RECEIVED
By Alameda County Environmental Health 10:19 am, Dec 15, 2016

ECOLOGICAL RISK EVALUATION REPORT

FORMER CALTRANS HEGENBERGER
MAINTENANCE STATION
555 HEGENBERGER ROAD
OAKLAND, ALAMEDA COUNTY, CALIFORNIA

PREPARED FOR

CALIFORNIA DEPARTMENT OF TRANSPORTATION,
DISTRICT 4
OFFICE OF ENVIRONMENTAL ENGINEERING
111 GRAND AVENUE, 14TH FLOOR
OAKLAND, CALIFORNIA

GEOCON PROJECT NO. E8722-02-01B

DECEMBER 2016

GEOCON
CONSULTANTS, INC.
GEOTECHNICAL
ENVIRONMENTAL
MATERIALS

GEOCON
CONSULTANTS, INC.
GEOTECHNICAL ■ ENVIRONMENTAL ■ MATERIALS

Geocon Project No. E8722-02-01B
December 9, 2016

Mr. Bahram Sazegar
Caltrans – District 4
Office of Environmental Engineering, MS 8C
111 Grand Avenue, 14th Floor
Oakland, California 94623

Subject: ECOLOGICAL RISK EVALUATION REPORT
FORMER CALTRANS HEGENBERGER MAINTENANCE STATION
555 HEGENBERGER ROAD
OAKLAND, ALAMEDA COUNTY, CALIFORNIA

Dear Mr. Sazegar:

Geocon Consultants, Inc. has prepared this *Ecological Risk Evaluation Report* for the Former Caltrans Maintenance Station site located at 555 Hegenberger Road in Oakland, Alameda County, California. Our report contains details of field services and laboratory analytical results.

Caltrans' authorization to submit this report is provided in Appendix D. Please contact the undersigned if you have any questions or comments.

Sincerely,

GEOCON CONSULTANTS, INC.

PROFESSIONAL GEOLOGIST
JOHN W. LOVE
No. 6315
STATE OF CALIFORNIA

John Love, PG
Senior Project Geologist

Richard Day, CEG, CHG
Senior Geologist

(5) Addressee
(1) Keith Nowell, Alameda County LOP

TABLE OF CONTENTS

ECOLOGICAL RISK EVALUATION REPORT Page

1.0 INTRODUCTION 1
- 1.1 Background 1
- 1.2 Scope of Services 2

2.0 SITE INVESTIGATION 2
- 2.1 Sample Rationale 3
- 2.2 Soil and Groundwater Sample Methodology and Laboratory Analysis 4
- 2.3 Soil and Groundwater Conditions 5
- 2.4 Soil and Groundwater Sample Results 5
  - 2.4.1 Soil Sample Results 5
  - 2.4.2 Groundwater Sample Results 5
- 2.5 Waste Disposal 6

3.0 CONCLUSIONS AND RECOMMENDATIONS 7

4.0 LIMITATIONS 8

FIGURES
1. Vicinity Map
2. Site Location Map

TABLES
1. Soil Analytical Results
2. Grab Groundwater Analytical Results

APPENDICES
A. ACHCSA Correspondence and Soil Boring Permit
B. Boring Logs
C. Analytical Laboratory Report and Chain-of-Custody
D. Client Authorization Letter

ECOLOGICAL RISK EVALUATION REPORT

1.0 INTRODUCTION

On behalf of Caltrans Department of Transportation – District 4 (Caltrans), Geocon Consultants, Inc. (Geocon) conducted an ecological risk evaluation at the Former Caltrans Maintenance Station site located at 555 Hegenberger Road in Oakland, Alameda County, California (Figure 1). The investigation was performed in response to the Alameda County Health Care Services Agency (ACHCSA) letter dated June 13, 2016. A copy of the letter is provided in Appendix A.

1.1 Background

Since 1948, the site is known to have been used as both City of Oakland and Caltrans maintenance yards. The Caltrans maintenance yard occupied the site from at least 1978 until the early 1990s. In 1994, two 2,000-gallon diesel underground storage tanks (USTs) and two 6,500-gallon gasoline USTs were reportedly removed. The USTs were reportedly last used in 1986.

In September 1994, GHH Engineering, Inc. removed the four USTs. During the UST removals, approximately 8,100 gallons of water and product were removed from the tanks. Upon removal from the ground, holes were observed in each UST indicating that a release had occurred. Approximately 280 cubic yards of soil were over-excavated from the common UST pit and disposed offsite during the UST removal.

After the USTs were removed in 1994, several subsurface investigations were conducted at the site to delineate the petroleum impacts to soil and groundwater resulting from the unauthorized release(s) of gasoline and diesel fuel from the four USTs.

The most recent investigation at the site was conducted by Geocon in April 2015. The intent of that investigation was to provide additional soil and groundwater data to fill in data gaps necessary to evaluate site closure under the 2012 Low Threat Closure Policy (LTCP) guidelines. The goals of the investigation were to assess hydrogeologic conditions beneath the investigation area, delineate the lateral extent of impacts to soil and groundwater northwest, northeast, and east of the former UST excavation area, assess potential vapor intrusion to existing buildings, and assess potential impacts to ecological receptors in the tidal channel located approximately 300 feet south of the former USTs.

Results of the April 2015 investigation were presented in the *Additional Soil and Groundwater Investigation Report* prepared by Geocon, dated June 10, 2015. Conclusions presented in the report were that impacts to soil and groundwater at several locations throughout the investigation area would require active remediation to meet the closure guidelines presented in the 2012 LTCP. We also

concluded that petroleum hydrocarbons released from the former Caltrans USTs do not pose a threat to aquatic habitat in the tidal channel located approximately 300 feet south of the former USTs. The ACHCSA concurred that active remediation would be necessary to meet the closure guidelines of the 2012 LTCP; however, they disagreed that the assessment to the adjacent tidal wetland was complete. In a letter dated June 13, 2016, the ACHCSA directed that an *Interim Remedial Action Workplan* and an *Ecological Risk Evaluation Workplan* be prepared.

In July 2016, we prepared and submitted an *Ecological Risk Evaluation Workplan* for review and comment by the ACHCSA. The workplan included the advancement of several borings south of the site to assess the origin of petroleum hydrocarbons reported in groundwater samples collected during the April 2015 investigation. In a letter dated June 13, 2016, the ACHCSA approved the scope of services presented in the workplan with some additions. In October 2016, Geocon implemented the approved scope of services associated with the ecological risk evaluation. The results of that investigation are presented herein.

1.2 Scope of Services

The scope of services conducted during this investigation included the following:

- Obtained soil boring permits from the ACHCSA. Copies of the permits are provided in Appendix A.
- Advanced 16 temporary borings using a Geoprobe direct-push sample rig.
- Collected and submitted 25 soil and 15 groundwater samples for laboratory analysis.
- Prepared report of findings.

2.0 SITE INVESTIGATION

On October 27 and 28, 2016, Geocon oversaw the advancement of 16 temporary borings from eight sample locations (SB-23A, SB-24A, SB-25A, and SB-26 to SB-30) as shown on Figure 2. Two boreholes were advanced at each sample location for the purpose of evaluating whether the sample collection methodology implemented during the April 2015 investigation had an effect on the sample results obtained during that investigation.

During the April 2015 investigation the groundwater sample collected from SB-25 was reported to contain TPHd at a concentration of 1,300 micrograms per liter (µg/l) (without using silica gel cleanup [SGC]) while groundwater samples from SB-23 and SB-24 were reported as non-detect (<50 µg/l). Since the groundwater samples collected from SB-23 and SB-24 were collected using a Hydropunch sampler and the sample collected from SB-25 was collected in an open borehole it was postulated that the sample collection methodologies could have been the reason for the differing groundwater sample results.

2.1 Sample Rationale

The concern the ACHCSA had with the tidal wetland area south of the former Caltrans site was that one of the groundwater samples collected from boring SB-25 (see Figure 2) was reported to contain total petroleum hydrocarbons as diesel (TPHd) at a concentration exceeding the San Francisco Bay Regional Water Quality Control Board (RWQCB) aquatic habitat environmental screening level (ESL) of 640 µg/l.

TPHd was reported in the groundwater sample collected from SB-25 at a concentration of 620 µg/l using silica gel cleanup (SGC) and 1,300 µg/l without using SGC. Since the RWQCB does not recognize sample results using the SGC process and the only valid sample result of 1,300 µg/l exceeds the aquatic habitat ESL of 640 µg/l, the ACHCSA requested that additional assessment be conducted to demonstrate that the unauthorized release of gasoline and diesel fuel from the former Caltrans USTs has not negatively impacted aquatic habitat in the tidal channel located south of the site.

The source of the TPHd reported in the SB-25 groundwater sample is not known; however, the former UST storage and dispensing system does not appear a likely source given the distance between the site and boring SB-25, as well as the absence of TPHd in groundwater samples collected from borings SB-23 and SB-24. More likely sources of TPHd in groundwater near SB-25 would be potential fill soils in this area and/or surface water originating from the tidal channel itself.

To investigate the ecological risk to aquatic habitat in the tidal channel posed by the unauthorized release at the Former Caltrans site, we collected soil and grab groundwater samples from five temporary boring locations placed on both sides of the tidal channel (SB-23A, SB-24A, SB-25A, SB-29 and SB-30), as well as three additional borings between the Former Caltrans site and the tidal channel (SB-26 to SB-28).

Borings SB-23A, SB-24A, and SB-25A were advanced adjacent to former borings SB-23, SB-24, and SB-25. The purpose of these borings was to assess whether the TPHd reported in the groundwater sample collected from boring SB-25 in April 2015 was anomalous or whether TPHd was present throughout the area.

To assess whether the presence of TPHd in the SB-25 groundwater sample and the absence of TPHd in the SB-23 and SB-24 groundwater samples was the result of differing sample collection methods, we advanced borings (SB-23A, SB-24A, and SB-25A) adjacent to the former SB-23, SB-24, and SB-25 boring locations and collected soil and groundwater samples for laboratory analysis. The collection of soil samples would help assess whether fill soils overlying groundwater south of the Former Caltrans Maintenance Station site could be a source of the TPHd reported in the SB-25 groundwater sample.

Borings SB-26, SB-27, and SB-28 were advanced approximately 75 feet north of borings SB-23A, SB-24A, and SB-25A. Presumably, if the release at the Former Caltrans Maintenance Station is the source of the TPHd reported in groundwater south of the site, it would be detected at concentrations at least equal to those reported in borings SB-23A, SB-24A, and SB-25A, if TPHd is present at these locations.

Borings SB-29 and SB-30 were advanced along the south side of the tidal channel. Soil and groundwater data collected from these borings should provide further information on the likely source of groundwater impacts near the tidal channel depending on the sample results.

2.2 Soil and Groundwater Sample Methodology and Laboratory Analysis

The borings were advanced using a Geoprobe™ direct-push sample rig provided by Geocon. The first borehole at each sample location was continuously cored by driving a four-foot-long by two-inch-diameter Macrocore sampler lined with an acetate sample tube into undisturbed soil at three- to four-foot sample intervals until the target sample depth was encountered.

Soil samples were collected by cutting the acetate sample sleeve from the targeted sample depth, capping the ends with Teflon tape and plastic end caps, and placing them in a chest cooled with ice for storage and transport to the analytical laboratory.

Grab-groundwater samples were collected from the first borehole at each sample location by installing a temporary ¾-inch-diameter PVC well casing into the open borehole and then allowing groundwater to enter the well casing. A Hydropunch sampler was used to facilitate the collection of groundwater samples from the second borehole at each location. Depth to groundwater encountered in the first borehole was used to determine the Hydropunch sample interval in the second borehole. Groundwater samples from the open and Hydropunch boreholes were retrieved to ground surface using a small diameter stainless steel bailer. Groundwater was then discharged from the bailer into one liter glass amber jars and 40 milliliter glass vials preserved with hydrochloric acid. The sample containers were then labeled and placed in a chest cooled with ice for storage and transport to the analytical laboratory.

All soil and groundwater samples were submitted for laboratory analysis under chain-of-custody protocol to McCampbell Analytical, Inc., a State of California-certified laboratory located in Pittsburg, California.

All soil and groundwater samples were analyzed for TPHd and total petroleum hydrocarbons as motor oil (TPHmo) both with and without using SGC following EPA Test Method 8015B. The groundwater samples were additionally analyzed for volatile organic compounds (VOCs) following EPA Test Method 8260B at the request of the ACHCSA.

2.3 Soil and Groundwater Conditions

The offsite investigation area is generally underlain by sandy and gravelly fill soils from ground surface to depths ranging from 6 to 12 feet. Underlying the fill soil is silty and sandy clay to depths ranging from 15 feet at SB-23A to at least 24 feet (the deepest depth explored) at SB-25A and SB-28.

Groundwater beneath the area was first encountered in six of the eight boring locations at depths ranging from 16 feet in SB-23A to 22 feet in SB-26. The water-bearing intervals consisted of silty sand, sand, and gravel when present. In most instances, but not all, groundwater stabilized around 6 or 7 feet below ground surface once encountered.

No odors were observed in soil or groundwater in the borings advanced during this investigation.

Copies of boring logs are provided in Appendix B.

2.4 Soil and Groundwater Sample Results

2.4.1 Soil Sample Results

Soil samples were analyzed for TPHd and TPHmo with and without SGC. The sample results are tabulated in Table 1.

The highest TPHd and/or TPHmo detections in soil samples were collected within 8 feet of ground surface along the tidal channel in borings SB-25A, SB-29, and SB-30, and to a lesser extent in boring SB-26 located just south of the Former Maintenance Station site (see Figure 2).

TPHd without SGC was reported at concentrations ranging from 160 milligrams per kilogram (mg/kg) in the 5-foot soil sample collected from boring SB-25A to 1.4 mg/kg in the 8-foot soil sample collected from boring SB-30. TPHmo without SGC was reported at concentrations ranging from 2,900 mg/kg in the 5-foot soil sample collected from boring SB-30 to 9.4 mg/kg in the 8-foot soil sample collected from boring SB-25A.

A copy of the analytical laboratory report is provided as Appendix C.

2.4.2 Groundwater Sample Results

TPHd and TPHmo without SGC were reported in all groundwater samples, except the Hydropunch groundwater sample collected from boring SB-28. TPHd and TPHmo without SGC were reported in the open borehole groundwater sample collected boring SB-28 at concentrations of 90 µg/l and

170 µg/l, respectively; however, these same analytes were reported as non-detect when collected using the Hydropunch sampler within two feet of the same sample location.

The highest TPHd and TPHmo concentrations (without SGC) were reported in the Hydropunch groundwater sample collected from boring SB-25A, which is the same location where TPHd in groundwater was reported at a concentration of 1,300 µg/l during the April 2015 investigation. TPHd without SGC was reported during recent investigation at the same concentration (1,300 µg/l); however, the groundwater sample collected in April 2015 was from an open borehole and the October 2016 sample was collected using a Hydropunch sampler.

1,1-dichloroethane (1,1-DCA) and 1,1-dichloroethene (1,1-DCE) were reported in the groundwater samples collected from borings SB-23A and SB-24A at concentrations ranging from 0.83 µg/l to 1.8 µg/l. These same analytes were reported in the groundwater samples collected from these same general locations during the April 2015 investigation.

1,1-DCA and 1,1-DCE were also reported in the Hydropunch groundwater sample collected from boring SB-30. It should be noted that groundwater did not enter the SB-30 open borehole boring and therefore, groundwater could not be collected as planned. 1,1-DCA was reported at a concentration of 0.61 µg/l and 1,1-DCE was reported at 1.3 µg/l in the SB-30 Hydropunch borehole.

Groundwater sample results are tabulated in Table 2. A copy of the analytical laboratory report is provided as Appendix C.

2.5 Waste Disposal

Soil cuttings and rinsate fluids generated during this investigation were containerized in a 55-gallon drum and transported back to Geocon's warehouse in Livermore pending disposal arrangements.

3.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this and the April 2015 investigation, we conclude the following:

- The TPHd and VOCs reported in the groundwater samples collected from SB-23, SB-24, and SB-25 during the April 2015 investigation did not originate from the Former Caltrans Hegenberger Maintenance Station site. It likely originated from the placement of TPH-containing fill soils south of the site and/or from TPH-impacted surface water in the tidal channel.

- The highest TPHd and TPHmo concentrations in soil were reported in the 5-foot samples collected from borings SB-25A, SB-29, and SB-30, situated along the margins of the north and south sides of the tidal channel. Likewise, the highest TPHd and TPHmo concentrations, and only detections of VOCs (1,1-DCA and 1,1-DCE), were reported in the groundwater samples collected from borings SB-23A, SB-24A, SB-25A, and SB-30, all situated along the north and south sides of the tidal channel.

- The combined TPHd and TPHmo concentrations (without SGC) of groundwater samples collected from borings SB-23A, SB-25A, and SB-29 exceed the Saltwater Ecological Toxicity ESL of 640 µg/l. Groundwater samples collected from borings SB-26, SB-27, and SB-28 located between the Former Caltrans Maintenance Facility site and the tidal channel did not exceed the Saltwater Ecological Toxicity ESL, further indicating that TPH-impacts reported in groundwater samples collected south of the Former Caltrans Maintenance Facility site did not originate from the Former Caltrans site.

- Based on the results of groundwater samples collected during the recent investigation from both an open borehole and using a Hydropunch sampler it does not appear that the collection of the SB-25 groundwater sample from an open borehole during the April 2015 investigation was the reason for the elevated TPHg concentration of 1,300 µg/l. This same TPHd concentration was reported in a groundwater sample collected using a Hydropunch sampler from boring SB-25A, located in the immediate vicinity of boring SB-25.

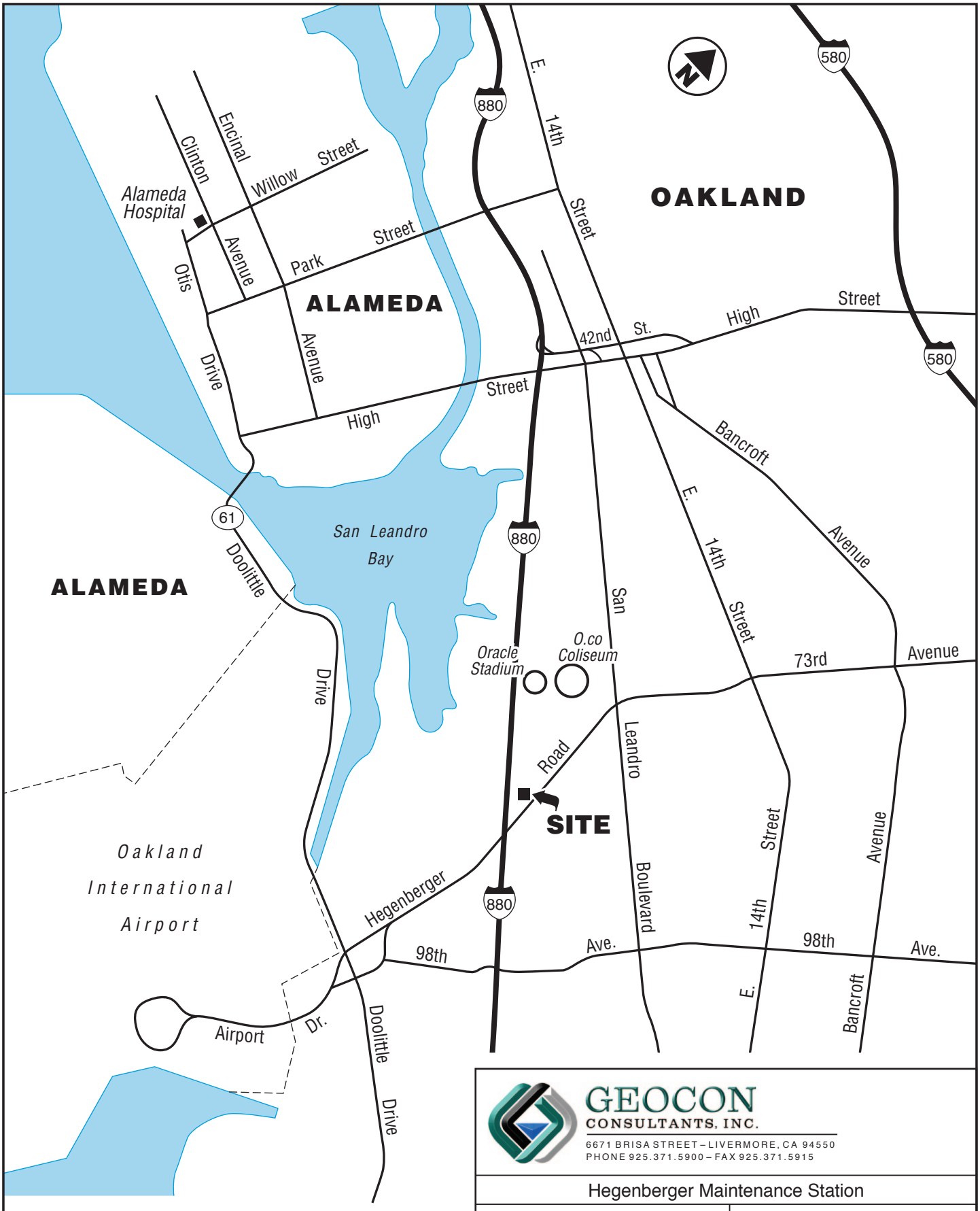
Based on the results of this investigation, groundwater surrounding the tidal channel is impacted with TPHd and TPHmo; however, the source of the impacts is not the Former Caltrans site. Accordingly, we do not recommend additional ecological evaluation of soil and groundwater surrounding the tidal channel, as it pertains to the Former Caltrans Maintenance Station site.

4.0 LIMITATIONS

This report has been prepared exclusively for Caltrans, District 4. The information contained herein is only valid as of the date of the report, and will require an update to reflect additional information obtained.

The Client should recognize that this report is not a comprehensive site characterization and the client should not construe it as such. This report presents findings of the results of the limited sampling and laboratory testing performed. In addition, it is not the intention of the information obtained to address potential impacts related to sources other than those specified herein.

Therefore, the report is only conclusive with respect to the information obtained. No guarantee of the results of the study is implied within the intent of this report. The services performed were conducted in accordance with the local standard of care in the geographic region at the time the services were rendered.



GEOCON CONSULTANTS, INC.
6671 BRISA STREET – LIVERMORE, CA 94550
PHONE 925.371.5900 – FAX 925.371.5915

Hegenberger Maintenance Station		
555 Hegenberger Road Oakland, California	**VICINITY MAP**	
GEOCON Proj. No. E8722-02-01B		
Task Order No. 1	December 2016	Figure 1

GEOCON CONSULTANTS, INC.

