PACIFIC
ENVIRONMENTAL
GROUP, INC.

March 2, 1994
Project 305-094.01

Mr. Lynn Walker
Shell Oil Company
P.O. Box 5278
Concord, California 94520

Re: Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California
WIC No 204-1381-0407

Dear Mr. Walker:

Pacific Environmental Group, Inc. (PACIFIC) has prepared this report for Shell Oil Company to document the findings during excavation of hydrocarbon-impacted soils at the site referenced above (Figure 1). Excavation of waste oil-impacted soils associated with the waste oil tank excavation was performed by Gradient Construction, Inc. The removal and sampling of the soil was observed and performed by a PACIFIC geologist. Excavation and sampling began in December 1992 and was completed in July 1993. The objective of the excavation was to remove waste oil-impacted soil to levels that would not pose a threat to groundwater.

SOIL EXCAVATION

Excavation was performed in four stages:

- The first stage was performed on December 12, 1992. During this stage the clean backfill from the excavation of the former waste oil tank was removed along with additional hydrocarbon-impacted soil immediately to the west of the former waste oil tank location. The maximum depth of the excavation was approximately 6 feet. Due to heavy rainfall, additional excavation was postponed.
- The second stage of excavation was performed on June 18, 1993. The excavation was enlarged to a maximum depth of approximately 9 feet (Figure 2).

- From June 30 to July 2, 1993, the third stage of excavation was performed to attain the final lateral dimensions and maximum depth of 14 feet. Excavation was performed below groundwater to remove soil impacted with oil and grease below the water table.
- The final stage of excavation was performed on July 12, 1993, and widened the deepest portion of the excavation (Figure 3).

Soil samples were collected from the excavation and analyzed for the presence of total petroleum hydrocarbons calculated as gasoline (TPH-g), benzene, toluene, ethylbenzene, and xylenes (BTEX compounds), TPH calculated as diesel (TPH-d), and oil and grease. Selected soil samples were analyzed additionally for volatile and semi-volatile organic compounds, and metals. Field and laboratory procedures are presented as Attachment A. Sample designations, sample collection dates and depths, and the results of laboratory analyses of these samples are presented in Tables 1 through 4. Concentrations of TPH-g, benzene, TPH-d, and oil and grease are shown on Figures 2 and 3. Figure 2 shows soil sample locations and depths during the initial sampling stages. Additional excavation was performed and removed additional soil in the excavation. Figure 3 shows the final soil sample locations and concentrations that remain in soil. Certified analytical reports are presented as Attachment B.

The final dimensions of the excavation were approximately 60 by 35 feet to a depth of 5 feet with a deeper portion of the excavation nearest to the former waste oil tank approximately 25 by 30 feet to a total depth of 14 feet (Figure 3). The maximum concentrations detected in the closure samples collected at the maximum extent of excavation were 1,500 parts per million (ppm) TPH-g, 3.3 ppm benzene, 190 ppm TPH-d, and 89 ppm oil and grease in [redacted] at a depth of 10 feet, located immediately west of the former location of the waste oil tank in the east wall of the deeper portion of the excavation. The highest concentration of oil and grease detected in the final closure samples was 130 ppm in [redacted] located at a depth of 4 feet in the northeastern corner of the excavation. No further excavation was possible in this area due to the proximity of the adjacent building.

LEW1 = Sidewall sample

Samples EW2, SW4, EF4, and T1 were also analyzed for oil and grease utilizing the soluble threshold limit concentration (STLC) and toxicity characteristic leaching procedures (TCLP). Oil and grease was detected in Samples EW2, SW4, EF4, and T1 at 130, 250, 370, and 940 ppm, respectively. No extractable oil and grease could be detected by utilizing either the STLC or TCLP extraction procedures. Additionally, no volatile or semi-volatile organic compounds were detected in any of the soil samples collected from the excavation. but were found in stockpile samples

Groundwater was encountered in the excavation at an approximate depth of 9 feet.

Stockpiled Soil Removal

Soils generated during the excavation were stockpiled on site for characterization and disposal. Stockpiles SP-1 through SP-3, SP-6, and SP-7 were hauled to Class III landfills. Approximately 450 cubic yards of soil were hauled to either BFI Landfill in Livermore or to B&J Landfill in Vacaville, California. [redacted]

Soil samples were collected from the stockpiled soils (Attachment A); sample designations, sample collection depths, and the results of laboratory analyses of these samples are presented in Tables 5, 6, and 7.

Excavation Backfill

Upon completion of excavation, clean imported Class II baserock was placed and compacted to at least 90 percent relative compaction. The backfill was placed between September 2 and 10, 1993. The compaction of the backfill material was certified by Seidelman Associates Incorporated. The results of the compaction testing are presented as Attachment C.

DISCUSSION

The objective of the excavation was to remove oil and grease-impacted soil in the vicinity of the former waste oil tank to levels that would not pose a threat to groundwater, and that would not require additional investigation or remediation.

The maximum concentration of oil and grease remaining in soil, based on the confirmation samples collected, was 130 ppm.

STLC and TCLP tests are designed to simulate natural conditions and to examine the potential for a substance to leach from soil into groundwater. The TCLP test is more conservative and therefore more likely to leach hydrocarbons than the STLC test.

The oil and grease concentrations in the samples submitted for STLC and TCLP analyses ranged between 130 and 940 ppm. The STLC and TCLP tests indicate that oil and grease will not leach out of the soil into groundwater at concentrations up to 940 ppm. Therefore, the oil and grease remaining in soil (maximum 130 ppm) is not likely to leach into groundwater at the site. The goal of the excavation was therefore achieved, and PACIFIC recommends that no further action be taken on the oil and grease in soil at the site.

If you have additional questions or comments, please feel free to contact our office.

Sincerely,

Pacific Environmental Group, Inc.

Ross W.N. Tinline
Project Geologist

Michael Hurd
Senior Geologist
RG 5319

REGISTERED GEOLOGIST
MICHAEL HURD
No. 5319
EXP. 6/94
STATE OF CALIFORNIA

Attachments:
- Table 1 - Soil Analytical Data - Total Petroleum Hydrocarbons (TPH as Gasoline, BTEX Compounds, TPH as Diesel, and Total Oil and Grease)
- Table 2 - Soil Analytical Data - Volatile Organic Compounds
- Table 3 - Soil Analytical Data - Semi-Volatile Organic Compounds
- Table 4 - Soil Analytical Data - Metals
- Table 5 - Soil Analytical Data - Stockpiled Soils Total Petroleum Hydrocarbons (TPH as Gasoline, BTEX Compounds, TPH as Diesel, and Total Oil and Grease)
- Table 6 - Soil Analytical Data - Stockpiled Soils Volatile Organic Compounds
- Table 7 - Soil Analytical Data - Stockpiled Soils Semi-Volatile Organic Compounds
- Figure 1 - Site Location Map
- Figure 2 - Excavated Soil Sample Concentration Map
- Figure 3 - Closure Soil Sample Concentration Map
- Attachment A - Field and Laboratory Procedures
- Attachment B - Certified Analytical Reports
- Attachment C - Summary of Compaction Testing

cc: ~~Mr. Larry Seto, Alameda County Health Care Services Agency~~
Mr. Rich Hiett, Regional Water Quality Control Board
Mr. Richard Finn, Larson & Burnham
Mr. David Swope, Shell Oil Company
Dr. Mohsen Mehran, Owner Consultant
Mr. Matthew Righetti, Righetti Law Firm
Mr. Richard A. Schoenberger, Esq., Walkup, Shelby, Bastian, Melodia, Kelly, Echeverria and Link

Table 1
Soil Analytical Data
Total Petroleum Hydrocarbons
(TPH as Gasoline, BTEX Compounds, TPH as Diesel, and Total Oil and Grease)
(ppm)

Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

Sample ID	Sample Depth (feet)	Date Sampled	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	TPH as Diesel	Total Oil and Grease
NW-1	4	12/17/92	ND	ND	ND	ND	ND	ND	ND
NW-1A	5	12/17/92	ND	ND	ND	ND	ND	ND	ND
NW-3	4	12/17/92	ND	ND	ND	ND	ND	ND	60
NW-4	4	12/17/92	27 a	ND	ND	ND	ND	27 b	100
NW-5	4	06/18/93	ND	ND	ND	ND	ND	ND	ND
NW-6	4	06/18/93	ND	ND	ND	ND	ND	ND	ND
NW-7	4	06/18/93	ND	ND	ND	ND	ND	ND	ND
NW-8	3	06/30/93	ND	ND	ND	ND	ND	ND	ND
NW-9	4	06/30/93	ND	ND	ND	ND	ND	ND	ND
LNW-1	10	07/01/93	ND	ND	ND	ND	ND	ND	ND
SW-1	4	12/17/92	ND	ND	ND	ND	ND	ND	ND
SW-2	4	12/17/92	ND	ND	ND	ND	ND	ND	ND
SW-3	9	12/17/92	120 a	ND	ND	ND	ND	340 b	97
SW-4	3	06/18/93	ND	ND	ND	ND	ND	ND	250
SW-5	3	06/30/93	ND	ND	ND	ND	ND	ND	ND
SW-6	4	06/30/93	ND	ND	ND	ND	ND	ND	ND
SW-7	4	06/30/93	ND	ND	ND	ND	ND	1.9 b	ND
LSW-1	10	07/01/93	9.2 c	0.048	0.022	0.074	0.12	2.4 b	ND
EW-1	4	12/17/92	ND	ND	ND	ND	ND	ND	ND
EW-2	4	06/18/93	ND	ND	ND	ND	ND	ND	130
LEW-1	10	07/01/93	1,500 c	3.3	9.5	14	86	190 b	89
LEW-2	10	07/01/93	1.3 a	ND	ND	0.022	0.025	71 b	54
WW-1	4	12/17/92	1.1 a	ND	ND	ND	ND	ND	78
WW-2	3	06/18/93	ND	ND	ND	ND	ND	ND	ND
WW-3	3	06/18/93	7.3 a	ND	ND	ND	ND	1.9 b	ND
WW-4	3	06/18/93	18 a	ND	ND	ND	ND	95 b	ND
WW-5	4	06/30/93	ND	ND	ND	ND	ND	ND	ND
WW-6	4	06/30/93	ND	ND	ND	ND	ND	ND	ND
LWW-1	10	07/01/93	1,300 c	5.8	ND	13	43	810 b	670
LWW-2	10	07/01/93	560 c	2.7	1.2	6.9	45	95 b	200
LWW-3	12	07/12/93	190	0.72	4.6	4.3	26	53 b	ND
LWW-4	12	07/12/93	ND	0.014	0.073	ND	0.011	ND	ND
EF-1	4	12/17/93	480 a	ND	ND	0.35	0.75	320 b	71
EF-2	9	06/18/93	43 a	0.019	ND	ND	0.35	29 b	190
EF-3	8	06/18/93	ND	ND	ND	ND	ND	ND	130
EF-4	9	06/18/93	66 a	ND	ND	0.27	0.83	41 b	370
EF-5	9	06/18/93	ND	ND	ND	ND	ND	ND	ND
EF-6	8	06/18/93	ND	ND	ND	ND	ND	ND	ND
EF-7	8	06/18/93	ND	ND	ND	ND	ND	ND	76
EF-8	5	06/30/93	ND	ND	ND	ND	ND	ND	ND
EF-9	5	06/30/93	ND	ND	ND	ND	ND	ND	ND
EF-10	5	06/30/93	ND	ND	ND	ND	ND	5.0 b	79
EF-11	5	06/30/93	ND	ND	ND	ND	ND	ND	99
EF-12	14	07/01/93	ND	ND	ND	ND	0.011	ND	ND
EF-13	14	07/01/93	ND	ND	ND	ND	0.021	2.1 b	ND
EF-14	6	07/02/93	ND	ND	ND	ND	ND	ND	ND
EF-15	6	07/02/93	ND	ND	ND	ND	ND	ND	ND
EF-17	15	07/12/93	ND	0.015	0.1	0.008	0.028	ND	ND
EF-18	15	07/12/93	ND	0.006	0.083	0.006	0.03	ND	ND
T1	3	06/18/93	330 a	ND	ND	ND	0.65	2,900 b	940
T2	3	06/18/93	1.2 a	ND	ND	ND	ND	75 b	85
T3	4	06/18/93	ND	ND	ND	ND	ND	ND	91
T4	3	06/30/93	ND	ND	ND	ND	ND	ND	ND

ppm = Parts per million
ND = Not detected
a. Laboratory notes as non-gasoline mix.
b. Laboratory notes as non-diesel mix.
c. Laboratory notes as gasoline plus non-gasoline mix.
Detection limits are indicated in certified analytical reports.

Table 2
Soil Analytical Data
Volatile Organic Compounds
(ppm)

Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

Sample ID	SW–2	NW–3	EW–1
Sample Date	12/17/92	12/17/93	12/17/93
Chloromethane	ND	ND	ND
Vinyl chloride	ND	ND	ND
Bromomethane	ND	ND	ND
Chloroethane	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND
1,1–Dichloroethene	ND	ND	ND
Trichlorotrifluoroethane	ND	ND	ND
Acetone	ND	ND	ND
Carbon disulfide	ND	ND	ND
Methylene chloride	ND	ND	ND
Trans–1,2–dichloroethene	ND	ND	ND
1,1–Dichloroethane	ND	ND	ND
Cis–1,2–dichloroethene	ND	ND	ND
2–Butanone	ND	ND	ND
Chloroform	ND	ND	ND
1,1,1–Trichloroethane	ND	ND	ND
Carbon tetrachloride	ND	ND	ND
Vinyl acetate	ND	ND	ND
Benzene	ND	ND	ND
1,2–Dichloroethane	ND	ND	ND
Trichloroethene	ND	ND	ND
1,2–Dichloropropane	ND	ND	ND
Bromodichloromethane	ND	ND	ND
Cis–1,3–dichloropropene	ND	ND	ND
4–Methyl–2–pentanone	ND	ND	ND
Toluene	ND	ND	ND
Trans–1,3–dichloropropene	ND	ND	ND
1,1,2–Trichloroethane	ND	ND	ND
Tetrachloroethene	ND	ND	ND
2–Hexanone	ND	ND	ND
Dibromochloromethane	ND	ND	ND
Chlorobenzene	ND	ND	ND
Ethylbenzene	ND	ND	ND
Xylene (Total)	ND	ND	ND
Styrene	ND	ND	ND
Bromoform	ND	ND	ND
1,1,2,2–Tetrachloroethane	ND	ND	ND
1,3–Dichlorobenzene	ND	ND	ND
1,4–Dichlorobenzene	ND	ND	ND
1,2–Dichlorobenzene	ND	ND	ND

ppm = Parts per million
ND = Not detected
Detection limits are indicated in certified analytical reports.

Table 3
Soil Analytical Data
Semi-Volatile Organic Compounds
(ppm)

Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

Sample ID	NW-1A	NW-3	NW-5	NW-6	NW-7
Sample Depth (feet)	5	4	4	4	4
Sample Date	06/18/93	12/17/92	06/18/93	06/18/93	06/18/93
Phenol	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND
Benzyl alcohol	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND
2,2'-Oxybis(1-chloropropane)	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND
N-nitroso-di-n-propylamine	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND
Isophrone	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND
Benzoic acid	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND
2-Chloronaphthlene	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND
Dimethylphthalate	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND
Diethylphthalate	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine (1)	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	ND	ND	ND	ND	ND
Hexachlorobenzene	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND
Di-n-Butylphthalate	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND	ND	ND
Chiysene	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	ND	ND	ND	ND	ND
Di-n-octylphthalate	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND
Azobenzene	ND	ND	ND	ND	ND
Benzidine	ND	ND	ND	ND	ND

ppm = Parts per million
ND = Not detected
Detection limits are indicated in certified analytical reports.

Table 3 (continued)
Soil Analytical Data
Semi-Volatile Organic Compounds
(ppm)

Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

Sample ID	SW-4	EW-1	EW-2	WW-2	WW-3
Sample Depth (feet)	3		4	3	3
Sample Date	06/18/93	12/17/92	06/18/93	06/18/93	06/18/93
Phenol	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND
Benzyl alcohol	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND
2,2'-Oxybis(1-chloropropane)	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND
N-nitroso-di-n-propylamine	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND
Isophrone	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND
Benzoic acid	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND
2-Chloronaphthlene	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND
Dimethylphthalate	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND
Diethylphthalate	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine (1)	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	ND	ND	ND	ND	ND
Hexachlorobenzene	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND
Di-n-Butylphthalate	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	ND	ND	ND	ND	ND
Di-n-octylphthalate	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND
Azobenzene	ND	ND	ND	ND	ND
Benzidine	ND	ND	ND	ND	ND

ppm = Parts per million
ND = Not detected
Detection limits are indicated in certified analytical reports.

Table 3 (continued)
Soil Analytical Data
Semi-Volatile Organic Compounds
(ppm)

Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

Sample ID	WW-4	EF-2	EF-3	EF-4	EF-5
Sample Depth (feet)	3	9	8	9	9
Sample Date	06/18/93	06/18/93	06/18/93	06/18/93	06/18/93
Phenol	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND
Benzyl alcohol	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND
2,2'-Oxybis(1-chloropropane)	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND
N-nitroso-di-n-propylamine	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND
Isophrone	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND
Benzoic acid	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND
2-Chloronaphthlene	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND
Dimethylphthalate	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND
Diethylphthalate	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine (1)	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	ND	ND	ND	ND	ND
Hexachlorobenzene	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND
Di-n-Butylphthalate	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	ND	ND	ND	ND	ND
Di-n-octylphthalate	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND
Azobenzene	ND	ND	ND	ND	ND
Benzidine	ND	ND	ND	ND	ND

ppm = Parts per million
ND = Not detected
Detection limits are indicated in certified analytical reports.

