RO-371

GETTLER-RYAN INC.

TRANSMITTAL

TO: Mr. David B. De Witt
ConocoPhillips
2000 Crow Canyon Place, Suite 400
San Ramon, California 94583

DATE: November 26, 2002
PROJ:#: 140106.06-2
SUBJECT: Report
Former Tosco Station No. 7004
15599 Hesperian Boulevard
San Leandro, California

FROM:
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Enclosed is one copy of the referenced Report. If you have any questions, please call me at (707) 789-3255.

cc Mr. Scott Seery - Alameda County Environmental Health Services - 1131 Harbor Bay Parkway, 2nd Floor, Alameda, CA 94502
Mr. Chuck Headlee. RWQCB, 1515 Clay Street, Suite 1400 Oakland CA, 94612.
Mr. Mike Bakaldin , San Leandro Environmental Services Division, 835 East 14th Street, San Leandro CA, 94577.

RO-371

GETTLER-RYAN INC.

SUBSURFACE INVESTIGATION REPORT

for

Former Tosco (76) Service Station No. No. 7004
15599 Hesperian Boulevard
San Leandro, California

Report No. 140106.06-2

Prepared for:

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STATE OF CALIFORNIA

November 26, 2002

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SUBSURFACE INVESTIGATION REPORT

for

Former Tosco (76) Service Station No. 7004
15599 Hesperian Boulevard
San Leandro, California

Report No.140106.06-2

1.0 INTRODUCTION

This report summarizes the results of the most recent subsurface investigation performed by Gettler-Ryan Inc. (GR) at the subject site. The work was performed at the request of Tosco Corporation (Tosco), a subsidiary of ConocoPhillips, and was originally proposed in GR's *Work Plan for Subsurface Investigation*, dated September 9, 2002. The work plan was approved in a letter from the Alameda County Environmental Health Services (ACEHS) to Tosco dated August 27, 2002. The purpose of this investigation was to further define the degree and extent of petroleum hydrocarbon-impacted groundwater in the vicinity of monitoring well MW-3, and to determine if the hydrocarbon-impacted groundwater is limited to the immediate vicinity of MW-3. Well MW-3 contains elevated concentrations of petroleum hydrocarbons, whereas the remaining wells at the site contain very low to non-detectable concentrations.

Additionally, soil and groundwater samples were collected and analyzed for chemical and physical parameters to allow a Risk-Based Corrective Action (RBCA) to be prepared. The results of the RBCA will be used to determine if a human health risk exists from the impacted groundwater beneath the existing onsite building. If the RBCA output determines that no human health risk exists, then GR and Tosco will submit the RBCA and request case closure from the ACEHS.

The scope of work for this investigation included: preparing a site-specific safety plan; obtaining the required permits; advancing five geoprobe soil borings; collecting and submitting selected soil and grab groundwater samples for chemical and physical analysis; and preparing a report summarizing the procedures and findings of the investigation.

2.0 SITE DESCRIPTION

2.1 General

The subject site is a former service station located on the northwest corner of the intersection of Hesperian Boulevard and Lewelling Boulevard in San Leandro, California (Figure 1). The site is a paved parking lot located within a Target Department Store complex and immediately adjacent to a former Kragen Auto Parts store. The site was formerly a Gemco Department Store and Service Station dispensing petroleum fuel prior to the purchase by Target. Operation of a facility dispensing 76 branded products was initiated in 1984. The subject site was most recently a 76 branded Service Station with two gasoline underground storage tanks (USTs), two fuel dispenser islands, and a station kiosk. All aboveground and subsurface facilities related to the service station have been removed. A total of six groundwater monitoring wells and one aquifer test/recovery well exist at and around the site. The nearest surface water body is San Lorenzo Creek located approximately 800 feet south of the site. Topography in the site vicinity is flat-lying, at an elevation of approximately 38 feet above mean sea level (MSL). Former locations of pertinent site features are shown on Figure 2.

2.2 Previous Environmental Work

1990 -Removal of three gasoline USTs, and the associated product piping. Overexcavation and offsite disposal of 1,600 cubic yards of impacted soil. Removal and offsite disposal of 5,000 gallons of groundwater from the UST pit. Installation of three 2-inch diameter groundwater monitoring wells (MW-1 through MW-3). Initiation of quarterly monitoring and sampling.

1991 -Installation of three additional 2-inch diameter groundwater monitoring wells (MW-4 through MW-6).

1992 -Installation of one 6-inch diameter groundwater recovery well (RW-1).

1996 -Installation of Oxygen Releasing Compound (ORC) in monitoring well MW-5).

1999 -Removal of ORC from monitoring well MW-5.

2000 -Removal of two gasoline USTs and the associated product piping. Installation of 360 pounds of ORC slurry in the bottom of the UST pit. Demolition of all above ground structures.

2001 -Well search performed by GR. Continuation of semi-annual groundwater monitoring and sampling.

2001 -Submittal of *Transmittal of Well Survey Results, Site Information Summary, and Request for Closure* by GR dated September 11, 2001.

2.3 Geology and Hydrogeology

Based on review of regional geological maps (U.S. Geological Survey Professional Paper 943 "Flatland Deposits of the San Francisco Day Region, California – Their Geology and Engineering Properties and their importance to Comprehensive Planning, " by E.J. Helley and K.R. Lajoie, 1979), the subject site is underlain by Holocene aged coarse -grained alluvium. This alluvium is described as typically consisting of unconsolidated, moderately sorted, permeable sand and silt, with a thickness ranging from less than 10 feet to as much as 50 feet.

Based on the results of previous subsurface studies, the site and vicinity are underlain by clayey and gravelly fill material to a depth of 1.5 to 5.5 feet below ground surface (bgs). The fill is in turn underlain by alluvium to the maximum explored depth of 29.5 feet bgs. This alluvium consists of interbedded silt and clay with two somewhat laterally continuous sand units. The sand units are located at approximately 8 to 12 feet bgs (unsaturated) and 15 to 23 feet bgs (saturated). These units are comprised of sand, silty sand and clayey sand.

Depth to groundwater has historically fluctuated between approximately 12 and 18 feet bgs. Groundwater flow direction has ranged toward west-southwest to west-northwest at a hydraulic gradient of 0.006 to 0.017 feet/feet.

3.0 FIELD WORK

Field work was conducted in accordance with GR's Field Methods and Procedures (Appendix A), the GR Health and Safety Plan and Site Safety Plan dated September 6, 2002. Soil borings were advanced under drilling permit number W02-0887, issued September 10, 2002, by the Alameda County Public Works Agency (ACPWA). A copy of the permit is included in Appendix B.

Underground Service Alert (USA) was notified prior to drilling at the site. As a precautionary measure, a private utility locator was contracted to identify utilities near the proposed boring locations. The borings were hand excavated, with a 3 inch diameter hand auger, for the first five feet bgs to insure that no utilities were disturbed.

3.1 Geoprobe® Advancement

On September 20, 2002, a GR geologist observed Gregg Drilling Inc. (C57 #485165) advance five Geoprobes® (G-1 through G-5) at the locations shown on Figure 2. Four of the Geoprobes were advanced with a truck mounted rig. One Geoprobe (G-5) was advanced with a portable rig which was temporarily anchored to the concrete floor inside the former Kragen Auto Store. The Geoprobes were advanced to 20 feet bgs. Soil sampling for lithologic logging was conducted continuously beginning at 5 feet bgs. Soil samples from selected depths were collected for

chemical analysis. The soil samples were handled in accordance with GR's Field Methods and Procedures (Appendix A). The GR geologist prepared logs of the Geoprobes and screened the samples in the field for the presence of volatile organic compounds. Screening data and the depths at which soil and groundwater samples were collected are presented on the boring logs in Appendix B.

3.2 Groundwater Sampling

Grab groundwater samples were collected from each Geoprobe with disposable teflon bailers through temporary well casings. The samples were decanted into the appropriate laboratory-supplied containers, as described in GR's field methods and procedures (Appendix A).

3.3 Borehole Sealing

After probing and sampling were completed, the boreholes were sealed with cement grout. The grout was placed from the bottom of the boring to approximately one foot bgs with a tremie pipe. The boreholes were finished to surface grade with cold patch asphaltic concrete (AC).

3.4 Waste Disposal

Drill cuttings were placed in one D.O.T. approved labeled 55-gallon drum and stored onsite pending disposal. One four part composite sample, Comp-1(A,B,C,D), was collected from the drill cuttings and submitted to the laboratory for analysis and disposal characterization. The analytical results, from the composite soil samples, were submitted to Allied Waste's Forward landfill in Manteca. Upon approval the soil will be removed from the site and transported to the landfill by a California-licensed hazardous waste hauler.

3.5 Laboratory Analysis

Selected soil and all groundwater samples were submitted to Sequoia Analytical in Sacramento California (ELAP #1624). The samples were analyzed for: Total Petroleum Hydrocarbons as gasoline (TPHg); benzene, toluene, ethylbenzene, xylenes (BTEX); methyl tertiary butyl ether (MtBE); ethanol; tert-butyl alcohol (TBA); di-isopropyl ether (DIPE); ethyl tert-butyl ether (ETBE); 1,2-dichloroethane (1,2 DCA); tert-amyl methyl ether (TAME) and ethylene dibromide (EDB) by Environmental Protection Agency (EPA) Method 8260B.

Composite soil sample Comp-1(A,B,C,D) was analyzed for TPHg (EPA Method 8015), BTEX and MtBE (EPA Method 8021), and total lead (EPA Method 6010). Copies of the laboratory analytical reports and chain-of-custody records are included in Appendix C.

Soil sample G-5(S11), collected at 11 feet bgs at boring B-5, was sent to PTS Laboratories in Santa Fe Springs California to be analyzed for geotechnical parameters for future RBCA

modeling. The sample was analyzed for moisture content (ASTM Method D2216), porosity (API Method IRP40), bulk density (ASTM Method D2937), soil pH (EPA Method 9045), grain size (ASTM Method D4464 M), Total Organic Carbon (TOC) (EPA Method 9060) and permeability (ASTM Method D584). Additionally, a grab groundwater sample from well MW-3 was submitted to Severn Trent Laboratories (STL) in Pensacola, Florida and analyzed for TPH carbon chain speciation by the State of Massachusetts method TPHCWG.

4.0 RESULTS

4.1 Subsurface Conditions

Groundwater was encountered during probing at approximately 15.5 to 16 feet bgs, however static groundwater level in MW-3 (Figure 2) was measured at 14.75 on September 20, 2002, the day of probing. Soil encountered during this investigation consisted primarily of interbedded silt and clay with one somewhat laterally continuous sand unit. The sand unit was observed at approximately 6 to 10 feet bgs and consists of poorly graded sand with varying amounts of silt and gravel. In boring G-1 (Figure 2) the sand unit was observed at approximately 12 feet bgs to approximately 18 feet bgs, and is interbedded with silt and clay.

4.2 Soil Analytical Results

All soil samples submitted to the lab were reported to have non-detectable concentrations of all hydrocarbon constituents analyzed, except sample G-3(S13.5), collected from boring G-3 at 13.5 feet bgs, which contained MtBE and TBA at 0.051 parts per million (ppm) and 0.083 ppm respectively. The drill cuttings sample, Comp-1(A,B,C,D), contained a concentration of lead that was acceptable for disposal at Allied Waste's Forward Landfill. The analytical results from the soil samples are summarized in Table 1.

Soil physical parameter analyses determined that sample G-5 at 11 feet is classified as a Silt with a moisture content of 27.3%wt, bulk density of 1.52 g/cc, a pH of 7.65, total porosity of 42.1%Vb, hydraulic conductivity of 1.33E-06, and total organic carbon of 2650mg/kg.

