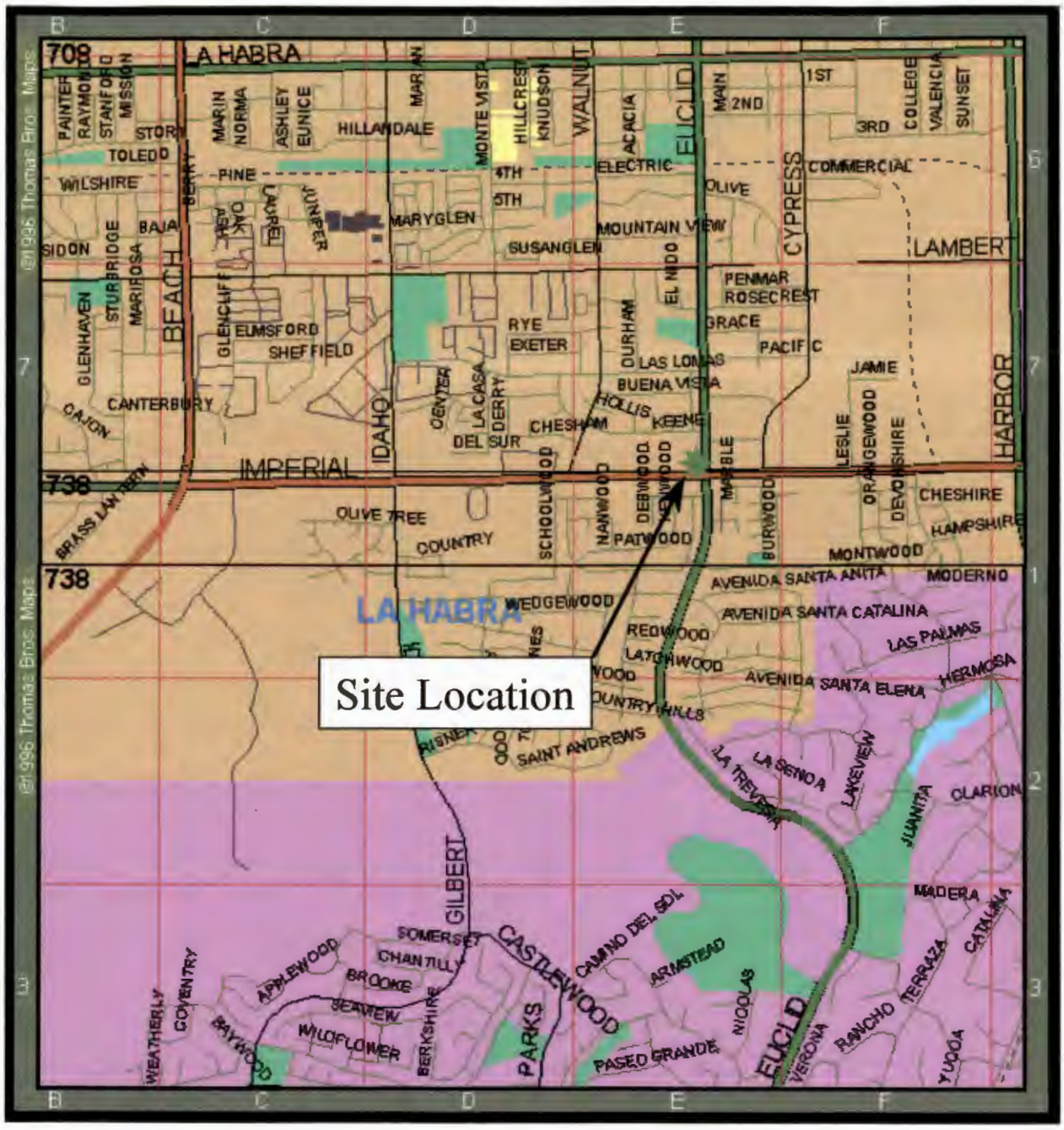
State of California Department of Water Resources (DWR), 1961, Southern District, Bulletin No. 104.

W. W. Irwin, Inc., Corrective Action Plan, January 13, 1995.

Wayne Perry, Inc., Third Quarter 1998 Groundwater Monitoring Report, October 30, 1998.

WGR Southwest, Inc., Third Quarter 1999 Groundwater Monitoring & Remediation System Operation Report, October 6, 1999.

FIGURES



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WGR Southwest, Inc. 11021 Winners Circle, Suite 101 Los Alamitos, CA 90720	Pomona Box Company			Figure
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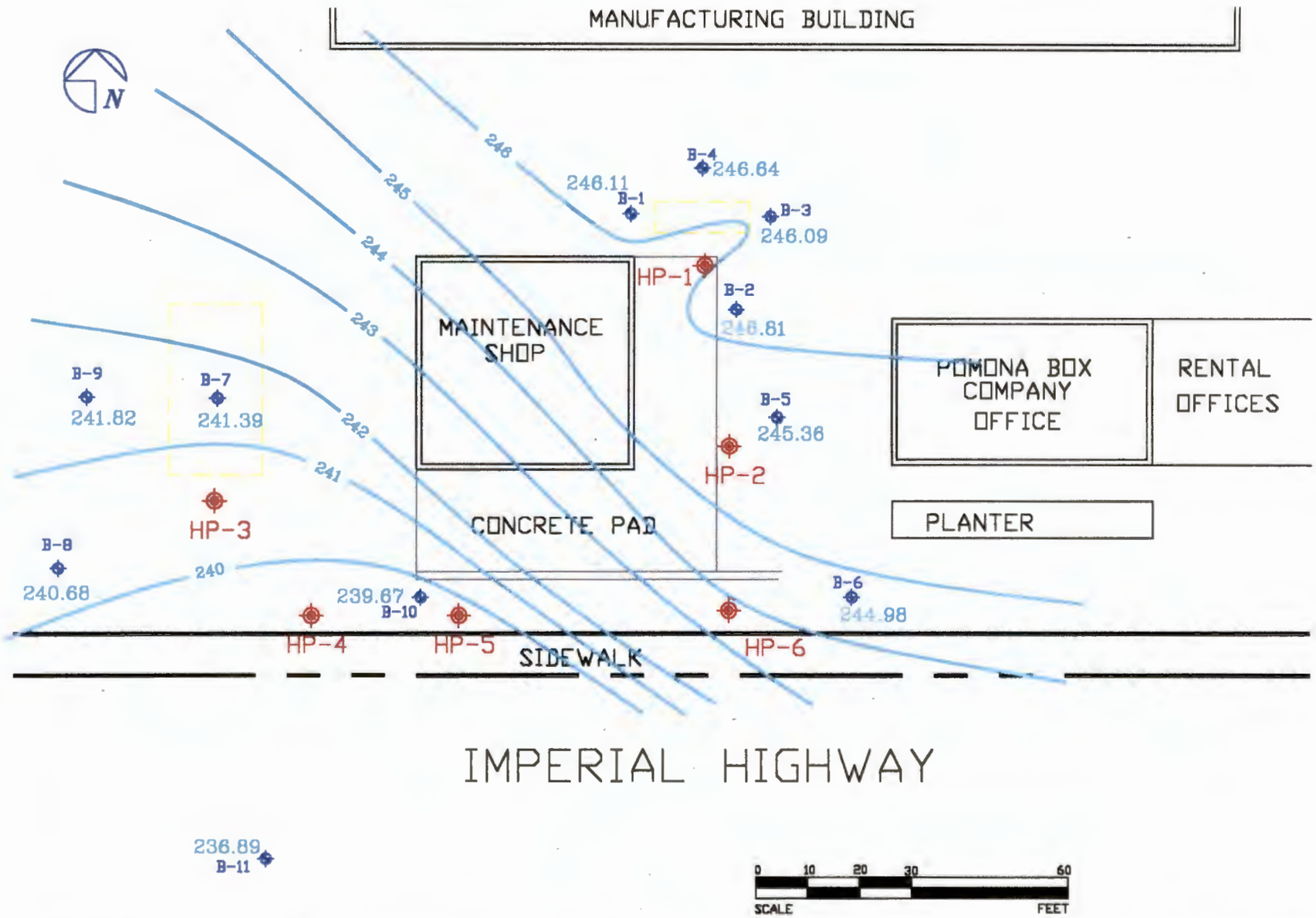
	DATE 8/16/99	PROJECT NUMBER 051.PRI.00	DWN BY JMT	DWG #



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- B-11 Groundwater Monitoring Well
- Former UST Location
- HP-6 Hydropunch confirmation Boring

WGR Southwest, Inc.
11081 Winners Circle, Suite 101
Los Alamitos, CA 90720

POMONA BOX COMPANY			Figure
PROPOSED CONFIRMATIONAL HYDROPUNCH LOCATIONS (Shown with 8/20/99 Groundwater Elevations and Gradient)			2
301 W. IMPERIAL HWY. LA HABRA, CA			
DATE 11/24/99	PROJECT NUMBER 051.PRI.00	DWN BY JMT	DWG #

CLOSURE ASSESSMENT & 4TH QUARTER 2000 MONITORING REPORT

at

Former UST Location
Pomona Box Company
301 W. Imperial Highway
La Habra, California
OCHCA Case No. 86UT224

April 9, 2001

for

VOTAW / DAVIS PROPERTIES

Mr. Don Votaw
Votaw/Davis Properties
P.O. Box 536
La Habra, California 90631

Prepared by

WGR
Southwest, Inc.
11021 Winners Circle, Suite 101
Los Alamitos, CA 90720

WGR Southwest, Inc., Project No. 051.PRI.00

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APPENDICES

CLOSURE ASSESSMENT
AND
FOURTH QUARTER 2000 MONITORING REPORT
FORMER UST LOCATION
POMONA BOX COMPANY
301 W. Imperial Highway
La Habra, California

1.0 INTRODUCTION

1.1 PROJECT HISTORY

The site is a facility that formerly had leaking underground fuel storage tanks (USTs) and is located at 301 W. Imperial Highway, in the City of La Habra (see Site Vicinity Map in **Appendix A**). It is situated on the north side of Imperial Highway, approximately 500 feet west of Euclid Street. The site is occupied by an operating box manufacturing company that consists of an office building, manufacturing building and a maintenance shop, as shown on the Site Map included in **Appendix A**.

One 1,000-gallon UST was removed in December 1986 by Wayne Perry Construction, Inc. Soil samples were collected from the tank excavation and analyzed for the presence of hydrocarbons. Results indicated an area of hydrocarbon contamination at the bottom of the excavation. The excavation was extended to 13 feet below ground surface (bgs) in an attempt to remove the soil contamination, and free phase hydrocarbons were discovered. The excavation was backfilled and the Orange County Health Care Agency (OCHCA) requested additional assessment. Six soil borings (B-1 through B-6) were installed between January and September 1987 to comply with OCHCA's request. Each of the borings was converted to a groundwater monitoring well. Dissolved or free phase hydrocarbons were detected in the wells.

Seven additional USTs were removed from the site in September 1989. Analysis of soil samples collected from the tank excavations indicated the presence of petroleum hydrocarbons. As a result, four soil borings (B-7 through B-10) were installed between March 1991 and February 1993 to further assess the site. The four borings were converted to groundwater monitoring wells. The monitoring well locations are shown on the Site Map included in **Appendix A.**

Based on the site investigation, the extent of the soil contamination appeared laterally limited to the vicinity of the former USTs. The highest levels of hydrocarbons were detected in samples collected at a depth of 15 feet bgs, which is slightly below the surface of the groundwater. The maximum total petroleum hydrocarbon (TPH) concentration encountered was 12,720 mg/Kg and the maximum benzene concentration was 44 mg/Kg.

Free phase hydrocarbons were detected in significant thicknesses in monitoring wells B-2, B-4, and B-5. The dissolved plume was interpreted to extend south to southwest of the former tank pits and possibly beneath Imperial Highway. However, samples collected from monitoring well B-11, which was installed in the center of Imperial Highway in May 1997, have not had any detections of BTEX, TPH, or MTBE above their respective method detection limits.

Wayne Perry, Inc. commenced manual free product recovery operations in June 1987. An automated recovery system was installed and became operational in April 1988. Recovery operations were discontinued in August 1992 since free phase hydrocarbons were no longer present in the wells.

Subsequent to performing a vapor extraction test and an aquifer pump test, a corrective action plan (CAP) was prepared and submitted to OCHCA by Wayne Perry, Inc. in August 1994 and revised in October 1994. OCHCA approved the CAP on December 8, 1994. In August 1995, in a meeting with Don Votaw and representatives of Wayne Perry, Inc. and W. W. Irwin, Inc., a decision was made to remediate the two Votaw sites (101 & 301 W. Imperial Highway) with the same remediation system. In December 1995, a remediation system, consisting of a vapor extraction system using a Baker Furnace™ 500 scfm unit and an activated carbon groundwater pump and treatment system, was installed at the Pomona Box Company at 301 W. Imperial Highway.

The remediation system commenced operation in January 1996 and operated continuously until August 1997, except for periods of equipment repair and maintenance downtimes. In August 1997, operation of the vapor extraction system was discontinued due to low influent soil vapor concentrations. In March 1998, the groundwater extraction system operation was discontinued because of low inlet dissolved hydrocarbon concentrations pumped from the groundwater extraction wells. In July 1999, the vapor extraction equipment was removed from the site with the approval of Mr. Anthony Martinez of OCHCA.

Since March 1998, groundwater monitoring and sampling have been performed at the site on a quarterly basis. All of the monitoring wells have either maintained non-detectable concentrations or have had a significant downward trend in TPH and benzene dissolved concentrations. The lingering dissolved hydrocarbons are present only in the immediate area of wells B-1 through B-5 and do not appear to be moving offsite. MTBE has never been detected in any of the wells during the ongoing quarterly groundwater sampling events. **Table 1** in **Appendix B** presents a summary of the monitoring data and the analytical results from the quarterly groundwater monitoring and sampling events.

1.2 PURPOSE AND SCOPE OF WORK

This report presents the results of the closure assessment work conducted during the Fall of 2000 as well as the results of the fourth quarter monitoring and sampling event. The purpose of the closure assessment work was to demonstrate the viability of site closure. The placement of the boring/hydropunch locations was designed to evaluate the dissolved

petroleum hydrocarbon concentrations beneath the site, specifically to the south - southwest (down gradient) of the wells with the highest dissolved concentrations (B-1 through B-5). Additionally, the closure assessment was undertaken to measure the effectiveness of the soil remedial efforts near the former tank pits. The fourth quarter groundwater monitoring and sampling activities were conducted as part of the ongoing schedule of quarterly monitoring and sampling.

2.0 SITE DESCRIPTION

2.1 SITE SETTING

The site is located in a mixed commercial/retail and residential area of La Habra, California, on the north side of Imperial Highway approximately 500 feet west of Euclid Street. The site is an operating wood and cardboard box and pallet manufacturing company. Residential areas are located adjacent to the facility to the north and across Imperial Highway to the south. Schools are also located north and south of Imperial Highway within one half mile of the site.

2.2 SITE GEOLOGY

The site is located in the La Habra-Brea basin between the Puente Hills to the north and the Coyote Hills to the south. The Whittier fault zone extends along the southern margin of the Puente Hills and passes the site location approximately four miles to the northeast. One of the upper tributaries of Coyote Creek flows to the west approximately two hundred feet south of the site along the far side of Imperial Highway. In general, Coyote Creek handles runoff from the Puente Hills and flows southwestward.

The area is underlain by sediments of the La Habra Formation which generally consist of non-indurated to poorly indurated, nonmarine deposits of silty and clayey sand, sandy and silty clay, sandstone, mudstone and conglomerate (DWR 1961). Sediments underlying the site to a depth of 30 feet consist primarily of interbedded clays, silty clays and clayey silts. Some interbeds of fine sand, silty sand and clayey sand are also present locally.

2.3 SITE HYDROGEOLOGY

The site lies within the La Habra-Yorba Linda hydrogeographic basin. This groundwater basin has a small capacity for storage in comparison to other basins in the Southern California region. The configuration of the groundwater reservoir in the area is complex, reflecting the influence of the widespread faulting associated with folding of the La Habra syncline and the Puente and Coyote Hills anticlines. According to City officials, only one well is maintained by the City of La Habra for domestic water production. This well is located approximately one mile northwest of the site near the intersection of Lambert Road and Idaho Street. The depth to static water level of the producing aquifer (Silverado Aquifer of the San Pedro Formation) within this well is reported at approximately 275 feet below ground surface (bgs) with drawdown increasing the depth to water to approximately 450 feet (DWR 1961).

Depth to first water is somewhat variable within the region due to the complex nature of the subsurface. On site, groundwater was noted at approximately 13 feet bgs during the tank removal operations in 1986 and 1989, and is now present at between 10 and 15 feet bgs in the monitoring wells. Other monitoring wells in the area report first water at depths ranging from 4 to 53 feet bgs. The groundwater encountered at this site is believed to be a thin perched zone as evidenced from repeated observations of unsaturated soil samples collected below this zone. It is believed that the perched water originates primarily from residential irrigation uphill of the site (to the north) that migrates southward to the Coyote Creek tributary in a laterally discontinuous manner. During the rainy season, groundwater seeps out of the asphalt along the southern part of the property.

3.0 CLOSURE FIELD ACTIVITIES

3.1 DRILL SITE CLEARANCE

The confirmational boring locations were marked with white paint and Underground Service Alert (USA) was contacted to identify any potential subsurface obstructions and/or conflicts. All identified utilities were marked and the proposed investigation locations were modified where necessary. In order to insure that no underground utilities or obstructions existed at the proposed boring locations, the initial five feet of drilling were advanced utilizing hand auger techniques.

3.2 HEALTH AND SAFETY PLAN

A site specific Health and Safety Plan detailing all known or potential hazards and emergency response procedures was prepared prior to field operations. All on-site personnel reviewed the plan and a "tailgate" safety meeting was conducted prior to initiation of field activities. The plan was maintained on site throughout the duration of field activities and is available for review upon request.

The closure assessment activities were conducted in compliance with the State Hazardous Waste and Underground Storage Tanks Laws and Regulations (Health and Safety Code, Division 20, Chapters 6.5 and 6.7, and California Administrative Code, Title 22, Division 4, Chapter 30, and Title 23, Subchapter 16).

3.3 CLOSURE SOIL SAMPLING

Six borings (HP-1 through HP-6) were advanced on site in order to demonstrate the viability of site closure. A truck-mounted, hydraulically operated Hydropunch™ push rig was utilized to advance the borings on September 21, 2000. The borings were situated in areas roughly down gradient of the former on-site source areas. The Site Map included in Appendix A illustrates the closure boring locations. HP-1 and HP-4 through HP-6 were each drilled to a total depth of approximately 21 feet bgs. HP-2 extended to a total depth of 31 feet bgs, and HP-3 extended to a total depth of 26 feet bgs. Pre-cleaned drill rods were used throughout the drilling operation to prevent potential cross contamination.

Undisturbed soil samples were collected for analysis within each boring at five-foot depth intervals beginning at approximately 5 feet bgs and extending to the total depth. The groundwater interface was typically encountered between 10 and 15 feet bgs, but there was not sufficient water to collect water samples until the borings were advanced to depths of at least 20 feet bgs.

Undisturbed soil samples were collected during the investigation utilizing a 48-inch long, 1.75-inch I.D. barrel sampler utilizing polyethylene sample sleeves. All sampling equipment was decontaminated between sampling episodes utilizing a triple rinse method consisting of a wash with trisodium phosphate (TSP), a rinse with potable water followed by a final rinse with distilled water.

Immediately upon recovery of the soil sample tubes, the ends of the selected samples were covered with Teflon film and capped with polyethylene lids. The lids were sealed with toluene free polyethylene tape and identification labels with all pertinent sampling information were affixed to the tubes. The samples were then placed immediately on ice and chilled for storage and subsequent delivery to the analyzing laboratory. Subsequent to collection of all samples, the borings were backfilled from total depth to near surface with hydrated bentonite chips, then capped with quick-set concrete.

Soil samples were described in the field using the Unified Soil Classification System (USCS). Other information that was recorded in the field and transcribed onto the soil-boring logs includes soil type, sample collection depth, any odor, description, and borehole completion information. The soil boring logs are included in **Appendix C**. All work was performed under the direct supervision of a California Registered Geologist.

3.4 CLOSURE GROUNDWATER SAMPLING

Groundwater samples were collected from HP-1, HP-2 and HP-6. The remaining three borings were dry. Groundwater samples were collected utilizing a Hydropunch™ groundwater-sampling device. This device was advanced through the soil column to below the groundwater interface where the sampler was opened and formation water was allowed to hydrostatically flow into the sampling device.

Immediately subsequent to collection, the water samples were transferred to 40-ml volumetric vials, leaving no head space, and immediately placed in a cooler with ice and protected from freezing by separating the vials with inert dividers. A travel blank was filled on site from a sealed container of deionized water, using the same type of sample container as the groundwater samples. The travel blank was handled in the same manner as the sample vials.

All samples were handled in accordance with the chain-of-custody record guidelines. Samples were preserved in the field as appropriate for the analyses scheduled to be performed, and analyzed within EPA holding times established for each analysis. Samples were shipped to the laboratory on the same day collected, unless otherwise noted. Samples were stored and transported in a cooler maintained at approximately 4 degrees centigrade.

3.5 CLOSURE SOIL SAMPLE ANALYSIS

Soil samples were submitted to a State certified laboratory for analysis by the California DHS-approved method, modified EPA Method 8015, for gasoline and by EPA Method 8021B for BTEX and MTBE components. The following soil detection limits were used: TPHg-0.5 mg/Kg, benzene-0.005 mg/Kg, toluene-0.005 mg/Kg, ethylbenzene-0.005 mg/Kg, total xylenes-0.01 mg/Kg, and MTBE-0.025 mg/Kg. A summary of the closure soil sample analytical results is presented in **Table 2** in **Appendix B**.

All of the soil samples recovered from closure confirmation borings HP-3 and HP-4 were free of detectable levels of hydrocarbon constituents. The 15-foot samples from HP-1 and HP-2 contained TPHg concentrations of 2,200 mg/Kg and 790 mg/Kg, respectively, and the 10-foot sample from HP-6 contained a TPHg concentration of 1,500 mg/Kg. TPHg concentrations of 2.5 mg/Kg and 5.3 mg/Kg were found in the 20-foot sample from HP-2 and the 15-foot sample from HP-5. With these exceptions, detectable TPHg concentrations were not found in any of the closure soil samples.

Benzene concentrations of 0.48 mg/Kg and 0.03 mg/Kg were detected in the 20- and 25-foot samples from HP-2. With these very minor exceptions, benzene was not detected in any of the closure soil samples. Maximum toluene, ethylbenzene and total xylene concentrations of 6.9 mg/Kg, 29 mg/Kg and 130 mg/Kg, respectively, were all detected in the 15-foot sample from HP-1. Detectable MTBE concentrations were not found in any of the closure soil samples. A figure graphically presenting the analytical results of the closure soil sampling is included in **Appendix D**. The laboratory analytical reports for the closure sampling are included as **Appendix E**.

3.6 CLOSURE GROUNDWATER SAMPLE ANALYSIS

Each of the groundwater samples was analyzed for TPHg by the California DHS-approved method, modified EPA Method 8015, and for BTEX and MTBE components by EPA Method 8260B. The following groundwater detection limits were used unless significantly higher concentrations were detected in the samples: TPHg-500 µg/L, Benzene-0.5 µg/L, Toluene-1.0 µg/L, Ethylbenzene-1.0 µg/L, Total Xylenes-1.0 µg/L, and MTBE-1.0 µg/L. A summary of the closure groundwater sample analytical results is presented in **Table 3** in **Appendix B**.

The groundwater sample recovered from HP-1 contained a TPHg concentration of 2,200 µg/L and a benzene concentration of 11 µg/L. TPHg and benzene concentrations of 2,100 µg/L and 570 µg/L, respectively, were detected in the groundwater sample from HP-2. A maximum dissolved TPHg concentration of 7,900 µg/L and a benzene concentration of 150 µg/L were detected in HP-6 and HP-7, respectively. The water sample from HP-2 contained an MTBE concentration of 4 µg/L. This was the only closure groundwater sample with detectable MTBE. The analytical results of the groundwater closure sampling combined with the third quarter 2000 groundwater sampling that was conducted concurrently are presented graphically on figures included in **Appendix D**.

3.7 DISPOSITION OF RESIDUAL SOIL AND WASTE WATER

The residual soil and wastewater generated during closure activities was stored on site in a 55-gallon DOT-approved steel drum pending characterization. The drum was labeled with the site name and address, generation date, and type and source of the material contained. After characterization, the drummed soil and water was transported to TPS Technologies Soil Recycling in Adelanto. A copy of the non-hazardous waste manifest is included in **Appendix I**.

4.0 FOURTH QUARTER 2000 GROUNDWATER REPORTING

4.1 QUARTERLY GROUNDWATER MONITORING

Groundwater level monitoring was conducted by WGR Southwest, Inc., on December 26, 2000 for the fourth quarter 2000 monitoring period. Prior to sampling each well, the depth to water was measured in each of the eleven groundwater monitoring wells using an oil/water interface probe. Copies of the well gauging and purging field data sheets are included as **Appendix F**.

Liquid phase petroleum hydrocarbon (free product) was not observed in any of the wells. Results of the groundwater monitoring data collected on December 26, 2000 are included on **Table 1** in **Appendix B**. A figure depicting the plotted and contoured groundwater elevations recorded during the fourth quarter 2000 monitoring event is included in **Appendix G**. As shown, the groundwater flow direction across the site is toward the south – southwest. This gradient has remained relatively consistent over the course of monitoring.

4.2 QUARTERLY GROUNDWATER SAMPLING PROCEDURES

On December 26, 2000, groundwater samples were collected from wells MW-1 through MW-11. The wells were gauged but not purged prior to sampling. (As approved by Mr. Anthony Martinez of OCHCA, purging groundwater from the monitoring wells was not required prior to well sampling.) The samples were collected using a new, disposable polyethylene bailer for each well. A trip blank was handled in an identical manner as the groundwater samples for use as a control sample.

The samples were chilled and transported to a California State-certified laboratory for analysis. Each of the samples, including the trip blank, was analyzed for TPHg by the California DHS-approved method, modified EPA Method 8015, and for BTEX and MTBE by EPA Method 8021B. In the event that MTBE was detected by Method 8021B, a verification test for MTBE was performed using EPA Method 8260B for levels above 5 µg/L.

4.3 ANALYTICAL RESULTS OF QUARTERLY SAMPLING

The analytical results for the groundwater samples collected during the fourth quarter of 2000 are summarized in **Table 1** in **Appendix B**. The dissolved TPHg, benzene, and MTBE concentrations detected in the wells on December 26, 2000 are plotted on figures

included within **Appendix G**. The laboratory report and chain-of-custody document for the fourth quarter 2000 sampling event are included in **Appendix H**.

During the fourth quarter groundwater sampling event, dissolved TPHg was detected in B-4 and B-5 at concentrations of 1,700 mg/Kg and 2,600 mg/Kg, respectively. A maximum benzene concentration of 220 mg/Kg was found in the groundwater sample from B-5. Dissolved MTBE was not detected in any of the monitoring wells during the fourth quarter of 2000.

5.0 SUMMARY AND CONCLUSIONS

5.1 SUMMARY

Six soil borings (HP-1 through HP-6) were advanced on site in fall of 2000 in order to demonstrate the viability of site closure and measure the effectiveness of soil and groundwater remedial efforts. A groundwater extraction system was in operation from January 1996 through March 1998, and a vapor extraction system operated from January 1996 through August 1997. Since March 1998, the eleven groundwater monitoring wells have been monitored and sampled on a quarterly basis for dissolved hydrocarbon constituents. The closure boring/hydropunch locations were selected to measure the dissolved concentrations across the site, particularly to the south – southwest (downgradient) of B-1, B-4 and B-5, the wells that have exhibited the highest hydrocarbon concentrations in the past.

The highest TPHg concentrations detected in the closure soil samples were 2,200 mg/Kg and 1,500 mg/Kg, found in the 15-foot sample from HP-1 and the 10-foot sample from HP-6, respectively. The highest benzene level recorded was 0.48 mg/Kg, and none of the soil samples recovered during the closure assessment contained detectable MTBE.

The hydropunch water samples were collected from the closure borings concurrently with the third quarter 2000 groundwater monitoring event. At this time, the eleven monitoring wells were monitored for depth to water and sampled. The highest dissolved TPHg concentration was 7,900 μg/L, detected in the sample recovered from HP-6, located in the southern portion of the site. B-1, HP-1, HP-2, B-4 and B-5 also contained detectable TPHg concentrations ranging from 1,200 μg/L in B-1 to 2,700 μg/L in B-4. During this sampling event, a maximum benzene concentration of 580 μg/L was measured in B-5, and a maximum MTBE concentration of 4.3 μg/L was detected in HP-2.

In accordance with the ongoing quarterly monitoring schedule, depth to water was monitored and groundwater samples were collected in the 11 monitoring wells again during the fourth quarter of 2000. The groundwater samples taken from B-4 and B-5 were the only two found to contain detectable TPHg levels of 1,700 μg/L and 2,600 μg/L, respectively. The maximum benzene concentration (220 μg/L) was detected in the sample taken from B-5. None of the groundwater monitoring wells contained detectable concentrations of MTBE during the fourth quarter 2000 sampling event. The overall

groundwater flow direction beneath the site was determined to be toward the south – southwest, consistent with that recorded in previous monitoring events.

5.2 CONCLUSIONS

Analysis of the closure soil samples has confirmed that vapor extraction has been effective in treating the hydrocarbon-impacted soils beneath the site. The data indicates some localized residual hydrocarbons remain in the soil in the vicinity of HP-1, HP-2 and HP-6 (between the Pomona Box Company office and the maintenance shop) at depths from 10 to 15 feet bgs. BTEX concentrations in the soil samples were very low or not detectable, and MTBE was not found in any of the closure soil samples.

The eleven wells have been monitored and sampled on a quarterly basis since the groundwater extraction system was shut down due to low inlet concentrations of dissolved hydrocarbons. Review of the historic groundwater data reveals that there has been no overall increase in dissolved hydrocarbon concentrations during this time to indicate a rebound effect following discontinuation of the pump and treatment system. Conversely, the hydrocarbon constituent levels in the groundwater have generally continued to decline since remedial efforts were suspended.

The water samples recovered from the closure borings are consistent with the groundwater monitoring data, indicating the presence of an isolated area of residual dissolved hydrocarbons extending from B-4 in the north to HP-6 in the south. The data further indicates that this localized plume is not migrating to any significant amount and will continue to undergo biodegradation with time, posing no threat to the environment.

5.3 RECOMMENDATIONS

Based upon the data presented herein, it is the recommendation of WGR Southwest, Inc. that quarterly groundwater monitoring on the site be suspended and the site be dropped from the UST active list. We request the site be granted closure and no further assessment or remediation be required.

WGR Southwest, Inc.

John M. Teravskis, Project Manager
State of California REA-I No. 06085

Marda T. Herbert, Project Geologist
State of California CEG No. 1732

REGISTERED GEOLOGIST
MARDA T. HERBERT
NO. 1732
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

REFERENCES

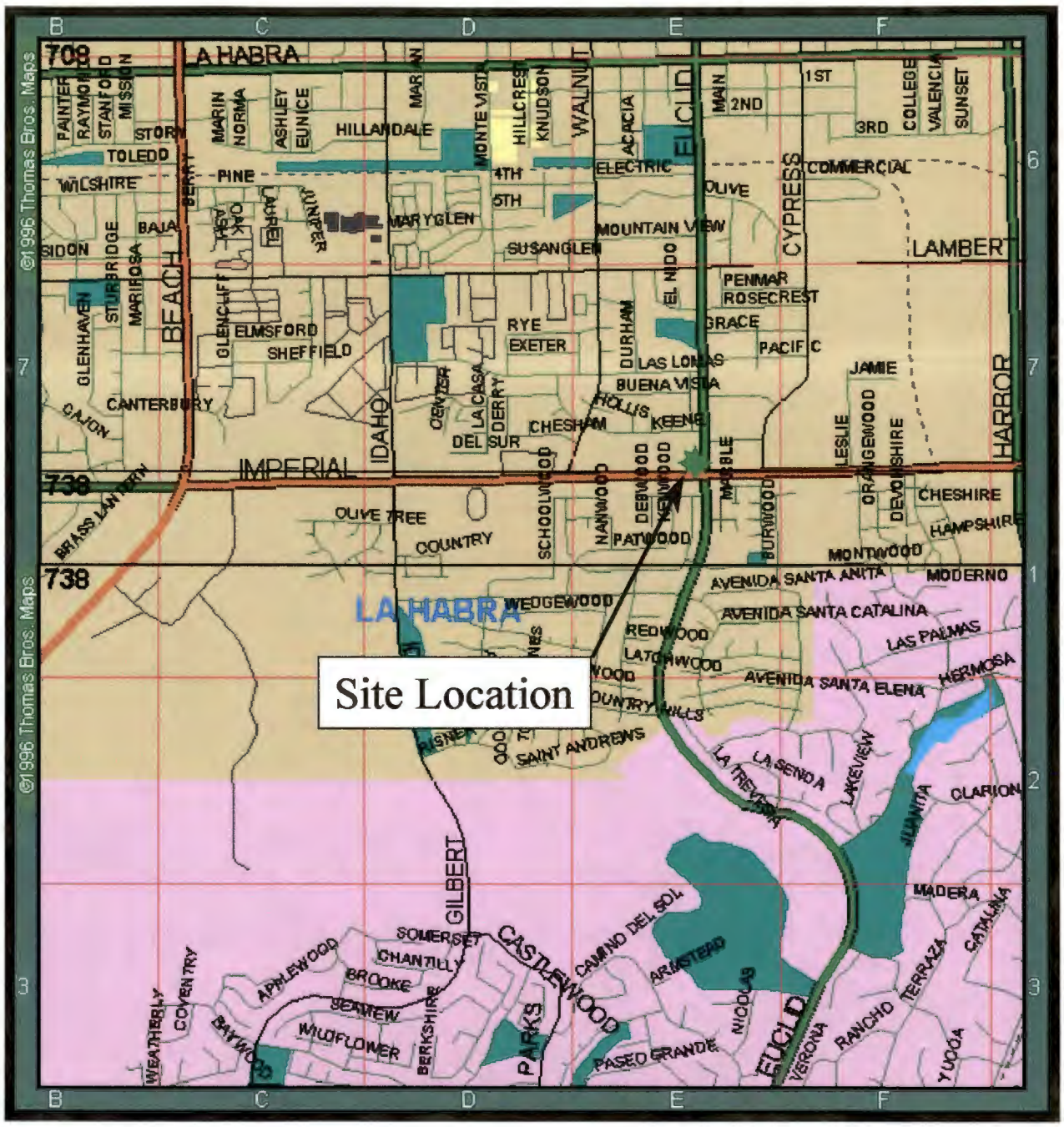
State of California Department of Water Resources (DWR), 1961, Southern District, Bulletin No. 104.

W. W. Irwin, Inc., Corrective Action Plan, January 31, 1994, revised April 14, 1994.

WGR Southwest, Inc., Third Quarter 2000 Groundwater Monitoring & Remediation System Operation Report at Pomona Box Company, January 9, 2001.

WGR Southwest, Inc., Revised Closure Confirmational Assessment Work Plan, Pomona Box Company, June 29, 2000.

APPENDIX A
Site Vicinity Map
Site Map



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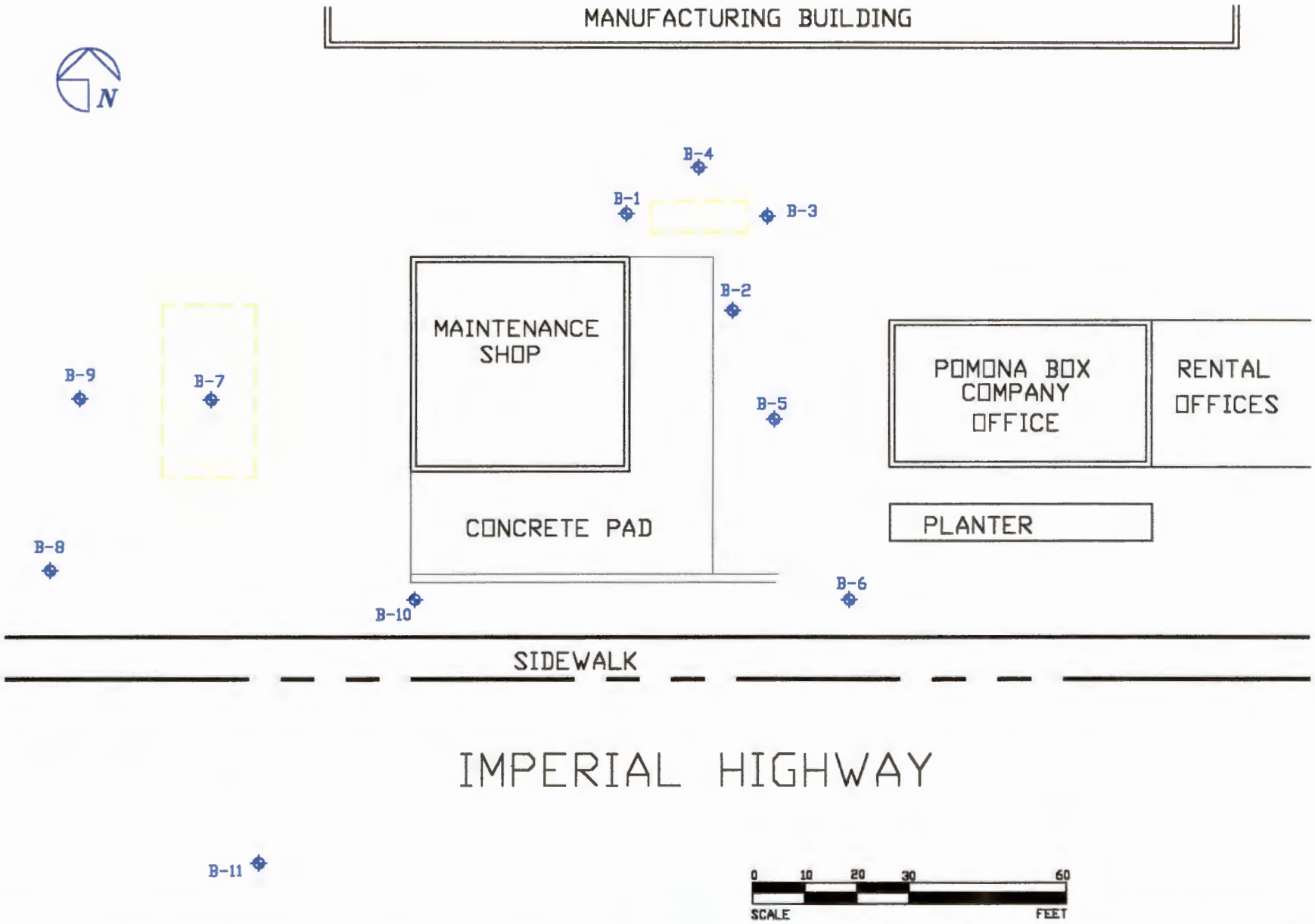
	DATE 12/17/99	PROJECT NUMBER 051.PRI.00	DWN BY JMT	DWG #



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B-11 Groundwater Monitoring Well

Former UST Location

WGR Southwest, Inc.
11021 Winners Circle, Suite 101
Los Alamitos, CA 90720

POMONA BOX COMPANY

SITE MAP

301 W. IMPERIAL HWY. LA HABRA, CA

DATE	PROJECT NUMBER	DWN BY	DWG #
3/21/01	051.PRI.00	JMT	

Figure 2

APPENDIX B

Table 1: Summary of Quarterly Gauging Data and Laboratory Analysis
Table 2: Closure Soil Sample Analytical Summary
Table 3: Closure Water Sample Analytical Summary

Table 1

SUMMARY OF GAUGING DATA AND LABORATORY ANALYSES
Pomona Box Company 301 W. Imperial Highway
La Habra, California

WELL	DATE	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	XYLENE (ug/L)	MTBE (ug/l)	COMMENTS
B-1	06/29/99	14.84	0	246.2	261.04	23.43	630	19	14	16	38	ND<5	Previously monitored by Wayne Perry, Inc.; Purged
	08/20/99	14.93	0	246.11	261.04	23.43	3700	190	35	130	500	ND<5 *	No Purge
	12/17/00	15.25	0	245.79	261.04	23.43	3300	150	26	69	67	ND<1.0*	No Purge
	03/27/00	14.69	0	246.35	261.04	23.43	ND<500	32	7.4	1.1	4.8	ND<1.0*	No Purge
	06/29/00	14.91	0	246.13	261.04	23.43	650	18	0.99	0.66	3.7	ND<1.0*	No Purge
	09/22/00	15.07	0	245.97	261.04	23.43	1200	59	4.6	8.6	43	ND<1.0*	No Purge
	12/26/00	**15.19**	**0**	**245.85**	**261.04**	**23.43**	**ND<500**	**10**	**1.2**	**ND<0.3**	**1.2**	**ND<5.0**	**No Purge**
B-2	06/29/99	14.17	0	246.86	261.03	22.18	550	57	1.3	35	25	ND<5	Previously monitored by Wayne Perry, Inc.; Purged
	08/20/99	14.22	0	246.81	261.03	22.18	530	8.1	ND<0.3	25	6.3	ND<5	No Purge
	12/17/99	14.55	0	246.48	261.03	22.18	1000	16	ND<0.3	22	38	ND<5	No Purge
	03/27/00	14.61	0	246.42	261.03	22.18	ND<500	ND<0.3	0.7	1	0.74	ND<1.0*	No Purge
	06/29/00	14.81	0	246.22	261.03	22.18	ND<500	3.6	0.3	1.1	1.3	ND<5	No Purge
	09/22/00	14.30	0	246.73	261.03	22.18	ND<500	1.6	0.35	0.66	0.89	ND<5	No Purge
	12/26/00	**14.89**	**0**	**246.14**	**261.03**	**22.18**	**ND<500**	**ND<0.3**	**1.1**	**ND<0.3**	**ND<0.6**	**ND<5.0**	**No Purge**
B-3	06/29/99	14.74	0	246.15	260.89	23.34	ND<500	2.6	ND<0.3	0.85	7	ND<5	Previously monitored by Wayne Perry, Inc.; Purged
	08/20/99	14.80	0	246.09	260.89	23.34	ND<500	0.62	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	12/17/99	15.12	0	245.77	260.89	23.34	ND<500	2.8	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	03/27/00	14.65	0	246.24	260.89	23.34	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	06/29/00	14.85	0	246.04	260.89	23.34	ND<500	3	0.41	0.35	1.5	ND<1.0*	No Purge
	09/22/00	14.90	0	245.99	260.89	23.34	ND<500	5.4	ND<0.3	ND<0.3	6.3	ND<5	No Purge
	12/26/00	**15.08**	**0**	**245.81**	**260.89**	**23.34**	**ND<500**	**2.2**	**ND<0.3**	**ND<0.3**	**ND<0.6**	**ND<5.0**	**No Purge**
B-4	06/29/99	14.82	0	246.74	261.56	34.62	1,100	13	27	58	280	ND<5	Previously monitored by Wayne Perry, Inc.; Purged
	08/20/99	14.92	0	246.64	261.56	34.62	5,800	130	56	460	770	ND<5	No Purge
	12/17/99	14.80	0	246.76	261.56	34.62	6,000	130	46	260	590	ND<5	No Purge
	03/27/00	14.66	0	246.9	261.56	34.62	4,400	100	30	180	530	ND<5*	No Purge
	06/29/00	14.23	0	247.33	261.56	34.62	3,900	110	11	160	330	ND<25	No Purge
	09/22/00	14.97	0	246.59	261.56	34.62	2,700	570	12	6.5	23	ND<5*	No Purge
	12/26/00	**15.09**	**0**	**246.47**	**261.56**	**34.62**	**1,700**	**33**	**6.5**	**45**	**110**	**ND<1.0***	**No Purge**
B-5	06/29/99	15.31	0	245.37	260.68	33.18	820	53	1.2	7.4	4	ND<5	Previously monitored by Wayne Perry, Inc.; Purged
	08/20/99	15.32	0	245.36	260.68	33.18	1,200	330	2.3	6.8	4.4	ND<5	No Purge
	12/17/99	15.53	0	245.15	260.68	33.18	3,300	280	1.7	ND<1.5	14	ND<5	No Purge
	03/27/00	15.14	0	245.54	260.68	33.18	4,200	1100	6.2	11	19	ND<5*	No Purge
	06/29/00	15.29	0	245.39	260.68	33.18	4,100	770	10	27	25	ND<2*	No Purge
	09/22/00	15.36	0	245.32	260.68	33.18	2,500	580	5.2	6.0	12	ND<10	No Purge
	12/26/00	**15.48**	**0**	**245.2**	**260.68**	**33.18**	**2,600**	**220**	**9.2**	**3.7**	**19**	**ND<25**	**No Purge**
B-6	06/29/99	11.65	0	244.95	256.6	33.34	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	Previously monitored by Wayne Perry, Inc.; Purged
	08/20/99	11.62	0	244.98	256.6	33.34	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	12/17/99	11.85	0	244.75	256.6	33.34	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	03/27/00	11.49	0	245.11	256.6	33.34	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	06/29/00	11.66	0	244.94	256.6	33.34	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	09/22/00	11.73	0	244.87	256.6	33.34	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<1*	No Purge
	12/26/00	**11.89**	**0**	**244.71**	**256.6**	**33.34**	**ND<500**	**ND<0.3**	**ND<0.3**	**ND<0.3**	**ND<0.6**	**ND<5.0**	**No Purge**

Table 1

SUMMARY OF GAUGING DATA AND LABORATORY ANALYSES

Pomona Box Company 301 W. Imperial Highway
La Habra, California

WELL	DATE	DEPTH TO WATER (feet)	HYDRO-CARBON THICKNESS (feet)	GROUND-WATER ELEVATION (feet)	TOP OF CASING (feet)	DEPTH OF WELL (feet)	TOTAL HYDRO-CARBONS (ug/L)	BENZENE (ug/L)	TOLUENE (ug/L)	ETHYL BENZENE (ug/L)	XYLENE (ug/L)	MTBE (ug/L)	COMMENTS
B-7	06/29/99	13.20	0	241.49	254.69	40.8	ND<500	ND<0.3	ND<0.3	1.2	ND<0.6	ND<5	Previously monitored by Wayne Perry, Inc.
	08/20/99	13.30	0	241.39	254.69	40.8	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	12/17/99	13.65	0	241.04	254.69	40.8	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	03/27/00	13.06	0	241.63	254.69	40.8	ND<500	1.7	ND<0.3	ND<0.3	ND<0.6	ND<1.0*	No Purge
	06/29/00	12.90	0	241.79	254.69	40.8	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	09/22/00	13.44	0	241.25	254.69	40.8	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	12/26/00	**13.56**	**0**	**241.13**	**254.69**	**40.8**	**ND<500**	**ND<0.3**	**ND<0.3**	**ND<0.3**	**ND<0.6**	**ND<5.0**	**No Purge**
B-8	06/29/99	10.09	0	240.78	250.87	32.26	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	Previously monitored by Wayne Perry, Inc.; Purged
	08/20/99	10.19	0	240.68	250.87	32.26	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	12/17/99	10.50	0	240.37	250.87	32.26	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	03/27/00	9.93	0	240.94	250.87	32.26	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	06/29/00	13.28	0	237.59	250.87	32.26	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	09/22/00	10.30	0	240.57	250.87	32.26	ND<500	0.57	ND<0.3	ND<0.3	0.76	ND<5	No Purge
	12/26/00	**10.15**	**0**	**240.72**	**250.87**	**32.26**	**ND<500**	**ND<0.3**	**0.68**	**ND<0.3**	**2.1**	**ND<1.0***	**No Purge**
B-9	06/29/99	11.80	0	241.92	253.72	21.98	ND<500	ND<0.3	ND<0.3	1.2	ND<0.6	ND<5	Previously monitored by Wayne Perry, Inc.; Purged
	08/20/99	11.90	0	241.82	253.72	21.98	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	12/17/99	12.21	0	241.51	253.72	21.98	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	03/27/00	11.64	0	242.08	253.72	21.98	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	06/29/00	10.15	0	243.57	253.72	21.98	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	09/22/00	11.94	0	241.78	253.72	21.98	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	12/26/00	**12.13**	**0**	**241.59**	**253.72**	**21.98**	**ND<500**	**ND<0.3**	**ND<0.3**	**ND<0.3**	**ND<0.6**	**ND<5.0**	**No Purge**
B-10	06/29/99	12.34	0	238.56	250.9	25.38	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	Previously monitored by Wayne Perry, Inc.; Purged
	08/20/99	11.23	0	239.67	250.9	25.38	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	12/17/99	11.55	0	239.35	250.9	25.38	ND<500	1.7	5.1	ND<0.3	7.6	ND<5	No Purge
	03/27/00	10.79	0	240.11	250.9	25.38	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	06/29/00	11.20	0	239.7	250.9	25.38	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	09/22/00	11.31	0	239.59	250.9	25.38	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	12/26/00	**11.49**	**0**	**239.41**	**250.9**	**25.38**	**ND<500**	**ND<0.3**	**ND<0.3**	**ND<0.3**	**ND<0.6**	**ND<5.0**	**No Purge**
B-11	06/29/99	13.63	0	236.95	250.58	32.77	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	8.9*	Previously monitored by Wayne Perry, Inc.; Purged
	08/20/99	13.69	0	236.89	250.58	32.77	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	12/17/99	13.84	0	236.74	250.58	32.77	ND<500	ND<0.3	ND<0.3	ND<0.3	1.7	ND<5	No Purge
	03/27/00	13.59	0	236.99	250.58	32.77	ND<500	ND<0.3	ND<0.3	ND<0.3	1.1	ND<5	No Purge
	06/29/00	13.70	0	236.88	250.58	32.77	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	09/22/00	13.67	0	236.91	250.58	32.77	ND<500	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5	No Purge
	12/26/00	**13.78**	**0**	**236.8**	**250.58**	**32.77**	**ND<500**	**ND<0.3**	**ND<0.3**	**ND<0.3**	**ND<0.6**	**ND<5.0**	**No Purge**

ND - not detected above the laboratory detection limit
NM - not measured, reason given in the comment section
NS - not sampled, reason given in the comment section
* - denotes that MTBE was detected by EPA method 8021B and verified by EPA method 8260B; the method 8260B result is reported

Note: Historic data prior to 6/29/99 is available from the Wayne Perry, Inc. Summary Table

Table 2

Pomona Box Company
301 West Imperial Highway
La Habra, California

Closure Soil Sample Analytical Summary

Sample Number	Date	8015M	8021B				
		TPHg mg/kg	Benzene mg/kg	Toluene mg/kg	Ethyl Benzene mg/kg	Total Xylenes mg/kg	MTBE mg/kg
HP-1 5'	9/22/00	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025
HP-1 10'	9/22/00	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025
HP-1 15'	9/22/00	2,200	ND<0.63	6.9	29	130	ND<3.1
HP-1 20'	9/22/00	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025
HP-2 5'	9/22/00	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025
HP-2 10'	9/22/00	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025
HP-2 15'	9/22/00	790	ND<1.3	ND<1.3	3.1	18	ND<6.3
HP-2 20'	9/22/00	2.5	0.48	ND<0.0050	0.01	ND<0.010	ND<0.025
HP-2 25'	9/22/00	ND<0.50	0.03	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025
HP-2 30'	9/22/00	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025
HP-3 5'	9/22/00	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025
HP-3 10'	9/22/00	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025
HP-3 15'	9/22/00	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025
HP-3 20'	9/22/00	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025
HP-4 5'	9/22/00	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025
HP-4 10'	9/22/00	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025
HP-4 15'	9/22/00	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025
HP-4 20'	9/22/00	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025
HP-5 5'	9/22/00	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025
HP-5 10'	9/22/00	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025
HP-5 15'	9/22/00	5.3	ND<0.0050	0.01	0.046	0.052	ND<0.025
HP-5 20'	9/22/00	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025
HP-6 5'	9/22/00	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025
HP-6 10'	9/22/00	1,500	ND<0.63	ND<0.63	20	62	ND<3.1
HP-6 15'	9/22/00	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025
HP-6 20'	9/22/00	ND<0.50	ND<0.0050	ND<0.0050	ND<0.0050	ND<0.010	ND<0.025

ND: Not Detected at the laboratory detection limits listed.

Table 3

Pomona Box Company
301 West Imperial Highway
La Habra, California

Closure Water Sample Analytical Summary

Sample Number	Date	8015M	8260B				
		TPHg ug/L	Benzene ug/L	Toluene ug/L	Ethyl Benzene ug/L	Total Xylenes ug/L	MTBE ug/L
HP-1 Water	9/22/00	2,200	11	2.1	65.0	209	ND<1.0
HP-2 Water	9/22/00	2,100	570	14	52	302	4
HP-6 Water	9/22/00	7,900	150	470	410	1,760	ND<5.0

ND: Not Detected at the laboratory detection limits listed.

APPENDIX C
Soil Boring Logs

WGR Southwest, Inc.

BORING LOG

Drill Rig: Hydropunch Truck	Date Drilled: 9/21/00	Logged By:
Boring Dia: 3 Inches	Boring Number: HP-1	Kevin Clark

Sample	Blow Counts	Completion	Depth Feet	Lithology	Description
					Asphalt
			5		CLAYEY SAND, dark grayish brown sandy clay/clayey medium grained sand, slightly moist, no odor
			10		SANDY CLAY, brown fine grained sandy clay, dense, slightly moist, no odor
			15		CLAYEY SAND, brown to gray fine grained silty/clayey sand, moist, odor
			20		SAND, light grayish brown very fine grained sandy silt to brown fine to coarse grained sand with gravel to 0.5 inch, moist to wet, no odor

Completion Notes:

Boring backfilled from total depth to surface with hydrated bentonite chips and capped with quick-set concrete.

Site:

Pomona Box Company
301 W. Imperial Highway
La Habra, CA

Project No.: 031.PRI.00

WGR Southwest, Inc.

BORING LOG

Drill Rig: Hydropunch Truck	Date Drilled: 9/21/00	Logged By:
Boring Dia: 3 Inches	Boring Number: HP-2	Kevin Clark

Sample	Blow Counts	Completion	Depth Feet	Lithology	Description
					Asphalt
					SANDY CLAY, dark brown medium grained sandy clay to light grayish brown sandy clayey silt, slightly moist, very faint to no odor
			5		
					CLAYEY SAND, brown clayey fine to medium grained sand, slightly moist, no odor
			10		
					CLAYEY SAND, brown to gray fine to medium grained clayey sand with some coarse grained sand, slightly moist, odor
			15		
					SILTY SAND, gray fine grained silty sand, slightly moist, odor
			20		
					CLAYEY SAND, gray fine to medium grained clayey sand with gravel to 0.5 inch, slightly moist, faint odor
			25		
					SILTY CLAY, light grayish brown to reddish brown silty clay, slightly moist, no odor
			30		

Completion Notes:

Boring backfilled from total depth to surface with hydrated bentonite chips and capped with quick-set concrete.

Site:

Pomona Box Company
301 W. Imperial Highway
La Habra, CA

Project No.: 031.PRI.00

WGR Southwest, Inc.

BORING LOG

Drill Rig:	Hydropunch Truck	Date Drilled:	9/21/00	Logged By:
Boring Dia:	3 Inches	Boring Number:	HP-3	Kevin Clark

Sample	Blow Counts	Completion	Depth Feet	Lithology	Description
					Asphalt
					SILTY SAND, dark brown fine grained silty sand, slightly moist, no odor
			5		
					SANDY CLAY, dark gray fine to medium grained sandy clay, slightly moist to wet (saturated), faint odor
			10		
					SILTY CLAY, reddish brown silty clay, slightly moist, no odor
			15		
					CLAYEY SILT, brown clayey silt, slightly moist, no odor
			20		
					CLAYEY SILT, brown to reddish brown, slightly moist, no odor
			25		

Completion Notes:

Boring backfilled from total depth to surface with hydrated bentonite chips and capped with quick-set concrete.

Site:

Pomona Box Company
301 W. Imperial Highway
La Habra, CA

Project No.: 031.PRI.00

WGR Southwest, Inc.

BORING LOG

Drill Rig: Hydropunch Truck	Date Drilled: 9/21/00	Logged By:
Boring Dia: 3 Inches	Boring Number: HP-4	Kevin Clark

Sample	Blow Counts	Completion	Depth Feet	Lithology	Description
					Asphalt
			5		SILTY SAND, dark brown fine grained silty sand, slightly moist, no odor
			10		SILTY SAND, grayish brown, fine to coarse grained silty sand, slightly moist, faint odor
			15		SANDY SILT, brown very fine grained sandy silt to very fine to fine grained silty sand, slightly moist, no odor
			20		SANDY SILT, brown very fine grained sandy silt to very fine to fine grained silty sand, slightly moist, no odor

Completion Notes:

Boring backfilled from total depth to surface with hydrated bentonite chips and capped with quick-set concrete.

Site:

Pomona Box Company
301 W. Imperial Highway
La Habra, CA

Project No.: 031.PRI.00

WGR Southwest, Inc.

BORING LOG

Drill Rig: Hydropunch Truck	Date Drilled: 9/21/00	Logged By:
Boring Dia: 3 Inches	Boring Number: HP-6	Kevin Clark

Sample	Blow Counts	Completion	Depth Feet	Lithology	Description
					Asphalt
					CLAYEY SAND, brown fine to coarse grained clayey sand, slightly moist, no odor
			5		
					SILTY SAND, dark gray fine grained silty sand, slightly moist, odor
			10		
					SILTY SAND, gray fine to coarse grained silty sand, faint odor
			15		
					SILTY SAND, brown fine to coarse grained clayey silty sand, moist, no odor
			20		

Completion Notes:

Boring backfilled from total depth to surface with hydrated bentonite chips and capped with quick-set concrete.

Site:

Pomona Box Company
301 W. Imperial Highway
La Habra, CA

Project No.: 031.PRI.00

WGR Southwest, Inc.

BORING LOG

Drill Rig:	Hydropunch Truck	Date Drilled:	9/21/00	Logged By:
Boring Dia:	3 Inches	Boring Number:	HP-5	Kevin Clark

Sample	Blow Counts	Completion	Depth Feet	Lithology	Description
					Asphalt
					SILTY SAND, brown fine grained silty sand, slightly moist, no odor
			5		
					SILTY CLAY, brown silty clay, slightly moist, very faint odor
			10		
					SILTY SAND, grayish brown fine grained silty sand, slightly moist, faint odor
			15		
					SILTY SAND, brown very fine grained clayey silty sand, slightly moist, no odor
			20		

Completion Notes:

Boring backfilled from total depth to surface with hydrated bentonite chips and capped with quick-set concrete.

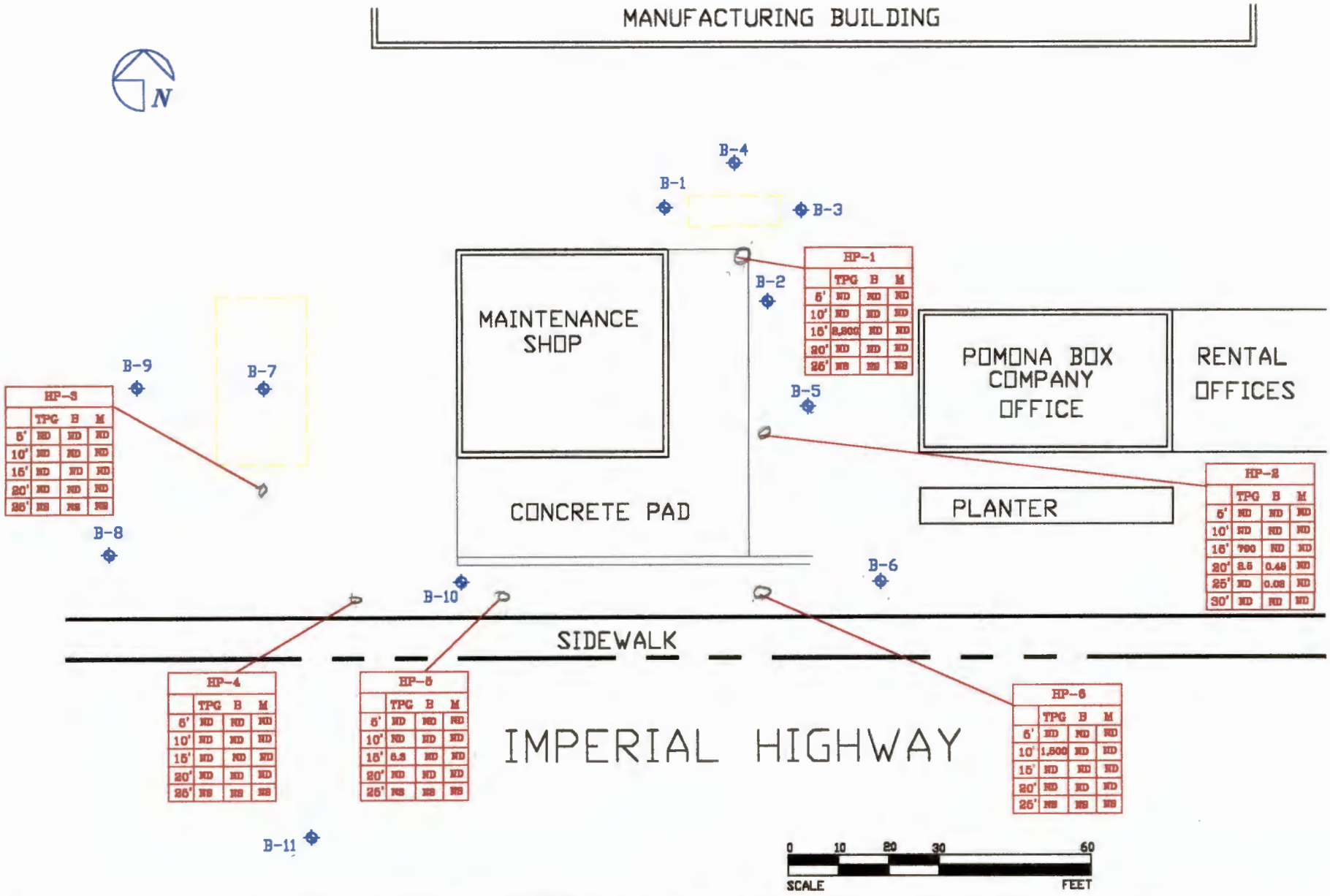
Site:

Pomona Box Company
301 W. Imperial Highway
La Habra, CA

Project No.: 031.PRI.00

APPENDIX D

Analytical Results of 9/22/00 Confirmational Soil Borings
TPH-g Concentrations in Groundwater 9/22/00
Benzene Concentrations in Groundwater 9/22/00
MTBE Concentrations in Groundwater 9/22/00



HP-1	TPG	B	M
5'	ND	ND	ND
10'	ND	ND	ND
15'	2,900	ND	ND
20'	ND	ND	ND
25'	NS	NS	NS

HP-2	TPG	B	M
5'	ND	ND	ND
10'	ND	ND	ND
15'	700	ND	ND
20'	2.5	0.48	ND
25'	ND	0.08	ND
30'	ND	ND	ND

HP-3	TPG	B	M
5'	ND	ND	ND
10'	ND	ND	ND
15'	ND	ND	ND
20'	ND	ND	ND
25'	NS	NS	NS

HP-4	TPG	B	M
5'	ND	ND	ND
10'	ND	ND	ND
15'	ND	ND	ND
20'	ND	ND	ND
25'	NS	NS	NS

HP-5	TPG	B	M
5'	ND	ND	ND
10'	ND	ND	ND
15'	8.2	ND	ND
20'	ND	ND	ND
25'	NS	NS	NS

HP-6	TPG	B	M
5'	ND	ND	ND
10'	1,500	ND	ND
15'	ND	ND	ND
20'	ND	ND	ND
25'	NS	NS	NS

Legend

B-11 Groundwater Monitoring Well

Former UST Location

All results reported in mg/kg
TPH=Total Pet. Hydrocarbons (gas.)
B = Benzene, M = MTBE

WGR Southwest, Inc.
11081 Winners Circle, Suite 101
Los Alamitos, CA 90720

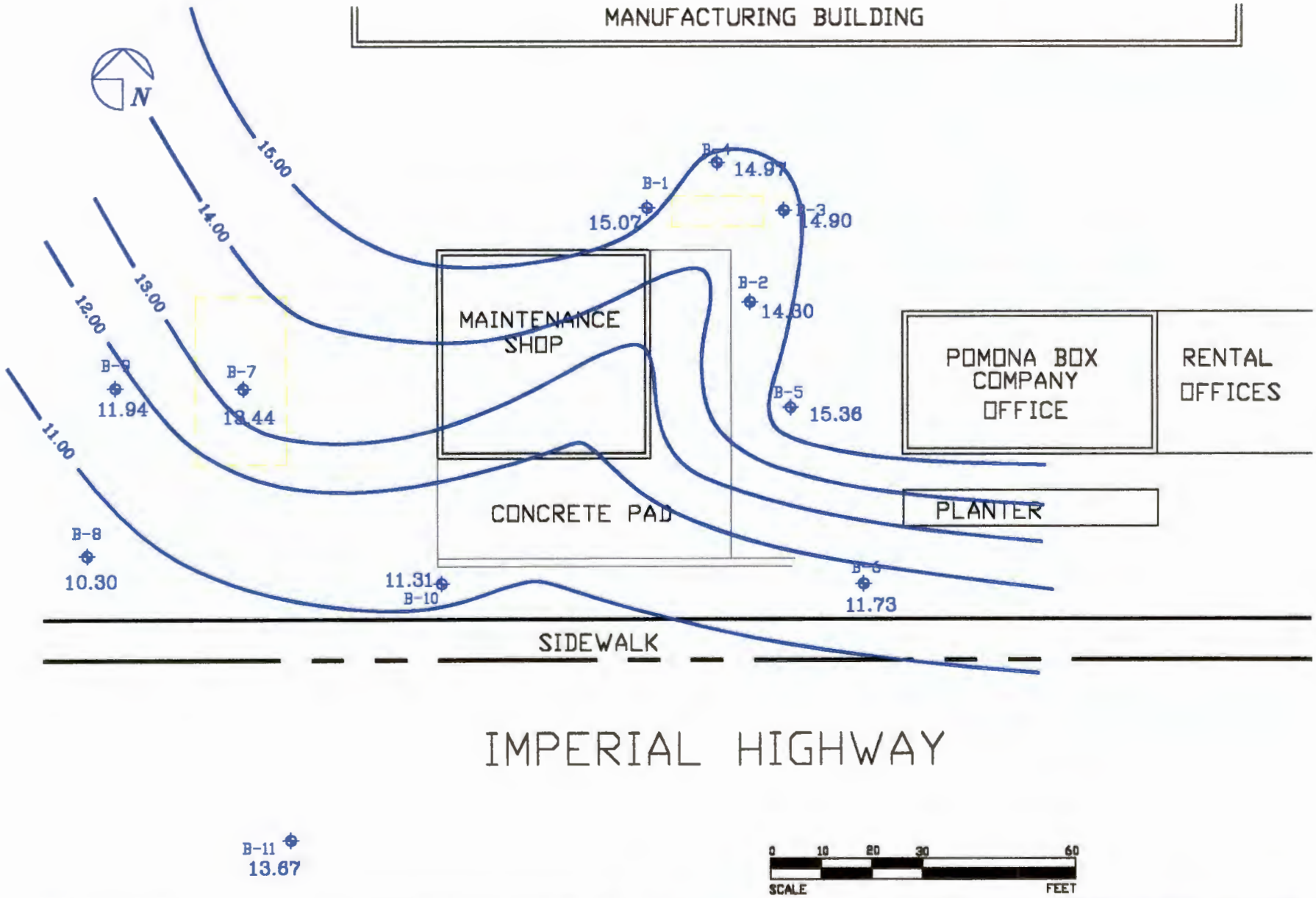
POMONA BOX COMPANY

SOIL ANALYTICAL RESULTS FROM 9/21/00
CONFIRMATION BORINGS

301 W. IMPERIAL HWY. LA HABRA, CA

DATE	PROJECT NUMBER	DWN BY	DWG #
3/30/01	051.PRI.00	JMT	

Figure 7



Legend

B-11 Groundwater Monitoring Well

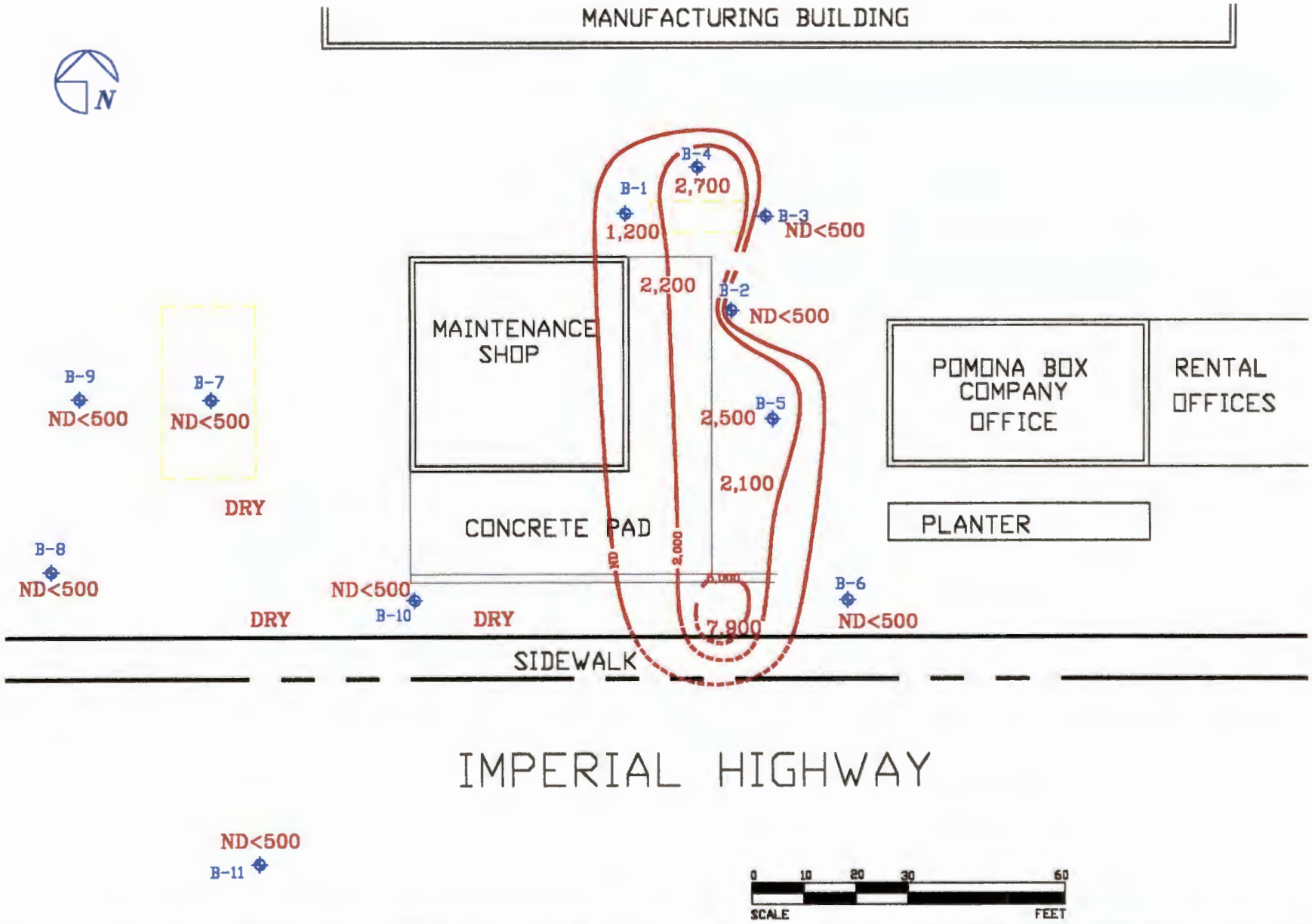
Former UST Location

WGR Southwest, Inc.
11021 Winners Circle, Suite 101
Los Alamitos, CA 90720

POMONA BOX COMPANY
GROUNDWATER ELEVATIONS (FT. MSL)
9/22/00
301 W. IMPERIAL HWY. LA HABRA, CA

Figure 3

DATE	PROJECT NUMBER	DWN BY	DWG #
3/30/01	051.PRI.00	JMT	



Legend

B-11 Groundwater Monitoring Well

Former UST Location

WGR Southwest, Inc.
11081 Winners Circle, Suite 101
Los Alamitos, CA 90720

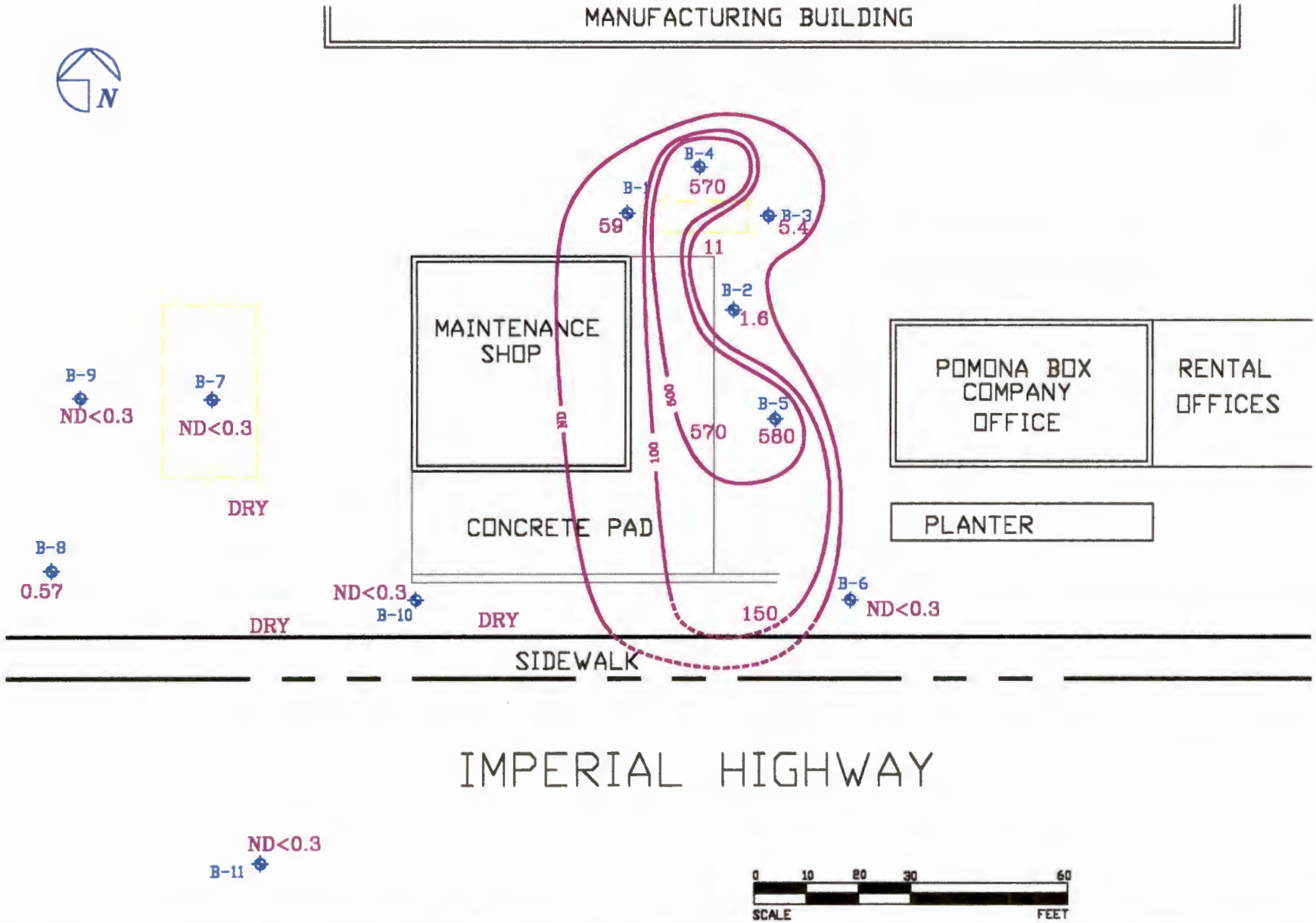
POMONA BOX COMPANY

TPH-g CONCENTRATIONS (ug/L) IN GROUNDWATER 9/22/00

301 W. IMPERIAL HWY. LA HABRA, CA

DATE	PROJECT NUMBER	DWN BY	DWG #
3/30/01	051.PRI.00	JMT	

Figure 4



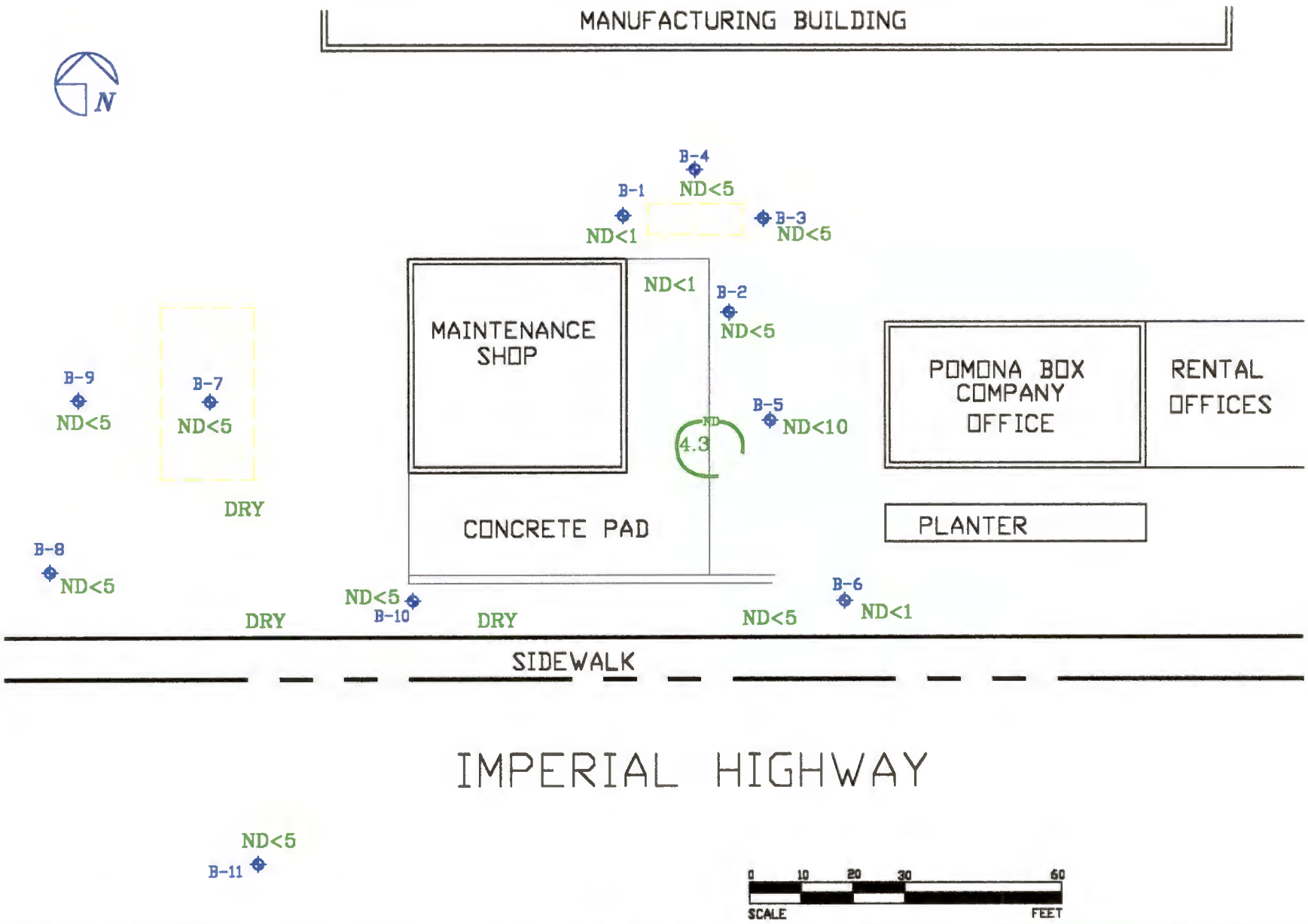
Legend

B-11 Groundwater Monitoring Well

Former UST Location

WGR Southwest, Inc.
11081 Winners Circle, Suite 101
Los Alamitos, CA 90720

POMONA BOX COMPANY			Figure
BENZENE CONCENTRATIONS (ug/l) IN GROUNDWATER 9/22/00 301 W. IMPERIAL HWY. LA HABRA, CA			5
DATE 3/30/01	PROJECT NUMBER 051.PRI.00	DWN BY JMT	DWG #



Legend

B-11 Groundwater Monitoring Well

Former UST Location

WGR Southwest, Inc.
11021 Winners Circle, Suite 101
Los Alamitos, CA 90720

POMONA BOX COMPANY

MTBE CONCENTRATIONS (ug/l) IN GROUNDWATER 9/22/00

301 W. IMPERIAL HWY. LA HABRA, CA

DATE	PROJECT NUMBER	DWN BY	DWG #
3/30/01	051.PRI.00	JMT	

Figure 6

APPENDIX E
Laboratory Reports for Closure Sampling

Calscience
Environmental
Laboratories, Inc.

September 28, 2000

John Teravskis
WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Subject: **Calscience Work Order No.: 00-09-0780**
Client Reference: Pomona Box Company

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 09/22/00 and analyzed in accordance with the attached chain-of-custody.

The results in this analytical report are limited to the samples tested and any reproduction of this report must be made in its entirety.

If you have any questions regarding this report, require sampling supplies or field services, or information on our analytical services, please feel free to call me at (714) 895-5494.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Larry Lem
Project Manager

William H. Christensen
Quality Assurance Manager

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: EPA 5030B
Method: EPA 8015M

Project: Pomona Box Company

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	098-03-006-657	Aqueous	N/A	N/A	09/23/00	00092301sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	93	57-128	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: N/A
Method: EPA 8260B

Project: Pomona Box Company

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
TB	00-09-0780-1	09/21/00	Aqueous	N/A	09/27/00	000927AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Tert-Butyl alcohol (TBA)	ND	50	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl t-butyl ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl methyl ether	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	102	86-118		Toluene-d8	103	88-110	
1,4-Bromofluorobenzene	97	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: N/A
Method: EPA 8260B

Project: Pomona Box Company

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
HP-1	00-09-0780-2	09/21/00	Aqueous	N/A	09/27/00	000927AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	14	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	11	0.50	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	65	1	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	9.1	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	1.5	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	12	1	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	3.7	1.0	1		ug/L	Naphthalene	29	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	26	1	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	2.1	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	170	1	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	52	1	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	150	1	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	59	1	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Tert-Butyl alcohol (TBA)	ND	50	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl t-butyl ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl methyl ether	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	101	86-118		Toluene-d8	103	88-110	
1,4-Bromofluorobenzene	97	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received:	09/22/00
Work Order No:	00-09-0780
Preparation:	N/A
Method:	EPA 8260B

Project: Pomona Box Company

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix	Date Prepared:	Date Analyzed:	QC Batch ID:
HP-2	00-09-0780-3	09/21/00	Aqueous	N/A	09/27/00	000927AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	570	5	10	D	ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	52	1	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	7.2	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	7.5	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	1.9	1.0	1		ug/L	Naphthalene	36	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	24	1	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	14	1	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	110	1	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	37	1	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	210	1	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	92	1	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	4.3	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Tert-Butyl alcohol (TBA)	130	50	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl ether (DIPE)	3.6	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl t-butyl ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl methyl ether	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	102	86-118		Toluene-d8	101	88-110	
1,4-Bromofluorobenzene	*98*	*86-115*					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: N/A
Method: EPA 8260B

Project: Pomona Box Company

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
HP-6	00-09-0780-4	09/21/00	Aqueous	N/A	09/27/00	000927AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	50	5		ug/L	1,1-Dichloropropene	ND	5.0	5		ug/L
Benzene	150	2	5		ug/L	c-1,3-Dichloropropene	ND	2.5	5		ug/L
Bromobenzene	ND	5.0	5		ug/L	t-1,3-Dichloropropene	ND	2.5	5		ug/L
Bromochloromethane	ND	5.0	5		ug/L	Ethylbenzene	410	5	5		ug/L
Bromodichloromethane	ND	5.0	5		ug/L	2-Hexanone	ND	50	5		ug/L
Bromoform	ND	5.0	5		ug/L	Isopropylbenzene	28	5	5		ug/L
Bromomethane	ND	5.0	5		ug/L	p-Isopropyltoluene	ND	5.0	5		ug/L
2-Butanone	ND	50	5		ug/L	Methylene Chloride	ND	50	5		ug/L
n-Butylbenzene	42	5	5		ug/L	4-Methyl-2-Pentanone	ND	50	5		ug/L
sec-Butylbenzene	10	5	5		ug/L	Naphthalene	110	50	5		ug/L
tert-Butylbenzene	ND	5.0	5		ug/L	n-Propylbenzene	120	5	5		ug/L
Carbon Disulfide	ND	50	5		ug/L	Styrene	ND	5.0	5		ug/L
Carbon Tetrachloride	ND	2.5	5		ug/L	1,1,1,2-Tetrachloroethane	ND	5.0	5		ug/L
Chlorobenzene	ND	5.0	5		ug/L	1,1,2,2-Tetrachloroethane	ND	5.0	5		ug/L
Chloroethane	ND	5.0	5		ug/L	Tetrachloroethene	ND	5.0	5		ug/L
Chloroform	ND	5.0	5		ug/L	Toluene	470	5	5		ug/L
Chloromethane	ND	5.0	5		ug/L	1,2,3-Trichlorobenzene	ND	5.0	5		ug/L
2-Chlorotoluene	ND	5.0	5		ug/L	1,2,4-Trichlorobenzene	ND	5.0	5		ug/L
4-Chlorotoluene	ND	5.0	5		ug/L	1,1,1-Trichloroethane	ND	5.0	5		ug/L
Dibromochloromethane	ND	5.0	5		ug/L	1,1,2-Trichloroethane	ND	5.0	5		ug/L
1,2-Dibromo-3-Chloropropane	ND	25	5		ug/L	Trichloroethene	ND	5.0	5		ug/L
1,2-Dibromoethane	ND	5.0	5		ug/L	Trichlorofluoromethane	ND	50	5		ug/L
Dibromomethane	ND	5.0	5		ug/L	1,2,3-Trichloropropane	ND	5.0	5		ug/L
1,2-Dichlorobenzene	ND	5.0	5		ug/L	1,2,4-Trimethylbenzene	660	5	5		ug/L
1,3-Dichlorobenzene	ND	5.0	5		ug/L	1,3,5-Trimethylbenzene	210	5	5		ug/L
1,4-Dichlorobenzene	ND	5.0	5		ug/L	Vinyl Acetate	ND	50	5		ug/L
Dichlorodifluoromethane	ND	5.0	5		ug/L	Vinyl Chloride	ND	2.5	5		ug/L
1,1-Dichloroethane	ND	5.0	5		ug/L	p/m-Xylene	1200	5	5		ug/L
1,2-Dichloroethane	ND	2.5	5		ug/L	o-Xylene	560	5	5		ug/L
1,1-Dichloroethene	ND	5.0	5		ug/L	Methyl-tert-Butyl Ether	ND	5.0	5		ug/L
c-1,2-Dichloroethene	ND	5.0	5		ug/L	Tert-Butyl alcohol (TBA)	ND	250	5		ug/L
t-1,2-Dichloroethene	ND	5.0	5		ug/L	Diisopropyl ether (DIPE)	ND	10	5		ug/L
1,2-Dichloropropane	ND	5.0	5		ug/L	Ethyl t-butyl ether (ETBE)	ND	10	5		ug/L
1,3-Dichloropropane	ND	5.0	5		ug/L	Tert-Amyl methyl ether	ND	10	5		ug/L
2,2-Dichloropropane	ND	5.0	5		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	102	86-118		Toluene-d8	103	88-110	
1,4-Bromofluorobenzene	*98*	*86-115*					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

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Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: N/A
Method: EPA 8260B

Project: Pomona Box Company

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	099-10-006-822	N/A	Aqueous	N/A	09/27/00	000927AW

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
Bromoform	ND	1.0	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
2-Butanone	ND	10	1		ug/L	Methylene Chloride	ND	10	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Naphthalene	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Styrene	ND	1.0	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	o-Xylene	ND	1.0	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	Methyl-tert-Butyl Ether	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	Tert-Butyl alcohol (TBA)	ND	50	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Diisopropyl ether (DIPE)	ND	2.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L	Ethyl t-butyl ether (ETBE)	ND	2.0	1		ug/L
1,3-Dichloropropane	ND	1.0	1		ug/L	Tert-Amyl methyl ether	ND	2.0	1		ug/L
2,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	104	86-118		Toluene-d8	104	88-110	
1,4-Bromofluorobenzene	96	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: EPA 5030B
Method: EPA 8015M/8021B

Project: Pomona Box Company

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-09-0772-4	Solid	GC 28	N/A	09/26/00	00092601ms

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	89	89	46-136	1	0-15	
Toluene	89	88	45-138	1	0-18	
Ethylbenzene	88	88	62-121	1	0-17	
p/m-Xylene	90	90	53-130	1	0-17	
o-Xylene	88	88	64-120	0	0-13	
Methyl-tert-Butyl Ether	94	90	24-144	4	0-23	
TPH for Gasoline	97	95	44-122	2	0-30	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Project: Pomona Box Company

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: EPA 5030B
Method: EPA 8015M/8021B

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
HP-4.5'	Solid	GC 28	N/A	09/26/00	0009260 1ms

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	85	81	46-136	5	0-15	
Toluene	84	80	45-138	4	0-18	
Ethylbenzene	84	80	62-121	5	0-17	
p/m-Xylene	86	81	53-130	5	0-17	
o-Xylene	83	79	64-120	5	0-13	
Methyl-tert-Butyl Ether	84	83	24-144	1	0-23	
TPH for Gasoline	93	94	44-122	1	0-30	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Project: Pomona Box Company

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: Ext + EPA 5030B
Method: EPA 8015M/8021B

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-01-002-2,300	Solid	GC 21	09/27/00	09/28/00	00092702sa

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	92	92	81-111	0	0-17	
Toluene	92	92	81-111	0	0-16	
Ethylbenzene	92	92	78-113	1	0-17	
p/m-Xylene	93	94	70-118	1	0-18	
o-Xylene	93	95	77-114	2	0-17	
Methyl-tert-Butyl Ether	96	96	65-126	0	0-27	
TPH for Gasoline	91	94	57-132	3	0-13	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Project: Pomona Box Company

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: EPA 5030B
Method: EPA 8015M/8021B

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-01-002-2,292	Solid	GC 28	N/A	09/25/00	00092501sa

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	89	90	81-111	1	0-17	
Toluene	89	89	81-111	1	0-16	
Ethylbenzene	88	89	78-113	1	0-17	
p/m-Xylene	90	91	70-118	0	0-18	
o-Xylene	88	89	77-114	1	0-17	
Methyl-tert-Butyl Ether	97	92	65-126	5	0-27	
TPH for Gasoline	96	96	57-132	1	0-13	

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Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: EPA 5030B
Method: EPA 8015M/8021B

Project: Pomona Box Company

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
HP-1 5'	00-09-0780-5	09/21/00	Solid	N/A	09/25/00	00092501sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	78	47-137		1,4-Bromofluorobenzene - FID	82	34-141	

HP-1 10'	00-09-0780-6	09/21/00	Solid	N/A	09/25/00	00092501sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	80	47-137		1,4-Bromofluorobenzene - FID	84	34-141	

HP-1 15'	00-09-0780-7	09/21/00	Solid	09/27/00	09/28/00	00092702sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.63	125	D	mg/kg	Xylenes (total)	130	1	125	D	mg/kg
Toluene	6.9	0.6	125	D	mg/kg	Methyl-tert-Butyl Ether	ND	3.1	125	D	mg/kg
Ethylbenzene	29	0.63	125	D	mg/kg	TPH for Gasoline	2200	63	125	D	mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	95	47-137		1,4-Bromofluorobenzene - FID	114	34-141	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: EPA 5030B
Method: EPA 8015M/8021B

Project: Pomona Box Company

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
HP-1 20'	00-09-0780-8	09/21/00	Solid	N/A	09/26/00	00092601sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	81	47-137		1,4-Bromofluorobenzene - FID	85	34-141	

HP-2 5'	00-09-0780-9	09/21/00	Solid	N/A	09/26/00	00092601sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	71	47-137		1,4-Bromofluorobenzene - FID	74	34-141	

HP-2 10'	00-09-0780-10	09/21/00	Solid	N/A	09/26/00	00092601sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	87	47-137		1,4-Bromofluorobenzene - FID	90	34-141	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: Ext + EPA 5030B
Method: EPA 8015M/8021B

Project: Pomona Box Company

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
HP-2 15'	00-09-0780-11	09/21/00	Solid	09/27/00	09/28/00	00092702sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	1.3	250	D	mg/kg	Xylenes (total)	18	2	250	D	mg/kg
Toluene	ND	1.3	250	D	mg/kg	Methyl-tert-Butyl Ether	ND	6.3	250	D	mg/kg
Ethylbenzene	3.1	1.3	250	D	mg/kg	TPH for Gasoline	790	130	250	D	mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	86	47-137		1,4-Bromofluorobenzene - FID	91	34-141	

HP-2 20'	00-09-0780-12	09/21/00	Solid	N/A	09/26/00	00092601sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	0.48	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	0.010	0.005	1		mg/kg	TPH for Gasoline	2.5	0.5	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	85	47-137		1,4-Bromofluorobenzene - FID	93	34-141	

HP-2 25'	00-09-0780-13	09/21/00	Solid	N/A	09/26/00	00092601sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	0.030	0.005	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	85	47-137		1,4-Bromofluorobenzene - FID	90	34-141	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: EPA 5030B
Method: EPA 8015M/8021B

Project: Pomona Box Company

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
HP-2 30'	00-09-0780-14	09/21/00	Solid	N/A	09/26/00	00092601sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	87	47-137		1,4-Bromofluorobenzene - FID	91	34-141	

HP-6 5'	00-09-0780-15	09/21/00	Solid	N/A	09/27/00	00092601sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	86	47-137		1,4-Bromofluorobenzene - FID	84	34-141	

HP-6 10'	00-09-0780-16	09/21/00	Solid	09/27/00	09/28/00	00092702sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.63	125	D	mg/kg	Xylenes (total)	62	1	125	D	mg/kg
Toluene	ND	0.63	125	D	mg/kg	Methyl-tert-Butyl Ether	ND	3.1	125	D	mg/kg
Ethylbenzene	20	0.63	125	D	mg/kg	TPH for Gasoline	1500	63	125	D	mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	95	47-137		1,4-Bromofluorobenzene - FID	115	34-141	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: EPA 5030B
Method: EPA 8015M/8021B

Project: Pomona Box Company

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
HP-6 15'	00-09-0780-17	09/21/00	Solid	N/A	09/26/00	00092501sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	66	47-137		1,4-Bromofluorobenzene - FID	69	34-141	

HP-6 20'	00-09-0780-18	09/21/00	Solid	N/A	09/26/00	00092501sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	65	47-137		1,4-Bromofluorobenzene - FID	68	34-141	

HP-6 5'	00-09-0780-19	09/21/00	Solid	N/A	09/26/00	00092501sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	89	47-137		1,4-Bromofluorobenzene - FID	92	34-141	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: EPA 5030B
Method: EPA 8015M/8021B

Project: Pomona Box Company

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
HP-5 10'	00-09-0780-20	09/21/00	Solid	N/A	09/26/00	00092601sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	87	47-137		1,4-Bromofluorobenzene - FID	91	34-141	

HP-5 15'	00-09-0780-21	09/21/00	Solid	N/A	09/26/00	00092601sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	0.052	0.010	1		mg/kg
Toluene	0.010	0.005	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	0.046	0.005	1		mg/kg	TPH for Gasoline	5.3	0.5	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	89	47-137		1,4-Bromofluorobenzene - FID	101	34-141	

HP-5 20'	00-09-0780-22	09/21/00	Solid	N/A	09/27/00	00092601sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	88	47-137		1,4-Bromofluorobenzene - FID	87	34-141	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: EPA 5030B
Method: EPA 8015M/8021B

Project: Pomona Box Company

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
HP-4 5'	00-09-0780-23	09/21/00	Solid	N/A	09/26/00	00092601sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	86	47-137		1,4-Bromofluorobenzene - FID	85	34-141	

HP-4 10'	00-09-0780-24	09/21/00	Solid	N/A	09/26/00	00092601sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	87	47-137		1,4-Bromofluorobenzene - FID	85	34-141	

HP-4 16'	00-09-0780-26	09/21/00	Solid	N/A	09/26/00	00092601sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	85	47-137		1,4-Bromofluorobenzene - FID	84	34-141	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: EPA 5030B
Method: EPA 8015M/8021B

Project: Pomona Box Company

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
HP-4 20'	00-09-0780-26	09/21/00	Solid	N/A	09/26/00	00092601sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	89	47-137		1,4-Bromofluorobenzene - FID	87	34-141	

HP-3 5'	00-09-0780-27	09/21/00	Solid	N/A	09/27/00	00092601sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	87	47-137		1,4-Bromofluorobenzene - FID	85	34-141	

HP-3 10'	00-09-0780-28	09/21/00	Solid	N/A	09/27/00	00092601sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	82	47-137		1,4-Bromofluorobenzene - FID	80	34-141	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: EPA 5030B
Method: EPA 8015M/8021B

Project: Pomona Box Company

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
HP-3 16'	00-09-0780-29	09/21/00	Solid	N/A	09/27/00	00092601sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	85	47-137		1,4-Bromofluorobenzene - FID	84	34-141	

HP-3 20'	00-09-0780-30	09/21/00	Solid	N/A	09/27/00	00092601sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	86	47-137		1,4-Bromofluorobenzene - FID	84	34-141	

Method Blank	098-01-002-2,292	N/A	Solid	N/A	09/26/00	00092601sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	94	47-137		1,4-Bromofluorobenzene - FID	98	34-141	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: EPA 5030B
Method: EPA 8015M/8021B

Project: Pomona Box Company

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	098-01-002-2,298	N/A	Solid	N/A	09/26/00	00092601sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.0050	1		mg/kg	Xylenes (total)	ND	0.010	1		mg/kg
Toluene	ND	0.0050	1		mg/kg	Methyl-tert-Butyl Ether	ND	0.025	1		mg/kg
Ethylbenzene	ND	0.0050	1		mg/kg	TPH for Gasoline	ND	0.50	1		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	92	47-137		1,4-Bromofluorobenzene - FID	90	34-141	

Method Blank	098-01-002-2,300	N/A	Solid	09/27/00	09/28/00	00092702sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.050	10		mg/kg	Xylenes (total)	ND	0.10	10		mg/kg
Toluene	ND	0.050	10		mg/kg	Methyl-tert-Butyl Ether	ND	0.25	10		mg/kg
Ethylbenzene	ND	0.050	10		mg/kg	TPH for Gasoline	ND	5.0	10		mg/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	95	47-137		1,4-Bromofluorobenzene - FID	93	34-141	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: EPA 5030B
Method: EPA 8015M

Project: Pomona Box Company

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
TB	00-09-0780-1	Aqueous	09/21/00	N/A	09/23/00	00092301sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	92	57-128	

HP-1	00-09-0780-2	Aqueous	09/21/00	N/A	09/23/00	00092301sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	2200	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	116	57-128	

HP-2	00-09-0780-3	Aqueous	09/21/00	N/A	09/23/00	00092301sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	2100	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	105	57-128	

HP-6	00-09-0780-4	Aqueous	09/21/00	N/A	09/24/00	00092301sa

Parameter	Result	RL	DF	Qual	Units
TPH for Gasoline	7900	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	158	57-128	2

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Project: Pomona Box Company

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: EPA 5030B
Method: EPA 8015M/8021B

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-01-002-2,298	Solid	GC 28	N/A	09/26/00	00092601sa

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	84	85	81-111	0	0-17	
Toluene	84	85	81-111	1	0-16	
Ethylbenzene	84	85	78-113	1	0-17	
p/m-Xylene	86	87	70-118	1	0-18	
o-Xylene	83	84	77-114	1	0-17	
Methyl-tert-Butyl Ether	84	80	65-126	5	0-27	
TPH for Gasoline	95	88	57-132	8	0-13	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Project: Pomona Box Company

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: EPA 5030B
Method: EPA 8015M

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-09-0708-5	Aqueous	GC 1	N/A	09/23/00	00092301ms

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH for Gasoline	104	102	68-122	2	0-14	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Project: Pomona Box Company

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: EPA 5030B
Method: EPA 8015M

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-03-006-657	Aqueous	GC 1	N/A	09/23/00	000923G1sa

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
TPH for Gasoline	102	103	79-115	1	0-19	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Project: Pomona Box Company

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: N/A
Method: EPA 8260B

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-09-0827-10	Aqueous	GC/MS M	N/A	09/27/00	000908271 0

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	105	107	72-127	2	0-25	
Carbon Tetrachloride	91	95	70-130	5	0-25	
Chlorobenzene	102	104	72-131	2	0-25	
1,2-Dichlorobenzene	102	103	70-130	2	0-25	
1,1-Dichloroethene	110	115	69-127	4	0-25	
Toluene	102	104	75-124	2	0-25	
Trichloroethene	104	106	60-137	2	0-25	
Vinyl Chloride	104	108	70-130	3	0-25	
Methyl-tert-Butyl Ether	104	108	80-120	4	0-25	
Tert-Butyl alcohol (TBA)	104	110	60-140	6	0-25	
Diisopropyl ether (DIPE)	104	108	60-140	4	0-25	
Ethyl t-butyl ether (ETBE)	99	104	60-140	5	0-25	
Tert-Amyl methyl ether	95	97	60-140	2	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Project: Pomona Box Company

Date Received: 09/22/00
Work Order No: 00-09-0780
Preparation: N/A
Method: EPA 8260B

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-822	Aqueous	GC/MS M	N/A	09/27/00	000927AW

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	107	103	72-127	4	0-25	
Carbon Tetrachloride	97	94	70-130	3	0-25	
Chlorobenzene	104	101	72-131	2	0-25	
1,2-Dichlorobenzene	102	99	70-130	3	0-25	
1,1-Dichloroethene	112	108	69-127	3	0-25	
Toluene	105	101	75-124	3	0-25	
Trichloroethene	107	104	60-137	3	0-25	
Vinyl Chloride	107	103	79-118	4	0-25	
Methyl-tert-Butyl Ether	103	101	80-120	2	0-25	
Tert-Butyl alcohol (TBA)	100	96	60-140	4	0-25	
Diisopropyl ether (DIPE)	83	87	60-140	5	0-25	
Ethyl t-butyl ether (ETBE)	101	99	60-140	2	0-25	
Tert-Amyl methyl ether	98	96	60-140	2	0-25	

Calscience Environmental Laboratories, Inc.

GLOSSARY OF TERMS AND QUALIFIERS

Work Order Number: 00-09-0780

Qualifier	Definition
2	Surrogate spike compound was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
D	The sample data was reported from a diluted analysis.
ND	Not detected at indicated reporting limit.

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 • FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

Date 9-22-00

Page 1 of 4

LABORATORY CLIENT: WGR

ADDRESS:

CITY STATE ZIP

TEL: FAX: E-MAIL:

CLIENT PROJECT NAME / NUMBER: Pomona Box Company

PROJECT CONTACT: John Teravskis

SAMPLER(S): (SIGNATURE) KM Clark

P.O. NO.:

QUOTE NO.:

LAB USE ONLY 09-0780

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___ / ___ / ___.

SPECIAL INSTRUCTIONS The soil sample from each boring with highest MTBE concentration analyze by full scan 8260B including other oxygenates and breakdown products.

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	LOCATION/DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G)	TPH (D) (O)	BTEX / MTBE (8021B)	HALOCARBONS (8021B)	VOCs (8260B)	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	EDB / DBCP (504.1) or (8011)	CAC, T22 METALS (6010B)	ICP/MS METALS (6020)	PNAs (8310)	VOCs (TO-14A) or (TO-15)	CH_4 / TGNMO (25.1)	FIXED GASES (25.1) or (D1946)
	TB	Trip Blank	9-21	802	H_2O	2	X				X										
	HP-1	HP-1		918	H_2O	2	X				X										
	HP-2	HP-2		1111	H_2O	2	X				X										
	HP-6	HP-6		1250	H_2O	2	X				X										
	HP-1	HP-1 5'		739	Soil	1	X		X												
		10'		757		1	X		X												
		15'		821		1	X		X												
		20'		844		1	X		X												
	HP-2	HP-2 5'		959		1	X		X												
		10'		1031		1	X		X												

Relinquished by: (Signature) KM Clark	Received by: (Signature)	Date: 9-22-00	Time: 10:32
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received for Laboratory by: (Signature)	Date: 9/22/00	Time: 13:50

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02/01/99 Revision

Q&Q Graphic (714) 898-9702

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 • FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

Date 9-22-00

Page 2 of 4

LABORATORY CLIENT: WGR

ADDRESS:

CITY STATE ZIP

TEL: FAX: E-MAIL:

CLIENT PROJECT NAME / NUMBER: Pomona Box Company

PROJECT CONTACT: John Terasvskis

SAMPLER(S): (SIGNATURE) KM

P.O. NO.:

QUOTE NO.:

LAB USE ONLY 09-0280

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___ / ___ / ___.

SPECIAL INSTRUCTIONS

see page 1

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	LOCATION/DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G)	TPH (D) (O)	BTEX / MTBE (8021B)	HALOCARBONS (8021B)	VOCs (8260B)	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	EDB / DBCP (504.1) or (8011)	CAC, T22 METALS (6010B)	ICP/MS METALS (6020)	PNAs (8310)	VOCs (TO-14A) or (TO-15)	CH_4 / TGNMO (25.1)	FIXED GASES (25.1) or (D1946)
	HP-2	HP-2 15'	9-21	1046	soil	1	X		X												
	↓	↓ 20'	↓	1105	↓	1	X		X												
		25'		1106		1	X		X												
	↓	↓ 30'		1107		1	X		X												
	HP-6	HP-6 5'		1218		1	X		X												
	↓	↓ 10'		1228		1	X		X												
		15'		1237		1	X		X												
	↓	↓ 20'		1244		1	X		X												
	HP-5	HP-5 5'		1323		1	X		X												
	↓	↓ 10'	↓	1350	↓	1	X		X												

Relinquished by: (Signature) KM	Received by: (Signature)	Date: 9-22-00	Time: 10:52
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received for Laboratory by: (Signature)	Date: 9/22	Time: 13:50

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02/01/99 Revision

Q&Q Graphic (714) 898-9702

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7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 • FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

Date 9-22-00

Page 3 of 4

LABORATORY CLIENT: WGR

ADDRESS:

CITY STATE ZIP

TEL: FAX: E-MAIL:

CLIENT PROJECT NAME / NUMBER: Pomona Box Company

PROJECT CONTACT: John Terasvskis

SAMPLER(S): (SIGNATURE)

P.O. NO.:

QUOTE NO.:

LAB USE ONLY 0 5 - 0 7 8 0

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___ / ___ / ___.

SPECIAL INSTRUCTIONS

See page 1

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	LOCATION/DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G)	TPH (D) (O)	BTEX / MTBE (8021B)	HALOCARBONS (8021B)	VOCs (8260B)	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	EDB / DBCP (504.1) or (8011)	CAC, T22 METALS (6010B)	ICP/MS METALS (6020)	PNAs (8310)	VOCs (TO-14A) or (TO-15)	CH_4 / TGNMO (25.1)	FIXED GASES (25.1) or (D1946)
	HP-5	HP-5 15'	9-21	1354	Soil	1	X		X												
	↓	↓ 20'		1359		1	X		X												
	HP-4	HP-4 5'		1407		1	X		X												
		10'		1431		1	X		X												
		15'		1446		1	X		X												
	↓	↓ 20'		1457		1	X		X												
	HP-3	HP-3 5'		1511		1	X		X												
		10'		1559		1	X		X												
		15'		1609		1	X		X												
	↓	↓ 20'	↓	1630	↓	1	X		X												

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
		9-22-00	10:32
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received for Laboratory by: (Signature)	Date: 9-22-00	Time: 18:50

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02/01/99 Revision

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 • FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

Date 9-22-00

Page 4 of 4

LABORATORY CLIENT: WGR

ADDRESS:

CITY STATE ZIP

TEL: FAX: E-MAIL:

CLIENT PROJECT NAME / NUMBER: Pomona Box Company

PROJECT CONTACT: John Teravskis

SAMPLER(S): (SIGNATURE) RM Clark

P.O. NO.:

QUOTE NO.:

LAB USE ONLY 09-678

TURNAROUND TIME
☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY)
☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___ / ___ / ___.

SPECIAL INSTRUCTIONS

see page 1

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	LOCATION/DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G)	TPH (D) (O)	BTEX / MTBE (8021B)	HALOCARBONS (8021B)	VOCs (8260B)	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	EDB / DBCP (504.1) or (8011)	CAC, T22 METALS (6010B)	ICP/MS METALS (6020)	PNAs (8310)	VOCs (TO-14A) or (TO-15)	CH_4 / TGNMO (25.1)	FIXED GASES (25.1) or (D1946)
	HP-3	HP-3 25'	9-21	1645	Soil	1	← Hold this sample please for possible analysis														

Relinquished by: (Signature) RM Clark	Received by: (Signature)	Date: 9-22-00	Time: 10:32
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received for Laboratory by: (Signature)	Date: 9-22-00	Time: 13:50

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02/01/99 Revision

APPENDIX F
Well Gauging and Purging Field Data Sheets – Fourth Quarter 2000

WGR Southwest, Inc. Well Purging & Sampling Form

Date: 12/26/00
Sampler: Nunnley
WGR Project Manager: John Trawskis

Site: PBC
Address: 301 W. Imperial Hwy La Habra CA
Project No.: 051.PRI.00

Well No.: B-1	Time	Gallons	Temp (°C or °F)	pH	Cond. (us/cm)	Comments
Total Depth:						
Depth to Water: 15.19						
Gal./Well Volume:						
Total Gal. Purged:						
Well Volumes Purged:						
Purge Start Time:						
Purge Stop Time:						

Well No.: B-2	Time	Gallons	Temp (°C or °F)	pH	Cond. (us/cm)	Comments
Total Depth:						
Depth to Water: 14.89						
Gal./Well Volume:						
Total Gal. Purged:						
Well Volumes Purged:						
Purge Start Time:						
Purge Stop Time:						

Well No.: B-3	Time	Gallons	Temp (°C or °F)	pH	Cond. (us/cm)	Comments
Total Depth:						
Depth to Water: 15.08						
Gal./Well Volume:						
Total Gal. Purged:						
Well Volumes Purged:						
Purge Start Time:						
Purge Stop Time:						

Well No.: B-4	Time	Gallons	Temp (°C or °F)	pH	Cond. (us/cm)	Comments
Total Depth:						
Depth to Water:						
Gal./Well Volume: 15.09						
Total Gal. Purged:						
Well Volumes Purged:						
Purge Start Time:						
Purge Stop Time:						

Well Volume Calculation:*

2-INCH DIAMETER	WV = 0.1632(TD - DTW)	Where: WV = WELL VOLUME (GALLONS)
4-INCH DIAMETER	WV = 0.6528(TD - DTW)	TD = TOTAL DEPTH OF WELL (FEET)
6-INCH DIAMETER	WV = 1.4688(TD - DTW)	DTW = DEPTH TO WATER (FEET)

WGR Southwest, Inc. Well Purging & Sampling Form

Date: 12/26/00
Sampler: Nunneley
WGR Project Manager: J.T.

Site: PBC
Address: 301 Imperial Hwy
Project No.: 051.PRI.00

Well No.: B-5	Time	Gallons	Temp (°C or °F)	pH	Cond. (us/cm)	Comments
Total Depth:						
Depth to Water: 15.48						
Gal./Well Volume:						
Total Gal. Purged:						
Well Volumes Purged:						
Purge Start Time:						
Purge Stop Time:						

Well No.: B-6	Time	Gallons	Temp (°C or °F)	pH	Cond. (us/cm)	Comments
Total Depth:						
Depth to Water: 11.89						
Gal./Well Volume:						
Total Gal. Purged:						
Well Volumes Purged:						
Purge Start Time:						
Purge Stop Time:						

Well No.: B-7	Time	Gallons	Temp (°C or °F)	pH	Cond. (us/cm)	Comments
Total Depth:						
Depth to Water: 13.56						
Gal./Well Volume:						
Total Gal. Purged:						
Well Volumes Purged:						
Purge Start Time:						
Purge Stop Time:						

Well No.: B-8	Time	Gallons	Temp (°C or °F)	pH	Cond. (us/cm)	Comments
Total Depth:						
Depth to Water: 10.15						
Gal./Well Volume:						
Total Gal. Purged:						
Well Volumes Purged:						
Purge Start Time:						
Purge Stop Time:						

Well Volume Calculation:*

2-INCH DIAMETER	WV = 0.1632(TD - DTW)	Where: WV = WELL VOLUME (GALLONS)
4-INCH DIAMETER	WV = 0.6528(TD - DTW)	TD = TOTAL DEPTH OF WELL (FEET)
6-INCH DIAMETER	WV = 1.4688(TD - DTW)	DTW = DEPTH TO WATER (FEET)

WGR Southwest, Inc. Well Purging & Sampling Form

Date: 12/26/00
Sampler: Nunnelley
WGR Project Manager: J.T.

