Appendix E: Final Initial Site Assessment Road 66B over Colusa Drain Bridge Replacement Glenn County, California

FINAL INITIAL SITE ASSESSMENT

Road 66B over Colusa Drain Bridge Replacement

Glenn County, California Existing Bridge 11C-0068 Federal ID BRLO-5911(063)

Prepared By:



1100 Corporate Way, Suite 230 Sacramento, CA 95831

> 13 June 2019 Job No. 16-322.1

> > Prepared For:



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16-322.1 13 June 2019

Mr. Scott McCauley, P.E. Quincy Engineering 11017 Cobblerock Drive, Suite 100 Rancho Cordova, CA 95670

Subject: **FINAL INITIAL SITE ASSESSMENT** Road 66B over Colusa Drain Bridge Replacement Glenn County, California Existing Bridge No. 11C-0068 Federal ID # BRLO-5911(063)

Dear Mr. McCauley:

Crawford & Associates, Inc. has prepared this Final Initial Site Assessment for the Road 66B over Colusa Drain bridge replacement project in the Glenn County, California. The purpose of this assessment is to identify and provide a preliminary assessment of the potential impacts of known or potential Recognized Environmental Conditions within the study area that may influence design and construction of the project. A Draft ISA published 25 June 2018 was reviewed by Caltrans District 3 without comment.

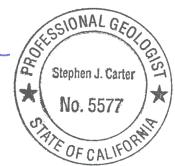
We include an executive summary, property information, records review, reconnaissance, findings and recommendations, and limitations in this report.

We appreciate the opportunity to be on your team for the Road 66B over Colusa Drain bridge replacement project. Please call us if you have questions or comments.

Sincerely,

CRAWFORD & ASSOCIATES, INC.

Stephen J. Carter P.G. #5577 Senior Geologist



Reviewed by:

W. Eric Nichols C.E.G. #2229 Senior Project Manager

Draft Approved for Client/Caltrans District 3 Review: 25 June 2018 Final Approved for Release: 13 June 2019



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APPENDIX F – National Analytical Laboratories, Inc. Report



1 EXECUTIVE SUMMARY

Crawford & Associates, Inc. (CAInc) performed an Initial Site Assessment (ISA) for the County Road (CR) 66B at Colusa Drain Bridge Replacement in Glenn County, California. The proposed project consists of replacing the existing bridge within the existing alignment.

The project site is located 2± miles west of State Route (SR) 45, and includes County Road (CR) 66B at Colusa Drain bridge and adjacent area as shown on Figure 1 in Appendix A. The existing bridge, built in 1940, is a three-span structure comprising a timber deck with timber girders on framed reinforced concrete bents founded on cast-in-steel-shell piles with reinforced concrete sill abutments. The bridge is approximately 54 feet long, 20 feet wide, and skewed about 10 degrees to the channel. The steel shell piles are severely corroded and the bridge is deemed Structurally Deficient by Caltrans. The bridge does not meet current design standards for travel width and shoulders, and currently has no barrier rails. The proposed replacement structure will be on the same alignment and will consist of a clear span bridge $4\pm$ feet wider and 5-10 \pm feet longer at each end. The replacement bridge superstructure will likely be a cast-in-place, pre-stressed concrete slab or a pre-cast, pre-stressed slab. The new profile grade may be slightly higher to meet hydraulic requirements.

The purpose of this ISA is to identify recognized soil or groundwater contamination and hazardous material issues that may affect the planned project improvements. Based on the records reviewed and the site reconnaissance, CAInc makes the following observations:

- The project site was not identified in the database records reviewed.
- The database records search did not identify any facilities in the vicinity that have potentially impacted the project site.
- Site reconnaissance, historical topographic maps, and historical aerial photographs indicate historical land use adjacent to the project site has the potential to have impacted the project site with agricultural chemicals.

Based on the public records, historical aerial photographs and historical topographic maps reviewed for this assessment, the site reconnaissance performed on 24 May 2018, and a telephone conversation with UC Agricultural Extension, CAInc makes the following recommendation:

 A recognized environmental condition (REC) was identified with respect to agricultural chemical use in the rice fields surrounding the project site. CAInc recommends that soil and surface water within the proposed construction limits be screened for the presence of agricultural chemicals at concentrations that present an exposure risk. If bridge demolition or construction activities are expected to encounter groundwater, the groundwater should also be screened.

The proposed project will impact an existing roadway, bridge structure, canal, and adjacent properties. The following general hazardous materials or environmental concerns are typical of similar projects and have been evaluated in this assessment. A detailed discussion is provided in Section 6.2.

- Asbestos Containing Material (ACCM)
- Lead-Containing Materials
- Chemically Treated Wood
- Thermoplastic Traffic Striping



- Naturally Occurring Asbestos (NOA)
- Transformers
- Agricultural Chemicals (Pesticides/Herbicides/fungicides)
- Aerially Deposited Lead (ADL)
- Petroleum Hydrocarbons

This report identifies recognized environmental conditions and general hazardous materials issues that may be present at the site and provides recommendations for further investigation. Additional research and assessment may provide more certainty on conditions to be encountered during demolition and construction.

2 INTRODUCTION

2.1 PURPOSE

The following report summarizes an ISA performed by CAInc for the CR 66B over Colusa Drain bridge replacement project in Glenn County, California. This ISA was prepared for use by Glenn County for this specific project in accordance with the agreement between Quincy Engineering Inc. (QEI) and CAInc. The purpose of this ISA is to help identify potential or known hazardous materials, hazardous waste, and/or contamination (recognized environmental conditions) at the project site. Site maps are included in Appendix A. Site photographs are included in Appendix B.

We use the term Recognized Environmental Condition (REC) consistent with ASTM E1527-13. ASTM E1527-13 defines REC as:

"the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. De minimis conditions are not recognized environmental conditions."

2.2 SCOPE OF SERVICES

CAInc completed the following tasks to prepare this Initial Site Assessment:

- Initiated a search request with GeoSearch to search federal, state, and local regulatory agency databases to determine whether areas of environmental concern exist on or near the project site. Search distances ranged between ½ and one mile from the project site, depending on the database.
- Reviewed geologic and groundwater conditions at the site.
- Reviewed historical aerial photographic coverage and topographic map coverage of the project area and vicinity for indications of potential sources of contamination.
- Reviewed of federal, state, and county records for indications of the use, misuse, or storage of hazardous and/or potentially hazardous substances on or near the site.
- Conducted limited site reconnaissance of the property and vicinity.
- Performed a limited review of the State of California's GeoTracker, Envirostor and Division of Oil, Gas and Geothermal Resources websites.
- Discussed agricultural chemical use in rice fields with University of California Cooperative Extension.



2.3 **PROJECT DESCRIPTION**

The existing bridge, built in 1940, is a three-span structure comprising a timber deck with timber girders on framed reinforced concrete bents founded on cast-in-steel-shell piles with reinforced concrete sill abutments. The bridge is approximately 54 feet long, 20 feet wide, and skewed about 10 degrees to the channel. The steel shell piles are severely corroded and the bridge is deemed Structurally Deficient by Caltrans.

The unlined Colusa Drain flows southerly at the bridge site and transports water for agricultural use. The flow is seasonal depending on agricultural use - generally the flows are highest between October through April for floodwater bypass and rice irrigation. No rock slope protection is in the channel and some scour appears to have occurred around the pier foundations. A drain empties into the canal near the northwest corner of the bridge and discharge from the outlet has eroded the embankment at this location.

The proposed project will replace the existing bridge on the same alignment with a clear span bridge $4\pm$ feet wider and 5-10± feet longer at each end. The bridge superstructure will likely be a cast-in-place, pre-stressed concrete slab or a pre-cast, pre-stressed slab. The new profile grade may be slightly higher to meet hydraulic requirements. The channel banks (including drain outfall) will be protected from scour/erosion with slope grading and rock slope protection.

2.4 **PROJECT LOCATION**

The project site is located in southeastern unincorporated Glenn County, California. The bridge site is 2± miles west of SR 45 on CR 66B, between CR W and CR VV. The project site lies within the Larkins Childrens Rancho Land Grant, T18N R2W. The project site coordinates are 39.428525°N, 122.050086°W, and the road elevation is about 78 feet (per Google Earth). A Site Vicinity Map (Figure 1) is included in Appendix A.

2.5 **GEOLOGIC CONDITIONS**

The project is located in the northern Sacramento Valley, within the Great Valley Geomorphic province of California. Surficial geology is characterized by flat-lying Quaternary age deposits comprising unconsolidated to semi-consolidated, non-marine sediments of fluvial, lacustrine and alluvial terrace origin.^{1,2} These deposits are generally layers of sand, silt, and clay with some gravel, typically increasing in strength and consolidation with depth. A Geologic Map (Figure 2) is included in Appendix A.

No faults have been mapped in the project site vicinity. Based on mapping from the US Geological Survey³ the nearest faults are the Great Valley Thrust Fault system 12.8± miles to the west and the Corning Fault 10.8 to the north-northwest, both of undifferentiated Quaternary age. The site is not included within an Alguist-Priolo Special Studies Zone.⁴ A Fault Map (Figure 3) is included in Appendix A.

⁴ https://maps.conservation.ca.gov/cgs/EQZApp/app/



¹ Jennings, Charles W. and Strand, Rudolph G., 1960, Geologic Map of California: Ukiah Sheet; State of California: Department of Natural Resources, 1:250,000. ² Jennings, C.W. 1997, Geologic Map of California; California Geological Survey, 1:750,000, (updated by C. Gutierrez,

W. Brvant, G. Saucedo and C. Wills, 2010).

³ U.S. Geological Survey and California Geological Survey, 2006, Quaternary fault and fold database for the United States, accessed 25 June 2018, from USGS web site: https://earthquake.usgs.gov/hazards/qfaults/.

The USDA-NRCS Web Soil Survey⁵ shows the western bridge approach, abutment, and Colusa Drain as underlain by Marvin silty clay loam, described as slightly saline-alkali soil forming 0 to 1% slopes with a typical profile of silty clay to 13 inches below ground surface (bgs) underlain by clay to at least 60 inches bgs. The eastern bridge approach and abutment are underlain by Marvin silty clay loam, forming 0 to 2% slopes, with a typical profile of silty clay loam to 13 inches bgs, underlain by clay to at least 60 inches bgs.

2.6 GROUNDWATER CONDITIONS

Colusa Drain is unlined in the vicinity of the project site. Hydraulic communication between groundwater and surface water was not assessed during this investigation.

The project site is located in the Colusa Subbasin (5-021.52). Based on information from DWR's Water Data Library⁶ there are two wells in the project site vicinity from which historical groundwater elevations are available. These wells are located 6,500± feet east-northeast and 4,800± feet east-southeast. Groundwater level data from these wells is only available for 2014 and 2015. Groundwater highs were measured in March 2015 at depths of 8.6 and 9.7 feet bgs, or 69.3 and 70.4 feet above mean sea level (msl). Groundwater lows were measured in July 2015 at 24.0 to 24.2 feet bgs, or 54.8 to 55.0 feet above msl]. Based on data available on DWR's Groundwater Information Center Interactive Map Application⁷ groundwater flow in the site vicinity during Spring 2017 was generally toward the south-southeast. Groundwater flow during Fall 2017 groundwater was radial toward the southwest, south, and southeast.

The site is identified on the Federal Emergency Management Agency's flood insurance rate map 06021C0850D⁸ (dated 5 August 2010) as being in Zone A (special flood hazard area subject to inundation by the 1% annual chance flood, no base flood elevation determined).

2.7 CURRENT LAND USE

Current land use adjacent to the project site consists of a rural local road serving predominantly agricultural properties and some rural residences and agricultural operations. The project site is surrounded by four privately-owned parcels: Assessor Parcel Number (APN) 013-210-034 and APN 013-210-023 are situated at the northwest corner of the bridge; APN 013-250-037 is at the southwest corner of the bridge; APN 013-210-035 is at the northeast corner of the bridge; and APN 013-250-021 is at the southeast corner of the bridge. All four of these parcels are zoned for intensive agriculture, and all four appear to be actively used for rice cultivation. A drainage ditch and narrow strip of land are located between Road 66B and the rice field on APN 013-210-035. Location of the parcels identified above relative to the project site are shown on Figure 1 in Appendix A.

2.8 HISTORICAL LAND USE

2.8.1 SUMMARY

Properties in the project vicinity have historically been used for agriculture, with rural residential and agriculture-related structures located 1,150± feet to the east, 1,560± feet to the northeast,

⁸ https://msc.fema.gov/portal/search#searchresultsanchor



⁵ Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture, Web Soil Survey, http://websoilsurvey.nrcs.usda.gov/

⁶ http://wdl.water.ca.gov/waterdatalibrary/

⁷ https://gis.water.ca.gov/app/gicima/

and 1,450± to the south-southwest (distances from Google Earth Pro). These conditions have remained largely unchanged over the historical period examined.

2.8.2 HISTORICAL AERIAL PHOTOGRAPHS

Aerial photographs were provided by GeoSearch for the years shown in Table 1. The photographs were reviewed for information about historic conditions and land uses within the study area. The photos are described in chronological order below. Aerial photographs are included in Appendix C.

Year	Source	Scale
1937	ASCS	1″=500′
1947	USGS	1″=500′
1958	ASCS	1″=1,320′
1964	ASCS	1″=1,320′
1973	USGS	1″=500′
1983	USGS	1″=700′
1993	USGS	1″=700′
1998	USGS	1″=500′
2003	USDA	1″=500′
2004	USDA	1″=500′
2005	USDA	1″=500′
2006	USDA	1″=500′
2009	USDA	1″=500′
2010	USDA	1″=500′
2012	USDA	1″=500′
2014	USDA	1″=500′
2016	USDA	1″=500′

Table 1: Historical Aerial Photographs

1937 All properties in the immediate vicinity of the project site are developed for agriculture (appears to be rice). Riparian vegetation (trees) is present in the Colusa Drain channel. Configurations of CRs 66B, W and VV, Colusa Drain, Bounde Creek, and other drainage structures appear similar to present. What appears to be agriculture-related and/or rural residential structures are visible 1,350± feet to the east, 1,900± feet to the northeast, and 1,700± to the south-southwest (distances scaled from photograph).

1947 No substantive changes are evident from the 1937 photograph.

1958 This photograph is of poor quality. Riparian vegetation is not visible in the Colusa Drain. No other substantive changes are evident from the 1947 photograph.

1964 This photograph is of poor quality. No substantive changes are evident from the 1958 photograph.

1973 No substantive changes are evident from the 1964 photograph.



1983 No substantive changes are evident from the 1973 photograph.

1984 No substantive changes are evident from the 1983 photograph.

1993 No substantive changes are evident from the 1984 photograph.

1998 No substantive changes are evident from the 1993 photograph.

2003 No substantive changes are evident from the 1998 photograph.

2004 No substantive changes are evident from the 2003 photograph.

2005 No substantive changes are evident from the 2004 photograph.

2006 No substantive changes are evident from the 2005 photograph.

2009 No substantive changes are evident from the 2006 photograph.

2010 No substantive changes are evident from the 2009 photograph.

2012 No substantive changes are evident from the 2010 photograph.

2014 No substantive changes are evident from the 2012 photograph.

2016 No substantive changes are evident from the 2014 photograph.

2.8.3 HISTORICAL TOPOGRAPHIC MAPS

Historical topographic maps were provided by GeoSearch for the years shown in Table 2 and are discussed in chronological order below. Maps were reviewed for significant changes in topography or property improvements. Topographic maps are included in Appendix D.

Year	Quad	Series	Scale
1906	Maxwell	15	1:62,496
1918	Princeton	7.5	1:31,680
1952	Maxwell	15	1:62,496
1952	Princeton	7.5	1:24,000
1973	Princeton	7.5	1:24,000
2012	Princeton	7.5	1:24,000

1906 Map depicts the topography in the project vicinity as flat (5-foot contour intervals). Bounde Creek is depicted, but Colusa Drain and CRs 66B, W and VV are not. No structures are depicted in the site vicinity.

1918 No substantive changes in the vicinity of the project site are evident from the 1906 map.

1952 In addition to Bounde Creek, the map depicts Colusa Drain and CRs 66, W and VV. Structures are depicted $1,150\pm$ feet to the east on the southeast corner of the CR 66B/CR W intersection, $1,560\pm$ feet to the northeast of the site on CR W, and $1,450\pm$ feet of the southwest



at the end of CR VV (distances scaled from topographic map). No other substantive changes in the vicinity of the project site are evident from the 1918 map.

1973 Photorevision Additional structures are depicted at the southeast corner of the CR 66/CR W intersection, and at the end of CR VV. The number and location of structures northeast of the project site on CR W have also changes slightly. No other substantive changes in the vicinity of the project site are evident from the 1952 map.

2012 The map depicts roadways, creeks, canals, and drains, but does not depict other cultural features or topography. No substantive changes in the vicinity of the project site are evident from the 1973 map.

3 DATABASE SEARCH AND RECORDS REVIEW

3.1 DATABASE SEARCH

Databases and site lists maintained by environmental regulatory agencies were searched for properties within the study area to identify sites with known releases of hazardous materials or petroleum products, and sites with the potential for such releases. Each database and site list were searched for sites within the ASTM standard search radius relative to the project site. The Geosearch database search records are provided in Appendix E. The following databases and site lists were searched:

FEDERAL LISTING

Standard Environmental Records

- ERNSCA Emergency Response Notification System
- EC Federal Engineering Institutional Control Sites
- LUCIS Land Use Control Information System
- RCRASC RCRA Sites with Controls
- RCRAGR09 Resource Conservation & Recovery Act Generator
- RCRANGR09 Resource Conservation & Recovery Act Non-Generator
- FEMALUST FEMA Owned Storage Tanks
- BF Brownfields Management System
- DNPL Delisted National Priorities List
- NLRRCRAT No Longer Regulated RCRA Non-CORRACTS TSD Facility
- RCRAT Resource Conservation & Recovery Act Non-CORRACTS Treatment, Storage & Disposal Facilities
- SEMS Superfund Enterprise Management System
- SEMSARCH Superfund Enterprise Management System Archived Site Inventory
- NPL National Priorities List
- NLRRCRAC No Longer Regulated RCRA Corrective Action Facilities
- PNPL Proposed National Priorities List
- RCRAC Resource Conservation & Recovery Act Corrective Action Facilities
- RCRASUBC Resource Conservation & Recovery Act Subject to Corrective Action Facilities

Additional Environmental Records

• AIRSAFS – Aerometric Information Retrieval System / Air Facility Subsystem



- BRS Biennial reporting system
- SFLIENS CIRCLIS Liens
- CDL Clandestine Drug Laboratory Locations
- DOCKETS EPA Docket Data
- ECHOR09 Enforcement and Compliance History Information
- FRSCA Facility Registry System
- HMIRSR09 Hazardous Materials Incident Reporting System
- ICIS Integrated Compliance Information System (formerly DOCKETS)
- ICISNPDES Integrated Compliance Information System National Pollutant Discharge Elimination System
- MLTS Material Licensing Tracking System
- NPDESR09 National Pollutant Discharge Elimination System
- PADS PCB Activity Database System
- PCSR09 Permit Compliance System
- SEMSLIENS SEMS Liens on Property
- SSTS Section Seven Tracking System
- TSCA Toxic Substance Control Act Inventory
- TRI Toxic Release Inventory
- ALTFUELS Alternative Fueling Stations
- HISTPST Historical Gas Stations
- ICISCLEANERS Integrated Compliance Information System Drycleaners
- MSHA Mine Safety and Health Administration Master Index File
- MRDS Mineral Resource Data System
- ODI Open Dump Inventory
- SMCRA Surface Mining Control and Reclamation Act Sites
- USUMTRCA Uranium Mill Tailings Radiation Control Act Sites
- DOD Department of Defense Sites
- NMS Former Military Nike Missile Sites
- FUDS Formerly Used Defense Sites
- FUSRAP Formerly Utilized Sites Remedial Action Program
- RODS Record of Decision System

STATE (CA) LISTING

Standard Environmental Records

- DTSCDR DTSC Deed Restrictions
- ABST Above Ground Storage Tanks
- AST2007 Aboveground Storage Tanks Prior to January 2008
- HISTUST Historical Underground Storage Tanks
- SWEEPS Statewide Environmental Evaluation and Planning System
- USTCUPA Underground Storage Tanks
- BF Brownfield Sites
- CALSITES CALSITES database
- CLEANUPSITES GeoTracker Cleanup Sites
- LUST Leaking Underground Storage Tanks
- SWIS Solid Waste Information System Sites
- VCP Voluntary Cleanup Sites
- ENVIROSTOR ENVIROSTOR Cleanup Sites



• ENVIROSTORPCA – ENVIROSTOR Permitted and Corrective Action Sites

Additional Environmental Records

- CHMIRS California Hazardous Material Incident Report System
- CDL Clandestine Drug Labs
- EMI Emissions Inventory Data
- HWTS Hazardous Waste Tanner System
- LDS Land Disposal Sites
- MCS Military cleanup Sites
- NPDES National Pollutant Discharge Elimination System Facilities
- LIENS Recorded Environmental Cleanup Liens
- MWMP California Medical Waste Management Program Facility List
- DTSCHWT DTSC Registered Hazardous Waste Transporters
- CLEANER Dry Cleaner Facilities
- MINES Mines Listing
- SLIC Spills, Leaks, Investigation & Cleanup Recovery Listing
- CORTESE Cortese List
- ERAP Expedited Removal Action Program Sites
- HISTCORTESE Historical Cortese List
- DROP Listing of Certified Dropoff, Collection, and Community Service Programs
- PROC Listing of Certified Processors
- NFA No Further Action Determination
- SWRCY Recycling centers
- REF Referred to Another Local or State Agency
- NFE Sites Needing Further Evaluation
- WMUDS Waste Management Unit Database
- TOXPITS Toxic Pits Cleanup Act Sites

TRIBAL LISTING

Standard Environmental Records

- USTR09 Underground Storage Tanks on Tribal Lands
- TORRESDUMPSITES Illegal Dump Sites on the Torres Martinez Reservation
- LUSTR09 Leaking Underground Storage Tanks on Tribal Lands
- ODINDIAN Open Dump Inventory on Tribal Lands

Additional Environmental Records

• INDIANRES – Indian Reservations

3.2 SUMMARY OF RECORDS SEARCH

The subject site was not identified in any of the databases searched. No suspect facilities were positively identified within the search radii.