Table 3 (continued)
Soil Analytical Data
Semi-Volatile Organic Compounds
(ppm)

Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

Sample ID	EF-5	EF-7	T1	T2	T-3	SW-2
Sample Depth (feet)	8	8	3	3	4	
Sample Date	06/18/93	06/18/93	06/18/93	06/18/93	06/18/93	12/17/92
Phenol	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND
Benzyl alcohol	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND	ND
2,2'-Oxybis(1-chloropropane)	ND	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND	ND
N-nitroso-di-n-propylamine	ND	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND
Isophrone	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND	ND
Benzoic acid	ND	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	ND
4-Chloroaniline	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND	ND
2-Chloronaphthlene	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ND	ND	ND	ND	ND	ND
Dimethylphthalate	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND	ND
Diethylphthalate	ND	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine (1)	ND	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND	ND
Di-n-Butylphthalate	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND
Di-n-octylphthalate	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	ND	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND	ND
Azobenzene	ND	ND	ND	ND	ND	ND
Benzidine	ND	ND	ND	ND	ND	ND

ppm = Parts per million
ND = Not detected
Detection limits are indicated in certified analytical reports.

Table 4
Soil Analytical Data
[redacted]
(ppm)

Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

Sample ID	NW–3	SW–2	EW–1
Sample Date	12/17/92	12/17/92	12/17/92
Cadmium	ND	ND	ND
Chromium, total	40	29	28
Lead	ND	5.1	12
Nickel	28	30	29
Zinc	43	39	49

ppm = Parts per million
ND = Not detected
Detection limits are indicated in certified analytical reports.

Table 5
Soil Analytical Data
Stockpiled Soils
Total Petroleum Hydrocarbons
(TPH as Gasoline, BTEX Compounds, TPH as Diesel, and Total Oil and Grease)
(ppm)

Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

Sample ID	Date Sampled	TPH as Gasoline	Benzene	Toluene	Ethyl-benzene	Xylenes	TPH as Diesel	Total Oil and Grease
SP-1A-D	12/17/92	ND	ND	ND	ND	ND	ND	ND
SP-2A-D	06/18/93	1.3 a	ND	ND	ND	ND	3.5 b	130
SP-3ABDE	06/18/93	ND	ND	ND	ND	ND	10 b	180
SP-3FGHC	06/18/93	5.8 a	ND	ND	0.008	0.066	6.4 b	150
SP-4A-D	06/30/93	ND	ND	ND	ND	ND	ND	140
SP-4E-H	07/02/93	38 a	ND	ND	ND	ND	NA	1,700
SP-5A-D	07/02/93	410 a	0.58	0.58	0.52	3.2	NA	120
SP-5E-H	07/02/93	140 a	ND	ND	ND	0.69	NA	51
SP-6A-D	07/02/93	ND	ND	ND	ND	ND	ND	ND
SP-7A-D	07/12/93	100	0.35	2.7	2.7	18	NA	ND
SP-7E-H	07/12/93	200	0.69	0.88	3.4	20	NA	ND

ppm = Parts per million
ND = Not detected
NA = Not analyzed
a. Laboratory notes non-gasoline mix.
b. Laboratory notes non-diesel mix.
Detection limits are indicated in certified analytical reports.

Table 6
Soil Analytical Data
Stockpiled Soils
Volatile Organic Compounds
(ppm)

Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

Sample ID	SP-1A-D	SP-2A-D	SP-3ABDE	SP-3FGHC	SP-4A-D	SP-4E-H
Sample Date	12/17/92	06/18/93	06/18/93	06/18/93	06/18/93	07/02/93
Chloromethane	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND
Trichlorotrifluoroethane	ND	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND	ND
Carbon disulfide	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND
Trans-1,2-dichloroethene	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND
Cis-1,2-dichloroethene	ND	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND
Vinyl acetate	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND
Cis-1,3-dichloropropene	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND
Trans-1,3-dichloropropene	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND
Xylene (Total)	ND	ND	ND	ND	ND	ND
Styrene	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	ND

Table 6 (continued)
Soil Analytical Data
Stockpiled Soils
Volatile Organic Compounds
(ppm)

Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

Sample ID Sample Date	SP-5A-D 07/02/93	SP-5E-H 07/02/93	SP-6A-D 07/02/93	SP-7A-D 07/12/93	SP-7E-H 07/12/93
Chloromethane	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND
Trichlorofluoromethane	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND
Trichlorotrifluoroethane	ND	ND	ND	ND	ND
Acetone	ND	ND	ND	ND	ND
Carbon disulfide	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND
Trans-1,2-dichloroethene	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND
Cis-1,2-dichloroethene	ND	ND	ND	ND	ND
2-Butanone	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND
Vinyl acetate	ND	ND	ND	ND	ND
Benzene	0.580	ND	ND	0.350	0.690
1,2-Dichloroethane	ND	ND	ND	ND	ND
Trichloroethene	[illegible]	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND
Cis-1,3-dichloropropene	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND
Toluene	0.580	ND	ND	2.7	0.880
Trans-1,3-dichloropropene	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND
Chlorobenzene	[illegible]	ND	ND	ND	ND
Ethylbenzene	0.520	ND	ND	2.7	3.4
Xylene (Total)	3.2	0.690	ND	1.8	20
Styrene	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	[illegible]	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND

ppm = Parts per million
ND = Not detected
Detection limits are indicated in certified analytical reports.

Table 7
Soil Analytical Data
Stockpiled Soils
Semi–Volatile Organic Compounds
(ppm)

Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

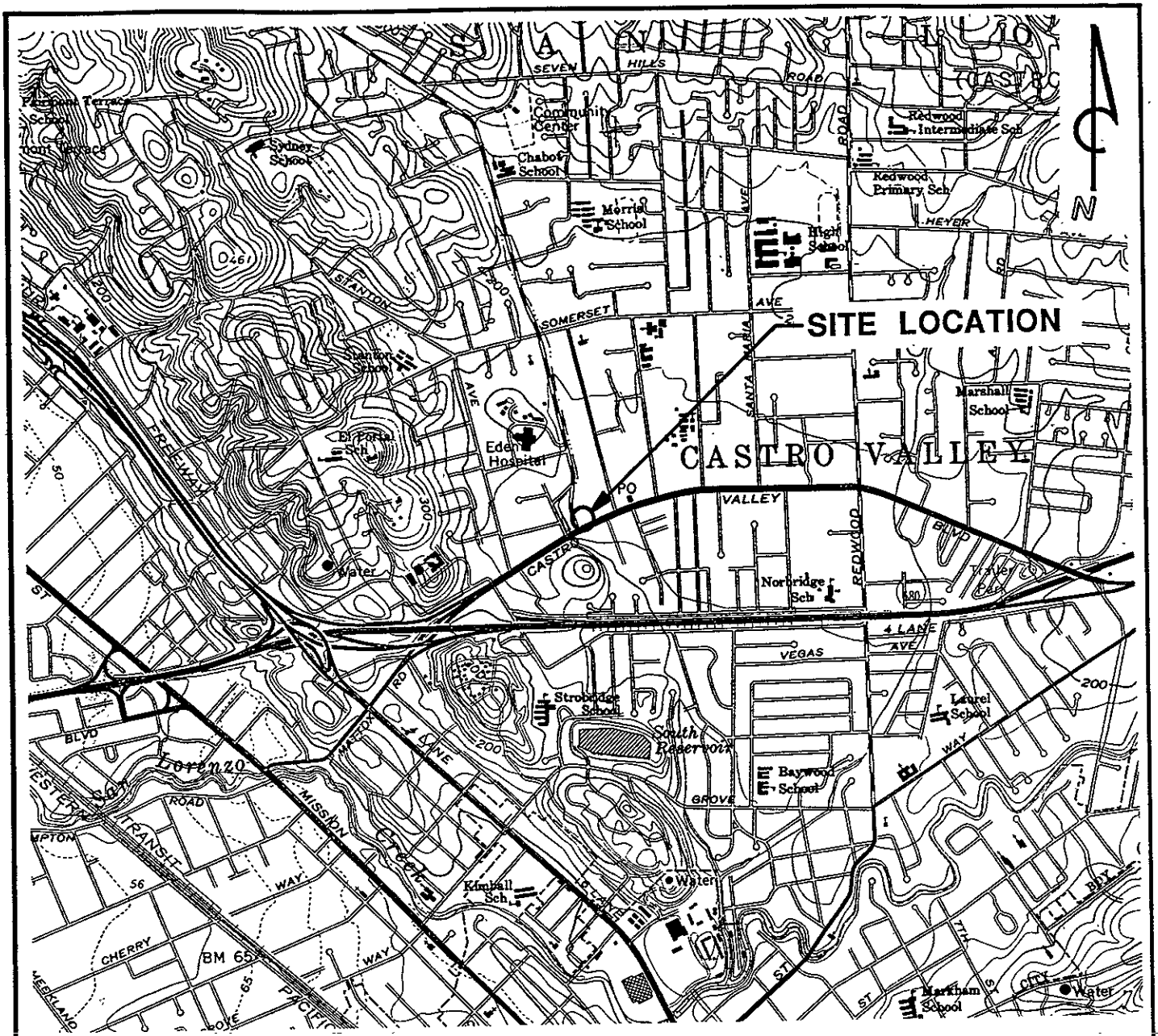
Sample ID	SP–1A–D	SP–2A–D	SP–3ABDE	SP–3FGHC	SP–4A–D	[redacted]
Sample Date	12/17/92	06/16/93	06/16/93	06/16/93	06/30/93	07/02/93
Phenol	ND	ND	ND	ND	ND	ND
Bis(2–chloroethyl)ether	ND	ND	ND	ND	ND	ND
2–Chlorophenol	ND	ND	ND	ND	ND	ND
1,3–Dichlorobenzene	ND	ND	ND	ND	ND	ND
1,4–Dichlorobenzene	ND	ND	ND	ND	ND	ND
Benzyl alcohol	ND	ND	ND	ND	ND	ND
1,2–Dichlorobenzene	ND	ND	ND	ND	ND	ND
2–Methylphenol	ND	ND	ND	ND	ND	ND
2,2'–Oxybis(1–chloropropane)	ND	ND	ND	ND	ND	ND
4–Methylphenol	ND	ND	ND	ND	ND	ND
N–nitroso–di–n–propylamine	ND	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND	ND
Isophrone	ND	ND	ND	ND	ND	ND
2–Nitrophenol	ND	ND	ND	ND	ND	ND
2,4–Dimethylphenol	ND	ND	ND	ND	ND	ND
Benzoic acid	ND	ND	ND	ND	ND	ND
Bis(2–chloroethoxy)methane	ND	ND	ND	ND	ND	ND
2,4–Dichlorophenol	ND	ND	ND	ND	ND	ND
1,2,4–Trichlorobenzene	ND	ND	ND	ND	ND	ND
Naphthalene	ND	ND	ND	ND	ND	0.53
4–Chloroaniline	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND	ND
4–Chloro–3–methylphenol	ND	ND	ND	ND	ND	ND
2–Methylnaphthalene	ND	ND	ND	ND	ND	4.0
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND	ND
2,4,6–Trichlorophenol	ND	ND	ND	ND	ND	ND
2,4,5–Trichlorophenol	ND	ND	ND	ND	ND	ND
2–Chloronaphthalene	ND	ND	ND	ND	ND	ND
2–Nitroaniline	ND	ND	ND	ND	ND	ND
Dimethylphthalate	ND	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND	ND
3–Nitroaniline	ND	ND	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	ND	ND	0.266
2,4–Dinitrophenol	ND	ND	ND	ND	ND	ND
4–Nitrophenol	ND	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND	0.390
2,4–Dinitrotoluene	ND	ND	ND	ND	ND	ND
2,6–Dinitrotoluene	ND	ND	ND	ND	ND	ND
Diethylphthalate	ND	ND	ND	ND	ND	ND
4–Chlorophenyl–phenylether	ND	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND	0.810
4–Nitroaniline	ND	ND	ND	ND	ND	ND
4,6–Dinitro–2–methylphenol	ND	ND	ND	ND	ND	ND
N–Nitrosodiphenylamine (1)	ND	ND	ND	ND	ND	ND
4–Bromophenyl–phenylether	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND	4.3
Anthracene	ND	ND	ND	ND	ND	0.780
Di–n–Butylphthalate	ND	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND	2.7
Pyrene	ND	ND	ND	ND	ND	3.2
Butylbenzylphthalate	ND	ND	ND	ND	ND	ND
3,3'–Dichlorobenzidine	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND	ND	ND	1.4
Chrysene	ND	ND	ND	ND	ND	1.4
Bis(2–ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND
Di–n–octylphthalate	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	0.75
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	0.570
Benzo(a)pyrene	ND	ND	ND	ND	ND	1.0
Indeno(1,2,3–cd)pyrene	ND	ND	ND	ND	ND	0.270
Dibenz(a,h)anthracene	ND	ND	ND	ND	ND	0.240
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND	ND
N–Nitrosodimethylamine	ND	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND	ND
Azobenzene	ND	ND	ND	ND	ND	ND
Benzidine	ND	ND	ND	ND	ND	ND

Table 7 (continued)
Soil Analytical Data
Stockpiled Soils
Semi-Volatile Organic Compounds
(ppm)

Former Shell Service Station
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

Sample ID	SP-5A-D	SP-5E-H	SP-6A-D	SP-7A-D	SP-7E-H
Sample Date	07/02/93	07/02/93	07/02/93	07/12/93	07/12/93
Phenol	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	ND	ND	ND	ND	ND
2-Chlorophenol	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	ND	ND	ND	ND	ND
Benzyl alcohol	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	ND	ND	ND	ND	ND
2-Methylphenol	ND	ND	ND	ND	ND
2,2'-Oxybis(1-chloropropane)	ND	ND	ND	ND	ND
4-Methylphenol	ND	ND	ND	ND	ND
N-nitroso-di-n-propylamine	ND	ND	ND	ND	ND
Hexachloroethane	ND	ND	ND	ND	ND
Nitrobenzene	ND	ND	ND	ND	ND
Isophrone	ND	ND	ND	ND	ND
2-Nitrophenol	ND	ND	ND	ND	ND
2,4-Dimethylphenol	ND	ND	ND	ND	ND
Benzoic acid	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ND	ND	ND	ND	ND
[redacted]	[redacted]	[redacted]	ND	[redacted]	[redacted]
4-Chloroaniline	ND	ND	ND	ND	ND
Hexachlorobutadiene	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ND	ND	ND	ND	ND
[redacted]	[redacted]	ND	ND	[redacted]	[redacted]
Hexachlorocyclopentadiene	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	ND	ND	ND	ND	ND
2-Chloronaphthlene	ND	ND	ND	ND	ND
[redacted]	ND	[redacted]	ND	ND	ND
Dimethylphthalate	ND	ND	ND	ND	ND
Acenaphthylene	ND	ND	ND	ND	ND
3-Nitroaniline	ND	ND	ND	ND	ND
Acenaphthene	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ND	ND	ND	ND	ND
4-Nitrophenol	ND	ND	ND	ND	ND
Dibenzofuran	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	ND	ND	ND	ND	ND
Diethylphthalate	ND	ND	ND	ND	ND
4-Chlorophenyl-phenylether	ND	ND	ND	ND	ND
Fluorene	ND	ND	ND	ND	ND
4-Nitroaniline	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine (1)	ND	ND	ND	ND	ND
4-Bromophenyl-phenylether	ND	ND	ND	ND	ND
Hexachlorobenzene	ND	ND	ND	ND	ND
Pentachlorophenol	ND	ND	ND	ND	ND
Phenanthrene	ND	ND	ND	ND	ND
Anthracene	ND	ND	ND	ND	ND
Di-n-Butylphthalate	ND	ND	ND	ND	ND
Fluoranthene	ND	ND	ND	ND	ND
Pyrene	ND	ND	ND	ND	ND
Butylbenzylphthalate	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	ND	ND	ND	ND	ND
Benzo(a)anthracene	ND	ND	ND	ND	ND
Chrysene	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	ND	ND	ND	ND	ND
Di-n-octylphthalate	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	ND	ND	ND	ND	ND
Aniline	ND	ND	ND	ND	ND
Azobenzene	ND	ND	ND	ND	ND
Benzidine	ND	ND	ND	ND	ND

ppm = Parts per million
ND = Not detected
Detection limits are indicated in certified analytical reports



QUADRANGLE LOCATION

REFERENCES:
USGS 7.5 MIN. TOPOGRAPHIC MAP
TITLED: HAYWARD, CALIFORNIA
DATED: 1959 REVISED: 1980

SCALE

2000 0 2000 FEET

PACIFIC ENVIRONMENTAL GROUP, INC.

FORMER SHELL SERVICE STATION
2724 Castro Valley Boulevard at Lake Chabot Road
Castro Valley, California

SITE LOCATION MAP

FIGURE: 1
PROJECT: 305-94.01

N

LAKE CHABOT ROAD

18/ND/95/ND - 3'

1.300/5.8/810/870 - 10'

480/ND/320/71 - 4'

1.2/ND/75/85 - 3'

27/ND/27/100 - 4'

ND/ND/ND/91 - 4'

ND/ND/ND/130 - 8'

ND/ND/ND/60 - 4'

T3

T2

WW4

EF3

LWW-1

NW4

7.3/ND/1.9/ND - 3'

WW1

NW3

EF1

WW3

EF2

NW1

1.1/ND/ND/78 - 4'

SW3

ND/ND/ND/ND - 4'

LWW2

EF4

SW1

43/0.019/29/190 - 9'

WW2

EF5

ND/ND/ND/ND - 4'

FORMER WASTE OIL TANK

T1

66/ND/41/370 - 9'

330/2,900/940 - 3'

SW4

120/ND/340/97 - 4'

ND/ND/ND/ND - 3'

560/2.7/95/200 - 10'

ND/ND/ND/ND - 9'

ND/ND/ND/250 - 3'

FORMER UNDERGROUND STORAGE TANK COMPLEX

LEGEND

NW1 ● SOIL SAMPLE LOCATION AND DESIGNATION

ND/ND/ND/ND - 4' TPH-g/BENZENE/TPH-d/OIL and GREASE CONCENTRATION IN SOIL, IN PARTS PER MILLION, AT DEPTH INDICATED IN FEET

ND NOT DETECTED

PACIFIC ENVIRONMENTAL GROUP, INC.