Site: PBC
Address: 301 Imperial Hwy
Project No.: 051.PRI.00

Well No.: B-9	Time	Gallons	Temp (°C or °F)	pH	Cond. (us/cm)	Comments
Total Depth:						
Depth to Water: 12.13						
Gal /Well Volume:						
Total Gal. Purged:						
Well Volumes Purged:						
Purge Start Time:						
Purge Stop Time:						

Well No.: B-10	Time	Gallons	Temp (°C or °F)	pH	Cond. (us/cm)	Comments
Total Depth:						
Depth to Water: 11.49						
Gal /Well Volume:						
Total Gal. Purged:						
Well Volumes Purged:						
Purge Start Time:						
Purge Stop Time:						

Well No.: B-11	Time	Gallons	Temp (°C or °F)	pH	Cond. (us/cm)	Comments
Total Depth:						
Depth to Water: 13.78						
Gal./Well Volume:						
Total Gal. Purged:						
Well Volumes Purged:						
Purge Start Time:						
Purge Stop Time:						

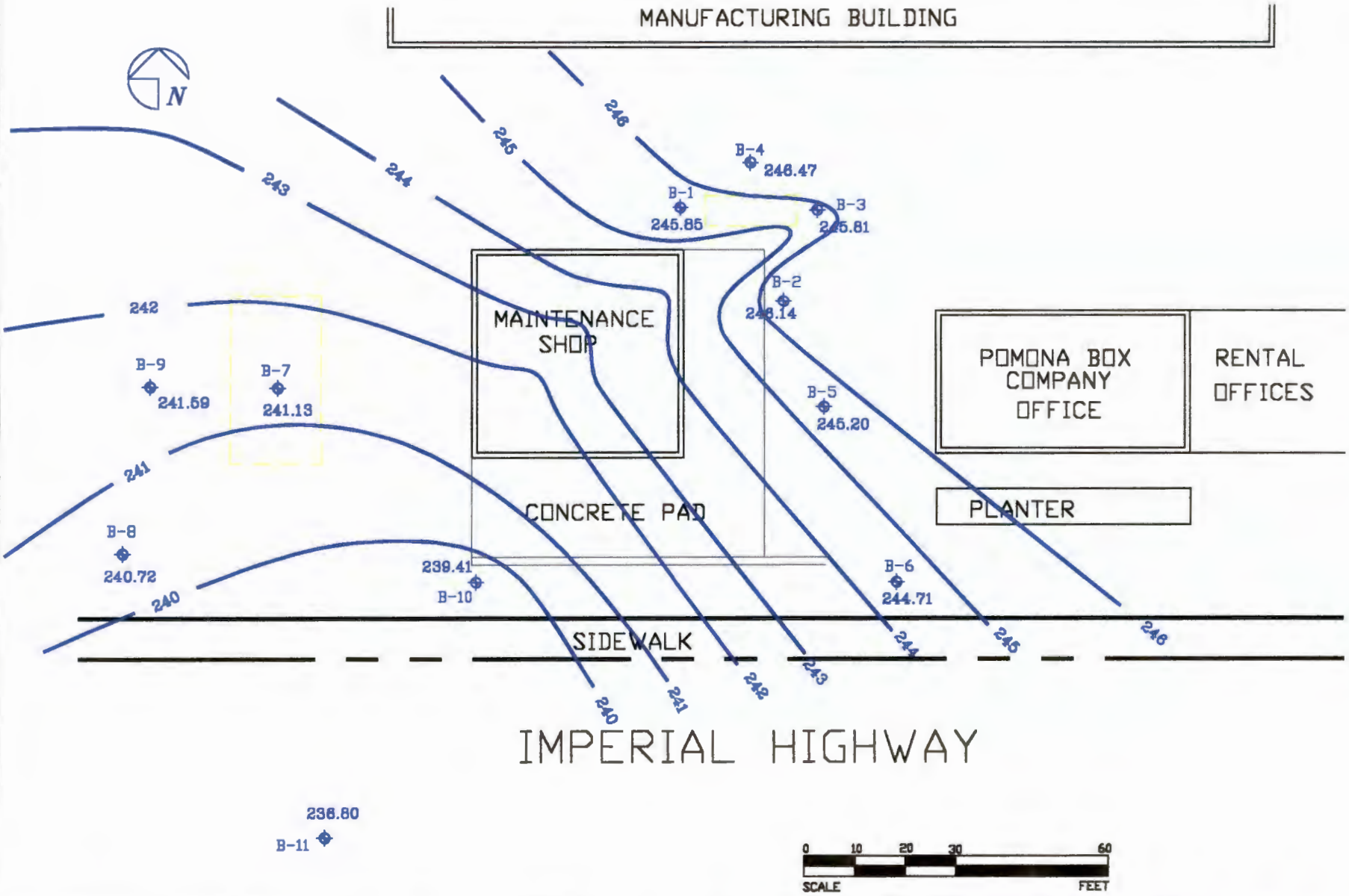
Well No.:	Time	Gallons	Temp (°C or °F)	pH	Cond. (us/cm)	Comments
Total Depth:						
Depth to Water:						
Gal./Well Volume:						
Total Gal. Purged:						
Well Volumes Purged:						
Purge Start Time:						
Purge Stop Time:						

Well Volume Calculation:*

2-INCH DIAMETER	WV = 0.1632(TD - DTW)	Where: WV = WELL VOLUME (GALLONS)
4-INCH DIAMETER	WV = 0.6528(TD - DTW)	TD = TOTAL DEPTH OF WELL (FEET)
6-INCH DIAMETER	WV = 1.4688(TD - DTW)	DTW = DEPTH TO WATER (FEET)

APPENDIX G

Groundwater Elevation 12/26/00
TPH-g Concentrations in Groundwater 12/26/00
Benzene Concentrations in Groundwater 12/26/00
MTBE Concentrations in Groundwater 12/26/00



Legend

B-11 Groundwater Monitoring Well

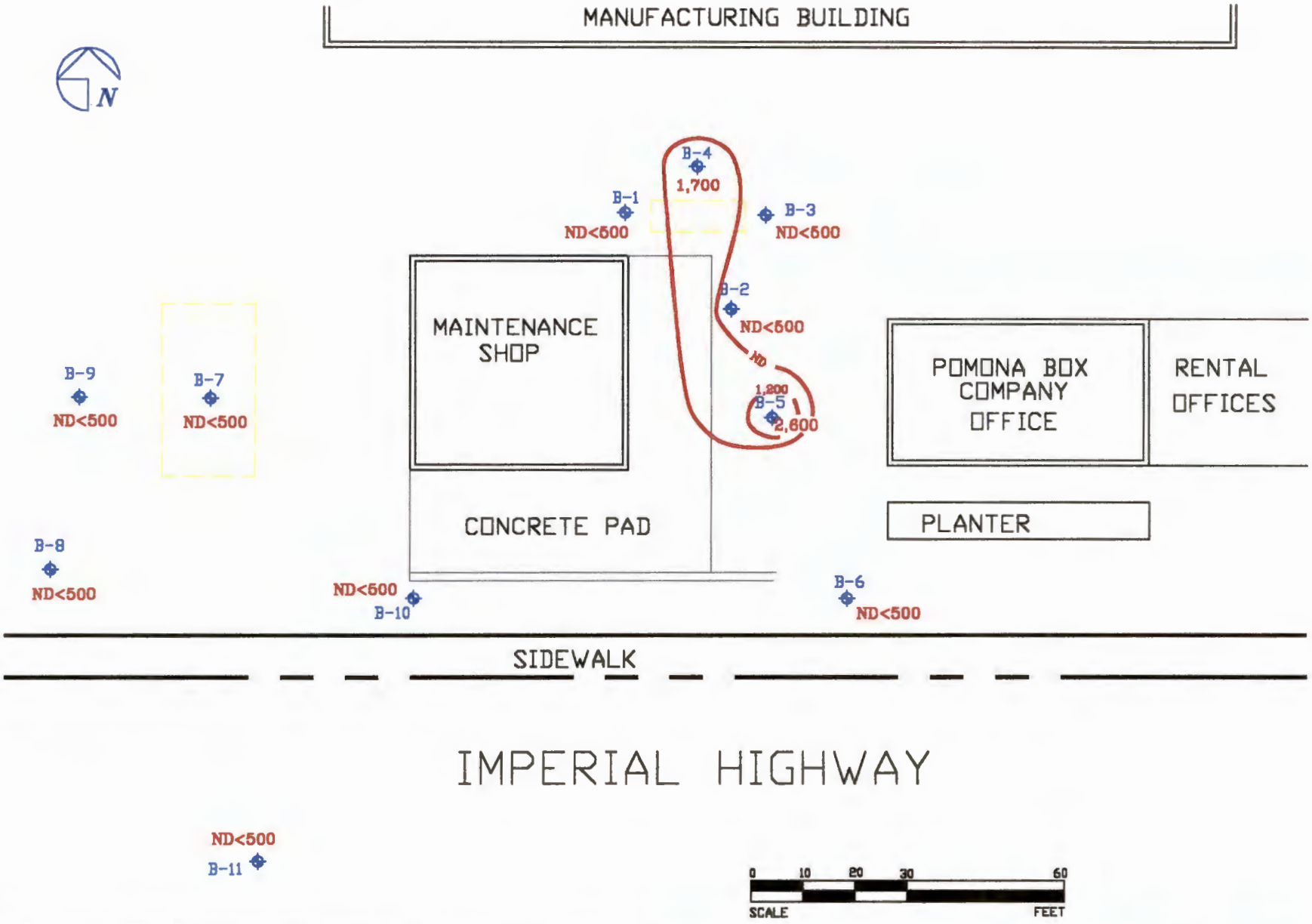
Former UST Location

WGR Southwest, Inc.
11021 Winners Circle, Suite 101
Los Alamitos, CA 90720

POMONA BOX COMPANY
GROUNDWATER ELEVATIONS (FT. MSL)
12/26/00
301 W. IMPERIAL HWY. LA HABRA, CA

Figure 3

DATE	PROJECT NUMBER	DWN BY	DWG #
3/21/01	051.PRI.00	JMT	



Legend

B-11 Groundwater Monitoring Well

Former UST Location

WGR Southwest, Inc.
11021 Winners Circle, Suite 101
Los Alamitos, CA 90720

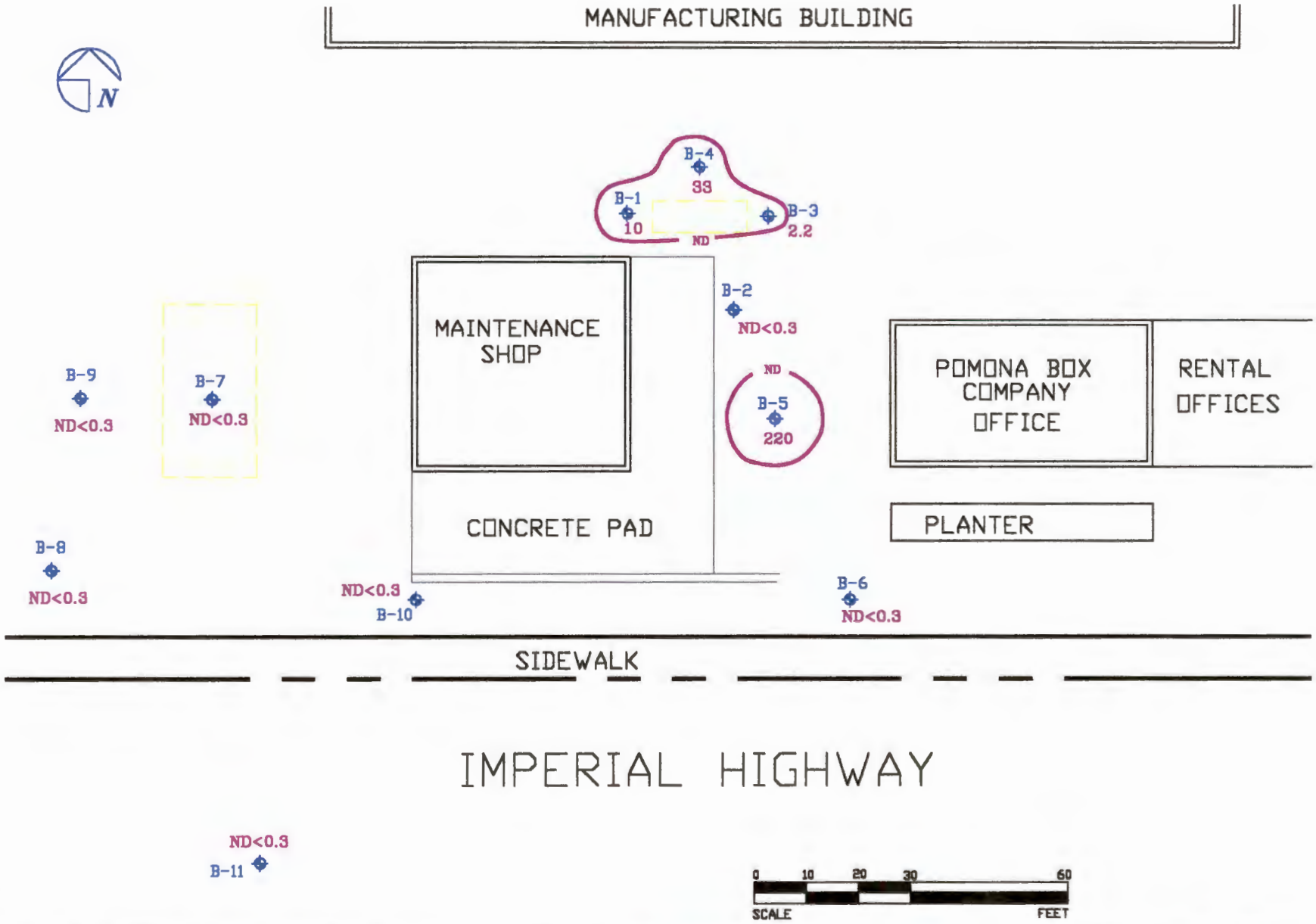
POMONA BOX COMPANY

TPH-g CONCENTRATIONS (ug-l) IN GROUONDWATER 12/26/00

301 W. IMPERIAL HWY. LA HABRA, CA

Figure 4

DATE	PROJECT NUMBER	DWN BY	DWG #
3/21/01	051.PRI.00	JMT	



Legend

B-11 Groundwater Monitoring Well

Former UST Location

WGR Southwest, Inc.
11081 Winners Circle, Suite 101
Los Alamitos, CA 90720

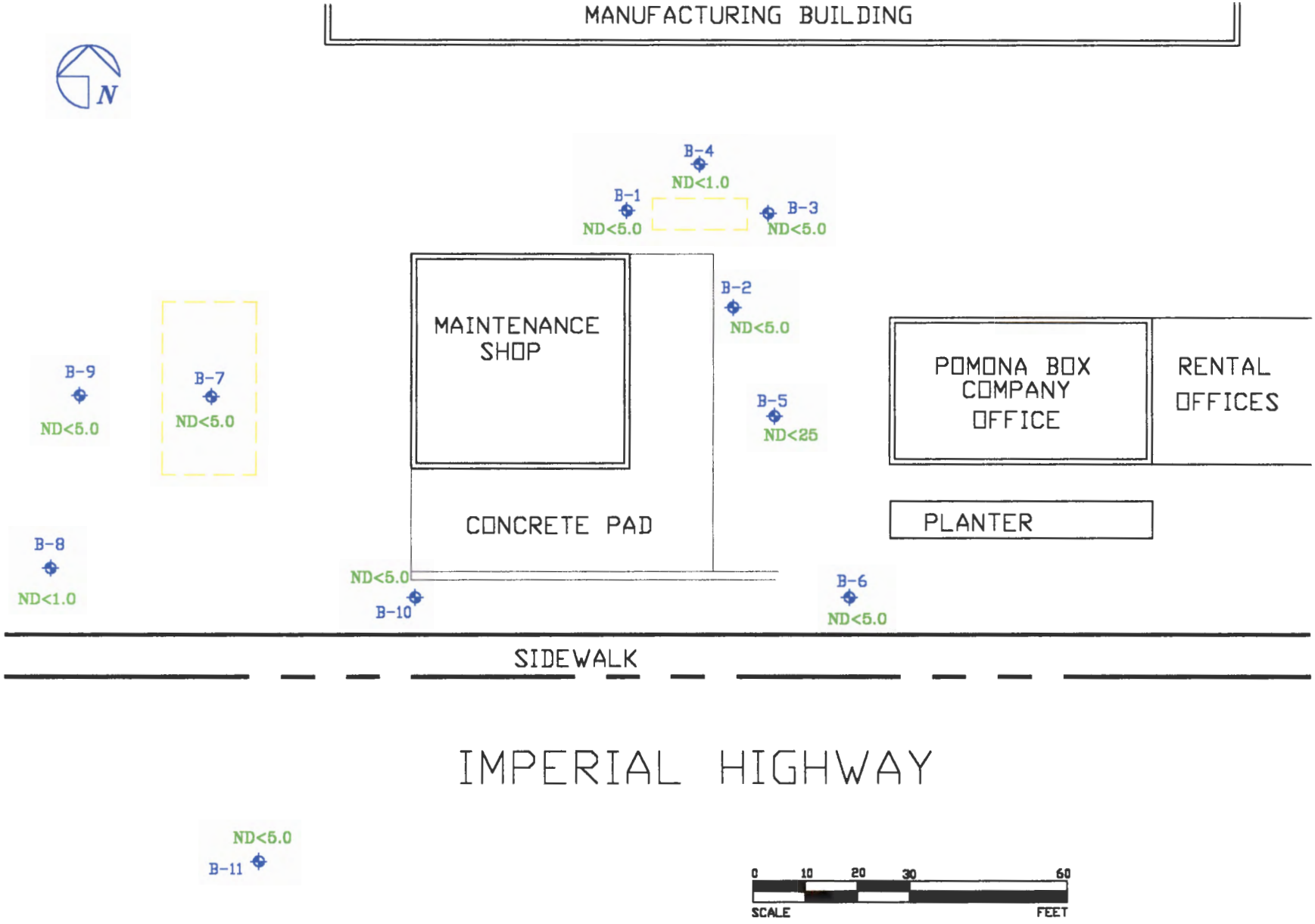
POMONA BOX COMPANY

BENZENE CONCENTRATIONS (ug/l) IN GROUNDWATER 12/26/00

301 W. IMPERIAL HWY. LA HABRA, CA

Figure 5

DATE	PROJECT NUMBER	DWN BY	DWG #
3/21/01	051.PRI.00	JMT	



Legend

B-11 Groundwater Monitoring Well

Former UST Location

WGR Southwest, Inc.
11021 Winners Circle, Suite 101
Los Alamitos, CA 90720

POMONA BOX COMPANY			Figure
MTBE CONCENTRATIONS (ug/l) IN GROUNDWATER 12/26/00			6
301 W. IMPERIAL HWY. LA HABRA, CA			
DATE 3/21/01	PROJECT NUMBER 051.PRI.00	DWN BY JMT	DWG #

APPENDIX H
Laboratory Report for Fourth Quarter 2000 Monitoring

Calscience
Environmental
Laboratories, Inc.

January 11, 2001

John Teravskis
WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Subject: **Calscience Work Order No.: 00-12-1106**
Client Reference: Pomona Box Co./051.PRI.00

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 12/27/00 and analyzed in accordance with the attached chain-of-custody.

The results in this analytical report are limited to the samples tested and any reproduction of this report must be made in its entirety.

If you have any questions regarding this report, require sampling supplies or field services, or information on our analytical services, please feel free to call me at (714) 895-5494.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Larry Lem
Project Manager

William H. Christensen
Quality Assurance Manager

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 12/27/00
Work Order No: 00-12-1106
Preparation: EPA 5030B
Method: EPA 8015M/8021B

Project: Pomona Box Co./051.PRI.00

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
B-1	00-12-1106-1	12/26/00	Aqueous	N/A	01/04/01	01010301sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	10	0.30	1		ug/L	Xylenes (total)	1.2	0.6	1		ug/L
Toluene	1.2	0.3	1		ug/L	Methyl-tert-Butyl Ether	ND	5.0	1		ug/L
Ethylbenzene	ND	0.30	1		ug/L	TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	100	81-116		1,4-Bromofluorobenzene - FID	98	57-128	

B-2	00-12-1106-2	12/26/00	Aqueous	N/A	01/04/01	01010301sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.30	1		ug/L	Xylenes (total)	ND	0.60	1		ug/L
Toluene	1.1	0.3	1		ug/L	Methyl-tert-Butyl Ether	ND	5.0	1		ug/L
Ethylbenzene	ND	0.30	1		ug/L	TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	106	81-116		1,4-Bromofluorobenzene - FID	112	57-128	

B-3	00-12-1106-3	12/26/00	Aqueous	N/A	01/02/01	01010201sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	2.2	0.3	1		ug/L	Xylenes (total)	ND	0.60	1		ug/L
Toluene	ND	0.30	1		ug/L	Methyl-tert-Butyl Ether	ND	5.0	1		ug/L
Ethylbenzene	ND	0.30	1		ug/L	TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	101	81-116		1,4-Bromofluorobenzene - FID	94	57-128	

B-4	00-12-1106-4	12/26/00	Aqueous	N/A	01/04/01	01010301sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	33	0.60	2	D	ug/L	Xylenes (total)	110	1	2	D	ug/L
Toluene	6.5	0.6	2	D	ug/L	Methyl-tert-Butyl Ether	15	10	2	D	ug/L
Ethylbenzene	45	0.60	2	D	ug/L	TPH for Gasoline	1700	1000	2	D	ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	111	81-116		1,4-Bromofluorobenzene - FID	126	57-128	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 12/27/00
Work Order No: 00-12-1106
Preparation: EPA 5030B
Method: EPA 8015M/8021B

Project: Pomona Box Co./051.PRI.00

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
B-5	00-12-1106-5	12/26/00	Aqueous	N/A	01/03/01	01010201sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	220	1	5	D	ug/L	Xylenes (total)	19	3	5	D	ug/L
Toluene	9.2	1.5	5	D	ug/L	Methyl-tert-Butyl Ether	ND	25	5	D	ug/L
Ethylbenzene	3.7	1.5	5	D	ug/L	TPH for Gasoline	2600	2500	5	D	ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	107	81-116		1,4-Bromofluorobenzene - FID	108	57-128	

B-6	00-12-1106-6	12/26/00	Aqueous	N/A	01/03/01	01010201sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.30	1		ug/L	Xylenes (total)	ND	0.60	1		ug/L
Toluene	ND	0.30	1		ug/L	Methyl-tert-Butyl Ether	ND	5.0	1		ug/L
Ethylbenzene	ND	0.30	1		ug/L	TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	99	81-116		1,4-Bromofluorobenzene - FID	92	57-128	

B-7	00-12-1106-7	12/26/00	Aqueous	N/A	01/03/01	01010201sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.30	1		ug/L	Xylenes (total)	ND	0.60	1		ug/L
Toluene	ND	0.30	1		ug/L	Methyl-tert-Butyl Ether	ND	5.0	1		ug/L
Ethylbenzene	ND	0.30	1		ug/L	TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	97	81-116		1,4-Bromofluorobenzene - FID	89	57-128	

B-8	00-12-1106-8	12/26/00	Aqueous	N/A	01/03/01	01010201sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.30	1		ug/L	Xylenes (total)	2.1	0.6	1		ug/L
Toluene	0.68	0.30	1		ug/L	Methyl-tert-Butyl Ether	5.8	5.0	1		ug/L
Ethylbenzene	ND	0.30	1		ug/L	TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	104	81-116		1,4-Bromofluorobenzene - FID	96	57-128	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 12/27/00
Work Order No: 00-12-1106
Preparation: EPA 5030B
Method: EPA 8015M/8021B

Project: Pomona Box Co./051.PRI.00

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
B-9	00-12-1106-9	12/26/00	Aqueous	N/A	01/03/01	01010201sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.30	1		ug/L	Xylenes (total)	ND	0.60	1		ug/L
Toluene	ND	0.30	1		ug/L	Methyl-tert-Butyl Ether	ND	5.0	1		ug/L
Ethylbenzene	ND	0.30	1		ug/L	TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	101	81-116		1,4-Bromofluorobenzene - FID	94	57-128	

B-10	00-12-1106-10	12/26/00	Aqueous	N/A	01/03/01	01010201sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.30	1		ug/L	Xylenes (total)	ND	0.60	1		ug/L
Toluene	ND	0.30	1		ug/L	Methyl-tert-Butyl Ether	ND	5.0	1		ug/L
Ethylbenzene	ND	0.30	1		ug/L	TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	102	81-116		1,4-Bromofluorobenzene - FID	95	57-128	

B-11	00-12-1106-11	12/26/00	Aqueous	N/A	01/03/01	01010201sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.30	1		ug/L	Xylenes (total)	ND	0.60	1		ug/L
Toluene	ND	0.30	1		ug/L	Methyl-tert-Butyl Ether	ND	5.0	1		ug/L
Ethylbenzene	ND	0.30	1		ug/L	TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	100	81-116		1,4-Bromofluorobenzene - FID	93	57-128	

Field Blank	00-12-1106-12	12/26/00	Aqueous	N/A	01/02/01	01010201sa

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.30	1		ug/L	Xylenes (total)	ND	0.60	1		ug/L
Toluene	ND	0.30	1		ug/L	Methyl-tert-Butyl Ether	5.3	5.0	1		ug/L
Ethylbenzene	ND	0.30	1		ug/L	TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	102	81-116		1,4-Bromofluorobenzene - FID	95	57-128	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received:	12/27/00
Work Order No:	00-12-1106
Preparation:	EPA 5030B
Method:	EPA 8015M/8021B

Project: Pomona Box Co./051.PRI.00

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	**098-01-003-2,126**	**N/A**	**Aqueous**	**N/A**	**01/02/01**	**01010201sa**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.30	1		ug/L	Xylenes (total)	ND	0.60	1		ug/L
Toluene	ND	0.30	1		ug/L	Methyl-tert-Butyl Ether	ND	5.0	1		ug/L
Ethylbenzene	ND	0.30	1		ug/L	TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	99	81-116		1,4-Bromofluorobenzene - FID	92	57-128	

Method Blank	**098-01-003-2,129**	**N/A**	**Aqueous**	**N/A**	**01/03/01**	**01010301sa**

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Benzene	ND	0.30	1		ug/L	Xylenes (total)	ND	0.60	1		ug/L
Toluene	ND	0.30	1		ug/L	Methyl-tert-Butyl Ether	ND	5.0	1		ug/L
Ethylbenzene	ND	0.30	1		ug/L	TPH for Gasoline	ND	500	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
1,4-Bromofluorobenzene	100	81-116		1,4-Bromofluorobenzene - FID	97	57-128	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

ANALYTICAL REPORT

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 12/27/00
Work Order No: 00-12-1106
Preparation: N/A
Method: EPA 8260B

Project: Pomona Box Co./051.PRI.00

Client Sample Number:	Lab Sample Number:	Matrix:	Date Collected:	Date Prepared:	Date Analyzed:	QC Batch ID:
B-4	00-12-1106-4	Aqueous	12/26/00	N/A	01/06/01	010105BW

Parameter	Result	RL	DF	Qual	Units
Methyl-tert-Butyl Ether	ND	1.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	100	86-118	
Toluene-d8	108	88-110	
1,4-Bromofluorobenzene	99	86-115	

B-8	00-12-1106-8	Aqueous	12/26/00	N/A	01/06/01	010105BW

Parameter	Result	RL	DF	Qual	Units
Methyl-tert-Butyl Ether	ND	1.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	101	86-118	
Toluene-d8	104	88-110	
1,4-Bromofluorobenzene	96	86-115	

Field Blank	00-12-1106-12	Aqueous	12/26/00	N/A	01/06/01	010105BW

Parameter	Result	RL	DF	Qual	Units
Methyl-tert-Butyl Ether	ND	1.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	100	86-118	
Toluene-d8	102	88-110	
1,4-Bromofluorobenzene	96	86-115	

Method Blank	099-10-006-1,437	Aqueous	N/A	N/A	01/06/01	010105BW

Parameter	Result	RL	DF	Qual	Units
Methyl-tert-Butyl Ether	ND	1.0	1		ug/L

Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	100	86-118	
Toluene-d8	100	88-110	
1,4-Bromofluorobenzene	93	86-115	

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 12/27/00
Work Order No: 00-12-1106
Preparation: EPA 5030B
Method: EPA 8015M/8021B

Project: Pomona Box Co./051.PRI.00

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-12-1167-1	Aqueous	GC 28	N/A	01/02/01	01010201ms

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	92	94	75-111	2	0-16	
Toluene	89	90	74-111	1	0-15	
Ethylbenzene	92	95	76-109	2	0-14	
p/m-Xylene	93	95	75-111	2	0-14	
o-Xylene	92	94	76-108	2	0-14	
Methyl-tert-Butyl Ether	96	94	67-119	2	0-13	
TPH for Gasoline	92	93	68-122	1	0-14	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Date Received: 12/27/00
Work Order No: 00-12-1106
Preparation: EPA 5030B
Method: EPA 8015M/8021B

Project: Pomona Box Co./051.PRI.00

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
00-12-1248-1	Aqueous	GC 28	N/A	01/03/01	01010301ms

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	89	90	75-111	1	0-16	
Toluene	86	88	74-111	2	0-15	
Ethylbenzene	87	91	76-109	5	0-14	
p/m-Xylene	82	90	75-111	10	0-14	
o-Xylene	86	90	76-108	5	0-14	
Methyl-tert-Butyl Ether	92	88	67-119	4	0-13	
TPH for Gasoline	93	94	68-122	1	0-14	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Project: Pomona Box Co./051.PRI.00

Date Received: 12/27/00
Work Order No: 00-12-1106
Preparation: EPA 5030B
Method: EPA 8015M/8021B

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-01-003-2,126	Aqueous	GC 28	N/A	01/02/01	01010201sa

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	93	93	79-109	1	0-18	
Toluene	90	90	79-109	0	0-18	
Ethylbenzene	94	94	79-109	0	0-17	
p/m-Xylene	95	94	80-110	1	0-17	
o-Xylene	94	94	80-108	1	0-16	
Methyl-tert-Butyl Ether	95	92	77-110	3	0-15	
TPH for Gasoline	103	104	79-115	1	0-19	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Project: Pomona Box Co./051.PRI.00

Date Received: 12/27/00
Work Order No: 00-12-1106
Preparation: EPA 5030B
Method: EPA 8015M/8021B

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
098-01-003-2,129	Aqueous	GC 28	N/A	01/03/01	01010301sa

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	88	90	79-109	3	0-18	
Toluene	85	86	79-109	1	0-18	
Ethylbenzene	88	90	79-109	2	0-17	
p/m-Xylene	89	91	80-110	2	0-17	
o-Xylene	88	91	80-108	3	0-16	
Methyl-tert-Butyl Ether	88	90	77-110	1	0-15	
TPH for Gasoline	100	104	79-115	5	0-19	

Calscience Environmental Laboratories, Inc.

Quality Control - Spike/Spike Duplicate

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Project: Pomona Box Co./051.PRI.00

Date Received: 12/27/00
Work Order No: 00-12-1106
Preparation: N/A
Method: EPA 8260B

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
01-01-0102-4	Aqueous	GC/MS O	N/A	01/06/01	01010102-4

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	102	103	72-127	1	0-25	
Carbon Tetrachloride	86	87	70-130	1	0-25	
Chlorobenzene	101	102	72-131	1	0-25	
1,2-Dichlorobenzene	101	104	70-130	2	0-25	
1,1-Dichloroethene	104	104	69-127	0	0-25	
Toluene	101	102	75-124	1	0-25	
Trichloroethene	99	98	60-137	0	0-25	
Vinyl Chloride	92	90	70-130	1	0-25	
Methyl-tert-Butyl Ether	100	105	80-120	5	0-25	

Calscience Environmental Laboratories, Inc.

Quality Control - LCS/LCS Duplicate

WGR Southwest, Inc.
315 West Pine Street, Suite 1A
Lodi, CA 95240

Project: Pomona Box Co./051.PRI.00

Date Received: 12/27/00
Work Order No: 00-12-1106
Preparation: N/A
Method: EPA 8260B

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-1,437	Aqueous	GC/MS O	N/A	01/05/01	010105BW

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	102	102	72-127	0	0-25	
Carbon Tetrachloride	85	85	70-130	0	0-25	
Chlorobenzene	102	100	72-131	2	0-25	
1,2-Dichlorobenzene	102	101	70-130	1	0-25	
1,1-Dichloroethene	103	102	69-127	1	0-25	
Toluene	102	99	75-124	2	0-25	
Trichloroethene	98	97	60-137	0	0-25	
Vinyl Chloride	93	88	79-118	6	0-25	
Methyl-tert-Butyl Ether	99	96	80-120	3	0-25	

Calscience Environmental Laboratories, Inc.

GLOSSARY OF TERMS AND QUALIFIERS

Work Order Number: 00-12-1106

Qualifier	Definition
D	The sample data was reported from a diluted analysis.
ND	Not detected at indicated reporting limit.

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

SAMPLE RECEIPT FORM

Work Order Number:	**00-12-1106**	Date Received:	12/27/00
Delivery Container Type:	Cooler	Date Opened:	12/27/00
Client Project ID:	Pomona Box Comp/051PR100	Opened By:	NC

Section A: Pass/Fail Criteria

		Comments
1. Chain of custody document(s) received with samples.	Yes	
2. Sample container label(s) consistent with custody papers.	Yes	
3. Sample container label(s) complete (ID, date, time, taken by).	Yes	
4. Sample container(s) intact and in good condition.	Yes	
5. If applicable, proper preservation noted on sample label(s).	Yes	
6. Sufficient sample volume received for analyses requested.	Yes	
7. Correct containers used for analyses requested.	Yes	
8. If applicable, VOA vials free of headspace.	Yes	

Section B: Additional Observations

1. Describe packing materials used in container.	NA	
2. Was sample container('s) sealed with custody	No	
3. Were all samples sealed in separate plastic bags?	Yes	
4. Measured temperature inside delivery container when opened.	4.0	°C
5. If delivery container shipped by third-party carrier, did container come with shipping slip, airbill, etc.? If YES, attach copy of shipping slip/airbill to the back of this	NA	
6. Do tedlar bags show condensation? Describe below if yes.	NA	
7. Are 25.1 condensate traps immersed in dry ice?	NA	
8. Are 25.1 sampling trains intact?	NA	
9. Are 25.3 condensate vials still attached to the sampling train?	NA	
10. Are 25.3 condensate vials on wet ice?	NA	

Section C: Additional Comments

CALSCIENCE ENVIRONMENTAL LABORATORIES, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 • FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

Date 12/27/00

Page 1 of 2

LABORATORY CLIENT: WGR Southwest, Inc.

ADDRESS: 11021 Winners Circle Suite 101

CITY: Los Alamitos STATE: CA ZIP: 90720

TEL: (562) 799-8570 FAX: (562) 799-8556 E-MAIL: —

CLIENT PROJECT NAME / NUMBER: Pomona Box Co. / 051.PRI.00

PROJECT CONTACT: John Terawskis

SAMPLER(S): (SIGNATURE)

P.O. NO.:

QUOTE NO.:

LAB USE ONLY: 1 2 - 1 1 0 6

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___/___/___.

SPECIAL INSTRUCTIONS

* confirm MTBE ~~detections~~ detections from 8015 by 8260

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	LOCATION/DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G)	TPH (D) (O)	BTEX / MTBE (8021B)	HALOCARBONS (8021B)	VOCs (8260B)	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	EDB / DBCP (504.1) or (8011)	CAC, T22 METALS (6010B)	ICP/MS METALS (6020)	PNAs (8310)	VOCs (TO-14A) or (TO-15)	CH_4 / TGNMO (25.1)	FIXED GASES (25.1) or (D1946)					
	B-1	PBC	12/26/00	pm	H_2O	3	X		X																	
	B-2																									
	B-3																									
	B-4																									
	B-5																									
	B-6																									
	B-7																									
	B-8																									
	B-9																									
	B-10																									

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received for Laboratory by: (Signature)	Date: 12/27/00	Time: 1410

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Yellow and Pink copies respectively.

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Q&Q Graphic (714) 898-9702

CALSCIENCE ENVIRONMENTAL
LABORATORIES, INC.
7440 LINCOLN WAY
GARDEN GROVE, CA 92841-1432
TEL: (714) 895-5494 • FAX: (714) 894-7501

CHAIN OF CUSTODY RECORD

Date 12/27/00

Page 2 of 2

LABORATORY CLIENT: WGR Southwest, Inc.

ADDRESS: 11021 Winners Circle Suite 101

CITY: Los Alamitos STATE: CA ZIP: 90720

TEL: (562) 799-8570 FAX: (562) 799-8556 E-MAIL: —

CLIENT PROJECT NAME / NUMBER: Pomona Box Co. / 051.PRI.00

PROJECT CONTACT: John Terawskis

SAMPLER(S): (SIGNATURE)

P.O. NO.:

QUOTE NO.:

LAB USE ONLY: 1 2 - 1 1 0 6

TURNAROUND TIME: ☐ SAME DAY ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAYS ☐ 10 DAYS

SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY): ☐ RWQCB REPORTING ☐ ARCHIVE SAMPLES UNTIL ___ / ___ / ___.

SPECIAL INSTRUCTIONS

*confirm MTBE detections from 8015 by 8260

REQUESTED ANALYSES

LAB USE ONLY	SAMPLE ID	LOCATION/DESCRIPTION	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH (G)	TPH (D) (O)	BTEX / MTBE (8021B)	HALOCARBONS (8021B)	VOCs (8260B)	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	EDB / DBCP (504.1) or (8011)	CAC, T22 METALS (6010B)	ICP/MS METALS (6020)	PNAs (8310)	VOCs (TO-14A) or (TO-15)	CH_4 / TGNMO (25.1)	FIXED GASES (25.1) or (D1946)				
	B-11		12/26/00	Pm	H_2O	3	X		X																
	Field Blank		↓	—	↓	↓	↓		↓																

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received for Laboratory by: (Signature)	Date: 12/27/00	Time: 1410

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.
Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Yellow and Pink copies respectively.

02/01/99 Revision

Q&Q Graphic (714) 898-9702

APPENDIX I
Non-Hazardous Waste Manifest

TPS Technologies Soil Recycling

Non-Hazardous Soils

Manifest

Manifest # 4

Date of Shipment:	Responsible for Payment:	Transporter Truck #:	Facility #:	Given by TPS:	Load #
12/1/2000	BELSHIRE	504	A07	15330	001

Generator and/or Consultant

Generator's Name and Billing Address: VOTAW-DAVIS PROPERTIES 301 W. IMPERIAL HIGHWAY LA HABRA, CA 90631	Generator's Phone #: Person to Contact: FAX#:	Generator's US EPA ID No. Customer Account Number with TPS:
Consultant's Name and Billing Address: WGR SOUTHWEST 11021 WINNERS CIRCLE SUITE 101 LOS ALAMITOS, CA 90720	Consultant's Phone #: 562-799-8510 Person to Contact: KEVIN CLARK FAX#: 562-799-8556	Customer Account Number with TPS:
Generation Site (Transport from): *(name & address)* POMONA BOX 301 W. IMPERIAL HIGHWAY LA HABRA, CA 90631	Site Phone #: Person to Contact: FAX#:	BTEX Levels TPH Levels AVC. Levels
Designated Facility (Transport to): *(name & address)* TPS TECHNOLOGIES, INC. 12328 HIBISCUS AVENUE ADELANTO, CA 92301	Facility Phone #: 800-862-6001 Person to Contact: DARREN BARTLETT FAX#: 760-246-8004	Facility Permit Numbers
Transporter Name and Mailing Address: B.E.S.I. PMB 269 25422 TRABUCO ROAD #105 LAKE FOREST, CA 92630 BESI# 29886.02	Transporter's Phone #: 949-450-1010 Person to Contact: BRIAN CASS FAX#: 949-450-1177	Transporter's US EPA ID No.: CAD983584621 Transporter's DOT No.: 450647 Customer Account Number with TPS: 1000193

Description of Soil	Moisture Content	Contaminated by:	Approx. Qty:	Description of Delivery	Gross Weight	Tare Weight	Net Weight
Sand ☐ Organic ☐ Clay ☐ Other ☐	0 - 10% ☐ 10 - 20% ☐ 20% - over ☐	Gas ☐ Diesel ☐ Other ☐	1 Dm.		1240	620	620
Sand ☐ Organic ☐ Clay ☐ Other ☐	0 - 10% ☐ 10 - 20% ☐ 20% - over ☐	Gas ☐ Diesel ☐ Other ☐					0.31

List any exception to items listed above: 104176

Generator's and/or consultant's certification: I/We certify that the soil referenced herein is taken entirely from those soils described in the Soil Data Sheet completed and certified by me/us for the Generation Site shown above and nothing has been added or done to such soil that would alter it in any way.

Print or Type Name: Generator ☐ Consultant ☐ LARRY MOOTHART (BESI on behalf of GENERATOR) | Signature and date: | Month 12 Day 1 Year 00

Transporter

Transporter's certification: I/We acknowledge receipt of the soil described above and certify that such soil is being delivered in exactly the same condition as when received. I/We further certify that this soil is being directly transported from the Generation Site to the Designated Facility without off-loading, adding to, subtracting from or in any way delaying delivery to such site.

Print or Type Name: Jim LARSON 15 of 101 | Signature and date: Jim Larson | Month 12 Day 1 Year 00

Recycling Facility

Discrepancies:

Recycling Facility certifies the receipt of the soil covered by this manifest except as noted above:

Print or Type Name: D. BARTLETT / D. BENTON | Signature and date: 12/1/00

Please print or type

TRANSPORTERS COPY

RECEIVED
APR 18 2001
HEALTH CARE AGENCY
REGULATORY HEALTH SERVICES

ACTIVITIES REPORT

Company Name: Pomona Box Co. 86-UT-224

Address: 301 W. Impl. Highway

City: La Habra State: Zip: 90631

Contact Person(s): Don Votaw Phone: 871-0932

Ric Smith / Mike Wylenka 876-0357

Date	Staff	Activities/Comments
1993 1-19	Luis L	Reviewed status report dtd 1-25-93: 3 mw's (6,7,8) were sampled: MW-8 = N.D, the other 2 had contamination. The rest (B1 to B5 had product sheens (max .005 ft) and were not sampled. (Note: additional wells are scheduled to be drilled here.)
6-2	Luis L.	Called Erin Velasco to confirm what Don Votaw said was State's treatment of 301 W. Imperial Highway cases (86-224 and 89-163) as a single case. Erin confirmed this. Case invalidation procedure initiated: case is now part of LUST # 86 UT 224.

ENVIRONMENTAL HEALTH DIVISION
WASTE MANAGEMENT SECTION

89-163

ACTIVITIES REPORT

Company Name: Pomona Box Company (#2)

Address: 301 West Imperial Highway

City: La Habra State: Zip: 90631

Contact Person(s): Don Votaw (f) Phone: 871-0932

~~Tom Rivers~~ (WP) Ric Smith 826-0352

Date	Staff	Activities/Comments
1992 1-23	Luis L.	Reviewed file: no NORF prepared. Requested NORF documentation from clerical. Noted that spoils disposal not mentioned! assume therefore that they were backfilled because they were "clean." Met with Don Votaw and explained to him that Bz level in one well was increasing and that plume must be contained. He also requested copy of UPR, but this was never prepared. I therefore suggested he provide the State with copy of CIU notification as substitute for documentation on unauthorized release.
4-30	Luis L.	Filed copy of NORF. Reviewed consolidated report on this large property. See Activity Report of 86UT224.
5-7	Luis L.	Continued plot/analysis, started for case 86-224, of consolidated data. Met with Tom Rivers to discuss future plan for site: pro-rated time/mileage w/ 86-224. GW monitoring to continue for a while.
8-4	Luis L.	Reviewed QTR report vis-a-vis 86-224: level of contamination in BH 1 increasing, although BH-8 remains N.D. (See 86-224 for FP, present in BH 1 to BH 5 and increasing contam. level in BH 6.
10-26	Luis L.	Call from Ric Smith who said he'd have CAP submitted for this and the other site by second week of Nov. He's preparing QTR reports this time.
11-13	Luis L.	Reviewed qtr (2d) report dtd. 10/28/92 vis-a-vis 86-224: FP in BH-1 to BH-5 (traces). BH-6 increased in contaminant level, but BH-9 had decreased TPH with N.D. BTE. (X = 90 ppb).
12-21	Luis L.	Reviewed WP (consolidated) for additional investigation: 2 MWs to be installed close to property south of facility, and g/water monitoring to be conducted.
12-22	Luis L.	Drafted response to WP (see 86-224).
1993 2-1	Luis L.	Discussed revisions to location of MWs with M. Wylenka — see entry in 86UT224.

COUNTY OF ORANGE
ENVIRONMENTAL HEALTH DIVISIC
WASTE MANAGEMENT SECTION

89-163

ACTIVITIES REPORT

Company Name: Pomona Box Company (#2)

Address: 301 W. Imperial Highway

City: La Habra State: Zip: 90631

Contact Person(s): Daryl/Don Votaw Phone: 871-0932

Tom Rivers 826-0352

Date	Staff	Activities/Comments
1991 6-6 Cont'd.	Luis L.	Revised SSR to reflect soil and gw contam. at this site. Prepared Prop. to Notif-Report.
6-10	Luis L.	Filed copy of SSR.
6-20	Luis L.	Drafted "adequate" ltr response to S/A rpt. dtd. 4/25/91. Prepared MW info sheet. Filed MW info sheet.
6-24	Luis L.	Filed copy "adequate ltr" response.
7-3	Luis L.	Call from Tom Rivers: he suggested only one add. well to SW of B-7, contending gw charac. the same for Pomona Box 1 & Box 2 sites. I agreed.
7-18	Luis L.	Call from Tom Rivers: he'll hand-deliver WP on addtl. MW permit. Hookup, Inst & discussed WP w/ Tom R. He said he'd be ready to install MW next week.
7-22	Luis L.	Reviewed WP for add. MW inst. Well to be installed SW of tank area, boring con which showed HC in ground & gw (this-Solved phase - Bz 200 ppb). Tom Rivers called to say MW installation on Wed - starting 8Am.
7-23	Luis L.	On site to witness MW installn. and discuss possible approach to further assmt. of gw cont. plume. MW initially proposed was moved to a location a little further SW of BH-7.
9-30	Luis L.	Reviewed addtl. SA rpt. dtd. Aug. 19/91. One MW installed SW of B-7. No soil nor gw contam. detected.
11-12	Luis L.	Reviewed status rpt. dtd 10-14-91 (combination for this case and 86-224 - Pom. Box #1): No FP in B7 nor B8: B7 has only 10 ppb Bz and 1600 ppb TPH.
(1992)		
1-3-92	Luis L.	Updated S/A, revised. status (see computer printout)
2-5	Luis L.	Reviewed consolidated Qtr (4th) report dtd. 1/21/92. Although TPH level in B-7 has decreased, benzene levels went up to 200 ppb this Qtr. B-8 still has no detected contamination.
2-26	Luis L.	Reviewed file: contam. levels in B-7 fluctuating, but increasingly showing d/g. (see file 86-224). Will monitor/determine need for further d/g MW

COUNTY OF ORANGE
HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH
WASTE MANAGEMENT SECTION

[X] UST CLEANUP

[ ] H.W. SITE CLEANUP

LUST # ~~89~~-UT-163

ACTIVITIES REPORT

Company Name: Pomona Box Company (#2)

Address: 301 West Imperial Highway

City: La Habra, CA 90631

Contact Person(s): Daryl Votaw / Don Votaw (father) Phone: 871-0932

Tom Rivers / Randy Brand (Wayne Perry) 826-0352

Date	Staff	ACTIVITIES/COMMENTS
1990		
6/5	Luis	Re-wrote "inadequate" ltr response: to clerical for drafting.
6/7	Luis	Rec'd, filed copy "inadeq." ltr response.
7/17	Luis	Rec'd, reviewed WP for add. site assmt dtd. July 13/90.
7/19	Luis	Drafted "adequate" ltr. response: forwarded for approval by Supers.
7/24	Luis	Filed copy "adeq." ltr.
10/31	Luis	Reviewed report / Work Plan for site assmt. Contaminated soil has low HC levels. GW investigation to be conducted to determine impact, if any.
		Called Daryl — the junior person answered + said ~~Daryl, Sr.~~ Dad left 9:30 A & must be on the way.
		Met with Don Votaw: requested only 1 mw: I said initially, one would do, but additional wells may be required later.
11/6	Luis	Returned Dave Henry's call: he wanted to confirm if 1 mw would do for the meantime: I said yes — just to determine if gw had been impacted or not.
1991		
2/1	Luis L.	Reviewed case: an initial of 1 mw will be installed; results will likely be submitted sometime this month (on 1st Qtr monitoring rpt).
2/25	Luis L.	Reviewed status: ~~will~~ send QRR ltr, drafted QRR.
2/28	Luis L.	Proofed / signed QRR for posting.
3/5	Luis L.	Call from Don Votaw — he said he'd checked with W. Perry + hasn't got any reply yet. He'll call me as soon as he gets reply from D. Henry / Perry.
3/6	Luis L.	Filed copy QRR ltr.
3/18	Luis L.	Call from Tom Rivers (WP) saying he's putting in mw Thursday, Mar. 21.
6-6	Luis L.	Reviewed subst'l. site assmt. rept. dated 4-25-91. B7 showed soil & gw contamination at this site. Additional soil/gw investigation reqd for this site.

REV. 10/13/87

COUNTY OF ORANGE
HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH
WASTE MANAGEMENT SECTION

☐ UST CLEANUP

☐ H.W. SITE CLEANUP

89UT163

ACTIVITIES REPORT

Company Name: Pomona Box Co. #2

See also 86UT224

Address: 301 West Imperial Hwy

GW depth ~115' bgs as of 1/90 gauging on Pom. Box #1 MWS.

City: La Habra 90631

Contact Person(s): Don or Daryl Votaw Phone: (714) 871-0932

Tom Rivers (Wayne Perry) 826-0357

Randy Brand (Wayne Perry)

Date	Staff	ACTIVITIES/COMMENTS
2-26-89	Luis L.	Reviewed file. Called Randy Brand (W.P.) and asked for lab results/COC. He'll call lab & have it send originals; he'll also FAX W.P. report on the site. Apparently site has very minor contamination — worst sample had 80 ppm TPH, 0.10 ppm B, 0.6 ppm T, 1.0 E & 10 Xy. Will send contamination ltr upon receipt of lab results, and if warranted.
2-27	Luis L.	Tom Rivers dropped by to hand me Tank Removal report dtd Sept 27/89. Reviewed report: confirmed lab results. Original COC/lab results should be sent over to HCA. Called Tom Rivers & explained HCA requirement for removal of 3FW contam. He agreed & said I'll have to communicate w/ RP.
2-28	Luis L.	Randy B. called re: originals COC/lab results, which he dropped at HCA.
1990		
2-04	Luis L.	Drafted cleanup ltr after review of contaminant levels/tank conditions, etc.
1-16	Luis L.	Reviewed case viz-a-vis 86-224 to determine if they should be separate cases. Based on degree of contamination and the great distance between the tank locations, the cases should be separate. Noticed also that no cleanup ltr final draft has been signed/mailed. Linda Stewart said "clerical" was still in December typing.
1/30	Luis L.	Reviewed tank pull lab results; proofed cleanup ltr for mailing.
2/1	Luis L.	Filed copy cleanup ltr
2/28	Luis	Call from Randy Brand — asked for guidelines w/c I prepared for him to pick up.
5/31	Luis	Reviewed case/report: no reply to cleanup ltr. Very minor contamination, except that G/W is very shallow. Referred to Pom. Box #1 plot plan to prepare consolidated map.
6/1	Luis	Reviewed case further: drafted "inadequate" ltr.

REV. 10/13/87

UST CLEANUP PROGRAM
SITE SPECIFIC REPORT

SITE NO.: 89UT163

~~8006619 GASOLINE~~

ACCOUNT NO.:
SOURCE OF FUNDS: F
SUBSTANCE: 12034 DIESEL
CONTRACTOR NO.: 30000
FEDERAL EXEMPT: N
PETROLEUM: (Y/N) Y
SITE NAME: POMONA BOX COMPANY #2

DATE REPORTED : 09/12/89
ADDRESS : 301 W IMPERIAL HWY
DATE CONFIRMED: 09/12/89
CITY: 12 LA HABRA
ZIP: 90631
MULTIPLE RPS: (Y/N) N

SITE STATUS

LEAD REFERRAL : L LOCAL
CASE TYPE (U/S/G/D) G
CONTRACT STATUS: 5
EMERGENCY RESPONSE:

AFFECTED RESOURCES : 7 SOIL AND GROUNDWATER
HOW DISCOVERED : 6 TANK REMOVAL

RP SEARCH (S/I/N/R/) S — DATE UNDERWAY: 09/12/89 — DATE COMPLETED: 09/12/89
PRELIMINARY ASSESSMENT (U/C/) C — DATE UNDERWAY: 09/12/89 — DATE COMPLETED: 04/25/91
REMEDIAL INVESTIGATION (U/C/) U — DATE UNDERWAY: 06/06/91 — DATE COMPLETED:
REMEDIAL ACTION (U/C/I) — DATE UNDERWAY: — DATE COMPLETED:
POST REMEDIAL ACTION MONITORING (Y/N/U/C/) — DATE UNDERWAY: — DATE COMPLETED:
ENFORCEMENT ACTION TAKEN: (Y/N) Y — TYPE (1/2/3/4/5/6) 2 — DATE TAKEN : 03/01/91

LUFT FIELD MANUAL CONSIDERATION
(1/2/3 PLUS H/S/C/A/R/W/G OR O AS APPLICABLE) 2HSCO

CASE CLOSED (Y/R/H/)
DATE CLOSED :
DATE EXCAVATION STARTED :
REMEDIAL ACTIONS TAKEN:
REMEDIATION TECHNOLOGY (WATER):
REMEDIATION TECHNOLOGY (SOIL) :
HOW DISPOSED:
AMOUNT
TONS

RESPONSIBLE PARTIES

CONTACT NAME : DARYL VOTAW
COMPANY NAME : POMONA BOX COMPANY #2
ADDRESS : 301 W IMPERIAL HWY
CITY/STATE/ZIP: LA HABRA, CA 90631

CONTACT NAME :
COMPANY NAME :
ADDRESS :
CITY/STATE/ZIP: ,

CONTACT NAME :
COMPANY NAME :
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CONTACT NAME :
COMPANY NAME :
ADDRESS :
CITY/STATE/ZIP: ,

INSPECTOR NO. : 219 UPDATE 11/03/92 06/06/91 03/06/90 12/14/89 09/

COUNTY OF ORANGE/HEALTH CARE A CY
MONITORING WELL INFORMATION Form

SITE NO. : 89UT163

UST ACCOUNT NO. :

SITE NAME : POMONA BOX COMPANY #2

ADDRESS : 301 IMPERIAL HWY

CITY CODE : 12 LA HABRA

ZIP CODE : 90631 LA HABRA

RESPONSIBLE PARTY INFORMATION
DARYL VOTAW

POMONA BOX COMPANY #2

301 IMPERIAL HWY

90631 LA HABRA

714-871-0532

Total Number Of Wells Open : 2

Total Number Of Wells Closed : 0

Total Number Of Wells 2

DATE	DEPTH TO GROUNDWATER BGS	UNIT OF MEASURE	GRADIENT	WELL PERMIT NO (NO.WELLS)
05/07/92	13.5	FEET	SW	
02/05/92	15.0	FEET	SW	
06/20/91	18.0	FEET	SW	

UST CLEANUP PROGRAM
SITE SPECIFIC REPORT

~~Gasoline~~ ~~Diesel~~

SITE NO.: 89 UT 163

ACCOUNT NO.:
SOURCE OF FUNDS: (S/F) F
SUBSTANCE: 1203 & 80066
CONTRACTOR NO.: 30,000
FEDERAL EXEMPT: (Y/N) N
PETROLEUM: (Y/N) Y
SITE NAME: Pomona Box Company #2
DATE REPORTED: 09/12/89
ADDRESS: 301 West Imperial Hywy
DATE CONFIRMED: 09/12/89
CITY: [12] La Habra
ZIP: ~~92635~~ 90631
CATEGORY: (R/S) R

SITE STATUS

CASE TYPE: (U/S/G/D) S
CONTRACT STATUS: 3
EMERGENCY RESPONSE:

AFFECTED RESOURCES: [3] Soil
VOLUME OF RELEASE: _____ UNITS: [ ] _____
HOW DISCOVERED: [06] Tank Removal
LEAK TYPE: [99] Unknown
CAUSES: [99] Unknown
RP SEARCH: (S/I/N/R/) S DATE UNDERWAY: 9/12/89 DATE COMPLETED: 9/12/89
PRELIMINARY ASSESSMENT: (U/C/) U DATE UNDERWAY: 09/12/89 DATE COMPLETED:
REMEDIAL INVESTIGATION: (U/C/) DATE UNDERWAY: DATE COMPLETED:
REMEDIAL ACTION: (U/C/) DATE UNDERWAY: DATE COMPLETED:
POST REMEDIAL ACTION MONITORING: (Y/N/U/C/) DATE UNDERWAY: DATE COMPLETED:
ENFORCEMENT ACTION TAKEN: (Y/N) TYPE: (1/2/3/4/5/6) DATE TAKEN:
RAP REQUIRED: (U/C/) DATE APPROVED:
CASE CLOSED: (Y/R/H/) DATE CLOSED:

DATE EXCAVATION STARTED: REMEDIAL ACTIONS TAKEN:

REMEDIATION TECHNOLOGY (WATER): [ ] _____
REMEDIATION TECHNOLOGY (SOIL): [ ] _____
HOW DISPOSED: [ ] _____ AMOUNT DISPOSED _____ TONS

RESPONSIBLE PARTY

CONTACT NAME: Daryl Votaw
PHONE NO.: (714) 871-0932
COMPANY NAME: Pomona Box Company
ADDRESS: 301 W. Imperial
CITY/STATE/ZIP: La Habra, CA ~~92635~~ 90631
INSPECTOR NO.: 226 UPDATE 9/12/89

12/12/88 afd

RECORDS RELEASE

RECORDS OF: Pomona Box Co.
(Name)

301 W. Imperial Hwy.
(Address)

La Habra, CA 90631
(City)

R.R. #: 96-1251

REQUESTOR: CTL Environmental
(Name)

24404 S. Vermont Ave., Ste. 307
(Address)

Harbor City, CA 90710
(City)

TOTAL PAGES: 57

RELEASE DATE: 10-29-96

NAME: Consuelo M. Burrs

RECORDS RELEASE

:ljs
REV:09/05/91
LINDA'S DISK/RR

RECORDS RELEASE

RECORDS OF: Pomona Box Company
(Name)

301 W. Imperial Hwy.
(Address)

La Habra, CA
(City)

R.R. #: 93-605

REQUESTOR: Kaselaan & D'Angelo Assoc., Inc.
(Name)

3700 Wilshire Blvd., Ste. 2A
(Address)
(213) 487-8081

Los Angeles, CA 90010
(City)

TOTAL PAGES: 335

RELEASE DATE: 6/23/93

NAME: Rose Ortiz

RECORDS RELEASE

:ljs
REV:09/05/91
LINDA'S DISK/RR

96.61

Jack Miller - FYI.

MEMO

County of Orange

CRS F850-124.3

DATE: June 2/93

TO: Data Entry / Processing DEPT DIST: Ø

FROM: William J. Diekmann, SHWS

SUBJECT: LUST CASES 86UT224 and 89UT163

Please invalidate LUST Case # 89UT163 (Pomona Box, 301 W. Imperial Highway, La Habra); this is to be considered the same as LUST Case # 86UT224 (Pomona Box, same address).

Note: State Cleanup Fund is treating both cases as a single case due to same address + same ownership. Number of total active LUST cases has to be adjusted.

COUNTY OF ORANGE

TOM URAM
DIRECTOR

L. REX EHLING, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E. MERRYMAN, R. S. MPH
DEPUTY DIRECTOR

MAILING ADDRESS: P.O. BOX 355
SANTA ANA, CA 92702

HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE
SANTA ANA, CALIFORNIA 92705
(714) 667-3700

April 27, 1992

CERTIFIED
RETURN RECEIPT
REQUESTED

Daryl Votaw
Pomona Box Company #2
301 W. Imperial Hwy.
La Habra, CA 90631

SUBJECT: Notification Of Responsibility For Reimbursement For Costs Incurred In Administering The Underground Storage Tank Cleanup Program For Pomona Box Company #2, 301 W. Imperial Hwy., La Habra, CA - O.C.H.C.A. Case #89UT163

The purpose of this letter is to inform responsible parties that the Orange County Health Care Agency has entered into an agreement with the State of California to oversee the cleanup of contaminated sites resulting from the unauthorized release of hazardous substances from underground storage tanks. The cleanup of these sites is necessary to protect the public and environment from unnecessary exposure to hazardous chemicals.

The cleanup program developed by Orange County is funded by State and Federal monies and is subject to the Reimbursement requirements associated with the use of these funds. In order to comply with the reimbursement requirement, it will be necessary to account for all time and materials expended by County staff at each cleanup site. On a routine basis, site specific amounts detailing the time and expenses expended for each site will be provided to the State. The State will then invoice the responsible party for all direct and indirect costs associated with the cleanup of the site.

For your information, please find the attached Notice of Reimbursement. This is your formal notification concerning reimbursement requirements for the responsible party. If any of the information contained in the Notice of Reimbursement is incorrect, or if you have any questions regarding the reimbursement requirements, please contact the Underground Storage Tank Cleanup Program at (714) 667-3700.

LL:cr

Attachment

cc: State Water Quality Control Board

State Water Resources Control Board
Division of Clean Water Programs
UST Local Oversight Program

NOTICE OF REIMBURSEMENT

Site Code 89UT163

Site Name Pomona Box Company #2

Address 301 W. Imperial Hwy.

City/State/Zip La Habra, CA 90631

Date First Reported 09 / 12 / 89

Substance Diesel/Gasoline

Petroleum (X) Yes ( ) No

The following information has been provided to:

Responsible Party Contact Person Daryl Votaw

Responsible Party Contact Company Pomona Box Company #2

Address 301 W. Imperial Hwy.

City/State/Zip La Habra, CA 90631

For Work Performed Prior to January 1, 1991

Whereas the federal Petroleum Leaking Underground Storage Tank Trust Fund provides funding to pay the local and state agency administrative and oversight costs associated with the cleanup of releases from underground storage tanks; and Whereas the direct and indirect costs of overseeing removal or remedial action at the above site are funded, in whole or in part, from the federal Trust Fund; and Whereas the above individual(s) or entity(ies) have been identified as the party or parties responsible for investigation and cleanup of the above site; YOU ARE HEREBY NOTIFIED that pursuant to Title 42 of the United States Code, Section 6991b(h)(6), the above Responsible Party or Parties shall reimburse the State Water Resources Control Board for all direct and indirect costs incurred by any and all state and local agencies while overseeing the cleanup of the above underground storage tank site, and the above Responsible Party or Parties shall make full payment of such costs within 30 days of receipt of a detailed invoice from the State Water Resources Control Board.

For Work Performed from January 1, 1991 to Present

Whereas the federal Petroleum Leaking Underground Storage Tank Trust Fund provides funding to pay the local and state agency administrative and oversight costs associated with the cleanup of releases from underground storage tanks; and Whereas the Legislature has authorized funds to pay the local and state agency administrative and oversight costs associated with the cleanup of releases from underground storage tanks; and Whereas the direct and indirect costs of overseeing removal or remedial action at the above site are funded, in whole or in part, from the federal Trust fund; and Whereas the above individual(s) or entity(ies) have been identified as the party or parties responsible for investigation and cleanup of the above site; YOU ARE HEREBY NOTIFIED that pursuant to Title 42 of the United States Code, the above Responsible Party or Parties shall reimburse the State Water Resources Control Board not more than 150 percent of the total amount of site specific oversight costs actually incurred while overseeing the cleanup of the above underground storage tank site, and the above Responsible Party or Parties shall make full payment of such costs within 30 days of receipt of a detailed invoice from the State Water Resources Control Board.

Contract Project Director:

Robert E. Merryman (714) 667-3771

Signature Telephone Number

Date April 27, 1992

ENVIRONMENTAL WaynePerry CONSTRUCTION INC. SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
PHONE (714) 826-0352 ■ FAX ADM. & CONST. (714) 523-7880 ■ FAX GEO. & ENG. (714) 523-7541

Project No. 88.03

April 27, 1993

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Supplemental Site Investigation as First Quarter - 1993 Status Report
Pomona Box Company
301 West Imperial Highway
La Habra, California

89-163
86-22d

Mr. Lodrigueza:

Attached is the Supplemental Site Investigation report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being submitted as the quarterly status report for the subject site. This report is being submitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by July 31, 1993.

If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

Michael S. Wielenga
Environmental Geologist

cc: Mr. Daryl Votaw, Pomona Box Company

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
PHONE (714) 826-0352 ■ FAX ADM. & CONST. (714) 523-7880 ■ FAX GEO. & ENG. (714) 523-7541

Project No. 88.03

January 25, 1993

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Quarterly Status Report
Pomona Box Company
301 West Imperial Highway
La Habra, California

89 UT 163

Mr. Lodrigueza:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by April 30, 1993.

If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

Richard V. Smith

Richard V. Smith
Registered Geologist 5014

cc: Mr. Daryl Votaw, Pomona Box Company

ENVIRONMENTAL
WaynePerry
CONSTRUCTION INC.
SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
PHONE (714) 826-0352 ■ FAX ADM. & CONST. (714) 523-7880 ■ FAX GEO. & ENG. (714) 523-7541

86 UT 224 and
89 UT 163

Project No. 88.03

October 28, 1992

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Quarterly Status Report
Pomona Box Company
301 West Imperial Highway
La Habra, California

Mr. Lodrigueza:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by January 31, 1993.

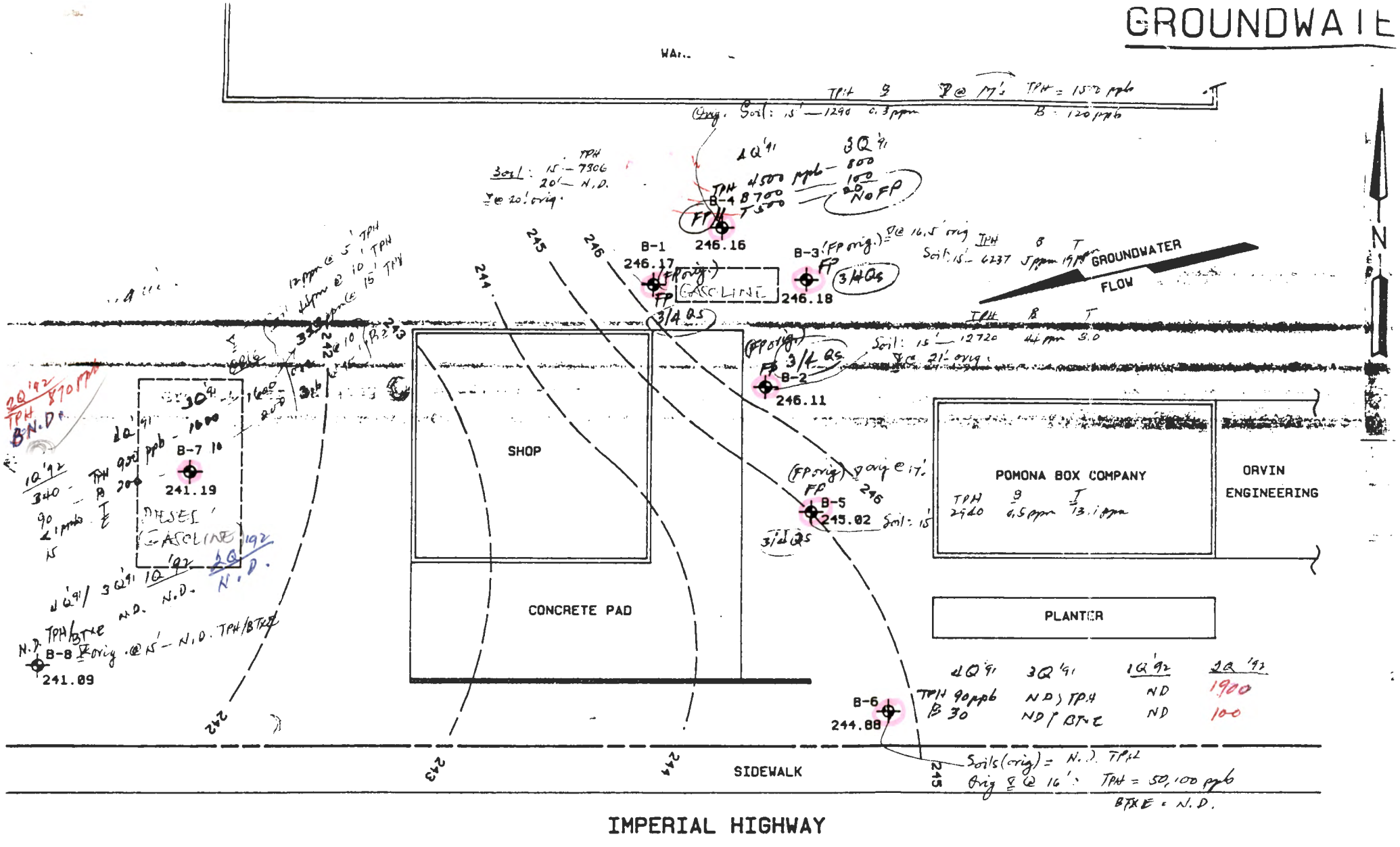
If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

Richard V. Smith

Richard V. Smith
Registered Geologist 5014

cc: Mr. Daryl Votaw, Pomona Box Company



Consolidated Analysis Map
5-6-92

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
PHONE (714) 826-0352 ■ FAX ADM. & CONST. (714) 523-7880 ■ FAX GEO. & ENG. (714) 523-7541

Consolidated Report
[See memo in 86-224 file]

Project No. 88.03

April 20, 1992

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Quarterly Status Report
Pomona Box Company
301 West Imperial Highway
La Habra, California

86-224 / 89-163

Mr. Lodrigueza:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by July 31, 1992.

If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

Thomas D. Rivers
Staff Geologist

cc: Mr. Daryl Votaw, Pomona Box Company

ENVIRONMENTAL
WaynePerry
CONSTRUCTION INC.
SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
PHONE (714) 826-0352 ■ FAX ADM. & CONST. (714) 523-7880 ■ FAX GEO. & ENG. (714) 523-7541

Project No. 88.03

January 21, 1992

Consolidated Report for 86-221 and 89-163

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Quarterly Status Report
Pomona Box Company
301 West Imperial Highway
La Habra, California

Mr. Lodrigueza:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by April 30, 1992.

If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

Thomas D. Rivers
Staff Geologist

cc: Mr. Daryl Votaw, Pomona Box Company

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
PHONE (714) 826-0352 ■ FAX ADM. & CONST. (714) 523-7880 ■ FAX GEO. & ENG. (714) 523-7541

roject No. 88.03

anuary 21, 1992

omona Box Company
01 West Imperial Highway
a Habra, California

ttention: Mr. Daryl Votaw

ubject: Fourth Quarter 1991-Status Report
Pomona Box Company
301 West Imperial Highway
La Habra, California

XECUTIVE SUMMARY

nclosed is the quarterly report for the Pomona Box Company acility located at 301 West Imperial Highway in the city of La labra. The purpose of this report is to provide updated nformation regarding product recovery and groundwater monitoring ctivities at this location, for the period October 1 through ecember 31, 1991.

ree product occurred in wells B-1 through B-5 during the onitoring period. Free product thicknesses ranged from trace mounts to 0.41 feet. Measurable amounts of free product were not ecovered.

issolved hydrocarbons were detected in samples from wells B-4, B-, and B-7. Concentrations of total hydrocarbons and purgeable romatic compounds were below state action levels with the xception of toluene in the sample from well B-4 and benzene in amples from all three wells. Overall, concentrations of issolved hydrocarbons increased in groundwater samples compared o the previous monitoring period. Dissolved hydrocarbons were ot detected in the sample from well B-8.

roundwater elevations decreased and the direction of flow emained toward the southwest.

PRODUCT RECOVERY, continued

and Overton facility in Carson, California where the mixture is separated for refinement, treatment, and disposal.

GROUNDWATER SAMPLING

Groundwater samples were obtained on October 15, 1991 from wells B-4, B-6, B-7, and B-8. The remainder of the wells were not sampled due to the presence of free product. Groundwater sampling procedures are presented in Appendix C. Groundwater samples were analyzed for total petroleum hydrocarbons using the California Department of Health Services Test Method 8015-M and purgeable aromatic compounds using EPA Test Method 602. Results of the groundwater analyses are presented in the Summary of Laboratory Test Results, Table 1.

SUMMARY OF LABORATORY TEST RESULTS

Table 1, Groundwater Analyses, 10/17/91

Well Number	Total Hydrocarbons mg/l	Benzene mg/l	Toluene mg/l	Ethyl Benzene mg/l	Total Xylenes mg/l
B-4	4.5	0.7	0.5	0.04	0.5
B-6	0.09	0.03	ND	ND	ND
B-7	0.9	0.2	ND	0.07	0.1
B-8	ND	ND	ND	ND	ND

Notes: 1. ND - none detected, below limits of detection.
2. Limits of Detection:

total hydrocarbons	< 0.05	mg/l
benzene	< 0.0005	mg/l
toluene	< 0.001	mg/l
ethyl benzene	< 0.002	mg/l
total xylenes	< 0.002	mg/l

CONCLUSIONS

Free product occurred in wells B-1 through B-5 during the monitoring period. Free product thicknesses ranged from trace amounts in wells B-1 through B-3 to 0.41 feet in well B-4. Prior to November 1991, free product had not been observed in well B-4.

UNDERGROUND WaynePerry CONSTRUCTION INC. SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

Project No. 89.151

August 19, 1991

O.C.H.C.A. Case No. 86UT224

County of Orange Health Care Agency
2009 E. Edinger
Santa Ana, California 92706

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Supplemental Site Investigation
Pomona Box Company
301 W. Imperial Highway
La Habra, California

Dear Mr. Lodrigueza:

Enclosed is a copy of the Supplemental Site Investigation for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. The report is being submitted at the request of Mr. Daryl Votaw of Pomona Box Company.

If you have any questions or require additional information, please contact me at (714) 826-0352.

Very truly yours,

Richard V. Smith for
Thomas D. Rivers
Staff Geologist

Attachment: Wayne Perry Supplemental Site Investigation

cc: Daryl Votaw, Pomona Box Company

UNDERGROUND WaynePerry CONSTRUCTION INC. SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

Project No. 89.151

July 17, 1991

County of Orange Health Care
Agency - Environmental Health
Division
P.O. Box 355
Santa Ana, California 92702

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Proposed Work Plan
Pomona Box Company
301 West Imperial Highway
La Habra, California

Dear Mr. Lodriqueza:

Enclosed is the proposed work plan for the above-referenced location.

If you have any questions or require additional information, please contact me at (714) 826-0352.

Very truly yours,

Thomas D. Rivers
Staff Geologist

Attachment: Wayne Perry Proposed Work Plan

COUNTY OF ORANGE

TOM URAM
DIRECTOR

L. REX EHLING, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E. MERRYMAN, R. S. MPH
DEPUTY DIRECTOR

MAILING ADDRESS: P.O. BOX 355
SANTA ANA, CA 92702

HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE
SANTA ANA, CALIFORNIA 92705
(714) 667-3700

June 21, 1991

Daryl Votaw
Pomona Box Company
301 West Imperial Highway
La Habra, CA 90631

Subject: Site Assessment Report, Dated April 25, 1991 For Pomona Box Facility, 301 West Imperial Highway, La Habra, CA - O.C.H.C.A. Case #89UT163

Dear Mr. Votaw:

Please be advised that this office has reviewed the above referenced report. We have found the report to be adequate to confirm soil and groundwater contamination and institute additional investigation at the subject site.

If you have any questions, please contact me at (714) 667-3717.

Very truly yours,

Luis Lodrigueza
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

LL:mm

cc: Sandy Hastings, La Habra Fire Department
Patricia Hannon, Santa Ana Regional Water Quality Control Board

UNDERGROUND WaynePerry CONSTRUCTION INC. SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

Project No. 89.151

May 30, 1991

County of Orange Health Care Agency
2009 E. Edinger
Santa Ana, California 92706

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Supplemental Site Investigation
Pomona Box Company
301 W. Imperial Highway
La Habra, California

Dear Mr. Lodrigueza:

Enclosed is a copy of the Supplemental Site Characterization for the Pomona Box facility located at 301 West Imperial Highway in the city of La Habra. The report is being submitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

If you have any questions or require additional information, please contact me at (714) 826-0352.

Very truly yours,

Thomas D. Rivers
Staff Geologist

Attachment: 4-25-91 Wayne Perry Supplemental Site Investigation

cc: Daryl Votaw, Pomona Box Company

COUNTY OF ORANGE
HCA/ENVIRONMENTAL HEALTH
PROPOSITION 65
NOTIFICATION REPORT
(714) 667-3765

PROP. 65 ID# _____

DART CASE ID# _____
LUST CASE ID# 89U7163

DATE REPORTED: 6-6-91 TIME: 11:10 DESIGNATED EMPLOYEE REPORTING: Luis Lodriguezza

REPORT SUBMITTED ON BEHALF OF ALL DESIGNATED EMPLOYEES OF WHAT AGENCY: HCA

DATE OF INCIDENT: 9-12-89 TIME: _____ SOURCE OF INFORMATION: Tank removal sampling

INCIDENT LOCATION: Pomona Box (DBA) 301 W. Imperial Highway (ADDRESS) La Habra (CITY)

90631 (ZIP) (714) 871-0932 (SITE TELEPHONE) Don/Daryl Votaw (CO. CONTACT PERSON)

DESCRIPTION/CAUSE OF INCIDENT: Contaminated soil beneath both ends of diesel UST. Later investigation conducted in April 1991 confirmed groundwater contamination, which may impact local drinking water supply with the carcinogen benzene.

RESPONSIBLE PARTY - NAME: Don Votaw TELEPHONE: (714) 871-0932

IDENTIFICATION OF DISCHARGED WASTE:

CHEMICAL NAME/COMMON NAME	PHYSICAL STATE	VOLUME	HAZARDOUS PROPERTIES/LEGAL LIMITS
Diesel / Possible Gasoline also	Liquid	Unknown	Contains carcinogen benzene & other toxic hydrocarbons.

FIELD DATA/LAB RESULTS (INDICATE SOIL, GROUNDWATER, ETC.):

TPH max 323 ppm; Benzene 3.6 ppm; Tol 36 ppm - in soil
Benzene = 200 µg/L (ppb) in groundwater

ENVIRONMENT AFFECTED: ROADWAY (GROUNDWATER) SEWER OR STORM DRAIN LAKE/STREAM/RIVER BAY/OCEAN
AIR (SOIL) FLOOD CHANNEL GROUND (PAVED) OTHER _____

LOCALE: RESIDENTIAL COMMERCIAL (INDUSTRIAL) OPEN AREA PUBLIC PROPERTY (PRIVATE PROPERTY) RURAL

DESCRIPTION OF EXTENT OF CONTAMINATION (LATERAL AND VERTICAL) Approximately 30 x 40 sq. ft. and up to groundwater at a depth of 18 feet below ground level as of April 1991.

NUMBER OF PERSONS REPORTEDLY INJURED: N/A NUMBER OF PERSONS RECEIVING MEDICAL TREATMENT: _____

WHERE?: _____

AGENCIES INVOLVED: _____

INCIDENT MITIGATED: YES (NO) DOES FURTHER ACTION NEED TO BE TAKEN: (YES) NO

ACTION: Further site characterization and delineation of the full extent of soil and groundwater contamination.

REFERRED TO: - NAME/AGENCY: _____ DATE: _____ TIME: _____

CLEANUP CONDUCTED BY: Maggie Perry LEGAL INVESTIGATION: YES NO

AREA PHYSICALLY ACCESSIBLE TO THE PUBLIC: YES (NO)

PROXIMITY TO THE PUBLIC (HOMES, SCHOOLS, ETC.): No

FACTORS THAT ARE LIKELY TO CAUSE SUBSTANTIAL INJURY TO THE PUBLIC HEALTH OR SAFETY: Presence of carcinogen benzene in gw water, which may migrate & impact local water source/supply.

ADDITIONAL COMMENTS: _____

Any designated government employee who obtains information in the course of his official duties, revealing the illegal discharge or threatened illegal discharge of a hazardous waste, that is likely to cause substantial injury to the public health and safety, must report such information within 72 hours to the Board of Supervisors and Health Officer or face up to $25,000 in fines and/or up to three years in jail (pursuant to Section 25180.7 of the Health and Safety Code). The information submitted in this report is based upon the best available information at the time the report was completed.

REPORT COMPLETED BY: Luis Lodriguez DATE: 6-6-91 TIME: 11:30

REPORT REVIEWED BY: _____ DATE: _____ TIME: _____

CONTACT FOR FURTHER INFORMATION: Luis Lodriguez TELEPHONE NO. (714) 667-3717
(Lead Person/Agency)

4/2/90

COUNTY OF ORANGE

HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE
SANTA ANA, CALIFORNIA 92705
(714) 667-3700

TOM URAM
DIRECTOR

L. REX EHLING, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E. MERRYMAN, REHS MPH
DEPUTY DIRECTOR

MAILING ADDRESS: P.O. BOX 355
SANTA ANA, CA 92702

March 1, 1991

Daryl Votaw
Pomona Box Company
301 West Imperial Highway
La Habra, CA 90631

Subject: Quarterly Reporting Requirements for Unauthorized Release from an Underground Storage Tank at Pomona Box Facility At 301 W. Imperial Highway, La Habra, CA - O.C.H.C.A. Case #89UT163.

Dear Mr. Votaw:

Please be advised that this Agency, which is authorized to enforce the State Underground Storage Tank Laws and Regulations, has not received a current progress report regarding the investigation and remedial activities completed to date at the subject location.

The California Code of Regulations, Title 23, Subchapter 16, Section 2652 requires that the following information be reported to the local agency every three (3) months until the cleanup is complete:

1. The results of all investigations completed at that time to determine the extent of soil or groundwater or surface water contamination due to the release.

2. Method of cleanup implemented to date, proposed cleanup actions, and approximate cost of actions taken to date.

3. Method and location of disposal of the released hazardous substance and any other contaminated soils or groundwater or surface water (indicate whether a hazardous waste manifest(s) is utilized).

Please submit to this office a summary report of the investigation and remedial activities that have occurred at the subject location. This report must be submitted within thirty (30) days of the receipt of this letter.

If you have any questions, please call me at (714) 667-3717.

Very truly yours,

Luis Lodrigueza
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

LL:md

cc: Steve Overman, Santa Ana Regional Water Quality Control Board

COUNTY OF ORANGE

HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE
SANTA ANA, CALIFORNIA 92705
(714) 667-3700

TOM URAM
DIRECTOR

L. REX EHLING, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E. MERRYMAN, REHS MPH
DEPUTY DIRECTOR

MAILING ADDRESS: P.O. BOX 355
SANTA ANA, CA 92702

July 19, 1990

Daryl Votaw
Pomona Box Company
301 West Imperial Highway
La Habra, CA 90631

Subject: Proposed Work Plan dated June 8, 1990 for Pomona Box Facility at 301 W. Imperial Highway, La Habra, O.C. H.C.A. Site 89UT163

Dear Mr. Votaw:

Please be advised that this office has reviewed the above referenced plan. We have found the work plan to be adequate for implementation at the subject site.

Although this office is the lead agency for this case, it is requested that copies of all reports be provided the Santa Ana Regional Water Quality Control Board.

If you have any questions, please contact me at (714) 667-3717.

Very truly yours,

Luis Lodrigueza
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

cc: Steven Overman, Santa Ana Regional Water Quality Control Board

POMONA BOX COMPANY

DONALD E. VOTAW
DARYL D. VOTAW

301 W. IMPERIAL HWY. • P.O. BOX 536 • LA HABRA, CALIFORNIA 90631
WOODEN BOXES • CRATES • PALLETS • CORRUGATED CARTONS
(714) 871-0932 (213) 697-6728

JULY 13, 1990

COUNTY OF ORANGE
HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE
SANTA ANA, CALIFORNIA 92705

LUIS A. LODRIGUEZA
HAZARDOUS WASTE SPECIALIST
HAZARDOUS MATERIALS MANAGEMENT SECTION

DEAR MR. LODRIGUEZA,

REGARDING YOUR LETTER DATED JUNE 7, 1990. WE HAVE HAD WAYNE PERRY CONSTRUCTION WORK UP A PROPOSED WORK PLAN FOR THE AREA IN QUESTION, WHICH I HAVE ENCLOSED. PLEASE LET US KNOW IF THIS PLAN MEETS YOUR APPROVAL. THANK YOU.

SINCERELY,

DARYL VOTAW

DDV:BC

TOM URAM
DIRECTOR

L. REX EHLING, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E. MERRYMAN, REHS MPH
DEPUTY DIRECTOR

MAILING ADDRESS: P.O. BOX 355
SANTA ANA, CA 92702

COUNTY OF ORANGE

HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE
SANTA ANA, CALIFORNIA 92705
(714) 667-3700

June 7, 1990

Daryl Votaw
Pomona Box Company
301 West Imperial Highway
La Habra, CA 90631

Subject: Tank Removal Inspection Report For Pomona Box Facility at 301 W. Imperial Highway, La Habra, CA 90631 - O.C.H.C.A. Site #89UT163

Dear Mr. Votaw:

Please be advised that this office has reviewed the above referenced report. We have found the report to be inadequate to fully characterize the contamination at the subject site.

The following considerations are to be addressed in a revised report which must be submitted to this office for approval prior to any further on-site activity:

1. TPH and BTXE values above allowable DHS action levels have been detected beneath the 5000-gallon diesel tank. This contaminant source must either he removed or otherwise be proven to have been mitigated.

2. Depth to groundwater at the site is 11 feet below grade, and since contaminated soil is either close to or within five feet of the water table, further investigation is required to determine if groundwater had been impacted.

If you have any questions, please contact me at (714) 667-3717.

Very truly yours,

Luis A. Lodrigueza
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

LAL:gmj

COUNTY OF ORANGE

HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE
SANTA ANA, CALIFORNIA 92705
(714) 667-3700

TOM URAM
DIRECTOR

L. REX EHLING, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E. MERRYMAN, REHS MPH
DEPUTY DIRECTOR

MAILING ADDRESS: P.O. BOX 355
SANTA ANA, CA 92702

January 30, 1990

Mr. Daryl Votaw
Pomona Box Company
301 West Imperial Highway
La Habra, California 90631

Subject: Soil Contamination Located at 301 W. Imperial Highway, La Habra, CA; OCHCA Site #89UT163

Dear Mr. Votaw:

Based on inspections and field tests conducted on September 12, 1989 it has been determined that diesel contaminated soil is present at the subject location.

This Agency is authorized to enforce the State Hazardous Waste and Underground Storage Tank Laws and Regulations and, under contract with the State Water Resources Control Board, is responsible for oversight of cleanup of soil and groundwater contamination resulting from unauthorized releases from underground storage tanks. By this letter, you are directed to conduct an investigation to assess the extent and significance of contamination at the site specified in the subject above.

The objective of this site investigation is to provide sufficient information to evaluate 1) the sensitivity of the site, 2) the potential threat of exposure to humans, 3) remedial actions and/or alternative mitigation strategies.

At minimum this investigation should include:

1. A clear delineation of the nature and extent of soil and groundwater contamination.

2. A hydrogeological characterization including depth to groundwater and, if groundwater is contaminated, site specific determination of groundwater gradient.

3. The proximity to wells and surrounding land uses; and future use of the site itself.

4. The potential impacts of contamination to public health and the environment, including the potential for contaminant vapor migration and human exposure by inhalation.

Please note that clearance of site investigation, remediation or other mitigation activities by any other agency does not constitute clearance from the Orange County Health Care Agency. The California Health and Safety Code, Section 25298 (c)(4) requires that a person closing an underground storage tank demonstrate to the Orange County Health Care Agency that the site has been investigated to determine if there are any present, or were past, releases, and if so, that appropriate corrective or remedial actions have been taken.

The investigation must include a risk assessment of vapor exposure for all projects involving a change in land use. The risk assessment must include a determination of the excess lifetime cancer risk due to inhalation of vapors from volatile contaminants, both inside and outside buildings. The risk assessment must be submitted for review and approval by this Agency.

Additionally, the project site must be properly secured to eliminate safety hazards and prevent public contact with contaminants present at the site. Any site activity which involves the excavation, disruption, collection, treatment, or removal of contaminated soil or groundwater must be conducted in a manner that precludes public exposure to chemical vapors above background levels.

The California Code of Regulations, Title 23, Subchapter 16, Section 2652 requires that the following information be reported to the local agency every three (3) months until cleanup is complete:

1. The results of all investigations completed at that time to determine the extent of soil and groundwater or surface water contamination due to the release.

2. Method of cleanup implemented to date, proposed cleanup actions, and approximate cost of actions taken to date.

3. Method and location of disposal of the released hazardous substance and any contaminated soils or groundwater or surface water (indicate whether a hazardous waste manifest(s) is utilized).

Violation of these requirements are subject to a civil penalty of up to Five Thousand Dollars ($5,000.00) per day.

Guidelines providing further information relating to site assessment and the site investigation objectives are available upon request. Although not required, an initial workplan or study design may be submitted to this Agency for review and comment. Please note that for sites with possible or confirmed groundwater contamination, copies of all correspondence, work plans, and reports should be routinely courtesy copied to the appropriate Regional Water Quality Control Board.

If you have any questions, please contact me at (714) 667-3717.

Very truly yours,

Luis A. Lodrigueza
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

LAL:tlh

cc: La Habra Fire Department
Steve Overman, Santa Ana Regional Water Quality Control Board

Enseco - CRL / South Coast
7440 Lincoln Way • Garden Grove, CA 92641
(714) 898-6370 • (213) 598-0458 • (800) LAB-1-CRL
FAX: (714) 891-5917

September 18, 1989

WAYNE PERRY CONST
8301 W. COMMONWEALTH AVE
BUENA PARK, CA 90621
ATTN: MR. LORA MINDER

Analysis No.: G-8925533-001/016
Date Sampled: 12-SEP-1989
Date Sample Rec'd: 12-SEP-1989
Project: POMONA BOX CO.

Enclosed with this letter is the report on the chemical and physical analyses on the samples from ANALYSIS NO: G-8925533-001/016 shown above.

The samples were received by CRL in a chilled state, intact and with the chain-of-custody record attached.

Please note that ND( ) means not detected at the detection limit expressed within the parentheses.

Solid samples are reported on "as received" basis.

Preliminary data were provided on September 15, 1989 at 5:25 P.M.

Reviewed

Approved

GEOTECHNICAL DEPARTMENT
SEP 21 1989

	AC	INFO			ACT	INFO
DMH				MSW		
DEP				JLC		
JRF				FILE		
TDR				FILE		
RJB						

Enseco - CRL / South Coast
7440 Lincoln Way • Garden Grove, CA 92641
(714) 898-6370 • (213) 598-0458 • (800) LAB-1-CRL
FAX: (714) 891-5917

Enseco

Laboratory Report

WAYNE PERRY CONSTRUCTION
8301 West Commonwealth Avenue
Buena Park, CA 90621
ATTN: MS. LORA MINDER
Project: POMONA BOX CO.

Analysis No.: G-8925533-001/016
Date Sampled: 12-SEP-1989
Date Sample Rec'd: 12-SEP-1989
Sample Type: SOLID

QA/QC Summary

Date	Parameter (Method)	QC Type	Average Spike Recovery	Acceptable Range	Relative Percent Difference	Acceptable Range
13-SEP-1989	TPH, EXTRACTABLE (EPA 8015)	M	89	60-120	15.	40
13-SEP-1989	TPH, EXTRACTABLE (EPA 8015)	M	75	60-120	11.	40
13-SEP-1989	TPH, VOLATILE (EPA 8015)	L	129	70-130	2.	40
13-SEP-1989	TOLUENE (EPA 8020)	M	87	60-120	1.	40
13-SEP-1989	ETHYLBENZENE (EPA 8020)	M	90	60-120	0.	40
13-SEP-1989	XYLENES, TOTAL (EPA 8020)	M	83	60-120	1.	40

M = Matrix Spike
L = Laboratory Control Sample Spike

FUEL FACILITIES

RECOVERY WELLS

DE-WATERING WELLS

LEAK CONTROL

EXPLORATION FOR
AND RECOVERY OF HYDROCARBONS

OIL RECOVERY DESIGN AND INSTALLATION

24 HOUR EMERGENCY SERVICE

4 HR. RESPONSE 11 WESTERN STATES

WAYNE PERRY CONSTRUCTION
INCORPORATED

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102

BILL BALE

ESTIMATOR

8301 W. COMMONWEALTH AVE., BUENA PARK, CA 90621

(714) 826-0352

TOM RIVERS - GEOLOGIST

UNDERGROUND

Wayne Perry

CONSTRUCTION INC.

Enseco - CRL / South Coast
7440 Lincoln Way • Garden Grove, CA 92641
(714) 898-6370 • (213) 598-0458 • (800) LAB-1-CRL
FAX: (714) 891-5917

Enseco

Laboratory Report

WAYNE PERRY CONSTRUCTION
8301 West Commonwealth Avenue
Buena Park, CA 90621
ATTN: MS. LORA MINDER

Analysis No.: G-8925533-001/016
Date Sampled: 12-SEP-1989
Date Sample Rec'd: 12-SEP-1989
Date Analyzed: 13-SEP-1989
Sample Type: SOLID

Project: POMONA BOX CO.

Sample ID	TPH, Volatile mg/kg EPA 8015	TPH, Extractable mg/kg EPA 8015
#1 NF1		3.*
#1 SB		ND(1.)
#3 FW		80.*
#3 EB		40.*
SP 4		7.*
SP 3		5.*
#4 FW		15.*
#4 EB		10.*
#2 FW	7.	
#2 EB	6.	
SP2	1.	
#5 EB	ND(1.)	
#5 FB	ND(1.)	
#6 FB	ND(1.)	
#7 FB	ND(1.)	
#7 BN	ND(1.)	
Blank	ND(1.)	ND(1.)

*Chromatographic fingerprint most closely matches that of diesel fuel.
Quantitation based upon diesel standard.

	ACT	INFO	GEOLOGICAL DEPARTMENT		ACT	INFO
DMH				MSW		
DEP			SEP 21 1989	JLC		
JRF				FILE		
TDR				FILE		
RJB						

Enseco - CRL / South Coast
7440 Lincoln Way • Garden Grove, CA 92641
(714) 898-6370 • (213) 598-0458 • (800) LAB-1-CRL
FAX: (714) 891-5917

Enseco

Laboratory Report

WAYNE PERRY CONSTRUCTION
8301 West Commonwealth Avenue
Buena Park, CA 90621
ATTN: MS. LORA MINDER

Analysis No.: G-8925533-001/016
Date Sampled: 12-SEP-1989
Date Sample Rec'd: 12-SEP-1989
Date Analyzed: 13-SEP-1989
Sample Type: SOLID

Project: POMONA BOX CO.

Sample ID	Benzene mg/kg EPA 8020	Toluene mg/kg EPA 8020	Ethylbenzene mg/kg EPA 8020	Xylenes, Total mg/kg EPA 8020
#1 NF1	ND(0.1)	ND(0.1)	ND(0.1)	0.1
#1 SB	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
#3 FW	0.1	0.6	1.	10.
#3 EB	ND(0.1)	ND(0.1)	0.7	2.
SP 4	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
SP 3	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
#4 FW	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
#4 EB	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
#2 FW	ND(0.1)	ND(0.1)	ND(0.1)	0.6
#2 EB	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
SP2	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
#5 EB	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
#5 FB	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
#6 FB	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
#7 FB	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
#7 BN	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)
Blank	ND(0.1)	ND(0.1)	ND(0.1)	ND(0.1)

page 1 of 4
Wayne Perry Const.
ATTN: LORA MINDER

COUNTY OF ORANGE/HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH (714) 834-8020
1725 WEST 17TH STREET, P.O. BOX 355
SANTA ANA, CA 92702
WASTE MANAGEMENT SECTION

CHAIN OF CUSTODY

1. ALL SAMPLES ARE TO BE HANDLED AS COURT EVIDENCE, AND ARE TO BE PROPERLY STORED IN A SECURE LOCATION.

2. PLEASE WRITE LEGIBLY.

3. ATTACH THIS FORM TO THE ORIGINAL REPORT OF THE ANALYTICAL RESULTS AND RETURN THEM TO THIS OFFICE. LABORATORY RESULTS RECEIVED WITHOUT PROPER CHAIN OF CUSTODY DOCUMENTATION WILL NOT BE ACCEPTED.

4. TO BE COMPLETED BY LABORATORY ANALYST

LAB NO.: 9255B3
DATE RECEIVED: 9/12/89 6:00 pm
SAMPLE(S) CONDITION (PLEASE CHECK):
CHILLED: ✓ COUNTY SEAL(S) INTACT: ✓
CONTAINER IN GOOD CONDITION: ✓
DATE ANALYSIS COMPLETED: 9-18-89
ANALYST: B

5. TO BE COMPLETED BY SAMPLE COLLECTOR

SAMPLE LOCATION: Conoco Bx Co.
301 W. Imperial Hwy.
La Habra
DATE OF COLLECTION: 9/12/89
SAMPLE COLLECTOR: Tom Rivers
TELEPHONE NO.: 714-826-0352

6. SAMPLE INFORMATION

SAMPLE NUMBER	DETERMINATION REQUESTED	SAMPLE DESCRIPTION/COMMENTS
#1 NFI	DHS Approved * marked for ~~gas~~ Diesel	Sandy, Moist Clay
# SB	Diesel *	
#2 FW	gas *	
#2 EB	gas *	
#3 FW	diesel *	
#3 EB	diesel *	
		* Run For 8020

Rush all samples
Run TPH + 8020

7. CHAIN OF CUSTODY

	SIGNATURE	TITLE	INCLUSIVE DATES
1.	[signature]	Hazwaste Specialist	9/12/89 - 9/12/89
2.	[signature]	STAFF GEOLOGIST	9-12-89 -
3.	[signature]	SAMPLE CONTROL	9/12/89 -
4.			-
5.			-
6.			-

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PINK-CONTRACTOR/CONSULTANT COPY, GOLDENROD-OFFICE COPY

[redacted]NTY OF ORANGE/HEALTH CARE AGEN[redacted]
ENVIRONMENTAL HEALTH (714) 834-8020
1725 WEST 17TH STREET, P.O. BOX 355
SANTA ANA, CA 92702
WASTE MANAGEMENT SECTION

CHAIN OF CUSTODY

1. ALL SAMPLES ARE TO BE HANDLED AS COURT EVIDENCE, AND ARE TO BE PROPERLY STORED IN A SECURE LOCATION.

2. PLEASE WRITE LEGIBLY.

3. ATTACH THIS FORM TO THE ORIGINAL REPORT OF THE ANALYTICAL RESULTS AND RETURN THEM TO THIS OFFICE. LABORATORY RESULTS RECEIVED WITHOUT PROPER CHAIN OF CUSTODY DOCUMENTATION WILL NOT BE ACCEPTED.

4. TO BE COMPLETED BY LABORATORY ANALYST

LAB NO.: _____

DATE RECEIVED: _____

SAMPLE(S) CONDITION (PLEASE CHECK):

CHILLED: ___ COUNTY SEAL(S) INTACT: ___

CONTAINER IN GOOD CONDITION: ___

DATE ANALYSIS COMPLETED: _____

ANALYST: _____

5. TO BE COMPLETED BY SAMPLE COLLECTOR

SAMPLE LOCATION: [illegible]
301 W. Imperial Hwy.
La Habra

DATE OF COLLECTION: 9/12/89

SAMPLE COLLECTOR: Tom [illegible]

TELEPHONE NO.: 714-526-0552

6. SAMPLE INFORMATION

SAMPLE NUMBER	DETERMINATION REQUESTED	SAMPLE DESCRIPTION/COMMENTS
#1 MW	OHS approved * modified [illegible]	[illegible] No T Chl
#2 SB	[illegible] *	
#2 FW	[illegible] *	
#2 EB	[illegible] *	
#3 FW	[illegible] *	TPH – 80 B 0.10 ppm <0.3 >.001 Pb 6 T >0.100 1.0 B >0.680 10 X >1.750
#3 EB	[illegible] *	
		* Non Fac. RO=D

7. CHAIN OF CUSTODY

	SIGNATURE	TITLE	INCLUSIVE DATES
1.	[signature]	Haz waste Specialist	9/12/89 - 9/12/89
2.	[signature]	STAFF GEOLOGIST	9-12-89 -
3.			-
4.			-
5.			-
6.			-

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page 2 of 4
Wayne Perry

COUNTY OF ORANGE/HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH (714) 834-8020
1725 WEST 17TH STREET, P.O. BOX 355
SANTA ANA, CA 92702
WASTE MANAGEMENT SECTION

CHAIN OF CUSTODY

1. ALL SAMPLES ARE TO BE HANDLED AS COURT EVIDENCE, AND ARE TO BE PROPERLY STORED IN A SECURE LOCATION.

2. PLEASE WRITE LEGIBLY.

3. ATTACH THIS FORM TO THE ORIGINAL REPORT OF THE ANALYTICAL RESULTS AND RETURN THEM TO THIS OFFICE. LABORATORY RESULTS RECEIVED WITHOUT PROPER CHAIN OF CUSTODY DOCUMENTATION WILL NOT BE ACCEPTED.

4. TO BE COMPLETED BY LABORATORY ANALYST

LAB NO.: 925533
DATE RECEIVED: 9/12/89 6:00 pm
SAMPLE(S) CONDITION (PLEASE CHECK):
CHILLED: ✓ COUNTY SEAL(S) INTACT: ✓
CONTAINER IN GOOD CONDITION: ✓
DATE ANALYSIS COMPLETED: 9-18-89
ANALYST: TS

5. TO BE COMPLETED BY SAMPLE COLLECTOR

SAMPLE LOCATION: Pomona Box Co.
301 W. Imperial Hwy
La Habra
DATE OF COLLECTION: 9/12/89
SAMPLE COLLECTOR: Tom Rivers
TELEPHONE NO.: 714-826-0352

6. SAMPLE INFORMATION

SAMPLE NUMBER	DETERMINATION REQUESTED	SAMPLE DESCRIPTION/COMMENTS
	DHS Approved method for gas *	Sand Moist Clay.
	*	
	*	
SP 4	Diesel *	
SP 3	Diesel *	
SP 2	GAS *	
		* RUN for 8020

7. CHAIN OF CUSTODY

	SIGNATURE	TITLE	INCLUSIVE DATES
1.	[signature]	Haz Waste Specialist	9/12/89 - 9/12/89
2.	[signature]	STAFF GEOLOGIST	9-12-89 -
3.	[signature]	SAMPLE CONTROL	9/12/89 -
4.			-
5.			-
6.			-

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COUNTY OF ORANGE/HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH (714) 834-8020
1725 WEST 17TH STREET, P.O. BOX 355
SANTA ANA, CA 92702
WASTE MANAGEMENT SECTION

CHAIN OF CUSTODY

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4. TO BE COMPLETED BY LABORATORY ANALYST

LAB NO.: _____

DATE RECEIVED: _____

SAMPLE(S) CONDITION (PLEASE CHECK):

CHILLED: ___ COUNTY SEAL(S) INTACT: ___

CONTAINER IN GOOD CONDITION: ___

DATE ANALYSIS COMPLETED: _____

ANALYST: _____

5. TO BE COMPLETED BY SAMPLE COLLECTOR

SAMPLE LOCATION: [illegible]

[illegible]

[illegible]

DATE OF COLLECTION: 9/12/89

SAMPLE COLLECTOR: Tom Rivers

TELEPHONE NO.: 714-834-0352

6. SAMPLE INFORMATION

SAMPLE NUMBER	DETERMINATION REQUESTED	SAMPLE DESCRIPTION/COMMENTS
	Organics [illegible] *	Sand Mart Clay
	*	
	*	
SP4	[illegible] *	
SP3	[illegible] *	
SP2	GAS *	
		* [illegible] 8020

7. CHAIN OF CUSTODY

	SIGNATURE	TITLE	INCLUSIVE DATES
1.	[illegible]	Hazwaste Specialist	9/12/89 - 9/12/89
2.	[illegible]	STAFF GEOLOGIST	9-12-89 -
3.			-
4.			-
5.			-
6.			-

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page 4 of 4
Wayne Perry

JNTY OF ORANGE/HEALTH CARE AGEI
ENVIRONMENTAL HEALTH (714) 834-8020
1725 WEST 17TH STREET, P.O. BOX 355
SANTA ANA, CA 92702
WASTE MANAGEMENT SECTION

CHAIN OF CUSTODY

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4. TO BE COMPLETED BY LABORATORY ANALYST

LAB NO.: 925533
DATE RECEIVED: 9/12/89 6:00 pm
SAMPLE(S) CONDITION (PLEASE CHECK):
CHILLED: ✓ COUNTY SEAL(S) INTACT: ✓
CONTAINER IN GOOD CONDITION: ✓
DATE ANALYSIS COMPLETED: 9-18-89
ANALYST: B

5. TO BE COMPLETED BY SAMPLE COLLECTOR

SAMPLE LOCATION: Pomona Bot. Co
301 W. Imperial, La Habra
DATE OF COLLECTION: 9/12/89
SAMPLE COLLECTOR: Tom Rivers
TELEPHONE NO.: 714-826-0352

6. SAMPLE INFORMATION

SAMPLE NUMBER	DETERMINATION REQUESTED	SAMPLE DESCRIPTION/COMMENTS
#7FA	DHS approved method for gas*	Dry Sand
#7BN	*	
		* Run for 8020

7. CHAIN OF CUSTODY

	SIGNATURE	TITLE	INCLUSIVE DATES
1.	[signature]	Haz Waste Specialist	9/12/89 - 9/12/89
2.	[signature]	STAFF GEOLOGIST	9-12-89 -
3.	[signature]	SAMPLE CONTROL	9/12/89 -
4.			-
5.			-
6.			-

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ITY OF ORANGE/HEALTH CARE AGEN
ENVIRONMENTAL HEALTH (714) 834-8020
1725 WEST 17TH STREET, P.O. BOX 355
SANTA ANA, CA 92702
WASTE MANAGEMENT SECTION

CHAIN OF CUSTODY

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4. TO BE COMPLETED BY LABORATORY ANALYST

LAB NO.: _____

DATE RECEIVED: _____

SAMPLE(S) CONDITION (PLEASE CHECK):

CHILLED: ___ COUNTY SEAL(S) INTACT: ___

CONTAINER IN GOOD CONDITION: ___

DATE ANALYSIS COMPLETED: _____

ANALYST: _____

5. TO BE COMPLETED BY SAMPLE COLLECTOR

SAMPLE LOCATION: [illegible]
301 W. Imperial La Habra

DATE OF COLLECTION: 9/2/89

SAMPLE COLLECTOR: [illegible]

TELEPHONE NO.: 714-526-0362

6. SAMPLE INFORMATION

SAMPLE NUMBER	DETERMINATION REQUESTED	SAMPLE DESCRIPTION/COMMENTS
#710	[illegible]	Air Sock
#711	*	
		* Method 8020

7. CHAIN OF CUSTODY

	SIGNATURE	TITLE	INCLUSIVE DATES
1.	[signature]	Haz Waste Specialist	9/2/89 - 9/2/89
2.	[signature]	STAFF GEOLOGIST	9-12-89 -
3.			-
4.			-
5.			-
6.			-

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page 3 of 4
Wayne Perry

COUNTY OF ORANGE/HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH (714) 834-8020
1725 WEST 17TH STREET, P.O. BOX 355
SANTA ANA, CA 92702
WASTE MANAGEMENT SECTION

CHAIN OF CUSTODY

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4. TO BE COMPLETED BY LABORATORY ANALYST

LAB NO.: 925533
DATE RECEIVED: 9/12/89 6:00 p
SAMPLE(S) CONDITION (PLEASE CHECK):
CHILLED: ✓ COUNTY SEAL(S) INTACT: ✓
CONTAINER IN GOOD CONDITION: ✓
DATE ANALYSIS COMPLETED: 9-18-89
ANALYST: B

5. TO BE COMPLETED BY SAMPLE COLLECTOR

SAMPLE LOCATION: Pomona Rock Co.
301 W. Imperial Hwy
La Habra
DATE OF COLLECTION: 9/12/89
SAMPLE COLLECTOR: Tom Rivers
TELEPHONE NO.: 714-826-0352

6. SAMPLE INFORMATION

SAMPLE NUMBER	DETERMINATION REQUESTED	SAMPLE DESCRIPTION/COMMENTS
#4 FV	DHS Approved Diesel method to gas *	Sandy Maint Clay.
#4 EB	[redacted] Diesel *	
#5 EB	[redacted] GAS *	
#5 FB	[redacted] GAS *	
#6 FB	GAS *	
[redacted]	[redacted] *	
		* Run for 8020

7. CHAIN OF CUSTODY

	SIGNATURE	TITLE	INCLUSIVE DATES
1.	[signature]	Haz Waste Specialist	9/12/89 - 9/12/89
2.	[signature]	STAFF GEOLOGIST	9/12/89 -
3.	[signature]	SAMPLE CONTROL	9/12/89 -
4.			-
5.			-
6.			-

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PINK-CONTRACTOR/CONSULTANT COPY, GOLDENROD-OFFICE COPY

[illegible]NTY OF ORANGE/HEALTH CARE AGEN[illegible]
ENVIRONMENTAL HEALTH (714) 834-8020
1725 WEST 17TH STREET, P.O. BOX 355
SANTA ANA, CA 92702
WASTE MANAGEMENT SECTION

CHAIN OF CUSTODY

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4. TO BE COMPLETED BY LABORATORY ANALYST

LAB NO.: _____

DATE RECEIVED: _____

SAMPLE(S) CONDITION (PLEASE CHECK):

CHILLED: ___ COUNTY SEAL(S) INTACT: ___

CONTAINER IN GOOD CONDITION: ___

DATE ANALYSIS COMPLETED: _____

ANALYST: _____

5. TO BE COMPLETED BY SAMPLE COLLECTOR

SAMPLE LOCATION: [illegible] Co.
301 W. Imperial Hwy
La Habra

DATE OF COLLECTION: 9/12/89

SAMPLE COLLECTOR: [illegible]

TELEPHONE NO.: 714-836-0352

6. SAMPLE INFORMATION

SAMPLE NUMBER	DETERMINATION REQUESTED	SAMPLE DESCRIPTION/COMMENTS
#4 FV	DHS Approved Co. [illegible] *	Sample No. T Clay
#4 EB	[illegible] *	
#5 WB	[illegible] *	
#5 FB	[illegible] *	
#6 FB	[illegible] *	
[illegible]	[illegible] *	
		* Run for 8020

7. CHAIN OF CUSTODY

	SIGNATURE	TITLE	INCLUSIVE DATES
1.	[illegible]	Haz Waste Specialist	9/12/89 - 9/12/89
2.	[illegible]	STAFF GEOLOGIST	9/12/89 -
3.			-
4.			-
5.			-
6.			-

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PINK-CONTRACTOR/CONSULTANT COPY, GOLDENROD-OFFICE COPY

NGE COUNTY ENVIRONMENTAL HEA

UNDERGROUND TANK CLEANUP FORM

Pomona Box Co. — Facility Name
301 W. Imperial Hwy La Habra — Address

Euclid — Cross Streets
714-871-0932 — Site Telephone Number

Orvin Engineering — Owner
251 W. Imperial Hwy La Habra — Address

Don Vetter — Contact Person
714-871-0932 — Telephone Number

Pomona Box Co. — Operator (If different than owner)
714-871-0932 — Telephone Number

Bill Bale (~~[illegible]~~) — Consultant (Contractor)
Same — Contact Name
714-826-0352 — Telephone Number

	Size	Const. Mat.	Mat. Stored
Tank 1	2,000	Steel	Gas
Tank 2	5,000	Steel	Gas
Tank 3	5,000	Steel	Gas
Tank 4	1,000	Steel	Gas.
Tank 5			
Tank 6			

epth To Groundwater 30ft ≈ X

ire Depart. personnel on-site: Sandie Hastings - La Habra Fire Dept.

mbient air readings on field instrument: 0ppm

roposition 65 required:

ther information: Area contained some visible contamination. Soil was sandy & in this area, some clay was present. Fairly moist also. Spoil piles ranged anywhere from 150-250 ppm. Tanks were taken to A.M.R. Rinse Transfered by Crosby & Overton.

EV :05/04/87

FIELD ACTIVITY DESCRIPTION

LUST #: _____ FACILITY NAME: Pomona Box Co DATE: 5/12/87

I.R. #: _____ ADDRESS: 301 West Imperial Hwy INSPECTOR: JG

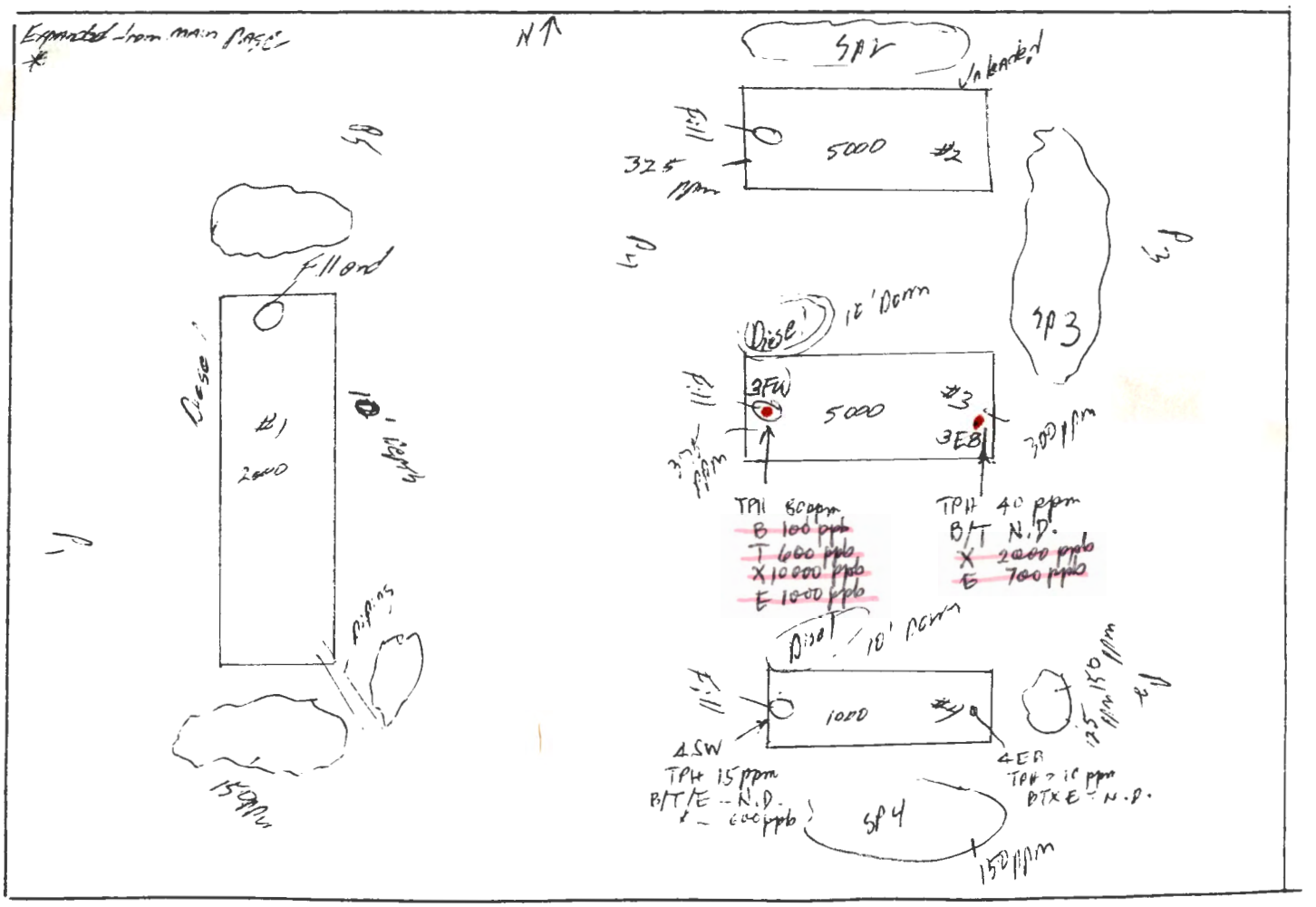
La Habra CA. 90631 TIME: 1:00

Field Activity: U.L. # Tank #2, H 36318

#3, H 856317

#4, E 81795

The tank areas & spoil piles were moist & sandy. Some clay present. Some contamination was noted around fill areas. Vapors were noticed when samples were taken around fill area #2 & 3. However, gas tech readings approached ≈ 32.5 ppm. Tom Rivers was geologist taking samples. Samples taken to C.R.L. Labs



REV·05/04/87

NOT TO SCALE

NGE COUNTY ENVIRONMENTAL HEAL

UNDERGROUND TANK CLEANUP FORM

Pomona Box Co. — Facility Name
301 W. Imperial Hwy La Habra — Address

Euclid — Cross Streets
714-871-0932 — Site Telephone Number

Orvin Engineering — Owner
251 W. Imperial Hwy La Habra — Address

Don Votaw — Contact Person
714-871-0932 — Telephone Number

Pomona Box Co. — Operator (If different than owner)
714-871-0932 — Telephone Number

Bill Bale — Consultant (Contractor)
Same — Contact Name
714-826-0352 — Telephone Number

	Size	Const. Mat.	Mat. Stored		Size	Const. Mat.	Mat. Stored
Tank 1	1000	Steel	Unlead gas	Tank 4			
Tank 2	2,000	Steel	Unlead gas	Tank 5			
Tank 3	500	Steel	Unlead gas	Tank 6			

epth To Groundwater 30 ft ~

ire Depart. personnel on-site: Sandie Hastings - La Habra Fire Dept

mbient air readings on field instrument: 0 ppm

roposition 65 required:

ther information: Area contained some visible contamination. Soil was sandy. Spoil piles ranged anywhere from 150-250 ppm. Tanks taken to A.M.R. Rinse. Transported by Crosby & Overton.

EV:05/04/87

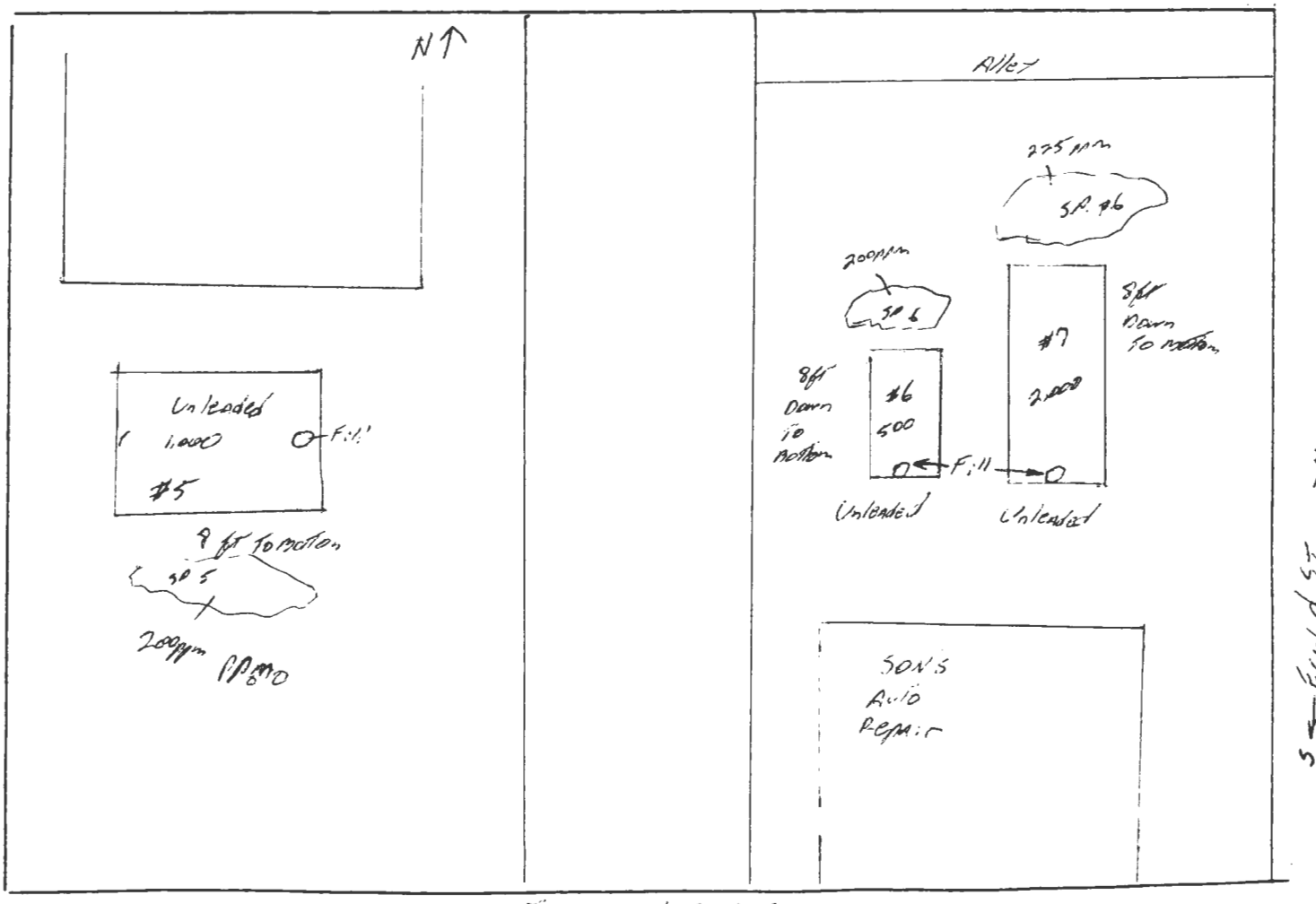
FIELD ACTIVITY DESCRIPTION

LUST #: _____ FACILITY NAME: Pomona Box Co DATE: 9/12/85

I.R. #: _____ ADDRESS: 301 West Imperial Hwy INSPECTOR: J.O.

La Habra CA 90631 TIME: 3 00

Field Activity: Stack pile & Tank area looked fairly clean. Most of any vapor was detected around fill areas. Dist was fairly dry & SA-VOT. Several area ppm readings were taken & no measurable results occured. Tom Rivers was geo logist taking samples. Samples were taken to C.R.L. Labs Inc.



REV·05/04/87

APPROVED
ORANGE COUNTY HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH
WASTE MANAGEMENT SECTION

Plan Reviewed By — Date — Plan #

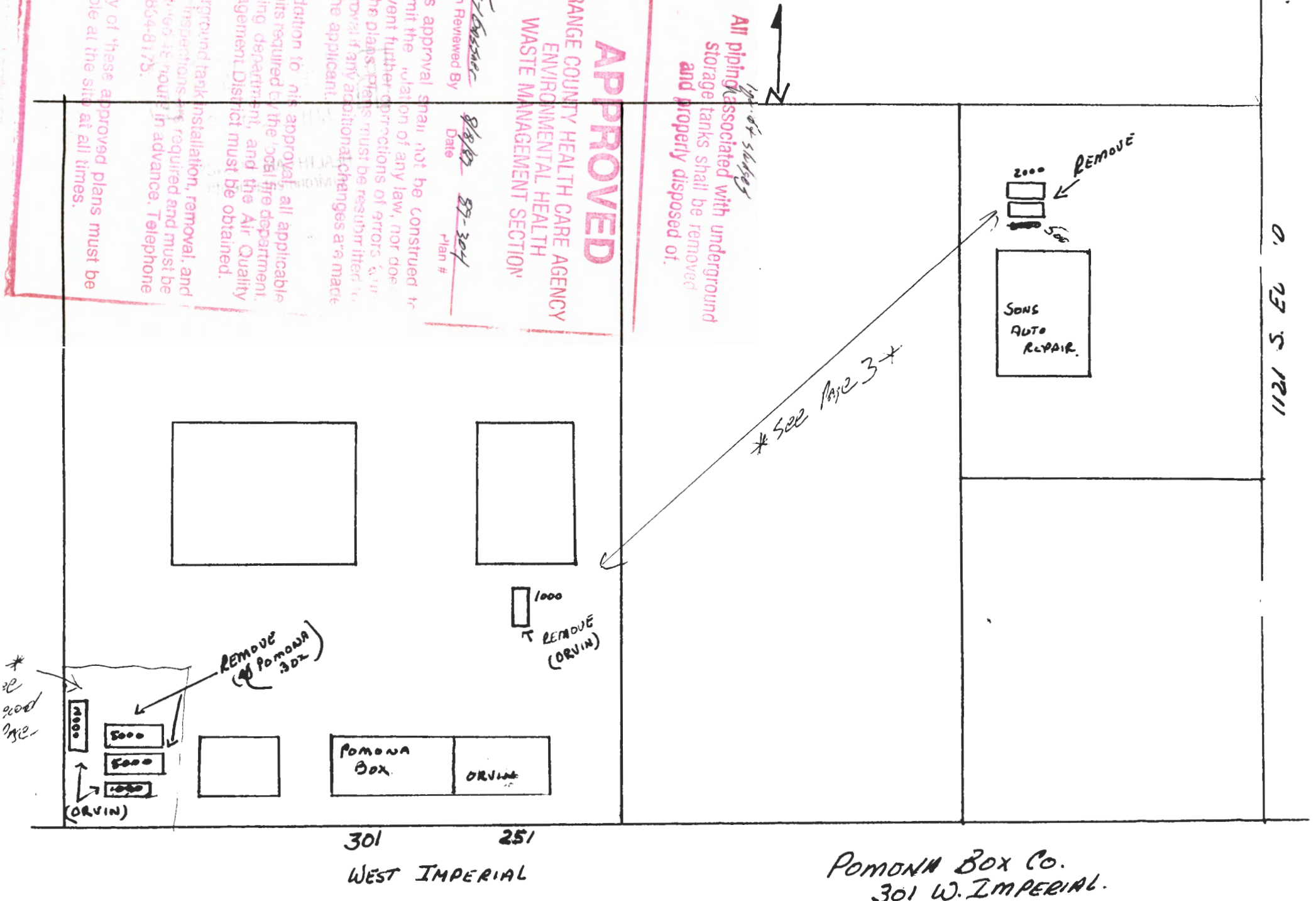
This approval shall not be construed to permit the violation of any law, nor does it prevent further corrections of errors found on the plans. Plans must be resubmitted for approval if any additional changes are made by the applicant.

