# APPENDIX C -DRAFT GEOTECHNICAL REPORT

City of Camarillo Reclaimed Water Storage Tank Initial Study

## **DRAFT** GEOTECHNICAL REPORT

## WT-14-03 Reclaimed Water Storage Reservoir

# **Camarillo Water Reclamation Facility**

## Camarillo, California

Yeh Project No.: 219-078

March 6, 2020



Prepared for:

Water Systems Consulting, Inc. 360 Mobil Avenue, Suite 213C Camarillo, California 93010 Attn: Mr. Michael Goymerac, PE

Prepared by:

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Project No. 219-078

March 6, 2020

Water Systems Consulting, Inc. 360 Mobil Avenue, Suite 213C Camarillo, California 93010

Attn: Mr. Michael Goymerac, PE

Subject:DRAFT Geotechnical Report, WT-14-03 Reclaimed Water Storage Reservoir, CamarilloWater Reclamation Facility, Camarillo, California

Dear Mr. Goymerac:

Yeh and Associates, Inc. is pleased to submit this geotechnical report for design of Reclaimed Water Storage Reservoir WT-14-03 at the Camarillo Water Reclamation Facility in Camarillo, California. This report was prepared in accordance with the professional services agreement dated September 25, 2019 and Amendment 1 dated December 3, 2019. This report provides recommendations for earthwork, trench design, and foundation and wall design for the new reservoir.

The geotechnical evaluation consisted of a program of field exploration, laboratory testing, review of existing geotechnical studies, engineering analyses, and preparation of this report. Field exploration and laboratory data collected for this study and previous studies are attached to the report. A map showing the location of the field exploration is also provided.

We appreciate the opportunity to be of service. Please contact Loree Berry at 805-481-9590 x 271 or Lberry@yeh-eng.com if you have questions or require additional information.

Sincerely, YEH AND ASSOCIATES, INC.



Loree A. Berry, P.E. Senior Project Manager



Jonathan Schmidt, E.I.T. Staff Engineer Reviewed by:



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## **1. PURPOSE AND SCOPE OF STUDY**

Yeh and Associates was retained by Water Systems Consulting to provide geotechnical recommendations for the design of a reclaimed water storage reservoir at the Camarillo Water Reclamation Facility in Camarillo, California. The location of the site is shown on Figure 1.

The geotechnical evaluation consisted of project coordination, field exploration, laboratory testing, review of existing geotechnical studies, and engineering analyses to provide the recommendations in this report. These include geotechnical inputs for design and recommendations for construction of the proposed reservoir.



Figure 1: Project Location Map

## 2. PROJECT UNDERSTANDING

The project generally consists of constructing a new one-million-gallon reclaimed water storage reservoir and conveyance piping at the City's water reclamation facility.

## 2.1 EXISTING FACILITY AND SITE DESCRIPTION

The water reclamation facility is located at the eastern edge of the Oxnard plain near the western reaches of the Santa Monica Mountains and along the west bank of Conejo Creek. The proposed tank site is in the south western portion of the plant and will be constructed within an area with existing sludge drying beds and may encroach into a triangular shaped undeveloped parcel south of the drying beds. The existing ground surface elevation within the proposed area for tank siting ranges from El. 104 feet to 108 feet based on previous record drawings of the plant site (Carollo 2007). The treatment plant property is bordered by agriculture to the north and west and undeveloped hills to the south and east beyond Conejo Creek. The existing site features in the proposed reservoir siting area is shown on Plate 1.



#### 2.2 PROPOSED DESIGN

Final reservoir layout, dimensions and depth are still being confirmed by Water Systems Consulting (WSC). Our report is based on assumptions and information provided by WSC and Kleinfelder via email and phone discussions between November 2019 and February 2020. The proposed reservoir location shown on Plate 1 was provided to Yeh on February 7, 2020 and consists of a buried, one million-gallon rectangular reinforced concrete reservoir with approximate dimensions of 125 feet by 205 feet and sited in the footprint of the existing sludge drying beds.

The finished floor of the new reservoir will be at an elevation of approximately 93.5 feet and the reservoir will be partially buried with roof of the reservoir one foot above existing grade (elevation 109.25). The reservoir floor is proposed to be a 7-inch thick concrete membrane slab underlain by drainage material. The reinforced concrete walls will be supported by a perimeter footing and the roof will be supported by isolated interior column footings. There will be a grid of 32 interior columns that will span 21.5-feet on center from the roof structure to concrete footings. Based on email correspondence with project team members from WSC and Kleinfelder in February 2020, the columns will be 18-inches in diameter and founded on 7-foot square concrete footings. The footings will be a minimum of 1-foot, 3-inches in height. The wall thickness is 16 inches and will be supported on a 2-foot thick, 6.5-foot wide thickened strip footing. The reservoir walls will be designed for a restrained (at-rest) and undrained condition. The interior footings will rest on top of the floor and the wall footings will be integrated into the slab.

Conveyance piping will be constructed between the new reservoir and the City's recycled water distribution system. It is assumed the pipeline will consist of 36-inch diameter ductile iron or welded steel pipe, be no longer than approximately 500 feet, and buried at depths ranging from 3 to 7 feet.

## **3. FIELD EXPLORATION AND TESTING**

## 3.1 GEOTECHNICAL DRILLING AND SAMPLING

The drilling subcontractor for this project was S/G Drilling Company of Lompoc, California. S/G used a CME-85 truck-mounted drill rig equipped with 8-inch diameter hollow stem augers to advance three borings (19E-01 through 19E-03) near the project extents on December 6, 2019. Upon completion, borings 19E-01 and 19E-02 were backfilled with cement slurry and boring 19E-03 was converted into a 2-inch diameter temporary groundwater monitoring well. The



surface of borings in the roadway were completed with concrete dyed black. The approximate boring locations are shown on Plate 1 – Exploration Plan.

Yeh collected bulk, drive, and thin walled tube samples for subsequent laboratory testing at each boring. Drive samples were collected using a 140-pound automatic trip hammer in accordance with ASTM 1586, the Standard Penetration Test (SPT). Three sampler types were used: the SPT split spoon sampler (SS), the modified California sampler (MC), and thin walled tube samplers (TWT). The SPT sampler has a 2-inch outside diameter (OD), 1-3/8-inch inside diameter (ID) and is equipped for but was used without liners. The 3-inch OD and 2-3/8-inch ID modified California sampler was used with 1-inch high brass ring liners. Bulk samples were collected from the auger flights as the borings were advanced. Thin walled tube samples were pushed using the rig's hydraulics. Pocket penetrometer tests were performed in the field on the trimmed end of selected samples to help estimate the undrained shear strength of cohesive soil.

A description of the subsurface conditions encountered, field test results, sample intervals, and blow counts (N-Values) recorded during drive sampling are presented on the logs included in Appendix A.

## **3.2 MONITORING WELL INSTALLATION**

Boring 19E-03 was converted to a temporary monitoring well with 2-inch PVC slotted and solid casing set at depths of 30 feet below the ground surface. The lower 20 feet of well casing was screened with 0.02-inch slotted pipe and solid pipe was used from 10 feet to the surface. The annular space around the slotted portion of the casing were backfilled with No. 3 Monterey Sand up to approximately 24 inches above the slots. Hydrated bentonite pellets were used to seal the annular space above the sand and around the solid casing. A traffic rated flush mount well cover was encased in concrete above the well seal. A diagram for the completed well is shown on the boring log for 19E-03 in Appendix A.

#### **3.3 MONITORING WELL DEVELOPMENT**

On December 18, 2019, Yeh personnel developed monitoring well 19E-03 by surging and bailing with a disposable bailer and air-lifting using a buffalo pump with a 0.8 horse-power maximum 150 psi air compressor. Air-pressure was applied to the well just sufficiently to initiate and sustain flow. The screened section of the casing was air-lifted at approximately one-foot intervals until discharge water from each interval was observed visually clear. The total well development time was approximately 2.25 hours and approximately 268.5 gallons of water was produced and discharged directly into an adjacent sludge drying bed.



#### 3.4 Environmental Soil and Groundwater Sampling and Testing

#### 3.4.1 SOIL SAMPLING

On December 6, 2019, Yeh personnel collected soil grab samples for environmental screening from the auger cuttings in explorations 19E-01, -02 and -03. Samples were collected within three discrete depth intervals in each boring: 1 to 5 feet, 5 to 10 feet and 10 to 15 feet. S/G utilized decontaminated augers to advance the first 15 feet in each boring. Soil cuttings were collected from the augers by Yeh personnel using clean, disposable Nitrile gloves and placed directly into clean, laboratory provided, 32-ounce glass jars with Teflon lined lids. The jars were overfilled to reduce headspace and placed immediately into a cooler with ice. The samples were picked up from the project site by a BC Labs courier and transported to the analytic lab under appropriate chain of custody protocol. Each environmental soil sample taken from the same depth range was composited by the laboratory, resulting in 3 total soil samples and tested for pesticides, herbicides, PCBs, VOCs, sVOCs, and metals. Laboratory test results are provided in Appendix C.

#### 3.4.2 GROUNDWATER SAMPLING

On January 2, 2020, Yeh personnel collected one groundwater sample from monitoring well 19E-03 for analysis by BC Laboratories in Bakersfield, California. Sampling was performed using a decontaminated, stainless steel monsoon-pro pump flowing at approximately 0.2 gallons per minute. Prior to sampling, the well was purged while water quality parameters of temperature, pH, oxidation reduction potential, turbidity, specific conductance, and dissolved oxygen were monitored using a Horiba U-50 multi-parameter water quality meter mounted in a flow-through cell. Approximately 21 gallons of water was purged prior to parameter stabilization. Water was pumped directly into clean, properly labeled, laboratory provided containers and placed immediately into a cooler on ice. The cooler with the samples was transported to Yeh's office in Ventura and picked up by the BC Laboratory courier the same afternoon under appropriate chain of custody documentation.

Groundwater was analyzed for the full list of constituents required under the NPDES Order R4-2018-0125; Discharge of Groundwater from Construction and Project Dewatering to Surface Waters Attachment E – Screening Levels for General Permits. Laboratory test results are presented in Appendix D.

#### **3.5 LABORATORY TESTING**

Laboratory testing was performed on selected samples recovered from the field exploration program. Tests for moisture content, unit weight, Atterberg limits, particle size distribution by



mechanical sieve analysis, unit weight versus moisture content relation by the modified Proctor test, pH and resistivity were performed at the Yeh office and laboratory in Ventura, California. Tests for particle size distribution by mechanical sieve analysis, Atterberg limits, consolidated undrained triaxial strength, consolidation, and hydraulic conductivity were performed by the Geo-E lab at the Cal Poly Civil Engineering Department in San Luis Obispo, California. Tests for soluble sulfates and chlorides were performed by Cooper Testing Laboratory in Palo Alto, California. Testing was performed in accordance with applicable ASTM standards. Laboratory test results are presented in Appendix B.

## **3.6 PREVIOUS DATA REVIEW**

Yeh reviewed a previous geotechnical report prepared by Fugro (2004) for upgrades to the water reclamation plant. The field exploration included 2 hollow-stem auger borings, 5 cone penetration test (CPT) soundings, and 6 test pits. The hollow-stem auger borings and CPT soundings were performed to maximum depth of 50 feet. Digital copies of the CPT were provided by the City and those data were re-processed by Yeh. Logs for Yeh's 2019 borings, the reprocessed 2004 CPT logs, and DH-101 from Fugro (2004) are included in Appendix A.

## 4. SITE CONDITIONS

## 4.1 GEOLOGIC SETTING

The project site is located within the Oxnard Plain portion of the Western Transverse Ranges Geomorphic Province of California. The Western Transverse Ranges are a regional deformation belt characterized by a northeast-southwest trending structural grain and corresponding geomorphic features that extend from the Santa Barbara Channel to the Mojave section of the San Andreas Fault. The Oxnard Plain is a coastal plain that is bordered to the east by the Santa Monica Mountains, to the west by the Santa Clara River and to the north by the Camarillo and



the Las Posas Hills. The project site is located at the eastern edge of the Oxnard Plain, at the foot of the western front of the Santa Monica Mountains.

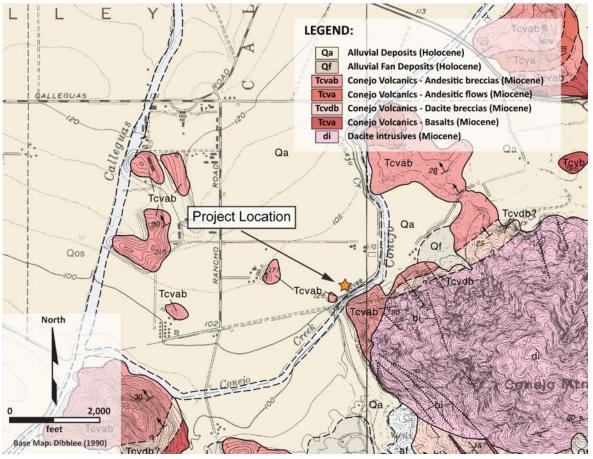


Figure 2: Geologic Map (Dibblee 1990)

The regional geology as mapped by Dibblee (1990) is shown on Figure 2. The Oxnard Plain generally consists of quaternary and Holocene alluvial and floodplain deposits that overly Cenozoic, predominately marine sedimentary units and the Miocene Conejo Volcanic Series. Dibblee (1990) mapped the surface geology at the site as "Qa; Alluvium gravel, sand and clay of flatlands". Tan, Clahan, and Hitchcock (2004) mapped the surface geology at the site as "Qair at the site as "Qwh1; Wash Deposits (Holocene) composed of unconsolidated sand, silt and gravel".

The closest mapped faults to the project site are the Baily Fault and the Camarillo fault. The northeast trending Baily Fault is approximately mapped 6,050 feet north west of the project site. It is listed as having Late Quaternary activity by the USGS quaternary Fault Database and is considered potentially active. The northeast trending Camarillo fault is a segment of the Simi-Santa Rosa Fault Zone. It is mapped along the southern edge of an east-west trending ridge approximately 8,950 feet northwest of the project site. The USGS Quaternary fault Database



lists the Camarillo Fault as having Latest Quaternary Activity; however, Treiman (1997) assumes Holocene displacement along this segment of the fault and describes it as active.

#### **4.2 SUBSURFACE CONDITIONS**

The subsurface conditions encountered in the previous exploration and the borings drilled for this project consisted of units of artificial fill and alluvial deposits. The approximate locations of the borings and CPTs utilized for this report are shown on the Field Exploration Plan on Plate 1. Yeh's interpretation of subsurface conditions along two subsurface profiles are presented on Plates 2 and 3. Descriptions of the units encountered are summarized below.

Artificial Fill (af). Design drawings by Bennet Engineering Company (1957) show that 2 to 3 feet of compacted fill was to be placed beneath the finished ground surface to construct the sludge drying beds and surrounding access paths. The sludge drying beds consisted of alternating rows of 4-inch thick concrete drive strips and drain tiles. The drainage material in the beds was to consist of 6 inches of graded, clean sand, 1 inch of pea gravel, and 4 inches of ¾" to ½" crushed rock. The specified pavement section west of the beds was specified as 4 inches of asphalt concrete (AC) pavement. The specified pavement section east of the drying beds between the drying beds and chlorine contact basin consisted of 3 inches of AC over 6 inches of base course underlain by compacted subgrade (Black and Veatch 1992). The artificial fill encountered in field explorations generally consisted of silty or clayey sand and very stiff sandy clay, both with varying amounts of gravel and extending to depths ranging from 2 to 5 feet below the ground surface. Pavement sections and drainage materials consistent with the specifications above were also encountered. The artificial fill was underlain by alluvium.

**Alluvium (Qal).** Alluvium was encountered below the artificial fill materials to the maximum depth explored, approximately 30 feet below the existing ground surface. Alluvial soil generally consisted of lean and fat clays, with varying amounts of sands, ranging in consistency from soft to hard. The sand content typically increased with depth, grading to clayey sand at approximately 30 feet bgs. Subsurface data from Fugro (2004) extended to 50 feet below the ground surface within the proposed reservoir siting location and indicates that the coarse-grained layer below 30 feet is on the order of 10 feet thick and is underlain by stiff clay to the total depth previously explored (50 feet below the ground surface).

A summary of the laboratory test results for the encountered subsurface units near the proposed reservoir location is presented in Table 1.



Geologic Unit	Depth (ft)	Dry Unit Wt. (pcf)	Moisture Content (%)	Particle Size Analyses* (%G, %S, %F)	Atterberg Limits* LL, PI	Shear Strength Parameters	Other
Artificial Fill (af)	0-5	106- 113	7-20				WC <sub>opt</sub> = 12% $\gamma_{d,max}$ = 119 pcf SO <sup>2-4</sup> = 155 mg/kg Cl <sup>-</sup> = 8 mg/kg ρ = 587 Ω-cm pH = 8.24
Alluvium (Qal)	5-30	83- 114	14-3	0 G 3-61 S 39-97 F	30 – 68 LL 13 - 48 PI	φ′ = 28-34° c′ = 150-310 psf	SO <sup>2-</sup> <sub>4</sub> = 216-379 mg/kg Cl <sup>-</sup> =63-95 mg/kg $\rho$ = 323-440 Ω-cm pH = 8.29 - 8.51 El = 90

#### Table 1: Geotechnical Properties Test Summary<sup>1</sup>

#### 4.3 GROUNDWATER CONDITIONS

Groundwater was encountered in each of the borings performed for this project as well as in previous explorations documented by Fugro (2004). Generally, groundwater was measured between 12 to 13 feet below the ground surface in December 2019. The water level was measured approximately 11 feet below the ground surface in early January 2020 following several December storm events. Table 2 summarizes the groundwater levels measured in the area of the proposed reservoir during previous and Yeh's explorations. Soil moisture and groundwater conditions will vary due to variations in rainfall, storm runoff, irrigation, groundwater pumping in the site vicinity, and other factors.

Boring No.	Date of Reading	Approximate Ground Surface Elevation (feet)	Depth to Measured Groundwater (feet)	Approximate Groundwater Elevation (feet)	Other
19E-01	12/5/2019	102	13	89	Boring data only
19E-02	12/5/2019	102	13	89	Boring data only
19E-03	12/5/2019 12/18/2019 1/2/2020 3/4/2020	102	12.9 12.5 10.9 13.2	89.1 89.5 91.1 88.8	Monitoring Well Installed

#### **Table 2: Groundwater Measurements**

<sup>&</sup>lt;sup>1 1</sup> Geotechnical properties are noted for dry unit weight ( $\gamma_d$ ) in lbs/ft<sup>3</sup> (pcf) and moisture content (WC) in percent; particle size as percent gravel (G), sand size (S) and fines content (F); electrical resistivity ( $\rho$ ) in ohm-centimeters ( $\Omega$ -cm); effective friction angle ( $\phi'$ ) and cohesion (c') in kips per square foot measured from direct shear tests; sulfate (SO<sup>2-</sup><sub>4</sub>) and chloride (Cl<sup>-</sup>)levels in mg/kg of dry weight; expansion index (El); and friction angle ( $\phi'$ ) or cohesion (c') in kips per square foot measured from direct shear (c) in kips per square foot measured from direct shear (ds) or consolidated undrained (cu) tests.



Boring No.	Date of Reading	Approximate Ground Surface Elevation (feet)	Depth to Measured Groundwater (feet)	Approximate Groundwater Elevation (feet)	Other
DH-101 Fugro (2004)	4/20/2004	107	16	91	Monitoring Well (abandoned)
DH-102 Fugro (2004)	4/20/2004	107	12	95	Monitoring Well (abandoned)

## 5. CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 SEISMIC DATA

The reservoir should be designed to resist lateral forces generated by earthquake shaking in accordance with relevant codes and applicable design practice. Seismic data presented in Table 3 can be used with the American Society of Civil Engineers (ASCE) 7-16 and American Concrete Institute (ACI) 350.3-06 design documents to determine appropriate seismic loadings.

The site is classified as a Site Class D per Table 20.3-1 in ASCE 7-16, based upon field blow counts. Yeh estimated seismic data in accordance with ASCE 7-16, Chapter 15 using an interactive web tool provided by the Structural Engineers Association of California (SEAOC, 2019). This interface queries the United States Geological Survey (USGS) seismic design map data and returns the appropriate design parameters in report format. Table 3 presents seismic data estimated for this project. The provisions of ASCE 7-16 would ordinarily require a ground motion hazard analysis for Class D sites when S<sub>1</sub> is greater than 0.2g. However, the values S<sub>DS</sub> and S<sub>D1</sub> listed below may be used provided the seismic response coefficient C<sub>s</sub> is calculated according to the conditions listed in section 11.4.8 of ASCE 7-16. Typically, C<sub>s</sub> is determined by the structural engineer when calculating seismic loads. The structural engineer should also determine how this provision of ASCE 7-16 applies to the water containing tank specific seismic coefficients calculated using ACI 350.3-06.

Seismic Parameter	Value
Latitude, degrees	34.1947
Longitude, degrees——	119.0015
Site Class	D, Stiff Soil
S <sub>s</sub> , Mapped MCE <sub>r</sub> <sup>2</sup> spectral acceleration parameter at short periods	1.532

#### **Table 3: Design Earthquake Ground Motion Parameters**

<sup>&</sup>lt;sup>2</sup> Risk targeted maximum considered earthquake ground motion response acceleration, oriented in the direction of maximum response in the horizontal plane



Seismic Parameter	Value
S <sub>1</sub> , Mapped MCE <sub>r</sub> spectral acceleration parameter at 1 second period	0.563
F <sub>a</sub> , Short period site coefficient	1
F <sub>v</sub> , Long period site coefficient	1.737
S <sub>MS</sub> , Mapped MCE <sub>r</sub> spectral acceleration parameter at short periods, adjusted for site effects	1.532
S <sub>M1</sub> , Mapped MCE <sub>r</sub> spectral acceleration parameter at 1 second period adjusted for site effects	0.978
$S_{\mbox{\scriptsize DS}},$ Design spectral acceleration parameter at short periods	1.021
S <sub>D1.</sub> Design spectral acceleration parameter at 1 second period	0.652
$T_{\rm L}$ long period transition period	8 seconds

## 5.1.1 LIQUEFACTION

Seismic liquefaction refers to the loss of soil strength due to excess pore water pressures generated during an earthquake. This can lead to global and/or local instabilities and settlement as pore pressures dissipate and soil particles re-consolidate. Liquefaction typically occurs in loose sands/granular soil that are saturated at the time of an earthquake. Cohesive soil, such as high plasticity clays and silts, are not considered susceptible to liquefaction but may have still have strength loss from dynamic loading due to cyclic softening.

Table 4 summarizes the peak ground acceleration and earthquake magnitude used in the liquefaction analyses based on the maximum considered earthquake ground motion. Yeh estimated the modified geometric mean peak ground acceleration (PGA<sub>m</sub>) using the SEAOC Seismic Design Maps Tool (2019) and the representative earthquake magnitude using the USGS Unified Hazard Tool (2019). The magnitude used in analysis is the deaggregated modal magnitude for the peak ground acceleration with a 2 percent probability of exceedance in 50 years.

Seismic Parameter	Value
PGAm	0.726g
Magnitude	7.7

#### **Table 4: Liquefaction Analysis Parameters**

Yeh used the program CLiq by Geologismiki (2018) to estimate the potential for liquefaction considering the CPT data from Fugro (2004). The program contains several empirical liquefaction triggering and volumetric reconsolidation models. Two relatively continuous subsurface layers encountered at depths of approximately 26 to 28 feet and 36 to 38 feet below the ground surface appear meet criteria for liquefaction triggering per Seed et al (2003). Using the earthquake parameters presented in Table 4 and a design groundwater depth of 7



feet below the surface, the total estimated settlement from the potentially liquefiable layers encountered below 26 feet is approximately 1.5 inches. The estimated differential seismic settlement between the north and south sides of the reservoir siting area (over 100 feet) is estimated on the order of 1 inch.

## 5.1.2 SURFACE FAULT RUPTURE

Surface fault rupture refers to when fault breakage within the earth's crust propagates to the ground surface. This causes large displacements and subsequent structural damage; however not all earthquakes will result in surface rupture. The Alquist-Priolo Act prohibits siting structures designed for human occupancy over active fault traces, defined as having movement in the last 11, 700 years (Holocene time).

The site is not located in an Alquist-Priolo Act Zone of Required Investigation (CGS, 2019). The closest mapped fault, the Baily Fault, is located approximately 1-mile north west of the project. Surface fault rupture is unlikely to pose a hazard to the project.

## 5.2 EARTHWORK – GENERAL

General recommendations for site preparation and grading are provided below. Specific recommendations for grading below the reservoir are provided later in this report.

## 5.2.1 SUGGESTED MATERIAL SPECIFICATIONS

The following specifications are suggested for materials referenced in various sections of this report. "Standard Specifications" refers to the 2018 edition of the *Standard Specifications* published by the California Department of Transportation. Alternative specifications or materials should be reviewed by Yeh before being used on this project. Recommendations for material use are provided in subsequent sections of this report.

**Aggregate Base.** Aggregate base shall consist of imported aggregate that complies with the grading and quality requirements for ¾-inch Class 2 aggregate base per Section 26-1.02B of the Standard Specifications (minimum R-value = 78).

**Aggregate** - **Stabilization.** Aggregate for stabilization below the reservoir shall consist of hard, durable, angular, clean crushed rock and shall be free from clay lumps, cementation, organic material, and other deleterious substances. Aggregate shall meet the gradation and quality requirements for No. 4 stone (1-1/2 x 3/4 inch) per ASTM C33 and with no more than 3 percent material passing the No. 200 sieve. Aggregate for Stabilization shall be fully encased in Geotextile – Stabilization where recommended.



**Aggregate - Gravel Bedding.** Gravel bedding or rock refill, such as for stabilizing bottoms of pipeline or utility trenches and used for sub-drainage shall consist of angular crushed rock that is free of organics, corrosive material, clay, recycled or reclaimed materials or other deleterious substances and conforming to No. 57 stone (1 inch x No.4) per ASTM C33. Gravel bedding shall be fully encased in Geotextile – Separation/Filter Fabric when in contact with in-situ or subsequent pipe zone or trench backfill material.

**Asphalt Concrete.** Asphalt concrete shall conform to Section 39-2, "Hot Mix Asphalt," of the Caltrans *Standard Specifications*. Asphalt binder shall be grade PG 64-10. Where asphalt shows signs of damage or fatigue a Type II slurry seal may be required.

**Compacted Fill.** Compacted fill material shall consist of imported or on-site material free of organics, oversize rock (greater than 3 inches), trash, debris, corrosive, and other deleterious materials. Fill materials shall comply with all specified material requirements for each designated placement location.

**Subsequent/Trench Backfill.** Trench backfill shall consist of imported or onsite material that is free of organics, debris, oversized material (greater than 3 inches), and other deleterious materials. Trench backfill material shall have at least 85 percent of the material passing the U.S. Standard No. 4 sieve, and/or comply with the applicable requirements for the area where trench backfill is being placed (such as the pavement structural section). Trench backfill shall have a sand equivalent of at least 20.

**Non-expansive/Imported Structural Backfill.** Imported structural backfill shall be nonexpansive material having an Expansion Index of less than 20 when tested according to latest approved edition of ASTM D4829 and conform to Section 19-3.02C, "Structure Backfill" of the *Standard Specifications*. Material types include SC, SM, SP, SW per ASTM D2487. Fill and borrow sources shall be reviewed and approved by the geotechnical professional before being imported to the site. The on-site soil encountered within the anticipated depths of excavation is not considered suitable for reuse as select material, such as for pipe bedding, pipe zone material, aggregate base, structure backfill, gravel or drainage material.

**Pipe Bedding/Pipe Zone Material.** Pipe bedding and pipe zone material shall consist of imported sand free of clay, organic, corrosive, trash, debris, and other deleterious materials. The sand shall have 100 percent material passing the 3/8-inch sieve, no less than 90 percent material passing the U.S. Standard No. Sieve, and no more than 3 percent passing the No. 200 sieve.



**Slurry Cement Backfill.** Slurry cement backfill can be used as Trench Backfill or as Initial pipe zone material when approved by the Engineer. Slurry cement shall consist of 2-sack sand-cement slurry conforming to Section 19-3.02G of the Caltrans Standard Specifications. Aggregate shall be imported sand conforming to the gradation and quality requirements of the Standard Specifications. Slurry cement backfill shall be a stable flowable mix and shall be consolidated using vibration during placement. Subsequent backfill or compacted material shall not be placed above slurry cement backfill until the slurry cement can support foot-traffic without more than ¼ - inch indentation. The Contractor shall provide ballast or stabilize the pipe as necessary to prevent movement or floating of the pipe during placement.

**Geotextile for Separation (Filter Fabric).** Geotextiles for filtration shall consist of Class C filter fabric conforming to Section 96-1.02B of the Standard Specifications.

**Geotextile for Stabilization.** Stabilization geotextile material shall consist of woven geosynthetic fabric. Geotextile for stabilization placed below crushed rock, on a soft subgrade or below rock fill shall comply with Subgrade Enhancement Geotextile in Section 96-1.020 of the Standard Specifications. Overlaps between adjacent rolls of geotextile shall be at least 2-feet wide or be spliced per the manufacture's recommendations. Geotextile shall be placed such that the fabric on the upstream or upslope side of the overlap is on top. Rocks, protrusions or sharp objects that could potentially damage the geotextile shall be removed from the subgrade prior to placing the fabric. Depressions or holes left in the subgrade from the removal of obstructions shall be filled with sand. Geotextile shall be placed smooth without wrinkles and be secured by anchoring, pinning, placing aggregate, or anchoring in trenches asneeded to maintain the integrity and location of the fabric when subsequent aggregates or fill is placed. Placement, anchorage and construction methods shall comply with the manufacturer's recommendations.

## 5.2.2 CLEARING AND GRUBBING

Clearing and grubbing should be performed to remove existing concrete, asphalt concrete, and any piping that will not serve the new reservoir. Soil containing pavement, debris, organics, loose or disturbed materials, or other unsuitable materials, should be excavated and removed prior to commencing fill placement. Demolition areas should be cleared of existing fill, pavement, abandoned utilities or pipelines, and soil disturbed during the clearing and grubbing process. Depressions left from the removal and demolition of materials should be replaced with compacted fill, where needed.



#### 5.2.3 FILL PLACEMENT - GENERAL

Jetting or ponding should not be permitted for placement or compaction of fill materials. Fill materials should be moisture conditioned and spread in lifts that are suitable for compaction with the equipment being used. Control of compaction layer thickness will be necessary to achieve compaction throughout the material being placed. Fill should typically be spread in loose lifts of approximately 8 inches or less, and within 2 percent of the optimum moisture content, to achieve the recommended compaction.

The moisture content of the material should be such that the specified compaction can be achieved in a firm and stable condition. Each layer should be spread evenly, bladed and mixed to provide relative uniformity of material within each layer, and be moisture conditioned by adding water or drying the material to provide a moisture content suitable for compaction. Soft or yielding materials should be removed and replaced with properly compacted fill material prior to placing the next layer of fill. Fill and backfill materials may need to be placed in thinner lifts to achieve the recommended compaction with the equipment being used.

Particles greater than half the compacted lift thickness can limit compactive effort. The fill should not contain rocks, gravel or other solid particles larger than 3 inches in the greatest dimension. Deleterious materials, such as soft rock particles, concrete or pavement rubble, metal, glass or sharp objects should not be placed within the fill material being placed. Recycled or reused materials should only be used and placed within the fill when specifically permitted by the project specifications. Rocks should not be nested, and voids should be filled with compacted fill material.

#### 5.2.4 COMPACTION

Fill placement should be observed and tested for compaction by a qualified geotechnical engineer and independent of the contractor performing the earthwork. Fill materials should be compacted to at least 90 percent relative compaction, unless a higher degree of compaction is otherwise recommended. Relative compaction should be assessed according to the latest approved edition of ASTM Standard Test Method D1557. Gravel, crushed rock, and drainage materials that cannot be tested per those standards should be compacted with at least 4 passes using a vibratory plate or by track walking with construction equipment for each 1 foot of material that is placed. Fill should be compacted to the minimum levels recommended in Table 5.



Location of Fill Placement	Fill Material	Recommend Minimum Relative Compaction
General	Compacted Fill	90% U.O.N. <sup>3</sup>
Utility trench bedding, pipe zone or backfill	Pipe Bedding, Pipe Zone Material, or Trench Backfill	90% U.O.N.
Fill or backfill placed within 3 feet of finished grade in pavement areas	Compacted Fill or Trench Backfill	95%
Foundation areas and Structure backfill	Structure Backfill	95%
Pavement areas	Asphalt concrete, aggregate base, or subbase	95%

#### Table 5: Recommended Relative Compaction

#### 5.2.5 EROSION AND DRAINAGE CONSIDERATIONS

Drainage should be provided such that water does not pond on pavements or adjacent to the reservoir. Roof gutters and downs spouts should be provided to collect roof drainage and direct the water away from foundation areas. Finished grades should be made such that surface water will drain away from the foundation and adjacent structures or flatwork. Finish grades around the reservoir and improvements should be designed with a cross slope to shed water directly to the edge of the pavement or to a nearby drainage inlet or facility. Rock or other energy dissipation devices should be provided at the outlet of drainage pipes, ditches or along concentrated flows of runoff. All slopes faces constructed or disturbed during construction should be recompacted and surfaced with erosion control measures.

## 5.3 REUSE OF EXCAVATED ONSITE MATERIAL

Onsite soil encountered within the anticipated grading depths consisted of plastic and expansive clay with in-situ moisture contents above the optimum moisture content needed for compaction. The onsite soil should not be considered suitable for reuse as structure backfill below or adjacent to foundations, structures, or below concrete flatwork or as select material such as aggregate base, pipe zone material or bedding, trench or wall backfill. Soil suitable for structure backfill or other select material should be imported to the site, as needed. Onsite soil may be windrowed and dried out for reuse as fill for berms for landscaping.

#### **5.4 PIPELINE DESIGN**

A typical trench detail for the design of buried pipes is presented in Figure 4. The detail and the following recommendations are intended to be used with Camarillo Sanitary District's standard plans and specifications as applicable, except where modified by the recommendations of this report. Excavated onsite soil is not considered suitable for use as pipe bedding or pipe zone

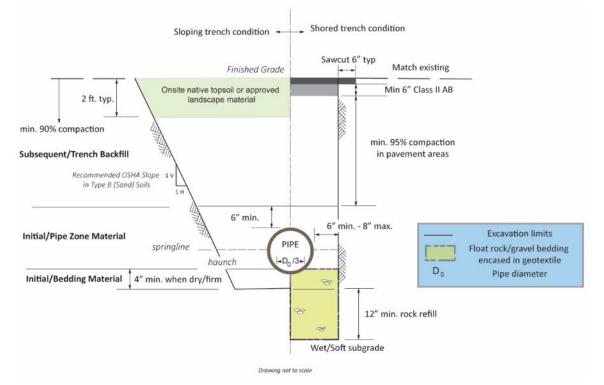
<sup>&</sup>lt;sup>3</sup> Unless otherwise noted



material. The excavated onsite soil may be used as trench backfill provided the fill is placed and compacted as recommended in this report.

#### 5.4.1 FOUNDATION AND BEDDING

Soil at the pipe elevation is expected to consist of soft to stiff lean and fat clay with varying amounts of sand and gravel that should provide adequate foundation support for new pipes. Bedding material for pipes can be placed on undisturbed soil at the bottom of the trench provided the subgrade is not soft or yielding. The bedding should have a minimum thickness of 4 inches and be compacted to at least 90 percent relative compaction. The pipe should be placed on the bedding such that the middle third of the pipe ( $D_0/3$  on Figure 3) is in contact with the bedding prior to placing initial backfill within the pipe zone. The bedding maybe loosened along the invert of the pipe if necessary, to help form the cradle.



**Figure 3: Trench Detail** 

Aggregate - gravel bedding material could be provided if the trench bottom is in wet or soft ground. For areas where the trench bottom is soft or yielding, the trench should be deepened to at least 1 foot below the normal bottom of the trench and be refilled with gravel bedding. The gravel should be fully encased in geotextile to provide separation between the gravel and the in-situ soil and subsequent backfill, and to reduce the potential for migration of soil into the gravel.



Trench stabilization may be omitted if the bottom of the trench is firm and stable. In such conditions, prior to placing bedding, the trench bottom should be scarified to a depth of 9 inches, moisture conditioned and compacted in place to at least 90 percent relative compaction.

Prior to placing bedding material, the foundation support soil exposed at the trench subgrade should be reviewed to allow for proper bedding and stabilization of the subgrade below the trench, if needed.

## 5.4.2 PIPE ZONE MATERIAL

Pipe Zone Material should be placed from the top of the bedding material to at least 6 inches above the crown of the pipe and compacted to at least 90 percent relative compaction. Pipe zone material should be placed such that there is an equal distribution of compaction and material on both sides of the pipe. Backfill should not be placed above the springline of the pipe until the fill below the springline has been placed and compacted to properly support the haunches. Compaction within the pipe zone should be performed such that the pipe is fully supported during compaction and such that excessive deformation, displacement or damage to the pipe does not occur. Trench backfill should not be placed until compaction and testing of the pipe zone material is complete.

## 5.4.3 TRENCH BACKFILL

Trench backfill is material placed in the trench from the top of the pipe zone to finished grade and includes the roadway structural section. Trench backfill placed within 3 feet of the finished grade below the path should be compacted to at least 95 percent relative compaction. Trench backfill should otherwise be compacted to at least 90 percent relative compaction unless a higher degree of compaction is recommended. In non-pavement areas the upper 2 feet of the backfill should consist of on-site native soil or approved landscape soil to help reduce the potential for surface water to infiltrate the trench if granular materials are used as trench backfill above the pipe zone. Slurry cement can also be used to backfill trenches.

## 5.5 RESERVOIR DESIGN

## 5.5.1 SITE PREPARATION AND GRADING

Site preparation and grading is recommended to provide a relatively uniform thickness of fill below the proposed reservoir, reduce estimated settlement, and to stabilize the potentially unstable subgrade soil. A detail showing the recommended overexcavation and reservoir backfill is shown on Figure 4.



NOT TO SCALE 2' Typ. Soil Cover New Tank Temporary Cut Slope 3' min. 6-inches of Aggregate Base 20 3' min 28 20 00 Undisturbed Alluvium Geotextile for Stabilization Legend: **Existing Grade** Compacted Fill, 95% R.C. Subgrade Stabilization Alluvium /Rock Fill

Figure 4: Tank Backfill and Drainage

#### 5.5.2 ANTICIPATED EXCAVATION CONDITIONS

Explorations for this report encountered groundwater between 11 and 13 feet below ground surface, which is near the anticipated bottom of the overexcavation. It is not anticipated that extensive dewatering will be needed; however, groundwater fluctuations will occur seasonally and in response to storm events. Potholing or measuring the water depth in the existing monitoring well should be used during planning and through construction, as needed, to estimate existing groundwater depths prior to and while excavations are open. Excavations for the reservoir are expected to expose plastic clayey soil with moisture contents above optimum and not be considered stable for the construction of the reservoir. Subgrade stabilization is recommended to provide a working platform for the reservoir construction and to support construction equipment and facilitate proper fill placement.

If dewatering is needed, it should be provided in advance of beginning excavation such that the groundwater level is lowered at least 1 foot below the depth of the excavation, unless methods and a work plan for wet construction are submitted by the contractor and approved for use on the project in advance of beginning an excavation. Dewatering systems should be designed by a qualified registered engineer or hydrogeologist. Sumps, well screens, and dewatering pits should be properly filtered such that fines and the surrounding soil are not removed or disturbed by dewatering.



#### 5.5.3 OVEREXCAVATION

Overexcavation should extend 3 feet below the bottom of the floor slab and laterally at least 3 feet beyond the outer edge of any structural element for the reservoir. Subgrade is expected to be unstable and may not support heavy equipment. Sub-excavation should be performed using excavator type equipment such that construction equipment will not operate on the exposed subgrade during excavation.

#### 5.5.4 RESERVOIR SUBGRADE PREPARATION

Based on the geotechnical explorations, soft or yielding subgrade conditions are anticipated within the proposed depths of the excavation. A geotextile for stabilization should be placed directly over the undisturbed overexcavation bottom. The geotextile should be placed without gaps or wrinkles and comply with the specifications listed previously. Aggregate for stabilization should consist of uniformly graded aggregate complying with specifications referenced previously. The aggregate should be encased fully with a geotextile for separation to reduce the potential for surrounding soil to erode into the gravel. The rock fill below the reservoir will serve to stabilize the subgrade, is considered suitable as structural fill, and will provide drainage below the reservoir. Gravel, crushed rock, and drainage materials that cannot be tested per those standards should be compacted with at least 4 passes using a vibratory plate or by track walking with construction equipment for each 1 foot of material that is placed.

The upper 6 inches of backfill below the reservoir should consist of compacted aggregate base to provide a workable platform for constructing the reservoir.

## 5.5.5 RESERVOIR BACKFILL

Backfill materials will be placed behind reservoir walls to partially bury the structure following construction. Imported structural backfill should be placed entirely between the tank and the temporary slope. The backfill should be placed to approximately 2 feet below the finished grade. If planned for landscaping, the structure backfill should be terminated 2 feet below finish grade and capped with a soil cover consisting of on-site soil. The onsite soil cap will be less permeable than the imported material and will likely reduce the potential for surface water to infiltrate the backfill materials. If the surface surrounding the tank will be paved, the imported backfill should be placed and compacted to the subgrade elevation below the pavement section.



#### 5.5.6 SURFACE DRAINAGE

Drainage should be provided such that water does not pond on pavements or adjacent to foundations. Finished grade around the structure should be designed with a cross slope to shed water directly to the edge of the pavement or to a nearby drainage inlet or facility.

#### 5.5.7 BEARING CAPACITY

Yeh's evaluations have assumed that loads are transmitted directly to the subgrade through the membrane slab and that the subgrade will be stabilized as recommended in this report. The loading of the columns is expected to be relatively uniform.

The reservoir foundations should be designed for a maximum allowable bearing capacity of 3,500 pounds per square foot. The estimated settlement presented below assumes exterior wall footings do not exceed 7 feet wide and interior column footings do not exceed 7 feet square.

The recommended allowable bearing pressure can be increased by 1/3 when considering seismic or other transient loading conditions. The toe pressure below retaining wall footings or edge pressure below eccentrically loaded footings, can exceed the recommended bearing pressure provided the resultant force acts within the middle third of the footing and the average pressure on the footing does not exceed the maximum allowable.

#### 5.5.8 SETTLEMENT

The estimated total settlement resulting from static foundation loads us up to approximately 1.5 inches, provided the foundations are designed according to the recommendations of this report. Differential settlement will depend on local variations in the subgrade and the load transfer to individual columns/walls but is expected to be less than ¼-inch over 25 feet.

#### 5.5.9 SWELL

Swelling primarily results from expansive soil undergoing wetting/drying cycles. A reduction in overburden stress, such as during/after the initial excavation or if the tank is suddenly emptied can also result in swelling. The recommended geotextile/gravel stabilization below the reservoir is intended reduce the potential impacts of expansive soil.

#### 5.5.10 UPLIFT

Groundwater has been measured at depths of approximately 11 feet below the ground surface and is generally expected to be below the bottom of the proposed structure most of the time. However, the walls will be undrained and groundwater levels may temporarily rise following storm or flood events. Emptying a buried structure reduces its total mass and decreases its



ability to withstand buoyant forces acting upward on the structure. The design of below grade structures whose foundations will extend below flood levels should consider buoyant forces that will act upward on the structure. The uplift forces should be estimated based on the maximum expected flood elevation, relative to the elevation of the base of the structure, and assuming a fully drained interior of the structure. Pressure relief valves can be installed in the walls of below grade structures to help reduce uplift forces, if the structure does not need to be emptied for maintenance. Valves should be designed to account for abrupt changes in pressures from lowering of water levels within the structures.

If needed, uplift forces due to buoyancy can be resisted by the buoyant dead weight of the structure, friction acting between the exterior walls of the structure and the surrounding soil, and foundations that extend beyond the walls and are buried with compacted fill. The maximum allowable frictional resistance between the soil and the buried concrete structure can be estimated as 0.2 times the effective overburden stress. The effective overburden stress, in psf, can be estimated using an effective buoyant unit weight of 58 pounds per cubic foot for submerged soil times the depth in feet. Uplift resistance due to wall friction should be neglected if a geotextile will be placed between the wall backfill and the ground or if the exterior of the buried structure walls will be coated with a waterproofing membrane.

#### 5.5.11 LATERAL RESISTANCE

Resistance to lateral loading of the foundations can be provided by sliding friction acting between the floor and subgrade combined with passive pressure acting on the sides of the foundation elements. A coefficient of friction of 0.35 and a passive resistance of 350 pounds per cubic foot (equivalent fluid weight) can be used to estimate the sliding resistance along the tank floor/wall footings and the aggregate rock fill. A one-third increase in the passive value can be used when considering short-term or seismic loads.

## 5.5.12 LATERAL EARTH PRESSURES

The new tank should be designed to resist lateral earth pressures. Yeh understands the walls will be designed for undrained, at-rest conditions. Table 6 provides recommended unfactored equivalent fluid weights for imported backfill material that conforms to the suggested material specification presented herein. The values provided assume that backfill will be placed in a 1h:1v plane projected up from the bottom of the foundation and a flat finished grade for a distance of at least the wall heights from the edge of the reservoir.



Wall Loading Condition	Lateral Earth Pressure	Backfill Material	Equivalent Fluid Weight (pcf)		
Restrained – Static, Undrainec Flat Backfill	Y At-Rest	Imported Structure Fill	90		
Seismic, Flat Backfill	Seismic Increment	Imported Structure Fill	31		
Notes:					
1. The seismic increment should be combined with a static active equivalent fluid weight of 80 pcf.					
2. For cases not shown a total unit weight of 125 pcf and a friction angle of 35 degrees may be used					
with an appropriate lateral earth pressure theory to determine loading					

#### **Table 6: Unfactored Lateral Earth Pressures**

#### 5.6 SOIL CORROSIVITY DATA

Samples from borings 19E-01 and 19E-02 collected in the upper 10 feet were tested for corrosion potential. The test results are presented in Appendix B and summarized in Table 2. Guidance from AWWA (2014) was used evaluate the severity of corrosion potential of the encountered soil. Measured resistivity values between 323 and 587 Ohm-cm indicate poor site soil (group IV) that have a high corrosion potential for susceptible metal piping and. Measured pH values (8.24– 8.51) are considered high. Sulfate content values were measured to be below 500 ppm and are considered nonaggressive. Measured chloride content values were less than 95 ppm indicating that pitting and crevice type corrosion in stainless steel is unlikely. Design of the project should consider corrosivity test results using appropriate design standards such as the American Water Works Association and American Concrete Institute.