6671 BRISA STREET, LIVERMORE, CA 94550; PHONE 925 371-5900 - FAX 925 371-5915

Hegenberger Maintenance Station

555 Hegenberger Road, Oakland, California

SAMPLE LOCATION MAP

GEOCON Proj. No. E8722-02-01B | December 2016 | Figure 2

SITE1116

Table 1
Soil Analytical Results
Former Caltrans Hegenberger Maintenance Station
555 Hegenberger Road
Oakland, Alameda County, CA

Sample ID	Date	Depth (feet)	TPHd (mg/kg)	TPHd* (mg/kg)	TPHmo (mg/kg)	TPHmo* (mg/kg)
SB-23A	11/27/2016	4	**5.6**	**5.5**	**140**	**77**
SB-23A	11/27/2016	8	<1.0	<1.0	**19**	**7.7**
SB-23A	11/27/2016	15	<1.0	<1.0	<5.0	<5.0
SB-24A	11/27/2016	4	**20**	**9.5**	**330**	**140**
SB-24A	11/27/2016	8	<5.0	**1.2**	**47**	**25**
SB-25A	11/27/2016	3	**160**	**120**	**2,100**	**1,400**
SB-25A	11/27/2016	8	<1.0	<1.0	**9.4**	**6.6**
SB-25A	11/27/2016	10	<1.0	<1.0	<5.0	<5.0
SB-25A	11/27/2016	15	<1.0	<1.0	<5.0	<5.0
SB-26	11/27/2016	4	<50	<50	**660**	**400**
SB-26	11/27/2016	8	**56**	<100	**1,700**	**1,300**
SB-26	11/27/2016	15	**2.6**	<1.0	**31**	**17**
SB-27	11/28/2016	5	<1.0	<1.0	<5.0	<5.0
SB-27	11/28/2016	10	<1.0	<1.0	<5.0	<5.0
SB-27	11/28/2016	15	<1.0	<1.0	<5.0	<5.0
SB-28	11/28/2016	5	**12**	**11**	**210**	**130**
SB-28	11/28/2016	10	<1.0	<1.0	<5.0	<5.0
SB-28	11/28/2016	15	<1.0	<1.0	<5.0	<5.0
SB-29	11/27/2016	4	**80**	<50	**1,700**	**1,100**
SB-29	11/27/2016	8	<1.0	<1.0	<5.0	<5.0
SB-29	11/27/2016	15	<1.0	<1.0	<5.0	<5.0
SB-29	11/27/2016	20	<1.0	<1.0	<5.0	<5.0
SB-30	11/27/2016	5	<100	<100	**2,900**	**2,000**
SB-30	11/27/2016	8	**1.4**	<1.0	**37**	**22**
SB-30	11/27/2016	15	<1.0	<1.0	**7.3**	**6.9**

Notes:
Bold type indicates analyte detected above reporting limit
* with silica gel cleanup
TPHd = Total petroleum hydrocarbons as diesel
TPHmo = Total petroleum hydrocarbons as motor oil

Table 2
Grab Groundwater Analytical Results
Former Caltrans Hegenberger Maintenance Station
555 Hegenberger Road
Oakland, Alameda County, CA

Sample ID	Date	TPHg (µg/l)	TPHd (µg/l)	TPHd* (µg/l)	TPHmo (µg/l)	TPHmo* (µg/l)	Total TPHd/TPHmo (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	Other VOCs (µg/l)
SB-23	4/24/15	<50	<50	**84**	NA	NA	<50	<0.50	<0.50	<0.50	<0.50	1,1-Dichloroethane = **0.61**
SB-23A OB	11/27/16	NA	**300**	**56**	**370**	**96**	**670**	<0.50	<0.50	<0.50	<0.50	1,1-Dichloroethene = **1.1**
SB-23A HP	11/27/16	NA	**250**	**96**	**320**	<120	**570**	<0.50	<0.50	<0.50	<0.50	1,1-Dichloroethene = **0.83**
SB-24	4/24/15	<50	<50	<50	NA	NA	<50	<0.50	<0.50	<0.50	<0.50	1,1-Dichloroethene = **1.1**
SB-24A OB	11/27/16	NA	**110**	<43	**140**	<91	**250**	<0.50	<0.50	<0.50	<0.50	ND
SB-24A HP	11/27/16	NA	**210**	<56	**250**	<120	**460**	<0.50	<0.50	<0.50	<0.50	1,1-Dichloroethane = **0.95** 1,1-Dichloroethene = **1.8**
SB-25	4/24/15	<50	**1,300**	**620**	NA	NA	**1,300**	<0.50	<0.50	<0.50	<0.50	ND
SB-25A OB	11/27/16	NA	**170**	NA	**190**	NA	**360**	<0.50	<0.50	<0.50	<0.50	ND
SB-25A HP	11/27/16	NA	**1,300**	**460**	**690**	<110	**1,990**	<0.50	<0.50	<0.50	<0.50	ND
SB-26 OB	11/27/16	NA	**120**	<49	**230**	<110	**350**	<0.50	<0.50	<0.50	<0.50	ND
SB-26 HP	11/27/16	NA	**250**	**60**	**220**	<100	**470**	<0.50	<0.50	<0.50	<0.50	ND
SB-27 OB	11/28/16	NA	**110**	<41	**210**	<88	**320**	<0.50	<0.50	<0.50	<0.50	ND
SB-27 HP	11/28/16	NA	**130**	<39	**260**	<83	**390**	<0.50	<0.50	<0.50	<0.50	ND
SB-28 OB	11/28/16	NA	**90**	<39	**170**	<84	**260**	<0.50	<0.50	<0.50	<0.50	ND
SB-28 HP	11/28/16	NA	<40	<40	<85	<85	<125	<0.50	<0.50	<0.50	<0.50	ND
SB-29 OB	11/27/16	NA	**280**	**46**	**500**	<84	**780**	<0.50	<0.50	<0.50	<0.50	ND
SB-29 HP	11/27/16	NA	**300**	NA	**230**	NA	**530**	<0.50	<0.50	<0.50	<0.50	ND
SB-30 HP	11/27/16	NA	**260**	**73**	**250**	<77	**510**	<0.50	<0.50	<0.50	<0.50	1,1-Dichloroethane = **0.61** 1,1-Dichloroethene = **1.3**

Table 2
Grab Groundwater Analytical Results
Former Caltrans Hegenberger Maintenance Station
555 Hegenberger Road
Oakland, Alameda County, CA

Sample ID	Date	TPHg (µg/l)	TPHd (µg/l)	TPHd* (µg/l)	TPHmo (µg/l)	TPHmo* (µg/l)	Total TPHd/TPHmo (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Xylenes (µg/l)	Other VOCs (µg/l)
RWQCB ESLs												
Saltwater Ecological Toxicity		500	640	640	NS	NS	640	35	2,500	43	NS	1,1-Dichloroethane = NS 1,1-Dichloroethene = 2,200

Notes:

Bold type indicates analyte detected above reporting limit

Yellow highlight indicates sample result exceeds ESL

OB = Open Borehole

HP = Hydropunch Sample

µg/l = micrograms per liter

NA = Not analyzed

NS = No standard

ND = Not Detected

TPHg = Total petroleum hydrocarbons as gasoline range organics

TPHd = Total petroleum hydrocarbons as diesel range organics

TPHmo = Total petroleum hydrocarbons as motor oil

* with silica gel cleanup

< = value less than method detection limit

APPENDIX A

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
REBECCA GEBHART, Interim Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

August 17, 2016

Caltrans
111 Grand Avenue
Oakland, CA 94612
Attn: Mr. Ray Boyer
(*Sent via electronic mail to: ray.boyer@dot.ca.gov*)

Subject: Ecological Risk Evaluation Work Plan Review, Fuel Leak Case No. RO0000225 and GeoTracker Global ID T0600101696, Caltrans Oakland Maintenance Station, 555 Hegenberger Road, Oakland, CA 94621

Dear Mr. Boyer:

Alameda County Department of Environmental Health (ACDEH) staff has reviewed the case file including the recently submitted document entitled *Ecological Risk Evaluation Workplan* (EWP) dated July 15, 2016 and prepared by Geocon Consultants, Inc. (Geocon) for the subject site. The EWP was prepared at the request of ACDEH in our letter dated June 13, 2016, which provided comments on a previous Geocon document entitled *Additional Soil and Groundwater Investigation Report* (SWI) dated June 10, 2015. Based on our review of the SWI, ACDEH concluded the assessment to the adjacent tidal wetland is incomplete as total petroleum hydrocarbons (TPH) as diesel (TPHd) was reported at a concentration of 1,300 µg/L in soil bore SB-25, located adjacent to the wetland, exceeding the 640 µg/L TPHd Aquatic Habitat Goal Environmental Screening Level (ESL).

In order to assess the ecological risk, the EWP proposes to collect soil and grab groundwater (GGW) samples from eight temporary boring locations, with soil samples collected at depths of 5, 10 and 15 feet (if groundwater is not encountered first). In order to address sample methodology discrepancies, GGW samples will be recovered at each boring location from an open borehole and using a Hydropunch sampler. Soil and GGW samples will be analyzed for TPHd and motor oil (TPHmo) without using silica gel cleanup (SGC).

ACDEH generally concurs with the proposed scope of work. The proposed scope of work may be implemented provided that the modifications requested in the technical comments below are addressed and incorporated during the field implementation. Submittal of a revised EWP is not required unless an alternate scope of work outside that described in the EWP and technical comments below is proposed. Additional data may be available that ACDEH is not aware of, or may not have been submitted, and therefore has not been incorporated in to ACDEH's file review. If additional data is made available, the data can be incorporated in future reviews.

TECHNICAL COMMENTS

1. **Soil Sample Collection –** ACDEH recommends that soil samples be collected and analyzed from within the 0- to 5-foot and 5- to 10-foot intervals as measured from the ground surface, areas of obvious contamination, the soil/groundwater interface, and at significant changes in lithology. If staining, odor, or elevated PID readings are observed over an interval of several

feet, a sufficient number of soil samples from this interval should be submitted for laboratory analyses to characterize the fuel hydrocarbon concentrations within this interval.

2. **Soil Bore Logs –** EWP *Section 3.0- Report Preparation* does not specify that soil bore logs will be prepared and included in the report. ACDEH requests the preparation and inclusion of soil bore logs in the soil and groundwater investigation report requested below. Please include photoionization detector (PID) measurements on the bore logs. Additionally, ACDEH requests submittal of each bore log to the California State Water Resources Control Board (SWRCB) GeoTracker website as a GEO_BORE file.

3. **Grab Groundwater Sample Collection –** ACDEH is in general agreement with the rationale presented in the EWP for the collection of GGW samples from the open borehole through a temporary well casing and with a Hydropunch sampler in order to evaluate the source of TPH concentrations reported in groundwater.

4. **Silica Gel Clean Up –** San Francisco Bay Regional Water Quality Control Board (SFBR-RWQCB) *Petroleum Metabolites- Literature Review and Assessment Framework, a Technical Resource Document* (SFBR-RWQCB, June 27, 2016) states the purpose of comparison of duplicate samples processed with and without SGC is to assess the relative degree of biodegradation. Therefore, ACDEH requests submittal of selected soil and GGW samples for analysis both with and without SGC. Please submit a sufficient number of soil samples consisting of both fill and bay mud and GGW samples representing both open borehole and Hydropunch methodologies for the SGC/ no SGC biodegradation evaluation.

5. **Scope of Analysis –** GGW samples collected from soil bores SB-23 and SB-24 were collected using Hydropunch sampling methodology. Both samples were reported to contain the volatile organic compound (VOC) 1,1-dichloroethene (1,1-DCE). The sample from SB-23 was also reported to contain another VOC, 1,1-dichloroethane (1,1-DCA). Therefore, ACDEH requests the analysis of samples using the full suite of VOCs by EPA Test Method 8260.

TECHNICAL REPORT REQUEST

Please upload technical reports to the ACDEH ftp site (Attention: Keith Nowell), and to the SWRCB's Geotracker website, in accordance with the following specified file naming convention and schedule:

- **October 17, 2016 –** Ecological Risk Evaluation Report (file name: RO0000225_SWI_R_yyyy-mm-dd

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

Online case files are available for review at the following website:
http://www.acgov.org/aceh/index.htm.

Thank you for your cooperation. ACDEH looks forward to working with you and your consultants to advance the case toward closure. Should you have any questions regarding this correspondence or your case, please call me at (510) 567-6764 or send an electronic mail message at keith.nowell@acgov.org.

Respectfully,

Keith Nowell

Digitally signed by Keith Nowell
DN: cn=Keith Nowell, o=Alameda County, ou=Department of Environmental Health, email=keith.nowell@acgov.org, c=US
Date: 2016.08.17 12:37:06 -07'00'

Keith Nowell
Hazardous Materials Specialist

Enclosure: Responsible Party(ies) Legal Requirements/Obligations
ACDEH Electronic Report Upload (ftp) Instructions

cc: Ramin Behani, Caltrans, 111 Grand Avenue, Oakland, CA 94612
(*Sent via electronic mail to: ramin.behani@dot.ca.gov*)

John Love, Geocon Consultants, Inc., 6671 Brisa Street, Livermore, CA 94550-2505
(*Sent via electronic mail to: love@geoconinc.com*)

Dilan Roe, ACDEH (*Sent via electronic mail to: dilan.roe@acgov.org*)
Keith Nowell, ACDEH (*Sent via electronic mail to: keith.nowelli@acgov.org*)
GeoTracker
File

Alameda County Public Works Agency - Water Resources Well Permit

Public Works Agency
Alameda County

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 09/28/2016 By jamesy

Permit Numbers: W2016-0729
Permits Valid from 10/11/2016 to 10/13/2016

Application Id: 1474928767820 **City of Project Site:** Oakland
Site Location: 555 Hegenberger Road
Project Start Date: 10/11/2016 **Completion Date:** 10/13/2016
Assigned Inspector: Contact Minh Ngo at (510) 670-5759 or Minh@acpwa.org

Applicant: Geocon Consultants, Inc. - John Love **Phone:** 925-371-5900 x407
6671 Brisa Street, Livermore, CA 94550
Property Owner: Bahram Sazegar **Phone:** 510-286-5643
111 Grand Ave, MS 8C, Oakland, CA 94623
Client: ** same as Property Owner **
Contact: John Love **Phone:** 925-371-5900 x407
Cell: 925-525-4142

Total Due: $265.00
Receipt Number: WR2016-0494 **Total Amount Paid:** $265.00
Payer Name : John William Love Paid By: VISA **PAID IN FULL**

Works Requesting Permits:

Borehole(s) for Geo Probes-Sampling 24 to 72 hours only - 8 Boreholes
Driller: Gregg Drilling and Testing, Inc. - Lic #: 485165 - Method: DP **Work Total: $265.00**

Specifications

Permit Number	Issued Dt	Expire Dt	# Boreholes	Hole Diam	Max Depth
W2016-0729	09/28/2016	01/09/2017	8	2.00 in.	25.00 ft

Specific Work Permit Conditions

1. Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings. All cuttings remaining or unused shall be containerized and hauled off site. The containers shall be clearly labeled to the ownership of the container and labeled hazardous or non-hazardous.

2. Boreholes shall not be left open for a period of more than 24 hours. All boreholes left open more than 24 hours will need approval from Alameda County Public Works Agency, Water Resources Section. All boreholes shall be backfilled according to permit destruction requirements and all concrete material and asphalt material shall be to Caltrans Spec or County/City Codes. No borehole(s) shall be left in a manner to act as a conduit at any time.

3. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

4. Applicant shall contact assigned inspector listed on the top of the permit at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

5. Permittee, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or

waterways or be allowed to move off the property where work is being completed.

6. NOTE:
Under California laws, the owner/operator are responsible for reporting the contamination to the governmental regulatory agencies under Section 25295(a). The owner/operator is liable for civil penalties under Section 25299(a)(4) and criminal penalties under Section 25299(d) for failure to report a leak. The owner/operator is liable for civil penalties under Section 25299(b)(4) for knowing failure to ensure compliance with the law by the operator. These penalty provisions do not apply to a potential buyer.

7. Prior to any drilling activities onto any public right-of-ways, it shall be the applicants responsibilities to contact and coordinate a Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits required for that City or to the County and follow all City or County Ordinances. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County a Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

8. Permit is valid only for the purpose specified herein. No changes in construction procedures, as described on this permit application. Boreholes shall not be converted to monitoring wells, without a permit application process.

APPENDIX B

PROJECT NO. **E8722-02-01B** PROJECT NAME **HEGENBERGER MAINTENANCE STATION**

BORING SB23A

ELEV. (MSL.) _____ DATE COMPLETED **10/27/16**

ENG./GEO. **JOHN LOVE** DRILLER **GREGG**

EQUIPMENT **GEOPROBE** HAMMER TYPE _____

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0					**FILL SOIL**			
6			▽		Stiff, moist, black and bluish green, Sandy CLAY, low to medium plasticity, no odor - groundwater stabilized			
15					Dense, moist to very moist, light brown, Silty SAND, medium sand, no odor - groundwater first encountered			
18					Dense, variegated, GRAVEL, fine to medium gravel, no odor			
20					BORING TERMINATED AT 20 FEET			

IN PROGRESS E8722-02-01B.GPJ 11/21/16

GEOCON

SAMPLE SYMBOLS
- ☐ ... SAMPLING UNSUCCESSFUL
- ⊠ ... DISTURBED OR BAG SAMPLE
- ◧ ... STANDARD PENETRATION TEST
- ◥ ... CHUNK SAMPLE
- ■ ... DRIVE SAMPLE (UNDISTURBED)
- ▼ ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

PROJECT NO. **E8722-02-01B** PROJECT NAME **HEGENBERGER MAINTENANCE STATION**

BORING SB24A

ELEV. (MSL.) _____ DATE COMPLETED **10/27/16**

ENG./GEO. **JOHN LOVE** DRILLER **GREGG DRILLING**

EQUIPMENT **GEOPROBE** HAMMER TYPE _____

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0					**FILL SOIL**			
1								
2								
3								
4								
5								
6					Stiff, moist, black and bluish green, Sandy CLAY, low to medium plasticity, no odor			
7			▽		- groundwater stabilized			
8								
9								
10					- bluish green with shell fragments			
11								
12								
13								
14								
15								
16								
17					Dense, saturated, yellowish brown, Gravelly SAND, well graded sand and fine gravel			
18								
19					- groundwater first encountered			
20					Very stiff, moist, yellowish-brown, Sandy CLAY, medium plasticity, no odor			
					BORING TERMINATED AT 20 FEET			

IN PROGRESS E8722-02-01B.GPJ 11/21/16

GEOCON

SAMPLE SYMBOLS

☐ ... SAMPLING UNSUCCESSFUL ◧ ... STANDARD PENETRATION TEST ■ ... DRIVE SAMPLE (UNDISTURBED)

⊠ ... DISTURBED OR BAG SAMPLE ◥ ... CHUNK SAMPLE ▼ ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

PROJECT NO. **E8722-02-01B** PROJECT NAME **HEGENBERGER MAINTENANCE STATION**

BORING SB25A

ELEV. (MSL.) _____ DATE COMPLETED **10/27/16**

ENG./GEO. **JOHN LOVE** DRILLER **GREGG DRILLING**

EQUIPMENT **GEOPROBE** HAMMER TYPE _____

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0					**FILL SOIL**			
6					Firm to very stiff, moist, dark gray with bluish gray, Silty/Sandy CLAY, low to medium plasticity, no odor			
14					- very moist			
18					Very stiff, moist, yellowish brown, Sandy CLAY, medium plasticity, no odor			
24					BORING TERMINATED AT 24 FEET			

IN PROGRESS E8722-02-01B.GPJ 11/21/16

GEOCON

SAMPLE SYMBOLS

- ☐ ... SAMPLING UNSUCCESSFUL
- ⊠ ... DISTURBED OR BAG SAMPLE
- ◧ ... STANDARD PENETRATION TEST
- ◥ ... CHUNK SAMPLE
- ■ ... DRIVE SAMPLE (UNDISTURBED)
- ▼ ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

PROJECT NO. **E8722-02-01B** PROJECT NAME **HEGENBERGER MAINTENANCE STATION**

BORING SB26

ELEV. (MSL.) _____ DATE COMPLETED **10/27/16**

ENG./GEO. **JOHN LOVE** DRILLER **GREGG DRILLING**

EQUIPMENT **GEOPROBE** HAMMER TYPE _____

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0					**FILL SOIL** (no recovery from 8-12')			
6			▽		- groundwater stabilized			
12					Stiff, moist, bluish green with orangish brown mottles, Sandy CLAY, medium plasticity			
22					Very dense, saturated, variegated, GRAVEL, fine to medium gravel, no odor			
24					- groundwater first encountered BORING TERMINATED AT 24 FEET			

IN PROGRESS E8722-02-01B.GPJ 11/21/16

GEOCON

SAMPLE SYMBOLS
- ☐ ... SAMPLING UNSUCCESSFUL
- ▨ ... DISTURBED OR BAG SAMPLE
- ◧ ... STANDARD PENETRATION TEST
- ◥ ... CHUNK SAMPLE
- ■ ... DRIVE SAMPLE (UNDISTURBED)
- ▼ ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

PROJECT NO. **E8722-02-01B** PROJECT NAME **HEGENBERGER MAINTENANCE STATION**

BORING SB27

ELEV. (MSL.) _____ DATE COMPLETED **10/27/16**

ENG./GEO. **JOHN LOVE** DRILLER **GREGG DRILLING**

EQUIPMENT **GEOPROBE** HAMMER TYPE _____

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0					**FILL SOIL**			
7			▽		- groundwater stabilized			
12					Stiff, moist, bluish green with orangish brown mottles, Sandy CLAY, medium plasticity, no odor			
20					Dense, saturated, variegated, Gravelly SAND, no odor			
					- groundwater first encountered			
24					BORING TERMINATED AT 24 FEET			

IN PROGRESS E8722-02-01B.GPJ 11/21/16

GEOCON

SAMPLE SYMBOLS
- ☐ ... SAMPLING UNSUCCESSFUL
- ▨ ... DISTURBED OR BAG SAMPLE
- ◧ ... STANDARD PENETRATION TEST
- ◥ ... CHUNK SAMPLE
- ■ ... DRIVE SAMPLE (UNDISTURBED)
- ▼ ... WATER TABLE OR SEEPAGE

NOTE: THE LOG OF SUBSURFACE CONDITIONS SHOWN HEREON APPLIES ONLY AT THE SPECIFIC BORING OR TRENCH LOCATION AND AT THE DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF SUBSURFACE CONDITIONS AT OTHER LOCATIONS AND TIMES.