SCALE

0 10 20 FEET

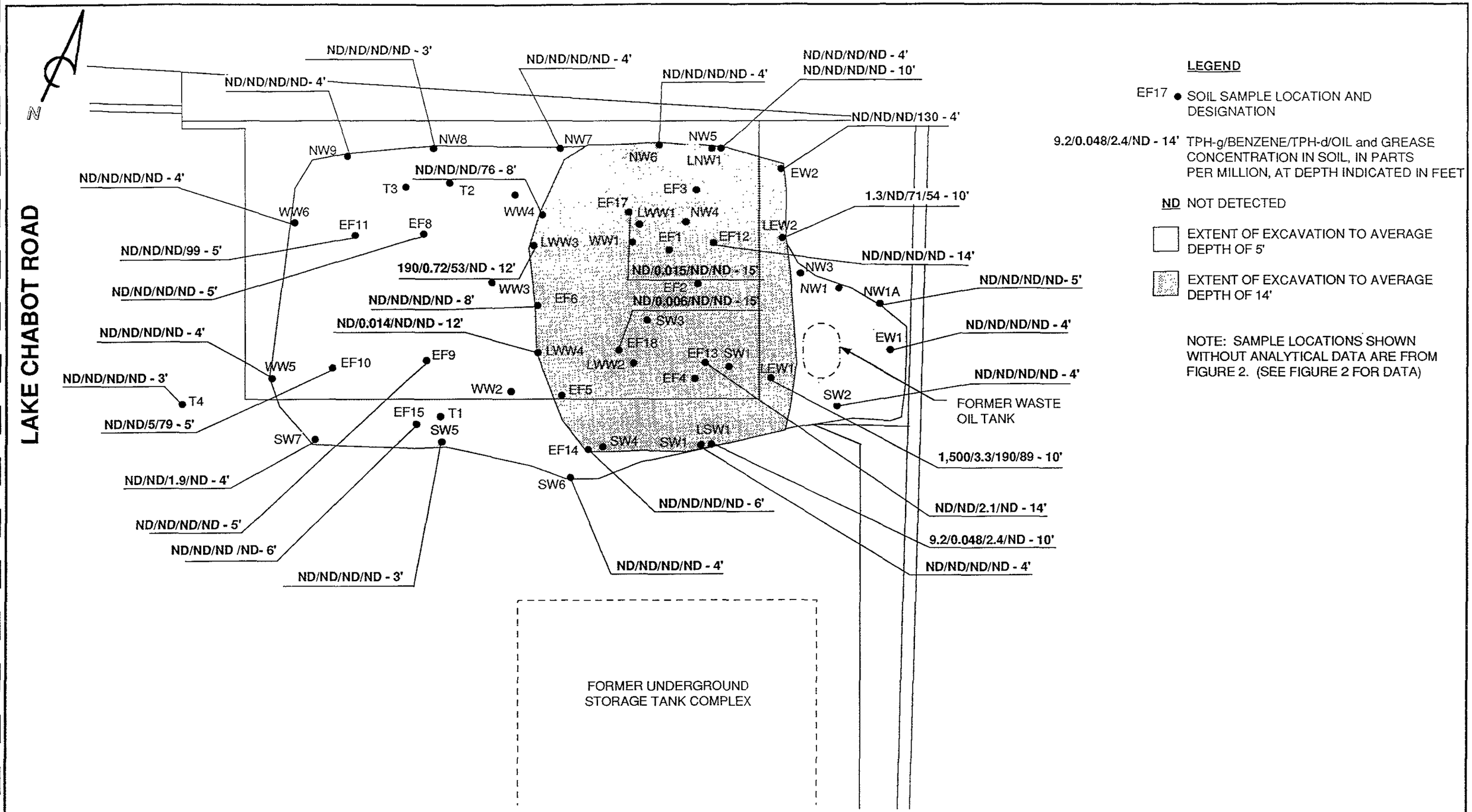
FORMER SHELL SERVICE STATION
2724 Castro Valley Boulevard at Lake Chabot Road,
Castro Valley, California

EXCAVATED SOIL SAMPLE CONCENTRATION MAP

FIGURE: 2

PROJECT: 305-094.01

03/01/94



PACIFIC ENVIRONMENTAL GROUP, INC.

SCALE
0 10 20 FEET

FORMER SHELL SERVICE STATION
2724 Castro Valley Boulevard at Lake Chabot Road,
Castro Valley, California

CLOSURE SOIL SAMPLE CONCENTRATION MAP

FIGURE: 3
PROJECT: 305-094.01

03/01/95

ATTACHMENT A

FIELD AND LABORATORY PROCEDURES

ATTACHMENT A
FIELD AND LABORATORY PROCEDURES

Soil Sampling

Soil samples were collected by advancing 2-inch diameter brass sample liners into undisturbed soil, or soil removed from an excavation by a backhoe bucket. Soil samples for chemical analysis were retained in the brass liners, labelled, and capped with Teflon sheets, plastic end caps, and Teflon tape. The samples were then sealed in zip-lock bags, placed on ice, and transported to the laboratory accompanied by the appropriate chain-of-custody documentation.

Organic Vapor Procedures

Selected soil samples were analyzed in the field for ionizable organic compounds using a photo-ionization detector with a 10.2 eV lamp. The test procedure involves measuring approximately 30 grams from an undisturbed soil sample, placing this subsample in a clean glass jar, and sealing the jar with aluminum foil secured under a ring-type threaded lid. The jar is warmed for approximately 20 minutes, then the foil is pierced and the head-space within the jar is tested for total organic vapor, measured in parts per million as benzene (ppm; volume/volume). The instrument was previously calibrated using a 100-ppm isobutylene standard (in air) and a sensitivity factor of 0.55, which relates the photo-ionization sensitivity of benzene (10.0 ppm) to the ionization potential of isobutylene (5.5 ppm). Results of these tests were used to assist in selection of samples for laboratory analysis.

Laboratory Procedures

Analyses for total petroleum hydrocarbons calculated as gasoline (TPH-g), TPH calculated as diesel (TPH-d), and TPH calculated as oil (TPH-o) were performed by the DHS LUFT method. Analysis for benzene, toluene, ethylbenzene, and xylenes was performed by modified EPA Method 8020. These analytical methods utilize gas chromatography and flame- or photo-ionization detection.

Analysis for total oil and grease was by the gravimetric method, EPA Method 5520 B and F. This analysis is also performed by gas chromatography and flame- or photo-ionization detection.

Analysis for volatile organics was by EPA Method 624/8240. Analysis for semi-volatile organics was by EPA Method 627/8270. These analytical methods utilize gas chromatography and mass spectrometry.

Analyses for metals were by California Assessment Manual techniques. The samples were extracted by chemical wet-lab techniques which vary by metal analyte. Detection was by atomic absorption, mass spectrometry, flame spectrometry, or photo-spectrometry, depending on the metal analyte.

Additional information on the laboratory analytical procedures used is included in the laboratory reports in Attachment B. All analyses were performed by California state-certified analytical laboratories.

ATTACHMENT B

CERTIFIED ANALYTICAL REPORTS

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

Project: 305-94.01/Shell, Castro Valley

Enclosed are the results from 10 soil samples received at Sequoia Analytical on December 18,1992. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
2123843	Soil, EW-1	12/17/92	EPA 3550/8015 EPA 5030/8015/8020 EPA 8240 EPA 8270 SM 5520 E&F (Gravimetric) Miscellaneous Metals
2123844	Soil, NW-1	12/17/92	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
2123845	Soil, NW-3	12/17/92	EPA 3550/8015 EPA 5030/8015/8020 EPA 8240 EPA 8270 SM 5520 E&F (Gravimetric) Miscellaneous Metals
2123846	Soil, NW-4	12/17/92	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
2123847	Soil, WW-1	12/17/92	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
2123848	Soil, EF-1	12/17/92	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
2123849	Soil, SW-3	12/17/92	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
2123850	Soil, SW-1	12/17/92	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
2123851	Soil, SW-2	12/17/92	EPA 3550/8015 EPA 5030/8015/8020 EPA 8240 EPA 8270 SM 5520 E&F (Gravimetric) Miscellaneous Metals
2123852	Soil, SP-1A-D	12/17/92	EPA 3550/8015 EPA 5030/8015/8020 EPA 8240 EPA 8270 SM 5520 E&F (Gravimetric) TTLC Metals

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Dec 17, 1992
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Dec 18, 1992
San Jose, CA 95110	Analysis Method:	EPA 5030/8015/8020	Reported:	Jan 4, 1993
Attention: Maree Doden	First Sample #:	212-3843		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 212-3843 EW-1	Sample I.D. 212-3844 NW-1	Sample I.D. 212-3845 NW-3	Sample I.D. 212-3846 NW-4	Sample I.D. 212-3847 WW-1	Sample I.D. 212-3848 EF-1
Purgeable Hydrocarbons	1.0	N.D.	N.D.	N.D.	27	1.1	480
Benzene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	0.35
Total Xylenes	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	0.75
Chromatogram Pattern:		--	--	--	Non-gas > C7	Non-gas > C7	Non-gas C7 - C12

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	5.0	1.0	50
Date Analyzed:	12/23/92	12/23/92	12/23/92	12/23/92	12/23/92	12/23/92
Instrument Identification:	GCHP-7	GCHP-7	GCHP-7	GCHP-7	GCHP-7	GCHP-7
Surrogate Recovery, %: (QC Limits = 70-130%)	101	101	93	93	86	91

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Dec 17, 1992
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received: Dec 18, 1992
San Jose, CA 95110	Analysis Method:	EPA 5030/8015/8020	Reported: Jan 4, 1993
Attention: Maree Doden	First Sample #:	212-3849	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 212-3849 SW-3	Sample I.D. 212-3850 SW-1	Sample I.D. 212-3851 SW-2	Sample I.D. 212-3852 SP-1A-D
Purgeable Hydrocarbons	1.0	120	N.D.	N.D.	N.D.
Benzene	0.0050	N.D.	N.D.	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.0050	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.0050	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		Non-gas C7 - C12	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	50	1.0	1.0	1.0
Date Analyzed:	12/23/92	12/23/92	12/23/92	12/23/92
Instrument Identification:	GCHP-7	GCHP-7	GCHP-7	GCHP-7
Surrogate Recovery, %: (QC Limits = 70-130%)	93	91	92	95

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Dec 17, 1992
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Dec 18, 1992
San Jose, CA 95110	Analysis Method:	EPA 3550/8015	Reported:	Jan 4, 1993
Attention: Maree Doden	First Sample #:	212-3843		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 212-3843 EW-1	Sample I.D. 212-3844 NW-1	Sample I.D. 212-3845 NW-3	Sample I.D. 212-3846 NW-4	Sample I.D. 212-3847 WW-1	Sample I.D. 212-3848 EF-1
Extractable Hydrocarbons	1.0	N.D.	N.D.	N.D.	27	N.D.	320
Chromatogram Pattern:		--	--	--	Non-diesel mix < C15	--	Non-diesel mix < c16

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	20
Date Extracted:	12/23/92	12/23/92	12/23/92	12/23/92	12/23/92	12/23/92
Date Analyzed:	12/23/92	12/23/92	12/23/92	12/23/92	12/23/92	12/28/92
Instrument Identification:	GCHP-4 INJ. B	GCHP-4 INJ. B	GCHP-4 INJ. B	GCHP-4 INJ. B	GCHP-4 INJ. B	GCHP-4 INJ. B

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Dec 17, 1992
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received: Dec 18, 1992
San Jose, CA 95110	Analysis Method:	EPA 3550/8015	Reported: Jan 4, 1993
Attention: Maree Doden	First Sample #:	212-3849	

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 212-3849 SW-3	Sample I.D. 212-3850 SW-1	Sample I.D. 212-3851 SW-2	Sample I.D. 212-3852 SP-1A-D
Extractable Hydrocarbons	1.0	340	N.D.	N.D.	N.D.
Chromatogram Pattern:		Non-diesel mix < C14	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	20	1.0	1.0	1.0
Date Extracted:	12/23/93	12/23/92	12/23/92	12/23/92
Date Analyzed:	12/28/93	12/23/92	12/23/92	12/23/92
Instrument Identification:	GCHP-4 INJ. B	GCHP-4 INJ. B	GCHP-4 INJ. B	GCHP-4 INJ. B

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Dec 17, 1992
2025 Gateway Place, Suite 440	Sample Descript:	Soil, EW-1	Received:	Dec 18, 1992
San Jose, CA 95110	Analysis Method:	EPA 8240	Analyzed:	Dec 28, 1993
Attention: Maree Doden	Lab Number:	212-3843	Reported:	Jan 4, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	500	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
cis-1,2-Dichloroethene	100	N.D.
trans-1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis-1,3-Dichloropropene	100	N.D.
trans-1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	250	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Dec 17, 1992
2025 Gateway Place, Suite 440	Sample Descript:	Soil, NW-3	Received:	Dec 18, 1992
San Jose, CA 95110	Analysis Method:	EPA 8240	Analyzed:	Dec 28, 1993
Attention: Maree Doden	Lab Number:	212-3845	Reported:	Jan 4, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	500	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
cis-1,2-Dichloroethene	100	N.D.
trans-1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis-1,3-Dichloropropene	100	N.D.
trans-1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	250	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Dec 17, 1992
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SW-2	Received:	Dec 18, 1992
San Jose, CA 95110	Analysis Method:	EPA 8240	Analyzed:	Dec 28, 1993
Attention: Maree Doden	Lab Number:	212-3851	Reported:	Jan 4, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	500	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
cis-1,2-Dichloroethene	100	N.D.
trans-1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis-1,3-Dichloropropene	100	N.D.
trans-1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	250	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Dec 17, 1992
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-1A-D	Received:	Dec 18, 1992
San Jose, CA 95110	Analysis Method:	EPA 8240	Analyzed:	Dec 28, 1993
Attention: Maree Doden	Lab Number:	212-3852	Reported:	Jan 4, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	500	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
cis-1,2-Dichloroethene	100	N.D.
trans-1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis-1,3-Dichloropropene	100	N.D.
trans-1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	250	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Dec 17, 1992
2025 Gateway Place, Suite 440	Sample Descript:	Soil, EW-1	Received:	Dec 18, 1992
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Dec 23, 1992
Attention: Maree Doden	Lab Number:	212-3843	Analyzed:	Dec 23, 1992
			Reported:	Jan 4, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Aniline	100	N.D.
Anthracene	100	N.D.
Benzidine	2,500	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Dec 17, 1992
2025 Gateway Place, Suite 440	Sample Descript:	Soil, EW-1	Received:	Dec 18, 1992
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Dec 23, 1992
Attention: Maree Doden	Lab Number:	212-3843	Analyzed:	Dec 23, 1992
			Reported:	Jan 4, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Eileen A. Manning
Project Manager

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Dec 17, 1992
2025 Gateway Place, Suite 440	Sample Descript:	Soil, NW-3	Received:	Dec 18, 1992
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Dec 23, 1992
Attention: Maree Doden	Lab Number:	212-3845	Analyzed:	Dec 23, 1992
			Reported:	Jan 4, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Aniline	100	N.D.
Anthracene	100	N.D.
Benzidine	2,500	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Dec 17, 1992
2025 Gateway Place, Suite 440	Sample Descript:	Soil, NW-3	Received:	Dec 18, 1992
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Dec 23, 1992
Attention: Maree Doden	Lab Number:	212-3845	Analyzed:	Dec 23, 1992
			Reported:	Jan 4, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Dec 17, 1992
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SW-2	Received:	Dec 18, 1992
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Dec 23, 1992
Attention: Maree Doden	Lab Number:	212-3851	Analyzed:	Dec 23, 1992
			Reported:	Jan 4, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Aniline	100	N.D.
Anthracene	100	N.D.
Benzidine	2,500	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Dec 17, 1992
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SW-2	Received:	Dec 18, 1992
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Dec 23, 1992
Attention: Maree Doden	Lab Number:	212-3851	Analyzed:	Dec 23, 1992
			Reported:	Jan 4, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Dec 17, 1992
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-1A-D	Received:	Dec 18, 1992
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Dec 23, 1992
Attention: Maree Doden	Lab Number:	212-3852	Analyzed:	Dec 23, 1992
			Reported:	Jan 4, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Aniline	100	N.D.
Anthracene	100	N.D.
Benzidine	2,500	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Dec 17, 1992
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-1A-D	Received:	Dec 18, 1992
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Dec 23, 1992
Attention: Maree Doden	Lab Number:	212-3852	Analyzed:	Dec 23, 1992
			Reported:	Jan 4, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Dec 17, 1992
2025 Gateway Place, Suite 440	Sample Descript:	Soil, EW-1	Received:	Dec 18, 1992
San Jose, CA 95110			Analyzed:	see below
Attention: Maree Doden	Lab Number:	212-3843	Reported:	Jan 4, 1993

LABORATORY ANALYSIS

Analyte	Date Analyzed	Detection Limit mg/kg	Sample Result mg/kg
Cadmium	12/23/92	0.50	N.D.
Chromium	12/23/92	0.50	28
Lead	12/23/92	5.0	12
Nickel	12/23/92	2.5	29
Zinc	12/23/92	0.50	49

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Dec 17, 1992
2025 Gateway Place, Suite 440	Sample Descript:	Soil, NW-3	Received:	Dec 18, 1992
San Jose, CA 95110			Analyzed:	see below
Attention: Maree Doden	Lab Number:	212-3845	Reported:	Jan 4, 1993

LABORATORY ANALYSIS

Analyte	Date Analyzed	Detection Limit mg/kg	Sample Result mg/kg
Cadmium	12/23/92	0.50	N.D.
Chromium	12/23/92	0.50	40
Lead	12/23/92	5.0	N.D.
Nickel	12/23/92	2.5	28
Zinc	12/23/92	0.50	43

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Dec 17, 1992
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SW-2	Received:	Dec 18, 1992
San Jose, CA 95110			Analyzed:	see below
Attention: Maree Doden	Lab Number:	212-3851	Reported:	Jan 4, 1993

LABORATORY ANALYSIS

Analyte	Date Analyzed	Detection Limit mg/kg	Sample Result mg/kg
Cadmium	12/23/92	0.50	N.D.
Chromium	12/23/92	0.50	29
Lead	12/23/92	5.0	5.1
Nickel	12/23/92	2.5	30
Zinc	12/23/92	0.50	39

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Dec 17, 1992
2025 Gateway Place, Suite 440	Matrix Descript:	Soil	Received: Dec 18, 1992
San Jose, CA 95110	Analysis Method:	SM 5520 E&F (Gravimetric)	Extracted: Dec 22, 1992
Attention: Maree Doden	First Sample #:	212-3843	Analyzed: Dec 22, 1992
			Reported: Jan 4, 1993