In addition to this approval, all applicable permits required by the local fire department, building department, and the Air Quality Management District must be obtained.

Underground tank installation, removal, and repair inspections are required and must be requested in advance. Telephone (714) 834-8175.

A copy of these approved plans must be available at the site at all times.

All piping associated with underground storage tanks shall be removed and properly disposed of.



POMONA BOX CO.
301 W. IMPERIAL.
LA HABRA
NOT TO SCALE.

0.'u T163

TOM URAM
DIRECTOR

L. REX EHLING, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E MERRYMAN, R. S. MPH
DEPUTY DIRECTOR

MAILING ADDRESS: P.O. BOX 355
SANTA ANA, CA 92702

County of Orange

HEALTH CARE AGENCY

PUBLIC HEALTH SERVICES

ENVIRONMENTAL HEALTH DIVISION
1725 W. 17TH STREET
SANTA ANA, CALIFORNIA 92706
(714) 834-8356

FACILITY MODIFICATION APPLICATION (INSTALLATION/REMOVAL/REPAIR)

(COMPLETE PAGES 1 & 2)

DATE: 8-15-89

FACILITY INFORMATION

NAME: POMONA BOX CO.

STREET ADDRESS: 301 W. IMPERIAL HWY.

CITY: LA HABRA

TOTAL NUMBER OF TANKS (AFTER INSTALLATION/REMOVAL) AT THIS LOCATION: 0

TYPE OF BUSINESS:

____ GASOLINE STATION ____ FARM

____ GOVERNMENT MFG OTHER

TANK OWNER

NAME (CORP., INDIVIDUAL, PUBLIC AGENCY): ORVIN ENGINEERING

STREET ADDRESS: 251 W. IMPERIAL HWY.

CITY: LA HABRA

STATE: CA ZIP: 90631

TELEPHONE NO.: 714/871-4040

BILLING ADDRESS INFORMATION

BILL TO NAME: POMONA BOX CO.

BILL TO ADDRESS: 301 W. IMPERIAL HWY.

CITY: LA HABRA

STATE: CA ZIP: 90631

TELELPHONE NO.: 714/871-0932

TYPE OF CONSTRUCTION

INDICATE NO. OF TANK(S):

____ INSTALLATION(S) (COMPLETE PAGE 2)

2 REPAIR(S)/RELINE(S)

____ CLOSURE(S)/REMOVAL(S)

____ SYSTEM MODIFICATION (E.G., REPIPE)

____ OTHER (SPECIFY) ____

24 HOUR ENERGENCY CONTACT PERSON

DAYS: DON VOTAW (NAME) 714/871-0932 (TELEPHONE)

NIGHTS: DON VOTAW (NAME) 213/691-3537 (TELEPHONE)

APPLICANT

NAME: William H. Bole (and H) (PLEASE PRINT)

SIGNATURE: William H Bole

COMPANY NAME: WAYNE PERRY CONST.

TELEPHONE NO.: 714-826-0352

FACILITY OPERATOR (CONTACT PERSON)

NAME: TERRY PEAK

BUSINESS TELEPHONE NO.: 714/871-4040

NOTE: NEW INSTALLATIONS, CLOSURES REPAIRS AND SYSTEM MODIFICATIONS OF UNDERGROUND STORAGE TANKS REQUIRE THE SUBMITTAL OF (4) SETS OF PLANS TO THIS DIVISION. THESE PLANS MUST BE APPROVED PRIOR TO THE INITIATION OF ANY CONSTRUCTION OR MODIFICATION.

OFFICE USE ONLY

FACILITY PERMIT NO.: ____ PLAN APPROVAL DATE: ____ BY: ____ NO.: ____

PLAN CHECK NO.: 89 304 FEES: $861.00 FINAL FIELD INSPECTION DATE: ____

NUMBER OF TANKS TO BE ADDED TO BILLING: ____ NUMBER OF TANKS TO RECEIVE A SURCHARGE BILL: ____

FORMS:FMA

HSO#75158 CL#479

TANK INFORMATI(

I.

TANK I.D.			#1	#2	#3	#4
MATERIALS STORED	CAS NO. OR WASTE I.D.	CURRENTLY				
		PROPOSED				
		PREVIOUSLY				
	FUEL TYPE (IF TRADE SECRET, PLEASE STATE)					
CONTAINER	TYPE (TANK, SUMP, OTHERS)					
	DOUBLE WALL/SINGLE WALL					
	UL NUMBER					
	YEAR INSTALLED					
	VAULTED/NOT VAULTED					
	PRIMARY	MANUFACTURER				
		CAPACITY (GALLON)				
		CONSTRUCTION MATERIAL				
		THICKNESS (UNITS)				
		INTERIOR LINING				
	SECONDARY	MANUFACTURER				
		CAPACITY (GALLON)				
		CONSTRUCTION MATERIAL				
		THICKNESS (UNITS)				
	CORROSION PROTECTION					
	TYPE OF LEAK DETECTION (LIQUID, VAPOR, ETC.)					
	MANUFACTURER OF LEAK DETECTOR					
PIPING	LOCATION (UNDER/ABOVE GROUND)					
	SUCTION/PRESSURE GRAVITY/UNKNOWN					
	PRIMARY	CONSTRUCTION MATERIAL				
		MANUFACTURER				
	SECONDARY	CONSTRUCTION MATERIAL				
		MANUFACTURER				
	TYPE OF LEAK DETECTION (LIQUID, VAPOR, ETC.)					
	MANUFACTURER OF LEAK DETECTOR					
OVERFILL PROTECTION (TYPE)						
SPILL CONTAINMENT						

II. ATTACH A DIAGRAM (8 1/2'' X 11'') INCLUDE THE LOCATIONS OF THE UNDERGROUND STORAGE TANK(S), PIPING, AUXILIARY EQUIPMENT, BUILDINGS AND OTHER LANDMARKS.

OFFICE USE ONLY

MONITORING SYSTEM/ALTERNATIVE				

Fax remaining tanks

TOM URAM
DIRECTOR
L. REX EHLING, M.D.
HEALTH OFFICER
ENVIRONMENTAL HEALTH DIVISION
ROBERT E MERRYMAN, R.E.H.S., MPH
DEPUTY DIRECTOR
MAILING ADDRESS: P.O. BOX 355
SANTA ANA, CA 92702

F.M.A.

County of Orange
HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES

ENVIRONMENTAL HEALTH DIVISION
1725 W. 17TH STREET
SANTA ANA, CALIFORNIA 92706
(714) 834-8356

FACILITY MODIFICATION APPLICATION (INSTALLATION/REMOVAL/REPAIR)

(COMPLETE PAGES 1 & 2)

DATE: 9/12/85

FACILITY INFORMATION

NAME: Pomona Box Co

STREET ADDRESS: 301 W. Imperial Hwy

CITY: La Habra

TOTAL NUMBER OF TANKS (AFTER INSTALLATION/REMOVAL) AT THIS LOCATION: 0

TYPE OF BUSINESS:

____ GASOLINE STATION ____ FARM

____ GOVERNMENT X OTHER

TANK OWNER

NAME (CORP., INDIVIDUAL, PUBLIC AGENCY): Orvin Engineering

STREET ADDRESS: 251 W. Imperial Hwy

CITY: La Habra

STATE: CA. ZIP: 90631

TELEPHONE NO.: 714 871-4040

BILLING ADDRESS INFORMATION

BILL TO NAME: Pomona Box Co

BILL TO ADDRESS: 301 W. Imperial Hwy

CITY: La Habra

STATE: CA. ZIP: 90631

TELEPHONE NO.: 714-871-0932

TYPE OF CONSTRUCTION

INDICATE NO. OF TANK(S):

____ INSTALLATION(S) (COMPLETE PAGE 2)

____ REPAIR(S)/RELINE(S)

1 CLOSURE(S)/REMOVAL(S)

____ SYSTEM MODIFICATION (E.G., REPIPE)

____ OTHER (SPECIFY) ____

24 HOUR EMERGENCY CONTACT PERSON

DAYS: Don Votaw (NAME) 714-871-0932 (TELEPHONE)

NIGHTS: Don Votaw (NAME) 213-691-3537 (TELEPHONE)

APPLICANT

NAME: William H. Bake (PLEASE PRINT)

SIGNATURE: ____

COMPANY NAME: Wayne Pond Const.

TELEPHONE NO.: 714-826-0352

FACILITY OPERATOR (CONTACT PERSON)

NAME: ____

BUSINESS TELEPHONE NO.: ____

NOTE: NEW INSTALLATIONS, CLOSURES REPAIRS AND SYSTEM MODIFICATIONS OF UNDERGROUND STORAGE TANKS REQUIRE THE SUBMITTAL OF (4) SETS OF PLANS TO THIS DIVISION. THESE PLANS MUST BE APPROVED PRIOR TO THE INITIATION OF ANY CONSTRUCTION OR MODIFICATION.

OFFICE USE ONLY

FACILITY PERMIT NO.: ____ PLAN APPROVAL DATE: ____ BY: ____ NO.: ____

PLAN CHECK NO.: ____ FEES: ____ FINAL FIELD INSPECTION DATE: ____

NUMBER OF TANKS TO BE ADDED TO BILLING: ____ NUMBER OF TANKS TO RECEIVE A SURCHARGE BILL: ____

FORMS:FMA
1 js:04/03/89

TANK INFORMATION

TANK I.D.			#1	#2	#3	#4	#5
MATERIALS STORED	CAS NO. OR WASTE I.D.	CURRENTLY	4993-FO	1203	1203	1203	1203
		PROPOSED					
		PREVIOUSLY					
	FUEL TYPE (IF TRADE SECRET, PLEASE STATE)		4	1	1	1	1
CONTAINER	TYPE (TANK, SUMP, OTHERS)		TANK	TANK	TANK	TANK	TANK
	DOUBLE WALL/SINGLE WALL		2	2	2	2	2
	UL NUMBER		99	H36318	99	99	99
	YEAR INSTALLED		99	99	99	99	99
	VAULTED/NOT VAULTED		2	2	2	2	2
	PRIMARY	MANUFACTURER	99	99	99	99	99
		CAPACITY (GALLON)	2000	5000	1000	500	2000
		CONSTRUCTION MATERIAL	1	1	1	1	1
		THICKNESS (UNITS)	99	99	99	99	99
		INTERIOR LINING	96	96	96	96	96
	SECONDARY	MANUFACTURER	97	97	97	97	97
		CAPACITY (GALLON)	97	97	97	97	97
		CONSTRUCTION MATERIAL	97	97	97	97	97
		THICKNESS (UNITS)	97	97	97	97	97
	CORROSION PROTECTION		96	96	96	96	96
	TYPE OF LEAK DETECTION (LIQUID, VAPOR, ETC.)		16	16	16	16	16
	MANUFACTURER OF LEAK DETECTOR		97	97	97	97	97
PIPING	LOCATION (UNDER/ABOVE GROUND)		UNDER	UNDER	UNDER	UNDER	UNDER
	SUCTION/PRESSURE GRAVITY/UNKNOWN		1	1	1	1	1
	PRIMARY	CONSTRUCTION MATERIAL	1	1	1	1	1
		MANUFACTURER	99	99	99	99	99
	SECONDARY	CONSTRUCTION MATERIAL	97	97	97	97	97
		MANUFACTURER	97	97	97	97	97
	TYPE OF LEAK DETECTION (LIQUID, VAPOR, ETC.)		96	96	96	96	96
	MANUFACTURER OF LEAK DETECTOR		97	97	97	97	97
OVERFILL PROTECTION (TYPE)			5	5	5	5	5
SPILL CONTAINMENT			NO	NO	NO	NO	NO

II. ATTACH A DIAGRAM (8 1/2" X 11") INCLUDE THE LOCATIONS OF THE UNDERGROUND STORAGE TANK(S), PIPING, AUXILIARY EQUIPMENT, BUILDINGS AND OTHER LANDMARKS.

OFFICE USE ONLY

MONITORING SYSTEM/ALTERNAT				

REV 04/04/88

FMA on file

ENVIRONEMTNAL HEALTH [714] 83 175
1725 WEST 17TH STREET, P.O. 355
SANTA ANA, CA 92702
UNDERGROUND TANK INSPECTION FORM.

Input File 7

ACCOUNT NO.: _____ PERMIT NO.: _____

FACILITY NAME: Pomona Box Co INSPECTION DATE: 9/12/89

STREET: 301 W. Imperial Hwy MAP COORDINATES: _____

CITY: [12] LaHabra ZIP: 90631 DISTRICT: 1

NEAREST CROSS STREET: Euclid PHONE: (714) 871-0932

EX CODE: __ STATUS: __ PUBLIC AGENCY: __

COMPLIANCE: _____ PERMIT DATE: __/__/__ UNDERGROUND: 1. GAS STATION
(2). NOT GAS STATION

STATE VARIANCE: [ ] _____

NUMBER OF TANKS THIS LOCATION: 7 DEPTH TO WATER TABLE: 30 (FT.)

DEALER SUPV.: Bill Bale (Chandler) PHONE: (714) 826-6352

TANK OWNER (MAILING ADDRESS)

NAME: Orvin Engineering PHONE: (714) 871-4040

STREET: 251 W. Imperial Hwy

CITY: LaHabra ST: CA ZIP: 90631

EMERGENCY CONTACT PERSONS

NAME: Don Votaw PHONE: (714) 871-0932

NIGHTS: Don Votaw PHONE: (213) 691-3537

Tanks - A.M.R.ONT Tom Rivers - Geo.

LaHabra Fire - Sandbrie Hastings

Manifest - Crosby & Overton

Pull 7 Tanks,

INSPECTOR #: 223 SIGNATURE: _____ DATE: 9/12/89

RECEIVED BY: _____ DATE: 9/12/89

ELAPSED TIME: 285 (MIN.)

County of Orange
Health Care Agency
Environmental Health Division
Hazardous Materials Management Section

Site Name: Pomona Box Company
Case #: 86-UT-224
Address: 301 West Imperial Highway
City: La Habra
Contact Person: Donald Votaw (RP)
Phone #: 871-0932

Date	Staff	ACTIVITIES/COMMENTS
10-9-2	AM	Prepare Closure letter & data input sheet.
10-11-2	AM	Case Closed.

County of Orange
Health Care Agency
Environmental Health Division
Hazardous Materials Management Section

Site Name: Pomona Box Company
Case #: 86UT224
Address: 301 West Imperial Hwy.
City: La Habra, CA
Contact Person: Don Votaw (RP)
Phone #: 871-0932
John Teravskis (WGR Southwest - Consultant) (209) - 334 - 5363
Marda Herbert " (925) 947 - 3738

Date	Staff	ACTIVITIES/COMMENTS
07/18/01	K.S.	Reviewed the case file for the first time. Reviewed past site assessments and remedial investigations that were conducted.
07/20/01	K.S.	Reviewed "Closure Assessment" Report and "4th Qtr. 2000 GW Monitoring" Report dated April 2001. The results are as follows a) Confirmation soil borings indicate some localized residual contamination in soil below the water table at depths of 15 - 20 feet. b) Highest MTBE & benzene in soil were at 6.3 mg/kg and 1.3 mg/kg. c) Dual phase remediation that was conducted at the site is not well summarized to determine the effectiveness.
07/23/01	K.S.	Phone call with RP to inquire if he has a copy of the tank destruction certificate at the time of UST Removal. He said he will review & send me a letter.
07/24/01	K.S.	Reviewed 1st Qtr. 2001 GW monitoring report.
08/3/01	K.S.	Prepared draft letter to RP on the closure assessment report with comments to the residual soil contamination detected.
08/10/01	K.S.	Mailed the letter to RP.
09/18/01	K.S.	Phone call from Marda Herbert of WGR Southwest, Inc. regarding the OCHCA letter dated 08/10/2001. She discussed about the soil results and said that she will get back to me after talking to the lab. They did not do 8260 analysis for soil samples with high detection limits, to confirm the presence of MTBE. Summary of dual-phase remediation conducted at the site need to be submitted.

County of Orange
Health Care Agency
Environmental Health Division
Hazardous Materials Management Section

Site Name: Pomona Box Company
Address: 301 West Imperial Hwy
City: La Habra
Contact Person: Don Vosteen

Case #:
Phone #: 871-0932

Date	Staff	ACTIVITIES/COMMENTS
5-29-98	AM	Rev. QR dated 4-30-98 (rec'd 5-28-98). GW concs look good. Fig. 4 of the QR incorrectly lists the TPH concs in the benzene row. Ph to D Vosteen. Left msg. He'll be out for another week. Ph w/ D. Henry. I asked him to submit a corrected version of Fig 4. He will. We also briefly discussed confirmation borings.
8-4-98	AM	Rev Rep dated 7-13-98
9-16-98	AM	Ph w/ D Vosteen & P Terwilliger (WGR) about dismantling the remediation system. Because of benzene concentration in one well, further monitoring should be conducted before the system is removed from the site.
10-25-99	AM	File rev QR dated 8-16-99.
11-22-99	AM	Review QR dated 10-6-99.
6-7-00	AM	I sent letter approving conf boring WP.
10-10-00	AM	Rev QR dated 8-11-00
10-12-00	AM	File update
4-27-01	AM	File rev/update. Closure rept. High soil/low gw.
7-12-01	AM	MTBE database review.

County of Orange
Health Care Agency
Environmental Health Division
Hazardous Materials Mangement Section

Site Name: Pomona Box Company
Address: 301 West Imperial Hwy
City: La Habra
Contact Person: Don Voton

Case #: 86 UT 224
Phone: 871-0932

Date	Staff	ACTIVITIES/COMMENTS
8-13-96	AM	Ph w/ D. Voton. The off-site down-gradient well will be installed by W W Irwin. He will contact me before the drilling is conducted. He expects the well to be installed in a couple of weeks.
9-4-96	AM	Case Survey Summary.
10-9-96	AM	Ph w/ D. Henry (Wayne Pumping). He hasn't seen recent VE monitoring data. ~~yet~~ He is not sure if the down gradient well has been installed yet.
		Ph w/ D Voton, Remediation Technology will install the additional well. QRs have not been submitted for some time, I will issue a letter requiring QRs for 1996. VES evaluation/monitoring report should also be submitted to evaluate the possibility of shuting the VES off at this site.
10-24-96	AM	Rev QR dated 10-31-96.
11-26-96	AM	Rev ~~QR~~ 11-19-96 report.
2-10-97	AM	Rev QR dated 1-31-97.
12-25-97	AM	File ~~letter~~ dated 11-12-97

County of Orange
Health Care Agency
Environmental Health Division
Hazardous Materials Mangement Section

Site Name: Pomona Box Company
Case #: 86-UT-224
Address: 301 West Imperial Highway
City: La Habra, CA
Contact Person: Don Votaw
Phone: 871-0932
Dave Henry (Wayne Perry)

Date	Staff	ACTIVITIES/COMMENTS
3-1-96	AM	Phone w/ Don Votaw. Discussed current site status and future development of this site. He also stated that D Henry said a workplan for the additional well (off-site) was already submitted to OCHCA. I will check file an "in" box again and talk to D Henry about this.
		Ph to D. Henry to inform him that I haven't rec'd the workplan for installation of the additional well yet. Left message.
		Ph w/ D Henry. The workplan was included in the 10-31-96 QR. I have that and will issue an approval letter next week. He also said the next QR is in the mail along with a response to the 1-18-96 letter.
3-18-96	AM	Ph w/ D Henry. He will send a letter describing the well construction (in response to the 3-4-96 OCHCA letter, item 1).
7-23-96	AM	Ph w/ D. Votaw. Asked about the well that is required South of the site (in Imperial Hwy). He said Wayne Perry still hasn't installed it. This well is necessary to monitor the down gradient extent of the dissolved phase plume. He will speak w/ Wayne Perry.
7-30-96	AM	File copy of the bid request dated 7-23-96.

County of Orange
Health Care Agency
Environmental Health Division
Hazardous Materials Mangement Section

Site Name: Pomona Box Company
Address: 301 West Imperial Hwy
City: La Habra
Contact Person: Don Vorlaw

Case #:
Phone:

Date	Staff	ACTIVITIES/COMMENTS
2-21-94 (cont)	AM	unless OCHCA approves the plan to reuse equipment from the other site. If equipment re-use is approved, OCHCA may revise the monitoring requirements for this site.
2-15-95	AM	File update (file CAP & Revised CAP).
3-28-95	AM	Phone with Don Vorlaw. He is waiting to hear from me on the two CAPs submitted for this site. He wants to discuss the merits of each before selecting one. He reiterated his proposal to delay remediation of this site until after the other site (OCHCA Case #92-10) is closed. I will consider this but it may require additional (interim CAP?) work at this site in the meantime. I will try to get back to him later this week or the week of the 10TH of March.
5-4-95	AM	Reviewed the revised CAP (1-95) and cover letter (1-25-95) and began writing letter requesting revisions.
5-8-95	AM	Finish letter responding to the CAP.
5-12-95	AM	Revise letter.
5-15-95	AM	Final copy of CAP response letter signed and mailed.
8-29-95	AM	Rev. QSR dated 1-31-95 & cover letter dated 1-31-95
9-21-95	AM	Meeting w/ D Vorlaw Discussed site status, RAP & future ug's
1-18-96	AM	Review QR dated 10 31-95 and revised RAP dated 9-26-95. Issue CAP approval letter.

COUNTY OF ORANGE
HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH
WASTE MANAGEMENT SECTION

[ ] UST CLEANUP

[ ] H.W. SITE CLEANUP

ACTIVITIES REPORT

Company Name: Pomona Box Co.

Address:

City:

Contact Person(s): Phone:

Date	Staff	ACTIVITIES/COMMENTS
6-30-94	AM	Review QR dated 4-18-94 and VET dated 1-31-94. CAP has not yet been submitted.
7-22-94	AM	Ph w/Don Votaw. He will have Wayne Perry call to discuss the CAP requirements for this site.
7-27-94	AM	Ph w/R. Smith. He will send over a CAP asap (probably in a couple of weeks).
8-19-94	AM	Review QR dated 7-18-94 and cover letter dated 7-28-94.
9-6-94	AM	Review CAP dated 89-94 & cover letter. Begin writing letter.
9-7-94	AM	Complete review of CAP and ~~to~~ write and mail letter requesting a revised CAP.
9-22-94	AM	Ph w/Richard Smith (Wayne Perry). He does not have a copy of the UST regs. I will mail him a copy of the OCHCA summary of the Regs and direct him to the SWRCB for a complete copy.
12-21-94	AM	File OCHCA letter (dated 12-8-94) approving the CAP. Ph w/D Votaw. He asked for an extension to the 1-15-95 deadline (see the 12-8-94 OCHCA letter). He wants to submit a different CAP for this site so that he might be able to reuse the remediation equipment at his other cleanup site (92-UT-10) at this site. The CAP will be submitted from 1-15-94 and implementation will begin ~2 wks after OCHCA approval.

COUNTY OF ORANGE
HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH
WASTE MANAGEMENT SECTION

☐ UST CLEANUP

☐ H.W. SITE CLEANUP

ACTIVITIES REPORT

Company Name: Pomona Box Co.

Address: 301 West La Habra

City: La Habra

Contact Person(s): Don Vatau (RP) Phone: 871-0932

Richard Smith (Wayne Perry)

Date	Staff	ACTIVITIES/COMMENTS
9-14-93	AM	Prepared first draft of letter responding to the 7-31-93 QR
1-22-93	AM	Meeting w/ Don Vatau (RP). He rec'd the OCHCA letter dated 9-17-93. He said that he is now getting funding from the Cleanup Fund and he will be pushing his consultant to proceed with the aquifer test and implementation/submittal of the CAP.
2-29-93	AM	Rec'd QR dated 11-1-93, ~~[illegible]~~ Aquifer test Report dated 11-22-93, and ~~RAP~~ dated 12-7-93. QR & Aquifer Test Report are OK. The CAP is inadequate and must be revised.
-13-94	AM	Prepared letter requesting revisions to the CAP. Ph w/ D Vatau. He said that a revised CAP will be issued.
2-10-94	AM	Reviewed QR dated 1-31-94 & cover letter. GW contam is significant. QR states that a CAP will be issued, but does not say when.
5-9-94	AM	Meeting at the site with Don Vatau and Richard Smith (Wayne Perry). R Smith gave me a copy of the 1st Qtr 1994 QR dated 4-18-94 (and cover letter dated 4-28-94). We discussed the CAP requirements for this site. They will be submitting a revised CAP very soon (at which time I will review the VET report & detail)

ENVIRONMENTAL HEALTH DIVISION
WASTE MANAGEMENT SECTION

ACTIVITIES REPORT

Company Name: POMONA BOX #1 86-UT-224

Address: 301 W. Imperial Highway

City: La Habra State: Zip: 90631

Contact Person(s): Don Vofaw Phone: 871-0932

Richard Smith (Wayne Perry) 826-0352

Date	Staff	Activities/Comments
1992 12-21	Luis L.	Reviewed consolidated-WP for additional investigation (see 89UT163).
12-22	Luis L.	Drafted "adequate" letter response to WP (see 89-163)
1993 2-1	Luis L.	Talked to Mike Wisenga (WPC) and discussed changes in MW location. He said he was of impression that I wanted their proposed 2 wells disregarded & replaced with my suggestion somewhere else. A compromise location for each was agreed upon: one directly west - 30 ft away) from B-7 and one about midway between B-6 and B-8.
2-19	Luis L.	Reviewed status report for site: see 89-UT-163 entry.
5-13	Luis L.	Reviewed suppl. site investigation report dated April 27/93: 2 additional m-wells (MW-9 and 10) installed, both showing significant contamination. Only 1 m-well showed FP, the others showed high contaminate levels.
5-14	Luis L.	Continued review of other reports' data: one to expanding plume, a conservative soil/water corrective action plan (which is prepared to contain pollutant migration and mitigate soil and groundwater. Called Duke W. and explained my plan to have JRP submit CAP and finish delineation of contaminant plume. Drafted letter.
6-2	Luis L.	Initiated case invalidation procedure for 89UT163 which is now officially part of this (86UT224) case — per suggestion of State Cleanup Fund (see notation - activity entry - of 89UT163).
9-9-93	AM	Rec'd 7-31-93 2nd Qtr 1993 Status Report & 8-11-93 cover letter. Began review of file and of this report.
9-13-93	AM	Continue review of file.

86-221

COUNTY OF ORANGE
ENVIRONMENTAL HEALTH DIVISION
WASTE MANAGEMENT SECTION

ACTIVITIES REPORT

Company Name: Pomona Box #1

Address: 301 N. Imperial Highway

City: La Habra State: Zip: 90631

Contact Person(s): Don Votaw Phone: 871-0932

Richard Smith (Wayne Perry) 826-0352

Date	Staff	Activities/Comments
1992 8-5	Luis L.	Called Richard Smith and explained my concern about F.P. on 5 MW's that have not been addressed effectively by automatic recovery system. He said the recovery could be done more effectively by manual bailing. I said I'd get to Don Votaw & try to convince him to address FP sooner possible, with efficiency.
8-6	Luis L.	Drafted letter in response to qtr. report specifying change to a more efficient method of FP recovery, installation of additional MW's and preparation/submission of a CAP.
10-14	Luis L.	Reviewed file: several requirements have been asked of Don Votaw. I called Ric Smith to ask for status, but he said he has not gotten any direction from D. Votaw. I called Don V. to inquire; he said he'd been on vacation but will look into this files and discuss this with Wayne Perry Const'n., this consultant.
10-15	Luis L	Talked to Don Votaw; he said he liked to Wayne P. staff and they'd have some WP for HCA sometime next week.
11-3	Luis L.	Mailed SSR.
11-13	Luis L.	Reviewed g/water monitoring report dtd 10/28/92: Traces of F.P. in wells BH-1 to BH-5; BH-6 and BH-7 had some contamination; BH-8 remained N.D. No F.P. recovered; concerns expressed in HCA letter dtd. 8/19/92 still not addressed (no WP received so far). I had, however, talked to Richard Smith earlier; he said Don Votaw had asked him for a WP which he'll prepare after completion of quarterly monitoring report (this report).
12-3	Luis L.	Ric Smith called to say that he is in process of preparing WP for additional investigation, submittal by Dec 15 or 16.

COUNTY OF ORANGE
ENVIRONMENTAL HEALTH DIVISION
WASTE MANAGEMENT SECTION

86-224

ACTIVITIES REPORT

Company Name: Pomona Box #1

Address: 301 W. Imperial Highway

City: La Habra State: Zip:

Contact Person(s): Don Votaw Phone: 871-0932

~~Tom Rivers~~ Richard Smith 826-0352

Date	Staff	Activities/Comments
1992 4-23 Cont'd.	Luis L.	Met with Don Votaw: explained to him a requirement to effectively remove free product, and possibly addressing dissolved phase HC contamination simultaneously. I also expressed possible need for another well S/G from the former gasoline tank excavation because plume is apparently migrating. Don Votaw requested copy of UST because his application for State c/a fund was rejected. I suggested he also include a c/a notification letter copy with the UST.
4-30	Luis L.	Reviewed consolidated report: apparently FP recovery for this quarter had stopped and was not put into operation (or no FP was ever present!). Reviewed previous reports also; B-7 benzene level decreasing, while B-6 and B-8 did not show any benzene. GW contaminant plume apparently still migrating — must ask RP for plan to contain migration and set up a more effective FP recovery system or an efficient incineration process.) Called Tom Rivers: left message
5-1	Luis L.	Called T. Rivers - already left office.
5-4	Luis L.	Returned call of T. Rivers; I requested copy of Oct. 29/87 Supplemental Site Investigation Report. He said he'd have copy sent to me.
5-6	Luis L.	Rec'd. copy of report dtd. 10-29-87 & requested Tom Rivers to send me, consolidated all boring logs/analyzed lab results vs a-vis substratum/soil types and possibility of impacted ARS. Plotted on consolidated map all pertinent information.
5-7	Luis L.	Called Wayne Perry's Tom Rivers and discussed possible need for a MW between gas & diesel excav. areas. Met w/ Tom Rivers to discuss future plans. Will monitor all wells for a while, when no more TPH FP is observed in wells, gw samples will be taken. Based on levels, either a CAP or L.T. monitoring will be required. (Prorated time & mileage w/ 89-163).
8-4	Luis L.	Reviewed Qtr rpt. dtd. 7-24-92: F.P. in 5 MW's, dissolved HC in 2 others, increasing from 1st quarter; only the most d/gradient well (BH8) had no contaminants. No F.P. recovered the past 2 quarters & in the last 5 quarters (1½ years) no F.P. had been recovered in spite of its presence in 5 MWs (probably ineffective system or small radius of influence). Called R. Smith (left message)

REV:10/31/91 FORM #33

COUNTY OF ORANGE
ENVIRONMENTAL HEALTH DIVISION
WASTE MANAGEMENT SECTION

86-224
WPPN · 88.03

ACTIVITIES REPORT

Company Name: Pomona Box (#1)

Address: 301 West Imperial Highway

City: L.H. State: Zip:

Contact Person(s): Don Votaw Phone: 871-0937
Tom Rivers 826-0352

Date	Staff	Activities/Comments
(1991) 9-10	Luis L.	Reviewed rept. on add. S/A. dtd. Aug. 19, 1991. One MW was installed SW of B-7. No soil nor g/w contamination was detected.
10-8	Luis L.	Talked to Tom Rivers: he says they feel an extra mo is not called for: sampling (analysis of down gradient well waters will help substantiate this).
11-12	Luis L.	Reviewed Status rpt. dtd. 10-14-91. Only 4 wells out of 8 sampled due to FP. FP in MWS B-1, B-2, B-3 and B-5. Report combines sampling of B-7 and B-9 (89UT163-Pom. Box #2). Will continue product recovery.
(1992) 1-3-92	Luis L.	Updated status on S/A / pend. (see computer printout)
2-5	Luis L.	Reviewed 4th Qtr report: FP in 5 wells, including B-4 which did not have FP before. Also dissolved HC contam. found in B-6 (w/c did not have any last qtr). Contam. levels in B-7 increasing. F.P. had not been removed the past two quarters of 1991! Drafted Notice to Remove Rec F.P.
2-10	Luis L.	Filed copy: Notice To Remove Recbl F.P.
2-13	Luis L.	Call from Don Votaw: he wanted to know what HCA ltr dtd. 2/10/92 was about. I explained that any FP must be recovered from site. He said he'd call Wayne Perry.
2-26	Luis L.	Reviewed file: plume apparently moving d/g (see B-7) and FP not successfully being recovered. A CAP must be conceived & submitted for this site. F.P. plume, again, may have to be fully defined and "fully" recovered. Called Tom Rivers: he said he hopes that after FP removal, g/w will have only minor, if ever, dissolved phase contamination. He said well B-4 pump was not effectively getting out FP & is being adjusted.
3-24	Luis L.	Reviewed file: (interim) FP recovery in progress. Revised SSR to reflect Task Status #6 (Remediation). Filed SSR.
4-23	Luis L.	Reviewed file: Free product recovery by ARS started April 1988 and has recovered about 763 gallons so far of gasoline product. As of latest monitoring (Dec 91) 5 wells have F.P., where only 4 had it before. GW contaminant plume also spreading. Measures must be taken to contain the plume.

COUNTY OF ORANGE
ENVIRONMENTAL HEALTH DIVISION
WASTE MANAGEMENT SECTION

86UT224
WPPN. 88.03

ACTIVITIES REPORT

Company Name: Pomona Box (#1)

Address: 301 West Imperial Highway

City: L.H. State: CA Zip: 90631

Contact Person(s): D. Votaw Phone: 871-0932

Date	Staff	Activities/Comments
1991 2/1	Luis L.	Reviewed Status (4th Qtr) rpt. dtd. 1/3/91. ARS still operational, but no FP recovered this Qtr. To continue product recovery.
3/18	Luis L.	Updated new information sheet.
3/26	Luis L.	Reviewed reports for revised. Sysi: ARS to recover FP. Plot plan of site into consolidated LH map.
4/18	Luis L.	Reviewed file for "act'y catgy" inventory: FP rec. by ARS.
5-6	Luis L.	Reviewed Qtr gas recovery oper. report. GW grad. dir. shifted to SW. FP recovery ongoing - to date 763 gal. of gas. have been recovered.
6-6	Luis L.	Reviewed file / site assmt / Qtr reports in conjunction with the newer LUST case 89-163 wh is at the site. Called Jane F. of Tech. Support (HCA) to ask for prior Prop. 65 on this site. Jane said it was a closed case by 10/24/89, but that I had to prepare another one if the case is still active. Prepared a new Prop. 65 Notif. Report.
6-11	Luis L.	Maintained file / revised SSR.
6-18	Luis L.	Filed revised SSR / MW info.
7-22	Luis L.	Reviewed case closed rpt. dtd. 4/8/91) FP only max. 02' thick. After complete FP rec'y - monitor all wells to determine dissolved phase benefits. [So far only FP rec'y & GW gauging being done @ site].
7-24	Luis L.	At site to meet w/ D. Votaw. Met also Tom Powers. We discussed recovery system & apparently very little FP is left in BH-5. I told Don V. & T. Powers that henceforth, all wells w/o FP should be sampled / analyzed.
8-5	Luis L.	Reviewed Qtr. rpt. dtd. 7/29/91. To date 763 gal. of FP product has been recovered from site since start of ARS in April 1988 (3 yrs ago). Prepared adeq. ltr. - asking for gw sampling / analysis of samples from wells w/o FP.
8-8	Luis L.	Proofed / signed "adeq." ltr. in house.

COUNTY OF ORANGE
HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH
WASTE MANAGEMENT SECTION

[X] UST CLEANUP

[ ] H.W. SITE CLEANUP

ACTIVITIES REPORT

W/P. A.N. 88.03

86 UT 224 Local (11.5') ✓ a/o 9/90.
GW depth ~~13 to~~ (~~[illegible]~~ MW's)
FP ~~height~~ pumped out ~~[illegible]~~ by ARS — 0.2' max as of 1/1/90
GW flow to ~~South~~ SW a/o 4/91.

Company Name: Pomona Box (1)

Address: 301 West Imperial Hwy.

City: La Habra, CA 90631

Contact Person(s): Don / Daryl Votaw — Phone: 871-0932

Randy Brand (Wayne Perry) — 826-0352

1990

Date	Staff	ACTIVITIES/COMMENTS
1-16 Cont'd.		Randy Brand called back — will look into files / will send latest update.
1-23	Luis L.	Rec'd. copy Oct. 24/89 status report.
1/24	Luis L.	Reviewed report dtd. Oct. 24/89, no data on borings B4, B5 & B6: will ask Randy B, as well as copy of Oct./84 supplem. site invest. report. Called Randy B — L.M. w/ secretary.
1/26	Luis L.	Called Randy B — asked for more reports. he said he'll send all he's got.
2/8	Luis L.	Rec'd. / filed ltr fr. Randy Brand, W.P.
2/28	Luis	Reviewed file for status: shall await quarterly report.
4/4	Luis	Reviewed report for MW / "health haz." categorization / Prop. 65 notif. (none in file
4/18	Luis	Reviewed file for FP removed. status
5/2	Luis	Called (returned call) Randy B — out till next wk: L.M.
5/30	Luis	Rec'd. / reviewed status rpt dtd. 23 May '90: ARS still operating & recovering F.P., whose thickness ranges fr. TR to 0.20'.
5/30	Luis	Continued case review, viz-a-vis composite contam. analysis.
7/30	Luis	Reviewed status report dtd July 20/90. Essentially FP recovery & gw mtg!
10/29	Luis	Call from Daryl Votaw: set meeting on 2 sites for Wed. Oct 3 tentatively @ 10:00 AM — HCA office.
10/31	Luis	Rec'd / reviewed status rpt. dtd. 10/18/90, F.P. recovery using ARS ongoing 7/5 gal. gas recovered to date since 1987. (B5 is rec. well). No FP in wells, except trace in B5 during 3rd Qtr. * Met with Don Votaw: asked about what to do to finish cleanup. I said FP will have to be removed, then a round of sampling / gauging will be needed, data from which will be basis for decision of whether to monitor or remediate groundwater contamination.

REV·10/13/87

COUNTY OF ORANGE
HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH
WASTE MANAGEMENT SECTION

☐ UST CLEANUP

☐ H.W. SITE CLEANUP

ACTIVITIES REPORT

86 UT 224
Local
GW depth ~ 13' (15' in 89-163), FP in all borings. (9/89)

Company Name: Pomona Box

Address: 350 W. Valencia

City: Fullerton

Contact Person(s): Don & Cheryl Voton Phone: 871-0932

Date	Staff	ACTIVITIES/COMMENTS
1/26/88	TBB	Dave Henry called. He said that they were getting ready to place a treatment system in at the facility. He asked for permission to pave over tank excavation area. I didn't object as long as he understands that the soil must still be treated.
3/1/88	TBB	Don Voton called. He asked permission to excavate and compact, ~~[illegible]~~ pave tank hole. I told him he could but that the soil will eventually need to be treated. He asks if he could excavate and spread the soil out on site for aeration. I told him he could do that too. I told him to keep us informed of his decision.
-30-89	M. O'Donnell	Received call from Dave Henry - he states that he is aware that he is late on responding to the 2-2-89 UIR letter, but that he'll have a report in soon.
990 1-16	Luis L.	Called Wayne Perry (Tom Rivers). Asked who was handling this case; it was Randy Brand. I requested Tom to LM for Randy. Reviewed this case: apparently some FP had been pumped out, but no F/u report has been received since Sept-'87 to reply to 2/89 ltr (URR).

REV: 10/13/87

COUNTY OF ORANGE
HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH
WASTE MANAGEMENT SECTION

☐ UST Cleanup

☐ H.W. Site Cleanup

CLEANUP ACTIVITIES REPORT

Company Name: Pomona Bot

Address: 350 W. Valencia

City: Fullerton

Contact Person(s): Don Votaw (father) Phone: 871-0932

Daryl Votaw (son)

Date	Inspector	ACTIVITIES/COMMENTS
9/24/87	BB	Talked to Ann Knight of Reg. Board. She stated that Wayne Perry Const. proposed to make 3 more borings and develop as wells. 2 will be to the South and 1 in the upgradient direction.
9/28/87	BB	Phone con with Daryl Votaw. Discussed need to remediate soil. He stated that Wayne Perry will address both water + soil depending on out come of borings proposed.
10/22/87	BB	Returned call from Chris of Congressman Dannemeyer's office to get information on site. Apparently Don Votaw called Dannemeyers office and said he couldn't afford to spend any more money. I gave Chris site status, name of agencies involved and information on possible aid (gave here name + # of pollution liability insurance person in Illinois.

REV:04/28/8

COUNTY OF ORANGE
HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH
WASTE MANAGEMENT SECTION

☐ UST Cleanup

☐ H.W. Site Cleanup

CLEANUP ACTIVITIES REPORT

Company Name: Pomona Bop

Address: 350 W Imperial, LA

City: La Habra

Contact Person(s): Don Votaw

Daryl Votaw

Phone: 871-0932

Date	Inspector	ACTIVITIES/COMMENTS
6/24/87	TBB	Don Votaw returned call. He stated that he thought that Wayne Perry had been out last month to pump wells. He said Daryl was handling the case.
7/16/87	TBB	Daryl Votaw returned call. He said that Wayne Perry is periodically pumping the wells. He said that a copy of report was not been sent to Reg. Board but that he would send a copy to the board.
7/28/87	TBB	Called Kurt Berchtold. Asked if he had been sent report. He said he hadn't so I sent him a copy.
8/5/87	TBB	Received call from Jim Knight. She will request additional characterization.

REV:04/28/87

COUNTY OF ORANGE
HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH
WASTE MANAGEMENT SECTION

☐ UST Cleanup
☐ H.W. Site Cleanup

CLEANUP ACTIVITIES REPORT

Company Name: Pomona Bx

Address: 350 W. Imperial Hwy, LA Habra

Contact Person: _____ Phone: _____

Date	Time Spent	Inspector	ACTIVITIES/COMMENTS
2/1/88			Tanks Pulled.
2/8/88			S. Marson onsite to take verification sample. Groundwater was found at 17'. Product was observed on ground water. No sample was taken
4/15/88		RB	Met w/ Daryl + Don Votaw onsite to discuss UST and make inspection. Recieved Wayne Perry Report. Informed Votaw that additional work is necessary and pumping should start ASAP. Inform them to contact RWQCB. Relayed info to Wayne Perry (Pave Bury) on 4/16.
4/24/88		RB	Called Votaws left message
4/27/88		RB	Called and Knight to check if RWQCB had recieved report. Store owner wan't call back.

PRIORITIZATION WORKSHEET FOR LUFT SITES

Check The Following Boxes Which Apply
Where Needed, Provide Further Explanation On Back

Case I.D.#: 86 UT224 ☒ **Initial**

Name: Pomona Box Co. ☐ **Reevaluation**

Address: 301 Imperial Hwy, La Habra

PRIORITY 1 - HIGH PRIORITY SITES

A. Current drinking water source - impacted or likely to be impacted through future migration.

- ☐ 1. Currently used municipal or domestic well impacted, i.e., drinking water wells where MCLs are exceeded.
- ☐ 2. Currently used municipal or domestic well threatened, (e.g. release site (GW) within 2000 feet of currently used well and/or possible vertical conduit exists to deep zone - that is used as drinking water source for the threatened well).
- ☐ 3. Currently used identified "Sole Source Aquifer" is impacted.
- ☐ 4. Other currently used municipal or domestic aquifer is impacted.
- ☐ 5. Currently used aquifer threatened by future migration (i.e. lateral pollutant transport or vertical movement through conduits).

B. Known health/safety/environmental impacts requiring prompt action.

- ☐ 1. Vapors at explosive levels in confined spaces, i.e., sewers or basements.
- ☐ 2. Vapors detected above human health safe levels at or near human receptors.
- ☐ 3. Free product in soil or groundwater.
- ☐ 4. Surface water/aquatic environment impacted (surface sheen or habitat covered).
- ☐ 5. Soil quality levels exceed human health safe levels and exposure likely, given existing site conditions.

C. Administrative need exists.

- ☒ 1. 2004 Funding available through "letter of commitment".
- ☐ 2. Enforcement action follow-up is necessary.
- ☐ 3. Closure request received by the responsible agency.
- ☐ 4. Public, Responsible Party or Political concerns require expeditious efforts.

PRIORITY 2 - MODERATE PRIORITY SITES

A. Water resource other than currently used drinking water is or may be impacted.

- ☐ 1. Existing beneficial use (other than municipal supply) is impacted.
- ☐ 2. Potential Source of Drinking Water (defined by SWRCB Policy 88-63) significantly impacted with high probability of future use.
- ☐ 3. Existing beneficial use threatened (requires mitigation study).
- ☐ 4. Soil contamination currently exists, requiring additional investigation of groundwater and/or soil to review threat and reprioritize at sites with designated beneficial uses.

B. Other health/safety/environment impacts are unknown, require additional investigation (groundwater/surface water), and/or health and ecological risk assessment.

- ☐ 1. Potential vapors at explosive levels in confined space.
- ☐ 2. Potential vapors above human health safe levels with receptors.
- ☐ 3. Potential free product at a site.
- ☐ 4. Potential for migration to aquatic habitats or surface waters.
- ☐ 5. Potential human exposure to soil above safe level.

PRIORITY 3 - LOW PRIORITY SITES

A. Minor or no potential water resource impacts exist.

- ☐ 1. No designated beneficial uses of water impacted.
- ☐ 2. Potential source of drinking water (defined by SWRCB Policy 88-63) with limited or minor impacts.
- ☐ 3. Potential source of drinking water (defined by SWRCB Policy 88-63) impacted where low probability of future use is determined.

B. Low potential health/safety/environmental impact exists after investigation and, if necessary, a Health or Ecological Risk Assessment has been completed and accepted.

- ☐ 1. Soil only cases with residual contaminated soil left in place.
- ☐ 2. Soil only cases where full cleanup achieved.

Specialist: Kathy F Martinez Date: 6-22-94

This case was Closed 10/24/88 per P. Brewer

COUNTY OF ORANGE
HCA/ENVIRONMENTAL HEALTH
PROPOSITION 65
NOTIFICATION REPORT
(714) 834-7172

ID# 87-0070

CASE ID# _____

TIME SPENT 5 min + 15

DATE REPORTED: 1-16-87 TIME: 1:35pm REPORTED BY: K Berntold AGENCY: SARWQCB

ADDRESS: 6809 Indiana Ave Riverside TELEPHONE: (714) 782-4130

DATE OF INCIDENT: Ongoing TIME: —

INCIDENT LOCATION: "Pomona Box" 350 w. Imperial Hgtway La Habra

CROSS STREETS ( ) SITE TELEPHONE CONTACT/OPERATOR

OWNER: Same ADDRESS: —

DESCRIPTION/CAUSE OF INCIDENT: Gasoline UST leak — Contaminated Soil & gw. Suspected. Free product on ground water.

RESPONSIBLE PARTY - NAME: — TELEPHONE: ( )

IDENTIFICATION OF DISCHARGED WASTE:

CHEMICAL NAME/COMMON NAME	PHYSICAL STATE	VOLUME	TLV/HAZARDOUS PROPERTIES, LEL
Gasoline	unk	unk	TLV - 300ppm

FIELD DATA (i.e., EQUIP. MONITORING):

ENVIRONMENT AFFECTED: ____ ROADWAY ____ GROUND WATER ____ SEWER OR STORM DRAIN ____ LAKE/STREAM ____ BAY/OCEAN ____ AIR ____ SOIL ____ FLOOD CHANNEL

LOCALE: ____ RESIDENTIAL ____ COMMERCIAL ____ OPEN AREA ____ PUBLIC PROPERTY ____ PRIVATE PROPERTY

DESCRIPTION OF EXTENT OF CONTAMINATION: SOIL unk

WATER unk

AIR _____

OTHER _____

NUMBER OF PERSONS REPORTEDLY INJURED: None MEDICAL TREATMENT RECEIVED? ___ YES ___ NO

IF YES, WHERE? — HOW MANY? _____

AGENCIES INVOLVED: 1 Sarwood 2 [illegible]

3 [illegible] 4 _____ 5 _____

CLEANUP CONDUCTED BY: _____

MATERIAL SAFETY DATA SHEETS ATTACHED? ___ YES X NO LAB ANALYSIS REQUIRED? ___ YES ___ NO

ADDITIONAL COMMENTS: Drums

DOES FURTHER ACTION NEED TO BE TAKEN? ___ YES ___ NO

REFERRED TO FOR FOLLOW-UP: NAME/AGENCY _____ DATE _____ TIME _____

FACTORS THAT ARE LIKELY TO CAUSE SUBSTANTIAL INJURY TO THE PUBLIC HEALTH OR SAFETY: _____

Any designated government employee who obtains information in the course of his official duties, revealing the illegal discharge or threatened illegal discharge of a hazardous waste, that is likely to cause substantial injury to the public health and safety, must report such information within 72 hours to the Board of Supervisors and Health Officer or face up to $25,000 in fines and/or up to three years in jail (pursuant to Section 25180.7 of the Health and Safety Code). The information submitted in this report is based upon the best available information at the time the report was completed.

REPORT RECEIVED BY: Sue Miller DATE: 1-16-87 TIME: 1:30pm

REPORT REVIEWED BY: Sue Miller DATE: 1-16-87 TIME: 1:30pm

CONTACT FOR FURTHER INFORMATION: Paul Brewer ( ) X 8181
TELEPHONE

01-02-87

update 1-7-86

570070

Tank has been pulled and backfilled with contaminated soil. 3 monitoring wells have been installed to help with site assessment.

No likelihood of public contact
No odors etc.

Site assessment on-going to determine the extent of contamination will decide cleanup methods after site assess.

4/20/88

COUNTY OF ORANGE/HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH (714) 834-8175
1725 WEST 17TH STREET, P.O. BOX 355
SANTA ANA, CA 92702
SITE MITIGATION/CLEANUP
REPORTING FORM

CASE ID: 86UT224

ACCOUNT NO.:

DATE RECEIVED: __/__/__

DBA: Pomona Box Company

ADDRESS: 301 West Imperial Highway
~~La Hab~~

CITY: [12] La Habra ZIP: 92635

CONTACT PERSON/Responsible party: PHONE: (714) 871-0932

CHEM ID: [DOT 1203] Gasoline

VOLUME: — UNITS: [99] unknown

HOW DISCOVERED: [76] ~~Onsite~~ inspection Tank Removal

[ ] OTHER (SPECIFY)

LEAK TYPE: [1] Tank leak

[ ] OTHER (SPECIFY)

CAUSES: [3] Corrosion

[ ] OTHER (SPECIFY)

AFFECTED RESOURCES: [7] Soil and groundwater

[ ] OTHER (SPECIFY)

REMEDIATION TECHNOLOGY (WATER): [1] Extraction/Pumping of free product.

REMEDIATION TECHNOLOGY (SOIL): [96] None to date

AMOUNT OF WASTES/CONTAMINATED SOIL REMOVED: 0 TONS

HOW DISPOSED: [90] Not yet disposed of

COMPLETED BY: SH

UST CLEANUP PROGRAM
SITE SPECIFIC REPORT SITE NO.: 86UT224

ACCOUNT NO.: SOURCE OF FUNDS: F SUBSTANCE: 8006619 GASOLINE
CONTRACTOR NO.: 30000 FEDERAL EXEMPT: N PETROLEUM: (Y/N) Y
SITE NAME: POMONA BOX CO #1

DATE REPORTED : 12/01/86
ADDRESS : 301 W IMPERIAL HIGHWAY DATE CONFIRMED: 12/01/86
CITY: 12 LA HABRA ZIP: 90631 MULTIPLE RPS: (Y/N) N

SITE STATUS

LEAD REFERRAL : L LOCAL
CASE TYPE (U/S/G/D) G CONTRACT STATUS: 6 EMERGENCY RESPONSE:

AFFECTED RESOURCES : 7 SOIL AND GROUNDWATER
HOW DISCOVERED : 6 TANK REMOVAL

RP SEARCH (S/I/N/R/) S DATE UNDERWAY: 12/01/86 DATE COMPLETED: 12/01/86
PRELIMINARY ASSESSMENT (U/C/) C DATE UNDERWAY: 12/01/86 DATE COMPLETED: 12/01/86
REMEDIAL INVESTIGATION (U/C/) U DATE UNDERWAY: 12/01/86 DATE COMPLETED:
REMEDIAL ACTION (U/C/I) I DATE UNDERWAY: 09/01/87 DATE COMPLETED:
POST REMEDIAL ACTION MONITORING (Y/N/U/C/) DATE UNDERWAY: DATE COMPLETED:
ENFORCEMENT ACTION TAKEN: (Y/N) Y TYPE (1/2/3/4/5/6) 2 DATE TAKEN : 08/08/91

LUFT FIELD MANUAL CONSIDERATION
(1/2/3 PLUS H/S/C/A/R/W/G OR O AS APPLICABLE) 2HSCA

CASE CLOSED (Y/R/H/) DATE CLOSED :
DATE EXCAVATION STARTED : 12/08/86 REMEDIAL ACTIONS TAKEN:
REMEDIATION TECHNOLOGY (WATER): 1 EXTRACTION/PUMPING - FREE UNDISSOLVED PRODUCT
REMEDIATION TECHNOLOGY (SOIL) : 96 NONE
HOW DISPOSED: 90 NOT YET DISPOSED OF AMOUNT 0 TONS

RESPONSIBLE PARTIES

CONTACT NAME : DON VOTAW
COMPANY NAME : POMONA BOX CO
ADDRESS : 301 W IMPERIAL HIGHWAY
CITY/STATE/ZIP: LA HABRA, CA 90631

CONTACT NAME :
COMPANY NAME :
ADDRESS :
CITY/STATE/ZIP: ,

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COMPANY NAME :
ADDRESS :
CITY/STATE/ZIP: ,

INSPECTOR NO. : 219 UPDATE 11/03/92 03/23/92 06/17/91 03/06/90 12/

COUNTY OF ORANGE/HEALTH CARE AGENCY
MONITORING WELL INFORMATION FORM

SITE NO. : 86UT224

UST ACCOUNT NO. :

SITE NAME : POMONA BOX CO #1

ADDRESS : 301 IMPERIAL HIGHWAY

CITY CODE : 12 LA HABRA

ZIP CODE : 90631 LA HABRA

RESPONSIBLE PARTY INFORMATION
DON VOTAU

POMONA BOX CO

301 IMPERIAL HIGHWAY

90631 LA HABRA

714-871-0932

Total Number Of Wells Open : 6

Total Number Of Wells Closed : 0

Total Number Of Wells 6

DATE	DEPTH TO GROUNDWATER BGS	UNIT OF MEASURE	GRADIENT	WELL PERMIT NO (NO.WELLS)
03/18/91	11.8	FEET	SE SW	
04/06/90	11.5	FEET	SSE	
01/01/87	14.3	FEET	SE	
5-7-92	10.0	FEET	SW	B-8 (89UT163)
5-7-92	15.0	FEET	SW	B-1 to 5
12-12-90	11.8-16.2	FT	SE	
3-4-91	11.2-15.5	FT	SW	change from historical direction of SE to new direction of SW.
3-15-93	9.1-15.8	FT	SW	

RECORDS RELEASE

RECORDS OF: Pomona Box Company
(Name)

301 West Imperial Hwy.
(Address)

La Habra, CA 90631
(City)

R.R. #: 94-1460

REQUESTOR: Krazan & Associates, Inc.
(Name)

215 W. Dakota Ave.
(Address)

Clovis, CA
(City)

TOTAL PAGES: 853

RELEASE DATE: 12-23-94

NAME: Sharon Villalba

RECORDS RELEASE

:ljs
REV:09/05/91
LINDA'S DISK/RR

COUNTY OF ORANGE
HEALTH CARE AGENCY

REGULATORY HEALTH SERVICES
ENVIRONMENTAL HEALTH

JULIETTE A. POULSON, RN, MN
DIRECTOR

MIKE SPURGEON
DEPUTY AGENCY DIRECTOR
REGULATORY HEALTH SERVICES

STEVEN K. WONG, REHS, MPH
DIRECTOR
ENVIRONMENTAL HEALTH

MAILING ADDRESS:
2009 EAST EDINGER AVENUE
SANTA ANA, CA 92705-4720

TELEPHONE: (714) 667-3600
FAX: (714) 972-0749
E-MAIL: environhealth@hca.co.orange.ca.us

Excellence
Integrity
Service

October 11, 2002

Donald E. Votaw
Pomona Box Company
301 West Imperial Highway
La Habra, CA 90631

Subject: **Remedial Action Completion Certification**

Re: Underground Storage Tank (UST) Case
Pomona Box Company
301 West Imperial Highway
La Habra, California 90631
O.C.H.C.A. Case # 86UT224

Dear Mr. Votaw:

This letter confirms the completion of site investigation and corrective action for the underground storage tank(s) formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this Agency was accurate and representative of site conditions, this Agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25299.37 of the Health and Safety Code.

Please contact Anthony Martinez of our office at (714) 667-3716 if you have any questions regarding this matter.

Sincerely,

Steven K. Wong, REHS, MPH, Director
Environmental Health Division

SKW:dp
Attachment: Case Closure Summary

cc: Carl Bernhardt, Santa Ana Regional Water Quality Control Board
SB 562 Database, State Water Resources Control Board
Cleanup Fund Manager, State Water Resources Control Board
Larry Honeybourne, Environmental Health

Case Closure Summary

Leaking Underground Fuel Tank Program

Date: **August 6, 2002**

I. Agency Information

Agency Name: **Orange County Health Care Agency**	Address: **2009 East Edinger Avenue**
City/State/Zip: **Santa Ana, CA 92705**	Phone: **(714) 667-3600**
Responsible staff person: **Anthony F. Martínez**	Title: **Geologist**

II. Case Information

Site Facility Name: **Pomona Box Company**		
Site Facility Address: **301 W. Imperial Highway, La Habra**		
RB LUSTIS Case No.:	Local Case No.:	LOP Case No.: **86UT224**
URF Filing Date:	SWEEPS No.:	

Responsible Party	Address	Phone Number
Donald E. Votaw	**301 W. Imperial Hwy La Habra, CA 90631**	**(714) 871-0932**

Tank No.	Size in Gallons	Contents	Closed In-Place/Removed?	Date
1	**1,000**	**Gasoline**	**Removed**	**December 1986**
2 & 3	**1,000**	**Diesel**	**Removed**	**September 1989**
4 & 5	**5,000**	**Gasoline**	**Removed**	**September 1989**
6 & 7	**1,000**	**Gasoline**	**Removed**	**September 1989**
8	**550**	**Gasoline**	**Removed**	**September 1989**

III. Release and Site Characterization Information

Cause and type of release: **Unknown**		
Site Characterization Complete: **yes**	Date approved by oversight agency:	
Monitoring wells installed?: **yes**	Number:**11**	Proper screened interval?: **yes**
Highest GW depth BGS: **10 feet**	Lowest depth: **15 feet**	Flow direction: **SW**
Most sensitive current use: **Designated Domestic and Municipal Supply**		
Are drinking water wells affected?: **no**	Aquifer name:	
Is surface water affected?: **no**	Nearest/affected SW name: **Coyote Creek**	
Off-site beneficial use impacts (addresses/locations): **None**		
Reports on file?: **yes**	Where are reports filed?: **OCHCA office**	

Treatment and Disposal of Affected Material

Material	Amount (include units)	Action (treatment or disposal/destination)	Date
Tank	**8**	**Removed, disposal unknown**	**1986 and 1989**
Soil			
Groundwater			
Barrels			

Case Closure Summary

Leaking Underground Fuel Tank Program

Date: **August 6, 2002**
Case #: **86UT224**

III. Release and Site Characterization Information (continued)

Maximum Documented Contaminant Concentrations—Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppm)		Contaminant	Soil (ppm)		Water (ppm)	
	before	after	before	after		before	after	before	after
TPH	12,720	2,200	62	1.6	MTBE	NA	<6.3	NA	<0.005
Benzene	44	<0.63	5.5	0.19	TBA	NA	NA	NA	0.130
Toluene	310	6.9	4.7	0.04	DIPE	NA	NA	NA	0.003
Ethylbenzene	172	29	7	0.01	ETBE	NA	NA	NA	<0.002
Xylene	911	130	3.3	0.16	TAME	NA	NA	NA	<0.002

Comments (Depth of Remediation, etc.): **A single 1,000 gallon capacity gasoline steel UST was removed in December 1986 at the subject site. During excavation to remove contaminated soils, groundwater and free product were encountered at a depth of approximately 13 feet. The excavation was backfilled with contaminated soil and site assessment work was initiated. Soil borings B-1 to B-7 were drilled and sampled in 1987. All of the borings were completed as groundwater monitoring wells. Free product and dissolved-phase hydrocarbons were detected in all of the wells. Manual free product recovery was initiated in June 1987. An automated recovery system was installed in April 1988.**

Seven additional USTs were removed from the western side of the property on September 1989. Subsequently, four monitoring wells (B-7 to B-10) were installed on-site and sampled as part of the supplemental site investigations that were conducted. A monitoring well (B-11) was installed in Imperial Hwy.

Since 1988, quarterly groundwater monitoring was conducted at all of the monitoring wells. On-site, groundwater was noted at approximately 13 feet bgs during the tank removal activities in 1986 and 1989, and is currently between 10 and 15 feet bgs in the monitoring wells.

With approval from OCHCA, a single remediation system was selected for two sites owned by the same RP (Pomona Box Company located at 301 and Votaw-Davis Properties at 101 W. Imperial Hwy). Each site has a separate UST Cleanup Fund claim number. The two sites that required remedial action are separated by another property, also owned by Votaw-Davis, and are about 400 feet apart. Because both sites had similar contamination, had subsurface conditions and could be connected by underground piping, a single treatment system was constructed for soil and groundwater remediation activities at both locations. This reportedly resulted in substantial cost savings. The remediation system consisted of a vapor extraction system (VES) using a Baker Furnace 500 scfm thermal/catalytic oxidizer and a 30 gpm granular activated carbon groundwater extraction system. The dual phase remediation system operated continuously from January 1996 to August 1997, except during periods of maintenance and repair. The VES was discontinued in August 1997 and the groundwater extraction system operation was discontinued in March 1998 due to low influent hydrocarbon concentrations. The VES equipment was removed from the site in July 1999 with the approval of the OCHCA.

Post remediation quarterly groundwater monitoring was implemented and concentrations in all of the monitoring wells have either maintained non-detectable levels or have had a significant downward trend. The last quarterly groundwater monitoring was conducted during the first quarter of 2001.

As part of the closure assessment work, six verification borings/hydropunch samples were taken at worst case locations, particularly downgradient, to evaluate the dissolved petroleum hydrocarbon concentrations across the site. The closure soil sample data indicate some localized residual hydrocarbons remain in the soil from 10 to 15 feet bgs, at locations between the office and the maintenance shop. BTEX concentrations were very low or non-detect and no MTBE was found in any of the samples. The groundwater samples taken from the closure borings were consistent with the groundwater monitoring data. Review of the post-remediation quarterly groundwater data indicates there was no rebound in the concentrations.

Based upon the low concentrations and limited extent of residual hydrocarbons in soil and groundwater, the site poses no threat to groundwater resources or public health or the environment. This case may be closed.

Case Closure Summary

Leaking Underground Fuel Tank Program

Date: **August 6, 2002**
Case #: **86UT224**

IV. Closure

Does completed corrective action protect *existing* beneficial uses per the Regional Board Basin Plan? **Yes**		
Does completed corrective action protect *potential* beneficial uses per the Regional Board Basin Plan? **Yes**		
Does corrective action protect public health for current land use? **Yes**		
Site management requirements: **Shallow soil contamination exists, an occupational health plan should be considered if excavation occurs at this site.**		
Should corrective action be reviewed if land use changes? **Yes, shallow soil contamination left in place.**		
Monitoring well decommissioned: **not yet**	Number decommissioned: **0**	Number Retained: **11**
List enforcement actions taken: **none**	List enforcement actions rescinded: **not applicable**	

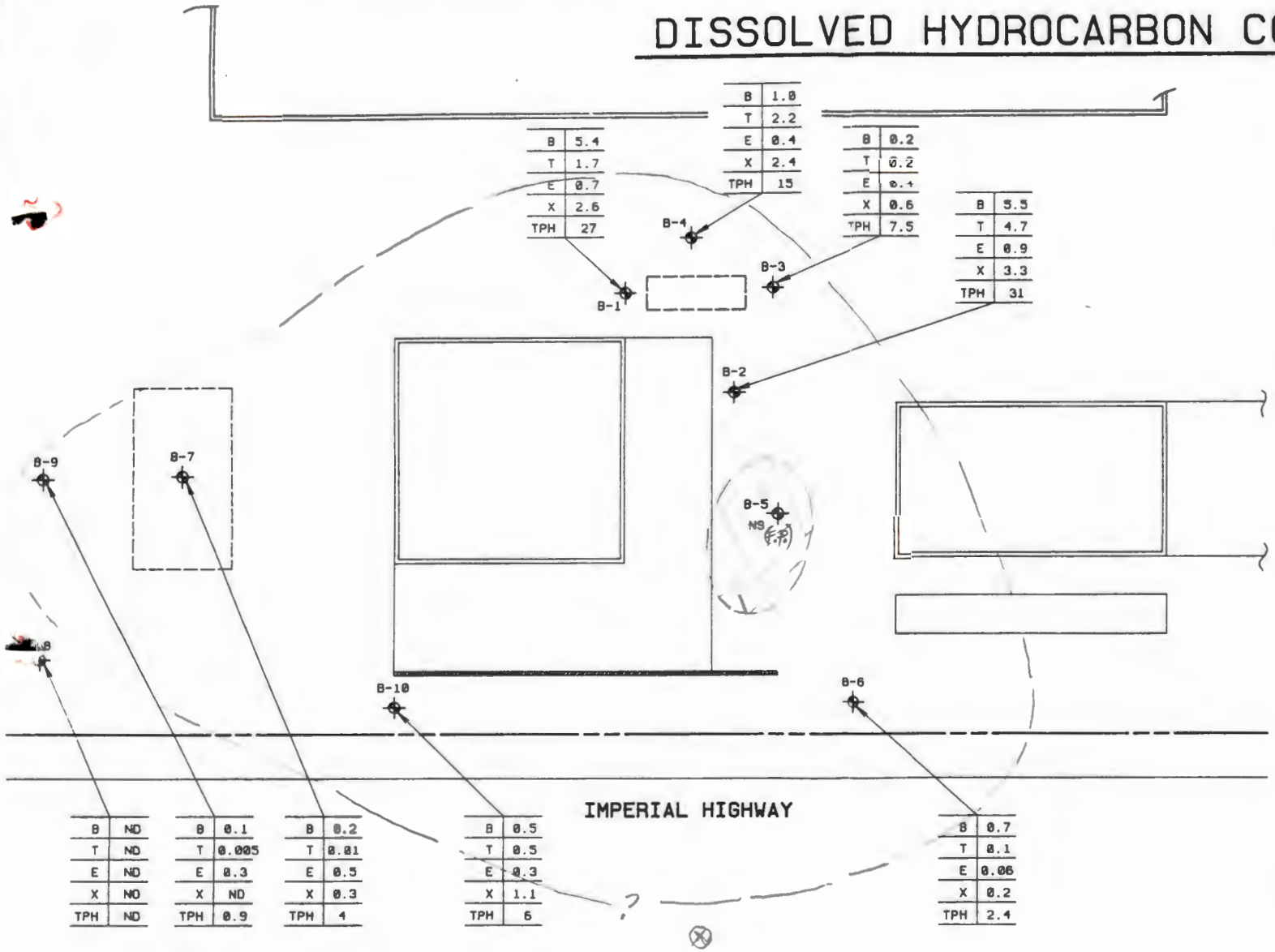
V. Local Agency Representative Data

Name: **Anthony F. Martínez**	Title: **Geologist**	Signature/Date: 8-14-02
Name: **Seth Daugherty**	Title: **Sup. Haz. Waste Spec.**	Signature/Date: 8-27-02
Name: **William Diekmann**	Title: **Sup. Haz. Waste Spec.**	Signature/Date: 8/29/02
Name: **Karen Hodel**	Title: **Program Manager**	Signature/Date: 9/13/02

VI. RWQCB Notification

Date Submitted to RB:	RB Response: Concur (see 10-4-2 SARWQCB fax)	
Name:	Title:	Signature/Date:
Name: **Kenneth Williams**	Title: **Sr. Eng. Geologist**	Signature/Date: signed by KW, see fax

DISSOLVED HYDROCARBON CONCENTRATION MAP



B	5.4
T	1.7
E	0.7
X	2.6
TPH	27

B	1.0
T	2.2
E	0.4
X	2.4
TPH	15

B	0.2
T	0.2
E	0.4
X	0.6
TPH	7.5

B	5.5
T	4.7
E	0.9
X	3.3
TPH	31

B	ND
T	ND
E	ND
X	ND
TPH	ND

B	0.1
T	0.005
E	0.3
X	ND
TPH	0.9

B	0.2
T	0.01
E	0.5
X	0.3
TPH	4

B	0.5
T	0.5
E	0.3
X	1.1
TPH	6

B	0.7
T	0.1
E	0.06
X	0.2
TPH	2.4

KEY

B-10 — MONITORING WELL SHOWING CONCENTRATION OF DISSOLVED HYDROCARBONS IN MG/L.

N

NOTES: 1. DATE OF SAMPLING 3/15/93.
2. NS - NOT SAMPLED, PUMP WELL

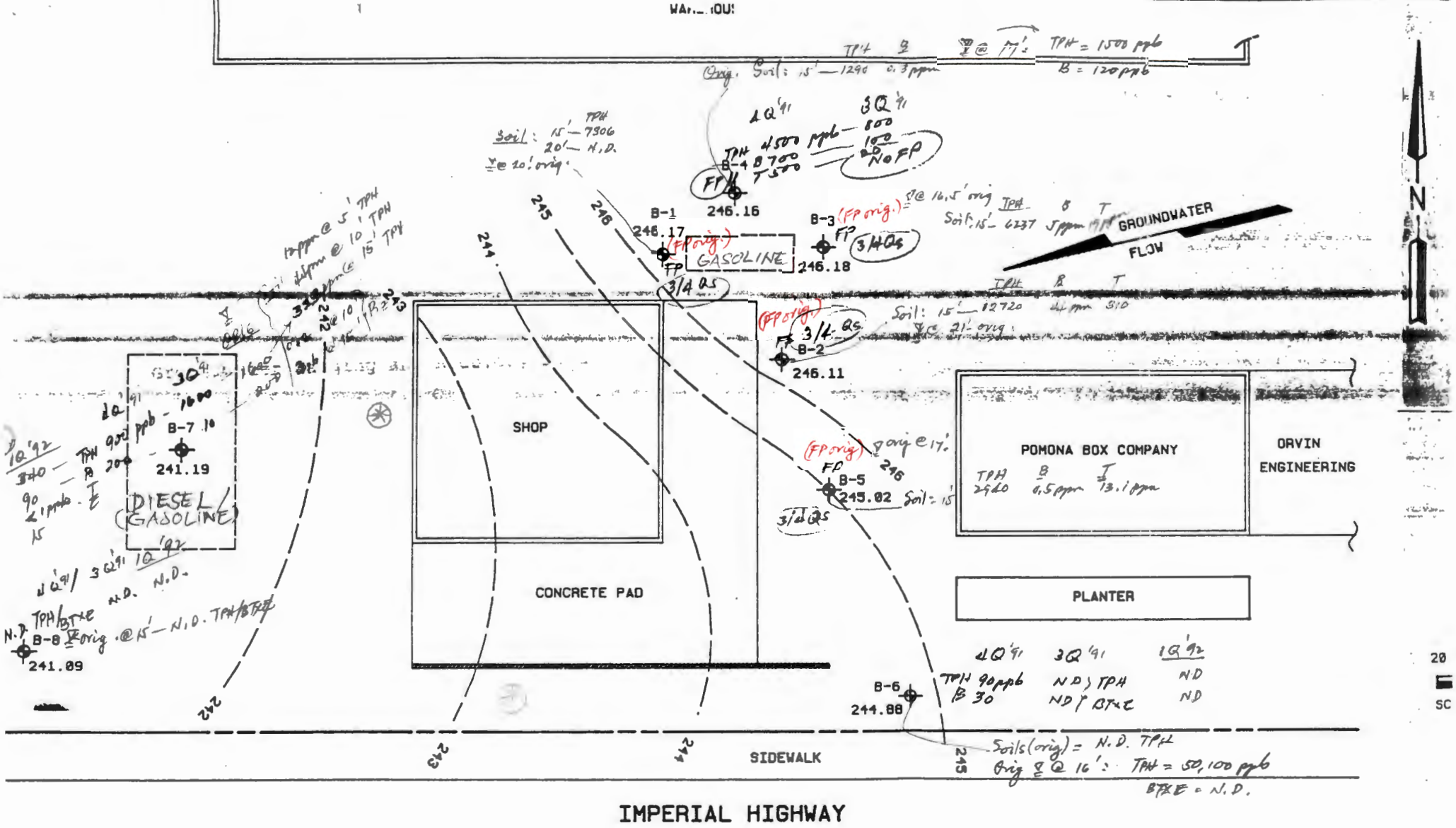
20 0 20 40
SCALE FEET

POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA.

PROJECT NO.	FIGURE NO.
88.3X	8
DRAWN BY	
EL 4/22/93	

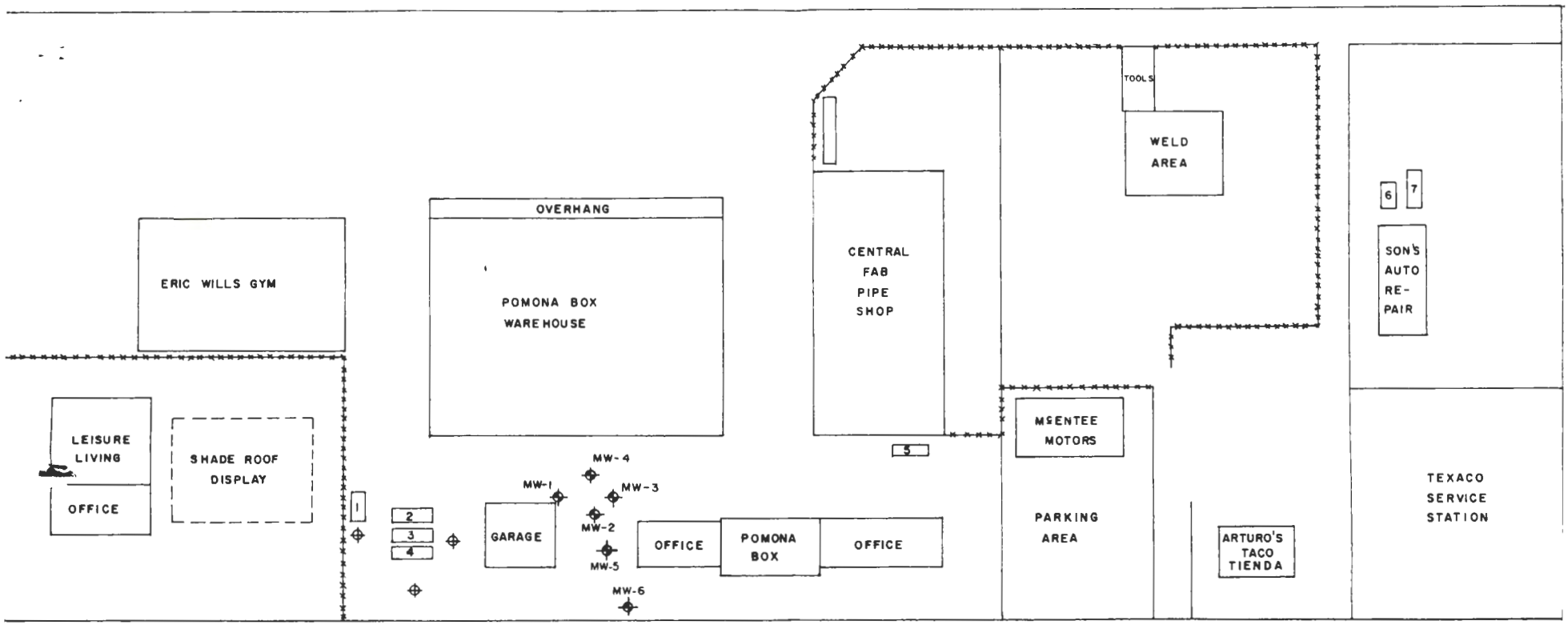
WaynePerry

GROUNDWATER



Consolidated Analysis Map
5-6-92

PLOT PLAN



IMPERIAL HIGHWAY

N

KEY

MW-4 MONITORING WELL

4 TANK LOCATION/NUMBER

PROPOSED MONITORING WELL

60 0 60 120

SCALE FEET

POMONA BOX COMPANY
301 W. IMPERIAL HIGHWAY
LA HABRA, CA.

PROJECT NO.	FIGURE NO.
89.151	1
DRAWN BY E.L. 9/19/89	

Post-It™ brand fax transmittal	o 7671	# of pages ▸ 2
To Anthony Martinez	From Carl Burnhardt	
Co. OCHCA	Co. CRWQCB-SAR	
Dept.	Phone # 909-782-4495	
Fax # 714-568-5116	Fax #	

Summary
Fuel Tank Program

Date: **August 6, 2002**

I. Agency Information

Agency Name: **Orange County Health Care Agency**	Address: **2009 East Edinger Avenue**
City/State/Zip: **Santa Ana, CA 92705**	Phone: **(714) 667-3600**
Responsible staff person: **Anthony F. Martinez**	Title: **Geologist**

II. Case Information

Site Facility Name: **Pomona Box Company**		
Site Facility Address: **301 W. Imperial Highway, La Habra**		
RB LUSTIS Case No.:	Local Case No.:	LOP Case No.: **86UT224**
URF Filing Date:	SWEEPS No.:	

Responsible Party	Address	Phone Number
Donald E. Votaw	**301 W. Imperial Hwy La Habra, CA 90631**	**(714) 871-0932**

Tank No.	Size in Gallons	Contents	Closed In-Place/Removed?	Date
1	**1,000**	**Gasoline**	**Removed**	**December 1986**
2 & 3	**1,000**	**Diesel**	**Removed**	**September 1989**
4 & 5	**5,000**	**Gasoline**	**Removed**	**September 1989**
6 & 7	**1,000**	**Gasoline**	**Removed**	**September 1989**
8	**550**	**Gasoline**	**Removed**	**September 1989**

III. Release and Site Characterization Information

Cause and type of release: **Unknown**		
Site Characterization Complete: **yes**	Date approved by oversight agency:	
Monitoring wells installed?: **yes**	Number:**11**	Proper screened interval?: **yes**
Highest GW depth BGS: **10 feet**	Lowest depth: **15 feet**	Flow direction: **SW**
Most sensitive current use: **Designated Domestic and Municipal Supply**		
Are drinking water wells affected?: **no**	Aquifer name:	
Is surface water affected?: **no**	Nearest/affected SW name: **Coyote Creek**	
Off-site beneficial use impacts (addresses/locations): **None**		
Reports on file?: **yes**	Where are reports filed?: **OCHCA office**	

Treatment and Disposal of Affected Material

Material	Amount (include units)	Action (treatment or disposal/destination)	Date
Tank	**8**	**Removed, disposal unknown**	**1986 and 1989**
Soil			
Groundwater			
Barrels			

Case Closure Summary

Leaking Underground Fuel Tank Program

Date: **August 6, 2002**
Case #: **86UT224**

IV. Closure

Does completed corrective action protect *existing* beneficial uses per the Regional Board Basin Plan? **Yes**		
Does completed corrective action protect *potential* beneficial uses per the Regional Board Basin Plan? **Yes**		
Does corrective action protect public health for current land use? **Yes**		
Site management requirements: **Shallow soil contamination exists, an occupational health plan should be considered if excavation occurs at this site.**		
Should corrective action be reviewed if land use changes? **Yes, shallow soil contamination left in place.**		
Monitoring well decommissioned: **not yet**	Number decommissioned: **0**	Number Retained: **11**
List enforcement actions taken: **none**	List enforcement actions rescinded: **not applicable**	

V. Local Agency Representative Data

Name: **Anthony F. Martinez**	Title: **Geologist**	Signature/Date: 8-14-02
Name: **Seth Daugherty**	Title: **Sup. Haz. Waste Spec.**	Signature/Date: 8-22
Name: **William Dickmann**	Title: **Sup. Haz. Waste Spec.**	Signature/Date: 8/29/02
Name: **Karen Hodel**	Title: **Program Manager**	Signature/Date: 9/13/02

VI. RWQCB Notification

Date Submitted to RB:	RB Response: Concur	
Name:	Title:	Signature/Date:
Name: **Kenneth Williams**	Title: **Sr. Eng. Geologist**	Signature/Date: 10/3/02

This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official site file. Revised: 10/22/97

WGR
Southwest, Inc.

October 15, 2001

County of Orange
Health Care Agency
Division of Environmental Health
2009 East Edinger Avenue
Santa Ana, CA 92705-4720
Attn.: Ms. Shyamala K. Sundaram

SUBJECT: POMONA BOX COMPANY
301 W. Imperial Highway
La Habra, California
OCHCA Case No. 86UT224

Dear Ms. Sundaram:

The following is submitted in response to the comments made in your August 10, 2001 correspondence regarding closure of the subject site:

1. Concerns were expressed regarding the nondetect results obtained for confirmation soil boring samples HP-1-15', HP-2-15' and HP-6-10' due to the relatively high detection limits reported. As addressed in the attached letter from Calscience Environmental Laboratories, Inc., the detection limits do not indicate the analyzed constituents were necessarily present at or just below the reported detection limits. As indicated, further review of available laboratory data by Calscience indicates that benzene was not confirmed to be present in samples HP-1-15' and HP-6-10' at a detection limit of an estimated 0.10 mg/kg. In HP-2-15' the potential benzene level was estimated at 0.63 mg/kg. MTBE was not confirmed to be present in sample HP-2-15' at an estimated detection limit of 0.19 mg/kg or in sample HP-6-10' at an estimated detection limit of 0.098 mg/kg. In HP-1-15' MTBE was potentially detected at an estimated quantity of 4.3 mg/kg. The data indicates that the area of residual hydrocarbons is limited in extent and concentration and does not pose a threat to the environment.

2. None of the samples were analyzed for MTBE by full scan EPA Method 8260B analysis since all confirmation boring samples were reported as nondetect for MTBE.

315 W. Pine Street, Suite 1A • Lodi, CA 95240 • (209) 334-5363 • Fax (209) 334-5374
Los Alamitos, CA • Bothell, WA • Lodi, CA

3. As we discussed, WGR Southwest has exhausted all potential sources of data pertaining to the former operation of the dual phase extraction system, and no additional information is available. All such data was apparently lost during the W. W. Irwin bankruptcy and subsequent transfer of the project to WGR Southwest. However, please find attached two letters from the Orange County Health Care Agency, authorizing termination of corrective actions based on a review of the case file and removal of the vapor extraction unit. It seems unlikely that the Agency would have issued such authorizations had the data not indicated that the remedial efforts had been successful and that asymptotic reduction conditions had been achieved.

Should you require additional information in your evaluation of the subject site for closure, please do not hesitate to contact me at (925) 947-3738.

Respectfully submitted,

Marda T. Herbert, C.E.G. No. 1732
Project Geologist
WGR Southwest, Inc.

Cc: Carl Bernhardt, Santa Ana Regional Water Quality Control Board
Don Votaw, Pomona Box Company
John Teravskis, WGR Southwest, Inc.

Calscience Environmental Laboratories, Inc.

October 01, 2001

Ms. Marda Herbert
WGR Southwest
1547 Palos Verdes, #137,
Walnut Creek, CA 94596

Re: **Pomona Box Company, Calscience 00-09-0780**

Dear Ms. Herbert:

Calscience Environmental Laboratories, Inc. has investigated the three samples with elevated reporting levels (HP-1-15', HP-2-15' and HP-6-10') with regards to the presence or absence of Benzene and Methy-t-Butyl Ether (MtBE).

Please refer to the attached explanatory sheet for a general discussion of issues related to diluted samples and the associated reporting levels.

Specifically as to the samples, two of the three samples **(HP-1-15' and HP-6-10')** had presumed Benzene in the primary column of the Gas Chromatograph instrument but not in the secondary column. Benzene is thus not confirmed as being present at the Method Detection Levels (MDL) of **ND @ 0.10 mg/kg (J, estimated)** for both samples.

The third sample, HP-2-15', had Benzene detected in both columns and may be quantified as detected at **0.63 mg/kg (J, estimated)**.

The investigation as to MtBE, showed two samples (HP-2-15' and HP-6-10') with presumed concentrations in the primary column of the Gas Chromatograph instrument but not in the secondary column. MtBE is thus not found at MDL levels of **ND @ 0.19 mg/kg (J, estimated) for HP-2-15"** and **ND @ 0.098 mg/kg (J, estimated) for HP-6-10'.**

The third sample, HP-1-15', had MtBE detected in both columns and may be quantified as detected at **4.3 mg/kg (J, estimated).** This is reported as estimated even though it is above the normal reporting limit (3.1 mg/kg) due to the secondary column level (2.38 mgkg) being below the normal RL but above the MDL (0.098 mg/kg) .

Attached, please find copies of the related raw data for the samples in question as support documentation.

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

Calscience
Environmental
Laboratories, Inc.

If there are any questions, or if I can be of further assistance, please do not hesitate to call at 714/895-5494.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Larry Lem
Project Manager

Attachments

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

Calscience
Environmental
Laboratories, Inc.

Sample Dilution Yields Higher Reporting Limits

Oftentimes a report will show reporting limits (RL) for certain compounds above our normal RL, or the project specific RL. Typically, this results from sample dilution. Samples are diluted for various reasons, but it is frequently done when there is a dirty sample matrix, or when there are high concentrations of target analytes.

Dilution of samples always results in higher reporting limits for all constituents that are part of the test. For example, if the normal RL for Benzene is 1 ug/L, a 10-fold dilution of the sample means that the new RL is 10 ug/L. Although the instrument and/or procedures used for testing are the same before and after dilution, the diluted sample is not the same. Once a sample is diluted, a dilution factor (in our example this is 10) must be applied to any resulting data and the corresponding RLs.

The following is an excerpt from EPA SW 846 regarding RLs (or EQLs) when dilution is required, "No matter which instrument is used, EQLs will be proportionately higher for sample extracts and samples that require dilution or when a reduced sample size is used to avoid saturation of the detector." As this statement indicates, loading a sample with a dirty matrix on an instrument, with no dilution or low dilution, can "overload" the instrument causing it to shut down and inflicting possible damage.

Even though an RL is raised it does not mean that the compound is present at a level just below the higher RL. The analyte may in fact be significantly below the RL or not present at all.

We can make some estimation of this by reviewing the data and determining whether an analyte falls between the Method Detection Level (MDL) and the RL. The MDL is a level that gives reasonable certainty that a compound is present, but is less certain as to the exact concentration. An RL is certain as to both identity and concentration. Values between the MDL and the RL may be reported as estimated with a "J" flag qualifier, if so desired.

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

RAW DATA SHEET FOR METHOD : EPA 8015M/8021B

WORK ORDER NUMBER : 00-09-0780
INSTRUMENT NAME : GC 21
D/T ANALYZED : 09/28/00 0845
ANALYST : UP

REVIEWED BY : [illegible]
DATE REVIEWED : [illegible]
EXTRACTION : Ext + EPA 5030B
D/T EXTRACTED : 09/27/00 0000

7 CLIENT SAMPLE NUMBER : HP-1 15'

DATA FILE : 039F0101

LCS/MB BATCH : 00092702sa
MS/MSD BATCH :
COMMENT : BENZENE NOT CONFIRMED MTBE DETECTED

COMPOUND	ON COL CONC	CONC	DF	RL	PF	UNITS	QUAL	TYPE	CONF CONC
Benzene	0.005	ND	125	0.63	5	mg/kg	ZD	2	ND
Toluene	0.011	6.9	125	0.63	5	mg/kg	D 66%	2	3.4
Ethylbenzene	0.047	29	125	0.63	5	mg/kg	D 10%	2	32
Xylenes (total)	0.202	130	125	1.3	5	mg/kg	D 7%	2	140
Methyl-tert-Butyl Ether	0.007	ND	125	3.1	5	mg/kg	ZD	2	ND
TPH for Gasoline	3.480	2200	125	63	5	mg/kg	D	N	

Confirmation Types - N ..... N/A; 2 ....Second Column; M ....Mass Spec; T. .....TPH; O.....Other

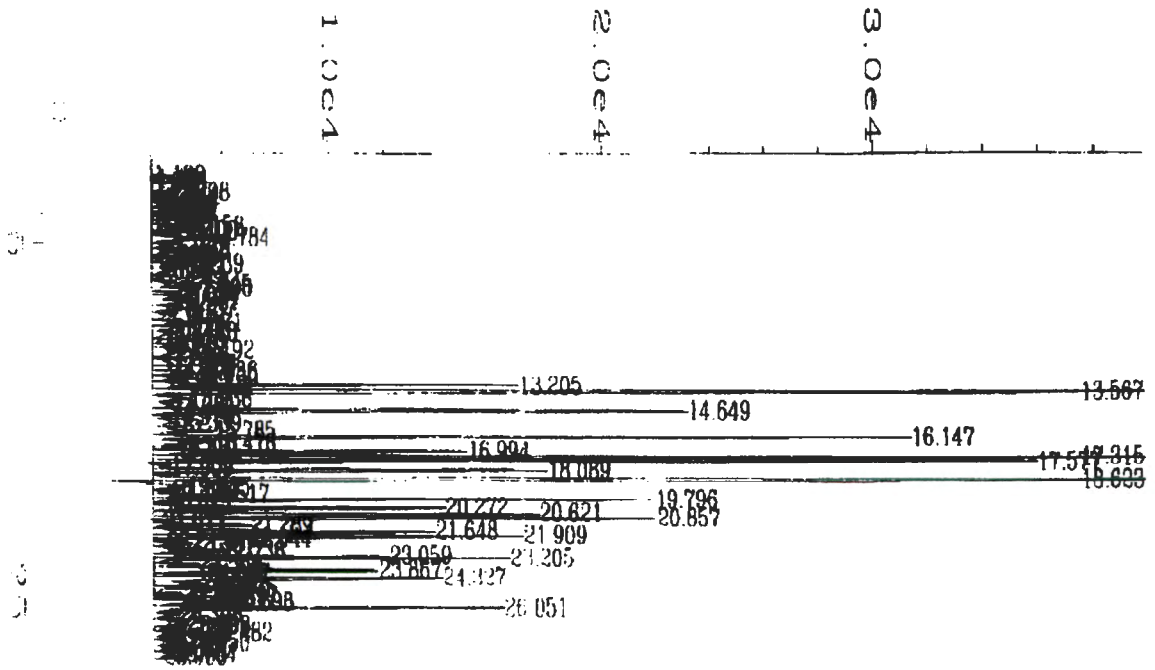
External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\000927\039R0101.D		
Operator	:	Page Number	: 1
Instrument	: GC 21	Vial Number	: 39
Sample Name	: 09-0780-7 625x	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 28 Sep 00 08:45 AM	Instrument Method	: 80158021.MTH
Report Created on	: 28 Sep 00 09:24 AM	Analysis Method	: INIT_AV.MTH
Last Recalib on	: 03 NOV 98 09:15 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\000927\039R0101.D

Ret Time	Area	Type	Width	Ref#	ug/L	Name
1.787	64906	VV	0.047	1	6.914	Methyl-tert-Butyl Ether
3.039	123393	VV	0.061	1	5.202	Benzene
5.918	235104	VV	0.198	1	11.029	Toluene
10.070	889559	VV	0.095	1	46.720	Ethylbenzene
10.426	3259142	VV	0.106	1	143.334	p/m-Xylene
11.416	1175503	VV	0.093	1	58.978	o-Xylene
12.679	1980614	VV	0.097	1-R	95.295	1,4-Bromofluorobenzene

Time Reference Peak	Expected RT	Actual RT	Difference
7	12.691	12.679	-0.012



External Standard Report

Data File Name	: C:\HPCHEM\2\DATA\000927\039F0101.D		
Operator	:	Page Number	: 1
Instrument	: GC 21 CON	Vial Number	: 39
Sample Name	: 09-0780-7 625x	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 28 Sep 00 08:45 AM	Instrument Method:	8021.MTH
Report Created on:	28 Sep 00 09:42 AM	Analysis Method	: DAILYCON.MTH
Last Recalib on	: 28 Sep 00 09:41 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\2\DATA\000927\039F0101.D

Ret Time	Area	Type	Width	Ref#	ug/l	Name
2.411	2769	HH	0.065	1	3.813	Methyl-tert-Butyl Ether
4.645	* not found *			1		Benzene
9.145	10248	HH	0.271	1	5.493	Toluene
13.205	97707	HH	0.111	1	50.838	Ethylbenzene
13.567	320736	HH	0.108	1	150.599	p/m-Xylene
14.649	131977	HH	0.105	1	68.438	o-Xylene
16.147	182357	HH	0.103	1-R	113.147	1,4-Bromofluorobenzene

Time Reference Peak	Expected RT	Actual RT	Difference
7	16.147	16.147	0.000

Not all calibrated peaks were found

RAW DATA SHEET FOR METHOD : EPA 8015M/8021B

WORK ORDER NUMBER : 00-09-0780
INSTRUMENT NAME : GC 21
D/T ANALYZED 09/28/00 0917
ANALYST UP

REVIEWED BY : <-
DATE REVIEWED : 9/28
EXTRACTION : Ext + EPA 5030B
D/T EXTRACTED : 09/27/00 0000

11 CLIENT SAMPLE NUMBER : HP-2 15'

DATA FILE : 040F0101

LCS/MB BATCH : 00092702sa
MS/MSD BATCH :
COMMENT

BENZENE DETECTED, MTBE NOT DETECTED

COMPOUND	ON COL CONC	CONC	DF	RL	PF	UNITS	QUAL	TYPE	CONF_CON
Benzene	0.001	ND	250	1.3	5	mg/kg	D	N	
Toluene	0.001	ND	250	1.3	5	mg/kg	ZD	2	ND
Ethylbenzene	0.003	3.1	250	1.3	5	mg/kg	D 9%	2	3.4
Xylenes (total)	0.015	18	250	2.5	5	mg/kg	D 0%	2	18
Methyl-tert-Butyl Ether	0.000	ND	250	6.3	5	mg/kg	D	N	
TPH for Gasoline	0.631	790	250	130	5	mg/kg	D	N	

Confirmation Types - N ... . N/A
2... ....Second Column
M.....Mass Spec
T.....TPH
O.....Other

External Standard Report

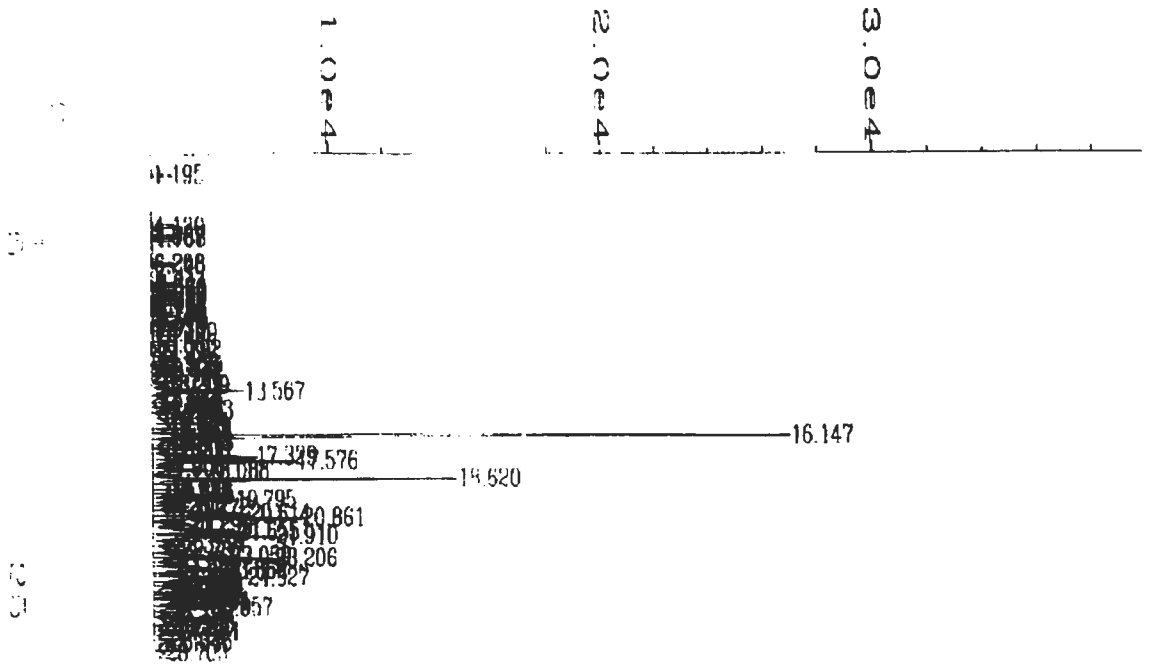
Data File Name	: C:\HPCHEM\1\DATA\000927\040R0101.D		
Operator	:	Page Number	: 1
Instrument	: GC 21	Vial Number	: 40
Sample Name	: 09-0780-11 1250x	Injection Number	: 1
Run Time Bar Code	:	Sequence Line	: 1
Acquired on	: 28 Sep 00 09:17 AM	Instrument Method	: 80158021.MTH
Report Created on	: 28 Sep 00 09:47 AM	Analysis Method	: INIT_AV.MTH
Last Recalib on	: 03 NOV 98 09:15 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\000927\040R0101.D

Ret Time	Area	Type	Width	Ref#	ug/L	Name
1.816	* not found *			1		Methyl-tert-Butyl Ether
2.996	11952	VV	0.083	1	0.504	Benzene
5.911	25722	VV	0.177	1	1.207	Toluene
10.067	47780	VV	0.100	1	2.509	Ethylbenzene
10.421	274578	VV	0.114	1	12.076	p/m-Xylene
11.412	49893	VV	0.099	1	2.503	o-Xylene
12.678	1796202	VV	0.091	1-R	86.422	1,4-Bromofluorobenzene

Time Reference Peak	Expected RT	Actual RT	Difference
7	12.691	12.678	-0.013

Not all calibrated peaks were found



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External Standard Report

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Data File Name	: C:\HPCHEM\2\DATA\000927\040F0101.D		
Operator	:	Page Number	: 1
Instrument	: GC 21 CON	Vial Number	: 40
Sample Name	: 09-0780-11 1250x	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 28 Sep 00 09:17 AM	Instrument Method	: 8021.MTH
Report Created on	: 28 Sep 00 09:47 AM	Analysis Method	: DAILYCON.MTH
Last Recalib on	: 28 Sep 00 09:41 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\2\DATA\000927\040F0101.D

Ret Time	Area	Type	Width	Ref#	ug/l	Name
2.409	* not found *			1		Methyl-tert-Butyl Ether
4.687	390	HH	0.078	1	0.210	Benzene
9.142	468	PH	0.095	1	0.251	Toluene
13.209	5192	HH	0.138	1	2.702	Ethylbenzene
13.567	23887	HH	0.108	1	11.216	p/m-Xylene
14.653	5983	HH	0.127	1	3.102	o-Xylene
16.147	148057	HH	0.099	1-R	91.865	1,4-Bromofluorobenzene

Time Reference Peak	Expected RT	Actual RT	Difference
7	16.147	16.147	0.000

Not all calibrated peaks were found

==========

RAW DATA SHEET FOR METHOD : EPA 8015M/8021B

WORK ORDER NUMBER : 00-09-0780
INSTRUMENT NAME : GC 21
D/T ANALYZED : 09/28/00 0950
ANALYST : UP

REVIEWED BY :
DATE REVIEWED :
EXTRACTION : Ext + EPA 5030B
D/T EXTRACTED : 09/27/00 0000

16 CLIENT SAMPLE NUMBER : HP-6 10'

DATA FILE : 041F0101

LCS/MB BATCH : 00092702sa
MS/MSD BATCH :
COMMENT

BENZENE AND MTBE NOT CONFIRMED

COMPOUND	ON COL CONC	CONC	DF	RL	PF	UNITS	QUAL	TYPE	CONF_CONC
Benzene	0.001	ND	125	0.63	5	mg/kg	ZD	2	ND
Toluene	0.007	ND	125	0.63	5	mg/kg	ZD	2	ND
Ethylbenzene	0.031	20	125	0.63	5	mg/kg	D 10%	2	22
Xylenes (total)	0.099	62	125	1.3	5	mg/kg	D 5%	2	65
Methyl-tert-Butyl Ether	0.001	ND	125	3.1	5	mg/kg	D	N	
TPH for Gasoline	2.450	1500	125	63	5	mg/kg	D	N	

Confirmation Types - N ..... N/A
2..... ..Second Column
M. .....Mass Spec
T.. .. ....TPH
O.....Other

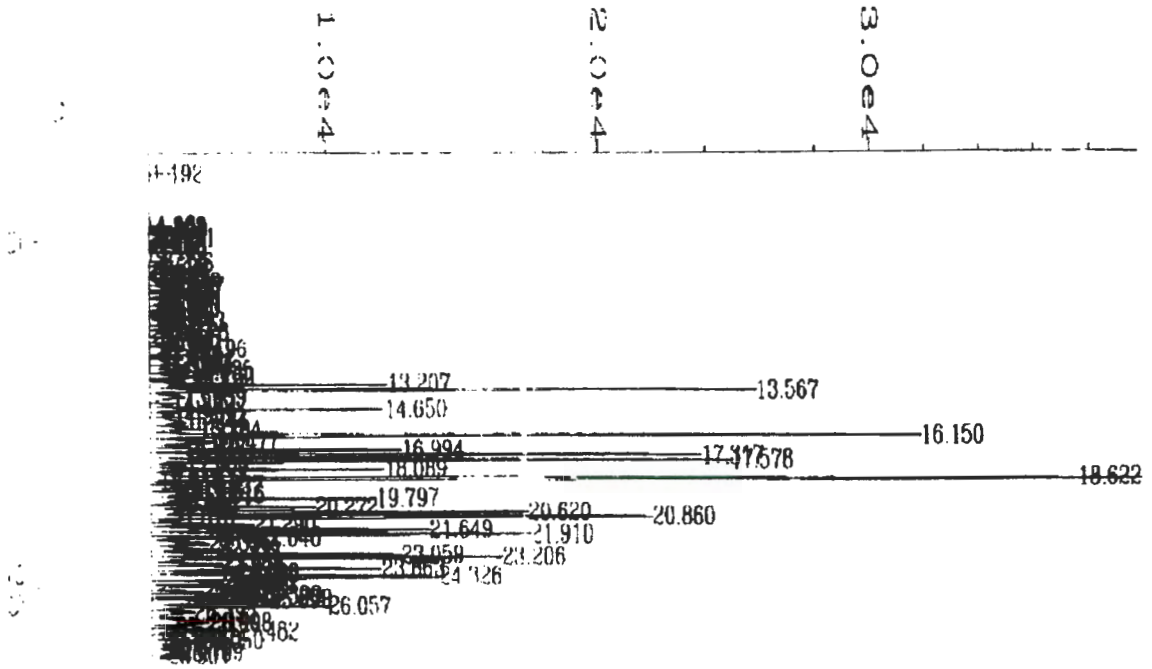
External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\000927\041R0101.D		
Operator	:	Page Number	: 1
Instrument	: GC 21	Vial Number	: 41
Sample Name	: 09-0780-16 625x	Injection Number	: 1
Run Time Bar Code	:	Sequence Line	: 1
Acquired on	: 28 Sep 00 09:50 AM	Instrument Method	: 80158021.MTH
Report Created on	: 28 Sep 00 10:28 AM	Analysis Method	: INIT_AV.MTH
Last Recalib on	: 03 NOV 98 09:15 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\000927\041R0101.D

Ret Time	Area	Type	Width	Ref#	ug/L	Name
1.787	5016	VV	0.054	1	0.534	Methyl-tert-Butyl Ether
3.036	33239	VV	0.074	1	1.401	Benzene
5.933	139235	VV	0.188	1	6.532	Toluene
10.071	597598	VV	0.096	1	31.386	Ethylbenzene
10.423	1623342	VV	0.112	1	71.393	p/m-Xylene
11.417	547564	VV	0.096	1	27.473	o-Xylene
12.681	1980561	VV	0.095	1-R	95.293	1,4-Bromofluorobenzene

Time Reference Peak	Expected RT	Actual RT	Difference
7	12.691	12.681	-0.010



External Standard Report

Data File Name	: C:\HPCHEM\2\DATA\000927\041F0101.D		
Operator	:	Page Number	: 1
Instrument	: GC 21 CON	Vial Number	: 41
Sample Name	: 09-0780-16 625x	Injection Number	: 1
Run Time Bar Code	:	Sequence Line	: 1
Acquired on	: 28 Sep 00 09:50 AM	Instrument Method	: 8021.MTH
Report Created on	: 28 Sep 00 10:29 AM	Analysis Method	: DAILYCON.MTH
Last Recalib on	: 28 Sep 00 09:41 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\2\DATA\000927\041F0101.D

Ret Time	Area	Type	Width	Ref#	ug/l	Name
2.409	* not found *			1		Methyl-tert-Butyl Ether
4.645	* not found *			1		Benzene
9.055	1753	HH	0.075	1	0.940	Toluene
13.207	66186	HH	0.114	1	34.438	Ethylbenzene
13.567	154294	HH	0.108	1	72.448	p/m-Xylene
14.650	59833	HH	0.105	1	31.027	o-Xylene
16.150	189138	HH	0.105	1-R	117.355	1,4-Bromofluorobenzene

Time Reference Peak	Expected RT	Actual RT	Difference
7	16.147	16.150	0.003

Not all calibrated peaks were found

COUNTY OF ORANGE
HEALTH CARE AGENCY

RONALD R. DILUIGI
INTERIM DIRECTOR

HUGH F. STALLWORTH, M.D., MPH
HEALTH OFFICER

JACK MILLER, RSHS
DEPUTY DIRECTOR

MAILING ADDRESS:
2009 EAST EDINGER AVENUE
SANTA ANA, CA 92705-4720

TELEPHONE: (714) 667-3600
FAX: (714) 972-0749

PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH

September 14, 1998

Don Votaw
Pomona Box Company
301 West Imperial Highway
La Habra, CA 90631

Subject: Request to Suspend Corrective Action

Re: Votaw-Davis Property
101 West Imperial Highway
La Habra, California
OCHCA Case #92UT10

Dear Mr. Votaw:

Pursuant to your request to terminate corrective actions at the subject site, this office has reviewed our case file. Based on this review, we have determined that it is appropriate to shut down the remediation system at the subject site. Quarterly groundwater monitoring and reporting must continue, however.

We will evaluate the results of the subsequent groundwater monitoring events. If the groundwater contamination appears to be increasing or if the contaminant plume begins to spread, we may direct you to submit a revised corrective action plan and by require resumption of active remediation at this site.

If you have any questions, please call me at (714) 667-3716.

Sincerely,

Anthony F. Martinez
Hazardous Waste Specialist
Hazardous Materials Management
Environmental Health Division

AFM

cc: Carl Bernhardt, Santa Ana Regional Water Quality Control Board

COUNTY OF ORANGE
HEALTH CARE AGENCY

DONALD R. OXLEY
DIRECTOR

HILDY MEYERS, M.D.
INTERIM HEALTH OFFICER

JACK MILLER, RRS
DEPUTY DIRECTOR

MAILING ADDRESS:
2009 EAST EDINGER AVENUE
SANTA ANA, CA 92705-4720

TELEPHONE: (714) 667-3800
FAX: (714) 558-5119

PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH

June 21, 1999

Don Votaw
Pomona Box Company
P.O. Box 536
La Habra, CA 90631

Subject: Remediation Requirements

Re: Votaw-Davis Property
301 West Imperial Highway
La Habra, CA 90631
OCHCA Case #86UT224

Dear Mr. Votaw:

This office has not objections to your proposal to remove the vapor extraction unit that had been operated at this site and at the site at 101 West Imperial Highway (OCHCA Case #92UT10). It is unlikely that this office will require additional vapor extraction at this site (or at the 101 West Imperial Highway site). However, further long-term monitoring is required; and if conditions change significantly, it is possible that additional remediation may be requested.

Please continue to collect groundwater samples every three months at this site until you are notified otherwise. These samples should be collected without purging the wells first. Prior to case closure you will be asked to collect pairs of groundwater samples, before and after purging from each well. You may submit a request to reduce the sampling frequency of some of the wells at the site. Wells that have at least four consecutive sampling events with non-detect or low levels of dissolved contamination may be sampled at a reduced frequency.

If you have any questions, please call me at (714) 667-3716.

Sincerely,

Anthony F. Martinez
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

cc: Carl Bernhardt, Santa Ana Regional Water Quality Control Board
John Teravskis, WGR Southwest Inc.

WGR
Southwest, Inc.

May 9, 2002

County of Orange
Health Care Agency
Division of Environmental Health
2009 East Edinger Avenue
Santa Ana, CA 92705-4720
Attn.: Ms. Shyamala K. Sundaram

Subject: Pomona Box Company
301 W. Imperial Highway
La Habra, California
OCHCA Case No. 86UT224

Dear Ms. Sundaram:

In response to your request, WGR Southwest, Inc. (WGR) performed a file review of the Orange County Health Care Agency (OCHCA) files for operational data of the remediation system for our client, Pomona Box Company. Attached to this letter is a table summarizing the groundwater treatment system and vapor extraction system data that we were able to locate by performing the file review. The groundwater data shows the cumulative volume of groundwater pumped, treated and discharged to the NPDES outfall and the volume of groundwater discharged for the reporting period. The vapor extraction data shows the inlet flow rate from the wells and the undiluted influent hydrocarbon concentration. The hydrocarbon concentration was measured using a portable photo ionization detector (PID) calibrated to hexane.

On September 14, 1998, OCHCA gave authorization to discontinue the remediation system operation based on a review of the case file. On June 21, 1999, OCHCA authorized the removal of the vapor extraction system and stated that it was "unlikely that this office [OCHCA] will require additional vapor extraction at this site (or at the 101 West Imperial Highway site)." With this file review, WGR has now exhausted all potential sources of data pertaining to the former operation of the remediation system. With the exception of the data presented on the attached table, much of the field data was apparently lost during the W. W. Irwin bankruptcy as explained in our October 15, 2001 letter. Although there are gaps in the remediation system operation data, the data that has been located appears to validate the above-mentioned OCHCA decisions to terminate the system operation in September 1998 and remove the system in June 1999.

315 W. Pine Street, Suite 1A • Lodi, CA 95240 • (209) 334-5363 • Fax (209) 334-5374
Los Alamitos, CA • Bothell, WA • Lodi, CA

We now respectfully request that in considering the attached remediation system operation data, the April 9, 2001 WGR Closure Assessment and Fourth Quarter 2000 Monitoring Report, and WGR's October 15, 2001 response to your August 10, 2001 comments, that OCHCA grant final closure to this site. As previously agreed by your agency, we have suspended all monitoring and remedial operations at the site. We also request authorization to abandon the monitoring wells at the site and the monitoring well located in Imperial Highway.

If you have any questions concerning our file review, the attached data, or the status of the site, please do not hesitate to contact me at (209) 334-5363.

Sincerely,
WGR Southwest, Inc.

John M. Teravskis
Project Manager

Attachment

Cc: Don Votaw
Anthony Martinez – OCHCA

Votaw - Davis & Pomona Box Company
Remediation System Operation Data

Date	Groundwater Treatment System		Vapor Extraction System	
	Total Volume Discharge Cummulative (Gallons)	Total Volume Discharged per period (Gallons)	Vapor Flow Rate (scfm)	Total influent hydrocarbon concentration (ppm)
Jan-96	338,867	338,867	340	370
Mar-96	732,230	393,363	337	176
Apr-96	907,070	174,840	340	110
May-96	1,146,410	239,340	360	72
Jun-96	1,223,690	77,280	336	91
Jul-96	1,345,405	121,715	314	29
Aug-96	1,527,952	182,547	338	73
Sep-96	1,703,380	175,428	352	80
Oct-96	1,724,120	20,740	353	N.M.
Dec-96	2,246,750	522,630	280	2.4
Mar-97	2,524,915	278,165	325	N.M.
Jun-97	2,835,045	310,130	325	N.M.
Mar-98	2,904,975	69,930		
Apr-98	**System was shut permanently shut off on March 31, 1998.**			

Sundaram, Shyamala

From: Marda Tyree Herbert [mtherbert@wgr-sw.com]
Sent: Tuesday, October 02, 2001 10:46 AM
To: 'ssundaram@hca.co.orange.ca.us'
Subject: 301 W. Imperial Hwy. Lab Analyses

00090780letterREVISED.pdf

Attached is the letter from Calscience regarding the high detection limits reported for three of the soil samples collected from the confirmation borings on the subject site. The raw data is also included. Please contact me if you have questions or wish to discuss this information. Thank you. -Marda.

Marda Herbert
WGR Southwest, Inc.
Phone: 925/947-3738
Fax: 510/217-3966
mtherbert@wgr-sw.com

-----Original Message-----
From: Larry Lem [SMTP:llem@calscience.com]
Sent: Monday, October 01, 2001 4:50 PM
To: MTHerbert@wgr-sw.com
Subject: Resend Pomona Box, CEL 00-09-0780

Marda-
Attached, please find the revised letter for the Pomona Box project incorporating findings for both Benzene and MtBE.
-Larry

Calscience Environmental Laboratories, Inc.

October 01, 2001

Ms. Marda Herbert
WGR Southwest
1547 Palos Verdes, #137,
Walnut Creek, CA 94596

Re: **Pomona Box Company, Calscience 00-09-0780**

Dear Ms. Herbert:

Calscience Environmental Laboratories, Inc. has investigated the three samples with elevated reporting levels (HP-1-15', HP-2-15' and HP-6-10') with regards to the presence or absence of Benzene and Methy-t-Butyl Ether (MtBE).

Please refer to the attached explanatory sheet for a general discussion of issues related to diluted samples and the associated reporting levels.

Specifically as to the samples, two of the three samples **(HP-1-15' and HP-6-10')** had presumed Benzene in the primary column of the Gas Chromatograph instrument but not in the secondary column. Benzene is thus not confirmed as being present at the Method Detection Levels (MDL) of **ND @ 0.10 mg/kg (J, estimated)** for both samples.

The third sample, HP-2-15', had Benzene detected in both columns and may be quantified as detected at **0.63 mg/kg (J, estimated)**.

The investigation as to MtBE, showed two samples (HP-2-15' and HP-6-10') with presumed concentrations in the primary column of the Gas Chromatograph instrument but not in the secondary column. MtBE is thus not found at MDL levels of **ND @ 0.19 mg/kg (J, estimated) for HP-2-15"** and **ND @ 0.098 mg/kg (J, estimated) for HP-6-10'.**

The third sample, HP-1-15', had MtBE detected in both columns and may be quantified as detected at **4.3 mg/kg (J, estimated).** This is reported as estimated even though it is above the normal reporting limit (3.1 mg/kg) due to the secondary column level (2.38 mgkg) being below the normal RL but above the MDL (0.098 mg/kg) .

Attached, please find copies of the related raw data for the samples in question as support documentation.

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

Calscience
Environmental
Laboratories, Inc.

If there are any questions, or if I can be of further assistance, please do not hesitate to call at 714/895-5494.

Sincerely,

Calscience Environmental
Laboratories, Inc.
Larry Lem
Project Manager

Attachments

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

Calscience
Environmental
Laboratories, Inc.

Sample Dilution Yields Higher Reporting Limits

Oftentimes a report will show reporting limits (RL) for certain compounds above our normal RL, or the project specific RL. Typically, this results from sample dilution. Samples are diluted for various reasons, but it is frequently done when there is a dirty sample matrix, or when there are high concentrations of target analytes.

Dilution of samples always results in higher reporting limits for all constituents that are part of the test. For example, if the normal RL for Benzene is 1 ug/L, a 10-fold dilution of the sample means that the new RL is 10 ug/L. Although the instrument and/or procedures used for testing are the same before and after dilution, the diluted sample is not the same. Once a sample is diluted, a dilution factor (in our example this is 10) must be applied to any resulting data and the corresponding RLs.

The following is an excerpt from EPA SW 846 regarding RLs (or EQLs) when dilution is required, "No matter which instrument is used, EQLs will be proportionately higher for sample extracts and samples that require dilution or when a reduced sample size is used to avoid saturation of the detector." As this statement indicates, loading a sample with a dirty matrix on an instrument, with no dilution or low dilution, can "overload" the instrument causing it to shut down and inflicting possible damage.

Even though an RL is raised it does not mean that the compound is present at a level just below the higher RL. The analyte may in fact be significantly below the RL or not present at all.

We can make some estimation of this by reviewing the data and determining whether an analyte falls between the Method Detection Level (MDL) and the RL. The MDL is a level that gives reasonable certainty that a compound is present, but is less certain as to the exact concentration. An RL is certain as to both identity and concentration. Values between the MDL and the RL may be reported as estimated with a "J" flag qualifier, if so desired.