PROJECT NO. **E8722-02-01B** PROJECT NAME **HEGENBERGER MAINTENANCE STATION**

BORING SB28

ELEV. (MSL.) _____ DATE COMPLETED **10/27/16**

ENG./GEO. **JOHN LOVE** DRILLER **GREGG DRILLING**

EQUIPMENT **GEOPROBE** HAMMER TYPE _____

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0					**FILL SOIL**			
12					Stiff, moist, reddish brown, Sandy CLAY, medium plasticity, no odor - very moist ~ 2 inches thick - soil turns brown			
24					BORING TERMINATED AT 24 FEET Notes: Approximately 4 feet of groundwater accumulated in borehole after about 20 minutes			

GEOCON

SAMPLE SYMBOLS

☐ ... SAMPLING UNSUCCESSFUL ◧ ... STANDARD PENETRATION TEST ■ ... DRIVE SAMPLE (UNDISTURBED)

⊠ ... DISTURBED OR BAG SAMPLE ◪ ... CHUNK SAMPLE ▼ ... WATER TABLE OR SEEPAGE

PROJECT NO. **E8722-02-01B** PROJECT NAME **HEGENBERGER MAINTENANCE STATION**

BORING SB29

ELEV. (MSL.) _____ DATE COMPLETED **10/27/16**

ENG./GEO. **JOHN LOVE** DRILLER **GREGG DRILLING**

EQUIPMENT **GEOPROBE** HAMMER TYPE _____

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0					**SANDY GRAVELLY FILL SOIL**			
6			▽		Stiff, moist, dark brown, light brown, dark gray, Sandy CLAY, medium plasticity, no odor - groundwater stabilized			
19					- very stiff - groundwater first encountered			
21					Dense, very moist to saturated, light brown, Silty and Gravelly SAND, fine to coarse sand, fine gravel, no odor			
24					BORING TERMINATED AT 24 FEET Note: Groundwater in "Hydropunch" borehole took 2 hours before enough groundwater was present to collect sample for laboratory analysis			

IN PROGRESS E8722-02-01B.GPJ 11/21/16

GEOCON

SAMPLE SYMBOLS
- ☐ ... SAMPLING UNSUCCESSFUL
- ▨ ... DISTURBED OR BAG SAMPLE
- ◧ ... STANDARD PENETRATION TEST
- ◥ ... CHUNK SAMPLE
- ■ ... DRIVE SAMPLE (UNDISTURBED)
- ▼ ... WATER TABLE OR SEEPAGE

PROJECT NO. **E8722-02-01B** PROJECT NAME **HEGENBERGER MAINTENANCE STATION**

BORING SB30

ELEV. (MSL.) _____ DATE COMPLETED **10/27/16**

ENG./GEO. **JOHN LOVE** DRILLER **GREGG DRILLING**

EQUIPMENT **GEOPROBE** HAMMER TYPE _____

DEPTH IN FEET	SAMPLE NO.	LITHOLOGY	GROUNDWATER	SOIL CLASS (USCS)	MATERIAL DESCRIPTION	PENETRATION RESISTANCE (BLOWS/FT.)	DRY DENSITY (P.C.F.)	MOISTURE CONTENT (%)
0					**SANDY GRAVELLY FILL SOIL**			
1								
2								
3								
4								
5								
6			▽		- groundwater stabilized			
7					Stiff, moist, light brown to orangish brown, Sandy CLAY, medium plasticity, no odor			
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20					BORING TERMINATED AT 20 FEET			

Notes: Borehole would not stay open to install temporary well casing to 20 feet. Installed Hydropunch to 20 feet in open borehole. No water in the "open borehole" boring. Advanced Hydropunch sampler to 24 feet in adjacent borehole. Groundwater came up to 6 feet in "Hydropunch" borehole after about 30 minutes.

GEOCON

SAMPLE SYMBOLS

☐ ... SAMPLING UNSUCCESSFUL ◧ ... STANDARD PENETRATION TEST ■ ... DRIVE SAMPLE (UNDISTURBED)

▩ ... DISTURBED OR BAG SAMPLE ◥ ... CHUNK SAMPLE ▼ ... WATER TABLE OR SEEPAGE

APPENDIX C

McCampbell Analytical, Inc.
"When Quality Counts"

Analytical Report

WorkOrder: 1610C83

Report Created for: GEOCON Env. Consultants

6671 Brisa St
Livermore, CA 94550

Project Contact: John Love
Project P.O.: E8722-02-01B
Project Name: Caltrans Hegenberger Maintenance Station

Project Received: 10/27/2016

Analytical Report reviewed & approved for release on 11/03/2016 by:

Angela Rydelius,
Laboratory Manager

1534 Willow Pass Rd. Pittsburg, CA 94565 ♦ TEL: (877) 252-9262 ♦ FAX: (925) 252-9269 ♦ www.mccampbell.com
CA ELAP 1644 ♦ NELAP 4033ORELAP

McCampbell Analytical, Inc.
"When Quality Counts"
1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: GEOCON Env. Consultants
Project: Caltrans Hegenberger Maintenance Station
WorkOrder: 1610C83

Glossary Abbreviation

%D	Serial Dilution Percent Difference
95% Interval	95% Confident Interval
DF	Dilution Factor
DI WET	(DISTLC) Waste Extraction Test using DI water
DISS	Dissolved (direct analysis of 0.45 µm filtered and acidified water sample)
DLT	Dilution Test (Serial Dilution)
DUP	Duplicate
EDL	Estimated Detection Limit
ITEF	International Toxicity Equivalence Factor
LCS	Laboratory Control Sample
MB	Method Blank
MB % Rec	% Recovery of Surrogate in Method Blank, if applicable
MDL	Method Detection Limit
ML	Minimum Level of Quantitation
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N/A	Not Applicable
ND	Not detected at or above the indicated MDL or RL
NR	Data Not Reported due to matrix interference or insufficient sample amount.
PDS	Post Digestion Spike
PDSD	Post Digestion Spike Duplicate
PF	Prep Factor
RD	Relative Difference
RL	Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.)
RPD	Relative Percent Deviation
RRT	Relative Retention Time
SPK Val	Spike Value
SPKRef Val	Spike Reference Value
SPLP	Synthetic Precipitation Leachate Procedure
ST	Sorbent Tube
TCLP	Toxicity Characteristic Leachate Procedure
TEQ	Toxicity Equivalents
WET (STLC)	Waste Extraction Test (Soluble Threshold Limit Concentration)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Glossary of Terms & Qualifier Definitions

Client: GEOCON Env. Consultants
Project: Caltrans Hegenberger Maintenance Station
WorkOrder: 1610C83

Analytical Qualifiers

a3	sample diluted due to high organic content.
b1	aqueous sample that contains greater than ~1 vol. % sediment
c8	sample pH is greater than 2
e2	diesel range compounds are significant; no recognizable pattern
e7	oil range compounds are significant

Quality Control Qualifiers

F2	LCS/LCSD recovery and/or RPD is out of acceptance criteria.
F3	the surrogate standard recovery and/or RPD is outside of acceptance limits.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-30 Hydropunch	**1610C83-004C**	**Water**	**10/27/2016 08:50**	**GC18**	**129016**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	10/29/2016 20:20
tert-Amyl methyl ether (TAME)	ND	0.50	1	10/29/2016 20:20
Benzene	ND	0.50	1	10/29/2016 20:20
Bromobenzene	ND	0.50	1	10/29/2016 20:20
Bromochloromethane	ND	0.50	1	10/29/2016 20:20
Bromodichloromethane	ND	0.50	1	10/29/2016 20:20
Bromoform	ND	0.50	1	10/29/2016 20:20
Bromomethane	ND	0.50	1	10/29/2016 20:20
2-Butanone (MEK)	ND	2.0	1	10/29/2016 20:20
t-Butyl alcohol (TBA)	ND	2.0	1	10/29/2016 20:20
n-Butyl benzene	ND	0.50	1	10/29/2016 20:20
sec-Butyl benzene	ND	0.50	1	10/29/2016 20:20
tert-Butyl benzene	ND	0.50	1	10/29/2016 20:20
Carbon Disulfide	ND	0.50	1	10/29/2016 20:20
Carbon Tetrachloride	ND	0.50	1	10/29/2016 20:20
Chlorobenzene	ND	0.50	1	10/29/2016 20:20
Chloroethane	ND	0.50	1	10/29/2016 20:20
Chloroform	ND	0.50	1	10/29/2016 20:20
Chloromethane	ND	0.50	1	10/29/2016 20:20
2-Chlorotoluene	ND	0.50	1	10/29/2016 20:20
4-Chlorotoluene	ND	0.50	1	10/29/2016 20:20
Dibromochloromethane	ND	0.50	1	10/29/2016 20:20
1,2-Dibromo-3-chloropropane	ND	0.20	1	10/29/2016 20:20
1,2-Dibromoethane (EDB)	ND	0.50	1	10/29/2016 20:20
Dibromomethane	ND	0.50	1	10/29/2016 20:20
1,2-Dichlorobenzene	ND	0.50	1	10/29/2016 20:20
1,3-Dichlorobenzene	ND	0.50	1	10/29/2016 20:20
1,4-Dichlorobenzene	ND	0.50	1	10/29/2016 20:20
Dichlorodifluoromethane	ND	0.50	1	10/29/2016 20:20
1,1-Dichloroethane	**0.61**	0.50	1	10/29/2016 20:20
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	10/29/2016 20:20
1,1-Dichloroethene	**1.3**	0.50	1	10/29/2016 20:20
cis-1,2-Dichloroethene	ND	0.50	1	10/29/2016 20:20
trans-1,2-Dichloroethene	ND	0.50	1	10/29/2016 20:20
1,2-Dichloropropane	ND	0.50	1	10/29/2016 20:20
1,3-Dichloropropane	ND	0.50	1	10/29/2016 20:20
2,2-Dichloropropane	ND	0.50	1	10/29/2016 20:20

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-30 Hydropunch	**1610C83-004C**	**Water**	**10/27/2016 08:50**	**GC18**	**129016**

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	10/29/2016 20:20
cis-1,3-Dichloropropene	ND	0.50	1	10/29/2016 20:20
trans-1,3-Dichloropropene	ND	0.50	1	10/29/2016 20:20
Diisopropyl ether (DIPE)	ND	0.50	1	10/29/2016 20:20
Ethylbenzene	ND	0.50	1	10/29/2016 20:20
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	10/29/2016 20:20
Freon 113	ND	0.50	1	10/29/2016 20:20
Hexachlorobutadiene	ND	0.50	1	10/29/2016 20:20
Hexachloroethane	ND	0.50	1	10/29/2016 20:20
2-Hexanone	ND	0.50	1	10/29/2016 20:20
Isopropylbenzene	ND	0.50	1	10/29/2016 20:20
4-Isopropyl toluene	ND	0.50	1	10/29/2016 20:20
Methyl-t-butyl ether (MTBE)	ND	0.50	1	10/29/2016 20:20
Methylene chloride	ND	0.50	1	10/29/2016 20:20
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	10/29/2016 20:20
Naphthalene	ND	0.50	1	10/29/2016 20:20
n-Propyl benzene	ND	0.50	1	10/29/2016 20:20
Styrene	ND	0.50	1	10/29/2016 20:20
1,1,1,2-Tetrachloroethane	ND	0.50	1	10/29/2016 20:20
1,1,2,2-Tetrachloroethane	ND	0.50	1	10/29/2016 20:20
Tetrachloroethene	ND	0.50	1	10/29/2016 20:20
Toluene	ND	0.50	1	10/29/2016 20:20
1,2,3-Trichlorobenzene	ND	0.50	1	10/29/2016 20:20
1,2,4-Trichlorobenzene	ND	0.50	1	10/29/2016 20:20
1,1,1-Trichloroethane	ND	0.50	1	10/29/2016 20:20
1,1,2-Trichloroethane	ND	0.50	1	10/29/2016 20:20
Trichloroethene	ND	0.50	1	10/29/2016 20:20
Trichlorofluoromethane	ND	0.50	1	10/29/2016 20:20
1,2,3-Trichloropropane	ND	0.50	1	10/29/2016 20:20
1,2,4-Trimethylbenzene	ND	0.50	1	10/29/2016 20:20
1,3,5-Trimethylbenzene	ND	0.50	1	10/29/2016 20:20
Vinyl Chloride	ND	0.50	1	10/29/2016 20:20
Xylenes, Total	ND	0.50	1	10/29/2016 20:20

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-30 Hydropunch	**1610C83-004C**	**Water**	**10/27/2016 08:50**	**GC18**	**129016**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	116	70-130		10/29/2016 20:20
Toluene-d8	87	70-130		10/29/2016 20:20
4-BFB	120	70-130		10/29/2016 20:20

Analyst(s): MW Analytical Comments: b1

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-25A Open Borehole	**1610C83-009B**	**Water**	**10/27/2016 10:25**	**GC18**	**129016**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	10/29/2016 20:59
tert-Amyl methyl ether (TAME)	ND	0.50	1	10/29/2016 20:59
Benzene	ND	0.50	1	10/29/2016 20:59
Bromobenzene	ND	0.50	1	10/29/2016 20:59
Bromochloromethane	ND	0.50	1	10/29/2016 20:59
Bromodichloromethane	ND	0.50	1	10/29/2016 20:59
Bromoform	ND	0.50	1	10/29/2016 20:59
Bromomethane	ND	0.50	1	10/29/2016 20:59
2-Butanone (MEK)	ND	2.0	1	10/29/2016 20:59
t-Butyl alcohol (TBA)	ND	2.0	1	10/29/2016 20:59
n-Butyl benzene	ND	0.50	1	10/29/2016 20:59
sec-Butyl benzene	ND	0.50	1	10/29/2016 20:59
tert-Butyl benzene	ND	0.50	1	10/29/2016 20:59
Carbon Disulfide	ND	0.50	1	10/29/2016 20:59
Carbon Tetrachloride	ND	0.50	1	10/29/2016 20:59
Chlorobenzene	ND	0.50	1	10/29/2016 20:59
Chloroethane	ND	0.50	1	10/29/2016 20:59
Chloroform	ND	0.50	1	10/29/2016 20:59
Chloromethane	ND	0.50	1	10/29/2016 20:59
2-Chlorotoluene	ND	0.50	1	10/29/2016 20:59
4-Chlorotoluene	ND	0.50	1	10/29/2016 20:59
Dibromochloromethane	ND	0.50	1	10/29/2016 20:59
1,2-Dibromo-3-chloropropane	ND	0.20	1	10/29/2016 20:59
1,2-Dibromoethane (EDB)	ND	0.50	1	10/29/2016 20:59
Dibromomethane	ND	0.50	1	10/29/2016 20:59
1,2-Dichlorobenzene	ND	0.50	1	10/29/2016 20:59
1,3-Dichlorobenzene	ND	0.50	1	10/29/2016 20:59
1,4-Dichlorobenzene	ND	0.50	1	10/29/2016 20:59
Dichlorodifluoromethane	ND	0.50	1	10/29/2016 20:59
1,1-Dichloroethane	ND	0.50	1	10/29/2016 20:59
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	10/29/2016 20:59
1,1-Dichloroethene	ND	0.50	1	10/29/2016 20:59
cis-1,2-Dichloroethene	ND	0.50	1	10/29/2016 20:59
trans-1,2-Dichloroethene	ND	0.50	1	10/29/2016 20:59
1,2-Dichloropropane	ND	0.50	1	10/29/2016 20:59
1,3-Dichloropropane	ND	0.50	1	10/29/2016 20:59
2,2-Dichloropropane	ND	0.50	1	10/29/2016 20:59

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-25A Open Borehole	**1610C83-009B**	**Water**	**10/27/2016 10:25**	**GC18**	**129016**

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	10/29/2016 20:59
cis-1,3-Dichloropropene	ND	0.50	1	10/29/2016 20:59
trans-1,3-Dichloropropene	ND	0.50	1	10/29/2016 20:59
Diisopropyl ether (DIPE)	ND	0.50	1	10/29/2016 20:59
Ethylbenzene	ND	0.50	1	10/29/2016 20:59
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	10/29/2016 20:59
Freon 113	ND	0.50	1	10/29/2016 20:59
Hexachlorobutadiene	ND	0.50	1	10/29/2016 20:59
Hexachloroethane	ND	0.50	1	10/29/2016 20:59
2-Hexanone	ND	0.50	1	10/29/2016 20:59
Isopropylbenzene	ND	0.50	1	10/29/2016 20:59
4-Isopropyl toluene	ND	0.50	1	10/29/2016 20:59
Methyl-t-butyl ether (MTBE)	ND	0.50	1	10/29/2016 20:59
Methylene chloride	ND	0.50	1	10/29/2016 20:59
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	10/29/2016 20:59
Naphthalene	ND	0.50	1	10/29/2016 20:59
n-Propyl benzene	ND	0.50	1	10/29/2016 20:59
Styrene	ND	0.50	1	10/29/2016 20:59
1,1,1,2-Tetrachloroethane	ND	0.50	1	10/29/2016 20:59
1,1,2,2-Tetrachloroethane	ND	0.50	1	10/29/2016 20:59
Tetrachloroethene	ND	0.50	1	10/29/2016 20:59
Toluene	ND	0.50	1	10/29/2016 20:59
1,2,3-Trichlorobenzene	ND	0.50	1	10/29/2016 20:59
1,2,4-Trichlorobenzene	ND	0.50	1	10/29/2016 20:59
1,1,1-Trichloroethane	ND	0.50	1	10/29/2016 20:59
1,1,2-Trichloroethane	ND	0.50	1	10/29/2016 20:59
Trichloroethene	ND	0.50	1	10/29/2016 20:59
Trichlorofluoromethane	ND	0.50	1	10/29/2016 20:59
1,2,3-Trichloropropane	ND	0.50	1	10/29/2016 20:59
1,2,4-Trimethylbenzene	ND	0.50	1	10/29/2016 20:59
1,3,5-Trimethylbenzene	ND	0.50	1	10/29/2016 20:59
Vinyl Chloride	ND	0.50	1	10/29/2016 20:59
Xylenes, Total	ND	0.50	1	10/29/2016 20:59

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-25A Open Borehole	**1610C83-009B**	**Water**	**10/27/2016 10:25**	**GC18**	**129016**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	116	70-130		10/29/2016 20:59
Toluene-d8	87	70-130		10/29/2016 20:59
4-BFB	121	70-130		10/29/2016 20:59

Analyst(s): MW Analytical Comments: b1

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-25A Hydropunch	**1610C83-010C**	**Water**	**10/27/2016 12:15**	**GC18**	**129016**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	10/29/2016 21:37
tert-Amyl methyl ether (TAME)	ND	0.50	1	10/29/2016 21:37
Benzene	ND	0.50	1	10/29/2016 21:37
Bromobenzene	ND	0.50	1	10/29/2016 21:37
Bromochloromethane	ND	0.50	1	10/29/2016 21:37
Bromodichloromethane	ND	0.50	1	10/29/2016 21:37
Bromoform	ND	0.50	1	10/29/2016 21:37
Bromomethane	ND	0.50	1	10/29/2016 21:37
2-Butanone (MEK)	ND	2.0	1	10/29/2016 21:37
t-Butyl alcohol (TBA)	ND	2.0	1	10/29/2016 21:37
n-Butyl benzene	ND	0.50	1	10/29/2016 21:37
sec-Butyl benzene	ND	0.50	1	10/29/2016 21:37
tert-Butyl benzene	ND	0.50	1	10/29/2016 21:37
Carbon Disulfide	ND	0.50	1	10/29/2016 21:37
Carbon Tetrachloride	ND	0.50	1	10/29/2016 21:37
Chlorobenzene	ND	0.50	1	10/29/2016 21:37
Chloroethane	ND	0.50	1	10/29/2016 21:37
Chloroform	ND	0.50	1	10/29/2016 21:37
Chloromethane	ND	0.50	1	10/29/2016 21:37
2-Chlorotoluene	ND	0.50	1	10/29/2016 21:37
4-Chlorotoluene	ND	0.50	1	10/29/2016 21:37
Dibromochloromethane	ND	0.50	1	10/29/2016 21:37
1,2-Dibromo-3-chloropropane	ND	0.20	1	10/29/2016 21:37
1,2-Dibromoethane (EDB)	ND	0.50	1	10/29/2016 21:37
Dibromomethane	ND	0.50	1	10/29/2016 21:37
1,2-Dichlorobenzene	ND	0.50	1	10/29/2016 21:37
1,3-Dichlorobenzene	ND	0.50	1	10/29/2016 21:37
1,4-Dichlorobenzene	ND	0.50	1	10/29/2016 21:37
Dichlorodifluoromethane	ND	0.50	1	10/29/2016 21:37
1,1-Dichloroethane	ND	0.50	1	10/29/2016 21:37
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	10/29/2016 21:37
1,1-Dichloroethene	ND	0.50	1	10/29/2016 21:37
cis-1,2-Dichloroethene	ND	0.50	1	10/29/2016 21:37
trans-1,2-Dichloroethene	ND	0.50	1	10/29/2016 21:37
1,2-Dichloropropane	ND	0.50	1	10/29/2016 21:37
1,3-Dichloropropane	ND	0.50	1	10/29/2016 21:37
2,2-Dichloropropane	ND	0.50	1	10/29/2016 21:37

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-25A Hydropunch	**1610C83-010C**	**Water**	**10/27/2016 12:15**	**GC18**	**129016**

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	10/29/2016 21:37
cis-1,3-Dichloropropene	ND	0.50	1	10/29/2016 21:37
trans-1,3-Dichloropropene	ND	0.50	1	10/29/2016 21:37
Diisopropyl ether (DIPE)	ND	0.50	1	10/29/2016 21:37
Ethylbenzene	ND	0.50	1	10/29/2016 21:37
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	10/29/2016 21:37
Freon 113	ND	0.50	1	10/29/2016 21:37
Hexachlorobutadiene	ND	0.50	1	10/29/2016 21:37
Hexachloroethane	ND	0.50	1	10/29/2016 21:37
2-Hexanone	ND	0.50	1	10/29/2016 21:37
Isopropylbenzene	ND	0.50	1	10/29/2016 21:37
4-Isopropyl toluene	ND	0.50	1	10/29/2016 21:37
Methyl-t-butyl ether (MTBE)	ND	0.50	1	10/29/2016 21:37
Methylene chloride	ND	0.50	1	10/29/2016 21:37
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	10/29/2016 21:37
Naphthalene	ND	0.50	1	10/29/2016 21:37
n-Propyl benzene	ND	0.50	1	10/29/2016 21:37
Styrene	ND	0.50	1	10/29/2016 21:37
1,1,1,2-Tetrachloroethane	ND	0.50	1	10/29/2016 21:37
1,1,2,2-Tetrachloroethane	ND	0.50	1	10/29/2016 21:37
Tetrachloroethene	ND	0.50	1	10/29/2016 21:37
Toluene	ND	0.50	1	10/29/2016 21:37
1,2,3-Trichlorobenzene	ND	0.50	1	10/29/2016 21:37
1,2,4-Trichlorobenzene	ND	0.50	1	10/29/2016 21:37
1,1,1-Trichloroethane	ND	0.50	1	10/29/2016 21:37
1,1,2-Trichloroethane	ND	0.50	1	10/29/2016 21:37
Trichloroethene	ND	0.50	1	10/29/2016 21:37
Trichlorofluoromethane	ND	0.50	1	10/29/2016 21:37
1,2,3-Trichloropropane	ND	0.50	1	10/29/2016 21:37
1,2,4-Trimethylbenzene	ND	0.50	1	10/29/2016 21:37
1,3,5-Trimethylbenzene	ND	0.50	1	10/29/2016 21:37
Vinyl Chloride	ND	0.50	1	10/29/2016 21:37
Xylenes, Total	ND	0.50	1	10/29/2016 21:37