4.3 Groundwater Analytical Results

All groundwater samples collected contained TPHg at concentrations ranging from 22 part per billion (ppb) to 96,000 ppb. Groundwater samples G-2W through G-5W contained Ethyl-benzene in concentrations ranging from 29 to 4,300 ppb. TBA was detected in groundwater sample G-3W at 300 ppb. MtBE was detected in samples G-1W, G-3W and G-5W at 0.47, 240 and 360 ppb respectively. The groundwater analytical results are summarized in Table 2.

The groundwater sample submitted for TPH speciation was reported as all ND due to the reporting limits for the analysis method (5,000 ppb). GR is in the process of analyzing an

additional groundwater sample for TPH speciation at a certified laboratory that can reach detection limits of 50 ppb. The STL laboratory report for the TPH speciation is included in Appendix C.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The chemical analytical results of the grab groundwater samples collected during this investigation, confirm that dissolved hydrocarbons are present in the groundwater beneath the subject site. A comparison of the analytical results from the grab groundwater samples collected from the Geoprobes and typical concentrations detected in monitoring wells reveals that the Geoprobe sample concentrations were elevated compared to the well samples. GR believes that the elevated concentrations are an artifact of the grab sampling from the Geoprobes, where localized groundwater has not been subjected to removal by development and quarterly purging performed in the wells. The results of the TPH speciation analyses performed by STL were not useful in preparing a RBCA due to the elevated reporting limits of the analysis method. Additional groundwater sampling (from MW-3) and TPH speciation analyses are in process with an alternate laboratory that can reach detection limits of 50 ppb.

The purpose of this investigation was to define the degree and extent of petroleum hydrocarbon-impacted groundwater in the vicinity of monitoring well MW-3, to determine if the impacted groundwater is limited to the immediate vicinity of MW-3, and to collect chemical and physical data from soil and groundwater for preparation of a RBCA Based on the laboratory results, the extent of hydrocarbon impacted groundwater has been delineated, it is limited to the immediate area around well MW-3 and it extends beneath the former Kragen Auto Parts store building. However, based on the current chemical constituents identified in groundwater, it appears that natural biodegradation of hydrocarbons is occurring (i.e. non-detectable concentrations of benzene, and the presence of TBA, a known degradation product of MtBE).

The former service station has been closed since 2000 when the USTs and all petroleum storage, conveyance and dispensing facilities were removed from the site. The impact to soil is minimal and the impacted groundwater has been delineated. It is unknown at this time if the presence of the hydrocarbon-impacted groundwater below the site presents a risk to human health to the occupants of the onsite commercial building or in general, and should be determined by a RBCA evaluation.

GR is currently preparing a RBCA evaluation, to quantify the indoor inhalation risk from the dissolved hydrocarbons beneath the Kragen store. Additionally, GR recommends continuation of the current groundwater monitoring and sampling program at the site, until the RBCA has been submitted and case closure is granted. Additional recommendations, if necessary, will be made based on the results of the RBCA evaluation. These recommendations will be included in the forthcoming RBCA Evaluation Report.

TABLE 1 - SOIL SAMPLE CHEMICAL ANALYTICAL DATA

Former Tosco (76) Service Station No. 7004
15599 Hesperian Boulevard
San Leandro, California

Sample No.	Sample Date	Sample Depth (feet)	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Total Xylenes (ppm)	ETHANOL (ppm)	TBA (ppm)	MTBE (ppm)	DIPE (ppm)	ETBE (ppm)	1,2-DCA (ppm)	TAME (ppm)	EDB (ppm)	Total Lead (ppm)
G-1 (S10)	9/20/2002	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.20	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
G-1 (S14)	9/20/2002	14	<100	<0.50	<0.50	<0.50	<0.50	<20	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	---
G-2 (S5)	9/20/2002	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.20	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
G-2 (S10)	9/20/2002	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.20	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
G-2 (S14)	9/20/2002	14	<100	<0.50	<0.50	<0.50	<0.50	<20	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	---
G-3 (S5)	9/20/2002	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.20	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
G-3 (S10)	9/20/2002	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.20	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
G-3 (S13.5)	9/20/2002	14	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.20	0.083	0.051	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
G-4 (S10)	9/20/2002	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.20	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
G-4 (S13)	9/20/2002	13	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.20	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
G-5 (S5)	9/20/2002	5	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.20	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
G-5 (S10)	9/20/2002	10	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.20	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	---
G-5 (S13)	9/20/2002	13	<100	<0.50	<0.50	<0.50	<0.50	<0.20	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	---
Comp-1 (A,B,C,D)	9/20/2002	na	7.4[1]	0.035[1]	0.066[1]	0.11[1]	0.074[1]	NA	NA	NA	NA	NA	NA	NA	NA	<10

EXPLANATION:

ppm = parts per million
--- = Not Analyzed
na = Not Applicable
[1] = Analyses by DHS LUFT
<1.0 = Not detected at or above laboratories listed reporting limit

ANALYTICAL LABORATORY:

Sequoia Analytical Sacramento CA (ELAP #1624)

ANALYTICAL METHOD:

TPHg = Total Petroleum Hydrocarbons as gasoline by EPA Method 8260B
Benzene, Toluene, Ethylbenzene and Total Xylenes by EPA Method 8260B
ETHANOL by EPA Method 8260B
TBA= tert-Butyl alcohol by EPA Method 8260B
MTBE = Methyl tert-butyl ether by EPA Method 8260B
DIPE = Di-isopropyl ether by EPA Method 8260B
ETBE = Ethyl tert-butyl ether by EPA Method 8260B
1,2- DCA =1,2-Dichloroethane by EPA Method 8260B
TAME = tert-Amyl methyl ether by EPA Method 8260B
EDB = Ethylene Dibromide by EPA Method 8260B
Total Lead by EPA Method 6010A

TABLE 2 - GRAB GROUNDWATER SAMPLE CHEMICAL ANALYTICAL DATA

Former Tosco (76) Service Station No. 7004
15599 Hesperian Boulevard
San Leandro, California

Sample No.	Sample Date	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
G-1W	9/20/2002	22[1]	<0.50	<0.50	<0.50	<0.50	<50	<5.0	0.47[1]	<0.50	<0.50	<0.50	<0.50	<0.50
G-2W	9/20/2002	8,200	<250	<250	540	<250	<25,000	<2,500	<250	<250	<250	<250	<250	<250
G-3W	9/20/2002	1,000	<25	<25	29	<25	<2,500	300	240	<25	<25	<25	<25	<25
G-4W	9/20/2002	96,000[2]	<100	<100	1,500	<100	<10,000	<1,000	<100	<100	<100	<100	<100	<100
G-5W	9/20/2002	9,300	<500	<500	4,300	<500	<50,000	<5,000	360	<500	<500	<500	<500	<500

EXPLANATION:

ppb = parts per billion

[1] = Estimated Value

[2] = Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel

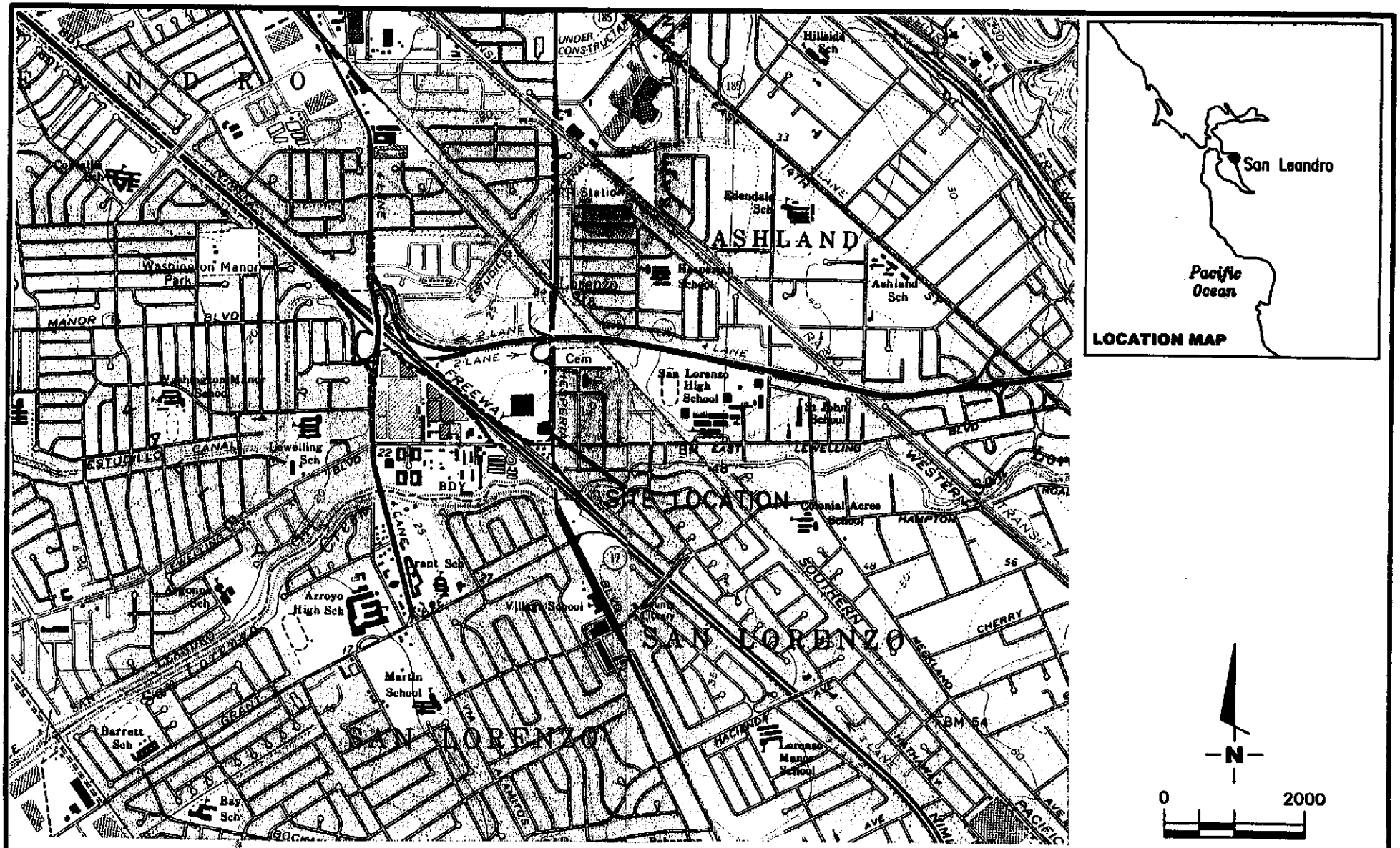
<0.50 = Not detected at or above laboratories listed reporting limit

ANALYTICAL LABORATORY:

Sequoia Analytical Sacramento CA (ELAP #1624)

ANALYTICAL METHOD:

TPHg = Total Petroleum Hydrocarbons as gasoline by EPA Method 8260B
Benzene, Toluene, Ethylbenzene and Total Xylenes by EPA method 8260B
ETHANOL by EPA Method 8260B
TBA= tert-Butyl alcohol by EPA Method 8260B
MTBE = Methyl tert-butyl ether by EPA Method 8260B
DIPE = Di-isopropyl ether by EPA Method 8260B
ETBE = Ethyl tert-butyl ether by EPA Method 8260B
1,2-DCA =1,2-Dichloroethane by EPA Method 8260B
TAME = tert-Amyl methyl ether by EPA Method 8260B
EDB = Ethylene Dibromide by EPA Method 8260B



Source: USGS Topographic Map, San Leandro and Hayward, 7.5

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VICINITY MAP
Former Tosco (76) Service Station No. 7004
15599 Hesperian Boulevard
San Leandro, California