#### 6. CONSTRUCTION CONSIDERATIONS

#### **6.1 TEMPORARY EXCAVATIONS**

Demolition of the existing sludge drying beds and construction of the new reservoir is anticipated to require an excavation extending approximately 10 to 15 feet below the existing site grade. Temporary slopes should be braced or sloped according to the requirements of (Cal) OSHA. The design of temporary slopes or shoring systems needed for construction is the responsibility of the contractor. The soil within the reservoir area will generally consists of clay with lenses of clayey sand. These can be classified as Type B soil and can be sloped to 1:1 for slope heights up to 20 feet. Slopes or shoring systems exceeding 20 feet in height are not addressed by OSHA and should be designed by a qualified professional engineer registered with the State of California.

#### 6.2 GROUNDWATER AND DEWATERING

Groundwater was encountered at depths that may be a critical aspect of the design and construction of the project depending on the final layout and geometry of the reservoir. Dewatering to lower groundwater levels for construction may be needed for reservoir



excavations. Dewatering should be performed in a controlled manner that includes the use of wells, well-points, gravel trenches, or other means of dewatering to lower the water surface elevation within the limits of the planned excavation as needed to provide a stable subgrade for construction. Dewatering facilities should be installed prior to beginning excavation, and time should be allowed for lowering of the groundwater table before beginning excavation. Secondary dewatering using sumps placed in the bottom of excavations and stabilization of the subgrade may be needed in addition to the initial dewatering. Well screens and sumps should be designed with properly designed filters such that sand and fine-grained materials are not removed from the soil during dewatering operations. Observation monitoring wells or points should be provided to check that groundwater has been lowered to a depth of at least 2 feet below the depth of excavations prior to beginning excavation.

## 6.3 MONITORING WELL ABANDONMENT

The monitoring well installed in boring 19E-03 as part of this investigation was constructed in accordance with Ventura County Well Permit No. GWP-8414 and is located just east of the reservoir footprint for the project. The well may be used for subsequent water level measurements or water quality sampling through design, bid phase, and during construction, as needed. The City or the Contractor shall destroy and abandon the temporary well in accordance to Ventura County Ordinance Code 4468 requirements for well destruction. Well abandonment should be accompanied by a Monitoring Well Destruction Seal Inspection report submitted to Ventura County within 30 days of destructing the well.

#### **6.4 SUBGRADE EVALUATION**

The geotechnical professional should observe the bottom of excavations to evaluate if the exposed subgrade is suitable for fill placement. The project specifications should provide for review of the subgrade by the geotechnical professional, and for variations in the depth of excavation, if needed, to remove additional loose soil, undocumented fill, or unsuitable material.

#### **6.5 GRADING OBSERVATION**

The geotechnical professional should observe grading operations during construction on behalf of the owner to have reasonable certainty that fill placement and compaction is being performed according to the recommendations of this report. Field density testing should be performed to help evaluate the compaction and moisture content of the materials being placed. Fill and aggregates delivered to the site and excavated onsite soil that will be reused as fill or backfill, should be sampled and tested for conformance with gradation and quality requirements for the project or submittals reviewed for conformance. The frequency and



locations of the tests should be at the discretion of the geotechnical professional. The project specifications should include provisions for the contractor to allow for testing and to provide any shoring, ingress-egress, or traffic control needed to safely perform the testing at the locations and depths needed.

## 7. LIMITATIONS

This study has been conducted in general accordance with currently accepted geotechnical practices in this area for use by the client for design purposes. The conclusions and recommendations submitted in this report are based upon the data obtained from field reconnaissance, drilling and sampling, and our understanding of the proposed project and type of construction described in this report. If there are any changes in the project or site conditions, Yeh should review those changes and provide additional recommendations, if needed. Any modifications to the recommendations of this report or approval of changes made to the project should not be considered valid unless they are made in writing. The report and drawings contained in this report are intended for design-input, and are not intended to act as construction drawings or specifications.

Site conditions will vary between points of observation or sampling, seasonally, and with time. The nature and extent of subsurface variations across the site may not become evident until excavation is performed. If during construction, fill, soil, or water conditions appear to be different from those described herein, Yeh should be advised and provided the opportunity to evaluate those conditions and provide additional recommendations, if necessary. The geotechnical professional should observe portions of the construction and site conditions, such as excavations, exposed subgrades and earthwork, to evaluate whether the conditions encountered are consistent with those assumed for design, and to provide additional recommendations during construction, if needed.

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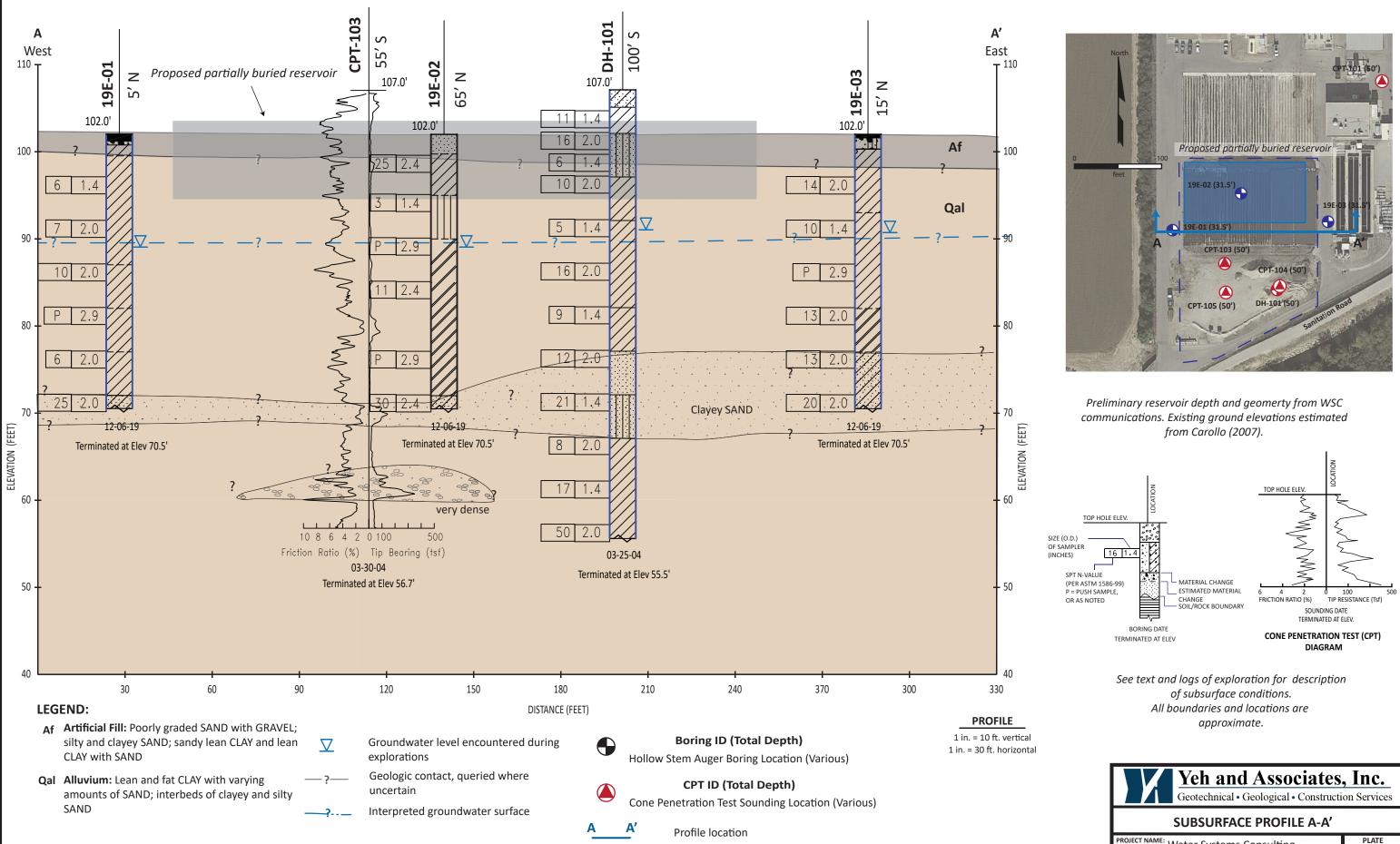
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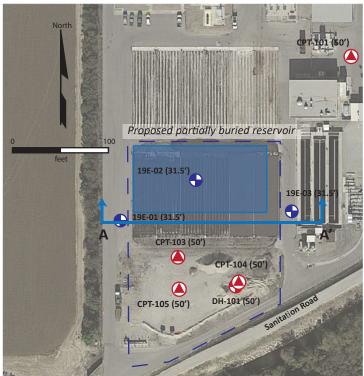


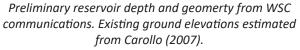
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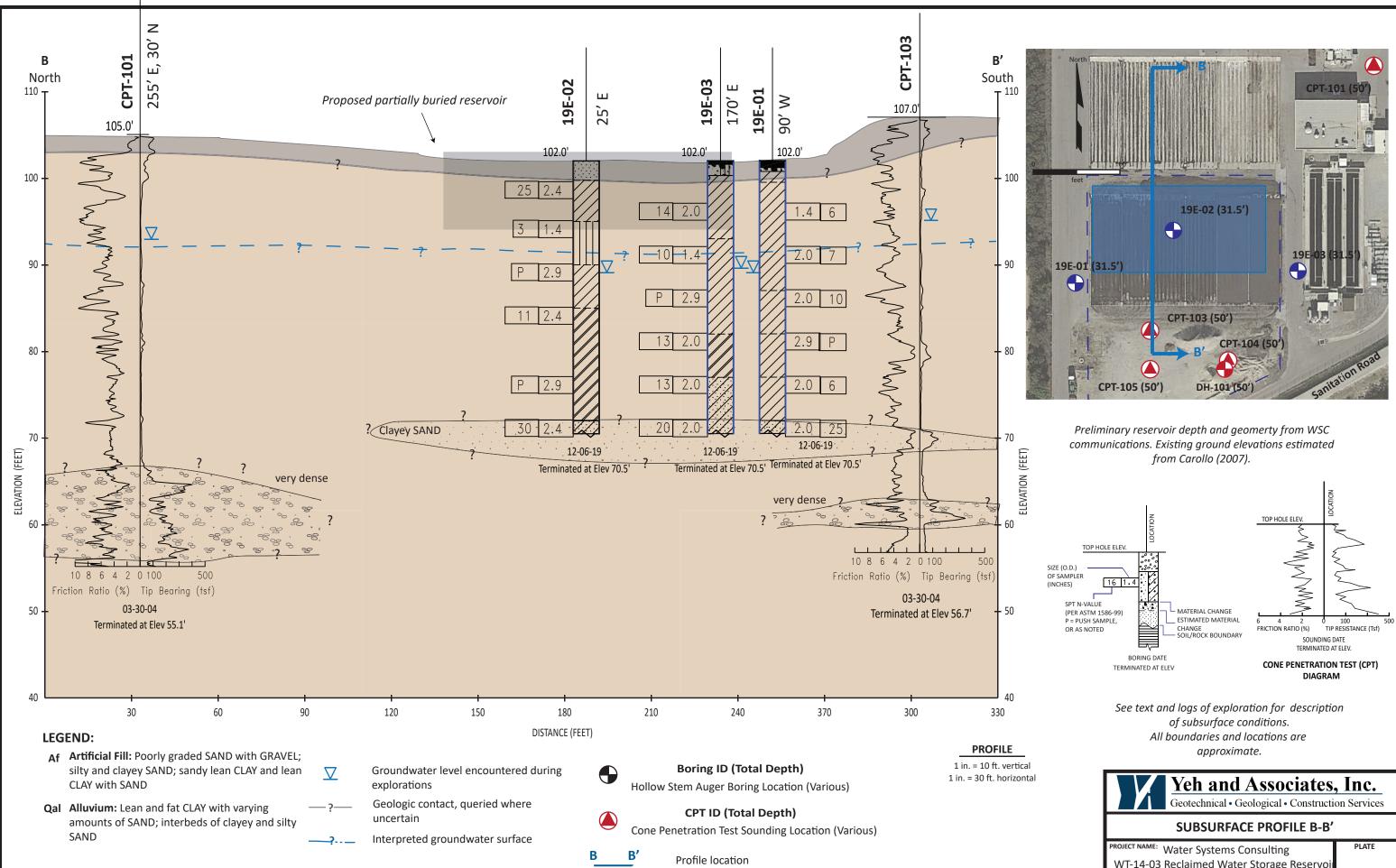








Yeh and Associates, Inc. Geotechnical • Geological • Construction Services			
SUBSURFACE PROFILE A-A'			
PROJECT NAME: Water Systems Consulting PLATE WT-14-03 Reclaimed Water Storage Reservoir Camarillo, California 2			
PROJECT NUMBER: 219-078	REVISION DATE: 12/11/2019		



Yeh and Associates, Inc. Geotechnical • Geological • Construction Services			
SUBSURFACE PROFILE B-B'			
PROJECT NAME:Water Systems ConsultingPLATEWT-14-03 Reclaimed Water Storage Reservoir Camarillo, California3			
PROJECT NUMBER: 219-078	REVISION DATE: 12/11/2019		

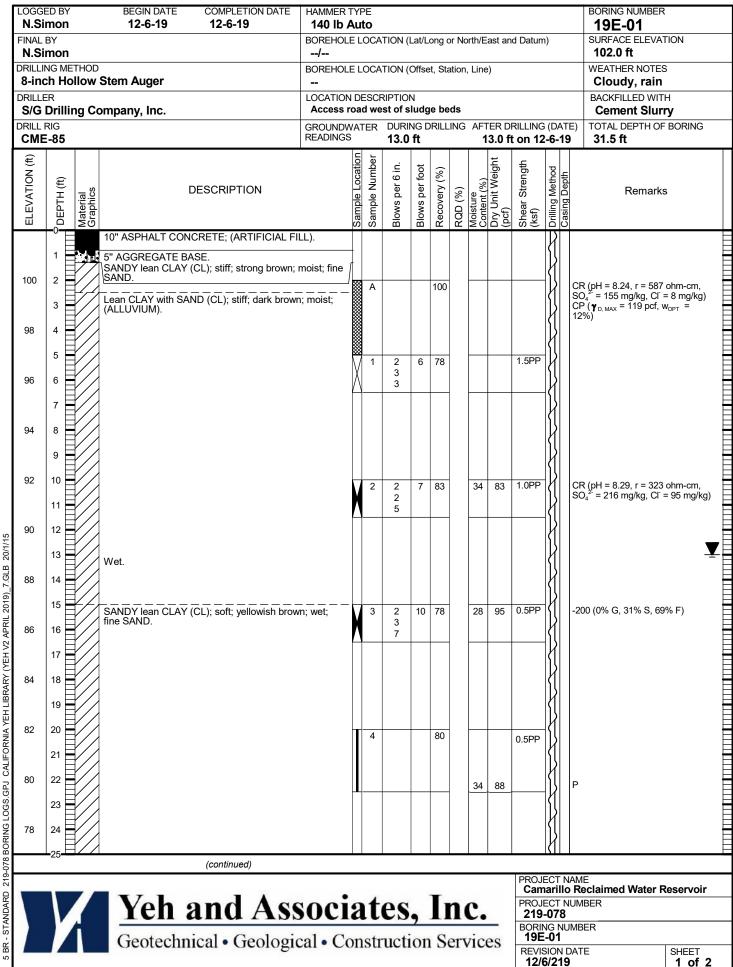
**APPENDIX A - BORING AND CPT LOGS** 

		GROUP SYMBO					FIELD AND LABORATORY TEST
phic /	/ Symbol	Group Names	Grap	hic/S	Symbol	Group Names	C Consolidation (ASTM D2435)
•	GW	Well-graded GRAVEL	//			Lean CLAY Lean CLAY with SAND	CL Collapse Potential (ASTM D5333)
		Well-graded GRAVEL with SAND	V/		CL	Lean CLAY with GRAVEL SANDY lean CLAY	<b>CP</b> Compaction Curve (ASTM D1557)
	GP	Poorly graded GRAVEL	V/	7		SANDY lean CLAY with GRAVEL	CR Corrosion, Sulfates, Chlorides (CTM 643; AS D4972, ASTM G187, ASTM D4327)
0,	GP	Poorly graded GRAVEL with SAND	//	$\lambda$		GRAVELLY lean CLAY GRAVELLY lean CLAY with SAND	CU Consolidated Undrained Triaxial (ASTM D47
Ĭ		Well-graded GRAVEL with SILT	Ń	ΠÎ		SILTY CLAY	DS Direct Shear (ASTM D3080)
	GW-GM	Well-graded GRAVEL with SILT and SAND				SILTY CLAY with SAND SILTY CLAY with GRAVEL	EI Expansion Index (ASTM D4829)
洲		Well-graded GRAVEL with CLAY (or SILTY CLAY)		c	CL-ML	SANDY SILTY CLAY	M Moisture Content (ASTM D2216)
$\Sigma$	GW-GC	Well-graded GRAVEL with CLAY and SAND				SANDY SILTY CLAY with GRAVEL GRAVELLY SILTY CLAY	OC Organic Content (ASTM D2974)
		(or SILTY CLAY and SAND)		Щ		GRAVELLY SILTY CLAY with SAND	P Permeability (ASTM 5084)
	GP-GM	Poorly graded GRAVEL with SILT				SILT SILT with SAND	PA Particle Size Analysis (ASTM D422-63 [2007
<u></u>		Poorly graded GRAVEL with SILT and SAND			ML	SILT with GRAVEL SANDY SILT	PI Liquid Limit, Plastic Limit, Plasticity Index (ASTM D4318)
sof	GP-GC	Poorly graded GRAVEL with CLAY (or SILTY CLAY)				SANDY SILT with GRAVEL	PL Point Load Index (ASTM D5731)
	GP-GC	Poorly graded GRAVEL with CLAY and SAND (or SILTY CLAY and SAND)				GRAVELLY SILT GRAVELLY SILT with SAND	PM Pressure Meter
		SILTY GRAVEL	27	7		ORGANIC lean CLAY	PP Pocket Penetrometer
0.9	GM	SILTY GRAVEL with SAND	ſ,	1		ORGANIC lean CLAY with SAND ORGANIC lean CLAY with GRAVEL	R R-Value (CTM 301)
3		CLAYEY GRAVEL	$\mathcal{V}_{\mathcal{I}}$	7	OL	SANDY ORGANIC lean CLAY SANDY ORGANIC lean CLAY with GRAVEL	SE Sand Equivalent (CTM 217)
Ë	GC	CLAYEY GRAVEL	$\mathbb{V}$	7		GRAVELLY ORGANIC lean CLAY	SG Specific Gravity (AASHTO T 100)
\$			KF	4		GRAVELLY ORGANIC lean CLAY with SAND ORGANIC SILT	SL Shrinkage Limit (ASTM D427)
8	GC-GM	SILTY, CLAYEY GRAVEL	$\langle \langle$	$\langle  $		ORGANIC SILT with SAND	SW Swell Potential (ASTM D4546)
ž		SILTY, CLAYEY GRAVEL with SAND	17	7	OL	ORGANIC SILT with GRAVEL SANDY ORGANIC SILT	TV Pocket Torvane
	sw	Well-graded SAND	$\left \right\rangle$	$\rangle$		SANDY ORGANIC SILT with GRAVEL GRAVELLY ORGANIC SILT	UC Unconfined Compression - Soil (ASTM D216 Unconfined Compression - Rock (ASTM D70
		Well-graded SAND with GRAVEL	$\sum$	$\sum$		GRAVELLY ORGANIC SILT with SAND	UU Unconsolidated Undrained Triaxial
	SP	Poorly graded SAND				Fat CLAY Fat CLAY with SAND	(ASTM D2850)
	5P	Poorly graded SAND with GRAVEL				Fat CLAY with GRAVEL	<b>UW</b> Unit Weight (ASTM D4767, ASTM D7263)
Π		Well-graded SAND with SILT			СН	SANDY fat CLAY SANDY fat CLAY with GRAVEL	<b>VS</b> Vane Shear (AASHTO T 223-96 [2004])
	SW-SM	Well-graded SAND with SILT and GRAVEL				GRAVELLY fat CLAY GRAVELLY fat CLAY with SAND	-200 200 Wash (ASTM D1140)
		Well-graded SAND with CLAY (or SILTY CLAY)				Elastic SILT	
	sw-sc	Well-graded SAND with CLAY and GRAVEL				Elastic SILT with SAND	SAMPLER GRAPHIC SYMBOLS
4		(or SILTY CLAY and GRAVEL)			мн	Elastic SILT with GRAVEL SANDY elastic SILT	
	SP-SM	Poorly graded SAND with SILT				SANDY elastic SILT with GRAVEL GRAVELLY elastic SILT	Standard Penetration Test (SPT) (2" C
		Poorly graded SAND with SILT and GRAVEL		Ц		GRAVELLY elastic SILT with SAND	
	SP-SC	Poorly graded SAND with CLAY (or SILTY CLAY)	Ő,	1		ORGANIC fat CLAY ORGANIC fat CLAY with SAND	
$\Delta$		Poorly graded SAND with CLAY and GRAVEL (or SILTY CLAY and GRAVEL)	P		он	ORGANIC fat CLAY with GRAVEL SANDY ORGANIC fat CLAY	Standard California Sampler (2.5" O.D
		SILTY SAND	C.	A	011	SANDY ORGANIC fat CLAY with GRAVEL	
	SM	SILTY SAND with GRAVEL	0	Ŋ		GRAVELLY ORGANIC fat CLAY GRAVELLY ORGANIC fat CLAY with SAND	Modified California Sampler (3" O.D.)
7		CLAYEY SAND	)))	<i>\$</i>		ORGANIC elastic SILT	
	sc	CLAYEY SAND with GRAVEL		\$1		ORGANIC elastic SILT with SAND ORGANIC elastic SILT with GRAVEL	
πł		SILTY. CLAYEY SAND	$\langle \langle \rangle$	$\langle  $	он	SANDY elastic ELASTIC SILT SANDY ORGANIC elastic SILT with GRAVEL	Shelby Tube Piston Sample
	SC-SM	SILTY, CLAYEY SAND	$\langle \langle \rangle$			GRAVELLY ORGANIC elastic SILT	
<u>ill</u>		OLT 1, OLATET GAIND WILL GRAVEL		<u>}</u>		GRAVELLY ORGANIC elastic SILT with SAND	Rock Core Grab Sample
<u>**</u>	РТ	PEAT		J.		ORGANIC SOIL ORGANIC SOIL with SAND	Rock Core Grab Sample
* *				۶c	DL/OH	ORGANIC SOIL with GRAVEL SANDY ORGANIC SOIL	
쉽		COBBLES COBBLES and BOULDERS	וריזא	7		SANDY ORGANIC SOIL with GRAVEL GRAVELLY ORGANIC SOIL	Bulk Sample Other (see rem
X		BOULDERS		7		GRAVELLY ORGANIC SOIL with SAND	
		DRILLING MET	ног	) SI	YMB	DLS	WATER LEVEL SYMBOLS
							V First Water Lovel Deciding (during dulling
וכך			$\square$		namio	Cone Diamond Core	$\Sigma$ First Water Level Reading (during drilling
(	Auger	Drilling Rotary Drilling	$\bowtie$	orl	Hand	Driven Diamond Core	▼ Static Water Level Reading (short-term)
ىد			للكن			نت	
							REPORT TITLE
_	_					ociates, Inc	LEGEND FOR SOIL CLASSIF
				1.00	and the second second	and a second	

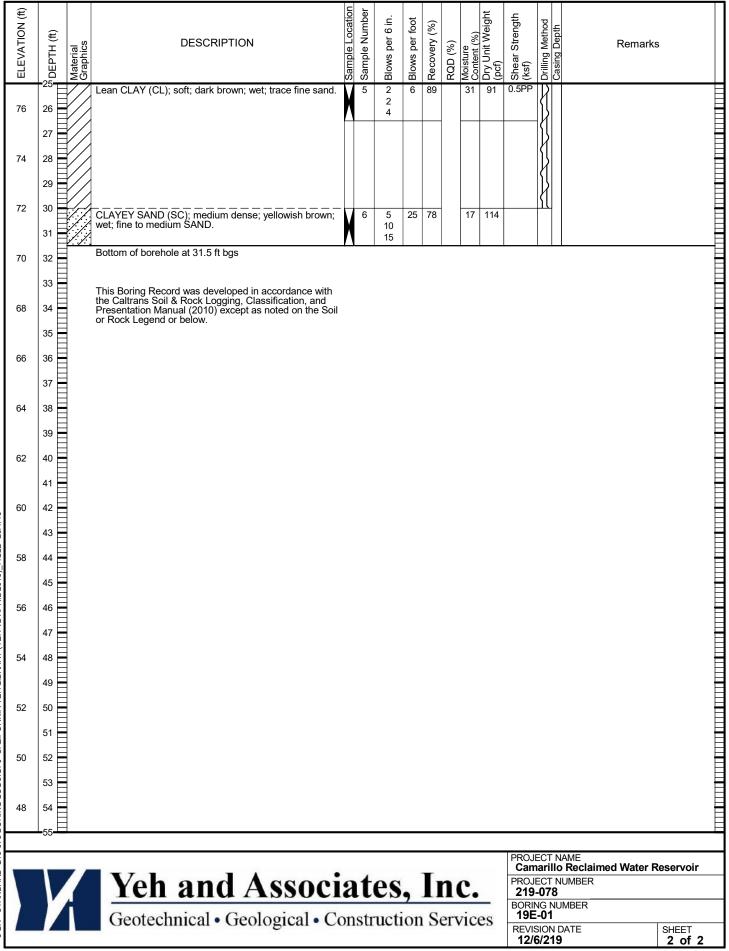
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SHEET 1 of 1

DATE 12/6/219



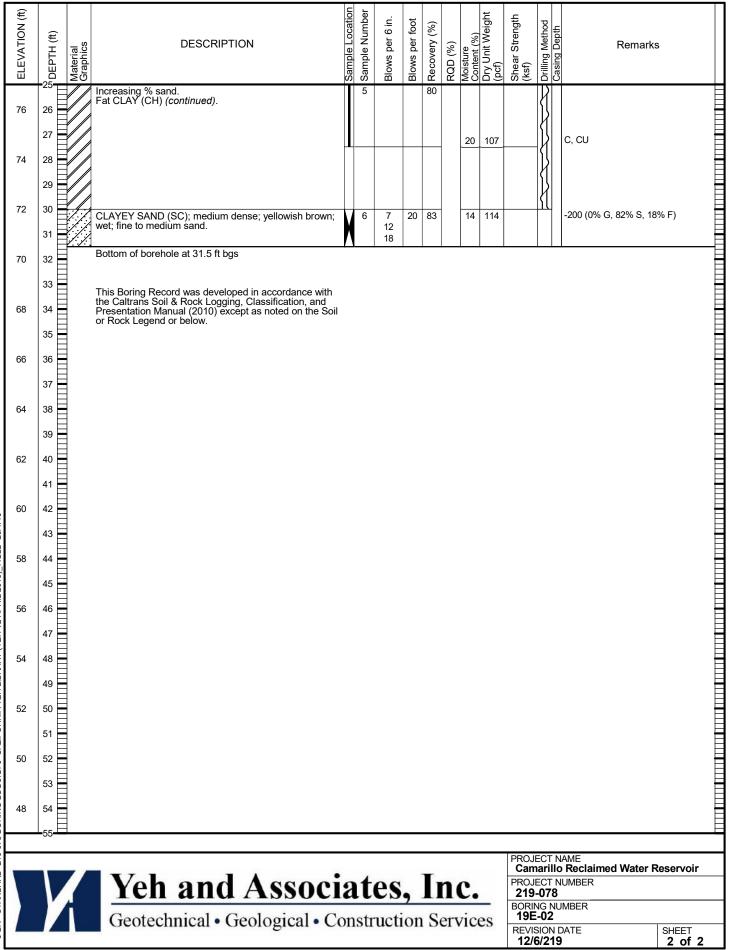
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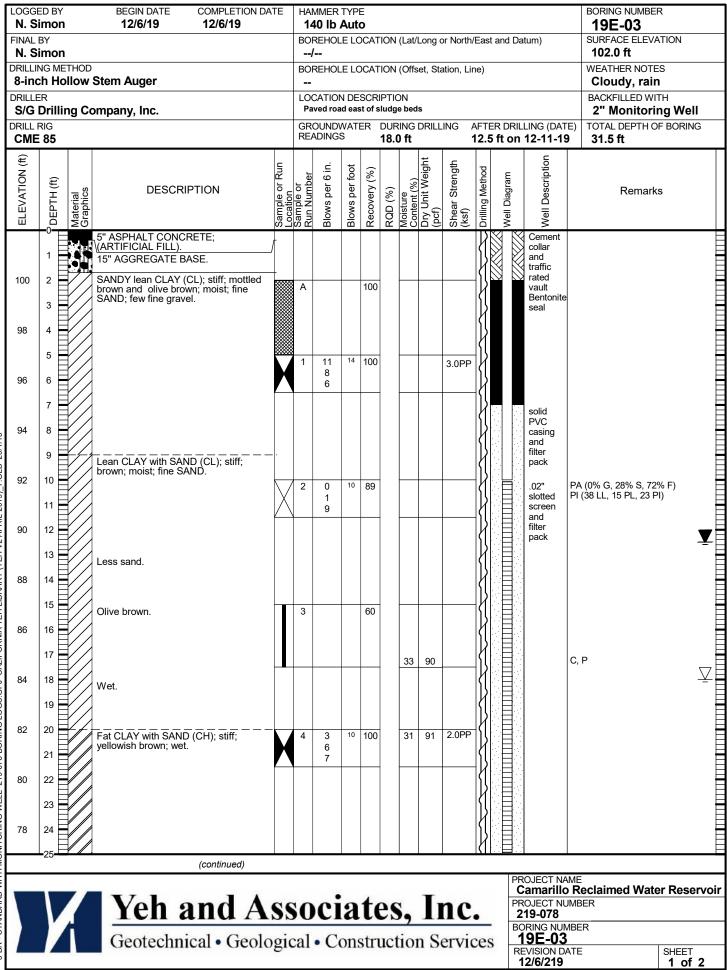
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LOGGE N. Si			BEGIN DATE <b>12-6-19</b>	COMPLETION DATE 12-6-19	HAMMER 140 lb											BORING NUMBER
FINAL E		n			BOREHOL	EL	OCA	TION (	_at/L	ong c	or No	rth/E	ast an	d Datum	ן)	SURFACE ELEVATION 102.0 ft
		ETHOD	Stem Auger		BOREHOL	EL	OCA	TION (	Offse	t, Sta	ation,	Line	)			WEATHER NOTES Cloudy, rain
DRILLE	R		_		LOCATION Within s				N							BACKFILLED WITH
DRILL F	RIG		ompany, Inc.		GROUND	VAT	-		NG D	RILL	ING					
CME	-85				READING		L					_		: on 12	2-6-19	9 31.5 ft
ELEVATION (ft)	DEPTH (ft)	Material Graphics	I	DESCRIPTION		Sample Location	Sample Number	Blows per 6 in.	Blows per foot	Recovery (%)	RQD (%)	Moisture Content (%)	Dry Unit Weight (pcf)	Shear Strength (ksf)	Drilling Method Casing Depth	Remarks
100	1		Poorly graded SANI dense; light gray; dr surface; (SLUDGE I	D with GRAVEL (SP); m y; trace dried sludge res BED FILL).	edium sidue at											
	3		Lean CLAY (CL); ha trace fine sand; (AL	ird; very dark grayish br LUVIUM).	own; moist;		1	4 10 15	25	83		20	106	>4.5PP		
98	4 5															
96	6							4	0	00				.5PP		
94	8		brown; moist.	YEY SILT (CL/ML); soft	t; light	X	2 A	1 2 1	3	83 100				.5PP		CR (pH = 8.51, r = 440 ohm-cm, SO4 <sup>2*</sup> = 379 mg/kg, Ci <sup>*</sup> = 63 mg/kg)
92	9															CR (pH = 8.51, r = 440 ohm-cm, SO <sub>4</sub> <sup>Z</sup> = 379 mg/kg, Cl <sup>-</sup> = 63 mg/kg) El (El = 90) C
90	11 12		Fat CLAY (CH); soft	;; dark brown; moist; tra	 ce fine	T	3			47		31	85			c 🗸
88	13 14		Wet.									31	90			 PI (56 LL, 22 PL, 34 PI) CU
86	15 16															
84	17 18		Fat CLAY (CH); stiff caliche present as n	; brown; wet; few fine G odules and veins.	RAVEL; 5%	N	4	5 4 7	11	89		37	83	2.0PP		PA (0% G, 3% S, 97% F) PI (68 LL, 20 PL, 48 PI)
82	19 20															
80	21															
80	22 23															
78	24															
	-25-			(continued)												
			Yeh a	and As	soci	a	t	es	,	I	n	c.		PROJ 219	ECT N	Reclaimed Water Reservoir
			Geotechn	ical • Geologi	ical • Co	on	str	ucti	on	S	erv	vice	es	19E	NG NU <b>-02</b> SION [ <b>6/219</b>	DATE SHEET 1 of 2

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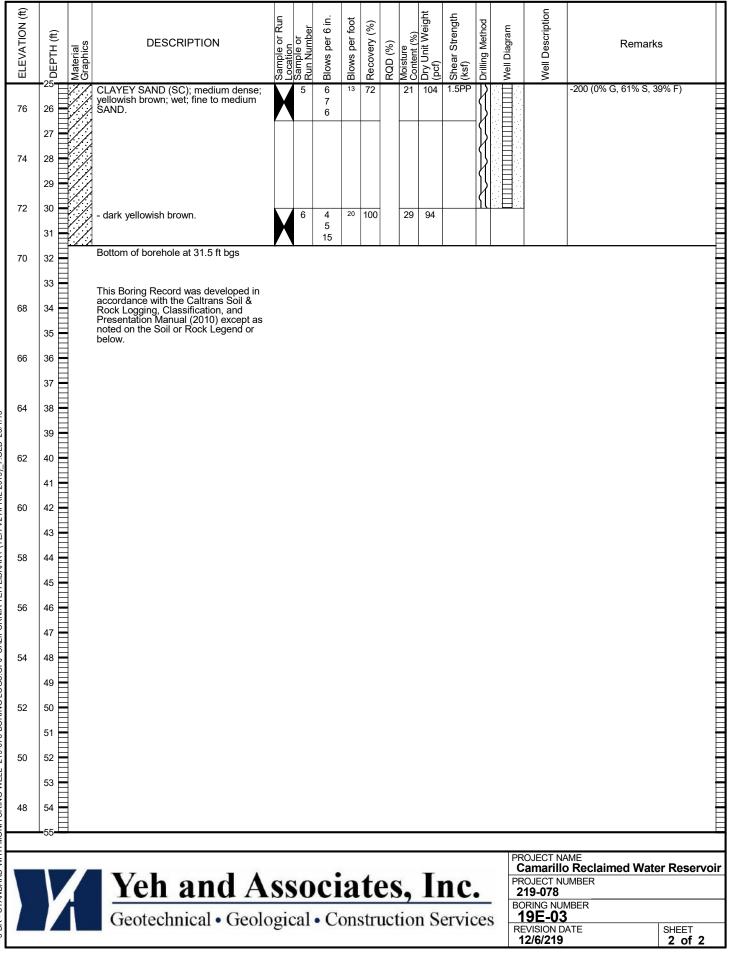


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5 BR - STANDARD WITH MONITORING WELL 219-078 BORING LOGS.GPJ CALIFORNIA YEH LIBRARY (YEH V2 APRIL 2019)\_7.GLB 20/1/15

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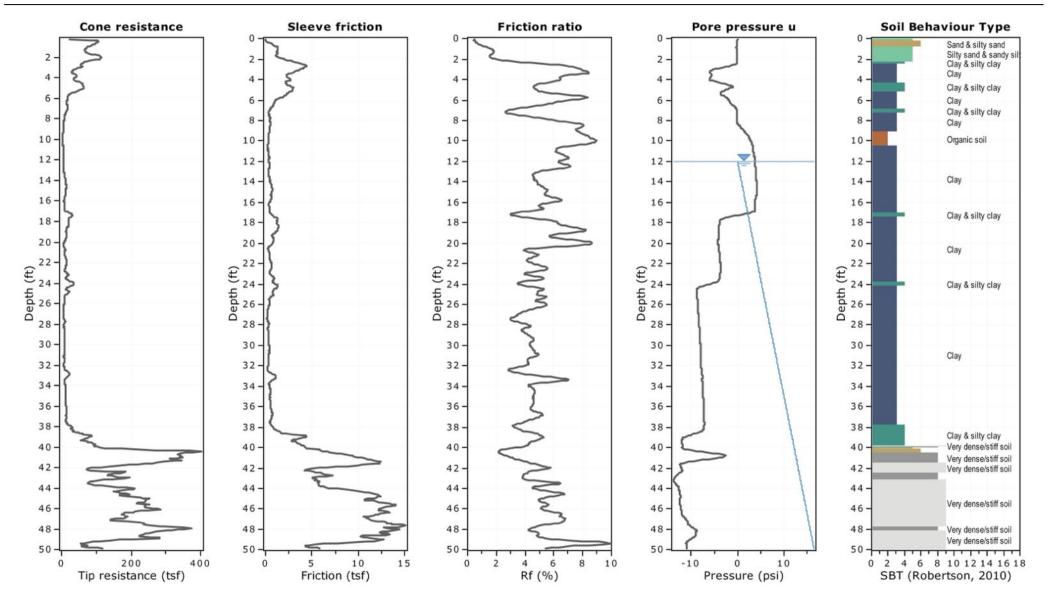
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Location: Camarillo Water Reclamation Facility



Total depth: 49.87 ft, Date: 3/30/2004 Surface Elevation: 105.00 ft Cone Operator: Fugro Geosciences



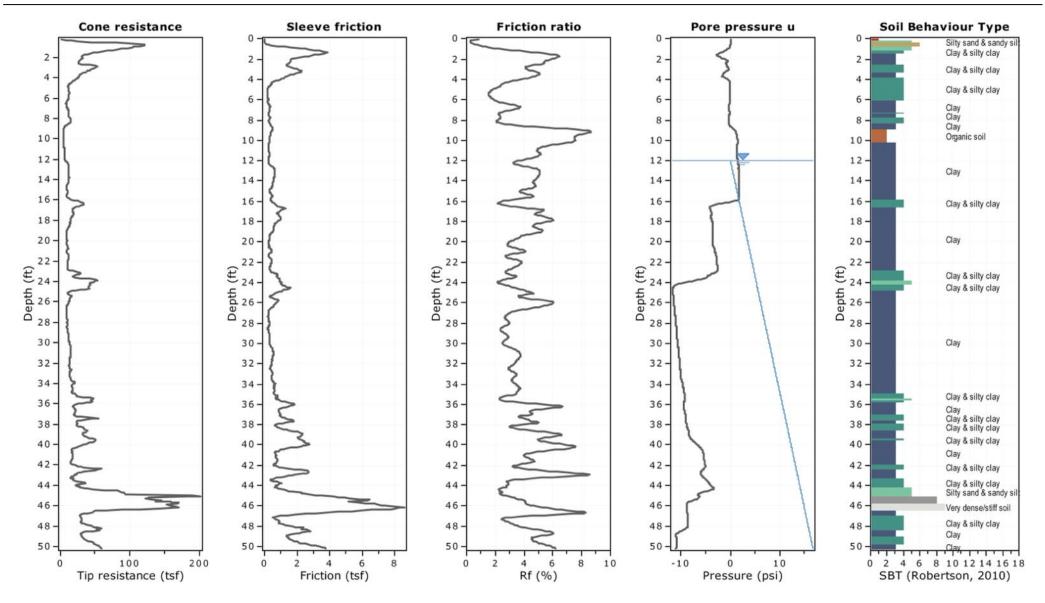
1



Location: Camarillo Water Reclamation Facility

**CPT: CPT-102** 

Total depth: 50.20 ft, Date: 3/30/2004 Surface Elevation: 105.00 ft Cone Operator: Fugro Geosciences



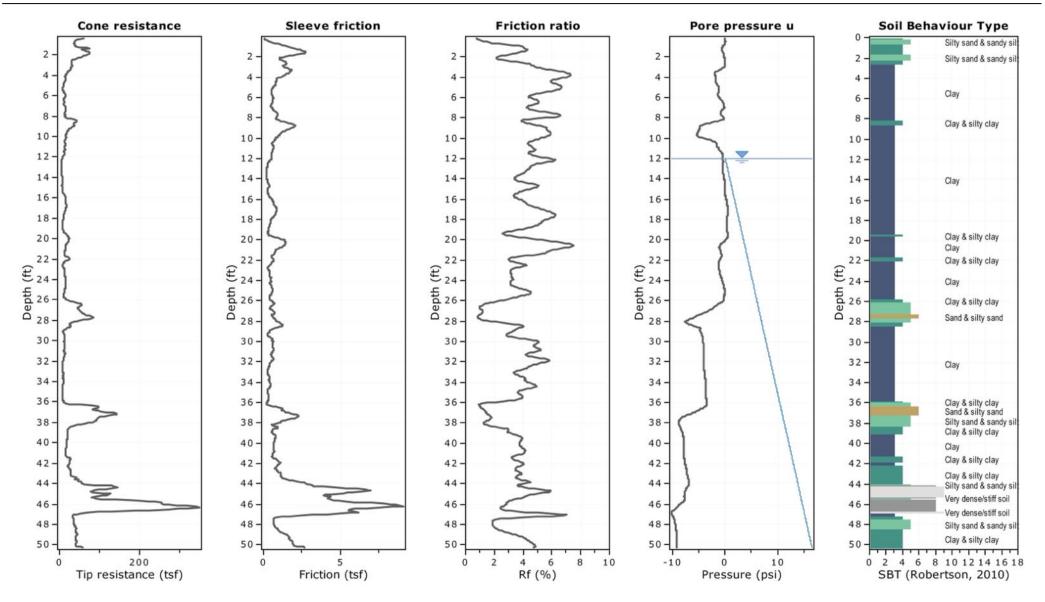
CPeT-IT v.3.0.3.2 - CPTU data presentation & interpretation software - Report created on: 12/12/2019, 2:11:14 PM



Location: Camarillo Water Reclamation Facility

CPT: CPT-103 Total depth: 50.26 ft, Date: 3/30/2004

Surface Elevation: 107.00 ft Cone Operator: Fugro Geosciences



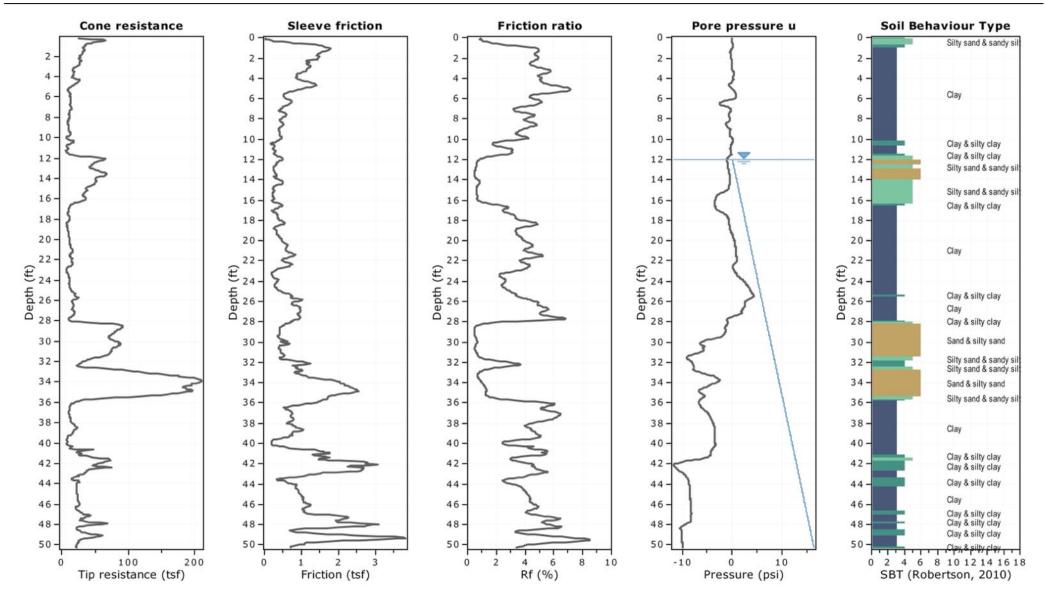
1



Location: Camarillo Water Reclamation Facility

CPT: CPT-104

Total depth: 50.26 ft, Date: 3/30/2004 Surface Elevation: 107.00 ft Cone Operator: Fugro Geosciences