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

RAW DATA SHEET FOR METHOD : EPA 8015M/8021B

WORK ORDER NUMBER : 00-09-0780
INSTRUMENT NAME : GC 21
D/T ANALYZED : 09/28/00 0845
ANALYST : UP

REVIEWED BY : GPS
DATE REVIEWED :
EXTRACTION : Ext + EPA 5030B
D/T EXTRACTED : 09/27/00 0000

7 CLIENT SAMPLE NUMBER : HP-1 15'

DATA FILE : 039F0101

LCS/MB BATCH : 00092702sa
MS/MSD BATCH :
COMMENT

BENZENE NOT CONFIRMED

MTBE DETECTED

COMPOUND	ON COL CONC	CONC	DF	RL	PF	UNITS	QUAL	TYPE	CONF CONC
Benzene	0.005	ND	125	0.63	5	mg/kg	ZD	2	ND
Toluene	0.011	6.9	125	0.63	5	mg/kg	D 68%	2	3.4
Ethylbenzene	0.047	29	125	0.63	5	mg/kg	D 10%	2	32
Xylenes (total)	0.202	130	125	1.3	5	mg/kg	D 7%	2	140
Methyl-tert-Butyl Ether	0.007	ND	125	3.1	5	mg/kg	ZD	2	ND
TPH for Gasoline	3.480	2200	125	63	5	mg/kg	D	N	

Confirmation Types - N . ... .. N/A
2 . ...Second Column
M..... ..Mass Spec
T. .....TPH
O.....Other

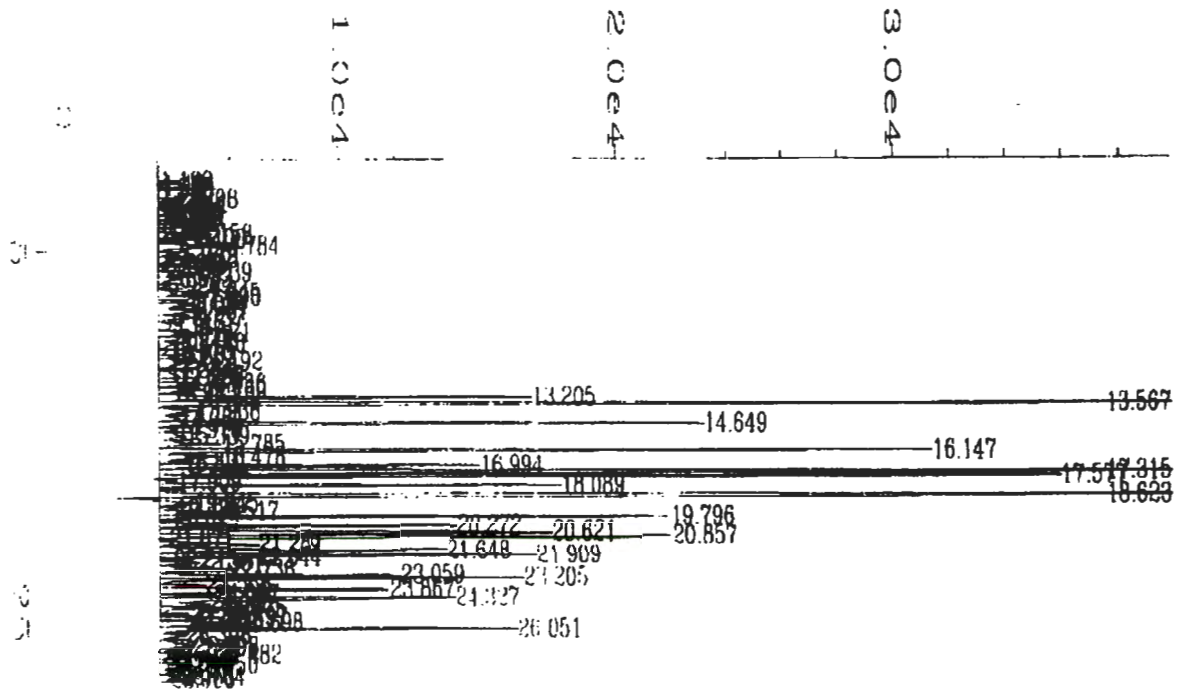
External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\000927\039R0101.D		
Operator	:	Page Number	: 1
Instrument	: GC 21	Vial Number	: 39
Sample Name	: 09-0780-7 625x	Injection Number	: 1
Run Time Bar Code	:	Sequence Line	: 1
Acquired on	: 28 Sep 00 08:45 AM	Instrument Method	: 80158021.MTH
Report Created on	: 28 Sep 00 09:24 AM	Analysis Method	: INIT_AV.MTH
Last Recalib on	: 03 NOV 98 09:15 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\000927\039R0101.D

Ret Time	Area	Type	Width	Ref#	ug/L	Name
1.787	64906	VV	0.047	1	6.914	Methyl-tert-Butyl Ether
3.039	123393	VV	0.061	1	5.202	Benzene
5.918	235104	VV	0.198	1	11.029	Toluene
10.070	889559	VV	0.095	1	46.720	Ethylbenzene
10.426	3259142	VV	0.106	1	143.334	p/m-Xylene
11.416	1175503	VV	0.093	1	58.978	o-Xylene
12.679	1980614	VV	0.097	1-R	95.295	1,4-Bromofluorobenzene

Time Reference Peak	Expected RT	Actual RT	Difference
7	12.691	12.679	-0.012



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External Standard Report

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Data File Name	: C:\HPCHEM\2\DATA\000927\039F0101.D		
Operator	:	Page Number	: 1
Instrument	: GC 21 CON	Vial Number	: 39
Sample Name	: 09-0780-7 625x	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 28 Sep 00 08:45 AM	Instrument Method:	8021.MTH
Report Created on:	28 Sep 00 09:42 AM	Analysis Method	: DAILYCON.MTH
Last Recalib on	: 28 Sep 00 09:41 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\2\DATA\000927\039F0101.D

Ret Time	Area	Type	Width	Ref#	ug/l	Name
2.411	2769	HH	0.065	1	3.813	Methyl-tert-Butyl Ether
4.645	* not found *			1		Benzene
9.145	10248	HH	0.271	1	5.493	Toluene
13.205	97707	HH	0.111	1	50.838	Ethylbenzene
13.567	320736	HH	0.108	1	150.599	p/m-Xylene
14.649	131977	HH	0.105	1	68.438	o-Xylene
16.147	182357	HH	0.103	1-R	113.147	1,4-Bromofluorobenzene

Time Reference Peak	Expected RT	Actual RT	Difference
7	16.147	16.147	0.000

Not all calibrated peaks were found

==========

RAW DATA SHEET FOR METHOD : EPA 8015M/8021B

WORK ORDER NUMBER : 00-09-0780
INSTRUMENT NAME : GC 21
D/T ANALYZED 09/28/00 0917
ANALYST UP

REVIEWED BY : C-
DATE REVIEWED : 9/28
EXTRACTION : Ext + EPA 5030B
D/T EXTRACTED : 09/27/00 0000

11 CLIENT SAMPLE NUMBER : HP-2 15'

DATA FILE : 040F0101

LCS/MB BATCH : 00092702sa
MS/MSD BATCH :
COMMENT

BENZENE DETECTED ! MTBE NOT DETECTED

COMPOUND	ON COL CONC	CONC	DF	RL	PF	UNITS	QUAL	TYPE	CONF_CON
Benzene	0.001	ND	250	1.3	5	mg/kg	D	N	
Toluene	0.001	ND	250	1.3	5	mg/kg	ZD	2	ND
Ethylbenzene	0.003	3.1	250	1.3	5	mg/kg	D 9%	2	3.4
Xylenes (total)	0.015	18	250	2.5	5	mg/kg	D 0%	2	18
Methyl-tert-Butyl Ether	0.000	ND	250	6.3	5	mg/kg	D	N	
TPH for Gasoline	0.631	790	250	130	5	mg/kg	D	N	

Confirmation Types - N ... . N/A
2... ....Second Column
M.....Mass Spec
T.....TPH
O.....Other

External Standard Report

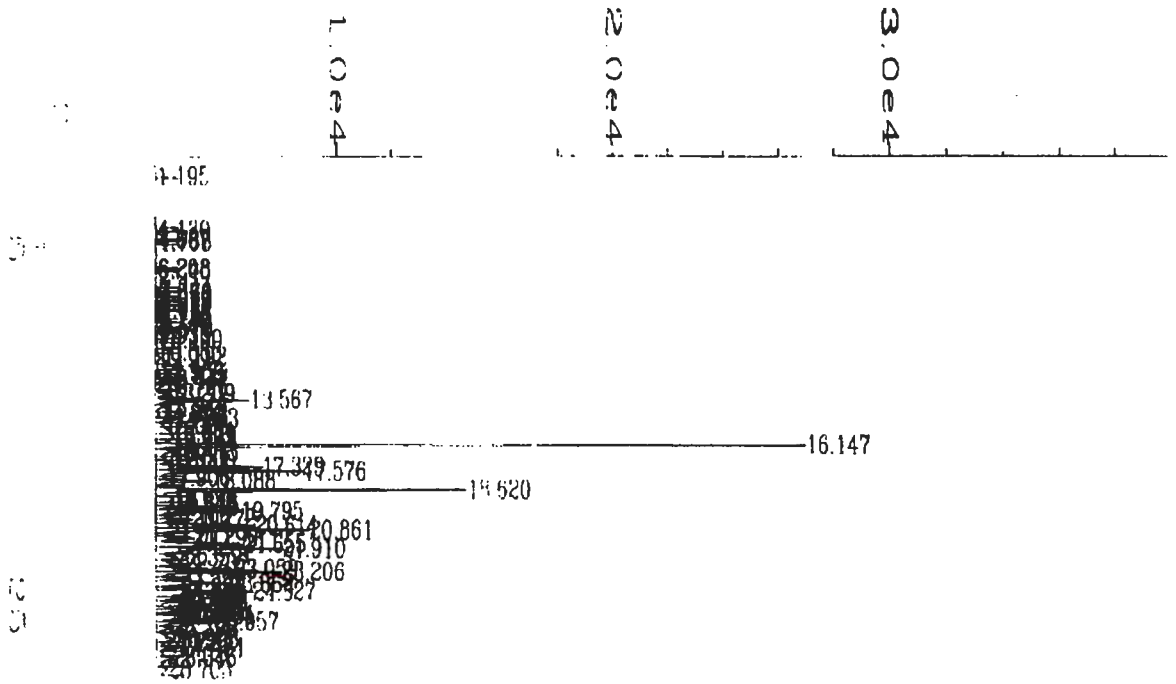
Data File Name	: C:\HPCHEM\1\DATA\000927\040R0101.D		
Operator	:	Page Number	: 1
Instrument	: GC 21	Vial Number	: 40
Sample Name	: 09-0780-11 1250x	Injection Number	: 1
Run Time Bar Code	:	Sequence Line	: 1
Acquired on	: 28 Sep 00 09:17 AM	Instrument Method	: 80158021.MTH
Report Created on	: 28 Sep 00 09:47 AM	Analysis Method	: INIT_AV.MTH
Last Recalib on	: 03 NOV 98 09:15 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\000927\040R0101.D

Ret Time	Area	Type	Width	Ref#	ug/L	Name
1.816	* not found *			1		Methyl-tert-Butyl Ether
2.996	11952	VV	0.083	1	0.504	Benzene
5.911	25722	VV	0.177	1	1.207	Toluene
10.067	47780	VV	0.100	1	2.509	Ethylbenzene
10.421	274578	VV	0.114	1	12.076	p/m-Xylene
11.412	49893	VV	0.099	1	2.503	o-Xylene
12.678	1796202	VV	0.091	1-R	86.422	1,4-Bromofluorobenzene

Time Reference Peak	Expected RT	Actual RT	Difference
7	12.691	12.678	-0.013

Not all calibrated peaks were found



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External Standard Report

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Data File Name : C:\HPCHEM\2\DATA\000927\040F0101.D
Operator :
Instrument : GC 21 CON
Sample Name : 09-0780-11 1250x
Run Time Bar Code:
Acquired on : 28 Sep 00 09:17 AM
Report Created on: 28 Sep 00 09:47 AM
Last Recalib on : 28 Sep 00 09:41 AM
Multiplier : 1

Page Number : 1
Vial Number : 40
Injection Number : 1
Sequence Line : 1
Instrument Method: 8021.MTH
Analysis Method : DAILYCON.MTH
Sample Amount : 0
ISTD Amount :

Sig. 1 in C:\HPCHEM\2\DATA\000927\040F0101.D

Ret Time	Area	Type	Width	Ref#	ug/l	Name
2.409	* not found *			1		Methyl-tert-Butyl Ether
4.687	390	HH	0.078	1	0.210	Benzene
9.142	468	PH	0.095	1	0.251	Toluene
13.209	5192	HH	0.138	1	2.702	Ethylbenzene
13.567	23887	HH	0.108	1	11.216	p/m-Xylene
14.653	5983	HH	0.127	1	3.102	o-Xylene
16.147	148057	HH	0.099	1-R	91.865	1,4-Bromofluorobenzene

Time Reference Peak	Expected RT	Actual RT	Difference
7	16.147	16.147	0.000

Not all calibrated peaks were found

==========

RAW DATA SHEET FOR METHOD : EPA 8015M/8021B

WORK ORDER NUMBER : 00-09-0780
INSTRUMENT NAME : GC 21
D/T ANALYZED : 09/28/00 0950
ANALYST UP

REVIEWED BY :
DATE REVIEWED :
EXTRACTION : Ext + EPA 5030B
D/T EXTRACTED : 09/27/00 0000

16 CLIENT SAMPLE NUMBER : HP-6 10'

DATA FILE : 041F0101

LCS/MB BATCH : 00092702sa
MS/MSD BATCH :
COMMENT

BENZENE AND MTBE NOT CONFIRMED

COMPOUND	ON COL CONC	CONC	DF	RL	PF	UNITS	QUAL	TYPE	CONF_CONC
Benzene	0.001	ND	125	0.63	5	mg/kg	ZD	2	ND
Toluene	0.007	ND	125	0.63	5	mg/kg	ZD	2	ND
Ethylbenzene	0.031	20	125	0.63	5	mg/kg	D 10%	2	22
Xylenes (total)	0.099	62	125	1.3	5	mg/kg	D 5%	2	65
Methyl-tert-Butyl Ether	0.001	ND	125	3.1	5	mg/kg	D	N	
TPH for Gasoline	2.450	1500	125	63	5	mg/kg	D	N	

Confirmation Types - N ..... N/A
2..... ..Second Column
M. .....Mass Spec
T.. .. ....TPH
O.....Other

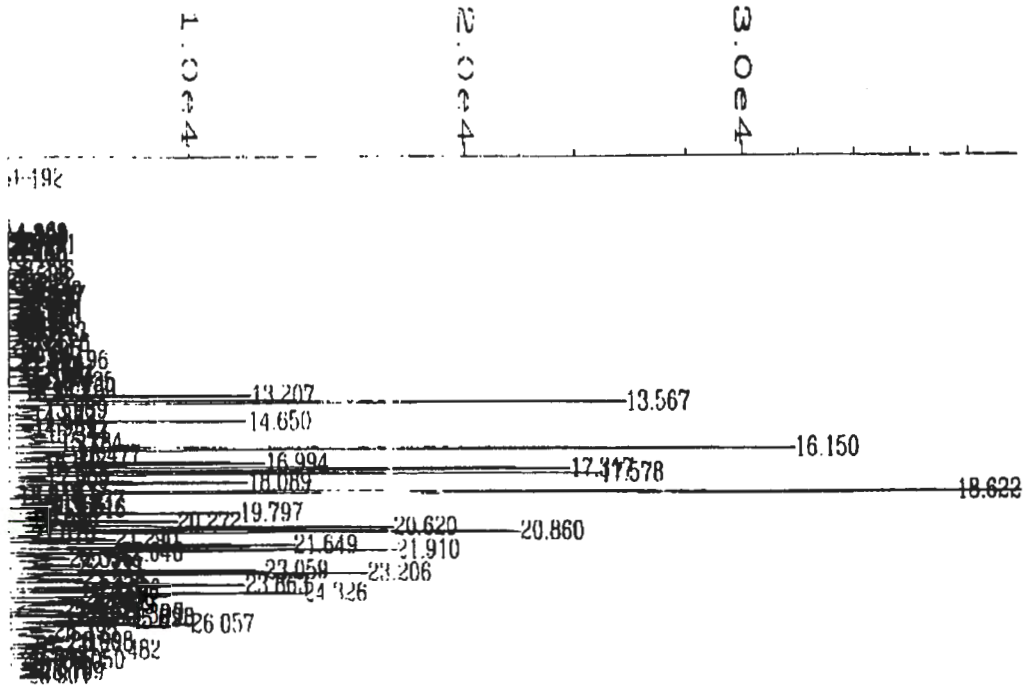
External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\000927\041R0101.D		
Operator	:	Page Number	: 1
Instrument	: GC 21	Vial Number	: 41
Sample Name	: 09-0780-16 625x	Injection Number	: 1
Run Time Bar Code	:	Sequence Line	: 1
Acquired on	: 28 Sep 00 09:50 AM	Instrument Method	: 80158021.MTH
Report Created on	: 28 Sep 00 10:28 AM	Analysis Method	: INIT_AV.MTH
Last Recalib on	: 03 NOV 98 09:15 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\000927\041R0101.D

Ret Time	Area	Type	Width	Ref#	ug/L	Name
1.787	5016	VV	0.054	1	0.534	Methyl-tert-Butyl Ether
3.036	33239	VV	0.074	1	1.401	Benzene
5.933	139235	VV	0.188	1	6.532	Toluene
10.071	597598	VV	0.096	1	31.386	Ethylbenzene
10.423	1623342	VV	0.112	1	71.393	p/m-Xylene
11.417	547564	VV	0.096	1	27.473	o-Xylene
12.681	1980561	VV	0.095	1-R	95.293	1,4-Bromofluorobenzene

Time Reference Peak	Expected RT	Actual RT	Difference
7	12.691	12.681	-0.010



==========

External Standard Report

==========

Data File Name	: C:\HPCHEM\2\DATA\000927\041F0101.D		
Operator	:	Page Number	: 1
Instrument	: GC 21 CON	Vial Number	: 41
Sample Name	: 09-0780-16 625x	Injection Number	: 1
Run Time Bar Code	:	Sequence Line	: 1
Acquired on	: 28 Sep 00 09:50 AM	Instrument Method	: 8021.MTH
Report Created on	: 28 Sep 00 10:29 AM	Analysis Method	: DAILYCON.MTH
Last Recalib on	: 28 Sep 00 09:41 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\2\DATA\000927\041F0101.D

Ret Time	Area	Type	Width	Ref#	ug/l	Name
2.409	* not found *			1		Methyl-tert-Butyl Ether
4.645	* not found *			1		Benzene
9.055	1753	HH	0.075	1	0.940	Toluene
13.207	66186	HH	0.114	1	34.438	Ethylbenzene
13.567	154294	HH	0.108	1	72.448	p/m-Xylene
14.650	59833	HH	0.105	1	31.027	o-Xylene
16.150	189138	HH	0.105	1-R	117.355	1,4-Bromofluorobenzene

Time Reference Peak	Expected RT	Actual RT	Difference
7	16.147	16.150	0.003

Not all calibrated peaks were found

==========

COUNTY OF ORANGE
HEALTH CARE AGENCY

REGULATORY HEALTH SERVICES
ENVIRONMENTAL HEALTH

JULIETTE A. POULSON, RN, MN
DIRECTOR

MIKE SPURGEON
DEPUTY AGENCY DIRECTOR
REGULATORY HEALTH SERVICES

STEVEN K. WONG
DIRECTOR
ENVIRONMENTAL HEALTH

MAILING ADDRESS:
2009 EAST EDINGER AVENUE
SANTA ANA, CA 92705-4720

TELEPHONE: (714) 667-3600
FAX: (714) 568-5116
E-MAIL: environhealth@hca.co.orange.ca.us

FAX TO THE FOLLOWING NUMBER: (209) 334-5374

THE FOLLOWING PAGES ARE FOR:

Name of Individual: Mr. John M. Teravskis

Telephone Number: (209) 334-5363

Firm Name: WGR Southwest, Inc., Lodi, CA

Documents Transmitted: Letter w.r.t. closure assessment report
OCHCA Case # 86UT224

Comments: As per our phone conversation, attached is the letter with my comments regarding the closure assessment for the site, that you had requested.

From: Shyamala K. Sundaram (714) 667-3719
HCA/Environmental Health **Telephone No.**

TOTAL NUMBER OF PAGES:

This Information Sheet plus 2 **Page(s)**

Date Sent: 08/13/2001 **Time Sent:** 4.30 **a.m./p.m.(circle one)**

If you do not receive all the pages, please call (714) 667-3706 as soon as possible to request a retransmission.

FAX Operator: _____

Rev: 2/13/01

COUNTY OF ORANGE
HEALTH CARE AGENCY

REGULATORY HEALTH SERVICES
ENVIRONMENTAL HEALTH

JULIETTE A. POULSON, RN, MN
DIRECTOR

MIKE SPURGEON
DEPUTY AGENCY DIRECTOR
REGULATORY HEALTH SERVICES

STEVEN K. WONG
DIRECTOR
ENVIRONMENTAL HEALTH

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SANTA ANA, CA 92705-4720

TELEPHONE: (714) 667-3600
FAX: (714) 568-5116
E-MAIL: environhealth@hca.co.orange.ca.us

FAX TO THE FOLLOWING NUMBER: (714) 871-3483

THE FOLLOWING PAGES ARE FOR:

Name of Individual: Mr. Don Votaw

Telephone Number: (714) 871-0932

Firm Name: Pomona Box Company, La Habra, CA

Documents Transmitted: Letter w.r.t. closure assessment report
OCHCA Case # 86UT224

Comments: Attached is the letter with my comments to the closure assessment report for the site. I also faxed a copy to Mr. John Teravskis.

From: Shyamala K. Sundaram (714) 667-3719
HCA/Environmental Health **Telephone No.**

TOTAL NUMBER OF PAGES:

This Information Sheet plus 2 **Page(s)**

Date Sent: 08/13/2001 **Time Sent:** 4.45 **a.m./p.m.** (circle one)

If you do not receive all the pages, please call (714) 667-3706 as soon as possible to request a retransmission.

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Rev: 2/13/01

COUNTY OF ORANGE
HEALTH CARE AGENCY

REGULATORY HEALTH SERVICES
ENVIRONMENTAL HEALTH

JULIETTE A. POULSON, RN, MN
DIRECTOR

MIKE SPURGEON
DEPUTY AGENCY DIRECTOR
REGULATORY HEALTH SERVICES

STEVEN K. WONG, REHS, MPH
DIRECTOR
ENVIRONMENTAL HEALTH

MAILING ADDRESS:
2009 EAST EDINGER AVENUE
SANTA ANA, CA 92705-4720

TELEPHONES: (714) 667-3600
FAX: (714) 972-0749
E-MAIL: environhealth@hca.co.orange.ca.us

August 10, 2001

WGR Southwest, Inc.
315 W. Pine Street, Suite 1A
Lodi, CA 95240
Attn.: Mr. John M. Teravskis

Subject: Closure Assessment & 4th Quarter 2000 Monitoring Report dated April 2001

Re: Pomona Box Company
301 W. Imperial Highway
La Habra, California
OCHCA Case #86UT224

Dear Mr. Teravskis:

The Orange County Health Care Agency (Agency) has reviewed and evaluated the assessment and monitoring report referenced above at the subject site for possible closure. Based on the review, the Agency has the following comments:

1. The confirmation soil borings (HP-1, HP-2, and HP-6) indicate some localized residual contamination remaining in the soil below the water table at depths between 15 and 20 feet. The groundwater encountered at the site is between 10 and 15 feet bgs. The highest concentrations of MTBE and benzene impacted soil were detected in boring HP-2 at 6,300 ppb and 1,300 ppb respectively.

2. The Revised Closure Confirmational Assessment Workplan dated June 29, 2000 states that "the soil sample from each boring with the highest MTBE concentration will be further analyzed by full scan EPA Method 8260B analysis, including all ether oxygenates and their breakdown products." However, confirmation soil borings with the highest contamination were analyzed only by EPA Method 8021, and not by 8260B analysis.

3. The closure assessment report does not adequately summarize the dual phase extraction that was conducted at the site. Please provide a description as to the total mass of hydrocarbon vapors (influent and effluent wellhead vapor concentrations) removed and gallons of groundwater treated from the site. This data should be presented in a manner

that demonstrates the effectiveness of the remedial system and that asymptotic reduction conditions were achieved.

The above information is required to evaluate if the site warrants closure. If you have any questions please call me at (714) 667-3719.

Sincerely,

K. Shyamala

Shyamala K. Sundaram
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health

cc: Carl Bernhardt, Santa Ana Regional Water Quality Control Board
Don Votaw, Pomona Box Company

COUNTY OF ORANGE
HEALTH CARE AGENCY

REGULATORY HEALTH SERVICES
ENVIRONMENTAL HEALTH

JULIETTE A. POULSON, RN, MN
DIRECTOR

MIKE SPURGEON
DEPUTY AGENCY DIRECTOR
REGULATORY HEALTH SERVICES

STEVEN K. WONG, REHS, MPH
DIRECTOR
ENVIRONMENTAL HEALTH

MAILING ADDRESS:
2009 EAST EDINGER AVENUE
SANTA ANA, CA 92705-4720

TELEPHONES: (714) 667-3600
FAX: (714) 972-0749
E-MAIL: environhealth@hca.co.orange.ca.us

August 10, 2001

WGR Southwest, Inc.
315 W. Pine Street, Suite 1A
Lodi, CA 95240
Attn.: Mr. John M. Teravskis

Subject: Closure Assessment & 4th Quarter 2000 Monitoring Report dated April 2001

Re: Pomona Box Company
301 W. Imperial Highway
La Habra, California
OCHCA Case #86UT224

Dear Mr. Teravskis:

The Orange County Health Care Agency (Agency) has reviewed and evaluated the assessment and monitoring report referenced above at the subject site for possible closure. Based on the review, the Agency has the following comments:

1. The confirmation soil borings (HP-1, HP-2, and HP-6) indicate some localized residual contamination remaining in the soil below the water table at depths between 15 and 20 feet. The groundwater encountered at the site is between 10 and 15 feet bgs. The highest concentrations of MTBE and benzene impacted soil were detected in boring HP-2 at 6,300 ppb and 1,300 ppb respectively.

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3. The closure assessment report does not adequately summarize the dual phase extraction that was conducted at the site. Please provide a description as to the total mass of hydrocarbon vapors (influent and effluent wellhead vapor concentrations) removed and gallons of groundwater treated from the site. This data should be presented in a manner

that demonstrates the effectiveness of the remedial system and that asymptotic reduction conditions were achieved.

The above information is required to evaluate if the site warrants closure. If you have any questions please call me at (714) 667-3719.

Sincerely,

K. Shyamala

Shyamala K. Sundaram
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health

cc: Carl Bernhardt, Santa Ana Regional Water Quality Control Board
Don Votaw, Pomona Box Company

POMONA BOX COMPANY

DONALD E. VOTAW
DARYL D. VOTAW

301 W. IMPERIAL HWY. • P.O. BOX 536 • LA HABRA, CALIFORNIA 90631
WOODEN BOXES • CRATES • PALLETS • CORRUGATED CARTONS
(714) 871-0932

July 26, 2001

Attention: Shyamala K. Sundaran
ORANGE COUNTY HEALTH CARE AGENCY
2009 East Edinger Avenue
Santa Ana, CA 92705

Re: Case #86UT224

Dear Ms. Sundaran,

This is in response to your phone and fax request for information.

I cannot find the "Tank Disposal" forms for either 1986 or 1989. I have gone completely through my old files and all the paid bill files from 1986 through 1990.

The removal of tanks, both 1986 and 1989 were done by Wayne Perry Construction in Buena Park. They are not currently working for us.

Yours very truly

D.E. Votaw, VP

COUNTY OF ORANGE
HEALTH CARE AGENCY

REGULATORY HEALTH SERVICES
ENVIRONMENTAL HEALTH

JULIETTE A. POULSON, RN, MN
DIRECTOR

MIKE SPURGEON
DEPUTY AGENCY DIRECTOR
REGULATORY HEALTH SERVICES

STEVEN K. WONG
DIRECTOR
ENVIRONMENTAL HEALTH

MAILING ADDRESS:
2009 EAST EDINGER AVENUE
SANTA ANA, CA 92705-4720

TELEPHONE: (714) 667-3600
FAX: (714) 568-5116
E-MAIL: environhealth@hca.co.orange.ca.us

FAX TO THE FOLLOWING NUMBER: (714) 871-3483

THE FOLLOWING PAGES ARE FOR:

Name of Individual: Mr. Don Votaw

Telephone Number: (714) 871-0932

Firm Name: Pomona Box Company

Documents Transmitted: Sample copy of a tank destruction certificate

Comments: Attached is a copy (sample copy) of a tank disposal form. We need to have something similar on file for the tanks removed from the site in 1986 and 1989. If you cannot find them, just send me a brief letter stating so.

From: Shyamala K. Sundaram (714) 667-3719
HCA/Environmental Health **Telephone No.**

TOTAL NUMBER OF PAGES:

This Information Sheet plus 2 **Page(s)**

Date Sent: 07/24/01 **Time Sent:** _____ **a.m./p.m.(circle one)**

If you do not receive all the pages, please call (714) 667-3706 as soon as possible to request a retransmission.

FAX Operator: _____

Rev: 2/13/01

AMERICAN FUEL TANK METAL RECYCLING, INC.

2202 S. MILLIKEN AVE. • ONTARIO, CA 91761
(909) 988-8000

№ 50268

TANK DISPOSAL FORM

Date: 12-17-98
Job#
P.O.#

CONTRACTOR: DEEP
ADDRESS:
JOB SITE: CITY OF PLACENTIA
ADDRESS: 2999 LALOLLA ST PLACENTIA
DESTINATION: A.M.R. 2202 S. MILLIKEN AVE., ONTARIO, CA 91761

DATE	TIME	PROJECTED TANKS	ORDERED BY	LIC NO

SPECIAL INSTRUCTIONS: C/O NIETO & SONS

TIME IN:
TIME OUT:

SAMPLE COPY

✔	Services Rendered	Cost
____	Disposal Fee	
____	Extensive Loading Time	
____	Disposal Fee with Permit	
____	Fiberglass Tank Disposal Fee Per Tank	
____	Fiberglass Delivered	
____	Bobtail Disposal	
____	Cancellation Fee	

TOTAL CHARGES $ 0

All fees incurred are per load unless specified. Terms are net 30 days from date of invoice. Contractor's signature represents acceptance of terms for payment, and confirms that tank removal complies with State laws.

CONTRACTOR'S SIGNATURE

TANKS RECEIVED

QTY	GALLONS	TYPE F*	TYPE S*	NET TONS	TOTAL
	280	☐	☐	.14	
	500	☐	☐	.21	
	550	☐	☐	.24	
	1000 - 12 ft.	☐	☐	.44	
	1000 - 6 ft.	☐	☐	.61	
	1500	☐	☐	.87	
	2000	☐	☐	.97	
	2500	☐	☐	1.14	
	3000	☐	☐	1.32	
	4000	☐	☐	1.64	
1	5000	☐	☑	2.42	
	6000	☐	☐	2.84	
	7500	☐	☐	3.26	
	8000	☐	☐	3.44	
	9000	☐	☐	3.82	
	10000	☐	☐	4.33	
	12000	☐	☐	4.93	

NO. OF TANKS: 1 TOTAL: NET TONS:

*F - FIBERGLASS *S - STEEL 105

CERTIFICATE OF TANK DISPOSAL / DESTRUCTION

THIS IS TO CERTIFY THE RECEIPT AND ACCEPTANCE OF THE TANK(S) AS SPECIFIED ABOVE. ALL MATERIALS SPECIFIED HAVE BEEN COMPLETELY DESTROYED FOR SCRAP PUROSES ONLY.

AUTHORIZED REP.

12-17-98
DATE

WGR
Southwest, Inc.

July 12, 2001

Orange County Health Care Agency
2009 E. Edinger Avenue
Santa Ana, CA 92705
Attn: Mr. Anthony Martinez

Subject: **First Quarter 2001 Groundwater Monitoring Report**
Pomona Box Company - Former UST Location
301 W. Imperial Highway, La Habra, California
OCHCA Case No. 86UT224
RWQCB Discharge Authorization No. CAG918001
WGR Southwest, Inc., Project No. 051.PRI.00

Dear Mr. Martinez,

WGR Southwest, Inc., on behalf of Pomona Box Company, is forwarding a copy of the First Quarter 2001, Groundwater Monitoring Report, documenting activities conducted at the above referenced facility.

Should you have any questions or comments, please contact Mr. Don Votaw at (714) 871-0932 or me at (562) 799-8510.

Sincerely,
WGR Southwest, Inc.

for

John M. Teravskis, Project Manager

Enc.

Cc: Don Votaw, Pomona Box Company
Carl Bernhardt, RWQCB-Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3339

jmt:WGR

315 W. Pine Street, Suite 1A • Lodi, CA 95240 • (209) 334-5363 • Fax (209) 334-5374
Los Alamitos, CA • Bothell, WA • Lodi, CA

WGR
Southwest, Inc.

April 16, 2001

Mr. Anthony Martinez
Orange County Health Care Agency
2009 E. Edinger Avenue
Santa Ana, CA 92705

RE: Transmittal of Closure Assessment & 4th Quarter 2000 Monitoring Report
Pomona Box Company Case No. 86UT224 at 301 W. Imperial Hwy., La Habra

Dear Mr. Martinez,

On behalf of our client, Mr. Don Votaw, of Votaw/Davis Properties, we are submitting the enclosed Closure Assessment and 4th Quarter 2000 Monitoring Report. In Section 5 of the report, we summarized the assessment and made a recommendation for site closure. Once you have had an opportunity to review the report, our client and we would like to meet with you to discuss site closure.

I will call you in May 2001 to set up a meeting date. In the meanwhile, if you have any questions regarding the enclosed report. Please do not hesitate to contact me.

Sincerely,
WGR Southwest, Inc.

John M. Teravskis
Project Manager

Cc: Don Votaw – Pomona Box Company
California State UST Reimbursement Fund C/O Don Votaw
Carl Bernhardt – RWQCB Santa Ana Region
WGR Project File

11021 Winners Circle, Suite 101 • Los Alamitos, CA 90720 • (562) 799-8510 • Fax (562) 799-8556
Los Alamitos, CA • Bothell, WA • Jackson, MO

RECEIVED
APR 18 2001
HEALTH CARE AGENCY
REGULATORY HEALTH SERVICES

WGR
Southwest, Inc.

August 14, 2000

Orange County Health Care Agency
2009 E. Edinger Avenue
Santa Ana, CA 92705
Attn: Mr. Anthony Martinez

Subject: **Second Quarter 2000 Groundwater Monitoring Report**
Pomona Box Company - Former UST Location
301 W. Imperial Highway, La Habra, California
OCHCA Case No. 86UT224
RWQCB Discharge Authorization No. CAG918001
WGR Southwest, Inc., Project No. 051.PRI.00

Dear Mr. Martinez,

WGR Southwest, Inc., on behalf of Pomona Box Company, is forwarding a copy of the Second Quarter 2000, Groundwater Monitoring Report, documenting activities conducted at the above referenced facility. The next quarterly groundwater monitoring and sampling event is scheduled for September 2000.

Should you have any questions or comments, please contact Mr. Don Votaw at (714) 871-0932 or me at (209) 334-5363.

Sincerely,
WGR Southwest, Inc.

John M. Teravskis, Project Manager

Enc.

Cc: Don Votaw, Pomona Box Company
Carl Bernhardt, RWQCB-Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3339

jmt:WGR

315 W. Pine Street, Suite 1A • Lodi, CA 95240 • (209) 334-5363 • Fax (209) 334-5374
Los Alamitos, CA • Bothell, WA • Lodi, CA

WGR
Southwest, Inc.

August 14, 2000

Orange County Health Care Agency
2009 E. Edinger Avenue
Santa Ana, CA 92705
Attn: Mr. Anthony Martinez

Subject: **First Quarter 2000 Groundwater Monitoring Report**
Pomona Box Company - Former UST Location
301 W. Imperial Highway, La Habra, California
OCHCA Case No. 86UT224
RWQCB Discharge Authorization No. CAG918001
WGR Southwest, Inc., Project No. 051.PRI.00

Dear Mr. Martinez,

WGR Southwest, Inc., on behalf of Pomona Box Company, is forwarding a copy of the First Quarter 2000, Groundwater Monitoring Report, documenting activities conducted at the above referenced facility.

Should you have any questions or comments, please contact Mr. Don Votaw at (714) 871-0932 or me at (209) 334-5363.

Sincerely,
WGR Southwest, Inc.

John M. Teravskis, Project Manager

Enc.

Cc: Don Votaw, Pomona Box Company
Carl Bernhardt, RWQCB-Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3339

jmt:WGR

WGR
Southwest, Inc.

October 8, 1999

Orange County Health Care Agency
2009 E. Edinger Avenue
Santa Ana, CA 92705
Attn: Mr. Anthony Martinez

Subject: **Third Quarter 1999 Groundwater Monitoring Report**
Pomona Box Company - Former UST Location
301 W. Imperial Highway, La Habra, California
OCHCA Case No. 86UT224
RWQCB Discharge Authorization No. CAG918001
WGR Southwest, Inc., Project No. 051.PRI.00

Dear Mr. Martinez,

WGR Southwest, Inc., on behalf of Pomona Box Company, is forwarding a copy of the Third Quarter 1999, Groundwater Monitoring Report, documenting activities conducted at the above referenced facility. The next quarterly groundwater monitoring and sampling event is scheduled for November 1999.

Should you have any questions or comments, please contact Mr. Don Votaw at (714) 871-0932 or me at (562) 799-8510.

Sincerely,
WGR Southwest, Inc.

John M. Teravskis, Project Manager

Enc.

Cc: Don Votaw, Pomona Box Company
Carl Bernhardt, RWQCB-Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3339

jmt:WGR

WGR
Southwest, Inc.

August 16, 1999

Orange County Health Care Agency
2009 E. Edinger Avenue
Santa Ana, CA 92705
Attn: Mr. Anthony Martinez

Subject: **Second Quarter 1999 Groundwater Monitoring Report**
Pomona Box Company - Former UST Location
301 W. Imperial Highway, La Habra, California
OCHCA Case No. 86UT224
RWQCB Discharge Authorization No. CAG918001
WGR Southwest, Inc., Project No. 051.PRI.00

Dear Mr. Martinez,

WGR Southwest, Inc., on behalf of Pomona Box Company, is forwarding a copy of the Second Quarter 1999, Groundwater Monitoring Report, documenting activities conducted at the above referenced facility. The next quarterly groundwater monitoring and sampling event is scheduled for August 1999.

Should you have any questions or comments, please contact Mr. Don Votaw at (714) 871-0932 or me at (562) 799-8510.

Sincerely,
WGR Southwest, Inc.

John M. Teravskis, Project Manager

Enc.

Cc: Don Votaw, Pomona Box Company
Carl Bernhardt, RWQCB-Santa Ana Region
3737 Main Street, Suite 500
Riverside, CA 92501-3339

jmt:WGR

11021 Winners Circle, Suite 101 • Los Alamitos, CA 90720 • (562) 799-8510 • Fax (562) 799-8556
Los Alamitos, CA • Bothell, WA • Jackson, MO

COUNTY OF ORANGE
HEALTH CARE AGENCY

PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH

DONALD R. OXLEY
DIRECTOR

HILDY MEYERS, M.D.
INTERIM HEALTH OFFICER

JACK MILLER, REHS
DEPUTY DIRECTOR

MAILING ADDRESS:
2009 EAST EDINGER AVENUE
SANTA ANA, CA 92705-4720

TELEPHONE: (714) 667-3600
FAX: (714) 568-5116

June 21, 1999

Don Votaw
Pomona Box Company
P.O. Box 536
La Habra, CA 90631

Subject: Remediation Requirements

Re: Votaw-Davis Property
301 West Imperial Highway
La Habra, CA 90631
OCHCA Case #86UT224

Dear Mr. Votaw:

This office has not objections to your proposal to remove the vapor extraction unit that had been operated at this site and at the site at 101 West Imperial Highway (OCHCA Case #92UT10). It is unlikely that this office will require additional vapor extraction at this site (or at the 101 West Imperial Highway site). However, further long-term monitoring is required; and if conditions change significantly, it is possible that additional remediation may be requested.

Please continue to collect groundwater samples every three months at this site until you are notified otherwise. These samples should be collected without purging the wells first. Prior to case closure you will be asked to collect pairs of groundwater samples, before and after purging from each well. You may submit a request to reduce the sampling frequency of some of the wells at the site. Wells that have at least four consecutive sampling events with non-detect or low levels of dissolved contamination may be sampled at a reduced frequency.

If you have any questions, please call me at (714) 667-3716.

Sincerely,

Anthony F. Martinez
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

cc: Carl Bernhardt, Santa Ana Regional Water Quality Control Board
John Teravskis, WGR Southwest Inc.

COUNTY OF ORANGE
HEALTH CARE AGENCY

PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH

RONALD R. DILUIGI
INTERIM DIRECTOR

HUGH F. STALLWORTH, M.D., MPH
HEALTH OFFICER

JACK MILLER, REHS
DEPUTY DIRECTOR

MAILING ADDRESS:
2009 EAST EDINGER AVENUE
SANTA ANA, CA 92705-4720

TELEPHONE: (714) 667-3600
FAX: (714) 972-0749

September 14, 1998

Don Votaw
Pomona Box Company
301 West Imperial Highway
La Habra, CA 90631

Subject: Request to Suspend Corrective Action

Re: Pomona Box Company
301 West Imperial Highway
La Habra, California
OCHCA Case #86UT224

Dear Mr. Votaw:

Pursuant to your request to terminate corrective actions at the subject site, this office has reviewed our case file. Based on this review, we have determined that it is appropriate to shut down the remediation system at the subject site. Quarterly groundwater monitoring and reporting must continue, however.

We will evaluate the results of the subsequent groundwater monitoring events. If the groundwater contamination appears to be increasing or if the contaminant plume begins to spread, we may direct you to submit a revised corrective action plan and by require resumption of active remediation at this site.

If you have any questions, please call me at (714) 667-3716.

Sincerely,

Anthony F. Martínez
Hazardous Waste Specialist
Hazardous Materials Management
Environmental Health Division

AFM

cc: Carl Bernhardt, Santa Ana Regional Water Quality Control Board

WGR
Southwest, Inc.

August 14, 1998

Mr. Anthony Martinez
Orange County Health Care Agency
2009 E. Edinger Avenue
Santa Ana, CA 92705

RE: Request to Demobilize the Combined Remediation System Equipment
~~Votaw/Davis Properties Case No. 92UT10 at 101 W. Imperial Hwy., La Habra~~
Pomona Box Company Case No. 86UT224 at 301 W. Imperial Hwy., La Habra

Dear Mr. Martinez,

On behalf of our client, Mr. Don Votaw, who is the owner of the above-referenced locations, we are submitting this letter to request your approval for the demobilization of the remediation system equipment.

As you are aware, the same remediation system, consisting of a vapor extraction system using a 500 scfm Baker Furnace™ thermal oxidizer and a 30-gallon-per-minute carbon adsorption groundwater treatment system, has been used to remediate the subsurface hydrocarbon impacted soils and groundwater at both locations. The groundwater pump and treatment system has not been operated since March 31, 1998. The thermal oxidizer vapor extraction system operation was terminated in late 1997. Even with the remediation systems not in operation, groundwater hydrocarbon concentrations have continued to decline, as reported to you in the recent Second Quarter 1998 Summary Report and Groundwater Monitoring and Sampling Results Report submitted by Remediation Technologies, Inc. and Wayne Perry, Inc., respectively. Therefore, we feel justified at this point to request your approval to remove the remediation system.

The remediation system demobilization will consist of the following.

- Removal of the thermal oxidizer unit
- Removal of the groundwater pump and treatment skids
- Removal of the electrical and gas utility connections
- Disconnection of piping from groundwater and vapor extraction wells
- Injection of cement slurry into abandoned below ground remediation lines
- Removal of the remediation system compound

At the time of the equipment demobilization, we will request Mr. Carl Bernhardt of the California Regional Water Quality Control Board (RWQCB) Santa Ana Region to terminate the NPDES permit (Order No. 91-63).

11021 Winners Circle, Suite 101 • Los Alamitos, CA 90720 • (562) 799-8510 • Fax (562) 799-8556
Los Alamitos, CA • Bothell, WA • Jackson, MO

None of the monitoring or recovery wells will be abandoned at this time. However, we will be evaluating the possibility of abandoning some of the wells in which significant levels of hydrocarbons have not been detected for some time and wells that are not necessary for monitoring purposes. Prior to abandoning any of the wells, we will submit for your approval a plan of abandonment.

Groundwater monitoring will continue for the next two quarters (3rd and 4th Quarters 1998). Assuming that groundwater hydrocarbon concentrations continue to be consistent with the current levels, we should be requesting site closure from you in early 1999.

We plan to begin equipment demobilization on **Monday, September 14, 1998**. If you have any objections to the above-described plan, please notify Mr. Don Votaw or myself prior to that date. If you have any questions or comments, you can contact me (at my new place of employment) at (562) 799-8510. Thank you for your consideration of these matters.

Sincerely,
WGR Southwest, Inc.

John M. Teravskis
Project Manager

Cc: Don Votaw – Votaw/Davis Properties & Pomona Box Company
Carl Bernhardt – RWQCB Santa Ana Region
WGR Project File

RETEC

1250 E. 223rd St.
Suite 114
Carson, CA 90745
310 522-9550
FAX (310) 522-9553

July 27, 1998

Mr. Anthony Martinez
Orange County Health Care Agency
Environmental Health Division
2009 E. Edinger Avenue
Santa Ana, CA 92705

Subject: **Quarterly Remediation System Operation Summary Reports**
~~Votaw/Davis Properties Case No. 92UT10~~
Pomona Box Company Case No. 86UT224

Dear Mr. Martinez:
Enclosed are the Quarterly Remediation System Operation Summary Reports for the above referenced locations for the reporting period of April - June 1998. If you have any questions concerning these reports, please do not hesitate to contact me at (310) 522-9550.

Sincerely,

REMEDIATION TECHNOLOGIES, INC.

John M. Teravskis / by KBW

John M. Teravskis
Project Manager

Attachment

cc: Don Votaw P.O. Box 536, La Habra, CA 90631
Project File No. 1-2652-400

TOM URAM
DIRECTOR

HUGH F. STALLWORTH, M.D.
HEALTH OFFICER

JACK MILLER, REHS
DEPUTY DIRECTOR

MAILING ADDRESS:
2009 EAST EDINGER AVENUE
SANTA ANA, CA 92705-4720

TELEPHONE: (714) 667-3600
FAX: (714) 972-0749

COUNTY OF ORANGE
HEALTH CARE AGENCY

PUBLIC HEALTH
DIVISION OF ENVIRONMENTAL HEALTH

November 12, 1997

Don Votaw
Pomona Box Company
301 West Imperial Highway
La Habra, CA 90631

Subject: Quarterly Status Report dated October 30, 1997

Re: Pomona Box Company
301 West Imperial Highway
La Habra, California
OCHCA Case #86UT224

Dear Mr. Votaw:

This office has reviewed the subject report. Based on the findings presented in the report this office has determined that you may discontinue all active remedial actions at this site. Quarterly groundwater monitoring must continue at this site until further notice.

Be advised that permanent cessation of active remediation at this site is dependant on the groundwater contaminant concentrations remaining at or below the levels shown in the October 30, 1997 quarterly report. If there is a significant rise in any of the wells of any of the contaminants, this office may require that you resume previous corrective actions or submit a modified corrective action plan.

If you have any questions, please call me at (714) 667-3716.

Sincerely,

Anthony F. Martínez
Hazardous Waste Specialist
Hazardous Materials Management
Environmental Health Division

AFM

cc: Carl Bernhardt, Santa Ana Regional Water Quality Control Board

Since 1968

WAYNE PERRY, INC.

Environmental Remediation, Construction and Consulting

Project No. 88.003

January 31, 1997

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Anthony Martinez

Subject: **TRANSMITTAL OF QUARTERLY STATUS REPORT**
POMONA BOX COMPANY
301 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA

Dear Mr. Martinez:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by April 30, 1997.

If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

David M. Henry

David M. Henry
Registered Geologist 4085

cc: Mr. Daryl Votaw, Pomona Box Company
Mr. Carl Bernhardt, California Regional Water Quality Control Board, Santa Ana Region

8281 Commonwealth Ave. Buena Park, California 90621 Phone (714) 826-0352 (800) 883-0352 Fax (714) 523-7880

RETEC

1230 E. 223rd Street
Suite 205
Carson, CA 90745
(310) 522-9550
FAX (310) 522-9553

November 19, 1996

Mr. Anthony Martinez
Orange County Health Care Agency
Environmental Health Division
2009 E. Edinger Avenue
Santa Ana, CA 92705

RE: Quarter Remediation System Operation Summary Reports
Votaw/Davis Properties Case No. 92UT10
Pomona Box Company Case No. 86UT224

Dear Mr. Martinez,

Enclosed are the quarterly remediation system operation summary reports for the above referenced locations covering the reporting period of March - October 1996. If you have any questions concerning these reports, please do not hesitate to contact me at (310) 522-9550. The next quarterly report for each location will be submitted by January 15, 1997.

Sincerely,

REMEDIATION TECHNOLOGIES, INC.

John Teravskis

John M. Teravskis
Project Manager

cc: Don Votaw P.O. Box 536, La Habra, CA 90631
Paul LaBonte - RETEC
Project File

VOTAW/DAVIS PROPERTIES
QUARTERLY SUMMARY REPORT OF THE
REMEDIATION SYSTEM OPERATION

OCHCA Case No. 92UT10

March 1996 - October 1996

Site Background:

The remediation system consists of a vapor extraction system (VES) using a Baker Furnace™ 500 scfm thermal/catalytic oxidizer and a 30 gpm granular activated carbon treatment system. The same remediation system processes and treats extracted groundwater and soil vapor from the two UST clean up locations at 101 and 301 W. Imperial Highway in La Habra, California. Remediation system operation commenced in December 1995. W. W. Irwin, Inc. of Long Beach, California was the original environmental contractor for the remediation system installation and operation. In September 1996, W. W. Irwin closed their business due to bankruptcy and Remediation Technologies, Inc. (RETEC) of Carson, California resumed the function of operating, maintaining and monitoring the remediation system.

Reporting Period Activities:

Operation of the treatment systems were fairly continuous during the reporting period of March through October even through the W. W. Irwin bankruptcy. Down time consisted of not more than a few days at a time for minor repairs and routine maintenance. However, as the reporting period indicates, the reporting was disrupted by the W. W. Irwin bankruptcy. Reports were delinquent with W. W. Irwin and data was lost due to the closing of their business. RETEC has attempted to retrieve as much data as possible from W. W. Irwin. We will be resuming a quarterly reporting period. Attached are data tables summarizing the monitoring and analytical data for this reporting period.

The VES experienced a decline in the total influent hydrocarbon concentration from 260 ppm in March 1996 to 80 ppm in September 1996. Well BT-1 had the highest individual well vapor concentration in March 1996 at 1,380 ppm which decreased to 160 ppm by September 1996. The average vapor flow rate was approximately 350 sfcm. In March 1996, the Baker Furnace operation mode was switched from the "thermal" mode to the "catalytic" mode which allowed us to operate at a lower temperature, using less supplemental fuel.

The water treatment system extracted and processed approximately 1.4 million gallons of water during the reporting period. During that period, only one carbon change out was necessary.

Planned Activities for the Next Quarter:

As is evident from the decreasing and relatively low influent vapor concentrations, the two sites are approaching "clean-up" levels. As requested by the OCHCA office, prior to site closure, the groundwater dissolved hydrocarbon plume must be defined for the Pomona Box Company site. One monitoring well is scheduled to be installed during the 4th Quarter 1996 in Imperial Highway, southwest of the Pomona Box Company site, which should finalize the plume definition. (The Votaw/Davis plume has previously been defined.) As soon as the Pomona Box Company plume has been defined, RETEC will be seeking site closure for both of the locations. However, until the plume is defined, remediation system operation (including vapor and groundwater extraction) will continue for both locations. We estimate that in January 1997, we will be making our case for the closure of both locations. Our next quarterly summary report for the 4th Quarter 1996 will be submitted by January 15, 1997.

Votaw/ Davis Properties - Pomona Box Company
Remediation System Operation Parameters
March 1996 - October 1996

	Vapor Extraction System:									Water System:	
Monitoring Date	Manifold Vacuum (in. of water)	Total Influent Hydrocarbon Vapor (ppm)	Baker Unit Operation Hour Meter	Flow Rate (scfm)	Burner Temp (deg. F)	Stack Temp. (def. F)	Accumulative Gas Meter (cf)	Electric Meter (kW-hrs.)	LEL%	Compressor Operation Hour Meter	Accumulative Total Gallons
01/29/96	66	370	863	340	1,448	1,447	668,300	1,024	7	129.0	338,867
03/01/96	75	260	1,115	334	726	627	684,600	1,376	8	193.5	508,939
03/08/96	70	200	1,195	329	677	610	601,200	1,482	9	212.1	561,470
03/22/96	69	123	1,532	341	662	630	770,100	1,899	4	264.1	682,260
03/29/96	69	120	1,695	343	662	633	804,300	2,097	5	219.7	732,230
04/03/96	65	110	1,818	324	684	642	830,100	2,244	5	311.9	767,610
04/12/96	61	100	2,033	346	689	632	975,300	2,499	4	346.4	827,310
04/17/96	67	110	2,149	342	697	645	909,500	2,638	3	365.2	859,804
04/24/96	60	120	2,321	349	684	640	936,200	2,840	4	392.2	907,070
05/02/96	50	100	2,508	365	651	632	977,100	3,049	2		
05/09/96	55	80	2,677	367	691	625	14,100	3,235	2	443.9	1,000,100
05/15/96	55	64	2,822	360	670	634	45,900	3,395	3	463.5	1,038,556
05/23/96	58	60	3,002	352	596	672		3,592	3		1,091,440
05/31/96	60	56	3,195	354	696	630	127,200	3,807	3		1,146,410
06/05/96	60	62	3,312	349	695	633	125,600	3,937	3	526.7	1,178,260
06/12/96	60	120	3,422	349	681	641	276,300	4,059	4	540.0	1,207,700
06/28/96	80		3,474	309	676	613	187,700	4,117	4	545.8	1,223,690
07/02/96	80		3,503	307	690	608	193,500	4,156	2	554.0	1,232,488
07/11/96	80	22	3,570	308	695	628	206,700	4,247	2	572.5	1,250,301
07/18/96	81	10	3,619		660	609	216,500	4,309	3	579.7	1,266,440
07/23/96	80	10	3,712	311	672	633	235,000	4,422	2	590.3	1,295,020
07/30/96	63	74	3,877	332	700	620	269,100	4,619	3	608.9	1,345,405
08/05/96	60	120	4,018	344	673	615	398,000	4,787	2	629.2	1,390,187
08/13/96	V.E.S Down									739.8	1,405,700
08/16/96	59	60	4,212	337	688	629	339,000	5,013	2	652.2	1,453,600
08/23/96	56		4,380	338	682	611	375,100	5,206	1	670.2	1,501,668
08/27/96	57	40	4,477	334	683	630	395,800	5,311	1	680.1	1,527,952
09/04/96	56	80	46,388	357	656	617	430,500	5,524	4	704.8	1,576,510
09/30/96	56		4,897	347	860	605	488,900	6,009	0	848.6	1,703,380
10/07/96	56		4,990	353	792	716			0	874.1	1,724,120

Votaw/ Davis Properties - Pomona Box Company
Individual Well Vapor Concentrations
March 1996 - October 1996

Date	BT-2		BT-2a		BT-3		MW-8		BT-1		MW-9		PBC Header	
	Vacuum (in. of water)	VOC (ppm)	Vacuum (in. of water)	VOC (ppm)	Vacuum (in. of water)	VOC (ppm)	Vacuum (in. of water)	VOC (ppm)	Vacuum (in. of water)	VOC (ppm)	Vacuum (in. of water)	VOC (ppm)	Vacuum (in. of water)	VOC (ppm)
01/29/96	61	730			61	830	61	140	61	1200	61	340	61	180
03/01/95	70	440			70	1190	70	180	69	1380	70	150	75	140
03/08/96	69	270			70	1100	69	490	69	960	69	360	69	155
03/22/96	65	137			65	497	65	49	65	1120	65	230	65	22
03/29/96	63	120			63	390	63	98	63	1200	62	520	62	51
04/03/96	60	65			62	360	62	30	60	835	61	280	61	115
04/12/96	60	110			60	400	60	66	60	720	60	380	60	42
04/17/96	62	323			62	689	62	362	62	938	62	692	50	172
04/24/96	56	140			55	120	55	120	55	740	55	540	48	80
05/02/96	50	80			48	70	50	65	50	640	50	420		
05/09/96	50	40			46	20	50	20	50	540	50	280	50	55
05/15/96	50	84			45	60	50	58		540	50	240	50	26
05/23/96	Well Closed				55	40	55	65	55	570	55	230	53	20
05/31/96					55	58	55	56	55	480	55	260	55	24
06/05/96					55	56	55	54	55	400	55	240	55	20
06/12/96					55	45	55	24	55	800	55	360	55	52
06/28/96														
07/02/96					80	24	80	24	80	24	75	96	75	24
07/11/96					80	32	80	36	80	36	80	110	76	42
07/18/96					78	26	78	45	78	130	78	150	76	14
07/23/96					78	12	78	6	78	88	78	66	75	16
07/30/96			59	535	59	65	59	36	59	75	59	40	57	68
08/05/96			58	205	58	96	58	18	58	104	58	44	57	105
08/13/96	V.E.S Down													
08/16/96			55	180	55	96	54	40	53	130	53	98	52	80
08/23/96			53	80	53	60	52	180	52	120	51	180	50	80
08/27/96					52	20	52	120	52	80	52	80	52	20
09/04/96				80		80		190		160		140		120
09/30/96														
10/07/96			50		50		50		50		50		50	

Note: BT-2a replaced BT-2

Votaw/ Davis Properties - Pomona Box Company
NPDES Treated Water Discharge Analytical Results
April 1996 - October 1996

Date	Sample I.D.	TPH (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl Benzene (ppb)	Total Xylenes (ppb)	Comments
04/03/96	SE-I	<50	<0.3	<0.3	<0.3	<0.6	
04/14/96	SE-I	<50	<0.3	<0.3	<0.3	<0.6	
06/28/96	SE-I	140	38	2.2	<0.3	14	
06/28/96	**SE-II**	<50	<0.3	<0.3	<0.3	<0.6	**Carbon Changed Out**
07/02/96	SE-I	<50	<0.3	<0.3	<0.3	<0.6	
07/11/96	SE-I	<50	<0.3	<0.3	<0.3	<0.6	
07/18/96	SE-I	<50	<0.3	<0.3	<0.3	<0.6	
07/22/96	SE-I	<50	<0.3	<0.3	<0.3	<0.6	
08/05/96	SE-I	<50	<0.3	<0.3	<0.3	<0.6	
08/16/96	SE-I	<50	<0.3	<0.3	<0.3	<0.6	
08/23/96	SE-I	<50	<0.3	<0.3	<0.3	<0.6	
08/27/96	SE-I	<50	<0.3	<0.3	<0.3	<0.6	
09/04/96	SE-I	<50	<0.3	<0.3	<0.3	<0.6	
09/21/96	SE-I	<50	<0.3	<0.3	<0.3	<0.6	
09/30/96	SE-I	<50	<0.3	<0.3	<0.3	<0.6	
09/30/96	SE-II	<50	<0.3	<0.3	<0.3	<0.6	
10/07/96	SE-I	<50	<0.3	<0.3	<0.3	<0.6	
10/07/96	SE-II	<50	<0.3	<0.3	<0.3	<0.6	
10/11/96	SI	90	5.7	4.5	1.1	28	
10/11/96	SE-I	<50	<0.3	<0.3	<0.3	<0.6	

Key:

SI	System Influent Sample Point (Prior to treatment)
SE-I	Intermediate System Effluent Sample Point (Inbetween the carbon vessels)
SE-II	Final System Effluent Sample Point (After the second carbon vessel)
	Note: Normal Procedure is to analyze SE-II only if there is a detection in SE-I

Since 1968

WAYNE PERRY, INC.

Environmental Remediation, Construction and Consulting

Project No. 88.003

October 31, 1996

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Anthony Martinez

Subject: **TRANSMITTAL OF QUARTERLY STATUS REPORT**
POMONA BOX COMPANY
301 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA

Dear Mr. Martinez:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by January 31, 1997.

If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

David M. Henry

David M. Henry
Registered Geologist 4085

cc: Mr. Daryl Votaw, Pomona Box Company
Mr. Carl Bernhardt, California Regional Water Quality Control Board, Santa Ana Region

8281 Commonwealth Ave. Buena Park, California 90621 Phone (714) 826-0352 (800) 883-0352 Fax (714) 523-7880

POMONA BOX COMPANY

DONALD E. VOTAW
DARYL D. VOTAW

301 W. IMPERIAL HWY. • P.O. BOX 536 • LA HABRA, CALIFORNIA 90631
WOODEN BOXES • CRATES • PALLETS • CORRUGATED CARTONS
(714) 871-0932

July 23, 1996

COPY

Mr. Dave Henry
WAYNE PERRY
8281 Commonwealth Ave.
Buena Park, CA 90621

SUBJECT: Request for Proposal to Install a Monitoring Well in Imperial Highway for Pomona Box Company at 301 W. Imperial Hwy., La Habra, CA.

Dear Mr. Henry,

We have been requested by the Orange County Health Care Agency (OCHCA) to install an additional groundwater monitoring well in Imperial Highway in order to define the southern extent of a dissolved hydrocarbon phase plume in the groundwater. We are currently receiving reimbursements from the State of California for the remediation of the subject site. In order to comply with the State of California reimbursement policies, we are requesting competitive bids.

We would like your company to provide a cost estimate to install and develop one groundwater monitoring well in Imperial Highway in La Habra, California. (Site map is attached.) The well installation is to be similar in nature to the attached boring/well completion log for another well located in Imperial Highway approximately 500 feet to the east of the proposed location. Your bid is to include the following:

All permits including OCHCA well permit and CALTRANS encroachment permits. Your company will be required by CALTRANS to post a $5,000 insurance bond. Your bid is to include the cost of the bond including the cost of annual premium renewal fees.

The drilling, installation and development (swabbing and removal of four well volumes of groundwater) of the well including all labor, equipment, materials, and services.

The surface completion of the monitoring well including a CALTRANS-approved well box, concrete, and reinforcement.

Soil samples to be collected at 5, 10, and 15 feet below ground surface and analyzed using EPA method 8015/8020 by a State-certified laboratory. Your bid is to include the costs of all sampling and analytical testing (including any soil profiling analyses).

All drums, soil handling, manifesting and waste disposal/recycling.

Preparation of a boring/well completion log and a summary report of the well installation, development, analytical results, and a description of soil samples according to the Unified Soil Classification System.

Development and sampling of the new well. Groundwater to be analyzed using EPA methods 8015 and 602 and analyzed for MTBE.

All appropriate traffic control equipment (i. e. arrow boards, signs, cones, delineators, etc.) according to WATCH Handbook.

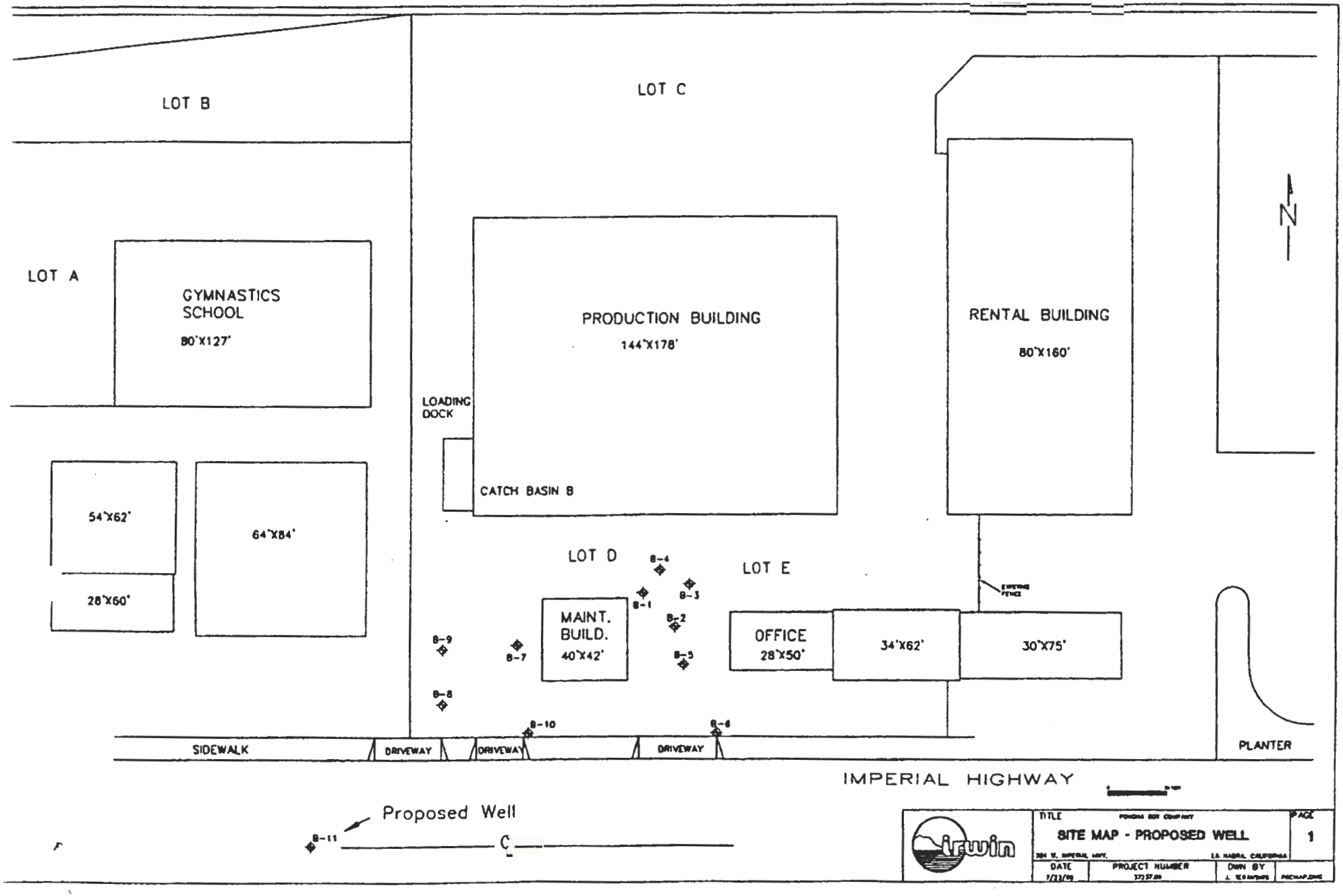
Your bid is to be on a time and materials not to exceed bases. Please submit your proposal by August 1, 1996 to the Pomona Box Company. You can fax you bid to (714) 871-3483. If you have any questions, you can call me at (714) 871-0932.

Sincerely,
POMONA BOX COMPANY

Donald E. Votaw

attachments: Site Map
Boring/Well Completion Log

cc: Anthony Martinez - OCHCA


LOT B
LOT C
LOT A
GYMNASTICS SCHOOL
80'X127'
PRODUCTION BUILDING
144'X178'
RENTAL BUILDING
80'X160'
N
LOADING DOCK
CATCH BASIN B
54'X62'
64'X84'
28'X60'
LOT D
LOT E
B-4
B-3
B-1
B-2
B-5
B-9
B-7
B-8
B-10
B-6
MAINT. BUILD.
40'X42'
OFFICE
28'X50'
34'X62'
30'X75'
PLANTER
SIDEWALK
DRIVEWAY
DRIVEWAY
DRIVEWAY
IMPERIAL HIGHWAY
Proposed Well
B-11
C
irwin
TITLE
SITE MAP - PROPOSED WELL
PAGE
1
DATE
PROJECT NUMBER
DWN BY

ENVIRONMENTAL irwin
2750 Signal Pkwy.
Long Beach, CA 90806

BORING LOG

Drill Rig: CME-75	Date Drilled: 8-25-93	Logged By:
Boring Dia: 10"	Boring Number: MW-10	J. Bollier

Sample Type	Sample Blow Count	Depth Feet	Well Const.	Casing (in.) 10 20	Elev. Feet	Soil Type	Description and Remarks
						SM	**SILTY SAND**, medium dense, brown, dry, fine to medium grained, poorly sorted, rare pebble, NO ODOR
■	10-20-22	5					**SILTY SAND**, medium dense, brown, dry to damp, fine to medium grained, poorly sorted, rare pebble, rare clay, NO ODOR, OVA 180 ppm
	10-18-21	10				CL	**SANDY CLAY**, stiff, light brown to olive, damp, low plasticity, gypsum xls, caliche stringers, NO ODOR, OVA 130 ppm
■	11-14-20	15					**SANDY CLAY**, same as above, moist to very moist, sand interbed at approx. 12-13', SLIGHT ODOR, OVA 220 ppm
■	11-16-22	20					**SANDY CLAY**, same as above, sand interbed (light brown, fine to medium grained, poorly sorted at 21', NO ODOR, OVA 180 ppm
	12-22-33	25					**SANDY CLAY**, stiff, light brown, damp to moist, caliche stringers, rare pebble, NO ODOR, OVA 100 ppm
							Total depth 25'.

Completion Notes:

Set 20' of 4" schedule 40 PVC 0.02" slotted casing, 5' of 4" schedule 40 PVC blank casing. Backfilled with #3 Monterey sand to 4' bgs, bentonite chip to 1' bgs, finished at surface grade with well box and concrete.

SITE:

Votaw/Davis
101 W. Imperial Highway
La Habra, California

Project No. 37237.02

Since 1968
WAYNE PERRY, INC.
Environmental Remediation, Construction and Consulting

March 18, 1996

Orange County Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Anthony Martinez

Subject: **REVIEW SHEET RESPONSE**
PROPOSED WELL INSTALLATION
POMONA BOX COMPANY
301 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA
OCHCA CASE NO. 86UT224

Dear Mr. Martinez:

In correspondence dated March 4, 1996, a site specific well construction diagram was requested. A general well construction was included in the October 31, 1995 work plan because the depth to groundwater beneath Imperial Highway in the immediate vicinity of the Pomona Box facility is unknown at this time. Accordingly, the exact depth of the well and depth of the slotted casing were not presented on the well construction diagram.

Depth of well and depth to the top screen section will be determined during drilling operations. Available information indicates the depth of the well will be between 20 and 30 feet. The top of the screen section will be placed a minimum of 5 feet and a maximum of 10 feet above the first encountered groundwater and the bottom of the screen will be a minimum of 10 feet and a maximum of 15 feet below first encountered groundwater. The screen section will be a minimum of 20 feet in length. All casing will be four-inch diameter schedule 40 PVC.

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If you have any questions or comments, please call me at (714)826-0352.

Sincerely,

David M. Henry

David M. Henry
Registered Geologist 4085

COUNTY OF ORANGE

TOM URAM
DIRECTOR

HUGH F. STALLWORTH, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E. MERRYMAN, REHS, MPH
DEPUTY DIRECTOR

HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE
SANTA ANA, CALIFORNIA 92705
(714) 667-3700

March 4, 1996

Don Votaw
Pomona Box Company
301 West Imperial Highway
La Habra, CA 90631

Subject: Quarterly Status Report dated October 31, 1995, prepared by Wayne Perry for the Pomona Box Company at 301 West Imperial Highway, La Habra, California—O.C.H.C.A. Case #86UT224

Dear Mr. Votaw:

This office has reviewed the work plan included in the report referenced above. The work plan describes the installation and sampling of an off-site groundwater monitoring well as required by this Agency. This office hereby approves implementation of the work plan provided the following items are addressed:

1. A site specific well construction diagram must be submitted to this office prior to installation.

2. The soil sample collected at the capillary fringe and the groundwater sample must also be analyzed for MTBE by EPA Method 8020.

The revised well construction diagram must be submitted to this office by March 18, 1996, and the well must be installed by April 1, 1996. Any delays due to CalTrans permitting requirements must be reported to this office immediately.

If you have any questions, please call me at (714) 667-3716.

Sincerely,

Anthony F. Martínez
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

AFM

cc: Carl Bernhardt, Santa Ana Regional Water Quality Control Board
David M. Henry, Wayne Perry, Inc.

Since 1968

WAYNE PERRY, INC.

Environmental Remediation, Construction and Consulting

February 27, 1996

Orange County Health Care Agency
Environmental Health Division
20009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Anthony Martinez

Subject: **REVIEW SHEET RESPONSE**
Pomona Box Company
301 West Imperial Highway
La Habra, California

Dear Mr. Martinez:

In correspondence dated January 18, 1996, the Orange County Health Care Agency approved implementation of the revised corrective action plan provided the following items were addressed:

1. Vapor concentration from each individual extraction well must be monitored on a monthly basis for the first three months of operation and quarterly thereafter;

2. Groundwater samples must be collected from all monitoring wells on a quarterly basis;

3. The Orange County Health Care Agency must be notified at least 48-hours before making any significant changes to the approved corrective actions; and,

4. A work plan for installation of an off-site groundwater monitoring well down gradient of well B-10 must be submitted by February 29, 1996.

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Accordingly, Wayne Perry, Inc. presents the following response.

Item 1: Vapor Concentration Monitoring

Due to how the system was constructed, it is not possible to obtain vapor concentration measurements from individual wells. The total influent hydrocarbon vapor concentration is measured on a weekly basis by representatives of W. W. Irwin. Data from the first three months of system operation will be forwarded to your office at the earliest possible date. Vapor concentration readings will thereafter be included in the regular quarterly status reports.

Item 2: Groundwater Sampling of All Monitoring Wells

Groundwater extraction pumps are currently installed in wells B-2, B-5, B-6, B-9, and B-10. In order to save money during remediation activities and reduce system down time, these wells will be sampled on an annual basis as long as the remediation system is operating. Once the system has been shut down, all wells will be sampled on a quarterly basis.

Item 3: 48-hour Notification

A minimum of 48-hours notice will be given prior to any changes Wayne Perry, Inc. may make to the approved corrective actions for the subject location.

Item 4: Work Plan for Off-site Well Installation

A work plan was submitted as part of the October 31, 1995 status report.

If you have any comments regarding this project, please call Mr. David Henry of Wayne Perry, Inc. at (714)826-0352.

Sincerely

David M. Henry

David M. Henry
Registered Geologist 4085

Since 1968

WAYNE PERRY, INC.

Environmental Remediation, Construction and Consulting

Project No. 88.003

January 31, 1996

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Anthony Martinez

Subject: **TRANSMITTAL OF QUARTERLY STATUS REPORT**
POMONA BOX COMPANY
301 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA

Dear Mr. Martinez:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by April 30, 1996..

If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

David M. Henry

David M. Henry
Registered Geologist 4085

cc: Mr. Daryl Votaw, Pomona Box Company
Mr. Carl Bernhardt, California Regional Water Quality Control Board, Santa Ana Region

8281 Commonwealth Ave. Buena Park, California 90621 Phone (714) 826-0352 (800) 883-0352 Fax (714) 523-7880

COUNTY OF ORANGE

HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE
SANTA ANA, CALIFORNIA 92705
(714) 667-3700

TOM URAM
DIRECTOR

HUGH F. STALLWORTH, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E. MERRYMAN, REHS, MPH
DEPUTY DIRECTOR

January 18, 1996

Don Votaw
Pomona Box Company
301 West Imperial Highway
La Habra, CA 90631

Subject: Revised Remedial Action Plan dated September 26, 1995, prepared by Wayne Perry for the Pomona Box Company at 301 West Imperial Highway, La Habra, California—O.C.H.C.A. Case #86UT224

Dear Mr. Votaw:

This office has reviewed the revised corrective action plan (CAP) referenced above. This office hereby approve implementation of the subject CAP provided the following items are addressed:

1. Vapor concentrations from individual extraction wells must be monitored on a monthly basis for the first three months of operation, and every three months thereafter. Vapor concentrations must be reported to this office quarterly.

2. Groundwater samples must be collected from all wells on a quarterly basis. The results of this monitoring must be reported to this office quarterly.

3. This office must be notified at least forty-eight hours before making any significant changes to the approved corrective actions.

4. You must submit a workplan to install an additional groundwater monitoring well downgradient of monitoring well B-10. This work plan must be submitted by February 29, 1996.

Pursuant to the California Code of Regulations, Title 23, Chapter 16, Section 2726(d), this office may require you to modify or suspend the corrective actions, if site conditions change significantly.

Copies of all workplans, reports, and other correspondence must also be submitted to the Regional Water Quality Control Board, Santa Ana Region.

If you have any questions, please call me at (714) 667-3716.

Sincerely,

Anthony F. Martínez
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

AFM

cc: Carl Bernhardt, Santa Ana Regional Water Quality Control Board
David M. Henry, Wayne Perry, Inc.

Since 1968

WAYNE PERRY, INC.

Environmental Remediation, Construction and Consulting

Project No. 88.003

October 31, 1995

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Anthony Martinez

Subject: **TRANSMITTAL OF QUARTERLY STATUS REPORT**
POMONA BOX COMPANY
301 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA

Dear Mr. Martinez:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by January 31, 1995.

If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

David M. Henry

David M. Henry
Registered Geologist 4085

cc: Mr. Daryl Votaw, Pomona Box Company
Mr. Carl Bernhardt, California Regional Water Quality Control Board, Santa Ana Region

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W.W. IRWIN, INC.

ENVIRONMENTAL • CONSTRUCTION • MAINTENANCE
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August 18, 1995

Mr. Don Votaw
Votaw/Davis Properties
P.O. Box 536
La Habra, CA 90631

RECD AUG 28 '95

SUBJECT: Votaw/Davis Properties and Pomona Box Company
Description of the Combined Remediation Approach

Dear Mr. Votaw,

This letter summarizes the discussions and conclusions made in the Wednesday, August 9, 1995 meeting concerning a combined remediation approach for the two above referenced locations. In attendance at the meeting were Don Votaw representing Votaw/Davis Properties and Pomona Box Company, David Henry of Wayne Perry Inc., consultant for the Pomona Box Company remediation, and John Ripley and John Teravskis of W. W. Irwin Inc., consultant for the Votaw/Davis Properties remediation.

In our meeting, it was noted that the two sites in question each have an individual California State underground storage tank reimbursement fund claim number. (The claim number for Votaw/Davis Properties at 101 W. Imperial Highway in La Habra is 6936 and the claim number for 301 W. Imperial Highway in La Habra is 2466.)

The two locations which require remedial action are approximately 400 feet apart in distance with Votaw/Davis Properties owning the connecting land between these two locations. The land between the two locations is leased by an automobile sales company and is used as an automobile sales lot. There are no significant property developments or structures between the two properties thus making it possible to connect the two locations with underground piping, which would allow the same remediation system to treat both of the sites.

Because the two locations have similar lithologies and the nature of the contaminated soil and ground water is similar at each location, the same remedial technology would be appropriate for either location. Both consultants agreed that combined groundwater and soil vapor extraction would be a suitable approach for their respective locations. It was also agreed that the Orange County Health Care Agency, which is the lead-agency, would most likely agree on a joint remediation effort.

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We discussed that the already acquired soil vapor extraction system capacity is ample enough to extract and treat vapor from both sites concurrently. For a relatively minimal cost, the groundwater treatment skid, which as of date has not yet been fabricated, could be modified to handle the increased flow rate caused by adding the Pomona Box wells.

One benefit of going to combined remediation approach will be expediting the commencement of remedial activities for both locations. Another, and possibly more significant benefit is that the combined approach will result in cost savings for the State of California ranging from $200,000 to $300,000. The cost savings are summarized as follows:

- Engineering performed for one system vs. two ($ 25,000)
- One set of permits and permit compliance items ($ 10,000)
- Use of the same capital remedial equipment ($ 100,000)
- Use of some of the same trenches to run pipe and conduit ($ 15,000)
- Use of the same treatment system compound ($ 5,000)
- The need for only one electrical and natural gas connection ($ 10,000)
- The operation, maintenance and monitoring of one treatment system vs. two ($ 30,000 annually)

Some additional costs will be incurred in combining the two systems, such as: revising the engineering and construction drawings to make allowances for the additional extracted soil vapor and groundwater, increasing pipe diameter sizes for increased capacity, extra trenching and piping associated with the relocation and centralization of the treatment equipment compound, and increasing the capacity of the groundwater treatment system. But, these additional costs are relatively much lower than installing a second completely independent treatment system.

We are currently revising the engineering plans to incorporate this combined remediation approach and we will submit them to you soon. In the meanwhile, if you have any questions or comments please feel free to contact us.

Sincerely,

John M. Teravskis, R.E.A.
Project Manager
W. W. Irwin, Inc.
(310) 426-3338

David Henry, R.G.
Geoscience Manager
Wayne Perry, Inc.
(714) 826-0352

Since 1968
WAYNE PERRY, INC.
Environmental Remediation, Construction and Consulting

Project No. 88.003

July 3, 1995

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Anthony Martinez

Subject: **TRANSMITTAL OF QUARTERLY STATUS REPORT**
POMONA BOX COMPANY
301 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA

Dear Mr. Martinez:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by October 31, 1995

If you have any questions or require additional information, please call me at (714) 826-0342.

Very truly yours,

David M. Henry

David M. Henry
Registered Geologist 4085

cc: Mr. Daryl Votaw, Pomona Box Company
Mr. Carl Bernhardt, California Regional Water Quality Control Board, Santa Ana Region

8281 Commonwealth Ave. Buena Park, California 90621 Phone (714) 826-0352 (800) 883-0352 Fax (714) 523-7880

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
PHONE (714) 826-0352 ■ (800) 883-0352 ■ FAX (714) 523-7880

Project No. 88.003

March 9, 1995

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Anthony Martinez

Subject: Transmittal of Quarterly Status Report
Pomona Box Company
301 West Imperial Highway
La Habra, California

Dear Mr. Martinez:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by July 31, 1995.

If you have any questions or require additional information, please call me at (714) 826-0342.

Very truly yours,

David M. Henry

David M. Henry
Registered Geologist 4085

cc: Mr. Daryl Votaw, Pomona Box Company
Mr. Carl Bernhardt, Santa Ana Regional Water Quality Control Board

TOM URAM
DIRECTOR

HUGH F. STALLWORTH, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E. MERRYMAN, REHS, MPH
DEPUTY DIRECTOR

COUNTY OF ORANGE

HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE
SANTA ANA, CALIFORNIA 92705
(714) 667-3700

May 15, 1995

Don Votaw
Pomona Box Company
301 West Imperial Highway
La Habra, CA 90631

WM

Subject: Revised Corrective Action Plan dated January 13, 1995, and the attached Cover Letter dated January 25, 1995, prepared by W.W. Irwin for the Pomona Box Company at 301 West Imperial Highway, La Habra, California—O.C.H.C.A. Case #86UT224

Dear Mr. Votaw:

This office has reviewed the revised corrective action plan (CAP) and the cover letter referenced above. The letter states that the January 1995 CAP is a more cost-effective alternative to the CAP dated October 6, 1994 (approved by this Agency on December 8, 1994). The January 1995 CAP proposes groundwater and soil vapor extraction, however, unlike the October 1994 CAP, a recovery trench is not proposed. Also, different equipment will be used to destroy the recovered contaminants. The cover letter also proposes delaying full implementation of the CAP for this site until remediation at 101 West Imperial Highway, La Habra is completed and the remediation equipment is available for use at the 301 West Imperial Highway site.

Based on our review of the CAP (dated January 13, 1995), this office has determined that the following items must be addressed in a revised CAP:

1. You must provide a more thorough justification for implementing the January 1995 CAP instead of the October 1994 CAP. Please include a more detailed comparison of the costs related to the implementation of both CAPs.

2. You must demonstrate that the January 1995 CAP will effectively remediate the contamination at the subject site. In particular, you must show that the installation of a recovery trench is not necessary. Include site a site plan that depicts the zones of influence of the recovery wells.

3. Due to the current contamination concentrations at this site and your proposal to delay full CAP implementation, interim corrective actions are required. The

interim corrective actions must include the installation and monitoring of additional wells at the down-gradient edge of the groundwater contaminant plume (south and west of the subject site). You must also propose interim remediation.

4. Provide a justification for delaying the implementation of the final corrective actions at this site. Include a schedule for beginning the remedial actions at this site and a description of the criteria for terminating the corrective actions at the other site (101 West Imperial Highway, La Habra). Also include a brief discussion of what will be done at this site if the remediation at the other site is not completed as scheduled.

5. The final CAP must be signed by an appropriately registered professional.

Pursuant to the California Code of Regulations, Title 23, Chapter 16, Section 2726(d), this office may require you to modify or suspend the corrective actions, if site conditions change significantly.

Copies of all workplans, reports, and other correspondence must also be submitted to the Regional Water Quality Control Board, Santa Ana Region.

If you have any questions, please call me at (714) 667-3716.

Sincerely,

Anthony F. Martinez
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

AFM

cc: Carl Bernhardt, Santa Ana Regional Water Quality Control Board
Lisa Morris, W.W. Irwin, Inc.

86-224

POMONA BOX COMPANY HISTORY
SUMMARY OF EVENTS
CLAIM #2466

1957 TO PRESENT: The site is occupied by an operating box manufacturing company located on the north side of Imperial Highway west of the intersection of Imperial Highway and Euclid Avenue in the city of La Habra.

DECEMBER 1986: In December 1986, a single 1,000 gallon underground storage tank was removed, a localized area of hydrocarbon contaminated soil was present. Product was encountered at a depth of approximately 13 feet. Site assessment work was required by the regulatory agency to define the extent of contamination.

JANUARY TO SEPTEMBER 1987: Six borings were drilled and sampled. All the borings were converted to groundwater monitoring wells.

APRIL THROUGH OCTOBER 1987: Review bids for tank removal.

DECEMBER 1987: Signed contract to automatically remove free product. Permission from city fire dept.

JANUARY 1987 THROUGH AUGUST 1992: Manual (and later automated) free product recovery.

MARCH THROUGH OCTOBER 1987: Site assessment work by Wayne Perry.

AUGUST 1988: Letter from OCHCA requiring cleanup.

SEPTEMBER 1989: Seven additional underground storage tanks were removed at this location. Results of laboratory analyses preformed as part of the removal procedure indicated petroleum hydrocarbons were present. Subsequently, four borings were drilled and sampled as part of supplemental site investigations between March 1991 and February 1993.

FEBRUARY 1990: Status report to county by Wayne Perry

JUNE 1990: Proposed work plan.

OCTOBER 1990: Recommendation report to county by Wayne Perry.

JANUARY 1991: Quarterly report to County.

MARCH 1991: Four more borings required.

APRIL 1991: Quarterly report to County.

APRIL 1991: Supplemental site investigation.

JULY 1991: Proposed work plan.

JULY 1991: Quarterly report to County.

AUGUST 1991: Supplemental site investigation.

JANUARY 1992: Quarterly report to County.

JANUARY 1992: Two formal applications to State for reimbursement. One for gasoline leak and one for diesel leak.

APRIL 1992: Quarterly report to County.

APRIL 1992: State will consider claim #2462 & 2466 as one occurance (combining our gas & diesel claims.)

JULY 1992: Quarterly report to County.

OCTOBER 1992: Quarterly report to County.

NOVEMBER 1992: First reimbursement request mailed to State.(check for $40,325.00 recieved March 1993.)

DECEMBER 1992: Work plan proposal.

JANUARY 1993: Quarterly report to County.

FEBRUARY 1993: Two more borings required.

APRIL 1993: Site assessment work by Wayne Perry.

MAY 1993: Second reimbursement mailed to State. (check for $28,322.00 recieved August 1993.)

AUGUST 1993: Quarterly report to County.

SEPTEMBER 1993: Letter from county require furhter work on RAP.

OCTOBER 7, 1993: A 24 hour aquifer test was performed. Results of the aquifer testing indicate transmissivities at the site range.

NOVEMBER 1993: Aquifer test analysis.

NOVEMBER 1993: Quarterly report to County.

DECEMBER 1993: Remedial action plan.

DECEMBER 1993 TO FEBRUARY 1994: Review bids for RAP. It was determined that RAP by Wayne Perry was entirely inadequit. Ask them to start over again.

JANUARY 1994: Vapor extraction test report.

JANUARY 1994: Quarterly report to County.

APRIL 1994: Quarterly report to County.

MAY 1994: Met here with Anthony Martinez of OCHCA and Richard Smith of Wayne Perry Construction. Wayne Perry will continue tests as required by the county.

MAY 1994: Third reimbursement request mailed to the State. (check for $6,886.00 recieved August 1994.)

JULY 1994: Quarterly report to County.

AUGUST 1994: Remedial Action Plan submitted.

AUGUST 1994: Fourth reimbursement request mailed to State. (Received $14,355.00 on 1-23-95 and $3,467.00 on 1-27-95)

SEPTEMBER 1994: County asked for revisions of August RAP.

OCTOBER 1994: Revised RAP submitted to the County and approved by County on December 8, 1994.

OCTOBER 1994: Quarterly report to County.

JANUARY 1995: Quarterly report to County.

JANUARY 1995: W. W. Irwin submitted a C A P to County - County will compare the two plans and advise.

FEBUARY/MARCH/APRIL 1995: Await County review.

MAY 1995: Received letter from county regarding revision of plan so we can wait till VDP (claim 3936) is complete.

JUNE 1995: Continue to wait for contractors reports. Investigate possible chemical remediation.

JULY 1995: Quarterly report to county.

JULY 1995: Fifth reimbursment request sent to state.

Aug 1995: Meeting w WW Irwin + Wayne Perry regarding moving VDP compound and possibly combining the 2 projects - enthusiastically approved by county.

Sept 1995 Phone call + letter to Jim Munch in Sac regarding the combined project - he approved.

Sept 1995 W. W. Irwin installed piping to Wayne Perry wells

Sept 1995 Back to city for more planning commission hearings and permits.

DONALD E. VOTAW

MARLIN W. DAVIS

VOTAW DAVIS PROPERTIES

P.O. BOX 536
LA HABRA, CALIFORNIA 90631

09-19-95

Attn: Mr. Jim Munch
U S T C F
2014 "T" Street, Suite 130
P. O. Box 944212
Sacramento, CA 94244-2120

Re: Claim Numbers 6936 and 2466

Dear Mr. Munch,

On September 6, we talked by phone regarding the combining of our two projects with a twofold objective. First, to get started with the cleanup, and second, to save the State money in the long run. We discussed the fact that the Orange County Health Care Agency is enthusiastic about this joint effort and the fact that the State of California will not require additional bidding.

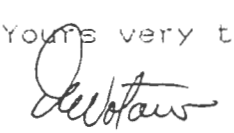
In response to your request for a technical letter, Wayne Perry Inc. confirmed in the attached August 18, 1995 letter that the remediation technology approved for the Votaw/Davis property will also be appropriate for the Pomona Box Company site based on the soil and ground water data collected during the investigation phase. Wayne Perry Inc. is currently revising the Corrective Action Plan which will soon be submitted to the State and the Orange County Health Care Agency. W. W. Irwin, Inc. has sized the remediation equipment to treat extracted vapors and ground water from both remediation sites. Attached are two sets of plans; one set of the original Votaw/Davis remediation system, and the other of the new combined Votaw/Davis - Pomona Box Company remediation system.

In response to your request for a cost analysis, I am enclosing a letter from W. W. Irwin, Inc. dated September 18, 1995 which details the additional costs involved in concurrently remediating both sites with the same remediation equipment. W. W. Irwin estimates the additional cost for connecting and operating the Pomona Box Company wells to total approximately $59,000.

The underground piping work has already commenced. The remediation equipment and compound is scheduled to be completed by the end of September. The remediation system start-up is scheduled for early October.

I hope I have covered everything to your satisfaction. If you have any questions concerning our approach or the associated costs, please do not hesitate to contact me at (714) 871-0932.

Yours very truly,



D. E. Votaw, Partner

cc: Anthony Martinez - Orange County Health Care Agency

enclosures

DEV:bc

W.W. IRWIN, INC.

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September 18, 1995

Mr. Don Votaw
Votaw/Davis Properties
P.O. Box 536
La Habra, CA 90631

SUBJECT: Votaw/Davis Properties and Pomona Box Company
Technical Description of Additional Costs Associated
with the Combined Remediation Approach
W. W. Irwin Project No. 37237.09

Dear Mr. Votaw,

As discussed in the August 18, 1995 letter from W. W. Irwin, Inc. and Wayne Perry Inc., the discission was made to concurrently remediate the Votaw/Davis property and the Pomona Box Company property utilizing the same remediation system. The Votaw/Davis Property is located at 101 W. Imperial Highway in La Habra (state reimbursement claim number 6936) and the Pomona Box Company is located at 301 W. Imperial Highway in La Habra (state reimbursement claim number 2466. This letter summarizes the costs associated with the combined remediation system.

The two locations which require remedial action are approximately 400 feet apart in distance with Votaw/Davis Properties owning the connecting land between these two locations. The land between the two locations is leased by an automobile sales company and is used as an automobile sales lot. There are no significant property developments or structures between the two properties thus making it possible to connect the two locations with underground piping, which would allow the same remediation system to treat both of the sites.

Because the two locations have similar lithologies and the nature of the contaminated soil and ground water is similar at each location, the same remedial technology would be appropriate for either location. Both consultants agreed that combined groundwater and soil vapor extraction would be a suitable approach for their respective locations. Orange County Health Care Agency, which is the lead-agency, has also agreed on the joint remediation effort.

The already acquired soil vapor extraction system (Baker Furnace 500) has a capacity of treating up to 500 scfm of soil vapor and is ample enough to extract and treat vapor from both sites concurrently. The groundwater treatment skid is capable of treating up to 30 gallons per minute of ground water originating from the 6 Votaw/Davis extraction wells and the 10 Pomona Box extraction wells. The air compressor was specified to operate up to 16 down-well pneumatic pumps.

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Enclosed are two sets of drawings to compare the original Votaw/Davis remediation system to the new combined Votaw/Davis - Pomona Box Company remediation system.

The following is a summary of the costs associated with the combined remediation system:

System Design Modification and Permitting	12,000
Pre-construction Activities	3,000
Construction Cost:	
Baker Furnace 500 (Purchased by Don Votaw)	50,000
Water Treatment Skid and Air Compressor	48,000
Down-Well Ground Water Extraction Pumps	32,000
Labor, Materials, and Equipment	140,000
System Monitoring and Reporting (One Year)	30,500
Total Estimated Cost for Installation and One Year of Operation*:	**$ 315,500**

* Note: This cost does not include the operational costs for the electrical and natural gas consumption.

On December 21, 1994, W. W. Irwin, Inc., as the low bidder, was awarded the contract for the installation of the remediation system for the Votaw/Davis property. The contracted amount was $256,500 (which included the purchase of the Baker Furnace). The above total amount of $315,500 is for the combined remediation system, a net difference of $59,000. The following summarizes the costs associated with the connection of the Pomona Box System wells into the system and the size modifications made to the piping and treatment systems to accommodate the higher flow volumes.

Design and Permitting Changes	5,500
Construction Costs:	
Increase in Cost due to Larger Water Treatment System and Air Compressor	6,000
Additional Down-well Pumps (5)	16,000
Labor, Materials, Equipment	26,500
Increase Cost of Monitoring and Reporting (One Year)	5,000
Total Additional Cost Associated with the Pomona Box Co. Location:	**$ 59,000**

Since the Baker Furnace was purchased by Don Votaw, W. W. Irwin's new total project cost with the additional costs associated with the Pomona Box remediation are summarized as follows:

Original Contract Value	$ 256,500
Baker Furnace Subtraction	(50,000)
Additional Costs Associated with the Pomona Box Remediation	59,000
New W. W. Irwin Contract Amount:	**$ 265,500**

It is important to note that even though the extracted soil hydrocarbon vapors and impacted ground water will be treated together, the two contamination plumes are a result of two different sources and are treated by the owner, county and state as two distinct locations. The ground water and soil hydrocarbon plumes currently do not overlap and it is unlikely that they will meet in the future, especially with the imminent start-up of the remediation system.

The remediation system start-up is currently scheduled for the week of October 2, 1995, depending on the delivery of the water treatment system. In the meanwhile, if you have any questions concerning the above or the installation, please do not hesitate to contact me at (310) 426-3338, extension 160.

Sincerely,
W. W. IRWIN, INC.

John M. Teravskis
Project Manager, Industrial Services

W.W. IRWIN, INC.

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August 18, 1995

Mr. Don Votaw
Votaw/Davis Properties
P.O. Box 536
La Habra, CA 90631

RECD AUG 28 '95

SUBJECT: Votaw/Davis Properties and Pomona Box Company
Description of the Combined Remediation Approach

Dear Mr. Votaw,

This letter summarizes the discussions and conclusions made in the Wednesday, August 9, 1995 meeting concerning a combined remediation approach for the two above referenced locations. In attendance at the meeting were Don Votaw representing Votaw/Davis Properties and Pomona Box Company, David Henry of Wayne Perry Inc., consultant for the Pomona Box Company remediation, and John Ripley and John Teravskis of W. W. Irwin Inc., consultant for the Votaw/Davis Properties remediation.

In our meeting, it was noted that the two sites in question each have an individual California State underground storage tank reimbursement fund claim number. (The claim number for Votaw/Davis Properties at 101 W. Imperial Highway in La Habra is 6936 and the claim number for 301 W. Imperial Highway in La Habra is 2466.)

The two locations which require remedial action are approximately 400 feet apart in distance with Votaw/Davis Properties owning the connecting land between these two locations. The land between the two locations is leased by an automobile sales company and is used as an automobile sales lot. There are no significant property developments or structures between the two properties thus making it possible to connect the two locations with underground piping, which would allow the same remediation system to treat both of the sites.

Because the two locations have similar lithologies and the nature of the contaminated soil and ground water is similar at each location, the same remedial technology would be appropriate for either location. Both consultants agreed that combined groundwater and soil vapor extraction would be a suitable approach for their respective locations. It was also agreed that the Orange County Health Care Agency, which is the lead-agency, would most likely agree on a joint remediation effort.

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We discussed that the already acquired soil vapor extraction system capacity is ample enough to extract and treat vapor from both sites concurrently. For a relatively minimal cost, the groundwater treatment skid, which as of date has not yet been fabricated, could be modified to handle the increased flow rate caused by adding the Pomona Box wells.

One benefit of going to combined remediation approach will be expediting the commencement of remedial activities for both locations. Another, and possibly more significant benefit is that the combined approach will result in cost savings for the State of California ranging from $200,000 to $300,000. The cost savings are summarized as follows:

- Engineering performed for one system vs. two ($ 25,000)
- One set of permits and permit compliance items ($ 10,000)
- Use of the same capital remedial equipment ($ 100,000)
- Use of some of the same trenches to run pipe and conduit ($ 15,000)
- Use of the same treatment system compound ($ 5,000)
- The need for only one electrical and natural gas connection ($ 10,000)
- The operation, maintenance and monitoring of one treatment system vs. two ($ 30,000 annually)

Some additional costs will be incurred in combining the two systems, such as: revising the engineering and construction drawings to make allowances for the additional extracted soil vapor and groundwater, increasing pipe diameter sizes for increased capacity, extra trenching and piping associated with the relocation and centralization of the treatment equipment compound, and increasing the capacity of the groundwater treatment system. But, these additional costs are relatively much lower than installing a second completely independent treatment system.

We are currently revising the engineering plans to incorporate this combined remediation approach and we will submit them to you soon. In the meanwhile, if you have any questions or comments please feel free to contact us.

Sincerely,

John M. Teravskis, R.E.A.
Project Manager
W. W. Irwin, Inc.
(310) 426-3338

David Henry, R.G.
Geoscience Manager
Wayne Perry, Inc.
(714) 826-0352

Joth.

TOM URAM
DIRECTOR

HUGH F. STALLWORTH, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E. MERRYMAN, REHS, MPH
DEPUTY DIRECTOR

COUNTY OF ORANGE

HEALTH CARE AGENCY
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ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE
SANTA ANA, CALIFORNIA 92705
(714) 667-3700

May 15, 1995

Don Votaw
Pomona Box Company
301 West Imperial Highway
La Habra, CA 90631

Subject: Revised Corrective Action Plan dated January 13, 1995, and the attached Cover Letter dated January 25, 1995, prepared by W.W. Irwin for the Pomona Box Company at 301 West Imperial Highway, La Habra, California—O.C.H.C.A. Case #86UT224

Dear Mr. Votaw:

This office has reviewed the revised corrective action plan (CAP) and the cover letter referenced above. The letter states that the January 1995 CAP is a more cost-effective alternative to the CAP dated October 6, 1994 (approved by this Agency on December 8, 1994). The January 1995 CAP proposes groundwater and soil vapor extraction, however, unlike the October 1994 CAP, a recovery trench is not proposed. Also, different equipment will be used to destroy the recovered contaminants. The cover letter also proposes delaying full implementation of the CAP for this site until remediation at 101 West Imperial Highway, La Habra is completed and the remediation equipment is available for use at the 301 West Imperial Highway site.

Based on our review of the CAP (dated January 13, 1995), this office has determined that the following items must be addressed in a revised CAP:

1. You must provide a more thorough justification for implementing the January 1995 CAP instead of the October 1994 CAP. Please include a more detailed comparison of the costs related to the implementation of both CAPs.

2. You must demonstrate that the January 1995 CAP will effectively remediate the contamination at the subject site. In particular, you must show that the installation of a recovery trench is not necessary. Include site a site plan that depicts the zones of influence of the recovery wells.

3. Due to the current contamination concentrations at this site and your proposal to delay full CAP implementation, interim corrective actions are required. The

interim corrective actions must include the installation and monitoring of additional wells at the down-gradient edge of the groundwater contaminant plume (south and west of the subject site). You must also propose interim remediation.

4. Provide a justification for delaying the implementation of the final corrective actions at this site. Include a schedule for beginning the remedial actions at this site and a description of the criteria for terminating the corrective actions at the other site (101 West Imperial Highway, La Habra). Also include a brief discussion of what will be done at this site if the remediation at the other site is not completed as scheduled.

5. The final CAP must be signed by an appropriately registered professional.

Pursuant to the California Code of Regulations, Title 23, Chapter 16, Section 2726(d), this office may require you to modify or suspend the corrective actions, if site conditions change significantly.

Copies of all workplans, reports, and other correspondence must also be submitted to the Regional Water Quality Control Board, Santa Ana Region.

If you have any questions, please call me at (714) 667-3716.

Sincerely,

Anthony F. Martinez
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

AFM

cc: Carl Bernhardt, Santa Ana Regional Water Quality Control Board
Lisa Morris, W.W. Irwin, Inc.

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
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Project No. 88.003

January 31, 1995

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Anthony Martinez

Subject: Transmittal of Quarterly Status Report
Pomona Box Company
301 West Imperial Highway
La Habra, California

Dear Mr. Martinez:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by April 30, 1995.

If you have any questions or require additional information, please call me at (714) 826-0342.

Very truly yours,

Richard V. Smith
Registered Geologist 5014

cc: Mr. Daryl Votaw, Pomona Box Company
Mr. Carl Bernhardt, Santa Ana Regional Water Quality Control Board

W.W. IRWIN, INC.

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January 25, 1995

Mr. Anthony Martinez
Orange County Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California 92705

Subject: Revised Corrective Action Plan
Pomona Box Company
301 West Imperial Highway
La Habra, California

Dear Mr. Martinez:

Attached for your review is a revised Corrective Action Plan (CAP) to address soil and groundwater contamination at the referenced location. Although implementation of the CAP previously prepared by Wayne Perry Construction Inc. is feasible, a slightly different approach may result in cost savings. W. W. Irwin's revised CAP proposes the same basic technologies as previously suggested by Wayne Perry and approved by the Orange County Health Care Agency (OCHCA). The differences are in the recommended treatment equipment and well utilization.

Aqueous phase carbon is not proposed as a primary treatment option for the groundwater due to the intitial influent hydrocarbon concentrations anticipated. Costs associated with carbon changeouts and regeneration/disposal of spent carbon would likely exceed the cost for utilizing an air stripper. In addition to the issue of costs, the use of aqueous phase carbon initially would result in lengthening the duration of treatment due to contaminant loading limitations of the carbon. Therefore, use of an air stripper increases the design efficiency in the event that influent hydrocarbon concentrations in the groundwater are higher than anticipated.

Similarly, a catalytic oxidation unit is recommended for treatment of process vapors, rather than vapor phase carbon for the same reasons of cost and efficiency. Given that the capillary fringe (the soil zone primarily impacted by hydrocarbons) was not exposed to air flow during the vent test, it is possible that influent hydrocarbon vapor concentrations could be significantly higher than anticipated. Higher influent concentrations would require more frequent carbon changeouts resulting in increased costs and reduced efficiency as previously mentioned. Additionally, hydrocarbon vapors stripped from the groundwater can be treated by the air stripper.

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Five exisiting wells are proposed for use as dual vapor extraction and groundwater extraction wells. The wellheads will be modified to accommodate both processes. Once the system has been started up, operating parameters can be evaluated to determine the need for additional wells. The treatment system will be designed for expansion accordingly. Additionally, W. W. Irwin does not recommend the installation of the recovery trench proposed by Wayne Perry. Due to the costs and site disruption associated with installation of the trench, W. W. Irwin suggests beginning remediation with the five dual purpose wells and evaluating system performance.

The equipment safety features, specifications, configuration, and permit requirements discussed in the Wayne Perry RAP will be addressed similarly by W. W. Irwin for this revised approach. Should Irwin's alternative approach be approved by the OCHCA, more detailed information regarding these issues will be presented in the bid request document.

As a final consideration, equipment utilization could be optimized by prioritizing the client's two sites in La Habra and using the same equipment for both. Although the schedule for completion of remediation activities at both sites would obviously be extended, a net cost savings to our client and the State of California would result.

Please do not hesitate to call the undersigned at (310) 426-3338 with any questions.

Sincerely,
W. W. Irwin, Inc.

LMMorris

Lisa M. Morris
Project Manager

attachment

cc: Don Votaw, Pomona Box Company

COUNTY OF ORANGE

TOM URAM
DIRECTOR

HUGH F. STALLWORTH, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E. MERRYMAN, REHS, MPH
DEPUTY DIRECTOR

HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE
SANTA ANA, CALIFORNIA 92705
(714) 667-3700

December 8, 1994

Don Votaw
Pomona Box Company
301 West Imperial Highway
La Habra, CA 90631

Subject: Revised Remedial Action Plan dated October 6, 1994, prepared by Wayne Perry Construction, Inc. for the Pomona Box Company Facility at 301 West Imperial Highway, La Habra, California—O.C.H.C.A. Case #86UT224

Dear Mr. Votaw:

This office has received the revised remedial action plan referenced above. Based on our review, we find that the revised remedial action plan adequately addresses the requirements of set forth in the California Code of Regulations, Title 23, Chapter 16, Section 2725 for corrective action plans. Therefore, we hereby concur with its implementation provided the following items are addressed:

1. All permitting must be conducted concurrently. Applications for permits must be made by January 15, 1995. Remedial equipment must be installed and ready to operate by March 1, 1994. Any requests for extensions to these deadlines must be made in writing at least two weeks before the deadline and must explain the cause of any delays. If delays are related to permit processing at other agencies, a request for an extension must include the name and telephone number of the agency contact person who can verify the delay. Twelve months to obtain either NPDES or SCAQMD permits, as proposed in the remedial action plan, is an unreasonably long period.

2. Monitoring reports must be submitted to this Agency and to the Regional Water Quality Control Board on a quarterly basis. These reports must include groundwater and remediation system monitoring data.

3. This office must be notified in writing at least two weeks prior to making any significant changes to the approved corrective actions. A justification for terminating the operation of the system must be presented to this Agency for approval before you can cease remedial efforts at this site.

Pursuant to the California Code of Regulations, Title 23, Chapter 16, Section 2726(d), this office may require you to modify or suspend the corrective actions, if site conditions change significantly.

If you have any questions, please call me at (714)667-3716.

Sincerely,

Anthony F. Martinez
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

AFM

cc: Carl Bernhardt, Santa Ana Regional Water Quality Control Board
Richard V. Smith, Wayne Perry Construction, Inc.

ENVIRONMENTAL SPECIALISTS
WaynePerry CONSTRUCTION INC.

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Project No. 88.003

October 11, 1994

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Anthony Martinez

Subject: Transmittal of Quarterly Status Report
Pomona Box Company
301 West Imperial Highway
La Habra, California

Dear Mr. Martinez:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by January 31, 1995.

If you have any questions or require additional information, please call me at (714) 826-0342.

Very truly yours,

Richard V. Smith
Registered Geologist 5014

cc: Mr. Daryl Votaw, Pomona Box Company
Mr. Carl Bernhardt, Santa Ana Regional Water Quality Control Board

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
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Project No. 88.003

October 6, 1994

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Anthony Martinez

Subject: Transmittal of Revised Remedial Action Plan for Soil and Groundwater
Pomona Box Company
301 West Imperial Highway
La Habra, California

Dear Mr. Martinez:

Attached is a remedial action plan for soil and groundwater at the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. Modifications have been made to the original work plan in response to your letter dated September 7, 1994. This revised plan is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

Upon approval of the remedial action plan, a NPDES Permit Application will be completed and submitted to the Regional Water Quality Control Board. In addition, an application for a Permit to Operate will be submitted to the South Coast Air Quality Management District for the soil remediation system.

If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

Richard V. Smith
Registered Geologist 5014

cc: Mr. Don Votaw, Pomona Box Company
Mr. Carl Bernhardt, RWQCB - Santa Ana Region

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TOM URAM
DIRECTOR

HUGH F. STALLWORTH, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E. MERRYMAN, REHS, MPH
DEPUTY DIRECTOR

COUNTY OF ORANGE

HEALTH CARE AGENCY
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ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE
SANTA ANA, CALIFORNIA 92705
(714) 667-3700

September 7, 1994

Don Votaw
Pomona Box Company
301 West Imperial Highway
La Habra, CA 90631

Subject: Corrective Action Plan dated August 9, 1994, prepared by Wayne Perry Construction, Inc. for the Pomona Box Company Facility at 301 West Imperial Highway, La Habra, California—O.C.H.C.A. Case #86UT224

Dear Mr. Votaw:

This office has reviewed the corrective action plan (CAP) referenced above . Based on our review of the CAP, the following items must be addressed in a revised CAP:

1. As required by the California Code of Regulations, Title 23, Chapter 16, Section 2725(f) a feasibility study must be included in the CAP. This feasibility study must identify and evaluate at least two alternatives for restoring and protecting groundwater.

2. An assessment of impacts must also be included in the CAP pursuant to 23 CCR, Section 2725(e).

3. Vapor concentrations from individual vapor extraction wells must be monitored. Please provide a monitoring plan in the revised CAP.

4. Groundwater samples must be collected from all wells on a quarterly basis. The results of this groundwater monitoring must also be reported to this Agency quarterly.

5. This office must be notified of, and approve, all planned changes to the remediation system. A thorough justification for discontinuing remedial actions must be submitted and approved before the system may be turned off.

6. A schedule for implementing the CAP must be provided.

The revised CAP must be submitted to this office by October 12, 1994. Based on the data presented in the monitoring reports, this office may require further modifications to the CAP in the future. Please notify this office at least forty-eight hours prior to conducting any field activities, including groundwater monitoring, well installation, and remedial system installation and modification.

If you have any questions, please call me at (714) 667-3716.

Sincerely,

Anthony F. Martínez
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

AFM

cc: Carl Bernhardt, Santa Ana Regional Water Quality Control Board
Richard V. Smith, Wayne Perry Construction, Inc.

ENVIRONMENTAL WaynePerry CONSTRUCTION INC. SPECIALISTS

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Project No. 88.003

August 9, 1994

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Anthony Martinez

Subject: Transmittal of Remedial Action Plan for Soil and Groundwater
Pomona Box Company
301 West Imperial Highway
La Habra, California

Dear Mr. Lodriqueza:

Attached is a remedial action plan for soil and groundwater at the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

Upon approval of the remedial action plan, a NPDES Permit Application will be completed and submitted to the Regional Water Quality Control Board. In addition, an application for a Permit to Operate will be submitted to the South Coast Air Quality Management District for the soil remediation system.

If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

Richard V. Smith

Richard V. Smith
Registered Geologist 5014

cc: Mr. Don Votaw, Pomona Box Company
Mr. Carl Bernhardt, RWQCB - Santa Ana Region

8C 224

ENVIRONMENTAL WaynePerry CONSTRUCTION INC. SPECIALISTS

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Project No. 88.003

July 28, 1994

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Anthony Martinez

Subject: Transmittal of Quarterly Status Report
Pomona Box Company
301 West Imperial Highway
La Habra, California

Dear Mr. Martinez:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by October 31, 1994.

If you have any questions or require additional information, please call me at (714) 826-0342.

Very truly yours,

Richard V. Smith

Richard V. Smith
Registered Geologist 5014

cc: Mr. Daryl Votaw, Pomona Box Company
Mr. Carl Bernhardt, Santa Ana Regional Water Quality Control Board

ENVIRONMENTAL
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Project No. 88.003

April 28, 1994

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Anthony Martinez

Subject: Transmittal of Quarterly Status Report
Pomona Box Company
301 West Imperial Highway
La Habra, California

Dear Mr. Martinez:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by July 31, 1994.

If you have any questions or require additional information, please call me at (714) 826-0342.

Very truly yours,

Richard V. Smith

Richard V. Smith
Registered Geologist 5014

cc: Mr. Daryl Votaw, Pomona Box Company

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
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Project No. 88.003

January 31, 1994

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Quarterly Status Report
Pomona Box Company
301 West Imperial Highway
La Habra, California

Dear Mr. Lodrigueza:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by April 30, 1994.

If you have any questions or require additional information, please call me at (714) 826-0342.

Very truly yours,

Richard V. Smith
Registered Geologist 5014

cc: Mr. Daryl Votaw, Pomona Box Company

ENVIRONMENTAL
WaynePerry
CONSTRUCTION INC.
SPECIALISTS

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Project No. 88.003

December 7, 1993

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Remedial Action Plan for Groundwater
Pomona Box Company
301 West Imperial Highway
La Habra, California

Dear Mr. Lodriqueza:

Attached is a remedial action plan for groundwater at the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

Upon approval of the remedial action plan, a NPDES Permit Application will be completed and submitted to the Regional Water Quality Control Board. A soil vapor extraction test will be performed by January 31, 1994 to acquire data appropriate to deriving a remedial action plan for contaminated soils.

If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

Richard V. Smith

Richard V. Smith
Registered Geologist 5014

cc: Mr. Don Votaw, Pomona Box Company

ENVIRONMENTAL SPECIALISTS
WaynePerry CONSTRUCTION INC.

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Project No. 88.003

November 22, 1993

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Aquifer Test Analyses Report
Pomona Box Company
301 West Imperial Highway
La Habra, California

Mr. Lodrigueza:

Attached is the Aquifer Test Analyses Report for the Pomona Box facility located at 301 West Imperial Highway in the city of La Habra. This report is being submitted at the request of Mr. Don Votaw of the Pomona Box Company.

If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

Michael S. Wielenga
Environmental Geologist

cc: Mr. Don Votaw, Pomona Box Company

ENVIRONMENTAL WaynePerry CONSTRUCTION INC. SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
PHONE (714) 826-0352 ■ FAX ADM. & CONST. (714) 523-7880 ■ FAX GEO. & ENG. (714) 523-7541

Project No. 88.003

November 1, 1993

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Quarterly Status Report
Pomona Box Company
301 West Imperial Highway
La Habra, California

Dear Mr. Lodrigueza:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by January 31, 1994.

If you have any questions or require additional information, please call me at (714) 826-0342.

Very truly yours,

Richard V. Smith

Richard V. Smith
Registered Geologist 5014

cc: Mr. Daryl Votaw, Pomona Box Company

COUNTY OF ORANGE

TOM URAM
DIRECTOR

L. REX EHLING, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E. MERRYMAN, REHS MPH
DEPUTY DIRECTOR

HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE
SANTA ANA, CALIFORNIA 92705
(714) 667-3700

September 17, 1993

Don Votaw
Pomona Box Company
301 W. Imperial Highway
La Habra, CA 90631

Subject: Second Quarter 1993 Status Report dated July 31, 1993 for Pomona Box Company, 301 W. Imperial Highway, La Habra, CA - O.C.H.C.A. Case #86UT224

Dear Mr. Votaw:

Please be advised that this office has received the subject report and we find that it satisfies the basic quarterly reporting requirements set forth in the California Code of Regulations, Title 23, Chapter 16, Section 2652. However, future quarterly reports must include a description of the method of recovery and disposition of all contaminated water and/or free product recovered at this site. Appropriate documentation regarding the off-site disposal of these wastes must be included.

We concur with your proposal to conduct aquifer tests during the third quarter. However, be advised that in a letter issued by this Agency on May 18, 1993, this office required that a Corrective Action Plan (CAP) be submitted to this office by July 30, 1993. In order to accommodate your plan to conduct the aquifer test, this Agency hereby grants an extension for the submittal of the CAP. The CAP must be submitted by November 15, 1993. No further extensions will be granted. Implementation of the CAP will be required by February 15, 1994.

Furthermore, be advised that this Agency's May 18, 1993 letter also requires that free product recovery and quarterly groundwater monitoring must continue at the subject site, and that further delineation of the contaminants plume is required. A workplan for conducting further assessment of the groundwater contamination must be submitted by November 15, 1993 also. Implementation of this workplan will be required by December 15, 1993.

If you have any questions please call me at (714) 667-3716.

Sincerely,

Anthony F. Martinez
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

AFM:all

cc: Patricia Hannon, Santa Ana Regional Water Quality Control Board
Sandie Hastings, La Habra Fire Department
Michael Wielenga, Wayne Perry Construction

ENVIRONMENTAL WaynePerry CONSTRUCTION INC. SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
PHONE (714) 826-0352 ■ FAX ADM. & CONST. (714) 523-7880 ■ FAX GEO. & ENG. (714) 523-7541

Project No. 88.03

August 11, 1993

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Quarterly Status Report
Pomona Box Company
301 West Imperial Highway
La Habra, California

Dear Mr. Lodrigueza:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by October 31, 1993.

If you have any questions or require additional information, please call me at (714) 826-0342.

Very truly yours,

Richard V. Smith

Richard V. Smith
Registered Geologist 5014

cc: Mr. Daryl Votaw, Pomona Box Company

COUNTY OF ORANGE

TOM URAM
DIRECTOR

L. REX EHLING, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E. MERRYMAN, REHS MPH
DEPUTY DIRECTOR

HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE
SANTA ANA, CALIFORNIA 92705
(714) 667-3700

May 18, 1993

Don Votaw
Pomona Box Company
301 W. Imperial Highway
La Habra, CA 90631

Subject: Supplemental Site Investigation Report dated April 27, 1993 for Pomona Box Facility, 301 W. Imperial Highway, La Habra, CA - O.C.H.C.A. Case #86UT224

Dear Mr. Votaw:

Please be advised that this office has reviewed the above referenced report. We have found the report to be adequate to characterize the present extent of contamination and initiate soil and groundwater remediation at the subject site, provided the following considerations are addressed:

1. A comprehensive corrective action plan, pursuant to the California Code of Regulations, Title 23, Chapter 16, Article 11, Section 2725, must be submitted to this Agency for review on or before July 30, 1993. It is presumed that hydrogeologic characterization will be conducted and results used to determine the appropriate cleanup method(s).

2. Free product recovery must also be continued, as should the delineation of the full extent of groundwater contamination (southern plume edge off-site), in addition to quarterly groundwater monitoring, gauging and reporting.

If you have any questions, please contact me at (714) 667-3717.

Very truly yours,

Luis Rodriguez
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

LL:me

cc: Sandie Hastings, La Habra Fire Department
Patricia A. Hannon, Santa Ana Regional Water Quality Control Board
Michael Wielenga, Wayne Perry Construction

COUNTY OF ORANGE

TOM URAM
DIRECTOR

L. REX EHLING, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E. MERRYMAN, R. S. MPH
DEPUTY DIRECTOR

HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE
SANTA ANA, CALIFORNIA 92705
(714) 667-3700

December 22, 1992

Don Votaw
Pomona Box Company
301 W. Imperial Highway
La Habra, CA 90631

Subject: Workplan for Supplemental Site Assessment for Pomona Box Facility, 301 West Imperial Highway, La Habra, CA - O.C.H.C.A. Case #86UT224

Dear Mr. Votaw:

Please be advised that this office has reviewed the above referenced workplan. We have found the workplan to be adequate to be implemented at the subject site provided the following consideration is addressed:

> To fully delineate the extent of both the gasoline and diesel contaminant plumes, one monitoring well must be installed directly downgradient of each of B-7 (west of former diesel tanks) and B-1 (between B-1 and B-7).