FIGURE
1

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE
140106		8/00	

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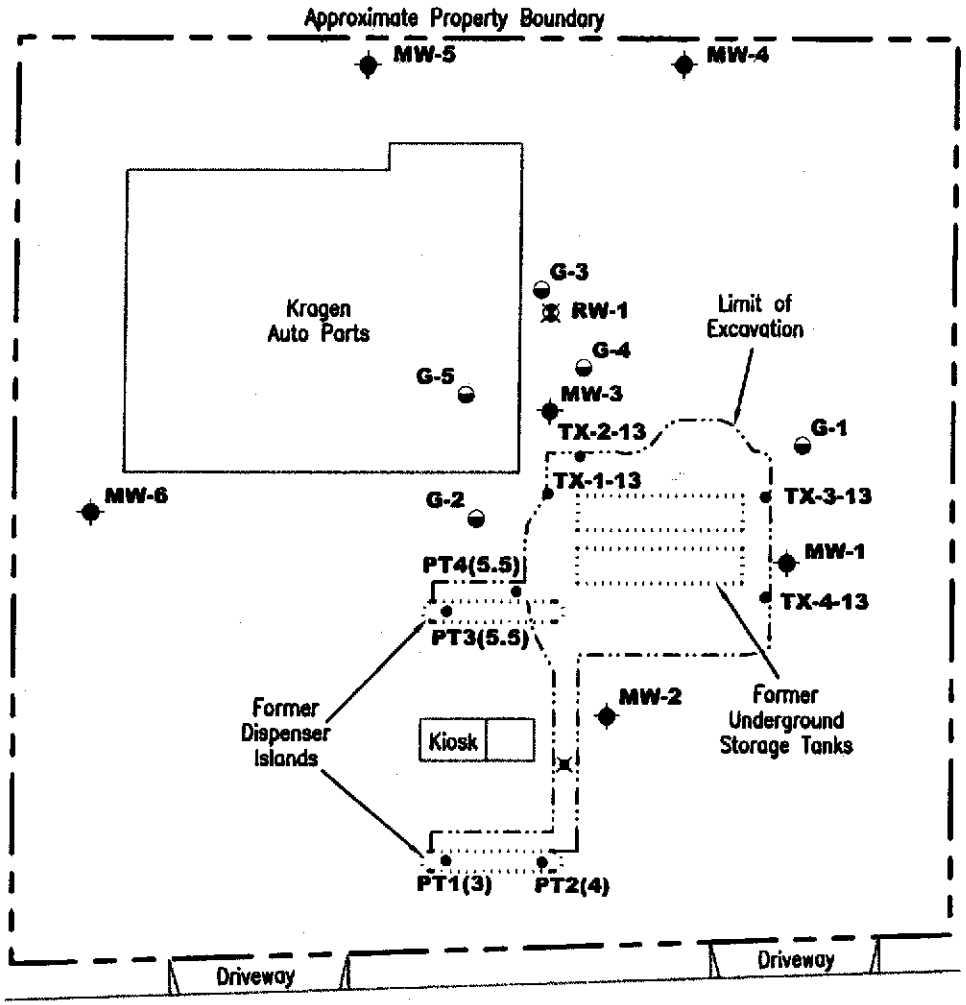

EXPLANATION

- Groundwater monitoring well
- Aquifer testing well
- Soil sample location
- Sample attempted pea gravel too deep to reach native soil
- Geoprobe boring

N

0 40

Scale in Feet

Source: Figure modified from drawing provided by MPDS Services Inc..

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SITE PLAN
Former Tosco (76) Service Station No. 7004
15599 Hesperian Boulevard
San Leandro, California

FIGURE 2

PROJECT NUMBER	REVIEWED BY	DATE	REVISED DATE
140106.06		10/02	

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APPENDIX A
GR FIELD METHODS AND PROCEDURES

GETTLER-RYAN INC.
FIELD METHODS AND PROCEDURES

Site Safety Plan

Field work performed by Gettler-Ryan Inc. (GR) is conducted in accordance with GR's Health and Safety Plan and the Site Safety Plan. GR personnel and subcontractors who perform work at the site are briefed on the of these plans contents prior to initiating site work. The GR geologist or engineer at the site when the work is performed acts as the Site Safety Officer. GR utilizes a photoionization detector (PID) to monitor ambient conditions as part of the Health and Safety Plan.

Collection of Soil Samples

Exploratory soil borings are drilled by a California-licensed well driller. A GR geologist is present to observe the drilling, collect soil samples for description, physical testing, and chemical analysis, and prepare a log of the exploratory soil boring. Soil samples are collected from the exploratory soil boring with a split-barrel sampler or other appropriate sampling device fitted with clean brass or stainless steel liners. The sampling device is driven approximately 18 inches with a 140-pound hammer falling 30 inches. The number of blows required to advance the sampler each successive 6 inches is recorded on the boring log. The encountered soil is described using the Unified Soil Classification System (ASTM 2488-84) and the Munsell Soil Color Chart.

After removal from the sampling device, soil samples for chemical analysis are covered on both ends with teflon sheeting or aluminum foil, capped, labeled, and placed in a cooler with blue ice for preservation. A chain-of-custody form is initiated in the field and accompanies the selected soil samples to the analytical laboratory. Samples are selected for chemical analysis based on:

a. depth relative to underground storage tanks and existing ground surface
b. depth relative to known or suspected groundwater
c. presence or absence of contaminant migration pathways
d. presence or absence of discoloration or staining
e. presence or absence of obvious gasoline hydrocarbon odors
f. presence or absence of organic vapors detected by headspace analysis

Field Screening of Soil Samples

A PID is used to perform head-space analysis in the field for the presence of organic vapors from the soil sample. This test procedure involves removing some soil from one of the sample tubes not retained for chemical analysis and immediately covering the end of the tube with a plastic cap. The PID probe is inserted into the headspace inside the tube through a hole in the plastic cap. Head-space screening results are recorded on the boring log. Head-space screening procedures are performed and results recorded as reconnaissance data. GR does not consider field screening techniques to be verification of the presence or absence of hydrocarbons.

Stockpile Sampling

Stockpile samples consist of four individual sample liners collected from each 100 cubic yards (yd^3) of stockpiled soil material. Four arbitrary points on the stockpiled material are chosen, and discrete soil sample is collected at each of these points. Each discrete stockpile sample is collected by removing the upper 3 to 6 inches of soil, and then driving the stainless steel or brass tube into the stockpiled material with a wooden mallet or hand driven soil sampling device. The sample tubes are then covered on both ends with teflon sheeting or aluminum foil, capped, labeled, placed in the cooler with blue ice for preservation. A chain-of-custody form is initiated in the field and accompanies the selected soil samples to the analytical laboratory. Stockpiled soils are covered with plastic sheeting after completion of sampling.

cooler with blue ice for preservation. A chain-of-custody form is initiated in the field and accompanies the selected soil samples to the analytical laboratory. Stockpiled soils are covered with plastic sheeting after completion of sampling.

Construction of Monitoring Wells

Monitoring wells are constructed in the exploratory borings with Schedule 40 polyvinyl Chloride (PVC) casing. All joints are thread-joined; no glues, cements, or solvents are used in well construction. The screened interval is constructed of machine-slotted PVC well screen which generally extends from the total well depth to a point above the groundwater. An appropriately-sized sorted sand is placed in the annular space adjacent to the entire screened interval. A bentonite transition seal is placed in the annular space above the sand, and the remaining annular space is sealed with neat cement or cement grout.

Wellheads are protected with water-resistant traffic rated vault boxes placed flush with the ground surface. The top of the well casing is sealed with a locking cap. A lock is placed on the well cap to prevent vandalism and unintentional introduction of materials into the well.

Storing and Sampling of Drill Cuttings

Drill cuttings are stockpiled on plastic sheeting or stored in drums depending on site conditions and regulatory requirements. Stockpile samples are collected and analyzed on the basis of one composite sample per 50 cubic yards of soil. Stockpile samples are composed of four discrete soil samples, each collected from an arbitrary location on the stockpile. The four discrete samples are then composited in the laboratory prior to analysis.

Each discrete stockpile sample is collected by removing the upper 3 to 6 inches of soil, and then driving the stainless or brass sample tube into the stockpiled material with a hand, mallet, or drive sampler. The sample tubes are then covered on both ends with teflon sheeting or aluminum foil, capped, labeled, and placed in a cooler with blue ice for preservation. A chain-of-custody form is initiated in the field and accompanies the selected soil samples to the analytical laboratory. Stockpiled soils are covered with plastic sheeting after completion of sampling.

Wellhead Survey

The top of the newly-installed well casing is surveyed by a California-licensed Land Surveyor to mean sea level (M.S.L.).

Well Development

The purpose of well development is to improve hydraulic communication between the well and surrounding aquifer. Prior to development, each well is monitored for the presence of separate-phase hydrocarbons and the depth-to-water is recorded. Wells are then developed by alternately surging the well with the bailer, then purging the well with a pump to remove accumulated sediments and draw groundwater into the well. Development continues until the groundwater parameters (temperature, pH, and conductivity) have stabilized.

Grab Groundwater Sampling

A Hydropunch® groundwater sampling tool or temporary PVC casing installed in the boring may be used to facilitate grab groundwater sample collection. Samples of groundwater are collected from the surface of the water in the Hydropunch® or temporary casing using a teflon bailer. The water samples are then gently poured into laboratory-cleaned containers and sealed with teflon-lined caps, and inspected for air bubbles to check for headspace. The samples are then labeled by an adhesive label, noted in permanent ink, and promptly placed in an ice storage. A Chain-of-

Custody Record is initiated and updated throughout handling of the samples, and accompanies the samples to the laboratory certified by the State of California for analyses requested.

Groundwater Sampling

Gettler-Ryan Inc. field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using a MMC flexi-dip (or comparable) interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, static water level measurements are collected with the interface probe and are also recorded in the field notes.

After water levels are collected and prior to sampling, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. Temperature, pH and electrical conductivity are measured a minimum of three times during the purging. Purging continues until these parameters stabilize.

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Tosco Marketing Company, the purge water and decontamination water generated during sampling activities is transported to Tosco - San Francisco Area Refinery, located in Rodeo, California.

APPENDIX B

PERMITS AND BORING LOGS

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-5554
FAX (510)782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 15595 Hesperian Blvd. San Leandro, CA

CLIENT
Name Conoco Phillips
Address 2000 Crow Canyon Place Phone
City Ste 400, San Ramon CA Zip 94583

APPLICANT
Name Gettler-Ryan Inc.
Fax 925 551-7888
Address 6747 Sierra Ct Phone 925 551-7440 ext 127
City Ste J, Dublin Zip 94568

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	X
Cathodic Protection	☐	General	
Water Supply	☐	Contamination	☐
Monitoring	☐	Well Destruction	☐

PROPOSED WATER SUPPLY WELL USE

New Domestic	☐	Replacement Domestic	☐
Municipal	☐	Irrigation	☐
Industrial	☐	Other	☐

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Auger	☐
Cable	☐	Other	☐	Geo Probe	

DRILLER'S NAME Gregg Drilling

DRILLER'S LICENSE NO. C57 # 485165

WELL PROJECTS
Drill Hole Diameter ____ in. Maximum
Casing Diameter ____ in. Depth 20 ft.
Surface Seal Depth ____ ft. Owner's Well Number ____

GEOTECHNICAL PROJECTS
Number of Borings 5 Maximum
Hole Diameter 2 in. Depth 20 ft.