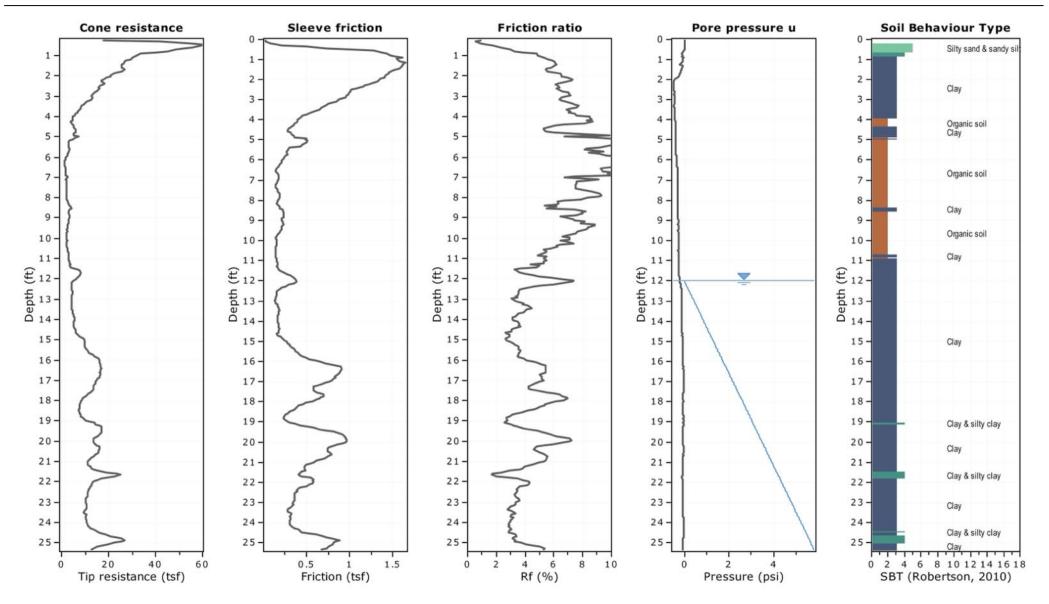


#### Project: CPT-105

#### Location:



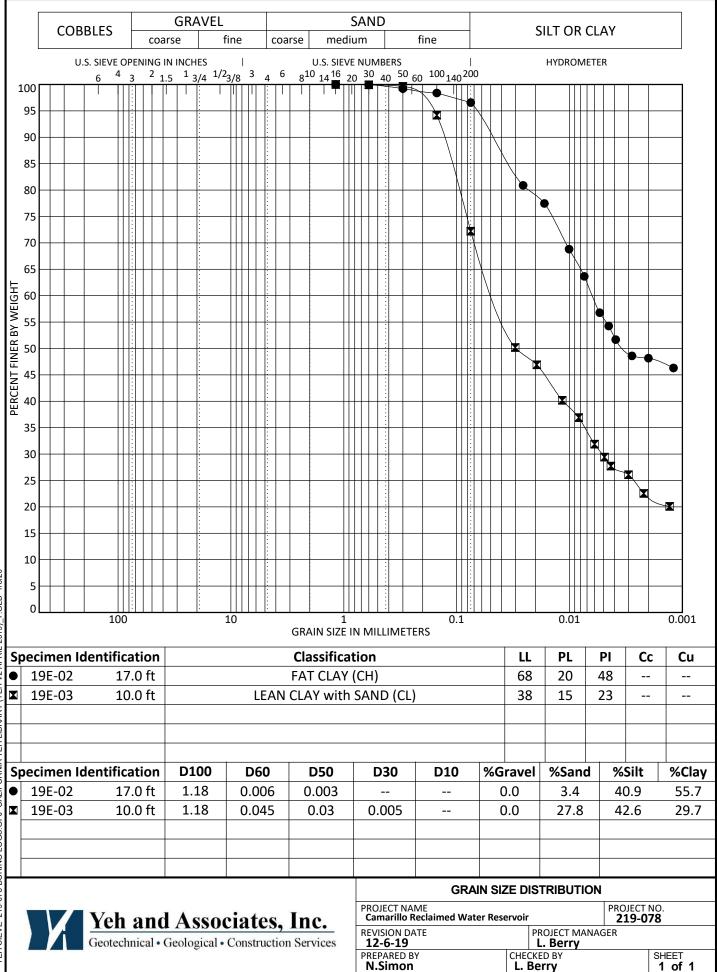
Total depth: 25.33 ft, Date: 3/30/2004 Surface Elevation: 107.00 ft Coords: X:0.00, Y:0.00 Cone Operator: Fugro Geosciences



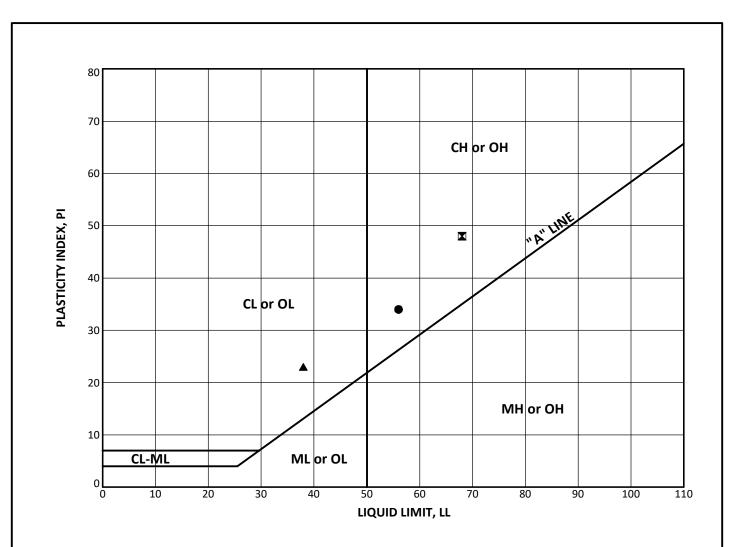
**APPENDIX B - RESULTS OF LABORATORY TESTING** 

#### SUMMARY OF LABORATORY TEST RESULTS

Sa	mple Info	rmation				Gi	radati	on	Atte	rberg		Corre	osion		Comp	action			
Boring No.	Sample No.	Depth (ft)	Sample Type	Dry Density, γ <sub>d</sub> , (pcf)	Moisture Content (%)	Gravel (%)	Sand (%)	Fines (%)	Plasticity Index (PI)	Liquid Limit (LL)	Hd	Resistivity ( <b>Ω</b> - cm)	SO4 <sup>2-</sup> (mg/kg)	Cl <sup>-</sup> (mg/kg)	Max. Dry Density, γ <sub>d, Max</sub> , (pcf)	Optimum Moisture Content (%)	R-Value	Expansion Index	USCS Classification
19E-01	А	2.0	BULK								8.24	587	155	8	119	12			Lean CLAY (CL)
19E-01	2	10.0	MCAL	83	34						8.29	323	216	95					Lean CLAY with SAND (CL)
19E-01	3	15.0	MCAL	95	28	0	31	69											SANDY lean CLAY (CL)
19E-01	4	22.0	SHELBY	88	34														SANDY lean CLAY (CL)
19E-01	5	25.0	MCAL	91	31														Lean CLAY (CL)
19E-01	6	30.0	MCAL	114	17														CLAYEY SAND (SC)
19E-02	1	2.5	MCAL	106	20														Lean CLAY (CL)
19E-02	А	8.0	BULK								8.51	440	379	63				90	SILTY CLAY to CLAYEY SILT (CL/ML)
19E-02	3a	12.0	SHELBY	85	31														Fat CLAY (CH)
19E-02	3b	14.0	SHELBY	90	31				34	56									Fat CLAY (CH)
19E-02	4	17.0	MCAL	83	37	0	3	97	48	68									FAT CLAY (CH)
19E-02	5	27.0	SHELBY	107	20														Fat CLAY with SAND (CH)
19E-02	6	30.0	MCAL	114	14	0	82	18											CLAYEY SAND (SC)
19E-03	1	5.0	MCAL																SANDY lean CLAY (CL)
19E-03	2	10.0	SPT			0	28	72	23	38									LEAN CLAY with SAND (CL)
19E-03	3	17.0	SHELBY	90	33														Lean CLAY with SAND (CL)
19E-03	4	20.0	MCAL	91	31														Fat CLAY (CH)
19E-03	5	25.0	MCAL	104	21	0	61	39											CLAYEY SAND (SC)
19E-03	6	30.0	MCAL	94	29														CLAYEY SAND (SC)
	Y	eh :	and	A	SS	DCi	iat	es	<b>, I</b>	nc	•	Can PROJ 219	ECT NAN narillo F ECT NO. - <b>078</b>	Reclaim	ed Wat	er Rese	ervoir	1	EVISION DATE 1 <b>2-6-19</b>
	Ge	otechr	nical • (	Jeolo	ogica	l • C	onst	ructi	ion S	ervi	ces	L. B	KED BY	NAGEK				St	REPARED BY N.Simon HEET L of 1

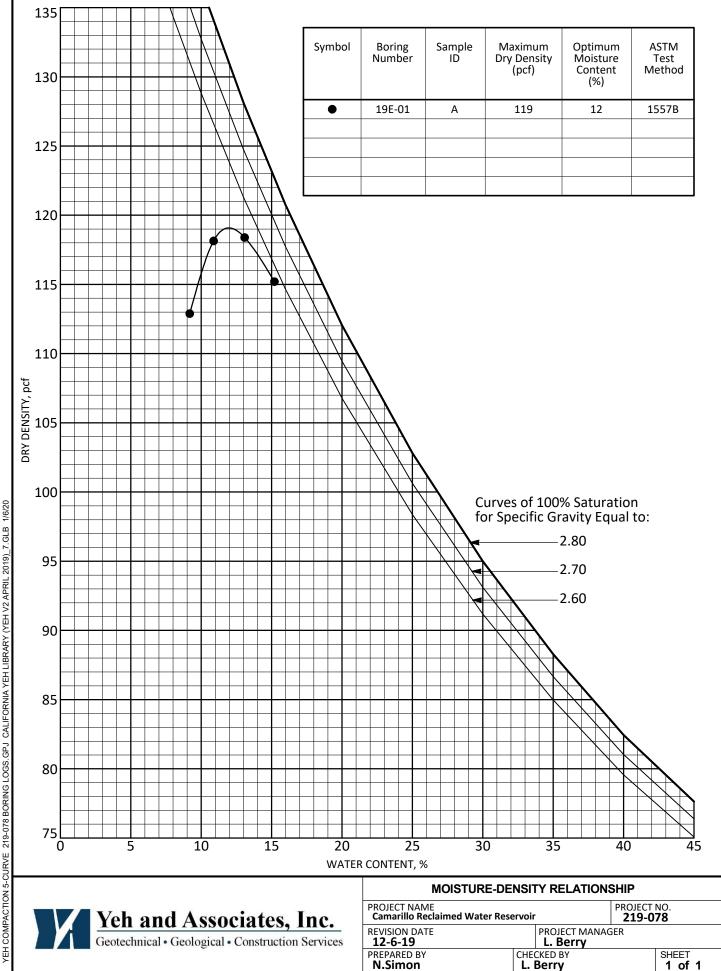


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Boring Number	Sample ID	Depth (ft)	Test Symbol	MC (%)	Fines (%)	ш	PL	Ы	Classification
19E-02	3	14.0	•	31		56	22	34	Fat CLAY (CH)
19E-02	4	17.0		37	97	68	20	48	FAT CLAY (CH)
19E-03	2	10.0			72	38	15	23	LEAN CLAY with SAND (CL)
						-			ATTERBERG LIMITS
	Yeh an	d Ass	sociat	es.	Inc		PROJEC Camar	illo Rec	E PROJECT NO. 219-078
	Yeh an Geotechnical	Geologia	cal • Const	ruction	n Service	es	REVISIO 12-6-	N DAT	E PROJECT MANAGER L. Berry
							PREPAR <b>N.Sin</b>		CHECKED BY SHEET L. Berry 1 of 1

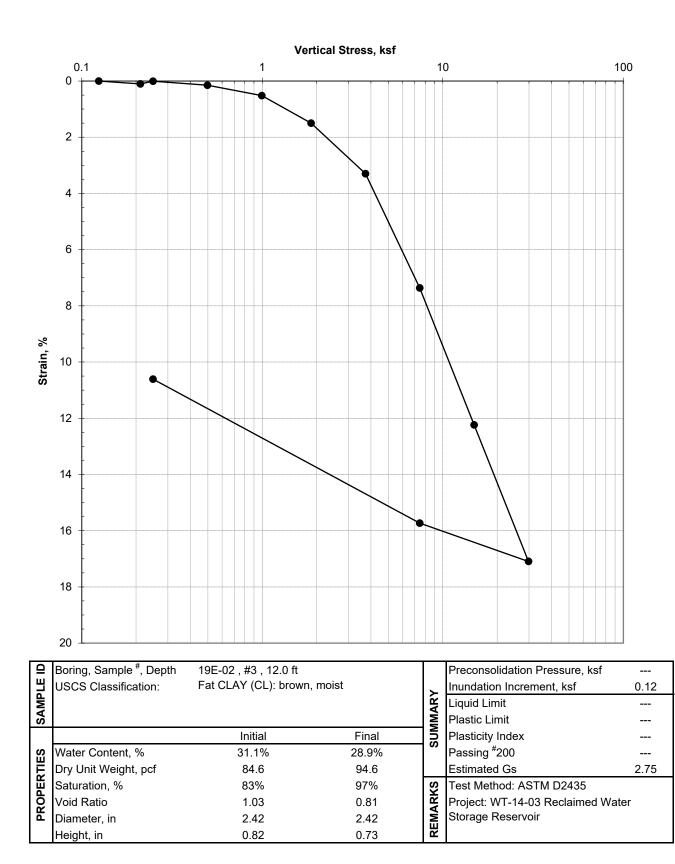
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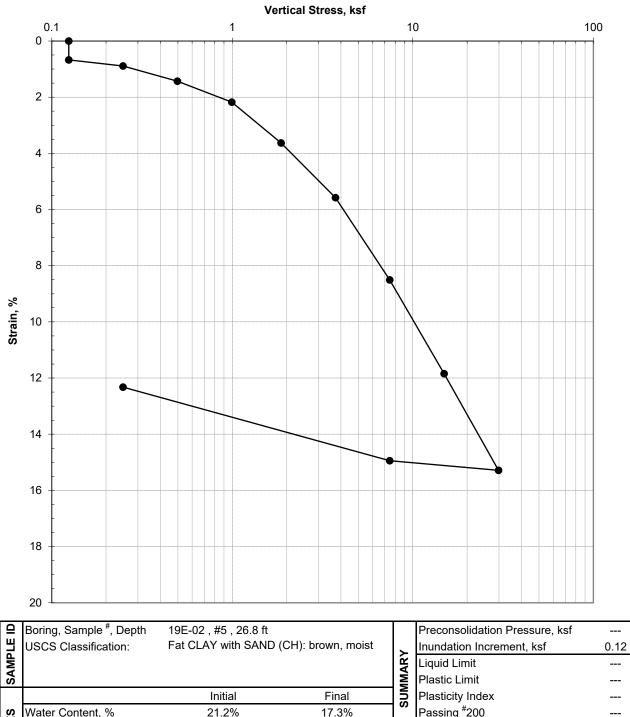


# Corrosivity Tests Summary

CTL #		-085	_	Date	: 12/1	7/2019	_	Tested By:	PJ		Checked:		PJ	
Client:		h & Associate	es	Project	: C	amarillo Rec	laimed Wat	er Reservio	rs	-	Proj. No:	219	9-078	
Remarks:														
San	ple Location	or ID	Resistiv	rity @ 15.5 °C (0	Ohm-cm)	Chloride		fate	рН	OR		Sulfide	Moisture	
			As Rec.	Min	Sat.	mg/kg	mg/kg	%		(Rede		Qualitative	At Test	Soil Visual Description
						Dry Wt.	Dry Wt.	Dry Wt.		E <sub>H</sub> (mv)		by Lead	%	
Boring	Sample, No.	Depth, ft.	ASTM G57	Cal 643	ASTM G57	ASTM D4327	ASTM D4327	ASTM D4327	ASTM G51	ASTM G200	Temp °C	Acetate Paper	ASTM D2216	
19E-01	2	10	-	-	-	95	216	0.0216	-	-	-	-	34.9	Lean CLAY with SAND
19E-01	А	2-6	-	-	-	8	155	0.0155	-	-	-	-	21.0	Lean CLAY with SAND
19E-02	А	8-10	-	-	-	63	379	0.0379	-	-	-	-	29.0	Silty CLAY

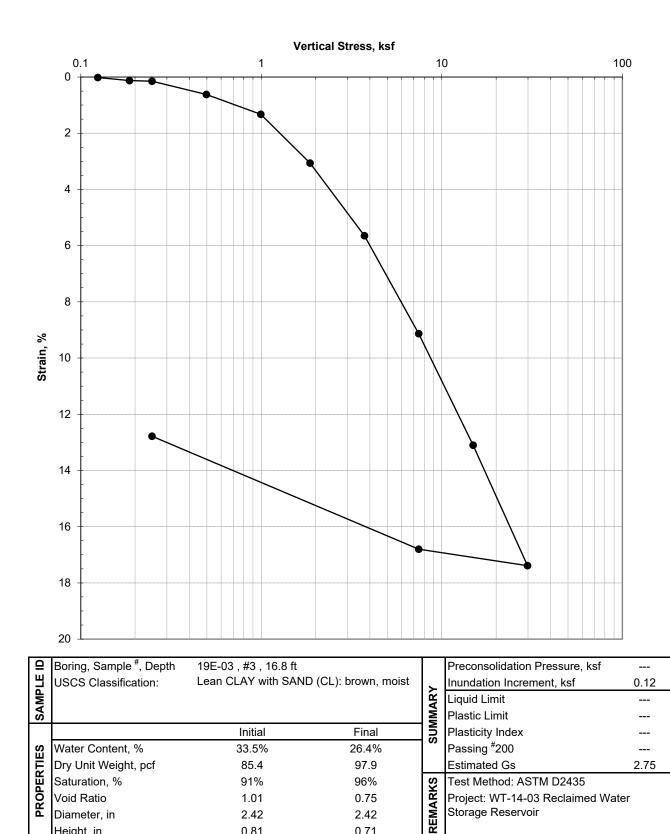


### **INCREMENTAL CONSOLIDATION TEST**



		Initial	Final	- S	Plasticity index	
ŝ	Water Content, %	21.2%	17.3%		Passing <sup>#</sup> 200	
Ĩ	Dry Unit Weight, pcf	100.5	114.6		Estimated Gs	2.75
Ш	Saturation, %	82%	95%	S	Test Method: ASTM D2435	
D D	Void Ratio	0.71	0.50	AR I	Project: WT-14-03 Reclaimed	l Water
Ľ.	Diameter, in	2.42	2.42	Ň	Storage Reservoir	
	Height, in	0.82	0.71	L R		

### **INCREMENTAL CONSOLIDATION TEST**



2.42

0.71

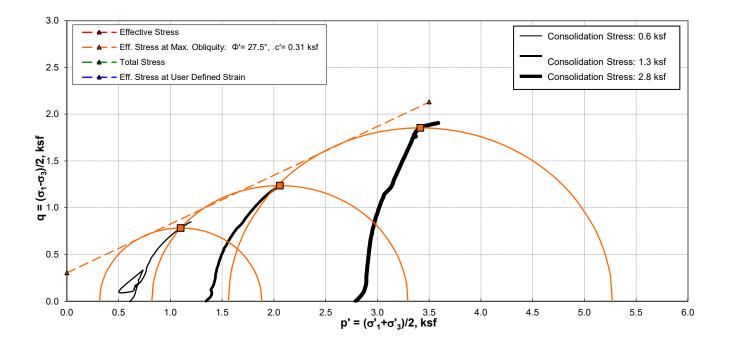
2.42

0.81

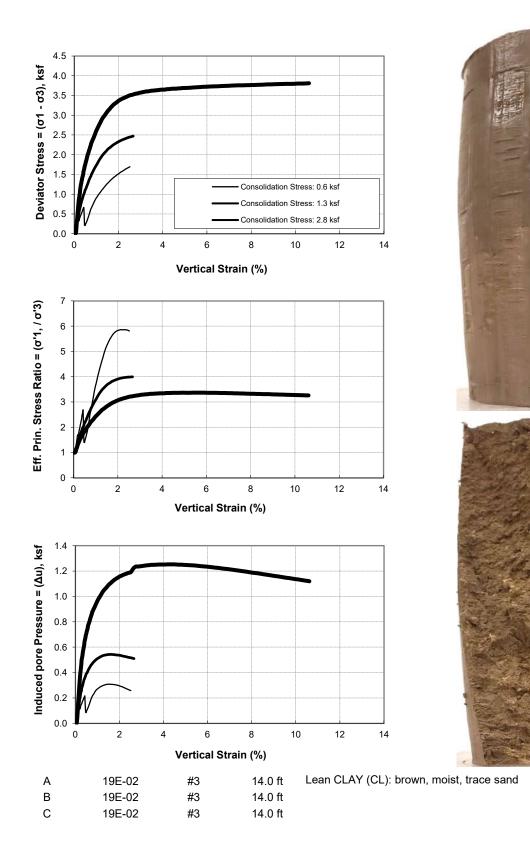
Diameter, in

Height, in

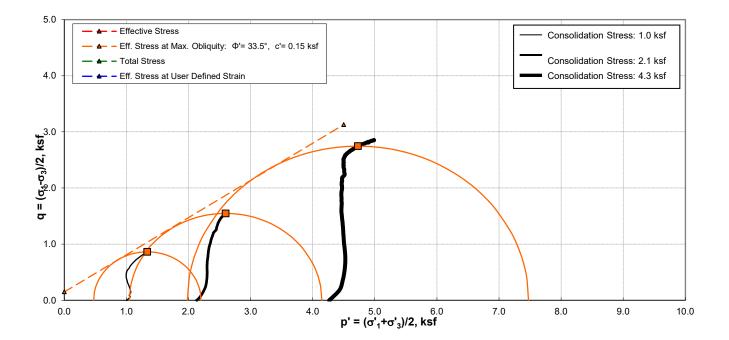
Storage Reservoir



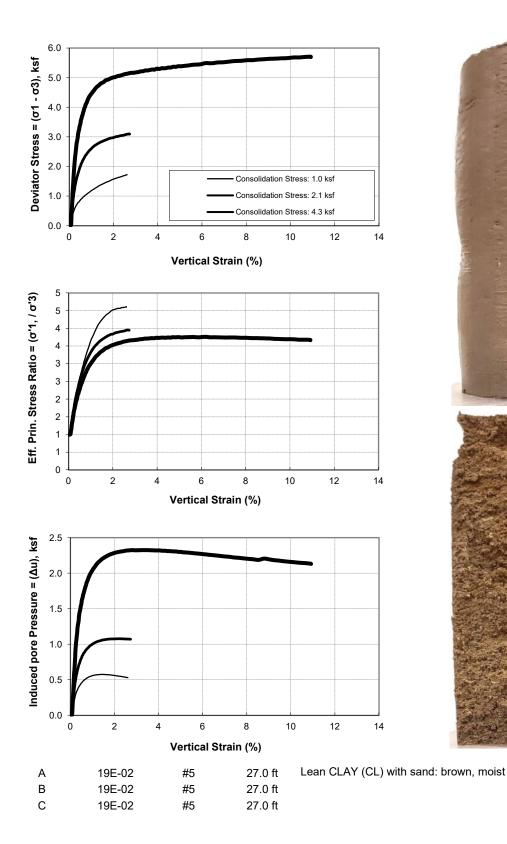
	Boring Number	19E-02			1	Trial ID	А	В	С
	Sample Number	3			Z	Liquid Limit			
₽	Specimen Depth	14.0 ft			ASSIFICATION	Plastic Limit			
	USCS Classification	Fat CLAY (C	H): brown,		1C	Plastic Index			
SAMPLE		moist, trace :	sand		SIF	Passing #4 (4.75 mm)			
AN						Passing #200 (0.075 mm)			
S					С	Estimated Gs	2.70	2.70	2.70
						Trial ID	А	В	С
	Trial ID	А	В	С		B-Parameter	0.98	0.98	0.98
	Water Content, %	31.7%	33.6%	32.6%		t <sub>50</sub> , minutes	N/A	N/A	N/A
	Dry Unit Weight, pcf	89.5	88.3	89.6		Strain Rate, %/min	0.02	0.02	0.02
NITIAL	Saturation, %	97%	100%	100%		Cell Pressure, ksf	9.4	10.1	11.5
Ξ	Void Ratio	0.88	0.91	0.88		Back Pressure, ksf	8.8	8.7	8.8
<b>—</b>	Diameter, in	2.87	2.91	2.92	≻	Consolidation Stress, ksf	0.6	1.3	2.8
	Height, in	5.76	5.66	5.56	<b>A</b> R	Deviator Stress <sup>@</sup> Failure, ksf	1.5	2.4	3.7
					SUMMARY	Axial Strain <sup>@</sup> Failure, %	2.1	2.7	5.4
ъ	Water Content, %	33.6%	32.6%	31.1%	۶.	σ' <sub>1F</sub> , ksf	1.9	3.3	5.2
SHEA	Dry Unit Weight, pcf	88.3	89.6	91.6	EST (	σ' <sub>3F</sub> , ksf	0.3	0.8	1.6
ļΫ́	Saturation, %	100%	100%	100%	Ш	Tested By:	ND	ND	ND
PRE-	Void Ratio	0.91	0.88	0.84		Date Tested:	12/21/19	12/23/19	12/26/19
₽									
s	Test Method: ASTM		-						
REMARKS	Project: WT-14-03 Re	eclaimed Wat	er Storage Re	eservoir					
MA									
RE									



### CONSOLIDATED UNDRAINED TRIAXIAL TEST



	Boring Number	19E-02				Trial ID	А	В	С
	Sample Number	5			N	Liquid Limit			
₽	Specimen Depth	27.0 ft			Ē	Plastic Limit			
	USCS Classification				SIFICATION	Plastic Index			
SAMPLE		sand: brown,	moist		SIF	Passing #4 (4.75 mm)			
AN					AS	Passing #200 (0.075 mm)			
S					C C	Estimated Gs	2.70	2.70	2.70
						Trial ID	А	В	С
	Trial ID	А	В	С		B-Parameter	0.98	0.98	0.98
	Water Content, %	19.9%	19.8%	19.5%		t <sub>50</sub> , minutes	N/A	N/A	N/A
	Dry Unit Weight, pcf	107.2	109.7	110.3		Strain Rate, %/min	0.02	0.02	0.02
NITIAL	Saturation, %	94%	100%	100%		Cell Pressure, ksf	9.7	10.9	13.0
Ī	Void Ratio	0.57	0.54	0.53		Back Pressure, ksf	8.7	8.8	8.8
	Diameter, in	2.87	2.88	2.90	⊢	Consolidation Stress, ksf	1.0	2.1	4.3
	Height, in	5.76	5.59	5.47	<b>A</b> R	Deviator Stress <sup>@</sup> Failure, ksf	1.7	3.1	5.4
					SUMMARY	Axial Strain <sup>@</sup> Failure, %	2.6	2.6	6.2
ъ	Water Content, %	19.8%	19.5%	18.2%	١,	σ' <sub>1F</sub> , ksf	2.2	4.1	7.4
SHEAL	Dry Unit Weight, pcf	109.7	110.3	112.9	EST (	σ' <sub>3F</sub> , ksf	0.5	1.0	2.0
ν	Saturation, %	100%	100%	100%	Ш	Tested By:	ND	ND	ND
PRE-	Void Ratio	0.54	0.53	0.49		Date Tested:	12/22/19	12/24/19	12/30/19
₽.									
s	Test Method: ASTM		-						
REMARKS	Project: WT-14-03 Re	eclaimed Wat	er Storage R	eservoir					
MA									
REI									
					<u> </u>				





#### CONSOLIDATED UNDRAINED TRIAXIAL TEST

	Boring Number	19E-0	)1			Si	eve Size	% Passing	Other P	arameters
₽	Sample Numbe	r 4			z	3/8-in. (	9.5mm)		Liquid Limit	
Ē	Sample Depth,	ft 22			10 E	<sup>#</sup> 4 (4.75	mm)		Plastic Limit	
SAMPLE	Classification		DY Lean CLAY	(CL):	CLASSIFICATION	<sup>#</sup> 16 (1.1	8mm)		Plasticity Index	
s/		brown	n, moist		SIF	<sup>#</sup> 30 (0.6	mm)		Estimated Gs	2.79
					LAS		150mm)			
			Intial	Final	U U	<sup>#</sup> 200 (0	075mm)			
	Mass, g		656.29	665.73						
	Water Content,	%	31.3%	33.2%	×	Sample	Туре		Т	WТ
ŝ	Dry Density, po	f	90.3	90.3	SUMMARY	Permea	nt		Deaired	Tap-Water
RTII	Saturation, %		94%	100%	MM	Pipette	Area, cm <sup>2</sup>		0.0	0314
PE	Void Ratio		0.93	0.93	ี เรา	Annulus	Area, cm <sup>2</sup>		0.7	7671
PRC	Diameter, in		2.83	2.83	TEST	k <sub>avg</sub> 20°	C, cm/s		1.7	E-07
SAMPLE PROPERTIES	Height, in		3.34	3.34	Г	Tested	Ву		1	ND
AMF	Area, in <sup>2</sup>		6.31	6.31		Test Me	thod: ASTM	D5084 (Method	IF)	
S	Volume, in <sup>3</sup>		21.07	21.07	SKS					
					REMARKS					
					RE					
	Trial	Date	Time, sec	Temp <sub>Avg</sub> , ⁰C	C	σ', ksf	µ, ksf	i <sub>o</sub>	İ <sub>f</sub>	k <sub>t</sub> , cm/s
٨TA	1	12/30/19	578	20.0		2.2	8.6	20.0	16.5	1.8E-07
D⊿	2	12/30/19	948	20.0		2.2	8.6	16.5	12.2	1.7E-07
lon	3	12/30/19	1273	20.0		2.2	8.6	19.1	12.6	1.7E-07
EAT	4	12/30/19	1270	20.0		2.2	8.6	19.1	12.6	1.7E-07
PERMEATION DATA	5	12/30/19	1251	20.0		2.2	8.6	18.8	12.5	1.7E-07
PE	6	12/30/19	1205	20.0		2.2	8.6	19.4	13.1	1.7E-07
		and they				6	"Cherry	-		

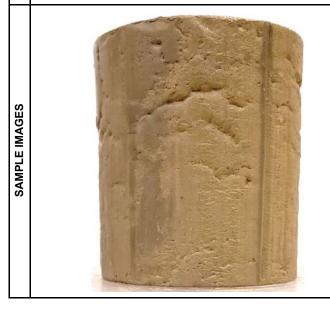


SAMPLE IMAGES



### HYDRAULIC CONDUCTIVITY TEST

	Boring Number	19E-0	)3			Si	eve Size	% Passing	Other P	arameters
₽	Sample Number	3			z	3/8-in. (	9.5mm)		Liquid Limit	
	Sample Depth, ft	17			TIO	<sup>#</sup> 4 (4.75	mm)		Plastic Limit	
SAMPLE	Classification		CLAY with SAN	ID (CL):	ICA	<sup>#</sup> 16 (1.1			Plasticity Index	
s/		brown	n, moist		SSIF	<sup>#</sup> 30 (0.6	mm)		Estimated Gs	2.79
					CLASSIFICATION		150mm)			
			Intial	Final	0		075mm)			
	Mass, g		673.18	664.12						
	Water Content, 9	%	32.9%	31.1%	۲	Sample	Туре		Т	WT
ŝ	Dry Density, pcf		89.7	93.3	SUMMARY	Permea	nt		Deaired	Tap-Water
RTI	Saturation, %		97%	100%	NML	Pipette	Area, cm <sup>2</sup>		0.	0314
DPE	Void Ratio		0.94	0.87	L SL	Annulus	s Area, cm <sup>2</sup>		0.	7671
PROPERTIES	Diameter, in		2.84	2.80	TEST	k <sub>avg</sub> 20°	C, cm/s		2.2	2E-07
SAMPLE	Height, in		3.40	3.36	-	Tested	Ву			ND
AMF	Area, in²		6.32	6.16		Test Me	ethod: ASTM	D5084 (Method	d F)	
S	Volume, in <sup>3</sup>		21.52	20.69	REMARKS					
					MAF					
					RE					
	Trial	Date	Time, sec	Temp <sub>Avg</sub> , ⁰C	σ	r', ksf	µ, ksf	i <sub>o</sub>	İ <sub>f</sub>	k <sub>t</sub> , cm/s
ATA	1	12/30/19	253	20.0		1.7	8.6	18.4	16.6	2.2E-07
N D/	2	12/30/19	273	20.0		1.7	8.6	16.6	14.7	2.3E-07
Ó I	3	12/30/19	255	20.0		1.7	8.6	19.5	17.6	2.1E-07
Ē	4	12/30/19	346	20.0		1.7	8.6	17.6	15.5	2.0E-07
PERMEATION DATA	5	12/30/19	1246	20.0		1.7	8.6	15.5	9.8	2.0E-07
Б	6	12/30/19	810	20.0		1.7	8.6	19.0	14.0	2.1E-07





## HYDRAULIC CONDUCTIVITY TEST

**APPENDIX C - RESULTS OF ENVIRONMENTAL SOIL SCREENING** 



Date of Report: 12/24/2019

Nick Simon

Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

**Client Project:** 214-078 Camarillo Reclained Water Res. Soil Sample **BCL Project:** 1941334 BCL Work Order: B366562 Invoice ID:

Enclosed are the results of analyses for samples received by the laboratory on 12/6/2019. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Felicia Johnson **Client Service Rep** 

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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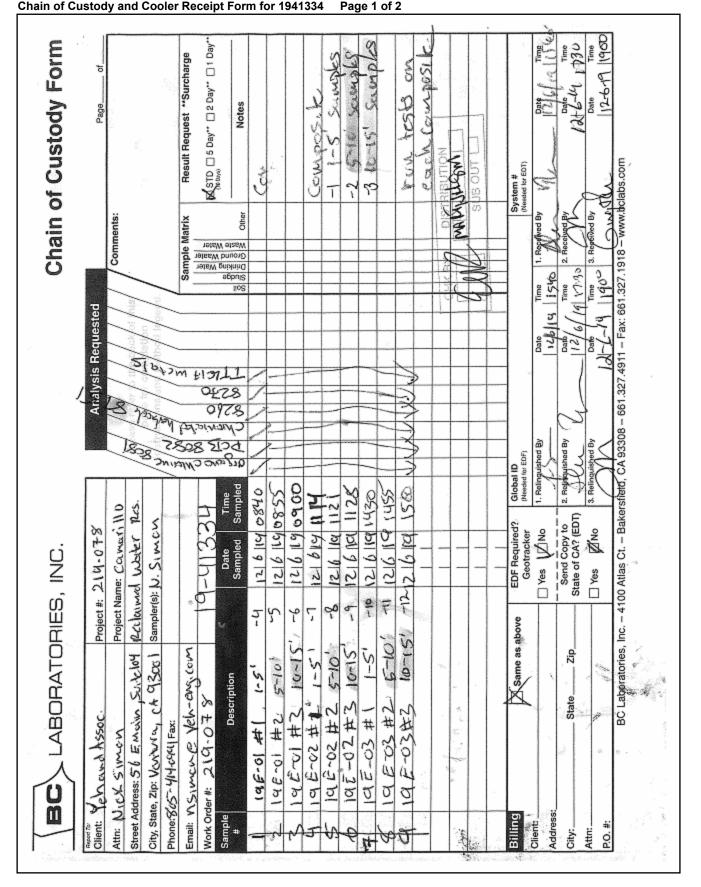
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 P.



Chain of Custody and Cooler Receipt Form for 1941334



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#### Chain of Custody and Cooler Receipt Form for 1941334 Page 2 of 2

BC LABORATORIES INC.			00015	D DEOF	DT FORM	-			1	
Submission #: 9-4	12241		COOLE	R RECE	PT FORM	J		F	Page	Of
Name of the owner of the owner of the owner of the owner of the owner owner owner owner owner owner owner owner	1 VI									
	CRMATIO	and Deliv	ery 🗆	Lice (	Chest,	G CONTA None E pecify)	Box C	1 	YES 🗆	NO D NO D / S
Refrigerant: Ice Blue Id	e 🗆 No	one 🗆	Other [	Co	mments:					
Custody Seals Ice Chest D	ALC: 2005 ALC: 2005	alñers 🗆 es 🗆 No 🛙	Nor		omments:					
All samples received? Yes Ø No 🗆	All samp!	les contain	ers intact?	Vac	No C	Dagasi				
COC Received		0.95	Containe	n: Clear	6 Therm	ometer ID: 3.5		Date/	and the second se	19:00
CAMPLE CONTAINUDE					SAME	PLE NUMBER:	s			
SAMPLE CONTAINERS	Ч	15	6	11	18	14	10	à	1 1	2 10
QT PE UNPRES				T			1	1	<u></u>	
4oz / 8oz / 16oz PE UNPRES										
2oz Cr*f							1			
QT INORGANIC CHEMICAL METALS								1		
INORGANIC CHEMICAL METALS 402 / 802 /	16oz						1			
PT CYANIDE							1			
PT NITROGEN FORMS							1	+		
PT TOTAL SULFIDE								+		
Ioz. NITRATE / NITRITE								1		
T TOTAL ORGANIC CARBON								1		1.
T CHEMICAL OXYGEN DEMAND								1		
TA PHENOLICS										
ami VOA VIAL TRAVEL BLANK						1				
0ml VOA VIAL						1	1			
T EPA 1664										
TODOR										
ADIOLOGICAL										
ACTERIOLOGICAL										
ml VOA VIAL- 504										
T EPA 508/608/8089										
T EPA 515.1/8150							1		+	
T EPA 525										1
TEPA 525 TRAVEL BLANK										
ml EPA 547										
mi EPA 531.1						1				1
z EPA 548				1		1.				
EPA 549										
`EPA 8015M										
EPA 8270										
/1602/3202 AMBER										
/ 1602 (320) JAR	A	A	A	A	A	A	A	A	A	
IL SLEEVE					1				-a	
B VIAL		T								
ASTIC BAG									+	
DLAR BAG										
ROUS IRON										
CORE										
ART KIT										
IMA CANISTER										
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Laboratories, Inc.

Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:12/24/201911:52Project:Soil SampleProject Number:214-078 Camarillo Reclained Water Res.Project Manager:Nick Simon

### Laboratory / Client Sample Cross Reference

Laboratory Client Sample Informatio		on					
1941334-01	COC Number:		Receive Date:	12/06/2019 19:00			
	Project Number:		Sampling Date:	12/05/2019 00:00			
	Sampling Location:		Sample Depth:				
	Sampling Point:	Composite 1-5'	Lab Matrix:	Solids			
	Sampled By:		Sample Type:	Soil			
1941334-02	COC Number:		Receive Date:	12/06/2019 19:00			
	Project Number:		Sampling Date:	12/05/2019 00:00			
	Sampling Location:		Sample Depth:				
	Sampling Point:	Composite 5-10'	Lab Matrix:	Solids			
	Sampled By:		Sample Type:	Soil			
941334-03	COC Number:		Receive Date:	12/06/2019 19:00			
	Project Number:		Sampling Date:	12/05/2019 00:00			
	Sampling Location:		Sample Depth:				
	Sampling Point:	Composite 10-15'	Lab Matrix:	Solids			
	Sampled By:	·	Sample Type:	Soil			
1941334-04	COC Number:		Receive Date:	12/06/2019 19:00			
	Project Number:		Sampling Date:	12/06/2019 08:40			
	Sampling Location:		Sample Depth:				
	Sampling Point:	19E-01 #1 1-5'	Lab Matrix:	Solids			
	Sampled By:		Sample Type:	Soil			
1941334-05	COC Number:		Receive Date:	12/06/2019 19:00			
	Project Number:		Sampling Date:	12/06/2019 08:55			
	Sampling Location:		Sample Depth:				
	Sampling Point:	19E-01 #2 5-10'	Lab Matrix:	Solids			
	Sampled By:		Sample Type:	Soil			
1941334-06	COC Number:		Receive Date:	12/06/2019 19:00			
	Project Number:		Sampling Date:	12/06/2019 09:00			
	Sampling Location:		Sample Depth:				
	Sampling Point:	19E-01 #3 10-15'	Lab Matrix:	Solids			
	Sampled By:		Sample Type:	Soil			
1941334-07	COC Number:		Receive Date:	12/06/2019 19:00			
	Project Number:		Sampling Date:	12/06/2019 11:14			
	Sampling Location:		Sample Depth:				
	Sampling Point:	19E-02 #1 1-5'	Lab Matrix:	Solids			
	Sampled By:		Sample Type:	Soil			

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Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res. Project Manager: Nick Simon

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Informati	on		
1941334-08	COC Number:		Receive Date:	12/06/2019 19:00
	Project Number:		Sampling Date:	12/06/2019 11:21
	Sampling Location:		Sample Depth:	
	Sampling Point:	19E-02 #2 5-10'	Lab Matrix:	Solids
	Sampled By:		Sample Type:	Soil
1941334-09	COC Number:		Receive Date:	12/06/2019 19:00
	Project Number:		Sampling Date:	12/06/2019 11:25
	Sampling Location:		Sample Depth:	
	Sampling Point:	19E-02 #3 10-15'	Lab Matrix:	Solids
	Sampled By:		Sample Type:	Soil
1941334-10	COC Number:		Receive Date:	12/06/2019 19:00
	Project Number:		Sampling Date:	12/06/2019 14:30
	Sampling Location:		Sample Depth:	
	Sampling Point:	19E-03 #1 1-5'	Lab Matrix:	Solids
	Sampled By:		Sample Type:	Soil
1941334-11	COC Number:		Receive Date:	12/06/2019 19:00
	Project Number:		Sampling Date:	12/06/2019 14:55
	Sampling Location:		Sample Depth:	
	Sampling Point:	19E-03 #2 5-10'	Lab Matrix:	Solids
	Sampled By:		Sample Type:	Soil
1941334-12	COC Number:		Receive Date:	12/06/2019 19:00
	Project Number:		Sampling Date:	12/06/2019 15:00
	Sampling Location:		Sample Depth:	
	Sampling Point:	19E-03 #3 10-15'	Lab Matrix:	Solids
	Sampled By:		Sample Type:	Soil

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Yeh & Associates

56 E. Main Street #104 Ventura, CA 93001

Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res. Project Manager: Nick Simon

# **Organochlorine Pesticides (EPA Method 8081A)**

BCL Sample ID:	1941334-01	Client Sampl	e Name:	Composit	e 1-5', 12/5/	2019 12:00:004	M		
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin		ND	mg/kg	0.0010	0.00017	EPA-8081A	ND	A01	1
alpha-BHC		ND	mg/kg	0.0010	0.00015	EPA-8081A	ND	A01	1
beta-BHC		ND	mg/kg	0.0010	0.00015	EPA-8081A	ND	A01	1
delta-BHC		ND	mg/kg	0.0010	0.00010	EPA-8081A	ND	A01	1
gamma-BHC (Lindane)		ND	mg/kg	0.0010	0.000092	EPA-8081A	ND	A01	1
Chlordane (Technical)		ND	mg/kg	0.10	0.0056	EPA-8081A	ND	A01	1
4,4'-DDD		0.0096	mg/kg	0.0010	0.00020	EPA-8081A	ND	A01	1
4,4'-DDE		ND	mg/kg	0.0010	0.00014	EPA-8081A	ND	A01	1
4,4'-DDT		0.011	mg/kg	0.0010	0.00015	EPA-8081A	ND	A01	1
Dieldrin		0.0018	mg/kg	0.0010	0.00017	EPA-8081A	ND	A01	1
Endosulfan I		ND	mg/kg	0.0010	0.00015	EPA-8081A	ND	A01	1
Endosulfan II		ND	mg/kg	0.0010	0.00016	EPA-8081A	ND	A01	1
Endosulfan sulfate		ND	mg/kg	0.0010	0.00013	EPA-8081A	ND	A01	1
Endrin		ND	mg/kg	0.0010	0.000062	EPA-8081A	ND	A01	1
Endrin aldehyde		ND	mg/kg	0.0010	0.00018	EPA-8081A	ND	A01	1
Heptachlor		ND	mg/kg	0.0010	0.000086	EPA-8081A	ND	A01	1
Heptachlor epoxide		ND	mg/kg	0.0010	0.00012	EPA-8081A	ND	A01	1
Methoxychlor		ND	mg/kg	0.0010	0.00036	EPA-8081A	ND	A01	1
Toxaphene		ND	mg/kg	0.10	0.0042	EPA-8081A	ND	A01	1
TCMX (Surrogate)		56.9	%	20 - 130 (LC	CL - UCL)	EPA-8081A		A01	1
Decachlorobiphenyl (Sur	rogate)	43.4	%	40 - 130 (LC	CL - UCL)	EPA-8081A		A01	1

		Run				QC			
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID		
1	EPA-8081A	12/11/19 17:45	12/12/19 20:24	JGM	GC-17	2.020	B064541		

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Yeh & Associates 56 E. Main Street #104

Ventura, CA 93001

Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res. Project Manager: Nick Simon

# PCB Analysis (EPA Method 8082)

BCL Sample ID:	1941334-01	Client Sampl	e Name:	Composite	e 1-5', 12/5	/2019 12:00:00	AM		
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016		ND	mg/kg	0.010	0.0019	EPA-8082	ND		1
PCB-1221		ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1232		ND	mg/kg	0.010	0.0029	EPA-8082	ND		1
PCB-1242		ND	mg/kg	0.010	0.0019	EPA-8082	ND		1
PCB-1248		ND	mg/kg	0.010	0.0021	EPA-8082	ND		1
PCB-1254		0.15	mg/kg	0.010	0.0046	EPA-8082	ND		1
PCB-1260		ND	mg/kg	0.010	0.0017	EPA-8082	ND		1
Total PCB's (Summatio	on)	0.15	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (Su	ırrogate)	40.0	%	40 - 120 (LC	L - UCL)	EPA-8082			1

		Run				QC		
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8082	12/11/19 18:00	12/13/19 11:40	JGM	GC-15	1.003	B064549	



Yeh & Associates 56 E. Main Street #104

Ventura, CA 93001

Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res. Project Manager: Nick Simon

#### Chlorinated Herbicides (EPA Method 8151A)

BCL Sample ID:	1941334-01	Client Sampl	e Name:	Composite	Composite 1-5', 12/5/2019 12:00:00AM							
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #			
2,4-D		ND	mg/kg	0.020	0.0032	EPA-8151A	ND		1			
2,4-DB		ND	mg/kg	0.040	0.0074	EPA-8151A	ND		1			
Dalapon		ND	mg/kg	0.050	0.015	EPA-8151A	ND		1			
Dicamba		ND	mg/kg	0.0020	0.00095	EPA-8151A	ND		1			
Dichloroprop		ND	mg/kg	0.020	0.0017	EPA-8151A	ND		1			
Dinoseb		ND	mg/kg	0.0070	0.0016	EPA-8151A	ND		1			
2,4,5-T		ND	mg/kg	0.0030	0.0014	EPA-8151A	ND		1			
2,4,5-TP (Silvex)		ND	mg/kg	0.0030	0.00057	EPA-8151A	ND		1			
2,4-Dichlorophenylace (Surrogate)	tic acid	46.7	%	40 - 120 (LC	L - UCL)	EPA-8151A			1			

			Run	QC				
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8151A	12/12/19 18:00	12/21/19 06:09	OLH	GC-8	1.003	B064740	



Yeh & Associates

56 E. Main Street #104 Ventura, CA 93001

Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res.