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-25A Hydropunch	**1610C83-010C**	**Water**	**10/27/2016 12:15**	**GC18**	**129016**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	116	70-130		10/29/2016 21:37
Toluene-d8	86	70-130		10/29/2016 21:37
4-BFB	121	70-130		10/29/2016 21:37

Analyst(s): MW Analytical Comments: b1

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-23A Open Borehole	**1610C83-014C**	**Water**	**10/27/2016 13:10**	**GC18**	**129016**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	10/29/2016 22:16
tert-Amyl methyl ether (TAME)	ND	0.50	1	10/29/2016 22:16
Benzene	ND	0.50	1	10/29/2016 22:16
Bromobenzene	ND	0.50	1	10/29/2016 22:16
Bromochloromethane	ND	0.50	1	10/29/2016 22:16
Bromodichloromethane	ND	0.50	1	10/29/2016 22:16
Bromoform	ND	0.50	1	10/29/2016 22:16
Bromomethane	ND	0.50	1	10/29/2016 22:16
2-Butanone (MEK)	ND	2.0	1	10/29/2016 22:16
t-Butyl alcohol (TBA)	ND	2.0	1	10/29/2016 22:16
n-Butyl benzene	ND	0.50	1	10/29/2016 22:16
sec-Butyl benzene	ND	0.50	1	10/29/2016 22:16
tert-Butyl benzene	ND	0.50	1	10/29/2016 22:16
Carbon Disulfide	ND	0.50	1	10/29/2016 22:16
Carbon Tetrachloride	ND	0.50	1	10/29/2016 22:16
Chlorobenzene	ND	0.50	1	10/29/2016 22:16
Chloroethane	ND	0.50	1	10/29/2016 22:16
Chloroform	ND	0.50	1	10/29/2016 22:16
Chloromethane	ND	0.50	1	10/29/2016 22:16
2-Chlorotoluene	ND	0.50	1	10/29/2016 22:16
4-Chlorotoluene	ND	0.50	1	10/29/2016 22:16
Dibromochloromethane	ND	0.50	1	10/29/2016 22:16
1,2-Dibromo-3-chloropropane	ND	0.20	1	10/29/2016 22:16
1,2-Dibromoethane (EDB)	ND	0.50	1	10/29/2016 22:16
Dibromomethane	ND	0.50	1	10/29/2016 22:16
1,2-Dichlorobenzene	ND	0.50	1	10/29/2016 22:16
1,3-Dichlorobenzene	ND	0.50	1	10/29/2016 22:16
1,4-Dichlorobenzene	ND	0.50	1	10/29/2016 22:16
Dichlorodifluoromethane	ND	0.50	1	10/29/2016 22:16
1,1-Dichloroethane	ND	0.50	1	10/29/2016 22:16
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	10/29/2016 22:16
1,1-Dichloroethene	**1.1**	0.50	1	10/29/2016 22:16
cis-1,2-Dichloroethene	ND	0.50	1	10/29/2016 22:16
trans-1,2-Dichloroethene	ND	0.50	1	10/29/2016 22:16
1,2-Dichloropropane	ND	0.50	1	10/29/2016 22:16
1,3-Dichloropropane	ND	0.50	1	10/29/2016 22:16
2,2-Dichloropropane	ND	0.50	1	10/29/2016 22:16

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-23A Open Borehole	**1610C83-014C**	**Water**	**10/27/2016 13:10**	**GC18**	**129016**

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	10/29/2016 22:16
cis-1,3-Dichloropropene	ND	0.50	1	10/29/2016 22:16
trans-1,3-Dichloropropene	ND	0.50	1	10/29/2016 22:16
Diisopropyl ether (DIPE)	ND	0.50	1	10/29/2016 22:16
Ethylbenzene	ND	0.50	1	10/29/2016 22:16
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	10/29/2016 22:16
Freon 113	ND	0.50	1	10/29/2016 22:16
Hexachlorobutadiene	ND	0.50	1	10/29/2016 22:16
Hexachloroethane	ND	0.50	1	10/29/2016 22:16
2-Hexanone	ND	0.50	1	10/29/2016 22:16
Isopropylbenzene	ND	0.50	1	10/29/2016 22:16
4-Isopropyl toluene	ND	0.50	1	10/29/2016 22:16
Methyl-t-butyl ether (MTBE)	ND	0.50	1	10/29/2016 22:16
Methylene chloride	ND	0.50	1	10/29/2016 22:16
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	10/29/2016 22:16
Naphthalene	ND	0.50	1	10/29/2016 22:16
n-Propyl benzene	ND	0.50	1	10/29/2016 22:16
Styrene	ND	0.50	1	10/29/2016 22:16
1,1,1,2-Tetrachloroethane	ND	0.50	1	10/29/2016 22:16
1,1,2,2-Tetrachloroethane	ND	0.50	1	10/29/2016 22:16
Tetrachloroethene	ND	0.50	1	10/29/2016 22:16
Toluene	ND	0.50	1	10/29/2016 22:16
1,2,3-Trichlorobenzene	ND	0.50	1	10/29/2016 22:16
1,2,4-Trichlorobenzene	ND	0.50	1	10/29/2016 22:16
1,1,1-Trichloroethane	ND	0.50	1	10/29/2016 22:16
1,1,2-Trichloroethane	ND	0.50	1	10/29/2016 22:16
Trichloroethene	ND	0.50	1	10/29/2016 22:16
Trichlorofluoromethane	ND	0.50	1	10/29/2016 22:16
1,2,3-Trichloropropane	ND	0.50	1	10/29/2016 22:16
1,2,4-Trimethylbenzene	ND	0.50	1	10/29/2016 22:16
1,3,5-Trimethylbenzene	ND	0.50	1	10/29/2016 22:16
Vinyl Chloride	ND	0.50	1	10/29/2016 22:16
Xylenes, Total	ND	0.50	1	10/29/2016 22:16

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-23A Open Borehole	**1610C83-014C**	**Water**	**10/27/2016 13:10**	**GC18**	**129016**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	117	70-130		10/29/2016 22:16
Toluene-d8	87	70-130		10/29/2016 22:16
4-BFB	122	70-130		10/29/2016 22:16

Analyst(s): MW

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-23A Hydropunch	**1610C83-015C**	**Water**	**10/27/2016 13:05**	**GC28**	**129016**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	10/31/2016 15:45
tert-Amyl methyl ether (TAME)	ND	0.50	1	10/31/2016 15:45
Benzene	ND	0.50	1	10/31/2016 15:45
Bromobenzene	ND	0.50	1	10/31/2016 15:45
Bromochloromethane	ND	0.50	1	10/31/2016 15:45
Bromodichloromethane	ND	0.50	1	10/31/2016 15:45
Bromoform	ND	0.50	1	10/31/2016 15:45
Bromomethane	ND	0.50	1	10/31/2016 15:45
2-Butanone (MEK)	ND	2.0	1	10/31/2016 15:45
t-Butyl alcohol (TBA)	ND	2.0	1	10/31/2016 15:45
n-Butyl benzene	ND	0.50	1	10/31/2016 15:45
sec-Butyl benzene	ND	0.50	1	10/31/2016 15:45
tert-Butyl benzene	ND	0.50	1	10/31/2016 15:45
Carbon Disulfide	ND	0.50	1	10/31/2016 15:45
Carbon Tetrachloride	ND	0.50	1	10/31/2016 15:45
Chlorobenzene	ND	0.50	1	10/31/2016 15:45
Chloroethane	ND	0.50	1	10/31/2016 15:45
Chloroform	ND	0.50	1	10/31/2016 15:45
Chloromethane	ND	0.50	1	10/31/2016 15:45
2-Chlorotoluene	ND	0.50	1	10/31/2016 15:45
4-Chlorotoluene	ND	0.50	1	10/31/2016 15:45
Dibromochloromethane	ND	0.50	1	10/31/2016 15:45
1,2-Dibromo-3-chloropropane	ND	0.20	1	10/31/2016 15:45
1,2-Dibromoethane (EDB)	ND	0.50	1	10/31/2016 15:45
Dibromomethane	ND	0.50	1	10/31/2016 15:45
1,2-Dichlorobenzene	ND	0.50	1	10/31/2016 15:45
1,3-Dichlorobenzene	ND	0.50	1	10/31/2016 15:45
1,4-Dichlorobenzene	ND	0.50	1	10/31/2016 15:45
Dichlorodifluoromethane	ND	0.50	1	10/31/2016 15:45
1,1-Dichloroethane	ND	0.50	1	10/31/2016 15:45
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	10/31/2016 15:45
1,1-Dichloroethene	**0.83**	0.50	1	10/31/2016 15:45
cis-1,2-Dichloroethene	ND	0.50	1	10/31/2016 15:45
trans-1,2-Dichloroethene	ND	0.50	1	10/31/2016 15:45
1,2-Dichloropropane	ND	0.50	1	10/31/2016 15:45
1,3-Dichloropropane	ND	0.50	1	10/31/2016 15:45
2,2-Dichloropropane	ND	0.50	1	10/31/2016 15:45

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-23A Hydropunch	**1610C83-015C**	**Water**	**10/27/2016 13:05**	**GC28**	**129016**

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	10/31/2016 15:45
cis-1,3-Dichloropropene	ND	0.50	1	10/31/2016 15:45
trans-1,3-Dichloropropene	ND	0.50	1	10/31/2016 15:45
Diisopropyl ether (DIPE)	ND	0.50	1	10/31/2016 15:45
Ethylbenzene	ND	0.50	1	10/31/2016 15:45
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	10/31/2016 15:45
Freon 113	ND	0.50	1	10/31/2016 15:45
Hexachlorobutadiene	ND	0.50	1	10/31/2016 15:45
Hexachloroethane	ND	0.50	1	10/31/2016 15:45
2-Hexanone	ND	0.50	1	10/31/2016 15:45
Isopropylbenzene	ND	0.50	1	10/31/2016 15:45
4-Isopropyl toluene	ND	0.50	1	10/31/2016 15:45
Methyl-t-butyl ether (MTBE)	ND	0.50	1	10/31/2016 15:45
Methylene chloride	ND	0.50	1	10/31/2016 15:45
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	10/31/2016 15:45
Naphthalene	ND	0.50	1	10/31/2016 15:45
n-Propyl benzene	ND	0.50	1	10/31/2016 15:45
Styrene	ND	0.50	1	10/31/2016 15:45
1,1,1,2-Tetrachloroethane	ND	0.50	1	10/31/2016 15:45
1,1,2,2-Tetrachloroethane	ND	0.50	1	10/31/2016 15:45
Tetrachloroethene	ND	0.50	1	10/31/2016 15:45
Toluene	ND	0.50	1	10/31/2016 15:45
1,2,3-Trichlorobenzene	ND	0.50	1	10/31/2016 15:45
1,2,4-Trichlorobenzene	ND	0.50	1	10/31/2016 15:45
1,1,1-Trichloroethane	ND	0.50	1	10/31/2016 15:45
1,1,2-Trichloroethane	ND	0.50	1	10/31/2016 15:45
Trichloroethene	ND	0.50	1	10/31/2016 15:45
Trichlorofluoromethane	ND	0.50	1	10/31/2016 15:45
1,2,3-Trichloropropane	ND	0.50	1	10/31/2016 15:45
1,2,4-Trimethylbenzene	ND	0.50	1	10/31/2016 15:45
1,3,5-Trimethylbenzene	ND	0.50	1	10/31/2016 15:45
Vinyl Chloride	ND	0.50	1	10/31/2016 15:45
Xylenes, Total	ND	0.50	1	10/31/2016 15:45

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-23A Hydropunch	**1610C83-015C**	**Water**	**10/27/2016 13:05**	**GC28**	**129016**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	103	70-130		10/31/2016 15:45
Toluene-d8	100	70-130		10/31/2016 15:45
4-BFB	96	70-130		10/31/2016 15:45

Analyst(s): MW Analytical Comments: b1

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-29 Open Borehole	**1610C83-020C**	**Water**	**10/27/2016 08:40**	**GC18**	**129016**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	10/29/2016 23:34
tert-Amyl methyl ether (TAME)	ND	0.50	1	10/29/2016 23:34
Benzene	ND	0.50	1	10/29/2016 23:34
Bromobenzene	ND	0.50	1	10/29/2016 23:34
Bromochloromethane	ND	0.50	1	10/29/2016 23:34
Bromodichloromethane	ND	0.50	1	10/29/2016 23:34
Bromoform	ND	0.50	1	10/29/2016 23:34
Bromomethane	ND	0.50	1	10/29/2016 23:34
2-Butanone (MEK)	ND	2.0	1	10/29/2016 23:34
t-Butyl alcohol (TBA)	ND	2.0	1	10/29/2016 23:34
n-Butyl benzene	ND	0.50	1	10/29/2016 23:34
sec-Butyl benzene	ND	0.50	1	10/29/2016 23:34
tert-Butyl benzene	ND	0.50	1	10/29/2016 23:34
Carbon Disulfide	ND	0.50	1	10/29/2016 23:34
Carbon Tetrachloride	ND	0.50	1	10/29/2016 23:34
Chlorobenzene	ND	0.50	1	10/29/2016 23:34
Chloroethane	ND	0.50	1	10/29/2016 23:34
Chloroform	ND	0.50	1	10/29/2016 23:34
Chloromethane	ND	0.50	1	10/29/2016 23:34
2-Chlorotoluene	ND	0.50	1	10/29/2016 23:34
4-Chlorotoluene	ND	0.50	1	10/29/2016 23:34
Dibromochloromethane	ND	0.50	1	10/29/2016 23:34
1,2-Dibromo-3-chloropropane	ND	0.20	1	10/29/2016 23:34
1,2-Dibromoethane (EDB)	ND	0.50	1	10/29/2016 23:34
Dibromomethane	ND	0.50	1	10/29/2016 23:34
1,2-Dichlorobenzene	ND	0.50	1	10/29/2016 23:34
1,3-Dichlorobenzene	ND	0.50	1	10/29/2016 23:34
1,4-Dichlorobenzene	ND	0.50	1	10/29/2016 23:34
Dichlorodifluoromethane	ND	0.50	1	10/29/2016 23:34
1,1-Dichloroethane	ND	0.50	1	10/29/2016 23:34
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	10/29/2016 23:34
1,1-Dichloroethene	ND	0.50	1	10/29/2016 23:34
cis-1,2-Dichloroethene	ND	0.50	1	10/29/2016 23:34
trans-1,2-Dichloroethene	ND	0.50	1	10/29/2016 23:34
1,2-Dichloropropane	ND	0.50	1	10/29/2016 23:34
1,3-Dichloropropane	ND	0.50	1	10/29/2016 23:34
2,2-Dichloropropane	ND	0.50	1	10/29/2016 23:34

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-29 Open Borehole	**1610C83-020C**	**Water**	**10/27/2016 08:40**	**GC18**	**129016**

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	10/29/2016 23:34
cis-1,3-Dichloropropene	ND	0.50	1	10/29/2016 23:34
trans-1,3-Dichloropropene	ND	0.50	1	10/29/2016 23:34
Diisopropyl ether (DIPE)	ND	0.50	1	10/29/2016 23:34
Ethylbenzene	ND	0.50	1	10/29/2016 23:34
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	10/29/2016 23:34
Freon 113	ND	0.50	1	10/29/2016 23:34
Hexachlorobutadiene	ND	0.50	1	10/29/2016 23:34
Hexachloroethane	ND	0.50	1	10/29/2016 23:34
2-Hexanone	ND	0.50	1	10/29/2016 23:34
Isopropylbenzene	ND	0.50	1	10/29/2016 23:34
4-Isopropyl toluene	ND	0.50	1	10/29/2016 23:34
Methyl-t-butyl ether (MTBE)	ND	0.50	1	10/29/2016 23:34
Methylene chloride	ND	0.50	1	10/29/2016 23:34
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	10/29/2016 23:34
Naphthalene	ND	0.50	1	10/29/2016 23:34
n-Propyl benzene	ND	0.50	1	10/29/2016 23:34
Styrene	ND	0.50	1	10/29/2016 23:34
1,1,1,2-Tetrachloroethane	ND	0.50	1	10/29/2016 23:34
1,1,2,2-Tetrachloroethane	ND	0.50	1	10/29/2016 23:34
Tetrachloroethene	ND	0.50	1	10/29/2016 23:34
Toluene	ND	0.50	1	10/29/2016 23:34
1,2,3-Trichlorobenzene	ND	0.50	1	10/29/2016 23:34
1,2,4-Trichlorobenzene	ND	0.50	1	10/29/2016 23:34
1,1,1-Trichloroethane	ND	0.50	1	10/29/2016 23:34
1,1,2-Trichloroethane	ND	0.50	1	10/29/2016 23:34
Trichloroethene	ND	0.50	1	10/29/2016 23:34
Trichlorofluoromethane	ND	0.50	1	10/29/2016 23:34
1,2,3-Trichloropropane	ND	0.50	1	10/29/2016 23:34
1,2,4-Trimethylbenzene	ND	0.50	1	10/29/2016 23:34
1,3,5-Trimethylbenzene	ND	0.50	1	10/29/2016 23:34
Vinyl Chloride	ND	0.50	1	10/29/2016 23:34
Xylenes, Total	ND	0.50	1	10/29/2016 23:34

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-29 Open Borehole	**1610C83-020C**	**Water**	**10/27/2016 08:40**	**GC18**	**129016**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	117	70-130		10/29/2016 23:34
Toluene-d8	87	70-130		10/29/2016 23:34
4-BFB	119	70-130		10/29/2016 23:34

Analyst(s): MW Analytical Comments: b1

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-29 Hydropunch	**1610C83-021B**	**Water**	**10/27/2016 10:30**	**GC16**	**129074**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	10/31/2016 23:32
tert-Amyl methyl ether (TAME)	ND	0.50	1	10/31/2016 23:32
Benzene	ND	0.50	1	10/31/2016 23:32
Bromobenzene	ND	0.50	1	10/31/2016 23:32
Bromochloromethane	ND	0.50	1	10/31/2016 23:32
Bromodichloromethane	ND	0.50	1	10/31/2016 23:32
Bromoform	ND	0.50	1	10/31/2016 23:32
Bromomethane	ND	0.50	1	10/31/2016 23:32
2-Butanone (MEK)	ND	2.0	1	10/31/2016 23:32
t-Butyl alcohol (TBA)	ND	2.0	1	10/31/2016 23:32
n-Butyl benzene	ND	0.50	1	10/31/2016 23:32
sec-Butyl benzene	ND	0.50	1	10/31/2016 23:32
tert-Butyl benzene	ND	0.50	1	10/31/2016 23:32
Carbon Disulfide	ND	0.50	1	10/31/2016 23:32
Carbon Tetrachloride	ND	0.50	1	10/31/2016 23:32
Chlorobenzene	ND	0.50	1	10/31/2016 23:32
Chloroethane	ND	0.50	1	10/31/2016 23:32
Chloroform	ND	0.50	1	10/31/2016 23:32
Chloromethane	ND	0.50	1	10/31/2016 23:32
2-Chlorotoluene	ND	0.50	1	10/31/2016 23:32
4-Chlorotoluene	ND	0.50	1	10/31/2016 23:32
Dibromochloromethane	ND	0.50	1	10/31/2016 23:32
1,2-Dibromo-3-chloropropane	ND	0.20	1	10/31/2016 23:32
1,2-Dibromoethane (EDB)	ND	0.50	1	10/31/2016 23:32
Dibromomethane	ND	0.50	1	10/31/2016 23:32
1,2-Dichlorobenzene	ND	0.50	1	10/31/2016 23:32
1,3-Dichlorobenzene	ND	0.50	1	10/31/2016 23:32
1,4-Dichlorobenzene	ND	0.50	1	10/31/2016 23:32
Dichlorodifluoromethane	ND	0.50	1	10/31/2016 23:32
1,1-Dichloroethane	ND	0.50	1	10/31/2016 23:32
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	10/31/2016 23:32
1,1-Dichloroethene	ND	0.50	1	10/31/2016 23:32
cis-1,2-Dichloroethene	ND	0.50	1	10/31/2016 23:32
trans-1,2-Dichloroethene	ND	0.50	1	10/31/2016 23:32
1,2-Dichloropropane	ND	0.50	1	10/31/2016 23:32
1,3-Dichloropropane	ND	0.50	1	10/31/2016 23:32
2,2-Dichloropropane	ND	0.50	1	10/31/2016 23:32

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-29 Hydropunch	**1610C83-021B**	**Water**	**10/27/2016 10:30**	**GC16**	**129074**

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	10/31/2016 23:32
cis-1,3-Dichloropropene	ND	0.50	1	10/31/2016 23:32
trans-1,3-Dichloropropene	ND	0.50	1	10/31/2016 23:32
Diisopropyl ether (DIPE)	ND	0.50	1	10/31/2016 23:32
Ethylbenzene	ND	0.50	1	10/31/2016 23:32
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	10/31/2016 23:32
Freon 113	ND	0.50	1	10/31/2016 23:32
Hexachlorobutadiene	ND	0.50	1	10/31/2016 23:32
Hexachloroethane	ND	0.50	1	10/31/2016 23:32
2-Hexanone	ND	0.50	1	10/31/2016 23:32
Isopropylbenzene	ND	0.50	1	10/31/2016 23:32
4-Isopropyl toluene	ND	0.50	1	10/31/2016 23:32
Methyl-t-butyl ether (MTBE)	ND	0.50	1	10/31/2016 23:32
Methylene chloride	ND	0.50	1	10/31/2016 23:32
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	10/31/2016 23:32
Naphthalene	ND	0.50	1	10/31/2016 23:32
n-Propyl benzene	ND	0.50	1	10/31/2016 23:32
Styrene	ND	0.50	1	10/31/2016 23:32
1,1,1,2-Tetrachloroethane	ND	0.50	1	10/31/2016 23:32
1,1,2,2-Tetrachloroethane	ND	0.50	1	10/31/2016 23:32
Tetrachloroethene	ND	0.50	1	10/31/2016 23:32
Toluene	ND	0.50	1	10/31/2016 23:32
1,2,3-Trichlorobenzene	ND	0.50	1	10/31/2016 23:32
1,2,4-Trichlorobenzene	ND	0.50	1	10/31/2016 23:32
1,1,1-Trichloroethane	ND	0.50	1	10/31/2016 23:32
1,1,2-Trichloroethane	ND	0.50	1	10/31/2016 23:32
Trichloroethene	ND	0.50	1	10/31/2016 23:32
Trichlorofluoromethane	ND	0.50	1	10/31/2016 23:32
1,2,3-Trichloropropane	ND	0.50	1	10/31/2016 23:32
1,2,4-Trimethylbenzene	ND	0.50	1	10/31/2016 23:32
1,3,5-Trimethylbenzene	ND	0.50	1	10/31/2016 23:32
Vinyl Chloride	ND	0.50	1	10/31/2016 23:32
Xylenes, Total	ND	0.50	1	10/31/2016 23:32