If you have any questions, please contact me at (714) 667-3717.

Very truly yours,

Luis Lodrigueza
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

LL:cr

cc: Patricia A. Hannon, Santa Ana Regional Water Quality Control Board
Sandie Hastings, La Habra Fire Department
Richard V. Smith, Wayne Perry Construction

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
PHONE (714) 826-0352 ■ FAX ADM. & CONST. (714) 523-7880 ■ FAX GEO. & ENG. (714) 523-7541

Project No. 88.03

December 10, 1992

County of Orange Health Care
Agency - Environmental Health
Division
P.O. Box 355
Santa Ana, California 92702

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Work Plan for
Proposed Supplemental Site Assessment
Pomona Box Company
La Habra, California

Dear Mr. Lodrigueza:

Enclosed is a proposed work plan for supplemental site assessment at the above-referenced location.

If you have any questions or require additional information, please contact me at (714) 826-0352.

Very truly yours,

Richard V. Smith

Richard V. Smith
Registered Geologist 5014

Attachment: Wayne Perry Proposed Work Plan

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
PHONE (714) 826-0352 ■ FAX ADM. & CONST. (714) 523-7880 ■ FAX GEO. & ENG. (714) 523-7541

86 UT 22d and
89 UT 163

Project No. 88.03

October 28, 1992

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Quarterly Status Report
Pomona Box Company
301 West Imperial Highway
La Habra, California

Mr. Lodrigueza:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by January 31, 1993.

If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

Richard V. Smith

Richard V. Smith
Registered Geologist 5014

cc: Mr. Daryl Votaw, Pomona Box Company

COUNTY OF ORANGE

TOM URAM
DIRECTOR

L. REX EHLING, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E. MERRYMAN, R. S. MPH
DEPUTY DIRECTOR

HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE
SANTA ANA, CALIFORNIA 92705
(714) 667-3700

August 10, 1992

Don Votaw
Pomona Box Company
301 W. Imperial
La Habra, CA 90631

Subject: Report Dated July 24, 1992, For Pomona Box Facility, 301 West Imperial Highway, La Habra, CA - O.C.H.C.A. Case #86UT224

Dear Mr. Votaw:

Please be advised that this office has reviewed the above referenced report. We have found the report to be adequate to characterize present levels of contamination at the subject site, provided the following considerations are addressed:

1. During the past 5 quarters, no free petroleum product was reported to have been recovered inspite of its presence in 5 of the 8 existing wells at this site. It is apparent that the Automatic Recovery System which had been operating here since 1988 no longer addresses this concern effectively.

   You were advised in this Agency's letter dated February 10, 1992 that the CCR, Title 23, Chapter 16, Section 2655 (a) requires the removal of free product to the maximum extent practicable, and that according to the CCR Title 23, Section 2655 (b), free product should be recovered in a manner that minimizes the spread of contamination into previously uncontaminated zones by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the site.

   A more efficient method of free product recovery must therefore be implemented at this site (even manual bailing may be a more effective undertaking). Free product removal reporting must also be done according to CCR, Title 23, Section 2655 (e).

2. Additional monitoring wells must be installed to fully define the free product and dissolved phase contaminant plumes, specifically south and southwest of the former gasoline tank location.

3. A corrective action plan must furthermore be submitted to this Agency as required by CCR, Title 23, Article 11.

4. Copies of all reports must be sent to the Santa Ana Regional Water Quality Control Board, attention of Nancy Olson-Martin.

If you have any questions, please contact me at (714) 667-3717.

Very truly yours,

Luis Lodrigueza
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

LL:md

cc: Richard Smith, Wayne Perry Construction, Inc.
Nancy Olson, Santa Ana Regional Water Quality Control Board

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
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Project No. 88.03

July 24, 1992

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Luis Lodrigueza

89 UT 163
86 UT 221

Subject: Transmittal of Quarterly Status Report
Pomona Box Company
301 West Imperial Highway
La Habra, California

Mr. Lodrigueza:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by October 31, 1992.

If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

Richard V. Smith
Richard V. Smith
Registered Geologist 5014

cc: Mr. Daryl Votaw, Pomona Box Company

LOG OF BORING

Drill Rig: CME-75	Boring Diameter: 10 inch	Boring Elevation:	Boring Number
Date Drilled: 1/28/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-1

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC AB
		5 10		CL	Sandy CLAY: red brown, moist, firm; color change to gray brown at 6 feet. ALLUVIUM
		15		SC	Clayey SAND: fine-to medium-grained, red brown, moist to very moist, dense. ALLUVIUM
		20	FP originally	CL	Sandy CLAY: red brown, moist to saturated, stiff. ALLUVIUM
		25 30 35 40 45 50			

Notes:
1. Bottom of boring at 24 feet.
2. Ground water encountered at 20 feet.
3. Casing set to 24 feet.

Pomona Box Company
301 W. Imperial Highway, La Habra

Project No.: 86.252

Figure No.: 2

LOG OF BORING

Drill Rig: CME-75	Boring Diameter: 10 inch	Boring Elevation:	Boring Number
Date Drilled: 1/28/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-2

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC
					AB
		5		CL	Sandy CLAY: red brown, moist, firm; slightly plastic; color changes to gray brown at 4.5 feet.
		10			ALLUVIUM
		15		SC	Clayey SAND: fine-to medium-grained, gray, very moist to saturated, dense.
					ALLUVIUM
		20		CL	FP originally Sandy CLAY: red brown, saturated, firm to stiff; slightly plastic.
					ALLUVIUM
		25			
		30			
		35			
		40			
		45			
		50			

Notes:
1. Bottom of boring at 24 feet.
2. Groundwater encountered at 21 feet.
3. Casing set to 24 feet.

Pomona Box Company
301 W. Imperial Highway, La Habra

Project No.: 86.252

Figure No.: 3

LOG OF BORING

Drill Rig: CME-75	Boring Diameter: 10 inch	Boring Elevation:	Boring Number
Date Drilled: 1/29/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-3

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC
				CL	AB
		5		SC	Silty CLAY: light brown, damp, firm; occasional coarse-grained sand; some decaying organics. ALLUVIUM
		10		ML	Clayey SAND: coarse-grained, yellow brown, damp, very dense; occasional gravel. ALLUVIUM
		15		FP originally	Clayey SILT: gray very moist to firm. ALLUVIUM
		20		SM	Silty SAND: medium-to coarse-grained, yellow brown, saturated, dense; occasional gravel and clayey sand. ALLUVIUM
		25			
		30			
		35			
		40			
		45			
		50			

Notes:

1. Bottom of boring at 24 feet.
2. Ground water encountered at 16.5 feet.
3. Casing set to 24 feet.

Pomona Box Company
301 W. Imperial Highway, La Habra

Project No. 86.252	Figure No. 4

LOG OF BORING

Drill Rig: B-61	Boring Diameter: 11 inch	Boring Elevation:	Boring Number
Date Drilled: 10/2/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-4

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC AB
	N.D.	5		CL	Sandy CLAY: gray brown, damp, stiff, mottled. **ALLUVIUM**
	N.D.	10		ML	Sandy SILT: dark brown, wet, firm, hydrocarbon odor at 7 feet. **ALLUVIUM**
TPH	1290 0.3 ppm	15		SM	Silty SAND: fine- to coarse-grained, brown to dark brown, saturated, medium dense, strong hydrocarbon odor. **ALLUVIUM**
		20		ML	Sandy SILT: light brown, saturated, very firm.
		25			GW: TPH — 1,500 ppb B 120 ppb T 290 ppb
		30			**ALLUVIUM**
		35			
		40			
		45			
		50			

Notes:
1. Bottom of boring at 35 feet.
2. Groundwater encountered at 17 feet.
3. Casing set to 35 feet.

Pomona Box Company
301 W. Imperial Hwy., La Habra

Project No.: 86.252 | Figure No.: 3

LOG OF BORING

Drill Rig: B-61	Boring Diameter: 11 inch	Boring Elevation:	Boring Number
Date Drilled: 10/2/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-5

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC AB
	TPH-12	5		CL	Sandy CLAY: brown, moist, medium stiff, mottled. ALLUVIUM
	TPH 23	10			
TPH	2940 0-5 13.'	15		SM	Silty SAND: fine- to coarse-grained, brown, wet, medium dense, trace of gravel, hydrocarbon odor. F.P. originally
		20			
		25			
		30			ALLUVIUM
		35			
		40			
		45			
		50			

Notes:
1. Bottom of boring at 35 feet.
2. Groundwater encountered at 17 feet.
3. Casing set to 35 feet.

Pomona Box Company
301 W. Imperial Hwy., La Habra

Project No.: 86.252

Figure No.: 4

LOG OF BORING

Drill Rig: B-61	Boring Diameter: 11 inch	Boring Elevation:	Boring Number
Date Drilled: 10/2/87	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-6

Sample: Tube	Sample: Bulk	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
					AC AB
	11 N.D. for TPH	5 10		CL	Sandy CLAY: dark brown, damp, stiff. ALLUVIUM
	STOP N.T.	15 20 25 30		SM	Silty SAND: fine- to medium-grained, brown, moist, medium dense. GW: TPH 50,100 ppb B N.D. T, E, X = N.D. ALLUVIUM
		35 40 45 50			

Notes:
1. Bottom of boring at 35 feet.
2. Groundwater encountered at 16 feet.
3. Casing set to 35 feet.

Pomona Box Company
301 W. Imperial Hwy., La Habra

Project No.: 86.252

Figure No.: 5

LOG OF BORING

Drill Rig: CME 75	Boring Diameter: 8"	Boring Elevation: 254.69	Boring Number
Date Drilled: 3-21-91	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-7

Sample Depth	Vapor Reading PPM/LEL	Time	Blow Counts	Depth Feet	Soil/Rock Symbol	Soil/Rock Type	Description and Remarks
							ASPHALT PAVING
				N.D.			SAND: light brown, fine- to medium-grained, moist, loose.
		TPH = 10 BTXE					
	10/0	9:35	2/3/4	5		SP	BACKFILL MATERIAL
							Clayey SAND: light gray, fine to medium-grained sand intermixed with clay, soft to firm, moist.
	235/2	9:43	3/3/4	10			
	B 0.2	T/E = ND				SC	
	60/0	9:46	2/5/7	15			BACKFILL MATERIAL
	TPH = 2.7 B = 3.6 ppm T = 3.2						CLAY: light brown, silty, moist, stiff, slightly plastic.
	15/0	9:50	3/7/11	20		CL	ALLUVIUM
	N.D. TPH BTXE						Clayey SAND: light brown, interbedded fine- to coarse-grained sands and silty clay, saturated, plastic, stiff to dense.
	15/0	10:10	3/8/17	25			
				30		SC	GW: TPH — 1600 ppb; B — 200; T — 20; E — 20; X — 200
				35			No in-place samples; auger return observation, only.
			18/13/21	40			ALLUVIUM
				45			
				50			
				55			
				60			

Notes:
1. Boring depth 43 feet.
2. Groundwater encountered at 18 feet.
3. Installed groundwater monitor well at 40 feet.

Pomona Box Company
301 Imperial Highway

Project No.: 89.151

Figure No.: 4

LOG OF BORING

Drill Rig: CME-55	Boring Diameter: 8½"	Boring Elevation:	Boring Number
Date Drilled: 7/24/91	This log is a representation of subsurface conditions at the time and place of drilling. With the passage of time or at any other location there may be consequential changes in conditions.		B-8

Sample Depth	Vapor Reading PPM/LEL	Time	Blow Counts	Depth Feet	Soil/ Rock Symbol	Soil/ Rock Type	Description and Remarks
	250/2	9:15	3/6/6	5		ML	Sandy SILT: light gray to black, moist, firm to stiff.
	50/0	9:20	5/11/18	10			ALLUVIUM
	25/0	9:24	4/7/13	15		CL	Sandy CLAY: light brown to gray, very moist, stiff; slightly mottled; slightly plastic; saturated below 15 feet.
	20/0	9:30	7/14/21	20			ALLUVIUM
				25		SC	Clayey SAND: fine- to medium-grained, light brown to gray, saturated, dense; thin layer of gravel at approximately 30 feet.
				30			GW: N.D. — TPH/BTXE
				35			ALLUVIUM
				40			
				45			
				50			
				55			
				60			

Notes:
1. Boring depth 37 feet.
2. Groundwater encountered at 15 feet.
3. Installed groundwater monitoring well at 35 feet.

Pomona Box Co.
301 West Imperial Hwy.

Project No.: 89.151

Figure No.: 3

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
PHONE (714) 826-0352 ■ FAX ADM. & CONST. (714) 523-7880 ■ FAX GEO. & ENG. (714) 523-7541

Consolidated Report

Project No. 88.03

April 20, 1992

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Quarterly Status Report
Pomona Box Company
301 West Imperial Highway
La Habra, California

86-224 / 89-163

Mr. Lodrigueza:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by July 31, 1992.

If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

Thomas D. Rivers
Staff Geologist

cc: Mr. Daryl Votaw, Pomona Box Company

COUNTY OF ORANGE

HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE
SANTA ANA, CALIFORNIA 92705
(714) 667-3700

TOM URAM
DIRECTOR

L. REX EHLING, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E. MERRYMAN, REHS MPH
DEPUTY DIRECTOR

MAILING ADDRESS: P.O. BOX 355
SANTA ANA, CA 92702

February 10, 1992

Don Votaw
Pomona Box Company
301 West Imperial Highway
La Habra, CA 90631

Subject: Notice to Remove Recoverable Petroleum Products at Pomona Box Facility, 301 W. Imperial Hghwy., La Habra, CA - O.C.H.C.A Case #86UT224

Dear Mr. Votaw:

Information received by this Agency confirms that liquid phase recoverable free hydrocarbons had not been removed in the last two quarters from the above referenced site. The presence of liquid phase free products suggests that contamination may be spreading as this product could still be draining and migrating along the watertable by the force of gravity. Moreover, all agencies concerned with a public health, public safety and groundwater resource protection agree that recoverable free product must be removed as soon as possible.

The California Code of Regulations, Title 23, Subchapter 16, Section 2655 (a) requires the owner or operator to remove free product to the maximum extent practicable, as determined by the local agency. Also, according to Section 2655 (b) of Title 23, California Code of Regulations, free product should be removed in a manner that minimizes the spread of contamination into previously uncontaminated zones by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the site.

You are hereby directed to determine the extent of recoverable free product contamination and initiate free product recovery operations within 30 days following receipt of this letter. You must also submit a remedial action plan before or shortly after beginning product recovery. Approval by this Agency is not needed to initiate immediate corrective action. Failure to comply with Section 25298 (c)(4) is punishable by a civil penalty of not less than $500.00 or more than $5,000.00 per day. Separate administrative, civil or criminal actions may be initiated by the California Regional Water Quality Control Board.

In addition, a free product removal report must be submitted to the local agency within 45 calendar days in compliance with Section 2652 (e), Title 23, California Code of Regulations. This report, shall at a minimum, provide the following information:

1. The name of the person(s) responsible for implementing the free product removal measures;

2. The estimated quantity, type, and thickness of free product observed or measured in wells, boreholes, and excavations;

3. The type of free product recovery system used;

4. Whether any discharge will take place on-site or off-site during the recovery operation and, if so, where this discharge will be located;

5. The type of treatment applied to, and the effluent quality expected in, any discharge;

6. The steps that have been or are being taken to obtain any necessary permits for any discharge; and

7. The means of disposal and/or proposed disposition of the recovered free product.

Further remedial action will be required following the removal of recoverable free petroleum products to control hydrocarbons dissolved in the groundwater and remove undissolved hydrocarbons from the subsurface.

If you have any further questions, please contact me at (714) 667-3717.

Very truly yours,

Luis Lodrigueza
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

LL:db

cc: Nancy O. Martin, Santa Ana Regional Water Quality Control Board
Thomas D. Rivers, Wayne Perry Construction, Inc.

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8281 COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
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Project No. 88.03

January 21, 1992

Consolidated Report for 86-326 and 89-163

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Quarterly Status Report
Pomona Box Company
301 West Imperial Highway
La Habra, California

Mr. Lodrigueza:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by April 30, 1992.

If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

Thomas D. Rivers
Staff Geologist

cc: Mr. Daryl Votaw, Pomona Box Company

UNDERGROUND WaynePerry CONSTRUCTION INC. SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

Project No. 88.03

October 24, 1991

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Quarterly Status Report
Third Quarter, 1991
Pomona Box Company
301 West Imperial Highway
La Habra, California

Mr. Lodrigueza:

Attached is the status report for the Pomona Box Company facility located at 301 West Imperial Highway in the city of La Habra. This report is being transmitted at the request of Mr. Daryl Votaw of the Pomona Box Company.

The next quarterly status report will be forwarded to your office by January 31, 1992.

If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

Thomas D. Rivers
Staff Geologist

cc: Mr. Daryl Votaw, Pomona Box Company

COUNTY OF ORANGE

TOM URAM
DIRECTOR

L. REX EHLING, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E. MERRYMAN, R. S. MPH
DEPUTY DIRECTOR

MAILING ADDRESS: P.O. BOX 355
SANTA ANA, CA 92702

HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
2009 E. EDINGER AVENUE
SANTA ANA, CALIFORNIA 92705
(714) 667-3700

August 8, 1991

Daryl Votaw
Pomona Box Company
301 West Imperial Highway
La Habra, CA 90631

Subject: Quarterly Report Dated July 29, 1991 For Pomona Box No. 1, 301 West Imperial Highway, La Habra, CA - O.C.H.C.A Case #86UT224

Dear Mr. Votaw:

Please be advised that this office has reviewed the above referenced report. We have found the report to be adequate to continue well gauging and free product recovery operation at the subject site, provided the following consideration is addressed:

In view of the presence of "free" hydrocarbon product in only one well, B-5, water gauging must henceforth be supplemented with quarterly groundwater sampling of wells that do not contain "free product", in order to determine the degree of dissolved phase hydrocarbon contamination at this site. Samples should be analyzed by TPH DHS Method for gasoline and EPA Method 602 for BTXE.

If you have any questions, please contact me at (714) 667-3717.

Very truly yours,

Luis Lodrigueza
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

LL:db

cc: Patricia Hannon, Santa Ana Regional Water Quality Control Board
Tom Rivers, Wayne Perry Construction, Inc.

UNDERGROUND WaynePerry CONSTRUCTION INC. SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

Project No. 88.03

July 29, 1991

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Quarterly Status Report
Second Quarter, 1991
Pomona Box Company
301 West Imperial Highway
La Habra, California

Mr. Lodrigueza:

Attached is the status report for the second quarter of 1991.

The next quarterly status report will be forwarded to your office by October 31, 1991.

If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

Thomas D. Rivers
Staff Geologist

cc: Mr. Daryl Votaw, Pomona Box Company

COUNTY OF ORANGE
HCA/ENVIRONMENTAL HEALTH
PROPOSITION 65
NOTIFICATION REPORT
(714) 667-3765

PROP. 65 ID# _____

DART CASE ID# _____
LUST CASE ID 86-224

DATE REPORTED: 6-6-91 TIME: 10:50 DESIGNATED EMPLOYEE REPORTING: Luis Lodrigueza

REPORT SUBMITTED ON BEHALF OF ALL DESIGNATED EMPLOYEES OF WHAT AGENCY: HCA

DATE OF INCIDENT: 1-16-87 TIME: 1:35 pm SOURCE OF INFORMATION: Progress Reports / Field Observa

INCIDENT LOCATION: Pomona Box (DBA) 301 W. Imperial Highway (ADDRESS) La Habra (CITY)

90631 (ZIP) (714) 871-0932 (SITE TELEPHONE) Don/Darrel Votaw (CO. CONTACT PERSON)

DESCRIPTION/CAUSE OF INCIDENT: Free (non-aqueous phase) hydrocarbon product (gasoline) found floating on water and impacting soil. Dissolved phase hydrocarbon in groundwater.

RESPONSIBLE PARTY - NAME: Don Votaw TELEPHONE: (714) 871-0932

IDENTIFICATION OF DISCHARGED WASTE:

CHEMICAL NAME/COMMON NAME	PHYSICAL STATE	VOLUME	HAZARDOUS PROPERTIES/LEGAL LIMITS
Gasoline	Liquid	Unknown	Contains carcinogen "benzene"

FIELD DATA/LAB RESULTS (INDICATE SOIL, GROUNDWATER, ETC.): As of this date (June 6/91) free product still being recovered from groundwater. Soil contamination still to be addressed.

ENVIRONMENT AFFECTED: ROADWAY (GROUNDWATER) SEWER OR STORM DRAIN LAKE/STREAM/RIVER BAY/OCEAN AIR (SOIL) FLOOD CHANNEL GROUND (PAVED) OTHER _____

LOCALE: RESIDENTIAL COMMERCIAL (INDUSTRIAL) OPEN AREA PUBLIC PROPERTY (PRIVATE PROPERTY) RURAL

DESCRIPTION OF EXTENT OF CONTAMINATION (LATERAL AND VERTICAL) About 60 x 100 sq. ft. at the south central part of property, and down to groundwater at 12 ft - below ground level (as of April '91).

NUMBER OF PERSONS REPORTEDLY INJURED: N/A NUMBER OF PERSONS RECEIVING MEDICAL TREATMENT: N/A

WHERE?:

AGENCIES INVOLVED:

INCIDENT MITIGATED: YES (NO) DOES FURTHER ACTION NEED TO BE TAKEN: (YES) NO

ACTION: Continued recovery of free product as an interim measure; mitigation of soil & groundwater contamination (dissolved hydrocarbon) later on.

REFERRED TO: - NAME/AGENCY: DATE: TIME:

CLEANUP CONDUCTED BY: Wayne Perry, Inc. LEGAL INVESTIGATION: YES NO

AREA PHYSICALLY ACCESSIBLE TO THE PUBLIC: YES (NO)

PROXIMITY TO THE PUBLIC (HOMES, SCHOOLS, ETC.): No

FACTORS THAT ARE LIKELY TO CAUSE SUBSTANTIAL INJURY TO THE PUBLIC HEALTH OR SAFETY:

Benzene contaminated groundwater might encrash upon drinking water well.

ADDITIONAL COMMENTS:

Any designated government employee who obtains information in the course of his official duties, revealing the illegal discharge or threatened illegal discharge of a hazardous waste, that is likely to cause substantial injury to the public health and safety, must report such information within 72 hours to the Board of Supervisors and Health Officer or face up to $25,000 in fines and/or up to three years in jail (pursuant to Section 25180.7 of the Health and Safety Code). The information submitted in this report is based upon the best available information at the time the report was completed.

REPORT COMPLETED BY: Luis Lodrigueza DATE: 6-6-91 TIME: 11:05

REPORT REVIEWED BY: DATE: TIME:

CONTACT FOR FURTHER INFORMATION: Luis Lodrigueza /HCA TELEPHONE NO. (714) 667-3717
(Lead Person/Agency)

4/2/90

UNDERGROUND WaynePerry CONSTRUCTION INC. SPECIALISTS
C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

Project No. 88.03

April 8, 1991

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, California

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Quarterly Status Report
1st Quarter, 1991
Pomona Box Company
301 West Imperial Highway
La Habra, California

Mr. Lodrigueza:

Attached is the status report for the first quarter of 1991.

The next quarterly status report will be forwarded to your office by July 31, 1991.

If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

Thomas D. Rivers
Staff Geologist

cc: Daryl Votaw, Pomona Box Company

UNDERGROUND WaynePerry CONSTRUCTION INC. SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

Project No. 88.03

January 3, 1991

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, CA

Attention: Mr. Luis Lodrigueza

~~89-163~~
86-221

Subject: Transmittal of Quarterly Status Report
Pomona Box Company
301 West Imperial Highway
La Habra, CA

Mr. Lodrigueza:

Attached is the status report for the fourth quarter of 1990.

The next quarterly status report will be forwarded to your office by April 30, 1991.

If you have any questions or require additional information, please call me at (714) 826-0352.

Very truly yours,

Richard V. Smith

Richard V. Smith
Hydrogeologist

cc: Daryl Votaw, Pomona Box Company

UNDERGROUND
WaynePerry
CONSTRUCTION INC.
SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

Project No. 88.03

October 23, 1990

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, CA

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Status Report
Pomona Box Company
301 West Imperial Highway
La Habra, CA

Mr. Lodrigueza:

Attached is the status report covering the third quarter of 1990. The purpose of this report is to provide the County of Orange Health Care Agency with updated site information.

The opportunity to be of service is sincerely appreciated. If you have any questions, or if we can be of service, please call.

Very truly yours,

Richard V. Smith

Richard V. Smith
Hydrogeologist

cc: Daryl Votaw, Pomona Box Company

UNDERGROUND
WaynePerry
CONSTRUCTION INC.
SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

Project No. 88.03

July 20, 1990

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, CA

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Status Report
Pomona Box Company
301 West Imperial Highway #1 86-UT-232
La Habra, CA

Mr. Lodrigueza:

Attached is the status report covering the second quarter of 1990. The purpose of this report is to provide the County of Orange Health Care Agency with updated site information.

The opportunity to be of service is sincerely appreciated. If you have any questions, or if we can be of service, please call.

Very truly yours,

David M. Henry

David M. Henry
Registered Geologist 4085

cc: Daryl Votaw, Pomona Box Company

UNDERGROUND WaynePerry CONSTRUCTION INC. SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

Project No. 88.03

May 23, 1990

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, CA

Attention: Mr. Luis Lodrigueza

Subject: Transmittal of Status Report #1 - 86117224
Pomona Box Company
301 West Imperial Highway
La Habra, CA

Mr. Lodrigueza:

Attached is the status report covering the first quarter of 1990. The purpose of this report is to provide the County of Orange Health Care Agency with updated site information.

The opportunity to be of service is sincerely appreciated. If you have any questions, or if we can be of service, please call.

Very truly yours,

David M. Henry

David M. Henry
Registered Geologist 4085

cc: Daryl Votaw, Pomona Box Company

UNDERGROUND WaynePerry CONSTRUCTION INC. SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

Project No. 88.03

February 6, 1990

County of Orange Health Care Agency
Environmental Health Division
2009 East Edinger Avenue
Santa Ana, CA

Attention: Mr. Luis Lodrigueza

Subject: Status Letter
Pomona Box Company
301 West Imperial Highway
La Habra, CA

Mr. Lodrigueza:

Pursuant of our telephone conversation of January 25, 1990, I have reviewed our files to find any reports which may not have been forwarded to the Health Care Agency. Upon review of our files, it was discovered that no reports exist which cover the span of time between the supplemental investigation dated October 29, 1987 and the tank removal report dated September 27, 1989. The explanation of why regular reporting was not performed has to do with the client's financial state rather than an act of non-compliance.

As stated in the status report dated October 24, 1989, we will compile status reports for the site on a quarterly basis. The status reports include the method of cleanup implemented, method and location of disposal of the recovered hazardous substance, copies of the hazardous waste manifests, and the approximate cost of actions taken to date.

The opportunity to be of service is sincerely appreciated. If you have any questions, or if we can be of service, please call.

Very truly yours,

Randall J. Brand

Randall J. Brand
Staff Geologist

cc: Daryl Votaw, Pomona Box Company

TOM URAM
DIRECTOR

L. REX EHLING, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH DIVISION
ROBERT E MERRYMAN, R. S. MPH
DEPUTY DIRECTOR

MAILING ADDRESS: P.O. BOX 355
SANTA ANA, CA 92702

County of Orange

HEALTH CARE AGENCY
PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH DIVISION
1725 W. 17TH STREET
SANTA ANA, CALIFORNIA 92706
(714) 834-8356

February 21, 1989

Mr. Daryl Votaw
Pomona Box Company
301 W. Imperial
La Habra, CA ~~92635~~ 90631

Subject: Quarterly Reporting Requirements for Unauthorized Release from an Underground Storage Tank at Pomona Box Company, 301 W. Imperial Highway, La Habra, California, Site Code #86UT224

Dear Mr. Votaw:

Please be advised that this Agency, which is authorized to enforce the State Underground Storage Tank Laws and Regulations, has not received a current progress report regarding the investigation and remedial activities completed to date at the subject location.

The California Code of Regulations, Title 23, Subchapter 16, Section 2652 requires that the following information be reported to the local agency every three (3) months until the cleanup is complete:

1. The results of all investigations completed at that time to determine the extent of soil or groundwater or surface water contamination due to the release.

2. Method of cleanup implemented to date, proposed cleanup actions, and approximate cost of actions taken to date.

3. Method and location of disposal of the released hazardous substance and any other contaminated soils or groundwater or surface water (indicate whether a hazardous waste manifest(s) is utilized).

Please submit to this office a summary report of the investigation and remedial activities that have occurred at the subject location. This report must be submitted within thirty (30) days of the receipt of this letter.

If you have any questions, please call me at (714) 834-7923.

Very truly yours,

Paul Brewer
Hazardous Waste Specialist
Hazardous Materials Management Section
Environmental Health Division

PB:fp

COUNTY OF ORANGE
HEALTH CARE AGENCY

TOM URAM
DIRECTOR

L. REX EHLING, M.D.
HEALTH OFFICER

ENVIRONMENTAL HEALTH
ROBERT E MERRYMAN, R. S. MPH
DEPUTY DIRECTOR

MAILING ADDRESS. P.O. BOX 355
SANTA ANA, CA 92702

PUBLIC HEALTH SERVICES
ENVIRONMENTAL HEALTH
1725 W. 17TH STREET
SANTA ANA, CALIFORNIA 92706
(714) 834-8356

August 19, 1988

CERTIFIED
RETURN RECEIPT
REQUESTED

Re: 86 UT 224

TO: Businesses/Persons Responsible For Releases Of Hazardous Substances From Underground Storage Tanks

FROM: County of Orange Health Care Agency/Environmental Health Underground Storage Tank Cleanup Program

SUBJECT: Reimbursement For Costs Incurred In Administering The Underground Storage Tank Cleanup Program

The purpose of this letter is to inform responsible parties that the Orange County Health Care Agency has entered into an agreement with the State of California to oversee the cleanup of contaminated sites resulting from the unauthorized release of hazardous substances from underground storage tanks. The cleanup of these sites is necessary to protect the public and environment from unnecessary exposure to hazardous chemicals.

The cleanup program developed by Orange County is funded by State and Federal
nts associated with the
mbursement requirement,
erials expended by County
e specific amounts detail-
l be provided to the
party for all direct
e site.

e of Reimbursement.
ement requirements for
ntained in the Notice
estions regarding the
ground Storage Tank

SENDER: Complete items 1, 2, 3 and 4.
Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for service(s) requested.
☐ Show to whom, date and address of delivery.
☐ Restricted Delivery.

3. Article Addressed to:
Dow Votaw
Pomona Box Company
301 W. Imperial Highway
La Habra, CA 92635

4. Type of Service:
☐ Registered ☐ Insured
☐ Certified ☐ COD
☐ Express Mail

Article Number
P 999 543 566

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature – Addressee
X

6. Signature – Agent
X

7. Date of Delivery
8/22/88

8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, July 1983 445-845 DOMESTIC RETURN RECEIPT

State Water Resources Control Board
Division of Water Quality
UST Cleanup Program

Notice of Reimbursement
When State Funds are Used

Site Code 86 UT 224 Date First Reported 12/01/86

Site Name Pomona Box Company Substance Gasoline

Address 301 West Imperial Highway Petroleum (X) Yes ( ) No

City/State/Zip La Habra, CA 92635

The following information has been provided to:

Responsible Party Dow Votaw

Company Name Pomona Box Company

Address 301 W. Imperial Highway

City/State/Zip La Habra, CA 92635

Whereas the Legislature has appropriated funds from the California Hazardous Substance Cleanup Fund to pay the local and state agency administrative and oversight costs associated with the cleanup of releases from underground storage tanks; and Whereas the direct and indirect costs of overseeing removal or remedial action at the above site are funded, in whole or in part, from the Hazardous Substance Cleanup Fund; and Whereas the above individual(s) or entity(ies) have been identified as the party or parties responsible for investigation and cleanup of the above site; YOU ARE HEREBY NOTIFIED that pursuant to Section 25360 of the Health and Safety Code, the above Responsible Party or Parties shall reimburse the State Water Resources Control Board for all direct and indirect costs incurred by any and all state and local agencies while overseeing the cleanup of the above underground storage tank site, and the above Responsible Party or Parties shall make full payment of such costs within 30 days of receipt of a detailed invoice from the State Water Resources Control Board.

Contract Project Director:

(714) 834-8174 Date 08/19/88

Signature Telephone Number

STANDARD FORM UST01(3/88)

UNDERGROUND
WaynePerry
CONSTRUCTION INC.
SPECIALISTS

C.S.C. LIC. NO. 500345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

Project No. 86.252

September 28, 1987

Orange County Health Care Agency
Environmental Health
P.O. Box 355
Santa Ana, CA 92703

Attention: Mr. Paul Brewer

Subject: Proposed Well Installation
Pomona Box Company
301 West Imperial Highway
La Habra, CA

Dear Mr. Brewer:

This letter is to inform you of the work we propose at the Pomona Box Company located at 301 West Imperial Highway, in the city of La Habra.

At the request of Ms. Ann Knight, of the California Regional Water Quality Control Board, we will install three additional monitoring wells around the former storage tank. These wells will be used to further define the limits of soil and groundwater contamination. Upon completion of the fieldwork and laboratory analyses, a report will be generated which will include: discussions of geologic and hydrogeologic conditions; copies of laboratory testing reports for the soil and groundwater obtained; and recommendations for remedial action.

The opportunity to be of service is sincerely appreciated. If you have any questions, or if we can be of further assistance, please call.

Very truly yours,

David M. Henry

David Henry
Registered Geologist 4085

UNDERGROUND
WaynePerry
CONSTRUCTION INC.
SPECIALISTS

C.S.C. LIC. NO. 300345 E.P.A. CAD 053841102
8301 W. COMMONWEALTH AVE. ■ BUENA PARK, CALIFORNIA 90621
(714) 826-0352

Project No. 86.252

September 28, 1987

Orange County Health Care Agency
Environmental Health
P.O. Box 355
Santa Ana, CA 92703

Attention: Mr. Paul Brewer

Subject: Proposed Well Installation
Pomona Box Company
301 West Imperial Highway
La Habra, CA

Dear Mr. Brewer:

This letter is to inform you of the work we propose at the Pomona Box Company located at 301 West Imperial Highway, in the city of La Habra.

At the request of Ms. Ann Knight, of the California Regional Water Quality Control Board, we will install three additional monitoring wells around the former storage tank. These wells will be used to further define the limits of soil and groundwater contamination. Upon completion of the fieldwork and laboratory analyses, a report will be generated which will include: discussions of geologic and hydrogeologic conditions; copies of laboratory testing reports for the soil and groundwater obtained; and recommendations for remedial action.

The opportunity to be of service is sincerely appreciated. If you have any questions, or if we can be of further assistance, please call.

Very truly yours,

David M. Henry

David Henry
Registered Geologist 4085

UNDERGROUND STORAGE T[illegible] UNAUTHORIZED RELEASE (LEAK, [illegible]ONTAMINATION SITE REPORT

EMERGENCY ☐ YES ☒ NO — HAS STATE OFFICE OF EMERGENCY SERVICES REPORT BEEN FILED? ☐ YES ☐ NO

STATE TANK ID #

REPORT DATE 01 14 87 (M M D D Y Y)

LOCAL CASE #

REGIONAL BOARD CASE #

US EPA ID #

REPORTED BY

NAME OF INDIVIDUAL FILING REPORT: DARYL VOTAW

PHONE: (714) 871-0932

SIGNATURE: [illegible]

REPRESENTING ☐ LOCAL AGENCY ☐ OTHER ☒ OWNER/OPERATOR ☐ REGIONAL BOARD

COMPANY OR AGENCY NAME: POMONA BOX COMPANY

ADDRESS: 301 WEST IMPERIAL HIGHWAY (STREET) — LA HABRA (CITY) — CA (STATE) — 90631 (ZIP)

RESPONSIBLE PARTY

NAME: POMONA BOX COMPANY ☐ UNKNOWN

CONTACT PERSON: DARYL VOTAW

PHONE: (714) 871-0932

ADDRESS: 301 WEST IMPERIAL HIGHWAY (STREET) — LA HABRA (CITY) — CA (STATE) — 90631 (ZIP)

SITE LOCATION

FACILITY NAME (IF APPLICABLE): SAME

OPERATOR:

PHONE: ( )

ADDRESS: STREET — CITY — COUNTY — ZIP

CROSS STREET: EUCLID

TYPE OF AREA: ☐ COMMERCIAL ☒ INDUSTRIAL ☐ RESIDENTIAL ☐ RURAL ☐ OTHER

TYPE OF BUSINESS: ☐ RETAIL FUEL STATION ☐ UNKNOWN ☒ OTHER MANUFACTURING

IMPLEMENTING AGENCIES

LOCAL AGENCY / AGENCY NAME	CONTACT PERSON	PHONE
COUNTY OF ORANGE HEALTH CARE	PAUL BREWER	(714) 834-8181
REGIONAL BOARD		( )
TSCD		( )

SUBSTANCES INVOLVED

	CAS # (ATTACH EXTRA SHEET IF NEEDED)	NAME	QUANTITY LOST (GALLONS)
(1)		UNLEADED GASOLINE	☒ UNKNOWN
(2)			☐ UNKNOWN

DISCOVERY/ABATEMENT

DATE DISCOVERED: 09 01 86 (M M D D Y Y)

HOW DISCOVERED: ☒ INVENTORY CONTROL ☐ SUBSURFACE MONITORING ☐ ROUTINE MONITORING ☐ TANK REMOVAL ☐ NUISANCE CONDITIONS ☐ OTHER:

DATE DISCHARGE BEGAN: M M D D Y Y ☒ UNKNOWN

HAS DISCHARGE BEEN STOPPED? ☐ YES ☐ NO IF YES, DATE M M D D Y Y

METHOD USED TO STOP DISCHARGE (CHECK ALL THAT APPLY): ☒ REMOVE CONTENTS ☐ REPLACE TANK ☐ CLOSE TANK ☐ REPAIR TANK ☐ REPAIR PIPING ☐ CHANGE PROCEDURES ☒ OTHER TANK REMOVAL

SOURCE/CAUSE

SOURCE(S) OF DISCHARGE: ☒ TANK LEAK ☐ UNKNOWN ☐ PIPING LEAK ☒ OTHER (SPECIFY) OR POSSIBLE OVERFILL

TANKS ONLY/CAPACITY 1,000 GAL

AGE 30 YRS. ☐ UNKNOWN

MATERIAL: ☒ STEEL ☐ FIBERGLASS ☐ OTHER

CAUSE(S): ☒ OVERFILL ☐ CORROSION ☐ RUPTURE/FAILURE ☐ SPILL ☐ UNKNOWN ☐ OTHER

RESOURCES AFFECTED/AT RISK

RESOURCES AFFECTED	YES	NO	THREATENED	UNKNOWN
AIR (VAPOR)	☐	☒	☐	☐
SOIL (VADOSE ZONE)	☒	☐	☐	☐
GROUNDWATER	☒	☐	☐	☐
SURFACE WATER OR STORM DRAIN	☐	☒	☐	☐
BUILDING OR UTILITY VAULT	☐	☒	☐	☐
OTHER (SPECIFY)	☐	☐	☐	☐

WATER SUPPLIES AFFECTED	YES	NO	THREATENED	UNKNOWN	# OF WELLS
PUBLIC DRINKING WATER	☐	☒	☐	☐	
PRIVATE DRINKING WATER	☐	☒	☐	☐	
INDUSTRIAL	☐	☒	☐	☐	
AGRICULTURAL	☐	☒	☐	☐	
OTHER (SPECIFY)	☐	☒	☐	☐	

GROUNDWATER BASIN NAME ☐ UNKNOWN

COMMENTS

COMMENTS:

AFTER YEARS OF CAREFUL MONITORING, WITH NO LEAKAGE, WE STOPPED USING THE TANK IMMEDIATLY UPON DISCOVERING OUR FIRST LOSS.

COMPLETE AND ATTACH A CLEANUP TRACKING REPORT IF ANY CLEANUP WORK OR PLANNING HAS STARTED

HSC 05 (10/85)

[illegible] 2925.4130

Pomona Pon
3500 W. Imperial Hwy
La Habra

86 UT 224

Paul Brewer

...TIFICATION REPORT ATTACHMENT

INTERNAL USE ONLY

I.D. #: 87-0070

INTERNAL CRITERIA MET FOR NOTIFICATION

____ Discharge has resulted in/will result in an injury to a person(s).

____ Discharge has required an evacuation to be ordered or public access restricted.

____ Discharge poses a public health or safety hazard as reported by the fire department.

____ Discharge has contaminated food or crops.

____ Discharge which could result in the inhalation of a hazardous chemical in excess of 1% of the TLV or it has been advised that inhalation at any level would be a hazard.

____ Discharge which has resulted in or could result in physical contact by the public.

____ Discharge which has contaminated domestic drinking water in levels exceeding state drinking water action levels, is a carcinogen, or is a potential hazard at any level.

____ Discharge has contaminated recreational waters in any concentration due to hazards posed by physical contact or bioaccumulation by organisms consumed by humans.

____ Discharge has contaminated nonrecreational waters in any concentration due to hazards posed by physical contact or bioaccumulation by organisms consumed by humans.

____ Discharge is believed by HCA to cause a substantial injury to public health and safety.

____ Other.

REASON FOR NOT NOTIFYING

____ Discharges are already public knowledge within the locality affected.

____ Discharges are the subject of an ongoing criminal investigation. (Case #: _____)

____ Discharges have already been notified. (Date of notification: _____)

____ Discharge was made under permit or approval of appropriate regulatory agency (Permit #: _____).

X Other: more info

Referred to ~~Health~~ PTO Officer: ____ yes X no

Completed by: S Miller Date: 1-16-87 Time: 1:30pm

Closed 10-24-88 per P. Brewer

COUNTY OF ORANGE
HEALTH CARE AGENCY

TOM URAM
DIRECTOR

L. REX EHLING, M.D.
HEALTH OFFICER

1725 WEST 17TH STREET
SANTA ANA, CA 92706

TELEPHONE: 714/834-7601

MAILING ADDRESS: P.O. BOX 355
SANTA ANA, CA 92702

PUBLIC HEALTH AND MEDICAL SERVICES
ENVIRONMENTAL HEALTH

January 12, 1987

Pomona Box
350 West Imperial Highway
La Habra, California 90631

Attention: Don

Subject: Soil and Possible Groundwater Contamination at 350 W. Imperial Highway, La Habra, CA

Dear Sir:

Based on inspections and field tests conducted on December 1, 1986 and December 8, 1986, it has been determined that gasoline contaminated soil and possibly groundwater is present at the subject location.

This Agency, which is authorized to enforce both the State Hazardous Waste and Underground Tank Laws and Regulations, (Chapters 6.5 and 6.7 of the California Health and Safety Code and Titles 22 and 23 of the California Administrative Code) directs Pomona Box to develop and submit a site assessment plan to this office within thirty (30) days of receipt of this letter. The plan must include the proposed methods to obtain the following information:

a. Identification of the nature, source, and estimated volume of released contaminants.

b. Identification of the lateral and vertical extent of soil and groundwater contamination and the concentration of contaminants.

c. Proposed number and location of samples and borings.

d. Proposed laboratory analyses and methods.

e. Depth to groundwater and groundwater gradient.

f. Description of the soil profile.

g. Hydrogeological setting.

h. Present and potential future uses of groundwater and surface water that may be affected by the contaminated material.

Field investigation may begin only after the plan has been approved. This office must be notified 48 hours in advance of sampling. After completion of the investigation, a report outlining the findings from the site assessment investigation and the proposals for site mitigation and remedial action must be submitted to this office for approval. Remedial actions must include the following as applicable:

1. Free undissolved product must be removed from groundwater.

2. Proposed method of dissolved product removal must be approved by the appropriate Regional Water Quality Control Board and must be included in the reports submitted to this Agency.

3. Demonstrate to the satisfaction of this office that the contaminated soil, if left in place, would not present a potential public health or environmental hazard. This risk assessment evaluates the potential for movement of contaminants into adjoining soils or groundwater and the associated public health or environmental effects.

4. Reduce contamination to acceptable levels. A proposal describing the treatment process must be submitted to this office for approval prior to initiation of such process. In addition, permits must be obtained from all appropriate regulatory agencies.

5. Monitoring of contaminant fate and movement in soil and groundwater. Monitoring may include periodic sampling of soil and periodic sampling of properly placed wells with annual reevaluation of well locations. A report describing the proposed investigations must be submitted to this office for review.

6. Remove the contaminated soil. The contaminated soil should be removed to a nondetectable level or to natural background. If this cannot be achieved, options three (3), four (4), and five (5) must be employed.

If any material to be removed is hazardous waste, as defined in the California Health and Safety Code, Chapter 6.5 or as identified in the California Administrative Code, Title 22, Division 4, Chapter 30, then the use of a registered hazardous waste hauler is required and a photocopy of every manifest signed by the receiving facility must be forwarded to this office for verification of proper disposal. Section 25298(c)(4) of the California Health and Safety Code states that no person shall close an underground storage tank unless the person demonstrates to

the satisfaction of the local agency that no significant soil contamination has occurred. Violation of this requirement is subject to a civil penalty of Five Thousand Dollars ($5,000.00) per day.

If you have any questions regarding this matter, please contact me at (714) 834-8181.

Very truly yours,

Paul Brewer
Hazardous Waste Specialist
Waste Managment Section
Environmental Health

PB:bl

cc: Barbara Wellens, La Habra Fire Department
Steven Overman, Santa Ana Regional Water Quality Control Board

FIELD ACTIVITY DESCRIPTION

LUST #_____ FACILITY NAME:_____ DATE: 12-8-86

I.R. #_____ ADDRESS: 301 W. Imperial INSPECTOR: Sm

URR #_____ La Habra

Field Activity: Went to site to take verif. sample after Greg (Wayne Perry) cleaned out tank pit. When I got there he had dug down to about 17' + hit g.w.. He says there is product on the g.w. It was difficult to tell, but there was a strong odor of gas from spoils + pit. Don (owner) should get our clean up letter + submit a workplan for site chara. Greg said he was going to fill in the hole. Don mentioned that he did loose about 200 gal from his last tank.

Another LUST file for O.C.

U ST 86-224

ORANGE COUNTY ENVIRONMENTAL HEALTH
UNDERGROUND TANK CLEANUP FORM

Inspector Brewer
Date 12-1-86
Time

Ponoma Box 380 W Imperial Hwy
Facility Name — Address

Imperial & Euclid
Cross Streets — Site Phone Number

Owner — Address

Contact Person — Phone Number

Operator (If different than owner) — Phone Number

Wayne Perry
Consultant (Contractor) — Contact Name — Phone Number

Tank 1 10000 Steel Gasoline
Size — Const. Mat. — Mat. Stored

Tank 2
Size — Const. Mat. — Mat. Stored

Tank 3
Size — Const. Mat. — Mat. Stored

Tank 4
Size — Const. Mat. — Mat. Stored

Tank 5
Size — Const. Mat. — Mat. Stored

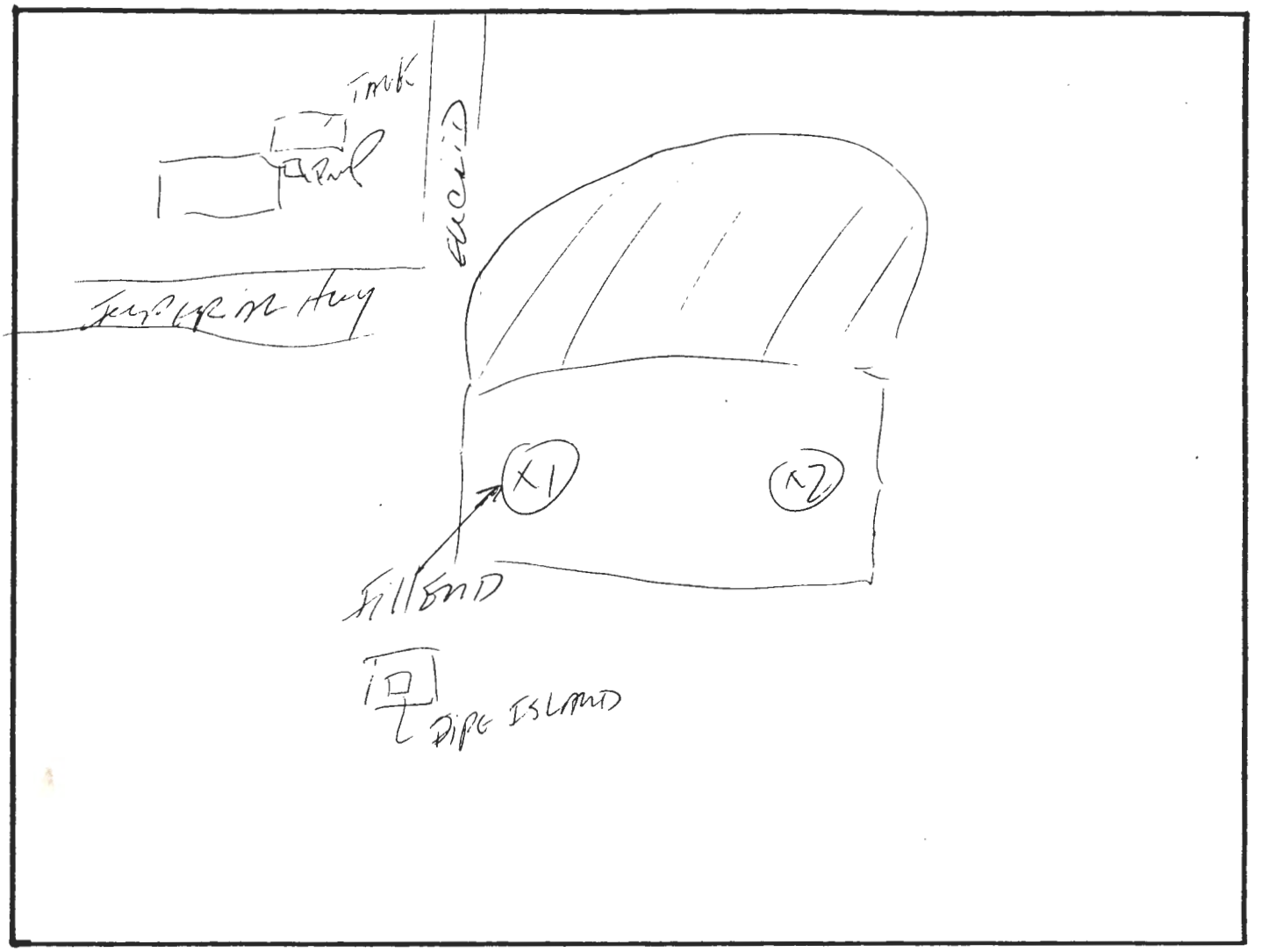
Tank 6
Size — Const. Mat. — Mat. Stored

Depth To Groundwater — Was Field Letter Given?

Were Options Explained To Responsible Party?

Site History TANKS INSTALLED 1957. OWNER STATED THAT HE NOTICED A LEAK FROM INVENTORY RECONCILIATION AND STOPPED USING TANK. OWNER ESTIMATES HE LOST 50-60 GALLONS. MAINTENANCE MAN STATED THAT TANK HELD approx. 16 gallons OF WATER PRIOR TO REMOVAL

Description: Include location of tanks, pipes, pumps, streets, buildings, soil pipes, sampling locations, monitoring locations & results, soil type, free product, water wells,...

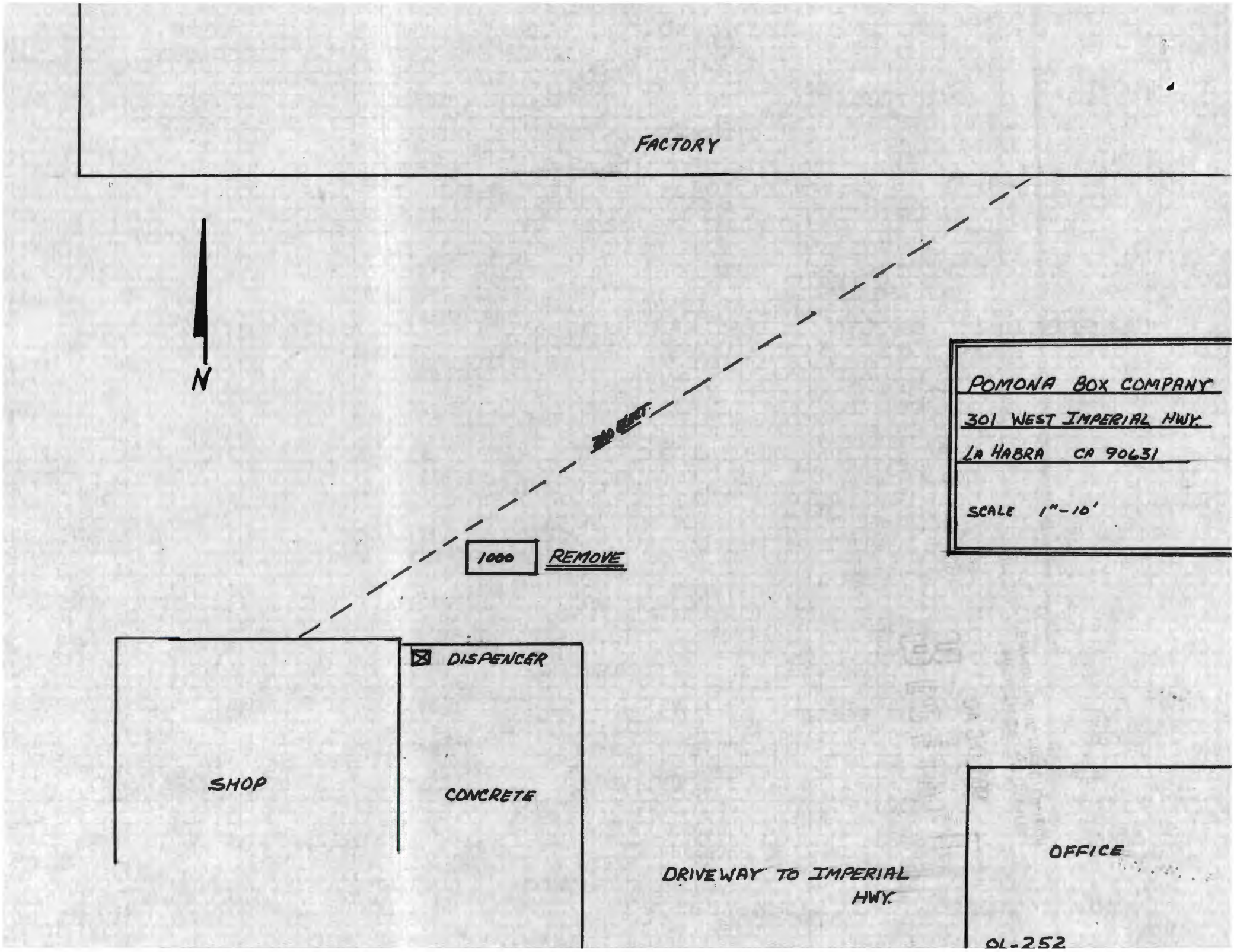


Action Taken:

SS#1 - MIXED BROWN CLAY W/ SMALL STONES STRONG ODOR
@ 2' BELOW TANK IN NATIVE

#2 - " " " " SLIGHT GAS ODOR

Comments/Follow-up Records:


FACTORY
N
POMONA BOX COMPANY
301 WEST IMPERIAL HWY.
LA HABRA CA 90631
SCALE 1"-10'
1000
REMOVE
DISPENSER
SHOP
CONCRETE
DRIVEWAY TO IMPERIAL HWY.
OFFICE
OL-252

APPROVED

ORANGE COUNTY HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH
WASTE MANAGEMENT SECTION

Plan Reviewed By | Date 1/20 | Plan # 86-691

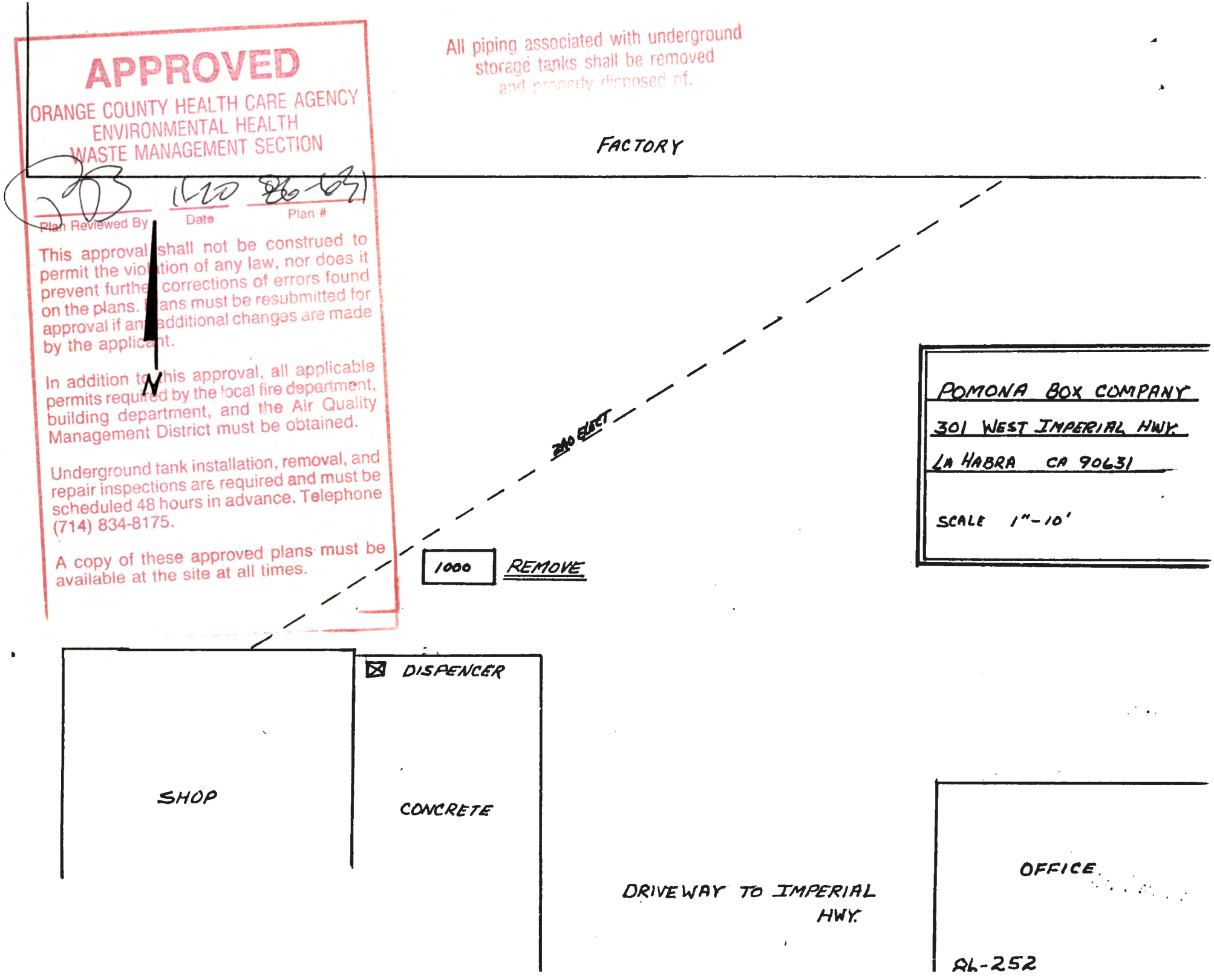
This approval shall not be construed to permit the violation of any law, nor does it prevent further corrections of errors found on the plans. Plans must be resubmitted for approval if any additional changes are made by the applicant.

In addition to this approval, all applicable permits required by the local fire department, building department, and the Air Quality Management District must be obtained.

Underground tank installation, removal, and repair inspections are required and must be scheduled 48 hours in advance. Telephone (714) 834-8175.

A copy of these approved plans must be available at the site at all times.

All piping associated with underground storage tanks shall be removed and properly disposed of.



APPENDIX B

Agency Correspondence

Department of Toxic Substances Control

Meredith Williams, Ph.D., Director
5796 Corporate Avenue
Cypress, California 90630

Jared Blumenfeld
Secretary for
Environmental Protection

Gavin Newsom
Governor

July 14, 2021 **SENT VIA ELECTRONIC MAIL**

Ms. Doris Nguyen
Vice President of Development
The Olson Company
3010 Old Ranch Parkway, #100
Seal Beach, California 90740
dnguyen@theolsonco.com

CONDITIONAL APPROVAL OF SITE ASSESSMENT PLAN, LA HABRA (EUCLID & IMPERIAL), 251 – 351 WEST IMPERIAL HIGHWAY, LA HABRA (SITE CODE: 401963)

Dear Ms. Nguyen:

The Department of Toxic Substances Control (DTSC) reviewed the draft Site Assessment Plan (Workplan) (Stantec, June 2021) for the La Habra (Euclid & Imperial) property located at 251 – 351 West Imperial Highway, La Habra (Site). The Workplan was prepared pursuant to the California Land Reuse and Revitalization Agreement (Docket No. HSA-FY20/21-125) executed on April 12, 2021 between DTSC and Olson Urban Housing, LLC. The Workplan presents the scope of work to further evaluate soil vapor impacts and groundwater conditions at the Site.

The Site consists of approximately 4.91 acres of an active commercial property. Business occupying the property include a box manufacturing facility, an automobile sales and repair shop, a children's gymnasium, a two-story multi-tenant office building, an automobile sales facility, and an automotive storage warehouse. The Site is surrounded by a mix of commercial and residential properties. The Site was used for agricultural purposes from at least 1928 to sometime between 1947 and 1953. The Site was developed with its current structures between 1953 and 1972. Eight underground storage tanks (gasoline and diesel) were previously located onsite and removed in 1989 under the Orange County Health Care Agency. Previous Site investigations, prior to DTSC oversight, detected elevated concentrations of total petroleum hydrocarbons (TPH) and chlorinated volatile organic compounds in soil vapor. Low detections of TPH have previously been identified in groundwater at the Site.

DTSC hereby approves the Workplan provided the enclosed comments are incorporated into the Workplan in addition to addressing them during fieldwork and in the upcoming report. Please submit revisions to the Workplan addressing the enclosed DTSC comments within 7 days from the date of this letter. Please notify DTSC a minimum of 48 hours in advance of field work or schedule changes.

If you have any questions regarding this project, please contact Ms. Rana Georges, Project Manager, at (714) 484-5450 or by e-mail at rana.georges@dtsc.ca.gov, or me at (714) 816-1978 or by e-mail at yolanda.garza@dtsc.ca.gov.

Sincerely,

Yolanda M. Garza
Unit Chief
Brownfields Restoration and School Evaluation Branch
Site Mitigation and Restoration Program

Enclosure

cc: (via e-mail)

Mr. Joshua Sargent, P.G.
Associate Geologist
Stantec
joshua.sargent@stantec.com

Ms. Wendy Arano, P.G.
Engineering Geologist
DTSC/Geologic Services Branch
wendy.arano@dtsc.ca.gov

Dr. Farah Esfandiari
Staff Toxicologist
DTSC/Human and Ecological Risk Office
farah.esfandiari@dtsc.ca.gov

Brownfields Restoration and School Evaluation Branch Reading File - Cypress

DTSC COMMENTS
DRAFT TECHNICAL MEMORANDUM FOR SUPPLEMENTAL SITE INVESTIGATION
LA HABRA (EUCLID & IMPERIAL)
251 – 351 WEST IMPERIAL HIGHWAY
LA HABRA

The following Department of Toxic Substances Control (DTSC) staff reviewed and provided comments herein to the Workplan. Please contact the Project Manager if you have any questions on the comments.

Farah Esfandiari, Ph.D.
Staff Toxicologist
Human and Ecological Risk Office (HERO)

COMMENTS:

1. Comparison of Groundwater (GW) Data to Maximum Contaminant Levels or MCLs: MCLs are drinking water standards and they do not consider vapor intrusion (VI) exposure; therefore they are not protective compared to a risk of 1E-06. HERO recommends presentation and use of both human health risk-based screening values (RBSLs) and MCLs. Cleaning up to MCLs might not be protective of the VI exposure pathway particularly for this Site since depth to GW is shallow (15 ft bgs). VOCs in GW should be compared to both MCLs and RBSLs. GW RBSLs are calculated by applying the chemical specific Henry's law constant and DTSC default GW attenuation factor (0.001) to the target indoor air concentrations. Please add groundwater to indoor air screening levels on the GW analytical results table in addition to MCLs.

2. Ambient (Outdoor) Air Sampling: The TM is proposing to collect/analyze one ambient air blank for VOCs for comparative ambient air concentrations at the time of sampling. In order to have useful outdoor air data, air samplers should be located upwind of subsurface plumes. Local wind direction should be considered to support the location of the air sampler for ambient air sampling.

Wendy Arano, P.G.
Engineering Geologist
Geological Support Branch (GSB)

See attached GSB Memorandum.

Department of Toxic Substances Control

Jared Blumenfeld
Secretary for
Environmental Protection

Meredith Williams, Ph.D.
Director
5796 Corporate Avenue
Cypress, California 90630

Gavin Newsom
Governor

MEMORANDUM

TO: Rana Georges
Project Manager
Site Mitigation and Restoration Program

FROM: Wendy Arano, P.G.
Engineering Geologist
Cypress Geological Services Branch

DATE: July 7, 2021

SUBJECT: DRAFT TECHNICAL MEMORANDUM FOR SUPPLEMENTAL SITE INVESTIGATIONS, 251-351 WEST IMPERIAL HIGHWAY, LA HABRA
PCA: 12018 Site Code: 401963-11 WR: 20077013 MPC: SI-CW

As requested, the Geological Services Branch (GSB) reviewed the "Draft Technical Memorandum for Supplemental Site Investigations" (TM) dated June 28, 2021, from Stantec Consulting Services, Inc. to Rana Georges, PM, DTSC. Stantec prepared the TM on behalf of Olson Urban Housing, LLC (Olson). Olson entered into a California Land Reuse and Revitalization Act (CLRRA) Agreement (Agreement) with the Department of Toxic Substances Control (DTSC) for the Site as outlined in the Docket No. HSA-FY20/21-125 executed on April 12, 2021.

The sampling proposed in the TM appears appropriate. The GSB provides the following specific comments on the Technical Memorandum and the Quality Assurance Project Plan (QAPP).

Specific Comments

1. All work plans or reports, either draft or final, should be signed and stamped by the registered professionals in charge of the work.
2. Page 1. Second Bullet. Stantec states that MW1 is located near the former 1,000-gallon underground storage tank (UST). Stantec should check the monitoring well labels on Figures 3, 4A, 4B, and 6. Some figures show two different wells labelled as MW1; the upgradient and the one near the former

1,000-gallon UST. Corrections should be made to text and figures as appropriate.

3. Page 2. The fourth bullet under the scope of work should include screening soils with a PID, as also described in the sixth bullet.

4. Page 4. Groundwater Well Sampling. The groundwater purging stabilization criteria proposed by Stantec do not match those recommended by DTSC in Table 1 (page 10) of the Cal EPA-DTSC, 2008 revision of "Representative Sampling of Groundwater for Hazardous Substances, Guidance Manual for Groundwater Investigations". The GSB recommends that Stantec use the stabilization criteria as listed in the DTSC guidance, as follows:

Temperature	± 3% of reading (minimum of ± 0.2° C)
pH	+/- 0.1
specific electrical conductance (SEC)	+/- 3%
oxidation-reduction potential (ORP)	+/- 10 millivolts
dissolved oxygen (DO)	+/- 10%, down to the level of accuracy at 0.2 milligrams per liter

(Sources: *Representative Sampling of Groundwater for Hazardous Substances,* Guidance Manual for Groundwater Investigations; July 1995, Revised February 2008; California Environmental Protection Agency/Department of Toxic Substances Control; and Rounds, S.A., Wilde, F.D., and Ritz, G.F., 2013, Dissolved oxygen (ver. 3.0): U.S. Geological Survey Techniques of Water-Resources Investigations, book 9, chap. A6, sec. 6.2, *http://water.usgs.gov/owq/FieldManual/Chapter*6/6.2_v3.0.pdf.)

5. Page 5. First Paragraph. The Technical Memorandum indicates that the Groundwater VOC analytical results will be screened against concentrations presented in DTSC HERO Note 3 "in conjunction with those presented in the USEPA Regional Screening levels (RSLs)", and the groundwater TPH analytical results will be screened against the San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (ESLs). The GSB recommends listing all the screening levels on the groundwater results table. Additionally, the QAPP (Appendix A), Table 1, shows Maximum Contaminant Levels (MCLS) for screening levels for groundwater. The GSB recommends that the TM and/or QAPP should be revised for consistency. Furthermore, the GSB recommends including the California MCLs as screening levels for groundwater, if an MCL is available for the analyte of interest.

6. Page 5. Soil Vapor Evaluation. First bullet. Figure 6 indicates that SV13 will also be re-installed, and it should be included in the list.
7. Page 6. QA/QC Samples. Stantec has proposed collection of an ambient air blank to compare ambient air concentrations at the time of soil vapor sampling. This sample is not described in the QAPP which should be revised. The sample collection method for this type of blank sample should be described and this type of blank should be collected for each day that soil vapor samples are collected.
8. Page 8. Reporting and Schedule. Stantec should ensure that the summary report also includes copies of the boring logs, well construction details, and soil vapor probe construction details.
9. Appendix A. Quality Assurance Project Plan. Comments specific to the QAPP are as follows:
    a. Section 2.1.1 – A correction should be made to the spelling of Brian Endlich's name.
    b. Section 3 – Step 4 of the DQOs imply that the study boundaries will include offsite investigation if needed. Olson and Stantec should confirm this with DTSC.
    c. Section 4.1 – This decontamination procedure indicates rinsing in potable water, then double rinsing with distilled water; whereas the TM indicates a double rinse, first in tap water followed by a final rinse using distilled water. Revisions should be made to either the QAPP or TM for consistency.
    d. Section 4.3 – The GSB recommends that samples be delivered to the laboratory (or their courier) on the same day as sampling, not on the day following sampling. If samples are to be delivered the day following sampling, Stantec should indicate where samples will be stored securely and appropriately refrigerated.
    e. Section 4.4 – The GSB recommends that a table showing the planned Field QA/QC samples, the media in which they will be collected, and the frequency of collection, should be included for reference in this section. This table may be similar to Table 2 Laboratory QC Sample Analyses Frequency.
    f. Section 4.4.1 – The collection of duplicate samples for groundwater and soil vapor should also be described in this section.
    g. Section 5.0 – groundwater samples should be included in this first sentence and the subsections.
    h. Section 6.3 should reference 6.4 instead of 7.5.
    i. QAPP Table 1 – A footnote should be added to the table to define "Laboratory Practical Quantitative Limit" (generally called laboratory Practical Quantitation Limit (PQL)) on the soil portion of the table, Laboratory Reporting Limit (RL) on the portion regarding soil vapor, and

"Laboratory Method Detection Limit Quantitative Limit", which appears on the groundwater portion of the table and seems to be a combination of two different laboratory limits.

Stantec provided a schedule on page 8 of the TM for the proposed field work. Stantec should notify the DTSC of any schedule revisions or refinements as soon as possible. If you have any questions, please contact me via email at wendy.arano@dtsc.ca.gov.

Peer Reviewed: Jose Marcos, P.G.

cc: Alfredo Zanoria, C.E.G., C.Hg.

From:	Sargent, Josh
To:	"Georges, Rana@DTSC"
Cc:	Emerson, Kyle; Arano, Wendy@DTSC; Esfandiari, Farah@DTSC; Doris Nguyen; Monge, Dion; Jason Hafliger (Jason.Hafliger@stantec.com)
Subject:	RE: Olson Urban Housing - La Habra (Envirostor ID: 60003115, Site Code: 401963) - Technical Memorandum
Date:	Thursday, July 15, 2021 3:03:00 PM
Attachments:	image001.png

Good afternoon Rana,

The groundwater well installation will occur tomorrow, July 16th beginning at 7:00 AM. Dion Monge will be the Stantec site contact, contact information is provided below. The plan is to install the Pomona Box Company groundwater well first, followed by the Mac Auto groundwater well. Groundwater well development activities are scheduled to occur on July 20th. The well development purging stabilization criteria will be performed in accordance with DTSC GSB comment # 4 of the conditional approval letter.

The soil vapor probe installation will begin on July 20th at 7:00 AM and will continue through July 22nd. Jason Haflinger will be the Stantec site contact for the soil vapor installation work, contact information is also provided below.

The groundwater and vapor sampling is scheduled to occur on July 26th and 27th. Additionally, the Groundwater Well Survey will occur on one of these days. The staffing for these activities is TBD.

We are currently reviewing the HERO and GSU comments for the Site Assessment Plan (SAP) and Quality Assurance Project Plan (QAPP) contained in the conditional approval letter, and will submit a revised SAP and QAPP by COB tomorrow. It should be noted the HERO and GSB comments do not influence tomorrow's scheduled activities.

Please let us know if you have any further questions.

Regards,

--Josh

Dion Monge
Senior Scientist
Mobile: 909 556-6516
Dion.Monge@stantec.com

Jason Hafliger
Associate Scientist
Mobile: 970 985-0194
jason.hafliger@stantec.com

Joshua Sargent PG
Associate Geologist

Direct: 909 255-8221
Mobile: 909 289-7111
Joshua.Sargent@stantec.com

Stantec
735 East Carnegie Drive Suite 280
San Bernardino CA 92408-3588

Stantec

Memo

To:	Rana Georges, Project Manager Department of Toxic Substances Control 5798 Corporate Avenue Cypress, California 90630	From:	Joshua Sargent, PG Kyle Emerson, CEG Stantec Consulting Services, Inc. 735 East Carnegie Drive, Suite 280 San Bernardino, California 92408
File:	Olson – La Habra (Imperial & Euclid) 18504671	Date:	July 16, 2021

Reference: **Response to Department of Toxic Substances Control, Human and Ecological Risk Office and Geologic Services Branch Comments Provided in Conditional Approval of Site Assessment Plan, La Habra**
251 – 351 West Imperial Highway
La Habra, California
Envirostor ID: 60003115, Site Code: 401963

Stantec Consulting Services Inc. (Stantec) has received the Department of Toxic Substances Control (DTSC), *Conditional Approval of Site Assessment Plan, La Habra (Euclid & Imperial)*, dated July 14, 2021, for the above-references property located in La Habra, County of Orange, California (the "Site" or "Property"). Included in the approval letter are comments from the Human and Ecological Risk Office (HERO) and Geologic Services Branch (GSB) pertaining to the Site Assessment Workplan (SAP). Stantec's response to the HERO and GSU comments are provided in the attached table. Further, these responses have been incorporated into the attached *Revised Site Assessment Plan*, and associated Quality Assurance Project Plan (QAPP), for review and consideration by DTSC.

Regards,

Stantec Consulting Services Inc.

Joshua Sargent PG
Geologist
Phone: 909 255 8221
Joshua.Sargent@stantec.com

PROFESSIONAL GEOLOGIST
Joshua Glenn Sargent
No. 9730
STATE OF CALIFORNIA

Kyle Emerson CEG
Managing Principal Geologist
Phone: 909 255 8220
Kyle.Emerson@Stantec.com

PROFESSIONAL GEOLOGIST
KYLE EMERSON
No. 1271
CERTIFIED
ENGINEERING
GEOLOGIST
STATE OF CALIFORNIA

c. Doris Nguyen, Olson Urban Housing LLC
Todd Olson, Olson Urban Housing LLC
Nicholas Targ, Holland & Knight, LLP

	HERO Comments	Stantec Response
1.	Comparison of Groundwater (GW) Data to Maximum Contaminant Levels or MCLs: MCLs are drinking water standards and they do not consider vapor intrusion (VI) exposure; therefore they are not protective compared to a risk of 1E-06. HERO recommends presentation and use of both human health risk-based screening values (RBSLs) and MCLs. Cleaning up to MCLs might not be protective of the VI exposure pathway particularly for this Site since depth to GW is shallow (15 ft bgs). VOCs in GW should be compared to both MCLs and RBSLs. GW RBSLs are calculated by applying the chemical specific Henry's law constant and DTSC default GW attenuation factor (0.001) to the target indoor air concentrations. Please add groundwater to indoor air screening levels on the GW analytical results table in addition to MCLs.	Groundwater RBSLs will be added on the groundwater analytical results on future submittals.
2.	Ambient (Outdoor) Air Sampling: The TM is proposing to collect/analyze one ambient air blank for VOCs for comparative ambient air concentrations at the time of sampling. In order to have useful outdoor air data, air samplers should be located upwind of subsurface plumes. Local wind direction should be considered to support the location of the air sampler for ambient air sampling.	Ambient (outdoor) air samples will be collected in the up-wind direction.
	GSB Specific Comments	**Stantec Response**
1.	All work plans or reports, either draft or final, should be signed and stamped by the registered professionals in charge of the work.	All future submittals, including drafts, will be signed and stamped by the registered professional.
2.	Page 1. Second Bullet. Stantec states that MW1 is located near the former 1,000-gallon underground storage tank (UST). Stantec should check the monitoring well labels on Figures 3, 4A, 4B, and 6. Some figures show two different wells labelled as MW1; the upgradient and the one near the former 1,000-gallon UST. Corrections should be made to text and figures as appropriate.	Groundwater monitoring well MW-1 is located in the southern portion of the Property near the former 1,000-gallon UST. Groundwater monitoring well MW-3 is located in the northern portion of the Property, north of the on-site commercial building. The report figures have been revised accordingly.
3.	Page 2. The fourth bullet under the scope of work should include screening soils with a PID, as also described in the sixth bullet.	PID field screening of soils is discussed in the sixth bullet, page 2. An additional sentence has been added to the fourth bullet for clarity.
4.	Page 4. Groundwater Well Sampling. The groundwater purging stabilization criteria proposed by Stantec do not match those recommended by DTSC in Table 1 (page 10) of the Cal EPA-DTSC, 2008 revision of "Representative Sampling of Groundwater for Hazardous Substances, Guidance Manual for Groundwater Investigations". The GSB recommends that Stantec use the stabilization criteria as listed in the DTSC guidance, as follows: • Temperature: ± 3% of reading (minimum of ± 0.2o C) • pH: +/- 0.1 • Specific Electrical Conductance (SEC): +/- 3% • Oxidation-reduction potential (ORP): +/- 10 millivolts • Dissolved Oxygen (DO): +/- 10%, down to the level of accuracy at 0.2 milligram per liter	The text has been revised to reflect the stabilization criteria presented in the Conditional Approval Letter.

Reference: **Response to Department of Toxic Substances Control, Human and Ecological Risk Office and Geologic Services Branch Comments Provided in Conditional Approval of Site Assessment Plan, La Habra**

5.	Page 5. First Paragraph. The Technical Memorandum indicates that the Groundwater VOC analytical results will be screened against concentrations presented in DTSC HERO Note 3 "in conjunction with those presented in the USEPA Regional Screening levels (RSLs)", and the groundwater TPH analytical results will be screened against the San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (ESLs). The GSB recommends listing all the screening levels on the groundwater results table. Additionally, the QAPP (Appendix A), Table 1, shows Maximum Contaminant Levels (MCLS) for screening levels for groundwater. The GSB recommends that the TM and/or QAPP should be revised for consistency. Furthermore, the GSB recommends including the California MCLs as screening levels for groundwater, if an MCL is available for the analyte of interest.	See above response to HERO Comments 1. The following groundwater analytical results screening criteria for will be provided on future submittals: • California MCLs • DTSC HERO Note 3 Screening Levels (Tap Water) • San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (ESLs) or TPH • RBSLs (See HERO Comment 1)
6.	Page 5. Soil Vapor Evaluation. First bullet. Figure 6 indicates that SV13 will also be re-installed, and it should be included in the list.	Text has been revised to include location SV13.
7.	Page 6. QA/QC Samples. Stantec has proposed collection of an ambient air blank to compare ambient air concentrations at the time of soil vapor sampling. This sample is not described in the QAPP which should be revised. The sample collection method for this type of blank sample should be described and this type of blank should be collected for each day that soil vapor samples are collected.	The SAP has been revised to incorporate location language. Further, he QAPP has been revised to describe the sample collection method, and frequency.
8.	Page 8. Reporting and Schedule. Stantec should ensure that the summary report also includes copies of the boring logs, well construction details, and soil vapor probe construction details.	The investigation summary report will include these items listed.
9.	Appendix A. Quality Assurance Project Plan. Comments specific to the QAPP are as follows:	--
a.	Section 2.1.1 – A correction should be made to the spelling of Brian Endlich's name.	Brian Endlich has been replaced with Farah Esfandiari as the HERO representative in the document.
b.	Section 3 – Step 4 of the DQOs imply that the study boundaries will include offsite investigation if needed. Olson and Stantec should confirm this with DTSC.	The text has been revised to define the study area to the Property. If it is determined that COPCs originating from the Property extend beyond the Property boundary, the study area will be reevaluated in consultation with DTSC.
c.	Section 4.1 – This decontamination procedure indicates rinsing in potable water, then double rinsing with distilled water; whereas the TM indicates a double rinse, first in tap water followed by a final rinse using distilled water. Revisions should be made to either the QAPP or TM for consistency.	Revisions have bee made across both documents for consistency.
d.	Section 4.3 – The GSB recommends that samples be delivered to the laboratory (or their courier) on the same day as sampling, not on the day following sampling. If samples are to be	The text has been revised to state "All samples will be delivered to the laboratory by courier on the same day of collection."

Reference: **Response to Department of Toxic Substances Control, Human and Ecological Risk Office and Geologic Services Branch Comments Provided in Conditional Approval of Site Assessment Plan, La Habra**

	delivered the day following sampling, Stantec should indicate where samples will be stored securely and appropriately refrigerated.	
e.	Section 4.4 – The GSB recommends that a table showing the planned Field QA/QC samples, the media in which they will be collected, and the frequency of collection, should be included for reference in this section. This table may be similar to Table 2 Laboratory QC Sample Analyses Frequency.	A “Field QC Sample Analyses Frequency” table has been added to the “Tables” section of the report.
f.	Section 4.4.1 – The collection of duplicate samples for groundwater and soil vapor should also be described in this section.	This section has been revised to include a discussion of groundwater and soil vapor samples.
g.	Section 5.0 – groundwater samples should be included in this first sentence and the subsections.	The text has been revised accordingly.
h.	Section 6.3 should reference 6.4 instead of 7.5.	The text has been revised accordingly.
i.	QAPP Table 1 – A footnote should be added to the table to define “Laboratory Practical Quantitative Limit” (generally called laboratory Practical Quantitation Limit (PQL)) on the soil portion of the table, Laboratory Reporting Limit (RL) on the portion regarding soil vapor, and “Laboratory Method Detection Limit Quantitative Limit”, which appears on the groundwater portion of the table and seems to be a combination of two different laboratory limits.	The text has been revised accordingly.

APPENDIX C

Orange County Health Care Agency Permits

Sargent, Josh

From: EH OC Wells <EHOCWells@ochca.com>
Sent: Thursday, July 15, 2021 10:16 AM
To: Sargent, Josh
Cc: Doris Nguyen; yolanda.garza@dtsc.ca.gov; ncasillas@lahabraca.gov; EH OC Wells
Subject: RE: La Habra Drilling Permits
Attachments: ochca_well_permit_sv_2021.pdf; ochca_well_permit_groundwater_2021.pdf

Josh,

Your monitoring well construction permit application is approved on this date. Work may proceed according to schedule. Approval of the application is contingent on the following requirements:

- Mail the application, supporting documents, and $511.00 fee to this Agency. The HCA Accounting Dept. must process your application fee by July 29th. Fees received afterwards will be assessed a late penalty fee of 25%.
- All notifications and submission of documents shall be via e-mail. Use the permit number on the subject line for reference.
- Notify this Agency of any changes to the work plan at least 2 business days prior to start.
- Notify this Agency when all work is complete and include the depth to first encountered groundwater.
- Submit copies of the DWR well completion reports within 30 days of completion of work.
- The permit expires on 07-16-2022 at 11:59 p.m.
- Failure to adhere to the permitting requirements is a violation of the California Well Standards and the City of La Habra's Well Ordinance, and constitutes a misdemeanor.

Your nested soil vapor probe (SVP) construction permit is approved on this date. Work may proceed according to schedule. Approval of the application is contingent on the following requirements:

- Mail the application, supporting documents, and $382.00 fee to this Agency. The HCA Accounting Dept. must process your application fee by July 29th. Fees received afterwards will be assessed a late penalty fee of 25%.
- All notifications and submission of documents shall be via e-mail. Use the permit number on the subject line for reference.
- Notify this Agency of any changes to the work plan at least 2 business days prior to start.
- This permit covers direct-push, CPT, and hang-augering drilling only.
    - The SVPs must meet the radial thickness for the upper annular seal (i.e., it must be at least 6.5 inches).
- Submit copies of the boring logs within 30 days of completion of work.
- In order for the SVP destructions to be covered by this permit, the tubes must be pulled completely by hand and the voids backfilled with an approved sealing material.
    - Any other method of destruction will require a well destruction permit.
- This permit expires on 07-16-2022 at 11:59 p.m.
- Failure to adhere to the permitting requirements is a violation of the California Well Standards and the City of La Habra's Well Ordinance, and constitutes a misdemeanor.

Your permit applications may take an additional 5 business days to arrive at our section after the payment has been processed by the HCA Accounting Dept. (please keep track of the check endorsements for your records). Once your applications are on our desks, we will sign them using today's date and issue the permit numbers at that time. If you have comments or questions regarding the permits, you may reply to this e-mail or call my extension at 714-433-6287.

Thank you,

Juan Anzora, REHS
Environmental Health Specialist II
Environmental Health
(714) 433-6287
Website | Facebook | Twitter

From: Sargent, Josh <Joshua.Sargent@stantec.com>
Sent: Wednesday, July 14, 2021 6:01 PM
To: Nguyen, Jane <JaNguyen@ochca.com>
Cc: Anzora, Juan <JAnzora@ochca.com>; Doris Nguyen <dnguyen@theolsonco.com>
Subject: La Habra Drilling Permits

Good Evening Jane,

Please find attached the soil vapor and groundwater permits we discussed earlier this week. The Department of Toxic Substances Control is proving regulatory oversight of the site, and has issued approval of our workplan. That DTSC approval letter, and excerpts of the approved workplan, are included in the attached permits. Hard copies of these permit packages, and associated permit fees, will be sent to the OCHCA office.

Currently, the groundwater wells are scheduled to be installed this Friday, July 16, and the soil vapor wells will be installed Tuesday July 20 through Thursday July 22.

Please let us know if you have any questions regarding the permits as we have been working with various parties to secure this drilling schedule and hope we are not delayed.

Thank you.

Joshua Sargent PG
Associate Geologist

Direct: 909 255-8221
Mobile: 909 289-7111
Joshua.Sargent@stantec.com

Stantec
735 East Carnegie Drive Suite 280
San Bernardino CA 92408-3588

APPLICATION FOR WELL CONSTRUCTION PERMIT

ORANGE COUNTY HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH DIVISION
1241 E. DYER ROAD, SUITE 120
SANTA ANA, CA 92705-5611
(714) 433-6000
FAX: (714) 433-6481

WELL PERMIT NUMBER

CITY: La Habra

DATE: July 12, 2021

WELL LOCATION (ADDRESS IF AVAILABLE): 251 West Imperial Highway

NAME OF WELL OWNER: Votaw Properties, LLC

ADDRESS: 251 West Imperial Highway

CITY: La Habra ZIP: 90631 TELEPHONE:

NAME OF CONSULTING FIRM: Stanec Consulting Services Inc.

BUSINESS ADDRESS: 735 East Carnege Drive, Suite 280

CITY: San Bernardino ZIP: 92408 TELEPHONE: 909-289-7111

NAME OF DRILLING CO.: MR Drilling Co

C-57 LICENSE NO.: 740854

CITY: Buena Park ZIP: 90620 TELEPHONE: 714-994-0402

TYPE OF WELL (CHECK)

- PRIVATE DOMESTIC ☐
- PUBLIC DOMESTIC ☐
- IRRIGATION ☐
- CATHODIC ☐
- PROBE SURVEY ☐
- MONITORING x
- SOIL BORING ☐
- OTHER _____ ☐
- TOTAL NUMBER 2

A. WELLS – SUBMIT A WELL CONSTRUCTION DIAGRAM (INCLUDE DIMENSIONS)

B. SOIL BORINGS AND PROBES –
TOTAL DEPTH 31
SEALING MATERIAL Portland cement grout, 5% bentonite by weight

C. PROPOSED START DATE July 16, 2021

DIAGRAM OF WELL SITE (Use additional sheets and/or attachments)

See attached proposed boring map and proposed construction boring log.

☐ SITE PLAN ATTACHED

I hereby agree to comply in every respect with all requirements of the Health Care Agency and with all ordinances and laws of the County of Orange and of the State of California pertaining to well construction, reconstruction and destruction, including the requirements to maintain the integrity of all significant confining zones.

APPLICANT'S SIGNATURE: Joshua Sargent DATE: July 12, 2021

PRINT NAME: Joshua Sargent

PHONE NUMBER: 909-289-7111 FAX NUMBER:

FOR ACCOUNTING USE ONLY:

HSO NO. _____ CHECK NO. _____

DATE _____ AMOUNT _____

INTL. _____

APPROVAL BY OTHER AGENCIES:

JURISDICTION: Department of Toxic Substances Control

REMARKS: See attached approval letter and work plan excerpt.

AUTHORIZED SIGNATURE _____ DATE _____

DISPOSITION OF PERMIT (DO NOT FILL IN):

☐ **APPROVED** SUBJECT TO THE FOLLOWING CONDITIONS:

A. NOTIFY THIS AGENCY AT LEAST **48 HOURS**

☐ PRIOR TO START.

☐ PRIOR TO SEALING THE ANNULAR SPACE OR FILLING OF THE CONDUCTOR CASING.

B. ☐ SUBMIT TO THE AGENCY WITHIN 30 DAYS AFTER COMPLETION OF WORK, A WELL COMPLETION REPORT AND/OR DRILLING LOGS. PLEASE REFERENCE PERMIT NO.

C. ☐ SECURE ALL MONITORING WELLS TO PREVENT TAMPERING.

D. ☐ OTHER _____

☐ **DENIED** _____

PERMIT ISSUED BY _____ DATE _____

PRINT NAME _____ PHONE NUMBER _____

WHEN SIGNED BY ORANGE COUNTY HEALTH CARE AGENCY REPRESENTATIVE, THIS APPLICATION IS A PERMIT.

LEGEND:

PROPERTY BOUNDARY

PROPOSED GROUNDWATER WELL

N

0 50 100

APPROXIMATE SCALE (FEET)

Stantec

735 EAST CARNEGIE DRIVE, SUITE 280
SAN BERNARDINO, CALIFORNIA
PH (909) 335-6116 FAX (909) 335-6120

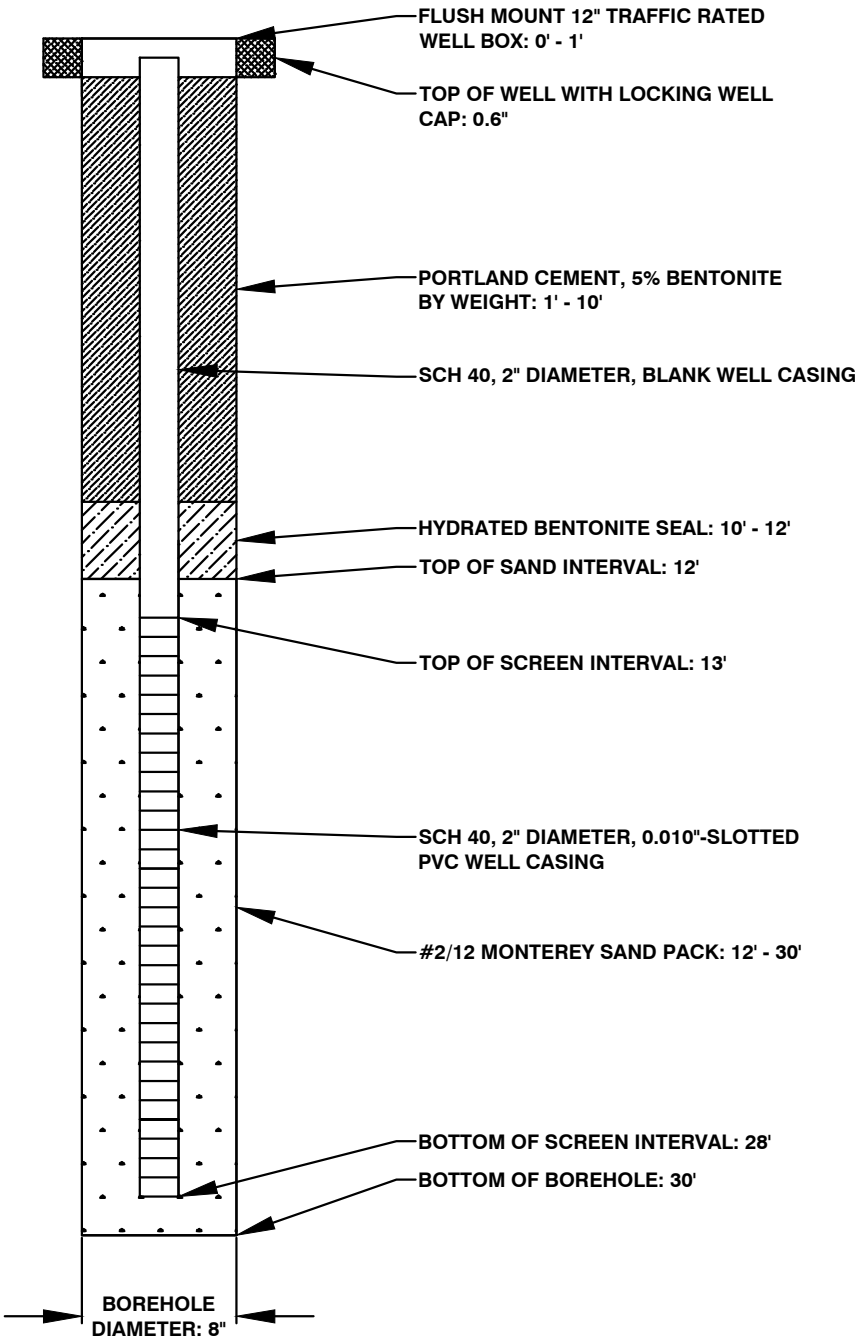
FOR:
OLSON URBAN HOUSING
251 TO 351 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA

PROPOSED BORING LOCATION MAP

FIGURE: **6**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185804671	JS	AJ	KE	06/21/2021

FILEPATH:V:\1858\active\185804671\05_report_deliv\drawings_design\cad_fig\olson_la_habra_figures.dwg modified by jsargent on Jul 12, 2021 at 11:40



Stantec
735 EAST CARNEGIE DRIVE, SUITE 280
SAN BERNARDINO, CALIFORNIA
PH (909) 335-6116 FAX (909) 335-6120

FOR:
OLSON URBAN HOUSING LLC
251 - 351 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA

PROPOSED GROUNDWATER WELL CONSTRUCTION DETAIL

FIGURE: **7**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185804671	JS	AJ	KE	06/28/2021

Department of Toxic Substances Control

Meredith Williams, Ph.D., Director
5796 Corporate Avenue
Cypress, California 90630

Jared Blumenfeld
Secretary for
Environmental Protection

Gavin Newsom
Governor

July 14, 2021 **SENT VIA ELECTRONIC MAIL**

Ms. Doris Nguyen
Vice President of Development
The Olson Company
3010 Old Ranch Parkway, #100
Seal Beach, California 90740
dnguyen@theolsonco.com

CONDITIONAL APPROVAL OF SITE ASSESSMENT PLAN, LA HABRA (EUCLID & IMPERIAL), 251 – 351 WEST IMPERIAL HIGHWAY, LA HABRA (SITE CODE: 401963)

Dear Ms. Nguyen:

The Department of Toxic Substances Control (DTSC) reviewed the draft Site Assessment Plan (Workplan) (Stantec, June 2021) for the La Habra (Euclid & Imperial) property located at 251 – 351 West Imperial Highway, La Habra (Site). The Workplan was prepared pursuant to the California Land Reuse and Revitalization Agreement (Docket No. HSA-FY20/21-125) executed on April 12, 2021 between DTSC and Olson Urban Housing, LLC. The Workplan presents the scope of work to further evaluate soil vapor impacts and groundwater conditions at the Site.

The Site consists of approximately 4.91 acres of an active commercial property. Business occupying the property include a box manufacturing facility, an automobile sales and repair shop, a children's gymnasium, a two-story multi-tenant office building, an automobile sales facility, and an automotive storage warehouse. The Site is surrounded by a mix of commercial and residential properties. The Site was used for agricultural purposes from at least 1928 to sometime between 1947 and 1953. The Site was developed with its current structures between 1953 and 1972. Eight underground storage tanks (gasoline and diesel) were previously located onsite and removed in 1989 under the Orange County Health Care Agency. Previous Site investigations, prior to DTSC oversight, detected elevated concentrations of total petroleum hydrocarbons (TPH) and chlorinated volatile organic compounds in soil vapor. Low detections of TPH have previously been identified in groundwater at the Site.

DTSC hereby approves the Workplan provided the enclosed comments are incorporated into the Workplan in addition to addressing them during fieldwork and in the upcoming report. Please submit revisions to the Workplan addressing the enclosed DTSC comments within 7 days from the date of this letter. Please notify DTSC a minimum of 48 hours in advance of field work or schedule changes.

If you have any questions regarding this project, please contact Ms. Rana Georges, Project Manager, at (714) 484-5450 or by e-mail at rana.georges@dtsc.ca.gov, or me at (714) 816-1978 or by e-mail at yolanda.garza@dtsc.ca.gov.

Sincerely,

Yolanda M. Garza
Unit Chief
Brownfields Restoration and School Evaluation Branch
Site Mitigation and Restoration Program

Enclosure

cc: (via e-mail)

Mr. Joshua Sargent, P.G.
Associate Geologist
Stantec
joshua.sargent@stantec.com

Ms. Wendy Arano, P.G.
Engineering Geologist
DTSC/Geologic Services Branch
wendy.arano@dtsc.ca.gov

Dr. Farah Esfandiari
Staff Toxicologist
DTSC/Human and Ecological Risk Office
farah.esfandiari@dtsc.ca.gov

Brownfields Restoration and School Evaluation Branch Reading File - Cypress

DTSC COMMENTS
DRAFT TECHNICAL MEMORANDUM FOR SUPPLEMENTAL SITE INVESTIGATION
LA HABRA (EUCLID & IMPERIAL)
251 – 351 WEST IMPERIAL HIGHWAY
LA HABRA

The following Department of Toxic Substances Control (DTSC) staff reviewed and provided comments herein to the Workplan. Please contact the Project Manager if you have any questions on the comments.

Farah Esfandiari, Ph.D.
Staff Toxicologist
Human and Ecological Risk Office (HERO)

COMMENTS:

1. Comparison of Groundwater (GW) Data to Maximum Contaminant Levels or MCLs: MCLs are drinking water standards and they do not consider vapor intrusion (VI) exposure; therefore they are not protective compared to a risk of 1E-06. HERO recommends presentation and use of both human health risk-based screening values (RBSLs) and MCLs. Cleaning up to MCLs might not be protective of the VI exposure pathway particularly for this Site since depth to GW is shallow (15 ft bgs). VOCs in GW should be compared to both MCLs and RBSLs. GW RBSLs are calculated by applying the chemical specific Henry's law constant and DTSC default GW attenuation factor (0.001) to the target indoor air concentrations. Please add groundwater to indoor air screening levels on the GW analytical results table in addition to MCLs.

2. Ambient (Outdoor) Air Sampling: The TM is proposing to collect/analyze one ambient air blank for VOCs for comparative ambient air concentrations at the time of sampling. In order to have useful outdoor air data, air samplers should be located upwind of subsurface plumes. Local wind direction should be considered to support the location of the air sampler for ambient air sampling.

Wendy Arano, P.G.
Engineering Geologist
Geological Support Branch (GSB)

See attached GSB Memorandum.

Department of Toxic Substances Control

Jared Blumenfeld
Secretary for
Environmental Protection

Meredith Williams, Ph.D.
Director
5796 Corporate Avenue
Cypress, California 90630

Gavin Newsom
Governor

MEMORANDUM

TO: Rana Georges
Project Manager
Site Mitigation and Restoration Program

FROM: Wendy Arano, P.G.
Engineering Geologist
Cypress Geological Services Branch

DATE: July 7, 2021

SUBJECT: DRAFT TECHNICAL MEMORANDUM FOR SUPPLEMENTAL SITE INVESTIGATIONS, 251-351 WEST IMPERIAL HIGHWAY, LA HABRA
PCA: 12018 Site Code: 401963-11 WR: 20077013 MPC: SI-CW

As requested, the Geological Services Branch (GSB) reviewed the "Draft Technical Memorandum for Supplemental Site Investigations" (TM) dated June 28, 2021, from Stantec Consulting Services, Inc. to Rana Georges, PM, DTSC. Stantec prepared the TM on behalf of Olson Urban Housing, LLC (Olson). Olson entered into a California Land Reuse and Revitalization Act (CLRRA) Agreement (Agreement) with the Department of Toxic Substances Control (DTSC) for the Site as outlined in the Docket No. HSA-FY20/21-125 executed on April 12, 2021.

The sampling proposed in the TM appears appropriate. The GSB provides the following specific comments on the Technical Memorandum and the Quality Assurance Project Plan (QAPP).

Specific Comments

1. All work plans or reports, either draft or final, should be signed and stamped by the registered professionals in charge of the work.
2. Page 1. Second Bullet. Stantec states that MW1 is located near the former 1,000-gallon underground storage tank (UST). Stantec should check the monitoring well labels on Figures 3, 4A, 4B, and 6. Some figures show two different wells labelled as MW1; the upgradient and the one near the former

1,000-gallon UST. Corrections should be made to text and figures as appropriate.

3. Page 2. The fourth bullet under the scope of work should include screening soils with a PID, as also described in the sixth bullet.

4. Page 4. Groundwater Well Sampling. The groundwater purging stabilization criteria proposed by Stantec do not match those recommended by DTSC in Table 1 (page 10) of the Cal EPA-DTSC, 2008 revision of "Representative Sampling of Groundwater for Hazardous Substances, Guidance Manual for Groundwater Investigations". The GSB recommends that Stantec use the stabilization criteria as listed in the DTSC guidance, as follows:

Temperature	± 3% of reading (minimum of ± 0.2° C)
pH	+/- 0.1
specific electrical conductance (SEC)	+/- 3%
oxidation-reduction potential (ORP)	+/- 10 millivolts
dissolved oxygen (DO)	+/- 10%, down to the level of accuracy at 0.2 milligrams per liter

(Sources: *Representative Sampling of Groundwater for Hazardous Substances,* Guidance Manual for Groundwater Investigations; July 1995, Revised February 2008; California Environmental Protection Agency/Department of Toxic Substances Control; and Rounds, S.A., Wilde, F.D., and Ritz, G.F., 2013, Dissolved oxygen (ver. 3.0): U.S. Geological Survey Techniques of Water-Resources Investigations, book 9, chap. A6, sec. 6.2, *http://water.usgs.gov/owq/FieldManual/Chapter*6/6.2_v3.0.pdf.)

5. Page 5. First Paragraph. The Technical Memorandum indicates that the Groundwater VOC analytical results will be screened against concentrations presented in DTSC HERO Note 3 "in conjunction with those presented in the USEPA Regional Screening levels (RSLs)", and the groundwater TPH analytical results will be screened against the San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (ESLs). The GSB recommends listing all the screening levels on the groundwater results table. Additionally, the QAPP (Appendix A), Table 1, shows Maximum Contaminant Levels (MCLS) for screening levels for groundwater. The GSB recommends that the TM and/or QAPP should be revised for consistency. Furthermore, the GSB recommends including the California MCLs as screening levels for groundwater, if an MCL is available for the analyte of interest.

6. Page 5. Soil Vapor Evaluation. First bullet. Figure 6 indicates that SV13 will also be re-installed, and it should be included in the list.
7. Page 6. QA/QC Samples. Stantec has proposed collection of an ambient air blank to compare ambient air concentrations at the time of soil vapor sampling. This sample is not described in the QAPP which should be revised. The sample collection method for this type of blank sample should be described and this type of blank should be collected for each day that soil vapor samples are collected.
8. Page 8. Reporting and Schedule. Stantec should ensure that the summary report also includes copies of the boring logs, well construction details, and soil vapor probe construction details.
9. Appendix A. Quality Assurance Project Plan. Comments specific to the QAPP are as follows:
    a. Section 2.1.1 – A correction should be made to the spelling of Brian Endlich's name.
    b. Section 3 – Step 4 of the DQOs imply that the study boundaries will include offsite investigation if needed. Olson and Stantec should confirm this with DTSC.
    c. Section 4.1 – This decontamination procedure indicates rinsing in potable water, then double rinsing with distilled water; whereas the TM indicates a double rinse, first in tap water followed by a final rinse using distilled water. Revisions should be made to either the QAPP or TM for consistency.
    d. Section 4.3 – The GSB recommends that samples be delivered to the laboratory (or their courier) on the same day as sampling, not on the day following sampling. If samples are to be delivered the day following sampling, Stantec should indicate where samples will be stored securely and appropriately refrigerated.
    e. Section 4.4 – The GSB recommends that a table showing the planned Field QA/QC samples, the media in which they will be collected, and the frequency of collection, should be included for reference in this section. This table may be similar to Table 2 Laboratory QC Sample Analyses Frequency.
    f. Section 4.4.1 – The collection of duplicate samples for groundwater and soil vapor should also be described in this section.
    g. Section 5.0 – groundwater samples should be included in this first sentence and the subsections.
    h. Section 6.3 should reference 6.4 instead of 7.5.
    i. QAPP Table 1 – A footnote should be added to the table to define "Laboratory Practical Quantitative Limit" (generally called laboratory Practical Quantitation Limit (PQL)) on the soil portion of the table, Laboratory Reporting Limit (RL) on the portion regarding soil vapor, and

"Laboratory Method Detection Limit Quantitative Limit", which appears on the groundwater portion of the table and seems to be a combination of two different laboratory limits.

Stantec provided a schedule on page 8 of the TM for the proposed field work. Stantec should notify the DTSC of any schedule revisions or refinements as soon as possible. If you have any questions, please contact me via email at wendy.arano@dtsc.ca.gov.

Peer Reviewed: Jose Marcos, P.G.

cc: Alfredo Zanoria, C.E.G., C.Hg.

To maintain data quality for the project, Stantec has developed a Quality Assurance Project Plan (QAPP), attached as **Appendix A**. The QAPP describes the quality assurance/quality control (QA/QC) procedures that will be performed during the course of the work activities for the Site. Routine application of procedures for obtaining prescribed standards of performance in the monitoring and measuring process, as well as tracking, reviewing, and auditing, will be implemented as necessary to ensure that the project work is performed in accordance with standards, regulations, and guidelines.

All proposed boring locations are depicted on **Figure 6**.

GROUNDWATER INVESTIGATION

Additional groundwater evaluation will be conducted following the installation of two (2) groundwater monitoring wells (MW-4 and MW-5) at the approximate locations depicted on **Figure 6.** The wells will be installed using a hollow stem auger (HSA) drilling rig. The following sections present the drilling and well installation procedures.

OCHCA Permit

Prior to drilling, well permits for the installation of two (2) groundwater monitoring wells will be obtained from the Orange County Health Care Agency (OCHCA). The application will be submitted with a copy of this SAP and the subsequent DTSC approval letter.

Drilling Procedures

Prior to drilling, the concrete or asphalt surface, if any, will be cored to provide access to the underlying soils. A hand auger will then be used to excavate soils to a depth of five feet bgs to clear for utilities lines.

Once the five-foot depth was reached, borings MW-4 and MW-5 will be advanced further using a HSA drilling rig. During advancement, sampling of subsurface soils will be performed in five-foot intervals starting at a depth of approximately five-feet bgs using an 18-inch long by 2-inch outer diameter and 1⅜-inch inner diameter split spoon sampler.

At each sampling interval, and sampler will be driven into undisturbed soil using a 140-pound hammer dropping 30 inches until approximately 18 inches of penetration was achieved. The number of blow counts per 6-inch increments will be noted on the boring logs. These blow counts will be translated into relative densities for the sampled soils, as noted on the boring logs.

Given that fine-grained soils present at the Site, accurate groundwater depth may be difficult to accurate interpret during drilling. Therefore, groundwater measurements will be collected from nearby on-site groundwater monitoring wells to confirm groundwater depth prior to installation of proposed groundwater monitoring wells, anticipated to be approximately 15 feet bgs. The proposed groundwater wells are anticipated to be completed to a terminal depth of approximately 27 feet bgs, consistent with other on-site groundwater monitoring wells.

Groundwater Monitoring Well Installation

Upon drilling to approximately 10-feet below first encountered groundwater (estimated at approximately 25 feet bgs, based on previous assessments) at each of the well borings, the boreholes will be converted into groundwater monitoring wells constructed with 2-inch diameter schedule 40 poly vinyl chloride (PVC) casing and a 0.010-inch factory slotted screen interval, with approximately 5-feet of screen above the water table and

10-feet below. The borehole annulus surrounding the screening interval will be backfilled with a Monterey #2/12-size sand filter pack installed from the bottom of the boring to approximately one foot above the top of the well screen. A two-foot transition seal consisting of hydrated bentonite chips will be placed on the top of the filter pack. The remainder of the borehole annulus was filled with a bentonite cement grout mixture to within 2 feet of the ground surface. Surface completion will consist of a traffic-rated flush-mount well vault. The proposed well construction is consistent with other on-site groundwater monitoring wells. A groundwater well construction detail is presented on **Figure 7**.

Well Survey

Following installation, the wells will be surveyed by a State of California Professional Land Surveyor (PLS) to determine the X, Y, and Z coordinates in accordance with State of California Geotracker® requirements. A notch will be cut into the top of the well casing to provide a reference elevation point to gauge groundwater elevations.

Groundwater Monitoring Well Development

After at least 72 hours have passed following the installation of the wells, the wells will be developed using surging and/or bailing methods. The wells will be developed by repeatedly surging, bailing and/or pumping the wells until a minimum of three saturated well-bore volumes were purged from the well have been removed and field monitoring parameters (i.e. pH, specific conductance, temperature, and dissolved oxygen) stabilize, whichever is greater.

Groundwater Well Sampling

To evaluate temporal trends in groundwater concentrations, flow direction and gradient, an additional sampling event will be conducted from the Site groundwater monitoring well network after a minimum of 72 hours following development of the proposed groundwater wells. The wells will be purged and sampled following the low-flow (minimum draw down) methods described by Puls and Barcelona (1996) using a Grundfos Rediflow®, or equivalent, submersible pump.

Dedicated polyethylene tubing, or equivalent, will be used at each monitoring well to purge and sample the wells. The wells will be purged at a low flow rate (*i.e.*, <0.5 L/min) through a flow cell equipped with a Horiba U-53, or equivalent, multi-meter. The flow rate will be monitored and recorded throughout purging to ensure the flow rate remains <0.5L/min. Groundwater samples will be collected once the following purge parameters stabilized as follows for three consecutive readings:

- Temperature range is no more than +1ºC
- pH varies by no more than 0.2 pH units
- EC readings are within 10% of the average
- Dissolved Oxygen (DO) and Oxidation and Reduction Potential (ORP) are within 10% of the average
- Turbidity is reduced to below 10 nephelometric turbidity units (NTU), or as low as practicable.

Groundwater samples will be transferred directly from the dedicated well tubing into laboratory-provided sample containers with preservative, if required. When transferring samples from the tubing into bottleware, care will be taken to minimize contact of the dedicated sample tubing with the sample container. Following collection, each sample will be labeled, annotated on chain of custody record, and stored in an ice-filled cooler for analysis of TPH and VOCs, in accordance with the methods and procedures outlined in the QAPP.

Groundwater VOC analytical results will be screened against the DTSC-Screening Levels (SLs) presented in DTSC's HERO Note 3 in conjunction with those presented in the USEPA Regional Screening Levels (RSLs). Groundwater TPH analytical results will be screened against San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (ESLs).

QA/QC Samples

A duplicate sample will be collected during sampling of one of the groundwater monitoring wells and analyzed for VOCs for the purposes of evaluating the sampling the quality of the sampling effort and analytical data. In addition, a laboratory provided trip-blank will be placed in the ice-cooler and accompany the samples to the lab for analysis of VOCs, to evaluate the cleanliness of the cooler and to evaluate whether any cross-contamination may have occurred during transit of the samples.

SOIL VAPOR EVALUATION

The following scope of work has been developed to further evaluate Site soil vapor conditions:

- Installation of dual-nested soil vapor borings, set at 5- and 10-feet below ground surface (or as close to the 10 foot depth as possible within a sand horizon to facilitate vapor sample collection), at the following locations:
  - Reinstallation of historical soil vapor locations where chemicals were detected exceeding the 0.03 attenuation factor screening level. These locations include: SV1, SV2, SV3, SV4, SV6, SV7, SV8, SV9, SV10, SV11, SV12, SV14, and SV15. Note that chemicals were identified at location SV5 at concentrations exceeding 0.03 attenuation factor screening levels. In consultation with DTSC, it was determined that this location <u>would not</u> be reinstalled.
  - Installation of eight (8) supplemental soil vapor locations along the north, east, and southern Property boundaries (SV31 through SV38);
  - Installation of four (4) soil vapor locations around the perimeter of the gymnasium building (SV39 through SV42).
- Sampling of newly/reinstalled soil vapor points.
- Resampling of the following soil vapor locations where chemicals were identified exceeding 0.03 attenuation factor screening levels to evaluate seasonal fluctuations: SV16, SV17, SV18, SV22, SV23, SV25, and SV29.
- Attempt to resample previous soil vapor locations where "no-flow" or "high-vacuum" conditions were observed: SV26, SV27, and SV28.

Approximately 70 primary soil vapor soil samples will attempt to be collected during this proposed scope of work.

OCHCA Permit

Stantec will prepare the necessary Orange County Health Care Agency (OCHCA) permit to perform the proposed soil vapor assessment scope of work outlined above.

APPLICATION FOR WELL CONSTRUCTION PERMIT

ORANGE COUNTY HEALTH CARE AGENCY
ENVIRONMENTAL HEALTH DIVISION
1241 E. DYER ROAD, SUITE 120
SANTA ANA, CA 92705-5611
(714) 433-6000
FAX: (714) 433-6481

WELL PERMIT NUMBER

CITY: La Habra

DATE: July 12, 2021

WELL LOCATION (ADDRESS IF AVAILABLE): 251 West Imperial Highway

NAME OF WELL OWNER: Votaw Properties, LLC

ADDRESS: 251 West Imperial Highway

CITY: La Habra ZIP: 90631 TELEPHONE:

NAME OF CONSULTING FIRM: Stanec Consulting Services Inc.

BUSINESS ADDRESS: 735 East Carnege Drive, Suite 280

CITY: San Bernardino ZIP: 92408 TELEPHONE: 909-289-7111

NAME OF DRILLING CO.: MR Drilling Co C-57 LICENSE NO.: 740854

CITY: Buena Park ZIP: 90620 TELEPHONE: 714-994-0402

TYPE OF WELL (CHECK)

- PRIVATE DOMESTIC ☐
- PUBLIC DOMESTIC ☐
- IRRIGATION ☐
- CATHODIC ☐
- PROBE SURVEY X
- MONITORING ☐
- SOIL BORING ☐
- OTHER ☐
- TOTAL NUMBER 25

A. WELLS – SUBMIT A WELL CONSTRUCTION DIAGRAM (INCLUDE DIMENSIONS)

B. SOIL BORINGS AND PROBES –
TOTAL DEPTH 10'
SEALING MATERIAL Cement-bentonite grout

C. PROPOSED START DATE July 19, 2021

DIAGRAM OF WELL SITE (Use additional sheets and/or attachments)

See attached proposed boring map and proposed construction boring log.

Soil vapor probes are intended to be semi-permanent and will be destroyed in approximately one year under agency oversight.

x SITE PLAN ATTACHED

I hereby agree to comply in every respect with all requirements of the Health Care Agency and with all ordinances and laws of the County of Orange and of the State of California pertaining to well construction, reconstruction and destruction, including the requirements to maintain the integrity of all significant confining zones.

APPLICANT'S SIGNATURE — DATE: July 12, 2021

PRINT NAME: Joshua Sargent

PHONE NUMBER: 909-289-7111 FAX NUMBER:

FOR ACCOUNTING USE ONLY:

HSO NO. _____ CHECK NO. _____

DATE _____ AMOUNT _____

INTL. _____

APPROVAL BY OTHER AGENCIES:

JURISDICTION: Department of Toxic Substances Control

REMARKS: See attached approval letter and approved work plan excerpt

AUTHORIZED SIGNATURE _____ DATE _____

DISPOSITION OF PERMIT (DO NOT FILL IN):

☐ **APPROVED** SUBJECT TO THE FOLLOWING CONDITIONS:

A. NOTIFY THIS AGENCY AT LEAST **48 HOURS**

☐ PRIOR TO START.

☐ PRIOR TO SEALING THE ANNULAR SPACE OR FILLING OF THE CONDUCTOR CASING.

B. ☐ SUBMIT TO THE AGENCY WITHIN 30 DAYS AFTER COMPLETION OF WORK, A WELL COMPLETION REPORT AND/OR DRILLING LOGS. PLEASE REFERENCE PERMIT NO.