Project Manager: Nick Simon

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1941334-01	Client Sampl	e Name:	Composite	e 1-5', 12/5	/2019 12:00:00/	AM		
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene		ND	mg/kg	0.010	0.0036	EPA-8260B	ND	A10	1
Bromobenzene		ND	mg/kg	0.010	0.0038	EPA-8260B	ND	A10	1
Bromochloromethane		ND	mg/kg	0.010	0.0028	EPA-8260B	ND	A10	1
Bromodichloromethane		ND	mg/kg	0.010	0.0040	EPA-8260B	ND	A10	1
Bromoform		ND	mg/kg	0.010	0.0046	EPA-8260B	ND	A10	1
Bromomethane		ND	mg/kg	0.010	0.0048	EPA-8260B	ND	A10	1
n-Butylbenzene		ND	mg/kg	0.010	0.0042	EPA-8260B	ND	A10	1
sec-Butylbenzene		ND	mg/kg	0.010	0.0042	EPA-8260B	ND	A10	1
tert-Butylbenzene		ND	mg/kg	0.010	0.0048	EPA-8260B	ND	A10	1
Carbon tetrachloride		ND	mg/kg	0.010	0.0038	EPA-8260B	ND	A10	1
Chlorobenzene		ND	mg/kg	0.010	0.0040	EPA-8260B	ND	A10	1
Chloroethane		ND	mg/kg	0.010	0.0038	EPA-8260B	ND	A10	1
Chloroform		ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10	1
Chloromethane		ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10	1
2-Chlorotoluene		ND	mg/kg	0.010	0.0036	EPA-8260B	ND	A10	1
4-Chlorotoluene		ND	mg/kg	0.010	0.0042	EPA-8260B	ND	A10	1
Dibromochloromethane		ND	mg/kg	0.010	0.0040	EPA-8260B	ND	A10	1
1,2-Dibromo-3-chloropropa	ine	ND	mg/kg	0.010	0.0046	EPA-8260B	ND	A10	1
1,2-Dibromoethane		ND	mg/kg	0.010	0.0038	EPA-8260B	ND	A10	1
Dibromomethane		ND	mg/kg	0.010	0.0032	EPA-8260B	ND	A10	1
1,2-Dichlorobenzene		ND	mg/kg	0.010	0.0046	EPA-8260B	ND	A10	1
1,3-Dichlorobenzene		ND	mg/kg	0.010	0.0040	EPA-8260B	ND	A10	1
1,4-Dichlorobenzene		ND	mg/kg	0.010	0.0046	EPA-8260B	ND	A10	1
Dichlorodifluoromethane		ND	mg/kg	0.010	0.0040	EPA-8260B	ND	A10	1
1,1-Dichloroethane		ND	mg/kg	0.010	0.0038	EPA-8260B	ND	A10	1
1,2-Dichloroethane		ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10	1
1,1-Dichloroethene		ND	mg/kg	0.010	0.0042	EPA-8260B	ND	A10	1
cis-1,2-Dichloroethene		ND	mg/kg	0.010	0.0036	EPA-8260B	ND	A10	1
trans-1,2-Dichloroethene		ND	mg/kg	0.010	0.0038	EPA-8260B	ND	A10	1
1,2-Dichloropropane		ND	mg/kg	0.010	0.0038	EPA-8260B	ND	A10	1
1,3-Dichloropropane		ND	mg/kg	0.010	0.0044	EPA-8260B	ND	A10	1
2,2-Dichloropropane		ND	mg/kg	0.010	0.0040	EPA-8260B	ND	A10	1
1,1-Dichloropropene		ND	mg/kg	0.010	0.0038	EPA-8260B	ND	A10	1

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Yeh & Associates 56 E. Main Street #104

Ventura, CA 93001

Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res.

Project Manager: Nick Simon

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID: 1941334-01	Client Sampl	e Name:	Composite	e 1-5', 12/5	/2019 12:00:004	AM		
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10	1
trans-1,3-Dichloropropene	ND	mg/kg	0.010	0.0036	EPA-8260B	ND	A10	1
Ethylbenzene	ND	mg/kg	0.010	0.0044	EPA-8260B	ND	A10	1
Hexachlorobutadiene	ND	mg/kg	0.010	0.0062	EPA-8260B	ND	A10	1
Isopropylbenzene	ND	mg/kg	0.010	0.0042	EPA-8260B	ND	A10	1
p-Isopropyltoluene	ND	mg/kg	0.010	0.0042	EPA-8260B	ND	A10	1
Methylene chloride	ND	mg/kg	0.020	0.0030	EPA-8260B	ND	A10	1
Methyl t-butyl ether	ND	mg/kg	0.010	0.0034	EPA-8260B	ND	A10	1
Naphthalene	ND	mg/kg	0.010	0.0046	EPA-8260B	ND	A10,V01	1
n-Propylbenzene	ND	mg/kg	0.010	0.0042	EPA-8260B	ND	A10	1
Styrene	ND	mg/kg	0.010	0.0040	EPA-8260B	ND	A10	1
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.010	0.0040	EPA-8260B	ND	A10	1
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.010	0.0044	EPA-8260B	ND	A10	1
Tetrachloroethene	ND	mg/kg	0.010	0.0044	EPA-8260B	ND	A10	1
Toluene	ND	mg/kg	0.010	0.0040	EPA-8260B	ND	A10	1
1,2,3-Trichlorobenzene	ND	mg/kg	0.010	0.0052	EPA-8260B	ND	A10	1
1,2,4-Trichlorobenzene	ND	mg/kg	0.010	0.0054	EPA-8260B	ND	A10	1
1,1,1-Trichloroethane	ND	mg/kg	0.010	0.0040	EPA-8260B	ND	A10	1
1,1,2-Trichloroethane	ND	mg/kg	0.010	0.0038	EPA-8260B	ND	A10	1
Trichloroethene	ND	mg/kg	0.010	0.0044	EPA-8260B	ND	A10	1
Trichlorofluoromethane	ND	mg/kg	0.010	0.0046	EPA-8260B	ND	A10	1
1,2,3-Trichloropropane	ND	mg/kg	0.010	0.0046	EPA-8260B	ND	A10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	mg/kg	0.010	0.0040	EPA-8260B	ND	A10	1
1,2,4-Trimethylbenzene	ND	mg/kg	0.010	0.0042	EPA-8260B	ND	A10	1
1,3,5-Trimethylbenzene	ND	mg/kg	0.010	0.0042	EPA-8260B	ND	A10	1
Vinyl chloride	ND	mg/kg	0.010	0.0038	EPA-8260B	ND	A10	1
Total Xylenes	ND	mg/kg	0.020	0.0068	EPA-8260B	ND	A10	1
p- & m-Xylenes	ND	mg/kg	0.010	0.0076	EPA-8260B	ND	A10	1
o-Xylene	ND	mg/kg	0.010	0.0042	EPA-8260B	ND	A10	1
1,2-Dichloroethane-d4 (Surrogate)	121	%	70 - 121 (LC	L - UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)	97.0	%	81 - 117 (LC	L - UCL)	EPA-8260B			1
4-Bromofluorobenzene (Surrogate)	96.2	%	74 - 121 (LC	L - UCL)	EPA-8260B			1

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Laboratories, Inc.

Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:12/24/201911:52Project:Soil SampleProject Number:214-078 Camarillo Reclained Water Res.

Project Manager: Nick Simon

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample I	<b>D:</b> 1941334-01	Composite 1-5	5', 12/5/2019 12	2:00:00AM				
			Run				QC	
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	12/11/19 10:00	12/11/19 16:22	BYM	MS-V3	2	B064258	

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Environmental Testing Laboratory Since 1949

Yeh & Associates 56 E. Main Street #104

Ventura, CA 93001

Reported:12/24/201911:52Project:Soil SampleProject Number:214-078 Camarillo Reclained Water Res.

Project Manager: Nick Simon

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID:	1941334-01	Client Sampl	e Name:	Composit	e 1-5', 12/5	;/2019 12:00:00 <i>F</i>	M		
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene		ND	mg/kg	1.0	0.067	EPA-8270C	ND	Second Second	1
Acenaphthylene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Aldrin		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Aniline		ND	mg/kg	2.0	0.11	EPA-8270C	ND		1
Anthracene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Benzidine		ND	mg/kg	30	0.093	EPA-8270C	ND		1
Benzo[a]anthracene		ND	mg/kg	1.0	0.077	EPA-8270C	ND		1
Benzo[b]fluoranthene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Benzo[k]fluoranthene		ND	mg/kg	1.0	0.082	EPA-8270C	ND		1
Benzo[a]pyrene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Benzo[g,h,i]perylene		ND	mg/kg	1.0	0.13	EPA-8270C	ND		1
Benzoic acid		ND	mg/kg	5.0	0.14	EPA-8270C	ND		1
Benzyl alcohol		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Benzyl butyl phthalate		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
alpha-BHC		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
beta-BHC		ND	mg/kg	1.0	0.075	EPA-8270C	ND		1
delta-BHC		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
gamma-BHC (Lindane)		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
bis(2-Chloroethoxy)metha	ne	ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
bis(2-Chloroethyl) ether		ND	mg/kg	1.0	0.097	EPA-8270C	ND		1
bis(2-Chloroisopropyl)ethe	r	ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
bis(2-Ethylhexyl)phthalate		ND	mg/kg	2.0	0.067	EPA-8270C	ND		1
4-Bromophenyl phenyl eth	er	ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
4-Chloroaniline		ND	mg/kg	1.0	0.15	EPA-8270C	ND		1
2-Chloronaphthalene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
4-Chlorophenyl phenyl eth	er	ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Chrysene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
4,4'-DDD		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
4,4'-DDE		ND	mg/kg	1.0	0.068	EPA-8270C	ND		1
4,4'-DDT		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Dibenzo[a,h]anthracene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Dibenzofuran		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
1,2-Dichlorobenzene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1

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Environmental Testing Laboratory Since 1949

Yeh & Associates 56 E. Main Street #104

Ventura, CA 93001

Reported:12/24/201911:52Project:Soil SampleProject Number:214-078 Camarillo Reclained Water Res.

Project Manager: Nick Simon

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID:	1941334-01	Client Sampl	e Name:	Composite	e 1-5', 12/5	/2019 12:00:00A	M		
Constituent		Decult	Unite	PQL	MDL	Mathad	MB	Lab	D
1,3-Dichlorobenzene		Result ND	Units mg/kg	1.0	0.067	Method EPA-8270C	Bias ND	Quals	<u>Run #</u> 1
1,4-Dichlorobenzene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
3,3-Dichlorobenzidine		ND	mg/kg	2.0	0.067	EPA-8270C	ND		1
Dieldrin		ND	mg/kg	1.0	0.077	EPA-8270C	ND		1
Diethyl phthalate		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Dimethyl phthalate		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Di-n-butyl phthalate		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
2,4-Dinitrotoluene		ND	mg/kg	1.0	0.085	EPA-8270C	ND		1
2,6-Dinitrotoluene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Di-n-octyl phthalate		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
1,2-Diphenylhydrazine		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Endosulfan I		ND	mg/kg	2.0	0.088	EPA-8270C	ND		1
Endosulfan II		ND	mg/kg	2.0	0.088	EPA-8270C	ND		1
Endosulfan sulfate		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Endrin		ND	mg/kg	2.0	0.086	EPA-8270C	ND		1
Endrin aldehyde		ND	mg/kg	5.0	0.070	EPA-8270C	ND		1
Fluoranthene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Fluorene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Heptachlor		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Heptachlor epoxide		ND	mg/kg	1.0	0.13	EPA-8270C	ND		1
Hexachlorobenzene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Hexachlorobutadiene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Hexachlorocyclopentadier	e	ND	mg/kg	1.0	0.15	EPA-8270C	ND		1
Hexachloroethane		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Indeno[1,2,3-cd]pyrene		ND	mg/kg	1.0	0.069	EPA-8270C	ND		1
Isophorone		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
2-Methylnaphthalene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Naphthalene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
2-Naphthylamine		ND	mg/kg	30	0.36	EPA-8270C	ND		1
2-Nitroaniline		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
3-Nitroaniline		ND	mg/kg	2.0	0.067	EPA-8270C	ND		1
4-Nitroaniline		ND	mg/kg	2.0	0.11	EPA-8270C	ND		1
Nitrobenzene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1

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Ventura, CA 93001

Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res.

Project Manager: Nick Simon

#### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID:	1941334-01	Client Sampl	e Name:	Composit	e 1-5', 12/5	/2019 12:00:00A	M		
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
N-Nitrosodimethylamine		ND	mg/kg	1.0	0.40	EPA-8270C	ND		1
N-Nitrosodi-N-propylamine		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
N-Nitrosodiphenylamine		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Phenanthrene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Pyrene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
1,2,4-Trichlorobenzene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
4-Chloro-3-methylphenol		ND	mg/kg	2.0	0.067	EPA-8270C	ND		1
2-Chlorophenol		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
2,4-Dichlorophenol		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
2,4-Dimethylphenol		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
4,6-Dinitro-2-methylphenol		ND	mg/kg	5.0	0.067	EPA-8270C	ND		1
2,4-Dinitrophenol		ND	mg/kg	5.0	0.067	EPA-8270C	ND		1
2-Methylphenol		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
3- & 4-Methylphenol		ND	mg/kg	2.0	0.14	EPA-8270C	ND		1
2-Nitrophenol		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
4-Nitrophenol		ND	mg/kg	2.0	0.18	EPA-8270C	ND		1
Pentachlorophenol		ND	mg/kg	2.0	0.17	EPA-8270C	ND		1
Phenol		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
2,4,5-Trichlorophenol		ND	mg/kg	2.0	0.11	EPA-8270C	ND		1
2,4,6-Trichlorophenol		ND	mg/kg	2.0	0.067	EPA-8270C	ND		1
2-Fluorophenol (Surrogate)		49.2	%	20 - 130 (LC	CL - UCL)	EPA-8270C			1
Phenol-d5 (Surrogate)		38.7	%	30 - 130 (LC	CL - UCL)	EPA-8270C			1
Nitrobenzene-d5 (Surrogate	e)	42.2	%	30 - 130 (LC	CL - UCL)	EPA-8270C			1
2-Fluorobiphenyl (Surrogat	e)	43.0	%	30 - 140 (LC	CL - UCL)	EPA-8270C			1
2,4,6-Tribromophenol (Surr	ogate)	42.2	%	20 - 150 (LC	CL - UCL)	EPA-8270C			1
p-Terphenyl-d14 (Surrogate	e)	39.5	%	30 - 150 (LC	CL - UCL)	EPA-8270C			1

			Run					
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8270C	12/12/19 12:00	12/15/19 03:48	MK1	HPCHEM	10.135	B064616	

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Yeh & Associates 56 E. Main Street #104

Ventura, CA 93001

Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res. Project Manager: Nick Simon

### **Total Concentrations (TTLC)**

BCL Sample ID:	1941334-01	Client Sampl	e Name:	Composit	e 1-5', 12/5	5/2019 12:00:004	۹M		
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony		ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic		3.4	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium		78	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium		0.33	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium		0.60	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium		21	mg/kg	0.50	0.050	EPA-6010B	0.058		1
Cobalt		5.5	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper		14	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead		5.2	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury		0.17	mg/kg	0.16	0.016	EPA-7471A	ND		2
Molybdenum		0.74	mg/kg	2.5	0.050	EPA-6010B	0.069	J	1
Nickel		16	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium		ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver		ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium		ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium		33	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc		38	mg/kg	2.5	0.087	EPA-6010B	0.28		1

			Run				QC
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-6010B	12/12/19 08:30	12/16/19 12:39	JCC	PE-OP3	0.943	B064535
2	EPA-7471A	12/18/19 09:10	12/18/19 11:34	TMT	CETAC3	0.992	B064970

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Yeh & Associates

56 E. Main Street #104 Ventura, CA 93001

Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res. Project Manager: Nick Simon

## **Organochlorine Pesticides (EPA Method 8081A)**

BCL Sample ID:	1941334-02	Client Sampl	e Name:	Composite 5-10', 12/5/2019 12:00:00AM							
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #		
Aldrin		ND	mg/kg	0.0010	0.00017	EPA-8081A	ND	A01	1		
alpha-BHC		ND	mg/kg	0.0010	0.00015	EPA-8081A	ND	A01	1		
beta-BHC		ND	mg/kg	0.0010	0.00015	EPA-8081A	ND	A01	1		
delta-BHC		ND	mg/kg	0.0010	0.00010	EPA-8081A	ND	A01	1		
gamma-BHC (Lindane)		ND	mg/kg	0.0010	0.000092	EPA-8081A	ND	A01	1		
Chlordane (Technical)		ND	mg/kg	0.10	0.0056	EPA-8081A	ND	A01	1		
4,4'-DDD		0.00058	mg/kg	0.0010	0.00020	EPA-8081A	ND	J,A01	1		
4,4'-DDE		ND	mg/kg	0.0010	0.00014	EPA-8081A	ND	A01	1		
4,4'-DDT		0.00043	mg/kg	0.0010	0.00015	EPA-8081A	ND	J,A01	1		
Dieldrin		ND	mg/kg	0.0010	0.00017	EPA-8081A	ND	A01	1		
Endosulfan I		ND	mg/kg	0.0010	0.00015	EPA-8081A	ND	A01	1		
Endosulfan II		ND	mg/kg	0.0010	0.00016	EPA-8081A	ND	A01	1		
Endosulfan sulfate		ND	mg/kg	0.0010	0.00013	EPA-8081A	ND	A01	1		
Endrin		ND	mg/kg	0.0010	0.000062	EPA-8081A	ND	A01	1		
Endrin aldehyde		ND	mg/kg	0.0010	0.00018	EPA-8081A	ND	A01	1		
Heptachlor		ND	mg/kg	0.0010	0.000086	EPA-8081A	ND	A01	1		
Heptachlor epoxide		ND	mg/kg	0.0010	0.00012	EPA-8081A	ND	A01	1		
Methoxychlor		ND	mg/kg	0.0010	0.00036	EPA-8081A	ND	A01	1		
Toxaphene		ND	mg/kg	0.10	0.0042	EPA-8081A	ND	A01	1		
TCMX (Surrogate)		47.0	%	20 - 130 (LC	CL - UCL)	EPA-8081A		A01	1		
Decachlorobiphenyl (Sur	rogate)	46.7	%	40 - 130 (LC	CL - UCL)	EPA-8081A		A01	1		

	Run						QC
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8081A	12/11/19 17:45	12/12/19 20:41	JGM	GC-17	2.020	B064541

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Ventura, CA 93001

Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res. Project Manager: Nick Simon

# PCB Analysis (EPA Method 8082)

BCL Sample ID:	1941334-02	Client Sampl	e Name:	Composit	e 5-10', 12/	5/2019 12:00:0	0AM		
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
PCB-1016		ND	mg/kg	0.010	0.0019	EPA-8082	ND		1
PCB-1221		ND	mg/kg	0.010	0.0032	EPA-8082	ND		1
PCB-1232		ND	mg/kg	0.010	0.0029	EPA-8082	ND		1
PCB-1242		ND	mg/kg	0.010	0.0019	EPA-8082	ND		1
PCB-1248		ND	mg/kg	0.010	0.0021	EPA-8082	ND		1
PCB-1254		0.099	mg/kg	0.010	0.0046	EPA-8082	ND		1
PCB-1260		ND	mg/kg	0.010	0.0017	EPA-8082	ND		1
Total PCB's (Summati	on)	0.099	mg/kg	0.010	0.0050	EPA-8082	ND		1
Decachlorobiphenyl (S	urrogate)	48.3	%	40 - 120 (LC	L - UCL)	EPA-8082			1

				QC				
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8082	12/11/19 18:00	12/13/19 11:51	JGM	GC-15	1.010	B064549	

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Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res. Project Manager: Nick Simon

#### Chlorinated Herbicides (EPA Method 8151A)

BCL Sample ID:	1941334-02	Client Sampl	e Name:	Composit	e 5-10', 12/	5/2019 12:00:00	MAC		
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
2,4-D		ND	mg/kg	0.020	0.0032	EPA-8151A	ND		1
2,4-DB		ND	mg/kg	0.040	0.0074	EPA-8151A	ND		1
Dalapon		ND	mg/kg	0.050	0.015	EPA-8151A	ND		1
Dicamba		ND	mg/kg	0.0020	0.00095	EPA-8151A	ND		1
Dichloroprop		ND	mg/kg	0.020	0.0017	EPA-8151A	ND		1
Dinoseb		ND	mg/kg	0.0070	0.0016	EPA-8151A	ND		1
2,4,5-T		ND	mg/kg	0.0030	0.0014	EPA-8151A	ND		1
2,4,5-TP (Silvex)		ND	mg/kg	0.0030	0.00057	EPA-8151A	ND		1
2,4-Dichlorophenylace (Surrogate)	tic acid	49.3	%	40 - 120 (LC	CL - UCL)	EPA-8151A			1

			Run				QC
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8151A	12/12/19 18:00	12/21/19 06:30	OLH	GC-8	1.017	B064740



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Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res. Project Manager: Nick Simon

## Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1941334-02	Client Sampl	e Name:	Composite	e 5-10', 12/	5/2019 12:00:00	)AM		
Constituent		Desult	11:5:45	PQL	MDL	Mathe	MB	Lab	D #
Constituent Benzene		Result ND	Units mg/kg	0.0050	0.0018	Method EPA-8260B	Bias ND	Quals S08,Z1	<b>Run #</b> 1
Bromobenzene		ND	mg/kg	0.0050	0.0019	EPA-8260B	ND	S08,Z1	1
Bromochloromethane		ND	mg/kg	0.0050	0.0014	EPA-8260B	ND	S08,Z1	1
Bromodichloromethane		ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S08,Z1	1
Bromoform		ND	mg/kg	0.0050	0.0023	EPA-8260B	ND	S08,Z1	1
Bromomethane		ND	mg/kg	0.0050	0.0024	EPA-8260B	ND	S08,Z1	1
n-Butylbenzene		ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S08,Z1	1
sec-Butylbenzene		ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S08,Z1	1
tert-Butylbenzene		ND	mg/kg	0.0050	0.0024	EPA-8260B	ND	S08,Z1	1
Carbon tetrachloride		ND	mg/kg	0.0050	0.0019	EPA-8260B	ND	S08,Z1	1
Chlorobenzene		ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S08,Z1	1
Chloroethane		ND	mg/kg	0.0050	0.0019	EPA-8260B	ND	S08,Z1	1
Chloroform		ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	S08,Z1	1
Chloromethane		ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	S08,Z1	1
2-Chlorotoluene		ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S08,Z1	1
4-Chlorotoluene		ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S08,Z1	1
Dibromochloromethane		ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S08,Z1	1
1,2-Dibromo-3-chloropropa	ne	ND	mg/kg	0.0050	0.0023	EPA-8260B	ND	S08,Z1	1
1,2-Dibromoethane		ND	mg/kg	0.0050	0.0019	EPA-8260B	ND	S08,Z1	1
Dibromomethane		ND	mg/kg	0.0050	0.0016	EPA-8260B	ND	S08,Z1	1
1,2-Dichlorobenzene		ND	mg/kg	0.0050	0.0023	EPA-8260B	ND	S08,Z1	1
1,3-Dichlorobenzene		ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S08,Z1	1
1,4-Dichlorobenzene		ND	mg/kg	0.0050	0.0023	EPA-8260B	ND	S08,Z1	1
Dichlorodifluoromethane		ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S08,Z1	1
1,1-Dichloroethane		ND	mg/kg	0.0050	0.0019	EPA-8260B	ND	S08,Z1	1
1,2-Dichloroethane		ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	S08,Z1	1
1,1-Dichloroethene		ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S08,Z1	1
cis-1,2-Dichloroethene		ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S08,Z1	1
trans-1,2-Dichloroethene		ND	mg/kg	0.0050	0.0019	EPA-8260B	ND	S08,Z1	1
1,2-Dichloropropane		ND	mg/kg	0.0050	0.0019	EPA-8260B	ND	S08,Z1	1
1,3-Dichloropropane		ND	mg/kg	0.0050	0.0022	EPA-8260B	ND	S08,Z1	1
2,2-Dichloropropane		ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S08,Z1	1
1,1-Dichloropropene		ND	mg/kg	0.0050	0.0019	EPA-8260B	ND	S08,Z1	1

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Yeh & Associates 56 E. Main Street #104

Ventura, CA 93001

Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res. Project Manager: Nick Simon

## Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1941334-02	Client Sample	e Name:	Composite	5-10', 12/	5/2019 12:00:00	MAC		
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene		ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	S08,Z1	1
trans-1,3-Dichloropropene		ND	mg/kg	0.0050	0.0018	EPA-8260B	ND	S08,Z1	1
Ethylbenzene		ND	mg/kg	0.0050	0.0022	EPA-8260B	ND	S08,Z1	1
Hexachlorobutadiene		ND	mg/kg	0.0050	0.0031	EPA-8260B	ND	S08,Z1	1
Isopropylbenzene		ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S08,Z1	1
p-Isopropyltoluene		ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S08,Z1	1
Methylene chloride		ND	mg/kg	0.010	0.0015	EPA-8260B	ND	S08,Z1	1
Methyl t-butyl ether		ND	mg/kg	0.0050	0.0017	EPA-8260B	ND	S08,Z1	1
Naphthalene		ND	mg/kg	0.0050	0.0023	EPA-8260B	ND	S08,V01,Z1	1
n-Propylbenzene		ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S08,Z1	1
Styrene		ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S08,Z1	1
1,1,1,2-Tetrachloroethane		ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S08,Z1	1
1,1,2,2-Tetrachloroethane		ND	mg/kg	0.0050	0.0022	EPA-8260B	ND	S08,Z1	1
Tetrachloroethene		ND	mg/kg	0.0050	0.0022	EPA-8260B	ND	S08,Z1	1
Toluene		ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S08,Z1	1
1,2,3-Trichlorobenzene		ND	mg/kg	0.0050	0.0026	EPA-8260B	ND	S08,Z1	1
1,2,4-Trichlorobenzene		ND	mg/kg	0.0050	0.0027	EPA-8260B	ND	S08,Z1	1
1,1,1-Trichloroethane		ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S08,Z1	1
1,1,2-Trichloroethane		ND	mg/kg	0.0050	0.0019	EPA-8260B	ND	S08,Z1	1
Trichloroethene		ND	mg/kg	0.0050	0.0022	EPA-8260B	ND	S08,Z1	1
Trichlorofluoromethane		ND	mg/kg	0.0050	0.0023	EPA-8260B	ND	S08,Z1	1
1,2,3-Trichloropropane		ND	mg/kg	0.0050	0.0023	EPA-8260B	ND	S08,Z1	1
1,1,2-Trichloro-1,2,2-trifluc	roethane	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND	S08,Z1	1
1,2,4-Trimethylbenzene		ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S08,Z1	1
1,3,5-Trimethylbenzene		ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S08,Z1	1
Vinyl chloride		ND	mg/kg	0.0050	0.0019	EPA-8260B	ND	S08,Z1	1
Total Xylenes		ND	mg/kg	0.010	0.0034	EPA-8260B	ND	S08,Z1	1
p- & m-Xylenes		ND	mg/kg	0.0050	0.0038	EPA-8260B	ND	S08,Z1	1
o-Xylene		ND	mg/kg	0.0050	0.0021	EPA-8260B	ND	S08,Z1	1
1,2-Dichloroethane-d4 (Su	rrogate)	24.7	%	70 - 121 (LCL	UCL)	EPA-8260B		S09	1
Toluene-d8 (Surrogate)		86.7	%	81 - 117 (LCL	- UCL)	EPA-8260B			1
4-Bromofluorobenzene (S	urrogate)	74.8	%	74 - 121 (LCL	- UCL)	EPA-8260B			1

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Laboratories, Inc.

Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:12/24/201911:52Project:Soil SampleProject Number:214-078 Camarillo Reclained Water Res.

Project Manager: Nick Simon

### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample II	<b>D:</b> 1941334-02	Client San	nple Name:	Composite 5-	10', 12/5/2019 <i>´</i>	12:00:00AM		
			Run				QC	
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	12/11/19 10:00	12/11/19 12:52	BYM	MS-V3	1	B064258	

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Project Manager: Nick Simon

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID:	1941334-02	Client Samp	e Name:	Composit	e 5-10', 12/	5/2019 12:00:00	AM		
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene		ND	mg/kg	1.0	0.067	EPA-8270C	ND	Quuis	<u>1</u>
Acenaphthylene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Aldrin		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Aniline		ND	mg/kg	2.0	0.11	EPA-8270C	ND		1
Anthracene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Benzidine		ND	mg/kg	30	0.093	EPA-8270C	ND		1
Benzo[a]anthracene		ND	mg/kg	1.0	0.077	EPA-8270C	ND		1
Benzo[b]fluoranthene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Benzo[k]fluoranthene		ND	mg/kg	1.0	0.082	EPA-8270C	ND		1
Benzo[a]pyrene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Benzo[g,h,i]perylene		ND	mg/kg	1.0	0.13	EPA-8270C	ND		1
Benzoic acid		ND	mg/kg	5.0	0.14	EPA-8270C	ND		1
Benzyl alcohol		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Benzyl butyl phthalate		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Ilpha-BHC		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
oeta-BHC		ND	mg/kg	1.0	0.075	EPA-8270C	ND		1
lelta-BHC		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
amma-BHC (Lindane)		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
vis(2-Chloroethoxy)metha	ne	ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
bis(2-Chloroethyl) ether		ND	mg/kg	1.0	0.097	EPA-8270C	ND		1
is(2-Chloroisopropyl)ethe	er	ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
is(2-Ethylhexyl)phthalate		ND	mg/kg	2.0	0.067	EPA-8270C	ND		1
I-Bromophenyl phenyl eth	er	ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
I-Chloroaniline		ND	mg/kg	1.0	0.15	EPA-8270C	ND		1
2-Chloronaphthalene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
I-Chlorophenyl phenyl eth	er	ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Chrysene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
,4'-DDD		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
I,4'-DDE		ND	mg/kg	1.0	0.068	EPA-8270C	ND		1
I,4'-DDT		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Dibenzo[a,h]anthracene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Dibenzofuran		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
,2-Dichlorobenzene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1

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Yeh & Associates 56 E. Main Street #104

Ventura, CA 93001

Reported:12/24/201911:52Project:Soil SampleProject Number:214-078 Camarillo Reclained Water Res.

Project Manager: Nick Simon

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID:	1941334-02	Client Sampl	e Name:	Composit	e 5-10', 12/	5/2019 12:00:00	AM		
Constituent		Result	Units	PQL	MDL	Method	MB	Lab	Dun #
1,3-Dichlorobenzene		ND	mg/kg	1.0	0.067	EPA-8270C	Bias ND	Quals	Run #1
1,4-Dichlorobenzene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
3,3-Dichlorobenzidine		ND	mg/kg	2.0	0.067	EPA-8270C	ND		1
Dieldrin		ND	mg/kg	1.0	0.077	EPA-8270C	ND		1
Diethyl phthalate		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Dimethyl phthalate		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Di-n-butyl phthalate		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
2,4-Dinitrotoluene		ND	mg/kg	1.0	0.085	EPA-8270C	ND		1
2,6-Dinitrotoluene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Di-n-octyl phthalate		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
1,2-Diphenylhydrazine		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Endosulfan I		ND	mg/kg	2.0	0.088	EPA-8270C	ND		1
Endosulfan II		ND	mg/kg	2.0	0.088	EPA-8270C	ND		1
Endosulfan sulfate		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Endrin		ND	mg/kg	2.0	0.086	EPA-8270C	ND		1
Endrin aldehyde		ND	mg/kg	5.0	0.070	EPA-8270C	ND		1
Fluoranthene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Fluorene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Heptachlor		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Heptachlor epoxide		ND	mg/kg	1.0	0.13	EPA-8270C	ND		1
Hexachlorobenzene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Hexachlorobutadiene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Hexachlorocyclopentadier	ne	ND	mg/kg	1.0	0.15	EPA-8270C	ND		1
Hexachloroethane		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Indeno[1,2,3-cd]pyrene		ND	mg/kg	1.0	0.069	EPA-8270C	ND		1
Isophorone		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
2-Methylnaphthalene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Naphthalene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
2-Naphthylamine		ND	mg/kg	30	0.36	EPA-8270C	ND		1
2-Nitroaniline		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
3-Nitroaniline		ND	mg/kg	2.0	0.067	EPA-8270C	ND		1
4-Nitroaniline		ND	mg/kg	2.0	0.11	EPA-8270C	ND		1
Nitrobenzene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1

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Ventura, CA 93001

Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res.

Project Manager: Nick Simon

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID:	1941334-02	Client Sampl	e Name:	Composit	e 5-10', 12/	/5/2019 12:00:00	MAM		
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
N-Nitrosodimethylamine		ND	mg/kg	1.0	0.40	EPA-8270C	ND		1
N-Nitrosodi-N-propylami	ne	ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
N-Nitrosodiphenylamine		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Phenanthrene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
Pyrene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
1,2,4-Trichlorobenzene		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
4-Chloro-3-methylpheno	I	ND	mg/kg	2.0	0.067	EPA-8270C	ND		1
2-Chlorophenol		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
2,4-Dichlorophenol		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
2,4-Dimethylphenol		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
4,6-Dinitro-2-methylpher	nol	ND	mg/kg	5.0	0.067	EPA-8270C	ND		1
2,4-Dinitrophenol		ND	mg/kg	5.0	0.067	EPA-8270C	ND		1
2-Methylphenol		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
3- & 4-Methylphenol		ND	mg/kg	2.0	0.14	EPA-8270C	ND		1
2-Nitrophenol		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
4-Nitrophenol		ND	mg/kg	2.0	0.18	EPA-8270C	ND		1
Pentachlorophenol		ND	mg/kg	2.0	0.17	EPA-8270C	ND		1
Phenol		ND	mg/kg	1.0	0.067	EPA-8270C	ND		1
2,4,5-Trichlorophenol		ND	mg/kg	2.0	0.11	EPA-8270C	ND		1
2,4,6-Trichlorophenol		ND	mg/kg	2.0	0.067	EPA-8270C	ND		1
2-Fluorophenol (Surroga	te)	63.9	%	20 - 130 (LC	L - UCL)	EPA-8270C			1
Phenol-d5 (Surrogate)		51.0	%	30 - 130 (LC	L - UCL)	EPA-8270C			1
Nitrobenzene-d5 (Surrog	jate)	47.5	%	30 - 130 (LC	L - UCL)	EPA-8270C			1
2-Fluorobiphenyl (Surrog	gate)	57.1	%	30 - 140 (LC	L - UCL)	EPA-8270C			1
2,4,6-Tribromophenol (S	urrogate)	51.0	%	20 - 150 (LC	L - UCL)	EPA-8270C			1
p-Terphenyl-d14 (Surrog	ate)	67.1	%	30 - 150 (LC	L - UCL)	EPA-8270C			1

			QC				
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8270C	12/12/19 12:00	12/15/19 04:16	MK1	HPCHEM	9.932	B064616

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Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res. Project Manager: Nick Simon

## **Total Concentrations (TTLC)**

BCL Sample ID:	1941334-02	Client Sampl	e Name:	Composit	e 5-10', 12	5/2019 12:00:00	MAC		
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony		ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic		4.8	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium		110	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium		0.47	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium		1.0	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium		29	mg/kg	0.50	0.050	EPA-6010B	0.058		1
Cobalt		7.1	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper		18	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead		5.1	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury		0.039	mg/kg	0.16	0.016	EPA-7471A	ND	J	2
Molybdenum		1.9	mg/kg	2.5	0.050	EPA-6010B	0.069	J	1
Nickel		25	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium		ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver		ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium		ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium		51	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc		49	mg/kg	2.5	0.087	EPA-6010B	0.28		1

			Run				QC
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-6010B	12/12/19 08:30	12/16/19 12:40	JCC	PE-OP3	0.943	B064535
2	EPA-7471A	12/18/19 09:10	12/18/19 11:36	TMT	CETAC3	0.992	B064970

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Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res. Project Manager: Nick Simon

#### **Organochlorine Pesticides (EPA Method 8081A)**

BCL Sample ID:	1941334-03	Client Sampl	e Name:	Composit	Composite 10-15', 12/5/2019 12:00:00AM						
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #		
Aldrin		ND	mg/kg	0.00050	0.000087	EPA-8081A	ND		1		
alpha-BHC		ND	mg/kg	0.00050	0.000073	EPA-8081A	ND		1		
beta-BHC		ND	mg/kg	0.00050	0.000074	EPA-8081A	ND		1		
delta-BHC		ND	mg/kg	0.00050	0.000050	EPA-8081A	ND		1		
gamma-BHC (Lindane)		ND	mg/kg	0.00050	0.000046	EPA-8081A	ND		1		
Chlordane (Technical)		ND	mg/kg	0.050	0.0028	EPA-8081A	ND		1		
4,4'-DDD		0.00017	mg/kg	0.00050	0.000099	EPA-8081A	ND	J	1		
4,4'-DDE		ND	mg/kg	0.00050	0.000071	EPA-8081A	ND		1		
4,4'-DDT		ND	mg/kg	0.00050	0.000074	EPA-8081A	ND		1		
Dieldrin		ND	mg/kg	0.00050	0.000083	EPA-8081A	ND		1		
Endosulfan I		ND	mg/kg	0.00050	0.000073	EPA-8081A	ND		1		
Endosulfan II		ND	mg/kg	0.00050	0.000079	EPA-8081A	ND		1		
Endosulfan sulfate		ND	mg/kg	0.00050	0.000064	EPA-8081A	ND		1		
Endrin		ND	mg/kg	0.00050	0.000031	EPA-8081A	ND		1		
Endrin aldehyde		ND	mg/kg	0.00050	0.000088	EPA-8081A	ND		1		
Heptachlor		ND	mg/kg	0.00050	0.000043	EPA-8081A	ND		1		
Heptachlor epoxide		ND	mg/kg	0.00050	0.000060	EPA-8081A	ND		1		
Methoxychlor		ND	mg/kg	0.00050	0.00018	EPA-8081A	ND		1		
Toxaphene		ND	mg/kg	0.050	0.0021	EPA-8081A	ND		1		
TCMX (Surrogate)		67.8	%	20 - 130 (LC	L - UCL)	EPA-8081A			1		
Decachlorobiphenyl (Sur	rogate)	61.7	%	40 - 130 (LC	L - UCL)	EPA-8081A			1		

			Run				QC
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8081A	12/11/19 17:45	12/12/19 20:57	JGM	GC-17	0.984	B064541

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# PCB Analysis (EPA Method 8082)

BCL Sample ID:	1941334-03	Client Sampl	e Name:	Composite	Composite 10-15', 12/5/2019 12:00:00AM						
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #		
PCB-1016		ND	mg/kg	0.010	0.0019	EPA-8082	ND		1		
PCB-1221		ND	mg/kg	0.010	0.0032	EPA-8082	ND		1		
PCB-1232		ND	mg/kg	0.010	0.0029	EPA-8082	ND		1		
PCB-1242		ND	mg/kg	0.010	0.0019	EPA-8082	ND		1		
PCB-1248		ND	mg/kg	0.010	0.0021	EPA-8082	ND		1		
PCB-1254		0.053	mg/kg	0.010	0.0046	EPA-8082	ND		1		
PCB-1260		ND	mg/kg	0.010	0.0017	EPA-8082	ND		1		
Total PCB's (Summatio	n)	0.053	mg/kg	0.010	0.0050	EPA-8082	ND		1		
Decachlorobiphenyl (Su	rrogate)	40.0	%	40 - 120 (LC	L - UCL)	EPA-8082			1		

			Run				QC
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8082	12/11/19 18:00	12/13/19 10:37	JGM	GC-15	1.003	B064549

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# Chlorinated Herbicides (EPA Method 8151A)

BCL Sample ID:	1941334-03	Client Sampl	e Name:	Composit	Composite 10-15', 12/5/2019 12:00:00AM						
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #		
2,4-D		ND	mg/kg	0.020	0.0032	EPA-8151A	ND		1		
2,4-DB		ND	mg/kg	0.040	0.0074	EPA-8151A	ND		1		
Dalapon		ND	mg/kg	0.050	0.015	EPA-8151A	ND		1		
Dicamba		ND	mg/kg	0.0020	0.00095	EPA-8151A	ND		1		
Dichloroprop		ND	mg/kg	0.020	0.0017	EPA-8151A	ND		1		
Dinoseb		ND	mg/kg	0.0070	0.0016	EPA-8151A	ND		1		
2,4,5-T		ND	mg/kg	0.0030	0.0014	EPA-8151A	ND		1		
2,4,5-TP (Silvex)		ND	mg/kg	0.0030	0.00057	EPA-8151A	ND		1		
2,4-Dichlorophenylace (Surrogate)	tic acid	43.5	%	40 - 120 (LC	CL - UCL)	EPA-8151A			1		

			Run				QC	
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8151A	12/12/19 18:00	12/21/19 06:50	OLH	GC-8	0.990	B064740	



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Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res.

Project Manager: Nick Simon

## Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1941334-03	Client Sampl	e Name:	Composite 10-15', 12/5/2019 12:00:00AM								
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #			
Benzene		0.0020	mg/kg	0.0050	0.0018	EPA-8260B	ND	J	1			
Bromobenzene		ND	mg/kg	0.0050	0.0019	EPA-8260B	ND		1			
Bromochloromethane		ND	mg/kg	0.0050	0.0014	EPA-8260B	ND		1			
Bromodichloromethane		ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1			
Bromoform		ND	mg/kg	0.0050	0.0023	EPA-8260B	ND		1			
Bromomethane		ND	mg/kg	0.0050	0.0024	EPA-8260B	ND		1			
n-Butylbenzene		ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1			
sec-Butylbenzene		ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1			
tert-Butylbenzene		ND	mg/kg	0.0050	0.0024	EPA-8260B	ND		1			
Carbon tetrachloride		ND	mg/kg	0.0050	0.0019	EPA-8260B	ND		1			
Chlorobenzene		ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1			
Chloroethane		ND	mg/kg	0.0050	0.0019	EPA-8260B	ND		1			
Chloroform		ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1			
Chloromethane		ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1			
2-Chlorotoluene		ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1			
4-Chlorotoluene		ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1			
Dibromochloromethane		ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1			
1,2-Dibromo-3-chloropro	ppane	ND	mg/kg	0.0050	0.0023	EPA-8260B	ND		1			
1,2-Dibromoethane		ND	mg/kg	0.0050	0.0019	EPA-8260B	ND		1			
Dibromomethane		ND	mg/kg	0.0050	0.0016	EPA-8260B	ND		1			
1,2-Dichlorobenzene		ND	mg/kg	0.0050	0.0023	EPA-8260B	ND		1			
1,3-Dichlorobenzene		ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1			
1,4-Dichlorobenzene		ND	mg/kg	0.0050	0.0023	EPA-8260B	ND		1			
Dichlorodifluoromethane	•	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1			
1,1-Dichloroethane		ND	mg/kg	0.0050	0.0019	EPA-8260B	ND		1			
1,2-Dichloroethane		ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1			
1,1-Dichloroethene		ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1			
cis-1,2-Dichloroethene		ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1			
trans-1,2-Dichloroethene	9	ND	mg/kg	0.0050	0.0019	EPA-8260B	ND		1			
1,2-Dichloropropane		ND	mg/kg	0.0050	0.0019	EPA-8260B	ND		1			
1,3-Dichloropropane		ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1			
2,2-Dichloropropane		ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1			
1,1-Dichloropropene		ND	mg/kg	0.0050	0.0019	EPA-8260B	ND		1			

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Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res.

Project Manager: Nick Simon

# Volatile Organic Analysis (EPA Method 8260B)

BCL Sample ID:	1941334-03	Client Sampl	10-15', 12/5/2019 12:00:00AM						
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene		ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
trans-1,3-Dichloropropene		ND	mg/kg	0.0050	0.0018	EPA-8260B	ND		1
Ethylbenzene		ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
Hexachlorobutadiene		ND	mg/kg	0.0050	0.0031	EPA-8260B	ND		1
Isopropylbenzene		ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
p-Isopropyltoluene		ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
Methylene chloride		ND	mg/kg	0.010	0.0015	EPA-8260B	ND		1
Methyl t-butyl ether		ND	mg/kg	0.0050	0.0017	EPA-8260B	ND		1
Naphthalene		ND	mg/kg	0.0050	0.0023	EPA-8260B	ND	V01	1
n-Propylbenzene		ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
Styrene		ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,1,2-Tetrachloroethane		ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,2,2-Tetrachloroethane		ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
Tetrachloroethene		ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
Toluene		ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,2,3-Trichlorobenzene		ND	mg/kg	0.0050	0.0026	EPA-8260B	ND		1
1,2,4-Trichlorobenzene		ND	mg/kg	0.0050	0.0027	EPA-8260B	ND		1
1,1,1-Trichloroethane		ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,1,2-Trichloroethane		ND	mg/kg	0.0050	0.0019	EPA-8260B	ND		1
Trichloroethene		ND	mg/kg	0.0050	0.0022	EPA-8260B	ND		1
Trichlorofluoromethane		ND	mg/kg	0.0050	0.0023	EPA-8260B	ND		1
1,2,3-Trichloropropane		ND	mg/kg	0.0050	0.0023	EPA-8260B	ND		1
1,1,2-Trichloro-1,2,2-trifluc	roethane	ND	mg/kg	0.0050	0.0020	EPA-8260B	ND		1
1,2,4-Trimethylbenzene		ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,3,5-Trimethylbenzene		ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
Vinyl chloride		ND	mg/kg	0.0050	0.0019	EPA-8260B	ND		1
Total Xylenes		ND	mg/kg	0.010	0.0034	EPA-8260B	ND		1
p- & m-Xylenes		ND	mg/kg	0.0050	0.0038	EPA-8260B	ND		1
o-Xylene		ND	mg/kg	0.0050	0.0021	EPA-8260B	ND		1
1,2-Dichloroethane-d4 (Su	rrogate)	82.1	%	70 - 121 (LCL	- UCL)	EPA-8260B			1
Toluene-d8 (Surrogate)		95.3	%	81 - 117 (LCL	- UCL)	EPA-8260B			1
4-Bromofluorobenzene (Se	urrogate)	89.7	%	74 - 121 (LCL	- UCL)	EPA-8260B			1

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Laboratories, Inc.

Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res.

Project Manager: Nick Simon

#### Volatile Organic Analysis (EPA Method 8260B)

BCL Sample II	<b>D:</b> 1941334-03	Composite 10	-15', 12/5/2019	12:00:00AM				
			Run				QC	
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8260B	12/11/19 10:00	12/11/19 14:23	BYM	MS-V3	1	B064258	

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Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported: 12/24/2019 11:52 Project: Soil Sample

Project Number: 214-078 Camarillo Reclained Water Res.

Project Manager: Nick Simon

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID:	1941334-03	Client Sampl	e Name:	Composit	e 10-15', 12				
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Acenaphthene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Acenaphthylene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Aldrin		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Aniline		ND	mg/kg	0.20	0.011	EPA-8270C	ND		1
Anthracene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Benzidine		ND	mg/kg	3.0	0.0093	EPA-8270C	ND		1
Benzo[a]anthracene		ND	mg/kg	0.10	0.0077	EPA-8270C	ND		1
Benzo[b]fluoranthene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Benzo[k]fluoranthene		ND	mg/kg	0.10	0.0082	EPA-8270C	ND		1
Benzo[a]pyrene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Benzo[g,h,i]perylene		ND	mg/kg	0.10	0.013	EPA-8270C	ND		1
Benzoic acid		ND	mg/kg	0.50	0.014	EPA-8270C	ND		1
Benzyl alcohol		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Benzyl butyl phthalate		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Ipha-BHC		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
oeta-BHC		ND	mg/kg	0.10	0.0075	EPA-8270C	ND		1
lelta-BHC		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
gamma-BHC (Lindane)		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
bis(2-Chloroethoxy)metha	ane	ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
bis(2-Chloroethyl) ether		ND	mg/kg	0.10	0.0097	EPA-8270C	ND		1
bis(2-Chloroisopropyl)eth	er	ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
is(2-Ethylhexyl)phthalate	9	ND	mg/kg	0.20	0.0067	EPA-8270C	ND		1
-Bromophenyl phenyl et	her	ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
I-Chloroaniline		ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
2-Chloronaphthalene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
-Chlorophenyl phenyl et	her	ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Chrysene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
I,4'-DDD		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
,4'-DDE		ND	mg/kg	0.10	0.0068	EPA-8270C	ND		1
1,4'-DDT		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Dibenzo[a,h]anthracene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Dibenzofuran		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
,2-Dichlorobenzene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1

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BC Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported: 12/24/2019 11:52 Project: Soil Sample

Project Number: 214-078 Camarillo Reclained Water Res.

Project Manager: Nick Simon

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID:	1941334-03	Client Sampl	e Name:	Composit	e 10-15', 12	2/5/2019 12:00:0	MA0		
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,3-Dichlorobenzene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
1,4-Dichlorobenzene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
3,3-Dichlorobenzidine		ND	mg/kg	0.20	0.0067	EPA-8270C	ND		1
Dieldrin		ND	mg/kg	0.10	0.0077	EPA-8270C	ND		1
Diethyl phthalate		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Dimethyl phthalate		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Di-n-butyl phthalate		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
2,4-Dinitrotoluene		ND	mg/kg	0.10	0.0085	EPA-8270C	ND		1
2,6-Dinitrotoluene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Di-n-octyl phthalate		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
1,2-Diphenylhydrazine		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Endosulfan I		ND	mg/kg	0.20	0.0088	EPA-8270C	ND		1
Endosulfan II		ND	mg/kg	0.20	0.0088	EPA-8270C	ND		1
Endosulfan sulfate		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Endrin		ND	mg/kg	0.20	0.0086	EPA-8270C	ND		1
Endrin aldehyde		ND	mg/kg	0.50	0.0070	EPA-8270C	ND		1
Fluoranthene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Fluorene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Heptachlor		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Heptachlor epoxide		ND	mg/kg	0.10	0.013	EPA-8270C	ND		1
Hexachlorobenzene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Hexachlorobutadiene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Hexachlorocyclopentadier	ie	ND	mg/kg	0.10	0.015	EPA-8270C	ND		1
Hexachloroethane		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Indeno[1,2,3-cd]pyrene		ND	mg/kg	0.10	0.0069	EPA-8270C	ND		1
Isophorone		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
2-Methylnaphthalene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
Naphthalene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
2-Naphthylamine		ND	mg/kg	3.0	0.036	EPA-8270C	ND		1
2-Nitroaniline		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1
3-Nitroaniline		ND	mg/kg	0.20	0.0067	EPA-8270C	ND		1
4-Nitroaniline		ND	mg/kg	0.20	0.011	EPA-8270C	ND		1
Nitrobenzene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1

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Laboratories, Inc.

Environmental Testing Laboratory Since 1949

Yeh & Associates 56 E. Main Street #104

Ventura, CA 93001

Reported: 12/24/2019 11:52 Project: Soil Sample

Project Number: 214-078 Camarillo Reclained Water Res.

Project Manager: Nick Simon

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

BCL Sample ID:	1941334-03	Client Sampl	e Name:	Composite 10-15', 12/5/2019 12:00:00AM						
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #	
N-Nitrosodimethylamine		ND	mg/kg	0.10	0.040	EPA-8270C	ND	Quais	<u>- Kull #</u> 1	
N-Nitrosodi-N-propylami	ne	ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1	
N-Nitrosodiphenylamine		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1	
Phenanthrene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1	
Pyrene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1	
1,2,4-Trichlorobenzene		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1	
4-Chloro-3-methylphenc	I	ND	mg/kg	0.20	0.0067	EPA-8270C	ND		1	
2-Chlorophenol		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1	
2,4-Dichlorophenol		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1	
2,4-Dimethylphenol		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1	
4,6-Dinitro-2-methylpher	lor	ND	mg/kg	0.50	0.0067	EPA-8270C	ND		1	
2,4-Dinitrophenol		ND	mg/kg	0.50	0.0067	EPA-8270C	ND		1	
2-Methylphenol		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1	
3- & 4-Methylphenol		ND	mg/kg	0.20	0.014	EPA-8270C	ND		1	
2-Nitrophenol		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1	
4-Nitrophenol		ND	mg/kg	0.20	0.018	EPA-8270C	ND		1	
Pentachlorophenol		ND	mg/kg	0.20	0.017	EPA-8270C	ND		1	
Phenol		ND	mg/kg	0.10	0.0067	EPA-8270C	ND		1	
2,4,5-Trichlorophenol		ND	mg/kg	0.20	0.011	EPA-8270C	ND		1	
2,4,6-Trichlorophenol		ND	mg/kg	0.20	0.0067	EPA-8270C	ND		1	
2-Fluorophenol (Surroga	ite)	28.9	%	20 - 130 (LC	CL - UCL)	EPA-8270C			1	
Phenol-d5 (Surrogate)		24.7	%	30 - 130 (LC	CL - UCL)	EPA-8270C		S09	1	
Nitrobenzene-d5 (Surrog	gate)	19.3	%	30 - 130 (LC	CL - UCL)	EPA-8270C		S09	1	
2-Fluorobiphenyl (Surrog	gate)	24.9	%	30 - 140 (LC	CL - UCL)	EPA-8270C		S09	1	
2,4,6-Tribromophenol (S	urrogate)	32.3	%	20 - 150 (LC	CL - UCL)	EPA-8270C			1	
p-Terphenyl-d14 (Surrog	ate)	42.3	%	30 - 150 (LC	CL - UCL)	EPA-8270C			1	

			Run	G					
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID		
1	EPA-8270C	12/12/19 12:00	12/15/19 01:57	MK1	HPCHEM	0.977	B064616		

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Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res. Project Manager: Nick Simon

### **Total Concentrations (TTLC)**

BCL Sample ID:	1941334-03	Client Sampl	e Name:	Composit	e 10-15', 1	2/5/2019 12:00:0	MA00		
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Antimony		ND	mg/kg	5.0	0.33	EPA-6010B	ND		1
Arsenic		4.4	mg/kg	1.0	0.40	EPA-6010B	ND		1
Barium		94	mg/kg	0.50	0.18	EPA-6010B	ND		1
Beryllium		0.43	mg/kg	0.50	0.047	EPA-6010B	ND	J	1
Cadmium		0.97	mg/kg	0.50	0.052	EPA-6010B	ND		1
Chromium		31	mg/kg	0.50	0.050	EPA-6010B	0.061		1
Cobalt		7.7	mg/kg	2.5	0.098	EPA-6010B	ND		1
Copper		17	mg/kg	1.0	0.050	EPA-6010B	ND		1
Lead		4.2	mg/kg	2.5	0.28	EPA-6010B	ND		1
Mercury		0.027	mg/kg	0.16	0.016	EPA-7471A	ND	J	2
Molybdenum		1.5	mg/kg	2.5	0.050	EPA-6010B	0.072	J	1
Nickel		26	mg/kg	0.50	0.15	EPA-6010B	ND		1
Selenium		ND	mg/kg	1.0	0.98	EPA-6010B	ND		1
Silver		ND	mg/kg	0.50	0.067	EPA-6010B	ND		1
Thallium		ND	mg/kg	5.0	0.64	EPA-6010B	ND		1
Vanadium		46	mg/kg	0.50	0.11	EPA-6010B	ND		1
Zinc		45	mg/kg	2.5	0.087	EPA-6010B	0.30		1

				QC				
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-6010B	12/12/19 08:30	12/16/19 12:42	JCC	PE-OP3	0.990	B064535	
2	EPA-7471A	12/18/19 09:10	12/18/19 11:43	ТМТ	CETAC3	1.008	B064970	

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#### **Organochlorine Pesticides (EPA Method 8081A)**

#### **Quality Control Report - Method Blank Analysis**

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B064541						
Aldrin	B064541-BLK1	ND	mg/kg	0.00050	0.000087	
alpha-BHC	B064541-BLK1	ND	mg/kg	0.00050	0.000073	
beta-BHC	B064541-BLK1	ND	mg/kg	0.00050	0.000074	
delta-BHC	B064541-BLK1	ND	mg/kg	0.00050	0.000050	
gamma-BHC (Lindane)	B064541-BLK1	ND	mg/kg	0.00050	0.000046	
Chlordane (Technical)	B064541-BLK1	ND	mg/kg	0.050	0.0028	
4,4'-DDD	B064541-BLK1	ND	mg/kg	0.00050	0.000099	
4,4'-DDE	B064541-BLK1	ND	mg/kg	0.00050	0.000071	
4,4'-DDT	B064541-BLK1	ND	mg/kg	0.00050	0.000074	
Dieldrin	B064541-BLK1	ND	mg/kg	0.00050	0.000083	
Endosulfan I	B064541-BLK1	ND	mg/kg	0.00050	0.000073	
Endosulfan II	B064541-BLK1	ND	mg/kg	0.00050	0.000079	
Endosulfan sulfate	B064541-BLK1	ND	mg/kg	0.00050	0.000064	
Endrin	B064541-BLK1	ND	mg/kg	0.00050	0.000031	
Endrin aldehyde	B064541-BLK1	ND	mg/kg	0.00050	0.000088	
Heptachlor	B064541-BLK1	ND	mg/kg	0.00050	0.000043	
Heptachlor epoxide	B064541-BLK1	ND	mg/kg	0.00050	0.000060	
Methoxychlor	B064541-BLK1	ND	mg/kg	0.00050	0.00018	
Toxaphene	B064541-BLK1	ND	mg/kg	0.050	0.0021	
TCMX (Surrogate)	B064541-BLK1	94.3	%	20 - 130 (LCL - UCL)		
Decachlorobiphenyl (Surrogate)	B064541-BLK1	105	%	40 - 13	0 (LCL - UCL)	



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:12/24/2019 11:52Project:Soil SampleProject Number:214-078 Camarillo Reclained Water Res.Project Manager:Nick Simon

#### **Organochlorine Pesticides (EPA Method 8081A)**

#### **Quality Control Report - Laboratory Control Sample**

								Control L	imits		
				Spike		Percent		Percent		Lab	
Constituent	QC Sample ID	Туре	Result	Level	Units	Recovery	RPD	Recovery	RPD	Quals	
QC Batch ID: B064541											
Aldrin	B064541-BS1	LCS	0.0043184	0.0050167	mg/kg	86.1		70 - 130			
gamma-BHC (Lindane)	B064541-BS1	LCS	0.0039592	0.0050167	mg/kg	78.9		60 - 140			
4,4'-DDT	B064541-BS1	LCS	0.0047769	0.0050167	mg/kg	95.2		60 - 140			
Dieldrin	B064541-BS1	LCS	0.0045990	0.0050167	mg/kg	91.7		70 - 130			
Endrin	B064541-BS1	LCS	0.0041652	0.0050167	mg/kg	83.0		60 - 140			
Heptachlor	B064541-BS1	LCS	0.0041348	0.0050167	mg/kg	82.4		60 - 140			
TCMX (Surrogate)	B064541-BS1	LCS	0.0093967	0.010033	mg/kg	93.7		20 - 130			
Decachlorobiphenyl (Surrogate)	B064541-BS1	LCS	0.020540	0.020067	mg/kg	102		40 - 130			



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#### **Organochlorine Pesticides (EPA Method 8081A)**

#### **Quality Control Report - Precision & Accuracy**

							Control Limits				
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: B064541	Use	d client samp	ole: N								
Aldrin	MS	1936933-93	ND	0.0042949	0.0050847	mg/kg		84.5		50 - 140	
	MSD	1936933-93	ND	0.0041812	0.0049342	mg/kg	2.7	84.7	30	50 - 140	
gamma-BHC (Lindane)	MS	1936933-93	ND	0.0039912	0.0050847	mg/kg		78.5		50 - 140	
	MSD	1936933-93	ND	0.0039089	0.0049342	mg/kg	2.1	79.2	30	50 - 140	
4,4'-DDT	MS	1936933-93	ND	0.0047475	0.0050847	mg/kg		93.4		50 - 140	
	MSD	1936933-93	ND	0.0047092	0.0049342	mg/kg	0.8	95.4	30	50 - 140	
Dieldrin	MS	1936933-93	ND	0.0046166	0.0050847	mg/kg		90.8		40 - 140	
	MSD	1936933-93	ND	0.0044934	0.0049342	mg/kg	2.7	91.1	30	40 - 140	
Endrin	MS	1936933-93	ND	0.0042441	0.0050847	mg/kg		83.5		50 - 150	
	MSD	1936933-93	ND	0.0041086	0.0049342	mg/kg	3.2	83.3	30	50 - 150	
Heptachlor	MS	1936933-93	ND	0.0041620	0.0050847	mg/kg		81.9		60 - 140	
	MSD	1936933-93	ND	0.0040684	0.0049342	mg/kg	2.3	82.5	30	60 - 140	
TCMX (Surrogate)	MS	1936933-93	ND	0.0094976	0.010169	mg/kg		93.4		20 - 130	
	MSD	1936933-93	ND	0.0092868	0.0098684	mg/kg	2.2	94.1		20 - 130	
Decachlorobiphenyl (Surrogate)	MS	1936933-93	ND	0.020749	0.020339	mg/kg		102		40 - 130	
	MSD	1936933-93	ND	0.020391	0.019737	mg/kg	1.7	103		40 - 130	



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#### PCB Analysis (EPA Method 8082)

#### **Quality Control Report - Method Blank Analysis**

	=					
Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B064549						
PCB-1016	B064549-BLK1	ND	mg/kg	0.010	0.0019	
PCB-1221	B064549-BLK1	ND	mg/kg	0.010	0.0032	
PCB-1232	B064549-BLK1	ND	mg/kg	0.010	0.0029	
PCB-1242	B064549-BLK1	ND	mg/kg	0.010	0.0019	
PCB-1248	B064549-BLK1	ND	mg/kg	0.010	0.0021	
PCB-1254	B064549-BLK1	ND	mg/kg	0.010	0.0046	
PCB-1260	B064549-BLK1	ND	mg/kg	0.010	0.0017	
Total PCB's (Summation)	B064549-BLK1	ND	mg/kg	0.010	0.0050	
Decachlorobiphenyl (Surrogate)	B064549-BLK1	102	%	40 - 12	20 (LCL - UCL)	



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#### PCB Analysis (EPA Method 8082)

#### **Quality Control Report - Laboratory Control Sample**

							Control Limits				
Constituent	QC Sample ID	Туре	Result	Spike Level	Units	Percent Recovery	RPD	Percent Recovery	RPD	Lab Quals	
QC Batch ID: B064549											
PCB-1016	B064549-BS1	LCS	0.082712	0.084746	mg/kg	97.6		60 - 120			
PCB-1260	B064549-BS1	LCS	0.079322	0.084746	mg/kg	93.6		60 - 120			
Decachlorobiphenyl (Surrogate)	B064549-BS1	LCS	0.019322	0.020339	mg/kg	95.0		40 - 120			

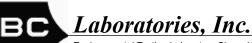


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#### PCB Analysis (EPA Method 8082)

#### **Quality Control Report - Precision & Accuracy**

									Cont	rol Limits	
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: B064549	Use	d client samp	ole: N								
PCB-1016	MS	1936933-57	ND	0.081757	0.084459	mg/kg		96.8		60 - 120	
	MSD	1936933-57	ND	0.073026	0.082237	mg/kg	11.3	88.8	30	60 - 120	
PCB-1260	MS	1936933-57	ND	0.077365	0.084459	mg/kg		91.6		60 - 120	
	MSD	1936933-57	ND	0.078618	0.082237	mg/kg	1.6	95.6	30	60 - 120	
Decachlorobiphenyl (Surrogate)	MS	1936933-57	ND	0.018919	0.020270	mg/kg		93.3		40 - 120	
	MSD	1936933-57	ND	0.019737	0.019737	mg/kg	4.2	100		40 - 120	

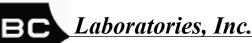


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### Chlorinated Herbicides (EPA Method 8151A)

**Quality Control Report - Method Blank Analysis** 

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B064740						
2,4-D	B064740-BLK1	ND	mg/kg	0.020	0.0032	
2,4-DB	B064740-BLK1	ND	mg/kg	0.040	0.0074	
Dalapon	B064740-BLK1	ND	mg/kg	0.050	0.015	
Dicamba	B064740-BLK1	ND	mg/kg	0.0020	0.00095	
Dichloroprop	B064740-BLK1	ND	mg/kg	0.020	0.0017	
Dinoseb	B064740-BLK1	ND	mg/kg	0.0070	0.0016	
2,4,5-T	B064740-BLK1	ND	mg/kg	0.0030	0.0014	
2,4,5-TP (Silvex)	B064740-BLK1	ND	mg/kg	0.0030	0.00057	
2,4-Dichlorophenylacetic acid (Surrogate)	B064740-BLK1	58.0	%	40 - 12	0 (LCL - UCL)	

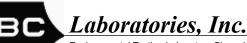


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#### Chlorinated Herbicides (EPA Method 8151A)

#### **Quality Control Report - Laboratory Control Sample**

						Control Limits					
				Spike		Percent		Percent		Lab	
Constituent	QC Sample ID	Туре	Result	Level	Units	Recovery	RPD	Recovery	RPD	Quals	
QC Batch ID: B064740											
2,4-D	B064740-BS1	LCS	0.077888	0.079208	mg/kg	98.3		50 - 120			
2,4-DB	B064740-BS1	LCS	0.16832	0.17822	mg/kg	94.4		50 - 120			
Dicamba	B064740-BS1	LCS	0.022772	0.019802	mg/kg	115		50 - 120			
Dichloroprop	B064740-BS1	LCS	0.069967	0.079208	mg/kg	88.3		50 - 120			
Dinoseb	B064740-BS1	LCS	0.033333	0.039604	mg/kg	84.2		50 - 120			
2,4,5-T	B064740-BS1	LCS	0.016172	0.019802	mg/kg	81.7		30 - 120			
2,4,5-TP (Silvex)	B064740-BS1	LCS	0.016502	0.019802	mg/kg	83.3		50 - 120			
2,4-Dichlorophenylacetic acid (Surrogate) B064740-BS1		LCS	0.087129	0.13201	mg/kg	66.0		40 - 120			



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# Chlorinated Herbicides (EPA Method 8151A)

#### **Quality Control Report - Precision & Accuracy**

		Source	Source		Spike			Percent		Percent	Lab
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: B064740	Use	d client samp	ole: N								
2,4-D	MS	1936933-92	ND	0.079661	0.081356	mg/kg		97.9		40 - 120	
	MSD	1936933-92	ND	0.080471	0.080808	mg/kg	1.0	99.6	30	40 - 120	
2,4-DB	MS	1936933-92	ND	0.13322	0.18305	mg/kg		72.8		50 - 120	
	MSD	1936933-92	ND	0.17273	0.18182	mg/kg	25.8	95.0	30	50 - 120	
Dicamba	MS	1936933-92	ND	0.023729	0.020339	mg/kg		117		50 - 120	
	MSD	1936933-92	ND	0.023906	0.020202	mg/kg	0.7	118	30	50 - 120	
Dichloroprop	MS	1936933-92	ND	0.069831	0.081356	mg/kg		85.8		40 - 120	
	MSD	1936933-92	ND	0.070370	0.080808	mg/kg	0.8	87.1	30	40 - 120	
Dinoseb	MS	1936933-92	ND	0.025763	0.040678	mg/kg		63.3		40 - 130	
	MSD	1936933-92	ND	0.030976	0.040404	mg/kg	18.4	76.7	30	40 - 130	
2,4,5-T	MS	1936933-92	ND	0.016271	0.020339	mg/kg		80.0		30 - 120	
	MSD	1936933-92	ND	0.016498	0.020202	mg/kg	1.4	81.7	30	30 - 120	
2,4,5-TP (Silvex)	MS	1936933-92	ND	0.016949	0.020339	mg/kg		83.3		40 - 120	
	MSD	1936933-92	ND	0.017172	0.020202	mg/kg	1.3	85.0	30	40 - 120	
2,4-Dichlorophenylacetic acid (Surrog	ate MS	1936933-92	ND	0.087458	0.13559	mg/kg		64.5		40 - 120	
	MSD	1936933-92	ND	0.091582	0.13468	mg/kg	4.6	68.0		40 - 120	

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# Volatile Organic Analysis (EPA Method 8260B)

#### **Quality Control Report - Method Blank Analysis**

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B064258						
Benzene	B064258-BLK1	ND	mg/kg	0.0050	0.0018	
Bromobenzene	B064258-BLK1	ND	mg/kg	0.0050	0.0019	
Bromochloromethane	B064258-BLK1	ND	mg/kg	0.0050	0.0014	
Bromodichloromethane	B064258-BLK1	ND	mg/kg	0.0050	0.0020	
Bromoform	B064258-BLK1	ND	mg/kg	0.0050	0.0023	
Bromomethane	B064258-BLK1	ND	mg/kg	0.0050	0.0024	
n-Butylbenzene	B064258-BLK1	ND	mg/kg	0.0050	0.0021	
sec-Butylbenzene	B064258-BLK1	ND	mg/kg	0.0050	0.0021	
tert-Butylbenzene	B064258-BLK1	ND	mg/kg	0.0050	0.0024	
Carbon tetrachloride	B064258-BLK1	ND	mg/kg	0.0050	0.0019	
Chlorobenzene	B064258-BLK1	ND	mg/kg	0.0050	0.0020	
Chloroethane	B064258-BLK1	ND	mg/kg	0.0050	0.0019	
Chloroform	B064258-BLK1	ND	mg/kg	0.0050	0.0017	
Chloromethane	B064258-BLK1	ND	mg/kg	0.0050	0.0017	
2-Chlorotoluene	B064258-BLK1	ND	mg/kg	0.0050	0.0018	
4-Chlorotoluene	B064258-BLK1	ND	mg/kg	0.0050	0.0021	
Dibromochloromethane	B064258-BLK1	ND	mg/kg	0.0050	0.0020	
1,2-Dibromo-3-chloropropane	B064258-BLK1	ND	mg/kg	0.0050	0.0023	
1,2-Dibromoethane	B064258-BLK1	ND	mg/kg	0.0050	0.0019	
Dibromomethane	B064258-BLK1	ND	mg/kg	0.0050	0.0016	
1,2-Dichlorobenzene	B064258-BLK1	ND	mg/kg	0.0050	0.0023	
1,3-Dichlorobenzene	B064258-BLK1	ND	mg/kg	0.0050	0.0020	
1,4-Dichlorobenzene	B064258-BLK1	ND	mg/kg	0.0050	0.0023	
Dichlorodifluoromethane	B064258-BLK1	ND	mg/kg	0.0050	0.0020	
1,1-Dichloroethane	B064258-BLK1	ND	mg/kg	0.0050	0.0019	
1,2-Dichloroethane	B064258-BLK1	ND	mg/kg	0.0050	0.0017	
1,1-Dichloroethene	B064258-BLK1	ND	mg/kg	0.0050	0.0021	
cis-1,2-Dichloroethene	B064258-BLK1	ND	mg/kg	0.0050	0.0018	
trans-1,2-Dichloroethene	B064258-BLK1	ND	mg/kg	0.0050	0.0019	
1,2-Dichloropropane	B064258-BLK1	ND	mg/kg	0.0050	0.0019	
1,3-Dichloropropane	B064258-BLK1	ND	mg/kg	0.0050	0.0022	
2,2-Dichloropropane	B064258-BLK1	ND	mg/kg	0.0050	0.0020	
1,1-Dichloropropene	B064258-BLK1	ND	mg/kg	0.0050	0.0019	
cis-1,3-Dichloropropene	B064258-BLK1	ND	mg/kg	0.0050	0.0017	

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# Volatile Organic Analysis (EPA Method 8260B)

#### **Quality Control Report - Method Blank Analysis**

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals	
QC Batch ID: B064258							
trans-1,3-Dichloropropene	B064258-BLK1	ND	mg/kg	0.0050	0.0018		
Ethylbenzene	B064258-BLK1	ND	mg/kg	0.0050	0.0022		
Hexachlorobutadiene	B064258-BLK1	ND	mg/kg	0.0050	0.0031		
Isopropylbenzene	B064258-BLK1	ND	mg/kg	0.0050	0.0021		
p-Isopropyltoluene	B064258-BLK1	ND	mg/kg	0.0050	0.0021		
Methylene chloride	B064258-BLK1	ND	mg/kg	0.010	0.0015		
Methyl t-butyl ether	B064258-BLK1	ND	mg/kg	0.0050	0.0017		
Naphthalene	B064258-BLK1	ND	mg/kg	0.0050	0.0023		
n-Propylbenzene	B064258-BLK1	ND	mg/kg	0.0050	0.0021		
Styrene	B064258-BLK1	ND	mg/kg	0.0050	0.0020		
1,1,1,2-Tetrachloroethane	B064258-BLK1	ND	mg/kg	0.0050	0.0020		
1,1,2,2-Tetrachloroethane	B064258-BLK1	ND	mg/kg	0.0050	0.0022		
Tetrachloroethene	B064258-BLK1	ND	mg/kg	0.0050	0.0022		
Toluene	B064258-BLK1	ND	mg/kg	0.0050	0.0020		
1,2,3-Trichlorobenzene	B064258-BLK1	ND	mg/kg	0.0050	0.0026		
1,2,4-Trichlorobenzene	B064258-BLK1	ND	mg/kg	0.0050	0.0027		
1,1,1-Trichloroethane	B064258-BLK1	ND	mg/kg	0.0050	0.0020		
1,1,2-Trichloroethane	B064258-BLK1	ND	mg/kg	0.0050	0.0019		
Trichloroethene	B064258-BLK1	ND	mg/kg	0.0050	0.0022		
Trichlorofluoromethane	B064258-BLK1	ND	mg/kg	0.0050	0.0023		
1,2,3-Trichloropropane	B064258-BLK1	ND	mg/kg	0.0050	0.0023		
1,1,2-Trichloro-1,2,2-trifluoroethane	B064258-BLK1	ND	mg/kg	0.0050	0.0020		
1,2,4-Trimethylbenzene	B064258-BLK1	ND	mg/kg	0.0050	0.0021		
1,3,5-Trimethylbenzene	B064258-BLK1	ND	mg/kg	0.0050	0.0021		
Vinyl chloride	B064258-BLK1	ND	mg/kg	0.0050	0.0019		
Total Xylenes	B064258-BLK1	ND	mg/kg	0.010	0.0034		
p- & m-Xylenes	B064258-BLK1	ND	mg/kg	0.0050	0.0038		
o-Xylene	B064258-BLK1	ND	mg/kg	0.0050	0.0021		
1,2-Dichloroethane-d4 (Surrogate)	B064258-BLK1	97.9	%	70 - 121 (LCL - UCL)			
Toluene-d8 (Surrogate)	B064258-BLK1	100	%	81 - 117 (LCL - UCL)			
4-Bromofluorobenzene (Surrogate)	B064258-BLK1	104	%	74 - 12	1 (LCL - UCL)		

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# Volatile Organic Analysis (EPA Method 8260B)

#### **Quality Control Report - Laboratory Control Sample**

						Control Limits			
QC Sample ID	Туре	Result	Spike Level	Units	Percent Recovery	RPD	Percent Recovery	RPD	Lab Quals
B064258-BS1	LCS	0.12273	0.12500	mg/kg	98.2		70 - 130		
B064258-BS1	LCS	0.12609	0.12500	mg/kg	101		70 - 130		
B064258-BS1	LCS	0.12336	0.12500	mg/kg	98.7		70 - 130		
B064258-BS1	LCS	0.14510	0.12500	mg/kg	116		70 - 130		
B064258-BS1	LCS	0.11984	0.12500	mg/kg	95.9		70 - 130		
B064258-BS1	LCS	0.12727	0.12500	mg/kg	102		70 - 130		
B064258-BS1	LCS	0.12626	0.12500	mg/kg	101		70 - 130		
B064258-BS1	LCS	0.12285	0.12500	mg/kg	98.3		70 - 130		
B064258-BS1	LCS	0.12632	0.12500	mg/kg	101		70 - 130		
B064258-BS1	LCS	0.056700	0.050000	mg/kg	113		70 - 121		
B064258-BS1	LCS	0.049010	0.050000	mg/kg	98.0		81 - 117		
B064258-BS1	LCS	0.051260	0.050000	mg/kg	103		74 - 121		
	B064258-BS1 B064258-BS1 B064258-BS1 B064258-BS1 B064258-BS1 B064258-BS1 B064258-BS1 B064258-BS1 B064258-BS1 B064258-BS1 B064258-BS1	B064258-BS1         LCS           B064258-BS1         LCS           B064258-BS1         LCS           B064258-BS1         LCS           B064258-BS1         LCS           B064258-BS1         LCS           B064258-BS1         LCS           B064258-BS1         LCS           B064258-BS1         LCS           B064258-BS1         LCS           B064258-BS1         LCS           B064258-BS1         LCS           B064258-BS1         LCS           B064258-BS1         LCS           B064258-BS1         LCS           B064258-BS1         LCS           B064258-BS1         LCS           B064258-BS1         LCS           B064258-BS1         LCS	B064258-BS1         LCS         0.12273           B064258-BS1         LCS         0.12609           B064258-BS1         LCS         0.12336           B064258-BS1         LCS         0.12336           B064258-BS1         LCS         0.14510           B064258-BS1         LCS         0.11984           B064258-BS1         LCS         0.12727           B064258-BS1         LCS         0.12626           B064258-BS1         LCS         0.12626           B064258-BS1         LCS         0.12632           B064258-BS1         LCS         0.12632           B064258-BS1         LCS         0.12632           B064258-BS1         LCS         0.056700           B064258-BS1         LCS         0.049010	QC Sample ID         Type         Result         Level           B064258-BS1         LCS         0.12273         0.12500           B064258-BS1         LCS         0.12609         0.12500           B064258-BS1         LCS         0.12336         0.12500           B064258-BS1         LCS         0.14510         0.12500           B064258-BS1         LCS         0.14510         0.12500           B064258-BS1         LCS         0.14510         0.12500           B064258-BS1         LCS         0.12727         0.12500           B064258-BS1         LCS         0.12626         0.12500           B064258-BS1         LCS         0.12626         0.12500           B064258-BS1         LCS         0.12626         0.12500           B064258-BS1         LCS         0.12632         0.12500           B064258-BS1         LCS         0.12632         0.12500           B064258-BS1         LCS         0.056700         0.050000           B064258-BS1         LCS         0.049010         0.050000	QC Sample ID         Type         Result         Level         Units           B064258-BS1         LCS         0.12273         0.12500         mg/kg           B064258-BS1         LCS         0.12609         0.12500         mg/kg           B064258-BS1         LCS         0.12336         0.12500         mg/kg           B064258-BS1         LCS         0.12336         0.12500         mg/kg           B064258-BS1         LCS         0.14510         0.12500         mg/kg           B064258-BS1         LCS         0.11984         0.12500         mg/kg           B064258-BS1         LCS         0.12727         0.12500         mg/kg           B064258-BS1         LCS         0.12626         0.12500         mg/kg           B064258-BS1         LCS         0.12626         0.12500         mg/kg           B064258-BS1         LCS         0.12632         0.12500         mg/kg           B064258-BS1         LCS         0.12632         0.12500         mg/kg           B064258-BS1         LCS         0.056700         0.050000         mg/kg           B064258-BS1         LCS         0.049010         0.050000         mg/kg	QC Sample IDTypeResultLevelUnitsRecoveryB064258-BS1LCS0.122730.12500mg/kg98.2B064258-BS1LCS0.126090.12500mg/kg101B064258-BS1LCS0.123360.12500mg/kg98.7B064258-BS1LCS0.145100.12500mg/kg916B064258-BS1LCS0.145100.12500mg/kg116B064258-BS1LCS0.127270.12500mg/kg102B064258-BS1LCS0.126260.12500mg/kg101B064258-BS1LCS0.126320.12500mg/kg101B064258-BS1LCS0.126320.12500mg/kg101B064258-BS1LCS0.126320.12500mg/kg101B064258-BS1LCS0.0567000.050000mg/kg113B064258-BS1LCS0.0490100.050000mg/kg98.0	QC Sample ID         Type         Result         Level         Units         Recovery         RPD           B064258-BS1         LCS         0.12273         0.12500         mg/kg         98.2           B064258-BS1         LCS         0.12609         0.12500         mg/kg         101           B064258-BS1         LCS         0.12336         0.12500         mg/kg         98.7           B064258-BS1         LCS         0.12336         0.12500         mg/kg         98.7           B064258-BS1         LCS         0.14510         0.12500         mg/kg         95.9           B064258-BS1         LCS         0.12727         0.12500         mg/kg         102           B064258-BS1         LCS         0.12626         0.12500         mg/kg         101           B064258-BS1         LCS         0.12626         0.12500         mg/kg         101           B064258-BS1         LCS         0.12632         0.12500         mg/kg         101           B064258-BS1         LCS         0.12632         0.12500         mg/kg         101           B064258-BS1         LCS         0.056700         0.050000         mg/kg         113           B064258-BS1         LCS <td>QC Sample IDTypeResultSpike LevelPercent RecoveryPercent RecoveryPercent RecoveryB064258-BS1LCS0.122730.12500mg/kg98.270 - 130B064258-BS1LCS0.126090.12500mg/kg10170 - 130B064258-BS1LCS0.123600.12500mg/kg98.770 - 130B064258-BS1LCS0.145100.12500mg/kg91670 - 130B064258-BS1LCS0.145100.12500mg/kg11670 - 130B064258-BS1LCS0.127270.12500mg/kg95.970 - 130B064258-BS1LCS0.127270.12500mg/kg10170 - 130B064258-BS1LCS0.126260.12500mg/kg10170 - 130B064258-BS1LCS0.126260.12500mg/kg10170 - 130B064258-BS1LCS0.126320.12500mg/kg10170 - 130B064258-BS1LCS0.126320.12500mg/kg10170 - 130B064258-BS1LCS0.0567000.050000mg/kg11370 - 121B064258-BS1LCS0.0490100.050000mg/kg11370 - 121B064258-BS1LCS0.0490100.050000mg/kg11370 - 121</td> <td>QC Sample ID         Type         Result         Spike Level         Units         Percent Recovery         Percent Recovery         Percent Recovery         RPD           B064258-BS1         LCS         0.12273         0.12500         mg/kg         98.2         70 - 130         70 - 130           B064258-BS1         LCS         0.12306         0.12500         mg/kg         98.7         70 - 130         70 - 130           B064258-BS1         LCS         0.12306         0.12500         mg/kg         98.7         70 - 130         70 - 130           B064258-BS1         LCS         0.14510         0.12500         mg/kg         98.7         70 - 130         70 - 130           B064258-BS1         LCS         0.14510         0.12500         mg/kg         916         70 - 130         70 - 130           B064258-BS1         LCS         0.11984         0.12500         mg/kg         95.9         70 - 130         70 - 130           B064258-BS1         LCS         0.12626         0.12500         mg/kg         101         70 - 130         70 - 130           B064258-BS1         LCS         0.12632         0.12500         mg/kg         98.3         70 - 130         70 - 130           B064258-BS1         <t< td=""></t<></td>	QC Sample IDTypeResultSpike LevelPercent RecoveryPercent RecoveryPercent RecoveryB064258-BS1LCS0.122730.12500mg/kg98.270 - 130B064258-BS1LCS0.126090.12500mg/kg10170 - 130B064258-BS1LCS0.123600.12500mg/kg98.770 - 130B064258-BS1LCS0.145100.12500mg/kg91670 - 130B064258-BS1LCS0.145100.12500mg/kg11670 - 130B064258-BS1LCS0.127270.12500mg/kg95.970 - 130B064258-BS1LCS0.127270.12500mg/kg10170 - 130B064258-BS1LCS0.126260.12500mg/kg10170 - 130B064258-BS1LCS0.126260.12500mg/kg10170 - 130B064258-BS1LCS0.126320.12500mg/kg10170 - 130B064258-BS1LCS0.126320.12500mg/kg10170 - 130B064258-BS1LCS0.0567000.050000mg/kg11370 - 121B064258-BS1LCS0.0490100.050000mg/kg11370 - 121B064258-BS1LCS0.0490100.050000mg/kg11370 - 121	QC Sample ID         Type         Result         Spike Level         Units         Percent Recovery         Percent Recovery         Percent Recovery         RPD           B064258-BS1         LCS         0.12273         0.12500         mg/kg         98.2         70 - 130         70 - 130           B064258-BS1         LCS         0.12306         0.12500         mg/kg         98.7         70 - 130         70 - 130           B064258-BS1         LCS         0.12306         0.12500         mg/kg         98.7         70 - 130         70 - 130           B064258-BS1         LCS         0.14510         0.12500         mg/kg         98.7         70 - 130         70 - 130           B064258-BS1         LCS         0.14510         0.12500         mg/kg         916         70 - 130         70 - 130           B064258-BS1         LCS         0.11984         0.12500         mg/kg         95.9         70 - 130         70 - 130           B064258-BS1         LCS         0.12626         0.12500         mg/kg         101         70 - 130         70 - 130           B064258-BS1         LCS         0.12632         0.12500         mg/kg         98.3         70 - 130         70 - 130           B064258-BS1 <t< td=""></t<>



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:12/24/2019 11:52Project:Soil SampleProject Number:214-078 Camarillo Reclained Water Res.Project Manager:Nick Simon

## Volatile Organic Analysis (EPA Method 8260B)

#### **Quality Control Report - Precision & Accuracy**

									<u>Cont</u>	rol Limits	
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: B064258	Use	d client samp	le: N								
Benzene	 MS	1936933-98	ND	0.11439	0.12500	mg/kg		91.5		70 - 130	
	MSD	1936933-98	ND	0.12403	0.12500	mg/kg	8.1	99.2	20	70 - 130	
Bromodichloromethane	MS	1936933-98	ND	0.12646	0.12500	mg/kg		101		70 - 130	
	MSD	1936933-98	ND	0.13164	0.12500	mg/kg	4.0	105	20	70 - 130	
Chlorobenzene	MS	1936933-98	ND	0.12641	0.12500	mg/kg		101		70 - 130	
	MSD	1936933-98	ND	0.13581	0.12500	mg/kg	7.2	109	20	70 - 130	
Chloroethane	MS	1936933-98	ND	0.13712	0.12500	mg/kg		110		70 - 130	
	MSD	1936933-98	ND	0.14351	0.12500	mg/kg	4.6	115	20	70 - 130	
I,4-Dichlorobenzene         MS         1936933-98         ND         0.12766         0.12500         mg/kg         102           MSD         1936933-98         ND         0.13364         0.12500         mg/kg         4.6         107		70 - 130									
	MSD	1936933-98	ND	0.13364	0.12500	mg/kg	4.6	107	20	70 - 130	
1,1-Dichloroethane	loroethane MS 1936933-98 ND 0.12180 0.12500 mg/kg 97.4 70 - 130	70 - 130									
	MSD	1936933-98	ND	0.12578	0.12500	mg/kg	3.2	101	20	70 - 130	
1,1-Dichloroethene	MS	1936933-98	ND	0.12366	0.12500	mg/kg		98.9		70 - 130	
	MSD	1936933-98	ND	0.13002	0.12500	mg/kg	5.0	104	20	70 - 130	
Toluene	MS	1936933-98	ND	0.12227	0.12500	mg/kg		97.8		70 - 130	
	MSD	1936933-98	ND	0.13491	0.12500	mg/kg	9.8	108	20	70 - 130	
Trichloroethene	MS	1936933-98	ND	0.12537	0.12500	mg/kg		100		70 - 130	
	MSD	1936933-98	ND	0.13315	0.12500	mg/kg	6.0	107	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1936933-98	ND	0.050040	0.050000	mg/kg		100		70 - 121	
	MSD	1936933-98	ND	0.050730	0.050000	mg/kg	1.4	101		70 - 121	
Toluene-d8 (Surrogate)	MS	1936933-98	ND	0.048990	0.050000	mg/kg		98.0		81 - 117	
	MSD	1936933-98	ND	0.050360	0.050000	mg/kg	2.8	101		81 - 117	
4-Bromofluorobenzene (Surrogate)	MS	1936933-98	ND	0.051000	0.050000	mg/kg		102		74 - 121	
	MSD	1936933-98	ND	0.051050	0.050000	mg/kg	0.1	102		74 - 121	

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# Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

#### **Quality Control Report - Method Blank Analysis**

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B064616						
Acenaphthene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Acenaphthylene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Aldrin	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Aniline	B064616-BLK1	ND	mg/kg	0.20	0.011	
Anthracene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Benzidine	B064616-BLK1	ND	mg/kg	3.0	0.0093	
Benzo[a]anthracene	B064616-BLK1	ND	mg/kg	0.10	0.0077	
Benzo[b]fluoranthene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Benzo[k]fluoranthene	B064616-BLK1	ND	mg/kg	0.10	0.0082	
Benzo[a]pyrene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Benzo[g,h,i]perylene	B064616-BLK1	ND	mg/kg	0.10	0.013	
Benzoic acid	B064616-BLK1	ND	mg/kg	0.50	0.014	
Benzyl alcohol	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Benzyl butyl phthalate	B064616-BLK1	ND	mg/kg	0.10	0.0067	
alpha-BHC	B064616-BLK1	ND	mg/kg	0.10	0.0067	
beta-BHC	B064616-BLK1	ND	mg/kg	0.10	0.0075	
delta-BHC	B064616-BLK1	ND	mg/kg	0.10	0.0067	
gamma-BHC (Lindane)	B064616-BLK1	ND	mg/kg	0.10	0.0067	
bis(2-Chloroethoxy)methane	B064616-BLK1	ND	mg/kg	0.10	0.0067	
bis(2-Chloroethyl) ether	B064616-BLK1	ND	mg/kg	0.10	0.0097	
bis(2-Chloroisopropyl)ether	B064616-BLK1	ND	mg/kg	0.10	0.0067	
bis(2-Ethylhexyl)phthalate	B064616-BLK1	ND	mg/kg	0.20	0.0067	
4-Bromophenyl phenyl ether	B064616-BLK1	ND	mg/kg	0.10	0.0067	
4-Chloroaniline	B064616-BLK1	ND	mg/kg	0.10	0.015	
2-Chloronaphthalene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
4-Chlorophenyl phenyl ether	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Chrysene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
4,4'-DDD	B064616-BLK1	ND	mg/kg	0.10	0.0067	
4,4'-DDE	B064616-BLK1	ND	mg/kg	0.10	0.0068	
4,4'-DDT	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Dibenzo[a,h]anthracene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Dibenzofuran	B064616-BLK1	ND	mg/kg	0.10	0.0067	
1,2-Dichlorobenzene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
1,3-Dichlorobenzene	B064616-BLK1	ND	mg/kg	0.10	0.0067	

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# Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

#### **Quality Control Report - Method Blank Analysis**

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B064616						
1,4-Dichlorobenzene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
3,3-Dichlorobenzidine	B064616-BLK1	ND	mg/kg	0.20	0.0067	
Dieldrin	B064616-BLK1	ND	mg/kg	0.10	0.0077	
Diethyl phthalate	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Dimethyl phthalate	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Di-n-butyl phthalate	B064616-BLK1	ND	mg/kg	0.10	0.0067	
2,4-Dinitrotoluene	B064616-BLK1	ND	mg/kg	0.10	0.0085	
2,6-Dinitrotoluene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Di-n-octyl phthalate	B064616-BLK1	ND	mg/kg	0.10	0.0067	
1,2-Diphenylhydrazine	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Endosulfan I	B064616-BLK1	ND	mg/kg	0.20	0.0088	
Endosulfan II	B064616-BLK1	ND	mg/kg	0.20	0.0088	
Endosulfan sulfate	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Endrin	B064616-BLK1	ND	mg/kg	0.20	0.0086	
Endrin aldehyde	B064616-BLK1	ND	mg/kg	0.50	0.0070	
Fluoranthene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Fluorene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Heptachlor	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Heptachlor epoxide	B064616-BLK1	ND	mg/kg	0.10	0.013	
Hexachlorobenzene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Hexachlorobutadiene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Hexachlorocyclopentadiene	B064616-BLK1	ND	mg/kg	0.10	0.015	
Hexachloroethane	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Indeno[1,2,3-cd]pyrene	B064616-BLK1	ND	mg/kg	0.10	0.0069	
Isophorone	B064616-BLK1	ND	mg/kg	0.10	0.0067	
2-Methylnaphthalene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Naphthalene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
2-Naphthylamine	B064616-BLK1	ND	mg/kg	3.0	0.036	
2-Nitroaniline	B064616-BLK1	ND	mg/kg	0.10	0.0067	
3-Nitroaniline	B064616-BLK1	ND	mg/kg	0.20	0.0067	
4-Nitroaniline	B064616-BLK1	ND	mg/kg	0.20	0.011	
Nitrobenzene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
N-Nitrosodimethylamine	B064616-BLK1	ND	mg/kg	0.10	0.040	
N-Nitrosodi-N-propylamine	B064616-BLK1	ND	mg/kg	0.10	0.0067	