3.2.1 UNLOCATED FACILITIES

One suspect facility (Torres Rice Ranch) was identified within the search radii that could not be mapped due to limited or incomplete address information (address given as Road 66B, Princeton). This site was identified in the SWEEPS database (historical listing of active and



inactive underground storage tanks storing petroleum products, industrial solvents, and other materials). The site was not identified in other databases identifying sites with leaking tanks or unauthorized discharges. Property ownership information supplied by QEI suggests that this facility was not located adjacent to the APE.

3.3 GEOTRACKER AND ENVIROSTOR DATABASES

CAInc reviewed the State of California's GeoTracker website to identify facilities in the project site vicinity. No facilities were identified within 1 mile of the project site.

CAInc reviewed the State of California's Envirostor website⁹ to identify facilities in the project site vicinity. No facilities were identified within 1 mile of the project site.

3.4 DIVISION OF OIL, GAS AND GEOTHERMAL RESOURCES DATABASE

CAInc reviewed the State of California's Oil, Gas and Geothermal Resources website¹⁰ to identify facilities in the project site vicinity. The project site is located on the western boundary of the Bounde Creek gas field. As of 27 April 2018, there were 8 dry wells, 4 producing wells, and 7 plugged wells within a 1-mile radius of the project site. The nearest wells to the project site are 1,600± feet to the southeast; two dry wells are identified at this location (distances estimated using Google Earth Pro).

4 **RECONNAISSANCE**

Reconnaissance of the project site was performed on 24 May 2018 by Steve Carter, PG. The reconnaissance consisted of a walking and driving traverse along CR 66B. The reconnaissance included visual observations of bridge construction, of the canal and bank, of the roadway and bridge approaches, and of properties bordering the project site. These observations were intended to identify the land uses and activities on adjacent land, and the presence, or likely presence, of hazardous substances or petroleum products at the project site or on adjacent properties. Photographs are included in Appendix B.

Mr. Carter observed that the bridge comprises a three-span timber structure supported by concrete abutments and piers on concrete piles (photos 1 through 5 and 8). Water in the canal was flowing toward the south. Steel jackets are visible at the base of the piles above the water line (photo 5). The bridge deck is constructed of wooden structural members, wooden decking, and a wooden curb. This wood appears new and lacks the color and dimpling typical of pressure-treated wood (photos 8 and 9). No guard rails are present on the bridge or bridge approaches. Concrete approach aprons are present on both sides of the bridge. CR 66B is asphalt-paved on both sides of the bridge. There is no centerline or fog line striping present.

Vegetation observed in Colusa Drain (weeds and vines) and adjacent to CR 66B (weeds) appeared seasonally healthy. Several tires were observed near the southwest corner of the bridge on APN 013-250-037 adjacent to Colusa Drain (photo 6). No utility boxes, wires, pipes, subgrade vaults, or manhole covers were observed in the project site vicinity. Wells, mining activities, oil and gas drilling and production equipment, pits, lagoons, hazardous materials containers, wells, rock outcrops, or indications of NOA were not observed within or in the vicinity of the APE. Evidence of vehicle repair operations or storage of petroleum motor fuels or agricultural chemicals

¹⁰ www.conservation.ca.gov/dog/Pages/Wellfinder.aspx



⁹ envirostor.dtsc.ca.gov

were not observed at the project site or vicinity. Ditches adjacent to the north side of CR 66B and east side of CR W contained flowing water. Standing water was present in the rice fields.

A new sign indicating the presence of pesticides in the rice field was observed at the southwest corner of the bridge (APN 013-250-021; photo 7).

Observations made during the site reconnaissance generally support the research and background data. Photographs from the site reconnaissance are provided in Appendix B.

4.1 INTERVIEW WITH UC AGRICULTURAL EXTENSION

CAInc spoke with Ms. Whitney Brim-DeForest of the University of California Cooperative Extension, Sutter-Yuba Counties, on 25 June 2018, regarding likely pesticides referred to by the sign observed in APN 013-250-021.

Ms. Brim-DeForest indicated that based on the time of year, the likely agricultural chemicals referred to by the sign were herbicides, likely applied in granular form via aircraft. Ms. Brim-DeForest indicated although less likely, pesticides and fungicides might also have been applied to the rice fields.

5 MATERIAL SAMPLING

5.1 ASBESTOS AND PAINT INSPECTION

CAInc contracted with National Analytical Laboratory, Inc. (NAL) to inspect the bridge for the presence of asbestos containing construction material (ACCM) and lead-containing material (LCM). This inspection was performed 15 May 2018. A copy of the NAL report is included as Appendix F.

5.1.1 ASBESTOS INSPECTION

According to the NAL report, the asbestos inspection was performed by a Certified Asbestos Consultant (CAC) in conformance with the Environmental Protection Agency's (EPA) Asbestos Containing Building Materials In-School Rule; CFR 763.85. During the inspection, four bulk samples were collected for later analysis by EMSL Analytical, Inc. (NVLAP #101048-10 and CAELAP #2339). Samples were analyzed by EPA Method 600/R93/116 using polarized light microscopy. NAL reported that asbestos was not detected in any of the four samples analyzed.

5.1.2 LEAD INSPECTION

According to the NAL report, the lead inspection was performed by a Certified Lead Inspector/Assessor (CLA) in conformance with the Department of Housing and Urban Development, EPA, and California Public Health Department guidelines, who regulate and require the abatement or in-place management of LCM, including lead-based paint (LBP). NAL collected paint samples from the east pier-column system metal support beam and the west pier-column system, round column system for later analysis by EMSL Analytical, Inc. Paint samples were analyzed by Flame AAS (SW 846 3050B/7000B). NAL reported that both samples had lead concentrations <0.010% by weight.



6 FINDINGS

The purpose of this report is to identify recognized soil or groundwater contamination or hazardous material issues that could impact the project. The assessment identified the following potential hazardous materials issues that should be considered in the planning of project improvements.

6.1 POTENTIAL HAZARDOUS MATERIALS SITES

The purpose of this ISA is to identify recognized soil or groundwater contamination and hazardous material issues that may affect the planned project improvements. Based on the records reviewed and the site reconnaissance, CAInc makes the following observations:

- The project site was not identified in the database records reviewed.
- The database records search did not identify any facilities in the vicinity that have potentially impacted the project site.
- Historical topographic maps and aerial photographs indicate historical land uses adjacent to the project site have the potential to have impacted the project site with agricultural chemicals.

6.2 GENERAL HAZARDOUS MATERIALS ISSUES

6.2.1 ASBESTOS CONTAINING CONSTRUCTION MATERIAL (ACCM)

Existing structures that will be impacted by project demolition are constructed of materials having the potential to contain asbestos. Concrete bridge components (piers, footings, abutments, deck) could potentially contain asbestos. ACCM, as defined in the California Code of Regulations, Title 8, Section 1529 of the Construction Safety Orders, can also be present in construction materials such as bridge joint seals, bearing pads, shims, deck drains or other less obvious materials such as pipe conduits for utilities. Under the federal asbestos National Emissions Standards for Hazardous Air Pollutants regulations (NESHAP, 40 CFR Part 61, Subpart M), a CAC must make definitive conclusions regarding the presence of ACCM. Prior to demolition or reconstruction, existing structures are required to have an asbestos survey completed to determine the appropriate method of handling and disposal of demolition debris. Written notification to the Air Quality Management District (AQMD) of demolition or renovation operations on structures is required at least 10 business days prior to conducting the work, regardless of the presence or absence of asbestos in the bridge materials.

NAL did not identify asbestos or ACCM in the bridge components inspected. Written notification to the AQMD of demolition operations is none the less required at least 10 business days prior to conducting the work.

6.2.2 LEAD-CONTAINING MATERIALS

Painted surfaces must be sampled to evaluate for the presence of lead when the likelihood of flaking, peeling, or paint dust exists. If lead is identified at concentrations above threshold limits, the painted surfaces must be dismantled and disposed of in accordance with the Caltrans 2015 Standard Specification (SS) 14-11.13 and SSP 14-11.13, Disturbance Of Existing Paint Systems On Bridges. Lead concentrations \geq 1.0 milligrams/centimeter² by XRF analysis, or \geq 0.05% by weight by flame atomic adsorption require abatement or in-place management of the lead-containing material. Lead-containing material with concentrations \geq 1,000 milligrams/kilogram requires the material be handled and disposed of as hazardous waste.



NAL reported that the paint samples collected from the bridge contained <0.010% by weight of lead, below threshold levels. The pained materials on the bridge do not require special handling, abatement, or disposal.

6.2.3 CHEMICALLY TREATED WOOD

Chemically treated wood must be handled as treated wood waste (TWW) and disposed of as hazardous waste. Should treated wood be encountered during bridge demolition it would need to be properly handled and disposed of as TWW. Section 66261.9.5 of Department of Toxic Substances Control (DTSC) regulations provide alternative management standards (AMS) for treated wood waste. SS 14-11.14 and SSP 14-11.14 for TWW are based on AMS regulations. This special standard provision directs the contractor to follow the AMS, including providing training to all personnel that may come in contact with TWW. Training must include, at a minimum, safe handling; sorting and segregating; storage; labeling (including date); and proper disposal methods. Chemically treated wood removed from the project site must adhere to SPP 14-11.09.

Chemically treated wood was not observed at the project site. Wood used for the bridge decking and support beans appeared new and does not have the dimpling and green color typical of pressure-treated wood. Special handling and disposal of this wood is not required. If chemically treated wood is encountered in parts of the bridge that could not be observed during site reconnaissance (e.g. sole plates on the piers or abutments), this would will need to be handled and disposed of as TWW.

6.2.4 THERMOPLASTIC TRAFFIC STRIPING

Thermoplastic traffic striping may contain heavy metals, including lead and chromium, at concentrations in excess of the hazardous waste thresholds established by the California Code of Regulations, and may produce toxic fumes when heated. Consequently, white and yellow traffic striping should be tested to determine whether hazardous concentrations are present. If the volume of striping material is low, it could be assumed to be hazardous waste and disposed of accordingly, at a Class 1 disposal facility. Grinding or planing of traffic striping containing heavy metals must be done in accordance with SS 14-11.12.

Paint striping was not observed during site reconnaissance.

6.2.5 NATURALLY OCCURRING ASBESTOS (NOA)

CAInc reviewed the potential for NOA at the project site by performing field reconnaissance and reviewing published geologic mapping.¹¹ The geologic mapping reviewed as part of this study does not indicate ultramafic rocks or rocks suspected to contain NOA are present within the project site vicinity. CAInc did not observe rock outcrops or rock fragments that are likely to contain NOA at the project. Although NOA can be associated with faults, no mapped faults have been identified in the project site vicinity. Figure 3 shows the locations of faults in the project vicinity. The potential for NOA in the study area is considered low and further study is not warranted.

¹¹Churchill, R.K. and Hill, R.L., 2000, A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos: California Division of Mines and Geology, Open-File Report 2000-019, scale 1:1000,000.



6.2.6 TRANSFORMERS

Historically, electrical transformers have contained polychlorinated biphenyls. Identification and remediation of old transformers is the responsibility of the utility owner. Site reconnaissance did not identify any electrical transformers in the immediate project site vicinity.

6.2.7 AGRICULTURAL CHEMICALS

Properties surrounding the project site are currently utilized for rice cultivation and have been throughout the historical period examined for this assessment. Agricultural chemicals are typically applied to rice fields; a sign indicating the presence of pesticides was observed within the APE. Discussion with the University of California Agricultural Extension indicated applied agricultural chemicals were likely herbicides, although may also have included pesticides and/or fungicides. The likely herbicide application method of the herbicide would have been granules applied by aircraft; this application method may have resulted in impact to the project site. The potential for agricultural chemicals in the soil and surface water within the APE constitutes a REC.

CAInc recommends that soil within the proposed construction limits be screened for the presence of agricultural chemicals at concentrations sufficient to be an exposure hazard. Water from the rice fields is carried by the adjacent drainage canals and Colusa Drain. Surface water within the APE should also be screened for agricultural chemicals as workers within Colusa Drain are likely to come in contact with Colusa Drain water during demolition and construction activities. Percolation of impacted surface water may also have impacted shallow groundwater; if excavation for the new bridge abutments encounters groundwater, this should also be screened for agricultural chemicals. If soil generated by excavation activities will be hauled for off-site disposal, the receiving facility may also require analysis of the spoils for agricultural chemicals as part of the disposal characterization process.

6.2.8 AERIALLY DEPOSITED LEAD (ADL)

Generally, ADL may be an issue on roads which have historically experienced significant traffic, particularly where vehicles would be stopping and idling, i.e., at a stop sign or a high congestion area. LBP has historically been used on transportation structures; ADL could also a concern in soil adjacent to structures where LBP was used.

Historical photographs and topographic maps indicate CR 66B was a low-traffic rural road during the period when leaded gasoline was in use (1920s through 1970s); lead impact from motor vehicle exhaust appears unlikely. Likewise, lead was not identified in the paint of the existing bridge structure, and other painted transportation structures were not identified at the project site; impact to soil from flaking and peeling LBP appears unlikely. Screening for ADL in soil at the project site is not warranted.

6.2.9 PETROLEUM HYDROCARBONS

Site reconnaissance did not identify the presence or likely presence of underground or aboveground storage or dispensing of petroleum-based fuels. Staining was not observed on the ground surface at the project site indicative of an unauthorized release of motor vehicle fuel, lubricant or hydraulic fluid. Screening for petroleum hydrocarbons is not warranted.



7 RECOMMENDATIONS

Based on the public records, historical aerial photographs, historical aerial photographs reviewed for this assessment, the site reconnaissance performed on 24 May 2018, and telephone conversation with UC Agricultural Extension, CAInc makes the following recommendation:

• A REC was identified with respect to agricultural chemical use in the rice fields surrounding the project site. CAInc recommends that soil and surface water within the proposed construction limits be screened for the presence of agricultural chemicals at concentrations that present an exposure risk. If bridge demolition or construction activities are expected to encounter groundwater, the groundwater should also be screened.

8 LIMITATIONS

This report summarizes the findings and opinions of CAInc with regard to the potential for the presence of contamination/hazardous materials within the project area at concentrations likely to warrant mitigation under current statutes and guidelines. Findings and opinions within this report are based on information obtained on given dates, or provided by specified individuals, through record reviews, site review, and related activities. CAInc's information is only as good as the information provided by these sources. Site conditions may change after documented observations have been made. A warrant or guarantee cannot be made that hazardous materials do not exist at the site. To further reduce risk, an extensive invasive exploration may be necessary prior to project implementation.

This report was prepared for the specific use of QEI and their agents for this project and applies only to the area identified as the project area. CAInc is not responsible for interpretations by others of data presented in this report. This report does not represent a legal opinion. No warranty is expressed or implied. Conclusions in this report are based on professional judgment and experience. Work for this assessment was performed in accordance with generally accepted standards of practice in northern California at the time of the assessment.

The scope of this investigation did not include determining the presence of radon. GeoSearch noted the project site is in Radon Zone 3, with a predicted indoor radon screening level <2 picocuries/liter. Identifying endangered species, geologic hazards, archeological sites, or ecologically sensitive areas are also beyond the scope of this report.

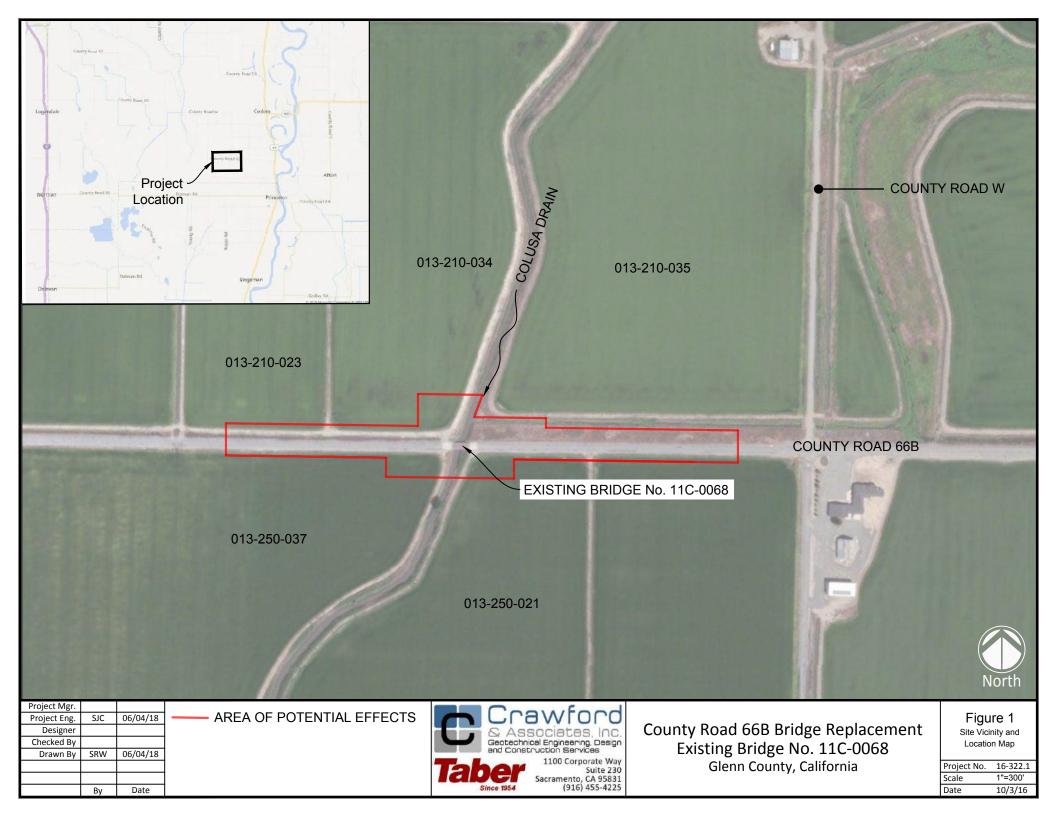
The governmental records summary within this report is derived from public records, which are updated on a continual basis. For this reason, it is not advisable to use this information to base a decision after 180 days of the issue date of this report. Conditions at the site can and will change over time. Please contact CAInc to revise this report to reflect new information.