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-29 Hydropunch	**1610C83-021B**	**Water**	**10/27/2016 10:30**	**GC16**	**129074**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	113	70-130		10/31/2016 23:32
Toluene-d8	98	70-130		10/31/2016 23:32
4-BFB	93	70-130		10/31/2016 23:32

Analyst(s): KF

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-24A Open Borehole	**1610C83-024C**	**Water**	**10/27/2016 13:30**	**GC28**	**129074**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	11/01/2016 22:10
tert-Amyl methyl ether (TAME)	ND	0.50	1	11/01/2016 22:10
Benzene	ND	0.50	1	11/01/2016 22:10
Bromobenzene	ND	0.50	1	11/01/2016 22:10
Bromochloromethane	ND	0.50	1	11/01/2016 22:10
Bromodichloromethane	ND	0.50	1	11/01/2016 22:10
Bromoform	ND	0.50	1	11/01/2016 22:10
Bromomethane	ND	0.50	1	11/01/2016 22:10
2-Butanone (MEK)	ND	2.0	1	11/01/2016 22:10
t-Butyl alcohol (TBA)	ND	2.0	1	11/01/2016 22:10
n-Butyl benzene	ND	0.50	1	11/01/2016 22:10
sec-Butyl benzene	ND	0.50	1	11/01/2016 22:10
tert-Butyl benzene	ND	0.50	1	11/01/2016 22:10
Carbon Disulfide	ND	0.50	1	11/01/2016 22:10
Carbon Tetrachloride	ND	0.50	1	11/01/2016 22:10
Chlorobenzene	ND	0.50	1	11/01/2016 22:10
Chloroethane	ND	0.50	1	11/01/2016 22:10
Chloroform	ND	0.50	1	11/01/2016 22:10
Chloromethane	ND	0.50	1	11/01/2016 22:10
2-Chlorotoluene	ND	0.50	1	11/01/2016 22:10
4-Chlorotoluene	ND	0.50	1	11/01/2016 22:10
Dibromochloromethane	ND	0.50	1	11/01/2016 22:10
1,2-Dibromo-3-chloropropane	ND	0.20	1	11/01/2016 22:10
1,2-Dibromoethane (EDB)	ND	0.50	1	11/01/2016 22:10
Dibromomethane	ND	0.50	1	11/01/2016 22:10
1,2-Dichlorobenzene	ND	0.50	1	11/01/2016 22:10
1,3-Dichlorobenzene	ND	0.50	1	11/01/2016 22:10
1,4-Dichlorobenzene	ND	0.50	1	11/01/2016 22:10
Dichlorodifluoromethane	ND	0.50	1	11/01/2016 22:10
1,1-Dichloroethane	ND	0.50	1	11/01/2016 22:10
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	11/01/2016 22:10
1,1-Dichloroethene	ND	0.50	1	11/01/2016 22:10
cis-1,2-Dichloroethene	ND	0.50	1	11/01/2016 22:10
trans-1,2-Dichloroethene	ND	0.50	1	11/01/2016 22:10
1,2-Dichloropropane	ND	0.50	1	11/01/2016 22:10
1,3-Dichloropropane	ND	0.50	1	11/01/2016 22:10
2,2-Dichloropropane	ND	0.50	1	11/01/2016 22:10

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-24A Open Borehole	**1610C83-024C**	**Water**	**10/27/2016 13:30**	**GC28**	**129074**

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	11/01/2016 22:10
cis-1,3-Dichloropropene	ND	0.50	1	11/01/2016 22:10
trans-1,3-Dichloropropene	ND	0.50	1	11/01/2016 22:10
Diisopropyl ether (DIPE)	ND	0.50	1	11/01/2016 22:10
Ethylbenzene	ND	0.50	1	11/01/2016 22:10
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	11/01/2016 22:10
Freon 113	ND	0.50	1	11/01/2016 22:10
Hexachlorobutadiene	ND	0.50	1	11/01/2016 22:10
Hexachloroethane	ND	0.50	1	11/01/2016 22:10
2-Hexanone	ND	0.50	1	11/01/2016 22:10
Isopropylbenzene	ND	0.50	1	11/01/2016 22:10
4-Isopropyl toluene	ND	0.50	1	11/01/2016 22:10
Methyl-t-butyl ether (MTBE)	ND	0.50	1	11/01/2016 22:10
Methylene chloride	ND	0.50	1	11/01/2016 22:10
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	11/01/2016 22:10
Naphthalene	ND	0.50	1	11/01/2016 22:10
n-Propyl benzene	ND	0.50	1	11/01/2016 22:10
Styrene	ND	0.50	1	11/01/2016 22:10
1,1,1,2-Tetrachloroethane	ND	0.50	1	11/01/2016 22:10
1,1,2,2-Tetrachloroethane	ND	0.50	1	11/01/2016 22:10
Tetrachloroethene	ND	0.50	1	11/01/2016 22:10
Toluene	ND	0.50	1	11/01/2016 22:10
1,2,3-Trichlorobenzene	ND	0.50	1	11/01/2016 22:10
1,2,4-Trichlorobenzene	ND	0.50	1	11/01/2016 22:10
1,1,1-Trichloroethane	ND	0.50	1	11/01/2016 22:10
1,1,2-Trichloroethane	ND	0.50	1	11/01/2016 22:10
Trichloroethene	ND	0.50	1	11/01/2016 22:10
Trichlorofluoromethane	ND	0.50	1	11/01/2016 22:10
1,2,3-Trichloropropane	ND	0.50	1	11/01/2016 22:10
1,2,4-Trimethylbenzene	ND	0.50	1	11/01/2016 22:10
1,3,5-Trimethylbenzene	ND	0.50	1	11/01/2016 22:10
Vinyl Chloride	ND	0.50	1	11/01/2016 22:10
Xylenes, Total	ND	0.50	1	11/01/2016 22:10

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-24A Open Borehole	**1610C83-024C**	**Water**	**10/27/2016 13:30**	**GC28**	**129074**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	103	70-130		11/01/2016 22:10
Toluene-d8	99	70-130		11/01/2016 22:10
4-BFB	88	70-130		11/01/2016 22:10

Analyst(s): MW

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-24A Hydropunch	**1610C83-025C**	**Water**	**10/27/2016 13:40**	**GC16**	**129074**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	11/01/2016 02:13
tert-Amyl methyl ether (TAME)	ND	0.50	1	11/01/2016 02:13
Benzene	ND	0.50	1	11/01/2016 02:13
Bromobenzene	ND	0.50	1	11/01/2016 02:13
Bromochloromethane	ND	0.50	1	11/01/2016 02:13
Bromodichloromethane	ND	0.50	1	11/01/2016 02:13
Bromoform	ND	0.50	1	11/01/2016 02:13
Bromomethane	ND	0.50	1	11/01/2016 02:13
2-Butanone (MEK)	ND	2.0	1	11/01/2016 02:13
t-Butyl alcohol (TBA)	ND	2.0	1	11/01/2016 02:13
n-Butyl benzene	ND	0.50	1	11/01/2016 02:13
sec-Butyl benzene	ND	0.50	1	11/01/2016 02:13
tert-Butyl benzene	ND	0.50	1	11/01/2016 02:13
Carbon Disulfide	ND	0.50	1	11/01/2016 02:13
Carbon Tetrachloride	ND	0.50	1	11/01/2016 02:13
Chlorobenzene	ND	0.50	1	11/01/2016 02:13
Chloroethane	ND	0.50	1	11/01/2016 02:13
Chloroform	ND	0.50	1	11/01/2016 02:13
Chloromethane	ND	0.50	1	11/01/2016 02:13
2-Chlorotoluene	ND	0.50	1	11/01/2016 02:13
4-Chlorotoluene	ND	0.50	1	11/01/2016 02:13
Dibromochloromethane	ND	0.50	1	11/01/2016 02:13
1,2-Dibromo-3-chloropropane	ND	0.20	1	11/01/2016 02:13
1,2-Dibromoethane (EDB)	ND	0.50	1	11/01/2016 02:13
Dibromomethane	ND	0.50	1	11/01/2016 02:13
1,2-Dichlorobenzene	ND	0.50	1	11/01/2016 02:13
1,3-Dichlorobenzene	ND	0.50	1	11/01/2016 02:13
1,4-Dichlorobenzene	ND	0.50	1	11/01/2016 02:13
Dichlorodifluoromethane	ND	0.50	1	11/01/2016 02:13
1,1-Dichloroethane	**0.95**	0.50	1	11/01/2016 02:13
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	11/01/2016 02:13
1,1-Dichloroethene	**1.8**	0.50	1	11/01/2016 02:13
cis-1,2-Dichloroethene	ND	0.50	1	11/01/2016 02:13
trans-1,2-Dichloroethene	ND	0.50	1	11/01/2016 02:13
1,2-Dichloropropane	ND	0.50	1	11/01/2016 02:13
1,3-Dichloropropane	ND	0.50	1	11/01/2016 02:13
2,2-Dichloropropane	ND	0.50	1	11/01/2016 02:13

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-24A Hydropunch	**1610C83-025C**	**Water**	**10/27/2016 13:40**	**GC16**	**129074**

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	11/01/2016 02:13
cis-1,3-Dichloropropene	ND	0.50	1	11/01/2016 02:13
trans-1,3-Dichloropropene	ND	0.50	1	11/01/2016 02:13
Diisopropyl ether (DIPE)	ND	0.50	1	11/01/2016 02:13
Ethylbenzene	ND	0.50	1	11/01/2016 02:13
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	11/01/2016 02:13
Freon 113	ND	0.50	1	11/01/2016 02:13
Hexachlorobutadiene	ND	0.50	1	11/01/2016 02:13
Hexachloroethane	ND	0.50	1	11/01/2016 02:13
2-Hexanone	ND	0.50	1	11/01/2016 02:13
Isopropylbenzene	ND	0.50	1	11/01/2016 02:13
4-Isopropyl toluene	ND	0.50	1	11/01/2016 02:13
Methyl-t-butyl ether (MTBE)	ND	0.50	1	11/01/2016 02:13
Methylene chloride	ND	0.50	1	11/01/2016 02:13
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	11/01/2016 02:13
Naphthalene	ND	0.50	1	11/01/2016 02:13
n-Propyl benzene	ND	0.50	1	11/01/2016 02:13
Styrene	ND	0.50	1	11/01/2016 02:13
1,1,1,2-Tetrachloroethane	ND	0.50	1	11/01/2016 02:13
1,1,2,2-Tetrachloroethane	ND	0.50	1	11/01/2016 02:13
Tetrachloroethene	ND	0.50	1	11/01/2016 02:13
Toluene	ND	0.50	1	11/01/2016 02:13
1,2,3-Trichlorobenzene	ND	0.50	1	11/01/2016 02:13
1,2,4-Trichlorobenzene	ND	0.50	1	11/01/2016 02:13
1,1,1-Trichloroethane	ND	0.50	1	11/01/2016 02:13
1,1,2-Trichloroethane	ND	0.50	1	11/01/2016 02:13
Trichloroethene	ND	0.50	1	11/01/2016 02:13
Trichlorofluoromethane	ND	0.50	1	11/01/2016 02:13
1,2,3-Trichloropropane	ND	0.50	1	11/01/2016 02:13
1,2,4-Trimethylbenzene	ND	0.50	1	11/01/2016 02:13
1,3,5-Trimethylbenzene	ND	0.50	1	11/01/2016 02:13
Vinyl Chloride	ND	0.50	1	11/01/2016 02:13
Xylenes, Total	ND	0.50	1	11/01/2016 02:13

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-24A Hydropunch	**1610C83-025C**	**Water**	**10/27/2016 13:40**	**GC16**	**129074**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	114	70-130		11/01/2016 02:13
Toluene-d8	100	70-130		11/01/2016 02:13
4-BFB	96	70-130		11/01/2016 02:13

Analyst(s): KF Analytical Comments: c8,b1

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-26 Open Borehole	**1610C83-029C**	**Water**	**10/27/2016 14:45**	**GC28**	**129074**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	11/01/2016 22:49
tert-Amyl methyl ether (TAME)	ND	0.50	1	11/01/2016 22:49
Benzene	ND	0.50	1	11/01/2016 22:49
Bromobenzene	ND	0.50	1	11/01/2016 22:49
Bromochloromethane	ND	0.50	1	11/01/2016 22:49
Bromodichloromethane	ND	0.50	1	11/01/2016 22:49
Bromoform	ND	0.50	1	11/01/2016 22:49
Bromomethane	ND	0.50	1	11/01/2016 22:49
2-Butanone (MEK)	ND	2.0	1	11/01/2016 22:49
t-Butyl alcohol (TBA)	ND	2.0	1	11/01/2016 22:49
n-Butyl benzene	ND	0.50	1	11/01/2016 22:49
sec-Butyl benzene	ND	0.50	1	11/01/2016 22:49
tert-Butyl benzene	ND	0.50	1	11/01/2016 22:49
Carbon Disulfide	ND	0.50	1	11/01/2016 22:49
Carbon Tetrachloride	ND	0.50	1	11/01/2016 22:49
Chlorobenzene	ND	0.50	1	11/01/2016 22:49
Chloroethane	ND	0.50	1	11/01/2016 22:49
Chloroform	ND	0.50	1	11/01/2016 22:49
Chloromethane	ND	0.50	1	11/01/2016 22:49
2-Chlorotoluene	ND	0.50	1	11/01/2016 22:49
4-Chlorotoluene	ND	0.50	1	11/01/2016 22:49
Dibromochloromethane	ND	0.50	1	11/01/2016 22:49
1,2-Dibromo-3-chloropropane	ND	0.20	1	11/01/2016 22:49
1,2-Dibromoethane (EDB)	ND	0.50	1	11/01/2016 22:49
Dibromomethane	ND	0.50	1	11/01/2016 22:49
1,2-Dichlorobenzene	ND	0.50	1	11/01/2016 22:49
1,3-Dichlorobenzene	ND	0.50	1	11/01/2016 22:49
1,4-Dichlorobenzene	ND	0.50	1	11/01/2016 22:49
Dichlorodifluoromethane	ND	0.50	1	11/01/2016 22:49
1,1-Dichloroethane	ND	0.50	1	11/01/2016 22:49
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	11/01/2016 22:49
1,1-Dichloroethene	ND	0.50	1	11/01/2016 22:49
cis-1,2-Dichloroethene	ND	0.50	1	11/01/2016 22:49
trans-1,2-Dichloroethene	ND	0.50	1	11/01/2016 22:49
1,2-Dichloropropane	ND	0.50	1	11/01/2016 22:49
1,3-Dichloropropane	ND	0.50	1	11/01/2016 22:49
2,2-Dichloropropane	ND	0.50	1	11/01/2016 22:49

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-26 Open Borehole	**1610C83-029C**	**Water**	**10/27/2016 14:45**	**GC28**	**129074**

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	11/01/2016 22:49
cis-1,3-Dichloropropene	ND	0.50	1	11/01/2016 22:49
trans-1,3-Dichloropropene	ND	0.50	1	11/01/2016 22:49
Diisopropyl ether (DIPE)	ND	0.50	1	11/01/2016 22:49
Ethylbenzene	ND	0.50	1	11/01/2016 22:49
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	11/01/2016 22:49
Freon 113	ND	0.50	1	11/01/2016 22:49
Hexachlorobutadiene	ND	0.50	1	11/01/2016 22:49
Hexachloroethane	ND	0.50	1	11/01/2016 22:49
2-Hexanone	ND	0.50	1	11/01/2016 22:49
Isopropylbenzene	ND	0.50	1	11/01/2016 22:49
4-Isopropyl toluene	ND	0.50	1	11/01/2016 22:49
Methyl-t-butyl ether (MTBE)	ND	0.50	1	11/01/2016 22:49
Methylene chloride	ND	0.50	1	11/01/2016 22:49
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	11/01/2016 22:49
Naphthalene	ND	0.50	1	11/01/2016 22:49
n-Propyl benzene	ND	0.50	1	11/01/2016 22:49
Styrene	ND	0.50	1	11/01/2016 22:49
1,1,1,2-Tetrachloroethane	ND	0.50	1	11/01/2016 22:49
1,1,2,2-Tetrachloroethane	ND	0.50	1	11/01/2016 22:49
Tetrachloroethene	ND	0.50	1	11/01/2016 22:49
Toluene	ND	0.50	1	11/01/2016 22:49
1,2,3-Trichlorobenzene	ND	0.50	1	11/01/2016 22:49
1,2,4-Trichlorobenzene	ND	0.50	1	11/01/2016 22:49
1,1,1-Trichloroethane	ND	0.50	1	11/01/2016 22:49
1,1,2-Trichloroethane	ND	0.50	1	11/01/2016 22:49
Trichloroethene	ND	0.50	1	11/01/2016 22:49
Trichlorofluoromethane	ND	0.50	1	11/01/2016 22:49
1,2,3-Trichloropropane	ND	0.50	1	11/01/2016 22:49
1,2,4-Trimethylbenzene	ND	0.50	1	11/01/2016 22:49
1,3,5-Trimethylbenzene	ND	0.50	1	11/01/2016 22:49
Vinyl Chloride	ND	0.50	1	11/01/2016 22:49
Xylenes, Total	ND	0.50	1	11/01/2016 22:49

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-26 Open Borehole	**1610C83-029C**	**Water**	**10/27/2016 14:45**	**GC28**	**129074**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	102	70-130		11/01/2016 22:49
Toluene-d8	99	70-130		11/01/2016 22:49
4-BFB	85	70-130		11/01/2016 22:49

Analyst(s): MW Analytical Comments: c8

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-26 Hydropunch	**1610C83-030C**	**Water**	**10/27/2016 14:55**	**GC16**	**129074**

Analytes	Result	RL	DF	Date Analyzed
Acetone	ND	10	1	11/01/2016 03:33
tert-Amyl methyl ether (TAME)	ND	0.50	1	11/01/2016 03:33
Benzene	ND	0.50	1	11/01/2016 03:33
Bromobenzene	ND	0.50	1	11/01/2016 03:33
Bromochloromethane	ND	0.50	1	11/01/2016 03:33
Bromodichloromethane	ND	0.50	1	11/01/2016 03:33
Bromoform	ND	0.50	1	11/01/2016 03:33
Bromomethane	ND	0.50	1	11/01/2016 03:33
2-Butanone (MEK)	ND	2.0	1	11/01/2016 03:33
t-Butyl alcohol (TBA)	ND	2.0	1	11/01/2016 03:33
n-Butyl benzene	ND	0.50	1	11/01/2016 03:33
sec-Butyl benzene	ND	0.50	1	11/01/2016 03:33
tert-Butyl benzene	ND	0.50	1	11/01/2016 03:33
Carbon Disulfide	ND	0.50	1	11/01/2016 03:33
Carbon Tetrachloride	ND	0.50	1	11/01/2016 03:33
Chlorobenzene	ND	0.50	1	11/01/2016 03:33
Chloroethane	ND	0.50	1	11/01/2016 03:33
Chloroform	ND	0.50	1	11/01/2016 03:33
Chloromethane	ND	0.50	1	11/01/2016 03:33
2-Chlorotoluene	ND	0.50	1	11/01/2016 03:33
4-Chlorotoluene	ND	0.50	1	11/01/2016 03:33
Dibromochloromethane	ND	0.50	1	11/01/2016 03:33
1,2-Dibromo-3-chloropropane	ND	0.20	1	11/01/2016 03:33
1,2-Dibromoethane (EDB)	ND	0.50	1	11/01/2016 03:33
Dibromomethane	ND	0.50	1	11/01/2016 03:33
1,2-Dichlorobenzene	ND	0.50	1	11/01/2016 03:33
1,3-Dichlorobenzene	ND	0.50	1	11/01/2016 03:33
1,4-Dichlorobenzene	ND	0.50	1	11/01/2016 03:33
Dichlorodifluoromethane	ND	0.50	1	11/01/2016 03:33
1,1-Dichloroethane	ND	0.50	1	11/01/2016 03:33
1,2-Dichloroethane (1,2-DCA)	ND	0.50	1	11/01/2016 03:33
1,1-Dichloroethene	ND	0.50	1	11/01/2016 03:33
cis-1,2-Dichloroethene	ND	0.50	1	11/01/2016 03:33
trans-1,2-Dichloroethene	ND	0.50	1	11/01/2016 03:33
1,2-Dichloropropane	ND	0.50	1	11/01/2016 03:33
1,3-Dichloropropane	ND	0.50	1	11/01/2016 03:33
2,2-Dichloropropane	ND	0.50	1	11/01/2016 03:33

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-26 Hydropunch	**1610C83-030C**	**Water**	**10/27/2016 14:55**	**GC16**	**129074**

Analytes	Result	RL	DF	Date Analyzed
1,1-Dichloropropene	ND	0.50	1	11/01/2016 03:33
cis-1,3-Dichloropropene	ND	0.50	1	11/01/2016 03:33
trans-1,3-Dichloropropene	ND	0.50	1	11/01/2016 03:33
Diisopropyl ether (DIPE)	ND	0.50	1	11/01/2016 03:33
Ethylbenzene	ND	0.50	1	11/01/2016 03:33
Ethyl tert-butyl ether (ETBE)	ND	0.50	1	11/01/2016 03:33
Freon 113	ND	0.50	1	11/01/2016 03:33
Hexachlorobutadiene	ND	0.50	1	11/01/2016 03:33
Hexachloroethane	ND	0.50	1	11/01/2016 03:33
2-Hexanone	ND	0.50	1	11/01/2016 03:33
Isopropylbenzene	ND	0.50	1	11/01/2016 03:33
4-Isopropyl toluene	ND	0.50	1	11/01/2016 03:33
Methyl-t-butyl ether (MTBE)	ND	0.50	1	11/01/2016 03:33
Methylene chloride	ND	0.50	1	11/01/2016 03:33
4-Methyl-2-pentanone (MIBK)	ND	0.50	1	11/01/2016 03:33
Naphthalene	ND	0.50	1	11/01/2016 03:33
n-Propyl benzene	ND	0.50	1	11/01/2016 03:33
Styrene	ND	0.50	1	11/01/2016 03:33
1,1,1,2-Tetrachloroethane	ND	0.50	1	11/01/2016 03:33
1,1,2,2-Tetrachloroethane	ND	0.50	1	11/01/2016 03:33
Tetrachloroethene	ND	0.50	1	11/01/2016 03:33
Toluene	ND	0.50	1	11/01/2016 03:33
1,2,3-Trichlorobenzene	ND	0.50	1	11/01/2016 03:33
1,2,4-Trichlorobenzene	ND	0.50	1	11/01/2016 03:33
1,1,1-Trichloroethane	ND	0.50	1	11/01/2016 03:33
1,1,2-Trichloroethane	ND	0.50	1	11/01/2016 03:33
Trichloroethene	ND	0.50	1	11/01/2016 03:33
Trichlorofluoromethane	ND	0.50	1	11/01/2016 03:33
1,2,3-Trichloropropane	ND	0.50	1	11/01/2016 03:33
1,2,4-Trimethylbenzene	ND	0.50	1	11/01/2016 03:33
1,3,5-Trimethylbenzene	ND	0.50	1	11/01/2016 03:33
Vinyl Chloride	ND	0.50	1	11/01/2016 03:33
Xylenes, Total	ND	0.50	1	11/01/2016 03:33