ESTIMATED STARTING DATE 9/20/02
ESTIMATED COMPLETION DATE 9/20/02

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [signature] DATE 9/6/02

PLEASE PRINT NAME Andrew Smith

FOR OFFICE USE

PERMIT NUMBER W02-0887
WELL NUMBER
APN

PERMIT CONDITIONS
Circled Permit Requirements Apply

A. GENERAL
1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL
Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC
Fill hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION
Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED [signature] DATE 9-10-02

Rev.5-13-00

MAJOR DIVISIONS				TYPICAL NAMES
COARSE-GRAINED SOILS (MORE THAN HALF IS COARSER THAN NO. 200 SIEVE)	GRAVELS (MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE SIZE)	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW	Well graded gravels with or without sand, little or no fines
			GP	Poorly graded gravels with or without sand, little or no fines
		GRAVELS WITH OVER 15% FINES	GM	Silty gravels, silty gravels with sand
			GC	Clayey gravels, clayey gravels with sand
	SANDS (MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE SIZE)	CLEAN SANDS WITH LITTLE OR NO FINES	SW	Well graded sands with or without gravel, little or no fines
			SP	Poorly graded sands with or without gravel, little or no fines
		SANDS WITH OVER 15% FINES	SM	Silty sands with or without gravel
			SC	Clayey sands with or without gravel
FINE-GRAINED SOILS (MORE THAN HALF IS FINER THAN NO. 200 SIEVE)	SILTS AND CLAYS (LIQUID LIMIT 50% OR LESS)		ML	Inorganic silts and very fine sands, rock flour, silts with sands and gravels
			CL	Inorganic clays of low to medium plasticity, clays with sands and gravels, lean clays
			OL	Organic silts or clays of low plasticity
	SILTS AND CLAYS (LIQUID LIMIT GREATER THAN 50%)		MH	Inorganic silts, micaceous or diatomaceous, fine sandy or silty soils, elastic silts
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic silts or clays of medium to high plasticity
HIGHLY ORGANIC SOILS			PT	Peat and other highly organic soils

PID	Volatile vapors in ppm
bgs	below ground surface
(2.5YR 6/2)	Soil color according to Munsell Soil Color Charts (1993 Edition)
BLOWS/FT.	Sample drive hammer weight – 140 pounds falling 30 inches. Blows required to drive sampler 1 foot are indicated on the logs.

———	Observed contact
– – – –	Inferred contact
▨	No soil sample recovered
■	"Undisturbed" sample
▽	First encountered groundwater level
▼	Static groundwater level

GETTLER - RYAN INC.
6747 Sierra Ct., Suite J
Dublin, CA 94568 (925) 551-7555

UNIFIED SOIL CLASSIFICATION
ASTM D 2488-85
AND
KEY TO SAMPLING DATA

Gettler-Ryan, Inc.

Log of Boring G-1

PROJECT: *Tosco (76) Service Station No. 7004*	LOCATION: *15599 Hesperian Blvd., San Leandro, CA*
GR PROJECT NO.: *140106.06*	SURFACE ELEVATION:
DATE STARTED: *09/20/02*	WL (ft. bgs): *16* DATE: *09/20/02* TIME: *8:00*
DATE FINISHED: *09/20/02*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *2 in. Geoprobe - Direct Push*	TOTAL DEPTH: *20 feet*
DRILLING COMPANY: *Gregg Drilling*	GEOLOGIST: *Andrew Smith*

DEPTH (feet)	PID (ppm)	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
						Asphalt and base rock.	
					ML	SILT (ML) - dark gray (N4), moist, soft; 90% silt, 10% fine sand.	Boring backfilled with neat cement to ground surface.
3							
	0						Hand augered to 5 feet bgs.
6						SILT WITH SAND (ML) - dark brown (7.5YR 4/1), moist, medium stiff; 75-85% silt, 15-25% fine sand.	
9							
	0	G-1 (S10)					
12					SP-SM	POORLY GRADED SAND WITH SILT (SP-SM) - dark brown (7.5YR 4/1), moist, dense; 90% fine sand, 10% silt.	
					ML	SILT (ML) - dark gray (N4), moist, medium stiff; 90% silt, 10% clay.	
	0	G-1 (S14)					
15					CL	CLAY (CL) - dark gray (N4), moist, medium stiff; 95% clay, 5% silt. ▽	
					SP	POORLY GRADED SAND (SP) - dark gray (N4), wet, medium dense; 90% fine sand, 10% silt.	
18					CL	CLAY (CL) - dark gray (N4), wet, medium stiff; 100% clay.	
						Bottom of boring at 20 feet bgs.	
21							

JOB NUMBER: *140106.06*

Gettler-Ryan, Inc.

Log of Boring G-2

PROJECT: *Tosco (76) Service Station No. 7004*	LOCATION: *15599 Hesperian Blvd., San Leandro, CA*
GR PROJECT NO. : *140106.06*	SURFACE ELEVATION:
DATE STARTED: *09/20/02*	WL (ft. bgs): *15.5* DATE: *09/20/02* TIME: *8:20*
DATE FINISHED: *09/20/02*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *2 in. Geoprobe - Direct Push*	TOTAL DEPTH: *20 feet*
DRILLING COMPANY: *Gregg Drilling*	GEOLOGIST: *Andrew Smith*

DEPTH (feet)	PID (ppm)	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
						Asphalt and base rock.	
					ML	SILT (ML) - dark gray (2.5Y 4/1), moist, medium stiff; 90% silt, 10% fine sand.	Boring backfilled with neat cement to ground surface.
3							
	0						Hand augered to 5 feet bgs.
6					SP	POORLY GRADED SAND (SP) - grayish brown (10YR 5/2), moist, medium dense; 95% fine sand, 5% silt.	
					ML	SILT WITH SAND (ML) - dark grayish brown (10YR 4/2), moist, medium stiff; 75-85% silt, 15-25% fine sand.	
9							
	0	G-2 (S10)					
12							
	0	G-2 (S14)					
15						▽	
						SILT (ML) - dark greenish gray (5GY 3/1), moist, medium stiff; 95% silt, 5% fine sand.	
					CL	CLAY (CL) - dark greenish gray (5GY 3/1), moist, medium stiff; 95% clay, 5% silt.	
18							
	17.1						
						Bottom of boring at 20 feet bgs.	
21							

JOB NUMBER: *140106.06*

Gettler-Ryan, Inc.

Log of Boring G-3

PROJECT: *Tosco (76) Service Station No. 7004*	LOCATION: *15599 Hesperian Blvd., San Leandro, CA*
GR PROJECT NO. : *140106.06*	SURFACE ELEVATION:
DATE STARTED: *09/20/02*	WL (ft. bgs): *15.5* DATE: *09/20/02* TIME: *8:55*
DATE FINISHED: *09/20/02*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *2 in. Geoprobe – Direct Push*	TOTAL DEPTH: *20 feet*
DRILLING COMPANY: *Gregg Drilling*	GEOLOGIST: *Andrew Smith*

DEPTH (feet)	PID (ppm)	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
						Asphalt and base rock.	
					ML	SILT (ML) – dark gray (2.5Y 4/1), moist, medium stiff; 85–90% silt, 10–15% fine sand.	Boring backfilled with neat cement to ground surface.
3							
	0	G-3 (S5)					Hand augered to 5 feet bgs.
6							
					SP-SM	POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM) – grayish brown (10YR 5/2), moist, medium dense; 75% fine sand, 15% gravel, 10% silt.	
9					SW	WELL-GRADED SAND (SW) – grayish brown (10YR 5/2), moist, medium dense; 95% sand, 5% silt.	
	0	G-3 (S10)			CL	CLAY (CL) – dark greenish gray (10Y 4/1), moist, medium stiff; 100% clay.	
12							
	0	G-3 (S13.5)					
15					SM	▽ SILTY SAND (SM) – dark greenish gray (10Y 4/1), wet, loose; 80–85% sand, 15–20% silt.	
					ML	SILT (ML) – dark greenish gray (10Y 4/1), moist, medium stiff; 90–95% silt, 5–10% clay.	
18							
						Bottom of boring at 20 feet bgs.	
21							

JOB NUMBER: *140106.06*

Gettler-Ryan, Inc.

Log of Boring G-4

PROJECT: *Tosco (76) Service Station No. 7004*	LOCATION: *15599 Hesperian Blvd., San Leandro, CA*
GR PROJECT NO. : *140106.06*	SURFACE ELEVATION:
DATE STARTED: *09/20/02*	WL (ft. bgs): *15.5* DATE: *09/20/02* TIME: *9:30*
DATE FINISHED: *09/20/02*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *2 in. Geoprobe – Direct Push*	TOTAL DEPTH: *20 feet*
DRILLING COMPANY: *Gregg Drilling*	GEOLOGIST: *Andrew Smith*

DEPTH (feet)	PID (ppm)	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
						Asphalt and base rock.	
					ML	SILT (ML) – dark gray (2.5Y 4/1), moist, medium stiff; 85–90% silt, 10–15% fine sand.	Boring backfilled with neat cement to ground surface.
3							
							Hand augered to 5 feet bgs.
6					SM	SILTY SAND WITH GRAVEL (SM) – dark brown (10YR 4/1), moist, medium dense; 70% sand, 15% fine gravel, 15% silt.	
					SP-SM	POORLY GRADED SAND WITH SILT (SP-SM) – dark brown (10YR 3/3), moist, medium dense; 90% fine sand, 10% silt.	
9		G-4 (S10)					
					ML	SILT (ML) – dark greenish gray (10GY 3/1), moist, stiff; 95% silt, 5% clay.	
12		G-4 (S13.5)					
15						▽ Becomes 90% silt, 10% clay.	
					CL	CLAY (CL) – dark greenish gray (10GY 3/1), wet, medium stiff; 90% clay, 10% silt.	
18							
						Bottom of boring at 20 feet bgs.	
21							

JOB NUMBER: *140106.06*

Gettler-Ryan, Inc.

Log of Boring G-5

PROJECT: *Tosco (76) Service Station No. 7004*	LOCATION: *15599 Hesperian Blvd., San Leandro, CA*
GR PROJECT NO. : *140106.06*	SURFACE ELEVATION:
DATE STARTED: *09/20/02*	WL (ft. bgs): *15.0* DATE: *09/20/02* TIME: *12:20*
DATE FINISHED: *09/20/02*	WL (ft. bgs): DATE: TIME:
DRILLING METHOD: *2 in. Geoprobe - Direct Push*	TOTAL DEPTH: *20 feet*
DRILLING COMPANY: *Gregg Drilling*	GEOLOGIST: *Andrew Smith*

DEPTH (feet)	PID (ppm)	SAMPLE NUMBER	SAMPLE INT.	GRAPHIC LOG	SOIL CLASS	GEOLOGIC DESCRIPTION	REMARKS
						Concrete - 5 inches thick.	
					SM	SILTY SAND (SM) - dark brown (7.5YR 3/2), moist, medium dense; 80% fine to medium sand, 20% silt.	Boring backfilled with neat cement to ground surface.
					ML	SILT (ML) - dark gray (2.5Y 4/1), moist, medium stiff; 85-90% silt, 10-15% fine sand.	
3	1.7						
	1.9	G-5 (S5)					Hand augered to 5 feet bgs.
6							
9							
	1.0	G-5 (S11)				Becomes 90-95% silt, 5-10% fine sand.	
12							
		G-5 (S13)					
15						∇	
					CL	CLAY (CL) - dark gray (2.5Y 4/1), moist, medium stiff; 95% clay, 5% silt.	
18							
						Bottom of boring at 20 feet bgs.	
21							