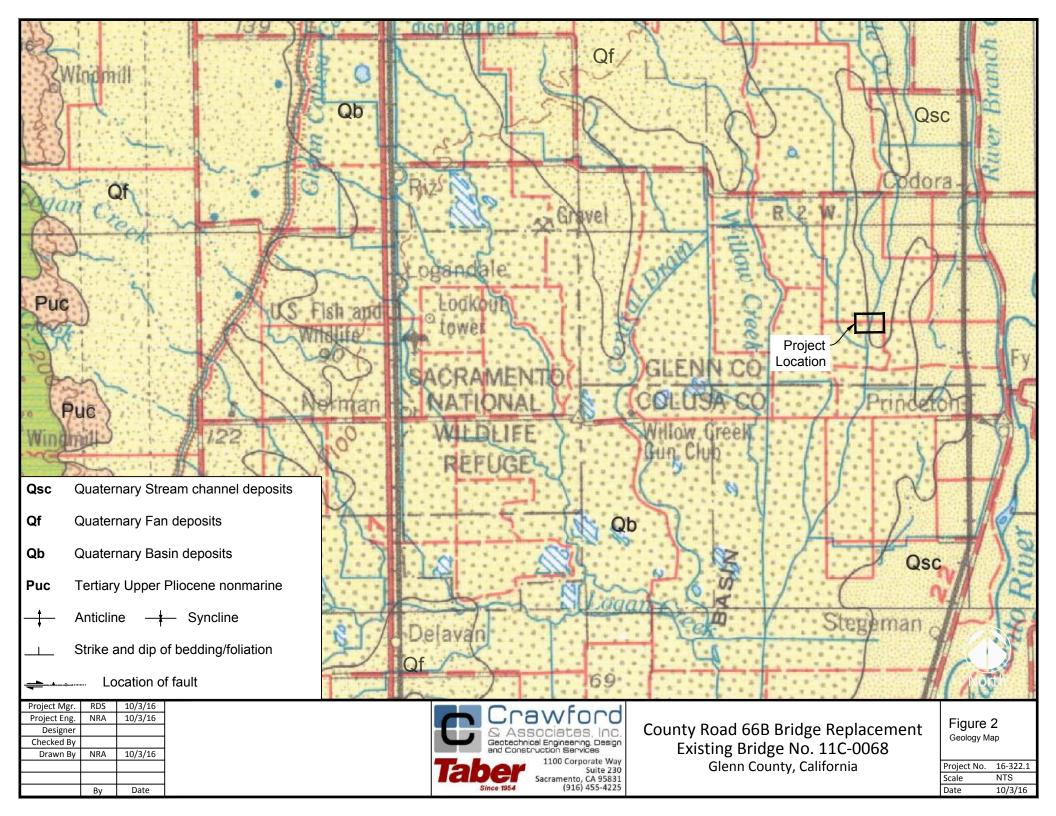


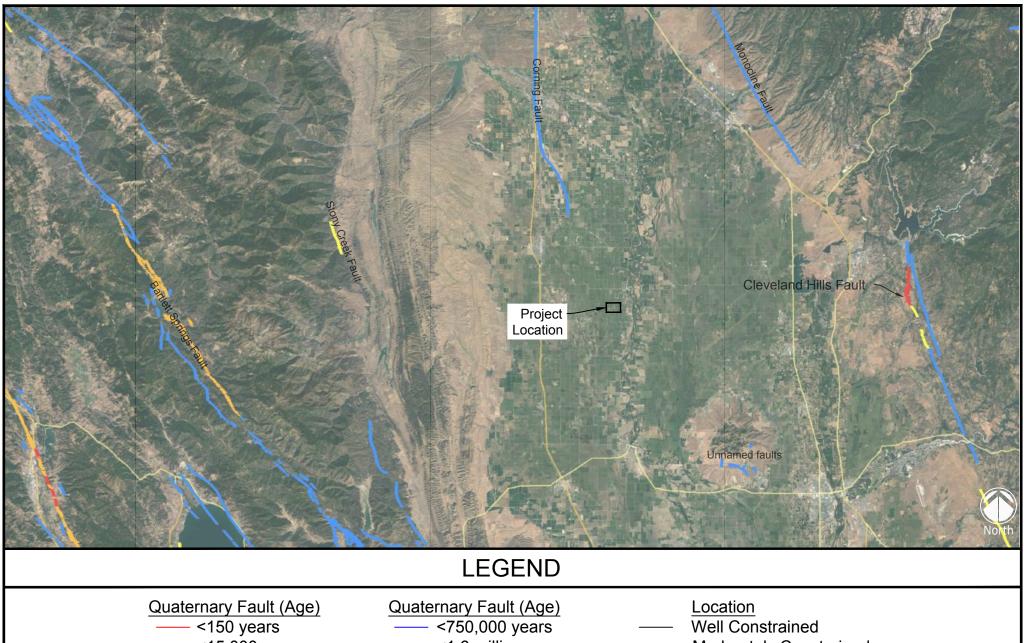
APPENDIX A

Site Maps









— <15,000 years — <130,000 years

10/3/16

10/3/16

10/3/16

Date

RDS

NRA

NRA

By

Project Mgr.

Project Eng.

Checked By

Designer

Drawn By

- <1.6 million years</p>

a

es, inc

1100 Corporate Way

Sacramento, CA 95831 (916) 455-4225

Suite 230

Geotechnical Engineering. Design

truction Services

- --- Moderately Constrained
- ----- Inferred

County Road 66B Bridge Replacement Existing Bridge No. 11C-0068 Glenn County, California

Figure 3
Fault Activity Map

 Project No.
 16-322.1

 Scale
 1"=10miles

 Date
 10/3/16

APPENDIX B

Site Photographs





Photo 1 – CR 66B bridge over Colusa Drain. Viewed west.



Photo 2 – CR 66B looking east from Colusa Drain bridge.





Photo 3 – View of bridge from the north side. Viewed southeast.



Photo 4 – View of bridge from the south side. Viewed north-northeast.





Photo 5 – Corroded steel jacketing on pile (western pier).



Photo 6 – Tires at southwest corner of bridge (APN 013-250-037).





Photo 7 – Sign at southeastern corner of bridge (APN 013-250-021).



Photo 8 – Abutment, northwest corner of bridge.





Photo 9 – Wooden decking and curb rail.



APPENDIX C

Historical Aerial Photographs





Historical Aerial Photographs

Target Property: CR 66B @ Colusa Drain Bridge Rd 66B Princeton, Glenn, California 95970

Prepared For:

Crawford & Associates

Order #: 107993 Job #: 236699 Project #: 16-322 Date: 5/11/2018

GeoSearch www.geo-search.com 888-396-0042

Target Property Summary

CR 66B @ Colusa Drain Bridge Rd 66B Princeton, Glenn, California 95970 USGS Quadrangle: Princeton

Target Property Geometry: **Point**

Target Property Longitude(s)/Latitude(s): (-122.050080175, 39.428544391)



Aerial Research Summary

<u>Date</u>	Source	Scale	Frame
2016	USDA	1" = 500'	N/A
2014	USDA	1" = 500'	N/A
2012	USDA	1" = 500'	N/A
2010	USDA	1" = 500'	N/A
2009	USDA	1" = 500'	N/A
2006	USDA	1" = 500'	N/A
2005	USDA	1" = 500'	N/A
2004	USDA	1" = 500'	N/A
2003	USDA	1" = 500'	N/A
08/25/1998	USGS	1" = 500'	N/A
06/16/1993	USGS	1'' = 700'	6358-68
07/04/1983	USGS	1'' = 700'	397-14
07/01/1973	USGS	1" = 500'	1-116
1964	ASCS	1" = 1320'	PI-3
1958	ASCS	1" = 1320'	PI-2
06/13/1947	USGS	1" = 500'	2-128
10/10/1937	ASCS	1" = 500'	115-8

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GeoSearch www.geo-search.com 888-396-0042

Order# 107993 Job# 236699





CR 66B @ Colusa Drain Bridge ASCS 10/10/1937



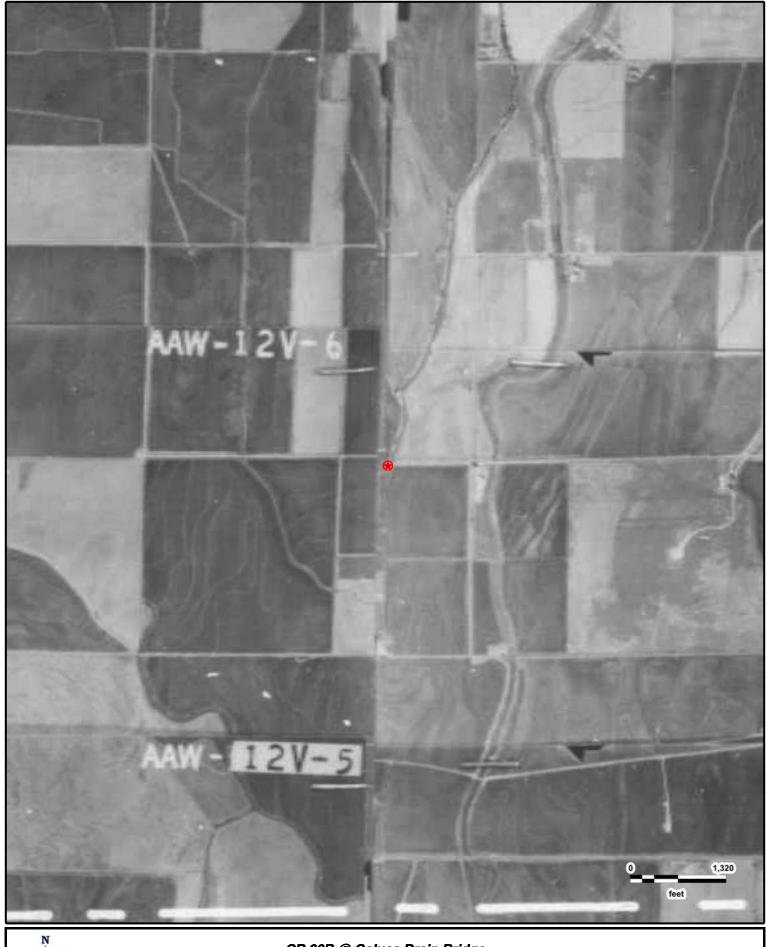
JOB #: 236699 - 05/11/2018

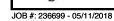




CR 66B @ Colusa Drain Bridge USGS 06/13/1947

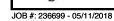






GeoSearch









CR 66B @ Colusa Drain Bridge USGS 07/01/1973







CR 66B @ Colusa Drain Bridge USGS 07/04/1983







CR 66B @ Colusa Drain Bridge USGS 06/16/1993

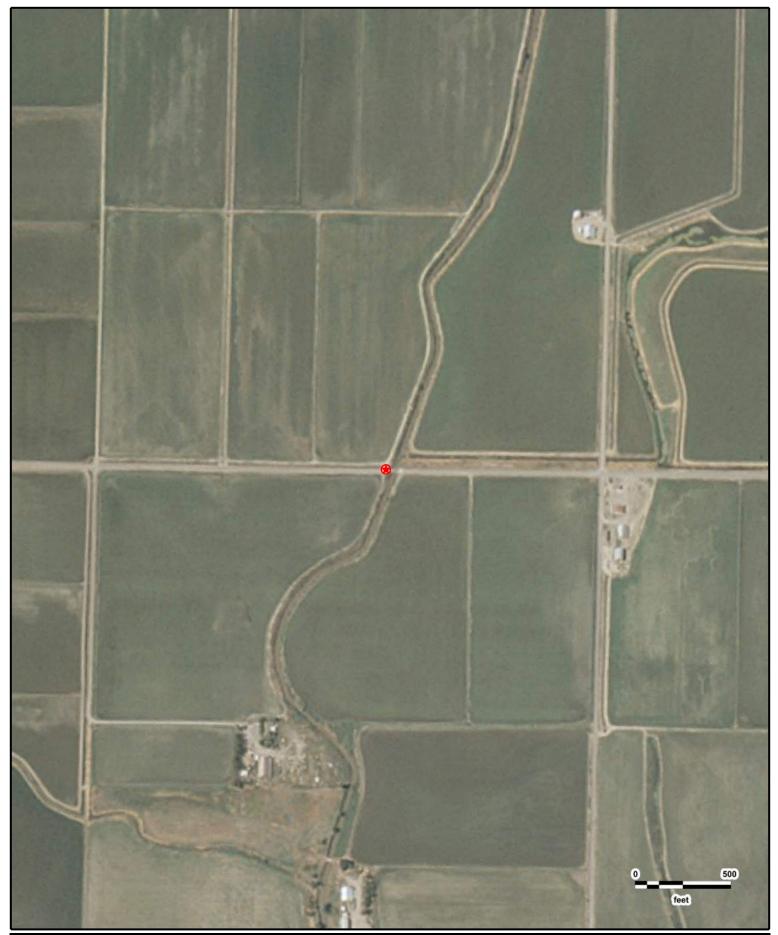






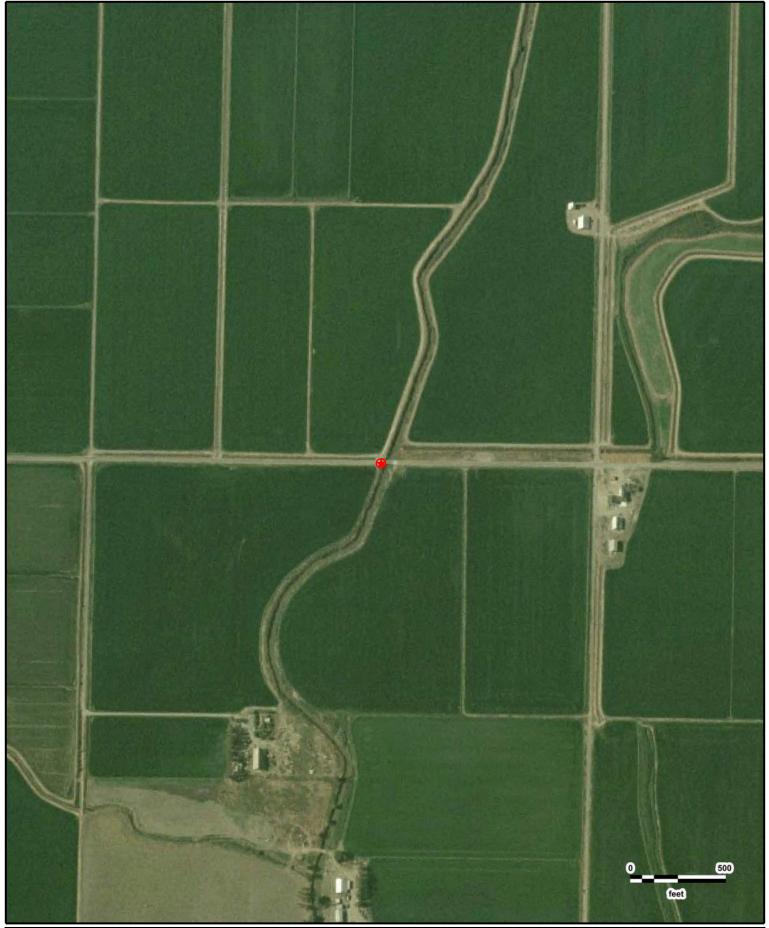
CR 66B @ Colusa Drain Bridge USGS 08/25/1998