C. ☐ SECURE ALL MONITORING WELLS TO PREVENT TAMPERING.

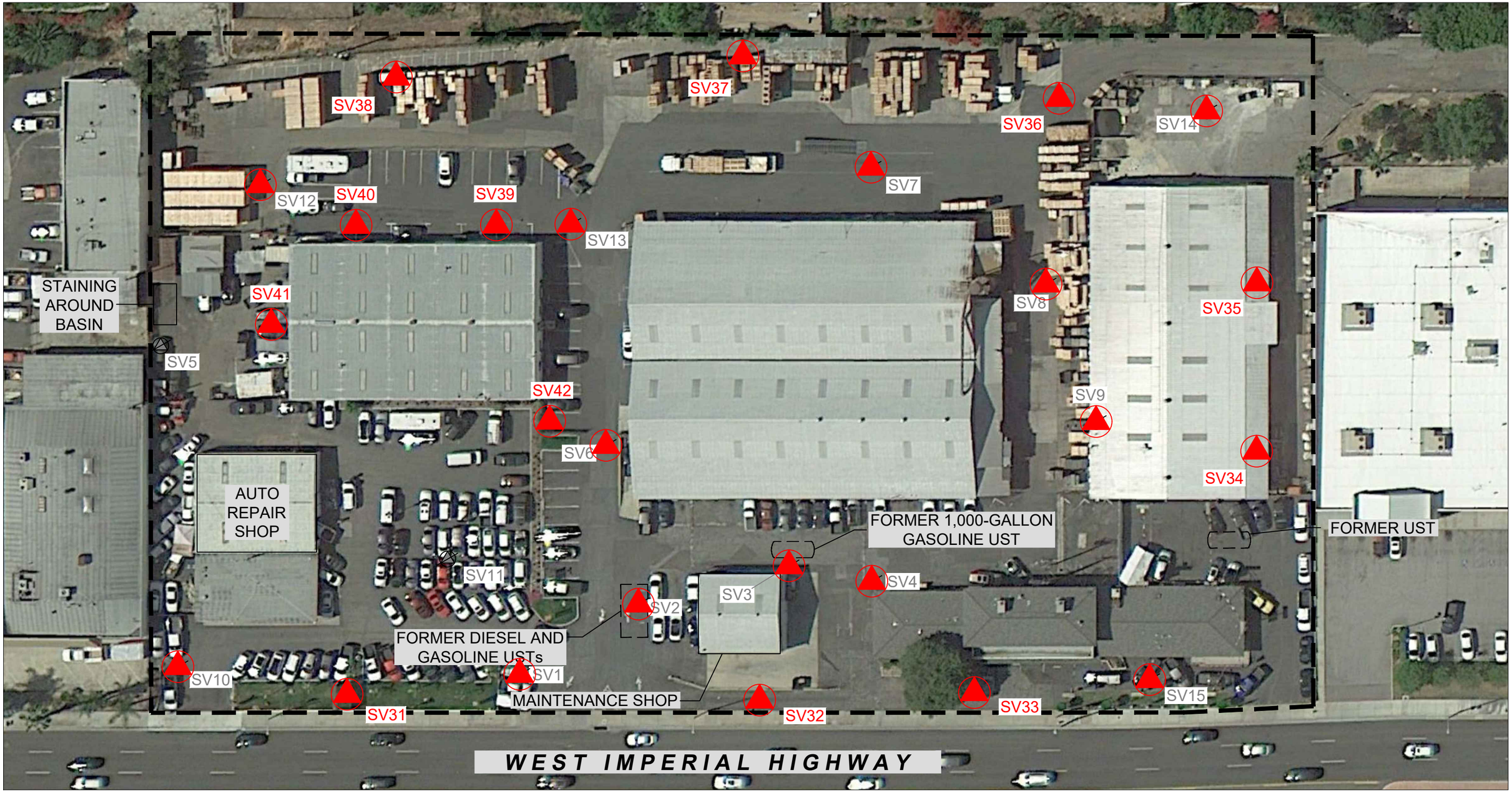
D. ☐ OTHER _____

☐ **DENIED** _____

PERMIT ISSUED BY _____ DATE _____

PRINT NAME _____ PHONE NUMBER _____

WHEN SIGNED BY ORANGE COUNTY HEALTH CARE AGENCY REPRESENTATIVE, THIS APPLICATION IS A PERMIT.



LEGEND:

PROPERTY BOUNDARY

PROPOSED SOIL VAPOR BORING

N

0 50 100

APPROXIMATE SCALE (FEET)

Stantec

735 EAST CARNEGIE DRIVE, SUITE 280
SAN BERNARDINO, CALIFORNIA
PH (909) 335-6116 FAX (909) 335-6120

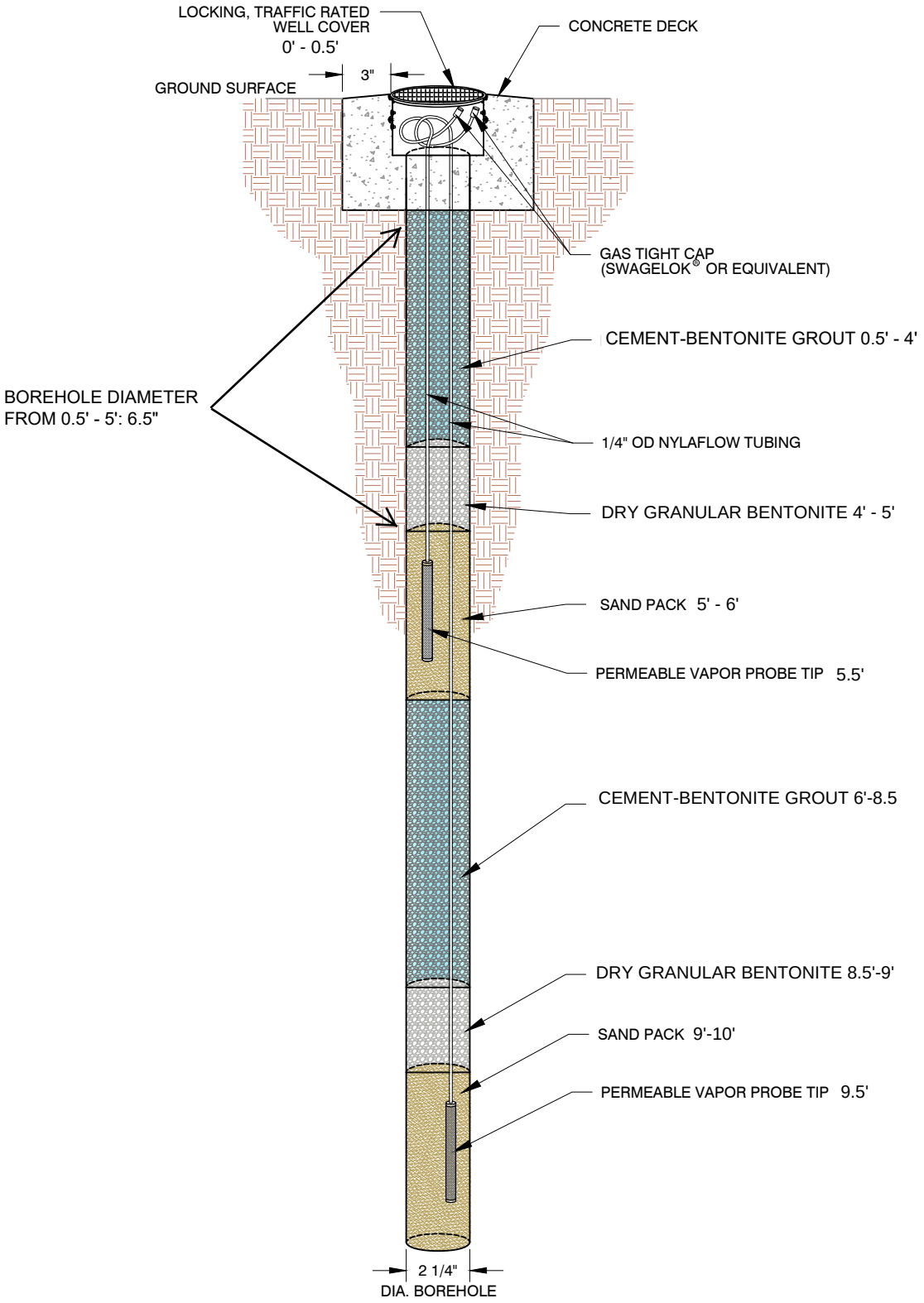
FOR:
OLSON URBAN HOUSING
251 TO 351 WEST IMPERIAL HIGHWAY
LA HABRA, CALIFORNIA

PROPOSED BORING LOCATION MAP

FIGURE: **6**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
185804671	JS	AJ	KE	06/21/2021

FILEPATH:V:\1858\active\185804671\05_report_deliv\drawings_design\cad_fig\olson_la_habra_figures.dwg modified by jsargent on Jul 12, 2021 at 11:37



Stantec	FOR: OLSON URBAN HOUSING 251 WEST IMPERIAL HIGHWAY, LA HABRA, CALIFORNIA		**TYPICAL DUAL NESTED SOIL VAPOR PROBE CONSTRUCTION DETAIL**		FIGURE: **3**
	JOB NUMBER: 185804671	DRAWN BY: STA	CHECKED BY: BV	APPROVED BY: KM	DATE: 10/08/2020

Department of Toxic Substances Control

Meredith Williams, Ph.D., Director
5796 Corporate Avenue
Cypress, California 90630

Jared Blumenfeld
Secretary for
Environmental Protection

Gavin Newsom
Governor

July 14, 2021 **SENT VIA ELECTRONIC MAIL**

Ms. Doris Nguyen
Vice President of Development
The Olson Company
3010 Old Ranch Parkway, #100
Seal Beach, California 90740
dnguyen@theolsonco.com

CONDITIONAL APPROVAL OF SITE ASSESSMENT PLAN, LA HABRA (EUCLID & IMPERIAL), 251 – 351 WEST IMPERIAL HIGHWAY, LA HABRA (SITE CODE: 401963)

Dear Ms. Nguyen:

The Department of Toxic Substances Control (DTSC) reviewed the draft Site Assessment Plan (Workplan) (Stantec, June 2021) for the La Habra (Euclid & Imperial) property located at 251 – 351 West Imperial Highway, La Habra (Site). The Workplan was prepared pursuant to the California Land Reuse and Revitalization Agreement (Docket No. HSA-FY20/21-125) executed on April 12, 2021 between DTSC and Olson Urban Housing, LLC. The Workplan presents the scope of work to further evaluate soil vapor impacts and groundwater conditions at the Site.

The Site consists of approximately 4.91 acres of an active commercial property. Business occupying the property include a box manufacturing facility, an automobile sales and repair shop, a children's gymnasium, a two-story multi-tenant office building, an automobile sales facility, and an automotive storage warehouse. The Site is surrounded by a mix of commercial and residential properties. The Site was used for agricultural purposes from at least 1928 to sometime between 1947 and 1953. The Site was developed with its current structures between 1953 and 1972. Eight underground storage tanks (gasoline and diesel) were previously located onsite and removed in 1989 under the Orange County Health Care Agency. Previous Site investigations, prior to DTSC oversight, detected elevated concentrations of total petroleum hydrocarbons (TPH) and chlorinated volatile organic compounds in soil vapor. Low detections of TPH have previously been identified in groundwater at the Site.

DTSC hereby approves the Workplan provided the enclosed comments are incorporated into the Workplan in addition to addressing them during fieldwork and in the upcoming report. Please submit revisions to the Workplan addressing the enclosed DTSC comments within 7 days from the date of this letter. Please notify DTSC a minimum of 48 hours in advance of field work or schedule changes.

If you have any questions regarding this project, please contact Ms. Rana Georges, Project Manager, at (714) 484-5450 or by e-mail at rana.georges@dtsc.ca.gov, or me at (714) 816-1978 or by e-mail at yolanda.garza@dtsc.ca.gov.

Sincerely,

Yolanda M. Garza
Unit Chief
Brownfields Restoration and School Evaluation Branch
Site Mitigation and Restoration Program

Enclosure

cc: (via e-mail)

Mr. Joshua Sargent, P.G.
Associate Geologist
Stantec
joshua.sargent@stantec.com

Ms. Wendy Arano, P.G.
Engineering Geologist
DTSC/Geologic Services Branch
wendy.arano@dtsc.ca.gov

Dr. Farah Esfandiari
Staff Toxicologist
DTSC/Human and Ecological Risk Office
farah.esfandiari@dtsc.ca.gov

Brownfields Restoration and School Evaluation Branch Reading File - Cypress

DTSC COMMENTS
DRAFT TECHNICAL MEMORANDUM FOR SUPPLEMENTAL SITE INVESTIGATION
LA HABRA (EUCLID & IMPERIAL)
251 – 351 WEST IMPERIAL HIGHWAY
LA HABRA

The following Department of Toxic Substances Control (DTSC) staff reviewed and provided comments herein to the Workplan. Please contact the Project Manager if you have any questions on the comments.

Farah Esfandiari, Ph.D.
Staff Toxicologist
Human and Ecological Risk Office (HERO)

COMMENTS:

1. Comparison of Groundwater (GW) Data to Maximum Contaminant Levels or MCLs: MCLs are drinking water standards and they do not consider vapor intrusion (VI) exposure; therefore they are not protective compared to a risk of 1E-06. HERO recommends presentation and use of both human health risk-based screening values (RBSLs) and MCLs. Cleaning up to MCLs might not be protective of the VI exposure pathway particularly for this Site since depth to GW is shallow (15 ft bgs). VOCs in GW should be compared to both MCLs and RBSLs. GW RBSLs are calculated by applying the chemical specific Henry's law constant and DTSC default GW attenuation factor (0.001) to the target indoor air concentrations. Please add groundwater to indoor air screening levels on the GW analytical results table in addition to MCLs.

2. Ambient (Outdoor) Air Sampling: The TM is proposing to collect/analyze one ambient air blank for VOCs for comparative ambient air concentrations at the time of sampling. In order to have useful outdoor air data, air samplers should be located upwind of subsurface plumes. Local wind direction should be considered to support the location of the air sampler for ambient air sampling.

Wendy Arano, P.G.
Engineering Geologist
Geological Support Branch (GSB)

See attached GSB Memorandum.

Department of Toxic Substances Control

Jared Blumenfeld
Secretary for
Environmental Protection

Meredith Williams, Ph.D.
Director
5796 Corporate Avenue
Cypress, California 90630

Gavin Newsom
Governor

MEMORANDUM

TO: Rana Georges
Project Manager
Site Mitigation and Restoration Program

FROM: Wendy Arano, P.G.
Engineering Geologist
Cypress Geological Services Branch

DATE: July 7, 2021

SUBJECT: DRAFT TECHNICAL MEMORANDUM FOR SUPPLEMENTAL SITE INVESTIGATIONS, 251-351 WEST IMPERIAL HIGHWAY, LA HABRA
PCA: 12018 Site Code: 401963-11 WR: 20077013 MPC: SI-CW

As requested, the Geological Services Branch (GSB) reviewed the "Draft Technical Memorandum for Supplemental Site Investigations" (TM) dated June 28, 2021, from Stantec Consulting Services, Inc. to Rana Georges, PM, DTSC. Stantec prepared the TM on behalf of Olson Urban Housing, LLC (Olson). Olson entered into a California Land Reuse and Revitalization Act (CLRRA) Agreement (Agreement) with the Department of Toxic Substances Control (DTSC) for the Site as outlined in the Docket No. HSA-FY20/21-125 executed on April 12, 2021.

The sampling proposed in the TM appears appropriate. The GSB provides the following specific comments on the Technical Memorandum and the Quality Assurance Project Plan (QAPP).

Specific Comments

1. All work plans or reports, either draft or final, should be signed and stamped by the registered professionals in charge of the work.
2. Page 1. Second Bullet. Stantec states that MW1 is located near the former 1,000-gallon underground storage tank (UST). Stantec should check the monitoring well labels on Figures 3, 4A, 4B, and 6. Some figures show two different wells labelled as MW1; the upgradient and the one near the former

1,000-gallon UST. Corrections should be made to text and figures as appropriate.

3. Page 2. The fourth bullet under the scope of work should include screening soils with a PID, as also described in the sixth bullet.

4. Page 4. Groundwater Well Sampling. The groundwater purging stabilization criteria proposed by Stantec do not match those recommended by DTSC in Table 1 (page 10) of the Cal EPA-DTSC, 2008 revision of "Representative Sampling of Groundwater for Hazardous Substances, Guidance Manual for Groundwater Investigations". The GSB recommends that Stantec use the stabilization criteria as listed in the DTSC guidance, as follows:

Temperature	± 3% of reading (minimum of ± 0.2° C)
pH	+/- 0.1
specific electrical conductance (SEC)	+/- 3%
oxidation-reduction potential (ORP)	+/- 10 millivolts
dissolved oxygen (DO)	+/- 10%, down to the level of accuracy at 0.2 milligrams per liter

(Sources: *Representative Sampling of Groundwater for Hazardous Substances,* Guidance Manual for Groundwater Investigations; July 1995, Revised February 2008; California Environmental Protection Agency/Department of Toxic Substances Control; and Rounds, S.A., Wilde, F.D., and Ritz, G.F., 2013, Dissolved oxygen (ver. 3.0): U.S. Geological Survey Techniques of Water-Resources Investigations, book 9, chap. A6, sec. 6.2, *http://water.usgs.gov/owq/FieldManual/Chapter*6/6.2_v3.0.pdf.)

5. Page 5. First Paragraph. The Technical Memorandum indicates that the Groundwater VOC analytical results will be screened against concentrations presented in DTSC HERO Note 3 "in conjunction with those presented in the USEPA Regional Screening levels (RSLs)", and the groundwater TPH analytical results will be screened against the San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (ESLs). The GSB recommends listing all the screening levels on the groundwater results table. Additionally, the QAPP (Appendix A), Table 1, shows Maximum Contaminant Levels (MCLS) for screening levels for groundwater. The GSB recommends that the TM and/or QAPP should be revised for consistency. Furthermore, the GSB recommends including the California MCLs as screening levels for groundwater, if an MCL is available for the analyte of interest.

6. Page 5. Soil Vapor Evaluation. First bullet. Figure 6 indicates that SV13 will also be re-installed, and it should be included in the list.
7. Page 6. QA/QC Samples. Stantec has proposed collection of an ambient air blank to compare ambient air concentrations at the time of soil vapor sampling. This sample is not described in the QAPP which should be revised. The sample collection method for this type of blank sample should be described and this type of blank should be collected for each day that soil vapor samples are collected.
8. Page 8. Reporting and Schedule. Stantec should ensure that the summary report also includes copies of the boring logs, well construction details, and soil vapor probe construction details.
9. Appendix A. Quality Assurance Project Plan. Comments specific to the QAPP are as follows:
    a. Section 2.1.1 – A correction should be made to the spelling of Brian Endlich's name.
    b. Section 3 – Step 4 of the DQOs imply that the study boundaries will include offsite investigation if needed. Olson and Stantec should confirm this with DTSC.
    c. Section 4.1 – This decontamination procedure indicates rinsing in potable water, then double rinsing with distilled water; whereas the TM indicates a double rinse, first in tap water followed by a final rinse using distilled water. Revisions should be made to either the QAPP or TM for consistency.
    d. Section 4.3 – The GSB recommends that samples be delivered to the laboratory (or their courier) on the same day as sampling, not on the day following sampling. If samples are to be delivered the day following sampling, Stantec should indicate where samples will be stored securely and appropriately refrigerated.
    e. Section 4.4 – The GSB recommends that a table showing the planned Field QA/QC samples, the media in which they will be collected, and the frequency of collection, should be included for reference in this section. This table may be similar to Table 2 Laboratory QC Sample Analyses Frequency.
    f. Section 4.4.1 – The collection of duplicate samples for groundwater and soil vapor should also be described in this section.
    g. Section 5.0 – groundwater samples should be included in this first sentence and the subsections.
    h. Section 6.3 should reference 6.4 instead of 7.5.
    i. QAPP Table 1 – A footnote should be added to the table to define "Laboratory Practical Quantitative Limit" (generally called laboratory Practical Quantitation Limit (PQL)) on the soil portion of the table, Laboratory Reporting Limit (RL) on the portion regarding soil vapor, and

"Laboratory Method Detection Limit Quantitative Limit", which appears on the groundwater portion of the table and seems to be a combination of two different laboratory limits.

Stantec provided a schedule on page 8 of the TM for the proposed field work. Stantec should notify the DTSC of any schedule revisions or refinements as soon as possible. If you have any questions, please contact me via email at wendy.arano@dtsc.ca.gov.

Peer Reviewed: Jose Marcos, P.G.

cc: Alfredo Zanoria, C.E.G., C.Hg.

Groundwater VOC analytical results will be screened against the DTSC-Screening Levels (SLs) presented in DTSC's HERO Note 3 in conjunction with those presented in the USEPA Regional Screening Levels (RSLs). Groundwater TPH analytical results will be screened against San Francisco Bay Regional Water Quality Control Board Environmental Screening Levels (ESLs).

QA/QC Samples

A duplicate sample will be collected during sampling of one of the groundwater monitoring wells and analyzed for VOCs for the purposes of evaluating the sampling the quality of the sampling effort and analytical data. In addition, a laboratory provided trip-blank will be placed in the ice-cooler and accompany the samples to the lab for analysis of VOCs, to evaluate the cleanliness of the cooler and to evaluate whether any cross-contamination may have occurred during transit of the samples.

SOIL VAPOR EVALUATION

The following scope of work has been developed to further evaluate Site soil vapor conditions:

- Installation of dual-nested soil vapor borings, set at 5- and 10-feet below ground surface (or as close to the 10 foot depth as possible within a sand horizon to facilitate vapor sample collection), at the following locations:
  - Reinstallation of historical soil vapor locations where chemicals were detected exceeding the 0.03 attenuation factor screening level. These locations include: SV1, SV2, SV3, SV4, SV6, SV7, SV8, SV9, SV10, SV11, SV12, SV14, and SV15. Note that chemicals were identified at location SV5 at concentrations exceeding 0.03 attenuation factor screening levels. In consultation with DTSC, it was determined that this location <u>would not</u> be reinstalled.
  - Installation of eight (8) supplemental soil vapor locations along the north, east, and southern Property boundaries (SV31 through SV38);
  - Installation of four (4) soil vapor locations around the perimeter of the gymnasium building (SV39 through SV42).
- Sampling of newly/reinstalled soil vapor points.
- Resampling of the following soil vapor locations where chemicals were identified exceeding 0.03 attenuation factor screening levels to evaluate seasonal fluctuations: SV16, SV17, SV18, SV22, SV23, SV25, and SV29.
- Attempt to resample previous soil vapor locations where "no-flow" or "high-vacuum" conditions were observed: SV26, SV27, and SV28.

Approximately 70 primary soil vapor soil samples will attempt to be collected during this proposed scope of work.

OCHCA Permit

Stantec will prepare the necessary Orange County Health Care Agency (OCHCA) permit to perform the proposed soil vapor assessment scope of work outlined above.

Reference: **Site Assessment Plan**

Soil Vapor Drilling Procedures

At proposed soil vapor locations proposed boring locations, the borehole will be advanced using a direct push technology (DPT) drilling rig (*e.g.*, Geoprobe). Sampling of soils will be conducted using a 48-inch long by 2.25-inch diameter stainless steel sampler lined with a clear acetate sample liner into undisturbed soils using a hydraulic ram on the drilling rig until 48 inches of penetration is achieved. Upon advancement of the sampler to the full 48-inches, the steel sampling rods will be extracted from the boring and the sampler removed. The drilling and sampling procedures will be repeated until the proposed terminal depth of the boring.

The monitoring points will be constructed by first placing approximately 4 to 6 inches of Monterey No. #3 wash sand, or equivalent, in the bottom of the borehole. A permeable vapor tip (e.g., airstone) connected to 1/4 -inch diameter Nylaflow tubing will then be lowered to the bottom of the borehole and then backfilled with filter sand, until approximately 12-inches of filter pack is placed. A transition seal consisting of approximately 12-inches of dry bentonite will then be placed above the filter pack, followed by an annular seal consisting of neat cement grout tremmied into the borehole until the next sampling interval is reached. The sequence will then be repeated at the next proposed vapor probe interval, until sealing the boreholes to the surface. Typical dual-nested soil vapor monitoring probe construction is provided on **Figure 8**. All soil vapor sampling points will be completed with traffic-rated well boxes, and the soil vapor points will be left on-site for potential future seasonal variability evaluation.

Soil Vapor Probe Sampling

Soil vapor samples will be collected in accordance with the methods and procedures outlined by the DTSC and CRWQCB *Advisory – Active Soil Gas Investigations*, dated July 2015 a minimum of 48-hours after installation to allow for equilibration. Soil vapor samples will not be collected during or within five days of a significant rain event (defined as greater than ½-inch or greater of rainfall during a 24-hour period). In addition, soil gas sampling will be delayed until the passage of any weather frontal systems to minimize the effects of barometric pressure fluctuations.

Prior to sampling, a shut-in test will be conducted on the sample train to ensure all connections and fittings are airtight. The shut-in test will be performed on the sampling train by applying a vacuum of 100 inches of water to the sampling train and monitoring magnehelic gauges for a pressure drop for one minute. If loss of vacuum is observed, fittings will be adjusted as needed until no vacuum loss is observed during subsequent shut-in tests. The sampling train is left at a vacuum for no less than three minutes.

After the sampling equipment passes the shut-in test, the probe will be purged to remove internal air from the sample train (calculated from the internal volume of the tubing and probe tip; the void space of the sand pack around the probe tip; and the void space of the dry bentonite in the annular space). Three internal volumes will be purged from each sampling location at a rate less than 200 ml/min, where soil conditions allow. Immediately following purging the internal volumes, the soil vapor will be collected by connecting a glass syringe to the sampling port with Teflon® or Nylaflow® tubing. A tracer compound (e.g., n-pentane) will be placed above the surface seal and along the sampling train to evaluate the integrity of the seal. The samples will be collected by the mobile laboratory technician into pre-cleaned glass syringes for analysis for VOCs following EPA method 8260B at an on-Site mobile laboratory.

Low flow / high vacuum conditions have been encountered during previous soil vapor sampling activities at the Site. Specifically, high vacuum conditions are defined as the inability to maintain an appreciable flow rate (100 mL/min or greater) without applying excessive vacuum, which is considered to be greater than 100 inches of

APPENDIX D

Boring Logs and Field Data Sheets

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-01A** PAGE 1 OF 1
DRILLING: STARTED **7/21/21** COMPLETED: **7/21/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			6" Asphalt							6" Well Box in Concrete
		CL	**SANDY CLAY** ; CL; 5Y dark reddish brown; fine grained; dense; slight odor		--			9.8		
						5.5				x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite
		SC	**CLAYEY SAND** ; SC; 10YR 5/6 yellowish brown; fine to medium-grained; dense; slight odor							Dry Granular Bentonite
					--			6.1		
5									5	1" Airstone in #3 Sand Filter Pack
										1/4" Nylaflow Tubing in Hydrated Granular Bentonite
						4.5				
			CLAYEY SAND ; 10YR 4/2 dark grayish brown; fine to medium-grained; low moisture; no odor		--			0.2		Dry Granular Bentonite
										1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.						10	

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-02A** PAGE 1 OF 1
DRILLING: STARTED **7/20/21** COMPLETED: **7/20/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			6" Asphalt							6" Well Box in Concrete
		SM	**SILTY SAND** ; SM; 10YR 4/3 brown; low moisture; no odor		--	5.5		0.0		x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite
		CL	**SANDY CLAY** ; CL; 10YR 4/3 brown; fine to medium-grained; low plasticity; no odor; low moisture		--			0.1		Dry Granular Bentonite
5									5	1" Airstone in #3 Sand Filter Pack
			SANDY CLAY ; 5YR 3/2 dark reddish brown; medium-grained; no odor; no staining		--	4.5		0.0		1/4" Nylaflow Tubing in Hydrated Granular Bentonite
										Dry Granular Bentonite
			SANDY CLAY ; 10YR 4/2 dark grayish brown; fine to medium-grained; no odor; dense		--			0.0		1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.						10	

GEO FORM 304 EVEN_MORE_SV_BORINGS.GPJ STANTEC001.GDT 8/12/21

PROJECT: **Olson - La Habra**
LOCATION: **251-351 W. Imperial Hwy, La Habra, CA**
PROJECT NUMBER: **185804671**

WELL / PROBEHOLE / BOREHOLE NO: **SV-03A** PAGE 1 OF 1

Stantec

DRILLING: STARTED **7/20/21** COMPLETED: **7/20/21**
INSTALLATION: STARTED COMPLETED:
DRILLING COMPANY: **M&R Drilling**
DRILLING EQUIPMENT: **GP6610**
DRILLING METHOD: **Manual/DPT**
SAMPLING EQUIPMENT:

NORTHING (ft):
LATITUDE:
GROUND ELEV (ft):
INITIAL DTW (ft): **NE**
STATIC DTW (ft): **NE**
WELL CASING DIAMETER (in): **---**
LOGGED BY: **JH**

EASTING (ft):
LONGITUDE:
TOC ELEV (ft):
BOREHOLE DEPTH (ft): **10.0**
WELL DEPTH (ft): **---**
BOREHOLE DIAMETER (in): **6.5/2**
CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			4" Asphalt							6" Well Box in Concrete
		SM	**SILTY SAND** ; SM; 10YR 4/3 brown; fine to medium-grained; no odor; low moisture		--			0.1		
						5.5				x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite
		CL	**SANDY CLAY** ; CL; 10YR 4/3 brown; fine to medium-grained; low plasticity; no odor; low moisture		--			0.6		Dry Granular Bentonite
5									5	1" Airstone in #3 Sand Filter Pack
						4.5				1/4" Nylaflow Tubing in Hydrated Granular Bentonite
										Dry Granular Bentonite
		CL	**SANDY CLAY** ; CL; 10YR 4/2 dark grayish brown; fine to medium-grained; slight HC odor; medium moisture		--			19.0		1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.						10	

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-04A** PAGE 1 OF 1
DRILLING: STARTED **7/20/21** COMPLETED: **7/20/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			4" Asphalt							6" Well Box in Concrete
		CL	**SANDY CLAY** ; CL; 10YR 4/3 brown; fine-grained; low plasticity; medium moisture		--			0.0		
			SANDY CLAY ; 10YR 5/6 yellowish brown; fine to medium-grained; no odor		--	5.5		0.1		x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite Dry Granular Bentonite
5									5	1" Airstone in #3 Sand Filter Pack
					--			0.1		1/4" Nylaflow Tubing in Hydrated Granular Bentonite
		SM	**SILTY SAND WITH CLAY** ; SM; 10YR 6/4 light yellowish brown; fine-grained; slight HC odor; medium moisture		--	4.5		11.1		Dry Granular Bentonite 1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.						10	

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-06A** PAGE 1 OF 1
DRILLING: STARTED **7/20/21** COMPLETED: **7/20/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			5" Asphalt							6" Well Box in Concrete
		CL	**SANDY CLAY** ; CL; 5YR 3/2 dark reddish brown; medium to coarse-grained; no odor; no staining		--	5.5		0.0		x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite Dry Granular Bentonite
5			**SANDY CLAY** ; 10YR 5/6 yellowish brown; fine to medium-grained; no odor; no staining; tight		--			0.2	5	1" Airstone in #3 Sand Filter Pack
			SANDY CLAY ; 10YR 4/2 dark grayish brown; fine to medium-grained; low plasticity		--	4.5		0.1		1/4" Nylaflow Tubing in Hydrated Granular Bentonite Dry Granular Bentonite 1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.						10	

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-07A** PAGE 1 OF 1
DRILLING: STARTED **7/20/21** COMPLETED: **7/20/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			3" Asphalt							6" Well Box in Concrete
		SC	**CLAYEY SAND** ; SC; 5YR 3/2 dark reddish brown; fine to medium-grained; no odor; dense		--	5.5		0.0		x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite
		CL	**SANDY CLAY** ; CL; 10YR 5/6 yellowish brown; fine to medium-grained; no odor; dense; low moisture		--			0.3		Dry Granular Bentonite
5									5	1" Airstone in #3 Sand Filter Pack
						4.5				1/4" Nylaflow Tubing in Hydrated Granular Bentonite
										Dry Granular Bentonite
		CL	**SANDY CLAY** ; CL; 10YR 4/2 dark grayish brown; fine to medium-grained; no odor; medium moisture		--			0.1		1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.						10	

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-08A** PAGE 1 OF 1
DRILLING: STARTED **7/21/21** COMPLETED: **7/21/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			5" Asphalt							6" Well Box in Concrete
		CL	**SANDY CLAY** ; CL; 5YR 3/2 dark reddish brown; medium to coarse-grained; no odor; dense		--	5.5		0.6		x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite Dry Granular Bentonite
5			**SANDY CLAY** ; 10YR 5/6 yellowish brown; mottled silty clay; 5YR 3/2 dark reddish brown; fine to medium grained sand; no odor		--	4.5		0.0	5	1" Airstone in #3 Sand Filter Pack 1/4" Nylaflow Tubing in Hydrated Granular Bentonite Dry Granular Bentonite
10			**SANDY CLAY** ; 10YR 4/2 dark grayish brown; fine-grained; no odor; dense Hole terminated at 10 feet.		--			0.1	10	1" Airstone in #3 Sand Filter Pack

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-09A** PAGE 1 OF 1
DRILLING: STARTED **7/22/21** COMPLETED: **7/22/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			6" Asphalt							6" Well Box in Concrete
		CL	**SANDY CLAY** ; CL; 5YR 3/2 dark reddish brown; fine to medium-grained; no odor		--			1.2		
						5.5				x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite
			SANDY CLAY ; 10YR 5/6 yellowish brown; fine to medium-grained; no odor		--			0.9		Dry Granular Bentonite
5									5	1" Airstone in #3 Sand Filter Pack
						4.5				1/4" Nylaflow Tubing in Hydrated Granular Bentonite
			SANDY CLAY ; 10YR 4/2 dark grayish brown; fine to medium-grained; no odor; dense		--			0.0		Dry Granular Bentonite
										1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.						10	

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-10A** PAGE 1 OF 1
DRILLING: STARTED **7/21/21** COMPLETED: **7/21/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			3" Asphalt							6" Well Box in Concrete
		CL	**SANDY CLAY** ; CL; 5YR 3/2 dark reddish brown; fine to medium-grained; no odor; dense		--			0.2		
						5.5				x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite
										Dry Granular Bentonite
5			**SANDY CLAY** ; 10YR 5/6 yellowish brown; fine to medium-grained; moist; no odor		--			0.1	5	1" Airstone in #3 Sand Filter Pack
						4.5				1/4" Nylaflow Tubing in Hydrated Granular Bentonite
										Dry Granular Bentonite
		SC	**CLAYEY SAND** ; SC; 10YR 6/4 light yellowish brown; low plasticity; moist; no odor							1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.		--			0.0	10	

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PROJECT: **Olson - La Habra**
LOCATION: **251-351 W. Imperial Hwy, La Habra, CA**
PROJECT NUMBER: **185804671**

WELL / PROBEHOLE / BOREHOLE NO: **SV-11A** PAGE 1 OF 1

Stantec

DRILLING: STARTED **7/21/21** COMPLETED: **7/21/21**
INSTALLATION: STARTED COMPLETED:
DRILLING COMPANY: **M&R Drilling**
DRILLING EQUIPMENT: **GP6610**
DRILLING METHOD: **Manual/DPT**
SAMPLING EQUIPMENT:

NORTHING (ft):
LATITUDE:
GROUND ELEV (ft):
INITIAL DTW (ft): **NE**
STATIC DTW (ft): **NE**
WELL CASING DIAMETER (in): **---**
LOGGED BY: **JH**

EASTING (ft):
LONGITUDE:
TOC ELEV (ft):
BOREHOLE DEPTH (ft): **10.0**
WELL DEPTH (ft): **---**
BOREHOLE DIAMETER (in): **6.5/2**
CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			6" Asphalt							6" Well Box in Concrete
		SC	**CLAYEY SAND** ; SC; 5YR 3/2 dark reddish brown; fine-grained; dense; slightly moist; no odor; no staining		--	5.5		0.9		x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite
		CL	**SANDY CLAY** ; CL; 10YR 5/6 yellowish brown; fine to medium-grained; very dense; slightly moist; no odor		--			0.6		Dry Granular Bentonite
5									5	1" Airstone in #3 Sand Filter Pack
			SANDY CLAY ; 10YR 4/2 dark grayish brown; fine to medium-grained; moist; no odor; no staining		--	4.5		0.1		1/4" Nylaflow Tubing in Hydrated Granular Bentonite
										Dry Granular Bentonite
										1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.						10	

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-12A** PAGE 1 OF 1
DRILLING: STARTED **7/20/21** COMPLETED: **7/20/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			5" Asphalt							6" Well Box in Concrete
		CL	**SANDY CLAY** ; CL; 5YR 3/2 dark reddish brown; medium to coarse-grained; dense; no odor		--			0.0		
						5.5				x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite
										Dry Granular Bentonite
			SANDY CLAY ; 10YR 5/6 yellowish brown; fine to medium-grained; moist; no odor; no staining		--			0.2		
5		SC	**CLAYEY SAND** ; SC; 10YR 5/6 yellowish brown; medium-grained; slightly moist; no odor						5	1" Airstone in #3 Sand Filter Pack
					--			0.0		
										1/4" Nylaflow Tubing in Hydrated Granular Bentonite
						4.5				
										Dry Granular Bentonite
		SM	**SILTY SAND WITH CLAY** ; SM; 10YR 6/4 light yellowish brown; low plasticity; no odor; no staining							1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.		--			0.0	10	

PROJECT: **Olson - La Habra**
LOCATION: **251-351 W. Imperial Hwy, La Habra, CA**
PROJECT NUMBER: **185804671**

WELL / PROBEHOLE / BOREHOLE NO: **SV-13A** PAGE 1 OF 1

Stantec

DRILLING: STARTED **7/22/21** COMPLETED: **7/22/21**
INSTALLATION: STARTED COMPLETED:
DRILLING COMPANY: **M&R Drilling**
DRILLING EQUIPMENT: **GP6610**
DRILLING METHOD: **Manual/DPT**
SAMPLING EQUIPMENT:

NORTHING (ft): EASTING (ft):
LATITUDE: LONGITUDE:
GROUND ELEV (ft): TOC ELEV (ft):
INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0**
STATIC DTW (ft): **NE** WELL DEPTH (ft): **---**
WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2**
LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			4" Asphalt							6" Well Box in Concrete
		CL	**SANDY CLAY** ; CL; 10YR 4/3 brown; fine to medium-grained; slightly moist		--			0.2		
						5.5				x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite
		SC	**CLAYEY SAND** ; SC; 10YR 5/6 yellowish brown; fine to medium-grained; no odor		--			0.0		Dry Granular Bentonite
5									5	1" Airstone in #3 Sand Filter Pack
						4.5				1/4" Nylaflow Tubing in Hydrated Granular Bentonite
		SM	**SILTY SAND** ; SM; 10YR 6/4 light yellowish brown; fine to medium-grained; low plasticity; moist; no odor		--			0.2		Dry Granular Bentonite
										1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.						10	

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-14A** PAGE 1 OF 1
DRILLING: STARTED **7/22/21** COMPLETED: **7/22/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			6" Asphalt							6" Well Box in Concrete
		SM	**SILTY SAND** ; SM; 10YR 4/3 brown; medium to coarse-grained; dense; no odor		--	5.5		0.3		x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite
		CL	**SANDY CLAY** ; CL; 10YR 4/3 brown; fine to medium-grained; slightly moist; no odor							Dry Granular Bentonite
5					--			0.0	5	1" Airstone in #3 Sand Filter Pack
			SANDY CLAY ; 10YR 4/2 dark grayish brown; fine to medium-grained; no odor; no staining		--	4.5		0.2		1/4" Nylaflow Tubing in Hydrated Granular Bentonite Dry Granular Bentonite 1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.						10	

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-15A** PAGE 1 OF 1
DRILLING: STARTED **7/21/21** COMPLETED: **7/21/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			5" Asphalt							6" Well Box in Concrete
		CL	**SANDY CLAY** ; CL; 5YR 3/2 dark reddish brown; medium to coarse-grained; dense; no odor		--	5.5		0.2		x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite
			SANDY CLAY ; 10YR 5/6 yellowish brown; fine to medium-grained; slightly moist; no odor; no staining		--			0.1		Dry Granular Bentonite
5									5	1" Airstone in #3 Sand Filter Pack
						4.5				1/4" Nylaflow Tubing in Hydrated Granular Bentonite
		SC	**CLAYEY SAND** ; SC; 10YR 4/2 dark grayish brown; fine-grained; no odor		--			0.0		Dry Granular Bentonite
										1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.						10	

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-31** PAGE 1 OF 1
DRILLING: STARTED **7/21/21** COMPLETED: **7/21/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			6" Topsoil							6" Well Box in Concrete
		SC	**CLAYEY SAND** ; SC; 5YR 3/2 dark reddish brown; fine to medium-grained; moist		--			0.0		
		CL	**SANDY CLAY** ; CL; 10YR 5/6 yellowish brown; fine to medium-grained; dense; slightly moist; no odor		--	5.5		0.0		x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite Dry Granular Bentonite
5									5	1" Airstone in #3 Sand Filter Pack
		CL	**SANDY CLAY** ; CL; 10YR 4/2 dark grayish brown; fine to medium-grained; dense; moist; no odor		--	4.5		0.0		1/4" Nylaflow Tubing in Hydrated Granular Bentonite Dry Granular Bentonite
10			Hole terminated at 10 feet.						10	1" Airstone in #3 Sand Filter Pack

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-32** PAGE 1 OF 1
DRILLING: STARTED **7/21/21** COMPLETED: **7/21/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			6" Asphalt							6" Well Box in Concrete
		CL	**SANDY CLAY** ; CL; 5YR 3/2 dark reddish brown; fine to medium-grained; no odor		--	5.5		0.6		x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite
			SANDY CLAY ; 10YR 5/6 yellowish brown; fine to medium-grained; slightly moist; no odor							Dry Granular Bentonite
5									5	1" Airstone in #3 Sand Filter Pack
			SANDY CLAY ; 10YR 4/2 dark grayish brown; fine to medium-grained; moist			4.5				1/4" Nylaflow Tubing in Hydrated Granular Bentonite
										Dry Granular Bentonite
										1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.						10	

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-33** PAGE 1 OF 1
DRILLING: STARTED **7/21/21** COMPLETED: **7/21/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			4" Asphalt							6" Well Box in Concrete
		CL	**SANDY CLAY** ; CL; 5YR 3/2 dark reddish brown; fine to medium-grained; slightly moist; no odor		--	5.5		0.0		x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite Dry Granular Bentonite
5			**SANDY CLAY** ; 10YR 5/6 yellowish brown; fine-grained; moist; no odor; no staining		--			0.0	5	1" Airstone in #3 Sand Filter Pack
			SANDY CLAY ; 10YR 4/2 dark grayish brown; fine to medium-grained; wet; no odor		--	4.5		0.0		1/4" Nylaflow Tubing in Hydrated Granular Bentonite Dry Granular Bentonite 1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.						10	

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-34** PAGE 1 OF 1
DRILLING: STARTED **7/22/21** COMPLETED: **7/22/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			5" Asphalt							6" Well Box in Concrete
		CL	**SANDY CLAY** ; CL; 5YR 3/2 dark reddish brown; medium to coarse-grained; no odor		--			1.3		
						5.5				x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite
										Dry Granular Bentonite
5			**SANDY CLAY** ; 10YR 5/6 yellowish brown; fine to medium-grained; moist; no odor		--			1.1	5	1" Airstone in #3 Sand Filter Pack
										1/4" Nylaflow Tubing in Hydrated Granular Bentonite
						4.5				
										Dry Granular Bentonite
10			**SANDY CLAY** ; 10YR 4/3 dark grayish brown; fine to medium-grained; moist; no odor		--			0.4	10	1" Airstone in #3 Sand Filter Pack
			Hole terminated at 10 feet.							

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-35** PAGE 1 OF 1
DRILLING: STARTED **7/22/21** COMPLETED: **7/22/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			4" Asphalt							6" Well Box in Concrete
		CL	**SANDY CLAY** ; CL; 5YR 3/2 dark reddish brown; fine to medium-grained; slightly moist; no odor		--			3.1		
						5.5				x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite
			SANDY CLAY ; 10YR 5/6 yellowish brown; fine to medium-grained; moist; no odor		--			1.2		Dry Granular Bentonite
5									5	1" Airstone in #3 Sand Filter Pack
										1/4" Nylaflow Tubing in Hydrated Granular Bentonite
					--	4.5		2.3		
										Dry Granular Bentonite
			SANDY CLAY ; 10YR 4/2 dark grayish brown; fine-grained; moist							1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.						10	

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-36** PAGE 1 OF 1
DRILLING: STARTED **7/20/21** COMPLETED: **7/20/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			4" Asphalt							6" Well Box in Concrete
		CL	**SANDY CLAY** ; CL; 5YR 3/2 dark reddish brown; medium to coarse-grained; dense; no odor		--			0.1		
						5.5				x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite
					--			0.5		
			SANDY CLAY ; 10YR 5/6 yellowish brown; fine to medium-grained; no odor; no staining							Dry Granular Bentonite
5									5	1" Airstone in #3 Sand Filter Pack
										1/4" Nylaflow Tubing in Hydrated Granular Bentonite
						4.5				
			SANDY CLAY ; 10YR 4/2 dark grayish brown; fine to medium-grained; dense; no odor							Dry Granular Bentonite
					--			0.2		1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.						10	

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-37** PAGE 1 OF 1
DRILLING: STARTED **7/20/21** COMPLETED: **7/20/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			3" Asphalt							6" Well Box in Concrete
		SC	**CLAYEY SAND** ; SC; 5YR 3/2 dark reddish brown; fine to medium-grained; medium dense; no odor; no staining			5.5				x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite
		CL	**SANDY CLAY** ; CL; 10YR 5/6 yellowish brown; fine to medium-grained; dense; no odor; no staining							Dry Granular Bentonite
5									5	1" Airstone in #3 Sand Filter Pack
		CL	**SANDY CLAY** ; CL; 10YR 4/2 dark grayish brown; fine to medium-grained; dense; no odor; no staining			4.5				1/4" Nylaflow Tubing in Hydrated Granular Bentonite
										Dry Granular Bentonite
										1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.						10	

GEO FORM 304 EVEN_MORE_SV_BORINGS.GPJ STANTEC001.GDT 8/12/21

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-38** PAGE 1 OF 1
DRILLING: STARTED **7/20/21** COMPLETED: **7/20/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			3" Asphalt							6" Well Box in Concrete
		CL	**SANDY CLAY** ; CL; 5YR 3/2 dark reddish brown; medium to coarse-grained; dense; no odor; no staining							x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite
			SANDY CLAY ; 10YR 5/6 yellowish brown; medium to coarse-grained; slightly moist; no odor; no staining			5.5				Dry Granular Bentonite
5									5	1" Airstone in #3 Sand Filter Pack
			SAME AS ABOVE ; tight							1/4" Nylaflow Tubing in Hydrated Granular Bentonite
			SAME AS ABOVE ; 10YR 4/2 dark grayish brown; fine to medium-grained; no odor; no staining			4.5				Dry Granular Bentonite
										1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.						10	

GEO FORM 304 EVEN_MORE_SV_BORINGS.GPJ STANTEC001.GDT 8/12/21

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-39** PAGE 1 OF 1
DRILLING: STARTED **7/22/21** COMPLETED: **7/22/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			4" Asphalt							6" Well Box in Concrete
		CL	**SANDY CLAY** ; CL; 5YR 3/2 dark reddish brown; medium to coarse-grained; dense; no odor **SANDY CLAY** ; 10YR 4/2 dark grayish brown; fine to medium-grained; no odor; tight		--	5.5		3.2		x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite
			SANDY CLAY ; 10YR 5/6 yellowish brown; medium to coarse-grained; no odor; no staining		--			0.1		Dry Granular Bentonite
5									5	1" Airstone in #3 Sand Filter Pack
					--	4.5		0.0		1/4" Nylaflow Tubing in Hydrated Granular Bentonite Dry Granular Bentonite 1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.						10	

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-40** PAGE 1 OF 1
DRILLING: STARTED **7/22/21** COMPLETED: **7/22/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			5" Asphalt							6" Well Box in Concrete
		CL	**SANDY CLAY** ; CL; 5YR 3/2 dark reddish brown; medium-grained; no odor		--	5.5		1.2		x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite Dry Granular Bentonite
5		CL	**SANDY CLAY** ; CL; 10YR 5/6 yellowish brown; medium to coarse-grained; no odor		--			0.8	5	1" Airstone in #3 Sand Filter Pack
					--	4.5		0.3		1/4" Nylaflow Tubing in Hydrated Granular Bentonite Dry Granular Bentonite
		CL	**SANDY CLAY** ; CL; 10YR 4/2 dark grayish brown; fine-grained; no odor; no staining							1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.						10	

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-41** PAGE 1 OF 1
DRILLING: STARTED **7/21/21** COMPLETED: **7/21/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			5" Asphalt							6" Well Box in Concrete
		SC	**CLAYEY SAND** ; SC; 5YR 3/2 dark reddish brown; fine-grained; no odor; no staining		--	5.5		0.3		x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite Dry Granular Bentonite
5		CL	**SANDY CLAY** ; CL; 10YR 4/2 dark grayish brown; medium to coarse-grained; no odor; no staining		--	4.5		0.2	5	1" Airstone in #3 Sand Filter Pack 1/4" Nylaflow Tubing in Hydrated Granular Bentonite Dry Granular Bentonite 1" Airstone in #3 Sand Filter Pack
10			Hole terminated at 10 feet.						10	

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **SV-42** PAGE 1 OF 1
DRILLING: STARTED **7/22/21** COMPLETED: **7/22/21** INSTALLATION: STARTED COMPLETED: DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **GP6610** DRILLING METHOD: **Manual/DPT** SAMPLING EQUIPMENT:	NORTHING (ft): EASTING (ft): LATITUDE: LONGITUDE: GROUND ELEV (ft): TOC ELEV (ft): INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **10.0** STATIC DTW (ft): **NE** WELL DEPTH (ft): **---** WELL CASING DIAMETER (in): **---** BOREHOLE DIAMETER (in): **6.5/2** LOGGED BY: **JH** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Borehole Backfill
			5" Asphalt							6" Well Box in Concrete
		SC	**CLAYEY SAND** ; SC; 5YR 3/2 dark reddish brown; fine to medium-grained; no odor		--			0.3		
		CL	**SANDY CLAY** ; CL; 10YR 5/6 yellowish brown; fine to medium-grained; slightly moist; no odor		--	5.5		0.1		x2 1/4" Nylaflow Tubing in Hydrated Granular Bentonite Dry Granular Bentonite
5									5	1" Airstone in #3 Sand Filter Pack
			SANDY CLAY ; 10YR 4/3 dark grayish brown; fine to medium-grained; moist; no odor		--	4.5		0.0		1/4" Nylaflow Tubing in Hydrated Granular Bentonite Dry Granular Bentonite
10			Hole terminated at 10 feet.						10	1" Airstone in #3 Sand Filter Pack

EPA On-line Tools for Site Assessment Calculation

Hydraulic Gradient -- Magnitude and Direction

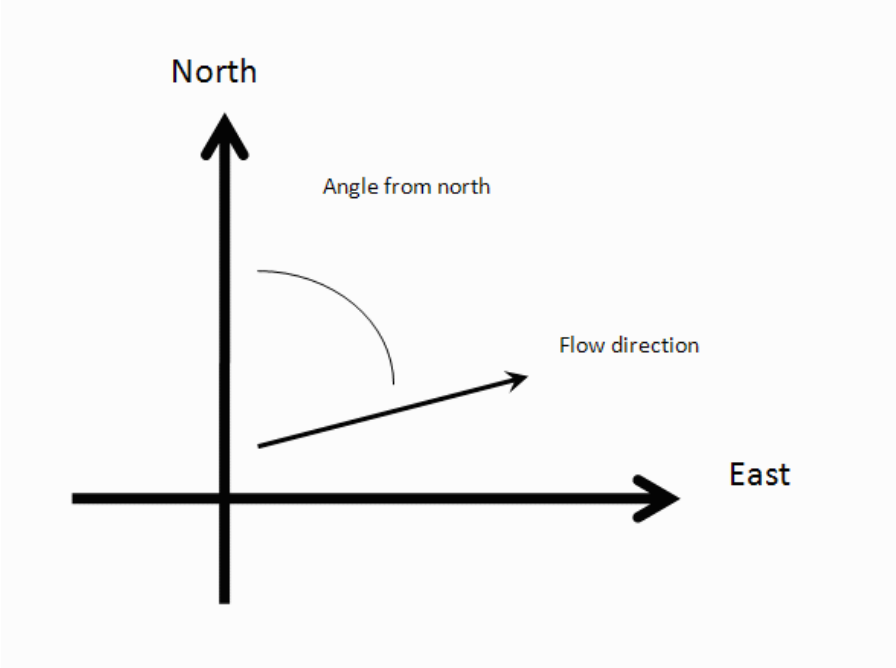
Gradient Calculation from fitting a plane to as many as thirty points

$a\,x_1 + b\,y_1 + c = h_1$
$a\,x_2 + b\,y_2 + c = h_2$
$a\,x_3 + b\,y_3 + c = h_3$
. . .
$a\,x_{30} + b\,y_{30} + c = h_{30}$

where (x_i, y_i) are the coordinates of the well and
h_i is the head

i = 1,2,3, ... , 30
The coefficients a, b, and c are calculated by a least-squares fitting of the the data to a plane

The gradient is calculated from the square root of $(a^2 + b^2)$ and the angle from the arctangent of a/b or b/a depending on the quadrant



Inputs

Example Data Set 1 | Example Data Set 2 | Calculate | Clear
Save Data | Recall Data | Go Back

Site Name: Olson - La Habra
Date: 07/26/2021 Current Date
Calculation basis: Head
Coordinates: ft

I.D.		x-coordinate	y-coordinate	head ft
1)	MW1	0	0	243.69
2)	MW2	-109.8070044	42.45909431	243.67
3)	MW3	13.43003865	193.9798584	244.58
4)	MW4	-70.4059224	-78.19369854	242.26
5)	MW5	-227.1194433	-49.35397513	243.08
6)				
7)				
8)				
9)				
10)				
11)				
12)				
13)				
14)				
15)				
16)				

17)				
18)				
19)				
20)				
21)				
22)				
23)				
24)				
25)				
26)				
27)				
28)				
29)				
30)				

Results

Number of Points Used in Calculation	5
Max. Difference Between Head Values	0.7071
Gradient Magnitude (i)	0.007678
Flow direction as degrees from North (positive y axis)	176.7
Coefficient of Determination (R^2)	0.861

WCMS

Last updated on 2/23/2016

STANTEC

Field water/product measurements

SITE La Habra

Date 7/26/21

PROJECT No.

Checked By

Field Personnel Jason Hafer

WELL ID	Depth of Well	Depth to Product	Depth to Water	Product Thickness	Instrument
MW-4	27.81	NM	11.51		
MW-5	28.90	NM	11.40		
MW-2	27.29	NM	15.03		
MW-3	26.85	NM	15.44		
MW-1	27.46	NM	15.60		

Stantec

Stantec
Well Sampling Data Sheet

Project No. _____
Purged By _____
Sampled By Sasan Hefti

Well ID MW-1
Sample ID MW-1-20210726
Client _____
Location _____

Type: Groundwater X Other _____

Casing Diameter (inches) 2 X 3 _____ 4 _____ 4.5 _____ 6 _____ Other _____
Gallons per Linerar Foot 0.163 0.367 0.653 0.826 1.469

Casing Elevation _____
Depth to Water 15.60
Elevation of Water _____
Depth of Well 27.46

Volume in Casing _____
Calculated Purge _____
Actual Purge _____
Depth of Mid Screen pump head is set at _____

Date Purged 7/26/21 Start 1454 End _____
Date Sampled _____ Start 1530 End _____

Field QC Sample(s) Collected at this Well (i.e. FB-1, X-DUP-1, MW-X etc.) _____

Time	Volume PTW (gal)	pH	E.C. (ms/cm³)	Temp (F/C)	D.O.(mg/L)	ORP	Color	NTU
1455	16.32	7.57	1.26	27.53	0.00	130	none	182
1458	16.31	7.35	1.26	27.40	0.00	129	none	104
1503	16.30	7.26	1.29	27.97	0.00	124	none	108
1507	16.30	7.24	1.29	28.04	0.00	118	none	120
1511	16.32	7.24	1.28	27.91	0.00	114	none	95.1
1515	16.34	7.30	1.26	27.78	0.00	108	none	24.1
1519	16.34	7.30	1.25	27.77	0.00	108	none	9.7
1523	16.35	7.31	1.25	27.79	0.00	107	none	9.3
1527	16.37	7.30	1.25	27.79	0.00	108	none	9.5

Length of Water column= (_____) (0.20)=_____ + Depth to Water = _____(80% Recharge)

Purging Equipment
- _____ Dedicated Pump
- X Grundfos/Rediflow
- _____ Vac-Truck
- _____ Development Rig
- _____ Bailer/Type: _____
- _____ Other: _____

Sampling Equipment
- _____ Dedicated Pump
- X Grundfos/Rediflow
- _____ Vac-Truck
- _____ Development Rig
- _____ Bailer/Type: _____
- _____ Other: _____

Well Integrity: _____

Remarks: purge rate @ 200 ml/min

Signature _____ Page 1 of 1

Stantec

Stantec
Well Sampling Data Sheet

Project No. _____
Purged By _____
Sampled By Sajem Hefly

Well ID MW-2
Sample ID MW-2-20210726
Client _____
Location _____

Type: Groundwater X Other _____

Casing Diameter (inches)	2	3	4	4.5	6	Other
	X					
Gallons per Linerar Foot	0.163	0.367	0.653	0.826	1.469	

Casing Elevation _____
Depth to Water 15.03
Elevation of Water _____
Depth of Well 27.29

Volume in Casing _____
Calculated Purge _____
Actual Purge _____
Depth of Mid Screen pump head is set at _____

Date Purged 7/26/21 Start 1236 End _____
Date Sampled _____ Start 1310 End _____

Field QC Sample(s) Collected at this Well (i.e. FB-1, X-DUP-1, MW-X etc.) _____

Time	~~Volume~~ DTW (gal)	pH	E.C. (ms/cm³)	Temp (F/C)	D.O.(mg/L)	ORP	Color	NTU
1239	15.22	7.45	1.45	25.13	0.04	148	tan	0.0
1243	15.22	7.25	1.43	24.61	0.00	148	tan	112
1247	15.23	7.19	1.41	24.75	0.00	144	tan	144
1250	15.23	7.17	1.41	24.82	0.00	139	clear	77.8
1254	15.23	7.17	1.41	24.92	0.00	131	none	38.6
1257	15.24	7.20	1.41	24.95	0.00	124	none	10.3
1300	15.22	7.24	1.40	24.94	0.00	120	none	9.3
1304	15.23	7.24	1.40	24.95	0.00	120	none	9.8
1307	15.23	7.24	1.40	24.95	0.00	120	none	9.5

Length of Water column= (_____) (0.20)=_____ + Depth to Water = _____(80% Recharge)

Purging Equipment
- ____ Dedicated Pump
- X Grundfos/Rediflow
- ____ Vac-Truck
- ____ Development Rig
- ____ Bailer/Type: _____
- ____ Other: _____

Sampling Equipment
- ____ Dedicated Pump
- X Grundfos/Rediflow
- ____ Vac-Truck
- ____ Development Rig
- ____ Bailer/Type: _____
- ____ Other: _____

Well Integrity: _____

Remarks: Purge rate @ 300 ml/min

Signature [signature]

Page 1 of 1

Stantec

Stantec
Well Sampling Data Sheet

Project No. _____
Purged By _____
Sampled By Jason Hafliger

Well ID MW-3
Sample ID MW-3-20210726
Client _____
Location _____

Type: Groundwater X Other _____

Casing Diameter (inches) 2 X 3 _____ 4 _____ 4.5 _____ 6 _____ Other _____
Gallons per Linerar Foot 0.163 0.367 0.653 0.826 1.469

Casing Elevation _____
Depth to Water 15.44
Elevation of Water _____
Depth of Well 26.85

Volume in Casing _____
Calculated Purge _____
Actual Purge _____
Depth of Mid Screen pump head is set at _____

Date Purged 7/26/21 Start 1100 End _____
Date Sampled _____ Start 1134 End _____

Field QC Sample(s) Collected at this Well (i.e. FB-1, X-DUP-1, MW-X etc.) _____

Time	~~Volume~~ Otw (gal)	pH	E.C. (ms/cm³)	Temp (F/C)	D.O.(mg/L)	ORP	Color	NTU
1100	15.71	7.56	1.26	24.88	0.60	148	tan	934
1104	15.65	7.50	1.27	24.94	0.00	146	tan	1060
1107	15.65	7.50	1.27	24.93	0.00	144	tan	841
1111	15.67	7.49	1.28	24.84	0.00	142	tan	468
1115	15.67	7.50	1.29	24.75	0.00	141	none	101
1119	15.63	7.51	1.29	24.91	0.00	136	none	91.5
1123	15.63	7.51	1.29	24.95	0.00	134	none	58.1
1126	15.64	7.51	1.29	24.96	0.00	132	none	9.9
1130	15.66	7.51	1.29	24.96	0.00	132	none	9.8
1133	15.67	7.51	1.29	24.97	0.00	132	none	9.9

Length of Water column= (_____) (0.20)=_____ + Depth to Water = _____(80% Recharge)

Purging Equipment
- ____ Dedicated Pump
- X Grundfos/Rediflow
- ____ Vac-Truck
- ____ Development Rig
- ____ Bailer/Type: _____
- ____ Other: _____

Sampling Equipment
- ____ Dedicated Pump
- X Grundfos/Rediflow
- ____ Vac-Truck
- ____ Development Rig
- ____ Bailer/Type: _____
- ____ Other: _____

Well Integrity: _____

Remarks: purge rate @ 250 ml/min

Signature _____ Page 1 of 1

Stantec

Stantec
Well Sampling Data Sheet

Project No. _____
Purged By _____
Sampled By Jason Hedl

Well ID MW-4
Sample ID MW-4-20210726
Client _____
Location _____

Type: Groundwater X Other _____

Casing Diameter (inches) 2 X 3 ____ 4 ____ 4.5 ____ 6 ____ Other ____
Gallons per Linerar Foot 0.163 0.367 0.653 0.826 1.469

Casing Elevation _____
Depth to Water 11.51
Elevation of Water _____
Depth of Well 27.81

Volume in Casing _____
Calculated Purge _____
Actual Purge _____
Depth of Mid Screen pump head is set at _____

Date Purged 7/26/21
Date Sampled _____

Start 1344 End _____
Start 1405 End _____

Field QC Sample(s) Collected at this Well (i.e. FB-1, X-DUP-1, MW-X etc.) _____

Time	~~Volume~~ DTW (gal)	pH	E.C. (ms/cm³)	Temp (F/C)	D.O.(mg/L)	ORP	Color	NTU
1345	12.05	7.34	1.79	26.53	2.83	170	tan	140
1348	12.06	7.28	1.80	27.00	1.82	161	tan	85.1
1351	12.30	7.27	1.80	27.32	1.67	156	none	63.9
1354	12.51	7.27	1.80	27.32	1.66	155	none	9.8
1357	12.62	7.27	1.80	27.33	1.67	156	none	8.9
1402	12.78	7.27	1.80	27.32	1.66	155	none	9.3

Length of Water column= (_____) (0.20)=_____ + Depth to Water = _____(80% Recharge)

Purging Equipment
- ____ Dedicated Pump
- X Grundfos/Rediflow
- ____ Vac-Truck
- ____ Development Rig
- ____ Bailer/Type: _____
- ____ Other: _____

Sampling Equipment
- ____ Dedicated Pump
- X Grundfos/Rediflow
- ____ Vac-Truck
- ____ Development Rig
- ____ Bailer/Type: _____
- ____ Other: _____

Well Integrity: _____

Remarks: purge @ 250 ml/min

Signature [signature]

Page 1 of 1

Stantec

Stantec
Well Sampling Data Sheet

Project No. _____
Purged By _____
Sampled By Jason Hatfield

Well ID ~~MW-5~~ 7/26/21 JH MW-5
Sample ID MW-5-20210726 / BD01-20210726
Client _____
Location La Habra

Type: Groundwater X Other _____

Casing Diameter (inches)	2 X	3	4	4.5	6	Other
Gallons per Linerar Foot	0.163	0.367	0.653	0.826	1.469	

Casing Elevation 7/26/21 JH
Depth to Water ~~11.54~~ 11.40
Elevation of Water _____
Depth of Well 27.81

Volume in Casing _____
Calculated Purge _____
Actual Purge _____
Depth of Mid Screen pump head is set at 17.00

Date Purged 7/26/21 Start 945 End 1018
Date Sampled 7/26/21 Start 1020 End _____

Field QC Sample(s) Collected at this Well (i.e. FB-1, X-DUP-1, MW-X etc.) BD01-20210726 (Dup)

Time	~~Volume~~ DTW (gal)	pH +/- 0.1	E.C. (ms/cm³) +/- 3%	Temp (F/C) ±3%	D.O. (mg/L) +/- 10%	ORP +/- 10 mV	Color	NTU <10
945	11.70	7.02	1.49	24.47	0.00	181	tan	442
949	11.74	7.19	1.46	24.60	0.00	168	none	244
953	11.73	7.26	1.45	24.68	0.00	160	none	213
957	11.78	7.29	1.44	24.74	0.00	155	none	182
1002	11.81	7.30	1.44	24.77	0.00	151	none	735
1006	11.82	7.30	1.44	24.76	0.00	150	none	10.3
1010	11.85	7.31	1.44	24.75	0.00	150	none	10.0
1015	11.86	7.30	1.44	24.76	0.00	150	none	9.8
1018	11.87	7.30	1.44	24.76	0.00	150	none	9.9

Length of Water column= (_____) (0.20)= _____ + Depth to Water = _____ (80% Recharge)

Purging Equipment
- ___ Dedicated Pump
- X Grundfos/Rediflow
- ___ Vac-Truck
- ___ Development Rig
- ___ Bailer/Type: _____
- ___ Other: _____

Sampling Equipment
- ___ Dedicated Pump
- X Grundfos/Rediflow
- ___ Vac-Truck
- ___ Development Rig
- ___ Bailer/Type: _____
- ___ Other: _____

Well Integrity: _____

Remarks: Pump rate @ 350 ml/m

Signature _____ Page 1 of 1

WELL DEVELOPMENT LOG

WELL# MW4

INITIAL T.D: 27.60'
INITIAL H20: 11.65

FINAL T.D: 27.61'
FINAL H20: 26.30

PURGE DATA

TIME	GALLONS	TEMPERATURE F°	TURBIDITY (NTU)	PH	DO	CONDUCTIVITY
0935	18	82.4	1,000 MAX	6.92	5.76	1.79
0940	19	83.1	" "	6.90	5.51	1.66
0945	19.5	83.4	" "	6.87	5.33	1.67
0950	19.75	82.9	" "	6.86	5.86	1.69
0955	20	82.6	580	6.87	5.82	1.70
1000	20.5	82.4	479	6.85	5.39	1.73
1005	21	82.6	1,000 MAX	6.80	5.75	1.86
1010	21.5	82.7	" "	6.80	5.95	1.95
1015	22	82.9	" "	6.83	5.68	1.92
1020	22.5	83.1	" "	6.83	5.96	1.90
1025	23	83.4	" "	6.84	5.39	1.92
1030	24	83.5	" "	6.81	5.9	1.98

WELL DEVELOPMENT LOG

26.70'

WELL# MW5

INITIAL T.D: 26.70'	FINAL T.D: 28.69
INITIAL H20: 11.58'	FINAL H20: 13.25

PURGE DATA

TIME	GALLONS	TEMPERATURE	TURBIDITY (NTU)	PH	DO	CONDUCTIVITY
1240	15	78.8	675	6.51	6.32	.045
1245	18	78.9	345	6.50	5.15	.043
1250	20.5	78.8	164	6.47	4.51	.043
1255	23	78.7	163	6.48	4.16	.043
1300	25.5	78.7	152	6.46	3.76	.043
1305	28	78.4	144	6.42	3.80	.041
1310	30.5	78.6	164	6.43	3.19	.040
1315	33	78.7	153	6.38	3.10	.041
1320	35	78.8	137	6.61	3.04	.078
1325	37	78.9	132	6.60	3.10	1.66
1330	39	78.8	154	6.59	2.10	1.66
1335	41	78.9	138	6.56	1.90	1.66
1340	43	78.8	125	6.54	1.85	1.66
1345	45	78.8	130	6.54	1.86	1.67
1350	47	78.7	158	6.53	1.86	1.66
1355	49	78.7	85.5	6.53	1.67	1.67
1400	51	78.5	110	6.52	1.55	1.66
1405	53	78.5	125	6.52	1.55	1.65
1410	55	78.5	115	6.51	1.60	1.66
1415	57	78.6	117	6.51	1.55	1.66
1420	59	78.7	135	6.50	1.50	1.67
1440	69	78.7	110	6.50	1.28	1.67
1445	71	78.8	97.5	6.49	1.09	1.67
1450	73	78.8	82.4	6.49	1.06	1.66
1455	75	78.7	85.7	6.48	1.10	1.66

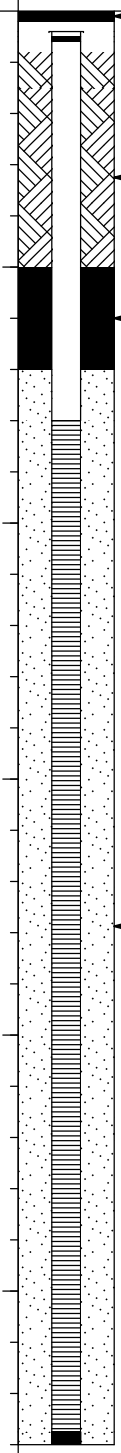
PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **MW-4** PAGE 1 OF 1
DRILLING: STARTED **7/16/21** COMPLETED: **7/16/21** INSTALLATION: STARTED **7/16/21** COMPLETED: **7/16/21** DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **CME-85** DRILLING METHOD: **HSA** SAMPLING EQUIPMENT: **Split Spoon**	NORTHING (ft): LATITUDE: GROUND ELEV (ft): INITIAL DTW (ft): **25** STATIC DTW (ft): **NE** WELL CASING DIAMETER (in): **2** LOGGED BY: **DM** EASTING (ft): LONGITUDE: TOC ELEV (ft): BOREHOLE DEPTH (ft): **28.0** WELL DEPTH (ft): **28.0** BOREHOLE DIAMETER (in): **8** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)	Well Construction
			3" Asphalt							8" Traffic Rated Well Box
		SM	**SILTY SAND** ; SM; 10YR 4/3 brown; moist; 25-35% fines; few gravel							
		CL	**SANDY CLAY** ; CL; GLEY1 4/1 dark greenish gray; low plasticity; moist; no odor; few fine to medium sand		--	5		1.6		2" Dia. Sch 40 PVC in Neat Cement Grout
5		SC	**CLAYEY SAND** ; SC; GLEY1 4/1 dark greenish gray; fine to medium-grained; non plastic; moist; no odor		--			0.1	5	Medium Bentonite Chip Annular Seal
10		CL	**SANDY CLAY** ; CL; GLEY1 3/1 very dark greenish gray; non plastic; moist; moderate HC odor; hydrocarbon staining; 25-30% medium to coarse sand; trace fine gravel		0845 MW-4-11.5	1 0.5	7 10 13	84	10	
15		CL	**SANDY CLAY** ; CL; 2.5Y 4/3 olive brown; low plasticity; moist; no odor; no staining; 25-30% fine sand; white calcification streaks		0855 MW-4-16.5	1 0.5	12 18 21	3.2	15	2" Dia. Sch 40 PVC 0.010" Slot Pipe in #2/12 Sand Filter Pack
20		CL	**SILTY CLAY** ; CL; 2.5Y 4/3 olive brown; non plastic; moist; no odor; no staining; 25-30% fine sand; white calcification streaks		0900 MW-4-21.5	1 0.5	15 19 22	1.4	20	
25									25	
		SP	**POORLY GRADED SAND** ; SP; 10YR 5/4 yellowish brown; fine to medium-grained; wet; no odor; no staining; trace fines							
		CL	**SANDY CLAY** ; CL; 10YR 5/4 yellowish brown; non plastic; moist; no odor; no staining; 30-35% fine sand							
			Hole terminated at 28 feet.							

PROJECT: **Olson - La Habra** LOCATION: **251-351 W. Imperial Hwy, La Habra, CA** PROJECT NUMBER: **185804671**	WELL / PROBEHOLE / BOREHOLE NO: **MW-5** PAGE 1 OF 1
DRILLING: STARTED **7/16/21** COMPLETED: **7/16/21** INSTALLATION: STARTED **7/16/21** COMPLETED: **7/16/21** DRILLING COMPANY: **M&R Drilling** DRILLING EQUIPMENT: **CME-85** DRILLING METHOD: **HSA** SAMPLING EQUIPMENT: **Split Spoon**	NORTHING (ft): LATITUDE: GROUND ELEV (ft): INITIAL DTW (ft): **15** STATIC DTW (ft): **NE** WELL CASING DIAMETER (in): **2** LOGGED BY: **DM** EASTING (ft): LONGITUDE: TOC ELEV (ft): BOREHOLE DEPTH (ft): **28.0** WELL DEPTH (ft): **28.0** BOREHOLE DIAMETER (in): **8** CHECKED BY: **JS**

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Time Sample ID	Measured Recovery (ft.)	Blow Count	PID Reading (ppmv)	Depth (feet)
			3" Asphalt						
		CL	**SANDY CLAY** ; CL; 5Y 3/1 very dark gray; non plastic; moist; no odor; no staining; some medium to coarse sand						
		SM	**SILTY SAND** ; SM; 10YR 5/4 yellowish brown; fine to medium-grained		--	5		0.3	
5		CL	**SANDY CLAY** ; CL; 10YR 4/3 yellowish brown; non plastic; moist; no odor; 5Y 3/1 very dark gray marbling; some fine to medium sand						5
10		SP	**POORLY GRADED SAND** ; SP; 10YR 4/2 dark grayish brown; fine to medium-grained; very moist; no odor; no staining; few fines		1105 --	1.5	10 12 14	0.2	10
15		SM	**SILTY SAND** ; SM; 10YR 4/3 brown; fine-grained; wet; no odor; no staining		1113 --	1.5	11 12 16	1.1	15
20			**SAME AS ABOVE**		1121 --	1.5	13 16 19	1.4	20
25		CL	**SANDY CLAY** ; CL; 10YR 4/4 dark yellowish brown; low plasticity; wet; no odor; no staining; some fine sand		1126 -- 1132 --	1.5 1.5	10 14 16 11 16 19	0.8 1.0	25
			Hole terminated at 28 feet.						

Well Construction



APPENDIX E

Laboratory Data Sheets

ADVANCED TECHNOLOGY LABORATORIES

July 26, 2021

Joshua Sargent
Stantec
735 E. Carnegie Drive, Suite 280
San Bernardino, CA 92408
Tel: (909) 335-6116
Fax:(909) 335-6120

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003

Re: ATL Work Order Number : 2101556
Client Reference : 185804671, Olson - La Habra

Enclosed are the results for sample(s) received on July 16, 2021 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

For

Amy Leung
Laboratory Director

Certificate of Analysis

Stantec		Project Number :	185804671, Olson - La Habra
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	07/26/2021

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
mw-4-11.5	2101556-01	Soil	7/16/21 8:45	7/16/21 18:00

CASE NARRATIVE

Sample for 8015_DRO analysis was subcontracted to AETL with CA-ELAP Cert. 1541.

Certificate of Analysis

Stantec		Project Number :	185804671, Olson - La Habra
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	07/26/2021

Client Sample ID: mw-4-11.5

Lab ID: 2101556-01

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: Kim

Analyte	Result (mg/kg)	PQL (mg/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	1.0	1	B1G0288	07/19/2021	07/19/21 12:28	
Surrogate: 4-Bromofluorobenzene	*112 %*	*47.6 - 121.18*		B1G0288	07/19/2021	*07/19/21 12:28*	

Volatile Organic Compounds by EPA 8260B

Analyst: KN

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
1,1,1-Trichloroethane	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
1,1,2,2-Tetrachloroethane	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
1,1,2-Trichloroethane	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
1,1-Dichloroethane	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
1,1-Dichloroethene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
1,1-Dichloropropene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
1,2,3-Trichloropropane	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
1,2,3-Trichlorobenzene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
1,2,4-Trichlorobenzene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
1,2,4-Trimethylbenzene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
1,2-Dibromo-3-chloropropane	ND	10	1	B1G0291	07/19/2021	07/19/21 14:03	
1,2-Dibromoethane	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
1,2-Dichlorobenzene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
1,2-Dichloroethane	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
1,2-Dichloropropane	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
1,3,5-Trimethylbenzene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
1,3-Dichlorobenzene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
1,3-Dichloropropane	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
1,4-Dichlorobenzene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
2,2-Dichloropropane	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
2-Chlorotoluene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
4-Chlorotoluene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
4-Isopropyltoluene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Benzene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Bromobenzene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Bromochloromethane	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Bromodichloromethane	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Bromoform	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	

Certificate of Analysis

Stantec		Project Number :	185804671, Olson - La Habra
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	07/26/2021

Client Sample ID: mw-4-11.5

Lab ID: 2101556-01

Volatile Organic Compounds by EPA 8260B **Analyst: KN**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromomethane	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Carbon disulfide	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Carbon tetrachloride	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Chlorobenzene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Chloroethane	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Chloroform	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Chloromethane	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
cis-1,2-Dichloroethene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
cis-1,3-Dichloropropene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Di-isopropyl ether	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Dibromochloromethane	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Dibromomethane	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Dichlorodifluoromethane	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Ethyl Acetate	ND	50	1	B1G0291	07/19/2021	07/19/21 14:03	
Ethyl Ether	ND	50	1	B1G0291	07/19/2021	07/19/21 14:03	
Ethyl tert-butyl ether	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Ethylbenzene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Freon-113	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Hexachlorobutadiene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Isopropylbenzene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
m,p-Xylene	ND	10	1	B1G0291	07/19/2021	07/19/21 14:03	
Methylene chloride	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
MTBE	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
n-Butylbenzene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
n-Propylbenzene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Naphthalene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
o-Xylene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
sec-Butylbenzene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Styrene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
tert-Amyl methyl ether	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
tert-Butanol	ND	100	1	B1G0291	07/19/2021	07/19/21 14:03	
tert-Butylbenzene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Tetrachloroethene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Toluene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
trans-1,2-Dichloroethene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
trans-1,3-Dichloropropene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	

Certificate of Analysis

Stantec		Project Number :	185804671, Olson - La Habra
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	07/26/2021

Client Sample ID: mw-4-11.5

Lab ID: 2101556-01

Volatile Organic Compounds by EPA 8260B **Analyst: KN**

Analyte	Result (ug/kg)	PQL (ug/kg)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichloroethene	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Trichlorofluoromethane	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Vinyl acetate	ND	50	1	B1G0291	07/19/2021	07/19/21 14:03	
Vinyl chloride	ND	5.0	1	B1G0291	07/19/2021	07/19/21 14:03	
Surrogate: 1,2-Dichloroethane-d4	*92.3 %*	*66 - 200*		B1G0291	07/19/2021	*07/19/21 14:03*	
Surrogate: 4-Bromofluorobenzene	*96.3 %*	*50 - 146*		B1G0291	07/19/2021	*07/19/21 14:03*	
Surrogate: Dibromofluoromethane	*86.0 %*	*77 - 159*		B1G0291	07/19/2021	*07/19/21 14:03*	
Surrogate: Toluene-d8	*96.8 %*	*81 - 128*		B1G0291	07/19/2021	*07/19/21 14:03*	

Certificate of Analysis

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San Bernardino , CA 92408		Reported :	07/26/2021

QUALITY CONTROL SECTION

Gasoline Range Organics by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/kg)	PQL (mg/kg)	MDL (mg/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1G0288 - GCVOA_S										
Blank (B1G0288-BLK1)					Prepared: 7/19/2021 Analyzed: 7/19/2021					
Gasoline Range Organics	ND	1.0	0.20							
Surrogate: 4-Bromofluorobenzene	*0.8949*			*0.800000*		*112*	*47.6 - 121.18*			
LCS (B1G0288-BS1)					Prepared: 7/19/2021 Analyzed: 7/19/2021					
Gasoline Range Organics	4.25100	1.0	0.20	5.00000		85.0	58.69 - 124.04			
Surrogate: 4-Bromofluorobenzene	*0.8425*			*0.800000*		*105*	*47.6 - 121.18*			
LCS Dup (B1G0288-BSD1)					Prepared: 7/19/2021 Analyzed: 7/19/2021					
Gasoline Range Organics	4.63600	1.0	0.20	5.00000		92.7	58.69 - 124.04	8.66	20	
Surrogate: 4-Bromofluorobenzene	*0.9434*			*0.800000*		*118*	*47.6 - 121.18*			
Matrix Spike (B1G0288-MS1)			**Source: 2101556-01**		Prepared: 7/19/2021 Analyzed: 7/19/2021					
Gasoline Range Organics	4.00800	1.0	0.20	5.00000	0.275000	74.7	37.92 - 128.32			
Surrogate: 4-Bromofluorobenzene	*0.9184*			*0.800000*		*115*	*47.6 - 121.18*			
Matrix Spike Dup (B1G0288-MSD1)			**Source: 2101556-01**		Prepared: 7/19/2021 Analyzed: 7/19/2021					
Gasoline Range Organics	3.70600	1.0	0.20	5.00000	0.275000	68.6	37.92 - 128.32	7.83	20	
Surrogate: 4-Bromofluorobenzene	*0.9444*			*0.800000*		*118*	*47.6 - 121.18*			

Certificate of Analysis

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San Bernardino , CA 92408		Reported :	07/26/2021

Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1G0291 - MSVOA_S										
Blank (B1G0291-BLK1)							Prepared: 7/19/2021 Analyzed: 7/19/2021			
1,1,1,2-Tetrachloroethane	ND	5.0	0.52							
1,1,1-Trichloroethane	ND	5.0	0.26							
1,1,2,2-Tetrachloroethane	ND	5.0	0.21							
1,1,2-Trichloroethane	ND	5.0	0.40							
1,1-Dichloroethane	ND	5.0	1.4							
1,1-Dichloroethene	ND	5.0	1.9							
1,1-Dichloropropene	ND	5.0	0.54							
1,2,3-Trichloropropane	ND	5.0	0.40							
1,2,3-Trichlorobenzene	ND	5.0	0.83							
1,2,4-Trichlorobenzene	ND	5.0	0.80							
1,2,4-Trimethylbenzene	ND	5.0	0.91							
1,2-Dibromo-3-chloropropane	ND	10	1.1							
1,2-Dibromoethane	ND	5.0	0.40							
1,2-Dichlorobenzene	ND	5.0	0.21							
1,2-Dichloroethane	ND	5.0	0.50							
1,2-Dichloropropane	ND	5.0	0.46							
1,3,5-Trimethylbenzene	ND	5.0	0.70							
1,3-Dichlorobenzene	ND	5.0	0.36							
1,3-Dichloropropane	ND	5.0	0.49							
1,4-Dichlorobenzene	ND	5.0	0.27							
2,2-Dichloropropane	ND	5.0	0.28							
2-Chlorotoluene	ND	5.0	0.53							
4-Chlorotoluene	ND	5.0	0.40							
4-Isopropyltoluene	ND	5.0	0.81							
Benzene	ND	5.0	0.36							
Bromobenzene	ND	5.0	0.62							
Bromochloromethane	ND	5.0	0.30							
Bromodichloromethane	ND	5.0	0.52							
Bromoform	ND	5.0	1.4							
Bromomethane	ND	5.0	2.5							
Carbon disulfide	ND	5.0	0.94							
Carbon tetrachloride	ND	5.0	0.73							
Chlorobenzene	ND	5.0	0.42							
Chloroethane	ND	5.0	1.5							
Chloroform	ND	5.0	0.24							
Chloromethane	ND	5.0	1.1							
cis-1,2-Dichloroethene	ND	5.0	0.20							
cis-1,3-Dichloropropene	ND	5.0	0.39							
Di-isopropyl ether	ND	5.0	1.9							
Dibromochloromethane	ND	5.0	0.81							

Certificate of Analysis

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1G0291 - MSVOA_S (continued)										
Blank (B1G0291-BLK1) - Continued					Prepared: 7/19/2021 Analyzed: 7/19/2021					
Dibromomethane	ND	5.0	0.23							
Dichlorodifluoromethane	ND	5.0	0.14							
Ethyl Acetate	ND	50	7.0							
Ethyl Ether	ND	50	17							
Ethyl tert-butyl ether	ND	5.0	0.85							
Ethylbenzene	ND	5.0	0.43							
Freon-113	ND	5.0	1.3							
Hexachlorobutadiene	ND	5.0	0.40							
Isopropylbenzene	ND	5.0	0.79							
m,p-Xylene	ND	10	0.98							
Methylene chloride	ND	5.0	2.2							
MTBE	ND	5.0	0.81							
n-Butylbenzene	ND	5.0	1.2							
n-Propylbenzene	ND	5.0	0.78							
Naphthalene	ND	5.0	1.1							
o-Xylene	ND	5.0	0.67							
sec-Butylbenzene	ND	5.0	0.63							
Styrene	ND	5.0	0.45							
tert-Amyl methyl ether	ND	5.0	1.1							
tert-Butanol	ND	100	11							
tert-Butylbenzene	ND	5.0	0.80							
Tetrachloroethene	ND	5.0	0.31							
Toluene	ND	5.0	0.27							
trans-1,2-Dichloroethene	ND	5.0	0.56							
trans-1,3-Dichloropropene	ND	5.0	0.59							
Trichloroethene	ND	5.0	0.32							
Trichlorofluoromethane	ND	5.0	1.0							
Vinyl acetate	ND	50	6.0							
Vinyl chloride	ND	5.0	0.92							
Surrogate: 1,2-Dichloroethane-d4	*45.91*			*50.0000*		*91.8*	*66 - 200*			
Surrogate: 4-Bromofluorobenzene	*47.41*			*50.0000*		*94.8*	*50 - 146*			
Surrogate: Dibromofluoromethan	*42.77*			*50.0000*		*85.5*	*77 - 159*			
Surrogate: Toluene-d8	*48.71*			*50.0000*		*97.4*	*81 - 128*			
LCS (B1G0291-BS1)					Prepared: 7/19/2021 Analyzed: 7/19/2021					
1,1,1,2-Tetrachloroethane	49.5900	5.0	0.52	50.0000		99.2	84 - 123			
1,1,1-Trichloroethane	46.6300	5.0	0.26	50.0000		93.3	78 - 133			
1,1,2,2-Tetrachloroethane	46.7800	5.0	0.21	50.0000		93.6	63 - 127			
1,1,2-Trichloroethane	50.4200	5.0	0.40	50.0000		101	80 - 125			
1,1-Dichloroethane	46.6100	5.0	1.4	50.0000		93.2	77 - 128			

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1G0291 - MSVOA_S (continued)										
LCS (B1G0291-BS1) - Continued					Prepared: 7/19/2021 Analyzed: 7/19/2021					
1,1-Dichloroethene	48.8500	5.0	1.9	50.0000		97.7	69 - 138			
1,1-Dichloropropene	51.9600	5.0	0.54	50.0000		104	80 - 133			
1,2,3-Trichloropropane	46.3300	5.0	0.40	50.0000		92.7	74 - 123			
1,2,3-Trichlorobenzene	49.3100	5.0	0.83	50.0000		98.6	79 - 133			
1,2,4-Trichlorobenzene	50.1800	5.0	0.80	50.0000		100	73 - 131			
1,2,4-Trimethylbenzene	50.6600	5.0	0.91	50.0000		101	86 - 137			
1,2-Dibromo-3-chloropropane	41.1000	10	1.1	50.0000		82.2	62 - 127			
1,2-Dibromoethane	46.6700	5.0	0.40	50.0000		93.3	83 - 126			
1,2-Dichlorobenzene	51.3000	5.0	0.21	50.0000		103	83 - 123			
1,2-Dichloroethane	48.3500	5.0	0.50	50.0000		96.7	76 - 128			
1,2-Dichloropropane	50.7600	5.0	0.46	50.0000		102	77 - 121			
1,3,5-Trimethylbenzene	51.0800	5.0	0.70	50.0000		102	84 - 135			
1,3-Dichlorobenzene	51.2600	5.0	0.36	50.0000		103	81 - 126			
1,3-Dichloropropane	49.5300	5.0	0.49	50.0000		99.1	80 - 118			
1,4-Dichlorobenzene	50.6500	5.0	0.27	50.0000		101	80 - 124			
2,2-Dichloropropane	45.8400	5.0	0.28	50.0000		91.7	72 - 135			
2-Chlorotoluene	51.7100	5.0	0.53	50.0000		103	81 - 127			
4-Chlorotoluene	51.8400	5.0	0.40	50.0000		104	83 - 127			
4-Isopropyltoluene	51.7800	5.0	0.81	50.0000		104	82 - 143			
Benzene	51.7900	5.0	0.36	50.0000		104	84 - 123			
Bromobenzene	50.2100	5.0	0.62	50.0000		100	80 - 122			
Bromochloromethane	46.7100	5.0	0.30	50.0000		93.4	83 - 127			
Bromodichloromethane	49.3600	5.0	0.52	50.0000		98.7	82 - 123			
Bromoform	48.3000	5.0	1.4	50.0000		96.6	80 - 132			
Bromomethane	51.2000	5.0	2.5	50.0000		102	67 - 176			
Carbon disulfide	33.8500	5.0	0.94	50.0000		67.7	75 - 138			L4
Carbon tetrachloride	51.1800	5.0	0.73	50.0000		102	76 - 131			
Chlorobenzene	51.9800	5.0	0.42	50.0000		104	84 - 119			
Chloroethane	44.2200	5.0	1.5	50.0000		88.4	56 - 170			
Chloroform	45.8700	5.0	0.24	50.0000		91.7	78 - 129			
Chloromethane	46.4600	5.0	1.1	50.0000		92.9	63 - 141			
cis-1,2-Dichloroethene	48.8500	5.0	0.20	50.0000		97.7	83 - 125			
cis-1,3-Dichloropropene	49.3600	5.0	0.39	50.0000		98.7	76 - 129			
Di-isopropyl ether	41.2900	5.0	1.9	50.0000		82.6	73 - 132			
Dibromochloromethane	49.9600	5.0	0.81	50.0000		99.9	81 - 120			
Dibromomethane	47.5000	5.0	0.23	50.0000		95.0	79 - 124			
Dichlorodifluoromethane	46.9100	5.0	0.14	50.0000		93.8	18 - 199			
Ethyl Acetate	391.600	50	7.0	500.000		78.3	76 - 138			
Ethyl Ether	431.290	50	17	500.000		86.3	74 - 128			
Ethyl tert-butyl ether	43.1200	5.0	0.85	50.0000		86.2	50 - 175			

Certificate of Analysis

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1G0291 - MSVOA_S (continued)										
LCS (B1G0291-BS1) - Continued					Prepared: 7/19/2021 Analyzed: 7/19/2021					
Ethylbenzene	53.0900	5.0	0.43	50.0000		106	86 - 130			
Freon-113	41.1900	5.0	1.3	50.0000		82.4	66 - 132			
Hexachlorobutadiene	51.5600	5.0	0.40	50.0000		103	64 - 135			
Isopropylbenzene	52.7800	5.0	0.79	50.0000		106	80 - 133			
m,p-Xylene	107.330	10	0.98	100.000		107	89 - 133			
Methylene chloride	46.4400	5.0	2.2	50.0000		92.9	72 - 143			
MTBE	38.3600	5.0	0.81	50.0000		76.7	73 - 136			
n-Butylbenzene	50.5800	5.0	1.2	50.0000		101	76 - 144			
n-Propylbenzene	52.8400	5.0	0.78	50.0000		106	81 - 136			
Naphthalene	47.5500	5.0	1.1	50.0000		95.1	64 - 128			
o-Xylene	52.1600	5.0	0.67	50.0000		104	82 - 134			
sec-Butylbenzene	52.2600	5.0	0.63	50.0000		105	81 - 138			
Styrene	51.8600	5.0	0.45	50.0000		104	79 - 152			
tert-Amyl methyl ether	40.3500	5.0	1.1	50.0000		80.7	48 - 166			
tert-Butanol	196.460	100	11	250.000		78.6	48 - 148			
tert-Butylbenzene	51.1300	5.0	0.80	50.0000		102	81 - 135			
Tetrachloroethene	53.1900	5.0	0.31	50.0000		106	75 - 127			
Toluene	51.9700	5.0	0.27	50.0000		104	88 - 130			
trans-1,2-Dichloroethene	48.8600	5.0	0.56	50.0000		97.7	79 - 127			
trans-1,3-Dichloropropene	49.3600	5.0	0.59	50.0000		98.7	80 - 130			
Trichloroethene	51.6400	5.0	0.32	50.0000		103	83 - 126			
Trichlorofluoromethane	48.7800	5.0	1.0	50.0000		97.6	62 - 143			
Vinyl acetate	391.480	50	6.0	500.000		78.3	69 - 150			
Vinyl chloride	46.1700	5.0	0.92	50.0000		92.3	69 - 140			
Surrogate: 1,2-Dichloroethane-d4	*43.95*			*50.0000*		*87.9*	*66 - 200*			
Surrogate: 4-Bromofluorobenzene	*50.35*			*50.0000*		*101*	*50 - 146*			
Surrogate: Dibromofluoromethan	*44.37*			*50.0000*		*88.7*	*77 - 159*			
Surrogate: Toluene-d8	*48.37*			*50.0000*		*96.7*	*81 - 128*			
LCS Dup (B1G0291-BSD1)					Prepared: 7/19/2021 Analyzed: 7/19/2021					
1,1,1,2-Tetrachloroethane	47.9800	5.0	0.52	50.0000		96.0	84 - 123	3.30	20	
1,1,1-Trichloroethane	45.5100	5.0	0.26	50.0000		91.0	78 - 133	2.43	20	
1,1,2,2-Tetrachloroethane	47.1900	5.0	0.21	50.0000		94.4	63 - 127	0.873	20	
1,1,2-Trichloroethane	49.4300	5.0	0.40	50.0000		98.9	80 - 125	1.98	20	
1,1-Dichloroethane	45.2300	5.0	1.4	50.0000		90.5	77 - 128	3.01	20	
1,1-Dichloroethene	45.1200	5.0	1.9	50.0000		90.2	69 - 138	7.94	20	
1,1-Dichloropropene	49.4000	5.0	0.54	50.0000		98.8	80 - 133	5.05	20	
1,2,3-Trichloropropane	46.3900	5.0	0.40	50.0000		92.8	74 - 123	0.129	20	
1,2,3-Trichlorobenzene	50.0600	5.0	0.83	50.0000		100	79 - 133	1.51	20	
1,2,4-Trichlorobenzene	50.2100	5.0	0.80	50.0000		100	73 - 131	0.0598	20	

Certificate of Analysis

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1G0291 - MSVOA_S (continued)										
LCS Dup (B1G0291-BSD1) - Continued					Prepared: 7/19/2021 Analyzed: 7/19/2021					
1,2,4-Trimethylbenzene	48.8500	5.0	0.91	50.0000		97.7	86 - 137	3.64	20	
1,2-Dibromo-3-chloropropane	44.6400	10	1.1	50.0000		89.3	62 - 127	8.26	20	
1,2-Dibromoethane	47.6300	5.0	0.40	50.0000		95.3	83 - 126	2.04	20	
1,2-Dichlorobenzene	49.7000	5.0	0.21	50.0000		99.4	83 - 123	3.17	20	
1,2-Dichloroethane	48.5700	5.0	0.50	50.0000		97.1	76 - 128	0.454	20	
1,2-Dichloropropane	46.6100	5.0	0.46	50.0000		93.2	77 - 121	8.52	20	
1,3,5-Trimethylbenzene	49.0400	5.0	0.70	50.0000		98.1	84 - 135	4.08	20	
1,3-Dichlorobenzene	49.9600	5.0	0.36	50.0000		99.9	81 - 126	2.57	20	
1,3-Dichloropropane	49.5100	5.0	0.49	50.0000		99.0	80 - 118	0.0404	20	
1,4-Dichlorobenzene	49.8000	5.0	0.27	50.0000		99.6	80 - 124	1.69	20	
2,2-Dichloropropane	44.4500	5.0	0.28	50.0000		88.9	72 - 135	3.08	20	
2-Chlorotoluene	49.2900	5.0	0.53	50.0000		98.6	81 - 127	4.79	20	
4-Chlorotoluene	49.9200	5.0	0.40	50.0000		99.8	83 - 127	3.77	20	
4-Isopropyltoluene	50.0800	5.0	0.81	50.0000		100	82 - 143	3.34	20	
Benzene	50.3900	5.0	0.36	50.0000		101	84 - 123	2.74	20	
Bromobenzene	49.4100	5.0	0.62	50.0000		98.8	80 - 122	1.61	20	
Bromochloromethane	47.1500	5.0	0.30	50.0000		94.3	83 - 127	0.938	20	
Bromodichloromethane	48.6200	5.0	0.52	50.0000		97.2	82 - 123	1.51	20	
Bromoform	47.7300	5.0	1.4	50.0000		95.5	80 - 132	1.19	20	
Bromomethane	47.8500	5.0	2.5	50.0000		95.7	67 - 176	6.76	20	
Carbon disulfide	33.0500	5.0	0.94	50.0000		66.1	75 - 138	2.39	20	L4
Carbon tetrachloride	48.9600	5.0	0.73	50.0000		97.9	76 - 131	4.43	20	
Chlorobenzene	49.7400	5.0	0.42	50.0000		99.5	84 - 119	4.40	20	
Chloroethane	41.2800	5.0	1.5	50.0000		82.6	56 - 170	6.88	20	
Chloroform	44.7600	5.0	0.24	50.0000		89.5	78 - 129	2.45	20	
Chloromethane	43.6200	5.0	1.1	50.0000		87.2	63 - 141	6.31	20	
cis-1,2-Dichloroethene	45.1200	5.0	0.20	50.0000		90.2	83 - 125	7.94	20	
cis-1,3-Dichloropropene	48.5400	5.0	0.39	50.0000		97.1	76 - 129	1.68	20	
Di-isopropyl ether	42.6900	5.0	1.9	50.0000		85.4	73 - 132	3.33	20	
Dibromochloromethane	48.2200	5.0	0.81	50.0000		96.4	81 - 120	3.54	20	
Dibromomethane	47.8000	5.0	0.23	50.0000		95.6	79 - 124	0.630	20	
Dichlorodifluoromethane	43.0900	5.0	0.14	50.0000		86.2	18 - 199	8.49	20	
Ethyl Acetate	392.460	50	7.0	500.000		78.5	76 - 138	0.219	20	
Ethyl Ether	437.810	50	17	500.000		87.6	74 - 128	1.50	20	
Ethyl tert-butyl ether	43.7900	5.0	0.85	50.0000		87.6	50 - 175	1.54	20	
Ethylbenzene	50.3000	5.0	0.43	50.0000		101	86 - 130	5.40	20	
Freon-113	39.3200	5.0	1.3	50.0000		78.6	66 - 132	4.65	20	
Hexachlorobutadiene	48.7400	5.0	0.40	50.0000		97.5	64 - 135	5.62	20	
Isopropylbenzene	50.2700	5.0	0.79	50.0000		101	80 - 133	4.87	20	
m,p-Xylene	102.470	10	0.98	100.000		102	89 - 133	4.63	20	

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1G0291 - MSVOA_S (continued)										
LCS Dup (B1G0291-BSD1) - Continued					Prepared: 7/19/2021 Analyzed: 7/19/2021					
Methylene chloride	47.0900	5.0	2.2	50.0000		94.2	72 - 143	1.39	20	
MTBE	39.8200	5.0	0.81	50.0000		79.6	73 - 136	3.73	20	
n-Butylbenzene	49.6800	5.0	1.2	50.0000		99.4	76 - 144	1.80	20	
n-Propylbenzene	50.6100	5.0	0.78	50.0000		101	81 - 136	4.31	20	
Naphthalene	49.0700	5.0	1.1	50.0000		98.1	64 - 128	3.15	20	
o-Xylene	50.1800	5.0	0.67	50.0000		100	82 - 134	3.87	20	
sec-Butylbenzene	49.7700	5.0	0.63	50.0000		99.5	81 - 138	4.88	20	
Styrene	50.3300	5.0	0.45	50.0000		101	79 - 152	2.99	20	
tert-Amyl methyl ether	46.1400	5.0	1.1	50.0000		92.3	48 - 166	13.4	20	
tert-Butanol	211.080	100	11	250.000		84.4	48 - 148	7.17	20	
tert-Butylbenzene	49.5500	5.0	0.80	50.0000		99.1	81 - 135	3.14	20	
Tetrachloroethene	49.7600	5.0	0.31	50.0000		99.5	75 - 127	6.66	20	
Toluene	50.0300	5.0	0.27	50.0000		100	88 - 130	3.80	20	
trans-1,2-Dichloroethene	45.1300	5.0	0.56	50.0000		90.3	79 - 127	7.94	20	
trans-1,3-Dichloropropene	48.5400	5.0	0.59	50.0000		97.1	80 - 130	1.68	20	
Trichloroethene	48.6200	5.0	0.32	50.0000		97.2	83 - 126	6.02	20	
Trichlorofluoromethane	45.7500	5.0	1.0	50.0000		91.5	62 - 143	6.41	20	
Vinyl acetate	392.270	50	6.0	500.000		78.5	69 - 150	0.202	20	
Vinyl chloride	43.9100	5.0	0.92	50.0000		87.8	69 - 140	5.02	20	
Surrogate: 1,2-Dichloroethane-d4	*46.16*			*50.0000*		*92.3*	*66 - 200*			
Surrogate: 4-Bromofluorobenzene	*49.04*			*50.0000*		*98.1*	*50 - 146*			
Surrogate: Dibromofluoromethan	*45.85*			*50.0000*		*91.7*	*77 - 159*			
Surrogate: Toluene-d8	*48.83*			*50.0000*		*97.7*	*81 - 128*			
Matrix Spike (B1G0291-MS1)			**Source: 2101556-01**		Prepared: 7/19/2021 Analyzed: 7/19/2021					
1,1,1,2-Tetrachloroethane	47.3400	5.0	0.52	50.0000	ND	94.7	50 - 126			
1,1,1-Trichloroethane	46.9200	5.0	0.26	50.0000	ND	93.8	56 - 144			
1,1,2,2-Tetrachloroethane	49.6900	5.0	0.21	50.0000	ND	99.4	20 - 153			
1,1,2-Trichloroethane	50.0100	5.0	0.40	50.0000	ND	100	0 - 421			
1,1-Dichloroethane	44.8800	5.0	1.4	50.0000	ND	89.8	58 - 131			
1,1-Dichloroethene	48.9800	5.0	1.9	50.0000	ND	98.0	60 - 143			
1,1-Dichloropropene	50.5700	5.0	0.54	50.0000	ND	101	57 - 144			
1,2,3-Trichloropropane	47.0900	5.0	0.40	50.0000	ND	94.2	52 - 121			
1,2,3-Trichlorobenzene	47.8500	5.0	0.83	50.0000	ND	95.7	0 - 153			
1,2,4-Trichlorobenzene	48.8100	5.0	0.80	50.0000	ND	97.6	0 - 146			
1,2,4-Trimethylbenzene	49.2600	5.0	0.91	50.0000	ND	98.5	26 - 155			
1,2-Dibromo-3-chloropropane	43.7000	10	1.1	50.0000	ND	87.4	36 - 125			
1,2-Dibromoethane	47.1600	5.0	0.40	50.0000	ND	94.3	56 - 127			
1,2-Dichlorobenzene	49.4300	5.0	0.21	50.0000	ND	98.9	26 - 136			
1,2-Dichloroethane	47.4000	5.0	0.50	50.0000	ND	94.8	60 - 118			

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1G0291 - MSVOA_S (continued)										
Matrix Spike (B1G0291-MS1) - Continued			**Source: 2101556-01**		Prepared: 7/19/2021 Analyzed: 7/19/2021					
1,2-Dichloropropane	47.6800	5.0	0.46	50.0000	ND	95.4	52 - 124			
1,3,5-Trimethylbenzene	49.6800	5.0	0.70	50.0000	ND	99.4	31 - 152			
1,3-Dichlorobenzene	49.1500	5.0	0.36	50.0000	ND	98.3	26 - 140			
1,3-Dichloropropane	49.4400	5.0	0.49	50.0000	ND	98.9	56 - 118			
1,4-Dichlorobenzene	49.7200	5.0	0.27	50.0000	ND	99.4	27 - 136			
2,2-Dichloropropane	45.5900	5.0	0.28	50.0000	ND	91.2	50 - 146			
2-Chlorotoluene	49.2500	5.0	0.53	50.0000	ND	98.5	28 - 149			
4-Chlorotoluene	49.7900	5.0	0.40	50.0000	ND	99.6	35 - 142			
4-Isopropyltoluene	52.4000	5.0	0.81	50.0000	ND	105	12 - 175			
Benzene	51.0600	5.0	0.36	50.0000	ND	102	61 - 127			
Bromobenzene	48.2000	5.0	0.62	50.0000	ND	96.4	40 - 129			
Bromochloromethane	44.9800	5.0	0.30	50.0000	ND	90.0	57 - 135			
Bromodichloromethane	48.8300	5.0	0.52	50.0000	ND	97.7	58 - 119			
Bromoform	47.4500	5.0	1.4	50.0000	ND	94.9	48 - 130			
Bromomethane	47.7900	5.0	2.5	50.0000	ND	95.6	40 - 183			
Carbon disulfide	33.5900	5.0	0.94	50.0000	ND	67.2	49 - 153			
Carbon tetrachloride	51.4600	5.0	0.73	50.0000	ND	103	49 - 146			
Chlorobenzene	48.0600	5.0	0.42	50.0000	ND	96.1	46 - 128			
Chloroethane	42.6000	5.0	1.5	50.0000	ND	85.2	37 - 178			
Chloroform	43.9700	5.0	0.24	50.0000	ND	87.9	59 - 129			
Chloromethane	41.4900	5.0	1.1	50.0000	ND	83.0	31 - 168			
cis-1,2-Dichloroethene	48.9800	5.0	0.20	50.0000	ND	98.0	52 - 137			
cis-1,3-Dichloropropene	47.9100	5.0	0.39	50.0000	ND	95.8	45 - 130			
Di-isopropyl ether	41.7600	5.0	1.9	50.0000	ND	83.5	55 - 132			
Dibromochloromethane	48.1800	5.0	0.81	50.0000	ND	96.4	56 - 117			
Dibromomethane	47.8700	5.0	0.23	50.0000	ND	95.7	62 - 116			
Dichlorodifluoromethane	48.1600	5.0	0.14	50.0000	ND	96.3	0 - 266			
Ethyl Acetate	389.610	50	7.0	500.000	ND	77.9	16 - 156			
Ethyl Ether	437.050	50	17	500.000	ND	87.4	58 - 127			
Ethyl tert-butyl ether	43.6900	5.0	0.85	50.0000	ND	87.4	23 - 181			
Ethylbenzene	50.9100	5.0	0.43	50.0000	ND	102	43 - 144			
Freon-113	43.3300	5.0	1.3	50.0000	ND	86.7	45 - 148			
Hexachlorobutadiene	50.1100	5.0	0.40	50.0000	ND	100	0 - 149			
Isopropylbenzene	51.6800	5.0	0.79	50.0000	ND	103	38 - 148			
m,p-Xylene	102.420	10	0.98	100.000	ND	102	43 - 146			
Methylene chloride	47.4300	5.0	2.2	50.0000	ND	94.9	51 - 139			
MTBE	40.7700	5.0	0.81	50.0000	ND	81.5	41 - 152			
n-Butylbenzene	52.3400	5.0	1.2	50.0000	ND	105	11 - 163			
n-Propylbenzene	52.4900	5.0	0.78	50.0000	ND	105	31 - 154			
Naphthalene	47.5800	5.0	1.1	50.0000	ND	95.2	0 - 266			

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1G0291 - MSVOA_S (continued)										
Matrix Spike (B1G0291-MS1) - Continued			**Source: 2101556-01**		Prepared: 7/19/2021 Analyzed: 7/19/2021					
o-Xylene	48.9000	5.0	0.67	50.0000	ND	97.8	40 - 142			
sec-Butylbenzene	52.4200	5.0	0.63	50.0000	ND	105	20 - 161			
Styrene	48.7000	5.0	0.45	50.0000	ND	97.4	31 - 157			
tert-Amyl methyl ether	47.0500	5.0	1.1	50.0000	ND	94.1	20 - 179			
tert-Butanol	212.410	100	11	250.000	ND	85.0	6 - 173			
tert-Butylbenzene	51.3600	5.0	0.80	50.0000	ND	103	28 - 155			
Tetrachloroethene	51.3400	5.0	0.31	50.0000	ND	103	39 - 144			
Toluene	49.3900	5.0	0.27	50.0000	ND	98.8	10 - 179			
trans-1,2-Dichloroethene	48.9900	5.0	0.56	50.0000	ND	98.0	60 - 135			
trans-1,3-Dichloropropene	47.9100	5.0	0.59	50.0000	ND	95.8	53 - 131			
Trichloroethene	50.0500	5.0	0.32	50.0000	ND	100	54 - 135			
Trichlorofluoromethane	50.1000	5.0	1.0	50.0000	ND	100	35 - 165			
Vinyl acetate	389.410	50	6.0	500.000	ND	77.9	0 - 180			
Vinyl chloride	43.7200	5.0	0.92	50.0000	ND	87.4	44 - 165			
Surrogate: 1,2-Dichloroethane-d4	*44.00*			*50.0000*		*88.0*	*66 - 200*			
Surrogate: 4-Bromofluorobenzene	*48.42*			*50.0000*		*96.8*	*50 - 146*			
Surrogate: Dibromofluoromethan	*43.39*			*50.0000*		*86.8*	*77 - 159*			
Surrogate: Toluene-d8	*48.64*			*50.0000*		*97.3*	*81 - 128*			
Matrix Spike Dup (B1G0291-MSD1)			**Source: 2101556-01**		Prepared: 7/19/2021 Analyzed: 7/19/2021					
1,1,1,2-Tetrachloroethane	51.0400	5.0	0.52	50.0000	ND	102	50 - 126	7.52	20	
1,1,1-Trichloroethane	49.9100	5.0	0.26	50.0000	ND	99.8	56 - 144	6.18	20	
1,1,2,2-Tetrachloroethane	50.8100	5.0	0.21	50.0000	ND	102	20 - 153	2.23	20	
1,1,2-Trichloroethane	52.3600	5.0	0.40	50.0000	ND	105	0 - 421	4.59	20	
1,1-Dichloroethane	49.0000	5.0	1.4	50.0000	ND	98.0	58 - 131	8.78	20	
1,1-Dichloroethene	53.2300	5.0	1.9	50.0000	ND	106	60 - 143	8.32	20	
1,1-Dichloropropene	53.0200	5.0	0.54	50.0000	ND	106	57 - 144	4.73	20	
1,2,3-Trichloropropane	47.8800	5.0	0.40	50.0000	ND	95.8	52 - 121	1.66	20	
1,2,3-Trichlorobenzene	48.1000	5.0	0.83	50.0000	ND	96.2	0 - 153	0.521	20	
1,2,4-Trichlorobenzene	48.9400	5.0	0.80	50.0000	ND	97.9	0 - 146	0.266	20	
1,2,4-Trimethylbenzene	51.3300	5.0	0.91	50.0000	ND	103	26 - 155	4.12	20	
1,2-Dibromo-3-chloropropane	44.8500	10	1.1	50.0000	ND	89.7	36 - 125	2.60	20	
1,2-Dibromoethane	49.6000	5.0	0.40	50.0000	ND	99.2	56 - 127	5.04	20	
1,2-Dichlorobenzene	51.5000	5.0	0.21	50.0000	ND	103	26 - 136	4.10	20	
1,2-Dichloroethane	51.2300	5.0	0.50	50.0000	ND	102	60 - 118	7.77	20	
1,2-Dichloropropane	51.0800	5.0	0.46	50.0000	ND	102	52 - 124	6.89	20	
1,3,5-Trimethylbenzene	51.7100	5.0	0.70	50.0000	ND	103	31 - 152	4.00	20	
1,3-Dichlorobenzene	51.2800	5.0	0.36	50.0000	ND	103	26 - 140	4.24	20	
1,3-Dichloropropane	50.8900	5.0	0.49	50.0000	ND	102	56 - 118	2.89	20	
1,4-Dichlorobenzene	51.1100	5.0	0.27	50.0000	ND	102	27 - 136	2.76	20	

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1G0291 - MSVOA_S (continued)										
Matrix Spike Dup (B1G0291-MSD1) - Continued			**Source: 2101556-01**		Prepared: 7/19/2021 Analyzed: 7/19/2021					
2,2-Dichloropropane	49.5800	5.0	0.28	50.0000	ND	99.2	50 - 146	8.38	20	
2-Chlorotoluene	51.6600	5.0	0.53	50.0000	ND	103	28 - 149	4.78	20	
4-Chlorotoluene	51.6400	5.0	0.40	50.0000	ND	103	35 - 142	3.65	20	
4-Isopropyltoluene	52.1000	5.0	0.81	50.0000	ND	104	12 - 175	0.574	20	
Benzene	53.3600	5.0	0.36	50.0000	ND	107	61 - 127	4.41	20	
Bromobenzene	50.3500	5.0	0.62	50.0000	ND	101	40 - 129	4.36	20	
Bromochloromethane	49.4400	5.0	0.30	50.0000	ND	98.9	57 - 135	9.45	20	
Bromodichloromethane	51.1800	5.0	0.52	50.0000	ND	102	58 - 119	4.70	20	
Bromoform	48.6000	5.0	1.4	50.0000	ND	97.2	48 - 130	2.39	20	
Bromomethane	53.2900	5.0	2.5	50.0000	ND	107	40 - 183	10.9	20	
Carbon disulfide	36.9100	5.0	0.94	50.0000	ND	73.8	49 - 153	9.42	20	
Carbon tetrachloride	52.9700	5.0	0.73	50.0000	ND	106	49 - 146	2.89	20	
Chlorobenzene	51.9100	5.0	0.42	50.0000	ND	104	46 - 128	7.70	20	
Chloroethane	46.2400	5.0	1.5	50.0000	ND	92.5	37 - 178	8.19	20	
Chloroform	48.9900	5.0	0.24	50.0000	ND	98.0	59 - 129	10.8	20	
Chloromethane	45.1400	5.0	1.1	50.0000	ND	90.3	31 - 168	8.43	20	
cis-1,2-Dichloroethene	53.2300	5.0	0.20	50.0000	ND	106	52 - 137	8.32	20	
cis-1,3-Dichloropropene	50.7300	5.0	0.39	50.0000	ND	101	45 - 130	5.72	20	
Di-isopropyl ether	45.3200	5.0	1.9	50.0000	ND	90.6	55 - 132	8.18	20	
Dibromochloromethane	51.2500	5.0	0.81	50.0000	ND	102	56 - 117	6.18	20	
Dibromomethane	50.8800	5.0	0.23	50.0000	ND	102	62 - 116	6.10	20	
Dichlorodifluoromethane	54.1000	5.0	0.14	50.0000	ND	108	0 - 266	11.6	20	
Ethyl Acetate	408.940	50	7.0	500.000	ND	81.8	16 - 156	4.84	20	
Ethyl Ether	465.720	50	17	500.000	ND	93.1	58 - 127	6.35	20	
Ethyl tert-butyl ether	46.5600	5.0	0.85	50.0000	ND	93.1	23 - 181	6.36	20	
Ethylbenzene	52.7700	5.0	0.43	50.0000	ND	106	43 - 144	3.59	20	
Freon-113	45.4700	5.0	1.3	50.0000	ND	90.9	45 - 148	4.82	20	
Hexachlorobutadiene	48.7500	5.0	0.40	50.0000	ND	97.5	0 - 149	2.75	20	
Isopropylbenzene	53.3200	5.0	0.79	50.0000	ND	107	38 - 148	3.12	20	
m,p-Xylene	107.710	10	0.98	100.000	ND	108	43 - 146	5.03	20	
Methylene chloride	52.1000	5.0	2.2	50.0000	ND	104	51 - 139	9.38	20	
MTBE	43.2900	5.0	0.81	50.0000	ND	86.6	41 - 152	6.00	20	
n-Butylbenzene	51.3200	5.0	1.2	50.0000	ND	103	11 - 163	1.97	20	
n-Propylbenzene	53.6000	5.0	0.78	50.0000	ND	107	31 - 154	2.09	20	
Naphthalene	48.3100	5.0	1.1	50.0000	ND	96.6	0 - 266	1.52	20	
o-Xylene	51.3900	5.0	0.67	50.0000	ND	103	40 - 142	4.97	20	
sec-Butylbenzene	53.7500	5.0	0.63	50.0000	ND	108	20 - 161	2.51	20	
Styrene	51.7100	5.0	0.45	50.0000	ND	103	31 - 157	6.00	20	
tert-Amyl methyl ether	49.0200	5.0	1.1	50.0000	ND	98.0	20 - 179	4.10	20	
tert-Butanol	226.420	100	11	250.000	ND	90.6	6 - 173	6.39	20	

Certificate of Analysis

Stantec		Project Number :	185804671, Olson - La Habra
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	07/26/2021

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/kg)	PQL (ug/kg)	MDL (ug/kg)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1G0291 - MSVOA_S (continued)										
Matrix Spike Dup (B1G0291-MSD1) - Continued			**Source: 2101556-01**		Prepared: 7/19/2021 Analyzed: 7/19/2021					
tert-Butylbenzene	51.9700	5.0	0.80	50.0000	ND	104	28 - 155	1.18	20	
Tetrachloroethene	53.2300	5.0	0.31	50.0000	ND	106	39 - 144	3.61	20	
Toluene	52.5300	5.0	0.27	50.0000	ND	105	10 - 179	6.16	20	
trans-1,2-Dichloroethene	53.2400	5.0	0.56	50.0000	ND	106	60 - 135	8.31	20	
trans-1,3-Dichloropropene	50.7300	5.0	0.59	50.0000	ND	101	53 - 131	5.72	20	
Trichloroethene	53.7400	5.0	0.32	50.0000	ND	107	54 - 135	7.11	20	
Trichlorofluoromethane	57.1400	5.0	1.0	50.0000	ND	114	35 - 165	13.1	20	
Vinyl acetate	409.220	50	6.0	500.000	ND	81.8	0 - 180	4.96	20	
Vinyl chloride	51.0800	5.0	0.92	50.0000	ND	102	44 - 165	15.5	20	
Surrogate: 1,2-Dichloroethane-d4	*46.02*			*50.0000*		*92.0*	*66 - 200*			
Surrogate: 4-Bromofluorobenzene	*48.30*			*50.0000*		*96.6*	*50 - 146*			
Surrogate: Dibromofluoromethan	*46.22*			*50.0000*		*92.4*	*77 - 159*			
Surrogate: Toluene-d8	*48.51*			*50.0000*		*97.0*	*81 - 128*			

Certificate of Analysis

Stantec		Project Number :	185804671, Olson - La Habra
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	07/26/2021

Notes and Definitions

L4	Laboratory Control Sample outside of control limit but within Marginal Exceedance (ME) limit.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

ADVANCED TECHNOLOGY LABORATORIES
3275 Walnut Ave., Signal Hill, CA 90755
Tel: (562) 989-4045 • Fax: (562) 989-4040

CHAIN OF CUSTODY RECORD

Page 1 of 1

Instruction: Complete all shaded areas.