JOB NUMBER: *140106.06*

APPENDIX C

LABORATORY ANALYTICAL RESULTS AND CHAIN-OF-CUSTODY REPORTS

Sequoia
Analytical

819 Striker Ave Ste 8
Sacramento, CA 95834
(916) 921-9600
FAX (916) 921-0100
www.sequoialabs.com

7 October, 2002

Doug Lee
Gettler-Ryan - Dublin
6747 Sierra Court, Ste. J
Dublin, CA 94568

RE: Tosco 7004, San Leandro, CA
Sequoia Work Order: S209552

Enclosed are the results of analyses for samples received by the laboratory on 09/24/02 09:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ron Chew
Client Services Representative

CA ELAP Certificate #1624

Sequoia Analytical

819 Striker Ave Ste 8
Sacramento, CA 95834
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FAX (916) 921-0100
www.sequoialabs.com

Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
G-1 (S5)	S209552-01	Soil	09/20/02 00:00	09/24/02 09:00
G-1 (S10)	S209552-02	Soil	09/20/02 00:00	09/24/02 09:00
G-1 (S14)	S209552-03	Soil	09/20/02 00:00	09/24/02 09:00
G-2 (S14)	S209552-04	Soil	09/20/02 00:00	09/24/02 09:00
G-2 (S5)	S209552-05	Soil	09/20/02 00:00	09/24/02 09:00
G-2 (S10)	S209552-06	Soil	09/20/02 00:00	09/24/02 09:00
G-3 (S5)	S209552-07	Soil	09/20/02 00:00	09/24/02 09:00
G-3 (S10)	S209552-08	Soil	09/20/02 00:00	09/24/02 09:00
G-3 (S13.5)	S209552-09	Soil	09/20/02 00:00	09/24/02 09:00
G-4 (S5)	S209552-10	Soil	09/20/02 00:00	09/24/02 09:00
G-4 (S10)	S209552-11	Soil	09/20/02 00:00	09/24/02 09:00
G-4 (S13)	S209552-12	Soil	09/20/02 00:00	09/24/02 09:00
G-5 (S5)	S209552-13	Soil	09/20/02 00:00	09/24/02 09:00
G-5 (S10)	S209552-14	Soil	09/20/02 00:00	09/24/02 09:00
G-5 (S13)	S209552-15	Soil	09/20/02 00:00	09/24/02 09:00
G-1W	S209552-16	Water	09/20/02 08:05	09/24/02 09:00
G-2W	S209552-17	Water	09/20/02 08:30	09/24/02 09:00
G-3W	S209552-18	Water	09/20/02 09:00	09/24/02 09:00
G-4W	S209552-19	Water	09/20/02 09:30	09/24/02 09:00
G-5W	S209552-20	Water	09/20/02 12:30	09/24/02 09:00
Comp-1 (A,B,C,D)(Composite)	S209552-21	Soil	09/20/02 00:00	09/24/02 09:00

Sequoia Analytical

819 Striker Ave Ste 8
Sacramento, CA 95834
(916) 921-9600
FAX (916) 921-0100
www.sequoialabs.com

Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

Total Purgeable Hydrocarbon, BTEX and MTBE by DHS LUFT

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Comp-1 (A,B,C,D)(Composite) (S209552-21) Soil Sampled: 09/20/02 00:00 Received: 09/24/02 09:00									
Purgeable Hydrocarbons	**7.4**	1.2	mg/kg	2.5	2090321	09/30/02	10/01/02	DHS LUFT	
Benzene	**0.035**	0.012	"	"	"	"	"	"	
Toluene	**0.066**	0.012	"	"	"	"	"	"	
Ethylbenzene	**0.11**	0.012	"	"	"	"	"	"	
Xylenes (total)	**0.074**	0.012	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.012	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*62 %*	*60-140*		"	"	"	"	

Sequoia Analytical

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Sacramento, CA 95834
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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

Gasoline\BTEX\Oxygenates by EPA method 8260B

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-1 (S10) (S209552-02) Soil Sampled: 09/20/02 00:00 Received: 09/24/02 09:00									
Ethanol	ND	0.20	mg/kg	1	2100038	10/02/02	10/03/02	EPA 8260B	
Tert-butyl alcohol	ND	0.050	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.0050	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.0050	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.0050	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.0050	"	"	"	"	"	"	
Benzene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline (C6-C10)	ND	1.0	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		*98 %*	*60-140*		"	"	"	"	
Surrogate: Toluene-d8		*123 %*	*60-140*		"	"	"	"	
Surrogate: 4-BFB		*117 %*	*60-140*		"	"	"	"	
G-1 (S14) (S209552-03) Soil Sampled: 09/20/02 00:00 Received: 09/24/02 09:00									
Ethanol	ND	20	mg/kg	1	2100076	10/04/02	10/04/02	EPA 8260B	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline (C6-C10)	ND	100	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		*87 %*	*60-140*		"	"	"	"	
Surrogate: Toluene-d8		*105 %*	*60-140*		"	"	"	"	
Surrogate: 4-BFB		*100 %*	*60-140*		"	"	"	"	

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

Gasoline\BTEX\Oxygenates by EPA method 8260B

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-2 (S14) (S209552-04) Soil Sampled: 09/20/02 00:00 Received: 09/24/02 09:00									
Ethanol	ND	20	mg/kg	1	2100076	10/04/02	10/04/02	EPA 8260B	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline (C6-C10)	ND	100	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		*91 %*	*60-140*		"	"	"	"	
Surrogate: Toluene-d8		*108 %*	*60-140*		"	"	"	"	
Surrogate: 4-BFB		*104 %*	*60-140*		"	"	"	"	
G-2 (S5) (S209552-05) Soil Sampled: 09/20/02 00:00 Received: 09/24/02 09:00									
Ethanol	ND	0.20	mg/kg	1	2100038	10/02/02	10/03/02	EPA 8260B	
Tert-butyl alcohol	ND	0.050	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.0050	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.0050	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.0050	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.0050	"	"	"	"	"	"	
Benzene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline (C6-C10)	ND	1.0	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		*99 %*	*60-140*		"	"	"	"	
Surrogate: Toluene-d8		*124 %*	*60-140*		"	"	"	"	
Surrogate: 4-BFB		*115 %*	*60-140*		"	"	"	"	

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

Gasoline\BTEX\Oxygenates by EPA method 8260B

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-2 (S10) (S209552-06) Soil Sampled: 09/20/02 00:00 Received: 09/24/02 09:00									
Ethanol	ND	0.20	mg/kg	1	2100038	10/02/02	10/03/02	EPA 8260B	
Tert-butyl alcohol	ND	0.050	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.0050	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.0050	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.0050	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.0050	"	"	"	"	"	"	
Benzene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline (C6-C10)	ND	1.0	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		*88 %*	*60-140*		"	"	"	"	
Surrogate: Toluene-d8		*122 %*	*60-140*		"	"	"	"	
Surrogate: 4-BFB		*112 %*	*60-140*		"	"	"	"	
G-3 (S5) (S209552-07) Soil Sampled: 09/20/02 00:00 Received: 09/24/02 09:00									
Ethanol	ND	0.20	mg/kg	1	2100038	10/02/02	10/03/02	EPA 8260B	
Tert-butyl alcohol	ND	0.050	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.0050	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.0050	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.0050	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.0050	"	"	"	"	"	"	
Benzene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline (C6-C10)	ND	1.0	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		*98 %*	*60-140*		"	"	"	"	
Surrogate: Toluene-d8		*119 %*	*60-140*		"	"	"	"	
Surrogate: 4-BFB		*113 %*	*60-140*		"	"	"	"	

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

Gasoline\BTEX\Oxygenates by EPA method 8260B

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-3 (S10) (S209552-08) Soil Sampled: 09/20/02 00:00 Received: 09/24/02 09:00									
Ethanol	ND	0.20	mg/kg	1	2100038	10/02/02	10/02/02	EPA 8260B	
Tert-butyl alcohol	ND	0.050	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.0050	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.0050	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.0050	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.0050	"	"	"	"	"	"	
Benzene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline (C6-C10)	ND	1.0	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		*89 %*	*60-140*		"	"	"	"	
Surrogate: Toluene-d8		*110 %*	*60-140*		"	"	"	"	
Surrogate: 4-BFB		*104 %*	*60-140*		"	"	"	"	
G-3 (S13.5) (S209552-09) Soil Sampled: 09/20/02 00:00 Received: 09/24/02 09:00									
Ethanol	ND	0.20	mg/kg	1	2100038	10/02/02	10/04/02	EPA 8260B	
Tert-butyl alcohol	**0.083**	0.050	"	"	"	"	"	"	
Methyl tert-butyl ether	**0.051**	0.0050	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.0050	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.0050	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.0050	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.0050	"	"	"	"	"	"	
Benzene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline (C6-C10)	ND	1.0	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		*89 %*	*60-140*		"	"	"	"	
Surrogate: Toluene-d8		*133 %*	*60-140*		"	"	"	"	
Surrogate: 4-BFB		*124 %*	*60-140*		"	"	"	"	

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

Gasoline\BTEX\Oxygenates by EPA method 8260B

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-4 (S10) (S209552-11) Soil Sampled: 09/20/02 00:00 Received: 09/24/02 09:00									
Ethanol	ND	0.20	mg/kg	1	2100038	10/02/02	10/03/02	EPA 8260B	
Tert-butyl alcohol	ND	0.050	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.0050	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.0050	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.0050	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.0050	"	"	"	"	"	"	
Benzene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline (C6-C10)	ND	1.0	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		*98 %*	*60-140*		"	"	"	"	
Surrogate: Toluene-d8		*119 %*	*60-140*		"	"	"	"	
Surrogate: 4-BFB		*113 %*	*60-140*		"	"	"	"	
G-4 (S13) (S209552-12) Soil Sampled: 09/20/02 00:00 Received: 09/24/02 09:00									
Ethanol	ND	0.20	mg/kg	1	2100038	10/02/02	10/04/02	EPA 8260B	
Tert-butyl alcohol	ND	0.050	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.0050	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.0050	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.0050	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.0050	"	"	"	"	"	"	
Benzene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline (C6-C10)	ND	1.0	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		*99 %*	*60-140*		"	"	"	"	
Surrogate: Toluene-d8		*112 %*	*60-140*		"	"	"	"	
Surrogate: 4-BFB		*105 %*	*60-140*		"	"	"	"	

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

Gasoline\BTEX\Oxygenates by EPA method 8260B

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-5 (S5) (S209552-13) Soil Sampled: 09/20/02 00:00 Received: 09/24/02 09:00									
Ethanol	ND	0.20	mg/kg	1	2100038	10/02/02	10/03/02	EPA 8260B	
Tert-butyl alcohol	ND	0.050	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.0050	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.0050	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.0050	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.0050	"	"	"	"	"	"	
Benzene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline (C6-C10)	ND	1.0	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		*94 %*	*60-140*		"	"	"	"	
Surrogate: Toluene-d8		*123 %*	*60-140*		"	"	"	"	
Surrogate: 4-BFB		*115 %*	*60-140*		"	"	"	"	
G-5 (S10) (S209552-14) Soil Sampled: 09/20/02 00:00 Received: 09/24/02 09:00									
Ethanol	ND	0.20	mg/kg	1	2100038	10/02/02	10/04/02	EPA 8260B	
Tert-butyl alcohol	ND	0.050	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.0050	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.0050	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.0050	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.0050	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.0050	"	"	"	"	"	"	
Benzene	ND	0.0050	"	"	"	"	"	"	
Ethylbenzene	ND	0.0050	"	"	"	"	"	"	
Toluene	ND	0.0050	"	"	"	"	"	"	
Xylenes (total)	ND	0.0050	"	"	"	"	"	"	
Gasoline (C6-C10)	ND	1.0	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		*112 %*	*60-140*		"	"	"	"	
Surrogate: Toluene-d8		*88 %*	*60-140*		"	"	"	"	
Surrogate: 4-BFB		*96 %*	*60-140*		"	"	"	"	