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg
212-3843	EW-1	N.D.
212-3844	NW-1	N.D.
212-3845	NW-3	60
212-3846	NW-4	100
212-3847	WW-1	78
212-3848	EF-1	71
212-3849	SW-3	97
212-3850	SW-1	N.D.
212-3851	SW-2	N.D.
212-3852	SP-1A-D	N.D.
Detection Limits:		**50**

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

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Project Manager

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Dec 17, 1992
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-1A-D	Received:	Dec 18, 1992
San Jose, CA 95110			Extracted:	Dec 29, 1992
Attention: Maree Doden	Lab Number:	212-3852	Reported:	Jan 4, 1993

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

Analyte	Soluble Threshold Limit Concentration (Waste Extraction Test) STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	Total Threshold Limit Concentration TTLC Max. Limit (mg/kg)	Detection Limit (mg/kg)	Analysis Result (mg/kg)
Antimony	**15**	**0.10**	-	**500**	**5.0**	**7.3**
Arsenic	5.0	0.10	-	500	5.0	N.D.
Barium	**100**	**0.10**	-	**10,000**	**5.0**	**140**
Beryllium	0.75	0.010	-	75	0.50	N.D.
Cadmium	1.0	0.010	-	100	0.50	N.D.
Chromium (VI)	5.0	0.0050	-	500	0.050	-
Chromium (III)	**560**	**0.010**	-	**2,500**	**0.50**	**31**
Cobalt	**80**	**0.050**	-	**8,000**	**2.5**	**11**
Copper	**25**	**0.010**	-	**2,500**	**0.50**	**29**
Lead	**5.0**	**0.10**	-	**1,000**	**5.0**	**16**
Mercury	**0.20**	**0.00020**	-	**20**	**0.010**	**0.043**
Molybdenum	350	0.050	-	3,500	2.5	N.D.
Nickel	**20**	**0.050**	-	**2,000**	**2.5**	**39**
Selenium	1.0	0.10	-	100	5.0	N.D.
Silver	5.0	0.010	-	500	0.50	N.D.
Thallium	7.0	0.10	-	700	5.0	N.D.
Vanadium	**24**	**0.050**	-	**2,400**	**2.5**	**39**
Zinc	**250**	**0.010**	-	**5,000**	**0.50**	**87**
Asbestos	-	10	-	10,000	100	-
Fluoride	180	0.10	-	18,000	1.0	-

TTLC results are reported as mg/kg of wet weight. Asbestos results are reported as fibers/g.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

Client Project ID: 305-94.01/Shell, Castro Valley

QC Sample Group: 2123843-52

Reported: Jan 4, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes	Extractable Hydrocarbons
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015
Analyst:	B. Ali	B. Ali	B. Ali	B. Ali	C. Lee
Reporting Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Dec 23, 1992	Dec 23, 1992	Dec 23, 1992	Dec 23, 1992	Dec 23, 1992
QC Sample #:	GBLK122292	GBLK122292	GBLK122292	GBLK122292	DBLK122392
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.20	0.20	0.20	0.60	15
Conc. Matrix Spike:	0.17	0.17	0.16	0.48	13
Matrix Spike % Recovery:	85	85	80	80	87
Conc. Matrix Spike Dup.:	0.17	0.17	0.17	0.50	13
Matrix Spike Duplicate % Recovery:	85	85	85	83	87
Relative % Difference:	0.0	0.0	6.1	4.1	0.0

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

$$\text{\% Recovery:} \quad \frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$$

$$\text{Relative \% Difference:} \quad \frac{\text{Conc. of M.S. - Conc. of M.S.D.}}{\text{(Conc. of M.S. + Conc. of M.S.D.) / 2}} \times 100$$

SEQUOIA ANALYTICAL

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

Client Project ID: 305-94.01/Shell, Castro Valley

QC Sample Group: 2123843-52

Reported: Jan 4, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Beryllium	Cadmium	Chromium	Nickel	Total Recoverable Petroleum Oil
Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010	SM5520 E&F
Analyst:	C. Medefesser	C. Medefesser	C. Medefesser	C. Medefesser	M. Shkidt
Reporting Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Dec 23, 1992	Dec 23, 1992	Dec 23, 1992	Dec 23, 1992	Dec 22, 1992
QC Sample #:	BLK122292	BLK122292	BLK122292	BLK122292	BLK122292
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	100	100	100	100	1000
Conc. Matrix Spike:	92	88	89	90	960
Matrix Spike % Recovery:	92	88	89	90	96
Conc. Matrix Spike Dup.:	80	78	79	80	960
Matrix Spike Duplicate % Recovery:	80	78	79	80	96
Relative % Difference:	14	12	12	12	0.0

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

SEQUOIA ANALYTICAL

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

Client Project ID: 305-94.01/Shell, Castro Valley

QC Sample Group: 2123843-52

Reported: Jan 4, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Mercury	Beryllium	Cadmium	Chromium	Nickel
Method:	EPA 7471	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Analyst:	J. Martinez	C. Medefesser	C. Medefesser	C. Medefesser	C. Medefesser
Reporting Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Dec 29, 1992	Dec 29, 1992	Dec 29, 1992	Dec 29, 1992	Dec 29, 1992
QC Sample #:	212-3852	BLK122892	BLK122892	BLK122892	BLK122892
Sample Conc.:	0.043	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.10	100	100	100	100
Conc. Matrix Spike:	0.16	89	83	86	88
Matrix Spike % Recovery:	117	89	83	86	88
Conc. Matrix Spike Dup.:	0.16	91	86	89	91
Matrix Spike Duplicate % Recovery:	117	91	86	89	91
Relative % Difference:	0.0	2.2	3.6	3.5	3.4

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

SEQUOIA ANALYTICAL

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

Client Project ID: 305-94.01/Shell, Castro Valley
Method (units): EPA 8240 (µg/L purged)
Analyst(s): M. Williams
QC Sample #: BLK122192

Q.C. Sample Dates
Analyzed: Dec 21, 1992
Reported: Jan 4, 1993

QUALITY CONTROL DATA REPORT

Analyte	Sample Conc.	Spike Conc. Added	Conc. Matrix Spike	Matrix Spike % Recovery	Conc. Matrix Spike Duplicate	Matrix Spike Duplicate % Recovery	Relative % Difference
1,1-Dichloro-ethene	N.D.	50	60	120	56	112	6.9
Trichloroethene	N.D.	50	50	100	46	92	8.3
Benzene	N.D.	50	51	102	49	98	4.0
Toluene	N.D.	50	51	102	48	96	6.1
Chlorobenzene	N.D.	50	50	100	46	92	8.3

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden

Client Project ID: 305-94.01/Shell, Castro Valley
Method: EPA 8270
Analyst(s): N. Injejikian
QC Sample #: SBLK121792

Q.C. Sample Dates
Extracted: Dec 17, 1992
Analyzed: Dec 22, 1992
Reported: Jan 4, 1993

QUALITY CONTROL DATA REPORT

Analyte	Sample Conc.	Spike Conc. Added	Conc. Matrix Spike	Matrix Spike % Recovery	Conc. Matrix Spike Duplicate	Matrix Spike Duplicate % Recovery	Relative % Difference
Phenol	N.D.	100	65	65	71	71	8.8
2-Chlorophenol	N.D.	100	68	68	72	72	5.7
1,4-Dichloro-benzene	N.D.	50	32	64	32	64	0.0
N-Nitroso-Di-N-propylamine	N.D.	50	37	74	38	76	2.7
1,2,4-Trichloro-benzene	N.D.	50	35	70	28	56	22
4-Chloro-3-Methylphenol	N.D.	100	65	65	64	64	1.6
Acenaphthene	N.D.	50	34	68	33	66	3.0
4-Nitrophenol	N.D.	100	69	69	63	63	9.1
2,4-Dinitro-toluene	N.D.	50	36	72	33	66	8.7
Pentachloro-phenol	N.D.	100	58	58	56	56	3.5
Pyrene	N.D.	50	35	70	34	68	2.9

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 12/18/92
Page 1 of 2

Site Address: 2724 CASTRO VALLEY BLVD. ~~CASTRO VALLEY, CA~~
WIC#: 204-1381-0407
Shell Engineer: P. HAYES — Phone No.: 675-6169 (510) — Fax #: (675-6172)
Consultant Name & Address: Pacific Environmental Group — 2025 Gateway Pl. Ste.440 S.J. 95110
Consultant Contact: Maree Doden — Phone No.: (408) 441-7500 — Fax #: 441-7539
Comments:
Sampled by: WILLERTON, ANDREW F. — Andrew Willerton
Printed Name:

LAB: SEQUOIA

CHECK ONE (1) BOX ONLY	C1/D1
Quarterly Monitoring	☐ 6441
Site Investigation	☑ 6441
Soil Closure/Disposal	☐ 6442
Water Closure/Disposal	☐ 6443
Soil/Air Rem. or Sys. O & M	☐ 6442
Water Rem. or Sys. O & M	☐ 6443
Other	☐

TURN AROUND TIME: 24 hours ☐ — 48 hours ☐ — 15 days ☑ (Normal) — Other ☐ ____

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	8270	METALS (Cd, Cr, Pb, Ni, Zn) TOTAL	~~Asbestos~~ SM 5520 E+F	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
EW-1	12/17/92		✓			1	✓	✓	✓	✓			✓	✓	✓	2" x 4"			EXCAV. SOILS	2123843
NW-1	12/17/92		✓			1	✓	✓	✓						✓				EXCAV. SOILS	44
NW-3	12/17/92		✓			1	✓	✓	✓	✓			✓	✓	✓				EXCAV SOILS	45
NW-4			✓			1	✓	✓	✓						✓					46
WW-1			✓			1	✓	✓	✓						✓					47
EF-1			✓			1	✓	✓	✓						✓					48
SW-3			✓			1	✓	✓	✓						✓					49
SW-1	↓		✓			1	✓	✓	✓						✓	↓				↓ 50

Relinquished By (signature): Andrew Willerton — Printed Name: ANDREW WILLERTON — Date: 12/18/92 Time: 16:50 — Received (signature): Rebekah J Harper — Printed Name: Rebekah J Harper — Date: 12/18/92 Time: 1650
Relinquished By (signature): Rebekah J Harper — Printed Name: Rebekah J. Harper — Date: 12/18/92 Time: 17:50 — Received (signature): Jim Costello — Printed Name: Tim Costello — Date: 12-18-92 Time: 1750
Relinquished By (signature): — Printed Name: — Date: — Time: — Received (signature): — Printed Name: — Date: — Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 12/18/92
Page 2 of 2

Site Address: 2724 CASTRO VALLEY BLVD. CASTRO VALLEY, CA
WIC#: 204-1381-0407
Shell Engineer: P. HAMES
Phone No.: Fax #:
Consultant Name & Address: Pacific Environmental Group 2025 Gateway Pl. Ste.440 S.J. 95110
Consultant Contact: Maree Doden
Phone No.: (408) 441-7500 Fax #: 441-7539
Comments:
Sampled by: WILLERTON, ANDREW F.
Printed Name: Andrew Willerton

LAB: SEQUOIA

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	8270	Metals (Cd, Cr, Pb, Ni, Zn) TOTAL	Asbestos SM 5520 E+F	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
SW-2	12/17/92		✓			1	✓	✓	✓	✓			✓	✓	✓	2" x 4"			EXCAV. SOILS	212.3851
SP-1A,B,C,D	↓		✓			4	✓	✓	✓	✓	✓		✓	✓	✓	↓			SPOILS SAMPLE	COMPOSITE TO ONE 212 3852

CHECK ONE (1) BOX ONLY — CT/DT

Quarterly Monitoring	☐	6441
Site Investigation	☑	6441
Soil Classify/Disposal	☐	6443
Water Classify/Disposal	☐	6443
Soil/Air Rem. or Sys. O & M	☐	6442
Water Rem. or Sys. O & M	☐	6443
Other	☐	

TURN AROUND TIME

- 24 hours ☐
- 48 hours ☐
- 10 days ☑ (Normal)
- Other ☐ ____

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT

Relinquished By (Signature): Andrew Willerton	Printed Name: ANDREW WILLERTON	Date: 12/18/92 Time: 16:30	Received (Signature): Rebekah J. Harper
Relinquished By (Signature): Rebekah J. Harper	Printed Name: Rebekah J. Harper	Date: 12/18/92 Time: 17:30	Received (Signature):
Relinquished By (Signature):	Printed Name:	Date: Time:	Received (Signature): Tim Costello

Printed Name: Rebekah J. Harper	Date: 12/18/92	
Printed Name:	Time: 16:50	
Printed Name: Tim Costello	Date: 12-18-92 Time: 1750	

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Michael Hurd

Project: 305-9401/ Shell, Castro Valley

Enclosed are the results from 5 soil samples received at Sequoia Analytical on February 17,1993. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
3B79401	Soil, SP-1,2,3,4,5	2/11/93	TTLC Metals EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3B79402	Soil, SP-6,7,8	2/11/93	TTLC Metals EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric) Organic Lead
3B79403	Soil, SP-9,10,11,12	2/11/93	TTLC Metals EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric) Organic Lead
3B79404	Soil, OMW-9 5-6.5	2/11/93	EPA 5030/8015/8020
3B79405	Soil, OMW-9 10-11.5	2/11/93	EPA 5030/8015/8020

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-9401 / Shell, Castro Valley	Sampled:	Feb 11, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Feb 17, 1993
San Jose, CA 95110	Analysis Method:	EPA 5030/8015/8020	Reported:	Mar 1, 1993
Attention: Michael Hurd	First Sample #:	3B79401		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 3B79401 SP-1,2,3,4,5	Sample I.D. 3B79402 SP-6,7,8	Sample I.D. 3B79403 SP-9,10,11,12	Sample I.D. 3B79404 OMW-9 5-6.5	Sample I.D. 3B79405 MW-9 10-11.5
Purgeable Hydrocarbons	1.0	44	N.D.	9.6	N.D.	N.D.
Benzene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		Non-gas mix C8 - C12	--	Non-gas mix C8 - C12	--	--

Quality Control Data

Report Limit Multiplication Factor:	5.0	1.0	5.0	1.0	1.0
Date Analyzed:	2/19/93	2/19/93	2/19/93	2/19/93	2/19/93
Instrument Identification:	GCHP-1	GCHP-1	GCHP-1	GCHP-1	GCHP-1
Surrogate Recovery, %: (QC Limits = 70-130%)	80	88	97	89	84

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-9401 / Shell, Castro Valley	Sampled:	Feb 11, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Feb 17, 1993
San Jose, CA 95110	Analysis Method:	EPA 3550/8015	Reported:	Mar 1, 1993
Attention: Michael Hurd	First Sample #:	3B79401		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 3B79401 SP-1,2,3,4,5	Sample I.D. 3B79402 SP-6,7,8	Sample I.D. 3B79403 SP-9,10,11,12
Extractable Hydrocarbons	1.0	37	N.D.	36
Chromatogram Pattern:		Non-diesel mix C10 - C14 + >C20	--	Non-diesel mix C10 - C14 + C20

Quality Control Data

Report Limit Multiplication Factor:	2.0	1.0	1.0
Date Extracted:	2/19/93	2/19/93	2/19/93
Date Analyzed:	2/19/93	2/19/93	2/19/93
Instrument Identification:	GCHP-4 INJ.A	GCHP-4 INJ.A	GCHP-4 INJ.A

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-9401 / Shell, Castro Valley	Sampled: Feb 11, 1993
2025 Gateway Place, Suite 440	Matrix Descript:	Soil	Received: Feb 17, 1993
San Jose, CA 95110	Analysis Method:	SM 5520 E&F (Gravimetric)	Extracted: Feb 22, 1993
Attention: Michael Hurd	First Sample #:	3B79401	Analyzed: Feb 22, 1993
			Reported: Mar 1, 1993

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg
3B79401	SP-1,2,3,4,5	290
3B79402	SP-6,7,8	250
3B79403	SP-9,10,11,12	810

Detection Limits:	**50**

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-9401/ Shell, Castro Valley	Sampled:	Feb 11, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-1, 2,3,4,5	Received:	Feb 17, 1993
San Jose, CA 95110				
Attention: Michael Hurd	Lab Number:	3B79401	Reported:	Mar 1, 1993

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

	Soluble Threshold Limit Concentration (Waste Extraction Test)			Total Threshold Limit Concentration		
Analyte	STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	TTLC Max. Limit (mg/kg)	Detection Limit (mg/kg)	Analysis Result (mg/kg)
Antimony	15	0.10	-	500	5.0	N.D.
Arsenic	5.0	0.10	-	500	5.0	N.D.
Barium	100	0.10	-	10,000	5.0	190
Beryllium	0.75	0.010	-	75	0.50	N.D.
Cadmium	1.0	0.010	-	100	0.50	N.D.
Chromium (VI)	5.0	0.0050	-	500	0.050	-
Chromium	560	0.010	-	2,500	0.50	30
Cobalt	80	0.050	-	8,000	2.5	12
Copper	25	0.010	-	2,500	0.50	40
Lead	5.0	0.10	-	1,000	5.0	12
Mercury	0.20	0.00020	-	20	0.010	0.059
Molybdenum	350	0.050	-	3,500	2.5	N.D.
Nickel	20	0.050	-	2,000	2.5	35
Selenium	1.0	0.10	-	100	5.0	N.D.
Silver	5.0	0.010	-	500	0.50	N.D.
Thallium	7.0	0.10	-	700	5.0	N.D.
Vanadium	24	0.050	-	2,400	2.5	49
Zinc	250	0.010	-	5,000	0.50	59
Asbestos	-	10	-	10,000	100	-
Fluoride	180	0.10	-	18,000	1.0	-

TTLC results are reported as mg/kg of wet weight. Asbestos results are reported as fibers/g.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-9401 / Shell, Castro Valley	Sampled: Feb 11, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-6,7,8	Received: Feb 17, 1993
San Jose, CA 95110			
Attention: Michael Hurd	Lab Number:	3B79402	Reported: Mar 1, 1993

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

Analyte	Soluble Threshold Limit Concentration (Waste Extraction Test) STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	Total Threshold Limit Concentration TTLC Max. Limit (mg/kg)	Detection Limit (mg/kg)	Analysis Result (mg/kg)
Antimony	15	0.10	-	500	5.0	N.D.
Arsenic	5.0	0.10	-	500	5.0	10
Barium	100	0.10	-	10,000	5.0	140
Beryllium	0.75	0.010	-	75	0.50	N.D.
Cadmium	1.0	0.010	-	100	0.50	N.D.
Chromium (VI)	5.0	0.0050	-	500	0.050	-
Chromium	560	0.010	-	2,500	0.50	33
Cobalt	80	0.050	-	8,000	2.5	8.9
Copper	25	0.010	-	2,500	0.50	62
Lead	5.0	0.10	-	1,000	5.0	19
Mercury	0.20	0.00020	-	20	0.010	0.023
Molybdenum	350	0.050	-	3,500	2.5	N.D.
Nickel	20	0.050	-	2,000	2.5	41
Selenium	1.0	0.10	-	100	5.0	N.D.
Silver	5.0	0.010	-	500	0.50	N.D.
Thallium	7.0	0.10	-	700	5.0	N.D.
Vanadium	24	0.050	-	2,400	2.5	36
Zinc	250	0.010	-	5,000	0.50	120
Arsenic	-	10	-	10,000	100	-
Fluoride	180	0.10	-	18,000	1.0	-
Organic Lead	-	-	-	-	0.10	N.D.