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# Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

#### **Quality Control Report - Method Blank Analysis**

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B064616						
N-Nitrosodiphenylamine	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Phenanthrene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
Pyrene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
1,2,4-Trichlorobenzene	B064616-BLK1	ND	mg/kg	0.10	0.0067	
4-Chloro-3-methylphenol	B064616-BLK1	ND	mg/kg	0.20	0.0067	
2-Chlorophenol	B064616-BLK1	ND	mg/kg	0.10	0.0067	
2,4-Dichlorophenol	B064616-BLK1	ND	mg/kg	0.10	0.0067	
2,4-Dimethylphenol	B064616-BLK1	ND	mg/kg	0.10	0.0067	
4,6-Dinitro-2-methylphenol	B064616-BLK1	ND	mg/kg	0.50	0.0067	
2,4-Dinitrophenol	B064616-BLK1	ND	mg/kg	0.50	0.0067	
2-Methylphenol	B064616-BLK1	ND	mg/kg	0.10	0.0067	
3- & 4-Methylphenol	B064616-BLK1	ND	mg/kg	0.20	0.014	
2-Nitrophenol	B064616-BLK1	ND	mg/kg	0.10	0.0067	
4-Nitrophenol	B064616-BLK1	ND	mg/kg	0.20	0.018	
Pentachlorophenol	B064616-BLK1	ND	mg/kg	0.20	0.017	
Phenol	B064616-BLK1	ND	mg/kg	0.10	0.0067	
2,4,5-Trichlorophenol	B064616-BLK1	ND	mg/kg	0.20	0.011	
2,4,6-Trichlorophenol	B064616-BLK1	ND	mg/kg	0.20	0.0067	
2-Fluorophenol (Surrogate)	B064616-BLK1	59.7	%	20 - 13	30 (LCL - UCL)	
Phenol-d5 (Surrogate)	B064616-BLK1	55.6	%	30 - 13	30 - 130 (LCL - UCL)	
Nitrobenzene-d5 (Surrogate)	B064616-BLK1	52.5	%	30 - 13	30 (LCL - UCL)	
2-Fluorobiphenyl (Surrogate)	B064616-BLK1	75.0	%	30 - 14	10 (LCL - UCL)	
2,4,6-Tribromophenol (Surrogate)	B064616-BLK1	72.2	%	20 - 15	50 (LCL - UCL)	
p-Terphenyl-d14 (Surrogate)	B064616-BLK1	61.9	%	30 - 15	50 (LCL - UCL)	



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## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

#### **Quality Control Report - Laboratory Control Sample**

							Control Limits			
Constituent	OC Semale ID	Turna	Decult	Spike	Unite	Percent		Percent	000	Lab
Constituent	QC Sample ID	Туре	Result	Level	Units	Recovery	RPD	Recovery	RPD	Quals
QC Batch ID: B064616										
Acenaphthene	B064616-BS1	LCS	1.3188	1.6611	mg/kg	79.4		50 - 130		
1,4-Dichlorobenzene	B064616-BS1	LCS	1.5468	1.6611	mg/kg	93.1		50 - 130		
2,4-Dinitrotoluene	B064616-BS1	LCS	1.5408	1.6611	mg/kg	92.8		50 - 130		
Hexachlorobenzene	B064616-BS1	LCS	2.0042	1.6611	mg/kg	121		40 - 130		
Hexachlorobutadiene	B064616-BS1	LCS	1.5424	1.6611	mg/kg	92.9		50 - 130		
Hexachloroethane	B064616-BS1	LCS	1.5000	1.6611	mg/kg	90.3		50 - 130		
Nitrobenzene	B064616-BS1	LCS	1.5791	1.6611	mg/kg	95.1		50 - 130		
N-Nitrosodi-N-propylamine	B064616-BS1	LCS	1.2665	1.6611	mg/kg	76.2		40 - 120		
Pyrene	B064616-BS1	LCS	1.3127	1.6611	mg/kg	79.0		40 - 150		
1,2,4-Trichlorobenzene	B064616-BS1	LCS	1.6700	1.6611	mg/kg	101		50 - 120		
4-Chloro-3-methylphenol	B064616-BS1	LCS	1.1603	1.6611	mg/kg	69.8		50 - 130		
2-Chlorophenol	B064616-BS1	LCS	1.8128	1.9934	mg/kg	90.9		50 - 130		
2-Methylphenol	B064616-BS1	LCS	1.2254	1.6611	mg/kg	73.8		50 - 130		
3- & 4-Methylphenol	B064616-BS1	LCS	2.3384	3.3223	mg/kg	70.4		50 - 130		
4-Nitrophenol	B064616-BS1	LCS	0.86241	1.6611	mg/kg	51.9		30 - 130		
Pentachlorophenol	B064616-BS1	LCS	1.0423	1.6611	mg/kg	62.7		20 - 130		
Phenol	B064616-BS1	LCS	1.0975	1.6611	mg/kg	66.1		40 - 120		
2,4,6-Trichlorophenol	B064616-BS1	LCS	1.3746	1.6611	mg/kg	82.8		50 - 130		
2-Fluorophenol (Surrogate)	B064616-BS1	LCS	1.0037	1.3289	mg/kg	75.5		20 - 130		
Phenol-d5 (Surrogate)	B064616-BS1	LCS	1.0359	1.3289	mg/kg	78.0		30 - 130		
Nitrobenzene-d5 (Surrogate)	B064616-BS1	LCS	0.97563	1.3289	mg/kg	73.4		30 - 130		
2-Fluorobiphenyl (Surrogate)	B064616-BS1	LCS	1.1919	1.3289	mg/kg	89.7		30 - 140		
2,4,6-Tribromophenol (Surrogate)	B064616-BS1	LCS	1.3064	1.3289	mg/kg	98.3		20 - 150		
p-Terphenyl-d14 (Surrogate)	B064616-BS1	LCS	0.58461	0.66445	mg/kg	88.0		30 - 150		

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Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res. Project Manager: Nick Simon

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

#### Control Limits Source Source Spike Percent Percent Lab Constituent Sample ID Result Added RPD RPD **Recovery Quals** Type Result Units Recovery Used client sample: N QC Batch ID: B064616 1936933-99 ND 1 2746 75 2 30 - 140 Acenaphthene 1 6949 MS mg/kg 1936933-99 ND 1.3354 1.6393 4.7 81.5 30 30 - 140 MSD mg/kg 1.4-Dichlorobenzene MS 1936933-99 ND 1.5097 1.6949 mg/kg 89 1 50 - 130 MSD 1936933-99 ND 1.5902 1.6393 mg/kg 5.2 97.0 30 50 - 130 2,4-Dinitrotoluene 1936933-99 ND 1.5045 1.6949 88.8 50 - 130 MS mg/kg 1936933-99 ND 1.5840 1.6393 96.6 30 50 - 130 MSD ma/ka 51 ND Hexachlorobenzene 1936933-99 1.9953 1.6949 118 50 - 130 MS ma/ka MSD 1936933-99 ND 2.1027 1.6393 mg/kg 5.2 128 30 50 - 130 Hexachlorobutadiene 1936933-99 ND 1.5535 1.6949 91.7 MS mg/kg 50 - 130 1936933-99 ND 1.5811 1.6393 MSD ma/ka 1.8 96.4 30 50 - 130 1936933-99 1.6949 85.2 Hexachloroethane MS ND 1.4446 mg/kg 50 - 130 1936933-99 ND 1.5441 1.6393 6.7 94.2 30 50 - 130 MSD mg/kg Nitrobenzene MS 1936933-99 ND 1.5374 1.6949 ma/ka 90.7 30 - 120 1936933-99 MSD ND 1.6178 1.6393 mg/kg 5.1 98.7 30 30 - 120 N-Nitrosodi-N-propylamine MS 1936933-99 ND 1.2173 1.6949 71.8 20 - 130 mg/kg MSD 1936933-99 ND 1.3016 1.6393 mg/kg 6.7 79.4 30 20 - 130 1936933-99 ND 1.2624 1 6949 74.5 40 - 140 Pyrene MS mg/kg 1936933-99 ND 1.4052 1.6393 10.7 85.7 30 40 - 140 MSD mg/kg 1.2.4-Trichlorobenzene 1936933-99 ND 1 6466 1.6949 MS mg/kg 97.1 50 - 130 1936933-99 ND 1.7232 1.6393 4.6 105 30 50 - 130 MSD mg/kg 1936933-99 ND 4-Chloro-3-methylphenol MS 1.1464 1.6949 mg/kg 67 6 50 - 1301936933-99 1.2003 MSD ND 1.6393 mg/kg 4.6 73.2 30 50 - 130 2-Chlorophenol MS 1936933-99 ND 1.7654 2.0339 86.8 50 - 130 mg/kg 1936933-99 ND 1.8739 1.9672 6.0 95.3 30 50 - 130 MSD mg/kg 2-Methylphenol 1936933-99 ND 1.1577 1.6949 68.3 50 - 130 MS mg/kg 1936933-99 ND 1.6393 7.3 75.9 30 MSD 1.2448 mg/kg 50 - 130 3- & 4-Methylphenol 1936933-99 ND 2.2201 65.5 MS 3.3898 mg/kg 50 - 130 1936933-99 ND 2.3215 3.2787 4.5 70.8 30 50 - 130 MSD mg/kg 4-Nitrophenol MS 1936933-99 ND 0.76161 1.6949 mg/kg 44.9 30 - 140 1936933-99 ND 0.77869 1 6393 22 47 5 30 30 - 140 MSD mg/kg Pentachlorophenol MS 1936933-99 ND 0.95837 1.6949 ma/ka 56 5 30 - 130 1936933-99 ND 1.0611 10.2 MSD 1.6393 mg/kg 64.7 30 30 - 130 ND Phenol MS 1936933-99 1 0 4 7 6 1 6949 618 40 - 150 ma/ka 1936933-99 ND 1.1494 1.6393 mg/kg 9.3 70.1 30 40 - 150 MSD

#### **Quality Control Report - Precision & Accuracy**

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1.3155

1.3996

1.6949

1.6393

mg/kg

mg/kg

6.2

77.6

85.4

ND

ND

MS

MSD

1936933-99

1936933-99

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Report ID: 1000979311

2,4,6-Trichlorophenol

50 - 130

50 - 130

30



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:12/24/201911:52Project:Soil SampleProject Number:214-078 Camarillo Reclained Water Res.Project Manager:Nick Simon

### Base Neutral and Acid Extractables Organic Analysis (EPA Method 8270C)

#### **Quality Control Report - Precision & Accuracy**

								Control Limits					
		Source	Source		Spike			Percent		Percent	Lab		
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals		
QC Batch ID: B064616	Use	d client samp	le: N										
2-Fluorophenol (Surrogate)	MS	1936933-99	ND	0.94968	1.3559	mg/kg		70.0		20 - 130			
	MSD	1936933-99	ND	1.0124	1.3115	mg/kg	6.4	77.2		20 - 130			
Phenol-d5 (Surrogate)	MS	1936933-99	ND	0.97576	1.3559	mg/kg		72.0		30 - 130			
	MSD	1936933-99	ND	1.0445	1.3115	mg/kg	6.8	79.6		30 - 130			
Nitrobenzene-d5 (Surrogate)	MS	1936933-99	ND	0.93325	1.3559	mg/kg		68.8		30 - 130			
	MSD	1936933-99	ND	0.98221	1.3115	mg/kg	5.1	74.9		30 - 130			
2-Fluorobiphenyl (Surrogate)	MS	1936933-99	ND	1.1448	1.3559	mg/kg		84.4		30 - 140			
	MSD	1936933-99	ND	1.1809	1.3115	mg/kg	3.1	90.0		30 - 140			
2,4,6-Tribromophenol (Surrogate)	MS	1936933-99	ND	1.3036	1.3559	mg/kg		96.1		20 - 150			
	MSD	1936933-99	ND	1.3311	1.3115	mg/kg	2.1	101		20 - 150			
p-Terphenyl-d14 (Surrogate)	MS	1936933-99	ND	0.54134	0.67797	mg/kg		79.8		30 - 150			
	MSD	1936933-99	ND	0.55602	0.65574	mg/kg	2.7	84.8		30 - 150			



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res. Project Manager: Nick Simon

# **Total Concentrations (TTLC)**

#### **Quality Control Report - Method Blank Analysis**

	-					
Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B064535						
Antimony	B064535-BLK1	ND	mg/kg	5.0	0.33	
Arsenic	B064535-BLK1	ND	mg/kg	1.0	0.40	
Barium	B064535-BLK1	ND	mg/kg	0.50	0.18	
Beryllium	B064535-BLK1	ND	mg/kg	0.50	0.047	
Cadmium	B064535-BLK1	ND	mg/kg	0.50	0.052	
Chromium	B064535-BLK1	0.061296	mg/kg	0.50	0.050	J
Cobalt	B064535-BLK1	ND	mg/kg	2.5	0.098	
Copper	B064535-BLK1	ND	mg/kg	1.0	0.050	
Lead	B064535-BLK1	ND	mg/kg	2.5	0.28	
Molybdenum	B064535-BLK1	0.072775	mg/kg	2.5	0.050	J
Nickel	B064535-BLK1	ND	mg/kg	0.50	0.15	
Selenium	B064535-BLK1	ND	mg/kg	1.0	0.98	
Silver	B064535-BLK1	ND	mg/kg	0.50	0.067	
Thallium	B064535-BLK1	ND	mg/kg	5.0	0.64	
Vanadium	B064535-BLK1	ND	mg/kg	0.50	0.11	
Zinc	B064535-BLK1	0.30181	mg/kg	2.5	0.087	J
QC Batch ID: B064970	B064970-BLK1	ND	malka	0.16	0.016	
Mercury	DU04970-DLK1	ND	mg/kg	0.10	0.016	



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:12/24/201911:52Project:Soil SampleProject Number:214-078 Camarillo Reclained Water Res.Project Manager:Nick Simon

# Total Concentrations (TTLC)

#### **Quality Control Report - Laboratory Control Sample**

							Control Limits			
O and it and		<b>T</b>	<b>D</b>	Spike	11	Percent		Percent		Lab
Constituent	QC Sample ID	Туре	Result	Level	Units	Recovery	RPD	Recovery	RPD	Quals
QC Batch ID: B064535										
Antimony	B064535-BS1	LCS	93.453	100.00	mg/kg	93.5		75 - 125		
Arsenic	B064535-BS1	LCS	18.834	20.000	mg/kg	94.2		75 - 125		
Barium	B064535-BS1	LCS	106.17	100.00	mg/kg	106		75 - 125		
Beryllium	B064535-BS1	LCS	9.6470	10.000	mg/kg	96.5		75 - 125		
Cadmium	B064535-BS1	LCS	9.6336	10.000	mg/kg	96.3		75 - 125		
Chromium	B064535-BS1	LCS	100.86	100.00	mg/kg	101		75 - 125		
Cobalt	B064535-BS1	LCS	106.74	100.00	mg/kg	107		75 - 125		
Copper	B064535-BS1	LCS	97.875	100.00	mg/kg	97.9		75 - 125		
Lead	B064535-BS1	LCS	105.25	100.00	mg/kg	105		75 - 125		
Molybdenum	B064535-BS1	LCS	97.724	100.00	mg/kg	97.7		75 - 125		
Nickel	B064535-BS1	LCS	106.88	100.00	mg/kg	107		75 - 125		
Selenium	B064535-BS1	LCS	18.439	20.000	mg/kg	92.2		75 - 125		
Silver	B064535-BS1	LCS	9.9070	10.000	mg/kg	99.1		75 - 125		
Thallium	B064535-BS1	LCS	108.34	100.00	mg/kg	108		75 - 125		
Vanadium	B064535-BS1	LCS	100.28	100.00	mg/kg	100		75 - 125		
Zinc	B064535-BS1	LCS	99.130	100.00	mg/kg	99.1		75 - 125		
QC Batch ID: B064970										
Mercury	B064970-BS1	LCS	0.84640	0.80000	mg/kg	106		80 - 120		



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

Reported: 12/24/2019 11:52 Project: Soil Sample Project Number: 214-078 Camarillo Reclained Water Res. Project Manager: Nick Simon

# **Total Concentrations (TTLC)**

#### **Quality Control Report - Precision & Accuracy**

									Cont	rol Limits	
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: B064535	Use	d client samp	le: N								
Antimony	 DUP	1940527-01	ND	ND		mg/kg			20		
	MS	1940527-01	ND	14.231	100.00	mg/kg		14.2		16 - 119	J,Q03
	MSD	1940527-01	ND	16.497	100.00	mg/kg	14.7	16.5	20	16 - 119	J
Arsenic	DUP	1940527-01	6.3534	4.8810		mg/kg	26.2		20		J,A02
	MS	1940527-01	6.3534	23.010	20.000	mg/kg		83.3		75 - 125	
	MSD	1940527-01	6.3534	24.849	20.000	mg/kg	7.7	92.5	20	75 - 125	
Barium	DUP	1940527-01	271.75	269.26		mg/kg	0.9		20		
	MS	1940527-01	271.75	380.08	100.00	mg/kg		108		75 - 125	
	MSD	1940527-01	271.75	366.76	100.00	mg/kg	3.6	95.0	20	75 - 125	
Beryllium	DUP	1940527-01	0.38905	0.44877		mg/kg	14.3		20		J
	MS	1940527-01	0.38905	10.130	10.000	mg/kg		97.4		75 - 125	
	MSD	1940527-01	0.38905	10.916	10.000	mg/kg	7.5	105	20	75 - 125	
Cadmium	DUP	1940527-01	ND	ND		mg/kg			20		
	MS	1940527-01	ND	9.4799	10.000	mg/kg		94.8		75 - 125	
	MSD	1940527-01	ND	10.455	10.000	mg/kg	9.8	105	20	75 - 125	
Chromium	DUP	1940527-01	38.583	40.396		mg/kg	4.6		20		
	MS	1940527-01	38.583	133.70	100.00	mg/kg		95.1		75 - 125	
	MSD	1940527-01	38.583	143.14	100.00	mg/kg	6.8	105	20	75 - 125	
Cobalt	DUP	1940527-01	8.0331	8.3718		mg/kg	4.1		20		J
	MS	1940527-01	8.0331	113.63	100.00	mg/kg		106		75 - 125	
	MSD	1940527-01	8.0331	121.39	100.00	mg/kg	6.6	113	20	75 - 125	
Copper	DUP	1940527-01	31.637	33.423		mg/kg	5.5		20		
	MS	1940527-01	31.637	127.85	100.00	mg/kg		96.2		75 - 125	
	MSD	1940527-01	31.637	137.41	100.00	mg/kg	7.2	106	20	75 - 125	
_ead	DUP	1940527-01	8.4749	9.7263		mg/kg	13.8		20		J
	MS	1940527-01	8.4749	108.03	100.00	mg/kg		99.6		75 - 125	
	MSD	1940527-01	8.4749	116.33	100.00	mg/kg	7.4	108	20	75 - 125	
Molybdenum	DUP	1940527-01	1.3819	ND		mg/kg			20		
	MS	1940527-01	1.3819	85.921	100.00	mg/kg		84.5		75 - 125	
	MSD	1940527-01	1.3819	93.399	100.00	mg/kg	8.3	92.0	20	75 - 125	
Nickel	DUP	1940527-01	20.945	21.824		mg/kg	4.1		20		
	MS	1940527-01	20.945	121.67	100.00	mg/kg		101		75 - 125	
	MSD	1940527-01	20.945	130.54	100.00	mg/kg	7.0	110	20	75 - 125	
Selenium	DUP	1940527-01	ND	ND		mg/kg			20		
	MS	1940527-01	ND	18.432	20.000	mg/kg		92.2		75 - 125	
	MSD	1940527-01	ND	18.562	20.000	mg/kg	0.7	92.8	20	75 - 125	
Silver	DUP	1940527-01	ND	ND		mg/kg			20		
	MS	1940527-01	ND	9.9776	10.000	mg/kg		99.8		75 - 125	
	MSD	1940527-01	ND	10.820	10.000	mg/kg	8.1	108	20	75 - 125	

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Report ID: 1000979311



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:12/24/201911:52Project:Soil SampleProject Number:214-078 Camarillo Reclained Water Res.Project Manager:Nick Simon

# **Total Concentrations (TTLC)**

#### **Quality Control Report - Precision & Accuracy**

								Cont	rol Limits	
	Source	Source		Spike			Percent		Percent	Lab
Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
Use	d client samp	le: N								
DUP	1940527-01	ND	ND		mg/kg			20		
MS	1940527-01	ND	102.19	100.00	mg/kg		102		75 - 125	
MSD	1940527-01	ND	107.55	100.00	mg/kg	5.1	108	20	75 - 125	
DUP	1940527-01	49.403	52.158		mg/kg	5.4		20		
MS	1940527-01	49.403	146.63	100.00	mg/kg		97.2		75 - 125	
MSD	1940527-01	49.403	155.94	100.00	mg/kg	6.2	107	20	75 - 125	
DUP	1940527-01	108.24	116.90		mg/kg	7.7		20		
MS	1940527-01	108.24	202.99	100.00	mg/kg		94.8		75 - 125	
MSD	1940527-01	108.24	213.96	100.00	mg/kg	5.3	106	20	75 - 125	
Use	d client samp	le: N								
<b>D</b> UP	1942598-01	ND	ND		mg/kg			20		
MS	1942598-01	ND	0.70794	0.79365	mg/kg		89.2		80 - 120	
MSD	1942598-01	ND	0.71111	0.79365	mg/kg	0.4	89.6	20	80 - 120	
	Used DUP MS MSD DUP MS MSD DUP MS MSD USed DUP MS	Type         Sample ID           USe         client samp           DUP         1940527-01           MS         1940527-01           MSD         1940527-01           DUP         1940527-01           MS         1940527-01           MS         1940527-01           MSD         1942598-01           MS         1942598-01	Type         Sample ID         Result           USed Client sample: N         ND           DUP         1940527-01         ND           MS         1940527-01         ND           MSD         1940527-01         ND           DUP         1940527-01         49.403           MS         1940527-01         49.403           MSD         1940527-01         49.403           MSD         1940527-01         108.24           MSD         1940527-01         ND           MSD         1940527-01         ND	Type         Sample ID         Result         Result           Used client sample: N         ND         ND           DUP         1940527-01         ND         102.19           MS         1940527-01         ND         102.19           MSD         1940527-01         49.403         52.158           DUP         1940527-01         49.403         146.63           MSD         1940527-01         49.403         155.94           DUP         1940527-01         108.24         116.90           MSD         1940527-01         108.24         202.99           MSD         1940527-01         108.24         213.96           Used client sample: N         DUP         1942598-01         ND         ND           MS         1942598-01         ND         ND         ND	Type         Sample ID         Result         Result         Added           Used client sample: N         ND         ND         ND           DUP         1940527-01         ND         102.19         100.00           MS         1940527-01         ND         107.55         100.00           MSD         1940527-01         49.403         52.158         100.00           DUP         1940527-01         49.403         155.94         100.00           MSD         1940527-01         49.403         155.94         100.00           MSD         1940527-01         108.24         116.90         100.00           MS         1940527-01         108.24         202.99         100.00           MS         1940527-01         108.24         213.96         100.00           MSD         1940527-01         108.24         213.96         100.00           MSD         1940527-01         108.24         213.96         100.00           MSD         1942598-01         ND         ND         ND           MS         1942598-01         ND         0.70794         0.79365	Type         Sample ID         Result         Result         Added         Units           Used client sample: N         ND         ND         mg/kg           MS         1940527-01         ND         102.19         100.00         mg/kg           MSD         1940527-01         ND         107.55         100.00         mg/kg           DUP         1940527-01         49.403         52.158         mg/kg           MS         1940527-01         49.403         146.63         100.00         mg/kg           MS         1940527-01         49.403         155.94         100.00         mg/kg           MSD         1940527-01         108.24         116.90         mg/kg           MS         1940527-01         108.24         202.99         100.00         mg/kg           MS         1940527-01         108.24         202.99         100.00         mg/kg           MS         1940527-01         108.24         202.99         100.00         mg/kg           MSD         1940527-01         108.24         213.96         100.00         mg/kg           MSD         1940527-01         ND         ND         mg/kg         100.00         mg/kg	Type         Sample ID         Result         Result         Added         Units         RPD           Used client sample: N         DUP         1940527-01         ND         ND         mg/kg           MS         1940527-01         ND         102.19         100.00         mg/kg           MSD         1940527-01         ND         107.55         100.00         mg/kg         5.1           DUP         1940527-01         49.403         52.158         mg/kg         5.4           MS         1940527-01         49.403         146.63         100.00         mg/kg         6.2           DUP         1940527-01         49.403         155.94         100.00         mg/kg         6.2           DUP         1940527-01         108.24         202.99         100.00         mg/kg         5.3           MS         1940527-01         108.24         202.99         100.00         mg/kg         5.3           MSD         1940527-01         108.24         213.96         100.00         mg/kg         5.3           MSD         1940527-01         108.24         213.96         100.00         mg/kg         5.3           USE         client sample: N         mg/kg	Type         Sample ID         Result         Result         Added         Units         RPD         Recovery           Used client sample: N          ND         mg/kg            1940527-01         ND         ND         mg/kg         102           MS         1940527-01         ND         102.19         100.00         mg/kg         5.1         108           DUP         1940527-01         ND         107.55         100.00         mg/kg         5.1         108           DUP         1940527-01         49.403         52.158         mg/kg         5.4         97.2           MS         1940527-01         49.403         155.94         100.00         mg/kg         6.2         107           DUP         1940527-01         49.403         155.94         100.00         mg/kg         6.2         107           DUP         1940527-01         108.24         202.99         100.00         mg/kg         94.8           MSD         1940527-01         108.24         202.99         100.00         mg/kg         5.3         106           Used client sample: N	Source Type         Source Sample ID         Source Result         Spike Result         Units         Percent RPD         Percent Recovery         RPD           Us= DUP         1940527-01         ND         ND         mg/kg         0         20           MS         1940527-01         ND         102.19         100.00         mg/kg         102         20           MSD         1940527-01         ND         107.55         100.00         mg/kg         5.1         108         20           DUP         1940527-01         49.403         52.158         mg/kg         5.4         20           MS         1940527-01         49.403         146.63         100.00         mg/kg         6.2         107         20           MSD         1940527-01         49.403         155.94         100.00         mg/kg         6.2         107         20           MSD         1940527-01         108.24         202.99         100.00         mg/kg         5.3         106         20           MSD         1940527-01         108.24         202.99         100.00         mg/kg         5.3         106         20           MSD         1940527-01         108.24         213.96         100	TypeSample IDResultResultAddedUnitsRPDRecoveryRPDRecoveryRPDRecoveryUsed client sample:NDUP1940527-01NDNDmg/kg10220MS1940527-01ND102.19100.00mg/kg10275 - 125MSD1940527-01ND107.55100.00mg/kg5.11082075 - 125DUP1940527-0149.40352.158mg/kg5.42075 - 125MSD1940527-0149.403146.63100.00mg/kg97.275 - 125MSD1940527-0149.403155.94100.00mg/kg6.21072075 - 125MSD1940527-01108.24116.90mg/kg7.72075 - 125MS1940527-01108.24202.99100.00mg/kg94.875 - 125MSD1940527-01108.24213.96100.00mg/kg5.31062075 - 125MSD1940527-01108.24213.96100.00mg/kg5.31062075 - 125MSD1940527-01108.24213.96100.00mg/kg5.32075 - 125MSD1940527-01108.24213.96100.00mg/kg5.31062075 - 125MSD1940527-01108.24213.96100.00mg/kg5.31062075 - 125MSD1940527-01 <td< td=""></td<>

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Environmental Testing Laboratory Since 1949

Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

# Reported:12/24/201911:52Project:Soil SampleProject Number:214-078 Camarillo Reclained Water Res.Project Manager:Nick Simon

#### Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected
PQL	Practical Quantitation Limit
A01	Detection and quantitation limits are raised due to sample dilution.
A02	The difference between duplicate readings is less than the quantitation limit.
A10	Detection and quantitation limits were raised due to matrix interference.
Q03	Matrix spike recovery(s) was(were) not within the control limits.
S08	The internal standard on the sample was not within the control limits.
S09	The surrogate recovery for this compound was not within the control limits.
V01	The Initial Calibration Verification (ICV) recovery is not within established control limits.
Z1	Internal Standard low due to matrix interferance. Interferance verified through second analysis.

APPENDIX D - RESULTS OF GROUNDWATER QUALITY SCREENING



Date of Report: 01/23/2020

Nick Simon

Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

**Client Project:** 219-078 Camarillo Recycled Water Reservoir **BCL Project:** 2000241 BCL Work Order: B369330 Invoice ID:

Enclosed are the results of analyses for samples received by the laboratory on 1/3/2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Felicia Johna

Contact Person: Felicia Johnson **Client Service Rep** 

Stuart Buttram **Technical Director** 

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101



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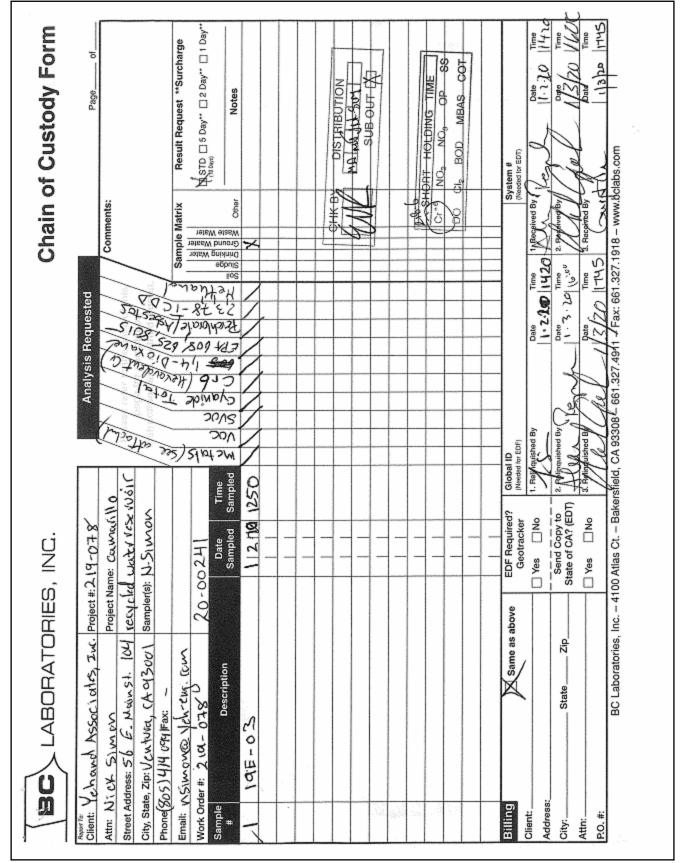
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Chain of Custody and Cooler Receipt Form for 2000241 Page 2 of 7

DISCHARGE OF GROUNDWATER FROM CONSTRUCTION AND PROJECT DEWATERING TO SURFACE WATERS ORDER NO. R4-2018-0125 NPDES NO. CAG994004

#### ATTACHMENT E - SCREENING LEVELS FOR GENERAL PERMITS

(Screening to be conducted on untreated groundwater sample prior to issuance of permit)

DOLLUTANT	MUN <sup>(a)</sup>	Others <sup>(b)</sup>	Minimum Levels
POLLUTANT	(µg/L)	(µg/L)	(µg/L)
METALS <sup>1</sup>			
Antimony (Sb)	6	14	5
Arsenic (As)	10	36	10
Beryllium (Be)	4	NA	0.5
Cadmium (Cd)	2.3	2.2 (9.3) <sup>2</sup>	0.5
Chromium III (Cr3+)	50	180	10
Chromium VI (Cr8+)	11	11	5
Copper (Cu)	9.0	9.0 (3.1) <sup>2</sup>	0.5
Cyanide (CN)	5.2	5.2 (NA) <sup>2</sup>	5
Lead (Pb)	2.5	25 (8.1) <sup>2</sup>	0.5
Mercury (Hg)	0.050	0.051	0.2
Nickel (Ni)	52	52 (8.2) <sup>2</sup>	1
Selenium (Se)	5	5 (71) <sup>2</sup>	2
Silver (Ag)	3.4	3.4 (1.9) <sup>2</sup>	0.25
Thallium (Ti)	1.7	6.3	1
Zinc (Zn)	120	120 (81) <sup>2</sup>	1
VOLATILE ORGANICS			
1,1 Dichloroethane	5	5	0.5
1,1 Dichloroethene	0.057	3.2	0.5
1,1,1 Trichloroethane	200	200	2
1,1,2 Trichloroethane	0.60	42	0.5
1,1,2,2 Tetrachloroethane	0.17	1	0.5
1,2 Dichlorobenzene	600	600	0.5
1,2 Dichloroethane	0.38	99	0.5
1,2 Dichloropropane	0.52	39	0.5
1,2-Trans Dichloroethylene	10	10	1
1,3 Dichlorobenzene	400	2600	2
1,3 Dichloropropylene	0.5	0.5	0.5
1,4 Dichlorobenzene	5	0.5	0.5
2-Chloroethyl vinyl ether	na	na	1
Acetone	700	700	na
Acrolein	100	100	5
Acrylonitrile	0.059	0.66	2.0
Benzene	1.0	1	0.5

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#### Chain of Custody and Cooler Receipt Form for 2000241 Page 3 of 7

DISCHARGE OF GROUNDWATER FROM CONSTRUCTION AND PROJECT DEWATERING TO SURFACE WATERS ORDER NO. R4-2018-0125 NPDES NO. CAG994004

POLLUTANT	MUN <sup>(a)</sup>	Others <sup>(b)</sup>	Minimum Levels
	(µg/L)	(µg/L)	(µg/L)
Bromoform	4.3	360	0.5
Carbon Tetrachloride	0.25	0.5	0.5
Chlorobenzene	30	21000	2
Chlorodibromo-methane	0.401	34	0.5
Chloroethane	100	100	2
Chloroform	100	100	2
Dichlorobromo-methane	0.56	46	0.5
Ethylbenzene	700	700	2
Ethylene Dibromide	0.05	0.05	na
Methyl Bromide	10	4000	2.0
Methyl Chloride	3	3	0.5
Methyl ethyl ketone	700	700	na
Methyl tertiary butyl ether (MTBE)	5	5	na
Methylene Chloride	. 4.7	1600	0.5
Tetrachloroethylene	0.8	8.85	0.5
Toluene	150	150	2
Trichloroethylene	2.7	5	0.5
Vinyl Chloride	0.5	0.5	0.5
Xylenes	1750	1750	na
SEMI-VOLATILE ORGANICS			
1,2 Diphenylhydrazine	0.040	0.54	1
1,2,4 Trichlorobenzene	70	na	5
2 Chlorophenol	120	400	5
2,4 Dichlorophenol	93	790	5
2,4 Dimethylphenol	540	2300	2
2,4 Dinitrophenol	70	14000	5
2,4 Dinitrotoluene	0.11	9.1	5
2,4,6 Trichlorophenol	2.1	6.5	10
2,6 Dinitrotoluene	NA	NA	5
-Nitrophenol	NA	NA	10
-Chloronaphthalene	1700	4300	10
,3' Dichlorobenzidine	0.04	0.077	5
-Methyl-4-Chlorophenol	ла	na	1
-Methyl-4,6-Dinitrophenol	13	765	5
-Nitrophenol	NA	NA	5
Bromophenyl phenyl ether	NA	NA	5
-Chlorophenyl phenyl ether	NA	NA	5
cenaphthene	1200	2700	1
cenaphthylene	NA	NA	10
nthracene	9600	110000	5
enzidine	0.00012	0.00054	5
enzo (a) Anthracene	0.0044	0.049	5

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#### Chain of Custody and Cooler Receipt Form for 2000241 Page 4 of 7

#### DISCHARGE OF GROUNDWATER FROM CONSTRUCTION AND PROJECT DEWATERING TO SURFACE WATERS

ORDER NO. R4-2018-0125 NPDES NO. CAG994004

POLLUTANT	MUN <sup>(a)</sup>	Others <sup>(b)</sup>	Minimum Levels
	(µg/L)	(µg/L)	(µg/L)
Benzo (a) Pyrene	0.0044	0.049	2
Benzo (b) Fluoranthene	0.0044	0.049	10
Benzo (g,h,i) Perylene	NA	NA	5
Benzo (k) Fluoranthene	0.0044	0.049	2
Bis (2-Chloroethoxyl) methane	NA	NA	5
Bis(2-Chloroethyl) ether	0.031	1.4	1
Bis(2-Chloroisopropyl) ether	1400	170000	10
Bis(2-Ethylhexyl) phthalate	1.8	5.9	5
Butyl benzyl phthalate	3000	5200	10
Chrysene	0.0044	0.049	5
Dibenzo(a,h)-anthracene	0.0044	0.049	0.1
Diethyl phthalate	23000	120000	10
Dimethyl phthalate	313000	2900000	10
di-n-Butyl phthalate	2700	12000	10
di-n-Octyl phthalate	NA	NA	10
Fluoranthene	300	370	10
Fluorene	1300	14000	10
Hexachlorobenzene	0.00075	0.00077	1
Hexachlorobutadiene	0.44	50	1
Hexachloro-cyclopentadiene	50	17000	5
Hexachloroethane	1.9	8.9	1
Indeno(1,2,3,cd)-pyrene	0.0044	0.049	0.05
Isophorone	8.4	600	1
N-Nitrosodimethyl amine (NDMA)	0.00069	8.1	5
N-Nitroso-di-n-propyl amine	0.005	1.4	5
N-Nitrosodiphenyl amine	5.0	16	1
Naphthalene	21	NA	10
Nitrobenzene	17	1900	10
Pentachlorophenol	0.28	7.9	1
Phenanthrene	NA	NA	5
Phenol	21000	4600000	50
Pyrene	960	11000	10
PESTICIDES AND PCBs			
4,4'-DDD	0.00083	0.00084	0.05
4,4'-DDE	0.00059	0.00059	0.05
1,4'-DDT	0.00059	0.00059	0.01
Alpha-Endosulfan	0.056	0.0087	0.02
Alpha-BHC	0.0039	0.013	0.01
Aldrin	0.00013	0.00014	0.005
Beta-Endosulfan	0.056	0.0087	0.01
peta-BHC	0.014	0.046	0.005
Chlordane	0.00057	0.00059	0.1

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#### Chain of Custody and Cooler Receipt Form for 2000241 Page 5 of 7

#### DISCHARGE OF GROUNDWATER FROM CONSTRUCTION AND PROJECT DEWATERING TO SURFACE WATERS

ORDER NO. R4-2018-0125 NPDES NO. CAG994004

POLLUTANT	MUN <sup>(s)</sup>	Others <sup>(b)</sup>	Minimum Levels
	(µg/L)	(µg/L)	(µg/L)
delta-BHC	NA	NA	0.005
Dieldrin	0.00014	0.00014	0.01
Endosulfan Sulfate	110	240	0.05
Endrin	0.036	0.0023	0.01
Endrin Aldehyde	0.76	0.81	0.01
Heptachior	0.00021	0.00021	0.01
Heptachlor Epoxide	0.0001	0.00011	0.01
gamma-BHC	0.019	0.063	0.02
PCB 1016	0.00017	0.00017	0.5
PCB 1221	0.00017	0.00017	0.5
PCB 1232	0.00017	0.00017	0.5
PCB 1242	0.00017	0.00017	0.5
PCB 1248	0.00017	0.00017	0.5
PCB 1254	0.00017	0.00017	0.5
PCB 1260	0.00017	0.00017	0.5
Toxaphene	0.00073	0.00075	0.5
MISCELLANEOUS			
Asbestos (in fibers count/liter)	7000000	7000000	na
Di-isopropyl ether (DIPE)	0.8	0.8	2
1,4-Dioxane	3	3	па
Ethanol	1000	1000	1000
Ethyl tertiary butyl ether (ETBE)	2	2	2
Methanol	1000	1000	1000
Methyl tertiary butyl ether (MTBE)	5	5	na
Perchlorate	6	6	na
2,3,7,8-TCDD (Dioxin)	1.3E-08	1.3E-08	0.00001
Fertiary amyl methyl ether (TAME)	2	2	2
Fertiary butyl alcohol (TBA)	12	12	10
otal petroleum hydrocarbons	100	100	na

(a) = Applies to water with Municipal and Domestic Supply (MUN) (indicated with E or an I in the Basin Plan) beneficial uses designations.

(b) = Applies to all other receiving waters.

1 = Metals concentrations are expressed as total recoverable.

2 = Applicable to saltwater only.

Revised: 06/21/2018

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Chain of Custody and Cooler Receipt Form for 2000241 Page 6 of 7

## For Sample Receiving:

Asbestos sample was already sent to L.A. Testing.

Thanks,

Alin Repede

Ventura Office

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#### Chain of Custody and Cooler Receipt Form for 2000241 Page 7 of 7

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COC Received	ssivity: () nperature:	98	Container:	₽E °° / '	Thermon	neter ID: 2			( . / / .	G 174
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T TOTAL SULFIDE								1		
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Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

#### Reported: 01/23/2020 14:57 Project: Camarillo Recycled Water Reservoir Project Number: 219-078 Project Manager: Nick Simon

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Informati	on		
2000241-01	COC Number:		Receive Date:	01/03/2020 17:45
	Project Number:		Sampling Date:	01/02/2020 12:50
	Sampling Location:		Sample Depth:	
	Sampling Point:	19E-03	Lab Matrix:	Water
	Sampled By:		Sample Type:	Groundwater



Yeh & Associates 56 E. Main Street #104

Ventura, CA 93001

Reported: 01/23/2020 14:57

Project: Camarillo Recycled Water Reservoir

Project Number: 219-078

Project Manager: Nick Simon

# **Organochlorine Pesticides and PCB's (EPA Method 608)**

BCL Sample ID:	2000241-01	Client Sampl	e Name:	19E-03, 1/2/2020 12:50:00PM					
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Aldrin		ND	ug/L	0.0050	0.0026	EPA-608	ND		1
alpha-BHC		ND	ug/L	0.0050	0.0032	EPA-608	ND		1
beta-BHC		ND	ug/L	0.0050	0.0020	EPA-608	ND		1
delta-BHC		ND	ug/L	0.0050	0.0021	EPA-608	ND		1
gamma-BHC (Lindane)		ND	ug/L	0.0050	0.0020	EPA-608	ND		1
Chlordane (Technical)		ND	ug/L	0.50	0.036	EPA-608	ND		1
4,4'-DDD		ND	ug/L	0.0050	0.0023	EPA-608	ND		1
4,4'-DDE		ND	ug/L	0.0050	0.0022	EPA-608	ND		1
4,4'-DDT		ND	ug/L	0.0050	0.0038	EPA-608	ND		1
Dieldrin		ND	ug/L	0.0050	0.0013	EPA-608	ND		1
Endosulfan sulfate		ND	ug/L	0.0050	0.0040	EPA-608	ND		1
Endrin		ND	ug/L	0.0050	0.0020	EPA-608	ND		1
Endrin aldehyde		ND	ug/L	0.010	0.0021	EPA-608	ND		1
Heptachlor		ND	ug/L	0.0050	0.0019	EPA-608	ND		1
Heptachlor epoxide		ND	ug/L	0.0050	0.0014	EPA-608	ND		1
Toxaphene		ND	ug/L	2.0	0.050	EPA-608	ND		1
PCB-1016		ND	ug/L	0.20	0.040	EPA-608	ND		1
PCB-1221		ND	ug/L	0.20	0.075	EPA-608	ND		1
PCB-1232		ND	ug/L	0.20	0.055	EPA-608	ND		1
PCB-1242		ND	ug/L	0.20	0.11	EPA-608	ND		1
PCB-1248		ND	ug/L	0.20	0.13	EPA-608	ND		1
PCB-1254		ND	ug/L	0.20	0.072	EPA-608	ND		1
PCB-1260		ND	ug/L	0.20	0.11	EPA-608	ND		1

		Run QC						
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-608	01/08/20 18:00	01/09/20 17:05	HKS	GC-17	1	B066512	

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Yeh & Associates

56 E. Main Street #104 Ventura, CA 93001

Reported: 01/23/2020 14:57

Project: Camarillo Recycled Water Reservoir

Project Number: 219-078

Project Manager: Nick Simon

# Volatile Organic Analysis (EPA Method 624)

BCL Sample ID:	2000241-01	Client Sampl	e Name:	19E-03, 1	/2/2020 12	2:50:00PM			
Constituent		Booult	Unito	PQL	MDL	Method	MB	Lab	Due #
Constituent Benzene		Result ND	Units ug/L	0.50	0.055	EPA-624	Bias ND	Quals	<b>Run #</b> 1
Bromobenzene		ND	ug/L	0.50	0.083	EPA-624	ND		1
Carbon tetrachloride		ND	ug/L	0.50	0.062	EPA-624	ND		1
Chlorobenzene		ND	ug/L	0.50	0.051	EPA-624	ND		1
Chloroethane		ND	ug/L	0.50	0.072	EPA-624	ND		1
Chloroform		ND	ug/L	0.50	0.057	EPA-624	ND		1
Dibromochloromethane		ND	ug/L	0.50	0.057	EPA-624	ND		1
1,2-Dichlorobenzene		ND	ug/L	0.50	0.055	EPA-624	ND		1
1,3-Dichlorobenzene		ND	ug/L	0.50	0.066	EPA-624	ND		1
1,4-Dichlorobenzene		ND	ug/L	0.50	0.050	EPA-624	ND		1
1,1-Dichloroethane		ND	ug/L	0.50	0.068	EPA-624	ND		1
1,2-Dichloroethane		ND	ug/L	0.50	0.086	EPA-624	ND		1
1,1-Dichloroethene		ND	ug/L	0.50	0.083	EPA-624	ND		1
trans-1,2-Dichloroethene	:	ND	ug/L	0.50	0.077	EPA-624	ND		1
1,2-Dichloropropane		ND	ug/L	0.50	0.056	EPA-624	ND		1
1,3-Dichloropropane		ND	ug/L	0.50	0.050	EPA-624	ND		1
Ethylbenzene		ND	ug/L	0.50	0.056	EPA-624	ND		1
Methylene chloride		ND	ug/L	1.0	0.063	EPA-624	ND		1
Methyl t-butyl ether		ND	ug/L	0.50	0.050	EPA-624	ND		1
1,1,2,2-Tetrachloroethan	e	ND	ug/L	0.50	0.075	EPA-624	ND		1
Tetrachloroethene		ND	ug/L	0.50	0.072	EPA-624	ND		1
Toluene		ND	ug/L	0.50	0.050	EPA-624	ND		1
1,1,1-Trichloroethane		ND	ug/L	0.50	0.068	EPA-624	ND		1
1,1,2-Trichloroethane		ND	ug/L	0.50	0.054	EPA-624	ND		1
Trichloroethene		ND	ug/L	0.50	0.085	EPA-624	ND		1
Vinyl chloride		ND	ug/L	0.50	0.11	EPA-624	ND		1
Total Xylenes		ND	ug/L	0.50	0.18	EPA-624	ND		1
Acetone		ND	ug/L	10	3.2	EPA-624	ND		1
Acrolein		ND	ug/L	20	1.7	EPA-624	ND		1
Acrylonitrile		ND	ug/L	5.0	0.40	EPA-624	ND		1
t-Amyl Methyl ether		ND	ug/L	0.50	0.085	EPA-624	ND		1
t-Butyl alcohol		ND	ug/L	10	7.2	EPA-624	ND		1
2-Chloroethyl vinyl ether		ND	ug/L	10	0.20	EPA-624	ND		1

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Report ID: 1000990214

Laboratories, Inc.