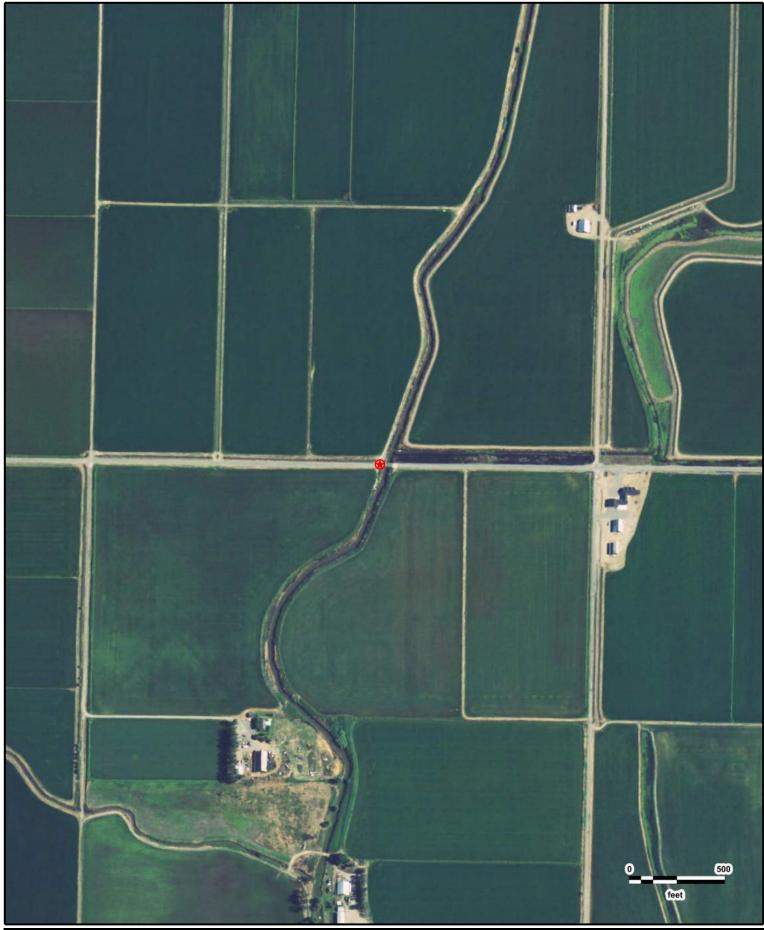






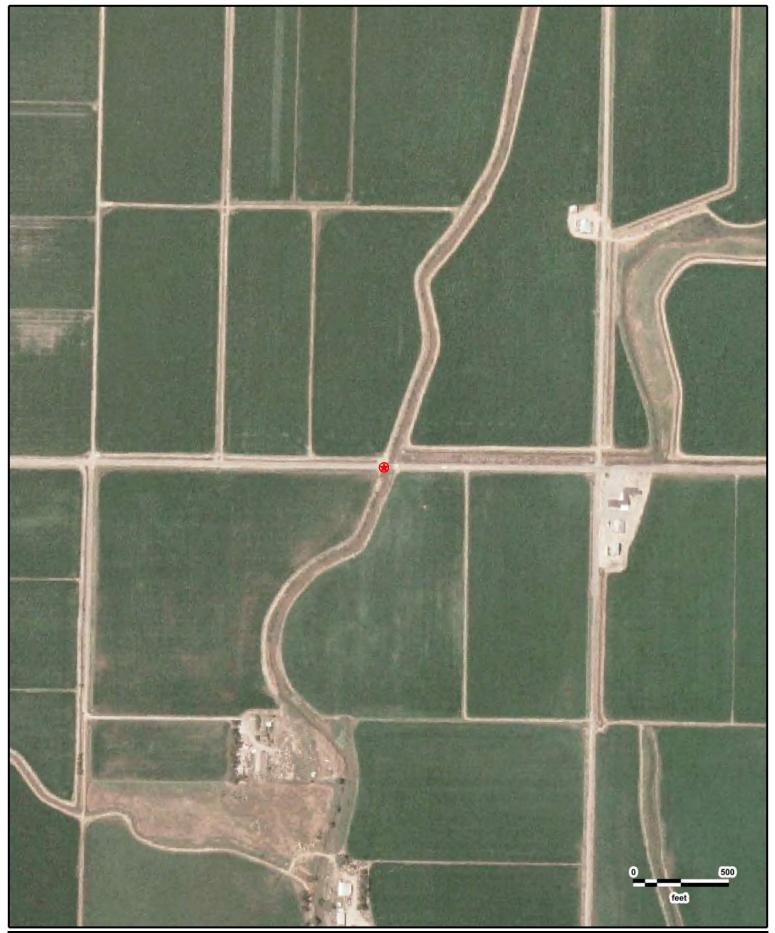






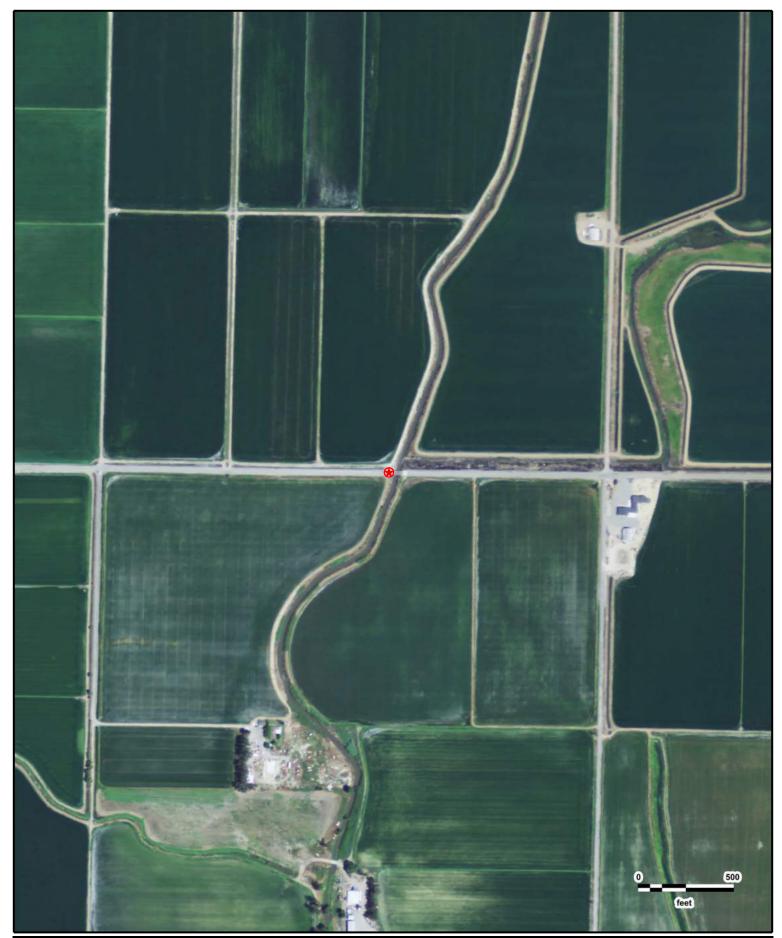






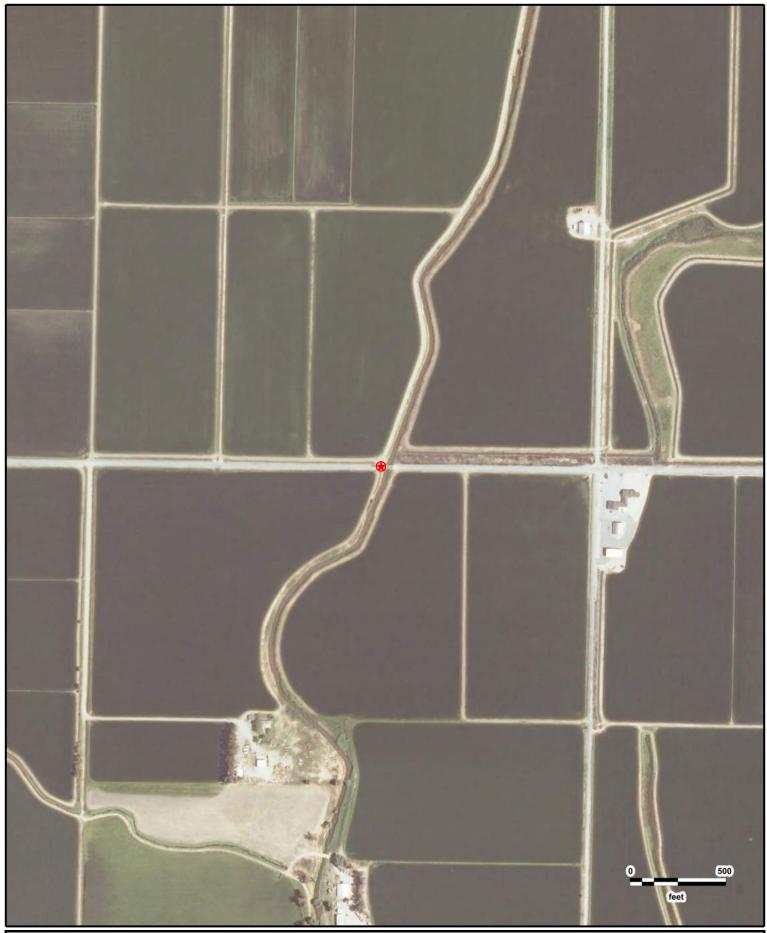






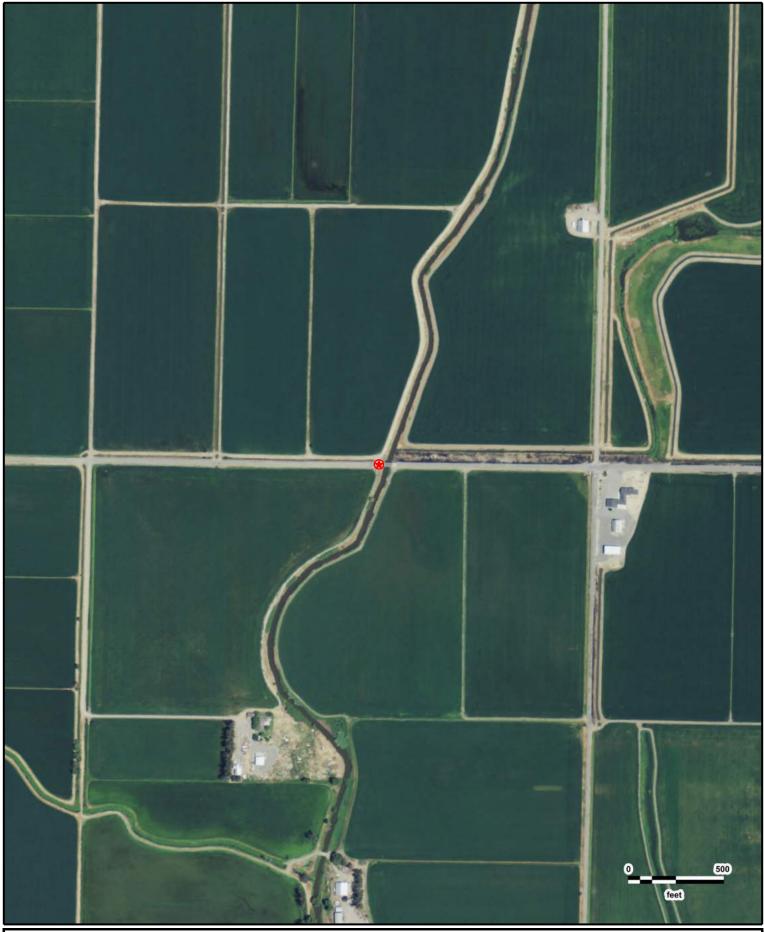












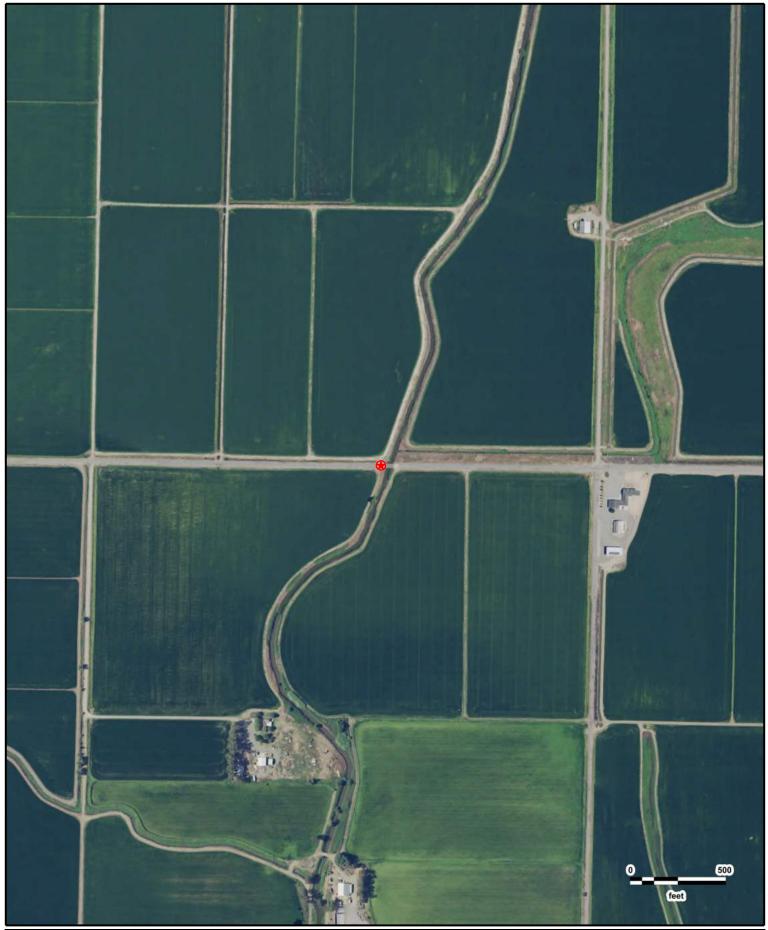
















APPENDIX D

Historical Topographic Maps





Historical Topographic Maps

Target Property: CR 66B @ Colusa Drain Bridge Rd 66B Princeton, Glenn, California 95970

Prepared For:

Crawford & Associates

Order #: 107993 Job #: 236698 Project #: 16-322 Date: 5/8/2018

GeoSearch www.geo-search.com 888-396-0042

Target Property Summary

CR 66B @ Colusa Drain Bridge Rd 66B Princeton, Glenn, California 95970 USGS Quadrangle: Princeton

Target Property Geometry: **Point**

Target Property Longitude(s)/Latitude(s): (-122.050080175, 39.428544391)

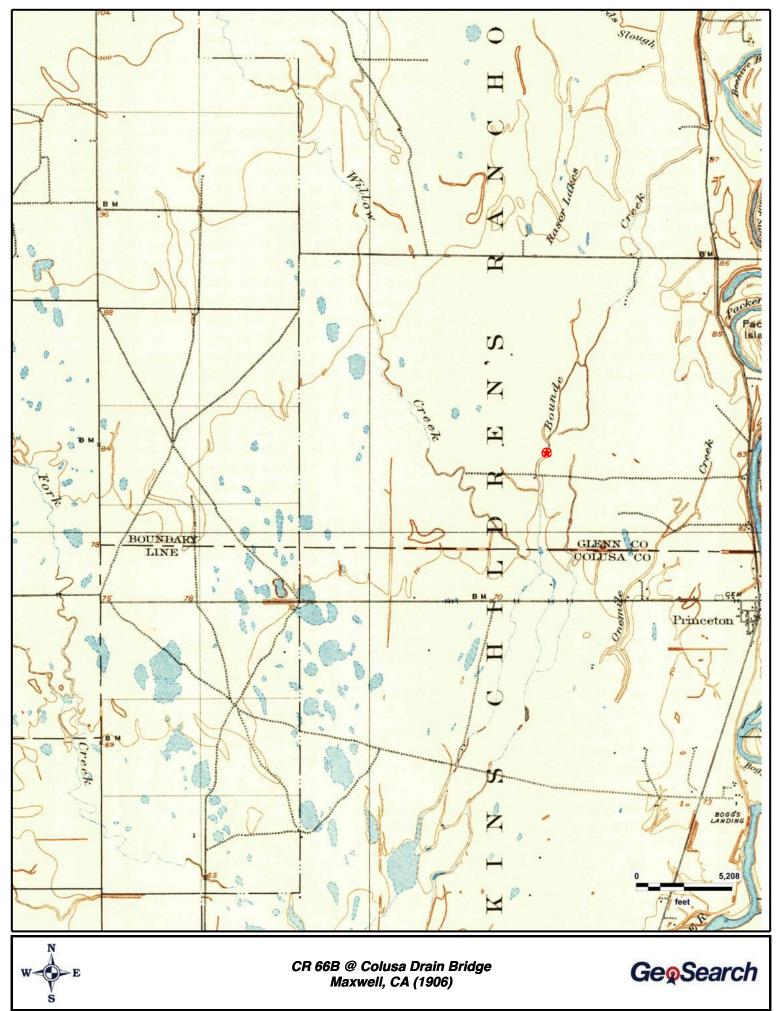


Topographic Map Summary

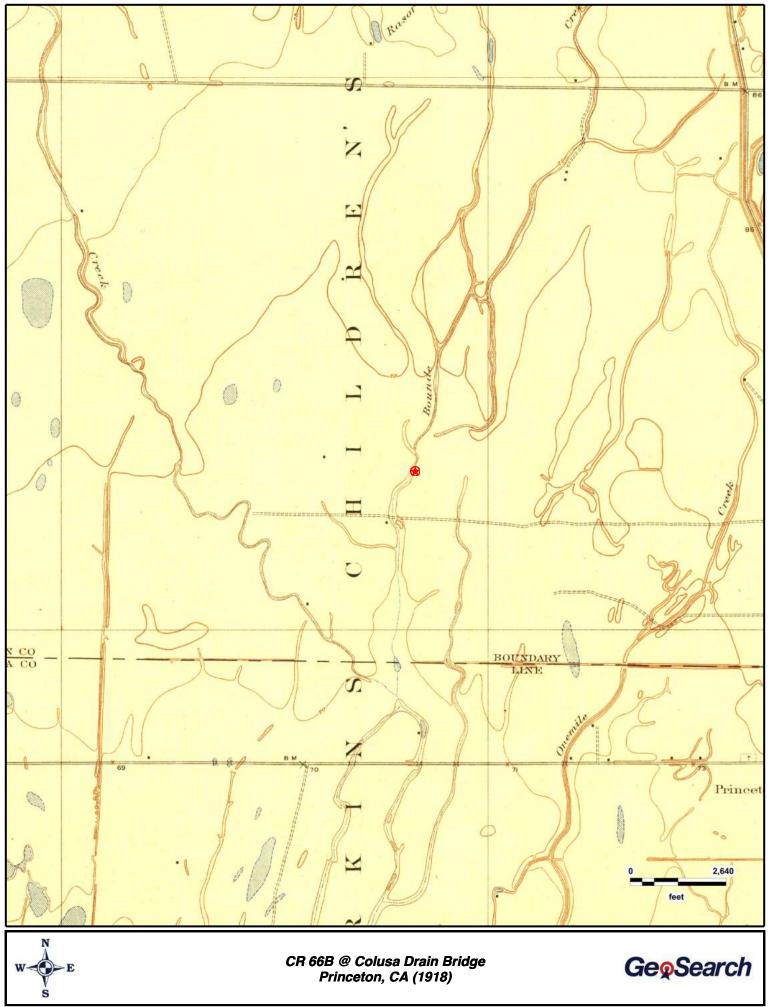
Date	Quadrangle	Scale
2012	Princeton, CA	1" = 2000'
1952 PHOTOREVISED 1973	Princeton, CA	1" = 2000'
1952	Princeton, CA	1" = 2000'
1952	Maxwell, CA	1" = 5208'
1918	Princeton, CA	1" = 2640'
1906	Maxwell, CA	1" = 5208'

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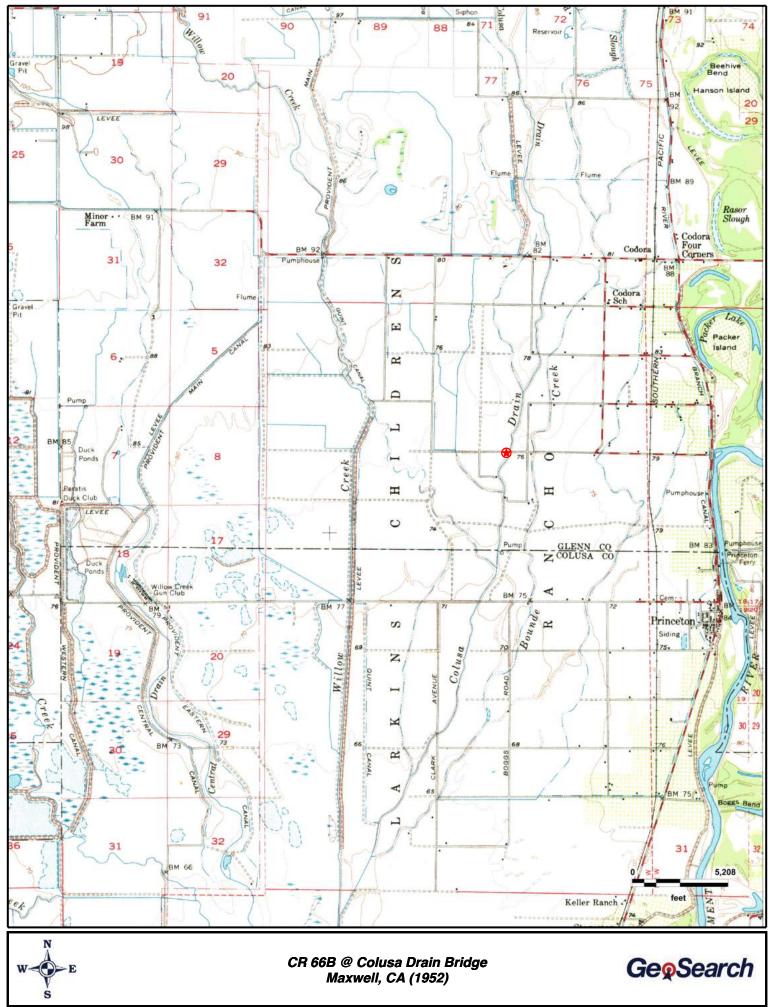
GeoSearch www.geo-search.com 888-396-0042