For Laboratory Use Only — ATLCOC Ver:20130715

Method of Transport	Sample Conditions Upon Receipt					
	Condition	Y	N	Condition	Y	N
☐Client ☐ATL	1. CHILLED	☐	☐	5. # OF SAMPLES MATCH COC	☐	☐
☐FedEx ☐OnTrac	2. HEADSPACE (VOA)	☐	☐	6. PRESERVED	☐	☐
☐GSO	3. CONTAINER INTACT	☐	☐	7. COOLER TEMP, deg C: 3.2		
☐Other:	4. SEALED	☐	☐			

CUSTOMER

Company: Stantec Consulting Services, Inc
Address: 735 E. Carneige Dr, Suite 280
City: San Bernardino
State: CA
Zip: 92408
Tel: (909) 556-6516
Fax: (909) 335-6120

SEND REPORT TO:
Attn: Josh Sargent
Email: joshua.sargent@stantec.com
Company: Stantec Consulting Services, Inc
Address: 735 E. Carnegie Dr, Suite 280
City: San Bernardino
State: CA
Zip: 92408

SEND INVOICE TO: ☐same as SEND REPORT TO
Attn:
Email:
Company:
Address:
City:
State:
Zip:

PROJECT SAMPLES

Project Name: Olson - La Habra - W Imperial
Project No.: 185804671
Sampler: Dion Monge
Quote #:
PO #:
Special Instructions/Comments:

QA/QC: ☐Routine ☐Caltrans ☐Legal ☐RWQCB ☐Level IV

Encircle or Write Requested Analysis: Select Analysis, Select Analysis, Select Analysis, Select Analysis, Select Analysis, Select Analysis, Select Analysis, Select Analysis, 8015: GRO, DRO, ORO, 8260b: VOCs (full scan), 6010/7471 Title 22 Metals, Enter Custom Analysis, Enter Custom Analysis, Enter Custom Analysis, Enter Custom Analysis, Enter Custom Analysis, Enter Custom Analysis, Enter Custom Analysis

Encircle Sample Matrix: Select Soil Matrix, Select Solid Matrix, Select Water Matrix, Select Wastewater Matrix, Select Aqueous Matrix, Enter Custom Matrix

Container: # / Type: 1=Tube; 2=VOA; 3=Liter; 4=Pint; 5=Jar; 6=Tedlar; 7 = Canister / Material: 1=Glass; 2=Plastic; 3=Metal / Preservative: 1=HCl; 2=HNO3; 3=H2SO4; 4 = 4C; 5=Zn (Ac)2; 6=NaOH; 7=NAZS2O3

ITEM	Lab No.	Sample ID / Location	Date	Time	8015: GRO, DRO, ORO	8260b: VOCs (full scan)	TAT	REMARKS
1		MW-4-11.5	7-16-21	0845 ~~0925~~	X	X	5	
2		MW-4-16.5	↓	0855				HOLD
3		MW-4-26.5	↓	0925				HOLD
4								
5								
6								
7								
8								
9								
10								

TERMS

1. Sample receiving hours: 7:30 AM to 7:30 PM Monday - Friday; Saturday 8:00 AM to 12:00 PM.
2. Samples submitted AFTER 3:00 PM are considered received the following business day at 8:00 AM.
3. The following turnaround time conditions apply:
   - TAT = 0 : 300% Surcharge SAME BUSINESS DAY if received by 9:00 AM
   - TAT = 1 : 100% Surcharge NEXT BUSINESS DAY (COB 5:00 PM)
   - TAT = 2 : 50% Surcharge 2ND BUSINESS DAY (COB 5:00 PM)
   - TAT = 3 : 30% Surcharge 3RD BUSINESS DAY (COB 5:00 PM)
   - TAT = 4 : 20% Surcharge 4TH BUSINESS DAY (COB 5:00 PM)
   - TAT = 5 : NO SURCHARGE 5th BUSINESS DAY (COB 5:00 PM)
4. Weekend, holiday, after-hours work --- ask for quote.
5. Subcontract TAT is 10 - 15 business days. Projects requiring shorter TATs will incur a surcharge respective to the subcontract lab --- ask for quote.
6. Liquid and solid samples will be disposed of after 45 calendar days from receipt of samples; air samples will be disposed of after 14 calendar days after receipt of samples.
7. Electronic records maintained for five (5) years from report date.
8. Hard copy reports will be disposed of after 45 calendar days from report date.
9. Storage and Report Fees:
   - Liquid & solid samples: Complimentary storage for forty-five (45) calendar days from receipt of samples; $2/sample/month if extended storage or hold is requested.
   - Air samples: Complimentary storage for ten (10) calendar days from receipt of samples; $20/ sample/week if extended storage is requested.
   - Hard copy and regenerated reports/EDDs: $17.50 per hard copy report requested; $50.00 per regenerated/reformatted report; $35 per reprocessed EDD.
10. Rush TCLP/STLC samples: add 2 days to analysis TAT for extraction procedure.
11. Unanalyzed samples will incur a disposal fee of $7 per sample.

As the authorized agent of the company above, I hereby purchase laboratory services from ATL as shown above and hereby guarantee payment as quoted.

Submitter Print Name — Signature

CUSTODY

Relinquished by: (Signature and Printed Name)	Date:	Time:	Received by: (Signature and Printed Name)	Date:	Time:
Dion Monge	7-16-21	16:00	[illegible]	7-16-21	6:00

AMERICAN ENVIRONMENTAL TESTING LABORATORY
2840 North Naomi Street Burbank, CA 91504 • ELAP# 1541 & 2402 • LACSD# 10181
TEL (888) 288-AETL • (818) 845-8200 • www.aetlab.com
A KYZER LABS COMPANY

July 23, 2021

AETL Job No: BCG0209
Received Date: 07/22/2021
Project Number: 2101556

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755-5225
Telephone: (562) 989-4045

Attention: Arianna Campuzano

Project Name: 2101556
Site:

Enclosed please find the results of analyses for samples which were analyzed as specified on the attached chain of custody. If you have any questions concerning this report, please do not hesitate to call.

Checked By:

Hossein Shahrokhnia
Project Manager

Approved By:

Hailley Coleman
Project Manager

Table of Contents

Client Project Name: General Project Number: 2101556
Work Order Number: BCG0209

AMERICAN ENVIRONMENTAL TESTING LABORATORY
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TEL (888) 288-AETL • (818) 845-8200 • www.aetlab.com
A KYZER LABS COMPANY

Advanced Technology Laboratories	AETL Job Number:	BCG0209		
3275 Walnut Avenue	Project Number:	2101556		
Signal Hill, CA 90755-5225	Attention:	Arianna Campuzano		
	Project Name:	2101556	Reported:	07/23/2021 13:22

Sample Condition on Receipt

Cooler ID: Default Cooler **Temperature: 5.0 °C**

Are the COCs Correct	Y		
Labels Legible	Y	Containers In Good Condition	Y
COC/Labels Agree	Y	Samples Preserved Properly	Y
Sufficient Sample Volume	Y	Sufficient Holding Time for all Tests	Y
Sample Labels intact	Y	Received on Ice	Y

ADVANCED TECHNOLOGY LABORATORIES

SUBCONTRACT ORDER

Work Order: 2101556

BCG0209

SENDING LABORATORY:

Advanced Technology Laboratories
3275 Walnut Avenue
Signal Hill, CA 90755
Phone: 562.989.4045
Fax: 562.989.6348
Project Manager: Arianna Campuzano

Sampler: Dion Monge

RECEIVING LABORATORY:

AETL
2840 North Naomi Street
Burbank, CA 91504
Phone :(818) 845-8200
Fax: (818) 845-8840
PO#: SC15825-3day TAT

IMPORTANT : Please include Work Order # and PO # in your invoice.

QC Requirements:

- [x] Routine
- [ ] RWQCB
- [ ] Caltrans
- [ ] Level IV*
- [ ] Legal
- [ ] Other: _____

* All Level IV sample containers (including empty ones) must be returned to ATL 30 days after receipt.

EDD Requirements:

- [x] Standard Excel
- [ ] Geotracker EDF
- [ ] Other:

Analysis	Due	Expires	Sampled	Comments
ATL Lab#: 2101556-01 / mw-4-11.5		**Soil**	**07/16/21 08:45**	BCG0209.01
8015_DRO [Diesel Range Organics]	**07/26/21 17:00**	07/30/21 08:45		

Prepared by: [signature] 7/21/21
Sample Control Technician — Date

Inspected by: [signature] 7/22/21
Sample Control Lead — Date

Approved by: Arianna Campuzano 7/21/21
Dedicated ATL Project Manager — Date

[signature] 7/21 9:12
Released By ATL Sample Control — Date — Time

Tiffany Vera 7-22-21 13:15
Received By Courier — Date — Time

Released By Courier — Date — Time

Received By Subcontract Laboratory — Date — Time
Loreta Ceinogoosian 7/22/21 13:15

Released By — Date — Time

Received By — Date — Time

AMERICAN ENVIRONMENTAL TESTING LABORATORY
2834 NORTH NAOMI ST. BURBANK, CALIFORNIA 91504 ELAP # 1541 LACSD # 10181
TEL (888) 288-AETL (818) 845-8200 FAX (818) 845-8840 www.aetlab.com
A KYZER LABS COMPANY

COOLER RECEIPT FORM

Client Name: ATL
Project Name:
AETL Job Number: BCG0209
Date Received: 7/22/21 Received by: Greta Co
Carrier: ☐ AETL Courier ☑ Client ☐ GLS ☐ FedEx ☐ UPS
☐Others:

Samples were received in: ☑ Cooler (1) ☐ Other (Specify):
Inside temperature of shipping container No 1: 5.0°, No 2: , No 3:
Type of sample containers: ☐ VOA, ☐ Glass bottles, ☑ Wide mouth jars, ☐HDPE bottles, ☐ Metal sleeves, ☐ Others (Specify):
How are samples preserved: ☐ None, ☑ Ice, ☐ Blue Ice, ☐ Dry Ice
☑ None, ☐ HNO_3, ☐ NaOH, ☐ ZnOAc, ☐ HCl, ☐ $Na_2S_2O_3$, ☐ MeOH, ☐ $NaHSO_4$
☐ Other (Specify):

	Yes	No*	N/A	Name, if client was notified.
1. Are the COCs Correct?	✓			
2. Are Sample labels legible & indelible ink?	✓			
3. Do samples match the COC?	✓			
4. Are the required analyses clear?	✓			
5. Is there enough samples for required analysis?	✓			
6. Does cooler or samples have custody seal(s)?			✓	
7. Are sample containers in good condition?	✓			
8. Are samples preserved?	✓			
9. Are samples preserved properly for the intended analysis?	✓			
10. Are the VOAs free of headspace?			✓	
11. Are the jars free of headspace?			✓	
* = see note below. N/A = Not Applicable				

PLEASE NOTE ALL SAMPLES WILL BE DISPOSED OF 30 DAYS AFTER RECEIVING DATE. IF AETL IS INFORMED OTHERWISE, THERE WILL BE A STORAGE CHARGE PER SAMPLE PER MONTH FOR ANY SAMPLE HELD BEYOND 30 DAYS.

***Explain all "No" answers for above questions:**

Advanced Technology Laboratories	AETL Job Number:	BCG0209		
3275 Walnut Avenue	Project Number:	2101556		
Signal Hill, CA 90755-5225	Attention:	Arianna Campuzano		
	Project Name:	2101556	Reported:	07/23/2021 13:22

Case Narrative

The following "Sample Received" Section summarizes the samples received and associated analyses requested as specified on the enclosed chain of custody.

Results as reported by the laboratory apply only to 1) the items tested, 2) as the samples are received, and 3) the accuracy of information provided. Information supplied by the customer that may affect validity of results and may be contained in this report include Project Name/Number, Site Location, Sample Locations, Sampling Dates/Times, Sample ID, Sample Preservation, Sample Matrix, Sample Properties, Field Blanks, Field Duplicates, Field Spikes, and Site Historical Data.

Accreditation applies only to the test methods listed on each scope of accreditation held by the laboratory; certifications held by the laboratory may not apply to results supplied in this report.

Unless otherwise noted, all results of soil and solid samples are based on wet weight.

No analytical non-conformances were encountered.

AMERICAN ENVIRONMENTAL TESTING LABORATORY
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Advanced Technology Laboratories	AETL Job Number:	BCG0209		
3275 Walnut Avenue	Project Number:	2101556		
Signal Hill, CA 90755-5225	Attention:	Arianna Campuzano		
	Project Name:	2101556	Reported:	07/23/2021 13:22

Samples Received

AETL received the following samples on 07/22/2021 with the following specifications

Client ID		Sample Date
mw-4-11.5		07/16/2021 8:45
Lab ID	**Matrix**	**Quantity of Containers**
BCG0209-01	Soil	1

Method	Analyte	Units	TAT
EPA 8015B TPH DRO/ORO	TPH as Diesel and Oil Range Organics using GCFID	mg/kg	3

Total Number of Samples received: 1

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Advanced Technology Laboratories	AETL Job Number:	BCG0209		
3275 Walnut Avenue	Project Number:	2101556		
Signal Hill, CA 90755-5225	Attention:	Arianna Campuzano		
	Project Name:	2101556	Reported:	07/23/2021 13:22

Positive Hits Summary

Lab ID	Client ID				Sampled
Method	Analyte	Result	Qualifier	Unit	Analyzed

No positive results reported

AMERICAN ENVIRONMENTAL TESTING LABORATORY
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A KYZER LABS COMPANY

Advanced Technology Laboratories	AETL Job Number:	BCG0209			
3275 Walnut Avenue	Project Number:	2101556			
Signal Hill, CA 90755-5225	Attention:	Arianna Campuzano			
	Project Name:	2101556	Reported:	07/23/2021 13:22	

Analytical Results

Client ID: mw-4-11.5

Lab ID: BCG0209-01 (Soil) **Sampled: 07/16/21 8:45**

Analyte	Result	Qualifier	Dilution	MDL	RL	Units	Prepared Date/Time	Analyzed Date/Time	Batch	Analyst Initials	Prep. Method
TPH Diesel Range											
Method: EPA 8015B TPH DRO/ORO											
TPH as Diesel Range Organics (C10-C28)	ND		1	1.62	5.00	mg/kg	07/22/21 10:00	07/23/21 01:02	B1G0473	TTN	3550B
TPH as Oil Range Organics (C28-C40)	ND		1	1.62	5.00	mg/kg	07/22/21 10:00	07/23/21 01:02	B1G0473	TTN	3550B
	Recovery				Acceptance Criteria						
Surrogate: Chlorobenzene	*116%*				*75-125*		07/22/21 10:00	*07/23/21 01:02*	B1G0473	*TTN*	3550B

Advanced Technology Laboratories	AETL Job Number:	BCG0209			
3275 Walnut Avenue	Project Number:	2101556			
Signal Hill, CA 90755-5225	Attention:	Arianna Campuzano			
	Project Name:	2101556	Reported:	07/23/2021 13:22	

Quality Control Results

TPH Diesel Range (EPA 8015B TPH DRO/ORO)

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: B1G0473 - 3550B					**Prepared: 07/22/2021 10:00**						
Method Blank (B1G0473-BLK1)					**Analyzed: 07/22/2021 12:03**						
TPH as Diesel Range Organics (C10-C28)	ND	1.62	5.00	mg/kg							
TPH as Oil Range Organics (C28-C40)	ND	1.62	5.00	mg/kg							
Surrogate: Chlorobenzene	*105*			*mg/kg*	*100*		*105*	*75-125*			

Advanced Technology Laboratories	AETL Job Number:	BCG0209			
3275 Walnut Avenue	Project Number:	2101556			
Signal Hill, CA 90755-5225	Attention:	Arianna Campuzano			
	Project Name:	2101556	Reported:	07/23/2021 13:22	

Quality Control Results

TPH Diesel Range (EPA 8015B TPH DRO/ORO)

Analyte	Result	MDL	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch: B1G0473 - 3550B (Continued)					**Prepared: 07/22/2021 10:00**						
Matrix Spike (B1G0473-MS1)		**Source: BCG0195-01**			**Analyzed: 07/22/2021 17:29**						
TPH as Diesel (C13-C22)	518	1.62	5.00	mg/kg	500	ND	104	75-125			
Surrogate: Chlorobenzene	*109*			*mg/kg*	*100*		*109*	*75-125*			
Matrix Spike Dup (B1G0473-MSD1)		**Source: BCG0195-01**			**Analyzed: 07/22/2021 18:12**						
TPH as Diesel (C13-C22)	510	1.62	5.00	mg/kg	500	ND	102	75-125	1.50	20	
Surrogate: Chlorobenzene	*110*			*mg/kg*	*100*		*110*	*75-125*			

Advanced Technology Laboratories	AETL Job Number:	BCG0209			
3275 Walnut Avenue	Project Number:	2101556			
Signal Hill, CA 90755-5225	Attention:	Arianna Campuzano			
	Project Name:	2101556	Reported:	07/23/2021 13:22	

Qualifiers and Definitions

Item	Definitions
% wt	Percent Weight
%REC	Percent Recovery
°F	Degrees Fahrenheit
AETL	American Environmental Testing Laboratory, LLC
C	Carbon
CARB	California Air Resources Board
COC	Chain of Custody
CRM	Certified Reference Material
DPD	Department of Planning and Development
DRO	Diesel Range Organics
Dup	Duplicate
ELAP	Environmental Laboratory Accreditation Program
EPA	Environmental Protection Agency
GC/FID	Gas Chromatography Flame Ionization Detection
GRO	Gasoline Range Organics
HC	Hydrocarbon
HEM	Hexane Extractable Material
HMU	Hazardous Material Unit
ICP/MS	Inductively Coupled Plasma Mass Spectrometry
LACSD	Los Angeles County Sanitation Districts
LCS	Laboratory Control Sample - A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes.
LCSD	Laboratory Control Sample Duplicate - A replicate of Laboratory Control Sample.
LOQ	Limit of Quantitation
MDL	Method Detection Limit - The minimum measured concentration of a substance that can be reported with 99% confidence. MDL is statistically derived number which is specific for each instrument, each method and each compound.
mg/kg	Miligrams per Kilogram
mg/L	Miligrams per Liter
ml/L/hr	Milliliter per Liter per Hour
MRO	Motor oil Range Organics
MS	Matrix Spike - A sample prepared, taken through all sample preparation and analytical steps of the procedure and analyzed as an independent test results.
MSD	Matrix Spike Duplicate - A replicate of Matrix Spike Sample.
N	No
ND	Analyte is not detected below Method Detection Limit.
ng/m3	Nanograms per cubic meter
NIOSH	National Institute for Occupational Safety and Health

Advanced Technology Laboratories	AETL Job Number:	BCG0209			
3275 Walnut Avenue	Project Number:	2101556			
Signal Hill, CA 90755-5225	Attention:	Arianna Campuzano			
	Project Name:	2101556	Reported:	07/23/2021 13:22	

nL/L	Nanoliters per Liter
NTU	Nephelometric Turbidity Units
Ohm-cm	Ohms per centimeter
ORO	Oil Range Organics
OSHA	Occupational Safety and Health Administration
PCB	Polychlorinated Biphenyl
PSU	Practical Salinity Unit
RL	Reporting Limit - The lowest concentration at which an analyte can be detected in a sample and its concentration can be reported with a specified degree of confidence, accuracy and precision. For usage at AETL, RL is equivalant to LOQ.
RPD	Relative Percent Difference
SIM	Selective Ion Monitoring
SM	Standard Method
SPLP	Synthetic Precipitation Leaching Procedure
STLC	Soluble Threshold Limit Concentration
TCLP	Toxicity Characteristic Leaching Procedure
TPH	Total Petroleum Hydrocarbons
TTLC	Total Threshold Limit Concentrations
ug/kg	Micrograms per Kilogram
ug/L	Micrograms per Liter
ug/m3	Micrograms per cubic meter
WET	Waste Extraction Test
Y	Yes
ZHE	Zero Headspace Extraction

August 03, 2021

Joshua Sargent
Stantec
735 E. Carnegie Drive, Suite 280
San Bernardino, CA 92408
Tel: (909) 335-6116
Fax:(909) 335-6120

ELAP No.: 1838
CSDLAC No.: 10196
ORELAP No.: CA300003

Re: ATL Work Order Number : 2101620
Client Reference : [none]

Enclosed are the results for sample(s) received on July 27, 2021 by Advanced Technology Laboratories. The sample(s) are tested for the parameters as indicated on the enclosed chain of custody in accordance with applicable laboratory certifications. The laboratory results contained in this report specifically pertains to the sample(s) submitted.

Thank you for the opportunity to serve the needs of your company. If you have any questions, please feel free to contact me or your Project Manager.

Sincerely,

For

Amy Leung
Laboratory Director

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

SUMMARY OF SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1-20210726	2101620-01	Water	7/26/21 15:30	7/27/21 16:35
MW-2-20210726	2101620-02	Water	7/26/21 13:10	7/27/21 16:35
MW-3-20210726	2101620-03	Water	7/26/21 11:34	7/27/21 16:35
MW-4-20210726	2101620-04	Water	7/26/21 14:05	7/27/21 16:35
MW-5-20210726	2101620-05	Water	7/26/21 10:20	7/27/21 16:35
BD01-20210726	2101620-06	Water	7/26/21 0:00	7/27/21 16:35
Trip Blank	2101620-07	Water	7/26/21 0:00	7/27/21 16:35

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: MW-1-20210726

Lab ID: 2101620-01

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: ER

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	1	B1G0432	07/27/2021	07/27/21 14:40	
Surrogate: 4-Bromofluorobenzene	*98.9 %*	*63.08 - 129.27*		B1G0432	07/27/2021	*07/27/21 14:40*	

Diesel Range Organics by EPA 8015B

Analyst: TM

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	0.05	1	B1G0524	07/31/2021	07/31/21 15:03	
ORO	ND	0.05	1	B1G0524	07/31/2021	07/31/21 15:03	
Surrogate: p-Terphenyl	*64.0 %*	*18 - 139*		B1G0524	07/31/2021	*07/31/21 15:03*	

Volatile Organic Compounds by EPA 8260B

Analyst: KN

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
1,1,1-Trichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
1,1,2-Trichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
1,1-Dichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
1,1-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
1,1-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
1,2,3-Trichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
1,2,3-Trichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
1,2,4-Trichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
1,2,4-Trimethylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
1,2-Dibromoethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
1,2-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
1,2-Dichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
1,2-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
1,3,5-Trimethylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
1,3-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
1,3-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
1,4-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
2,2-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: MW-1-20210726

Lab ID: 2101620-01

Volatile Organic Compounds by EPA 8260B **Analyst: KN**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
2-Chlorotoluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
4-Chlorotoluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
4-Isopropyltoluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Benzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Bromobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Bromochloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Bromodichloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Bromoform	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Bromomethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Carbon disulfide	ND	1.0	1	B1G0433	07/27/2021	07/27/21 14:37	
Carbon tetrachloride	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Chlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Chloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Chloroform	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Chloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
cis-1,2-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
cis-1,3-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Di-isopropyl ether	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Dibromochloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Dibromomethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Dichlorodifluoromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Ethyl Acetate	ND	10	1	B1G0433	07/27/2021	07/27/21 14:37	
Ethyl Ether	ND	10	1	B1G0433	07/27/2021	07/27/21 14:37	
Ethyl tert-butyl ether	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Ethylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Freon-113	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Hexachlorobutadiene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Isopropylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
m,p-Xylene	ND	1.0	1	B1G0433	07/27/2021	07/27/21 14:37	
Methylene chloride	ND	1.0	1	B1G0433	07/27/2021	07/27/21 14:37	
MTBE	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
n-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
n-Propylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Naphthalene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
o-Xylene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
sec-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: MW-1-20210726

Lab ID: 2101620-01

Volatile Organic Compounds by EPA 8260B **Analyst: KN**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Styrene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
tert-Amyl methyl ether	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
tert-Butanol	ND	10	1	B1G0433	07/27/2021	07/27/21 14:37	
tert-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Tetrachloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Toluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
trans-1,2-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
trans-1,3-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Trichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Trichlorofluoromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Vinyl acetate	ND	10	1	B1G0433	07/27/2021	07/27/21 14:37	
Vinyl chloride	ND	0.50	1	B1G0433	07/27/2021	07/27/21 14:37	
Surrogate: 1,2-Dichloroethane-d4	*91.7 %*	*64 - 155*		B1G0433	07/27/2021	*07/27/21 14:37*	
Surrogate: 4-Bromofluorobenzene	*92.4 %*	*73 - 124*		B1G0433	07/27/2021	*07/27/21 14:37*	
Surrogate: Dibromofluoromethane	*98.5 %*	*78 - 129*		B1G0433	07/27/2021	*07/27/21 14:37*	
Surrogate: Toluene-d8	*100 %*	*84 - 117*		B1G0433	07/27/2021	*07/27/21 14:37*	

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: MW-2-20210726

Lab ID: 2101620-02

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: ER

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	1	B1G0432	07/27/2021	07/27/21 15:06	
Surrogate: 4-Bromofluorobenzene	*96.7 %*	*63.08 - 129.27*		B1G0432	07/27/2021	*07/27/21 15:06*	

Diesel Range Organics by EPA 8015B

Analyst: TM

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	0.05	1	B1G0524	07/31/2021	07/31/21 15:31	
ORO	ND	0.05	1	B1G0524	07/31/2021	07/31/21 15:31	
Surrogate: p-Terphenyl	*88.9 %*	*18 - 139*		B1G0524	07/31/2021	*07/31/21 15:31*	

Volatile Organic Compounds by EPA 8260B

Analyst: KN

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
1,1,1-Trichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
1,1,2-Trichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
1,1-Dichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
1,1-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
1,1-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
1,2,3-Trichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
1,2,3-Trichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
1,2,4-Trichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
1,2,4-Trimethylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
1,2-Dibromoethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
1,2-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
1,2-Dichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
1,2-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
1,3,5-Trimethylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
1,3-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
1,3-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
1,4-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
2,2-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: MW-2-20210726

Lab ID: 2101620-02

Volatile Organic Compounds by EPA 8260B **Analyst: KN**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
2-Chlorotoluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
4-Chlorotoluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
4-Isopropyltoluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Benzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Bromobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Bromochloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Bromodichloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Bromoform	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Bromomethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Carbon disulfide	ND	1.0	1	B1G0433	07/27/2021	07/27/21 15:02	
Carbon tetrachloride	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Chlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Chloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Chloroform	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Chloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
cis-1,2-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
cis-1,3-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Di-isopropyl ether	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Dibromochloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Dibromomethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Dichlorodifluoromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Ethyl Acetate	ND	10	1	B1G0433	07/27/2021	07/27/21 15:02	
Ethyl Ether	ND	10	1	B1G0433	07/27/2021	07/27/21 15:02	
Ethyl tert-butyl ether	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Ethylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Freon-113	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Hexachlorobutadiene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Isopropylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
m,p-Xylene	ND	1.0	1	B1G0433	07/27/2021	07/27/21 15:02	
Methylene chloride	ND	1.0	1	B1G0433	07/27/2021	07/27/21 15:02	
MTBE	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
n-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
n-Propylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Naphthalene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
o-Xylene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
sec-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: MW-2-20210726

Lab ID: 2101620-02

Volatile Organic Compounds by EPA 8260B **Analyst: KN**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Styrene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
tert-Amyl methyl ether	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
tert-Butanol	ND	10	1	B1G0433	07/27/2021	07/27/21 15:02	
tert-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Tetrachloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Toluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
trans-1,2-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
trans-1,3-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Trichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Trichlorofluoromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Vinyl acetate	ND	10	1	B1G0433	07/27/2021	07/27/21 15:02	
Vinyl chloride	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:02	
Surrogate: 1,2-Dichloroethane-d4	*93.2 %*	*64 - 155*		B1G0433	07/27/2021	*07/27/21 15:02*	
Surrogate: 4-Bromofluorobenzene	*87.9 %*	*73 - 124*		B1G0433	07/27/2021	*07/27/21 15:02*	
Surrogate: Dibromofluoromethane	*96.5 %*	*78 - 129*		B1G0433	07/27/2021	*07/27/21 15:02*	
Surrogate: Toluene-d8	*102 %*	*84 - 117*		B1G0433	07/27/2021	*07/27/21 15:02*	

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: MW-3-20210726

Lab ID: 2101620-03

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: ER

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	1	B1G0432	07/27/2021	07/27/21 15:30	
Surrogate: 4-Bromofluorobenzene	*101 %*	*63.08 - 129.27*		B1G0432	07/27/2021	*07/27/21 15:30*	

Diesel Range Organics by EPA 8015B

Analyst: TM

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	0.05	1	B1G0524	07/31/2021	07/31/21 15:59	
ORO	ND	0.05	1	B1G0524	07/31/2021	07/31/21 15:59	
Surrogate: p-Terphenyl	*66.7 %*	*18 - 139*		B1G0524	07/31/2021	*07/31/21 15:59*	

Volatile Organic Compounds by EPA 8260B

Analyst: KN

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
1,1,1-Trichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
1,1,2-Trichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
1,1-Dichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
1,1-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
1,1-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
1,2,3-Trichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
1,2,3-Trichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
1,2,4-Trichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
1,2,4-Trimethylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
1,2-Dibromoethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
1,2-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
1,2-Dichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
1,2-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
1,3,5-Trimethylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
1,3-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
1,3-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
1,4-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
2,2-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: MW-3-20210726

Lab ID: 2101620-03

Volatile Organic Compounds by EPA 8260B **Analyst: KN**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
2-Chlorotoluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
4-Chlorotoluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
4-Isopropyltoluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Benzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Bromobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Bromochloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Bromodichloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Bromoform	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Bromomethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Carbon disulfide	ND	1.0	1	B1G0433	07/27/2021	07/27/21 15:27	
Carbon tetrachloride	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Chlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Chloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Chloroform	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Chloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
cis-1,2-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
cis-1,3-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Di-isopropyl ether	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Dibromochloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Dibromomethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Dichlorodifluoromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Ethyl Acetate	ND	10	1	B1G0433	07/27/2021	07/27/21 15:27	
Ethyl Ether	ND	10	1	B1G0433	07/27/2021	07/27/21 15:27	
Ethyl tert-butyl ether	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Ethylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Freon-113	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Hexachlorobutadiene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Isopropylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
m,p-Xylene	ND	1.0	1	B1G0433	07/27/2021	07/27/21 15:27	
Methylene chloride	ND	1.0	1	B1G0433	07/27/2021	07/27/21 15:27	
MTBE	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
n-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
n-Propylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Naphthalene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
o-Xylene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
sec-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: MW-3-20210726

Lab ID: 2101620-03

Volatile Organic Compounds by EPA 8260B **Analyst: KN**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Styrene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
tert-Amyl methyl ether	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
tert-Butanol	ND	10	1	B1G0433	07/27/2021	07/27/21 15:27	
tert-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Tetrachloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Toluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
trans-1,2-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
trans-1,3-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Trichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Trichlorofluoromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Vinyl acetate	ND	10	1	B1G0433	07/27/2021	07/27/21 15:27	
Vinyl chloride	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:27	
Surrogate: 1,2-Dichloroethane-d4	*92.4 %*	*64 - 155*		B1G0433	07/27/2021	*07/27/21 15:27*	
Surrogate: 4-Bromofluorobenzene	*91.1 %*	*73 - 124*		B1G0433	07/27/2021	*07/27/21 15:27*	
Surrogate: Dibromofluoromethane	*99.1 %*	*78 - 129*		B1G0433	07/27/2021	*07/27/21 15:27*	
Surrogate: Toluene-d8	*97.8 %*	*84 - 117*		B1G0433	07/27/2021	*07/27/21 15:27*	

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: MW-4-20210726

Lab ID: 2101620-04

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: ER

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	**0.34**	0.05	1	B1G0432	07/27/2021	07/27/21 15:55	
Surrogate: 4-Bromofluorobenzene	*97.0 %*	*63.08 - 129.27*		B1G0432	07/27/2021	*07/27/21 15:55*	

Diesel Range Organics by EPA 8015B

Analyst: TM

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	**0.34**	0.05	1	B1G0524	07/31/2021	07/31/21 16:27	
ORO	ND	0.05	1	B1G0524	07/31/2021	07/31/21 16:27	
Surrogate: p-Terphenyl	*71.9 %*	*18 - 139*		B1G0524	07/31/2021	*07/31/21 16:27*	

Volatile Organic Compounds by EPA 8260B

Analyst: KN

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
1,1,1-Trichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
1,1,2-Trichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
1,1-Dichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
1,1-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
1,1-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
1,2,3-Trichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
1,2,3-Trichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
1,2,4-Trichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
1,2,4-Trimethylbenzene	**1.6**	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
1,2-Dibromoethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
1,2-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
1,2-Dichloroethane	**0.70**	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
1,2-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
1,3,5-Trimethylbenzene	**1.9**	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
1,3-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
1,3-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
1,4-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
2,2-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: MW-4-20210726

Lab ID: 2101620-04

Volatile Organic Compounds by EPA 8260B **Analyst: KN**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
2-Chlorotoluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
4-Chlorotoluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
4-Isopropyltoluene	**1.6**	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Benzene	**8.5**	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Bromobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Bromochloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Bromodichloromethane	**0.77**	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Bromoform	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Bromomethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Carbon disulfide	ND	1.0	1	B1G0433	07/27/2021	07/27/21 15:52	
Carbon tetrachloride	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Chlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Chloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Chloroform	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Chloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
cis-1,2-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
cis-1,3-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Di-isopropyl ether	**1.0**	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Dibromochloromethane	**0.72**	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Dibromomethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Dichlorodifluoromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Ethyl Acetate	ND	10	1	B1G0433	07/27/2021	07/27/21 15:52	
Ethyl Ether	ND	10	1	B1G0433	07/27/2021	07/27/21 15:52	
Ethyl tert-butyl ether	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Ethylbenzene	**0.60**	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Freon-113	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Hexachlorobutadiene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Isopropylbenzene	**1.4**	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
m,p-Xylene	**4.1**	1.0	1	B1G0433	07/27/2021	07/27/21 15:52	
Methylene chloride	ND	1.0	1	B1G0433	07/27/2021	07/27/21 15:52	
MTBE	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
n-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
n-Propylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Naphthalene	**3.7**	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
o-Xylene	**1.9**	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
sec-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: MW-4-20210726

Lab ID: 2101620-04

Volatile Organic Compounds by EPA 8260B **Analyst: KN**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Styrene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
tert-Amyl methyl ether	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
tert-Butanol	**13**	10	1	B1G0433	07/27/2021	07/27/21 15:52	
tert-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Tetrachloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Toluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
trans-1,2-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
trans-1,3-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Trichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Trichlorofluoromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Vinyl acetate	ND	10	1	B1G0433	07/27/2021	07/27/21 15:52	
Vinyl chloride	ND	0.50	1	B1G0433	07/27/2021	07/27/21 15:52	
Surrogate: 1,2-Dichloroethane-d4	*95.6 %*	*64 - 155*		B1G0433	07/27/2021	*07/27/21 15:52*	
Surrogate: 4-Bromofluorobenzene	*102 %*	*73 - 124*		B1G0433	07/27/2021	*07/27/21 15:52*	
Surrogate: Dibromofluoromethane	*98.5 %*	*78 - 129*		B1G0433	07/27/2021	*07/27/21 15:52*	
Surrogate: Toluene-d8	*104 %*	*84 - 117*		B1G0433	07/27/2021	*07/27/21 15:52*	

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: MW-5-20210726

Lab ID: 2101620-05

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: ER

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	1	B1G0432	07/27/2021	07/27/21 16:20	
Surrogate: 4-Bromofluorobenzene	*98.1 %*	*63.08 - 129.27*		B1G0432	07/27/2021	*07/27/21 16:20*	

Diesel Range Organics by EPA 8015B

Analyst: TM

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	0.05	1	B1G0524	07/31/2021	07/31/21 16:55	
ORO	ND	0.05	1	B1G0524	07/31/2021	07/31/21 16:55	
Surrogate: p-Terphenyl	*66.4 %*	*18 - 139*		B1G0524	07/31/2021	*07/31/21 16:55*	

Volatile Organic Compounds by EPA 8260B

Analyst: KN

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
1,1,1-Trichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
1,1,2-Trichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
1,1-Dichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
1,1-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
1,1-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
1,2,3-Trichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
1,2,3-Trichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
1,2,4-Trichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
1,2,4-Trimethylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
1,2-Dibromoethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
1,2-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
1,2-Dichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
1,2-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
1,3,5-Trimethylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
1,3-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
1,3-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
1,4-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
2,2-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: MW-5-20210726

Lab ID: 2101620-05

Volatile Organic Compounds by EPA 8260B **Analyst: KN**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
2-Chlorotoluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
4-Chlorotoluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
4-Isopropyltoluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Benzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Bromobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Bromochloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Bromodichloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Bromoform	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Bromomethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Carbon disulfide	ND	1.0	1	B1G0433	07/27/2021	07/27/21 16:17	
Carbon tetrachloride	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Chlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Chloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Chloroform	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Chloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
cis-1,2-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
cis-1,3-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Di-isopropyl ether	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Dibromochloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Dibromomethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Dichlorodifluoromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Ethyl Acetate	ND	10	1	B1G0433	07/27/2021	07/27/21 16:17	
Ethyl Ether	ND	10	1	B1G0433	07/27/2021	07/27/21 16:17	
Ethyl tert-butyl ether	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Ethylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Freon-113	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Hexachlorobutadiene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Isopropylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
m,p-Xylene	ND	1.0	1	B1G0433	07/27/2021	07/27/21 16:17	
Methylene chloride	ND	1.0	1	B1G0433	07/27/2021	07/27/21 16:17	
MTBE	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
n-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
n-Propylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Naphthalene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
o-Xylene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
sec-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: MW-5-20210726

Lab ID: 2101620-05

Volatile Organic Compounds by EPA 8260B **Analyst: KN**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Styrene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
tert-Amyl methyl ether	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
tert-Butanol	ND	10	1	B1G0433	07/27/2021	07/27/21 16:17	
tert-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Tetrachloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Toluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
trans-1,2-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
trans-1,3-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Trichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Trichlorofluoromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Vinyl acetate	ND	10	1	B1G0433	07/27/2021	07/27/21 16:17	
Vinyl chloride	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:17	
Surrogate: 1,2-Dichloroethane-d4	*92.0 %*	*64 - 155*		B1G0433	07/27/2021	*07/27/21 16:17*	
Surrogate: 4-Bromofluorobenzene	*94.6 %*	*73 - 124*		B1G0433	07/27/2021	*07/27/21 16:17*	
Surrogate: Dibromofluoromethane	*96.7 %*	*78 - 129*		B1G0433	07/27/2021	*07/27/21 16:17*	
Surrogate: Toluene-d8	*108 %*	*84 - 117*		B1G0433	07/27/2021	*07/27/21 16:17*	

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: BD01-20210726

Lab ID: 2101620-06

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: ER

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	1	B1G0432	07/27/2021	07/27/21 16:45	
Surrogate: 4-Bromofluorobenzene	*96.7 %*	*63.08 - 129.27*		B1G0432	07/27/2021	*07/27/21 16:45*	

Diesel Range Organics by EPA 8015B

Analyst: TM

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
DRO	ND	0.05	1	B1G0524	07/31/2021	07/31/21 17:23	
ORO	ND	0.05	1	B1G0524	07/31/2021	07/31/21 17:23	
Surrogate: p-Terphenyl	*67.0 %*	*18 - 139*		B1G0524	07/31/2021	*07/31/21 17:23*	

Volatile Organic Compounds by EPA 8260B

Analyst: KN

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
1,1,1-Trichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
1,1,2-Trichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
1,1-Dichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
1,1-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
1,1-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
1,2,3-Trichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
1,2,3-Trichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
1,2,4-Trichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
1,2,4-Trimethylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
1,2-Dibromoethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
1,2-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
1,2-Dichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
1,2-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
1,3,5-Trimethylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
1,3-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
1,3-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
1,4-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
2,2-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: BD01-20210726

Lab ID: 2101620-06

Volatile Organic Compounds by EPA 8260B **Analyst: KN**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
2-Chlorotoluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
4-Chlorotoluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
4-Isopropyltoluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Benzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Bromobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Bromochloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Bromodichloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Bromoform	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Bromomethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Carbon disulfide	ND	1.0	1	B1G0433	07/27/2021	07/27/21 16:42	
Carbon tetrachloride	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Chlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Chloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Chloroform	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Chloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
cis-1,2-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
cis-1,3-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Di-isopropyl ether	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Dibromochloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Dibromomethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Dichlorodifluoromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Ethyl Acetate	ND	10	1	B1G0433	07/27/2021	07/27/21 16:42	
Ethyl Ether	ND	10	1	B1G0433	07/27/2021	07/27/21 16:42	
Ethyl tert-butyl ether	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Ethylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Freon-113	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Hexachlorobutadiene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Isopropylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
m,p-Xylene	ND	1.0	1	B1G0433	07/27/2021	07/27/21 16:42	
Methylene chloride	ND	1.0	1	B1G0433	07/27/2021	07/27/21 16:42	
MTBE	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
n-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
n-Propylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Naphthalene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
o-Xylene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
sec-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: BD01-20210726

Lab ID: 2101620-06

Volatile Organic Compounds by EPA 8260B **Analyst: KN**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Styrene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
tert-Amyl methyl ether	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
tert-Butanol	ND	10	1	B1G0433	07/27/2021	07/27/21 16:42	
tert-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Tetrachloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Toluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
trans-1,2-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
trans-1,3-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Trichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Trichlorofluoromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Vinyl acetate	ND	10	1	B1G0433	07/27/2021	07/27/21 16:42	
Vinyl chloride	ND	0.50	1	B1G0433	07/27/2021	07/27/21 16:42	
Surrogate: 1,2-Dichloroethane-d4	*92.3 %*	*64 - 155*		B1G0433	07/27/2021	*07/27/21 16:42*	
Surrogate: 4-Bromofluorobenzene	*90.2 %*	*73 - 124*		B1G0433	07/27/2021	*07/27/21 16:42*	
Surrogate: Dibromofluoromethane	*96.5 %*	*78 - 129*		B1G0433	07/27/2021	*07/27/21 16:42*	
Surrogate: Toluene-d8	*105 %*	*84 - 117*		B1G0433	07/27/2021	*07/27/21 16:42*	

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: Trip Blank

Lab ID: 2101620-07

Gasoline Range Organics by EPA 8015B (Modified)

Analyst: ER

Analyte	Result (mg/L)	PQL (mg/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Gasoline Range Organics	ND	0.05	1	B1G0432	07/27/2021	07/27/21 17:10	
Surrogate: 4-Bromofluorobenzene	*131 %*	*63.08 - 129.27*		B1G0432	07/27/2021	*07/27/21 17:10*	D9

Volatile Organic Compounds by EPA 8260B

Analyst: KN

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
1,1,1,2-Tetrachloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
1,1,1-Trichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
1,1,2,2-Tetrachloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
1,1,2-Trichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
1,1-Dichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
1,1-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
1,1-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
1,2,3-Trichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
1,2,3-Trichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
1,2,4-Trichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
1,2,4-Trimethylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
1,2-Dibromo-3-chloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
1,2-Dibromoethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
1,2-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
1,2-Dichloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
1,2-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
1,3,5-Trimethylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
1,3-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
1,3-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
1,4-Dichlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
2,2-Dichloropropane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
2-Chlorotoluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
4-Chlorotoluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
4-Isopropyltoluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Benzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Bromobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Bromochloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Bromodichloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Bromoform	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: Trip Blank

Lab ID: 2101620-07

Volatile Organic Compounds by EPA 8260B **Analyst: KN**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Bromomethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Carbon disulfide	ND	1.0	1	B1G0433	07/27/2021	07/27/21 13:22	
Carbon tetrachloride	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Chlorobenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Chloroethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Chloroform	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Chloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
cis-1,2-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
cis-1,3-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Di-isopropyl ether	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Dibromochloromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Dibromomethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Dichlorodifluoromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Ethyl Acetate	ND	10	1	B1G0433	07/27/2021	07/27/21 13:22	
Ethyl Ether	ND	10	1	B1G0433	07/27/2021	07/27/21 13:22	
Ethyl tert-butyl ether	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Ethylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Freon-113	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Hexachlorobutadiene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Isopropylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
m,p-Xylene	ND	1.0	1	B1G0433	07/27/2021	07/27/21 13:22	
Methylene chloride	ND	1.0	1	B1G0433	07/27/2021	07/27/21 13:22	
MTBE	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
n-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
n-Propylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Naphthalene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
o-Xylene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
sec-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Styrene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
tert-Amyl methyl ether	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
tert-Butanol	ND	10	1	B1G0433	07/27/2021	07/27/21 13:22	
tert-Butylbenzene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Tetrachloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Toluene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
trans-1,2-Dichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
trans-1,3-Dichloropropene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	

Certificate of Analysis

Stantec		Project Number :	-
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San Bernardino , CA 92408		Reported :	08/03/2021

Client Sample ID: Trip Blank

Lab ID: 2101620-07

Volatile Organic Compounds by EPA 8260B **Analyst: KN**

Analyte	Result (ug/L)	PQL (ug/L)	Dilution	Batch	Prepared	Date/Time Analyzed	Notes
Trichloroethene	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Trichlorofluoromethane	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Vinyl acetate	ND	10	1	B1G0433	07/27/2021	07/27/21 13:22	
Vinyl chloride	ND	0.50	1	B1G0433	07/27/2021	07/27/21 13:22	
Surrogate: 1,2-Dichloroethane-d4	*92.5 %*	*64 - 155*		B1G0433	07/27/2021	*07/27/21 13:22*	
Surrogate: 4-Bromofluorobenzene	*90.2 %*	*73 - 124*		B1G0433	07/27/2021	*07/27/21 13:22*	
Surrogate: Dibromofluoromethane	*96.6 %*	*78 - 129*		B1G0433	07/27/2021	*07/27/21 13:22*	
Surrogate: Toluene-d8	*98.0 %*	*84 - 117*		B1G0433	07/27/2021	*07/27/21 13:22*	

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San Bernardino , CA 92408		Reported :	08/03/2021

QUALITY CONTROL SECTION

Gasoline Range Organics by EPA 8015B (Modified) - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1G0432 - GCVOA_W										
Blank (B1G0432-BLK1)					Prepared: 7/27/2021 Analyzed: 7/27/2021					
Gasoline Range Organics	ND	0.05	0.05							
Surrogate: 4-Bromofluorobenzene	*0.3644*			*0.400000*		*91.1*	*53.08 - 129.27*			
LCS (B1G0432-BS1)					Prepared: 7/27/2021 Analyzed: 7/27/2021					
Gasoline Range Organics	0.879000	0.05	0.05	1.00000		87.9	73.27 - 109.13			
Surrogate: 4-Bromofluorobenzene	*0.3829*			*0.400000*		*95.7*	*53.08 - 129.27*			
LCS Dup (B1G0432-BSD1)					Prepared: 7/27/2021 Analyzed: 7/27/2021					
Gasoline Range Organics	0.887000	0.05	0.05	1.00000		88.7	73.27 - 109.13	0.906	20	
Surrogate: 4-Bromofluorobenzene	*0.3533*			*0.400000*		*88.3*	*53.08 - 129.27*			
Duplicate (B1G0432-DUP1)			**Source: 2101620-01**		Prepared: 7/27/2021 Analyzed: 7/27/2021					
Gasoline Range Organics	ND	0.05	0.05		ND			NR	20	
Surrogate: 4-Bromofluorobenzene	*0.3876*			*0.400000*		*96.9*	*53.08 - 129.27*			

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San Bernardino , CA 92408	Reported : 08/03/2021

Diesel Range Organics by EPA 8015B - Quality Control

Analyte	Result (mg/L)	PQL (mg/L)	MDL (mg/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1G0524 - GCSEMI_DRO_W										
Blank (B1G0524-BLK1)					Prepared: 7/31/2021 Analyzed: 7/31/2021					
DRO	ND	0.05	0.01							
ORO	ND	0.05	0.01							
Surrogate: p-Terphenyl	*0.05074*			*8.00000E-2*		*63.4*	*18 - 139*			
LCS (B1G0524-BS1)					Prepared: 7/31/2021 Analyzed: 7/31/2021					
DRO	0.673123	0.05	0.01	1.00000		67.3	37 - 117			
Surrogate: p-Terphenyl	*0.05450*			*8.00000E-2*		*68.1*	*18 - 139*			
LCS Dup (B1G0524-BSD1)					Prepared: 7/31/2021 Analyzed: 7/31/2021					
DRO	0.721452	0.05	0.01	1.00000		72.1	37 - 117	6.93	20	
Surrogate: p-Terphenyl	*0.05072*			*8.00000E-2*		*63.4*	*18 - 139*			

Certificate of Analysis

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Volatile Organic Compounds by EPA 8260B - Quality Control

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1G0433 - MSVOA_LL_W										
Blank (B1G0433-BLK1)							Prepared: 7/27/2021 Analyzed: 7/27/2021			
1,1,1,2-Tetrachloroethane	ND	0.50	0.11							
1,1,1-Trichloroethane	ND	0.50	0.21							
1,1,2,2-Tetrachloroethane	ND	0.50	0.36							
1,1,2-Trichloroethane	ND	0.50	0.25							
1,1-Dichloroethane	ND	0.50	0.09							
1,1-Dichloroethene	ND	0.50	0.13							
1,1-Dichloropropene	ND	0.50	0.13							
1,2,3-Trichloropropane	ND	0.50	0.39							
1,2,3-Trichlorobenzene	ND	0.50	0.18							
1,2,4-Trichlorobenzene	ND	0.50	0.16							
1,2,4-Trimethylbenzene	ND	0.50	0.14							
1,2-Dibromo-3-chloropropane	ND	0.50	0.41							
1,2-Dibromoethane	ND	0.50	0.24							
1,2-Dichlorobenzene	ND	0.50	0.20							
1,2-Dichloroethane	ND	0.50	0.20							
1,2-Dichloropropane	ND	0.50	0.15							
1,3,5-Trimethylbenzene	ND	0.50	0.13							
1,3-Dichlorobenzene	ND	0.50	0.16							
1,3-Dichloropropane	ND	0.50	0.21							
1,4-Dichlorobenzene	ND	0.50	0.17							
2,2-Dichloropropane	ND	0.50	0.38							
2-Chlorotoluene	ND	0.50	0.11							
4-Chlorotoluene	ND	0.50	0.12							
4-Isopropyltoluene	ND	0.50	0.11							
Benzene	ND	0.50	0.13							
Bromobenzene	ND	0.50	0.21							
Bromochloromethane	ND	0.50	0.16							
Bromodichloromethane	ND	0.50	0.14							
Bromoform	ND	0.50	0.20							
Bromomethane	ND	0.50	0.40							
Carbon disulfide	ND	1.0	0.07							
Carbon tetrachloride	ND	0.50	0.09							
Chlorobenzene	ND	0.50	0.13							
Chloroethane	ND	0.50	0.15							
Chloroform	ND	0.50	0.11							
Chloromethane	ND	0.50	0.12							
cis-1,2-Dichloroethene	ND	0.50	0.14							
cis-1,3-Dichloropropene	ND	0.50	0.13							
Di-isopropyl ether	ND	0.50	0.15							
Dibromochloromethane	ND	0.50	0.16							

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San Bernardino , CA 92408		Reported :	08/03/2021

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1G0433 - MSVOA_LL_W (continued)										
Blank (B1G0433-BLK1) - Continued						Prepared: 7/27/2021 Analyzed: 7/27/2021				
Dibromomethane	ND	0.50	0.19							
Dichlorodifluoromethane	ND	0.50	0.18							
Ethyl Acetate	ND	10	8.7							
Ethyl Ether	ND	10	2.0							
Ethyl tert-butyl ether	ND	0.50	0.21							
Ethylbenzene	ND	0.50	0.13							
Freon-113	ND	0.50	0.13							
Hexachlorobutadiene	ND	0.50	0.15							
Isopropylbenzene	ND	0.50	0.10							
m,p-Xylene	ND	1.0	0.19							
Methylene chloride	ND	1.0	0.71							
MTBE	ND	0.50	0.26							
n-Butylbenzene	ND	0.50	0.11							
n-Propylbenzene	ND	0.50	0.10							
Naphthalene	ND	0.50	0.41							
o-Xylene	ND	0.50	0.13							
sec-Butylbenzene	ND	0.50	0.09							
Styrene	ND	0.50	0.13							
tert-Amyl methyl ether	ND	0.50	0.41							
tert-Butanol	ND	10	2.4							
tert-Butylbenzene	ND	0.50	0.09							
Tetrachloroethene	ND	0.50	0.10							
Toluene	ND	0.50	0.12							
trans-1,2-Dichloroethene	ND	0.50	0.09							
trans-1,3-Dichloropropene	ND	0.50	0.23							
Trichloroethene	ND	0.50	0.10							
Trichlorofluoromethane	ND	0.50	0.23							
Vinyl acetate	ND	10	1.7							
Vinyl chloride	ND	0.50	0.13							
Surrogate: 1,2-Dichloroethane-d4	*23.72*			*25.0000*		*94.9*	*64 - 155*			
Surrogate: 4-Bromofluorobenzene	*21.51*			*25.0000*		*86.0*	*73 - 124*			
Surrogate: Dibromofluoromethan	*24.37*			*25.0000*		*97.5*	*78 - 129*			
Surrogate: Toluene-d8	*26.31*			*25.0000*		*105*	*84 - 117*			
LCS (B1G0433-BS1)						Prepared: 7/27/2021 Analyzed: 7/27/2021				
1,1,1,2-Tetrachloroethane	20.1700	0.50	0.11	20.0000		101	79 - 116			
1,1,1-Trichloroethane	19.6100	0.50	0.21	20.0000		98.0	73 - 130			
1,1,2,2-Tetrachloroethane	18.8700	0.50	0.36	20.0000		94.4	71 - 122			
1,1,2-Trichloroethane	21.9200	0.50	0.25	20.0000		110	70 - 124			
1,1-Dichloroethane	20.0600	0.50	0.09	20.0000		100	69 - 128			

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Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1G0433 - MSVOA_LL_W (continued)										
LCS (B1G0433-BS1) - Continued						Prepared: 7/27/2021 Analyzed: 7/27/2021				
1,1-Dichloroethene	20.4900	0.50	0.13	20.0000		102	65 - 137			
1,1-Dichloropropene	21.0500	0.50	0.13	20.0000		105	74 - 129			
1,2,3-Trichloropropane	18.5500	0.50	0.39	20.0000		92.8	74 - 123			
1,2,3-Trichlorobenzene	21.2800	0.50	0.18	20.0000		106	59 - 130			
1,2,4-Trichlorobenzene	18.8400	0.50	0.16	20.0000		94.2	65 - 125			
1,2,4-Trimethylbenzene	19.7400	0.50	0.14	20.0000		98.7	88 - 124			
1,2-Dibromo-3-chloropropane	19.1300	0.50	0.41	20.0000		95.6	61 - 127			
1,2-Dibromoethane	21.6200	0.50	0.24	20.0000		108	72 - 125			
1,2-Dichlorobenzene	21.4700	0.50	0.20	20.0000		107	84 - 113			
1,2-Dichloroethane	18.8800	0.50	0.20	20.0000		94.4	68 - 130			
1,2-Dichloropropane	21.7700	0.50	0.15	20.0000		109	77 - 121			
1,3,5-Trimethylbenzene	19.8800	0.50	0.13	20.0000		99.4	83 - 124			
1,3-Dichlorobenzene	21.1700	0.50	0.16	20.0000		106	83 - 112			
1,3-Dichloropropane	19.4400	0.50	0.21	20.0000		97.2	77 - 119			
1,4-Dichlorobenzene	20.3400	0.50	0.17	20.0000		102	79 - 115			
2,2-Dichloropropane	19.7500	0.50	0.38	20.0000		98.8	67 - 149			
2-Chlorotoluene	20.7600	0.50	0.11	20.0000		104	81 - 119			
4-Chlorotoluene	21.4300	0.50	0.12	20.0000		107	86 - 117			
4-Isopropyltoluene	19.3000	0.50	0.11	20.0000		96.5	82 - 131			
Benzene	20.0500	0.50	0.13	20.0000		100	75 - 124			
Bromobenzene	20.5200	0.50	0.21	20.0000		103	82 - 108			
Bromochloromethane	20.0700	0.50	0.16	20.0000		100	73 - 125			
Bromodichloromethane	20.0000	0.50	0.14	20.0000		100	80 - 120			
Bromoform	19.7100	0.50	0.20	20.0000		98.6	70 - 123			
Bromomethane	16.9700	0.50	0.40	20.0000		84.8	44 - 151			
Carbon disulfide	13.3400	1.0	0.07	20.0000		66.7	63 - 150			
Carbon tetrachloride	20.8100	0.50	0.09	20.0000		104	62 - 140			
Chlorobenzene	20.3700	0.50	0.13	20.0000		102	80 - 112			
Chloroethane	18.3300	0.50	0.15	20.0000		91.6	42 - 167			
Chloroform	19.4700	0.50	0.11	20.0000		97.4	77 - 122			
Chloromethane	20.2800	0.50	0.12	20.0000		101	33 - 153			
cis-1,2-Dichloroethene	20.1300	0.50	0.14	20.0000		101	75 - 121			
cis-1,3-Dichloropropene	20.1500	0.50	0.13	20.0000		101	73 - 127			
Di-isopropyl ether	19.7400	0.50	0.15	20.0000		98.7	64 - 144			
Dibromochloromethane	18.8300	0.50	0.16	20.0000		94.2	77 - 122			
Dibromomethane	21.7400	0.50	0.19	20.0000		109	75 - 121			
Dichlorodifluoromethane	19.9100	0.50	0.18	20.0000		99.6	0 - 171			
Ethyl Acetate	176.220	10	8.7	200.000		88.1	54 - 153			
Ethyl Ether	176.200	10	2.0	200.000		88.1	65 - 139			
Ethyl tert-butyl ether	24.8900	0.50	0.21	20.0000		124	54 - 141			

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San Bernardino , CA 92408		Reported :	08/03/2021

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1G0433 - MSVOA_LL_W (continued)										
LCS (B1G0433-BS1) - Continued					Prepared: 7/27/2021 Analyzed: 7/27/2021					
Ethylbenzene	21.5600	0.50	0.13	20.0000		108	82 - 119			
Freon-113	19.0200	0.50	0.13	20.0000		95.1	49 - 156			
Hexachlorobutadiene	19.8100	0.50	0.15	20.0000		99.0	71 - 131			
Isopropylbenzene	19.4500	0.50	0.10	20.0000		97.2	75 - 126			
m,p-Xylene	40.2900	1.0	0.19	40.0000		101	86 - 119			
Methylene chloride	20.3000	1.0	0.71	20.0000		102	76 - 125			
MTBE	18.1600	0.50	0.26	20.0000		90.8	70 - 121			
n-Butylbenzene	19.3700	0.50	0.11	20.0000		96.8	81 - 125			
n-Propylbenzene	21.5800	0.50	0.10	20.0000		108	78 - 130			
Naphthalene	17.3300	0.50	0.41	20.0000		86.6	47 - 128			
o-Xylene	19.2600	0.50	0.13	20.0000		96.3	85 - 119			
sec-Butylbenzene	20.3100	0.50	0.09	20.0000		102	78 - 130			
Styrene	19.7100	0.50	0.13	20.0000		98.6	62 - 148			
tert-Amyl methyl ether	20.3700	0.50	0.41	20.0000		102	55 - 131			
tert-Butanol	87.6500	10	2.4	100.000		87.6	45 - 153			
tert-Butylbenzene	19.9300	0.50	0.09	20.0000		99.6	77 - 125			
Tetrachloroethene	20.4700	0.50	0.10	20.0000		102	73 - 120			
Toluene	22.3300	0.50	0.12	20.0000		112	79 - 119			
trans-1,2-Dichloroethene	19.5700	0.50	0.09	20.0000		97.8	70 - 129			
trans-1,3-Dichloropropene	21.5500	0.50	0.23	20.0000		108	67 - 137			
Trichloroethene	19.9800	0.50	0.10	20.0000		99.9	73 - 117			
Trichlorofluoromethane	20.0000	0.50	0.23	20.0000		100	59 - 135			
Vinyl acetate	166.600	10	1.7	200.000		83.3	67 - 155			
Vinyl chloride	19.4800	0.50	0.13	20.0000		97.4	58 - 132			
Surrogate: 1,2-Dichloroethane-d4	*23.31*			*25.0000*		*93.2*	*64 - 155*			
Surrogate: 4-Bromofluorobenzene	*25.82*			*25.0000*		*103*	*73 - 124*			
Surrogate: Dibromofluoromethan	*24.29*			*25.0000*		*97.2*	*78 - 129*			
Surrogate: Toluene-d8	*25.83*			*25.0000*		*103*	*84 - 117*			
LCS Dup (B1G0433-BSD1)					Prepared: 7/27/2021 Analyzed: 7/27/2021					
1,1,1,2-Tetrachloroethane	19.9300	0.50	0.11	20.0000		99.6	79 - 116	1.20	20	
1,1,1-Trichloroethane	19.6500	0.50	0.21	20.0000		98.2	73 - 130	0.204	20	
1,1,2,2-Tetrachloroethane	20.0500	0.50	0.36	20.0000		100	71 - 122	6.06	20	
1,1,2-Trichloroethane	22.0600	0.50	0.25	20.0000		110	70 - 124	0.637	20	
1,1-Dichloroethane	19.9100	0.50	0.09	20.0000		99.6	69 - 128	0.751	20	
1,1-Dichloroethene	20.1700	0.50	0.13	20.0000		101	65 - 137	1.57	20	
1,1-Dichloropropene	21.0800	0.50	0.13	20.0000		105	74 - 129	0.142	20	
1,2,3-Trichloropropane	19.4300	0.50	0.39	20.0000		97.2	74 - 123	4.63	20	
1,2,3-Trichlorobenzene	22.3000	0.50	0.18	20.0000		112	59 - 130	4.68	20	
1,2,4-Trichlorobenzene	19.6000	0.50	0.16	20.0000		98.0	65 - 125	3.95	20	

Certificate of Analysis

Stantec	Project Number : -
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San Bernardino , CA 92408	Reported : 08/03/2021

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1G0433 - MSVOA_LL_W (continued)										
LCS Dup (B1G0433-BSD1) - Continued					Prepared: 7/27/2021 Analyzed: 7/27/2021					
1,2,4-Trimethylbenzene	20.1300	0.50	0.14	20.0000		101	88 - 124	1.96	20	
1,2-Dibromo-3-chloropropane	19.9200	0.50	0.41	20.0000		99.6	61 - 127	4.05	20	
1,2-Dibromoethane	21.9800	0.50	0.24	20.0000		110	72 - 125	1.65	20	
1,2-Dichlorobenzene	22.4100	0.50	0.20	20.0000		112	84 - 113	4.28	20	
1,2-Dichloroethane	19.4500	0.50	0.20	20.0000		97.2	68 - 130	2.97	20	
1,2-Dichloropropane	21.2700	0.50	0.15	20.0000		106	77 - 121	2.32	20	
1,3,5-Trimethylbenzene	20.2100	0.50	0.13	20.0000		101	83 - 124	1.65	20	
1,3-Dichlorobenzene	21.9400	0.50	0.16	20.0000		110	83 - 112	3.57	20	
1,3-Dichloropropane	20.0600	0.50	0.21	20.0000		100	77 - 119	3.14	20	
1,4-Dichlorobenzene	20.9700	0.50	0.17	20.0000		105	79 - 115	3.05	20	
2,2-Dichloropropane	18.9900	0.50	0.38	20.0000		95.0	67 - 149	3.92	20	
2-Chlorotoluene	21.0700	0.50	0.11	20.0000		105	81 - 119	1.48	20	
4-Chlorotoluene	21.9200	0.50	0.12	20.0000		110	86 - 117	2.26	20	
4-Isopropyltoluene	19.9800	0.50	0.11	20.0000		99.9	82 - 131	3.46	20	
Benzene	20.1200	0.50	0.13	20.0000		101	75 - 124	0.349	20	
Bromobenzene	20.9900	0.50	0.21	20.0000		105	82 - 108	2.26	20	
Bromochloromethane	20.4300	0.50	0.16	20.0000		102	73 - 125	1.78	20	
Bromodichloromethane	20.4500	0.50	0.14	20.0000		102	80 - 120	2.22	20	
Bromoform	20.0200	0.50	0.20	20.0000		100	70 - 123	1.56	20	
Bromomethane	17.5000	0.50	0.40	20.0000		87.5	44 - 151	3.08	20	
Carbon disulfide	12.8500	1.0	0.07	20.0000		64.2	63 - 150	3.74	20	
Carbon tetrachloride	20.7700	0.50	0.09	20.0000		104	62 - 140	0.192	20	
Chlorobenzene	20.4400	0.50	0.13	20.0000		102	80 - 112	0.343	20	
Chloroethane	18.8900	0.50	0.15	20.0000		94.4	42 - 167	3.01	20	
Chloroform	19.4300	0.50	0.11	20.0000		97.2	77 - 122	0.206	20	
Chloromethane	20.6900	0.50	0.12	20.0000		103	33 - 153	2.00	20	
cis-1,2-Dichloroethene	20.2900	0.50	0.14	20.0000		101	75 - 121	0.792	20	
cis-1,3-Dichloropropene	20.4100	0.50	0.13	20.0000		102	73 - 127	1.28	20	
Di-isopropyl ether	19.9100	0.50	0.15	20.0000		99.6	64 - 144	0.858	20	
Dibromochloromethane	19.0700	0.50	0.16	20.0000		95.4	77 - 122	1.27	20	
Dibromomethane	21.6200	0.50	0.19	20.0000		108	75 - 121	0.554	20	
Dichlorodifluoromethane	19.7400	0.50	0.18	20.0000		98.7	0 - 171	0.858	20	
Ethyl Acetate	178.140	10	8.7	200.000		89.1	54 - 153	1.08	20	
Ethyl Ether	178.880	10	2.0	200.000		89.4	65 - 139	1.51	20	
Ethyl tert-butyl ether	24.0100	0.50	0.21	20.0000		120	54 - 141	3.60	20	
Ethylbenzene	21.6700	0.50	0.13	20.0000		108	82 - 119	0.509	20	
Freon-113	18.2800	0.50	0.13	20.0000		91.4	49 - 156	3.97	20	
Hexachlorobutadiene	20.3800	0.50	0.15	20.0000		102	71 - 131	2.84	20	
Isopropylbenzene	20.0900	0.50	0.10	20.0000		100	75 - 126	3.24	20	
m,p-Xylene	39.8900	1.0	0.19	40.0000		99.7	86 - 119	0.998	20	

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Volatile Organic Compounds by EPA 8260B - Quality Control (cont'd)

Analyte	Result (ug/L)	PQL (ug/L)	MDL (ug/L)	Spike Level	Source Result	% Rec	% Rec Limits	RPD	RPD Limit	Notes
Batch B1G0433 - MSVOA_LL_W (continued)										
LCS Dup (B1G0433-BSD1) - Continued					Prepared: 7/27/2021 Analyzed: 7/27/2021					
Methylene chloride	20.3200	1.0	0.71	20.0000		102	76 - 125	0.0985	20	
MTBE	18.1600	0.50	0.26	20.0000		90.8	70 - 121	0.00	20	
n-Butylbenzene	19.7100	0.50	0.11	20.0000		98.6	81 - 125	1.74	20	
n-Propylbenzene	22.0300	0.50	0.10	20.0000		110	78 - 130	2.06	20	
Naphthalene	18.5400	0.50	0.41	20.0000		92.7	47 - 128	6.75	20	
o-Xylene	19.4600	0.50	0.13	20.0000		97.3	85 - 119	1.03	20	
sec-Butylbenzene	20.4500	0.50	0.09	20.0000		102	78 - 130	0.687	20	
Styrene	19.7300	0.50	0.13	20.0000		98.6	62 - 148	0.101	20	
tert-Amyl methyl ether	19.9000	0.50	0.41	20.0000		99.5	55 - 131	2.33	20	
tert-Butanol	96.6900	10	2.4	100.000		96.7	45 - 153	9.81	20	
tert-Butylbenzene	20.2300	0.50	0.09	20.0000		101	77 - 125	1.49	20	
Tetrachloroethene	20.5700	0.50	0.10	20.0000		103	73 - 120	0.487	20	
Toluene	22.8200	0.50	0.12	20.0000		114	79 - 119	2.17	20	
trans-1,2-Dichloroethene	19.3200	0.50	0.09	20.0000		96.6	70 - 129	1.29	20	
trans-1,3-Dichloropropene	22.2300	0.50	0.23	20.0000		111	67 - 137	3.11	20	
Trichloroethene	20.2600	0.50	0.10	20.0000		101	73 - 117	1.39	20	
Trichlorofluoromethane	19.6000	0.50	0.23	20.0000		98.0	59 - 135	2.02	20	
Vinyl acetate	169.090	10	1.7	200.000		84.5	67 - 155	1.48	20	
Vinyl chloride	19.7100	0.50	0.13	20.0000		98.6	58 - 132	1.17	20	
Surrogate: 1,2-Dichloroethane-d4	*23.35*			*25.0000*		*93.4*	*64 - 155*			
Surrogate: 4-Bromofluorobenzene	*25.60*			*25.0000*		*102*	*73 - 124*			
Surrogate: Dibromofluoromethan	*24.40*			*25.0000*		*97.6*	*78 - 129*			
Surrogate: Toluene-d8	*26.56*			*25.0000*		*106*	*84 - 117*			

Certificate of Analysis

Stantec		Project Number :	-
735 E. Carnegie Drive, Suite 280		Report To :	Joshua Sargent
San Bernardino , CA 92408		Reported :	08/03/2021

Notes and Definitions

D9	A lesser amount of sample was analyzed due to limited sample.
ND	Analyte is not detected at or above the Practical Quantitation Limit (PQL). When client requests quantitation against MDL, analyte is not detected at or above the Method Detection Limit (MDL)
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
NR	Not Reported
RPD	Relative Percent Difference
CA2	CA-ELAP (CDPH)
OR1	OR-NELAP (OSPHL)

Notes:
(1) The reported MDL and PQL are based on prep ratio variation and analytical dilution.
(2) The suffix [2C] of specific analytes signifies that the reported result is taken from the instrument's second column.
(3) Results are wet unless otherwise specified.

Stantec

CHAIN OF CUSTODY FORM

735 E. Carnegie Drive, Suite 280
San Bernardino, CA 92408
(909)335-6116, Fax (909) 335-6120

Client Name/Address:
Stantec
735 E. Carnegie Drive, Suite 280
San Bernardino, CA 92408

Project/PO Number:
251-351 West Imperial Hwy
La Habra, CA

Laboratory: Advanced Technology Laboratories

Project Manager:
Email Address:

Phone Number: 909-335-6116

Fax Number: 909-335-6120

Sampler: ~~J. Sargent~~ Joshua.Sargent@Stantec.com
Jason Hafliger

Analysis Required

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	8260VOC, 8015 GRO	8015 DRO/ORO							Special Instructions
MW-1-20210726	water	glass	4	7/26/21	1530	HCl, Ice	X	X							Low level
MW-2-20210726	water	glass	4	7/26/21	1310	HCl, Ice	X	X							detections
MW-3-20210726	water	glass	4	7/26/21	1134	HCl, Ice	X	X							and
MW-4-20210726	water	glass	4	7/26/21	1405	HCl, Ice	X	X							Reporting
MW-5-20210726	water	glass	4	7/26/21	1020	HCl, Ice	X	X							limits
BD01-20210726	water	glass	4	7/26/21	—	HCl, Ice	X	X							
Trip Blank	water	glass	1	7/26/21	—	HCl, Ice	X	X							confirm
															with
															Josh Sargent
															909-335-6116
															BD01-20210726
															is Dup-MW-5

Relinquished By:	Date/Time:	Received By:	Date/Time:
Jason Hafliger	7/26/21 1635	Tiffany Wade	7-26-21 16:35
Relinquished By:	Date/Time:	Received By:	Date/Time: 7-26-21 17:00
Relinquished By:	Date/Time:	Received in Lab By:	Date/Time:

Turn-Around Time: Same day / 24 hour / 48 hour / 72 hours / 5 days / normal

Sample Integrity: (Check) intact ✓ on ice 4.4

Note: By relinquishing samples, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

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562-646-1611

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Stantec Consulting Services, Inc.	**Report date:**	8/2/2021
Client Address:	735 E Carnegie Dr, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	G-0351
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/26/2021
		Date Received:	7/26/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/26/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

ANALYSES REQUESTED

1. EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sampling – Soil Gas samples were collected in glass gas-tight syringes equipped with Teflon plungers.

A tracer gas mixture of n-pentane, n-hexane, and n-heptane was placed at the tubing-surface interface before sampling. These compounds were analyzed during the 8260B analytical run to determine if there were surface leaks into the subsurface due to improper installation of the probe. No tracer was detected in any of the samples reported herein.

The sampling rate was approximately 200 cc/min, except when noted differently on the chain of custody record, using a glass gas-tight syringe. Purging was completed using a pump set at approximately 200 cc/min, except when noted differently on the chain of custody record. A default of 3 purge volumes was used as recommended by July 2015 DTSC/RWQCB guidance documents.

Prior to purging and sampling of soil gas at each point, a shut-in test was conducted to check for leaks in the above ground fittings. The shut-in test was performed on the above ground apparatus by evacuating the line to a vacuum of 100 inches of water, sealing the entire system and watching the vacuum for at least one minute. A vacuum gauge attached in parallel to the apparatus measured the vacuum. If there was any observable loss of vacuum, the fittings were adjusted as needed until the vacuum did not change noticeably. The soil gas sample was then taken.

No flow conditions occur when a sampling rate greater than 10 mL/min cannot be maintained without applying a vacuum greater than 100 inches of water to the sampling train. The sampling train is left at a vacuum for no less than three minutes. If the vacuum does not subside appreciably after three minutes, the sample location is determined to be a no flow sample.

Analytical – Soil Gas samples were analyzed using EPA Method 8260 that includes extra compounds required by DTSC/RWQCB (such as Freon 113). Instrument Continuing Calibration Verification, QC Reference Standards, Instrument Blanks and Sampling Blanks were analyzed every 12 hours as prescribed by the method. In addition, a Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were analyzed with each batch of Soil Gas samples. A duplicate/replicate sample was analyzed each day of the sampling activity. All samples were injected into the GC/MS system within 30 minutes of collection.

Approval: _____

Annalise O'Toole
Mobile Lab Manager

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Stantec Consulting Services, Inc.	**Report date:**	8/2/2021
Client Address:	735 E Carnegie Dr, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	G-0351
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/26/2021
		Date Received:	7/26/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/26/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV2A-5**	**SV2A-5 REP**	**SV31-5**	**SV31-10**	**SV10A-5**		
Jones ID:	**G-0351-01**	**G-0351-02**	**G-0351-03**	**G-0351-04**	**G-0351-05**	**Reporting Limit**	**Units**
Analytes:							
Benzene	**4.5**	**5.5**	**6.9**	**6.8**	**3.8**	2.0	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	2.0	µg/m3
Bromoform	ND	ND	ND	ND	ND	2.0	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	3.0	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	3.0	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	3.0	µg/m3
Carbon tetrachloride	**13.3**	**12.8**	ND	ND	ND	2.0	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	6.0	µg/m3
Chloroform	ND	ND	**28.8**	ND	ND	2.0	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	3.0	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	3.0	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	2.0	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
Dichlorodifluoromethane	**5.0**	**5.1**	**4.6**	ND	**4.5**	4.0	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	4.0	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	2.5	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV2A-5**	**SV2A-5 REP**	**SV31-5**	**SV31-10**	**SV10A-5**		
Jones ID:	**G-0351-01**	**G-0351-02**	**G-0351-03**	**G-0351-04**	**G-0351-05**	**Reporting Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	2.0	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	2.0	µg/m3
Ethylbenzene	ND	ND	ND	ND	**5.5**	2.0	µg/m3
Freon 113	**9.4**	**9.2**	ND	ND	ND	4.0	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	6.0	µg/m3
Isopropylbenzene	ND	ND	ND	ND	ND	2.0	µg/m3
4-Isopropyltoluene	**11.0**	**13.2**	**3.5**	**3.9**	**82.3**	2.0	µg/m3
Methylene chloride	**4.8**	**5.2**	ND	ND	ND	2.0	µg/m3
Naphthalene	ND	ND	ND	ND	ND	10.0	µg/m3
n-Propylbenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Styrene	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	4.0	µg/m3
Tetrachloroethene	ND	ND	**16.0**	**4.4**	**28.3**	2.0	µg/m3
Toluene	**4.7**	**4.4**	**3.3**	**7.7**	**14.0**	2.0	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
Trichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	4.0	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	2.0	µg/m3
m,p-Xylene	ND	ND	ND	ND	**8.1**	4.0	µg/m3
o-Xylene	ND	ND	ND	**2.3**	**7.4**	2.0	µg/m3
MTBE	ND	ND	ND	ND	ND	10.0	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	10.0	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	10.0	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	10.0	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	100.0	µg/m3
Gasoline Range Organics (C4-C12)	**45400**	**59400**	**5490**	**3970**	**136000**	500.0	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	80.0	µg/m3
n-Hexane	ND	ND	ND	ND	ND	80.0	µg/m3
n-Heptane	ND	ND	ND	ND	ND	80.0	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	97%	101%	95%	100%	93%	60 - 140	
Toluene-d_8	101%	103%	94%	97%	97%	60 - 140	
4-Bromofluorobenzene	112%	119%	93%	94%	120%	60 - 140	
Batch ID:	G1-072621-01	G1-072621-01	G1-072621-01	G1-072621-01	G1-072621-01		

ND = Value below reporting limit

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Stantec Consulting Services, Inc.	**Report date:**	8/2/2021
Client Address:	735 E Carnegie Dr, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	G-0351
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/26/2021
		Date Received:	7/26/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/26/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV10A-10**	**SV28-5**	**SV25-5**	**SV25-12**	**SV41-5**		
Jones ID:	**G-0351-06**	**G-0351-07**	**G-0351-08**	**G-0351-09**	**G-0351-10**	**Reporting Limit**	**Units**
Analytes:							
Benzene	**41.8**	**3.6**	**5.7**	**9.4**	ND	2.0	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	2.0	µg/m3
Bromoform	ND	ND	ND	ND	ND	2.0	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	3.0	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	3.0	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	3.0	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	2.0	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	6.0	µg/m3
Chloroform	ND	ND	ND	ND	ND	2.0	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	3.0	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	3.0	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	2.0	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
Dichlorodifluoromethane	ND	ND	**4.6**	**6.5**	**6.0**	4.0	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	4.0	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	2.5	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV10A-10**	**SV28-5**	**SV25-5**	**SV25-12**	**SV41-5**		
Jones ID:	**G-0351-06**	**G-0351-07**	**G-0351-08**	**G-0351-09**	**G-0351-10**	**Reporting Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	2.0	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	2.0	µg/m3
Ethylbenzene	ND	ND	ND	**2.7**	ND	2.0	µg/m3
Freon 113	ND	ND	ND	ND	ND	4.0	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	6.0	µg/m3
Isopropylbenzene	ND	ND	ND	ND	ND	2.0	µg/m3
4-Isopropyltoluene	**39.6**	**2.9**	ND	**9.5**	ND	2.0	µg/m3
Methylene chloride	**4.8**	**3.6**	**5.3**	**63.9**	ND	2.0	µg/m3
Naphthalene	ND	ND	ND	ND	ND	10.0	µg/m3
n-Propylbenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Styrene	ND	ND	ND	**2.1**	ND	2.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	4.0	µg/m3
Tetrachloroethene	**127**	**7.8**	**3.2**	**17.2**	**31.5**	2.0	µg/m3
Toluene	**37.5**	**12.7**	**5.6**	**147**	**7.5**	2.0	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
Trichloroethene	**2.1**	ND	ND	**2.5**	ND	2.0	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	4.0	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2,4-Trimethylbenzene	ND	ND	ND	ND	**4.5**	2.0	µg/m3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	2.0	µg/m3
m,p-Xylene	ND	ND	ND	**4.0**	ND	4.0	µg/m3
o-Xylene	ND	**5.4**	**4.4**	**3.1**	ND	2.0	µg/m3
MTBE	ND	ND	ND	ND	ND	10.0	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	10.0	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	10.0	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	10.0	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	100.0	µg/m3
Gasoline Range Organics (C4-C12)	**454000**	**3240**	ND	**5480**	**95400**	500.0	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	80.0	µg/m3
n-Hexane	ND	ND	ND	ND	ND	80.0	µg/m3
n-Heptane	ND	ND	ND	ND	ND	80.0	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	94%	65%	94%	97%	91%	60 - 140	
Toluene-d_8	121%	113%	96%	96%	96%	60 - 140	
4-Bromofluorobenzene	126%	83%	94%	94%	114%	60 - 140	
Batch ID:	G1-072621-01	G1-072621-01	G1-072621-01	G1-072621-01	G1-072621-01		

ND = Value below reporting limit

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Stantec Consulting Services, Inc.	**Report date:**	8/2/2021
Client Address:	735 E Carnegie Dr, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	G-0351
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/26/2021
		Date Received:	7/26/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/26/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV41-10**	**SV22-5**	**SV22-12**	**SV23-5**	**SV23-12**		
Jones ID:	**G-0351-11**	**G-0351-12**	**G-0351-13**	**G-0351-14**	**G-0351-15**	**Reporting Limit**	**Units**
Analytes:							
Benzene	**60.9**	**6.8**	ND	**9.9**	ND	2.0	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	2.0	µg/m3
Bromoform	ND	ND	ND	ND	ND	2.0	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	3.0	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	3.0	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	3.0	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	2.0	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	6.0	µg/m3
Chloroform	ND	ND	ND	ND	ND	2.0	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	3.0	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	3.0	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	2.0	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
Dichlorodifluoromethane	**7.4**	ND	ND	ND	ND	4.0	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	4.0	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	2.5	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV41-10**	**SV22-5**	**SV22-12**	**SV23-5**	**SV23-12**		
Jones ID:	**G-0351-11**	**G-0351-12**	**G-0351-13**	**G-0351-14**	**G-0351-15**	**Reporting Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	2.0	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	2.0	µg/m3
Ethylbenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Freon 113	ND	ND	ND	ND	ND	4.0	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	6.0	µg/m3
Isopropylbenzene	ND	ND	ND	ND	ND	2.0	µg/m3
4-Isopropyltoluene	ND	ND	ND	ND	ND	2.0	µg/m3
Methylene chloride	**43.3**	**12.4**	ND	ND	ND	2.0	µg/m3
Naphthalene	ND	ND	ND	ND	ND	10.0	µg/m3
n-Propylbenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Styrene	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	4.0	µg/m3
Tetrachloroethene	**86.3**	**15.7**	ND	**13.5**	**2.4**	2.0	µg/m3
Toluene	**57.3**	**31.4**	**2.4**	**17.4**	ND	2.0	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
Trichloroethene	ND	**3.2**	ND	**2.2**	ND	2.0	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	4.0	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	2.0	µg/m3
m,p-Xylene	ND	ND	ND	ND	ND	4.0	µg/m3
o-Xylene	ND	**2.8**	ND	**2.2**	ND	2.0	µg/m3
MTBE	ND	ND	ND	ND	ND	10.0	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	10.0	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	10.0	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	10.0	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	100.0	µg/m3
Gasoline Range Organics (C4-C12)	**421000**	**6620**	ND	**135000**	ND	500.0	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	80.0	µg/m3
n-Hexane	ND	ND	ND	ND	ND	80.0	µg/m3
n-Heptane	ND	ND	ND	ND	ND	80.0	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	97%	99%	102%	100%	102%	60 - 140	
Toluene-d_8	120%	94%	94%	95%	94%	60 - 140	
4-Bromofluorobenzene	120%	96%	94%	97%	95%	60 - 140	
Batch ID:	G1-072621-01	G1-072621-01	G1-072621-01	G1-072621-01	G1-072621-01		

ND = Value below reporting limit

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Stantec Consulting Services, Inc.	**Report date:**	8/2/2021
Client Address:	735 E Carnegie Dr, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	G-0351
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/26/2021
		Date Received:	7/26/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/26/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV29-5**	**SV29-12**	**SV13A-5**	**SV13A-10**		
Jones ID:	**G-0351-16**	**G-0351-17**	**G-0351-18**	**G-0351-19**	**Reporting Limit**	**Units**
Analytes:						
Benzene	**8.1**	**4.2**	ND	**6.4**	2.0	µg/m3
Bromobenzene	ND	ND	ND	ND	2.0	µg/m3
Bromodichloromethane	ND	ND	ND	ND	2.0	µg/m3
Bromoform	ND	ND	ND	ND	2.0	µg/m3
n-Butylbenzene	ND	ND	ND	ND	3.0	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	3.0	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	3.0	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	2.0	µg/m3
Chlorobenzene	ND	ND	ND	ND	6.0	µg/m3
Chloroform	ND	ND	ND	ND	2.0	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	3.0	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	3.0	µg/m3
Dibromochloromethane	ND	ND	ND	ND	2.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	2.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	2.0	µg/m3
Dibromomethane	ND	ND	ND	ND	2.0	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	4.0	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	4.0	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	4.0	µg/m3
Dichlorodifluoromethane	ND	ND	**6.0**	ND	4.0	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	2.0	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	2.0	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	2.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	2.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	2.0	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	2.0	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	2.0	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	4.0	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	2.5	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV29-5**	**SV29-12**	**SV13A-5**	**SV13A-10**		
Jones ID:	**G-0351-16**	**G-0351-17**	**G-0351-18**	**G-0351-19**	**Reporting Limit**	**Units**
Analytes:						
cis-1,3-Dichloropropene	ND	ND	ND	ND	2.0	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	2.0	µg/m3
Ethylbenzene	ND	ND	ND	ND	2.0	µg/m3
Freon 113	ND	ND	ND	**15.4**	4.0	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	6.0	µg/m3
Isopropylbenzene	ND	ND	ND	ND	2.0	µg/m3
4-Isopropyltoluene	ND	ND	ND	ND	2.0	µg/m3
Methylene chloride	**4.0**	**6.4**	ND	**44.1**	2.0	µg/m3
Naphthalene	ND	ND	ND	ND	10.0	µg/m3
n-Propylbenzene	ND	ND	ND	ND	2.0	µg/m3
Styrene	ND	ND	ND	ND	2.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	2.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	4.0	µg/m3
Tetrachloroethene	**2.1**	**6.5**	**10.9**	**3.7**	2.0	µg/m3
Toluene	**8.8**	**64.2**	ND	**6.1**	2.0	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	4.0	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	4.0	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	2.0	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	2.0	µg/m3
Trichloroethene	ND	**7.7**	ND	ND	2.0	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	4.0	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	2.0	µg/m3
1,2,4-Trimethylbenzene	ND	ND	ND	ND	2.0	µg/m3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	2.0	µg/m3
Vinyl chloride	ND	ND	ND	ND	2.0	µg/m3
m,p-Xylene	ND	ND	ND	ND	4.0	µg/m3
o-Xylene	ND	ND	ND	**4.2**	2.0	µg/m3
MTBE	ND	ND	ND	ND	10.0	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	10.0	µg/m3
Di-isopropylether	ND	ND	ND	ND	10.0	µg/m3
tert-amylmethylether	ND	ND	ND	ND	10.0	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	100.0	µg/m3
Gasoline Range Organics (C4-C12)	ND	**4110**	ND	**25200**	500.0	µg/m3
Tracer:						
n-Pentane	ND	ND	ND	ND	80.0	µg/m3
n-Hexane	ND	ND	ND	ND	80.0	µg/m3
n-Heptane	ND	ND	ND	ND	80.0	µg/m3
Dilution Factor	1	1	1	1		
Surrogate Recoveries:					**QC Limits**	
Dibromofluoromethane	95%	103%	104%	103%	60 - 140	
Toluene-d_8	94%	95%	95%	95%	60 - 140	
4-Bromofluorobenzene	93%	95%	95%	94%	60 - 140	
Batch ID:	G1-072621-01	G1-072621-01	G1-072621-01	G1-072621-01		

ND = Value below reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Stantec Consulting Services, Inc.	**Report date:**	8/2/2021
Client Address:	735 E Carnegie Dr, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	G-0351
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/26/2021
		Date Received:	7/26/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/26/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**METHOD BLANK**	**SAMPLING BLANK**		
Jones ID:	**072621-G1MB1**	**072621-G1SB1**	**Reporting Limit**	**Units**
Analytes:				
Benzene	ND	ND	2.0	µg/m3
Bromobenzene	ND	ND	2.0	µg/m3
Bromodichloromethane	ND	ND	2.0	µg/m3
Bromoform	ND	ND	2.0	µg/m3
n-Butylbenzene	ND	ND	3.0	µg/m3
sec-Butylbenzene	ND	ND	3.0	µg/m3
tert-Butylbenzene	ND	ND	3.0	µg/m3
Carbon tetrachloride	ND	ND	2.0	µg/m3
Chlorobenzene	ND	ND	6.0	µg/m3
Chloroform	ND	ND	2.0	µg/m3
2-Chlorotoluene	ND	ND	3.0	µg/m3
4-Chlorotoluene	ND	ND	3.0	µg/m3
Dibromochloromethane	ND	ND	2.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	2.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	2.0	µg/m3
Dibromomethane	ND	ND	2.0	µg/m3
1,2- Dichlorobenzene	ND	ND	4.0	µg/m3
1,3-Dichlorobenzene	ND	ND	4.0	µg/m3
1,4-Dichlorobenzene	ND	ND	4.0	µg/m3
Dichlorodifluoromethane	ND	ND	4.0	µg/m3
1,1-Dichloroethane	ND	ND	2.0	µg/m3
1,2-Dichloroethane	ND	ND	2.0	µg/m3
1,1-Dichloroethene	ND	ND	2.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	2.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	2.0	µg/m3
1,2-Dichloropropane	ND	ND	2.0	µg/m3
1,3-Dichloropropane	ND	ND	2.0	µg/m3
2,2-Dichloropropane	ND	ND	4.0	µg/m3
1,1-Dichloropropene	ND	ND	2.5	µg/m3

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**METHOD BLANK**	**SAMPLING BLANK**		
Jones ID:	**072621-G1MB1**	**072621-G1SB1**	**Reporting Limit**	**Units**
Analytes:				
cis-1,3-Dichloropropene	ND	ND	2.0	µg/m3
trans-1,3-Dichloropropene	ND	ND	2.0	µg/m3
Ethylbenzene	ND	ND	2.0	µg/m3
Freon 113	ND	ND	4.0	µg/m3
Hexachlorobutadiene	ND	ND	6.0	µg/m3
Isopropylbenzene	ND	ND	2.0	µg/m3
4-Isopropyltoluene	ND	ND	2.0	µg/m3
Methylene chloride	ND	ND	2.0	µg/m3
Naphthalene	ND	ND	10.0	µg/m3
n-Propylbenzene	ND	ND	2.0	µg/m3
Styrene	ND	ND	2.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	2.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	4.0	µg/m3
Tetrachloroethene	ND	ND	2.0	µg/m3
Toluene	ND	ND	2.0	µg/m3
1,2,3-Trichlorobenzene	ND	ND	4.0	µg/m3
1,2,4-Trichlorobenzene	ND	ND	4.0	µg/m3
1,1,1-Trichloroethane	ND	ND	2.0	µg/m3
1,1,2-Trichloroethane	ND	ND	2.0	µg/m3
Trichloroethene	ND	ND	2.0	µg/m3
Trichlorofluoromethane	ND	ND	4.0	µg/m3
1,2,3-Trichloropropane	ND	ND	2.0	µg/m3
1,2,4-Trimethylbenzene	ND	ND	2.0	µg/m3
1,3,5-Trimethylbenzene	ND	ND	2.0	µg/m3
Vinyl chloride	ND	ND	2.0	µg/m3
m,p-Xylene	ND	ND	4.0	µg/m3
o-Xylene	ND	ND	2.0	µg/m3
MTBE	ND	ND	10.0	µg/m3
Ethyl-tert-butylether	ND	ND	10.0	µg/m3
Di-isopropylether	ND	ND	10.0	µg/m3
tert-amylmethylether	ND	ND	10.0	µg/m3
tert-Butylalcohol	ND	ND	100.0	µg/m3
Gasoline Range Organics (C4-C12)	ND	ND	500.0	µg/m3
Tracer:				
n-Pentane	ND	ND	80.0	µg/m3
n-Hexane	ND	ND	80.0	µg/m3
n-Heptane	ND	ND	80.0	µg/m3
Dilution Factor	1	1		
Surrogate Recoveries:			**QC Limits**	
Dibromofluoromethane	102%	101%	60 - 140	
Toluene-d_8	96%	95%	60 - 140	
4-Bromofluorobenzene	94%	94%	60 - 140	
Batch ID:	G1-072621-01	G1-072621-01		

ND = Value below reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Stantec Consulting Services, Inc.	**Report date:**	8/2/2021
Client Address:	735 E Carnegie Dr, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	G-0351
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/26/2021
		Date Received:	7/26/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/26/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Batch ID: G1-072621-01

Jones ID:	**072621-G1LCS1**	**072621-G1LCSD1**			**072621-G1CCV1**	
Parameter	LCS Recovery (%)	LCSD Recovery (%)	RPD	Acceptability Range (%)	CCV	Acceptability Range (%)
Vinyl chloride	122%	112%	8.6%	60 - 140	81%	80 - 120
1,1-Dichloroethene	112%	112%	0.4%	60 - 140	89%	80 - 120
Cis-1,2-Dichloroethene	109%	105%	3.7%	70 - 130	114%	80 - 120
1,1,1-Trichloroethane	101%	100%	0.8%	70 - 130	112%	80 - 120
Benzene	108%	106%	1.5%	70 - 130	113%	80 - 120
Trichloroethene	120%	117%	2.4%	70 - 130	119%	80 - 120
Toluene	108%	107%	1.5%	70 - 130	111%	80 - 120
Tetrachloroethene	126%	126%	0.6%	70 - 130	122%[1]	80 - 120
Chlorobenzene	107%	113%	5.5%	70 - 130	115%	80 - 120
Ethylbenzene	101%	110%	8.7%	70 - 130	119%	80 - 120
1,2,4 Trimethylbenzene	96%	103%	7.3%	70 - 130	117%	80 - 120
Gasoline Range Organics (C4-C12)	103%	107%	3.1%	70 - 130	115%	80 - 120
Surrogate Recovery:						
Dibromofluoromethane	102%	101%		60 - 140	102%	60 - 140
Toluene-d_8	95%	95%		60 - 140	96%	60 - 140
4-Bromofluorobenzene	93%	95%		60 - 140	94%	60 - 140

[1]Recovery outside of acceptable limits. LCS/LCSD recoveries and RPD were within QC limits, therefore data was accepted.
LCS = Laboratory Control Sample
LCSD = Laboratory Control Sample Duplicate
CCV = Continuing Calibration Verification
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 20%

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Soil-Gas Chain-of-Custody Record

Client: Stantec
Project Name: Olson Urban Housing
Project Address: 251-351 W Imperial Highway, La Habra, CA
Email:
Phone:
Report To: Jason Hafliger
Sampler: Dylan Lindsay

Date: 7/26/2021
Client Project #: 185804671

Purge Number: □ 1P ☒ 3P □ 7P □ 10P

Shut-In Test: (Y) / N

Report Options
EDD ____
EDF* - 10% Surcharge ____
*Global ID _____

LAB USE ONLY
Jones Project # G-0351
Page 1 of 2
Sample Container: GASTIGHT GLASS SYRINGE
If different than above, see Notes.

Turn Around Requested
- □ Immediate Attention
- □ Rush 24 Hours
- □ Rush 48 Hours
- □ Rush 72 Hours
- □ Normal
- ☒ Mobile Lab

Tracer
- ☒ n-pentane
- ☒ n-hexane
- ☒ n-heptane
- □ Isopropyl Alchohol
- □ 1,1-DFA
- □ _____

Reporting Limits
□ Standard ☒ Low Level* □ MDL*
*surcharge for these limits

Units µg/m3

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)	Gasoline Range Organics			Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
SV2A-5	3	12800	7/26/21	7:54	7:56	G-0351-01	1000	SKC.12628	M100.110	SG	X	X			<2	1	
SV2A-5 REP	3	12800	7/26/21	8:07	8:09	G-0351-02	1000	SKC.12628	M100.110	SG	X	X			<2	1	
SV31-5	3	12800	7/26/21	8:41	8:44	G-0351-03	2000	SKC.12628	M100.003	SG	X	X			<2	1	
SV31-10	3	1710	7/26/21	8:57	9:00	G-0351-04	200	CASEY.1	M100.007	SG	X	X			<2	1	
SV10A-5	3	12800	7/26/21	9:15	9:17	G-0351-05	2000	SKC.10125	M100.202	SG	X	X			<2	1	
SV10A-10	3	1710	7/26/21	9:42	9:45	G-0351-06	100	CASEY.2	M100.203	SG	X	X			40	1	
SV28-5	3	12800	7/26/21	10:05	10:07	G-0351-07	2000	SKC.12628	M100.003	SG	X	X			30	1	
SV25-5	-	-	7/26/21	11:10	11:14	G-0351-08	-	-	M100.007	SG	X	X			>100	1	NO FLOW, GRAB SAMPLE
SV25-12	-	-	7/26/21	11:24	11:29	G-0351-09	-	-	M100.202	SG	X	X			>100	1	NO FLOW, GRAB SAMPLE
SV41-5	3	12800	7/26/21	11:55	11:58	G-0351-10	2000	SKC.10125	M100.203	SG	X	X			<2	1	
																10	Total Number of Containers

Representative Signature	Printed Name	Laboratory Signature	Printed Name
	Jason Hafliger		Dylan Lindsay
Company STANTEC	**Date** 7/26/2021 **Time** 1551	**Company** JONES ENVIRONMENTAL, INC.	**Date** 7/26/2021 **Time** 15:46
Representative Signature	**Printed Name**	**Laboratory Signature**	**Printed Name**
Company	**Date** **Time**	**Company**	**Date** **Time**

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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Soil-Gas Chain-of-Custody Record

Client: Stantec
Project Name: Olson Urban Housing
Project Address: 251-351 W Imperial Highway
La Habra, CA
Email:
Phone:
Report To: Jason Hafliger
Sampler: Dylan Lindsay

Date: 7/26/2021
Client Project #: 185804671

Purge Number: □ 1P ☒ 3P □ 7P □ 10P
Shut-In Test: (Y) / N

Report Options
EDD ____
EDF* - 10% Surcharge____
*Global ID _____

LAB USE ONLY
Jones Project #: G-0351

Page 2 of 2
Sample Container: GASTIGHT GLASS SYRINGE
If different than above, see Notes.

Turn Around Requested
- □ Immediate Attention
- □ Rush 24 Hours
- □ Rush 48 Hours
- □ Rush 72 Hours
- □ Normal
- ☒ Mobile Lab

Tracer
- ☒ n-pentane
- ☒ n-hexane
- ☒ n-heptane
- □ Isopropyl Alchohol
- □ 1,1-DFA
- □ _____

Reporting Limits
□ Standard ☒ Low Level* □ MDL*
*surcharge for these limits

Units mg/m³

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)	Gasoline Range Organics			Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
SV41-10	-	-	7/26/21	12:12	12:16	G-0351-11	-	-	M100.003	SG	X	X			>100	1	NO FLOW, GRAB SAMPLE
SV22-5	-	-	7/26/21	12:45	12:50	G-0351-12	-	-	M100.007	SG	X	X			>100	1	NO FLOW, GRAB SAMPLE
SV22-12	3	1710	7/26/21	13:02	13:06	G-0351-13	100	CASEY.2	M100.202	SG	X	X			<2	1	
SV23-5	-	-	7/26/21	13:16	13:26	G-0351-14	-	-	M100.203	SG	X	X			>100	1	NO FLOW, GRAB SAMPLE
SV23-12	3	1740	7/26/21	13:32	13:47	G-0351-15	200	CASEY.1	M100.003	SG	X	X			<2	1	
SV29-5	-	-	7/26/21	14:02	14:11	G-0351-16	-	-	M100.007	SG	X	X			>100	1	NO FLOW, GRAB SAMPLE
SV29-12	-	-	7/26/21	14:22	14:39	G-0351-17	-	-	M100.202	SG	X	X			>100	1	NO FLOW, GRAB SAMPLE
SV13A-5	3	12800	7/26/21	14:52	14:57	G-0351-18	1000	SKC.12628	M100.203	SG	X	X			<2	1	
SV13A-10	-	-	7/26/21	15:12		G-0351-19	-	-	M100.003	SG	X	X			>100	1	NO FLOW, GRAB SAMPLE
SV28-12	-	-	7/26/21	-	10:15	-	-	-	M100.007	-	-	-			>100	-	NO SAMPLE
																9	Total Number of Containers

Representative Signature	Printed Name	Laboratory Signature	Printed Name
	Jason Hafliger		Dylan Lindsay
Company: STANTEC	Date: 7/26/2021 Time:	Company: JONES ENVIRONMENTAL, INC.	Date: 7/26/2021 Time: 15:46
Representative Signature	Printed Name	Laboratory Signature	Printed Name
Company	Date Time	Company	Date Time

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Stantec Consulting Services, Inc.	**Report date:**	8/3/2021
Client Address:	735 E Carnegie Dr, Suite 280 San Bernardino, CA	**Jones Ref. No.:** **Client Ref. No.:**	G-0352 185804671
Attn:	Joshua Sargent	**Date Sampled:** **Date Received:**	7/27/2021 7/27/2021
Project:	Olson La Habra	**Date Analyzed:**	7/27/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

ANALYSES REQUESTED

1. EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sampling – Soil Gas samples were collected in glass gas-tight syringes equipped with Teflon plungers.

A tracer gas mixture of n-pentane, n-hexane, and n-heptane was placed at the tubing-surface interface before sampling. These compounds were analyzed during the 8260B analytical run to determine if there were surface leaks into the subsurface due to improper installation of the probe.

The sampling rate was approximately 200 cc/min, except when noted differently on the chain of custody record, using a glass gas-tight syringe. Purging was completed using a pump set at approximately 200 cc/min, except when noted differently on the chain of custody record. A default of 3 purge volumes was used as recommended by July 2015 DTSC/RWQCB guidance documents.

Prior to purging and sampling of soil gas at each point, a shut-in test was conducted to check for leaks in the above ground fittings. The shut-in test was performed on the above ground apparatus by evacuating the line to a vacuum of 100 inches of water, sealing the entire system and watching the vacuum for at least one minute. A vacuum gauge attached in parallel to the apparatus measured the vacuum. If there was any observable loss of vacuum, the fittings were adjusted as needed until the vacuum did not change noticeably. The soil gas sample was then taken.

No flow conditions occur when a sampling rate greater than 10 mL/min cannot be maintained without applying a vacuum greater than 100 inches of water to the sampling train. The sampling train is left at a vacuum for no less than three minutes. If the vacuum does not subside appreciably after three minutes, the sample location is determined to be a no flow sample.

Analytical – Soil Gas samples were analyzed using EPA Method 8260 that includes extra compounds required by DTSC/RWQCB (such as Freon 113). Instrument Continuing Calibration Verification, QC Reference Standards, Instrument Blanks and Sampling Blanks were analyzed every 12 hours as prescribed by the method. In addition, a Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were analyzed with each batch of Soil Gas samples. A duplicate/replicate sample was analyzed each day of the sampling activity. All samples were injected into the GC/MS system within 30 minutes of collection. All samples injected met the acceptance criteria for standard recovery except SV18-5. This sample was deteremined to be invalid and will be re-collected and re-analyzed at a later date.

Approval: _____

Annalise O'Toole
Mobile Lab Manager

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Stantec Consulting Services, Inc.	**Report date:**	8/3/2021
Client Address:	735 E Carnegie Dr, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	G-0352
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/27/2021
		Date Received:	7/27/2021
Project:	Olson La Habra	**Date Analyzed:**	7/27/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV32-5**	**SV33-5**	**SV33-10**	**SV15A-5**	**SV15A-5 REP**		
Jones ID:	**G-0352-01**	**G-0352-02**	**G-0352-03**	**G-0352-04**	**G-0352-05**	**Reporting Limit**	**Units**
Analytes:							
Benzene	**2.2**	ND	**44.9**	ND	ND	1.0	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	1.0	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	1.0	µg/m3
Bromoform	ND	ND	ND	ND	ND	1.0	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	1.5	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	1.5	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	1.5	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	1.0	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	6.0	µg/m3
Chloroform	ND	ND	ND	ND	ND	1.0	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	1.5	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	1.5	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	1.0	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Dichlorodifluoromethane	**3.8**	**4.9**	**4.4**	**3.1**	**3.6**	2.0	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	1.3	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV32-5**	**SV33-5**	**SV33-10**	**SV15A-5**	**SV15A-5 REP**		
Jones ID:	**G-0352-01**	**G-0352-02**	**G-0352-03**	**G-0352-04**	**G-0352-05**	**Reporting Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	1.0	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	1.0	µg/m3
Ethylbenzene	**1.2**	ND	**13.6**	ND	ND	1.0	µg/m3
Freon 113	ND	ND	ND	ND	ND	2.0	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	3.0	µg/m3
Isopropylbenzene	ND	ND	ND	ND	ND	1.0	µg/m3
4-Isopropyltoluene	**18.8**	**5.3**	**302**	**93.0**	**89.7**	1.0	µg/m3
Methylene chloride	**1.6**	ND	**1.1**	ND	ND	1.0	µg/m3
Naphthalene	ND	ND	ND	ND	ND	5.0	µg/m3
n-Propylbenzene	ND	ND	ND	ND	ND	1.0	µg/m3
Styrene	ND	ND	ND	ND	ND	1.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
Tetrachloroethene	**36.6**	**7.8**	**83.3**	**20.8**	**21.0**	1.0	µg/m3
Toluene	**8.0**	**2.2**	**93.6**	**1.4**	**1.4**	1.0	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
Trichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	1.0	µg/m3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	1.0	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	1.0	µg/m3
m,p-Xylene	**2.2**	ND	**14.7**	ND	ND	2.0	µg/m3
o-Xylene	**2.0**	ND	**12.1**	**1.2**	**1.3**	1.0	µg/m3
MTBE	ND	ND	ND	ND	ND	5.0	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	5.0	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	5.0	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	5.0	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	50.0	µg/m3
Gasoline Range Organics (C4-C12)	**1310**	ND	**118000**	**13100**	**12800**	250.0	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	80.0	µg/m3
n-Hexane	ND	ND	ND	ND	ND	80.0	µg/m3
n-Heptane	ND	ND	ND	ND	ND	80.0	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	89%	99%	92%	100%	103%	60 - 140	
Toluene-d_8	94%	93%	97%	95%	95%	60 - 140	
4-Bromofluorobenzene	96%	92%	●	107%	106%	60 - 140	
Batch ID:	G1-072721-01	G1-072721-01	G1-072721-01	G1-072721-01	G1-072721-01		

ND = Value below reporting limit

● = Hydrocarbon interference prevented adequate surrogate recovery.

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Stantec Consulting Services, Inc.	**Report date:**	8/3/2021
Client Address:	735 E Carnegie Dr, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	G-0352
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/27/2021
		Date Received:	7/27/2021
Project:	Olson La Habra	**Date Analyzed:**	7/27/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV16-5**	**SV16-12**	**SV17-5**	**SV7A-5**	**SV7A-10**		
Jones ID:	**G-0352-06**	**G-0352-07**	**G-0352-08**	**G-0352-09**	**G-0352-10**	**Reporting Limit**	**Units**
Analytes:							
Benzene	ND	**5.1**	**17.8**	**90.9**	**84.9**	1.0	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	1.0	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	1.0	µg/m3
Bromoform	ND	ND	ND	ND	ND	1.0	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	1.5	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	1.5	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	1.5	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	1.0	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	6.0	µg/m3
Chloroform	ND	ND	ND	ND	ND	1.0	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	1.5	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	1.5	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	1.0	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Dichlorodifluoromethane	**2.4**	ND	ND	ND	ND	2.0	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	1.3	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV16-5**	**SV16-12**	**SV17-5**	**SV7A-5**	**SV7A-10**		
Jones ID:	**G-0352-06**	**G-0352-07**	**G-0352-08**	**G-0352-09**	**G-0352-10**	**Reporting Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	1.0	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	1.0	µg/m3
Ethylbenzene	ND	ND	ND	**14.0**	**9.2**	1.0	µg/m3
Freon 113	ND	ND	ND	ND	ND	2.0	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	3.0	µg/m3
Isopropylbenzene	ND	ND	ND	ND	ND	1.0	µg/m3
4-Isopropyltoluene	ND	ND	ND	**69.5**	**43.6**	1.0	µg/m3
Methylene chloride	ND	**2.9**	ND	ND	**2.3**	1.0	µg/m3
Naphthalene	ND	ND	ND	ND	ND	5.0	µg/m3
n-Propylbenzene	ND	ND	ND	ND	ND	1.0	µg/m3
Styrene	ND	ND	ND	ND	ND	1.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
Tetrachloroethene	**1.2**	**1.7**	ND	**46.7**	**53.3**	1.0	µg/m3
Toluene	**1.1**	**87.2**	**3.1**	**74.0**	**53.4**	1.0	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
Trichloroethene	ND	**5.6**	**1.2**	ND	ND	1.0	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2,4-Trimethylbenzene	ND	ND	ND	ND	ND	1.0	µg/m3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	1.0	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	1.0	µg/m3
m,p-Xylene	ND	ND	ND	**18.6**	**11.0**	2.0	µg/m3
o-Xylene	ND	ND	**2.1**	**25.9**	**11.5**	1.0	µg/m3
MTBE	ND	ND	ND	ND	ND	5.0	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	5.0	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	5.0	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	5.0	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	50.0	µg/m3
Gasoline Range Organics (C4-C12)	ND	ND	ND	**202000**	**47200**	250.0	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	80.0	µg/m3
n-Hexane	ND	ND	ND	ND	ND	80.0	µg/m3
n-Heptane	ND	ND	ND	ND	ND	80.0	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	92%	98%	99%	99%	96%	60 - 140	
Toluene-d_8	94%	93%	94%	98%	95%	60 - 140	
4-Bromofluorobenzene	91%	93%	93%	108%	107%	60 - 140	
Batch ID:	G1-072721-01	G1-072721-01	G1-072721-01	G1-072721-01	G1-072721-01		

ND = Value below reporting limit

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Stantec Consulting Services, Inc.	**Report date:**	8/3/2021
Client Address:	735 E Carnegie Dr, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	G-0352
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/27/2021
		Date Received:	7/27/2021
Project:	Olson La Habra	**Date Analyzed:**	7/27/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV34-5**	**SV34-10**	**SV3-5**	**SV3-10**	**SV40-5 TRACER RR**		
Jones ID:	**G-0352-11**	**G-0352-12**	**G-0352-13**	**G-0352-14**	**G-0352-15**	**Reporting Limit**	**Units**
Analytes:							
Benzene	**1.8**	**37.2**	ND	ND	**1.7**	1.0	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	1.0	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	1.0	µg/m3
Bromoform	ND	ND	ND	ND	ND	1.0	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	1.5	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	1.5	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	1.5	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	1.0	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	6.0	µg/m3
Chloroform	ND	ND	ND	ND	ND	1.0	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	1.5	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	1.5	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	1.0	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Dichlorodifluoromethane	**4.7**	**4.8**	**3.8**	ND	**5.7**	2.0	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	1.3	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV34-5**	**SV34-10**	**SV3-5**	**SV3-10**	**SV40-5 TRACER RR**		
Jones ID:	**G-0352-11**	**G-0352-12**	**G-0352-13**	**G-0352-14**	**G-0352-15**	**Reporting Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	1.0	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	1.0	µg/m3
Ethylbenzene	**1.4**	**5.4**	ND	ND	ND	1.0	µg/m3
Freon 113	ND	ND	ND	ND	ND	2.0	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	3.0	µg/m3
Isopropylbenzene	ND	ND	ND	ND	ND	1.0	µg/m3
4-Isopropyltoluene	**48.00**	**34.4**	**3.0**	ND	ND	1.0	µg/m3
Methylene chloride	ND	**2.4**	ND	ND	ND	1.0	µg/m3
Naphthalene	ND	ND	ND	ND	ND	5.0	µg/m3
n-Propylbenzene	ND	ND	ND	ND	ND	1.0	µg/m3
Styrene	ND	ND	ND	ND	ND	1.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
Tetrachloroethene	**21.9**	**60.8**	**9.0**	**9.6**	**9.2**	1.0	µg/m3
Toluene	**9.6**	**69.0**	**2.9**	ND	**1.9**	1.0	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
Trichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2,4-Trimethylbenzene	ND	ND	**1.1**	ND	ND	1.0	µg/m3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	1.0	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	1.0	µg/m3
m,p-Xylene	**2.1**	**6.9**	ND	ND	ND	2.0	µg/m3
o-Xylene	ND	**6.2**	**1.4**	ND	ND	1.0	µg/m3
MTBE	ND	ND	ND	ND	ND	5.0	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	5.0	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	5.0	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	5.0	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	50.0	µg/m3
Gasoline Range Organics (C4-C12)	ND	**39100**	ND	**471000**	ND	250.0	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	**85**	80.0	µg/m3
n-Hexane	ND	ND	ND	ND	**118**	80.0	µg/m3
n-Heptane	ND	ND	ND	ND	**315**	80.0	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	91%	92%	79%	98%	87%	60 - 140	
Toluene-d_8	93%	96%	93%	106%	94%	60 - 140	
4-Bromofluorobenzene	93%	97%	93%	96%	93%	60 - 140	
Batch ID:	G1-072721-01	G1-072721-01	G1-072721-01	G1-072721-01	G1-072721-01		

ND = Value below reporting limit

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Stantec Consulting Services, Inc.	**Report date:**	8/3/2021
Client Address:	735 E Carnegie Dr, Suite 280 San Bernardino, CA	**Jones Ref. No.:** **Client Ref. No.:**	G-0352 185804671
Attn:	Joshua Sargent	**Date Sampled:** **Date Received:**	7/27/2021 7/27/2021
Project:	Olson La Habra	**Date Analyzed:**	7/27/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV40-10 TRACER RR**	**SV32-10**		
Jones ID:	**G-0352-16**	**G-0352-17**	**Reporting Limit**	**Units**
Analytes:				
Benzene	**3.8**	**15.9**	1.0	µg/m3
Bromobenzene	ND	ND	1.0	µg/m3
Bromodichloromethane	ND	ND	1.0	µg/m3
Bromoform	ND	ND	1.0	µg/m3
n-Butylbenzene	ND	ND	1.5	µg/m3
sec-Butylbenzene	ND	ND	1.5	µg/m3
tert-Butylbenzene	ND	ND	1.5	µg/m3
Carbon tetrachloride	**2.2**	ND	1.0	µg/m3
Chlorobenzene	ND	ND	6.0	µg/m3
Chloroform	ND	ND	1.0	µg/m3
2-Chlorotoluene	ND	ND	1.5	µg/m3
4-Chlorotoluene	ND	ND	1.5	µg/m3
Dibromochloromethane	ND	ND	1.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	1.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	1.0	µg/m3
Dibromomethane	ND	ND	1.0	µg/m3
1,2- Dichlorobenzene	ND	ND	2.0	µg/m3
1,3-Dichlorobenzene	ND	ND	2.0	µg/m3
1,4-Dichlorobenzene	ND	ND	2.0	µg/m3
Dichlorodifluoromethane	**6.8**	**6.5**	2.0	µg/m3
1,1-Dichloroethane	ND	ND	1.0	µg/m3
1,2-Dichloroethane	ND	ND	1.0	µg/m3
1,1-Dichloroethene	ND	ND	1.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	1.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	1.0	µg/m3
1,2-Dichloropropane	ND	ND	1.0	µg/m3
1,3-Dichloropropane	ND	ND	1.0	µg/m3
2,2-Dichloropropane	ND	ND	2.0	µg/m3
1,1-Dichloropropene	ND	ND	1.3	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV40-10 TRACER RR**	**SV32-10**		
Jones ID:	**G-0352-16**	**G-0352-17**	**Reporting Limit**	**Units**
Analytes:				
cis-1,3-Dichloropropene	ND	ND	1.0	µg/m3
trans-1,3-Dichloropropene	ND	ND	1.0	µg/m3
Ethylbenzene	ND	ND	1.0	µg/m3
Freon 113	ND	ND	2.0	µg/m3
Hexachlorobutadiene	ND	ND	3.0	µg/m3
Isopropylbenzene	ND	ND	1.0	µg/m3
4-Isopropyltoluene	**2.0**	**13.9**	1.0	µg/m3
Methylene chloride	**6.6**	ND	1.0	µg/m3
Naphthalene	ND	ND	5.0	µg/m3
n-Propylbenzene	ND	ND	1.0	µg/m3
Styrene	ND	ND	1.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	1.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	2.0	µg/m3
Tetrachloroethene	**1.7**	**42.2**	1.0	µg/m3
Toluene	**2.4**	**7.5**	1.0	µg/m3
1,2,3-Trichlorobenzene	ND	ND	2.0	µg/m3
1,2,4-Trichlorobenzene	ND	ND	2.0	µg/m3
1,1,1-Trichloroethane	ND	ND	1.0	µg/m3
1,1,2-Trichloroethane	ND	ND	1.0	µg/m3
Trichloroethene	ND	ND	1.0	µg/m3
Trichlorofluoromethane	**2.1**	ND	2.0	µg/m3
1,2,3-Trichloropropane	ND	ND	1.0	µg/m3
1,2,4-Trimethylbenzene	ND	ND	1.0	µg/m3
1,3,5-Trimethylbenzene	ND	ND	1.0	µg/m3
Vinyl chloride	ND	ND	1.0	µg/m3
m,p-Xylene	ND	ND	2.0	µg/m3
o-Xylene	**2.7**	ND	1.0	µg/m3
MTBE	ND	ND	5.0	µg/m3
Ethyl-tert-butylether	ND	ND	5.0	µg/m3
Di-isopropylether	ND	ND	5.0	µg/m3
tert-amylmethylether	ND	ND	5.0	µg/m3
tert-Butylalcohol	ND	ND	50.0	µg/m3
Gasoline Range Organics (C4-C12)	ND	ND	250.0	µg/m3
Tracer:				
n-Pentane	**5850**	ND	80.0	µg/m3
n-Hexane	**3700**	ND	80.0	µg/m3
n-Heptane	**519**	ND	80.0	µg/m3
Dilution Factor	1	2		
Surrogate Recoveries:			**QC Limits**	
Dibromofluoromethane	95%	96%	60 - 140	
Toluene-d_8	94%	94%	60 - 140	
4-Bromofluorobenzene	93%	92%	60 - 140	
Batch ID:	G1-072721-01	G1-072721-01		

ND = Value below reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Stantec Consulting Services, Inc.	**Report date:**	8/3/2021
Client Address:	735 E Carnegie Dr, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	G-0352
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/27/2021
		Date Received:	7/27/2021
Project:	Olson La Habra	**Date Analyzed:**	7/27/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**METHOD BLANK**	**SAMPLING BLANK**		
Jones ID:	**072721-G1MB1**	**072721-G1SB1**	**Reporting Limit**	**Units**
Analytes:				
Benzene	ND	ND	1.0	µg/m3
Bromobenzene	ND	ND	1.0	µg/m3
Bromodichloromethane	ND	ND	1.0	µg/m3
Bromoform	ND	ND	1.0	µg/m3
n-Butylbenzene	ND	ND	1.5	µg/m3
sec-Butylbenzene	ND	ND	1.5	µg/m3
tert-Butylbenzene	ND	ND	1.5	µg/m3
Carbon tetrachloride	ND	ND	1.0	µg/m3
Chlorobenzene	ND	ND	6.0	µg/m3
Chloroform	ND	ND	1.0	µg/m3
2-Chlorotoluene	ND	ND	1.5	µg/m3
4-Chlorotoluene	ND	ND	1.5	µg/m3
Dibromochloromethane	ND	ND	1.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	1.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	1.0	µg/m3
Dibromomethane	ND	ND	1.0	µg/m3
1,2- Dichlorobenzene	ND	ND	2.0	µg/m3
1,3-Dichlorobenzene	ND	ND	2.0	µg/m3
1,4-Dichlorobenzene	ND	ND	2.0	µg/m3
Dichlorodifluoromethane	ND	ND	2.0	µg/m3
1,1-Dichloroethane	ND	ND	1.0	µg/m3
1,2-Dichloroethane	ND	ND	1.0	µg/m3
1,1-Dichloroethene	ND	ND	1.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	1.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	1.0	µg/m3
1,2-Dichloropropane	ND	ND	1.0	µg/m3
1,3-Dichloropropane	ND	ND	1.0	µg/m3
2,2-Dichloropropane	ND	ND	2.0	µg/m3
1,1-Dichloropropene	ND	ND	1.3	µg/m3

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**METHOD BLANK**	**SAMPLING BLANK**		
Jones ID:	**072721-G1MB1**	**072721-G1SB1**	**Reporting Limit**	**Units**
Analytes:				
cis-1,3-Dichloropropene	ND	ND	1.0	µg/m3
trans-1,3-Dichloropropene	ND	ND	1.0	µg/m3
Ethylbenzene	ND	ND	1.0	µg/m3
Freon 113	ND	ND	2.0	µg/m3
Hexachlorobutadiene	ND	ND	3.0	µg/m3
Isopropylbenzene	ND	ND	1.0	µg/m3
4-Isopropyltoluene	ND	ND	1.0	µg/m3
Methylene chloride	ND	ND	1.0	µg/m3
Naphthalene	ND	ND	5.0	µg/m3
n-Propylbenzene	ND	ND	1.0	µg/m3
Styrene	ND	ND	1.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	1.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	2.0	µg/m3
Tetrachloroethene	ND	ND	1.0	µg/m3
Toluene	ND	ND	1.0	µg/m3
1,2,3-Trichlorobenzene	ND	ND	2.0	µg/m3
1,2,4-Trichlorobenzene	ND	ND	2.0	µg/m3
1,1,1-Trichloroethane	ND	ND	1.0	µg/m3
1,1,2-Trichloroethane	ND	ND	1.0	µg/m3
Trichloroethene	ND	ND	1.0	µg/m3
Trichlorofluoromethane	ND	ND	2.0	µg/m3
1,2,3-Trichloropropane	ND	ND	1.0	µg/m3
1,2,4-Trimethylbenzene	ND	ND	1.0	µg/m3
1,3,5-Trimethylbenzene	ND	ND	1.0	µg/m3
Vinyl chloride	ND	ND	1.0	µg/m3
m,p-Xylene	ND	ND	2.0	µg/m3
o-Xylene	ND	ND	1.0	µg/m3
MTBE	ND	ND	5.0	µg/m3
Ethyl-tert-butylether	ND	ND	5.0	µg/m3
Di-isopropylether	ND	ND	5.0	µg/m3
tert-amylmethylether	ND	ND	5.0	µg/m3
tert-Butylalcohol	ND	ND	50.0	µg/m3
Gasoline Range Organics (C4-C12)	ND	ND	250.0	µg/m3
Tracer:				
n-Pentane	ND	ND	80.0	µg/m3
n-Hexane	ND	ND	80.0	µg/m3
n-Heptane	ND	ND	80.0	µg/m3
Dilution Factor	1	1		
Surrogate Recoveries:			**QC Limits**	
Dibromofluoromethane	103%	102%	60 - 140	
Toluene-d_8	96%	94%	60 - 140	
4-Bromofluorobenzene	94%	92%	60 - 140	
Batch ID:	G1-072721-01	G1-072721-01		

ND = Value below reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Stantec Consulting Services, Inc.	**Report date:**	8/3/2021
Client Address:	735 E Carnegie Dr, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	G-0352
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/27/2021
		Date Received:	7/27/2021
Project:	Olson La Habra	**Date Analyzed:**	7/27/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Batch ID: G1-072721-01

Jones ID:	**072721-G1LCS1**	**072721-G1LCSD1**			**072721-G1CCV1**	
Parameter	LCS Recovery (%)	LCSD Recovery (%)	RPD	Acceptability Range (%)	CCV	Acceptability Range (%)
Vinyl chloride	76%	79%	4.7%	60 - 140	78%	80 - 120
1,1-Dichloroethene	108%	108%	0.7%	60 - 140	86%	80 - 120
Cis-1,2-Dichloroethene	116%	114%	2.1%	70 - 130	100%	80 - 120
1,1,1-Trichloroethane	102%	109%	7.2%	70 - 130	98%	80 - 120
Benzene	111%	118%	6.3%	70 - 130	101%	80 - 120
Trichloroethene	121%	130%	7.6%	70 - 130	109%	80 - 120
Toluene	110%	118%	7.0%	70 - 130	103%	80 - 120
Tetrachloroethene	128%	126%	2.2%	70 - 130	119%	80 - 120
Chlorobenzene	113%	120%	6.5%	70 - 130	105%	80 - 120
Ethylbenzene	112%	116%	3.2%	70 - 130	105%	80 - 120
1,2,4 Trimethylbenzene	106%	106%		70 - 130	103%	80 - 120
Gasoline Range Organics (C4-C12)	110%	115%	4.2%	70 - 130	103%	80 - 120
Surrogate Recovery:						
Dibromofluoromethane	102%	101%		60 - 140	103%	60 - 140
Toluene-d_8	95%	95%		60 - 140	96%	60 - 140
4-Bromofluorobenzene	93%	94%		60 - 140	96%	60 - 140

LCS = Laboratory Control Sample
LCSD = Laboratory Control Sample Duplicate
CCV = Continuing Calibration Verification
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 20%

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Soil-Gas Chain-of-Custody Record

Client: Stantec
Project Name: Olson Urban Housing
Project Address: 251-351 W Imperial Highway, La Habra, CA
Email:
Phone:
Report To: Jason Hafliger
Sampler: Dylan Lindsay

Date: 7/27/2021
Client Project #: 185804671

Purge Number: □ 1P ☒ 3P □ 7P □ 10P
Shut-In Test: (Y) N

Report Options
EDD ____
EDF* - 10% Surcharge ____
*Global ID ____

LAB USE ONLY
Jones Project # G-0352
Page 1 of 3
Sample Container: GASTIGHT GLASS SYRINGE
If different than above, see Notes.