Yeh & Associates 56 E. Main Street #104

Ventura, CA 93001

Reported: 01/23/2020 14:57

Project: Camarillo Recycled Water Reservoir

Project Number: 219-078

Project Manager: Nick Simon

# Volatile Organic Analysis (EPA Method 624)

BCL Sample ID:	2000241-01	Client Sampl	e Name:	19E-03, 1/2/2020 12:50:00PM					
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diisopropyl ether		ND	ug/L	0.50	0.14	EPA-624	ND		1
Ethyl t-butyl ether		ND	ug/L	0.50	0.092	EPA-624	ND		1
Methyl isobutyl ketone		ND	ug/L	10	0.83	EPA-624	ND		1
1,2-Dichloroethane-d4	(Surrogate)	99.6	%	75 - 125 (LC	L - UCL)	EPA-624			1
Toluene-d8 (Surrogate	)	97.6	%	80 - 120 (LC	L - UCL)	EPA-624			1
4-Bromofluorobenzene	e (Surrogate)	106	%	80 - 120 (LC	L - UCL)	EPA-624			1

			Run				QC
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-624	01/08/20 06:00	01/08/20 09:42	MGC	MS-V7	1	B066145

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Project: Camarillo Recycled Water Reservoir

Project Number: 219-078

Project Manager: Nick Simon

# Base Neutral and Acid Extractables Organic Analysis (EPA Method 625)

BCL Sample ID:	2000241-01	Client Sampl	19E-03, 1	/2/2020 12	2:50:00PM				
Constituent		Result	Unito	PQL	MDL	Method	MB	Lab	D #
Acenaphthene		ND	Units ug/L	2.0	0.20	EPA-625	Bias ND	Quals	<u>Run #</u> 1
Acenaphthylene		ND	ug/L	2.0	0.20	EPA-625	ND		1
Aldrin		ND	ug/L	2.0	0.23	EPA-625	ND		1
Aniline		ND	ug/L	5.0	0.28	EPA-625	ND		1
Anthracene		ND	ug/L	2.0	0.20	EPA-625	ND		1
Benzidine		ND	ug/L	20	1.6	EPA-625	ND		1
Benzo[a]anthracene		ND	ug/L	2.0	0.21	EPA-625	ND		1
Benzo[b]fluoranthene		ND	ug/L	2.0	0.24	EPA-625	ND		1
Benzo[k]fluoranthene		ND	ug/L	2.0	0.30	EPA-625	ND		1
Benzo[a]pyrene		ND	ug/L	2.0	0.20	EPA-625	ND		1
Benzo[g,h,i]perylene		ND	ug/L	2.0	0.33	EPA-625	ND		1
Benzoic acid		ND	ug/L	10	0.52	EPA-625	ND		1
Benzyl alcohol		ND	ug/L	2.0	0.20	EPA-625	ND		1
Benzyl butyl phthalate		ND	ug/L	2.0	0.20	EPA-625	ND		1
Ipha-BHC		ND	ug/L	2.0	0.20	EPA-625	ND		1
eta-BHC		ND	ug/L	2.0	0.20	EPA-625	ND		1
lelta-BHC		ND	ug/L	2.0	0.20	EPA-625	ND		1
gamma-BHC (Lindane)		ND	ug/L	2.0	0.20	EPA-625	ND		1
ois(2-Chloroethoxy)metha	ne	ND	ug/L	2.0	0.20	EPA-625	ND		1
ois(2-Chloroethyl) ether		ND	ug/L	2.0	0.31	EPA-625	ND		1
ois(2-Chloroisopropyl)ethe	r	ND	ug/L	2.0	0.20	EPA-625	ND		1
bis(2-Ethylhexyl)phthalate		ND	ug/L	5.0	0.20	EPA-625	ND		1
I-Bromophenyl phenyl eth	er	ND	ug/L	2.0	0.20	EPA-625	ND		1
1-Chloroaniline		ND	ug/L	2.0	1.1	EPA-625	ND		1
2-Chloronaphthalene		ND	ug/L	2.0	0.20	EPA-625	ND		1
I-Chlorophenyl phenyl eth	er	ND	ug/L	2.0	0.20	EPA-625	ND		1
Chrysene		ND	ug/L	2.0	0.20	EPA-625	ND		1
1,4'-DDD		ND	ug/L	2.0	0.26	EPA-625	ND		1
,4'-DDE		ND	ug/L	3.0	0.24	EPA-625	ND		1
I,4'-DDT		ND	ug/L	2.0	0.22	EPA-625	ND		1
Dibenzo[a,h]anthracene		ND	ug/L	3.0	0.34	EPA-625	ND		1
Dibenzofuran		ND	ug/L	2.0	0.20	EPA-625	ND		1
1,2-Dichlorobenzene		ND	ug/L	2.0	0.20	EPA-625	ND		1

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Report ID: 1000990214

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Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported: 01/23/2020 14:57

Project: Camarillo Recycled Water Reservoir

Project Number: 219-078

Project Manager: Nick Simon

# Base Neutral and Acid Extractables Organic Analysis (EPA Method 625)

BCL Sample ID:	2000241-01	Client Sampl	e Name:	19E-03, 1	/2/2020 12	2:50:00PM			
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,3-Dichlorobenzene		ND	ug/L	2.0	0.20	EPA-625	ND	Quais	1
1,4-Dichlorobenzene		ND	ug/L	2.0	0.27	EPA-625	ND		1
3,3-Dichlorobenzidine		ND	ug/L	10	0.53	EPA-625	ND		1
Dieldrin		ND	ug/L	3.0	0.39	EPA-625	ND		1
Diethyl phthalate		ND	ug/L	2.0	0.20	EPA-625	ND		1
Dimethyl phthalate		ND	ug/L	2.0	0.20	EPA-625	ND		1
Di-n-butyl phthalate		ND	ug/L	2.0	0.20	EPA-625	ND		1
2,4-Dinitrotoluene		ND	ug/L	2.0	0.40	EPA-625	ND		1
2,6-Dinitrotoluene		ND	ug/L	2.0	0.20	EPA-625	ND		1
Di-n-octyl phthalate		ND	ug/L	2.0	0.21	EPA-625	ND		1
1,2-Diphenylhydrazine		ND	ug/L	2.0	0.20	EPA-625	ND		1
Endosulfan I		ND	ug/L	10	0.31	EPA-625	ND		1
Endosulfan II		ND	ug/L	10	0.30	EPA-625	ND		1
Endosulfan sulfate		ND	ug/L	3.0	0.23	EPA-625	ND		1
Endrin		ND	ug/L	2.0	0.38	EPA-625	ND		1
Endrin aldehyde		ND	ug/L	10	0.44	EPA-625	ND		1
Fluoranthene		ND	ug/L	2.0	0.28	EPA-625	ND		1
Fluorene		ND	ug/L	2.0	0.20	EPA-625	ND		1
Heptachlor		ND	ug/L	2.0	0.20	EPA-625	ND		1
Heptachlor epoxide		ND	ug/L	2.0	0.26	EPA-625	ND		1
Hexachlorobenzene		ND	ug/L	2.0	0.25	EPA-625	ND		1
Hexachlorobutadiene		ND	ug/L	2.0	0.20	EPA-625	ND		1
Hexachlorocyclopentadier	ie	ND	ug/L	2.0	0.31	EPA-625	ND		1
Hexachloroethane		ND	ug/L	2.0	0.20	EPA-625	ND		1
Indeno[1,2,3-cd]pyrene		ND	ug/L	2.0	0.29	EPA-625	ND		1
Isophorone		ND	ug/L	2.0	0.20	EPA-625	ND		1
2-Methylnaphthalene		ND	ug/L	2.0	0.20	EPA-625	ND		1
Naphthalene		ND	ug/L	2.0	0.20	EPA-625	ND		1
2-Naphthylamine		ND	ug/L	20	1.3	EPA-625	ND		1
2-Nitroaniline		ND	ug/L	2.0	0.20	EPA-625	ND		1
3-Nitroaniline		ND	ug/L	2.0	0.22	EPA-625	ND		1
4-Nitroaniline		ND	ug/L	5.0	0.38	EPA-625	ND		1
Nitrobenzene		ND	ug/L	2.0	0.20	EPA-625	ND		1

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Report ID: 1000990214

Laboratories, Inc.

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Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

Reported: 01/23/2020 14:57

Project: Camarillo Recycled Water Reservoir

Project Number: 219-078

Project Manager: Nick Simon

## Base Neutral and Acid Extractables Organic Analysis (EPA Method 625)

BCL Sample ID:	2000241-01	Client Sampl	e Name:	19E-03, 1	/2/2020 1	2:50:00PM			
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
N-Nitrosodimethylamine	2	ND	ug/L	2.0	1.2	EPA-625	ND		1
N-Nitrosodi-N-propylam	ine	ND	ug/L	2.0	0.21	EPA-625	ND		1
N-Nitrosodiphenylamine	)	ND	ug/L	2.0	0.20	EPA-625	ND		1
Phenanthrene		ND	ug/L	2.0	0.20	EPA-625	ND		1
Pyrene		ND	ug/L	2.0	0.22	EPA-625	ND		1
1,2,4-Trichlorobenzene		ND	ug/L	2.0	0.20	EPA-625	ND		1
4-Chloro-3-methylpheno	bl	ND	ug/L	5.0	0.20	EPA-625	ND		1
2-Chlorophenol		ND	ug/L	2.0	0.20	EPA-625	ND		1
2,4-Dichlorophenol		ND	ug/L	2.0	0.23	EPA-625	ND		1
2,4-Dimethylphenol		ND	ug/L	2.0	0.20	EPA-625	ND		1
4,6-Dinitro-2-methylphe	nol	ND	ug/L	10	0.24	EPA-625	ND		1
2,4-Dinitrophenol		ND	ug/L	10	0.20	EPA-625	ND		1
2-Methylphenol		ND	ug/L	2.0	0.20	EPA-625	ND		1
3- & 4-Methylphenol		ND	ug/L	2.0	0.40	EPA-625	ND		1
2-Nitrophenol		ND	ug/L	2.0	0.20	EPA-625	ND		1
4-Nitrophenol		ND	ug/L	2.0	0.30	EPA-625	ND		1
Pentachlorophenol		ND	ug/L	10	0.40	EPA-625	ND		1
Phenol		ND	ug/L	2.0	0.21	EPA-625	ND		1
2,4,5-Trichlorophenol		ND	ug/L	5.0	0.20	EPA-625	ND		1
2,4,6-Trichlorophenol		ND	ug/L	5.0	0.20	EPA-625	ND		1
2-Fluorophenol (Surrog	ate)	61.7	%	30 - 120 (LC	CL - UCL)	EPA-625			1
Phenol-d5 (Surrogate)		49.4	%	12 - 110 (LC	L - UCL)	EPA-625			1
Nitrobenzene-d5 (Surro	gate)	82.5	%	50 - 130 (LC	CL - UCL)	EPA-625			1
2-Fluorobiphenyl (Surro	gate)	87.6	%	55 - 125 (LC	CL - UCL)	EPA-625			1
2,4,6-Tribromophenol (	Surrogate)	91.7	%	40 - 150 (LC	CL - UCL)	EPA-625			1
p-Terphenyl-d14 (Surrog	gate)	77.4	%	40 - 150 (LC	CL - UCL)	EPA-625			1

			Run					
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-625	01/08/20 08:00	01/09/20 11:46	MK1	MS-B2	0.990	B066597	

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Laboratories, Inc.

Yeh & Associates 56 E. Main Street #104

Ventura, CA 93001

Reported: 01/23/2020 14:57

Project: Camarillo Recycled Water Reservoir

Project Number: 219-078

Project Manager: Nick Simon

## Solvent Scan (EPA Method 8015B)

BCL Sample ID:	19E-03, 1	/2/2020 12	2:50:00PM						
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Ethanol		ND	ug/L	500	97	EPA-8015B	ND		1
Methanol		ND	ug/L	500	360	EPA-8015B	ND		1
2-Chloroacrylonitrile (S	Surrogate)	89.6	%	60 - 140 (LC	L - UCL)	EPA-8015B			1

			Run					
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8015B	01/07/20 05:30	01/07/20 09:57	BUP	GC-12	1	B066147	

Laboratories, Inc.

Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported: 01/23/2020 14:57

Project: Camarillo Recycled Water Reservoir

Project Number: 219-078

Project Manager: Nick Simon

# 1,4-Dioxane (EPA Method 8270C)

BCL Sample ID:	2000241-01	Client Sampl	e Name:	19E-03, 1	/2/2020 1	2:50:00PM			
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
1,4-Dioxane		ND	ug/L	1.0	0.16	EPA-8270C	ND		1
Naphthalene-d8 (Surro	ogate)	84.4	%	70 - 130 (LC	CL - UCL)	EPA-8270C			1

			Run					
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	EPA-8270C	01/08/20 10:15	01/08/20 18:14	OLH	MS-B4	0.960	B066607	



Yeh & Associates 56 E. Main Street #104

Ventura, CA 93001

Reported: 01/23/2020 14:57

Project: Camarillo Recycled Water Reservoir Project Number: 219-078

Project Manager: Nick Simon

### **Total Petroleum Hydrocarbons**

BCL Sample ID:	2000241-01	Client Sample	e Name:	19E-03, 1	/2/2020 12	2:50:00PM			
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
TPH - Light Naptha		ND	ug/L	100	40	EPA-8015B/FFP	ND		1
TPH - Aviation Gas		ND	ug/L	100	40	EPA-8015B/FFP	ND		1
TPH - Stoddard Solvent		ND	ug/L	40	20	EPA-8015B/FFP	ND		1
TPH - Heavy Naptha		ND	ug/L	40	20	EPA-8015B/FFP	ND		1
TPH - Gasoline		ND	ug/L	100	40	EPA-8015B/FFP	ND		1
TPH - Jet Fuel (JP4)		ND	ug/L	40	20	EPA-8015B/FFP	ND		1
TPH - Jet Fuel (JP5)		ND	ug/L	40	26	EPA-8015B/FFP	ND		1
TPH - Jet Fuel (JP6)		ND	ug/L	40	20	EPA-8015B/FFP	ND		1
TPH - Jet Fuel (JP8)		ND	ug/L	40	20	EPA-8015B/FFP	ND		1
TPH - Kerosene		ND	ug/L	40	11	EPA-8015B/FFP	ND		1
TPH - Diesel (FFP)		ND	ug/L	40	11	EPA-8015B/FFP	ND		1
TPH - Fuel Oil		ND	ug/L	100	40	EPA-8015B/FFP	ND		1
TPH - Fuel Oil #6		ND	ug/L	40	20	EPA-8015B/FFP	ND		1
TPH - Crude Oil		ND	ug/L	100	28	EPA-8015B/FFP	ND		1
TPH - Hydraulic Oil / Motor	Oil	ND	ug/L	100	26	EPA-8015B/FFP	ND		1
TPH - Waste Oil		ND	ug/L	100	40	EPA-8015B/FFP	ND		1
TPH - WD-40		ND	ug/L	40	20	EPA-8015B/FFP	ND		1
TPH - Mineral Oil		ND	ug/L	200	100	EPA-8015B/FFP	ND		1
TPH - Mineral Spirit		ND	ug/L	40	20	EPA-8015B/FFP	ND		1
TPH - Motor Oil		ND	ug/L	100	26	EPA-8015B/FFP	ND		1
TPH - Lube Oil		ND	ug/L	100	40	EPA-8015B/FFP	ND		1
TPH - Olive Oil		ND	ug/L	100	40	EPA-8015B/FFP	ND		1
TPH - Diluent		ND	ug/L	100	40	EPA-8015B/FFP	ND		1
Tetracosane (Surrogate)		84.7	%	37 - 134 (LC	L - UCL)	EPA-8015B/FFP			1

		Run			QC		
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-8015B/FFP	01/08/20 16:45	01/09/20 09:11	BUP	GC-13	0.980	B066490

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Ventura, CA 93001

Reported: 01/23/2020 14:57

Project: Camarillo Recycled Water Reservoir

Project Number: 219-078

Project Manager: Nick Simon

# Water Analysis (General Chemistry)

BCL Sample ID:	2000241-01	Client Sampl	e Name:	19E-03, 1	/2/2020 12	2:50:00PM			
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Trivalent Chromium		ND	ug/L	10	5.0	Calc	ND		1
Total Cyanide		0.0018	mg/L	0.0050	0.0017	EPA-335.4	ND	J	2
Perchlorate		ND	ug/L	4.0	0.76	EPA-314.0	ND		3

			Run				QC	
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID	
1	Calc	01/06/20 12:01	01/08/20 17:01	AMM	Calc	1	B^A0024	
2	EPA-335.4	01/07/20 08:37	01/07/20 13:11	MC1	KONE-1	1	B066157	
3	EPA-314.0	01/06/20 16:00	01/07/20 03:14	SAV	IC6	1	B066110	



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Reported: 01/23/2020 14:57

Project: Camarillo Recycled Water Reservoir Project Number: 219-078

Project Manager: Nick Simon

# Metals Analysis

BCL Sample ID:	2000241-01	Client Sampl	e Name:	19E-03, 1	/2/2020 12	2:50:00PM			
Constituent		Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromiun	1	ND	ug/L	0.20	0.032	EPA-218.6	ND		1
Total Recoverable Ar	ntimony	0.54	ug/L	2.0	0.11	EPA-200.8	ND	J	2
Total Recoverable Ar	senic	11	ug/L	2.0	0.70	EPA-200.8	ND		3
Total Recoverable Be	ryllium	ND	ug/L	1.0	0.14	EPA-200.8	ND		2
Total Recoverable Ca	admium	0.29	ug/L	1.0	0.11	EPA-200.8	ND	J	2
Total Recoverable Cl	nromium	1.4	ug/L	3.0	0.50	EPA-200.8	ND	J	2
Total Recoverable Co	opper	4.5	ug/L	2.0	0.22	EPA-200.8	ND		2
Total Recoverable Le	ad	0.30	ug/L	1.0	0.10	EPA-200.8	ND	J	2
Total Recoverable Me	ercury	ND	ug/L	0.20	0.041	EPA-245.1	ND		4
Total Recoverable Ni	ckel	15	ug/L	2.0	0.19	EPA-200.8	ND		3
Total Recoverable Se	elenium	3.0	ug/L	2.0	0.19	EPA-200.8	ND		2
Total Recoverable Silv	ver	ND	ug/L	1.0	0.10	EPA-200.8	ND		2
Total Recoverable The	allium	ND	ug/L	1.0	0.10	EPA-200.8	ND		2
Total Recoverable Zi	nc	5.6	ug/L	10	1.7	EPA-200.8	1.7	J	2

			Run				QC
Run #	Method	Prep Date	Date/Time	Analyst	Instrument	Dilution	Batch ID
1	EPA-218.6	01/03/20 18:00	01/03/20 20:50	CMM	IC-4	1	B066063
2	EPA-200.8	01/07/20 12:55	01/07/20 21:44	ARD	PE-EL2	1	B066203
3	EPA-200.8	01/07/20 12:55	01/08/20 08:19	JNC	PE-EL2	1	B066203
4	EPA-245.1	01/09/20 08:10	01/09/20 15:09	ТМТ	CETAC3	1	B066358

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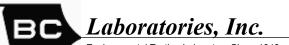


Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:01/23/202014:57Project:Camarillo Recycled Water ReservoirProject Number:219-078Project Manager:Nick Simon

# **Organochlorine Pesticides and PCB's (EPA Method 608)**

#### **Quality Control Report - Method Blank Analysis**

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B066512						
Aldrin	B066512-BLK1	ND	ug/L	0.0050	0.0026	
alpha-BHC	B066512-BLK1	ND	ug/L	0.0050	0.0032	
beta-BHC	B066512-BLK1	ND	ug/L	0.0050	0.0020	
delta-BHC	B066512-BLK1	ND	ug/L	0.0050	0.0021	
gamma-BHC (Lindane)	B066512-BLK1	ND	ug/L	0.0050	0.0020	
Chlordane (Technical)	B066512-BLK1	ND	ug/L	0.50	0.036	
4,4'-DDD	B066512-BLK1	ND	ug/L	0.0050	0.0023	
4,4'-DDE	B066512-BLK1	ND	ug/L	0.0050	0.0022	
4,4'-DDT	B066512-BLK1	ND	ug/L	0.0050	0.0038	
Dieldrin	B066512-BLK1	ND	ug/L	0.0050	0.0013	
Endosulfan sulfate	B066512-BLK1	ND	ug/L	0.0050	0.0040	
Endrin	B066512-BLK1	ND	ug/L	0.0050	0.0020	
Endrin aldehyde	B066512-BLK1	ND	ug/L	0.010	0.0021	
Heptachlor	B066512-BLK1	ND	ug/L	0.0050	0.0019	
Heptachlor epoxide	B066512-BLK1	ND	ug/L	0.0050	0.0014	
Toxaphene	B066512-BLK1	ND	ug/L	2.0	0.050	
PCB-1016	B066512-BLK1	ND	ug/L	0.20	0.040	
PCB-1221	B066512-BLK1	ND	ug/L	0.20	0.075	
PCB-1232	B066512-BLK1	ND	ug/L	0.20	0.055	
PCB-1242	B066512-BLK1	ND	ug/L	0.20	0.11	
PCB-1248	B066512-BLK1	ND	ug/L	0.20	0.13	
PCB-1254	B066512-BLK1	ND	ug/L	0.20	0.072	
 PCB-1260	B066512-BLK1	ND	ug/L	0.20	0.11	



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:01/23/2020 14:57Project:Camarillo Recycled Water ReservoirProject Number:219-078Project Manager:Nick Simon

# **Organochlorine Pesticides and PCB's (EPA Method 608)**

#### **Quality Control Report - Laboratory Control Sample**

								Control Limits			
				Spike		Percent		Percent		Lab	
Constituent	QC Sample ID	Туре	Result	Level	Units	Recovery	RPD	Recovery	RPD	Quals	
QC Batch ID: B066512											
Aldrin	B066512-BS1	LCS	0.15170	0.15000	ug/L	101		50 - 130			
gamma-BHC (Lindane)	B066512-BS1	LCS	0.15629	0.15000	ug/L	104		60 - 130			
4,4'-DDT	B066512-BS1	LCS	0.20055	0.15000	ug/L	134		60 - 130		L01	
Dieldrin	B066512-BS1	LCS	0.15562	0.15000	ug/L	104		60 - 130			
Endrin	B066512-BS1	LCS	0.15327	0.15000	ug/L	102		60 - 130			
Heptachlor	B066512-BS1	LCS	0.16241	0.15000	ug/L	108		60 - 130			



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:01/23/202014:57Project:Camarillo Recycled Water ReservoirProject Number:219-078Project Manager:Nick Simon

# **Organochlorine Pesticides and PCB's (EPA Method 608)**

#### **Quality Control Report - Precision & Accuracy**

								Control Limits			
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: B066512	Use	d client samp	ole: N								
Aldrin	MS	1941859-90	ND	0.15161	0.15000	ug/L		101		50 - 130	
	MSD	1941859-90	ND	0.15491	0.15000	ug/L	2.2	103	30	50 - 130	
gamma-BHC (Lindane)	MS	1941859-90	ND	0.14959	0.15000	ug/L		99.7		60 - 130	
	MSD	1941859-90	ND	0.15715	0.15000	ug/L	4.9	105	30	60 - 130	
4,4'-DDT	MS	1941859-90	ND	0.20231	0.15000	ug/L		135		60 - 130	Q03
	MSD	1941859-90	ND	0.20975	0.15000	ug/L	3.6	140	30	60 - 130	Q03
Dieldrin	MS	1941859-90	ND	0.15602	0.15000	ug/L		104		60 - 130	
	MSD	1941859-90	ND	0.15781	0.15000	ug/L	1.1	105	30	60 - 130	
Endrin	MS	1941859-90	ND	0.15402	0.15000	ug/L		103		60 - 130	
	MSD	1941859-90	ND	0.15614	0.15000	ug/L	1.4	104	30	60 - 130	
Heptachlor	MS	1941859-90	ND	0.16354	0.15000	ug/L		109		50 - 130	
	MSD	1941859-90	ND	0.16801	0.15000	ug/L	2.7	112	30	50 - 130	



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

Reported: 01/23/2020 14:57 Project: Camarillo Recycled Water Reservoir Project Number: 219-078 Project Manager: Nick Simon

# Volatile Organic Analysis (EPA Method 624)

#### **Quality Control Report - Method Blank Analysis**

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B066145						
Benzene	B066145-BLK1	ND	ug/L	0.50	0.055	
Bromobenzene	B066145-BLK1	ND	ug/L	0.50	0.083	
Carbon tetrachloride	B066145-BLK1	ND	ug/L	0.50	0.062	
Chlorobenzene	B066145-BLK1	ND	ug/L	0.50	0.051	
Chloroethane	B066145-BLK1	ND	ug/L	0.50	0.072	
Chloroform	B066145-BLK1	ND	ug/L	0.50	0.057	
Dibromochloromethane	B066145-BLK1	ND	ug/L	0.50	0.057	
1,2-Dichlorobenzene	B066145-BLK1	ND	ug/L	0.50	0.055	
1,3-Dichlorobenzene	B066145-BLK1	ND	ug/L	0.50	0.066	
1,4-Dichlorobenzene	B066145-BLK1	ND	ug/L	0.50	0.050	
1,1-Dichloroethane	B066145-BLK1	ND	ug/L	0.50	0.068	
1,2-Dichloroethane	B066145-BLK1	ND	ug/L	0.50	0.086	
1,1-Dichloroethene	B066145-BLK1	ND	ug/L	0.50	0.083	
trans-1,2-Dichloroethene	B066145-BLK1	ND	ug/L	0.50	0.077	
1,2-Dichloropropane	B066145-BLK1	ND	ug/L	0.50	0.056	
1,3-Dichloropropane	B066145-BLK1	ND	ug/L	0.50	0.050	
Ethylbenzene	B066145-BLK1	ND	ug/L	0.50	0.056	
Methylene chloride	B066145-BLK1	ND	ug/L	1.0	0.063	
Methyl t-butyl ether	B066145-BLK1	ND	ug/L	0.50	0.050	
1,1,2,2-Tetrachloroethane	B066145-BLK1	ND	ug/L	0.50	0.075	
Tetrachloroethene	B066145-BLK1	ND	ug/L	0.50	0.072	
Toluene	B066145-BLK1	ND	ug/L	0.50	0.050	
1,1,1-Trichloroethane	B066145-BLK1	ND	ug/L	0.50	0.068	
1,1,2-Trichloroethane	B066145-BLK1	ND	ug/L	0.50	0.054	
Trichloroethene	B066145-BLK1	ND	ug/L	0.50	0.085	
Vinyl chloride	B066145-BLK1	ND	ug/L	0.50	0.11	
Total Xylenes	B066145-BLK1	ND	ug/L	0.50	0.18	
Acetone	B066145-BLK1	ND	ug/L	10	3.2	
Acrolein	B066145-BLK1	ND	ug/L	20	1.7	
Acrylonitrile	B066145-BLK1	ND	ug/L	5.0	0.40	
t-Amyl Methyl ether	B066145-BLK1	ND	ug/L	0.50	0.085	
t-Butyl alcohol	B066145-BLK1	ND	ug/L	10	7.2	
2-Chloroethyl vinyl ether	B066145-BLK1	ND	ug/L	10	0.20	
Diisopropyl ether	B066145-BLK1	ND	ug/L	0.50	0.14	

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Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

Reported: 01/23/2020 14:57 Project: Camarillo Recycled Water Reservoir Project Number: 219-078 Project Manager: Nick Simon

# Volatile Organic Analysis (EPA Method 624)

# **Quality Control Report - Method Blank Analysis**

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B066145						
Ethyl t-butyl ether	B066145-BLK1	ND	ug/L	0.50	0.092	
Methyl isobutyl ketone	B066145-BLK1	ND	ug/L	10	0.83	
1,2-Dichloroethane-d4 (Surrogate)	B066145-BLK1	97.8	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	B066145-BLK1	99.9	%	80 - 12	0 (LCL - UCL)	
4-Bromofluorobenzene (Surrogate)	B066145-BLK1	106	%	80 - 12	0 (LCL - UCL)	



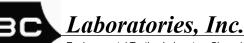
Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:01/23/202014:57Project:Camarillo Recycled Water ReservoirProject Number:219-078Project Manager:Nick Simon

# Volatile Organic Analysis (EPA Method 624)

#### **Quality Control Report - Laboratory Control Sample**

								Control Limits			
Constituent	QC Sample ID	Туре	Result	Spike Level	Units	Percent Recovery	RPD	Percent Recovery	RPD	Lab Quals	
		Type	Result	Level	onits	Recovery	INF D	Recovery	INF D	Quais	
QC Batch ID: B066145 Benzene	 B066145-BS1	LCS	23.370	25.000	ug/L	93.5		79 - 120			
Carbon tetrachloride	B066145-BS1	LCS	25.200	25.000	ug/L	101		72 - 136			
Chlorobenzene	B066145-BS1	LCS	25.300	25.000	ug/L	101		82 - 118			
Chloroethane	B066145-BS1		26.200	25.000		101		60 - 138			
		LCS			ug/L						
Chloroform	B066145-BS1	LCS	23.600	25.000	ug/L	94.4		79 - 124			
Dibromochloromethane	B066145-BS1	LCS	22.540	25.000	ug/L	90.2		74 - 126			
1,2-Dichlorobenzene	B066145-BS1	LCS	24.440	25.000	ug/L	97.8		80 - 119			
1,3-Dichlorobenzene	B066145-BS1	LCS	24.130	25.000	ug/L	96.5		80 - 119			
1,4-Dichlorobenzene	B066145-BS1	LCS	24.210	25.000	ug/L	96.8		79 - 118			
1,1-Dichloroethane	B066145-BS1	LCS	24.470	25.000	ug/L	97.9		77 - 125			
1,2-Dichloroethane	B066145-BS1	LCS	24.000	25.000	ug/L	96.0		73 - 128			
1,1-Dichloroethene	B066145-BS1	LCS	20.260	25.000	ug/L	81.0		71 - 131			
trans-1,2-Dichloroethene	B066145-BS1	LCS	21.340	25.000	ug/L	85.4		75 - 124			
1,2-Dichloropropane	B066145-BS1	LCS	23.080	25.000	ug/L	92.3		78 - 122			
Ethylbenzene	B066145-BS1	LCS	26.680	25.000	ug/L	107		79 - 121			
Methylene chloride	B066145-BS1	LCS	20.630	25.000	ug/L	82.5		74 - 124			
Methyl t-butyl ether	B066145-BS1	LCS	22.690	25.000	ug/L	90.8		71 - 124			
1,1,2,2-Tetrachloroethane	B066145-BS1	LCS	22.310	25.000	ug/L	89.2		71 - 121			
Tetrachloroethene	B066145-BS1	LCS	22.880	25.000	ug/L	91.5		74 - 129			
Toluene	B066145-BS1	LCS	24.410	25.000	ug/L	97.6		80 - 121			
1,1,1-Trichloroethane	B066145-BS1	LCS	24.560	25.000	ug/L	98.2		74 - 131			
1,1,2-Trichloroethane	B066145-BS1	LCS	21.480	25.000	ug/L	85.9		80 - 119			
Trichloroethene	B066145-BS1	LCS	23.570	25.000	ug/L	94.3		79 - 123			
Vinyl chloride	B066145-BS1	LCS	26.270	25.000	ug/L	105		58 - 137			
Total Xylenes	B066145-BS1	LCS	79.240	75.000	ug/L	106		79 - 121			
2-Chloroethyl vinyl ether	B066145-BS1	LCS	105.89	100.00	ug/L	106		51 - 139			
1,2-Dichloroethane-d4 (Surrogate)	B066145-BS1	LCS	9.8500	10.000	ug/L	98.5		75 - 125			
Toluene-d8 (Surrogate)	B066145-BS1	LCS	9.8000	10.000	ug/L	98.0		80 - 120			
4-Bromofluorobenzene (Surrogate)	B066145-BS1	LCS	10.690	10.000	ug/L	107		80 - 120			
		-			-						

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# Volatile Organic Analysis (EPA Method 624)

### **Quality Control Report - Precision & Accuracy**

									Cont	rol Limits	
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: B066145	Use	ed client samp	ole: N								
Benzene	⊥ °°° MS	2000657-01	ND	24.140	25.000	ug/L		96.6		79 - 120	
Denzene	MSD	2000657-01	ND	23.440	25.000	ug/L	2.9	93.8	30	79 - 120 79 - 120	
O ant an tata abla dal							2.0				
Carbon tetrachloride	MS	2000657-01	ND	25.940	25.000	ug/L	2.0	104	20	72 - 136	
	MSD	2000657-01	ND	25.190	25.000	ug/L	2.9	101	30	72 - 136	
Chlorobenzene	MS	2000657-01	ND	26.570	25.000	ug/L		106		82 - 118	
	MSD	2000657-01	ND	25.570	25.000	ug/L	3.8	102	30	82 - 118	
Chloroethane	MS	2000657-01	ND	27.200	25.000	ug/L		109		60 - 138	
	MSD	2000657-01	ND	26.800	25.000	ug/L	1.5	107	30	60 - 138	
Chloroform	MS	2000657-01	0.28000	24.750	25.000	ug/L		97.9		79 - 124	
	MSD	2000657-01	0.28000	24.100	25.000	ug/L	2.7	95.3	30	79 - 124	
Dibromochloromethane	MS	2000657-01	ND	23.570	25.000	ug/L		94.3		74 - 126	
	MSD	2000657-01	ND	23.130	25.000	ug/L	1.9	92.5	30	74 - 126	
1,2-Dichlorobenzene	MS	2000657-01	ND	25.570	25.000	ug/L		102		80 - 119	
1,2-Dichlorobenzene	MSD	2000657-01	ND	24.850	25.000	ug/L	2.9	99.4	30	80 - 119	
						-	2.0				
1,3-Dichlorobenzene	MS	2000657-01 2000657-01	ND	25.480	25.000	ug/L	1 1	102	20	80 - 119	
	MSD		ND	25.190	25.000	ug/L	1.1	101	30	80 - 119	
1,4-Dichlorobenzene	MS	2000657-01	ND	25.590	25.000	ug/L		102		79 - 118	
	MSD	2000657-01	ND	25.340	25.000	ug/L	1.0	101	30	79 - 118	
1,1-Dichloroethane	MS	2000657-01	ND	25.380	25.000	ug/L		102		77 - 125	
	MSD	2000657-01	ND	24.690	25.000	ug/L	2.8	98.8	30	77 - 125	
1,2-Dichloroethane	MS	2000657-01	ND	24.440	25.000	ug/L		97.8		73 - 128	
	MSD	2000657-01	ND	23.550	25.000	ug/L	3.7	94.2	30	73 - 128	
1,1-Dichloroethene	MS	2000657-01	ND	21.100	25.000	ug/L		84.4		71 - 131	
	MSD	2000657-01	ND	20.490	25.000	ug/L	2.9	82.0	30	71 - 131	
trans-1,2-Dichloroethene	MS	2000657-01	ND	22.070	25.000	ug/L		88.3		75 - 124	
	MSD	2000657-01	ND	21.430	25.000	ug/L	2.9	85.7	30	75 - 124	
1.2 Dichlerenrenene						0				78 - 122	
1,2-Dichloropropane	MS MSD	2000657-01 2000657-01	ND ND	24.100 23.580	25.000 25.000	ug/L ug/L	2.2	96.4 94.3	30	78 - 122 78 - 122	
						-	2.2		50		
Ethylbenzene	MS	2000657-01	ND	27.920	25.000	ug/L	0.4	112	00	79 - 121	
	MSD	2000657-01	ND	27.080	25.000	ug/L	3.1	108	30	79 - 121	
Methylene chloride	MS	2000657-01	ND	21.350	25.000	ug/L		85.4		74 - 124	
	MSD	2000657-01	ND	20.980	25.000	ug/L	1.7	83.9	30	74 - 124	
Methyl t-butyl ether	MS	2000657-01	ND	23.220	25.000	ug/L		92.9		71 - 124	
	MSD	2000657-01	ND	22.320	25.000	ug/L	4.0	89.3	30	71 - 124	
		2000657.01	ND	23.510	25.000			04.0		71 101	
1,1,2,2-Tetrachloroethane	MS	2000657-01	IND	23.510	25.000	ug/L		94.0		71 - 121	

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# Volatile Organic Analysis (EPA Method 624)

#### **Quality Control Report - Precision & Accuracy**

									Cont		
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: B066145	Use	ed client samp	ole: N								
Tetrachloroethene	MS	2000657-01	ND	24.020	25.000	ug/L		96.1		74 - 129	
	MSD	2000657-01	ND	23.480	25.000	ug/L	2.3	93.9	30	74 - 129	
Toluene	MS	2000657-01	ND	25.370	25.000	ug/L		101		80 - 121	
	MSD	2000657-01	ND	24.820	25.000	ug/L	2.2	99.3	30	80 - 121	
1,1,1-Trichloroethane	MS	2000657-01	ND	25.550	25.000	ug/L		102		74 - 131	
	MSD	2000657-01	ND	24.800	25.000	ug/L	3.0	99.2	30	74 - 131	
1,1,2-Trichloroethane	MS	2000657-01	ND	22.090	25.000	ug/L		88.4		80 - 119	
	MSD	2000657-01	ND	21.820	25.000	ug/L	1.2	87.3	30	80 - 119	
Trichloroethene	MS	2000657-01	ND	24.750	25.000	ug/L		99.0		79 - 123	
	MSD	2000657-01	ND	23.760	25.000	ug/L	4.1	95.0	30	79 - 123	
Vinyl chloride	MS	2000657-01	ND	26.980	25.000	ug/L		108		58 - 137	
	MSD	2000657-01	ND	26.650	25.000	ug/L	1.2	107	30	58 - 137	
Total Xylenes	MS	2000657-01	ND	82.470	75.000	ug/L		110		79 - 121	
	MSD	2000657-01	ND	79.840	75.000	ug/L	3.2	106	30	79 - 121	
2-Chloroethyl vinyl ether	MS	2000657-01	ND	104.12	100.00	ug/L		104		51 - 139	
	MSD	2000657-01	ND	96.760	100.00	ug/L	7.3	96.8	30	51 - 139	
1,2-Dichloroethane-d4 (Surrogate)	MS	2000657-01	ND	9.4200	10.000	ug/L		94.2		75 - 125	
	MSD	2000657-01	ND	9.6500	10.000	ug/L	2.4	96.5		75 - 125	
Toluene-d8 (Surrogate)	MS	2000657-01	ND	9.8900	10.000	ug/L		98.9		80 - 120	
	MSD	2000657-01	ND	9.8700	10.000	ug/L	0.2	98.7		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	2000657-01	ND	10.640	10.000	ug/L		106		80 - 120	
	MSD	2000657-01	ND	10.710	10.000	ug/L	0.7	107		80 - 120	

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Laboratories, Inc.

Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

# Reported:01/23/202014:57Project:Camarillo Recycled Water ReservoirProject Number:219-078Project Manager:Nick Simon

# Base Neutral and Acid Extractables Organic Analysis (EPA Method 625)

#### **Quality Control Report - Method Blank Analysis**

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B066597						
Acenaphthene	B066597-BLK1	ND	ug/L	2.0	0.20	
Acenaphthylene	B066597-BLK1	ND	ug/L	2.0	0.20	
Aldrin	B066597-BLK1	ND	ug/L	2.0	0.23	
Aniline	B066597-BLK1	ND	ug/L	5.0	0.28	
Anthracene	B066597-BLK1	ND	ug/L	2.0	0.20	
Benzidine	B066597-BLK1	ND	ug/L	20	1.6	
Benzo[a]anthracene	B066597-BLK1	ND	ug/L	2.0	0.21	
Benzo[b]fluoranthene	B066597-BLK1	ND	ug/L	2.0	0.24	
Benzo[k]fluoranthene	B066597-BLK1	ND	ug/L	2.0	0.30	
Benzo[a]pyrene	B066597-BLK1	ND	ug/L	2.0	0.20	
Benzo[g,h,i]perylene	B066597-BLK1	ND	ug/L	2.0	0.33	
Benzoic acid	B066597-BLK1	ND	ug/L	10	0.52	
Benzyl alcohol	B066597-BLK1	ND	ug/L	2.0	0.20	
Benzyl butyl phthalate	B066597-BLK1	ND	ug/L	2.0	0.20	
alpha-BHC	B066597-BLK1	ND	ug/L	2.0	0.20	
beta-BHC	B066597-BLK1	ND	ug/L	2.0	0.20	
delta-BHC	B066597-BLK1	ND	ug/L	2.0	0.20	
gamma-BHC (Lindane)	B066597-BLK1	ND	ug/L	2.0	0.20	
bis(2-Chloroethoxy)methane	B066597-BLK1	ND	ug/L	2.0	0.20	
bis(2-Chloroethyl) ether	B066597-BLK1	ND	ug/L	2.0	0.31	
bis(2-Chloroisopropyl)ether	B066597-BLK1	ND	ug/L	2.0	0.20	
bis(2-Ethylhexyl)phthalate	B066597-BLK1	ND	ug/L	5.0	0.20	
4-Bromophenyl phenyl ether	B066597-BLK1	ND	ug/L	2.0	0.20	
4-Chloroaniline	B066597-BLK1	ND	ug/L	2.0	1.1	
2-Chloronaphthalene	B066597-BLK1	ND	ug/L	2.0	0.20	
4-Chlorophenyl phenyl ether	B066597-BLK1	ND	ug/L	2.0	0.20	
Chrysene	B066597-BLK1	ND	ug/L	2.0	0.20	
4,4'-DDD	B066597-BLK1	ND	ug/L	2.0	0.26	
4,4'-DDE	B066597-BLK1	ND	ug/L	3.0	0.24	
4,4'-DDT	B066597-BLK1	ND	ug/L	2.0	0.22	
Dibenzo[a,h]anthracene	B066597-BLK1	ND	ug/L	3.0	0.34	
Dibenzofuran	B066597-BLK1	ND	ug/L	2.0	0.20	
1,2-Dichlorobenzene	B066597-BLK1	ND	ug/L	2.0	0.20	
1,3-Dichlorobenzene	B066597-BLK1	ND	ug/L	2.0	0.20	

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Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

# Reported:01/23/202014:57Project:Camarillo Recycled Water ReservoirProject Number:219-078Project Manager:Nick Simon

# Base Neutral and Acid Extractables Organic Analysis (EPA Method 625)

#### **Quality Control Report - Method Blank Analysis**

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B066597						
1,4-Dichlorobenzene	B066597-BLK1	ND	ug/L	2.0	0.27	
3,3-Dichlorobenzidine	B066597-BLK1	ND	ug/L	10	0.53	
Dieldrin	B066597-BLK1	ND	ug/L	3.0	0.39	
Diethyl phthalate	B066597-BLK1	ND	ug/L	2.0	0.20	
Dimethyl phthalate	B066597-BLK1	ND	ug/L	2.0	0.20	
Di-n-butyl phthalate	B066597-BLK1	ND	ug/L	2.0	0.20	
2,4-Dinitrotoluene	B066597-BLK1	ND	ug/L	2.0	0.40	
2,6-Dinitrotoluene	B066597-BLK1	ND	ug/L	2.0	0.20	
Di-n-octyl phthalate	B066597-BLK1	ND	ug/L	2.0	0.21	
1,2-Diphenylhydrazine	B066597-BLK1	ND	ug/L	2.0	0.20	
Endosulfan I	B066597-BLK1	ND	ug/L	10	0.31	
Endosulfan II	B066597-BLK1	ND	ug/L	10	0.30	
Endosulfan sulfate	B066597-BLK1	ND	ug/L	3.0	0.23	
Endrin	B066597-BLK1	ND	ug/L	2.0	0.38	
Endrin aldehyde	B066597-BLK1	ND	ug/L	10	0.44	
Fluoranthene	B066597-BLK1	ND	ug/L	2.0	0.28	
Fluorene	B066597-BLK1	ND	ug/L	2.0	0.20	
Heptachlor	B066597-BLK1	ND	ug/L	2.0	0.20	
Heptachlor epoxide	B066597-BLK1	ND	ug/L	2.0	0.26	
Hexachlorobenzene	B066597-BLK1	ND	ug/L	2.0	0.25	
Hexachlorobutadiene	B066597-BLK1	ND	ug/L	2.0	0.20	
Hexachlorocyclopentadiene	B066597-BLK1	ND	ug/L	2.0	0.31	
Hexachloroethane	B066597-BLK1	ND	ug/L	2.0	0.20	
Indeno[1,2,3-cd]pyrene	B066597-BLK1	ND	ug/L	2.0	0.29	
Isophorone	B066597-BLK1	ND	ug/L	2.0	0.20	
2-Methylnaphthalene	B066597-BLK1	ND	ug/L	2.0	0.20	
Naphthalene	B066597-BLK1	ND	ug/L	2.0	0.20	
2-Naphthylamine	B066597-BLK1	ND	ug/L	20	1.3	
2-Nitroaniline	B066597-BLK1	ND	ug/L	2.0	0.20	
3-Nitroaniline	B066597-BLK1	ND	ug/L	2.0	0.22	
4-Nitroaniline	B066597-BLK1	ND	ug/L	5.0	0.38	
Nitrobenzene	B066597-BLK1	ND	ug/L	2.0	0.20	
N-Nitrosodimethylamine	B066597-BLK1	ND	ug/L	2.0	1.2	
N-Nitrosodi-N-propylamine	B066597-BLK1	ND	ug/L	2.0	0.21	

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Report ID: 1000990214



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

# Reported:01/23/202014:57Project:Camarillo Recycled Water ReservoirProject Number:219-078Project Manager:Nick Simon

# Base Neutral and Acid Extractables Organic Analysis (EPA Method 625)

#### **Quality Control Report - Method Blank Analysis**

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B066597						
N-Nitrosodiphenylamine	B066597-BLK1	ND	ug/L	2.0	0.20	
Phenanthrene	B066597-BLK1	ND	ug/L	2.0	0.20	
Pyrene	B066597-BLK1	ND	ug/L	2.0	0.22	
1,2,4-Trichlorobenzene	B066597-BLK1	ND	ug/L	2.0	0.20	
4-Chloro-3-methylphenol	B066597-BLK1	ND	ug/L	5.0	0.20	
2-Chlorophenol	B066597-BLK1	ND	ug/L	2.0	0.20	
2,4-Dichlorophenol	B066597-BLK1	ND	ug/L	2.0	0.23	
2,4-Dimethylphenol	B066597-BLK1	ND	ug/L	2.0	0.20	
4,6-Dinitro-2-methylphenol	B066597-BLK1	ND	ug/L	10	0.24	
2,4-Dinitrophenol	B066597-BLK1	ND	ug/L	10	0.20	
2-Methylphenol	B066597-BLK1	ND	ug/L	2.0	0.20	
3- & 4-Methylphenol	B066597-BLK1	ND	ug/L	2.0	0.40	
2-Nitrophenol	B066597-BLK1	ND	ug/L	2.0	0.20	
4-Nitrophenol	B066597-BLK1	ND	ug/L	2.0	0.30	
Pentachlorophenol	B066597-BLK1	ND	ug/L	10	0.40	
Phenol	B066597-BLK1	ND	ug/L	2.0	0.21	
2,4,5-Trichlorophenol	B066597-BLK1	ND	ug/L	5.0	0.20	
2,4,6-Trichlorophenol	B066597-BLK1	ND	ug/L	5.0	0.20	
2-Fluorophenol (Surrogate)	B066597-BLK1	52.5	%	30 - 12	0 (LCL - UCL)	
Phenol-d5 (Surrogate)	B066597-BLK1	33.2	%	12 - 11	0 (LCL - UCL)	
Nitrobenzene-d5 (Surrogate)	B066597-BLK1	80.8	%	50 - 13	0 (LCL - UCL)	
2-Fluorobiphenyl (Surrogate)	B066597-BLK1	87.0	%	55 - 12	25 (LCL - UCL)	
2,4,6-Tribromophenol (Surrogate)	B066597-BLK1	87.9	%	40 - 15	0 (LCL - UCL)	
p-Terphenyl-d14 (Surrogate)	B066597-BLK1	76.2	%	40 - 15	0 (LCL - UCL)	



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:01/23/202014:57Project:Camarillo Recycled Water ReservoirProject Number:219-078Project Manager:Nick Simon

# Base Neutral and Acid Extractables Organic Analysis (EPA Method 625)

### **Quality Control Report - Laboratory Control Sample**

							Control Limits			
Constituent	QC Sample ID	Туре	Result	Spike Level	Units	Percent Recovery	RPD	Percent Recovery	RPD	Lab Quals
		Type	Result	Level	Units	Recovery	RFD	Recovery	RFD	Quais
QC Batch ID: B066597			00.400	50.000		70.0		50 400		
Acenaphthene	B066597-BS1	LCS	39.400	50.000	ug/L	78.8		50 - 120		
1,4-Dichlorobenzene	B066597-BS1	LCS	43.690	50.000	ug/L	87.4		50 - 120		
2,4-Dinitrotoluene	B066597-BS1	LCS	42.460	50.000	ug/L	84.9		50 - 120		
Hexachlorobenzene	B066597-BS1	LCS	57.750	50.000	ug/L	116		60 - 120		
Hexachlorobutadiene	B066597-BS1	LCS	36.110	50.000	ug/L	72.2		40 - 110		
Hexachloroethane	B066597-BS1	LCS	40.010	50.000	ug/L	80.0		40 - 120		
Nitrobenzene	B066597-BS1	LCS	51.170	50.000	ug/L	102		50 - 120		
N-Nitrosodi-N-propylamine	B066597-BS1	LCS	40.570	50.000	ug/L	81.1		50 - 120		
Pyrene	B066597-BS1	LCS	33.100	50.000	ug/L	66.2		40 - 140		
1,2,4-Trichlorobenzene	B066597-BS1	LCS	47.670	50.000	ug/L	95.3		45 - 120		
4-Chloro-3-methylphenol	B066597-BS1	LCS	38.360	50.000	ug/L	76.7		50 - 120		
2-Chlorophenol	B066597-BS1	LCS	55.830	60.000	ug/L	93.0		50 - 120		
2-Methylphenol	B066597-BS1	LCS	35.930	50.000	ug/L	71.9		40 - 110		
3- & 4-Methylphenol	B066597-BS1	LCS	64.900	100.00	ug/L	64.9		40 - 110		
4-Nitrophenol	B066597-BS1	LCS	16.360	50.000	ug/L	32.7		10 - 110		
Pentachlorophenol	B066597-BS1	LCS	42.490	50.000	ug/L	85.0		30 - 130		
Phenol	B066597-BS1	LCS	16.570	50.000	ug/L	33.1		20 - 110		
2,4,6-Trichlorophenol	B066597-BS1	LCS	43.970	50.000	ug/L	87.9		54 - 120		
2-Fluorophenol (Surrogate)	B066597-BS1	LCS	23.000	40.000	ug/L	57.5		30 - 120		
Phenol-d5 (Surrogate)	B066597-BS1	LCS	15.230	40.000	ug/L	38.1		12 - 110		
Nitrobenzene-d5 (Surrogate)	B066597-BS1	LCS	35.360	40.000	ug/L	88.4		50 - 130		
2-Fluorobiphenyl (Surrogate)	B066597-BS1	LCS	37.000	40.000	ug/L	92.5		55 - 125		
2,4,6-Tribromophenol (Surrogate)	B066597-BS1	LCS	38.860	40.000	ug/L	97.2		40 - 150		
p-Terphenyl-d14 (Surrogate)	B066597-BS1	LCS	16.130	20.000	ug/L	80.6		40 - 150		

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Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:01/23/202014:57Project:Camarillo Recycled Water ReservoirProject Number:219-078Project Manager:Nick Simon

# Base Neutral and Acid Extractables Organic Analysis (EPA Method 625)

									Control Limits		
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
		d client samp	No: N								
QC Batch ID: B066597 Acenaphthene		1941859-68	ND	39.278	50.000	ug/l		78.6		50 - 120	
Acenaphthene	MS MSD	1941859-68	ND	39.278 41.960	50.000	ug/L ug/L	6.6	83.9	30	50 - 120 50 - 120	
						-	0.0				
1,4-Dichlorobenzene	MS	1941859-68	ND	41.826	50.000	ug/L		83.7		47 - 120	
	MSD	1941859-68	ND	45.580	50.000	ug/L	8.6	91.2	30	47 - 120	
2,4-Dinitrotoluene	MS	1941859-68	ND	45.335	50.000	ug/L		90.7		50 - 130	
	MSD	1941859-68	ND	47.450	50.000	ug/L	4.6	94.9	30	50 - 130	
Hexachlorobenzene	MS	1941859-68	ND	56.330	50.000	ug/L		113		50 - 120	
	MSD	1941859-68	ND	58.950	50.000	ug/L	4.5	118	30	50 - 120	
Hexachlorobutadiene	MS	1941859-68	ND	34.055	50.000	ug/L		68.1		40 - 110	
	MSD	1941859-68	ND	37.010	50.000	ug/L	8.3	74.0	30	40 - 110	
Hexachloroethane	MS	1941859-68	ND	36.534	50.000	ug/L		73.1		40 - 120	
	MSD	1941859-68	ND	39.340	50.000	ug/L	7.4	78.7	30	40 - 120	
Nitrobenzene	MS	1941859-68	ND	50.950	50.000	ug/L		102		50 - 120	
Nittobenzene	MSD	1941859-68	ND	53.410	50.000	ug/L	4.7	102	30	50 - 120 50 - 120	
NI NIME						-					
N-Nitrosodi-N-propylamine	MS	1941859-68	ND	38.191 40.720	50.000 50.000	ug/L	6.4	76.4 81.4	20	50 - 120	
	MSD	1941859-68	ND			ug/L	6.4		30	50 - 120	
Pyrene	MS	1941859-68	ND	32.938	50.000	ug/L		65.9		40 - 140	
	MSD	1941859-68	ND	34.440	50.000	ug/L	4.5	68.9	30	40 - 140	
1,2,4-Trichlorobenzene	MS	1941859-68	ND	46.334	50.000	ug/L		92.7		43 - 120	
	MSD	1941859-68	ND	48.360	50.000	ug/L	4.3	96.7	30	43 - 120	
4-Chloro-3-methylphenol	MS	1941859-68	ND	37.701	50.000	ug/L		75.4		50 - 120	
	MSD	1941859-68	ND	38.490	50.000	ug/L	2.1	77.0	30	50 - 120	
2-Chlorophenol	MS	1941859-68	ND	54.321	60.000	ug/L		90.5		50 - 120	
	MSD	1941859-68	ND	55.720	60.000	ug/L	2.5	92.9	30	50 - 120	
2-Methylphenol	MS	1941859-68	ND	33.398	50.000	ug/L		66.8		40 - 110	
	MSD	1941859-68	ND	36.030	50.000	ug/L	7.6	72.1	30	40 - 110	
3- & 4-Methylphenol	MS	1941859-68	ND	59.388	100.00	ug/L		59.4		40 - 110	
	MSD	1941859-68	ND	65.580	100.00	ug/L	9.9	65.6	30	40 - 110	
4 Nitrank on al						-	0.0				
4-Nitrophenol	MS	1941859-68	ND ND	14.769 15.070	50.000 50.000	ug/L	7 0	29.5 31.9	20	10 - 110 10 - 110	
	MSD	1941859-68		15.970		ug/L	7.8		30		
Pentachlorophenol	MS	1941859-68	ND	38.984	50.000	ug/L	- ·	78.0	00	30 - 120	
	MSD	1941859-68	ND	41.150	50.000	ug/L	5.4	82.3	30	30 - 120	
Phenol	MS	1941859-68	ND	14.798	50.000	ug/L		29.6		20 - 110	
	MSD	1941859-68	ND	16.480	50.000	ug/L	10.8	33.0	30	20 - 110	
2,4,6-Trichlorophenol	MS	1941859-68	ND	42.640	50.000	ug/L		85.3		50 - 150	
	MSD	1941859-68	ND	44.550	50.000	ug/L	4.4	89.1	30	50 - 150	

#### **Quality Control Report - Precision & Accuracy**

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Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:01/23/202014:57Project:Camarillo Recycled Water ReservoirProject Number:219-078Project Manager:Nick Simon

# Base Neutral and Acid Extractables Organic Analysis (EPA Method 625)

				•			•	•					
									Control Limits				
		Source	Source		Spike			Percent		Percent	Lab		
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals		
QC Batch ID: B066597	Use	d client samp	ole: N										
2-Fluorophenol (Surrogate)	MS	1941859-68	ND	20.913	40.000	ug/L		52.3		30 - 120			
	MSD	1941859-68	ND	22.440	40.000	ug/L	7.0	56.1		30 - 120			
Phenol-d5 (Surrogate)	MS	1941859-68	ND	13.436	40.000	ug/L		33.6		12 - 110			
	MSD	1941859-68	ND	14.460	40.000	ug/L	7.3	36.2		12 - 110			
Nitrobenzene-d5 (Surrogate)	MS	1941859-68	ND	32.693	40.000	ug/L		81.7		50 - 130			
	MSD	1941859-68	ND	34.330	40.000	ug/L	4.9	85.8		50 - 130			
2-Fluorobiphenyl (Surrogate)	MS	1941859-68	ND	35.995	40.000	ug/L		90.0		55 - 125			
	MSD	1941859-68	ND	35.970	40.000	ug/L	0.1	89.9		55 - 125			
2,4,6-Tribromophenol (Surrogate)	MS	1941859-68	ND	36.231	40.000	ug/L		90.6		40 - 150			
	MSD	1941859-68	ND	36.080	40.000	ug/L	0.4	90.2		40 - 150			
p-Terphenyl-d14 (Surrogate)	MS	1941859-68	ND	14.798	20.000	ug/L		74.0		40 - 150			
	MSD	1941859-68	ND	15.130	20.000	ug/L	2.2	75.6		40 - 150			

#### **Quality Control Report - Precision & Accuracy**



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:01/23/202014:57Project:Camarillo Recycled Water ReservoirProject Number:219-078Project Manager:Nick Simon

# Solvent Scan (EPA Method 8015B)

## **Quality Control Report - Method Blank Analysis**

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B066147						
Ethanol	B066147-BLK1	ND	ug/L	500	97	
Methanol	B066147-BLK1	ND	ug/L	500	360	
2-Chloroacrylonitrile (Surrogate)	B066147-BLK1	95.5	%	60 - 140 (LCL - UCL)		



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

Reported: 01/23/2020 14:57 Project: Camarillo Recycled Water Reservoir Project Number: 219-078 Project Manager: Nick Simon

# Solvent Scan (EPA Method 8015B)

### **Quality Control Report - Laboratory Control Sample**

							Control Limits					
Constituent	QC Sample ID	Туре	Result	Spike Level	Units	Percent Recovery	RPD	Percent Recovery	RPD	Lab Quals		
QC Batch ID: B066147												
Ethanol	B066147-BS1	LCS	2168.0	2000.0	ug/L	108		70 - 130				
Methanol	B066147-BS1	LCS	2148.0	2000.0	ug/L	107		70 - 130				
2-Chloroacrylonitrile (Surrogate)	B066147-BS1	LCS	3784.0	4000.0	ug/L	94.6		60 - 140				



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:01/23/202014:57Project:Camarillo Recycled Water ReservoirProject Number:219-078Project Manager:Nick Simon

# Solvent Scan (EPA Method 8015B)

## **Quality Control Report - Precision & Accuracy**

							Control Limits						
		Source	Source		Spike			Percent		Percent	Lab		
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals		
QC Batch ID: B066147	Use	d client samp	ole: N										
Ethanol	MS	1941859-69	ND	2050.0	2000.0	ug/L		102		60 - 130			
	MSD	1941859-69	ND	2261.0	2000.0	ug/L	9.8	113	30	60 - 130			
Methanol	MS	1941859-69	ND	2030.0	2000.0	ug/L		102		60 - 130			
	MSD	1941859-69	ND	2234.0	2000.0	ug/L	9.6	112	30	60 - 130			
2-Chloroacrylonitrile (Surrogate)	MS	1941859-69	ND	3848.0	4000.0	ug/L		96.2		60 - 140			
	MSD	1941859-69	ND	3759.0	4000.0	ug/L	2.3	94.0		60 - 140			



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:01/23/202014:57Project:Camarillo Recycled Water ReservoirProject Number:219-078Project Manager:Nick Simon

# 1,4-Dioxane (EPA Method 8270C)

#### **Quality Control Report - Method Blank Analysis**

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B066607						
1,4-Dioxane	B066607-BLK1	ND	ug/L	1.0	0.16	
Naphthalene-d8 (Surrogate)	B066607-BLK1	87.7	%	70 - 13	0 (LCL - UCL)	



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

Reported: 01/23/2020 14:57 Project: Camarillo Recycled Water Reservoir Project Number: 219-078 Project Manager: Nick Simon

# 1,4-Dioxane (EPA Method 8270C)

#### **Quality Control Report - Laboratory Control Sample**

							Control Limits				
Constituent	QC Sample ID	Туре	Result	Spike Level	Units	Percent Recovery	RPD	Percent Recovery	RPD	Lab Quals	
QC Batch ID: B066607											
1,4-Dioxane	B066607-BS1	LCS	38.810	50.000	ug/L	77.6		70 - 130			
Naphthalene-d8 (Surrogate)	B066607-BS1	LCS	7.0600	8.0000	ug/L	88.2		70 - 130			



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:01/23/202014:57Project:Camarillo Recycled Water ReservoirProject Number:219-078Project Manager:Nick Simon

# 1,4-Dioxane (EPA Method 8270C)

## **Quality Control Report - Precision & Accuracy**

						rol Limits					
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: B066607	Use	d client samp	ole: N								
1,4-Dioxane	MS	1941859-81	ND	35.844	50.000	ug/L		71.7		70 - 130	
	MSD	1941859-81	ND	35.977	50.000	ug/L	0.4	72.0	30	70 - 130	
Naphthalene-d8 (Surrogate)	MS	1941859-81	ND	7.0205	8.0000	ug/L		87.8		70 - 130	
	MSD	1941859-81	ND	6.9840	8.0000	ug/L	0.5	87.3		70 - 130	



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

Reported: 01/23/2020 14:57 Project: Camarillo Recycled Water Reservoir Project Number: 219-078 Project Manager: Nick Simon

# **Total Petroleum Hydrocarbons**

#### **Quality Control Report - Method Blank Analysis**

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B066490						
TPH - Light Naptha	B066490-BLK1	ND	ug/L	100	40	
TPH - Aviation Gas	B066490-BLK1	ND	ug/L	100	40	
TPH - Stoddard Solvent	B066490-BLK1	ND	ug/L	40	20	
TPH - Heavy Naptha	B066490-BLK1	ND	ug/L	40	20	
TPH - Gasoline	B066490-BLK1	ND	ug/L	100	40	
TPH - Jet Fuel (JP4)	B066490-BLK1	ND	ug/L	40	20	
TPH - Jet Fuel (JP5)	B066490-BLK1	ND	ug/L	40	26	
TPH - Jet Fuel (JP6)	B066490-BLK1	ND	ug/L	40	20	
TPH - Jet Fuel (JP8)	B066490-BLK1	ND	ug/L	40	20	
TPH - Kerosene	B066490-BLK1	ND	ug/L	40	11	
TPH - Diesel (FFP)	B066490-BLK1	ND	ug/L	40	11	
TPH - Fuel Oil	B066490-BLK1	ND	ug/L	100	40	
TPH - Fuel Oil #6	B066490-BLK1	ND	ug/L	40	20	
TPH - Crude Oil	B066490-BLK1	ND	ug/L	100	28	
TPH - Hydraulic Oil / Motor Oil	B066490-BLK1	ND	ug/L	100	26	
TPH - Waste Oil	B066490-BLK1	ND	ug/L	100	40	
TPH - WD-40	B066490-BLK1	ND	ug/L	40	20	
TPH - Mineral Oil	B066490-BLK1	ND	ug/L	200	100	
TPH - Mineral Spirit	B066490-BLK1	ND	ug/L	40	20	
TPH - Motor Oil	B066490-BLK1	ND	ug/L	100	26	
TPH - Lube Oil	B066490-BLK1	ND	ug/L	100	40	
TPH - Olive Oil	B066490-BLK1	ND	ug/L	100	40	
TPH - Diluent	B066490-BLK1	ND	ug/L	100	40	
Tetracosane (Surrogate)	B066490-BLK1	39.8	%	37 - 13	4 (LCL - UCL)	



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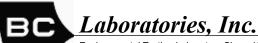
56 E. Main Street #104 Ventura, CA 93001

Reported: 01/23/2020 14:57 Project: Camarillo Recycled Water Reservoir Project Number: 219-078 Project Manager: Nick Simon

# **Total Petroleum Hydrocarbons**

#### **Quality Control Report - Laboratory Control Sample**

							Control Limits				
Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recoverv	RPD	Percent Recoverv	RPD	Lab Quals	
QC Batch ID: B066490		<u> </u>									
TPH - Diesel (FFP)	B066490-BS1	LCS	315.95	500.00	ug/L	63.2		52 - 128			
Tetracosane (Surrogate)	B066490-BS1	LCS	10.320	20.000	ug/L	51.6		37 - 134			

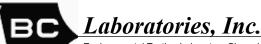


Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:01/23/202014:57Project:Camarillo Recycled Water ReservoirProject Number:219-078Project Manager:Nick Simon

# **Total Petroleum Hydrocarbons**

#### **Quality Control Report - Precision & Accuracy**

						Control Limits					
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: B066490	Use	d client samp	ole: N								
TPH - Diesel (FFP)	MS	1941859-18	ND	399.06	500.00	ug/L		79.8		50 - 127	
	MSD	1941859-18	ND	317.15	500.00	ug/L	22.9	63.4	24	50 - 127	
Tetracosane (Surrogate)	MS	1941859-18	ND	12.585	20.000	ug/L		62.9		37 - 134	
	MSD	1941859-18	ND	9.7152	20.000	ug/L	25.7	48.6		37 - 134	



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:01/23/2020 14:57Project:Camarillo Recycled Water ReservoirProject Number:219-078Project Manager:Nick Simon

# Water Analysis (General Chemistry)

### **Quality Control Report - Method Blank Analysis**

	-	-		-		
Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B^A0024						
Trivalent Chromium	B^A0024-BLK1	ND	ug/L	10	5.0	
QC Batch ID: B066110						
Perchlorate	B066110-BLK1	ND	ug/L	4.0	0.76	
QC Batch ID: B066157						
Total Cyanide	B066157-BLK1	ND	mg/L	0.0050	0.0017	



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

Reported: 01/23/2020 14:57 Project: Camarillo Recycled Water Reservoir Project Number: 219-078 Project Manager: Nick Simon

# Water Analysis (General Chemistry)

### **Quality Control Report - Laboratory Control Sample**

								Control L	<u>imits</u>	
Constituent	QC Sample ID	Туре	Result	Spike Level	Units	Percent Recovery	RPD	Percent Recovery	RPD	Lab Quals
QC Batch ID: B066110										
Perchlorate	B066110-BS1	LCS	10.596	10.000	ug/L	106		85 - 115		
QC Batch ID: B066157										
Total Cyanide	B066157-BS1	LCS	0.15287	0.15000	mg/L	102		90 - 110		



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

Reported: 01/23/2020 14:57 Project: Camarillo Recycled Water Reservoir Project Number: 219-078 Project Manager: Nick Simon

# Water Analysis (General Chemistry)

## **Quality Control Report - Precision & Accuracy**

									Cont	trol Limits	
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: B066110	Use	d client samp	ole: N								
Perchlorate	DUP	1943531-01	ND	ND		ug/L			15		
	MS	1943531-01	ND	9.0200	10.101	ug/L		89.3		80 - 120	
	MSD	1943531-01	ND	8.6846	10.101	ug/L	3.8	86.0	15	80 - 120	
QC Batch ID: B066157	Use	d client samp	ole: Y - Des	cription: 19E	-03, 01/02/2	2020 12:5	0				
Total Cyanide	DUP	2000241-01	0.0017970	0.0018110		mg/L	0.8		10		J
	MS	2000241-01	0.0017970	0.098178	0.10000	mg/L		96.4		90 - 110	
	MSD	2000241-01	0.0017970	0.099209	0.10000	mg/L	1.0	97.4	10	90 - 110	



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

Reported: 01/23/2020 14:57 Project: Camarillo Recycled Water Reservoir Project Number: 219-078 Project Manager: Nick Simon

# **Metals Analysis**

#### **Quality Control Report - Method Blank Analysis**

		•				
Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B066063						
Hexavalent Chromium	B066063-BLK1	ND	ug/L	0.20	0.032	
QC Batch ID: B066203						
Total Recoverable Antimony	B066203-BLK1	ND	ug/L	2.0	0.11	
Total Recoverable Arsenic	B066203-BLK2	ND	ug/L	2.0	0.70	
Total Recoverable Beryllium	B066203-BLK1	ND	ug/L	1.0	0.14	
Total Recoverable Cadmium	B066203-BLK1	ND	ug/L	1.0	0.11	
Total Recoverable Chromium	B066203-BLK1	ND	ug/L	3.0	0.50	
Total Recoverable Copper	B066203-BLK1	ND	ug/L	2.0	0.22	
Total Recoverable Lead	B066203-BLK1	ND	ug/L	1.0	0.10	
Total Recoverable Nickel	B066203-BLK2	ND	ug/L	2.0	0.19	
Total Recoverable Selenium	B066203-BLK1	ND	ug/L	2.0	0.19	
Total Recoverable Silver	B066203-BLK1	ND	ug/L	1.0	0.10	
Total Recoverable Thallium	B066203-BLK1	ND	ug/L	1.0	0.10	
Total Recoverable Zinc	B066203-BLK1	1.7350	ug/L	10	1.7	J
QC Batch ID: B066358						
Total Recoverable Mercury	B066358-BLK1	ND	ug/L	0.20	0.041	



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

Reported: 01/23/2020 14:57 Project: Camarillo Recycled Water Reservoir Project Number: 219-078 Project Manager: Nick Simon

## **Metals Analysis**

#### **Quality Control Report - Laboratory Control Sample**

							Control Limits			
		_		Spike		Percent		Percent		Lab
Constituent	QC Sample ID	Туре	Result	Level	Units	Recovery	RPD	Recovery	RPD	Quals
QC Batch ID: B066063										
Hexavalent Chromium	B066063-BS1	LCS	21.385	20.000	ug/L	107		90 - 110		
QC Batch ID: B066203										
Total Recoverable Antimony	B066203-BS1	LCS	38.927	40.000	ug/L	97.3		85 - 115		
Total Recoverable Arsenic	B066203-BS2	LCS	102.94	100.00	ug/L	103		85 - 115		
Total Recoverable Beryllium	B066203-BS1	LCS	41.048	40.000	ug/L	103		85 - 115		
Total Recoverable Cadmium	B066203-BS1	LCS	40.562	40.000	ug/L	101		85 - 115		
Total Recoverable Chromium	B066203-BS1	LCS	38.345	40.000	ug/L	95.9		85 - 115		
Total Recoverable Copper	B066203-BS1	LCS	100.62	100.00	ug/L	101		85 - 115		
Total Recoverable Lead	B066203-BS1	LCS	98.805	100.00	ug/L	98.8		85 - 115		
Total Recoverable Nickel	B066203-BS2	LCS	102.99	100.00	ug/L	103		85 - 115		
Total Recoverable Selenium	B066203-BS1	LCS	108.43	100.00	ug/L	108		85 - 115		
Total Recoverable Silver	B066203-BS1	LCS	39.154	40.000	ug/L	97.9		85 - 115		
Total Recoverable Thallium	B066203-BS1	LCS	38.442	40.000	ug/L	96.1		85 - 115		
Total Recoverable Zinc	B066203-BS1	LCS	109.11	100.00	ug/L	109		85 - 115		
QC Batch ID: B066358										
Total Recoverable Mercury	B066358-BS1	LCS	0.96000	1.0000	ug/L	96.0		85 - 115		



Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

Reported: 01/23/2020 14:57 Project: Camarillo Recycled Water Reservoir Project Number: 219-078 Project Manager: Nick Simon

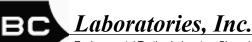
## **Metals Analysis**

#### **Quality Control Report - Precision & Accuracy**

									Cont	rol Limits	
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: B066063	Use	d client samp	ole: N								
Hexavalent Chromium	 DUP	1943530-01	2.7780	2.7880		ug/L	0.4		10		
	MS	1943530-01	2.7780	23.028	20.202	ug/L		100		90 - 110	
	MSD	1943530-01	2.7780	22.779	20.202	ug/L	1.1	99.0	10	90 - 110	
QC Batch ID: B066203	Use	d client samp	ole: Y - Des	cription: 19F	E-03. 01/02/2	2020 12:50	)				
Total Recoverable Antimony		2000241-01	0.54300	0.51200	_ 00, 00	ug/L	5.9		20		J
	MS	2000241-01	0.54300	39.171	40.000	ug/L	5.0	96.6		70 - 130	-
	MSD	2000241-01	0.54300	38.618	40.000	ug/L	1.4	95.2	20	70 - 130	
Total Recoverable Arsenic	DUP	2000241-01	10.523	10.044		ug/L	4.7		20		
	MS	2000241-01	10.523	122.95	100.00	ug/L		112		70 - 130	
	MSD	2000241-01	10.523	119.70	100.00	ug/L	2.7	109	20	70 - 130	
Total Recoverable Beryllium	DUP	2000241-01	ND	ND		ug/L			20		
	MS	2000241-01	ND	30.038	40.000	ug/L		75.1	20	70 - 130	
	MSD	2000241-01	ND	30.523	40.000	ug/L	1.6	76.3	20	70 - 130	
Total Recoverable Cadmium	DUP	2000241-01	0.29400	0.35600		ug/L	19.1		20		J
	MS	2000241-01	0.29400	36.827	40.000	ug/L		91.3	20	70 - 130	-
	MSD	2000241-01	0.29400	38.185	40.000	ug/L	3.6	94.7	20	70 - 130	
Total Recoverable Chromium	DUP	2000241-01	1.3810	1.1640		ug/L	17.1		20		J
	MS	2000241-01	1.3810	31.921	40.000	ug/L		76.4		70 - 130	
	MSD	2000241-01	1.3810	31.328	40.000	ug/L	1.9	74.9	20	70 - 130	
Total Recoverable Copper	DUP	2000241-01	4.4650	4.0790		ug/L	9.0		20		
	MS	2000241-01	4.4650	95.950	100.00	ug/L		91.5		70 - 130	
	MSD	2000241-01	4.4650	97.531	100.00	ug/L	1.6	93.1	20	70 - 130	
Total Recoverable Lead	DUP	2000241-01	0.29500	0.26600		ug/L	10.3		20		J
	MS	2000241-01	0.29500	94.385	100.00	ug/L		94.1		70 - 130	
	MSD	2000241-01	0.29500	94.324	100.00	ug/L	0.1	94.0	20	70 - 130	
Total Recoverable Nickel	DUP	2000241-01	14.687	14.310		ug/L	2.6		20		
	MS	2000241-01	14.687	86.377	100.00	ug/L		71.7		70 - 130	
	MSD	2000241-01	14.687	85.892	100.00	ug/L	0.6	71.2	20	70 - 130	
Total Recoverable Selenium	DUP	2000241-01	3.0210	3.1220		ug/L	3.3		20		
	MS	2000241-01	3.0210	107.40	100.00	ug/L		104		70 - 130	
	MSD	2000241-01	3.0210	110.56	100.00	ug/L	2.9	108	20	70 - 130	
Total Recoverable Silver	DUP	2000241-01	ND	ND		ug/L			20		
	MS	2000241-01	ND	35.691	40.000	ug/L		89.2		70 - 130	
	MSD	2000241-01	ND	36.672	40.000	ug/L	2.7	91.7	20	70 - 130	
Total Recoverable Thallium	DUP	2000241-01	ND	ND		ug/L			20		
	MS	2000241-01	ND	37.297	40.000	ug/L		93.2		70 - 130	
	MSD	2000241-01	ND	37.171	40.000	ug/L	0.3	92.9	20	70 - 130	

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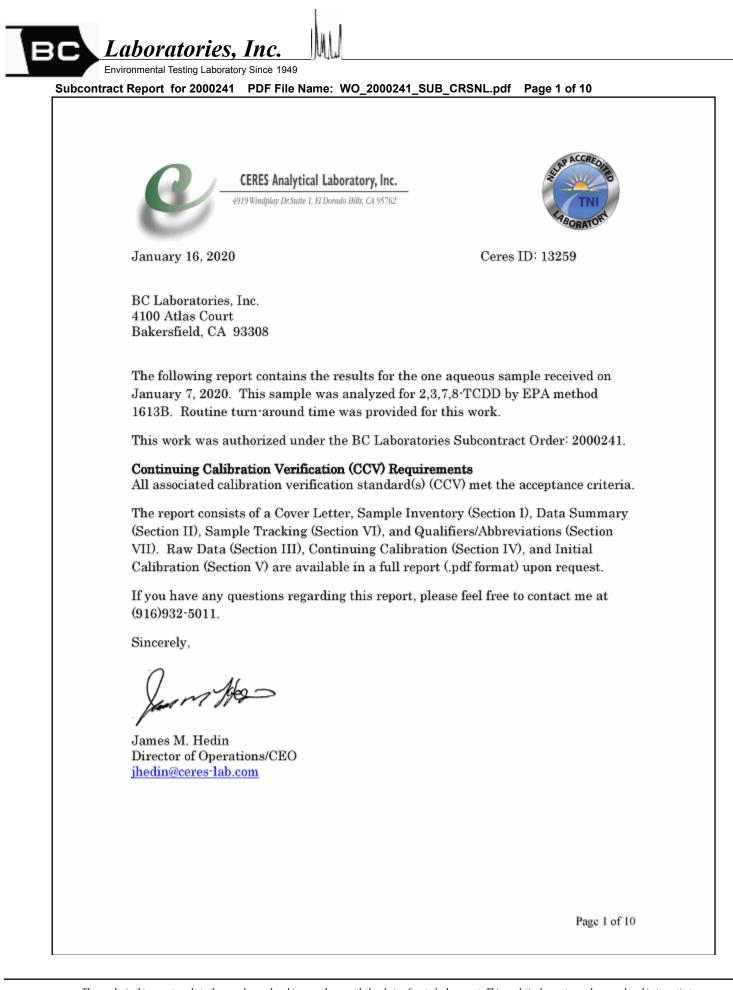


Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001 Reported:01/23/202014:57Project:Camarillo Recycled Water ReservoirProject Number:219-078Project Manager:Nick Simon

## **Metals Analysis**

### **Quality Control Report - Precision & Accuracy**

									Cont	rol Limits	
		Source	Source		Spike			Percent		Percent	Lab
Constituent	Туре	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery	Quals
QC Batch ID: B066203	Use	d client samp	le: Y - Des	cription: 19	E-03, 01/02/2	2020 12:5	0				
Total Recoverable Zinc	DUP	2000241-01	5.6310	5.1930		ug/L	8.1		20		J
	MS	2000241-01	5.6310	95.307	100.00	ug/L		89.7		70 - 130	
	MSD	2000241-01	5.6310	95.887	100.00	ug/L	0.6	90.3	20	70 - 130	
QC Batch ID: B066358	Use	d client samp	ole: N								
Total Recoverable Mercury	DUP	1943597-01	ND	ND		ug/L			20		
	MS	1943597-01	ND	1.0200	1.0000	ug/L		102		70 - 130	
	MSD	1943597-01	ND	1.0150	1.0000	ug/L	0.5	102	20	70 - 130	





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#### Section I: Sample Inventory

Ceres Sample ID: 13259-001 <u>Sample ID</u> 2000241-01 Date Received 1/7/2020 Collection Date &Time 1/2/2020 12:50

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Section II: Data Summary

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CERES Analytical Laboratory, Inc. 4919 Windplay De Saiter 1. El Donado Hills, CA 95762

#### EPA Method 1613B

Quality A:	ssurance Sample						Date Receive	d: NA
Me	thod Blank	- 1	ac	Batch #:	2117		Date Extracte	d: 1/13/2020
		- 1		Matrix:	Aqueous		ZB-5MS Analysi	s: 1/14/2020
Project ID:	2000241		Sam	ple Size:	1.000 L			
Analyte	Conc. (pg/L)	MD	L RL	Qual.	Labeled Standards	% R	LCL-UCL (a)	Qualifiers
2,3,7,8-TCDD	DL= 1.86	1.4	9 5.00		13C-2378-TCDD	101	31-137	
					CRS			
					37CI4-2378-TCDD	91.6	35-197	
					DL - Signifies Non-Detect EMPC - Estimated Maxim ratio failure.			
					(a) - Lower control limit - U	Jpper control	limit	

Analyst: JMH

Reviewed by: BS

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CERES Analytical Laboratory, Inc. 4919 Windplay DeSater 1, El Donado Hills, CA 95762

#### EPA Method 1613B

Quality Ass	surance Sample				Date Received:	NA
Ongoing Preci	ision and Recovery	QC Batch #:	2117		Date Extracted:	1/13/2020
		Matrix:	Aqueous		ZB-5MS Analysis:	1/14/2020
Project ID:	2000241	Sample Size:	1.000 L			
Analyte	Conc. (ng/mL)	Limits (a)	Labeled Standards	%	Rec.	Limits (a)
2,3,7,8-TCDD	8.95	7.3-14.6	13C-2378-TCDD	1	13	25-141
			CRS			
			37CI4-2378-TCDD	1	04	37-158
			(a) Limits based on method acc	eptanc	e criteria.	

Analyst: JMH

Reviewed by: BS

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#### EPA Method 1613B

Client Samp	ole ID: 2000241-01							
Project ID:	2000241	0	eres Sa	mple ID:	13259-001		Date Received	: 1/7/2020
			QC	Batch #:	2117		Date Extracted	: 1/13/2020
Date Coll	ected: 1/2/2020			Matrix:	Aqueous		ZB-5MS Analysis	: 1/14/2020
Time Coll	ected: 12:50		Sam	ple Size:	0.965 L			
Analyte	Conc. (pg/L)	MDL	RL	Qual.	Labeled Standards	% R	LCL-UCL (a)	Qualifiers
,3,7,8-TCDD	DL= 3.09	1.49	5.18		13C-2378-TCDD	91.3	31-137	
					CRS			
					37CI4-2378-TCDD	97.0	42-164	
					DL - Signifies Non-Detect (	ND) at sampl	e specific detection lin	nit.
					EMPC - Estimated Maximu			
					ratio failure.			
					(a) - Lower control limit - Up	pper control li	mit	

Analyst: JMH

Reviewed by: BS

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Section VI: Sample Tracking

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		SUBCONTRACT ORDE BC Laboratories 2000241	ĒR	
ENDING LABORATORY: 3C Laboratories 4100 Atlas Court 3akersfield, CA 93308 Phone: 661-327-4911 FAX: 661-327-1918 Project Manager: Felicia Johnso	n	RECEIVING LABO Ceres Analytical La 4919 Windplay Dr., El Dorado Hills, CA Phone: (916) 932-5 FAX:	boratory, Inc. Ste. 1 95762	CRSNL
Analysis	Due	Expires	Comments	
Sample ID: 2000241-01	Water	Sampled: 01/02/20 12:50		
EPA 1613B - 2,3,7,8-TCDD	01/17/2 fonber G	20 17:00 12/31/20 12:50		
Released By	<u>1-0-20</u> Date	Received By	— <u>1/2/20 /</u> Date	5-179

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Client Project ID: 200024/ Received Temp: 1.9 Acceptable: 4/N Chain of Custody Relinquished by signed? Chain of Custody Received by signed? Custody Seals? Present? Unlabeled / Illegible Samples Proper Containers: Proper Containers: Prop	Ceres ID: 13259		Date/Time: 1/7/20 11:09
Chain of Custody Received by signed? Chain of Custody Received by signed? Custody Seals? Present? Y / N Intact? Y / N NA: Unlabeled / Illegible Samples Proper Containers: Proper Containers: Preservation Acceptable (Chemical or Temperature)? Drinking Water, Sodium Thiosulfate present? Aqueous sample pH: Preservation Cl? Aqueous sample pH: Preservation Acceptable Samples: List COC discrepancies: List Damaged Samples:			Received Temp: 1.9
Chain of Custody Received by signed?       Image: Constraint of the signed?       Image: Constraint of the signed?         Custody Seals?       Present?       Y / N         Intact?       Y / N         NA:       Image: Constraint of the signed?         Unlabeled / Illegible Samples       Y / N         Proper Containers:       Y / N         Preservation Acceptable (Chemical or Temperature)?       Image: Constraint of the signed of t	Chain of Custody Relinquished by signed	1?	Acceptable. V/N
Intact? Y / N NA: D Unlabeled / Illegible Samples Proper Containers: Y/N Preservation Acceptable (Chemical or Temperature)? Y/N Drinking Water, Sodium Thiosulfate present? Aqueous sample pH: 7 List COC discrepancies: List COC discrepancies: List Damaged Samples:			Ø/ N
NA:       NA:         Unlabeled / Illegible Samples       Y / N         Proper Containers:       Ø/ N         Preservation Acceptable (Chemical or Temperature)?       Ø/ N         Drinking Water, Sodium Thiosulfate present?       Y Ø/ N         Aqueous sample pH:       P         List COC discrepancies:       July July July July July July July July	Custody Seals?	Present?	Y / N
Unlabeled / Illegible Samples       Y / N         Proper Containers:       Ø/ N         Preservation Acceptable (Chemical or Temperature)?       Ø/ N         Drinking Water, Sodium Thiosulfate present?       Y N         Aqueous sample pH:       Preservation Cl?         List COC discrepancies:       July 20         List Damaged Samples:       List Damaged Samples:		Intact?	Y / N
Unlabeled / Illegible Samples       Y / N         Proper Containers:       Ø/ N         Preservation Acceptable (Chemical or Temperature)?       Ø/ N         Drinking Water, Sodium Thiosulfate present?       Y N         Aqueous sample pH:       Preservation COP         List COC discrepancies:       July 20         List Damaged Samples:       List Damaged Samples:		NA:	ND
Preservation Acceptable (Chemical or Temperature)? Drinking Water, Sodium Thiosulfate present? Aqueous sample pH:	Unlabeled / Illegible Samples	- MA	
Preservation Acceptable (Chemical or Temperature)? Drinking Water, Sodium Thiosulfate present? Aqueous sample pH:	Proper Containers:		Cy/N
Drinking Water, Sodium Thiosulfate present? Aqueous sample pH:		emperature)?	~
List COC discrepancies:	Drinking Water, Sodium Thiosulfate pro		Y NNA Y NNA
	List Damaged Samples:		

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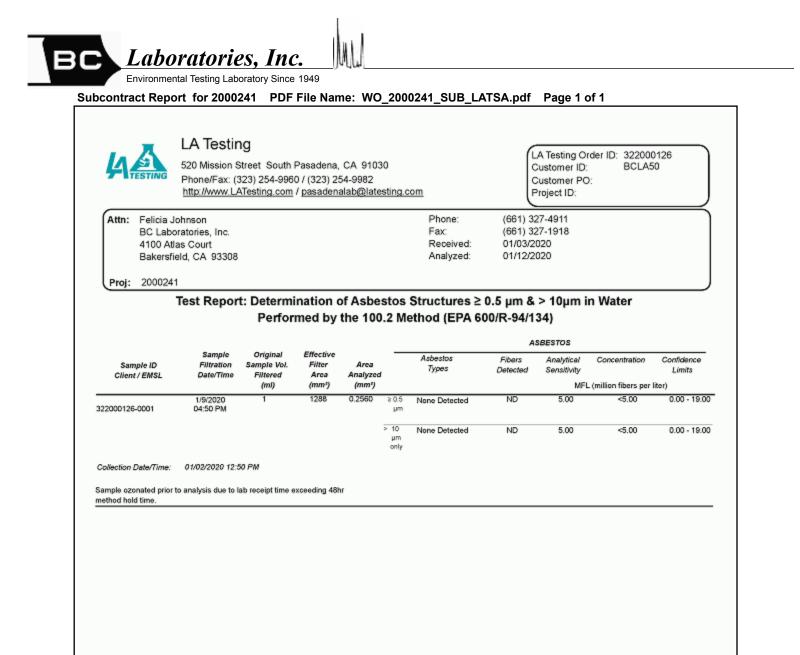
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#### Section VII: Qualifiers/Abbreviations

- J Concentration found below the lower quantitation limit but greater than zero.
- B Analyte present in the associated Method Blank.
- E Concentration found exceeds the Calibration range of the HRGC/HRMS.
- D This analyte concentration was calculated from a dilution.
- X The concentration found is the estimated maximum possible concentration due to chlorinated diphenyl ethers present in the sample.
- H Recovery limits exceeded. See cover letter.
- Results taken from dilution.
- I Interference. See cover letter.
- Conc. Concentration Found
- DL Calculated Detection Limit
- ND Non-Detect
- % Rec. Percent Recovery

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Analyst(s) Sherrie Ahmad	(1)	
		Jerry Drapala Ph.D, Laboratory Manager
		or Other Approved Signatory
Any questions please co	ntact Jerry Drapala.	
initial report from: 01/12/	2020 16:51:30	
Sample collection and containers	a provided by the client, acceptable bottle blank	level is defined as s0.01MFL>10um. ND=Nane Detected. This report relates only to those items tested. This sting. Samples received in good condition unless otherwise noted.
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Laboratories, Inc.

Yeh & Associates 56 E. Main Street #104 Ventura, CA 93001

#### Reported: 01/23/2020 14:57 Project: Camarillo Recycled Water Reservoir Project Number: 219-078 Project Manager: Nick Simon

#### **Notes And Definitions**

- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- L01 The Laboratory Control Sample Water (LCSW) recovery is not within laboratory established control limits.
- Q03 Matrix spike recovery(s) was(were) not within the control limits.