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW5030B
Date Prepared:	10/29/16-11/1/16	**Analytical Method:**	SW8260B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Volatile Organics

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-26 Hydropunch	**1610C83-030C**	**Water**	**10/27/2016 14:55**	**GC16**	**129074**

Analytes	Result	RL	DF	Date Analyzed
Surrogates	REC (%)	Limits		
Dibromofluoromethane	112	70-130		11/01/2016 03:33
Toluene-d8	99	70-130		11/01/2016 03:33
4-BFB	97	70-130		11/01/2016 03:33

Analyst(s): KF Analytical Comments: c8

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3510C/3630C
Date Prepared:	10/31/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons w/ SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-30 Hydropunch	**1610C83-004B**	**Water**	**10/27/2016 08:50**	**GC9b**	**129046**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**73**	36	1	11/01/2016 03:29
TPH-Motor Oil (C18-C36)	ND	77	1	11/01/2016 03:29

Surrogates	REC (%)	Limits	
C26	99	71-134	11/01/2016 03:29

Analyst(s): TK Analytical Comments: e2,b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-25A Hydropunch	**1610C83-010B**	**Water**	**10/27/2016 12:15**	**GC9b**	**129046**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**460**	52	1	11/01/2016 04:07
TPH-Motor Oil (C18-C36)	ND	110	1	11/01/2016 04:07

Surrogates	REC (%)	Limits	
C26	96	71-134	11/01/2016 04:07

Analyst(s): TK Analytical Comments: e2,b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-23A Open Borehole	**1610C83-014B**	**Water**	**10/27/2016 13:10**	**GC9b**	**129046**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**56**	41	1	11/01/2016 04:46
TPH-Motor Oil (C18-C36)	**96**	88	1	11/01/2016 04:46

Surrogates	REC (%)	Limits	
C26	98	71-134	11/01/2016 04:46

Analyst(s): TK Analytical Comments: e7,e2

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3510C/3630C
Date Prepared:	10/31/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons w/ SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-23A Hydropunch	**1610C83-015B**	**Water**	**10/27/2016 13:05**	**GC9b**	**129046**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**96**	54	1	11/01/2016 06:04
TPH-Motor Oil (C18-C36)	ND	120	1	11/01/2016 06:04

Surrogates	REC (%)	Limits	
C26	96	71-134	11/01/2016 06:04

Analyst(s): TK Analytical Comments: e2,b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-29 Open Borehole	**1610C83-020B**	**Water**	**10/27/2016 08:40**	**GC11B**	**129046**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**46**	39	1	11/01/2016 19:29
TPH-Motor Oil (C18-C36)	ND	84	1	11/01/2016 19:29

Surrogates	REC (%)	Limits	
C26	96	71-134	11/01/2016 19:29

Analyst(s): TK Analytical Comments: e2,b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-24A Open Borehole	**1610C83-024B**	**Water**	**10/27/2016 13:30**	**GC9b**	**129046**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	43	1	11/01/2016 07:21
TPH-Motor Oil (C18-C36)	ND	91	1	11/01/2016 07:21

Surrogates	REC (%)	Limits	
C26	92	71-134	11/01/2016 07:21

Analyst(s): TK

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3510C/3630C
Date Prepared:	10/31/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons w/ SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-24A Hydropunch	**1610C83-025B**	**Water**	**10/27/2016 13:40**	**GC9b**	**129046**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	56	1	11/01/2016 08:39
TPH-Motor Oil (C18-C36)	ND	120	1	11/01/2016 08:39

Surrogates	REC (%)	Limits	
C26	87	71-134	11/01/2016 08:39

Analyst(s): TK Analytical Comments: b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-26 Open Borehole	**1610C83-029B**	**Water**	**10/27/2016 14:45**	**GC9b**	**129046**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	49	1	11/01/2016 09:18
TPH-Motor Oil (C18-C36)	ND	110	1	11/01/2016 09:18

Surrogates	REC (%)	Limits	
C26	89	71-134	11/01/2016 09:18

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-26 Hydropunch	**1610C83-030B**	**Water**	**10/27/2016 14:55**	**GC11B**	**129046**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**60**	49	1	11/01/2016 17:32
TPH-Motor Oil (C18-C36)	ND	100	1	11/01/2016 17:32

Surrogates	REC (%)	Limits	
C26	86	71-134	11/01/2016 17:32

Analyst(s): TK Analytical Comments: e2

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3510C
Date Prepared:	10/31/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-30 Hydropunch	**1610C83-004A**	**Water**	**10/27/2016 08:50**	**GC9a**	**129044**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**260**	36	1	11/01/2016 04:07
TPH-Motor Oil (C18-C36)	**250**	77	1	11/01/2016 04:07

Surrogates	REC (%)	Limits	
C26	96	70-130	11/01/2016 04:07

Analyst(s): TK Analytical Comments: b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-25A Open Borehole	**1610C83-009A**	**Water**	**10/27/2016 10:25**	**GC11B**	**129044**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**170**	52	1	11/01/2016 23:22
TPH-Motor Oil (C18-C36)	**190**	110	1	11/01/2016 23:22

Surrogates	REC (%)	Limits	
C26	90	70-130	11/01/2016 23:22

Analyst(s): TK Analytical Comments: e7,e2,b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-25A Hydropunch	**1610C83-010A**	**Water**	**10/27/2016 12:15**	**GC11B**	**129044**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**1300**	41	1	11/02/2016 05:13
TPH-Motor Oil (C18-C36)	**690**	88	1	11/02/2016 05:13

Surrogates	REC (%)	Limits	
C26	96	70-130	11/02/2016 05:13

Analyst(s): TK Analytical Comments: e2,e7,b1

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3510C
Date Prepared:	10/31/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-23A Open Borehole	**1610C83-014A**	**Water**	**10/27/2016 13:10**	**GC9a**	**129044**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**300**	60	1	11/02/2016 00:06
TPH-Motor Oil (C18-C36)	**370**	130	1	11/02/2016 00:06

Surrogates	REC (%)	Limits	
C26	95	70-130	11/02/2016 00:06

Analyst(s): TK Analytical Comments: e7,e2,b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-23A Hydropunch	**1610C83-015A**	**Water**	**10/27/2016 13:05**	**GC11B**	**129044**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**250**	54	1	11/02/2016 06:31
TPH-Motor Oil (C18-C36)	**320**	120	1	11/02/2016 06:31

Surrogates	REC (%)	Limits	
C26	97	70-130	11/02/2016 06:31

Analyst(s): TK Analytical Comments: e7,e2,b1

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-29 Open Borehole	**1610C83-020A**	**Water**	**10/27/2016 08:40**	**GC9a**	**129044**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**280**	39	1	11/01/2016 09:18
TPH-Motor Oil (C18-C36)	**500**	84	1	11/01/2016 09:18

Surrogates	REC (%)	Limits	
C26	89	70-130	11/01/2016 09:18

Analyst(s): TK Analytical Comments: b1

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3510C
Date Prepared:	10/31/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-29 Hydropunch	**1610C83-021A**	**Water**	**10/27/2016 10:30**	**GC11B**	**129044**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**300**	46	1	11/02/2016 07:49
TPH-Motor Oil (C18-C36)	**230**	99	1	11/02/2016 07:49

Surrogates	REC (%)	Limits	
C26	95	70-130	11/02/2016 07:49

Analyst(s): TK Analytical Comments: e2,e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-24A Open Borehole	**1610C83-024A**	**Water**	**10/27/2016 13:30**	**GC11B**	**129044**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**110**	43	1	11/01/2016 22:04
TPH-Motor Oil (C18-C36)	**140**	91	1	11/01/2016 22:04

Surrogates	REC (%)	Limits	
C26	90	70-130	11/01/2016 22:04

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-24A Hydropunch	**1610C83-025A**	**Water**	**10/27/2016 13:40**	**GC11B**	**129044**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**210**	50	1	11/02/2016 02:37
TPH-Motor Oil (C18-C36)	**250**	110	1	11/02/2016 02:37

Surrogates	REC (%)	Limits	
C26	87	70-130	11/02/2016 02:37

Analyst(s): TK Analytical Comments: e7,e2,b1

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3510C
Date Prepared:	10/31/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	µg/L

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-26 Open Borehole	**1610C83-029A**	**Water**	**10/27/2016 14:45**	**GC11B**	**129044**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**120**	49	1	11/02/2016 03:55
TPH-Motor Oil (C18-C36)	**230**	110	1	11/02/2016 03:55

Surrogates	REC (%)	Limits	
C26	89	70-130	11/02/2016 03:55

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-26 Hydropunch	**1610C83-030A**	**Water**	**10/27/2016 14:55**	**GC9a**	**129044**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**250**	49	1	11/01/2016 22:10
TPH-Motor Oil (C18-C36)	**220**	100	1	11/01/2016 22:10

Surrogates	REC (%)	Limits	
C26	84	70-130	11/01/2016 22:10

Analyst(s): TK Analytical Comments: e2,e7

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3550B/3630C
Date Prepared:	10/27/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-30/5'	**1610C83-001A**	**Soil**	**10/27/2016 07:35**	**GC9a**	**128877**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	100	100	10/31/2016 12:34
TPH-Motor Oil (C18-C36)	**2000**	500	100	10/31/2016 12:34

Surrogates	REC (%)	Limits	
C9	91	70-130	10/31/2016 12:34

Analyst(s): TK Analytical Comments: e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-30/8'	**1610C83-002A**	**Soil**	**10/27/2016 07:37**	**GC11A**	**128877**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	11/01/2016 19:29
TPH-Motor Oil (C18-C36)	**22**	5.0	1	11/01/2016 19:29

Surrogates	REC (%)	Limits	
C9	98	70-130	11/01/2016 19:29

Analyst(s): TK Analytical Comments: e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-30/15'	**1610C83-003A**	**Soil**	**10/27/2016 07:40**	**GC11A**	**128877**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/28/2016 10:55
TPH-Motor Oil (C18-C36)	**6.9**	5.0	1	10/28/2016 10:55

Surrogates	REC (%)	Limits	
C9	100	70-130	10/28/2016 10:55

Analyst(s): TK Analytical Comments: e7

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3550B/3630C
Date Prepared:	10/27/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-25A/3'	**1610C83-005A**	**Soil**	**10/27/2016 09:30**	**GC11A**	**128877**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**120**	100	100	10/31/2016 15:37
TPH-Motor Oil (C18-C36)	**1400**	500	100	10/31/2016 15:37

Surrogates	REC (%)	Limits	
C9	96	70-130	10/31/2016 15:37

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-25A/8'	**1610C83-006A**	**Soil**	**10/27/2016 09:33**	**GC11A**	**128893**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/28/2016 09:28
TPH-Motor Oil (C18-C36)	**6.6**	5.0	1	10/28/2016 09:28

Surrogates	REC (%)	Limits	
C9	96	70-130	10/28/2016 09:28

Analyst(s): TK Analytical Comments: e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-25A/10'	**1610C83-007A**	**Soil**	**10/27/2016 09:35**	**GC9b**	**128893**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/29/2016 17:29
TPH-Motor Oil (C18-C36)	ND	5.0	1	10/29/2016 17:29

Surrogates	REC (%)	Limits	
C9	98	70-130	10/29/2016 17:29

Analyst(s): TK

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3550B/3630C
Date Prepared:	10/27/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-25A/15	1610C83-008A	Soil	10/27/2016 09:40	GC9b	128893

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/29/2016 16:50
TPH-Motor Oil (C18-C36)	ND	5.0	1	10/29/2016 16:50

Surrogates	REC (%)	Limits	
C9	98	70-130	10/29/2016 16:50

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-23A/4'	1610C83-011A	Soil	10/27/2016 11:52	GC11A	128893

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**5.5**	2.0	2	11/01/2016 21:25
TPH-Motor Oil (C18-C36)	**77**	10	2	11/01/2016 21:25

Surrogates	REC (%)	Limits	
C9	86	70-130	11/01/2016 21:25

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-23A/8'	1610C83-012A	Soil	10/27/2016 11:54	GC6A	128893

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/28/2016 22:58
TPH-Motor Oil (C18-C36)	**7.7**	5.0	1	10/28/2016 22:58

Surrogates	REC (%)	Limits	
C9	97	70-130	10/28/2016 22:58

Analyst(s): TK Analytical Comments: e7

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3550B/3630C
Date Prepared:	10/27/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-23A/15'	**1610C83-013A**	**Soil**	**10/27/2016 12:00**	**GC6A**	**128893**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/28/2016 14:56
TPH-Motor Oil (C18-C36)	ND	5.0	1	10/28/2016 14:56

Surrogates	REC (%)	Limits	
C9	97	70-130	10/28/2016 14:56

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-29/4'	**1610C83-016A**	**Soil**	**10/27/2016 08:10**	**GC11A**	**128893**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	50	11/02/2016 00:01
TPH-Motor Oil (C18-C36)	**1100**	250	50	11/02/2016 00:01

Surrogates	REC (%)	Limits	
C9	98	70-130	11/02/2016 00:01

Analyst(s): TK Analytical Comments: e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-29/8'	**1610C83-017A**	**Soil**	**10/27/2016 08:12**	**GC9b**	**128893**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/28/2016 07:17
TPH-Motor Oil (C18-C36)	ND	5.0	1	10/28/2016 07:17

Surrogates	REC (%)	Limits	
C9	97	70-130	10/28/2016 07:17

Analyst(s): TK

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3550B/3630C
Date Prepared:	10/27/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-29/15'	**1610C83-018A**	**Soil**	**10/27/2016 08:16**	**GC9b**	**128893**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/29/2016 18:08
TPH-Motor Oil (C18-C36)	ND	5.0	1	10/29/2016 18:08

Surrogates	REC (%)	Limits	
C9	98	70-130	10/29/2016 18:08

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-29/20'	**1610C83-019A**	**Soil**	**10/27/2016 08:25**	**GC9b**	**128893**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/29/2016 18:47
TPH-Motor Oil (C18-C36)	ND	5.0	1	10/29/2016 18:47

Surrogates	REC (%)	Limits	
C9	97	70-130	10/29/2016 18:47

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-24A/4'	**1610C83-022A**	**Soil**	**10/27/2016 11:30**	**GC6A**	**128893**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**9.5**	5.0	5	11/02/2016 08:42
TPH-Motor Oil (C18-C36)	**140**	25	5	11/02/2016 08:42

Surrogates	REC (%)	Limits	
C9	94	70-130	11/02/2016 08:42

Analyst(s): TK Analytical Comments: e7,e2

(Cont.)

NELAP 4033ORELAP


Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3550B/3630C
Date Prepared:	10/27/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-24A/8'	**1610C83-023A**	**Soil**	**10/27/2016 11:25**	**GC11A**	**128893**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**1.2**	1.0	1	11/01/2016 18:11
TPH-Motor Oil (C18-C36)	**25**	5.0	1	11/01/2016 18:11

Surrogates	REC (%)	Limits	
C9	100	70-130	11/01/2016 18:11

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-26/4'	**1610C83-026A**	**Soil**	**10/27/2016 14:15**	**GC9b**	**128893**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	50	10/29/2016 19:26
TPH-Motor Oil (C18-C36)	**400**	250	50	10/29/2016 19:26

Surrogates	REC (%)	Limits	
C9	97	70-130	10/29/2016 19:26

Analyst(s): TK Analytical Comments: e7,a3

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-26/8'	**1610C83-027A**	**Soil**	**10/27/2016 14:17**	**GC9b**	**128893**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	100	100	10/29/2016 22:40
TPH-Motor Oil (C18-C36)	**1300**	500	100	10/29/2016 22:40

Surrogates	REC (%)	Limits	
C9	113	70-130	10/29/2016 22:40

Analyst(s): TK Analytical Comments: e7,a3

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3550B/3630C
Date Prepared:	10/27/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons with Silica Gel Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-26/15	**1610C83-028A**	**Soil**	**10/27/2016 14:20**	**GC11A**	**128893**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	11/01/2016 16:53
TPH-Motor Oil (C18-C36)	**17**	5.0	1	11/01/2016 16:53

Surrogates	REC (%)	Limits	
C9	98	70-130	11/01/2016 16:53

Analyst(s): TK Analytical Comments: e7

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3550B
Date Prepared:	10/27/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-30/5'	**1610C83-001A**	**Soil**	**10/27/2016 07:35**	**GC9a**	**128891**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	100	100	10/31/2016 17:46
TPH-Motor Oil (C18-C36)	**2900**	500	100	10/31/2016 17:46

Surrogates	REC (%)	Limits	
C9	93	72-114	10/31/2016 17:46

Analyst(s): TK Analytical Comments: e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-30/8'	**1610C83-002A**	**Soil**	**10/27/2016 07:37**	**GC6A**	**128891**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**1.4**	1.0	1	11/02/2016 10:39
TPH-Motor Oil (C18-C36)	**37**	5.0	1	11/02/2016 10:39

Surrogates	REC (%)	Limits	
C9	99	72-114	11/02/2016 10:39

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-30/15'	**1610C83-003A**	**Soil**	**10/27/2016 07:40**	**GC11A**	**128891**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/29/2016 14:50
TPH-Motor Oil (C18-C36)	**7.3**	5.0	1	10/29/2016 14:50

Surrogates	REC (%)	Limits	
C9	97	72-114	10/29/2016 14:50

Analyst(s): TK Analytical Comments: e7

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3550B
Date Prepared:	10/27/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-25A/3'	**1610C83-005A**	**Soil**	**10/27/2016 09:30**	**GC6B**	**128891**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**160**	100	100	11/02/2016 08:42
TPH-Motor Oil (C18-C36)	**2100**	500	100	11/02/2016 08:42

Surrogates	REC (%)	Limits	
C9	89	72-114	11/02/2016 08:42

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-25A/8'	**1610C83-006A**	**Soil**	**10/27/2016 09:33**	**GC11A**	**128891**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/29/2016 10:17
TPH-Motor Oil (C18-C36)	**9.4**	5.0	1	10/29/2016 10:17

Surrogates	REC (%)	Limits	
C9	98	72-114	10/29/2016 10:17

Analyst(s): TK Analytical Comments: e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-25A/10'	**1610C83-007A**	**Soil**	**10/27/2016 09:35**	**GC6A**	**128891**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/28/2016 20:17
TPH-Motor Oil (C18-C36)	ND	5.0	1	10/28/2016 20:17

Surrogates	REC (%)	Limits	
C9	97	72-114	10/28/2016 20:17

Analyst(s): TK

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3550B
Date Prepared:	10/27/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-25A/15	1610C83-008A	Soil	10/27/2016 09:40	GC6A	128891

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/28/2016 21:34
TPH-Motor Oil (C18-C36)	ND	5.0	1	10/28/2016 21:34

Surrogates	REC (%)	Limits	
C9	97	72-114	10/28/2016 21:34

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-23A/4'	1610C83-011A	Soil	10/27/2016 11:52	GC9b	128891

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**5.6**	5.0	5	10/31/2016 12:34
TPH-Motor Oil (C18-C36)	**140**	25	5	10/31/2016 12:34

Surrogates	REC (%)	Limits	
C9	93	72-114	10/31/2016 12:34

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-23A/8'	1610C83-012A	Soil	10/27/2016 11:54	GC9a	128891

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/31/2016 19:42
TPH-Motor Oil (C18-C36)	**19**	5.0	1	10/31/2016 19:42

Surrogates	REC (%)	Limits	
C9	97	72-114	10/31/2016 19:42

Analyst(s): TK Analytical Comments: e7

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3550B
Date Prepared:	10/27/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-23A/15'	**1610C83-013A**	**Soil**	**10/27/2016 12:00**	**GC11A**	**128891**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/29/2016 10:56
TPH-Motor Oil (C18-C36)	ND	5.0	1	10/29/2016 10:56

Surrogates	REC (%)	Limits	
C9	97	72-114	10/29/2016 10:56

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-29/4'	**1610C83-016A**	**Soil**	**10/27/2016 08:10**	**GC6B**	**128891**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**80**	50	50	11/02/2016 04:11
TPH-Motor Oil (C18-C36)	**1700**	250	50	11/02/2016 04:11

Surrogates	REC (%)	Limits	
C9	90	72-114	11/02/2016 04:11

Analyst(s): TK Analytical Comments: e7,e2

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-29/8'	**1610C83-017A**	**Soil**	**10/27/2016 08:12**	**GC11A**	**128891**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/29/2016 11:35
TPH-Motor Oil (C18-C36)	ND	5.0	1	10/29/2016 11:35

Surrogates	REC (%)	Limits	
C9	98	72-114	10/29/2016 11:35

Analyst(s): TK

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3550B
Date Prepared:	10/27/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-29/15'	**1610C83-018A**	**Soil**	**10/27/2016 08:16**	**GC6A**	**128891**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/28/2016 18:59
TPH-Motor Oil (C18-C36)	ND	5.0	1	10/28/2016 18:59

Surrogates	REC (%)	Limits	
C9	94	72-114	10/28/2016 18:59

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-29/20'	**1610C83-019A**	**Soil**	**10/27/2016 08:25**	**GC11A**	**128891**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	1.0	1	10/29/2016 14:11
TPH-Motor Oil (C18-C36)	ND	5.0	1	10/29/2016 14:11

Surrogates	REC (%)	Limits	
C9	97	72-114	10/29/2016 14:11

Analyst(s): TK

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-24A/4'	**1610C83-022A**	**Soil**	**10/27/2016 11:30**	**GC11A**	**128891**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**20**	20	20	10/29/2016 18:05
TPH-Motor Oil (C18-C36)	**330**	100	20	10/29/2016 18:05

Surrogates	REC (%)	Limits	
C9	102	72-114	10/29/2016 18:05

Analyst(s): TK Analytical Comments: e7,e2

(Cont.)