Turn Around Requested
- □ Immediate Attention
- □ Rush 24 Hours
- □ Rush 48 Hours
- □ Rush 72 Hours
- □ Normal
- ☒ Mobile Lab

Tracer
- ☒ n-pentane
- ☒ n-hexane
- ☒ n-heptane
- □ Isopropyl Alchohol
- □ 1,1-DFA
- □ ____

Reporting Limits
□ Standard ☒ Low Level* □ MDL*
*surcharge for these limits

Units ug/m3

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)	Gasoline Range Organics			Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
SV32-5	3	12800	7/27/21	7:41	7:42	G-0352-01	2000	SKC.10125	M100.003	SG	X	X			20	1	
SV33-5	3	12800	7/27/21	7:54	7:58	G-0352-02	1000	SKC.12628	M100.202	SG	X	X			<2	1	
SV33-10	3	1710	7/27/21	8:12	8:17	G-0352-03	200	SAMPLER.2	M100.110	SG	X	X			10	1	
SV15A-5	3	12800	7/27/21	8:33	8:35	G-0352-04	2000	SKC.10125	M100.003	SG	X	X			<2	1	
SV15A-5 REP	3	12800	7/27/21	8:41	8:55	G-0352-05	2000	SKC.10125	M100.003	SG	X	X			<2	1	
SV16-5	3	12800	7/27/21	9:22	9:24	G-0352-06	2000	SKC.12628	M100.202	SG	X	X			8	1	
SV16-12	3	1740	7/27/21	9:42	9:45	G-0352-07	200	SAMPLER.2	M100.110	SG	X	X			10	1	
SV17-5	3	12800	7/26/21	10:02	10:12	G-0352-08	2000	SKC.10125	M100.003	SG	X	X			<2	1	
SV7A-5	3	12800	7/27/21	10:42	10:44	G-0352-09	2000	SKC.12628	M100.202	SG	X	X			8	1	
SV7A-10	3	1710	7/27/21	10:58	11:06	G-0352-10	200	SAMPLER.2	M100.110	SG	X	X			<2	1	

10 Total Number of Containers

Representative Signature	Printed Name	Laboratory Signature	Printed Name
	Jason Hafliger 1545		Dylan Lindsay
Company STANTEC	**Date** 7/27/2021 **Time**	**Company** JONES ENVIRONMENTAL, INC.	**Date** 7/27/2021 **Time** 15:40
Representative Signature	**Printed Name**	**Laboratory Signature**	**Printed Name**
Company	**Date** **Time**	**Company**	**Date** **Time**

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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Soil-Gas Chain-of-Custody Record

Client: Stantec
Project Name: Olson Urban Housing
Project Address: 251-351 W Imperial Highway, La Habra, CA
Email:
Phone:
Report To: Jason Hafliger
Sampler: Dylan Lindsay

Date: 7/27/2021
Client Project #: 185804671

Purge Number: □ 1P ☒ 3P □ 7P □ 10P
Shut-In Test: (Y) / N

Report Options
EDD ____
EDF* - 10% Surcharge ____
*Global ID ____

LAB USE ONLY
Jones Project # G-0352
Page 2 of 3
Sample Container: GASTIGHT GLASS SYRINGE
If different than above, see Notes.

Turn Around Requested
- □ Immediate Attention
- □ Rush 24 Hours
- □ Rush 48 Hours
- □ Rush 72 Hours
- □ Normal
- ☒ Mobile Lab

Tracer
- ☒ n-pentane
- ☒ n-hexane
- ☒ n-heptane
- □ Isopropyl Alchohol
- □ 1,1-DFA
- □ ____

Reporting Limits
□ Standard ☒ Low Level* □ MDL*
*surcharge for these limits
Units: mg/m3

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)	Gasoline Range Organics			Magnehelic Vacuum (in/H_2O)	Number of Containers	Notes & Special Instructions
SV34-5	3	12800	7/27/21	11:28	11:32	G-0352-11	2000	SKC.10125	M100.003	SG	X	X			<2	1	
SV34-10	3	1710	7/27/21	11:51	11:58	G-0352-12	200	SAMPLER.1	M100.007	SG	X	X			18	1	
SV3-5	3	12800	7/27/21	12:16	12:18	G-0352-13	2000	SKC.10125	M100.202	SG	X	X			<2	1	
SV3-10	3	1710	7/27/21	12:38	12:39	G-0352-14	200	SAMPLER.2	M100.110	SG	X	X			<2	1	
SV40-5 TRACER RR	3	12800	7/27/21	13:52	13:55	G-0352-15	2000	SKC.10125	M100.003	SG	X	X			<2	1	TRACER DETECTED
SV40-10 TRACER RR	3	1710	7/27/21	14:05	14:10	G-0352-16	200	SAMPLER.1	M100.007	SG	X	X			<2	1	TRACER DETECTED
~~SV18-5~~	-	-	~~7/27/21~~	~~14:25~~	~~14:30~~	~~G-0352-17~~	-	-	~~M100.110~~	~~SG~~	~~X~~	~~X~~			~~>100~~	~~1~~	~~no flow, grab sample~~ AO 8/11
SV32-10	-	-	7/27/21	15:08	15:10	G-0352-~~18~~ 17	-	-	M100.110	SG	X	X			>100	1	no flow, grab sample
			7/27/21							SG	X	X				1	
			7/27/21							-	-	-				-	

Representative Signature	Printed Name	Laboratory Signature	Printed Name	
	Jason Hafliger 18:45		Dylan Lindsay	9 Total Number of Containers
Company STANTEC	**Date** 7/27/2021 **Time**	**Company** JONES ENVIRONMENTAL, INC.	**Date** 7/27/2021 **Time** 15:40	
Representative Signature	**Printed Name**	**Laboratory Signature**	**Printed Name**	
Company	**Date** **Time**	**Company**	**Date** **Time**	

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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Soil-Gas Chain-of-Custody Record

Client: Stantec
Project Name: Olson Urban Housing
Project Address: 251-351 W Imperial Highway, La Habra, CA
Email:
Phone:
Report To: Jason Hafliger
Sampler: Dylan Lindsay

Date: 7/27/2021
Client Project #: 185804671

Purge Number: □ 1P ☒ 3P □ 7P □ 10P

Shut-In Test: (Y) N

Report Options
EDD ____
EDF* - 10% Surcharge____
*Global ID _____

LAB USE ONLY
Jones Project # G-0352

Page 3 of 3

Sample Container: GASTIGHT GLASS SYRINGE
If different than above, see Notes.

Turn Around Requested
- □ Immediate Attention
- □ Rush 24 Hours
- □ Rush 48 Hours
- □ Rush 72 Hours
- □ Normal
- ☒ Mobile Lab

Tracer
- ☒ n-pentane
- ☒ n-hexane
- ☒ n-heptane
- □ Isopropyl Alchohol
- □ 1,1-DFA
- □ _____

Reporting Limits
- ☒ Standard
- ☒ Low Level*
- □ MDL*

*surcharge for these limits

Units mg/m3

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)	Gasoline Range Organics			Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
SV15-10	-	-	7/27/21	-	8:12	-	-	-	M100.007	-	-	-			>100	-	NO SAMPLE
SV18-5	-	-	7/27/21	-	8:58	-	-	-	M100.202	-	-	-			>100	-	NO SAMPLE
SV18-12	-	-	7/27/21	-	9:02	-	-	-	M100.110	-	-	-			>100	-	NO SAMPLE
SV17-12	-	-	7/27/21	-	10:00	-	-	-	M100.007	-	-	-			>100	-	NO SAMPLE

Representative Signature	Printed Name	Laboratory Signature	Printed Name	Total Number of Containers
	0 Jason Hafliger 1545		Dylan Lindsay	
Company STANTEC	**Date** 7/27/2021 **Time** ~~0:00~~	**Company** JONES ENVIRONMENTAL, INC.	**Date** 7/27/2021 **Time** ~~0:00~~ 15:40	
Representative Signature	**Printed Name**	**Laboratory Signature**	**Printed Name**	
Company	**Date** **Time**	**Company**	**Date** **Time**	

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Stantec Consulting Services Inc.	**Report date:**	7/29/2021
Client Address:	735 E Carnegie Drive, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	H-0022
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/26/2021
		Date Received:	7/26/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/26/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

ANALYSES REQUESTED

1. EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sampling – Soil Gas samples were collected in glass gas-tight syringes equipped with Teflon plungers.

A tracer gas mixture of n-pentane, n-hexane, and n-heptane was placed at the tubing-surface interface before sampling. These compounds were analyzed during the 8260B analytical run to determine if there were surface leaks into the subsurface due to improper installation of the probe.

The sampling rate was approximately 200 cc/min, except when noted differently on the chain of custody record, using a glass gas-tight syringe. Purging was completed using a pump set at approximately 200 cc/min, except when noted differently on the chain of custody record. A default of 3 purge volumes was used as recommended by July 2015 DTSC/RWQCB guidance documents.

Prior to purging and sampling of soil gas at each point, a shut-in test was conducted to check for leaks in the above ground fittings. The shut-in test was performed on the above ground apparatus by evacuating the line to a vacuum of 100 inches of water, sealing the entire system and watching the vacuum for at least one minute. A vacuum gauge attached in parallel to the apparatus measured the vacuum. If there was any observable loss of vacuum, the fittings were adjusted as needed until the vacuum did not change noticeably. The soil gas sample was then taken.

No flow conditions occur when a sampling rate greater than 10 mL/min cannot be maintained without applying a vacuum greater than 100 inches of water to the sampling train. The sampling train is left at a vacuum for no less than three minutes. If the vacuum does not subside appreciably after three minutes, the sample location is determined to be a no flow sample.

Analytical – Soil Gas samples were analyzed using EPA Method 8260 that includes extra compounds required by DTSC/RWQCB (such as Freon 113). Instrument Continuing Calibration Verification, QC Reference Standards, Instrument Blanks and Sampling Blanks were analyzed every 12 hours as prescribed by the method. In addition, a Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were analyzed with each batch of Soil Gas samples. A duplicate/replicate sample was analyzed each day of the sampling activity. All samples were injected into the GC/MS system within 30 minutes of collection.

Approval: _____

Annalise O'Toole
Mobile Lab Manager

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Stantec Consulting Services Inc.	**Report date:**	7/29/2021
Client Address:	735 E Carnegie Drive, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	H-0022
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/26/2021
		Date Received:	7/26/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/26/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**AA1-210726**	**SV-1A-5**	**SV-1A-10**	**SV-11A-5**	**SV-11A-10**		
Jones ID:	**H-0022-01**	**H-0022-02**	**H-0022-03**	**H-0022-04**	**H-0022-05**	**Reporting Limit**	**Units**
Analytes:							
Benzene	ND	**22.5**	**19.3**	**65.1**	**70.0**	2.0	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	2.0	µg/m3
Bromoform	ND	ND	ND	ND	ND	2.0	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	3.0	µg/m3
sec-Butylbenzene	ND	**6.9**	ND	ND	ND	3.0	µg/m3
tert-Butylbenzene	ND	ND	**4.2**	ND	ND	3.0	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	2.0	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Chloroform	ND	ND	ND	**30.5**	**4.2**	2.0	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	3.0	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	3.0	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	2.0	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
Dichlorodifluoromethane	**4.0**	ND	ND	ND	ND	4.0	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	4.0	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	2.5	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**AA1-210726**	**SV-1A-5**	**SV-1A-10**	**SV-11A-5**	**SV-11A-10**		
Jones ID:	**H-0022-01**	**H-0022-02**	**H-0022-03**	**H-0022-04**	**H-0022-05**	**Reporting Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	2.0	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	2.0	µg/m3
Ethylbenzene	ND	**4.1**	**5.1**	**15.3**	**13.8**	2.0	µg/m3
Freon 113	ND	ND	ND	ND	ND	4.0	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	6.0	µg/m3
Isopropylbenzene	ND	ND	**3.6**	ND	ND	2.0	µg/m3
4-Isopropyltoluene	ND	**52.4**	**19.4**	**23.2**	**21.3**	2.0	µg/m3
Methylene chloride	ND	ND	**28.6**	**7.1**	ND	2.0	µg/m3
Naphthalene	ND	ND	ND	ND	ND	10.0	µg/m3
n-Propylbenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Styrene	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	4.0	µg/m3
Tetrachloroethene	ND	**21.1**	**71.8**	**289**	**263**	2.0	µg/m3
Toluene	ND	**21.1**	**32.2**	**102**	**69.0**	2.0	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
Trichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	4.0	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2,4-Trimethylbenzene	ND	**7.9**	**4.5**	ND	ND	2.0	µg/m3
1,3,5-Trimethylbenzene	ND	ND	**2.4**	ND	ND	2.0	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	2.0	µg/m3
m,p-Xylene	ND	**11.8**	**16.0**	ND	ND	4.0	µg/m3
o-Xylene	ND	**7.2**	**5.6**	ND	**10.2**	2.0	µg/m3
MTBE	ND	ND	ND	ND	ND	10.0	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	10.0	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	10.0	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	10.0	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	100.0	µg/m3
Gasoline Range Organics (C4-C12)	ND	**47000**	**16100**	**781000**	**723000**	500.0	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	80.0	µg/m3
n-Hexane	ND	ND	ND	ND	ND	80.0	µg/m3
n-Heptane	ND	ND	ND	ND	ND	80.0	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	78%	88%	76%	88%	75%	60 - 140	
Toluene-d_8	100%	103%	106%	●	●	60 - 140	
4-Bromofluorobenzene	92%	120%	106%	●	●	60 - 140	
Batch ID:	H1-072621-01	H1-072621-01	H1-072621-01	H1-072621-01	H1-072621-01		

ND = Value below reporting limit

● = Hydrocarbon interference prevented adequate surrogate recovery.

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Stantec Consulting Services Inc.	**Report date:**	7/29/2021
Client Address:	735 E Carnegie Drive, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	H-0022
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/26/2021
		Date Received:	7/26/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/26/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV-27-5**	**SV-27-12**	**SV-26-12**	**SV-1A-5 REP**	**SV-42-5**		
Jones ID:	**H-0022-06**	**H-0022-07**	**H-0022-08**	**H-0022-09**	**H-0022-10**	**Reporting Limit**	**Units**
Analytes:							
Benzene	ND	ND	ND	**20.2**	**17.3**	2.0	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Bromodichloromethane	ND	ND	ND	ND	**3.7**	2.0	µg/m3
Bromoform	ND	ND	ND	ND	ND	2.0	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	3.0	µg/m3
sec-Butylbenzene	ND	ND	ND	**6.4**	ND	3.0	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	3.0	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	2.0	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Chloroform	ND	ND	ND	ND	**20.1**	2.0	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	3.0	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	3.0	µg/m3
Dibromochloromethane	ND	ND	ND	ND	**3.4**	2.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	2.0	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
Dichlorodifluoromethane	ND	ND	ND	ND	ND	4.0	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	4.0	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	2.5	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV-27-5**	**SV-27-12**	**SV-26-12**	**SV-1A-5 REP**	**SV-42-5**		
Jones ID:	**H-0022-06**	**H-0022-07**	**H-0022-08**	**H-0022-09**	**H-0022-10**	**Reporting Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	2.0	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	2.0	µg/m3
Ethylbenzene	ND	ND	ND	**3.7**	**3.1**	2.0	µg/m3
Freon 113	ND	ND	ND	ND	ND	4.0	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	6.0	µg/m3
Isopropylbenzene	ND	ND	**2.1**	ND	**3.9**	2.0	µg/m3
4-Isopropyltoluene	**3.7**	**2.2**	ND	**45.6**	**110**	2.0	µg/m3
Methylene chloride	**20.8**	ND	**25.0**	ND	ND	2.0	µg/m3
Naphthalene	ND	ND	ND	ND	ND	10.0	µg/m3
n-Propylbenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Styrene	ND	**2.1**	ND	ND	ND	2.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	4.0	µg/m3
Tetrachloroethene	**2.6**	**4.2**	**2.9**	**17.9**	**20.7**	2.0	µg/m3
Toluene	**10.1**	**4.9**	**12.2**	**18.1**	**51.2**	2.0	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
Trichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	4.0	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2,4-Trimethylbenzene	ND	**2.4**	ND	**6.8**	ND	2.0	µg/m3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	2.0	µg/m3
m,p-Xylene	ND	ND	ND	**12.7**	**8.9**	4.0	µg/m3
o-Xylene	**2.2**	ND	ND	**6.0**	**3.9**	2.0	µg/m3
MTBE	ND	ND	ND	ND	ND	10.0	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	10.0	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	10.0	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	10.0	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	100.0	µg/m3
Gasoline Range Organics (C4-C12)	**4050**	ND	**4700**	**79500**	**6110**	500.0	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	80.0	µg/m3
n-Hexane	ND	ND	ND	ND	ND	80.0	µg/m3
n-Heptane	ND	ND	ND	ND	ND	80.0	µg/m3
Dilution Factor	1	2.5	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	69%	75%	82%	91%	79%	60 - 140	
Toluene-d_8	100%	98%	100%	104%	98%	60 - 140	
4-Bromofluorobenzene	92%	92%	93%	113%	94%	60 - 140	
Batch ID:	H1-072621-01	H1-072621-01	H1-072621-01	H1-072621-01	H1-072621-01		

ND = Value below reporting limit

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Stantec Consulting Services Inc.	**Report date:**	7/29/2021
Client Address:	735 E Carnegie Drive, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	H-0022
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/26/2021
		Date Received:	7/26/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/26/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV-42-10**	**SV-39-5**	**SV-39-10**	**SV-40-5**	**SV-40-10**		
Jones ID:	**H-0022-11**	**H-0022-12**	**H-0022-13**	**H-0022-14**	**H-0022-15**	**Reporting Limit**	**Units**
Analytes:							
Benzene	**34.0**	ND	**4.2**	**3.8**	**2.8**	2.0	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Bromodichloromethane	ND	ND	ND	ND	ND	2.0	µg/m3
Bromoform	ND	ND	ND	ND	ND	2.0	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	3.0	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	3.0	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	3.0	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	**2.8**	2.0	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Chloroform	ND	**3.5**	ND	**7.1**	**4.1**	2.0	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	3.0	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	3.0	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	2.0	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
Dichlorodifluoromethane	**4.4**	ND	ND	**7.0**	ND	4.0	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	4.0	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	2.5	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV-42-10**	**SV-39-5**	**SV-39-10**	**SV-40-5**	**SV-40-10**		
Jones ID:	**H-0022-11**	**H-0022-12**	**H-0022-13**	**H-0022-14**	**H-0022-15**	**Reporting Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	2.0	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	2.0	µg/m3
Ethylbenzene	**5.6**	ND	ND	ND	ND	2.0	µg/m3
Freon 113	ND	ND	ND	ND	ND	4.0	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	6.0	µg/m3
Isopropylbenzene	**17.7**	ND	ND	ND	ND	2.0	µg/m3
4-Isopropyltoluene	**19.7**	ND	ND	ND	**2.1**	2.0	µg/m3
Methylene chloride	**9.6**	**2.9**	ND	**3.5**	**8.1**	2.0	µg/m3
Naphthalene	ND	ND	ND	ND	ND	10.0	µg/m3
n-Propylbenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Styrene	**3.0**	ND	ND	ND	ND	2.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	4.0	µg/m3
Tetrachloroethene	**17.6**	**2.7**	**13.3**	**8.5**	ND	2.0	µg/m3
Toluene	**60.2**	**3.9**	**14.9**	**7.3**	**2.7**	2.0	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	4.0	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
Trichloroethene	ND	ND	ND	ND	ND	2.0	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	4.0	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2,4-Trimethylbenzene	ND	ND	ND	ND	**2.1**	2.0	µg/m3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	2.0	µg/m3
m,p-Xylene	**15.1**	ND	ND	ND	**6.0**	4.0	µg/m3
o-Xylene	**8.7**	ND	ND	ND	**5.8**	2.0	µg/m3
MTBE	ND	ND	ND	ND	ND	10.0	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	10.0	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	10.0	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	10.0	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	100.0	µg/m3
Gasoline Range Organics (C4-C12)	**13300**	ND	ND	ND	**3100**	500.0	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	**387000**	ND	80.0	µg/m3
n-Hexane	ND	ND	ND	**91000**	ND	80.0	µg/m3
n-Heptane	ND	ND	ND	**43800**	ND	80.0	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	77%	92%	82%	151%@	91%	60 - 140	
Toluene-d_8	100%	98%	97%	98%	99%	60 - 140	
4-Bromofluorobenzene	94%	93%	91%	91%	95%	60 - 140	
Batch ID:	H1-072621-01	H1-072621-01	H1-072621-01	H1-072621-01	H1-072621-01		

ND = Value below reporting limit

@= Surrogate outside acceptable limits. All other QC parameters in control, therefore data was accepted.

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Stantec Consulting Services Inc.	**Report date:**	7/29/2021
Client Address:	735 E Carnegie Drive, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	H-0022
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/26/2021
		Date Received:	7/26/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/26/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV-12A-5**	**SV-12A-10**		
Jones ID:	**H-0022-16**	**H-0022-17**	**Reporting Limit**	**Units**
Analytes:				
Benzene	**27.6**	**49.0**	2.0	µg/m3
Bromobenzene	ND	ND	2.0	µg/m3
Bromodichloromethane	**8.2**	ND	2.0	µg/m3
Bromoform	ND	ND	2.0	µg/m3
n-Butylbenzene	ND	ND	3.0	µg/m3
sec-Butylbenzene	ND	ND	3.0	µg/m3
tert-Butylbenzene	ND	ND	3.0	µg/m3
Carbon tetrachloride	ND	ND	2.0	µg/m3
Chlorobenzene	ND	ND	2.0	µg/m3
Chloroform	**6.7**	**3.3**	2.0	µg/m3
2-Chlorotoluene	ND	ND	3.0	µg/m3
4-Chlorotoluene	ND	ND	3.0	µg/m3
Dibromochloromethane	ND	ND	2.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	2.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	2.0	µg/m3
Dibromomethane	ND	ND	2.0	µg/m3
1,2- Dichlorobenzene	ND	ND	4.0	µg/m3
1,3-Dichlorobenzene	ND	ND	4.0	µg/m3
1,4-Dichlorobenzene	ND	ND	4.0	µg/m3
Dichlorodifluoromethane	ND	ND	4.0	µg/m3
1,1-Dichloroethane	ND	ND	2.0	µg/m3
1,2-Dichloroethane	ND	ND	2.0	µg/m3
1,1-Dichloroethene	ND	ND	2.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	2.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	2.0	µg/m3
1,2-Dichloropropane	ND	ND	2.0	µg/m3
1,3-Dichloropropane	ND	ND	2.0	µg/m3
2,2-Dichloropropane	ND	ND	4.0	µg/m3
1,1-Dichloropropene	ND	ND	2.5	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV-12A-5**	**SV-12A-10**		
Jones ID:	**H-0022-16**	**H-0022-17**	**Reporting Limit**	**Units**
Analytes:				
cis-1,3-Dichloropropene	ND	ND	2.0	µg/m3
trans-1,3-Dichloropropene	ND	ND	2.0	µg/m3
Ethylbenzene	**10.8**	**17.7**	2.0	µg/m3
Freon 113	ND	ND	4.0	µg/m3
Hexachlorobutadiene	ND	ND	6.0	µg/m3
Isopropylbenzene	ND	ND	2.0	µg/m3
4-Isopropyltoluene	**10.5**	**22.1**	2.0	µg/m3
Methylene chloride	ND	**2.2**	2.0	µg/m3
Naphthalene	ND	ND	10.0	µg/m3
n-Propylbenzene	ND	ND	2.0	µg/m3
Styrene	ND	ND	2.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	2.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	4.0	µg/m3
Tetrachloroethene	**102**	**102**	2.0	µg/m3
Toluene	**91.4**	**106**	2.0	µg/m3
1,2,3-Trichlorobenzene	ND	ND	4.0	µg/m3
1,2,4-Trichlorobenzene	ND	ND	4.0	µg/m3
1,1,1-Trichloroethane	ND	ND	2.0	µg/m3
1,1,2-Trichloroethane	ND	ND	2.0	µg/m3
Trichloroethene	ND	ND	2.0	µg/m3
Trichlorofluoromethane	ND	ND	4.0	µg/m3
1,2,3-Trichloropropane	ND	ND	2.0	µg/m3
1,2,4-Trimethylbenzene	**4.4**	**14.6**	2.0	µg/m3
1,3,5-Trimethylbenzene	ND	ND	2.0	µg/m3
Vinyl chloride	ND	ND	2.0	µg/m3
m,p-Xylene	**27.8**	**46.2**	4.0	µg/m3
o-Xylene	**13.4**	**20.1**	2.0	µg/m3
MTBE	ND	ND	10.0	µg/m3
Ethyl-tert-butylether	ND	ND	10.0	µg/m3
Di-isopropylether	ND	ND	10.0	µg/m3
tert-amylmethylether	ND	ND	10.0	µg/m3
tert-Butylalcohol	ND	ND	100.0	µg/m3
Gasoline Range Organics (C4-C12)	**52600**	**63800**	500.0	µg/m3
Tracer:				
n-Pentane	ND	ND	80.0	µg/m3
n-Hexane	ND	ND	80.0	µg/m3
n-Heptane	ND	ND	80.0	µg/m3
Dilution Factor	1	1		
Surrogate Recoveries:			**QC Limits**	
Dibromofluoromethane	81%	80%	60 - 140	
Toluene-d_8	102%	105%	60 - 140	
4-Bromofluorobenzene	92%	122%	60 - 140	
Batch ID:	H1-072621-01	H1-072621-01		

ND = Value below reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Stantec Consulting Services Inc.	**Report date:**	7/29/2021
Client Address:	735 E Carnegie Drive, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	H-0022
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/26/2021
		Date Received:	7/26/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/26/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**METHOD BLANK**	**SAMPLING BLANK**		
Jones ID:	**072621-H1MB1**	**072621-H1SB1**	**Reporting Limit**	**Units**
Analytes:				
Benzene	ND	ND	2.0	µg/m3
Bromobenzene	ND	ND	2.0	µg/m3
Bromodichloromethane	ND	ND	2.0	µg/m3
Bromoform	ND	ND	2.0	µg/m3
n-Butylbenzene	ND	ND	3.0	µg/m3
sec-Butylbenzene	ND	ND	3.0	µg/m3
tert-Butylbenzene	ND	ND	3.0	µg/m3
Carbon tetrachloride	ND	ND	2.0	µg/m3
Chlorobenzene	ND	ND	2.0	µg/m3
Chloroform	ND	ND	2.0	µg/m3
2-Chlorotoluene	ND	ND	3.0	µg/m3
4-Chlorotoluene	ND	ND	3.0	µg/m3
Dibromochloromethane	ND	ND	2.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	2.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	2.0	µg/m3
Dibromomethane	ND	ND	2.0	µg/m3
1,2- Dichlorobenzene	ND	ND	4.0	µg/m3
1,3-Dichlorobenzene	ND	ND	4.0	µg/m3
1,4-Dichlorobenzene	ND	ND	4.0	µg/m3
Dichlorodifluoromethane	ND	ND	4.0	µg/m3
1,1-Dichloroethane	ND	ND	2.0	µg/m3
1,2-Dichloroethane	ND	ND	2.0	µg/m3
1,1-Dichloroethene	ND	ND	2.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	2.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	2.0	µg/m3
1,2-Dichloropropane	ND	ND	2.0	µg/m3
1,3-Dichloropropane	ND	ND	2.0	µg/m3
2,2-Dichloropropane	ND	ND	4.0	µg/m3
1,1-Dichloropropene	ND	ND	2.5	µg/m3

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**METHOD BLANK**	**SAMPLING BLANK**		
Jones ID:	**072621-H1MB1**	**072621-H1SB1**	**Reporting Limit**	**Units**
Analytes:				
cis-1,3-Dichloropropene	ND	ND	2.0	µg/m3
trans-1,3-Dichloropropene	ND	ND	2.0	µg/m3
Ethylbenzene	ND	ND	2.0	µg/m3
Freon 113	ND	ND	4.0	µg/m3
Hexachlorobutadiene	ND	ND	6.0	µg/m3
Isopropylbenzene	ND	ND	2.0	µg/m3
4-Isopropyltoluene	ND	ND	2.0	µg/m3
Methylene chloride	ND	ND	2.0	µg/m3
Naphthalene	ND	ND	10.0	µg/m3
n-Propylbenzene	ND	ND	2.0	µg/m3
Styrene	ND	ND	2.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	2.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	4.0	µg/m3
Tetrachloroethene	ND	ND	2.0	µg/m3
Toluene	ND	ND	2.0	µg/m3
1,2,3-Trichlorobenzene	ND	ND	4.0	µg/m3
1,2,4-Trichlorobenzene	ND	ND	4.0	µg/m3
1,1,1-Trichloroethane	ND	ND	2.0	µg/m3
1,1,2-Trichloroethane	ND	ND	2.0	µg/m3
Trichloroethene	ND	ND	2.0	µg/m3
Trichlorofluoromethane	ND	ND	4.0	µg/m3
1,2,3-Trichloropropane	ND	ND	2.0	µg/m3
1,2,4-Trimethylbenzene	ND	ND	2.0	µg/m3
1,3,5-Trimethylbenzene	ND	ND	2.0	µg/m3
Vinyl chloride	ND	ND	2.0	µg/m3
m,p-Xylene	ND	ND	4.0	µg/m3
o-Xylene	ND	ND	2.0	µg/m3
MTBE	ND	ND	10.0	µg/m3
Ethyl-tert-butylether	ND	ND	10.0	µg/m3
Di-isopropylether	ND	ND	10.0	µg/m3
tert-amylmethylether	ND	ND	10.0	µg/m3
tert-Butylalcohol	ND	ND	100.0	µg/m3
Gasoline Range Organics (C4-C12)	ND	ND	500.0	µg/m3
Tracer:				
n-Pentane	ND	ND	80.0	µg/m3
n-Hexane	ND	ND	80.0	µg/m3
n-Heptane	ND	ND	80.0	µg/m3
Dilution Factor	1	1		
Surrogate Recoveries:			**QC Limits**	
Dibromofluoromethane	99%	98%	60 - 140	
Toluene-d_8	98%	99%	60 - 140	
4-Bromofluorobenzene	93%	93%	60 - 140	
Batch ID:	H1-072621-01	H1-072621-01		

ND = Value below reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Stantec Consulting Services Inc.	**Report date:**	7/29/2021
Client Address:	735 E Carnegie Drive, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	H-0022
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/26/2021
		Date Received:	7/26/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/26/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Batch ID: H1-072621-01

Jones ID:	**072621-H1LCS1**	**072621-H1LCSD1**			**072621-H1CCV1**	
Parameter	LCS Recovery (%)	LCSD Recovery (%)	RPD	Acceptability Range (%)	CCV	Acceptability Range (%)
Vinyl chloride	68%	69%	0.4%	60 - 140	78%[1]	80 - 120
1,1-Dichloroethene	122%	128%	4.6%	60 - 140	90%	80 - 120
Cis-1,2-Dichloroethene	121%	118%	2.3%	70 - 130	110%	80 - 120
1,1,1-Trichloroethane	94%	97%	3.1%	70 - 130	89%	80 - 120
Benzene	119%	120%	0.2%	70 - 130	105%	80 - 120
Trichloroethene	126%	124%	1.2%	70 - 130	107%	80 - 120
Toluene	117%	122%	3.7%	70 - 130	108%	80 - 120
Tetrachloroethene	125%	122%	2.2%	70 - 130	101%	80 - 120
Chlorobenzene	118%	120%	1.8%	70 - 130	107%	80 - 120
Ethylbenzene	116%	112%	3.4%	70 - 130	105%	80 - 120
1,2,4 Trimethylbenzene	94%	93%	0.8%	70 - 130	92%	80 - 120
Gasoline Range Organics (C4-C12)	112%	112%		70 - 130	103%	80 - 120
Surrogate Recovery:						
Dibromofluoromethane	96%	97%		60 - 140	99%	60 - 140
Toluene-d_8	99%	99%		60 - 140	100%	60 - 140
4-Bromofluorobenzene	94%	96%		60 - 140	95%	60 - 140

[1]Recovery outside of acceptable limits. LCS/LCSD recoveries and RPD were within QC limits, therefore data was accepted.
LCS = Laboratory Control Sample
LCSD = Laboratory Control Sample Duplicate
CCV = Continuing Calibration Verification
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 20%

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Soil-Gas Chain-of-Custody Record

Client: Stantec Consulting Services Inc.
Project Name: Olson - La Habra
Project Address: 251 West Imperial Highway, La Habra, CA
Email:
Phone:
Report To: Joshua Sargent
Sampler: Jackson Nestor

Date: 7/26/2021
Client Project #: 185804671

Purge Number: ☐ 1P ☐ 3P ☐ 7P ☐ 10P
Shut-In Test: Y / N

Report Options: EDD ____ EDF* - 10% Surcharge ____ *Global ID ____

Turn Around Requested: ☐ Immediate Attention ☐ Rush 24 Hours ☐ Rush 48 Hours ☐ Rush 72 Hours ☐ Normal ☐ Mobile Lab

Tracer: ☐ n-pentane ☐ n-hexane ☐ n-heptane ☐ Isopropyl Alchohol ☐ 1,1-DFA ☐ ____

Reporting Limits: ☐ Standard ☐ Low Level* ☐ MDL* *surcharge for these limits
Units: ____

LAB USE ONLY
Jones Project #: H-0022
Page 1 of 2
Sample Container: GASTIGHT GLASS SYRINGE
If different than above, see Notes.

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)	Gasoline Range Organics			Magnehelic Vacuum (in/H_2O)	Number of Containers	Notes & Special Instructions
AA1-210726	-	-	7/26/21	7:42	7:44	H-0022-01	-	-	-	A	X	X			-	1	
SV-1A-5	3	12800	7/26/21	8:16	8:17	H-0022-02	1000	SKC.12750	M100.203	SG	X	X			<2	1	
SV-1A-10	-	-	7/26/21	8:33	8:35	H-0022-03	-	-	M100.201	SG	X	X			>100	1	NO FLOW, GRAB SAMPLE, TRACER DETECTED
SV-11A-5	-	-	7/26/21	8:50	8:52	H-0022-04	-	-	M100.102	SG	X	X			>100	1	NO FLOW, GRAB SAMPLE, TRACER DETECTED
SV-11A-10	3	1710	7/26/21	9:26	9:28	H-0022-05	50	SAMPLER.1	118009	SG	X	X			24	1	TRACER DETECTED
SV-27-5	-	-	7/26/21	9:51	9:52	H-0022-06	-	-	M100.203	SG	X	X			>100	1	
SV-27-12	-	-	7/26/21	11:13	11:15	H-0022-07	-	-	M100.201	SG	X	X			>100	1	
SV-26-12	-	-	7/26/21	10:49	10:50	H-0022-08	-	-	M100.102	SG	X	X			>100	1	NO FLOW, GRAB SAMPLE
SV-1A-5 REP	-	-	7/26/21	11:37	11:50	H-0022-09	1000	SKC.12750	M100.203	SG	X	X			<2	1	
SV-42-5	3	12800	7/26/21	12:07	12:08	H-0022-10	1000	SKC.12750	M100.102	SG	X	X			<2	1	

Total Number of Containers: 10

Representative Signature: [signature] Printed Name: Jason Heflin
Company: Date: 7/26/2021 Time:

Laboratory Signature: [signature] Printed Name: Jackson Nestor
Company: JONES ENVIRONMENTAL, INC. Date: 7/26/2021 Time: 1805

Representative Signature: Printed Name:
Company: Date: Time:

Laboratory Signature: Printed Name:
Company: Date: Time:

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been requested, and the information provided herein is correct and accurate.

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Soil-Gas Chain-of-Custody Record

Client: Stantec Consulting Services Inc.
Project Name: Olson - La Habra
Project Address: 251 West Imperial Highway, La Habra, CA
Email:
Phone:
Report To: Joshua Sargent
Sampler: Jackson Nestor

Date: 7/26/2021
Client Project #: 185804671

Purge Number: □ 1P □ 3P □ 7P □ 10P
Shut-In Test: Y / N

Report Options: EDD ____ EDF* - 10% Surcharge ____ *Global ID ____

Turn Around Requested: □ Immediate Attention □ Rush 24 Hours □ Rush 48 Hours □ Rush 72 Hours □ Normal □ Mobile Lab

Tracer: □ n-pentane □ n-hexane □ n-heptane □ Isopropyl Alchohol □ 1,1-DFA □ ____

Reporting Limits: □ Standard □ Low Level* □ MDL* *surcharge for these limits

Units: ____

LAB USE ONLY
Jones Project #: H-0022
Page 2 of 2
Sample Container: GASTIGHT GLASS SYRINGE
If different than above, see Notes.

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)	Gasoline Range Organics			Magnehelic Vacuum (in/H2O)	Number of Containers	Notes & Special Instructions
SV-42-10	-	-	7/26/21	12:26	12:27	H-0022-11	-	-	M100.201	SG	X	X			>100	1	NO FLOW, GRAB SAMPLE, TRACER DETECTED
SV-39-5	3	12800	7/26/21	12:41	12:44	H-0022-12	1000	SKC.12750	118009	SG	X	X			<2	1	
SV-39-10	3	1710	7/26/21	13:04	13:06	H-0022-13	200	GOOSE.1	M100.203	SG	X	X			8	1	
SV-40-5	3	12800	7/26/21	13:23	13:25	H-0022-14	1000	SKC.12750	M100.102	SG	X	X			<2	1	TRACER DETECTED
SV-40-10	3	1710	7/26/21	14:08	14:11	H-0022-15	200	GOOSE.1	M100.201	SG	X	X			14	1	TRACER DETECTED
SV-12A-5	3	12800	7/26/21	14:22	14:27	H-0022-16	1000	SKC.12750	118009	SG	X	X			<2	1	
SV-12A-10	3	1710	7/26/21	14:46	14:48	H-0022-17	200	GOOSE.1	M100.203	SG	X	X			10	1	
SV-26-5	-	-	7/26/21	10:19	-	-	-	-	118009	-					>100	-	NO FLOW, WATER IN PROBE
																7	Total Number of Containers

Representative Signature: [signature] Printed Name: Jason Hafliger
Company: Date: 7/26/2021 Time:

Laboratory Signature: [signature] Printed Name: Jackson Nestor
Company: JONES ENVIRONMENTAL, INC. Date: 7/26/2021 Time: 1805

Representative Signature: Printed Name:
Company: Date: Time:

Laboratory Signature: Printed Name:
Company: Date: Time:

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Stantec Consulting Services Inc.	**Report date:**	7/29/2021
Client Address:	735 E Carnegie Drive, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	H-0023
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/27/2021
		Date Received:	7/27/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/27/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

ANALYSES REQUESTED

1. EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sampling – Soil Gas samples were collected in glass gas-tight syringes equipped with Teflon plungers.

A tracer gas mixture of n-pentane, n-hexane, and n-heptane was placed at the tubing-surface interface before sampling. These compounds were analyzed during the 8260B analytical run to determine if there were surface leaks into the subsurface due to improper installation of the probe.

The sampling rate was approximately 200 cc/min, except when noted differently on the chain of custody record, using a glass gas-tight syringe. Purging was completed using a pump set at approximately 200 cc/min, except when noted differently on the chain of custody record. A default of 3 purge volumes was used as recommended by July 2015 DTSC/RWQCB guidance documents.

Prior to purging and sampling of soil gas at each point, a shut-in test was conducted to check for leaks in the above ground fittings. The shut-in test was performed on the above ground apparatus by evacuating the line to a vacuum of 100 inches of water, sealing the entire system and watching the vacuum for at least one minute. A vacuum gauge attached in parallel to the apparatus measured the vacuum. If there was any observable loss of vacuum, the fittings were adjusted as needed until the vacuum did not change noticeably. The soil gas sample was then taken.

No flow conditions occur when a sampling rate greater than 10 mL/min cannot be maintained without applying a vacuum greater than 100 inches of water to the sampling train. The sampling train is left at a vacuum for no less than three minutes. If the vacuum does not subside appreciably after three minutes, the sample location is determined to be a no flow sample.

Analytical – Soil Gas samples were analyzed using EPA Method 8260 that includes extra compounds required by DTSC/RWQCB (such as Freon 113). Instrument Continuing Calibration Verification, QC Reference Standards, Instrument Blanks and Sampling Blanks were analyzed every 12 hours as prescribed by the method. In addition, a Laboratory Control Sample (LCS) and Laboratory Control Sample Duplicate (LCSD) were analyzed with each batch of Soil Gas samples. A duplicate/replicate sample was analyzed each day of the sampling activity. All samples were injected into the GC/MS system within 30 minutes of collection.

Approval: _____

Annalise O'Toole
Mobile Lab Manager

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Stantec Consulting Services Inc.	**Report date:**	7/29/2021
Client Address:	735 E Carnegie Drive, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	H-0023
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/27/2021
		Date Received:	7/27/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/27/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**AA2-210727**	**SV-6A-5**	**SV-6A-10**	**SV-6A-10 REP**	**SV-38-5**		
Jones ID:	**H-0023-01**	**H-0023-02**	**H-0023-03**	**H-0023-04**	**H-0023-05**	**Reporting Limit**	**Units**
Analytes:							
Benzene	ND	**14.1**	**20.7**	**21.5**	**7.4**	1.0	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	1.0	µg/m3
Bromodichloromethane	ND	**11.1**	ND	ND	**26.9**	1.0	µg/m3
Bromoform	ND	ND	ND	ND	ND	1.0	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	1.5	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	1.5	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	1.5	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	**3.7**	1.0	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	1.0	µg/m3
Chloroform	ND	**20.8**	ND	ND	**36.4**	1.0	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	1.5	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	1.5	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	1.0	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Dichlorodifluoromethane	**4.0**	**3.8**	ND	ND	**7.1**	2.0	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	1.3	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**AA2-210727**	**SV-6A-5**	**SV-6A-10**	**SV-6A-10 REP**	**SV-38-5**		
Jones ID:	**H-0023-01**	**H-0023-02**	**H-0023-03**	**H-0023-04**	**H-0023-05**	**Reporting Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	1.0	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	1.0	µg/m3
Ethylbenzene	ND	**2.6**	**1.9**	**1.6**	ND	1.0	µg/m3
Freon 113	ND	ND	ND	ND	ND	2.0	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	3.0	µg/m3
Isopropylbenzene	ND	ND	**1.3**	**1.4**	**1.5**	1.0	µg/m3
4-Isopropyltoluene	ND	**5.7**	**3.8**	**3.5**	ND	1.0	µg/m3
Methylene chloride	ND	**2.6**	ND	ND	**1.5**	1.0	µg/m3
Naphthalene	ND	ND	ND	ND	ND	5.0	µg/m3
n-Propylbenzene	ND	ND	ND	ND	ND	1.0	µg/m3
Styrene	ND	ND	**2.3**	**2.2**	**1.2**	1.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
Tetrachloroethene	ND	**65.6**	**9.0**	**8.4**	**1.1**	1.0	µg/m3
Toluene	**1.2**	**28.9**	**12.7**	**13.1**	**3.8**	1.0	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
Trichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	ND	2.0	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2,4-Trimethylbenzene	ND	ND	**3.0**	**2.9**	ND	1.0	µg/m3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	1.0	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	1.0	µg/m3
m,p-Xylene	ND	ND	**9.1**	**9.3**	**2.3**	2.0	µg/m3
o-Xylene	ND	ND	**7.6**	**7.6**	ND	1.0	µg/m3
MTBE	ND	ND	ND	ND	ND	5.0	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	5.0	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	5.0	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	5.0	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	50.0	µg/m3
Gasoline Range Organics (C4-C12)	ND	**130000**	**9930**	**10100**	**9080**	250.0	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	**230000**	80.0	µg/m3
n-Hexane	ND	ND	ND	ND	**87700**	80.0	µg/m3
n-Heptane	ND	ND	ND	ND	**48500**	80.0	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	75%	81%	86%	90%	172%@	60 - 140	
Toluene-d_8	99%	103%	100%	100%	101%	60 - 140	
4-Bromofluorobenzene	91%	●	96%	96%	92%	60 - 140	
Batch ID:	H1-072721-01	H1-072721-01	H1-072721-01	H1-072721-01	H1-072721-01		

ND = Value below reporting limit

● = Hydrocarbon interference prevented adequate surrogate recovery.

@= Surrogate outside acceptable limits. All other QC parameters in control, therefore data was accepted.

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Stantec Consulting Services Inc.	**Report date:**	7/29/2021
Client Address:	735 E Carnegie Drive, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	H-0023
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/27/2021
		Date Received:	7/27/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/27/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV-38-10**	**SV-37-5**	**SV-37-10**	**SV-36-5**	**SV-8A-5**		
Jones ID:	**H-0023-06**	**H-0023-07**	**H-0023-08**	**H-0023-09**	**H-0023-10**	**Reporting Limit**	**Units**
Analytes:							
Benzene	**1.6**	ND	**56.5**	ND	**7.5**	1.0	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	1.0	µg/m3
Bromodichloromethane	ND	**1.5**	ND	**2.0**	ND	1.0	µg/m3
Bromoform	ND	ND	ND	ND	ND	1.0	µg/m3
n-Butylbenzene	ND	ND	ND	ND	**3.7**	1.5	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	1.5	µg/m3
tert-Butylbenzene	ND	ND	ND	ND	ND	1.5	µg/m3
Carbon tetrachloride	**4.8**	ND	ND	ND	ND	1.0	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	1.0	µg/m3
Chloroform	ND	ND	**6.6**	ND	**5.4**	1.0	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	1.5	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	1.5	µg/m3
Dibromochloromethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	1.0	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Dichlorodifluoromethane	**2.9**	**2.5**	**2.8**	ND	ND	2.0	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	1.3	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV-38-10**	**SV-37-5**	**SV-37-10**	**SV-36-5**	**SV-8A-5**		
Jones ID:	**H-0023-06**	**H-0023-07**	**H-0023-08**	**H-0023-09**	**H-0023-10**	**Reporting Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	1.0	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	1.0	µg/m3
Ethylbenzene	ND	**2.1**	**7.5**	ND	**7.1**	1.0	µg/m3
Freon 113	ND	ND	ND	ND	ND	2.0	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	3.0	µg/m3
Isopropylbenzene	ND	ND	**13.0**	ND	ND	1.0	µg/m3
4-Isopropyltoluene	ND	**18.2**	**54.2**	ND	**8.0**	1.0	µg/m3
Methylene chloride	**2.2**	**1.9**	**1.3**	ND	**1.1**	1.0	µg/m3
Naphthalene	ND	ND	ND	ND	ND	5.0	µg/m3
n-Propylbenzene	ND	ND	ND	ND	**2.2**	1.0	µg/m3
Styrene	ND	ND	ND	**1.7**	ND	1.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
Tetrachloroethene	ND	**9.2**	**81.7**	**19.6**	**5.5**	1.0	µg/m3
Toluene	ND	**6.5**	**61.1**	**3.3**	**28.7**	1.0	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
Trichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
Trichlorofluoromethane	ND	ND	ND	**4.2**	ND	2.0	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2,4-Trimethylbenzene	**1.7**	**2.1**	ND	**2.4**	**11.0**	1.0	µg/m3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	ND	1.0	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	1.0	µg/m3
m,p-Xylene	ND	**7.8**	**21.9**	**6.4**	**25.7**	2.0	µg/m3
o-Xylene	ND	**5.5**	**8.6**	**4.2**	**13.9**	1.0	µg/m3
MTBE	ND	ND	ND	ND	ND	5.0	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	5.0	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	5.0	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	5.0	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	50.0	µg/m3
Gasoline Range Organics (C4-C12)	**4710**	**13600**	**102000**	**4260**	**12000**	250.0	µg/m3
Tracer:							
n-Pentane	**9840**	ND	ND	ND	ND	80.0	µg/m3
n-Hexane	**490**	ND	ND	ND	ND	80.0	µg/m3
n-Heptane	ND	ND	ND	ND	ND	80.0	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	81%	82%	74%	86%	85%	60 - 140	
Toluene-d_8	99%	96%	105%	96%	98%	60 - 140	
4-Bromofluorobenzene	93%	98%	136%	93%	96%	60 - 140	
Batch ID:	H1-072721-01	H1-072721-01	H1-072721-01	H1-072721-01	H1-072721-01		

ND = Value below reporting limit

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JONES ENVIRONMENTAL LABORATORY RESULTS

Client:	Stantec Consulting Services Inc.	**Report date:**	7/29/2021
Client Address:	735 E Carnegie Drive, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	H-0023
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/27/2021
		Date Received:	7/27/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/27/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV-9A-5**	**SV-14A-5**	**SV-35-5**	**SV-35-10**	**SV-4A-5**		
Jones ID:	**H-0023-11**	**H-0023-12**	**H-0023-13**	**H-0023-14**	**H-0023-15**	**Reporting Limit**	**Units**
Analytes:							
Benzene	**39.6**	**3.9**	**2.6**	**8.6**	**17.2**	1.0	µg/m3
Bromobenzene	ND	ND	ND	ND	ND	1.0	µg/m3
Bromodichloromethane	ND	**6.2**	**2.3**	ND	ND	1.0	µg/m3
Bromoform	ND	ND	ND	ND	ND	1.0	µg/m3
n-Butylbenzene	ND	ND	ND	ND	ND	1.5	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	ND	1.5	µg/m3
tert-Butylbenzene	**8.2**	ND	**14.7**	ND	ND	1.5	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	ND	1.0	µg/m3
Chlorobenzene	ND	ND	ND	ND	ND	1.0	µg/m3
Chloroform	**2.5**	**4.8**	**2.3**	**1.4**	ND	1.0	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	ND	1.5	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	ND	1.5	µg/m3
Dibromochloromethane	ND	**6.4**	ND	ND	ND	1.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	ND	1.0	µg/m3
Dibromomethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
Dichlorodifluoromethane	ND	**14.4**	**7.9**	**3.2**	**2.4**	2.0	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
cis-1,2-Dichloroethene	**3.0**	ND	ND	ND	ND	1.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	ND	2.0	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	ND	1.3	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV-9A-5**	**SV-14A-5**	**SV-35-5**	**SV-35-10**	**SV-4A-5**		
Jones ID:	**H-0023-11**	**H-0023-12**	**H-0023-13**	**H-0023-14**	**H-0023-15**	**Reporting Limit**	**Units**
Analytes:							
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	1.0	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	1.0	µg/m3
Ethylbenzene	**6.9**	**10.4**	**8.5**	**5.1**	**5.4**	1.0	µg/m3
Freon 113	ND	**8.4**	**13.3**	ND	ND	2.0	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	ND	3.0	µg/m3
Isopropylbenzene	**1.4**	**2.2**	ND	ND	**3.5**	1.0	µg/m3
4-Isopropyltoluene	**50.1**	**119**	**106**	**30.7**	**73.1**	1.0	µg/m3
Methylene chloride	ND	**1.1**	ND	**1.5**	ND	1.0	µg/m3
Naphthalene	ND	ND	ND	ND	ND	5.0	µg/m3
n-Propylbenzene	**2.1**	**5.5**	**2.1**	ND	ND	1.0	µg/m3
Styrene	ND	**2.9**	**2.7**	**1.5**	ND	1.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	2.0	µg/m3
Tetrachloroethene	**8.5**	**27.4**	**35.9**	**20.2**	**73.0**	1.0	µg/m3
Toluene	**37.4**	**54.4**	**42.0**	**54.8**	**75.4**	1.0	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	2.0	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	1.0	µg/m3
Trichloroethene	ND	ND	ND	ND	ND	1.0	µg/m3
Trichlorofluoromethane	ND	**98.8**	**112**	**6.4**	ND	2.0	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	ND	1.0	µg/m3
1,2,4-Trimethylbenzene	**11.7**	**21.5**	**13.5**	ND	**13.6**	1.0	µg/m3
1,3,5-Trimethylbenzene	**4.5**	**7.8**	**4.5**	ND	ND	1.0	µg/m3
Vinyl chloride	ND	ND	ND	ND	ND	1.0	µg/m3
m,p-Xylene	**27.6**	**41.1**	**38.2**	**17.8**	ND	2.0	µg/m3
o-Xylene	**9.4**	**11.7**	**13.0**	**5.1**	**4.2**	1.0	µg/m3
MTBE	ND	ND	ND	ND	ND	5.0	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	ND	5.0	µg/m3
Di-isopropylether	ND	ND	ND	ND	ND	5.0	µg/m3
tert-amylmethylether	ND	ND	ND	ND	ND	5.0	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	ND	50.0	µg/m3
Gasoline Range Organics (C4-C12)	**8120**	**3320**	**1800**	**2430**	**88900**	250.0	µg/m3
Tracer:							
n-Pentane	ND	ND	ND	ND	ND	80.0	µg/m3
n-Hexane	ND	ND	ND	ND	ND	80.0	µg/m3
n-Heptane	ND	ND	ND	ND	ND	80.0	µg/m3
Dilution Factor	1	1	1	1	1		
Surrogate Recoveries:						**QC Limits**	
Dibromofluoromethane	82%	79%	73%	81%	78%	60 - 140	
Toluene-d_8	99%	98%	97%	98%	106%	60 - 140	
4-Bromofluorobenzene	93%	93%	93%	94%	139%	60 - 140	
Batch ID:	H1-072721-01	H1-072721-01	H1-072721-01	H1-072721-01	H1-072721-01		

ND = Value below reporting limit

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		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/27/2021
		Date Received:	7/27/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/27/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV-4A-10**	**SV-38-5 Tracer RR**	**SV-38-10 Tracer RR**	**SV-15A-10**		
Jones ID:	**H-0023-16**	**H-0023-17**	**H-0023-18**	**H-0023-19**	**Reporting Limit**	**Units**
Analytes:						
Benzene	**12.9**	**3.8**	**1.2**	**28.8**	1.0	µg/m3
Bromobenzene	ND	ND	ND	ND	1.0	µg/m3
Bromodichloromethane	ND	**12.0**	ND	ND	1.0	µg/m3
Bromoform	ND	ND	ND	ND	1.0	µg/m3
n-Butylbenzene	ND	ND	ND	ND	1.5	µg/m3
sec-Butylbenzene	ND	ND	ND	ND	1.5	µg/m3
tert-Butylbenzene	ND	ND	ND	**6.9**	1.5	µg/m3
Carbon tetrachloride	ND	ND	ND	ND	1.0	µg/m3
Chlorobenzene	ND	ND	ND	ND	1.0	µg/m3
Chloroform	ND	**14.0**	ND	**7.3**	1.0	µg/m3
2-Chlorotoluene	ND	ND	ND	ND	1.5	µg/m3
4-Chlorotoluene	ND	ND	ND	ND	1.5	µg/m3
Dibromochloromethane	ND	**3.9**	ND	ND	1.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	ND	ND	1.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	ND	ND	1.0	µg/m3
Dibromomethane	ND	ND	ND	ND	1.0	µg/m3
1,2- Dichlorobenzene	ND	ND	ND	ND	2.0	µg/m3
1,3-Dichlorobenzene	ND	ND	ND	ND	2.0	µg/m3
1,4-Dichlorobenzene	ND	ND	ND	ND	2.0	µg/m3
Dichlorodifluoromethane	ND	**2.9**	ND	**2.7**	2.0	µg/m3
1,1-Dichloroethane	ND	ND	ND	ND	1.0	µg/m3
1,2-Dichloroethane	ND	ND	ND	ND	1.0	µg/m3
1,1-Dichloroethene	ND	ND	ND	ND	1.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	ND	ND	1.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	ND	ND	1.0	µg/m3
1,2-Dichloropropane	ND	ND	ND	ND	1.0	µg/m3
1,3-Dichloropropane	ND	ND	ND	ND	1.0	µg/m3
2,2-Dichloropropane	ND	ND	ND	ND	2.0	µg/m3
1,1-Dichloropropene	ND	ND	ND	ND	1.3	µg/m3

JONES ENVIRONMENTAL LABORATORY RESULTS

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**SV-4A-10**	**SV-38-5 Tracer RR**	**SV-38-10 Tracer RR**	**SV-15A-10**		
Jones ID:	**H-0023-16**	**H-0023-17**	**H-0023-18**	**H-0023-19**	**Reporting Limit**	**Units**
Analytes:						
cis-1,3-Dichloropropene	ND	ND	ND	ND	1.0	µg/m3
trans-1,3-Dichloropropene	ND	ND	ND	ND	1.0	µg/m3
Ethylbenzene	**6.9**	ND	ND	**3.7**	1.0	µg/m3
Freon 113	ND	ND	ND	ND	2.0	µg/m3
Hexachlorobutadiene	ND	ND	ND	ND	3.0	µg/m3
Isopropylbenzene	**37.3**	ND	**1.3**	ND	1.0	µg/m3
4-Isopropyltoluene	**783**	**1.2**	**1.4**	**31.4**	1.0	µg/m3
Methylene chloride	ND	ND	ND	**45.2**	1.0	µg/m3
Naphthalene	ND	ND	ND	ND	5.0	µg/m3
n-Propylbenzene	**2.4**	ND	ND	ND	1.0	µg/m3
Styrene	**2.9**	ND	ND	ND	1.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	ND	ND	1.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	2.0	µg/m3
Tetrachloroethene	ND	**1.1**	**1.0**	**43.2**	1.0	µg/m3
Toluene	**42.3**	**4.5**	ND	**33.6**	1.0	µg/m3
1,2,3-Trichlorobenzene	ND	ND	ND	ND	2.0	µg/m3
1,2,4-Trichlorobenzene	ND	ND	ND	ND	2.0	µg/m3
1,1,1-Trichloroethane	ND	ND	ND	ND	1.0	µg/m3
1,1,2-Trichloroethane	ND	ND	ND	ND	1.0	µg/m3
Trichloroethene	ND	ND	ND	ND	1.0	µg/m3
Trichlorofluoromethane	ND	ND	ND	ND	2.0	µg/m3
1,2,3-Trichloropropane	ND	ND	ND	ND	1.0	µg/m3
1,2,4-Trimethylbenzene	**34.3**	ND	ND	**3.8**	1.0	µg/m3
1,3,5-Trimethylbenzene	ND	ND	ND	ND	1.0	µg/m3
Vinyl chloride	ND	ND	ND	ND	1.0	µg/m3
m,p-Xylene	**17.7**	ND	ND	**15.0**	2.0	µg/m3
o-Xylene	**10.4**	ND	ND	**4.4**	1.0	µg/m3
MTBE	ND	ND	ND	ND	5.0	µg/m3
Ethyl-tert-butylether	ND	ND	ND	ND	5.0	µg/m3
Di-isopropylether	ND	ND	ND	ND	5.0	µg/m3
tert-amylmethylether	ND	ND	ND	ND	5.0	µg/m3
tert-Butylalcohol	ND	ND	ND	ND	50.0	µg/m3
Gasoline Range Organics (C4-C12)	**895000**	**6190**	**2220**	**81400**	250.0	µg/m3
Tracer:						
n-Pentane	ND	**18900**	**58900**	**2790**	80.0	µg/m3
n-Hexane	ND	**17800**	**17600**	**3040**	80.0	µg/m3
n-Heptane	ND	**8930**	**382**	**3310**	80.0	µg/m3
Dilution Factor	1	1	1	1		
Surrogate Recoveries:					**QC Limits**	
Dibromofluoromethane	92%	97%	85%	90%	60 - 140	
Toluene-d_8	106%	100%	100%	104%	60 - 140	
4-Bromofluorobenzene	105%	94%	93%	110%	60 - 140	
Batch ID:	H1-072721-01	H1-072721-01	H1-072721-01	H1-072721-01		

ND = Value below reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Stantec Consulting Services Inc.	**Report date:**	7/29/2021
Client Address:	735 E Carnegie Drive, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	H-0023
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/27/2021
		Date Received:	7/27/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/27/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**METHOD BLANK**	**SAMPLING BLANK**		
Jones ID:	**072721-H1MB1**	**072721-H1SB1**	**Reporting Limit**	**Units**
Analytes:				
Benzene	ND	ND	1.0	µg/m3
Bromobenzene	ND	ND	1.0	µg/m3
Bromodichloromethane	ND	ND	1.0	µg/m3
Bromoform	ND	ND	1.0	µg/m3
n-Butylbenzene	ND	ND	1.5	µg/m3
sec-Butylbenzene	ND	ND	1.5	µg/m3
tert-Butylbenzene	ND	ND	1.5	µg/m3
Carbon tetrachloride	ND	ND	1.0	µg/m3
Chlorobenzene	ND	ND	1.0	µg/m3
Chloroform	ND	ND	1.0	µg/m3
2-Chlorotoluene	ND	ND	1.5	µg/m3
4-Chlorotoluene	ND	ND	1.5	µg/m3
Dibromochloromethane	ND	ND	1.0	µg/m3
1,2-Dibromo-3-chloropropane	ND	ND	1.0	µg/m3
1,2-Dibromoethane (EDB)	ND	ND	1.0	µg/m3
Dibromomethane	ND	ND	1.0	µg/m3
1,2- Dichlorobenzene	ND	ND	2.0	µg/m3
1,3-Dichlorobenzene	ND	ND	2.0	µg/m3
1,4-Dichlorobenzene	ND	ND	2.0	µg/m3
Dichlorodifluoromethane	ND	ND	2.0	µg/m3
1,1-Dichloroethane	ND	ND	1.0	µg/m3
1,2-Dichloroethane	ND	ND	1.0	µg/m3
1,1-Dichloroethene	ND	ND	1.0	µg/m3
cis-1,2-Dichloroethene	ND	ND	1.0	µg/m3
trans-1,2-Dichloroethene	ND	ND	1.0	µg/m3
1,2-Dichloropropane	ND	ND	1.0	µg/m3
1,3-Dichloropropane	ND	ND	1.0	µg/m3
2,2-Dichloropropane	ND	ND	2.0	µg/m3
1,1-Dichloropropene	ND	ND	1.3	µg/m3

JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Sample ID:	**METHOD BLANK**	**SAMPLING BLANK**		
Jones ID:	**072721-H1MB1**	**072721-H1SB1**	**Reporting Limit**	**Units**
Analytes:				
cis-1,3-Dichloropropene	ND	ND	1.0	µg/m3
trans-1,3-Dichloropropene	ND	ND	1.0	µg/m3
Ethylbenzene	ND	ND	1.0	µg/m3
Freon 113	ND	ND	2.0	µg/m3
Hexachlorobutadiene	ND	ND	3.0	µg/m3
Isopropylbenzene	ND	ND	1.0	µg/m3
4-Isopropyltoluene	ND	ND	1.0	µg/m3
Methylene chloride	ND	ND	1.0	µg/m3
Naphthalene	ND	ND	5.0	µg/m3
n-Propylbenzene	ND	ND	1.0	µg/m3
Styrene	ND	ND	1.0	µg/m3
1,1,1,2-Tetrachloroethane	ND	ND	1.0	µg/m3
1,1,2,2-Tetrachloroethane	ND	ND	2.0	µg/m3
Tetrachloroethene	ND	ND	1.0	µg/m3
Toluene	ND	ND	1.0	µg/m3
1,2,3-Trichlorobenzene	ND	ND	2.0	µg/m3
1,2,4-Trichlorobenzene	ND	ND	2.0	µg/m3
1,1,1-Trichloroethane	ND	ND	1.0	µg/m3
1,1,2-Trichloroethane	ND	ND	1.0	µg/m3
Trichloroethene	ND	ND	1.0	µg/m3
Trichlorofluoromethane	ND	ND	2.0	µg/m3
1,2,3-Trichloropropane	ND	ND	1.0	µg/m3
1,2,4-Trimethylbenzene	ND	ND	1.0	µg/m3
1,3,5-Trimethylbenzene	ND	ND	1.0	µg/m3
Vinyl chloride	ND	ND	1.0	µg/m3
m,p-Xylene	ND	ND	2.0	µg/m3
o-Xylene	ND	ND	1.0	µg/m3
MTBE	ND	ND	5.0	µg/m3
Ethyl-tert-butylether	ND	ND	5.0	µg/m3
Di-isopropylether	ND	ND	5.0	µg/m3
tert-amylmethylether	ND	ND	5.0	µg/m3
tert-Butylalcohol	ND	ND	50.0	µg/m3
Gasoline Range Organics (C4-C12)	ND	ND	250.0	µg/m3
Tracer:				
n-Pentane	ND	ND	80.0	µg/m3
n-Hexane	ND	ND	80.0	µg/m3
n-Heptane	ND	ND	80.0	µg/m3
Dilution Factor	1	1		
Surrogate Recoveries:			**QC Limits**	
Dibromofluoromethane	97%	94%	60 - 140	
Toluene-d_8	98%	100%	60 - 140	
4-Bromofluorobenzene	91%	91%	60 - 140	
Batch ID:	H1-072721-01	H1-072721-01		

ND = Value below reporting limit

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JONES ENVIRONMENTAL QUALITY CONTROL INFORMATION

Client:	Stantec Consulting Services Inc.	**Report date:**	7/29/2021
Client Address:	735 E Carnegie Drive, Suite 280 San Bernardino, CA	**Jones Ref. No.:**	H-0023
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/27/2021
		Date Received:	7/27/2021
Project:	Olson - La Habra	**Date Analyzed:**	7/27/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

EPA 8260B – Volatile Organics by GC/MS + Oxygenates/Gasoline Range Organics

Batch ID: H1-072721-01

Jones ID:	**072721-H1LCS1**	**072721-H1LCSD1**			**072721-H1CCV1**	
Parameter	LCS Recovery (%)	LCSD Recovery (%)	RPD	Acceptability Range (%)	CCV	Acceptability Range (%)
Vinyl chloride	54%[1]	51%[1]	4.5%	60 - 140	92%	80 - 120
1,1-Dichloroethene	123%	116%	6.0%	60 - 140	94%	80 - 120
Cis-1,2-Dichloroethene	116%	115%	1.4%	70 - 130	102%	80 - 120
1,1,1-Trichloroethane	83%	89%	6.6%	70 - 130	81%	80 - 120
Benzene	111%	112%	0.7%	70 - 130	101%	80 - 120
Trichloroethene	120%	117%	2.8%	70 - 130	98%	80 - 120
Toluene	111%	111%	0.0%	70 - 130	101%	80 - 120
Tetrachloroethene	125%	120%	4.1%	70 - 130	97%	80 - 120
Chlorobenzene	110%	111%	1.2%	70 - 130	101%	80 - 120
Ethylbenzene	107%	101%	5.5%	70 - 130	100%	80 - 120
1,2,4 Trimethylbenzene	88%	83%	5.6%	70 - 130	89%	80 - 120
Gasoline Range Organics (C4-C12)	104%	102%	2.4%	70 - 130	98%	80 - 120
Surrogate Recovery:						
Dibromofluoromethane	96%	96%		60 - 140	96%	60 - 140
Toluene-d_8	99%	98%		60 - 140	98%	60 - 140
4-Bromofluorobenzene	94%	93%		60 - 140	98%	60 - 140

[1]Recovery outside of acceptable limits. CCV recovery and LCS/LCSD RPD were within QC limits, therefore data was accepted.
LCS = Laboratory Control Sample
LCSD = Laboratory Control Sample Duplicate
CCV = Continuing Calibration Verification
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 20%

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Soil-Gas Chain-of-Custody Record

Client: Stantec Consulting Services Inc.
Date: 7/27/2021
Project Name: Olson - La Habra
Client Project #: 185804671
Project Address: 251 West Imperial Highway, La Habra, CA
Email:
Phone:
Report To: Joshua Sargent
Sampler: Jackson Nestor

Purge Number: ☐ 1P ☒ 3P ☐ 7P ☐ 10P
Shut-In Test: (Y) / N

Report Options
EDD ____
EDF* - 10% Surcharge ____
*Global ID ____

LAB USE ONLY
Jones Project # H-0023
Page 1 of 3
Sample Container: GASTIGHT GLASS SYRINGE
If different than above, see Notes.

Turn Around Requested
☐ Immediate Attention
☐ Rush 24 Hours
☐ Rush 48 Hours
☐ Rush 72 Hours
☐ Normal
☒ Mobile Lab

Tracer
☒ n-pentane
☒ n-hexane
☒ n-heptane
☐ Isopropyl Alchohol
☐ 1,1-DFA
☐ ____

Reporting Limits
☐ Standard ☒ Low Level* ☐ MDL*
*surcharge for these limits
Units: mg/m³

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)	Gasoline Range Organics			Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
AA2-210727	-	-	7/27/21	7:21	7:23	H-0023-01	-	-	-	A	X	X			-	1	
SV-6A-5	3	12800	7/27/21	8:54	8:55	H-0023-02	200	JACKSON.2	118009	SG	X	X			26	1	
SV-6A-10	3	1710	7/27/21	7:44	7:45	H-0023-03	200	GOOSE.1	118008	SG	X	X			8	1	
SV-6A-10 REP	3	1710	7/27/21	7:49	8:01	H-0023-04	200	GOOSE.1	118008	SG	X	X			8	1	
SV-38-5	3	12800	7/27/21	8:15	8:17	H-0023-05	1000	SKC.12750	M100.102	SG	X	X			<2	1	TRACER DETECTED
SV-38-10	3	1710	7/27/21	9:09	9:12	H-0023-06	200	GOOSE.1	M100.010	SG	X	X			<2	1	TRACER DETECTED
SV-37-5	3	12800	7/27/21	9:28	9:30	H-0023-07	1000	SKC.12750	118008	SG	X	X			<2	1	
SV-37-10	3	1710	7/27/21	9:46	9:48	H-0023-08	200	GOOSE.1	118009	SG	X	X			<2	1	
SV-36-5	3	12800	7/27/21	9:59	10:05	H-0023-09	1000	SKC.12750	M100.102	SG	X	X			<2	1	
SV-8A-5	3	12800	7/27/21	11:16	11:18	H-0023-10	200	JACKSON.2	118008	SG	X	X			<2	1	

Representative Signature	Printed Name	Laboratory Signature	Printed Name	
	Jason Haflige 1610		Jackson Nestor	10 Total Number of Containers
Company	**Date / Time**	**Company**	**Date / Time**	
	7/27/2021	JONES ENVIRONMENTAL, INC.	7/27/2021 1610	
Representative Signature	**Printed Name**	**Laboratory Signature**	**Printed Name**	Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.
Company	**Date / Time**	**Company**	**Date / Time**	

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Soil-Gas Chain-of-Custody Record

Client: Stantec Consulting Services Inc.
Project Name: Olson - La Habra
Project Address: 251 West Imperial Highway, La Habra, CA
Email:
Phone:
Report To: Joshua Sargent
Sampler: Jackson Nestor

Date: 7/27/2021
Client Project #: 185804671

Purge Number: □ 1P ☒ 3P □ 7P □ 10P
Shut-In Test: (Y) / N

Report Options
EDD _____
EDF* - 10% Surcharge____
*Global ID _____

LAB USE ONLY
Jones Project # H-0023
Page 2 of 3
Sample Container: GASTIGHT GLASS SYRINGE
If different than above, see Notes.

Turn Around Requested
□ Immediate Attention
□ Rush 24 Hours
□ Rush 48 Hours
□ Rush 72 Hours
□ Normal
☒ Mobile Lab

Tracer
☒ n-pentane
☒ n-hexane
☒ n-heptane
□ Isopropyl Alchohol
□ 1,1-DFA
□ _____

Reporting Limits
□ Standard ☒ Low Level* □ MDL*
*surcharge for these limits

Units mg/m³

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)	Gasoline Range Organics			Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
SV-9A-5	3	12800	7/27/21	10:55	10:58	H-0023-11	1000	SKC.12750	118009	SG	X	X			<2	1	
SV-14A-5	3	12800	7/27/21	11:35	11:38	H-0023-12	1000	SKC.12750	M100.102	SG	X	X			<2	1	
SV-35-5	3	12800	7/27/21	11:53	11:57	H-0023-13	1000	SKC.10125	118008	SG	X	X			<2	1	
SV-35-10	-	-	7/27/21	12:09	12:15	H-0023-14	-	-	118009	SG	X	X			>100	1	GRAB SAMPLE, TRACER DETECTED
SV-4A-5	3	12800	7/27/21	12:33	12:35	H-0023-15	1000	SKC.12750	M100.102	SG	X	X			<2	1	
SV-4A-10	3	1710	7/27/21	12:55	12:58	H-0023-16	200	JACKSON.2	118009	SG	X	X			<2	1	
SV-38-5 Tracer RR	3	12800	7/27/21	14:13	14:15	H-0023-17	1000	SKC.12750	118008	SG	X	X			<2	1	TRACER DETECTED
SV-38-10 Tracer RR	3	1710	7/27/21	13:55	13:57	H-0023-18	200	JACKSON.2	118009	SG	X	X			<2	1	TRACER DETECTED
SV-15A-10	-	-	7/27/21	15:17	15:21	H-0023-19	-	-	118008	SG	X	X			>100	1	NO FLOW, GRAB SAMPLE, TRACER DETECTED

Total Number of Containers: 9

Representative Signature	Printed Name	Laboratory Signature	Printed Name
	Jason Hafligr 1610		Jackson Nestor
Company	**Date / Time**	**Company**	**Date / Time**
	7/27/2021	JONES ENVIRONMENTAL, INC.	7/27/2021 1610
Representative Signature	**Printed Name**	**Laboratory Signature**	**Printed Name**
Company	**Date / Time**	**Company**	**Date / Time**

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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Soil-Gas Chain-of-Custody Record

Client
Stantec Consulting Services Inc.

Date
7/27/2021

Project Name
Olson - La Habra

Client Project #
185804671

Project Address
251 West Imperial Highway

La Habra, CA

Email

Phone

Report To
Joshua Sargent

Sampler
Jackson Nestor

Purge Number:
□ 1P ☒ 3P □ 7P □ 10P

Shut-In Test: (Y) / N

Report Options
EDD ____
EDF* - 10% Surcharge ____
*Global ID _____

LAB USE ONLY
Jones Project #
H-0023

Page 3 of 3

Sample Container:
GASTIGHT GLASS SYRINGE
If different than above, see Notes.

Turn Around Requested
- □ Immediate Attention
- □ Rush 24 Hours
- □ Rush 48 Hours
- □ Rush 72 Hours
- □ Normal
- ☒ Mobile Lab

Tracer
- ☒ n-pentane
- ☒ n-hexane
- ☒ n-heptane
- □ Isopropyl Alchohol
- □ 1,1-DFA
- □ _____

Reporting Limits
□ Standard ☒ Low Level* □ MDL*
*surcharge for these limits

Units mg/m³

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	EPA 8260B (VOCs)	Gasoline Range Organics			Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
SV-36-10	-	-	7/27/21	-	-	-	-	-	118008	-					>100	-	NO FLOW
SV-8A-10	-	-	7/27/21	-	-	-	-	-	118009	-					>100	-	NO FLOW
SV-9A-10	-	-	7/27/21	-	-	-	-	-	M100.102						>100	-	NO FLOW
SV-14A-10	-	-	7/27/21	-	-	-	-	-	118008						>100	-	NO FLOW

Representative Signature	Printed Name	Laboratory Signature	Printed Name
	Jason Heflign 1610		Jackson Nestor
Company	**Date** / **Time**	**Company**	**Date** / **Time**
	7/27/2021	JONES ENVIRONMENTAL, INC.	7/27/2021 1610
Representative Signature	**Printed Name**	**Laboratory Signature**	**Printed Name**
Company	**Date** / **Time**	**Company**	**Date** / **Time**

Total Number of Containers

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	Stantec Consulting Services, Inc.	**Report date:**	7/30/2021
Client Address:	735 E Carnegie Dr. #280 San Bernardino, CA	**Jones Ref. No.:** **Client Ref. No.:**	ST-17874 185804671
Attn:	Joshua Sargent	**Date Sampled:** **Date Received:**	7/27/2021 7/27/2021
Project:	Olson La Habra	**Date Analyzed:**	7/28/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

ANALYSES REQUESTED

1. ASTM D1946 – Fixed Gases

Analytical – Soil Gas samples were analyzed using ASTM D1946 by GC/TCD. All samples were injected into the GC/MS system within 6 hours of sampling.

Approval:

Colby Wakeman
QA/QC Manager

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	Stantec Consulting Services, Inc.	**Report date:**	7/30/2021
Client Address:	735 E Carnegie Dr. #280 San Bernardino, CA	**Jones Ref. No.:**	ST-17874
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/27/2021
		Date Received:	7/27/2021
Project:	Olson La Habra	**Date Analyzed:**	7/28/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

ASTM D1946 – Fixed Gases

Sample ID:	**SV-31-5**	**SV-3A-5**	**SV-2A-10**	**SV-39-5**	**SV-17A-5**		
Jones ID:	**ST-17874-01**	**ST-17874-02**	**ST-17874-03**	**ST-17874-04**	**ST-17874-05**	**Reporting Limit**	**Units**
Analytes:							
Oxygen (O_2)	**9.92**	**7.55**	**0.27**	**3.98**	**0.35**	0.100	%
Methane (CH_4)	**0.11**	ND	**2.13**	ND	**0.32**	0.023	%
Dilution Factor:	1	1	1	1	1		

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JONES ENVIRONMENTAL
LABORATORY RESULTS

Client:	Stantec Consulting Services, Inc.	**Report date:**	7/30/2021
Client Address:	735 E Carnegie Dr. #280 San Bernardino, CA	**Jones Ref. No.:**	ST-17874
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/27/2021
		Date Received:	7/27/2021
Project:	Olson La Habra	**Date Analyzed:**	7/28/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

ASTM D1946 – Fixed Gases

Sample ID: **SV-14A-5**

Jones ID:	**ST-17874-06**	**Reporting Limit**	**Units**
Analytes:			
Oxygen (O_2)	**3.89**	0.100	%
Methane (CH_4)	ND	0.023	%

Dilution Factor: 1

JONES ENVIRONMENTAL, INC.

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JONES ENVIRONMENTAL
QUALITY CONTROL INFORMATION

Client:	Stantec Consulting Services, Inc.	**Report date:**	7/30/2021
Client Address:	735 E Carnegie Dr. #280 San Bernardino, CA	**Jones Ref. No.:**	ST-17874
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/27/2021
		Date Received:	7/27/2021
Project:	Olson La Habra	**Date Analyzed:**	7/28/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

ASTM D1946 – Fixed Gases

Sample ID:	**METHOD BLANK**	**HELIUM BLANK**		
Jones ID:	**072821-ASTMMB1**	**072821-ASTMHB1**	**Reporting Limit**	**Units**
Analytes:				
Oxygen (O_2)	**18.9**	ND	0.100	%
Methane (CH_4)	ND	ND	0.023	%
	ASTM-072821-01	**ASTM-072821-01**		

ND = Value less than reporting limit

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JONES ENVIRONMENTAL
QUALITY CONTROL INFORMATION

Client:	Stantec Consulting Services, Inc.	**Report date:**	7/30/2021
Client Address:	735 E Carnegie Dr. #280 San Bernardino, CA	**Jones Ref. No.:**	ST-17874
		Client Ref. No.:	185804671
Attn:	Joshua Sargent	**Date Sampled:**	7/27/2021
		Date Received:	7/27/2021
Project:	Olson La Habra	**Date Analyzed:**	7/28/2021
Project Address:	251 West Imperial Highway La Habra, CA	**Physical State:**	Soil Gas

ASTM D1946 – Fixed Gases

GC#: ASTM-072821-01

Jones ID:	**072821-ASTMCCV1**	**072821-ASTMCCVD1**		
Parameter	CCV Recovery (%)	CCVD Recovery (%)	RPD	Acceptability Range (%)
Carbon Dioxide (CO_2)	114%	108%	5.4%	80-120
Oxygen (O_2)	94%	94%	0.0%	80-120
Nitrogen (N_2)	93%	93%	0.1%	80-120
Methane (CH_4)	97%	97%	0.0%	80-120
Carbon Monoxide (CO)	136%	136%	0.0%	80-120

CCV = Continuing Calibration Verification
CCV = Continuing Calibration Verification Duplicate
RPD = Relative Percent Difference; Acceptability range for RPD is ≤ 15%

JONES ENVIRONMENTAL, INC.
11007 Forest Pl.
Santa Fe Springs, CA 90670
(714) 449-9937
Fax (714) 449-9685
www.jonesenv.com

Soil-Gas Chain-of-Custody Record

ST-17874

LAB USE ONLY

Jones Project # ~~H-0023~~

Page 1 of 1

Sample Container: GASTIGHT GLASS SYRINGE

If different than above, see Notes.

Client: Stantec Consulting Services Inc.

Date: 7/27/2021

Project Name: Olson - La Habra

Client Project #: 185804671

Project Address: 251 West Imperial Highway, La Habra, CA

Email:

Phone:

Report To: Joshua Sargent

Sampler: Jackson Nestor/Dylan Lindsay

Purge Number: ☐ 1P ☒ 3P ☐ 7P ☐ 10P

Shut-In Test: (Y) / N

Report Options: EDD ____ EDF* - 10% Surcharge ____ *Global ID ____

Turn Around Requested: ☐ Immediate Attention ☐ Rush 24 Hours ☐ Rush 48 Hours ☐ Rush 72 Hours ☐ Normal ☒ Mobile Lab

Tracer: ☒ n-pentane ☒ n-hexane ☒ n-heptane ☐ Isopropyl Alchohol ☐ 1,1-DFA ☐ ____

Reporting Limits: ☐ Standard ☒ Low Level* ☐ MDL* *surcharge for these limits

Units: µg/m³

Analysis Requested

Sample ID	Purge Number	Purge Volume (mL)	Date	Sample Collection Time	Sample Analysis Time	Laboratory Sample ID	Purge Rate (mL/min)	Pump Used	Magnehelic	Sample Matrix: Soil Gas (SG), Air (A), Material (M)	ASTM 1946 Oxygen+Methane Only				Magnehelic Vacuum (In/H_2O)	Number of Containers	Notes & Special Instructions
SV-31-5	3	12800	7/27/21	15:28		ST-17874-01	1000	SKC.10125	M100.007	SG	X				<2	1	
SV-3A-5	3	12800	7/27/21	14:30		ST-17874-02	1000	SKC.10125	M100.003	SG	X				<2	1	
SV-2A-10	3	1710	7/27/21	15:23		ST-17874-03	200	SAMPLER.1	M100.003	SG	X				<2	1	
SV-39-5	3	12800	7/27/21	15:01		ST-17874-04	1000	SKC.12725	118009	SG	X				<2	1	
SV-17A-5	3	12800	7/27/21	15:08		ST-17874-05	1000	SKC.12725	118008	SG	X				<2	1	
SV-14A-5	3	12800	7/27/21	14:50		ST-17874-06	1000	SKC.12725	M100.102	SG	X				<2	1	

Representative Signature: [signature] Printed Name: Jason Hatter 1550 Company: Date: 7/27/2021 Time:

Laboratory Signature: [signature] Printed Name: Jackson Nestor Company: JONES ENVIRONMENTAL, INC. Date: 7/27/2021 Time: 1550

Total Number of Containers: 6

Representative Signature: Printed Name: Company: Date: Time:

Laboratory Signature: Printed Name: Company: Date: Time:

Client signature on this Chain of Custody form constitutes acknowledgement that the above analyses have been reqested, and the information provided herein is correct and accurate.

APPENDIX F

Data Validation Reports

DATA VALIDATION SUMMARY REPORT

GENERAL INFORMATION

Lab Name:	Advanced Technology Laboratories (ATL)
Lab SDG/Project/Work Order:	2101526
Project Name:	Olson La Habra
Stantec Project Number:	185804671
Client:	The Olson Company
Validator Name:	Patrick Vaughan
Date of Validation:	August 3, 2021

SAMPLE INFORMATION:

Number of Samples:	3
Matrix:	Soil
Number of Trip Blanks:	0
Number of Equipment Blanks:	0
Number of Field Duplicates	0
Date of Sample Collection:	July 16, 2021

Sample Name	Matrix	Analysis
MW-4-11.5, MW-4-16.5 hold requested), MW-4-26.5 (hold requested).	Soil	TPH-GRO, DRO, and ORO by EPA Method 8015; VOCs by EPA Method 8260B.

GENERAL DATA VALIDATION

Case Narrative: Case narrative indicates only that TPH-DRO was subcontracted to American Environmental Testing Laboratory (AETL) of Burbank, CA.
Chain of Custody: The COC is complete and analyses was performed as requested.
Sample Receipt: No exceptions were noted by either ATL or AETL.
Holding Times: All samples were analyzed within the required holding times.
Trip Blank Review: NA
Equipment Blank Review: Equipment Blank not collected.
Surrogates: All surrogate recoveries within method acceptance limits.
Elevated Reporting Limits: None reported.
Compound Identification: No issues noted.

PER ANALYSIS

EPA Method 8015B

Method Blanks: TPH-GRO, DRO, or ORO were not detected above the RL in the laboratory method blank.
Laboratory Control Sample/Laboratory Control Sample Duplicate: LCS and LCSD analyte recovery within acceptance limits. Carbon disulfide LCS outside of control limit but within Marginal Exceedance (ME) limit.
Matrix Spike/Matrix Spike Duplicate: MS/MSD %REC and RPD within control limits.
Laboratory Duplicate: NA

EPA Method 8260B
Method Blanks: No analytes detected above the RL in the laboratory method blank.
Laboratory Control Sample/Laboratory Control Sample Duplicate: LCS and LCSD analyte recovery within acceptance limits except for carbon disulfide. Carbon disulfide LCS/LCSD outside of control limit but within Marginal Exceedance (ME) limit.
Matrix Spike/Matrix Spike Duplicate: MS/MSD %REC and RPD within control limits.
Laboratory Duplicate: NA

FIELD DUPLICATE REVIEW:

Field duplicate samples not collected.

DETERMINATION:

The data in this work order have been validated. No data has been rejected, no qualifiers required, and all data is usable.

NOTES:

Data validation assigned qualifiers (U, UJ, J, R). The following qualifiers may be assigned to data in this data set based on the results of the data validation procedure (documented on this form). In general data qualifiers are defined as follows:

- U Indicates the analyte was analyzed for but was not detected above the reported sample quantitation limit (MRL, or MDL if reported). Results assigned this qualifier are considered undetected at the MRL, or MDL if reported.

- UJ Indicates the analyte was not detected above the quantitation limit or MRL (MDL, if reported); however, the MRL (MDL, if reported) is approximate and

may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. Results assigned this qualifier are considered undetected at the estimated MRL (MDL, if reported).

- J Indicates the analyte was positively identified; however, the associated numerical value is the approximate concentration of the analyte in the sample. Results assigned this qualifier as considered and detected at an estimated value. J-qualifiers may be appended with a "+" or "-" to indicate the result has a potential positive or negative bias, respectively.

- R Indicates the presence or absence of the analyte cannot be confirmed due to serious laboratory deficiencies in the ability to analyze the sample and meet quality control criteria. Results assigned this qualifier are rejected and considered unusable.

REFERENCES:

EPA. 2002. *Guidance on Environmental Data Verification and Data Validation, EPA QA/G-8.* USEPA. November 2002.

EPA. 2017. *USEPA National Functional Guidelines for Superfund Organic Methods Data Review, EPA-540-R-014-002*. OSRTI. August.

DATA VALIDATION SUMMARY REPORT

GENERAL INFORMATION

Lab Name:	Advanced Technology Laboratories (ATL)
Lab SDG/Project/Work Order:	2101620
Project Name:	Olson La Habra
Stantec Project Number:	185804671
Client:	The Olson Company
Validator Name:	Patrick Vaughan
Date of Validation:	August 4, 2021

SAMPLE INFORMATION:

Number of Samples:	7
Matrix:	Water
Number of Trip Blanks:	1
Number of Equipment Blanks:	0
Number of Field Duplicates	1
Date of Sample Collection:	July 26, 2021

Sample Name	Matrix	Analysis
MW-1-20210726 through MW-5-20210726, BD01-20210726, and Trip Blank.	Water	TPH-GRO and VOCs by EPA Method 8260B, DRO, and ORO by EPA Method 8015.

GENERAL DATA VALIDATION

Case Narrative: Only cover letter provided.
Chain of Custody: The COC is complete and analyses was performed as requested.
Sample Receipt: No exceptions were noted by ATL.
Holding Times: All samples were analyzed within the required holding times.
Trip Blank Review: No analytes detected above LRLs in Trip Blank.
Equipment Blank Review: Equipment Blank not collected.
Surrogates: All surrogate recoveries within method acceptance limits.
Elevated Reporting Limits: None reported.
Compound Identification: No issues noted.

PER ANALYSIS

EPA Method 8015B

Method Blanks: TPH-DRO, and ORO were not detected above the RL in the laboratory method blank.
Laboratory Control Sample/Laboratory Control Sample Duplicate: LCS and LCSD analyte recovery within acceptance limits.
Matrix Spike/Matrix Spike Duplicate: NA
Laboratory Duplicate: TPH-GRO not detected above LRL in duplicate prepared from MW-1-20210726.

EPA Method 8260B
Method Blanks: No analytes detected above the RL in the laboratory method blank.
Laboratory Control Sample/Laboratory Control Sample Duplicate: LCS and LCSD analyte recovery within acceptance limits.
Matrix Spike/Matrix Spike Duplicate: NA
Laboratory Duplicate: NA

FIELD DUPLICATE REVIEW:

All analytes reported as ND in duplicate sample BD01-20210726.

DETERMINATION:

The data in this work order have been validated. No data has been rejected, no qualifiers required, and all data is usable.

NOTES:

Data validation assigned qualifiers (U, UJ, J, R). The following qualifiers may be assigned to data in this data set based on the results of the data validation procedure (documented on this form). In general data qualifiers are defined as follows:

- U Indicates the analyte was analyzed for but was not detected above the reported sample quantitation limit (MRL, or MDL if reported). Results assigned this qualifier are considered undetected at the MRL, or MDL if reported.

- UJ Indicates the analyte was not detected above the quantitation limit or MRL (MDL, if reported); however, the MRL (MDL, if reported) is approximate and may or may not represent the actual limit of quantitation necessary to accurately

and precisely measure the analyte in the sample. Results assigned this qualifier are considered undetected at the estimated MRL (MDL, if reported).

- J Indicates the analyte was positively identified; however, the associated numerical value is the approximate concentration of the analyte in the sample. Results assigned this qualifier as considered and detected at an estimated value. J-qualifiers may be appended with a "+" or "-" to indicate the result has a potential positive or negative bias, respectively.

- R Indicates the presence or absence of the analyte cannot be confirmed due to serious laboratory deficiencies in the ability to analyze the sample and meet quality control criteria. Results assigned this qualifier are rejected and considered unusable.

REFERENCES:

EPA. 2002. *Guidance on Environmental Data Verification and Data Validation, EPA QA/G-8.* USEPA. November 2002.

EPA. 2017. *USEPA National Functional Guidelines for Superfund Organic Methods Data Review, EPA-540-R-014-002*. OSRTI. August.

DATA VALIDATION SUMMARY REPORT

GENERAL INFORMATION

Lab Name:	Jones Environmental, Inc.
Lab SDG/Project/Work Order:	G-0351
Project Name:	Olson La Habra
Stantec Project Number:	185804671
Client:	The Olson Company
Validator Name:	Patrick Vaughan
Date of Validation:	August 4, 2021

SAMPLE INFORMATION:

Number of Samples:	20
Matrix:	Soil Gas
Number of Trip Blanks:	0
Number of Equipment Blanks:	0
Number of Field Duplicates	0
Date of Sample Collection:	July 26, 2021

Sample Name	Matrix	Analysis
SV2A-5, SV2A-5 REP, SV31-5, SV31-10, SV10A-5, SV10A-10, SV28-5, SV25-5, SV25-12, SV41-5, SV41-10, SV22-5, SV22-12, SV23-5 SV23-12, SV29-5, SV29-12, SV13A-5, SV13A-10, and SV28-12.	Soil Gas	TPH-GRO, Oxygenates and VOCs by EPA Method 8260B.

GENERAL DATA VALIDATION

Case Narrative:
No exceptions to method or sample collection and handling were noted. No flow conditions as indicated on the COC are described as occurring when a sampling rate greater than 10 mL/min cannot be maintained without applying a vacuum greater than 100 inches of water to the sampling train. The sampling train is left at a vacuum for no less than three minutes. If the vacuum does not subside appreciably after three minutes, the sample location is determined to be a no flow sample.

Chain of Custody
The COC is complete and analyses was performed as requested. Eight samples (SV25 -5, SV25-12, SV41-10, SV22-5, SV23-5, SV29-5, SV29-12, and SV13A-10 are identified as "no-flow grab samples" indicating these samples were collected without a default purging of 3 volumes of dead air.

Sample Receipt:
No exceptions were noted.

Holding Times:
All samples were analyzed within the required holding times.

Trip Blank Review:
NA

Equipment Blank Review:
Equipment Blank not collected.

Surrogates: All surrogate recoveries reported to be within acceptance limits.
Elevated Reporting Limits: None reported.
Compound Identification: No issues noted.

PER ANALYSIS

EPA Method 8260B
Method Blanks: No VOCs were detected above the RL in the laboratory method blank or sampling blank.
Laboratory Control Sample/Laboratory Control Sample Duplicate: LCS and LCSD analyte recovery within acceptance limits. CCV recovery above acceptance range for PCE but LCS/LCSD RPD within acceptance limits and as such data for PCE was reported.
Matrix Spike/Matrix Spike Duplicate: NA
Laboratory Duplicate: NA

FIELD DUPLICATE REVIEW:

Field duplicate samples not collected.

DETERMINATION:

The data in this work order have been validated. No data has been rejected, no qualifiers required, and all data is usable except:

- Samples SV25 -5, SV25-12, SV41-10, SV22-5, SV23-5, SV29-5, SV29-12, and SV13A-10 were identified as "no-flow grab samples" indicating these samples were collected without a default purging of 3 volumes of dead air. **Detected analytes in these sample should be flagged "J" estimated**. **Non-detected data should be qualified as "R" rejected.**

NOTES:

Data validation assigned qualifiers (U, UJ, J, R). The following qualifiers may be assigned to data in this data set based on the results of the data validation procedure (documented on this form). In general data qualifiers are defined as follows:

- U Indicates the analyte was analyzed for but was not detected above the reported sample quantitation limit (MRL, or MDL if reported). Results assigned this qualifier are considered undetected at the MRL, or MDL if reported.

- UJ Indicates the analyte was not detected above the quantitation limit or MRL (MDL, if reported); however, the MRL (MDL, if reported) is approximate and may or may not represent the actual limit of quantitation necessary to accurately

and precisely measure the analyte in the sample. Results assigned this qualifier are considered undetected at the estimated MRL (MDL, if reported).

- J Indicates the analyte was positively identified; however, the associated numerical value is the approximate concentration of the analyte in the sample. Results assigned this qualifier as considered and detected at an estimated value. J-qualifiers may be appended with a "+" or "-" to indicate the result has a potential positive or negative bias, respectively.

- R Indicates the presence or absence of the analyte cannot be confirmed due to serious laboratory deficiencies in the ability to analyze the sample and meet quality control criteria. Results assigned this qualifier are rejected and considered unusable.

REFERENCES:

EPA. 2002. *Guidance on Environmental Data Verification and Data Validation, EPA QA/G-8.* USEPA. November 2002.

EPA. 2017. *USEPA National Functional Guidelines for Superfund Organic Methods Data Review, EPA-540-R-014-002*. OSRTI. August.

DATA VALIDATION SUMMARY REPORT

GENERAL INFORMATION

Lab Name:	Jones Environmental, Inc. (Mobile Lab)
Lab SDG/Project/Work Order:	G-0352
Project Name:	Olson La Habra
Stantec Project Number:	185804671
Client:	The Olson Company
Validator Name:	Patrick Vaughan
Date of Validation:	August 11, 2021

SAMPLE INFORMATION:

Number of Samples:	17
Matrix:	Soil Gas
Number of Trip Blanks:	0
Number of Equipment Blanks:	0
Number of Field Duplicates	0
Date of Sample Collection:	July 27, 2021

Sample Name	Matrix	Analysis
SV32-5, SV33-5, SV33-10, SV15A-5, SV15A-5 REP, SV16-5, SV16-12, SV17-5, SV17A-5, SV7A-10, SV34-5, SV34-10, SV3-5, SV3-10, SV40-5 TRACER RR, SV40-10 TRACER RR, SV32-10 (no flow grab sample).	Soil Gas	TPH-GRO, and VOCs by EPA Method 8260B.

GENERAL DATA VALIDATION

Case Narrative:
No exceptions to method or sample collection and handling were noted. The tracer gas consisted of a mixture of n-pentane, n-hexane, and n-heptane. No flow conditions as indicated on the COC are described as occurring when a sampling rate greater than 10 mL/min cannot be maintained without applying a vacuum greater than 100 inches of water to the sampling train. The sampling train is left at a vacuum for no less than three minutes. If the vacuum does not subside appreciably after three minutes, the sample location is determined to be a no flow sample.

Chain of Custody
The COC is complete and analyses was performed as requested. One sample (SV32-10) was identified as a "no-flow grab sample" indicating these samples were collected without a default purging of 3 volumes of dead air.

Sample Receipt:
No exceptions were noted.

Holding Times:
All samples were analyzed within the required holding times.

Trip Blank Review:
NA

Equipment Blank Review:
Equipment Blank not collected.

Surrogates: All surrogate recoveries reported to be within acceptance limits.
Elevated Reporting Limits: None reported.
Compound Identification: No issues noted.

PER ANALYSIS

EPA Method 8260B
Method Blanks: No VOCs were detected above the RL in the laboratory method blank or sampling blank.
Laboratory Control Sample/Laboratory Control Sample Duplicate: LCS and LCSD analyte recovery within acceptance limits. CCV recovery is within acceptance range for all analytes. LCS/LCSD %R and RPD within acceptance limits.
Matrix Spike/Matrix Spike Duplicate: NA
Laboratory Duplicate: NA

FIELD DUPLICATE REVIEW:

Field duplicate samples not collected.

DETERMINATION:

The data in this work order have been validated. No data has been rejected, no qualifiers required, and all data is usable except:

- Sample SV32 -10 was identified as a "no-flow grab sample" indicating this sample was collected without a default purging of 3 volumes of dead air. **Detected analytes in this sample should be flagged "J" estimated**. **Non-detected data should be qualified as "R" rejected.**

NOTES:

Data validation assigned qualifiers (U, UJ, J, R). The following qualifiers may be assigned to data in this data set based on the results of the data validation procedure (documented on this form). In general data qualifiers are defined as follows:

- U Indicates the analyte was analyzed for but was not detected above the reported sample quantitation limit (MRL, or MDL if reported). Results assigned this qualifier are considered undetected at the MRL, or MDL if reported.

- UJ Indicates the analyte was not detected above the quantitation limit or MRL (MDL, if reported); however, the MRL (MDL, if reported) is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. Results assigned this qualifier are considered undetected at the estimated MRL (MDL, if reported).

- J Indicates the analyte was positively identified; however, the associated numerical value is the approximate concentration of the analyte in the sample. Results assigned this qualifier as considered and detected at an estimated value. J-qualifiers may be appended with a "+" or "-" to indicate the result has a potential positive or negative bias, respectively.

- R Indicates the presence or absence of the analyte cannot be confirmed due to serious laboratory deficiencies in the ability to analyze the sample and meet quality control criteria. Results assigned this qualifier are rejected and considered unusable.

REFERENCES:

EPA. 2002. *Guidance on Environmental Data Verification and Data Validation, EPA QA/G-8.* USEPA. November 2002.

EPA. 2017. *USEPA National Functional Guidelines for Superfund Organic Methods Data Review, EPA-540-R-014-002*. OSRTI. August.

DATA VALIDATION SUMMARY REPORT

GENERAL INFORMATION

Lab Name:	Jones Environmental, Inc.
Lab SDG/Project/Work Order:	H-0022
Project Name:	Olson Gardena
Stantec Project Number:	185804671
Client:	The Olson Company
Validator Name:	Patrick Vaughan
Date of Validation:	August 3, 2021

SAMPLE INFORMATION:

Number of Samples:	17
Matrix:	Soil Gas
Number of Trip Blanks:	0
Number of Equipment Blanks:	0
Number of Field Duplicates	0
Date of Sample Collection:	July 26, 2021

Sample Name	Matrix	Analysis
AA1, SV-1A-5, SV-1A-10, SV-11A-5, SV-11A-10, SV-27-5, SV-27-12, SV-1A-5REP, SV-42-5, SV-42-10, SV-39-5, SV-39-10, SV-40-5, SV-40-10, SV-12A-4, SV-12A-10.	Soil Gas	TPH-GRO, Oxygenates and VOCs by EPA Method 8260B.

GENERAL DATA VALIDATION

Case Narrative:
No exceptions to method or sample collection and handling were noted. No flow conditions as indicated on the COC are described as occurring when a sampling rate greater than 10 mL/min cannot be maintained without applying a vacuum greater than 100 inches of water to the sampling train. The sampling train is left at a vacuum for no less than three minutes. If the vacuum does not subside appreciably after three minutes, the sample location is determined to be a no flow sample.

Chain of Custody
The COC is complete and analyses was performed as requested. Four samples (SV-1A-10, SV-11A, SV-26-12, and SV-42-10) are identified "no-flow grab samples". however, analysis was performed.

Sample Receipt:
No exceptions were noted.

Holding Times:
All samples were analyzed within the required holding times.

Trip Blank Review:
NA

Equipment Blank Review:
Equipment Blank not collected.

Surrogates:
Hydrocarbon interference prevented adequate surrogate recovery in samples SV-11A-5 and SV-11A-10. Dibromofluoromethane recoveries in these sample within acceptance limits.

Elevated Reporting Limits: None reported.
Compound Identification: No issues noted.

PER ANALYSIS

EPA Method 8260B
Method Blanks: No VOCs were detected above the RL in the laboratory method blank or sampling blank.
Laboratory Control Sample/Laboratory Control Sample Duplicate: Vinyl chloride %Recovery below acceptance limits in the CCV but within acceptance limits in LCS/LCSD. Therefore, data was reported.
Matrix Spike/Matrix Spike Duplicate: NA
Laboratory Duplicate: NA

FIELD DUPLICATE REVIEW:

Field duplicate samples not collected.

DETERMINATION:

The data in this work order have been validated. No data has been rejected, no qualifiers required, and all data is usable except:

- SV-1A-10, SV-11A-5, SV-26-12, and SV-42-10 are identified on COC as "no-flow" tracer detected samples; however, analysis was performed, reported and the tracer is listed as ND in these samples. **Detected analytes should be flagged as "J" estimated. Analytes reported as not detected should be flagged as "R" rejected.**

NOTES:

Data validation assigned qualifiers (U, UJ, J, R). The following qualifiers may be assigned to data in this data set based on the results of the data validation procedure (documented on this form). In general data qualifiers are defined as follows:

- U Indicates the analyte was analyzed for but was not detected above the reported sample quantitation limit (MRL, or MDL if reported). Results assigned this qualifier are considered undetected at the MRL, or MDL if reported.

- UJ Indicates the analyte was not detected above the quantitation limit or MRL (MDL, if reported); however, the MRL (MDL, if reported) is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. Results assigned this qualifier are considered undetected at the estimated MRL (MDL, if reported).

- J Indicates the analyte was positively identified; however, the associated numerical value is the approximate concentration of the analyte in the sample. Results assigned this qualifier as considered and detected at an estimated value. J-qualifiers may be appended with a "+" or "-" to indicate the result has a potential positive or negative bias, respectively.

- R Indicates the presence or absence of the analyte cannot be confirmed due to serious laboratory deficiencies in the ability to analyze the sample and meet quality control criteria. Results assigned this qualifier are rejected and considered unusable.

REFERENCES:

EPA. 2002. *Guidance on Environmental Data Verification and Data Validation, EPA QA/G-8.* USEPA. November 2002.

EPA. 2017. *USEPA National Functional Guidelines for Superfund Organic Methods Data Review, EPA-540-R-014-002*. OSRTI. August.

DATA VALIDATION SUMMARY REPORT

GENERAL INFORMATION

Lab Name:	Jones Environmental, Inc.
Lab SDG/Project/Work Order:	ST-17
Project Name:	Olson La Habra
Stantec Project Number:	185804671
Client:	The Olson Company
Validator Name:	Patrick Vaughan
Date of Validation:	August 4, 2021

SAMPLE INFORMATION:

Number of Samples:	22
Matrix:	Soil Vapor
Number of Trip Blanks:	0
Number of Equipment Blanks:	0
Number of Field Duplicates	0
Date of Sample Collection:	July 26, 2021

Sample Name	Matrix	Analysis
AA2-210727, SV-6A-5, SV-6A-10, SV-6A-10 REP, SV-38-5, SV-38-10, SV-37-5, SV-37-10, SV-36-5, SV-8A-5, SV-9A-5, SV-35-5, SV-35-10, SV-4A-5, SV-4A-10, SV-38-5 Tracer RR, SV-38-10 Tracer RR, SV-15A-10, SV-36-10, SV-8A-10, SV-9A-10, and SV-14A-19.	Soil Vapor	TPH-GRO, Oxygenates and VOCs by EPA Method 8260B.

GENERAL DATA VALIDATION

Case Narrative:
No exceptions to method or sample collection and handling were noted.

Chain of Custody
The COC is complete and analyses was performed as requested. Five samples (SV-15A-10, SV-36-10, SV-8A-10, SV-9A-10 and SV-14A-10 are identified as "no-flow" samples; however, analysis was performed, and results reported for sample SV-15A-10..

Sample Receipt:
No exceptions were noted.

Holding Times:
All samples were analyzed within the required holding times.

Trip Blank Review:
NA

Equipment Blank Review:
Equipment Blank not collected.

Surrogates:
Hydrocarbon interference prevented adequate 4-Bromofluorobenzene surrogate recovery in sample SV-6A-5. All other QC parameters within acceptance criteria and data was reported.

Elevated Reporting Limits:
None reported.

Compound Identification:
No issues noted.

PER ANALYSIS

EPA Method 8260B
Method Blanks: No VOCs were detected above the RL in the laboratory method blank or sampling blank.
Laboratory Control Sample/Laboratory Control Sample Duplicate: LCS and LCSD analyte recovery within acceptance limits except for vinyl chloride. CCV recovery and LCS/LCSD RPD within acceptance limits and as the data for vinyl chloride was reported.
Matrix Spike/Matrix Spike Duplicate: MS/MSD %REC and RPD within control limits.
Laboratory Duplicate: NA

FIELD DUPLICATE REVIEW:

Field duplicate samples not collected.

DETERMINATION:

The data in this work order have been validated. No data has been rejected, no qualifiers required, and all data is usable except:

- Samples SV-15A-10, SV-36-10, SV-8A-10, SV-9A-10 and SV-14A-10 are identified as "no-flow" samples on COC; however, analysis was performed for sample SV-15A-10 and reported. **The positive results for sample SV-15A-10 should be qualified as "J" estimated. Results reported as ND or not-detected should be qualified as "R" rejected.**

NOTES:

Data validation assigned qualifiers (U, UJ, J, R). The following qualifiers may be assigned to data in this data set based on the results of the data validation procedure (documented on this form). In general data qualifiers are defined as follows:

- U Indicates the analyte was analyzed for but was not detected above the reported sample quantitation limit (MRL, or MDL if reported). Results assigned this qualifier are considered undetected at the MRL, or MDL if reported.

- UJ Indicates the analyte was not detected above the quantitation limit or MRL (MDL, if reported); however, the MRL (MDL, if reported) is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. Results assigned this qualifier are considered undetected at the estimated MRL (MDL, if reported).

- J Indicates the analyte was positively identified; however, the associated numerical value is the approximate concentration of the analyte in the sample. Results assigned this qualifier as considered and detected at an estimated value. J-qualifiers may be appended with a "+" or "-" to indicate the result has a potential positive or negative bias, respectively.

- R Indicates the presence or absence of the analyte cannot be confirmed due to serious laboratory deficiencies in the ability to analyze the sample and meet quality control criteria. Results assigned this qualifier are rejected and considered unusable.

REFERENCES:

EPA. 2002. *Guidance on Environmental Data Verification and Data Validation, EPA QA/G-8.* USEPA. November 2002.

EPA. 2017. *USEPA National Functional Guidelines for Superfund Organic Methods Data Review, EPA-540-R-014-002*. OSRTI. August.

DATA VALIDATION SUMMARY REPORT

GENERAL INFORMATION

Lab Name:	Jones Environmental, Inc.
Lab SDG/Project/Work Order:	ST-17874
Project Name:	Olson La Habra
Stantec Project Number:	185804671
Client:	The Olson Company
Validator Name:	Patrick Vaughan
Date of Validation:	August 4, 2021

SAMPLE INFORMATION:

Number of Samples:	6
Matrix:	Soil Gas
Number of Trip Blanks:	0
Number of Equipment Blanks:	0
Number of Field Duplicates	0
Date of Sample Collection:	July 27, 2021

Sample Name	Matrix	Analysis
SV-31A-5, SV-3A-5, SV-2A-10, SV-39-5, SV-17A-5, SV-14A-5.	Soil Gas	Oxygenates + Methane Only by ASTM D1946

GENERAL DATA VALIDATION

Case Narrative: No exceptions to method or sample collection and handling were noted.
Chain of Custody The COC is complete and analyses was performed as requested.
Sample Receipt: No exceptions were noted.
Holding Times: All samples were analyzed within the required holding times.
Trip Blank Review: NA
Equipment Blank Review: Equipment Blank not collected.
Surrogates: Hydrocarbon interference prevented adequate 4-Bromofluorobenzene surrogate recovery in sample SV-6A-5. All other QC parameters within acceptance criteria and data was reported.
Elevated Reporting Limits: None reported.
Compound Identification: No issues noted.

PER ANALYSIS

ASTM D1946

Method Blanks: Oxygen reported in Method Blank at atmospheric levels.
Laboratory Control Sample/Laboratory Control Sample Duplicate: LCS and LCSD analyte recovery within acceptance limits except for vinyl chloride. CCV recovery and LCS/LCSD RPD within acceptance limits and as the data for vinyl chloride was reported.
Matrix Spike/Matrix Spike Duplicate: NA
Laboratory Duplicate: NA

FIELD DUPLICATE REVIEW:

Field duplicate samples not collected.

DETERMINATION:

The data in this work order have been validated. No data has been rejected, no qualifiers required, and all data is usable.

NOTES:

Data validation assigned qualifiers (U, UJ, J, R). The following qualifiers may be assigned to data in this data set based on the results of the data validation procedure (documented on this form). In general data qualifiers are defined as follows:

- U Indicates the analyte was analyzed for but was not detected above the reported sample quantitation limit (MRL, or MDL if reported). Results assigned this qualifier are considered undetected at the MRL, or MDL if reported.

- UJ Indicates the analyte was not detected above the quantitation limit or MRL (MDL, if reported); however, the MRL (MDL, if reported) is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. Results assigned this qualifier are considered undetected at the estimated MRL (MDL, if reported).

- J Indicates the analyte was positively identified; however, the associated numerical value is the approximate concentration of the analyte in the sample. Results assigned this qualifier as considered and detected at an estimated value. J-qualifiers may be appended with a "+" or "-" to indicate the result has a potential positive or negative bias, respectively.

- R Indicates the presence or absence of the analyte cannot be confirmed due to serious laboratory deficiencies in the ability to analyze the sample and meet quality control criteria. Results assigned this qualifier are rejected and considered unusable.

REFERENCES:

EPA. 2002. *Guidance on Environmental Data Verification and Data Validation, EPA QA/G-8.* USEPA. November 2002.

EPA. 2017. *USEPA National Functional Guidelines for Superfund Organic Methods Data Review, EPA-540-R-014-002*. OSRTI. August.

DATA VALIDATION SUMMARY REPORT

GENERAL INFORMATION

Lab Name:	Jones Environmental, Inc. (Mobile Lab)
Lab SDG/Project/Work Order:	ST-18000
Project Name:	Olson La Habra
Stantec Project Number:	185804671
Client:	The Olson Company
Validator Name:	Patrick Vaughan
Date of Validation:	August 16, 2021

SAMPLE INFORMATION:

Number of Samples:	1
Matrix:	Soil Gas
Number of Trip Blanks:	0
Number of Equipment Blanks:	0
Number of Field Duplicates	0
Date of Sample Collection:	Reanalysis of sample collected on August 13, 2021

Sample Name	Matrix	Analysis
SV18-5	Soil Gas	VOCs by 8260B and Gasoline Range Organics.

GENERAL DATA VALIDATION

Case Narrative: Case narrative not provided.
Chain of Custody The COC is complete and analyses was performed as requested.
Sample Receipt: No exceptions were noted.
Holding Times: The sample was analyzed within the required holding time.
Trip Blank Review: NA
Equipment Blank Review: Equipment Blank not collected.
Surrogates: All surrogate recoveries within acceptance limits.
Elevated Reporting Limits: None reported.
Compound Identification: No issues noted.

PER ANALYSIS

EPA Method 8260B

Method Blanks: No analytes detected in method blank
Laboratory Control Sample/Laboratory Control Sample Duplicate: LCS and LCSD analyte recovery within acceptance limits. CCV recovery and LCS/LCSD RPD within acceptance limits.
Matrix Spike/Matrix Spike Duplicate: NA
Laboratory Duplicate: NA

FIELD DUPLICATE REVIEW:

Field duplicate samples not collected.

DETERMINATION:

The data in this work order have been validated. No data has been rejected, no qualifiers required, and all data is usable.

NOTES:

Data validation assigned qualifiers (U, UJ, J, R). The following qualifiers may be assigned to data in this data set based on the results of the data validation procedure (documented on this form). In general data qualifiers are defined as follows:

- U Indicates the analyte was analyzed for but was not detected above the reported sample quantitation limit (MRL, or MDL if reported). Results assigned this qualifier are considered undetected at the MRL, or MDL if reported.

- UJ Indicates the analyte was not detected above the quantitation limit or MRL (MDL, if reported); however, the MRL (MDL, if reported) is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. Results assigned this qualifier are considered undetected at the estimated MRL (MDL, if reported).

- J Indicates the analyte was positively identified; however, the associated numerical value is the approximate concentration of the analyte in the sample. Results assigned this qualifier as considered and detected at an estimated value. J-qualifiers may be appended with a "+" or "-" to indicate the result has a potential positive or negative bias, respectively.

- R Indicates the presence or absence of the analyte cannot be confirmed due to serious laboratory deficiencies in the ability to analyze the sample and meet quality control criteria. Results assigned this qualifier are rejected and considered unusable.

REFERENCES:

EPA. 2002. *Guidance on Environmental Data Verification and Data Validation, EPA QA/G-8.* USEPA. November 2002.

EPA. 2017. *USEPA National Functional Guidelines for Superfund Organic Methods Data Review, EPA-540-R-014-002*. OSRTI. August.