TTLC results are reported as mg/kg of wet weight. Asbestos results are reported as fibers/g.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-9401/ Shell, Castro Valley	Sampled: Feb 11, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-9,10,11,12	Received: Feb 17, 1993
San Jose, CA 95110			
Attention: Michael Hurd	Lab Number:	3B79403	Reported: Mar 1, 1993

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

Analyte	Soluble Threshold Limit Concentration (Waste Extraction Test) STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	Total Threshold Limit Concentration TTLC Max. Limit (mg/kg)	Detection Limit (mg/kg)	Analysis Result (mg/kg)
Antimony	15	0.10	-	500	5.0	N.D.
Arsenic	5.0	0.10	-	500	5.0	13
Barium	100	0.10	-	10,000	5.0	130
Beryllium	0.75	0.010	-	75	0.50	N.D.
Cadmium	1.0	0.010	-	100	0.50	N.D.
Chromium (VI)	5.0	0.0050	-	500	0.050	-
Chromium	560	0.010	-	2,500	0.50	27
Cobalt	80	0.050	-	8,000	2.5	8.8
Copper	25	0.010	-	2,500	0.50	38
Lead	5.0	0.10	1.9	1,000	5.0	70
Mercury	0.20	0.00020	-	20	0.010	0.082
Molybdenum	350	0.050	-	3,500	2.5	N.D.
Nickel	20	0.050	-	2,000	2.5	28
Selenium	1.0	0.10	-	100	5.0	N.D.
Silver	5.0	0.010	-	500	0.50	N.D.
Thallium	7.0	0.10	-	700	5.0	N.D.
Vanadium	24	0.050	-	2,400	2.5	44
Zinc	250	0.010	-	5,000	0.50	200
Arsenic	-	10	-	10,000	100	-
Fluoride	180	0.10	-	18,000	1.0	-
Organic Lead	-	-	-	-	0.10	0.97

TTLC results are reported as mg/kg of wet weight. Asbestos results are reported as fibers/g.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Michael Hurd

Client Project ID: 305-9401/ Shell, Castro Valley

QC Sample Group: 3B79401-05

Reported: Mar 1, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler
Reporting Units:	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Feb 19, 1993	Feb 19, 1993	Feb 19, 1993	Feb 19, 1993
QC Sample #:	G9302-794-04A	G9302-794-04A	G9302-794-04A	G9302-794-04A
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	0.20	0.20	0.20	0.60
Conc. Matrix Spike:	0.22	0.22	0.22	0.65
Matrix Spike % Recovery:	110	110	110	108
Conc. Matrix Spike Dup.:	0.21	0.21	0.21	0.62
Matrix Spike Duplicate % Recovery:	105	105	105	103
Relative % Difference:	4.7	4.7	4.7	4.7

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Michael Hurd

Client Project ID: 305-9401 / Shell, Castro Valley

QC Sample Group: 3B79401-03

Reported: Mar 1, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Extractable Hydrocarbons	Total Recoverable Petroleum Oil	Beryllium	Cadmium	Chromium	Nickel
Method:	EPA 8015	SM 5520 E&F	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Analyst:	E. Cunanan	M. Shkidt	M. Mistry	M. Mistry	M. Mistry	M. Mistry
Reporting Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Date Analyzed:	Feb 18, 1993	Feb 22, 1993	Feb 22, 1993	Feb 22, 1993	Feb 22, 1993	Feb 22, 1993
QC Sample #:	D9302778-03	BLK022293	930279403A-D	930279403A-D	930279403A-D	930279403A-D
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	27	28
Spike Conc. Added:	15	1000	100	100	100	100
Conc. Matrix Spike:	13	1300	92	86	120	120
Matrix Spike % Recovery:	87	130	92	86	93	92
Conc. Matrix Spike Dup.:	12	860	88	82	110	110
Matrix Spike Duplicate % Recovery:	80	86	88	82	83	82
Relative % Difference:	8.0	41	4.4	4.8	8.7	8.7

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

% Recovery:	$\frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}}$	x 100
Relative % Difference:	$\frac{\text{Conc. of M.S. - Conc. of M.S.D.}}{\text{(Conc. of M.S. + Conc. of M.S.D.) / 2}}$	x 100

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Michael Hurd

Client Project ID: 305-9401 / Shell, Castro Valley

QC Sample Group: 3B79401-03

Reported: Mar 1, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Mercury	Organic Lead
Method:	EPA 7471	LUFT
Analyst:	J. Martinez	S. Foster
Reporting Units:	mg/kg	mg/kg
Date Analyzed:	Feb 19, 1993	Feb 26, 1993
QC Sample #:	9302690 07A	302-0792
Sample Conc.:	N.D.	N.D.
Spike Conc. Added:	0.10	0.50
Conc. Matrix Spike:	0.11	0.56
Matrix Spike % Recovery:	110	112
Conc. Matrix Spike Dup.:	0.096	0.53
Matrix Spike Duplicate % Recovery:	96	106
Relative % Difference:	0.0	5.5

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

[redacted] QUOI[redacted]NAL [redacted]CAL [redacted]MPL[redacted]ECE [redacted]LOG [redacted]

CLIENT NAME: PEC
REC. BY (PRINT): PH

MASTER LOG NO. / PAGE: V.O.# 93-02-794
DATE OF LOG-IN: 2-18

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
1. Custody Seal(s): Present / (Absent) Intact / Broken*	01	A	SP - 1	COIE	S	2-11	
2. Custody Seal Nos.:		B	2				
		C	3				
		D	4				
3. Chain-of-Custody Records: (Present) / Absent*		E	5				
	02	A	SP - 6				
		B	7				
		C	8				
4. Traffic Reports or Packing List: Present / (Absent)	03	A	SP - 9				
		B	10				
		C	11				
5. Airbill: Airbill / Sticker Present / (Absent)		D	12				
	04	A	OMW - 9 (5 - 6.5)				
6. Airbill No.:	05	A	OMW - 9 (10 - 11.5)				
7. Sample Tags: (Present) / Absent* Sample Tag Nos.: (Listed) / Not Listed on Chain-of-Custody							
8. Sample Condition: (Intact) / Broken* / Leaking*							
9. Does information on custody reports, traffic reports and sample tags agree? (Yes) / No*							
10. Proper Preservatives Used: (Yes) / No*							
11. Date Rec. at Lab: 2-17-93							
12. Time Rec. at Lab: 1635							

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

Form SC001

SEQUOIA ANALYTICAL
CHAIN OF CUSTODY

❑ [redacted] Chesapeake Drive • Redwood City, CA [redacted] • (415) [redacted]-9600 FAX (415) [redacted]
❑ 819 West Striker Ave. • Sacramento, CA 95834 • (916) 921-9600 FAX (916) 921-0100
❑ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 FAX (510) 686-9689

Company Name: SEQUOIA — RWC	Project Name: PEG / SHELL
Address:	Billing Address (if different):
City: State: Zip Code:	
Telephone: FAX #:	P.O. #:
Report To: E. MANNING Sampler:	QC Data: ❑ Level A (Standard) ❑ Level B ❑ Level C ❑ Level D

Turnaround Time: ❑ 10 Working Days ❑ 7 Working Days ❑ 5 Working Days ❑ 3 Working Days ❑ 2 Working Days ❑ 24 Hours ❑ 2 - 8 Hours

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	O-Pb	Comments
1. WO#93-02-7H 02		SOIL	3	VOAs		X	COMPOSITE
2. 03		↓	4	↓		↓	
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							

Relinquished By: [signature]	Date: 2/5/93	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab:	Date:	Time:

Were Samples Received in Good Condition? ❑ Yes ❑ No Samples on Ice? ❑ Yes ❑ No Method of Shipment _____

Pink - Client
Yellow - Sequoia
White - Sequoia

[redacted] :L[redacted]OIL [redacted] AN[redacted] [redacted] | [redacted] C[redacted]N [redacted] CUS[redacted]DY [redacted] | [redacted]

...AIL ENVIRONMENTAL ENGINEERING - WEST

Serial No: ______

Page 1 of 1

Site Address: 2724 CASTRO VALLEY BLVD, Castro Valley

WIC#: 204-1381-0407

Shell Engineer: RANDY ORLOWSKI — Phone No.: 1-800-447-4355 — Fax #:

Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC.

Consultant Contact: MICHAEL HURD — Phone No.: 408-441-7500 — Fax #: 441-7539

Comments:

Sampled by: [signature]

Printed Name: ANDREW WILLERTON

LAB: SEQUOIA

CHECK ONE (1) BOX ONLY	CT/DT
G.W. Monitoring ☐	4461
Site Investigation ☒	4441
Soil Classify/Disposal ☒	4442
Water Classify/Disposal ☐	4443
Soil/Air Rem. or Sys. O & M ☐	4452
Water Rem. or Sys. O & M ☐	4453
Other ☐	

TURN AROUND TIME: 24 hours ☐; 48 hours ☐; 15 days ☒ (Normal); Other ☐ ____

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: ______

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	ANALYZE FOR DISPOSAL GAS BTEX DIESEL	OIL & GREASE (5520 E+F)	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS	
SP-1,-2,-3,-4,-5	2/11		✓			5							✓	✓				Y	UST/gas SOIL	W.O. # 9302794	01
SP-6,-7,-8	2/11		✓			3							✓	✓				Y	↓	↓	02
SP-9,-10,-11,-12	2/11		✓			4							✓	✓				Y	↓	↓	03
OMW-9, 5-6.5	2/11		✓			1						✓						N	↓	↓	04
OMW-9, 10-11.5	2/11		✓			1						✓						N	↓	↓	05

Relinquished By (signature):	Printed Name:	Date/Time	Received (signature):	Printed Name:	Date/Time
[signature]	ANDREW WILLERTON	Date: 2/17/93 Time: 0920	[signature]	Rebekah J. Harper	Date: 2/17/93 Time: 9:20
[signature]	Rebekah J. Harper	Date: 2/17/93 Time: 10:35	[signature]		Date: Time:
		Date: Time:	[signature]	P. HUFAND	Date: 2-17-93 Time: 1035

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Project: 305-94.01/Shell, Castro Valley

Enclosed are the results from 4 soil samples relogged at Sequoia Analytical on June 30,1993. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
3F90601	Soil, EW-2, 4'	6/18/93	SM 5520 B&F (Gravimetric) TCLP and STLC
3F90608	Soil, SW-4, 3'	6/18/93	SM 5520 B&F (Gravimetric) TCLP and STLC
3F90611	Soil, EF-4, 9'	6/18/93	SM 5520 B&F (Gravimetric) TCLP and STLC
3F90616	Soil, T1, 3'	6/18/93	SM 5520 B&F (Gravimetric) TCLP and STLC

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Matrix Descript:	Soil	Relogged:	Jun 30, 1993
San Jose, CA 95110	Analysis Method:	SM 5520 B&F (Gravimetric)	Extracted:	Jul 6, 1993
Attention: Mike Hurd	First Sample #:	3F90601A	Analyzed:	Jul 6, 1993
			Reported:	Jul 7, 1993

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Sample Number	Sample Description	TCLP Oil & Grease mg/L	STLC Oil & Grease mg/L
3F90601	EW-2, 4'	N.D.	N.D.
3F90608	SW-4, 3'	N.D.	N.D.
3F90611	EF-4, 9'	N.D.	N.D.
3F90616	T1, 3'	N.D.	N.D.
Detection Limits:		**5.0**	**5.0**

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Water
QC Sample Group: 3F90601, 08, 11, 16

Reported: Jul 7, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Total Recoverable Petroleum Hydrocarbons
Method:	SM 5520BF
Analyst:	M. Shkidt
Conc. Spiked:	30
Units:	mg/L
LCS Batch#:	BLK070293
Date Prepared:	7/2/93
Date Analyzed:	7/6/93
Instrument I.D.#:	N.A.
LCS % Recovery:	90
Control Limits:	70-110
MS/MSD Batch #:	3FB9505
Date Prepared:	7/2/93
Date Analyzed:	7/6/93
Instrument I.D.#:	N.A.
Matrix Spike % Recovery:	85
Matrix Spike Duplicate % Recovery:	83
Relative % Difference:	2.4

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6-18-93
Page 3 of 4

Site Address: 2724 Castro Valley Blvd., Castro Valley

WIC#: 204-1381-0407

Shell Engineer: Randy Ordowski
Phone No.: 714 520-3395
Fax #: 520-3486

Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFORNIA 95110

Consultant Contact: Mike Hurd
Phone No.: 408 441-7500
Fax #: 441-7539

Comments:

Sampled by: Charles Melancon

Printed Name: Charles Melancon

LAB: Sequoia

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
G.W. Monitoring	4441	24 hours
Site Investigation	X 4441	48 hours
Soil Classify/Disposal		15 days / Normal
Water Classify/Disposal	4443	Other: X 5 day
Soil/Air Rem. or Sys. O & M	4452	NOTE: Notify Lab as soon as Possible of 24/48 hr. TAT.
Water Rem. or Sys. O & M	4453	
Other		

UST AGENCY: _____

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	STLC 17	Volatile Organics (EPA 8240)	STLC P6	Combination TPH 8015 & BTEX 8020 GAS	8270	5520 E&F	RCI	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
T1, 3'	6/18/93		X			1		X				X	X	X					Soil	
T2, 3'	↓		↓			1		↓				↓	↓	↓					↓	
T3, 4'	↓		↓			1		↓				↓	↓	↓						
								X	X	X	X	X	X	X	X			Y	Soil/Spoils	Composite
SP-3F																		X		
SP-3G																		Y		
SP-3H																		Y		
SP-3C																		Y	↓	↓

Relinquished By (signature): Charles Melancon	Printed Name: Charles Melancon	Date: 6-18-93	Received (signature): M Doden	Printed Name: M Doden	Date: 6/21/93
Relinquished By (signature): M Doden	Printed Name: M. Doden	Time: 1800	Received (signature): Lisa Steinstrom	Printed Name: Lisa Steinstrom	Time: 1015
Relinquished By (signature):	Printed Name:	Date: 6/21/93	Received (signature):	Printed Name:	Date: 6-21-93
		Time: 1045			Time: 1045
		Date:			Date:
		Time:			Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Shell Oil Co. Chain of Custody

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6-18-93
Page 2 of 4

Site Address: 2724 Castro Valley Blvd., Castrovalley

WIC#: 204-1381-0407

Shell Engineer: Randy Orlowski — Phone No.: 744-5320-3395 Fax #: 5-20-3469

Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFORNIA 95110

Consultant Contact: Mike Hurd — Phone No.: 408 441-7500 Fax #: 441-7539

Comments:

Sampled by: Charles Melancon

Printed Name: Charles Melancon

LAB: Sequoia

Analysis Required

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
G.W. Monitoring	4461	24 hours
Site Investigation	4481	48 hours
Soil Classify/Disposal	4442	15 days (Normal)
Water Classify/Disposal	4443	Other 5 day
Soil/Air Rem. or Sys. O & M	4462	
Water Rem. or Sys. O & M	4463	
Other		

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: _____

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020 GAS	8220	5520 E&F	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
EF-2, 9'	6/18/93		X			1		X				X	X	X					soil	
EF-3, 8'																				
EF-4, 9'															+ 1C					
EF-5, 9'																				
EF-6, 8'																				
EF-7, 8'																				
NW-1A, 5'																				

Relinquished By (signature)	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
Charles Melancon	Charles Melancon	6-18-93	1800	M Doden	M. Doden	6/21/93	10:15
M Doden	M. Doden	6/21/93	10:45	Lisa Stenstrom	Lisa Stenstrom	6-21-93	1045

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Shell Oil Co. Chain of Custody

SHELL OIL COMPANY 205-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6-[illegible]-93
Page 1 of 4

Site Address: 2724 Castro Valley Blvd. Castro Valley

WIC#: 204-1381-0407

Shell Engineer: Randy Orlowski — Phone No.: 714 520-3395 Fax #: 520-3469

Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFORNIA 95110

Consultant Contact: Mike Hurd — Phone No.: 408 441-7500 Fax #: 441-7539

Comments:

Sampled by: Charles Melancon

Printed Name: Charles Melancon

LAB: Sequoia

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020 GAS	8270	5520 E&F	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
* EW-2,4'	6/[illegible]/93		X			1		X				X	X	X	-01				SOIL	6/30/93 Please add analysis for these samples TCLP O+G STLC O+G 72 hr RUSH! (ND)
NW-5,4'																				
NW-6,4'																				
NW-7,4'											G30699	06								
WW-2,3'																				
WW-3,3'																				
WW-4,3'																				
* SW-4,3'	✓		✓			✓		✓				✓	✓	✓	-08				✓	

CHECK ONE (1) BOX ONLY — CT/DT

- G.W. Monitoring ☐ 4461
- Site Investigation ☒ 4481
- Soil Closure/Disposal ☐ 4482
- Water Closure/Disposal ☐ 4483
- Soil/Air Rem. or Sys. O & M ☐ 4452
- Water Rem. or Sys. O & M ☐ 4453
- Other ☐

TURN AROUND TIME

- 24 hours ☐
- 48 hours ☐
- 15 days ☐ (Normal)
- Other ☒ 5 day

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: _____

Relinquished By (signature): Charles Melancon	Printed Name: Charles Melancon	Date: 6-18-93 Time: 1800	Received (signature): M Doden
Relinquished By (signature): M Doden	Printed Name: M. Doden	Date: 6/21/93 Time: 1050	Received (signature): Lisa Stenstrom
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature):

Printed Name: M Doden	Date: 6/21/93	Time: 1015
Printed Name: Lisa Stenstrom	Date: 6-21-93	Time: 1050
Printed Name:	Date:	Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Shell Oil Co. of Calif.