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

Gasoline\BTEX\Oxygenates by EPA method 8260B

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-5 (S13) (S209552-15) Soil Sampled: 09/20/02 00:00 Received: 09/24/02 09:00									**R-05**
Ethanol	ND	20	mg/kg	1	2100076	10/04/02	10/04/02	EPA 8260B	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline (C6-C10)	ND	100	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		*91 %*	*60-140*		"	"	"	"	
Surrogate: Toluene-d8		*106 %*	*60-140*		"	"	"	"	
Surrogate: 4-BFB		*102 %*	*60-140*		"	"	"	"	

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

BTEX by EPA Method 8260B

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-1W (S209552-16) Water Sampled: 09/20/02 08:05 Received: 09/24/02 09:00									
Ethanol	ND	50	ug/l	1	2100049	10/03/02	10/03/02	EPA 8260B	
Tert-butyl alcohol	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
Benzene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Gasoline (C6-C10)	ND	50	"	"	"	"	"	"	
Surrogate: Toluene-d8		*104 %*	*60-140*		"	"	"	"	
Surrogate: 4-BFB		*98 %*	*60-140*		"	"	"	"	
Surrogate: 1,2-DCA-d4		*72 %*	*60-140*		"	"	"	"	
G-2W (S209552-17) Water Sampled: 09/20/02 08:30 Received: 09/24/02 09:00									
Ethanol	ND	25000	ug/l	500	2100049	10/03/02	10/03/02	EPA 8260B	
Tert-butyl alcohol	ND	2500	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	250	"	"	"	"	"	"	
Di-isopropyl ether	ND	250	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	250	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	250	"	"	"	"	"	"	
1,2-Dichloroethane	ND	250	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	250	"	"	"	"	"	"	
Benzene	ND	250	"	"	"	"	"	"	
Ethylbenzene	**540**	250	"	"	"	"	"	"	
Toluene	ND	250	"	"	"	"	"	"	
Xylenes (total)	ND	250	"	"	"	"	"	"	
Gasoline (C6-C10)	ND	25000	"	"	"	"	"	"	
Surrogate: Toluene-d8		*94 %*	*60-140*		"	"	"	"	
Surrogate: 4-BFB		*90 %*	*60-140*		"	"	"	"	
Surrogate: 1,2-DCA-d4		*84 %*	*60-140*		"	"	"	"	

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

BTEX by EPA Method 8260B

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-3W (S209552-18) Water Sampled: 09/20/02 09:00 Received: 09/24/02 09:00									
Ethanol	ND	2500	ug/l	50	2100049	10/03/02	10/03/02	EPA 8260B	
Tert-butyl alcohol	**300**	250	"	"	"	"	"	"	
Methyl tert-butyl ether	**240**	25	"	"	"	"	"	"	
Di-isopropyl ether	ND	25	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	25	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	25	"	"	"	"	"	"	
1,2-Dichloroethane	ND	25	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	25	"	"	"	"	"	"	
Benzene	ND	25	"	"	"	"	"	"	
Ethylbenzene	**29**	25	"	"	"	"	"	"	
Toluene	ND	25	"	"	"	"	"	"	
Xylenes (total)	ND	25	"	"	"	"	"	"	
Gasoline (C6-C10)	ND	2500	"	"	"	"	"	"	
Surrogate: Toluene-d8		*92 %*	*60-140*		"	"	"	"	
Surrogate: 4-BFB		*89 %*	*60-140*		"	"	"	"	
Surrogate: 1,2-DCA-d4		*83 %*	*60-140*		"	"	"	"	
G-4W (S209552-19) Water Sampled: 09/20/02 09:30 Received: 09/24/02 09:00									
Ethanol	ND	10000	ug/l	200	2100049	10/03/02	10/03/02	EPA 8260B	
Tert-butyl alcohol	ND	1000	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	100	"	"	"	"	"	"	
Di-isopropyl ether	ND	100	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	100	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	100	"	"	"	"	"	"	
1,2-Dichloroethane	ND	100	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	100	"	"	"	"	"	"	
Benzene	ND	100	"	"	"	"	"	"	
Ethylbenzene	**1500**	100	"	"	"	"	"	"	
Toluene	ND	100	"	"	"	"	"	"	
Xylenes (total)	ND	100	"	"	"	"	"	"	
Gasoline (C6-C10)	**96000**	10000	"	"	"	"	"	"	
Surrogate: Toluene-d8		*91 %*	*60-140*		"	"	"	"	
Surrogate: 4-BFB		*96 %*	*60-140*		"	"	"	"	
Surrogate: 1,2-DCA-d4		*85 %*	*60-140*		"	"	"	"	

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

BTEX by EPA Method 8260B

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
G-5W (S209552-20) Water Sampled: 09/20/02 12:30 Received: 09/24/02 09:00									
Ethanol	ND	50000	ug/l	1000	2100049	10/03/02	10/03/02	EPA 8260B	
Tert-butyl alcohol	ND	5000	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	500	"	"	"	"	"	"	
Di-isopropyl ether	ND	500	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	500	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	500	"	"	"	"	"	"	
1,2-Dichloroethane	ND	500	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	500	"	"	"	"	"	"	
Benzene	ND	500	"	"	"	"	"	"	
Ethylbenzene	**4300**	500	"	"	"	"	"	"	
Toluene	ND	500	"	"	"	"	"	"	
Xylenes (total)	ND	500	"	"	"	"	"	"	
Gasoline (C6-C10)	ND	50000	"	"	"	"	"	"	
Surrogate: Toluene-d8		*98 %*	*60-140*		"	"	"	"	
Surrogate: 4-BFB		*97 %*	*60-140*		"	"	"	"	
Surrogate: 1,2-DCA-d4		*77 %*	*60-140*		"	"	"	"	

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

Total Metals by EPA 6000/7000 Series Methods

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Comp-1 (A,B,C,D)(Composite) (S209552-21) Soil Sampled: 09/20/02 00:00 Received: 09/24/02 09:00									
Lead	ND	10	mg/kg	4	2100006	10/02/02	10/03/02	EPA 6010B	

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

Total Purgeable Hydrocarbon, BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2090321 - EPA 5030B (P/T)										
Blank (2090321-BLK1)				Prepared & Analyzed: 09/30/02						
Purgeable Hydrocarbons	ND	0.50	mg/kg							
Benzene	ND	0.0050	"							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Methyl tert-butyl ether	ND	0.0050	"							
Surrogate: a,a,a-Trifluorotoluene	*0.0219*		"	*0.0200*		*110*	*60-140*			
Blank (2090321-BLK2)				Prepared & Analyzed: 10/01/02						
Purgeable Hydrocarbons	ND	0.50	mg/kg							
Benzene	ND	0.0050	"							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Methyl tert-butyl ether	ND	0.0050	"							
Surrogate: a,a,a-Trifluorotoluene	*0.0199*		"	*0.0200*		*100*	*60-140*			
Blank (2090321-BLK3)				Prepared & Analyzed: 10/02/02						
Purgeable Hydrocarbons	ND	0.50	mg/kg							
Benzene	ND	0.0050	"							
Toluene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Methyl tert-butyl ether	ND	0.0050	"							
Surrogate: a,a,a-Trifluorotoluene	*0.0197*		"	*0.0200*		*98*	*60-140*			
Laboratory Control Sample (2090321-BS1)				Prepared & Analyzed: 09/30/02						
Benzene	0.0168	0.0050	mg/kg	0.0200		84	70-130			
Toluene	0.0181	0.0050	"	0.0200		91	70-130			
Ethylbenzene	0.0189	0.0050	"	0.0200		94	70-130			
Xylenes (total)	0.0584	0.0050	"	0.0600		97	70-130			
Methyl tert-butyl ether	0.0164	0.0050	"	0.0200		82	70-130			

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

Total Purgeable Hydrocarbon, BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2090321 - EPA 5030B (P/T)										
Laboratory Control Sample (2090321-BS1)				Prepared & Analyzed: 09/30/02						
Surrogate: a,a,a-Trifluorotoluene	*0.0227*		*mg/kg*	*0.0200*		*114*	*60-140*			
Laboratory Control Sample (2090321-BS2)				Prepared & Analyzed: 10/01/02						
Benzene	0.0158	0.0050	mg/kg	0.0200		79	70-130			
Toluene	0.0171	0.0050	"	0.0200		86	70-130			
Ethylbenzene	0.0179	0.0050	"	0.0200		90	70-130			
Xylenes (total)	0.0555	0.0050	"	0.0600		92	70-130			
Methyl tert-butyl ether	0.0173	0.0050	"	0.0200		87	70-130			
Surrogate: a,a,a-Trifluorotoluene	*0.0208*		"	*0.0200*		*104*	*60-140*			
Laboratory Control Sample (2090321-BS3)				Prepared & Analyzed: 10/02/02						
Benzene	0.0165	0.0050	mg/kg	0.0200		82	70-130			
Toluene	0.0177	0.0050	"	0.0200		88	70-130			
Ethylbenzene	0.0188	0.0050	"	0.0200		94	70-130			
Xylenes (total)	0.0576	0.0050	"	0.0600		96	70-130			
Methyl tert-butyl ether	0.0177	0.0050	"	0.0200		88	70-130			
Surrogate: a,a,a-Trifluorotoluene	*0.0215*		"	*0.0200*		*108*	*60-140*			
Matrix Spike (2090321-MS1)		**Source: S209507-12**		Prepared & Analyzed: 09/30/02						
Benzene	0.0166	0.0050	mg/kg	0.0200	ND	83	60-140			
Toluene	0.0177	0.0050	"	0.0200	ND	88	60-140			
Ethylbenzene	0.0187	0.0050	"	0.0200	ND	94	60-140			
Xylenes (total)	0.0571	0.0050	"	0.0600	ND	95	60-140			
Methyl tert-butyl ether	0.0163	0.0050	"	0.0200	ND	82	60-140			
Surrogate: a,a,a-Trifluorotoluene	*0.0216*		"	*0.0200*		*108*	*60-140*			
Matrix Spike Dup (2090321-MSD1)		**Source: S209507-12**		Prepared & Analyzed: 09/30/02						
Benzene	0.0181	0.0050	mg/kg	0.0200	ND	91	60-140	9	25	
Toluene	0.0193	0.0050	"	0.0200	ND	97	60-140	9	25	
Ethylbenzene	0.0204	0.0050	"	0.0200	ND	102	60-140	9	25	
Xylenes (total)	0.0624	0.0050	"	0.0600	ND	104	60-140	9	25	

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

Total Purgeable Hydrocarbon, BTEX and MTBE by DHS LUFT - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2090321 - EPA 5030B (P/T)										
Matrix Spike Dup (2090321-MSD1)		**Source: S209507-12**		Prepared & Analyzed: 09/30/02						
Methyl tert-butyl ether	0.0180	0.0050	mg/kg	0.0200	ND	90	60-140	10	25	
Surrogate: a,a,a-Trifluorotoluene	*0.0212*		"	*0.0200*		*106*	*60-140*			