NELAP 4033ORELAP

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3550B
Date Prepared:	10/27/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-24A/8'	**1610C83-023A**	**Soil**	**10/27/2016 11:25**	**GC9a**	**128891**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	5.0	5	10/31/2016 15:49
TPH-Motor Oil (C18-C36)	**47**	25	5	10/31/2016 15:49

Surrogates	REC (%)	Limits	
C9	94	72-114	10/31/2016 15:49

Analyst(s): TK Analytical Comments: e7

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-26/4'	**1610C83-026A**	**Soil**	**10/27/2016 14:15**	**GC9b**	**128891**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	ND	50	50	10/28/2016 23:21
TPH-Motor Oil (C18-C36)	**660**	250	50	10/28/2016 23:21

Surrogates	REC (%)	Limits	
C9	91	72-114	10/28/2016 23:21

Analyst(s): TK Analytical Comments: e7,a3

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-26/8'	**1610C83-027A**	**Soil**	**10/27/2016 14:17**	**GC11B**	**128891**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**56**	20	20	11/01/2016 09:49
TPH-Motor Oil (C18-C36)	**1700**	100	20	11/01/2016 09:49

Surrogates	REC (%)	Limits	
C9	93	72-114	11/01/2016 09:49

Analyst(s): TK Analytical Comments: e7,e2

(Cont.)

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Analytical Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Received:	10/27/16 16:30	**Extraction Method:**	SW3550B
Date Prepared:	10/27/16	**Analytical Method:**	SW8015B
Project:	Caltrans Hegenberger Maintenance Station	**Unit:**	mg/Kg

Total Extractable Petroleum Hydrocarbons w/out SG Clean-Up

Client ID	Lab ID	Matrix	Date Collected	Instrument	Batch ID
SB-26/15	**1610C83-028A**	**Soil**	**10/27/2016 14:20**	**GC9a**	**128891**

Analytes	Result	RL	DF	Date Analyzed
TPH-Diesel (C10-C23)	**2.6**	2.0	2	10/29/2016 02:35
TPH-Motor Oil (C18-C36)	**31**	10	2	10/29/2016 02:35

Surrogates	REC (%)	Limits	
C9	88	72-114	10/29/2016 02:35

Analyst(s): TK Analytical Comments: e7,e2

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Prepared:	10/29/16	**BatchID:**	129016
Date Analyzed:	10/29/16	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	Caltrans Hegenberger Maintenance Station	**Sample ID:**	MB/LCS-129016 1610C83-004CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	11.4	0.50	10	-	114	54-140
Benzene	ND	9.62	0.50	10	-	96	47-158
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	52.6	2.0	40	-	131	42-140
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	10.1	0.50	10	-	101	43-157
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	10.4	0.50	10	-	104	44-155
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	11.8	0.50	10	-	118	66-125
1,1-Dichloroethene	ND	9.52	0.50	10	-	95	47-149
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-

(Cont.)

NELAP 4033ORELAP

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Prepared:	10/29/16	**BatchID:**	129016
Date Analyzed:	10/29/16	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	Caltrans Hegenberger Maintenance Station	**Sample ID:**	MB/LCS-129016 1610C83-004CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
Diisopropyl ether (DIPE)	ND	8.59	0.50	10	-	86	57-136
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	10.7	0.50	10	-	107	55-137
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	11.3	0.50	10	-	113	53-139
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	8.56	0.50	10	-	86	52-137
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	10.7	0.50	10	-	107	43-157
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-

(Cont.)

NELAP 4033ORELAP

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Prepared:	10/29/16	**BatchID:**	129016
Date Analyzed:	10/29/16	**Extraction Method:**	SW5030B
Instrument:	GC18	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	Caltrans Hegenberger Maintenance Station	**Sample ID:**	MB/LCS-129016 1610C83-004CMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	28.2	28.1		25	113	113	70-130
Toluene-d8	22.0	22.4		25	88	89	70-130
4-BFB	3.06	2.95		2.5	122	118	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	12.1	11.9	10	ND	121	119	69-139	1.23	20
Benzene	9.43	9.13	10	ND	94	91	69-141	3.20	20
t-Butyl alcohol (TBA)	53.2	57.4	40	ND	133	143	41-152	7.54	20
Chlorobenzene	9.99	9.62	10	ND	100	96	77-120	3.71	20
1,2-Dibromoethane (EDB)	10.6	10.5	10	ND	106	105	76-135	1.31	20
1,2-Dichloroethane (1,2-DCA)	12.4	11.9	10	ND	124	119	73-139	3.89	20
1,1-Dichloroethene	10.6	10.3	10	1.287	93	103	59-140	2.89	20
Diisopropyl ether (DIPE)	8.55	8.36	10	ND	85	84	72-140	2.21	20
Ethyl tert-butyl ether (ETBE)	11.1	10.9	10	ND	111	109	71-140	2.24	20
Methyl-t-butyl ether (MTBE)	12.3	12.1	10	ND	121	121	73-139	0	20
Toluene	8.27	7.89	10	ND	83	79	71-128	4.74	20
Trichloroethene	10.6	10.2	10	ND	106	102	64-132	3.53	20
Surrogate Recovery									
Dibromofluoromethane	28.8	28.9	25		115	115	73-131	0	20
Toluene-d8	22.2	22.0	25		89	88	72-117	0.881	20
4-BFB	2.93	2.97	2.5		117,F3	119,F3	74-116	1.36	20

(Cont.)

NELAP 4033ORELAP

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Prepared:	10/31/16 - 11/1/16	**BatchID:**	129074
Date Analyzed:	10/31/16 - 11/1/16	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	Caltrans Hegenberger Maintenance Station	**Sample ID:**	MB/LCS-129074 1610B63-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Acetone	ND	-	10	-	-	-	-
tert-Amyl methyl ether (TAME)	ND	10.5	0.50	10	-	105	54-140
Benzene	ND	10.7	0.50	10	-	107	47-158
Bromobenzene	ND	-	0.50	-	-	-	-
Bromochloromethane	ND	-	0.50	-	-	-	-
Bromodichloromethane	ND	-	0.50	-	-	-	-
Bromoform	ND	-	0.50	-	-	-	-
Bromomethane	ND	-	0.50	-	-	-	-
2-Butanone (MEK)	ND	-	2.0	-	-	-	-
t-Butyl alcohol (TBA)	ND	40.6	2.0	40	-	102	42-140
n-Butyl benzene	ND	-	0.50	-	-	-	-
sec-Butyl benzene	ND	-	0.50	-	-	-	-
tert-Butyl benzene	ND	-	0.50	-	-	-	-
Carbon Disulfide	ND	-	0.50	-	-	-	-
Carbon Tetrachloride	ND	-	0.50	-	-	-	-
Chlorobenzene	ND	9.84	0.50	10	-	98	43-157
Chloroethane	ND	-	0.50	-	-	-	-
Chloroform	ND	-	0.50	-	-	-	-
Chloromethane	ND	-	0.50	-	-	-	-
2-Chlorotoluene	ND	-	0.50	-	-	-	-
4-Chlorotoluene	ND	-	0.50	-	-	-	-
Dibromochloromethane	ND	-	0.50	-	-	-	-
1,2-Dibromo-3-chloropropane	ND	-	0.20	-	-	-	-
1,2-Dibromoethane (EDB)	ND	9.83	0.50	10	-	98	44-155
Dibromomethane	ND	-	0.50	-	-	-	-
1,2-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,3-Dichlorobenzene	ND	-	0.50	-	-	-	-
1,4-Dichlorobenzene	ND	-	0.50	-	-	-	-
Dichlorodifluoromethane	ND	-	0.50	-	-	-	-
1,1-Dichloroethane	ND	-	0.50	-	-	-	-
1,2-Dichloroethane (1,2-DCA)	ND	9.99	0.50	10	-	100	66-125
1,1-Dichloroethene	ND	10.7	0.50	10	-	107	47-149
cis-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
trans-1,2-Dichloroethene	ND	-	0.50	-	-	-	-
1,2-Dichloropropane	ND	-	0.50	-	-	-	-
1,3-Dichloropropane	ND	-	0.50	-	-	-	-
2,2-Dichloropropane	ND	-	0.50	-	-	-	-

(Cont.)

NELAP 4033ORELAP

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Prepared:	10/31/16 - 11/1/16	**BatchID:**	129074
Date Analyzed:	10/31/16 - 11/1/16	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	Caltrans Hegenberger Maintenance Station	**Sample ID:**	MB/LCS-129074 1610B63-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
1,1-Dichloropropene	ND	-	0.50	-	-	-	-
cis-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
trans-1,3-Dichloropropene	ND	-	0.50	-	-	-	-
Diisopropyl ether (DIPE)	ND	11.0	0.50	10	-	110	57-136
Ethylbenzene	ND	-	0.50	-	-	-	-
Ethyl tert-butyl ether (ETBE)	ND	10.8	0.50	10	-	108	55-137
Freon 113	ND	-	0.50	-	-	-	-
Hexachlorobutadiene	ND	-	0.50	-	-	-	-
Hexachloroethane	ND	-	0.50	-	-	-	-
2-Hexanone	ND	-	0.50	-	-	-	-
Isopropylbenzene	ND	-	0.50	-	-	-	-
4-Isopropyl toluene	ND	-	0.50	-	-	-	-
Methyl-t-butyl ether (MTBE)	ND	10.3	0.50	10	-	103	53-139
Methylene chloride	ND	-	0.50	-	-	-	-
4-Methyl-2-pentanone (MIBK)	ND	-	0.50	-	-	-	-
Naphthalene	ND	-	0.50	-	-	-	-
n-Propyl benzene	ND	-	0.50	-	-	-	-
Styrene	ND	-	0.50	-	-	-	-
1,1,1,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
1,1,2,2-Tetrachloroethane	ND	-	0.50	-	-	-	-
Tetrachloroethene	ND	-	0.50	-	-	-	-
Toluene	ND	9.47	0.50	10	-	95	52-137
1,2,3-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,2,4-Trichlorobenzene	ND	-	0.50	-	-	-	-
1,1,1-Trichloroethane	ND	-	0.50	-	-	-	-
1,1,2-Trichloroethane	ND	-	0.50	-	-	-	-
Trichloroethene	ND	10.3	0.50	10	-	103	43-157
Trichlorofluoromethane	ND	-	0.50	-	-	-	-
1,2,3-Trichloropropane	ND	-	0.50	-	-	-	-
1,2,4-Trimethylbenzene	ND	-	0.50	-	-	-	-
1,3,5-Trimethylbenzene	ND	-	0.50	-	-	-	-
Vinyl Chloride	ND	-	0.50	-	-	-	-
Xylenes, Total	ND	-	0.50	-	-	-	-

(Cont.)

NELAP 4033ORELAP

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Prepared:	10/31/16 - 11/1/16	**BatchID:**	129074
Date Analyzed:	10/31/16 - 11/1/16	**Extraction Method:**	SW5030B
Instrument:	GC16	**Analytical Method:**	SW8260B
Matrix:	Water	**Unit:**	µg/L
Project:	Caltrans Hegenberger Maintenance Station	**Sample ID:**	MB/LCS-129074 1610B63-001AMS/MSD

QC Summary Report for SW8260B

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
Surrogate Recovery							
Dibromofluoromethane	27.7	27.5		25	111	110	70-130
Toluene-d8	25.3	25.4		25	101	102	70-130
4-BFB	2.38	2.61		2.5	95	104	70-130

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
tert-Amyl methyl ether (TAME)	9.88	10.7	10	ND	99	107	69-139	8.38	20
Benzene	10.0	10.4	10	ND	100	104	69-141	4.01	20
t-Butyl alcohol (TBA)	40.0	44.0	40	ND	100	110	41-152	9.37	20
Chlorobenzene	9.19	9.47	10	ND	92	95	77-120	2.95	20
1,2-Dibromoethane (EDB)	9.87	9.97	10	ND	99	100	76-135	1.05	20
1,2-Dichloroethane (1,2-DCA)	9.16	9.92	10	ND	92	99	73-139	8.04	20
1,1-Dichloroethene	10.2	10.3	10	ND	102	103	59-140	1.14	20
Diisopropyl ether (DIPE)	10.2	11.1	10	ND	102	111	72-140	8.46	20
Ethyl tert-butyl ether (ETBE)	10.2	11.1	10	ND	101	111	71-140	8.68	20
Methyl-t-butyl ether (MTBE)	10.1	10.9	10	ND	101	109	73-139	8.25	20
Toluene	8.64	8.80	10	ND	86	88	71-128	1.89	20
Trichloroethene	9.91	10.0	10	ND	99	100	64-132	1.08	20
Surrogate Recovery									
Dibromofluoromethane	28.0	28.3	25		112	113	73-131	1.04	20
Toluene-d8	24.7	24.8	25		99	99	72-117	0	20
4-BFB	2.42	2.50	2.5		97	100	74-116	3.22	20

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Prepared:	10/31/16	**BatchID:**	129046
Date Analyzed:	11/1/16	**Extraction Method:**	SW3510C/3630C
Instrument:	GC9a	**Analytical Method:**	SW8015B
Matrix:	Water	**Unit:**	µg/L
Project:	Caltrans Hegenberger Maintenance Station	**Sample ID:**	MB/LCS/LCSD-129046

QC Report for SW8015B w/ SG Clean-Up

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	35	-	-	-
TPH-Motor Oil (C18-C36)	ND	75	-	-	-
Surrogate Recovery					
C26	115		125	92	71-134

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	185	248	200	93	124	70-130	29.1	30
Surrogate Recovery								
C26	118	119	125	95	95	71-134	0	30

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Prepared:	10/31/16	**BatchID:**	129044
Date Analyzed:	11/1/16	**Extraction Method:**	SW3510C
Instrument:	GC9a	**Analytical Method:**	SW8015B
Matrix:	Water	**Unit:**	µg/L
Project:	Caltrans Hegenberger Maintenance Station	**Sample ID:**	MB/LCS/LCSD-129044

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	RL	SPK Val	MB SS %REC	MB SS Limits
TPH-Diesel (C10-C23)	ND	35	-	-	-
TPH-Motor Oil (C18-C36)	ND	75	-	-	-
Surrogate Recovery					
C26	110		125	88	70-112

Analyte	LCS Result	LCSD Result	SPK Val	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	166	237	200	83	118	60-142	35.1,F2	30
Surrogate Recovery								
C26	112	117	125	90	93	70-112	3.85	30

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Prepared:	10/27/16	**BatchID:**	128877
Date Analyzed:	10/28/16	**Extraction Method:**	SW3550B/3630C
Instrument:	GC9a	**Analytical Method:**	SW8015B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	Caltrans Hegenberger Maintenance Station	**Sample ID:**	MB/LCS-128877 1610C79-001AMS/MSD

QC Report for SW8015B w/ Silica Gel Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	43.0	1.0	40	-	107	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
Surrogate Recovery							
C9	23.8	24.0		25	95	96	62-139

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	43.5	46.5	40	ND	109	116	70-130	6.69	30
Surrogate Recovery									
C9	24.3	24.6	25		97	99	70-130	1.30	30

(Cont.)

NELAP 4033ORELAP

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Prepared:	10/27/16	**BatchID:**	128893
Date Analyzed:	10/28/16	**Extraction Method:**	SW3550B/3630C
Instrument:	GC9a, GC9b	**Analytical Method:**	SW8015B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	Caltrans Hegenberger Maintenance Station	**Sample ID:**	MB/LCS-128893 1610C83-006AMS/MSD

QC Report for SW8015B w/ Silica Gel Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	44.9	1.0	40	-	112	70-130
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
Surrogate Recovery							
C9	24.0	24.0		25	96	96	62-139

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	41.4	41.7	40	ND	102	103	70-130	0.737	30
Surrogate Recovery									
C9	24.2	24.0	25		97	96	70-130	0.947	30

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Quality Control Report

Client:	GEOCON Env. Consultants	**WorkOrder:**	1610C83
Date Prepared:	10/27/16	**BatchID:**	128891
Date Analyzed:	10/28/16	**Extraction Method:**	SW3550B
Instrument:	GC11B	**Analytical Method:**	SW8015B
Matrix:	Soil	**Unit:**	mg/Kg
Project:	Caltrans Hegenberger Maintenance Station	**Sample ID:**	MB/LCS-128891 1610C84-001AMS/MSD

QC Report for SW8015B w/out SG Clean-Up

Analyte	MB Result	LCS Result	RL	SPK Val	MB SS %REC	LCS %REC	LCS Limits
TPH-Diesel (C10-C23)	ND	44.5	1.0	40	-	111	91-127
TPH-Motor Oil (C18-C36)	ND	-	5.0	-	-	-	-
Surrogate Recovery							
C9	21.9	22.8		25	88	91	74-110

Analyte	MS Result	MSD Result	SPK Val	SPKRef Val	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD Limit
TPH-Diesel (C10-C23)	49.8	57.8	40	9.129	102	122	74-143	14.9	30
Surrogate Recovery									
C9	22.8	23.2	25		91	93	72-114	1.47	30

NELAP 4033ORELAP

QA/QC Officer

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1610C83 **ClientCode: GECL**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☑ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
John Love
GEOCON Env. Consultants
6671 Brisa St
Livermore, CA 94550
(925) 371-5900 FAX: 925-371-5915

Email: love@geoconinc.com; day@geoconinc.co
cc/3rd Party:
PO: E8722-02-01B
ProjectNo: Caltrans Hegenberger Maintenance Station

Bill to:
Accounts Payable
GEOCON Env. Consultants
6671 Brisa St
Livermore, CA 94550

Requested TAT: **5 days;**

Date Received: **10/27/2016**
Date Logged: **10/27/2016**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1610C83-001	SB-30/5'	Soil	10/27/2016 07:35	☐		A	A			A						
1610C83-002	SB-30/8'	Soil	10/27/2016 07:37	☐			A			A						
1610C83-003	SB-30/15'	Soil	10/27/2016 07:40	☐			A			A						
1610C83-004	SB-30 Hydropunch	Water	10/27/2016 08:50	☐	C			A	B							
1610C83-005	SB-25A/3'	Soil	10/27/2016 09:30	☐			A			A						
1610C83-006	SB-25A/8'	Soil	10/27/2016 09:33	☐			A			A						
1610C83-007	SB-25A/10'	Soil	10/27/2016 09:35	☐			A			A						
1610C83-008	SB-25A/15	Soil	10/27/2016 09:40	☐			A			A						
1610C83-009	SB-25A Open Borehole	Water	10/27/2016 10:25	☐	B			A								
1610C83-010	SB-25A Hydropunch	Water	10/27/2016 12:15	☐	C			A	B							
1610C83-011	SB-23A/4'	Soil	10/27/2016 11:52	☐			A			A						
1610C83-012	SB-23A/8'	Soil	10/27/2016 11:54	☐			A			A						
1610C83-013	SB-23A/15'	Soil	10/27/2016 12:00	☐			A			A						
1610C83-014	SB-23A Open Borehole	Water	10/27/2016 13:10	☐	C			A	B							
1610C83-015	SB-23A Hydropunch	Water	10/27/2016 13:05	☐	C			A	B							

Test Legend:

1	8260B_W	2	PREDF REPORT	3	TPH(DMO)_S	4	TPH(DMO)LV_W
5	TPH(DMO)LVWSG_W	6	TPH(DMO)WSG_S	7		8	
9		10		11		12	

Prepared by: Briana Cutino

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 1610C83 **ClientCode: GECL**

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Report to:
John Love
GEOCON Env. Consultants
6671 Brisa St
Livermore, CA 94550
(925) 371-5900 FAX: 925-371-5915

Email: love@geoconinc.com; day@geoconinc.co
cc/3rd Party:
PO: E8722-02-01B
ProjectNo: Caltrans Hegenberger Maintenance Station

Bill to:
Accounts Payable
GEOCON Env. Consultants
6671 Brisa St
Livermore, CA 94550

Requested TAT: **5 days;**

Date Received: **10/27/2016**
Date Logged: **10/27/2016**

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1610C83-016	SB-29/4'	Soil	10/27/2016 08:10	☐			A			A						
1610C83-017	SB-29/8'	Soil	10/27/2016 08:12	☐			A			A						
1610C83-018	SB-29/15'	Soil	10/27/2016 08:16	☐			A			A						
1610C83-019	SB-29/20'	Soil	10/27/2016 08:25	☐			A			A						
1610C83-020	SB-29 Open Borehole	Water	10/27/2016 08:40	☐	C			A	B							
1610C83-021	SB-29 Hydropunch	Water	10/27/2016 10:30	☐	B			A								
1610C83-022	SB-24A/4'	Soil	10/27/2016 11:30	☐			A			A						
1610C83-023	SB-24A/8'	Soil	10/27/2016 11:25	☐			A			A						
1610C83-024	SB-24A Open Borehole	Water	10/27/2016 13:30	☐	C			A	B							
1610C83-025	SB-24A Hydropunch	Water	10/27/2016 13:40	☐	C			A	B							
1610C83-026	SB-26/4'	Soil	10/27/2016 14:15	☐			A			A						
1610C83-027	SB-26/8'	Soil	10/27/2016 14:17	☐			A			A						
1610C83-028	SB-26/15	Soil	10/27/2016 14:20	☐			A			A						
1610C83-029	SB-26 Open Borehole	Water	10/27/2016 14:45	☐	C			A	B							
1610C83-030	SB-26 Hydropunch	Water	10/27/2016 14:55	☐	C			A	B							

Test Legend:

1	8260B_W	2	PREDF REPORT	3	TPH(DMO)_S	4	TPH(DMO)LV_W
5	TPH(DMO)LVWSG_W	6	TPH(DMO)WSG_S	7		8	
9		10		11		12	

Prepared by: Briana Cutino

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

WORK ORDER SUMMARY

Client Name: GEOCON ENV. CONSULTANTS **Project:** Caltrans Hegenberger Maintenance Station **Work Order:** 1610C83
Client Contact: John Love **QC Level:** LEVEL 2
Contact's Email: love@geoconinc.com; day@geoconinc.com **Comments:** **Date Logged:** 10/27/2016

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1610C83-001A	SB-30/5'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	10/27/2016 7:35	5 days		☐	
			SW8015B (Diesel & Motor Oil)			☐		5 days		☐	
1610C83-002A	SB-30/8'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	10/27/2016 7:37	5 days		☐	
			SW8015B (Diesel & Motor Oil)			☐		5 days		☐	
1610C83-003A	SB-30/15'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	10/27/2016 7:40	5 days		☐	
			SW8015B (Diesel & Motor Oil)			☐		5 days		☐	
1610C83-004A	SB-30 Hydropunch	Water	SW8015B (TPH-d,mo)	1	1LA	☐	10/27/2016 8:50	5 days	10%+	☐	
1610C83-004B	SB-30 Hydropunch	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	1LA	☐	10/27/2016 8:50	5 days	10%+	☐	
1610C83-004C	SB-30 Hydropunch	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	10/27/2016 8:50	5 days	10%+	☐	
1610C83-005A	SB-25A/3'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	10/27/2016 9:30	5 days		☐	
			SW8015B (Diesel & Motor Oil)			☐		5 days		☐	
1610C83-006A	SB-25A/8'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	10/27/2016 9:33	5 days		☐	
			SW8015B (Diesel & Motor Oil)			☐		5 days		☐	
1610C83-007A	SB-25A/10'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	10/27/2016 9:35	5 days		☐	
			SW8015B (Diesel & Motor Oil)			☐		5 days		☐	
1610C83-008A	SB-25A/15	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	10/27/2016 9:40	5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