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6-18-93
Page 1 of 4

Site Address: 2724 Castro Valley Blvd. Castro Valley
WIC#: 204-1381-0407
Shell Engineer: Randy Orlowski
Phone No.: 714 520-3395 Fax #: 520-3469
Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFORNIA 95110
Consultant Contact: Mike Hurd
Phone No.: 408 441-7500 Fax #: 441-7539
Comments:
Sampled by: Charles Melancon
Printed Name: Charles Melancon

LAB: Segvoia

CHECK ONE (1) BOX ONLY	CT/DT
G.W. Monitoring	☐ 4461
Site Investigation	☒ 4441
Soil Classify/Disposal	☐ 4442
Water Classify/Disposal	☐ 4443
Soil/Air Rem. or Sys. O & M	☐ 4452
Water Rem. or Sys. O & M	☐ 4453
Other	☐

TURN AROUND TIME: 24 hours ☐ 48 hours ☐ 15 days ☐ (Normal) Other ☒ 5 day

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: _____

Analysis Required: TPH (EPA 8015 Mod. Gas); TPH (EPA 8015 Mod. Diesel); BTEX (EPA 8020/602); Volatile Organics (EPA 8240); Test for Disposal; Combination TPH 8015 & BTEX 8020 GAS; 8270; 5520 E&F; Asbestos; Container Size; Preparation Used; Composite Y/N

	Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
*	EW-2, 4'	6/18/93		X			1	Soil	6/30/93 Please add analysis for these samples TCLP O&G STLC O&G 72 hr RUSH! AD
	NW-5, 4'								
	NW-6, 4'								
	NW-7, 4'								
	WW-2, 3'								
	WW-3, 3'								
	WW-4, 3'								
*	SW-4, 3'	↓		↓			↓	↓	

Relinquished By (signature): Charles Melancon	Printed Name: Charles Melancon	Date: 6-18-93 Time: 1800	Received (signature): M Doden	Printed Name: M Doden	Date: 6/21/93 Time: 1015
Relinquished By (signature): M Doden	Printed Name: M. Doden	Date: 6/21/93 Time: 1050	Received (signature): Lisa Stenstrom	Printed Name: Lisa Stenstrom	Date: 6-21-93 Time: 1050
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature):	Printed Name:	Date: Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev. 7/12/93

Shell Oil Chn. of Custody

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6-18-93

Site Address: 2724 Castro Valley Blvd., Castro Valley
WIC#: 204-1381-0407
Shell Engineer: Randy Orlowski
Phone No.: 714 520-3395
Fax #: 520-3469
Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFORNIA 95110
Consultant Contact: Mike Hurd
Phone No.: 408 441-7500
Fax #: 441-7539
Comments:
Sampled by: Charles Melancon
Printed Name: Charles Melancon

LAB: Segvoia

CHECK ONE (1) BOX ONLY		CT/DT	TURN AROUND TIME	
G.W. Monitoring	☐	4461	24 hours	☐
Site Investigation	☒	4441	48 hours	☐
Soil Classify/Disposal	☐	4442	15 days	☐ (Normal)
Water Classify/Disposal	☐	4443	Other	☒ 5day
Soil/Air Rem. or Sys. O & M	☐	4452	NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.	
Water Rem. or Sys. O & M	☐	4453		
Other	☐			

UST AGENCY: _____

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020 GAS	8270	5520 E&F	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
EF-2, 9'	6/18/93		X			1		X				X	X	X					soil	
EF-3, 8'																				
EF-4, 9'																				
EF-5, 9'																				
EF-6, 8'																				
EF-7, 8'																				
NW-1A, 5'																				

Relinquished By (signature): Charles Melancon	Printed Name: Charles Melancon	Date: 6-18-93 Time: 1800	Received (signature): M Doden	Printed Name: M. Doden	Date: 6/21/93 Time: 10:15
Relinquished By (signature): M Doden	Printed Name: M. Doden	Date: 6/21/93 Time: 1045	Received (signature): Lisa Stenstrom	Printed Name: Lisa Stenstrom	Date: 6-21-93 Time: 1045
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature):	Printed Name:	Date: Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev. 1/13/93

Shell Oil Chn. of Custody

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6-18-93
Page 3 of 4

Site Address: 2724 Castro Valley Blvd., Castro Valley

WIC#: 204-1381-0407

Shell Engineer: Randy Orlowski — Phone No.: 714 520-3395 Fax #: 520-3469

Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFORNIA 95110

Consultant Contact: Mike Hurd — Phone No.: 408 441-7500 Fax #: 441-7539

Comments:

Sampled by: Charles Melancon

Printed Name: Charles Melancon

LAB: Sequoia

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	[redacted] STLC 4M 17	Volatile Organics (EPA 8240)	Toxicity Disposal STLC PB	Combination TPH 8015 & BTEX 8020 GAS	8270	5520 E&F	Asbestos RCI	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
* T1, 3'	6/18/93		X			1		X				X	X	X					Soil	
T2, 3'	↓		↓			1		↓				↓	↓	↓					↓	
T3, 4'	↓		↓			1		↓				↓	↓	↓					↓	
---	---	---	---	---	---	---	---													
SP-3F (composited)								X	X	X	X	X	X	X	X			Y	Soil/Spoils	Composite
SP-3G (composited)																		Y	↓	↓
SP-3H (composited)																		Y		
SP-3C (composited)																		Y		

CHECK ONE (1) BOX ONLY

	CT/DT
G.W. Monitoring	4461
Site Investigation	X 4441
Soil Classify/Disposal	[redacted]
Water Classify/Disposal	4443
Soil/Air Rem. or Sys. O & M	4452
Water Rem. or Sys. O & M	4453
Other	

TURN AROUND TIME
- 24 hours ☐
- 48 hours ☐
- 15 days ☐ (Normal)
- Other ☒ 5 day

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: _____

Relinquished By (signature)	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
Charles Melancon	Charles Melancon	6-18-93	1800	M Doden	M. Doden	6/21/93	1015
M Doden	M. Doden	6/21/93	1045	Lisa Steinstrom	Lisa Steinstrom	6-21-93	1045

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev. 1/12/93

Shell Oil Chn. of Custody

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6-18-93
Page 4 of 4

Site Address: 2724 Castro Valley Blvd, Castro Valley
WIC#: 204-1381-0407
Shell Engineer: Randy Orlowski — Phone No.: 714 520-3395 Fax #: 520-3469
Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFORNIA 95110
Consultant Contact: Mike Hurd — Phone No.: 408 441-7500 Fax #: 441-7539
Comments:
Sampled by: Charles Melancon
Printed Name: Charles Melancon

LAB: Sequoia

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	~~BTEX 8020~~ 5520 F/B	Volatile Organics (EPA 8240)	~~Tetraethyl Lead~~ STLC CAM 17	Combination TPH 8015 & BTEX 8020 GAS	8270	STLC Lead	~~Asbestos~~ RCI	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
SP-2A	6/18/93		X			1		X	X	X	X	X	X	X	X			Y	Soil/Spoils	Composite
SP-2B						1												Y		
SP-2C						1												Y		
SP-2D						1												Y		
SP-3A						1		X	X	X	X	X	X	X	X			Y		Composite
SP-3B						1												Y		
SP-3D						1												Y		
SP-3E	↓		↓			1												Y	↓	

CHECK ONE (1) BOX ONLY

	CT/DT
G.W. Monitoring	4461
Site Investigation	4441
Soil Classify/Disposal	XXXX
Water Classify/Disposal	4443
Soil/Air Rem. or Sys. O & M	4452
Water Rem. or Sys. O & M	4453
Other	

TURN AROUND TIME: 24 hours ☐ 48 hours ☐ 15 days ☐ (Normal) Other ☒ 5day

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: _____

Relinquished By (signature): Charles Melancon	Printed Name: Charles Melancon	Date: 6-18-93 Time: 1800	Received (signature): M. Doden	Printed Name: M. Doden — Date: 6/21/93 Time: 10:15
Relinquished By (signature): M. Doden	Printed Name: M. Doden	Date: 6/21/93 Time: 1045	Received (signature): Lisa Stenstrom	Printed Name: Lisa Stenstrom — Date: 6-21-93 Time: 1045
Relinquished By (signature):	Printed Name:	Date: Time:	Received (signature):	Printed Name: — Date: Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev. 7/12/93

Shell Oil Chain of Custody

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Project: 305-94.01/Shell, Castro Valley

Enclosed are the results from 21 soil samples received at Sequoia Analytical on June 21,1993. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
3F90601	Soil, EW-2, 4'	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric)
3F90602	Soil, NW-5, 4'	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric)
3F90603	Soil, NW-6, 4'	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric)
3F90604	Soil, NW-7, 4'	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric)
3F90605	Soil, WW-2, 3'	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric)
3F90606	Soil, WW-3, 3'	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric)
3F90607	Soil, WW-4, 3'	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric)
3F90608	Soil, SW-4, 3'	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric)

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
3F90609	Soil, EF-2, 9'	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric)
3F90610	Soil, EF-3, 8'	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric)
3F90611	Soil, EF-4, 9'	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric)
3F90612	Soil, EF-5, 9'	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric)
3F90613	Soil, EF-6, 8'	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric)
3F90614	Soil, EF-7, 8'	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric)
3F90615	Soil, NW-1A, 5'	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric)
3F90616	Soil, T1, 3'	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric)
3F90617	Soil, T2, 3'	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric)
3F90618	Soil, T3, 4'	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric)

SEQUOIA ANALYTICAL

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(415) 364-9600 • FAX (415) 364-9233

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
3F90619	Soil, SP-3(F,G,H,C) comp	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric) Reactivity Corrosivity Ignitability EPA 8240 STLC Cam 17 Metals
3F90620	Soil, SP-2(A,B,C,D) comp	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric) Reactivity Corrosivity Ignitability EPA 8240 STLC Cam 17 Metals
3F90621	Soil, SP-3(A,B,D,E) comp	6/18/93	EPA 3550/8015 EPA 5030/8015/8020 EPA 8270 SM 5520 E&F (Gravimetric) Reactivity Corrosivity Ignitability EPA 8240 STLC Cam 17 Metals

Please contact me if you have any questions. In the meantime, thank you for the opportun work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 3550/8015	Reported:	Jun 25, 1993
Attention: Mike Hurd	First Sample #:	3F90601		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 3F90601 EW-2, 4'	Sample I.D. 3F90602 NW-5, 4'	Sample I.D. 3F90603 NW-6, 4'	Sample I.D. 3F90604 NW-7, 4'	Sample I.D. 3F90605 WW-2, 3'	Sample I.D. 3F90606 WW-3, 3'
Extractable Hydrocarbons	1.0	N.D.	N.D.	N.D.	N.D.	N.D.	1.9
Chromatogram Pattern:		--	--	--	--	--	Non-diesel mix C9 - C11

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Extracted:	6/21/93	6/21/93	6/21/93	6/21/93	6/21/93	6/21/93
Date Analyzed:	6/22/93	6/22/93	6/22/93	6/22/93	6/22/93	6/22/93
Instrument Identification:	HP5B	HP5B	HP5B	HP5B	HP5B	HP5B

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 3550/8015	Reported:	Jun 25, 1993
Attention: Mike Hurd	First Sample #:	3F90607		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 3F90607 WW-4, 3'	Sample I.D. 3F90608 SW-4, 3'	Sample I.D. 3F90609 EF-2, 9'	Sample I.D. 3F90610 EF-3, 8'	Sample I.D. 3F90611 EF-4, 9'	Sample I.D. 3F90612 EF-5, 9'
Extractable Hydrocarbons	1.0	95	N.D.	29	N.D.	41	N.D.
Chromatogram Pattern:		Non-diesel mix C9 - C15	--	Non-diesel mix < C11, C12 - C20	--	Non-diesel mix < C14, > C18	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	5.0	1.0	5.0	1.0
Date Extracted:	6/21/93	6/21/93	6/21/93	6/21/93	6/21/93	6/21/93
Date Analyzed:	6/22/93	6/22/93	6/23/93	6/22/93	6/22/93	6/22/93
Instrument Identification:	HP5B	HP5B	HP5B	HP5B	HP5B	HP5B

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 3550/8015	Reported:	Jun 25, 1993
Attention: Mike Hurd	First Sample #:	3F90613		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 3F90613 EF-6, 8'	Sample I.D. 3F90614 EF-7, 8'	Sample I.D. 3F90615 NW-1A, 5'	Sample I.D. 3F90616 T1, 3'	Sample I.D. 3F90617 T2, 3'	Sample I.D. 3F90618 T3, 4'
Extractable Hydrocarbons	1.0	N.D.	N.D.	N.D.	2,900	75	N.D.
Chromatogram Pattern:		--	--	--	Non-diesel mix C9 - C16	Non-diesel mix C10 - C15	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	100	5.0	1.0
Date Extracted:	6/21/93	6/21/93	6/21/93	6/21/93	6/21/93	6/21/93
Date Analyzed:	6/22/93	6/22/93	6/23/93	6/23/93	6/22/93	6/22/93
Instrument Identification:	HP5B	HP5B	HP5B	HP5B	HP5B	HP5B

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 3550/8015	Reported:	Jun 25, 1993
Attention: Mike Hurd	First Sample #:	3F90619		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 3F90619 SP-3(F,G,H,C) comp	Sample I.D. 3F90620 SP-2(A,B,C,D) comp	Sample I.D. 3F90621 SP-3(A,B,D,E) comp
Extractable Hydrocarbons	1.0	6.4	3.5	10
Chromatogram Pattern:		Non-diesel mix C9 - C11 > C20	Non-diesel mix C9 - C11, > C19	Non-diesel mix C9 - C15, > C17

Quality Control Data

Report Limit Multiplication Factor:	2.0	1.0	1.0
Date Extracted:	6/21/93	6/21/93	6/21/93
Date Analyzed:	6/23/93	6/23/93	6/23/93
Instrument Identification:	HP5B	HP5B	HP5B

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 5030/8015/8020	Reported:	Jun 25, 1993
Attention: Mike Hurd	First Sample #:	3F90601		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 3F90601 EW-2, 4'	Sample I.D. 3F90602 NW-5, 4'	Sample I.D. 3F90603 NW-6, 4'	Sample I.D. 3F90604 NW-7, 4'	Sample I.D. 3F90605 WW-2, 3'	Sample I.D. 3F90606 WW-3, 3'
Purgeable Hydrocarbons	1.0	N.D.	N.D.	N.D.	N.D.	N.D.	7.3
Benzene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		--	--	--	--	--	Non-gas mix > C8

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Analyzed:	6/22/93	6/22/93	6/22/93	6/22/93	6/22/93	6/22/93
Instrument Identification:	GCHP-18	GCHP-18	GCHP-18	GCHP-18	GCHP-18	GCHP-18
Surrogate Recovery, %: (QC Limits = 70-130%)	100	91	88	101	76	100

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 5030/8015/8020	Reported:	Jun 25, 1993
Attention: Mike Hurd	First Sample #:	3F90607		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 3F90607 WW-4, 3'	Sample I.D. 3F90608 SW-4, 3'	Sample I.D. 3F90609 EF-2, 9'	Sample I.D. 3F90610 EF-3, 8'	Sample I.D. 3F90611 EF-4, 9'	Sample I.D. 3F90612 EF-5, 9'
Purgeable Hydrocarbons	1.0	18	N.D.	43	N.D.	66	N.D.
Benzene	0.0050	N.D.	N.D.	0.019	N.D.	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.0050	N.D.	N.D.	N.D.	N.D.	0.27	N.D.
Total Xylenes	0.0050	N.D.	N.D.	0.35	N.D.	0.83	N.D.
Chromatogram Pattern:		Non-gas mix > C8	--	Non-gas mix > C4	--	Non-gas mix > C6	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	5.0	1.0	10	1.0
Date Analyzed:	6/22/93	6/22/93	6/23/93	6/22/93	6/24/93	6/22/93
Instrument Identification:	GCHP-18	GCHP-18	GCHP-6	GCHP-18	GCHP-18	GCHP-1
Surrogate Recovery, %: (QC Limits = 70-130%)	96	95	103	90	99	111

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received: Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 5030/8015/8020	Reported: Jun 25, 1993
Attention: Mike Hurd	First Sample #:	3F90613	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 3F90613 EF-6, 8'	Sample I.D. 3F90614 EF-7, 8'	Sample I.D. 3F90615 NW-1A, 5'	Sample I.D. 3F90616 T1, 3'	Sample I.D. 3F90617 T2, 3'	Sample I.D. 3F90618 T3, 4'
Purgeable Hydrocarbons	1.0	N.D.	N.D.	N.D.	330	1.2	N.D.
Benzene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.0050	N.D.	N.D.	N.D.	0.65	N.D.	N.D.
Chromatogram Pattern:		--	--	--	Non-gas mix > C6	Non-gas mix > C8	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	25	1.0	1.0
Date Analyzed:	6/23/93	6/23/93	6/23/93	6/24/93	6/23/93	6/23/93
Instrument Identification:	GCHP-6	GCHP-14	GCHP-6	GCHP-6	GCHP-6	GCHP-1
Surrogate Recovery, %: (QC Limits = 70-130%)	128	108	111	98	103	110

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received: Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 5030/8015/8020	Reported: Jun 25, 1993
Attention: Mike Hurd	First Sample #:	3F90619	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 3F90619 SP-3(F,G,H,C) comp	Sample I.D. 3F90620 SP-2(A,B,C,D) comp	Sample I.D. 3F90621 SP-3(A,B,D,E) comp
Purgeable Hydrocarbons	1.0	5.8	1.3	N.D.
Benzene	0.0050	N.D.	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.	N.D.
Ethyl Benzene	0.0050	0.0080	N.D.	N.D.
Total Xylenes	0.0050	0.066	N.D.	N.D.
Chromatogram Pattern:		Non-gas mix > C6	Non-gas mix > C8	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0
Date Analyzed:	6/23/93	6/23/93	6/23/93
Instrument Identification:	GCHP-18	GCHP-1	GCHP-6
Surrogate Recovery, %: (QC Limits = 70-130%)	101	106	110