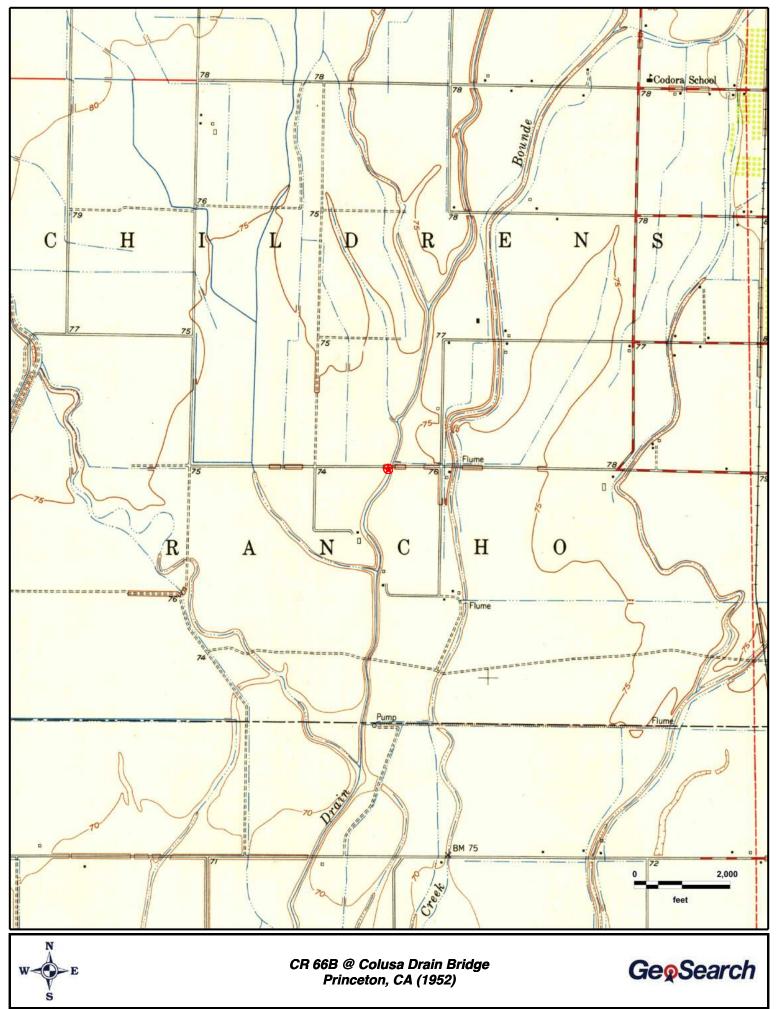


JOB #: 236698 - 05/08/2018

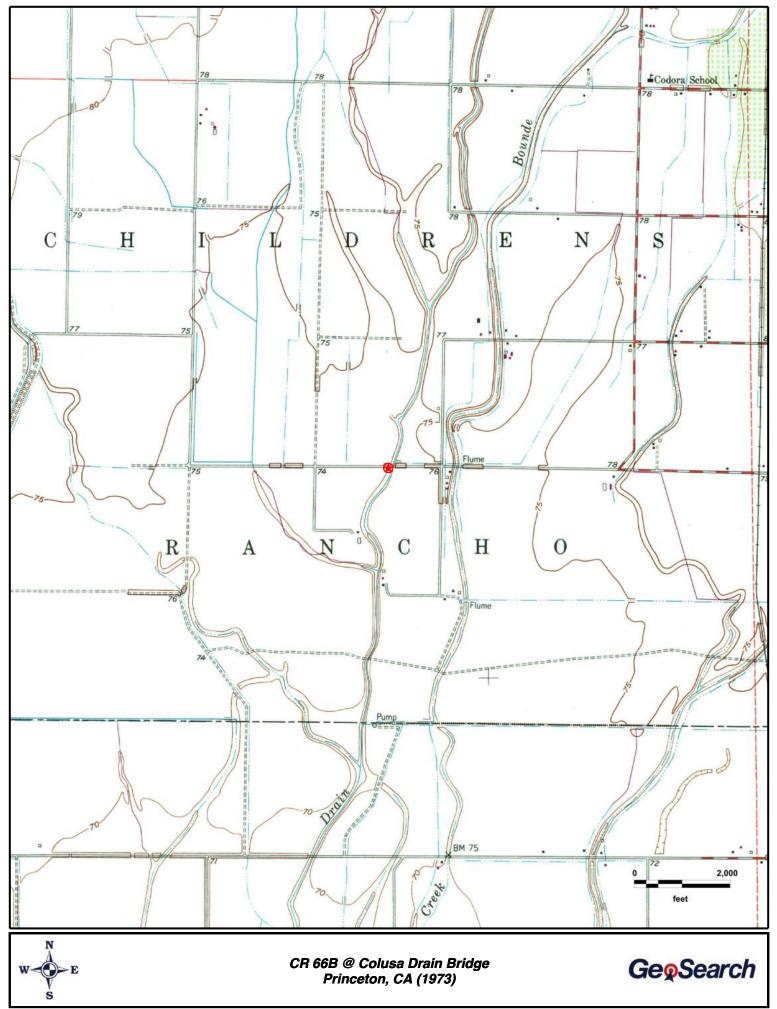


JOB #: 236698 - 05/08/2018

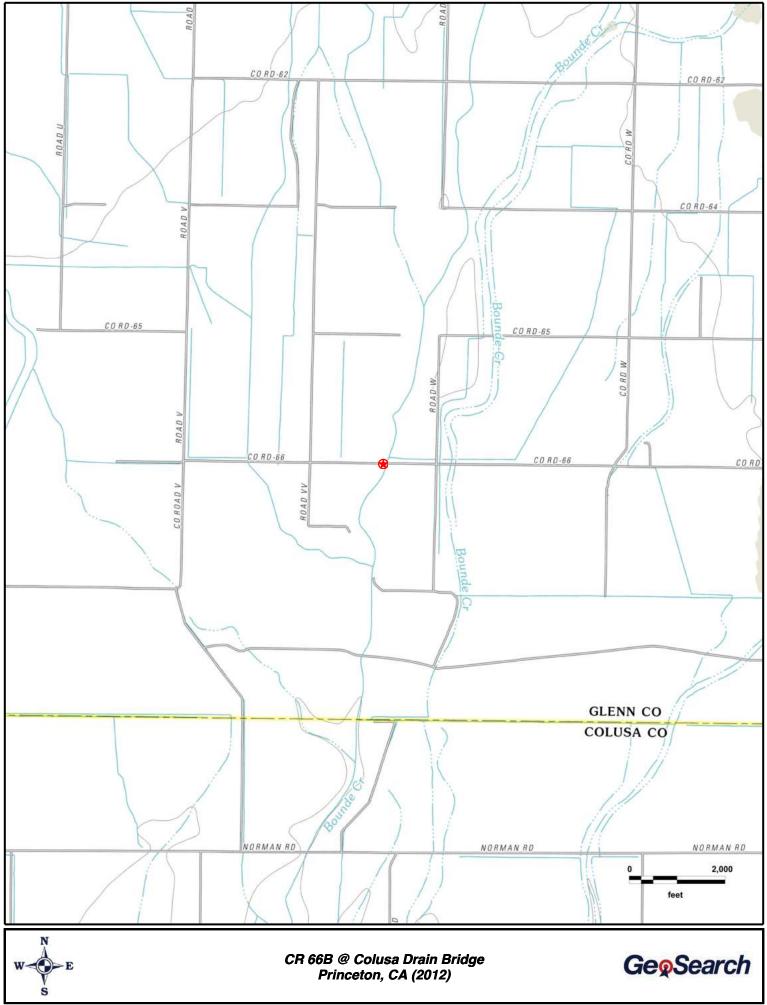




JOB #: 236698 - 05/08/2018



JOB #: 236698 - 05/08/2018



JOB #: 236698 - 05/08/2018

APPENDIX E

GeoSearch Radius Report Order Number: 107993





Radius Report

Satellite view

Target Property: CR 66B @ Colusa Drain Bridge Rd 66B Princeton, Glenn County, California 95970

Prepared For:

Crawford & Associates

Order #: 107993 Job #: 236697 Project #: 16-322 Date: 05/09/2018

GeoSearch www.geo-search.com 888-396-0042

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Unlocated Sites Summary
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Unlocatable Report
Zip Report



This report was designed by GeoSearch to meet or exceed the records search requirements of the All Appropriate Inquiries Rule (40 CFR §312.26) and the current version of the ASTM International E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process or, if applicable, the custom requirements requested by the entity that ordered this report. The records and databases of records used to compile this report were collected from various federal, state and local governmental entities. It is the goal of GeoSearch to meet or exceed the 40 CFR §312.26 and E1527 requirements for updating records by using the best available technology. GeoSearch contacts the appropriate governmental entities on a recurring basis. Depending on the frequency with which a record source or database of records is updated by the governmental entity, the data used to prepare this report may be updated monthly, quarterly, semi-annually, or annually.

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Target Property Summary

Target Property Information

CR 66B @ Colusa Drain Bridge Rd 66B Princeton, California 95970

Coordinates

Point (-122.05008, 39.428544) 72 feet above sea level

USGS Quadrangle

Princeton, CA

Geographic Coverage Information

County/Parish: Glenn (CA) *ZipCode(s):* Princeton CA: 95970

Radon

* Target property is located in Radon Zone 3. Zone 3 areas have a predicted average indoor radon screening level less than 2 pCi/L (picocuries per liter).



FEDERAL LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
EMERGENCY RESPONSE NOTIFICATION SYSTEM	<u>ERNSCA</u>	0	0	TP/AP
FEDERAL ENGINEERING INSTITUTIONAL CONTROL SITES	EC	0	0	TP/AP
LAND USE CONTROL INFORMATION SYSTEM	LUCIS	0	0	TP/AP
RCRA SITES WITH CONTROLS	<u>RCRASC</u>	0	0	TP/AP
RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR	RCRAGR09	0	0	0.1250
RESOURCE CONSERVATION & RECOVERY ACT - NON- GENERATOR	<u>RCRANGR09</u>	0	0	0.1250
FEMA OWNED STORAGE TANKS	<u>FEMAUST</u>	0	0	0.2500
BROWNFIELDS MANAGEMENT SYSTEM	<u>BF</u>	0	0	0.5000
DELISTED NATIONAL PRIORITIES LIST	<u>DNPL</u>	0	0	0.5000
NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES	<u>NLRRCRAT</u>	0	0	0.5000
RESOURCE CONSERVATION & RECOVERY ACT - NON-CORRACTS TREATMENT, STORAGE & DISPOSAL FACILITIES	<u>RCRAT</u>	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM	<u>SEMS</u>	0	0	0.5000
SUPERFUND ENTERPRISE MANAGEMENT SYSTEM ARCHIVED SITE INVENTORY	<u>SEMSARCH</u>	0	0	0.5000
NATIONAL PRIORITIES LIST	<u>NPL</u>	0	0	1.0000
NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES	<u>NLRRCRAC</u>	0	0	1.0000
PROPOSED NATIONAL PRIORITIES LIST	<u>PNPL</u>	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - CORRECTIVE ACTION FACILITIES	<u>RCRAC</u>	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - SUBJECT TO CORRECTIVE ACTION FACILITIES	<u>RCRASUBC</u>	0	0	1.0000
SUB-TOTAL		0	0	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
AEROMETRIC INFORMATION RETRIEVAL SYSTEM / AIR FACILITY SUBSYSTEM	<u>AIRSAFS</u>	0	0	TP/AP
BIENNIAL REPORTING SYSTEM	<u>BRS</u>	0	0	TP/AP
CERCLIS LIENS	<u>SFLIENS</u>	0	0	TP/AP
CLANDESTINE DRUG LABORATORY LOCATIONS	<u>CDL</u>	0	0	TP/AP
EPA DOCKET DATA	DOCKETS	0	0	TP/AP
ENFORCEMENT AND COMPLIANCE HISTORY INFORMATION	ECHOR09	0	0	TP/AP



Database Summary

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
FACILITY REGISTRY SYSTEM	<u>FRSCA</u>	0	0	TP/AP
HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM	HMIRSR09	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM (FORMERLY DOCKETS)	<u>ICIS</u>	0	0	TP/AP
INTEGRATED COMPLIANCE INFORMATION SYSTEM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	ICISNPDES	0	0	TP/AP
MATERIAL LICENSING TRACKING SYSTEM	<u>MLTS</u>	0	0	TP/AP
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	NPDESR09	0	0	TP/AP
PCB ACTIVITY DATABASE SYSTEM	<u>PADS</u>	0	0	TP/AP
PERMIT COMPLIANCE SYSTEM	PCSR09	0	0	TP/AP
SEMS LIEN ON PROPERTY	<u>SEMSLIENS</u>	0	0	TP/AP
SECTION SEVEN TRACKING SYSTEM	<u>SSTS</u>	0	0	TP/AP
TOXIC SUBSTANCE CONTROL ACT INVENTORY	<u>TSCA</u>	0	0	TP/AP
TOXICS RELEASE INVENTORY	<u>TRI</u>	0	0	TP/AP
ALTERNATIVE FUELING STATIONS	<u>ALTFUELS</u>	0	0	0.2500
HISTORICAL GAS STATIONS	<u>HISTPST</u>	0	0	0.2500
INTEGRATED COMPLIANCE INFORMATION SYSTEM DRYCLEANERS	ICISCLEANERS	0	0	0.2500
MINE SAFETY AND HEALTH ADMINISTRATION MASTER INDEX FILE	<u>MSHA</u>	0	0	0.2500
MINERAL RESOURCE DATA SYSTEM	<u>MRDS</u>	0	0	0.2500
OPEN DUMP INVENTORY	<u>ODI</u>	0	0	0.5000
SURFACE MINING CONTROL AND RECLAMATION ACT SITES	<u>SMCRA</u>	0	0	0.5000
URANIUM MILL TAILINGS RADIATION CONTROL ACT SITES	<u>USUMTRCA</u>	0	0	0.5000
DEPARTMENT OF DEFENSE SITES	<u>DOD</u>	0	0	1.0000
FORMER MILITARY NIKE MISSILE SITES	<u>NMS</u>	0	0	1.0000
FORMERLY USED DEFENSE SITES	<u>FUDS</u>	0	0	1.0000
FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM	<u>FUSRAP</u>	0	0	1.0000
RECORD OF DECISION SYSTEM	<u>RODS</u>	0	0	1.0000
SUB-TOTAL		0	0	

GeoSearch www.geo-search.com 888-396-0042

STATE (CA) LISTING

Standard Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
DTSC DEED RESTRICTIONS	DTSCDR	0	0	TP/AP
ABOVE GROUND STORAGE TANKS	<u>ABST</u>	0	0	0.2500
ABOVEGROUND STORAGE TANKS PRIOR TO JANUARY 2008	<u>AST2007</u>	0	0	0.2500
HISTORICAL UNDERGROUND STORAGE TANKS	<u>HISTUST</u>	0	0	0.2500
STATEWIDE ENVIRONMENTAL EVALUATION AND PLANNING SYSTEM	<u>SWEEPS</u>	0	1	0.2500
UNDERGROUND STORAGE TANKS	<u>USTCUPA</u>	0	0	0.2500
BROWNFIELD SITES	<u>BF</u>	0	0	0.5000
CALSITES DATABASE	<u>CALSITES</u>	0	0	0.5000
GEOTRACKER CLEANUP SITES	<u>CLEANUPSITES</u>	0	0	0.5000
LEAKING UNDERGROUND STORAGE TANKS	<u>LUST</u>	0	0	0.5000
SOLID WASTE INFORMATION SYSTEM SITES	<u>SWIS</u>	0	0	0.5000
VOLUNTARY CLEANUP PROGRAM	<u>VCP</u>	0	0	0.5000
ENVIROSTOR CLEANUP SITES	ENVIROSTOR	0	0	1.0000
ENVIROSTOR PERMITTED AND CORRECTIVE ACTION SITES	ENVIROSTORPCA	0	0	1.0000
SUB-TOTAL		0	1	

Additional Environmental Records

Database	Acronym	Locatable	Unlocatable	Search Radius (miles)
CALIFORNIA HAZARDOUS MATERIAL INCIDENT REPORT SYSTEM	<u>CHMIRS</u>	0	0	TP/AP
CLANDESTINE DRUG LABS	<u>CDL</u>	0	0	TP/AP
EMISSIONS INVENTORY DATA	<u>EMI</u>	0	0	TP/AP
HAZARDOUS WASTE TANNER SUMMARY	<u>HWTS</u>	0	0	TP/AP
LAND DISPOSAL SITES	<u>LDS</u>	0	0	TP/AP
MILITARY CLEANUP SITES	<u>MCS</u>	0	0	TP/AP
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM FACILITIES	<u>NPDES</u>	0	0	TP/AP
RECORDED ENVIRONMENTAL CLEANUP LIENS	<u>LIENS</u>	0	0	TP/AP
CALIFORNIA MEDICAL WASTE MANAGEMENT PROGRAM FACILITY LIST	<u>MWMP</u>	0	0	0.2500
DTSC REGISTERED HAZARDOUS WASTE TRANSPORTERS	<u>DTSCHWT</u>	0	0	0.2500
DRY CLEANER FACILITIES	<u>CLEANER</u>	0	0	0.2500
MINES LISTING	<u>MINES</u>	0	0	0.2500

Database Summary

Database	Acronym	Locatable	Uniocatable	Search Radius (miles)
SPILLS, LEAKS, INVESTIGATION & CLEANUP RECOVERY LISTING	SLIC	0	0	0.2500
CORTESE LIST	<u>CORTESE</u>	0	0	0.5000
EXPEDITED REMOVAL ACTION PROGRAM SITES	ERAP	0	0	0.5000
HISTORICAL CORTESE LIST	<u>HISTCORTESE</u>	0	0	0.5000
LISTING OF CERTIFIED DROPOFF, COLLECTION, AND COMMUNITY SERVICE PROGRAMS	<u>DROP</u>	0	0	0.5000
LISTING OF CERTIFIED PROCESSORS	<u>PROC</u>	0	0	0.5000
NO FURTHER ACTION DETERMINATION	<u>NFA</u>	0	0	0.5000
RECYCLING CENTERS	<u>SWRCY</u>	0	0	0.5000
REFERRED TO ANOTHER LOCAL OR STATE AGENCY	<u>REF</u>	0	0	0.5000
SITES NEEDING FURTHER EVALUATION	<u>NFE</u>	0	0	0.5000
WASTE MANAGEMENT UNIT DATABASE	<u>WMUDS</u>	0	0	0.5000
TOXIC PITS CLEANUP ACT SITES	<u>TOXPITS</u>	0	0	1.0000
SUB-TOTAL		0	0	



TRIBAL LISTING

Standard Environmental Records

				Search Radius
Database	Acronym	Locatable	Unlocatable	(miles)
UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	<u>USTR09</u>	0	0	0.2500
ILLEGAL DUMP SITES ON THE TORRES MARTINEZ RESERVATION	<u>TORRESDUMPSIT</u> <u>ES</u>	0	0	0.5000
LEAKING UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	<u>LUSTR09</u>	0	0	0.5000
OPEN DUMP INVENTORY ON TRIBAL LANDS	<u>ODINDIAN</u>	0	0	0.5000
		-	-	
SUB-TOTAL		0	0	

Additional Environmental Records

INDIAN RESERVATIONS INDIAN	I <u>RES</u> 0	0	1.0000
SUB-TOTAL	0	0	

|--|



Database Radius Summary

FEDERAL LISTING

Standard environmental records are displayed in **bold**.