WORK ORDER SUMMARY

Client Name: GEOCON ENV. CONSULTANTS **Project:** Caltrans Hegenberger Maintenance Station **Work Order:** 1610C83
Client Contact: John Love **QC Level:** LEVEL 2
Contact's Email: love@geoconinc.com; day@geoconinc.com **Comments:** **Date Logged:** 10/27/2016

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1610C83-008A	SB-25A/15	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	☐	10/27/2016 9:40	5 days		☐	
1610C83-009A	SB-25A Open Borehole	Water	SW8015B (TPH-d,mo)	1	1LA	☐	10/27/2016 10:25	5 days	10%+	☐	
1610C83-009B	SB-25A Open Borehole	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	10/27/2016 10:25	5 days	10%+	☐	
1610C83-010A	SB-25A Hydropunch	Water	SW8015B (TPH-d,mo)	1	1LA	☐	10/27/2016 12:15	5 days	10%+	☐	
1610C83-010B	SB-25A Hydropunch	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	1LA	☐	10/27/2016 12:15	5 days	10%+	☐	
1610C83-010C	SB-25A Hydropunch	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	10/27/2016 12:15	5 days	10%+	☐	
1610C83-011A	SB-23A/4'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	10/27/2016 11:52	5 days		☐	
			SW8015B (Diesel & Motor Oil)			☐		5 days		☐	
1610C83-012A	SB-23A/8'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	10/27/2016 11:54	5 days		☐	
			SW8015B (Diesel & Motor Oil)			☐		5 days		☐	
1610C83-013A	SB-23A/15'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	10/27/2016 12:00	5 days		☐	
			SW8015B (Diesel & Motor Oil)			☐		5 days		☐	
1610C83-014A	SB-23A Open Borehole	Water	SW8015B (TPH-d,mo)	1	1LA	☐	10/27/2016 13:10	5 days	10%+	☐	
1610C83-014B	SB-23A Open Borehole	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	1LA	☐	10/27/2016 13:10	5 days		☐	
1610C83-014C	SB-23A Open Borehole	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	10/27/2016 13:10	5 days		☐	
1610C83-015A	SB-23A Hydropunch	Water	SW8015B (TPH-d,mo)	1	1LA	☐	10/27/2016 13:05	5 days	10%+	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

WORK ORDER SUMMARY

Client Name: GEOCON ENV. CONSULTANTS **Project:** Caltrans Hegenberger Maintenance Station **Work Order:** 1610C83
Client Contact: John Love **QC Level:** LEVEL 2
Contact's Email: love@geoconinc.com; day@geoconinc.com **Comments:** **Date Logged:** 10/27/2016

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1610C83-015B	SB-23A Hydropunch	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	1LA	☐	10/27/2016 13:05	5 days	10%+	☐	
1610C83-015C	SB-23A Hydropunch	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	10/27/2016 13:05	5 days	10%+	☐	
1610C83-016A	SB-29/4'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	10/27/2016 8:10	5 days		☐	
			SW8015B (Diesel & Motor Oil)			☐		5 days		☐	
1610C83-017A	SB-29/8'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	10/27/2016 8:12	5 days		☐	
			SW8015B (Diesel & Motor Oil)			☐		5 days		☐	
1610C83-018A	SB-29/15'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	10/27/2016 8:16	5 days		☐	
			SW8015B (Diesel & Motor Oil)			☐		5 days		☐	
1610C83-019A	SB-29/20'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	10/27/2016 8:25	5 days		☐	
			SW8015B (Diesel & Motor Oil)			☐		5 days		☐	
1610C83-020A	SB-29 Open Borehole	Water	SW8015B (TPH-d,mo)	1	1LA	☐	10/27/2016 8:40	5 days	10%+	☐	
1610C83-020B	SB-29 Open Borehole	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	1LA	☐	10/27/2016 8:40	5 days	10%+	☐	
1610C83-020C	SB-29 Open Borehole	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	10/27/2016 8:40	5 days	10%+	☐	
1610C83-021A	SB-29 Hydropunch	Water	SW8015B (TPH-d,mo)	1	1LA	☐	10/27/2016 10:30	5 days	Present	☐	
1610C83-021B	SB-29 Hydropunch	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	10/27/2016 10:30	5 days	Present	☐	
1610C83-022A	SB-24A/4'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	10/27/2016 11:30	5 days		☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

WORK ORDER SUMMARY

Client Name: GEOCON ENV. CONSULTANTS **Project:** Caltrans Hegenberger Maintenance Station **Work Order:** 1610C83
Client Contact: John Love **QC Level:** LEVEL 2
Contact's Email: love@geoconinc.com; day@geoconinc.com **Comments:** **Date Logged:** 10/27/2016

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1610C83-022A	SB-24A/4'	Soil	SW8015B (Diesel & Motor Oil)	1	Acetate Liner	☐	10/27/2016 11:30	5 days		☐	
1610C83-023A	SB-24A/8'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	10/27/2016 11:25	5 days		☐	
			SW8015B (Diesel & Motor Oil)			☐		5 days		☐	
1610C83-024A	SB-24A Open Borehole	Water	SW8015B (TPH-d,mo)	1	1LA	☐	10/27/2016 13:30	5 days	Present	☐	
1610C83-024B	SB-24A Open Borehole	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	1LA	☐	10/27/2016 13:30	5 days	Present	☐	
1610C83-024C	SB-24A Open Borehole	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	10/27/2016 13:30	5 days	Present	☐	
1610C83-025A	SB-24A Hydropunch	Water	SW8015B (TPH-d,mo)	1	1LA	☐	10/27/2016 13:40	5 days	10%+	☐	
1610C83-025B	SB-24A Hydropunch	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	1LA	☐	10/27/2016 13:40	5 days	10%+	☐	
1610C83-025C	SB-24A Hydropunch	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	10/27/2016 13:40	5 days	10%+	☐	
1610C83-026A	SB-26/4'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	10/27/2016 14:15	5 days		☐	
			SW8015B (Diesel & Motor Oil)			☐		5 days		☐	
1610C83-027A	SB-26/8'	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	10/27/2016 14:17	5 days		☐	
			SW8015B (Diesel & Motor Oil)			☐		5 days		☐	
1610C83-028A	SB-26/15	Soil	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	Acetate Liner	☐	10/27/2016 14:20	5 days		☐	
			SW8015B (Diesel & Motor Oil)			☐		5 days		☐	
1610C83-029A	SB-26 Open Borehole	Water	SW8015B (TPH-d,mo)	1	1LA	☐	10/27/2016 14:45	5 days	Present	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

WORK ORDER SUMMARY

Client Name: GEOCON ENV. CONSULTANTS
Client Contact: John Love
Contact's Email: love@geoconinc.com; day@geoconinc.com

Project: Caltrans Hegenberger Maintenance Station
Comments:

Work Order: 1610C83
QC Level: LEVEL 2
Date Logged: 10/27/2016

☐ WaterTrax ☐ WriteOn ☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

Lab ID	Client ID	Matrix	Test Name	Containers /Composites	Bottle & Preservative	De-chlorinated	Collection Date & Time	TAT	Sediment Content	Hold	SubOut
1610C83-029B	SB-26 Open Borehole	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	1LA	☐	10/27/2016 14:45	5 days	Present	☐	
1610C83-029C	SB-26 Open Borehole	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	10/27/2016 14:45	5 days	Present	☐	
1610C83-030A	SB-26 Hydropunch	Water	SW8015B (TPH-d,mo)	1	1LA	☐	10/27/2016 14:55	5 days	Present	☐	
1610C83-030B	SB-26 Hydropunch	Water	SW8015B (TPH-d,mo w/ S.G. Clean-Up)	1	1LA	☐	10/27/2016 14:55	5 days	Present	☐	
1610C83-030C	SB-26 Hydropunch	Water	SW8260B (VOCs)	2	VOA w/ HCl	☐	10/27/2016 14:55	5 days	Present	☐	

NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).

- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.

General COC

MAI Work Order # 1610C83

McCAMPBELL ANALYTICAL, INC.

1534 Willow Pass Rd. Pittsburg, Ca. 94565-1701
Telephone: (877) 252-9262 / Fax: (925) 252-9269
www.mccampbell.com main@mccampbell.com

CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush | 2 Day Rush | 3 Day Rush | STD ● | Quote #
J-Flag / MDL | ESL | Cleanup Approved | Bottle Order #
Delivery Format: GeoTracker EDF ● | PDF ● | EDD | Write On (DW) | EQuIS

Report To: John Love | Bill To: same
Company: Geocon Consultants, Inc.
Email: love@geoconinc.com
Alt Email: day@geoconinc.com | Tele: 925-371-5900
Project Name/#: Caltrans Hegenberger Maintenance Station
Project Location: Oakland, CA | PO # E8722-02-01B
Sampler Signature:

Analysis Requested

SAMPLE ID Location / Field Point	Sampling Date	Sampling Time	#Containers	Matrix	Preservative	TPHd / TPHmo EPA 8015	TPHd / TPHmo w /silica gel cleanup	VOCs EPA 8260B
SB-30 / 5'	10/27/16	7:35	1	soil	none	●	●	
SB-30 / 8'		7:37	1	soil	none	●	●	
SB-30 / 15'		7:40	1	soil	none	●	●	
SB-30 /			1	soil	none	●	●	
SB-30 /			1	soil	none	●	●	
SB-30 Open Borehole			1		none	●	●	
SB-30 Open Borehole			2	GW	HCl			●
SB-30 Hydropunch		8:50	2	GW	none	●	●	
SB-30 Hydropounch		8:50	2	GW	HCl			●

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Comments / Instructions

Global ID # T0600101696

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
[signature] / Geocon	10/27	10:30	[signature]		

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other

Preservative Code: 1=4°C 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=ZnOAc/NaOH 7=None

Temp 5.2 °C Initials [initials]

General COC

MAI Work Order # _____

McCAMPBELL ANALYTICAL, INC.

1534 Willow Pass Rd. Pittsburg, Ca. 94565-1701
Telephone: (877) 252-9262 / Fax: (925) 252-9269
www.mccampbell.com main@mccampbell.com

CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush | 2 Day Rush | 3 Day Rush | STD ● | Quote #
J-Flag / MDL | ESL | Cleanup Approved | Bottle Order #
Delivery Format: GeoTracker EDF ● | PDF ● | EDD | Write On (DW) | EQuIS

Report To: John Love | Bill To: same
Company: Geocon Consultants, Inc.
Email: love@geoconinc.com
Alt Email: day@geoconinc.com | Tele: 925-371-5900
Project Name/#: Caltrans Hegenberger Maintenance Station
Project Location: Oakland, CA | PO # E8722-02-01B
Sampler Signature:

Analysis Requested

SAMPLE ID Location / Field Point	Sampling Date	Sampling Time	#Containers	Matrix	Preservative	TPHd / TPHmo EPA 8015	TPHd / TPHmo w /silica gel cleanup	VOCs EPA 8260B
SB-25A / 3'	10/27/16	9:30	1	soil	none	●	●	
SB-25A / 8'		9:33	1	soil	none	●	●	
SB-25A / 10'		9:35	1	soil	none	●	●	
SB-25A / 15'		9:40	1	soil	none	●	●	
~~SB-25A /~~			1	soil	none	●	●	
SB-25A Open Borehole		10:25	1	GW	none	●	[illegible]	
SB-25A Open Borehole		10:00	2	GW	HCl			●
SB-25A Hydropunch		12:15	2	GW	none	●	●	
SB-25A Hydropounch	↓	11:45	2	GW	HCl			●

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
[signature] / Geocon	10/27	16:30	[signature]		

Comments / Instructions

Global ID # T0600101696

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other

Preservative Code: 1=4°C 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=ZnOAc/NaOH 7=None

Temp _____ °C Initials _____

Page ___ of ___

General COC

MAI Work Order # _____

McCAMPBELL ANALYTICAL, INC.

1534 Willow Pass Rd. Pittsburg, Ca. 94565-1701
Telephone: (877) 252-9262 / Fax: (925) 252-9269
www.mccampbell.com main@mccampbell.com

CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush | 2 Day Rush | 3 Day Rush | STD ● | Quote #
J-Flag / MDL | ESL | Cleanup Approved | Bottle Order #
Delivery Format: GeoTracker EDF ● | PDF ● | EDD | Write On (DW) | EQuIS

Report To: John Love | Bill To: same
Company: Geocon Consultants, Inc.
Email: love@geoconinc.com
Alt Email: day@geoconinc.com | Tele: 925-371-5900
Project Name/#: Caltrans Hegenberger Maintenance Station
Project Location: Oakland, CA | PO # E8722-02-01B
Sampler Signature:

Analysis Requested

SAMPLE ID Location / Field Point	Sampling Date	Sampling Time	#Containers	Matrix	Preservative	TPHd / TPHmo EPA 8015	TPHd / TPHmo w /silica gel cleanup	VOCs EPA 8260B
SB-23A / 4'	10/27/16	11:52	1	soil	none	●	●	
SB-23A / 8'		11:54	1	soil	none	●	●	
SB-23A / 15'		12:00	1	soil	none	●	●	
~~SB-23A /~~			1	soil	none	●	●	
~~SB-23A /~~			1	soil	none	●	●	
SB-23A Open Borehole		13:10	2	GW	none	●	●	
SB-23A Open Borehole		13:10	2	GW	HCl			●
SB-23A Hydropunch		13:05	2	GW	none	●	●	
SB-23A Hydropounch		13:05	2	GW	HCl			●

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
/ Geocon	10/27	16:30			

Comments / Instructions

Global ID # T0600101696

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other

Preservative Code: 1=4°C 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=ZnOAc/NaOH 7=None

Temp _____ °C Initials _____

General COC

MAI Work Order # _____

McCAMPBELL ANALYTICAL, INC.

1534 Willow Pass Rd. Pittsburg, Ca. 94565-1701
Telephone: (877) 252-9262 / Fax: (925) 252-9269
www.mccampbell.com main@mccampbell.com

CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush | 2 Day Rush | 3 Day Rush | STD ● | Quote #
J-Flag / MDL | ESL | Cleanup Approved | Bottle Order #
Delivery Format: GeoTracker EDF ● | PDF ● | EDD | Write On (DW) | EQuIS

Report To: John Love | Bill To: same
Company: Geocon Consultants, Inc.
Email: love@geoconinc.com
Alt Email: day@geoconinc.com | Tele: 925-371-5900
Project Name/#: Caltrans Hegenberger Maintenance Station
Project Location: Oakland, CA | PO # E8722-02-01B
Sampler Signature:

Analysis Requested

SAMPLE ID Location / Field Point	Sampling Date	Sampling Time	#Containers	Matrix	Preservative	TPHd / TPHmo EPA 8015	TPHd / TPHmo w /silica gel cleanup	VOCs EPA 8260B
SB-29 / 4'	10/27/16	8:10	1	soil	none	●	●	
SB-29 / 8'		8:12	1	soil	none	●	●	
SB-29 / 15'		8:16	1	soil	none	●	●	
SB-29 / 20'		8:25	1	soil	none	●	●	
SB-29			1	soil	none	●	●	
SB-29 Open Borehole		8:40	2	GW	none	●	●	
SB-29 Open Borehole		8:40	2	GW	HCl			●
SB-29 Hydropunch		10:45	1	GW	none	●		
SB-29 Hydropounch		10:30	2	GW	HCl			●

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
Geocon	10/27	16:30			

Comments / Instructions

Global ID # T0600101696

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other

Preservative Code: 1=4°C 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=ZnOAc/NaOH 7=None

Temp _____ °C Initials _____

Page ___ of ___

MAI Work Order # _____

McCAMPBELL ANALYTICAL, INC.

1534 Willow Pass Rd. Pittsburg, Ca. 94565-1701
Telephone: (877) 252-9262 / Fax: (925) 252-9269
www.mccampbell.com main@mccampbell.com

CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush | 2 Day Rush | 3 Day Rush | STD ● | Quote #
J-Flag / MDL | ESL | Cleanup Approved | Bottle Order #
Delivery Format: GeoTracker EDF ● | PDF ● | EDD | Write On (DW) | EQuIS

Report To: John Love | Bill To: same
Company: Geocon Consultants, Inc.
Email: love@geoconinc.com
Alt Email: day@geoconinc.com | Tele: 925-371-5900
Project Name/#: Caltrans Hegenberger Maintenance Station
Project Location: Oakland, CA | PO # E8722-02-01B
Sampler Signature:

Analysis Requested

SAMPLE ID Location / Field Point	Sampling Date	Sampling Time	#Containers	Matrix	Preservative	TPHd / TPHmo EPA 8015	TPHd / TPHmo w /silica gel cleanup	VOCs EPA 8260B
SB-24A / 4'	10/27/16	11:30	1	soil	none	●	●	
SB-24A / 8'		11:25	1	soil	none	●	●	
SB-24A /			1	soil	none	●	●	
SB-24A /			1	soil	none	●	●	
SB-24A /			1	soil	none	●	●	
SB-24A Open Borehole		13:30	2	GW	none	●	●	
SB-24A Open Borehole		13:30	2	GW	HCl			●
SB-24A Hydropunch		13:40	2	GW	none	●	●	
SB-24A Hydropounch		13:40	2	GW	HCl			●

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
Geocon	10/27	16:30			

Comments / Instructions

Global ID # T0600101696

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other

Preservative Code: 1=4°C 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=ZnOAc/NaOH 7=None

Temp _____ °C Initials _____

General COC

MAI Work Order # _____

McCAMPBELL ANALYTICAL, INC.

1534 Willow Pass Rd. Pittsburg, Ca. 94565-1701

Telephone: (877) 252-9262 / Fax: (925) 252-9269

www.mccampbell.com main@mccampbell.com

CHAIN OF CUSTODY RECORD

Turn Around Time: 1 Day Rush | 2 Day Rush | 3 Day Rush | STD ● | Quote #

J-Flag / MDL | ESL | Cleanup Approved | Bottle Order #

Delivery Format: GeoTracker EDF ● | PDF ● | EDD | Write On (DW) | EQuIS

Report To: John Love | Bill To: same

Company: Geocon Consultants, Inc.

Email: love@geoconinc.com

Alt Email: day@geoconinc.com | Tele: 925-371-5900

Project Name/#: Caltrans Hegenberger Maintenance Station

Project Location: Oakland, CA | PO # E8722-02-01B

Sampler Signature:

Analysis Requested

SAMPLE ID Location / Field Point	Sampling Date	Sampling Time	#Containers	Matrix	Preservative	TPHd / TPHmo EPA 8015	TPHd / TPHmo w /silica gel cleanup	VOCs EPA 8260B
SB-26 / 4'	10/27/16	14:15	1	soil	none	●	●	
SB-26 / 8'		14:17	1	soil	none	●	●	
SB-26 / 15'		14:20	1	soil	none	●	●	
~~SB-26~~			~~1~~	~~soil~~	~~none~~	●	●	
~~SB-26~~			1	soil	none	●	●	
SB-26 Open Borehole		14:45	2	GW	none	●	●	
SB-26 Open Borehole		14:45	2	GW	HCl			●
SB-26 Hydropunch		14:55	2	GW	none	●	●	
SB-26 Hydropounch	↓	14:55	2	GW	HCl			●

MAI clients MUST disclose any dangerous chemicals known to be present in their submitted samples in concentrations that may cause immediate harm or serious future health endangerment as a result of brief, gloved, open air, sample handling by MAI staff. Non-disclosure incurs an immediate $250 surcharge and the client is subject to full legal liability for harm suffered. Thank you for your understanding and for allowing us to work safely.

* If metals are requested for water samples and the water type (Matrix) is not specified on the chain of custody, MAI will default to metals by E200.8.

Please provide an adequate volume of sample. If the volume is not sufficient for a MS/MSD a LCS/LCSD will be prepared in its place and noted in the report.

Relinquished By / Company Name	Date	Time	Received By / Company Name	Date	Time
Geocon	10/27	16:30			

Comments / Instructions

Global ID # T0600101696

Matrix Code: DW=Drinking Water, GW=Ground Water, WW=Waste Water, SW=Seawater, S=Soil, SL=Sludge, A=Air, WP=Wipe, O=Other

Preservative Code: 1=4°C 2=HCl 3=H_2SO_4 4=HNO_3 5=NaOH 6=ZnOAc/NaOH 7=None

Temp _____ °C Initials _____

Page ___ of ___

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

Sample Receipt Checklist

Client Name:	**GEOCON Env. Consultants**	Date and Time Received	**10/27/2016 16:30**
Project Name:	**Caltrans Hegenberger Maintenance Station**	Date Logged:	**10/27/2016**
		Received by:	Briana Cutino
WorkOrder №:	**1610C83** Matrix: Soil/Water	Logged by:	Briana Cutino
Carrier:	Client Drop-In		

Chain of Custody (COC) Information

Chain of custody present?	Yes	☑	No	☐	
Chain of custody signed when relinquished and received?	Yes	☑	No	☐	
Chain of custody agrees with sample labels?	Yes	☑	No	☐	
Sample IDs noted by Client on COC?	Yes	☑	No	☐	
Date and Time of collection noted by Client on COC?	Yes	☑	No	☐	
Sampler's name noted on COC?	Yes	☑	No	☐	

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes	☐	No	☐	NA ☑
Shipping container/cooler in good condition?	Yes	☑	No	☐	
Samples in proper containers/bottles?	Yes	☑	No	☐	
Sample containers intact?	Yes	☑	No	☐	
Sufficient sample volume for indicated test?	Yes	☑	No	☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes	☑	No	☐	
Sample/Temp Blank temperature	Temp: 5.2°C				NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes	☑	No	☐	NA ☐
Sample labels checked for correct preservation?	Yes	☑	No	☐	
pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)?	Yes	☐	No	☐	NA ☑
Samples Received on Ice?	Yes	☑	No	☐	
	(Ice Type: WET ICE)				

UCMR3 Samples:

Total Chlorine tested and acceptable upon receipt for EPA 522?	Yes	☐	No	☐	NA ☑
Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539?	Yes	☐	No	☐	NA ☑

Comments:

APPENDIX D

December 9, 2016

Mr. Keith Nowell
Alameda County Health Care Services
Environmental Protection Division
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Reference: Ecological Risk Evaluation Report
Former Hegenberger Maintenance Station
555 Hegenberger Road
Oakland, California

Dear Mr. Nowell:

Attached for your review is the *Ecological Risk Evaluation Report* for the Former Hegenberger Maintenance Station located at 555 Hegenberger Road in Oakland, California. This workplan was prepared for the Alameda County Health Care Services Environmental Protection Division by Geocon Consultants, Inc.

I declare under penalty of perjury, that the information and/or recommendations contained in the referenced report is true and correct, to the best of my knowledge.

If you have any questions, please don't hesitate to contact me or Geocon project manager John Love at (925) 371-5900 extension 407.

Sincerely,

Ray Boyer

Ray Boyer, P.E.
Office of Environmental Engineering
Division of Planning & Engineering
Caltrans District 4