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

Gasoline\BTEX\Oxygenates by EPA method 8260B - Quality Control
Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100038 - EPA 5030B [P/T]										
Blank (2100038-BLK1)				Prepared & Analyzed: 10/02/02						
Ethanol	ND	0.20	mg/kg							
Tert-butyl alcohol	ND	0.050	"							
Methyl tert-butyl ether	ND	0.0050	"							
Di-isopropyl ether	ND	0.0050	"							
Ethyl tert-butyl ether	ND	0.0050	"							
Tert-amyl methyl ether	ND	0.0050	"							
1,2-Dichloroethane	ND	0.0050	"							
1,2-Dibromoethane (EDB)	ND	0.0050	"							
Benzene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Toluene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Gasoline (C6-C10)	ND	1.0	"							
Surrogate: 1,2-DCA-d4	*0.0459*		"	*0.0500*		*92*	*60-140*			
Surrogate: Toluene-d8	*0.0603*		"	*0.0500*		*121*	*60-140*			
Surrogate: 4-BFB	*0.0565*		"	*0.0500*		*113*	*60-140*			
Blank (2100038-BLK2)				Prepared & Analyzed: 10/03/02						
Ethanol	ND	0.20	mg/kg							
Tert-butyl alcohol	ND	0.050	"							
Methyl tert-butyl ether	ND	0.0050	"							
Di-isopropyl ether	ND	0.0050	"							
Ethyl tert-butyl ether	ND	0.0050	"							
Tert-amyl methyl ether	ND	0.0050	"							
1,2-Dichloroethane	ND	0.0050	"							
1,2-Dibromoethane (EDB)	ND	0.0050	"							
Benzene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Toluene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Gasoline (C6-C10)	ND	1.0	"							
Surrogate: 1,2-DCA-d4	*0.0462*		"	*0.0500*		*92*	*60-140*			
Surrogate: Toluene-d8	*0.0610*		"	*0.0500*		*122*	*60-140*			
Surrogate: 4-BFB	*0.0550*		"	*0.0500*		*110*	*60-140*			

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

Gasoline\BTEX\Oxygenates by EPA method 8260B - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100038 - EPA 5030B [P/T]										
Blank (2100038-BLK2)				Prepared & Analyzed: 10/03/02						
Blank (2100038-BLK3)				Prepared & Analyzed: 10/04/02						
Ethanol	ND	0.20	mg/kg							
Tert-butyl alcohol	ND	0.050	"							
Methyl tert-butyl ether	ND	0.0050	"							
Di-isopropyl ether	ND	0.0050	"							
Ethyl tert-butyl ether	ND	0.0050	"							
Tert-amyl methyl ether	ND	0.0050	"							
1,2-Dichloroethane	ND	0.0050	"							
1,2-Dibromoethane (EDB)	ND	0.0050	"							
Benzene	ND	0.0050	"							
Ethylbenzene	ND	0.0050	"							
Toluene	ND	0.0050	"							
Xylenes (total)	ND	0.0050	"							
Gasoline (C6-C10)	ND	1.0	"							
Surrogate: 1,2-DCA-d4	*0.0445*		"	*0.0500*		*89*	*60-140*			
Surrogate: Toluene-d8	*0.0578*		"	*0.0500*		*116*	*60-140*			
Surrogate: 4-BFB	*0.0517*		"	*0.0500*		*103*	*60-140*			
Laboratory Control Sample (2100038-BS1)				Prepared & Analyzed: 10/02/02						
Methyl tert-butyl ether	0.0447	0.0050	mg/kg	0.0436		103	60-140			
Benzene	0.0271	0.0050	"	0.0268		101	70-130			
Toluene	0.166	0.0050	"	0.162		102	70-130			
Gasoline (C6-C10)	1.67	1.0	"	2.20		76	70-130			
Surrogate: 1,2-DCA-d4	*0.0486*		"	*0.0500*		*97*	*60-140*			
Surrogate: Toluene-d8	*0.0552*		"	*0.0500*		*110*	*60-140*			
Surrogate: 4-BFB	*0.0533*		"	*0.0500*		*107*	*60-140*			

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

Gasoline\BTEX\Oxygenates by EPA method 8260B - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100038 - EPA 5030B [P/T]										
Laboratory Control Sample (2100038-BS2)				Prepared & Analyzed: 10/03/02						
Methyl tert-butyl ether	0.0417	0.0050	mg/kg	0.0436		96	60-140			
Benzene	0.0251	0.0050	"	0.0268		94	70-130			
Toluene	0.174	0.0050	"	0.162		107	70-130			
Gasoline (C6-C10)	1.80	1.0	"	2.20		82	70-130			
Surrogate: 1,2-DCA-d4	*0.0438*		"	*0.0500*		*88*	*60-140*			
Surrogate: Toluene-d8	*0.0554*		"	*0.0500*		*111*	*60-140*			
Surrogate: 4-BFB	*0.0507*		"	*0.0500*		*101*	*60-140*			
Laboratory Control Sample (2100038-BS3)				Prepared & Analyzed: 10/04/02						
Methyl tert-butyl ether	0.0444	0.0050	mg/kg	0.0436		102	60-140			
Benzene	0.0270	0.0050	"	0.0268		101	70-130			
Toluene	0.183	0.0050	"	0.162		113	70-130			
Gasoline (C6-C10)	1.87	1.0	"	2.20		85	70-130			
Surrogate: 1,2-DCA-d4	*0.0446*		"	*0.0500*		*89*	*60-140*			
Surrogate: Toluene-d8	*0.0578*		"	*0.0500*		*116*	*60-140*			
Surrogate: 4-BFB	*0.0522*		"	*0.0500*		*104*	*60-140*			
Matrix Spike (2100038-MS1)		**Source: S209552-08**		Prepared & Analyzed: 10/02/02						
Methyl tert-butyl ether	0.0475	0.0050	mg/kg	0.0436	ND	99	60-140			
Benzene	0.0255	0.0050	"	0.0268	ND	94	60-140			
Toluene	0.171	0.0050	"	0.162	ND	105	60-140			
Gasoline (C6-C10)	1.63	1.0	"	2.20	ND	74	60-140			
Surrogate: 1,2-DCA-d4	*0.0466*		"	*0.0500*		*93*	*60-140*			
Surrogate: Toluene-d8	*0.0590*		"	*0.0500*		*118*	*60-140*			
Surrogate: 4-BFB	*0.0569*		"	*0.0500*		*114*	*60-140*			
Matrix Spike Dup (2100038-MSD1)		**Source: S209552-08**		Prepared & Analyzed: 10/02/02						
Methyl tert-butyl ether	0.0496	0.0050	mg/kg	0.0436	ND	104	60-140	4	25	
Benzene	0.0264	0.0050	"	0.0268	ND	98	60-140	3	25	
Toluene	0.173	0.0050	"	0.162	ND	106	60-140	1	25	
Gasoline (C6-C10)	1.72	1.0	"	2.20	ND	78	60-140	5	25	

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

Gasoline\BTEX\Oxygenates by EPA method 8260B - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100038 - EPA 5030B [P/T]										
Matrix Spike Dup (2100038-MSD1)	**Source: S209552-08**			Prepared & Analyzed: 10/02/02						
Surrogate: 1,2-DCA-d4	*0.0485*		*mg/kg*	*0.0500*		*97*	*60-140*			
Surrogate: Toluene-d8	*0.0594*		*"*	*0.0500*		*119*	*60-140*			
Surrogate: 4-BFB	*0.0552*		*"*	*0.0500*		*110*	*60-140*			
Batch 2100076 - EPA 5030B [MeOH]										
Blank (2100076-BLK1)				Prepared & Analyzed: 10/04/02						
Ethanol	ND	20	mg/kg							
Tert-butyl alcohol	ND	5.0	"							
Methyl tert-butyl ether	ND	0.50	"							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
Tert-amyl methyl ether	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
Benzene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Gasoline (C6-C10)	ND	100	"							
Surrogate: 1,2-DCA-d4	*2.18*		*"*	*2.50*		*87*	*60-140*			
Surrogate: Toluene-d8	*2.83*		*"*	*2.50*		*113*	*60-140*			
Surrogate: 4-BFB	*2.70*		*"*	*2.50*		*108*	*60-140*			
Laboratory Control Sample (2100076-BS1)				Prepared & Analyzed: 10/04/02						
Methyl tert-butyl ether	2.34	0.50	mg/kg	2.18		107	60-140			
Benzene	1.46	0.50	"	1.34		109	70-130			
Toluene	8.04	0.50	"	8.10		99	70-130			
Gasoline (C6-C10)	102	100	"	110		93	70-130			
Surrogate: 1,2-DCA-d4	*2.33*		*"*	*2.50*		*93*	*60-140*			
Surrogate: Toluene-d8	*2.42*		*"*	*2.50*		*97*	*60-140*			
Surrogate: 4-BFB	*2.40*		*"*	*2.50*		*96*	*60-140*			

Sequoia Analytical

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Sacramento, CA 95834
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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

Gasoline\BTEX\Oxygenates by EPA method 8260B - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100076 - EPA 5030B [MeOH]										
Laboratory Control Sample Dup (2100076-BSD1)				Prepared & Analyzed: 10/04/02						
Methyl tert-butyl ether	2.36	0.50	mg/kg	2.18		108	60-140	0.9	25	
Benzene	1.50	0.50	"	1.34		112	70-130	3	25	
Toluene	8.25	0.50	"	8.10		102	70-130	3	25	
Gasoline (C6-C10)	101	100	"	110		92	70-130	1	25	
Surrogate: 1,2-DCA-d4	*2.29*		"	*2.50*		*92*	*60-140*			
Surrogate: Toluene-d8	*2.45*		"	*2.50*		*98*	*60-140*			
Surrogate: 4-BFB	*2.44*		"	*2.50*		*98*	*60-140*			

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

BTEX by EPA Method 8260B - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100049 - EPA 5030B [P/T]										
Blank (2100049-BLK1)				Prepared & Analyzed: 10/03/02						
Ethanol	ND	50	ug/l							
Tert-butyl alcohol	ND	5.0	"							
Methyl tert-butyl ether	ND	0.50	"							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
Tert-amyl methyl ether	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
Benzene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Toluene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Gasoline (C6-C10)	ND	50	"							
Surrogate: Toluene-d8	*23.3*		"	*25.0*		*93*	*60-140*			
Surrogate: 4-BFB	*23.1*		"	*25.0*		*92*	*60-140*			
Surrogate: 1,2-DCA-d4	*21.9*		"	*25.0*		*88*	*60-140*			
Laboratory Control Sample (2100049-BS1)				Prepared & Analyzed: 10/03/02						
Methyl tert-butyl ether	20.8	0.50	ug/l	21.8		95	60-140			
Benzene	14.0	0.50	"	13.4		104	70-130			
Toluene	76.8	0.50	"	81.0		95	70-130			
Gasoline (C6-C10)	927	50	"	1100		84	70-130			
Surrogate: Toluene-d8	*22.8*		"	*25.0*		*91*	*60-140*			
Surrogate: 4-BFB	*23.8*		"	*25.0*		*95*	*60-140*			
Surrogate: 1,2-DCA-d4	*20.4*		"	*25.0*		*82*	*60-140*			
Matrix Spike (2100049-MS1)	**Source: S209552-16**			Prepared & Analyzed: 10/03/02						
Methyl tert-butyl ether	18.6	0.50	ug/l	21.8	ND	83	60-140			
Benzene	15.2	0.50	"	13.4	ND	113	70-130			
Toluene	94.7	0.50	"	81.0	ND	117	70-130			
Gasoline (C6-C10)	1080	50	"	1100	ND	96	60-140			
Surrogate: Toluene-d8	*26.7*		"	*25.0*		*107*	*60-140*			