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
AIRSAFS	0.0200	0	NS	NS	NS	NS	NS	0
BRS	0.0200	0	NS	NS	NS	NS	NS	0
CDL	0.0200	0	NS	NS	NS	NS	NS	0
DOCKETS	0.0200	0	NS	NS	NS	NS	NS	0
EC	0.0200	0	NS	NS	NS	NS	NS	0
ECHOR09	0.0200	0	NS	NS	NS	NS	NS	0
ERNSCA	0.0200	0	NS	NS	NS	NS	NS	0
FRSCA	0.0200	0	NS	NS	NS	NS	NS	0
HMIRSR09	0.0200	0	NS	NS	NS	NS	NS	0
ICIS	0.0200	0	NS	NS	NS	NS	NS	0
ICISNPDES	0.0200	0	NS	NS	NS	NS	NS	0
LUCIS	0.0200	о	NS	NS	NS	NS	NS	0
MLTS	0.0200	0	NS	NS	NS	NS	NS	0
NPDESR09	0.0200	0	NS	NS	NS	NS	NS	0
PADS	0.0200	0	NS	NS	NS	NS	NS	0
PCSR09	0.0200	0	NS	NS	NS	NS	NS	0
RCRASC	0.0200	о	NS	NS	NS	NS	NS	0
SEMSLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SFLIENS	0.0200	0	NS	NS	NS	NS	NS	0
SSTS	0.0200	0	NS	NS	NS	NS	NS	0
TRI	0.0200	0	NS	NS	NS	NS	NS	0
TSCA	0.0200	0	NS	NS	NS	NS	NS	0
RCRAGR09	0.1250	о	0	NS	NS	NS	NS	0
RCRANGR09	0.1250	о	0	NS	NS	NS	NS	0
ALTFUELS	0.2500	0	0	0	NS	NS	NS	0
FEMAUST	0.2500	о	0	о	NS	NS	NS	0
HISTPST	0.2500	0	0	0	NS	NS	NS	0
ICISCLEANERS	0.2500	0	0	0	NS	NS	NS	0
MRDS	0.2500	0	0	0	NS	NS	NS	0
MSHA	0.2500	0	0	0	NS	NS	NS	0
BF	0.5000	о	0	о	0	NS	NS	0
DNPL	0.5000	о	0	о	o	NS	NS	0
NLRRCRAT	0.5000	о	0	о	0	NS	NS	0
ODI	0.5000	0	0	0	о	NS	NS	0
RCRAT	0.5000	0	0	о	0	NS	NS	0

GeoSearch www.geo-search.com 888-396-0042

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
SEMS	0.5000	0	0	0	0	NS	NS	0
SEMSARCH	0.5000	0	0	о	о	NS	NS	0
SMCRA	0.5000	0	0	0	0	NS	NS	0
USUMTRCA	0.5000	0	0	0	0	NS	NS	0
DOD	1.0000	0	0	0	0	0	NS	0
FUDS	1.0000	0	0	0	0	0	NS	0
FUSRAP	1.0000	0	0	0	0	0	NS	0
NLRRCRAC	1.0000	0	0	о	о	0	NS	0
NMS	1.0000	0	0	0	0	0	NS	0
NPL	1.0000	0	0	о	о	0	NS	0
PNPL	1.0000	0	0	о	о	0	NS	0
RCRAC	1.0000	0	0	о	о	0	NS	0
RCRASUBC	1.0000	0	о	о	о	0	NS	0
RODS	1.0000	0	0	0	0	0	NS	0
		_	_	_	-	-	_	_
SUB-TOTAL		0	0	0	0	0	0	0



STATE (CA) LISTING

Standard environmental records are displayed in **bold**.

Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
CDL	0.0200	0	NS	NS	NS	NS	NS	0
CHMIRS	0.0200	0	NS	NS	NS	NS	NS	0
DTSCDR	0.0200	о	NS	NS	NS	NS	NS	0
EMI	0.0200	0	NS	NS	NS	NS	NS	0
HWTS	0.0200	0	NS	NS	NS	NS	NS	0
LDS	0.0200	0	NS	NS	NS	NS	NS	0
LIENS	0.0200	0	NS	NS	NS	NS	NS	0
MCS	0.0200	0	NS	NS	NS	NS	NS	0
NPDES	0.0200	0	NS	NS	NS	NS	NS	0
ABST	0.2500	о	0	0	NS	NS	NS	0
AST2007	0.2500	о	0	0	NS	NS	NS	0
CLEANER	0.2500	0	0	0	NS	NS	NS	0
DTSCHWT	0.2500	0	0	0	NS	NS	NS	0
HISTUST	0.2500	о	0	0	NS	NS	NS	0
MINES	0.2500	0	0	0	NS	NS	NS	0
MWMP	0.2500	0	0	0	NS	NS	NS	0
SLIC	0.2500	0	0	0	NS	NS	NS	0
SWEEPS	0.2500	о	0	0	NS	NS	NS	0
USTCUPA	0.2500	0	0	0	NS	NS	NS	0
BF	0.5000	о	0	0	о	NS	NS	0
CALSITES	0.5000	о	0	0	о	NS	NS	0
CLEANUPSITES	0.5000	о	0	0	о	NS	NS	0
CORTESE	0.5000	0	0	0	0	NS	NS	0
DROP	0.5000	0	0	0	0	NS	NS	0
ERAP	0.5000	0	0	0	0	NS	NS	0
HISTCORTESE	0.5000	0	0	0	0	NS	NS	0
LUST	0.5000	о	0	0	о	NS	NS	0
NFA	0.5000	0	0	0	0	NS	NS	0
NFE	0.5000	0	0	0	0	NS	NS	0
PROC	0.5000	0	0	0	0	NS	NS	0
REF	0.5000	0	0	0	0	NS	NS	0
SWIS	0.5000	о	0	0	о	NS	NS	0
SWRCY	0.5000	0	0	0	0	NS	NS	0
VCP	0.5000	о	0	0	о	NS	NS	0
WMUDS	0.5000	0	0	0	0	NS	NS	0

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Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
ENVIROSTOR	1.0000	0	0	0	0	0	NS	0
ENVIROSTORPCA	1.0000	0	0	0	0	0	NS	о
TOXPITS	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		0	0	0	0	0	0	0



TRIBAL LISTING

Standard environmental records are displayed in **bold**.

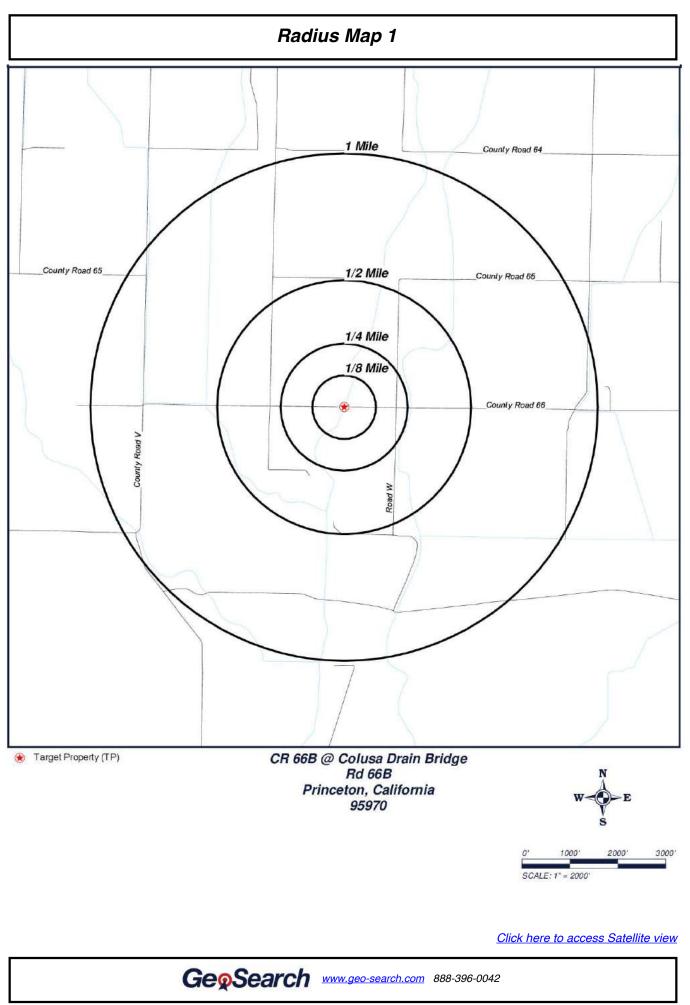
Acronym	Search Radius (miles)	TP/AP (0 - 0.02)	1/8 Mile (> TP/AP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total
USTR09	0.2500	0	0	0	NS	NS	NS	0
LUSTR09	0.5000	0	0	0	0	NS	NS	0
ODINDIAN	0.5000	0	0	0	0	NS	NS	0
TORRESDUMPSITES	0.5000	0	0	0	0	NS	NS	0
INDIANRES	1.0000	0	0	0	0	0	NS	0
SUB-TOTAL		0	0	0	0	0	0	0

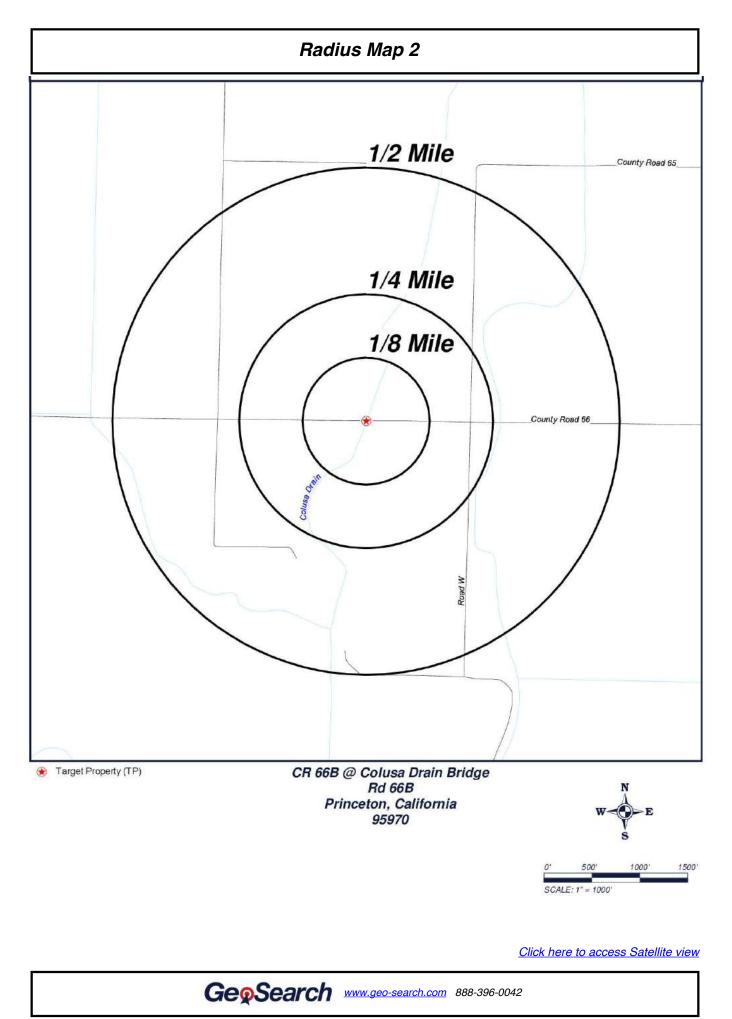
	TOTAL	0	0	0	0	0	0	0

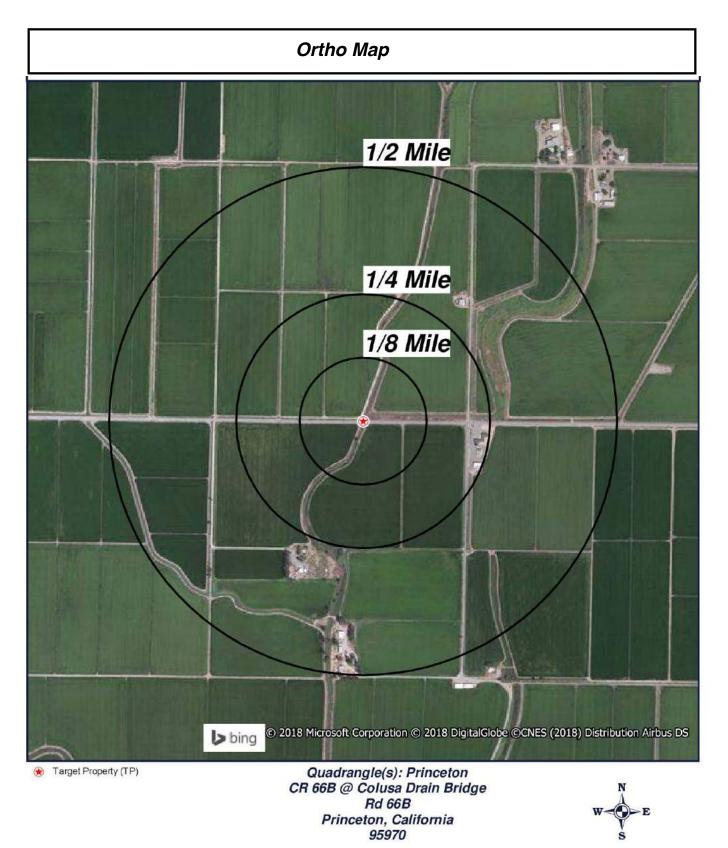
NOTES:

NS = NOT SEARCHED TP/AP = TARGET PROPERTY/ADJACENT PROPERTY





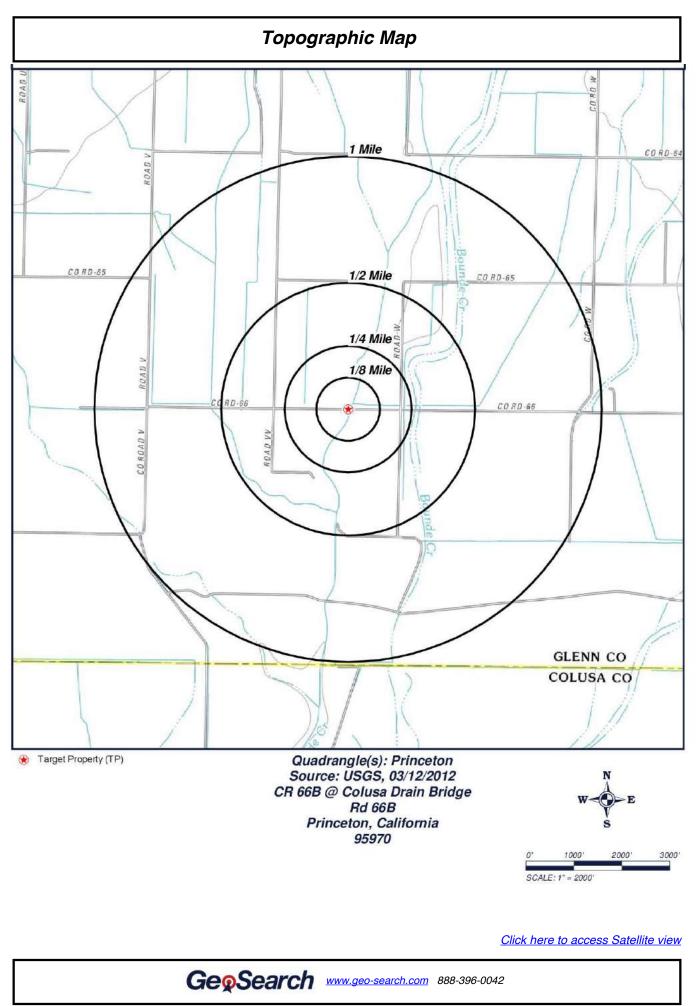




0' 500' 1000' 1500' SCALE: 1" = 1000'

Click here to access Satellite view

GeoSearch www.geo-search.com 888-396-0042



Order# 107993 Job# 236697

Located Sites Summary

No Records Found.



Elevation Summary

Elevations are collected from the USGS 3D Elevation Program 1/3 arc-second (approximately 10 meters) layer hosted at the NGTOC. .

Target Property Elevation: 72 ft.

NOTE: Standard environmental records are displayed in **bold**.

No Records Found.



Unlocated Sites Summary

This list contains sites that could not be mapped due to limited or incomplete address information.

Database Name	Site ID#	Site Name	Address	City/State/Zip/County
SWEEPS	111-000-999990	TORRES RICE RANCH	ROAD 66B	PRINCETON 95970 Colusa



AIRSAFS

Aerometric Information Retrieval System / Air Facility Subsystem

VERSION DATE: 10/20/14

The United States Environmental Protection Agency (EPA) modified the Aerometric Information Retrieval System (AIRS) to a database that exclusively tracks the compliance of stationary sources of air pollution with EPA regulations: the Air Facility Subsystem (AFS). Since this change in 2001, the management of the AIRS/AFS database was assigned to EPA's Office of Enforcement and Compliance Assurance.

BRS Biennial Reporting System

VERSION DATE: 12/31/11

The United States Environmental Protection Agency (EPA), in cooperation with the States, biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The Biennial Report captures detailed data on the generation of hazardous waste from large quantity generators and data on waste management practices from treatment, storage and disposal facilities. Currently, the EPA states that data collected between 1991 and 1997 was originally a part of the defunct Biennial Reporting System and is now incorporated into the RCRAInfo data system.

CDL

Clandestine Drug Laboratory Locations

VERSION DATE: 07/01/16

The U.S. Department of Justice ("the Department") provides this information as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments. The Department does not establish, implement, enforce, or certify compliance with clean-up or remediation standards for contaminated sites; the public should contact a state or local health department or environmental protection agency for that information.

DOCKETS

EPA Docket Data

VERSION DATE: 12/22/05

The United States Environmental Protection Agency Docket data lists Civil Case Defendants, filing dates as far back as 1971, laws broken including section, violations that occurred, pollutants involved, penalties assessed and superfund awards by facility and location. Please refer to ICIS database as source of current data.

EC

Federal Engineering Institutional Control Sites

VERSION DATE: 08/03/15

This database includes site locations where Engineering and/or Institutional Controls have been identified as part



of a selected remedy for the site as defined by United States Environmental Protection Agency official remedy decision documents. A site listing does not indicate that the institutional and engineering controls are currently in place nor will be in place once the remedy is complete; it only indicates that the decision to include either of them in the remedy is documented as of the completed date of the document. Institutional controls are actions, such as legal controls, that help minimize the potential for human exposure to contamination by ensuring appropriate land or resource use. Engineering controls include caps, barriers, or other device engineering to prevent access, exposure, or continued migration of contamination.

ECHOR09

Enforcement and Compliance History Information

VERSION DATE: 08/26/17

The EPA's Enforcement and Compliance History Online (ECHO) database, provides compliance and enforcement information for facilities nationwide. This database includes facilities regulated as Clean Air Act stationary sources, Clean Water Act direct dischargers, Resource Conservation and Recovery Act hazardous waste handlers, Safe Drinking Water Act public water systems along with other data, such as Toxics Release Inventory releases.

ERNSCA

Emergency Response Notification System

VERSION DATE: 10/15/17

This National Response Center database contains data on reported releases of oil, chemical, radiological, biological, and/or etiological discharges into the environment anywhere in the United States and its territories. The data comes from spill reports made to the U.S. Environmental Protection Agency, U.S. Coast Guard, the National Response Center and/or the U.S. Department of Transportation.

FRSCA

Facility Registry System

VERSION DATE: 09/06/17

The United States Environmental Protection Agency's Office of Environmental Information (OEI) developed the Facility Registry System (FRS) as the centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The Facility Registry System replaced the Facility Index System or FINDS database.

HMIRSR09

Hazardous Materials Incident Reporting System

VERSION DATE: 03/27/18

The HMIRS database contains unintentional hazardous materials release information reported to the U.S. Department of Transportation located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

ICIS

Integrated Compliance Information System (formerly DOCKETS)

VERSION DATE: 09/23/17



ICIS is a case activity tracking and management system for civil, judicial, and administrative federal Environmental Protection Agency enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act - Section 313, the Toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

ICISNPDES	Integrated Compliance Information System National Pollutant Discharge Elimination System
VERSION DATE: 07/09/17	

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States.

LUCIS

Land Use Control Information System

VERSION DATE: 09/01/06

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

MLTS	Material Licensing Tracking System
VERSION DATE: 06/29/17	

MLTS is a list of approximately 8,100 sites which have or use radioactive materials subject to the United States Nuclear Regulatory Commission (NRC) licensing requirements.

NPDESR09

National Pollutant Discharge Elimination System

VERSION DATE: 04/01/07

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. The NPDES database was collected from December 2002 until April 2007. Refer to the PCS and/or ICIS-NPDES database as source of current data. This database includes permitted facilities located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

PADS

PCB Activity Database System

VERSION DATE: 07/18/17

PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are



required to notify the EPA of such activities.