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jun 18, 1993
2025 Gateway Place, Suite 440	Matrix Descript:	Soil	Received: Jun 21, 1993
San Jose, CA 95110	Analysis Method:	SM 5520 E&F (Gravimetric)	Extracted: Jun 23, 1993
Attention: Mike Hurd	First Sample #:	3F90601	Analyzed: Jun 24, 1993
			Reported: Jun 25, 1993

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Sample Number	Sample Description	Oil & Grease mg/kg
3F90601	EW-2, 4'	130
3F90602	NW-5, 4'	N.D.
3F90603	NW-6, 4'	N.D.
3F90604	NW-7, 4'	N.D.
3F90605	WW-2, 3'	N.D.
3F90606	WW-3, 3'	N.D.
3F90607	WW-4, 3'	N.D.
3F90608	SW-4, 3'	250
3F90609	EF-2, 9'	190
3F90610	EF-3, 8'	130
Detection Limits:		**50**

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Matrix Descript:	Soil	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	SM 5520 E&F (Gravimetric)	Extracted:	Jun 23, 1993
Attention: Mike Hurd	First Sample #:	3F90611	Analyzed:	Jun 24, 1993
			Reported:	Jun 25, 1993

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Sample Number	Sample Description	Oil & Grease mg/kg
3F90611	EF-4, 9'	370
3F90612	EF-5, 9'	N.D.
3F90613	EF-6, 8'	N.D.
3F90614	EF-7, 8'	76
3F90615	NW-1A, 5'	N.D.
3F90616	T1, 3'	940
3F90617	T2, 3'	85
3F90618	T3, 4'	91
3F90619	SP-3(F,G,H,C) comp	150
3F90620	SP-2(A,B,C,D) comp	130
Detection Limits:		**50**

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jun 18, 1993
2025 Gateway Place, Suite 440	Matrix Descript:	Soil	Received: Jun 21, 1993
San Jose, CA 95110	Analysis Method:	SM 5520 E&F (Gravimetric)	Extracted: Jun 23, 1993
Attention: Mike Hurd	First Sample #:	3F90621	Analyzed: Jun 24, 1993
			Reported: Jun 25, 1993

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Sample Number	Sample Description	Oil & Grease mg/kg
3F90621	SP-3(A,B,D,E) comp	180

Detection Limits:	**50**

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, EW-2, 4'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90601	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, EW-2, 4'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90601	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, NW-5, 4'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90602	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, NW-5, 4'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90602	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, NW-6, 4'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90603	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, NW-6, 4'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90603	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, NW-7, 4'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90604	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, NW-7, 4'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90604	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Eileen A. Manning
Project Manager

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, WW-2, 3'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90605	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, WW-2, 3'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90605	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Eileen A. Manning
Project Manager

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, WW-3, 3'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90606	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, WW-3, 3'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90606	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Eileen A. Manning
Project Manager

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, WW-4, 3'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90607	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, WW-4, 3'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90607	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Eileen A. Manning
Project Manager

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SW-4, 3'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90608	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SW-4, 3'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90608	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Eileen A. Manning
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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, EF-2, 9'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90609	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, EF-2, 9'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90609	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, EF-3, 8'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90610	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, EF-3, 8'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90610	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Eileen A. Manning
Project Manager

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, EF-4, 9'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90611	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, EF-4, 9'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90611	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Project Manager

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, EF-5, 9'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90612	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, EF-5, 9'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90612	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, EF-6, 8'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90613	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, EF-6, 8'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90613	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, EF-7, 8'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90614	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, EF-7, 8'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90614	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Eileen A. Manning
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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, NW-1A, 5'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90615	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, NW-1A, 5'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90615	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Eileen A. Manning
Project Manager

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, T1, 3'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90616	Analyzed:	Jun 23, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, T1, 3'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90616	Analyzed:	Jun 23, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Eileen A. Manning
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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, T2, 3'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90617	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, T2, 3'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90617	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, T3, 4'	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90618	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, T3, 4'	Received: Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted: Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90618	Analyzed: Jun 22, 1993
			Reported: Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Eileen A. Manning
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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-3(F,G,H,C)comp	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90619	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-3(F,G,H,C)comp	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90619	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Eileen A. Manning
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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-2(A,B,C,D)comp	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90620	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-2(A,B,C,D)comp	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90620	Analyzed:	Jun 22, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Eileen A. Manning
Project Manager

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-3(A,B,D,E)comp	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90621	Analyzed:	Jun 23, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-3(A,B,D,E)comp	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90621	Analyzed:	Jun 23, 1993
			Reported:	Jun 25, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Eileen A. Manning
Project Manager

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(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-3(F,G,H,C)comp	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8240	Analyzed:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90619	Reported:	Jun 25, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	500	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
cis-1,2-Dichloroethene	100	N.D.
trans-1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis-1,3-Dichloropropene	100	N.D.
trans-1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	250	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-2(A,B,C,D)comp	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8240	Analyzed:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90620	Reported:	Jun 25, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	500	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
cis-1,2-Dichloroethene	100	N.D.
trans-1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis-1,3-Dichloropropene	100	N.D.
trans-1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	250	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-3(A,B,D,E)comp	Received:	Jun 21, 1993
San Jose, CA 95110	Analysis Method:	EPA 8240	Analyzed:	Jun 22, 1993
Attention: Mike Hurd	Lab Number:	3F90621	Reported:	Jun 25, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	500	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
cis-1,2-Dichloroethene	100	N.D.
trans-1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis-1,3-Dichloropropene	100	N.D.
trans-1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	250	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-3(A,B,D,E)comp	Received: Jun 21, 1993
San Jose, CA 95110			Analyzed: Jun 22-23, 1993
Attention: Mike Hurd	Lab Number:	3F90621	Reported: Jun 25, 1993

CORROSIVITY, IGNITABILITY, AND REACTIVITY

Analyte	Detection Limit	Sample Results
Corrosivity:		
pH	N.A.	7.1
Ignitability:		
Flashpoint (Shell Open Cup)° C	N.A.	Negative
Reactivity:		
Sulfide, mg/kg	13	N.D.
Cyanide, mg/kg	0.50	N.D.
Reaction with water	N.A.	Negative

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-3(F,G,H,C) comp	Received:	Jun 21, 1993
San Jose, CA 95110				
Attention: Mike Hurd	Lab Number:	3F90619	Reported:	Jun 25, 1993

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

	Soluble Threshold Limit Concentration Waste Extraction Test			Total Threshold Limit Concentration		
Analyte	STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	TTLC Max. Limit (mg/kg)	Detection Limit (mg/kg)	Analysis Result (mg/kg)
Antimony	15	0.10	N.D.	500	5.0	-
Arsenic	5.0	0.10	N.D.	500	5.0	-
Barium	100	0.10	8.1	10,000	5.0	-
Beryllium	0.75	0.010	0.013	75	0.50	-
Cadmium	1.0	0.010	N.D.	100	0.50	-
Chromium (VI)	5.0	0.0050	-	500	0.050	-
Chromium	560	0.010	0.41	2,500	0.50	-
Cobalt	80	0.050	0.39	8,000	2.5	-
Copper	25	0.010	0.51	2,500	0.50	-
Lead	5.0	0.10	0.29	1,000	5.0	-
Mercury	0.20	0.00020	0.0010	20	0.010	-
Molybdenum	350	0.050	N.D.	3,500	2.5	-
Nickel	20	0.050	0.44	2,000	2.5	-
Selenium	1.0	0.10	N.D.	100	5.0	-
Silver	5.0	0.010	N.D.	500	0.50	-
Thallium	7.0	0.10	N.D.	700	5.0	-
Vanadium	24	0.050	0.74	2,400	2.5	-
Zinc	250	0.010	1.3	5,000	0.50	-
Asbestos	-	10	-	10,000	100	-
Fluoride	180	0.10	-	18,000	1.0	-

TTLC results are reported as mg/kg of wet weight. Asbestos results are reported as fibers/g.
Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-2(A,B,C,D) comp	Received: Jun 21, 1993
San Jose, CA 95110			
Attention: Mike Hurd	Lab Number:	3F90620	Reported: Jun 25, 1993

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

	Soluble Threshold Limit Concentration (Waste Extraction Test)			Total Threshold Limit Concentration		
Analyte	STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	TTLC Max. Limit (mg/kg)	Detection Limit (mg/kg)	Analysis Result (mg/kg)
Antimony	15	0.10	N.D.	500	5.0	-
Arsenic	5.0	0.10	N.D.	500	5.0	-
Barium	100	0.10	8.3	10,000	5.0	-
Beryllium	0.75	0.010	0.019	75	0.50	-
Cadmium	1.0	0.010	N.D.	100	0.50	-
Chromium (VI)	5.0	0.0050	-	500	0.050	-
Chromium	560	0.010	0.54	2,500	0.50	-
Cobalt	80	0.050	0.44	8,000	2.5	-
Copper	25	0.010	0.68	2,500	0.50	-
Lead	5.0	0.10	0.19	1,000	5.0	-
Mercury	0.20	0.00020	0.00093	20	0.010	-
Molybdenum	350	0.050	N.D.	3,500	2.5	-
Nickel	20	0.050	0.95	2,000	2.5	-
Selenium	1.0	0.10	N.D.	100	5.0	-
Silver	5.0	0.010	N.D.	500	0.50	-
Thallium	7.0	0.10	N.D.	700	5.0	-
Vanadium	24	0.050	0.96	2,400	2.5	-
Zinc	250	0.010	1.3	5,000	0.50	-
Asbestos	-	10	-	10,000	100	-
Fluoride	180	0.10	-	18,000	1.0	-

TTLC results are reported as mg/kg of wet weight. Asbestos results are reported as fibers/g.
Analytes reported as N.D. were not present above the stated limit of detection.

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Eileen A. Manning
Project Manager

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 18, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-3(A,B,D,E) comp	Received:	Jun 21, 1993
San Jose, CA 95110				
Attention: Mike Hurd	Lab Number:	3F90621	Reported:	Jun 25, 1993

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

Analyte	Soluble Threshold Limit Concentration (Waste Extraction Test) STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	Total Threshold Limit Concentration TTLC Max. Limit (mg/kg)	Detection Limit (mg/kg)	Analysis Result (mg/kg)
Antimony	15	0.10	N.D.	500	5.0	-
Arsenic	5.0	0.10	N.D.	500	5.0	-
Barium	100	0.10	9.0	10,000	5.0	-
Beryllium	0.75	0.010	0.017	75	0.50	-
Cadmium	1.0	0.010	N.D.	100	0.50	-
Chromium (VI)	5.0	0.0050	-	500	0.050	-
Chromium	560	0.010	0.37	2,500	0.50	-
Cobalt	80	0.050	0.46	8,000	2.5	-
Copper	25	0.010	0.43	2,500	0.50	-
Lead	5.0	0.10	0.23	1,000	5.0	-
Mercury	0.20	0.00020	0.00067	20	0.010	-
Molybdenum	350	0.050	N.D.	3,500	2.5	-
Nickel	20	0.050	0.56	2,000	2.5	-
Selenium	1.0	0.10	N.D.	100	5.0	-
Silver	5.0	0.010	N.D.	500	0.50	-
Thallium	7.0	0.10	N.D.	700	5.0	-
Vanadium	24	0.050	0.93	2,400	2.5	-
Zinc	250	0.010	0.93	5,000	0.50	-
Asbestos	-	10	-	10,000	100	-
Fluoride	180	0.10	-	18,000	1.0	-

TTLC results are reported as mg/kg of wet weight. Asbestos results are reported as fibers/g.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil

QC Sample Group: 3F90601-21

Reported: Jun 25, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Diesel

Method:	EPA 8015
Analyst:	C. Lee
Conc. Spiked:	15
Units:	mg/kg
LCS Batch#:	DBLK062193-A
Date Prepared:	6/21/93
Date Analyzed:	6/22/93
Instrument I.D.#:	GCHP-5 INJ. B
LCS % Recovery:	67
Control Limits:	50-150

MS/MSD Batch #:	D930609615
Date Prepared:	6/21/93
Date Analyzed:	6/22/93
Instrument I.D.#:	GCHP-5 INJ. B
Matrix Spike % Recovery:	67
Matrix Spike Duplicate % Recovery:	67
Relative % Difference:	0.0

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Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3F90601-21

Reported: Jun 25, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler
Conc. Spiked:	0.20	0.20	0.20	0.60
Units:	mg/kg	mg/kg	mg/kg	mg/kg
LCS Batch#:	GBLK062293	GBLK062293	GBLK062293	GBLK062293
Date Prepared:	6/22/93	6/22/93	6/22/93	6/22/93
Date Analyzed:	6/22/93	6/22/93	6/22/93	6/22/93
Instrument I.D.#:	GCHP-18	GCHP-18	GCHP-18	GCHP-18
LCS % Recovery:	100	105	105	103
Control Limits:	60-140	60-140	60-140	60-140
MS/MSD Batch #:	G930679211A	G930679211A	G930679211A	G930679211A
Date Prepared:	6/22/93	6/22/93	6/22/93	6/22/93
Date Analyzed:	6/22/93	6/22/93	6/22/93	6/22/93
Instrument I.D.#:	GCHP-18	GCHP-18	GCHP-18	GCHP-18
Matrix Spike % Recovery:	100	100	100	100
Matrix Spike Duplicate % Recovery:	100	100	100	98
Relative % Difference:	0.0	0.0	0.0	2.0

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
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SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil

QC Sample Group: 3F90601-08

Reported: Jun 25, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Total Recoverable Petroleum Hydrocarbons
Method:	SM 5520EF
Analyst:	M. Shkidt
Conc. Spiked:	1000
Units:	mg/kg
LCS Batch#:	BLK061793
Date Prepared:	6/17/93
Date Analyzed:	6/17/93
Instrument I.D.#:	N.A.
LCS % Recovery:	77
Control Limits:	70-110
MS/MSD Batch #:	9306391-5A
Date Prepared:	6/17/93
Date Analyzed:	6/17/93
Instrument I.D.#:	N.A.
Matrix Spike % Recovery:	84
Matrix Spike Duplicate % Recovery:	84
Relative % Difference:	0.0

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3F90609-21

Reported: Jun 25, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Total Recoverable Petroleum Hydrocarbons
Method:	SM 5520EF
Analyst:	M. Shkidt
Conc. Spiked:	1000
Units:	mg/kg
LCS Batch#:	BLK062393
Date Prepared:	6/23/93
Date Analyzed:	6/24/93
Instrument I.D.#:	N.A.
LCS % Recovery:	88
Control Limits:	70-110
MS/MSD Batch #:	9306906-15A
Date Prepared:	6/23/93
Date Analyzed:	6/24/93
Instrument I.D.#:	N.A.
Matrix Spike % Recovery:	79
Matrix Spike Duplicate % Recovery:	77
Relative % Difference:	2.6

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3F90601-21

Reported: Jun 25, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Phenol	2-Chlorophenol	1,4-Dichloro-benzene	N-Nitroso-Di-N-propylamine	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenol
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel	E. Manuel	E. Manuel
Conc. Spiked:	100	100	50	50	50	100
Units:	ng	ng	ng	ng	ng	ng
LCS Batch#:	BLK062293	BLK062293	BLK062293	BLK062293	BLK062293	BLK062293
Date Prepared:	6/22/93	6/22/93	6/22/93	6/22/93	6/22/93	6/22/93
Date Analyzed:	6/23/93	6/23/93	6/23/93	6/23/93	6/23/93	6/23/93
Instrument I.D.#:	H5	H5	H5	H5	H5	H5
LCS % Recovery:	76	78	70	84	74	79
Control Limits:	26-90	25-102	28-104	41-126	38-107	26-103
MS/MSD Batch #:	930690601	930690601	930690601	930690601	930690601	930690601
Date Prepared:	6/22/93	6/22/93	6/22/93	6/22/93	6/22/93	6/22/93
Date Analyzed:	6/22/93	6/22/93	6/22/93	6/22/93	6/22/93	6/22/93
Instrument I.D.#:	H5	H5	H5	H5	H5	H5
Matrix Spike % Recovery:	80	77	72	90	72	79
Matrix Spike Duplicate % Recovery:	79	74	70	88	72	75
Relative % Difference:	1.3	4.0	2.8	2.2	0.0	5.2

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3F90601-21

Reported: Jun 25, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Acenaphthene	4-Nitrophenol	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel	E. Manuel
Conc. Spiked:	50	100	50	100	50
Units:	ng	ng	ng	ng	ng
LCS Batch#:	BLK062293	BLK062293	BLK062293	BLK062293	BLK062293
Date Prepared:	6/22/93	6/22/93	6/22/93	6/22/93	6/22/93
Date Analyzed:	6/23/93	6/23/93	6/23/93	6/23/93	6/23/93
Instrument I.D.#:	H5	H5	H5	H5	H5
LCS % Recovery:	74	71	68	62	74
Control Limits:	31-137	11-114	28-89	17-109	35-142
MS/MSD Batch #:	930690601	930690601	930690601	930690601	930690601
Date Prepared:	6/22/93	6/22/93	6/22/93	6/22/93	6/22/93
Date Analyzed:	6/22/93	6/22/93	6/22/93	6/22/93	6/22/93
Instrument I.D.#:	H5	H5	H5	H5	H5
Matrix Spike % Recovery:	72	71	72	67	88
Matrix Spike Duplicate % Recovery:	74	66	72	69	86
Relative % Difference:	2.7	7.3	0.0	2.9	2.3

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3F90619-21

Reported: Jun 25, 1993

QUALITY CONTROL DATA REPORT

ANALYTE:	1,1-Dichloro-ethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
Method:	EPA 8240	EPA 8240	EPA 8240	EPA 8240	EPA 8240
Analyst:	M. Williams	M. Williams	M. Williams	M. Williams	M. Williams
Conc. Spiked:	2500	2500	2500	2500	2500
Units:	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
LCS Batch#:	BLK062293	BLK062293	BLK062293	BLK062293	BLK062293
Date Prepared:	6/22/93	6/22/93	6/22/93	6/22/93	6/22/93
Date Analyzed:	6/22/93	6/22/93	6/22/93	6/22/93	6/22/93
Instrument I.D.#:	F2	F2	F2	F2	F2
LCS % Recovery:	84	92	88	92	88
Control Limits:	59-172	62-137	66-142	59-139	60-133
MS/MSD Batch #:	930690621	930690621	930690621	930690621	930690621
Date Prepared:	6/22/93	6/22/93	6/22/93	6/22/93	6/22/93
Date Analyzed:	6/22/93	6/22/93	6/22/93	6/22/93	6/22/93
Instrument I.D.#:	F2	F2	F2	F2	F2
Matrix Spike % Recovery:	88	88	84	92	88
Matrix Spike Duplicate % Recovery:	76	84	80	84	84
Relative % Difference:	15	4.7	4.9	9.1	4.7