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

BTEX by EPA Method 8260B - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100049 - EPA 5030B [P/T]										
Matrix Spike (2100049-MS1)	**Source: S209552-16**			Prepared & Analyzed: 10/03/02						
Surrogate: 4-BFB	*25.1*		*ug/l*	*25.0*		*100*	*60-140*			
Surrogate: 1,2-DCA-d4	*16.5*		*"*	*25.0*		*66*	*60-140*			
Matrix Spike Dup (2100049-MSD1)	**Source: S209552-16**			Prepared & Analyzed: 10/03/02						
Methyl tert-butyl ether	22.1	0.50	ug/l	21.8	ND	99	60-140	17	25	
Benzene	15.2	0.50	"	13.4	ND	113	70-130	0	25	
Toluene	85.2	0.50	"	81.0	ND	105	70-130	11	25	
Gasoline (C6-C10)	1060	50	"	1100	ND	94	60-140	2	25	
Surrogate: Toluene-d8	*23.8*		*"*	*25.0*		*95*	*60-140*			
Surrogate: 4-BFB	*23.5*		*"*	*25.0*		*94*	*60-140*			
Surrogate: 1,2-DCA-d4	*19.4*		*"*	*25.0*		*78*	*60-140*			

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

Total Metals by EPA 6000/7000 Series Methods - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2100006 - EPA 3050B										
Blank (2100006-BLK1)				Prepared & Analyzed: 10/01/02						
Lead	ND	2.5	mg/kg							
Laboratory Control Sample (2100006-BS1)				Prepared & Analyzed: 10/01/02						
Lead	53.7	2.5	mg/kg	50.0		107	80-120			
Matrix Spike (2100006-MS1)		Source: S209576-04		Prepared & Analyzed: 10/01/02						
Lead	410	10	mg/kg	50.0	300	220	80-120			QM-07
Matrix Spike Dup (2100006-MSD1)		Source: S209576-04		Prepared & Analyzed: 10/01/02						
Lead	360	10	mg/kg	50.0	300	120	80-120	13	20	

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Gettler-Ryan - Dublin	Project: Tosco 7004, San Leandro, CA	S209552
6747 Sierra Court, Ste. J	Project Number: N/A	**Reported:**
Dublin CA, 94568	Project Manager: Doug Lee	10/07/02 17:23

Notes and Definitions

QM-07	The spike recovery was outside control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
R-05	The sample was diluted due to the presence of high levels of non-target analytes resulting in elevated reporting limits.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

№ 007693

TOSCO

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☐ 1455 McDowell Blvd. North, Suite D • Petaluma, CA 94954 • (707) 792-1865 • FAX (707) 792-0342
☐ 1551 Industrial Road • San Carlos, CA 94070 • (650) 232-9600 • FAX (650) 232-9612

Consultant Company: Geller-Ryan Inc. 140106.06	Tosco Engineer: David B. De Witt
Address: 6747 Sierra Ct, Suite J	Site #: 7004, GID T0600101451
City: Dublin State: CA Zip Code: 94568	Site Address: 15579 Hesperian BLVD.
Telephone: 925-551-7555 Fax #: 925-551-7888	City, State: San Leandro, CA
Report To: Doug Lee Sampler: Andrew Smith	QC Data: ☒ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

Turnaround Time: ☒ 10 Work Days ☐ 5 Work Days ☐ 3 Work Days ☐ 2 Work Days ☐ 1 Work Day ☐ 2-8 Hours

☐ Drinking Water ☐ Waste Water ☒ Other

Project Coding:

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	TPHg/BTEX/MTBE 8260	TPH Diesel (8015)	TOG (418.1)	Oxygenates (6) 8260	Oxygenates (6)+ EDB 1,2 DCA (8260)	Comments
1. G-1 (S5)	9/20/02	Soil	1	Core	209552-01	X					Hold
2. G-1 (S10)					-02	X			X		
3. G-1 (S14)					-03	X			X		
4. G-2 (S14)					-04	X			X		
5. G-2 (S5)					-05	X			X		Hold 209552-05 off Hold
6. G-2 (S10)					-06	X			X		
7. G-3 (S9)					-07	X			X		Hold 209552-07 off Hold
8. G-3 (S10					-08	X			X		
9. G-3 (S 13.5)					-09	X			X		
10. G-4 (S5)					-10	X					Hold

Relinquished By:	Date: 7/24/02	Time: 1535	Received By:	Date: 9/20/02 Time: 1535
Relinquished By: Michael Gurin	Date: 9/20/02	Time: 1630	Received By:	Date: 9-23 Time: 1600
Relinquished By:	Date: 9-23	Time:	Received By: Monica	Date: 9/24/02 Time: 900

Were Samples Received In Good Condition? ☐ Yes ☐ No Samples on Ice? ☐ Yes ☐ No Method of Shipment _____ Page 1 of 3

To be completed upon receipt of report:

1) Were the analyses requested on the Chain of Custody reported? ☐ Yes ☐ No If no, what analyses are still needed? _____

2) Was the report issued within the requested turnaround time? ☐ Yes ☐ No If no, what was the turnaround time? _____

Approved by: _____ Signature: _____ Company: _____ Date: _____

Pink - Client
Yellow - Sequoia
White - Sequoia

№ 007651

TOSCO

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☐ 1551 Industrial Road • San Carlos, CA 94070 • (650) 232-9600 • FAX (650) 232-9612

Consultant Company: Gettler Ryan Inc. 140106.06	Tosco Engineer: David B. De Witt
Address: 6747 Sierra ct Suite J	Site #: 7004, GID. T0600101451
City: Dublin State: CA Zip Code: 94568	Site Address: 15579 Hesperian BLVD
Telephone: 925-551-7855 Fax #: 925-551-7888	City, State: San Leandro, CA
Report To: Doug Lee Sampler: Andrew Smith	QC Data: ☒ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

Turnaround Time: ☒ 10 Work Days ☐ 5 Work Days ☐ 3 Work Days ☐ 2 Work Days ☐ 1 Work Day ☐ 2-8 Hours

☐ Drinking Water ☐ Waste Water ☒ Other

Project Coding:

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	TPHg/BTEX/MTBE 8260	TPH Diesel (8015)	TOG (418.1)	Oxygenates (5) 8260	Oxygenates (5) + EDB, 1,2 DCA (8260)	Comments
1. G-4 (S10)	9/20/02	Soil	1	Core	209552-11	X			X		
2. G-4 (S13)					-12	X			X		
3. G-5 (S5)					-13	X			X		Hold off pending results
4. G-5 (S10)					-14	X			X		
5. G-5 (S13)					-15	X			X		
6. G-1W	805	H2O	6	VOAs	-16	X			X		
7. G-2W	830				-17	X			X		
8. G-3W	900				-18	X			X		
9. G-4W	930				-19	X			X		
10. G-5W	1230				-20	X			X		

Relinquished By:	Date: 9/20/02	Time: 1535	Received By:	Date: 9/20/02 Time: 1535
Relinquished By: Michael Gosin	Date: 9/20/02	Time: 1630	Received By:	Date: 9-23 Time: 1600
Relinquished By:	Date: 9-24	Time:	Received By: Monica Gibson	Date: 9/25/02 Time: 900

Were Samples Received in Good Condition? ☐ Yes ☐ No Samples on Ice? ☐ Yes ☐ No Method of Shipment _____ Page 2 of 3

To be completed upon receipt of report:

1) Were the analyses requested on the Chain of Custody reported? ☐ Yes ☐ No If no, what analyses are still needed? _____

2) Was the report issued within the requested turnaround time? ☐ Yes ☐ No If no, what was the turnaround time? _____

Approved by: _____ Signature: _____ Company: _____ Date: _____

Pink - Client Yellow - Sequoia White - Sequoia

№ 007652

TOSCO

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☐ 1551 Industrial Road • San Carlos, CA 94070 • (650) 232-9600 • FAX (650) 232-9612

Consultant Company: Getter-Ryan Inc, 140106.06	Tosco Engineer: David B. Bewitt
Address: 6747 Sierra Ct Suite J	Site #: 7004, T0600101451
City: Dublin State: CA Zip Code: 94568	Site Address: 155-99 Hesperian BLVD.
Telephone: 925-551-7555 Fax #: 925-551-7888	City, State: San Leandro CA,
Report To: Doug Lee Sampler: Andrew Smith	QC Data: ☒ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

Turnaround Time: ☒ 10 Work Days ☐ 5 Work Days ☐ 3 Work Days ☐ 2 Work Days ☐ 1 Work Day ☐ 2-8 Hours

☐ Drinking Water ☐ Waste Water ☒ Other

Project Coding:

Analyses Requested: TPHg/BTEX/MTBE; TPH Diesel (8015); TOG (418.1); Oxygenates (6) 8260; Oxygenates (6)+4 EDB 1,2 DCA (8260); Total Lead (200.7); Comments

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	TPHg/BTEX/MTBE	TPH Diesel (8015)	TOG (418.1)	Oxygenates (6) 8260	Oxygenates (6)+4 EDB 1,2 DCA (8260)	Total Lead (200.7)	Comments
1. Comp-1 (A,B,C,D)	9/20/02	Soil	4	Cores	209552 21	X				X		
2.												
3.												
4.												
5.												
6.												
7.												
8.												
9.												
10.												

Relinquished By: Andrew Smith	Date: 9/24	Time: 1535	Received By: Athena	Date: 9/24/02	Time: 1535
Relinquished By: Michael Gorin	Date: 9/20/02	Time: 1630	Received By:	Date: 9-23	Time: 1600
Relinquished By:	Date: 9-24	Time:	Received By: Monica Frost	Date: 9/24/02	Time: 900

Were Samples Received in Good Condition? ☐ Yes ☐ No Samples on Ice? ☐ Yes ☐ No Method of Shipment _____ Page 3 of 3

To be completed upon receipt of report:

1) Were the analyses requested on the Chain of Custody reported? ☐ Yes ☐ No If no, what analyses are still needed? _____

2) Was the report issued within the requested turnaround time? ☐ Yes ☐ No If no, what was the turnaround time? _____

Approved by: _____ Signature: _____ Company: _____ Date: _____

Pink - Client
Yellow - Sequoia
White - Sequoia

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: Kettle Ryan
REC. BY (PRINT): Monica
WORKORDER: 9209552

DATE Received at Lab: 9/20/02
TIME Received at Lab: 900
LOG IN DATE: 9/20/02

(Drinking water) for regulatory purposes: YES/(NO)
(Wastewater) for regulatory purposes: YES/(NO)

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	#	CLIENT ID	DESCRIPTION	SAMPLE MATRIX	DATE SAMPLED	CONDITION (ETC.)
1. Custody Seal(s)	Present / (Absent)	9209552	01	G-1 (S5	BTSS	Soil	9/20/02	
	Intact / Broken*		02	1 (S10)				
2. Chain-of-Custody	(Present) / Absent*		03	1 (S14)				
3. Traffic Reports or Packing List:	Present / (Absent)		04	G-2 (S14)				
4. Airbill:	Airbill / Sticker		05	1 (S5)				
	Present / (Absent)		06	1 (S10)				
5. Airbill #:			07	G-3 (S5)				
6. Sample Labels:	(Present) / Absent		08	1 (S10)				
7. Sample IDs:	(Listed) / Not Listed		09	1 (S13.5)				
	on Chain-of-Custody		10	G-4 (S5)				
8. Sample Condition:	(Intact) / Broken* /		11	1 (S10)				
	Leaking*		12	1 S13)				
9. Does information on			13	G-5 (S5)				
custody reports, traffic			14	1 (S16)				
reports and sample			15	1 (S13)	1			
labels agree?	(Yes) / No*		16	L-1W	VOA	W	9/20/02	
10. Sample received within			17	-2W				
hold time:	(Yes) / No*		18	-3W				
11. Proper Preservatives			19	-4W				
used:	(Yes) / No*		20	-5W				
12. Temp Rec. at Lab:		✓	21	comp(ABCD)	BTSS	Soil	9/20/02	
(Acceptance range for samples requiring thermal pres.:4+/-2°C)	Yes / No*							

AF

*If Circled, contact Project Manager and attach record of resolution.