PCSR09

Permit Compliance System

VERSION DATE: 08/01/12

The Permit Compliance System is used in tracking enforcement status and permit compliance of facilities controlled by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act and is maintained by the United States Environmental Protection Agency's Office of Compliance. PCS is designed to support the NPDES program at the state, regional, and national levels. This database includes permitted facilities located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa. PCS has been modernized, and no longer exists. National Pollutant Discharge Elimination System (ICIS-NPDES) data can now be found in Integrated Compliance Information System (ICIS).

RCRASC

RCRA Sites with Controls

VERSION DATE: 03/21/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with institutional controls in place.

SEMSLIENS

SEMS Lien on Property

VERSION DATE: 12/11/17

The U.S. Environmental Protections Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs. This is a listing of SEMS sites with a lien on the property.

SFLIENS

CERCLIS Liens

VERSION DATE: 06/08/12

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which United States Environmental Protection Agency has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties. This database contains those CERCLIS sites where the Lien on Property action is complete.



SSTS

TRI

Section Seven Tracking System

VERSION DATE: 02/01/17

The United States Environmental Protection Agency tracks information on pesticide establishments through the Section Seven Tracking System (SSTS). SSTS records the registration of new establishments and records pesticide production at each establishment. The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) requires that production of pesticides or devices be conducted in a registered pesticide-producing or device-producing establishment. ("Production" includes formulation, packaging, repackaging, and relabeling.)

Toxics Release Inventory

VERSION DATE: 12/31/16

The Toxics Release Inventory, provided by the United States Environmental Protection Agency, includes data on toxic chemical releases and waste management activities from certain industries as well as federal and tribal facilities. This inventory contains information about the types and amounts of toxic chemicals that are released each year to the air, water, and land as well as information on the quantities of toxic chemicals sent to other facilities for further waste management.

TSCA

Toxic Substance Control Act Inventory

VERSION DATE: 12/31/12

The Toxic Substances Control Act (TSCA) was enacted in 1976 to ensure that chemicals manufactured, imported, processed, or distributed in commerce, or used or disposed of in the United States do not pose any unreasonable risks to human health or the environment. TSCA section 8(b) provides the United States Environmental Protection Agency authority to "compile, keep current, and publish a list of each chemical substance that is manufactured or processed in the United States." This TSCA Chemical Substance Inventory contains non-confidential information on the production amount of toxic chemicals from each manufacturer and importer site.

RCRAGR09

Resource Conservation & Recovery Act - Generator

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities currently generating hazardous waste. EPA Region 9 includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

RCRANGR09

Resource Conservation & Recovery Act - Non-Generator

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities classified as non-generators. Non-Generators do not presently generate hazardous waste. EPA Region 9 includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

ALTFUELS

Alternative Fueling Stations

VERSION DATE: 01/22/18

Nationwide list of alternative fueling stations made available by the US Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Biodiesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE).

FEMAUST

FEMA Owned Storage Tanks

VERSION DATE: 12/01/16

This is a listing of FEMA owned underground and aboveground storage tank sites. For security reasons, address information is not released to the public according to the U.S. Department of Homeland Security.

HISTPST

Historical Gas Stations

VERSION DATE: NR

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

ICISCLEANERS

Integrated Compliance Information System Drycleaners

VERSION DATE: 09/23/17

This is a listing of drycleaner facilities from the Integrated Compliance Information System (ICIS). The Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments.

MRDS

Mineral Resource Data System

VERSION DATE: 03/15/16



MRDS (Mineral Resource Data System) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS.

MSHA

Mine Safety and Health Administration Master Index File

VERSION DATE: 09/01/17

The Mine dataset lists all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970. It includes such information as the current status of each mine (Active, Abandoned, NonProducing, etc.), the current owner and operating company, commodity codes and physical attributes of the mine. Mine ID is the unique key for this data. This information is provided by the United States Department of Labor - Mine Safety and Health Administration (MSHA).

BF

Brownfields Management System

VERSION DATE: 03/26/18

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. The United States Environmental Protection Agency maintains this database to track activities in the various brown field grant programs including grantee assessment, site cleanup and site redevelopment. This database included tribal brownfield sites.

DNPL

Delisted National Priorities List

VERSION DATE: 04/11/18

This database includes sites from the United States Environmental Protection Agency's Final National Priorities List (NPL) where remedies have proven to be satisfactory or sites where the original analyses were inaccurate, and the site is no longer appropriate for inclusion on the NPL, and final publication in the Federal Register has occurred.

NLRRCRAT

No Longer Regulated RCRA Non-CORRACTS TSD Facilities

VERSION DATE: 03/01/18

This database includes RCRA Non-Corrective Action TSD facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements. This listing includes facilities that formerly treated, stored or disposed of hazardous waste.

ODI

Open Dump Inventory

VERSION DATE: 06/01/85



The open dump inventory was published by the United States Environmental Protection Agency. An "open dump" is defined as a facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944) and which is not a facility for disposal of hazardous waste. This inventory has not been updated since June 1985.

RCRAT Resource Conservation & Recovery Act - Non-CORRACTS Treatment, Storage & Disposal Facilities

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities recognized as hazardous waste treatment, storage, and disposal sites (TSD).

Superfund Enterprise Management System

VERSION DATE: 04/11/18

The U.S. Environmental Protections Agency's (EPA) Office of Solid Waste and Emergency Response, Office of Superfund Remediation and Technology Innovation (OSRTI), has implemented The Superfund Enterprise Management System (SEMS), formerly known as CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) to track and report on clean-up and enforcement activities taking place at Superfund sites. SEMS represents a joint development and ongoing collaboration between Superfund's Remedial, Removal, Federal Facilities, Enforcement and Emergency Response programs.

SEMSARCH

Superfund Enterprise Management System Archived Site Inventory

VERSION DATE: 04/11/18

The Superfund Enterprise Management System Archive listing (SEMS-ARCHIVE) has replaced the CERCLIS NFRAP reporting system in 2015. This listing reflect sites that have been assessed and no further remediation is planned and is of no further interest under the Superfund program.

SMCRA

Surface Mining Control and Reclamation Act Sites

VERSION DATE: 08/25/17

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.



USUMTRCA

Uranium Mill Tailings Radiation Control Act Sites

VERSION DATE: 03/04/17

The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).

DOD Department of Defense Sites

VERSION DATE: 12/01/14

This information originates from the National Atlas of the United States Federal Lands data, which includes lands owned or administered by the Federal government. Army DOD, Army Corps of Engineers DOD, Air Force DOD, Navy DOD and Marine DOD areas of 640 acres or more are included.

FUDS

Formerly Used Defense Sites

VERSION DATE: 06/01/15

The Formerly Used Defense Sites (FUDS) inventory includes properties previously owned by or leased to the United States and under Secretary of Defense Jurisdiction, as well as Munitions Response Areas (MRAs). The remediation of these properties is the responsibility of the Department of Defense. This data is provided by the U.S. Army Corps of Engineers (USACE), the boundaries/polygon data are based on preliminary findings and not all properties currently have polygon data available. DISCLAIMER: This data represents the results of data collection/processing for a specific USACE activity and is in no way to be considered comprehensive or to be used in any legal or official capacity as presented on this site. While the USACE has made a reasonable effort to insure the accuracy of the maps and associated data, it should be explicitly noted that USACE makes no warranty, representation or guaranty, either expressed or implied, as to the content, sequence, accuracy, timeliness or completeness of any of the data provided herein. For additional information on Formerly Used Defense Sites please contact the USACE Public Affairs Office at (202) 528-4285.

FUSRAP

Formerly Utilized Sites Remedial Action Program

VERSION DATE: 03/04/17

The U.S. DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

NLRRCRAC

No Longer Regulated RCRA Corrective Action Facilities

VERSION DATE: 03/01/18



This database includes RCRA Corrective Action facilities that are no longer regulated by the United States Environmental Protection Agency or do not meet other RCRA reporting requirements.

		A 111		<u></u>
NMS	Former Military	Nike	Missile	Sites

VERSION DATE: 12/01/84

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites.

During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

NPL

National Priorities List

VERSION DATE: 04/11/18

This database includes United States Environmental Protection Agency (EPA) National Priorities List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.

PNPL	Proposed National Priorities List

VERSION DATE: 04/11/18

This database contains sites proposed to be included on the National Priorities List (NPL) in the Federal Register. The United States Environmental Protection Agency investigates these sites to determine if they may present long-term threats to public health or the environment.

RCRAC

Resource Conservation & Recovery Act - Corrective Action Facilities

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities with corrective action activity.



RCRASUBC

Resource Conservation & Recovery Act - Subject to Corrective Action Facilities

VERSION DATE: 03/01/18

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. This listing refers to facilities subject to corrective actions.

RODS

Record of Decision System

VERSION DATE: 12/11/17

These decision documents maintained by the United States Environmental Protection Agency describe the chosen remedy for NPL (Superfund) site remediation. They also include site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, and scope and role of response action.



CDL

Clandestine Drug Labs

VERSION DATE: 06/30/17

The California Department of Toxic Substance Control (DTSC) provides this listing of illegal drug laboratories. Pursuant to Section 25354.5 of the California Health and Safety Code, DTSC conducts emergency removal actions at clandestine drug labs at the request of State and local law enforcement agencies. DTSC's contractors typically remove hazardous substances that may pose an immediate threat to public health and the environment while the enforcement officials are on scene. During the emergency removal actions, contractors remove and properly dispose of contaminated lab equipment, chemicals used to make the illegal drugs (usually methamphetamine), lab chemical wastes, and other grossly contaminated materials. DTSC does not perform additional assessment work beyond standard emergency removal actions and makes no further determination regarding the need for future cleanup work at the emergency removal location. The reported location information may or may not include the actual location of the illegal drug lab. The DTSC does not guarantee the accuracy of the address or location information or the condition of the location listed.

CHMIRS

California Hazardous Material Incident Report System

VERSION DATE: 05/09/17

The California Hazardous Material Incident Report System database is provided by the California Emergency Management Agency. This database contains accidental or spill release information from reported hazardous material incidents since 1993.

DTSCDR

DTSC Deed Restrictions

VERSION DATE: 01/21/18

The California Department of Toxic Substances Control (DTSC) maintains this listing of sites with deed restrictions. According to the DTSC, restricted land use indicates whether the site or area within the site has an environmental restriction recorded and/or other institutional control preventing certain types of land use or activities. The land use restrictions listed under the site management requirements are only an abbreviated summary of the land use restrictions, and may not encompass all restrictions and notification requirements placed on a property. For complete land use restriction information please contact the DTSC to review associated Land Use Restriction documents.

EMI

Emissions Inventory Data

VERSION DATE: 12/31/15

The Air Resources Board's Emissions Inventory Database contains criteria pollutant data and toxic data on facilities throughout the state of California for the 2012-2000 inventory years.

HWTS

Hazardous Waste Tanner Summary

VERSION DATE: 12/31/16



This data is prepared from information extracted from copies of hazardous waste manifests received each year by the Department of Toxic Substances Control. The Hazardous Waste Summary Report (Tanner Report) currently includes manifest data from the 1993 through the 2016 reporting years.

LDS Land Disposal Sites

VERSION DATE: 01/21/18

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

LIENS	Recorded Environmental Cleanup Liens
VERSION DATE: 02/20/18	

The California Department of Toxic Substance Control (DTSC) maintains this listing of liens placed upon real properties. A lien is utilized by the DTSC to obtain reimbursement from responsible parties for costs associated with the remediation of contaminated properties.

MCS Military Cleanup Sites

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater

NPDES	National Pollutant Discharge Elimination System Facilities

VERSION DATE: 03/12/18

Authorized by the Clean Water Act, the National Pollutant Discharge Elimination System (NPDES) permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States.

ABST Above Ground Storage Tanks

VERSION DATE: 03/22/18

This database, provided by the California Environmental Protection Agency's (CalEPA) Regulated Site Portal, contains aboveground petroleum storage tank facilities originating from the California Environmental Reporting System (CERS). These facilities store petroleum in aboveground storage tanks with oversight by local agencies. As of January 1, 2008, Assembly Bill No. 1130 of the Aboveground Petroleum Storage Act (APSA) authorized the Certified Unified Program Agencies to implement and administer the requirements of the APSA. CalEPA Data Disclaimer: Information displayed in the portal is collected from separate agency databases and displayed unaltered. Information that is considered confidential, trade secret, or is otherwise protected by the agency that

manages the database is not loaded into the portal. For more detail about information displayed in the portal, please visit the data source sites. Please refer to AST2007 database for aboveground storage tank information obtained from the California State Water Resources Control Board prior to 2008 APSA requirements.

Aboveground Storage Tanks Prior to January 2008

VERSION DATE: 12/01/07

This database contains aboveground storage tank facilities registered with the California State Water Resources Control Board (SWRCB) between 2007 and 2003. Since 2006, tanks were required to contain a minimum (even as cumulative) of 1320 gallons to be in the program. As of January 1, 2008, the SWRCB no longer maintains a list of registered aboveground storage tanks, due to effective Assembly Bill No. 1130 (Laird) of the Aboveground Petroleum Storage Act (APSA). This Bill authorized the Certified Unified Program Agencies to implement and administer the requirements of the APSA. Please refer to ABST database as a current source for aboveground petroleum storage tank data.

CLEANER

Dry Cleaner Facilities

VERSION DATE: 03/13/18

This database, created by accessing the California Department of Toxic Substances Control's (DTSC) Hazardous Waste Tracking System, includes dry cleaner facilities that have registered EPA identification numbers. These facilities are categorized with one of the following NAICS Codes: 81231 or 81232. This database may also include facilities other than dry cleaners who also register with these same NAICS Codes. Not all companies report their NAICS/SIC Codes to the DTSC and therefore this database may exclude registered dry cleaner facilities with incomplete classification information.

DTSCHWT

DTSC Registered Hazardous Waste Transporters

VERSION DATE: 02/06/18

The Department of Toxic Substances Control provides this list of Registered Hazardous Waste Transporters.

HISTUST

Historical Underground Storage Tanks

VERSION DATE: 12/31/87

The Hazardous Substance Storage Container Database is a historical list of Underground Storage Tank sites, compiled from tank survey and registration information collected at one time between 1984 and 1987 by the State Water Resources Control Board. The hazardous substances stored within these tanks includes, but not restricted to, petroleum products, industrial solvents, and other materials.

MINES

Mines Listing

VERSION DATE: 02/11/18

This database includes mine site locations from the California Office of Mine Reclamation.



MWMP

California Medical Waste Management Program Facility List

VERSION DATE: 02/07/18

To protect the public and the environment from potential infectious exposure to disease causing agents, the Medical Waste Management Program (MWMP), in the Environmental Management Branch of the California Department of Public Health, regulates the generation, handling, storage, treatment, and disposal of medical waste by providing oversight for the implementation of the Medical Waste Management Act (MWMA). The MWMP permits and inspects all medical waste off-site treatment facilities, medical waste transporters, and medical waste transfer stations.

SLIC

Spills, Leaks, Investigation & Cleanup Recovery Listing

VERSION DATE: 06/16/08

These records are maintained by the California Regional Water Quality Control Board (RWQCB). This list includes contaminated sites that impact groundwater or have the potential to impact ground water. Please refer to CLEANUPSITES database as source of current data.

SWEEPS	Statewide Environmental Evaluation and Planning System
VERSION DATE: 10/01/94	

The Statewide Environmental Evaluation and Planning System (SWEEPS) contains a historical listing of active and inactive underground storage tank locations from the State Water Resources Control Board. The hazardous substances stored within these tanks includes, but not restricted to, petroleum products, industrial solvents, and other materials. Refer to CUPA listing for source of current data.

UST	CI.	ID۸
031	υu	л

Underground Storage Tanks

VERSION DATE: 02/11/18

An underground storage tank is an individual tank or group of tanks that store hazardous substances. Underground storage tanks are completely or considerably below the ground surface. This database contains UST permit data submitted from the Certified Unified Program Agencies (CUPA) directly to the State Water Resources Control Board. CUPA's are local agencies that have been certified by the California EPA to implement state environmental programs within the local agency's jurisdiction.

 BF
 Brownfield Sites

 VERSION DATE: 03/06/18

This database includes Brownfield sites from the State Water Resources Control Board. These are sites that have gone through the Moratorium of Agreement (MOA) process.



CALSITES

CALSITES Database

VERSION DATE: 05/01/04

This historical database was maintained by the Department of Toxic Substance Control for more than a decade. CALSITES contains information on Brownfield properties with confirmed or potential hazardous contamination. In 2006, DTSC introduced EnviroStor as the latest Brownfields site database.

CLEANUPSITES GeoTracker Cleanup Sites	
VERSION DATE: 04/16/18	

This GeoTracker Cleanup Sites database is maintained by the California Regional Water Quality Control Board (RWQCB). The database contains contaminated sites that impact groundwater or have the potential to impact ground water, including spills, investigations, cleanup recoveries and reported leaking underground storage tank incidents.

This active listing includes hazardous waste and substances sites designated by the State Water Resources Control Board, the Integrated Waste Board, and the Department of Toxic Substance Control. The Cortese List is utilized by the State, local agencies and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites.

DROP

Listing of Certified Dropoff, Collection, and Community Service Programs

VERSION DATE: 02/06/18

Listing of Certified Dropoff, Collection, and Community Service Programs (non-buyback) operating under the state of California's Beverage Container Recycling Program. This list is maintained by the Department of Conservation.

ERAP Expedited Removal Action Program Sites
VERSION DATE: 01/29/18

The Expedited Remedial Action Program is a pilot project administered by the Department of Toxic Substances Control's Site Mitigation and Brownfields Reuse Program to promote the cleanup of up to 30 hazardous substance release sites. ERAP provides significant incentives for redevelopment of contaminated properties by promoting cleanups based on the planned land use, by providing a covenant not to sue, and by outlining a fair and equitable liability scheme.

HISTCORTESE

Historical Cortese List

VERSION DATE: 11/02/02



This historical listing includes hazardous waste and substances sites designated by the State Water Resources Control Board, the Integrated Waste Board, and the Department of Toxic Substance Control. The Cortese List was utilized by the State, local agencies and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. See CACORTESE for an updated version of this database.

LUST

Leaking Underground Storage Tanks

VERSION DATE: 04/16/18

This database is maintained by the State Water Resources Control Board. LUST records contain an inventory of reported leaking underground storage tank incidents. Please refer to the CLEANUPSITES database as source of current data.

NFA

No Further Action Determination

VERSION DATE: 07/01/05

The NFA listing contains properties at which the Department of Toxic Substance Control has made a clear determination that the property does not pose a problem to the environment or to public health.

NFE Sites Needing Further Evaluation

VERSION DATE: 07/01/05

The NFE listing contains properties that the Department of Toxic Substance Control suspects with possible contamination. These are unconfirmed contaminated properties that need further assessment.

PROC Listing of Certified Processors

VERSION DATE: 02/19/18

Listing of Certified Processors that are operating under the state of California's Beverage Container Recycling Program. This list is maintained by the Department of Conservation.

REF Referred to Another Local or State Agency

VERSION DATE: 07/01/05

The REF listing contains properties where contamination has not been confirmed and which were determined as not requiring direct Department of Toxic Substance Control Site Mitigation Program action or oversight. Accordingly, these sites have been referred to another state or local regulatory agency.

SWIS

Solid Waste Information System Sites

VERSION DATE: 04/18/18

GeoSearch www.geo-search.com 888-396-0042

The Solid Waste Information System (SWIS) database includes information on solid waste facilities, operations, and disposal sites located in California. This database is maintained by the California Department of Resources Recycling and Recovery.

Recycling Centers

VERSION DATE: 02/20/18

Listing of Certified Recycling Centers that are operating under the state of California's Beverage Container Recycling Program. This list is maintained by the Department of Conservation.

VCP	Voluntary Cleanup Program
VERSION DATE: 04/23/18	

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

WMUDS	Waste Management Unit Database
VERSION DATE: 01/01/00	

The Waste Management Unit Database System tracks and inventories waste management units. CCR Title 27 contains criteria stating that Waste Management Units are classified according to their ability to contain wastes. Containment shall be determined by geology, hydrology, topography, climatology, and other factors relating to the ability of the Unit to protect water quality. Water Code Section 13273.1 requires that operators submit a water quality solid waste assessment test (SWAT) report to address leak status. The WMUDS was last updated by the State Water Resources control board in 2000.

ENVIROSTOR

EnviroStor Cleanup Sites

VERSION DATE: 04/23/18

The Department of Toxic Substances Control (DTSC) has developed the EnviroStor database system to evaluate and track sites with confirmed or potential contamination and sites where further investigation may be necessary. This EnviroStor database of cleanup sites contains the following: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. Sites where DTSC has made a "No Action Required" determination are not included in this database, as these sites had assessments that revealed no evidence of recognized environmental conditions in connection with the property.

ENVIROSTORPCA

EnviroStor Permitted and Corrective Action Sites

VERSION DATE: 02/05/18



The Department of Toxic Substances Control (DTSC) has developed the EnviroStor database system to evaluate and track sites with confirmed or potential contamination and sites where further investigation may be necessary. This EnviroStor database contains detailed information on hazardous waste permitted and corrective action facilities. Investigation and cleanup activities at hazardous waste facilities (either Resource Conservation and Recovery Act (RCRA) or State-only) that either were eligible for a permit or received a permit are called "corrective action." These facilities treated stored, disposed and/or transferred hazardous waste.

TOXPITS

Toxic Pits Cleanup Act Sites

VERSION DATE: 07/01/95

Toxic Pits are sites with possible contamination of hazardous substances where cleanup is necessary. This listing is no longer updated by the State Water Resources Control Board.



USTR09

Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/13/17

This database, provided by the United States Environmental Protection Agency (EPA), contains underground storage tanks on Tribal lands located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

Leaking Underground Storage Tanks On Tribal Lands

VERSION DATE: 10/13/17

This database, provided by the United States Environmental Protection Agency (EPA), contains leaking underground storage tanks on Tribal lands located in EPA Region 9. This region includes the following states: Arizona, California, Hawaii, Nevada, and the territories of Guam and American Samoa.

ODINDIAN

Open Dump Inventory on Tribal Lands

VERSION DATE: 11/08/06

This Indian Health Service database contains information about facilities and sites on tribal lands where solid waste is disposed of, which are not sanitary landfills or hazardous waste disposal facilities, and which meet the criteria promulgated under section 4004 of the Solid Waste Disposal Act (42 U.S.C. 6944).

Illegal Dump Sites on the Torres Martinez Reservation

VERSION DATE: 10/29/07

This listing of illegal dump site locations on the Torres Martinez Reservation is maintained by the United States Environmental Protection Agency, Region IX. These dump sites contain unlawfully discarded household waste such as landscaping and wood wastes with no known soil or groundwater contamination. A majority of the sites have already been cleaned up through the collaborative efforts of the EPA, The California Integrated Waste Management Board and the Torres Martinez Tribe.

INDIANRES

Indian Reservations

VERSION DATE: 01/01/00

The Department of Interior and Bureau of Indian Affairs maintains this database that includes American Indian Reservations, off-reservation trust lands, public domain allotments, Alaska Native Regional Corporations and Recognized State Reservations.



APPENDIX F

National Analytical Laboratories, Inc. Report



Asbestos and Lead Bridge Inspection/Survey

Road 66 Bridge

39.428525, -122.050086 Princeton, CA 95970

Presented to:

Stephen J. Carter, PG Senior Geologist

Crawford & Associates 1165 Scenic Drive, Suite B Modesto, CA 95350

Inspection Date:

May 15, 2018

Conducted by:

Michael J. Lee Certified Asbestos Consultant Certified Lead Inspector/ Assessor Registered Environmental Property Assessor

National Analytical Laboratories, Inc. 2201 Francisco Dr., Ste.140-261 El Dorado Hills, CA 95762 Office: (916) 361-0555 | Fax: (916) 361-0540 E-Mail: NAL1@NAL1.com | Web Page: www.NAL1.com





May 16, 2018

Stephen J. Carter, PG Senior Geologist Crawford & Associates 1165 Scenic Drive, Suite B Modesto, CA 95350

RE: Asbestos and Lead Bridge Inspection/Survey Road 66 Bridge 39.428525, -122.050086 Princeton, CA 95970

Dear Mr. Carter,

This report is in regards to the asbestos and lead bridge inspection conducted at 39.428525, -122.050086, in Princeton, CA. Of the four (4) suspected asbestos containing samples collected, none (0) were found to contain asbestos containing construction materials (ACCM). Of the two (2) suspected lead containing areas tested, none (0) were found to contain Lead Containing Material (LCM), Lead Based Paint (LBP), or Lead Based Material (LBM). Michael J. Lee, Certified Asbestos Consultant, Certified Lead Inspector/Assessor, and Registered Environmental Property Assessor, for National Analytical Laboratories, Inc. (N.A.L.), conducted the inspection on May 15, 2018.

SUMMARY OF FINDINGS -

The bridge inspection and analytical results indicate that no ACCM is present in the limited area that is being renovated. The contractor, his employees and/or his sub-contractors, can complete their work, in the specific area tested, without any health or safety concerns in regards to the exposure of airborne asbestos fibers.

Based on the inspection and lead sample results, all materials tested were found to be below OSHA's Lead Limit of Detection at the site. Therefore, the general contractor may conduct the renovation/demolition work on the work areas, this work can be completed without any health or safety concerns, to his workers or sub-contractors, regarding the exposure to lead hazardous dust.

SECTION I: ASBESTOS INSPECTION -

The inspection was completed according to the EPA's Asbestos Containing Building Materials (ACBM) In-Schools Rule; 40 CFR 763.85 (Inspection and Re-Inspection). Currently, EPA regulations classify ACBM as materials containing more that 1-percent (1%) of asbestos. Cal-OSHA currently regulates asbestos to 1/10th of 1% (0.1%) and requires that a certified asbestos

Breathe easy

Asbestos and Lead Bridge Inspection/Survey Road 66 Bridge - 39.428525, -122.050086, Princeton, CA May 16, 2018 Page 3 of 8

worker conduct this work.

There were no as-built drawings to review so only a site visit was conducted. Once at the physical bridge site, Mr. Lee performed an entire bridge walk around and under, to visually assess the bridge structure. The bridge system is a wood deck with no rails, set on concrete columns, with a concrete abutment and approach.

Upon completion of the visual inspection, the suspect asbestos bulk sample materials were collected in accordance with EPA and OSHA protocol. They were placed into new, air tight, plastic bags, sealed, and identified with unique identification numbers. The bulk samples were transported to the laboratory under chain of custody protocol for analysis.

No destructive sampling was conducted during the site visit, in the event that demolition work reveals any unforeseen suspect materials or if any future renovation work is to be conducted in other areas at the site; the contractor shall cease all work and contact the building owner for further testing.

EMSL Analytical, Inc. (EMSL) in Carle Place, New York, analyzed the bulk suspect asbestos containing samples utilizing Polarized Light Microscopy (PLM) Method. National Voluntary Laboratory Accreditation Program (NVLAP) certification #101048-10 and California Environmental Laboratory Accreditation Program (CAELAP) certification #2339, certifies EMSL Analytical, Inc.

Sample ID#	Material Description	Sample Location	Results
66-1	Concrete	Pier-Column System, Various Area 6 Hit	None Detected
		Composite	
66-2	Concrete	Abutment System, Various Area 6 Hit Composite	None Detected
66-3	Concrete	Approach System, Various Areas 6 Hit Composite	None Detected
66-4	Black Sealant	Pier-Column System, East Pier (-20 sf)	None Detected

The location and results from this sampling are as follows:

sf = Square Feet

SECTION II: LEAD INSPECTION -

The lead suspect samples were collected according to the Housing Urban Development (HUD) Guidelines, the Environmental Protection Agency (EPA) and California Public Health Department (formally DHS), who regulate and require the abatement or in-place management of LCM/LBP/LBM hazards equal to or greater than 1.0 milligram per square centimeter (1.0 mg/cm2) of lead by XRF Analysis or more than 0.5% lead by weight by laboratory flame atomic absorption. The following regulation shall be adhered to because OSHA considers all surfaces to contain lead: OSHA's 29 CFR 1926.62, California Occupational Safety and Health Standard, Title 8 (Cal/OSHA 8 CCR 1532.1).



Upon completion of the visual inspection, suspect materials were sampled for potential lead content, in accordance with EPA and OSHA protocol. They were labeled with a unique identification number and analyzed.

EMSL Analytical, Inc. (EMSL) in Cinnaminson, New Jersey, utilizing the SW-846-3050B*/7000B method, analyzed the suspect LCM samples. National Voluntary Laboratory Accreditation Program (NJLAP) Certification #102344 and Environmental Laboratory Accreditation Program (NYSELAP) certification #11469, certifies EMSL.

			Concentration % By
Sample ID #	Material Description	Sample Location/Component	Weight
66-1L	Scraping	East Pier-Column System, Metal	<0.01%
		Support Beam, Various Areas	
66-2L	Metal Sleeve	West Pier-Column System,	<0.01%
		Round Column System, Sleeve	

The following samples were found to be less than (<) the OSHA's Limit of Detection:

LEAD RECOMMENDATION -

The above listed samples/materials were found to be below OSHA's Lead Limit of Detection, therefore, the general contractor may conduct the renovation/demolition work, without any health or safety concerns to his workers or sub-contractors, regarding the exposure to lead hazardous dust or lead contamination.

Included at the end of this report are site photographs, laboratory analytical results, chain of custody forms, and site map. If you have any questions regarding this report or if we can be of further assistance, please contact our office.

Reviewed and submitted by:

Michael J. Lee Certified Asbestos Consultant, DOSH# 06-4047 Certified Lead Inspector/Assessor, CDPH# 10531 Registered Environmental Property Assessor, REPA# 716352750

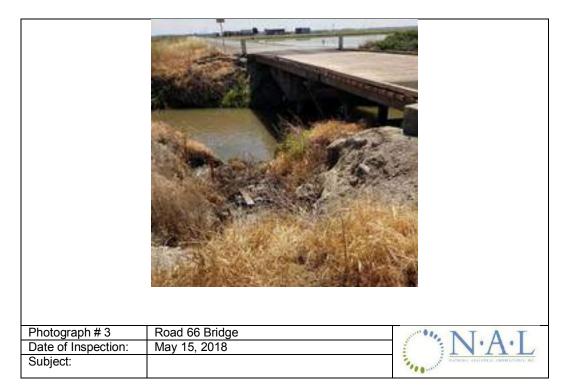


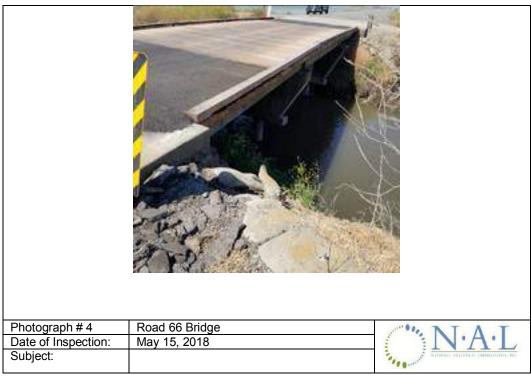


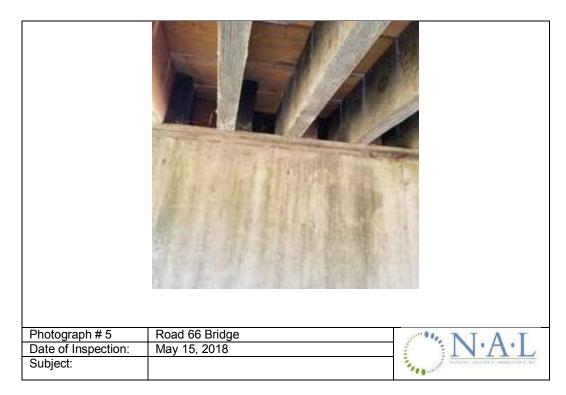
SITE PHOTOGRAPHS

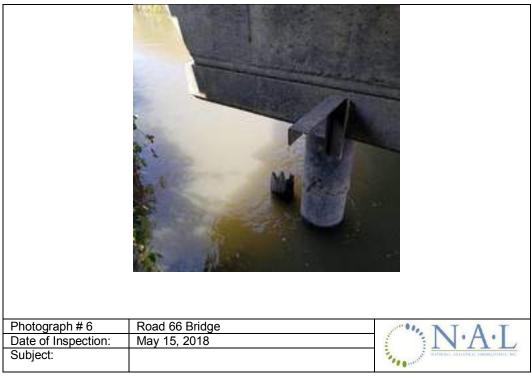


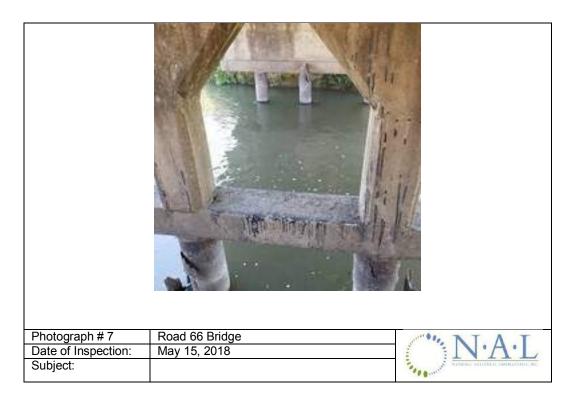












Photograph # 8	Road 66 Bridge	MANTA T
Date of Inspection: Subject:	May 15, 2018	IN'A'L
Subject:		BATHONEL CREPTICAL PRODUCTION, INC.

EMSL	EMSL Analytical, Inc. 528 Mineola Avenue Carle Place, NY 11514 Tel/Fax: (516) 997-7251 / (516) 997-7528 http://www.EMSL.com / carleplacelab@emsl.com	EMSL Order: Customer ID: Customer PO: Project ID:	
Attention:	Paula Lee	Phone:	(916) 361-0555
	National Analytical Laboratories (NAL)	Fax:	(916) 361-0540
	2201 Francisco Dr.	Received Date:	05/16/2018 9:42 AM
	Ste. 140-261	Analysis Date:	05/16/2018
	El Dorado Hills, CA 95762	Collected Date:	05/15/2018
Project:	Road 66 Bridge: 39.428525-122.050086, Princeton, CA 95970		

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

		Non-Asbestos		Asbestos	
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Туре
66-1	Pier-Column System, Various Area 6 Hit	Gray Non-Fibrous		55% Quartz 25% Ca Carbonate	None Detected
061808893-0001	Composite/Concrete	Homogeneous		20% Non-fibrous (Other)	
66-2	Abutment System,	Gray		55% Quartz	None Detected
	Various Area 6 Hit	Non-Fibrous		30% Ca Carbonate	
061808893-0002	Composite/Concrete	Homogeneous		15% Non-fibrous (Other)	
66-3	Approach System,	Gray		50% Quartz	None Detected
	Various Areas 6 Hit	Non-Fibrous		28% Ca Carbonate	
061808893-0003	Composite/Concrete	Homogeneous		22% Non-fibrous (Other)	
66-4	Pier-Column System,	Black		50% Matrix	None Detected
	East Pier/Black	Non-Fibrous		50% Non-fibrous (Other)	
061808893-0004	Sealant	Homogeneous			

Analyst(s)

Melvin Ramirez (4)

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Michelle McGowan, Laboratory Manager or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government . Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Samples received in good condition unless otherwise noted. Estimated accuracy, precision and uncertainty data available upon request. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Reporting limit is 1%

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY NVLAP Lab Code 101048-10, CA ELAP 2339, NYS ELAP 11469

Initial report from: 05/16/2018 15:29:34

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<u>IN</u>	<u>·A·L</u>	NAL LOG-IN RECORD	Login #	39478
ENVIRONMEN	ITAL TESTING & CONSULTING	Ph: 916.361.0555 Fx: 916.361.0540		
National Analytical	Laboratories, Inc.	Job Site/Job #:		
Client#-Lot#	4734 / 29	Road 66 Birdge:	Date	5/15/2018
Crawford & Associates		39.428525, -122.050086	Sampling Date:	5/15/2018
Phone Number		Princeton, CA 95970	Sampling Time	10:30:00 AM
FAX Number			Type Of Work:	PLM-FB
Contact			No. of Samples	4 CF
E-Mail Address			Turnaround:	6 hours

Num.	Sample ID#	Location/Description	
1	66-I	Pier-Column System, Various Area 6 Hit Composite / Concrete	
2	66-2	Abutment Sytem, Various Area 6 Hit Composite / Concrete	
3	66-3	Approach System, Various Areas 6 Hit Composite / Concrete	
4	66-4	Pier-Column System, East Pier (-20 sf) / Black Sealant	

*IF RESULTS ARE LESS THAN 1%, PLEASE 400 POINT COUNT

	564808893		 -
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		tody Information		
Released By Signature	Date/ Time	Received By Signature	Date/ , Time	
Michael Lee	5/15/18 1630	CCCS	SIL R	Due: 9420
Released By Signature	Date/ Time	Received By Signature	Date/ Time	At:
	/		/	
		Melon Karny	5/16/1	g.
	•	i cave / coovery) (i) (i	0
	Page 1 Of	1		



Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample Description	Lab ID	Collected	Analyzed	Lead Concentration
66-1L	061808892-0001	5/15/2018	5/16/2018	<0.010 % wt
	Site: East Pier-C Scraping	olumn Syste	m, Metal Support Beam, Various Areas	
66-2L	061808892-0002	5/15/2018	5/16/2018	<0.010 % wt
	Site: West Pier-O Sleeve/Metal Sle		em, Round Column System,	

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Michelle McGowan, Laboratory Manager or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.010 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. This report relates only to the samples reported above and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities. Samples received in good condition unless otherwise noted. "<" (less than) result signifies that the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc. Carle Place, NY Lab ID 102344 is accredited by the AIHA-LAP, LLC in the Environmental Lead accreditation program for Lead in Paint, CT PH-0249, NYS ELAP 11469

Initial report from 05/16/2018 14:48:01

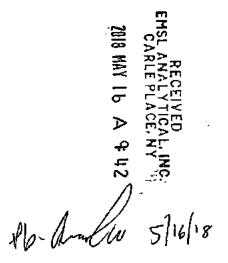
	- л т		Page	1 of 1
	<u>•A•L</u>	NAL LOG-IN RECORD	Login #	39477
ENVIRONME)	NTAL TESTING & CONSULTING	Ph: 916.361.0555 Fx: 916.361.0540		
National Analytica	l Laboratories, Inc.	Job Site/Job #:		
Client#-Lot#	4734 / 28	Road 66 Bridge:	Date	5/15/2018
Crawford & Associates		39.428525, -122.050086	Sampling Date:	5/15/2018
Phone Number		Princeton, CA 95970	Sampling Time	10:30:00 AM
FAX Number			Type Of Work:	Lead BI
Contact			No. of Samples	2 9
E-Mail Address			Turnaround:	6 hours

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Num.	Sample ID#	Location/Description
1	66-1L	East Pier-Column System, Metal Support Beam, Various AreasScraping
2	66-2L	West Pier-Column System, Round Column System, Sleeve \ Metal Sleeve

- -

064808892



C	Chain of Custody Information						
Released By Signature	Date/ Time	Received By Signatore	Date/ Time	_			
Michael Lee	5/15/18 1630	1/2	54618	Due: 9999			
Released By Signature	Date/ Time	Received By Signature	Date/ Time	At:			
	-						