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Eileen A. Manning
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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3F90619-21

Reported: Jun 25, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Sulfide	Cyanide
Method:	EPA 9030	EPA 9010
Analyst:	K. Newberry	A. Savva
Conc. Spiked:	10	3.0
Units:	mg/kg	mg/kg
LCS Batch#:	LCS062393	LCS062393
Date Prepared:	6/23/93	6/23/93
Date Analyzed:	6/23/93	6/23/93
Instrument I.D.#:	N.A.	N.A.
LCS % Recovery:	93	103
Control Limits:	80-120	80-120
MS/MSD Batch #:	9306799-1	9306538-1A
Date Prepared:	6/21/93	6/21/93
Date Analyzed:	6/21/93	6/21/93
Instrument I.D.#:	N.A.	N.A.
Matrix Spike % Recovery:	89	97
Matrix Spike Duplicate % Recovery:	85	99
Relative % Difference:	1.1	2.0

SEQUOIA ANALYTICAL

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Pacific Environmental Group
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Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Liquid

QC Sample Group: 3F906019-21

Reported: Jun 25, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Beryllium	Cadmium	Chromium	Nickel	Nickel	Mercury
Method:	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 7521	EPA 245.1
Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler	S. Chin	A. McDonald
Conc. Spiked:	1.0	1.0	1.0	1.0	1.0	0.0020
Units:	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
LCS Batch#:	BLK062393	BLK062393	BLK062393	BLK062393	BLK062393	BLK062493
Date Prepared:	6/23/93	6/23/93	6/23/93	6/23/93	6/23/93	6/24/93
Date Analyzed:	6/24/93	6/24/93	6/24/93	6/24/93	6/24/93	6/24/93
Instrument I.D.#:	MTJA-2	MTJA-2	MTJA-2	MTJA-2	MV-1	MPE-2
LCS % Recovery:	106	95	99	82	79	109
Control Limits:	75-125	75-125	75-125	75-125	75-125	90-110
MS/MSD Batch #:	930699-01A	930699-01A	930699-01A	930699-01A	9306999-01A	9306868-1F
Date Prepared:	6/23/93	6/23/93	6/23/93	6/23/93	6/23/93	6/24/93
Date Analyzed:	6/24/93	6/24/93	6/24/93	6/24/93	6/24/93	6/24/93
Instrument I.D.#:	MTJA-2	MTJA-2	MTJA-2	MTJA-2	MV-1	MPE-2
Matrix Spike % Recovery:	107	94	99	104	59	106
Matrix Spike Duplicate % Recovery:	105	93	96	80	58	112
Relative % Difference:	1.9	1.1	3.1	26	1.7	5.7

SEQUOIA ANALYTICAL

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Liquid
QC Sample Group: 3F90619-21

Reported: Jun 25, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	pH	Ignitabilty
Method:	EPA 150.1	Open Cup
Analyst:	K. Follett	K.Newberry
Units:	pH units	°C
Date:	6/22/93	6/23/93
Sample #:	9306916	9306906-21
Sample Concentration:	7.0	Negative
Sample Duplicate Concentration:	6.9	Negative
% RPD:	1.4	0.0
Control Limits:	0-30	N.A.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6-18-93
Page 1 of 4

Site Address: 2724 Castro Valley Blvd., Castro Valley

WIC#: 204-1381-0407

Shell Engineer: Randy Orlowski — Phone No.: 714 520-3395 Fax #: 520-3469

Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFORNIA 95110

Consultant Contact: Mike Hurd — Phone No.: 408 441-7500 Fax #: 441-7539

Comments:

Sampled by: Charles Melancon

Printed Name: Charles Melancon

LAB: Segvoia

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020 GAS	8270	5520 E&F	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
EW-2, 4'	6/6/93		X			1		X				X	X	X					Soil	9306906-1A
NW-5, 4'																				-2A
NW-6, 4'																				-3A
NW-7, 4'																				-4A
WW-2, 3'																				-5A
WW-3, 3'																				-6A
WW-4, 3'																				-7A
SW-4, 3'																				-8A

CHECK ONE (1) BOX ONLY — CT/DT — TURN AROUND TIME

- G.W. Monitoring ☐ 4461
- Site Investigation ☒ 4441
- Soil Classify/Disposal ☐ 4442
- Water Classify/Disposal ☐ 4443
- Soil/Air Rem. or Sys. O & M ☐ 4452
- Water Rem. or Sys. O & M ☐ 4453
- Other ☐

TURN AROUND TIME: 24 hours ☐ — 48 hours ☐ — 15 days ☐ (Normal) — Other ☒ 5 day

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: _____

Relinquished By (signature)	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
Charles Melancon	Charles Melancon	6-18-93	1800	M Doden	M Doden	6/21/93	1015
M Doden	M. Doden	6/21/93	1050	Lisa Stenstrom	Lisa Stenstrom	6-21-93	1050
Lisa Stenstrom	Lisa Stenstrom	6-21-93	1156				

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev. 7/17/93

Shell Chain of Custody

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6-18-93
Page 2 of 4

Site Address: 2724 Castro Valley Blvd., Castro Valley

WIC#: 204-1381-0407

Shell Engineer: Randy Orlowski — Phone No.: 714 520-3395 Fax #: 520-3469

Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFORNIA 95110

Consultant Contact: Mike Hurd — Phone No.: 408 441-7500 Fax #: 441-7539

Comments:

Sampled by: Charles Melancon

Printed Name: Charles Melancon

LAB: Sequoia

CHECK ONE (1) BOX ONLY		CT/DT
G.W. Monitoring	☐	4461
Site Investigation	☒	4441
Soil Classify/Disposal	☐	4442
Water Classify/Disposal	☐	4443
Soil/Air Rem. or Sys. O & M	☐	4452
Water Rem. or Sys. O & M	☐	4453
Other	☐	

TURN AROUND TIME: 24 hours ☐ 48 hours ☐ 15 days ☐ (Normal) Other ☒ 5day

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: _____

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020 GAS	8240	5520 E&F	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
EF-2, 9'	6/18/93		X			1		X				X	X	X					soil	9306906-9A
EF-3, 8'																				-10A
EF-4, 9'																				-11A
EF-5, 9'																				-12A
EF-6, 8'																				-13A
EF-7, 8'																				-14A
NW-1A, 5'																				-15A

	Printed Name	Date/Time		Printed Name	Date/Time
Relinquished By (signature): Charles Melancon	Charles Melancon	Date: 6-18-93 Time: 1800	Received (signature): M Doden	M. Doden	Date: 6/21/93 Time: 10:15
Relinquished By (signature): M Doden	M. Doden	Date: 6/21/93 Time: 10:45	Received (signature): Lisa Stenstrom	Lisa Stenstrom	Date: 6-21-93 Time: 1045
Relinquished By (signature): Lisa Stenstrom	Lisa Stenstrom	Date: 6-21-93 Time: 1455	Received (signature):	Printed Name:	Date: Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev. 7/12/93

Shell Oil Co. Chain of Custody

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6-18-93
Page 3 of 4

Site Address: 2724 Castro Valley Blvd., Castro Valley
WIC#: 204-1381-0407
Shell Engineer: Randy Orlowski
Phone No.: 714-520-3395
Fax #: 520-3469
Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFORNIA 95110
Consultant Contact: Mike Hurd
Phone No.: 408 441-7500
Fax #: 441-7539
Comments:
Sampled by: Charles Melancon
Printed Name: Charles Melancon

LAB: Sequoia

CHECK ONE (1) BOX ONLY	CT/DT
G.W. Monitoring	4461
Site Investigation	X 4441
Soil Classify/Disposal	
Water Classify/Disposal	4443
Soil/Air Rem. or Sys. O & M	4452
Water Rem. or Sys. O & M	4453
Other	

TURN AROUND TIME: 24 hours ☐ 48 hours ☐ 15 days ☐ (Normal) Other ☒ Rush

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: _____

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	STLC 4M 17	Volatile Organics (EPA 8240)	STLC P6	Combination TPH 8015 & BTEX 8020 GAS	8270	5520 E&F	RCI	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
T1, 3'	6/18/93		X			1		X				X	X	X					Soil	9306906-16A
T2, 3'	↓		↓			1		↓				↓	↓	↓					↓	-17A
T3, 4'	↓		↓			1		↓				↓	↓	↓					↓	-18A
SP-3F (Dispose)								X	X	X	X	X	X	X	X			Y	Soil/Spoils	-19A
SP-3G (Dispose)																		X	↓	-19B
SP-3H (Dispose)																		Y		-19C
SP-3C (Dispose)																		Y		-19D

Relinquished By (signature)	Printed Name	Date/Time	Received (signature)	Printed Name	Date/Time
Charles Melancon	Charles Melancon	6-18-93 1800	M Doden	M Doden	6/21/93 1015
M Doden	M. Doden	6/21/93 1045	Lisa Stenstrom	Lisa Stenstrom	6-21-93 1045
Lisa Stenstrom	Lisa Stenstrom	6-21-93 1156	Received (signature):	Printed Name:	Date: Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev. 7/1/93 — Shell Oil Chain of Custody

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No: ______

Date: 6-18-93
Page 4 of 4

Site Address: 2724 Castro Valley Blvd, Castro Valley

WIC#: 204-1381-0407

Shell Engineer: Randy Orlowski — Phone No.: 714 520-3395 Fax #: 520-3469

Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFONRIA 95110

Consultant Contact: Mike Hurd — Phone No.: 408 441-7500 Fax #: 441-7539

Comments:

Sampled by: Charles Melancon

Printed Name: Charles Melancon

LAB: Sequoia

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
G.W. Monitoring ☐	4461	24 hours ☐
Site Investigation ☒	4441	48 hours ☐
Soil Classify/Disposal ■	4442	16 days ☐ (Normal)
Water Classify/Disposal ☐	4443	Other ☒ 5day
Soil/Air Rem. or Sys. O & M ☐	4452	NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.
Water Rem. or Sys. O & M ☐	4453	
Other ☐		

UST AGENCY: ______

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	~~BTEX (EPA 8020/602)~~ 5520 E:F	Volatile Organics (EPA 8240)	~~Test for Disposal~~ STLC CAM 17	Combination TPH 8015 & BTEX 8020 GAS	8270	STLC Lead	~~Asbestos~~ RCI	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
SP-2A (composite)	6/18/93		X			1		X	X	X	X	X	X	X	X			Y	Soil/Spoils	9306906-20A (composite)
SP-2B	↓		↓			1												Y	↓	-20B
SP-2C	↓		↓			1												Y	↓	-20C
SP-2D	↓		↓			1												Y	↓	-20D
SP-3A (composite)	↓		↓			1		X	X	X	X	X	X	X	X			Y	↓	9306906-21A (composite)
SP-3B	↓		↓			1												Y	↓	-21B
SP-3D	↓		↓			1												Y	↓	-21C
SP-3E	↓		↓			1												Y	↓	-21D

Relinquished By (signature):	Printed Name:	Date/Time	Received (signature):	Printed Name:	Date/Time
Charles Melancon	Charles Melancon	Date: 6-18-93 Time: 1800	M. Doden	M. Doden	Date: 6/21/93 Time: 10:15
M. Doden	M. Doden	Date: 6/21/93 Time: 1045	Lisa Stenstrom	Lisa Stenstrom	Date: 6-21-93 Time: 1045
Lisa Stenstrom	Lisa Stenstrom	Date: 6-21-93 Time: 1156			Date: Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Project: 305-94.01/Shell, Castro Valley

Enclosed are the results from 1 soil sample received at Sequoia Analytical on June 30,1993. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
3FE7701	Soil, SP-4A to 4D comp	6/30/93	STLC Metals Reactivity, Corrosivity, & Ignitability EPA 5030/8015 EPA 8240 EPA 8270 SM 5520 E&F (Gravimetric)

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 30, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jun 30, 1993
San Jose, CA 95110	Analysis Method:	EPA 5030/8015	Reported:	Jul 8, 1993
Attention: Mike Hurd	First Sample #:	3FE7701		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 3FE7701 SP-4A to 4D comp
Purgeable Hydrocarbons	1.0	N.D.
Chromatogram Pattern:		--

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Analyzed:	7/5/93
Instrument Identification:	GCHP-2
Surrogate Recovery: (QC Limits = 70-130%)	98

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

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Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 30, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-4A to 4D comp	Received:	Jun 30, 1993
San Jose, CA 95110	Analysis Method:	EPA 8240	Analyzed:	Jul 2, 1993
Attention: Mike Hurd	Lab Number:	3FE7701	Reported:	Jul 8, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	500	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
cis-1,2-Dichloroethene	100	N.D.
trans-1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis-1,3-Dichloropropene	100	N.D.
trans-1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	250	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Project Manager

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 30, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-4A to 4D comp	Received:	Jun 30, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jul 2, 1993
Attention: Mike Hurd	Lab Number:	3FE7701	Analyzed:	Jul 2, 1993
			Reported:	Jul 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Aniline	100	N.D.
Anthracene	100	N.D.
Benzidine	2,500	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 30, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-4A to 4D comp	Received:	Jun 30, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jul 2, 1993
Attention: Mike Hurd	Lab Number:	3FE7701	Analyzed:	Jul 2, 1993
			Reported:	Jul 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 30, 1993
2025 Gateway Place, Suite 440	Matrix Descript:	Soil	Received:	Jun 30, 1993
San Jose, CA 95110	Analysis Method:	SM 5520 E&F (Gravimetric)	Extracted:	Jul 1, 1993
Attention: Mike Hurd	First Sample #:	3FE7701	Analyzed:	Jul 2, 1993
			Reported:	Jul 8, 1993

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg
3FE7701	SP-4A to 4D comp	140

Detection Limits:	**50**

Analytes reported as N.D. were not present above the stated limit of detection.

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Project Manager

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 30, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-4A to 4D comp	Received:	Jun 30, 1993
San Jose, CA 95110			Analyzed:	Jul 1-2, 1993
Attention: Mike Hurd	Lab Number:	3FE7701	Reported:	Jul 8, 1993

CORROSIVITY, IGNITABILITY, AND REACTIVITY

Analyte	Detection Limit	Sample Results
Corrosivity:		
pH	N.A.	6.6
Ignitability:		
Flashpoint (Shell Open Cup)	N.A.	Negative
Reactivity:		
Sulfide, mg/kg	13	N.D.
Cyanide, mg/kg	0.50	N.D.
Reaction with water	N.A.	Negative

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 30, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-4A to 4D comp	Received:	Jun 30, 1993
San Jose, CA 95110			Extracted:	Jul 6, 1993
Attention: Mike Hurd	Lab Number:	3FE7701	Reported:	Jul 8, 1993

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

	Soluble Threshold Limit Concentration Waste Extraction Test			Total Threshold Limit Concentration		
Analyte	STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	TTLC Max. Limit (mg/kg)	Detection Limit (mg/kg)	Analysis Result (mg/kg)
Antimony	15	0.10	0.14	500	5.0	-
Arsenic	5.0	0.10	N.D.	500	5.0	-
Barium	100	0.10	8.3	10,000	5.0	-
Beryllium	0.75	0.010	0.023	75	0.50	-
Cadmium	1.0	0.010	N.D.	100	0.50	-
Chromium (VI)	5.0	0.0050	-	500	0.050	-
Chromium	560	0.010	0.30	2,500	0.50	-
Cobalt	80	0.050	0.66	8,000	2.5	-
Copper	25	0.010	0.21	2,500	0.50	-
Lead	5.0	0.10	0.27	1,000	5.0	-
Mercury	0.20	0.00020	N.D.	20	0.010	-
Molybdenum	350	0.050	N.D.	3,500	2.5	-
Nickel	20	0.050	1.0	2,000	2.5	-
Selenium	1.0	0.050	N.D.	100	5.0	-
Silver	5.0	0.010	N.D.	500	0.50	-
Thallium	7.0	0.10	N.D.	700	5.0	-
Vanadium	24	0.050	0.70	2,400	2.5	-
Zinc	250	0.010	1.7	5,000	0.50	-
Asbestos	-	10	-	10,000	100	-
Fluoride	180	0.10	-	18,000	1.0	-

TTLC results are reported as mg/kg of wet weight. Asbestos results are reported as fibers/g.
Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil

QC Sample Group: 3FE7701

Reported: Jul 8, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	E. Cunanan	E. Cunanan	E. Cunanan	E. Cunanan
Conc. Spiked:	0.20	0.20	0.20	0.60
Units:	mg/kg	mg/kg	mg/kg	mg/kg
LCS Batch#:	GBLK070293	GBLK070293	GBLK070293	GBLK070293
Date Prepared:	7/2/93	7/2/93	7/2/93	7/2/93
Date Analyzed:	7/5/93	7/5/93	7/5/93	7/5/93
Instrument I.D.#:	GCHP-3	GCHP-3	GCHP-3	GCHP-3
LCS % Recovery:	90	95	100	97
Control Limits:	60-140	60-140	60-140	60-140
MS/MSD Batch #:	3FE5712	3FE5712	3FE5712	3FE5712
Date Prepared:	7/2/93	7/2/93	7/2/93	7/2/93
Date Analyzed:	7/2/93	7/2/93	7/2/93	7/2/93
Instrument I.D.#:	GCHP-18	GCHP-18	GCHP-18	GCHP-18
Matrix Spike % Recovery:	80	80	90	90
Matrix Spike Duplicate % Recovery:	80	85	90	92
Relative % Difference:	0.0	6.1	0.0	2.2

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Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil

QC Sample Group: 3FE7701

Reported: Jul 8, 1993

QUALITY CONTROL DATA REPORT

ANALYTE:	1,1-Dichloro-ethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
Method:	EPA 8240	EPA 8240	EPA 8240	EPA 8240	EPA 8240
Analyst:	S. Hoffmann	S. Hoffmann	S. Hoffmann	S. Hoffmann	S. Hoffmann
Conc. Spiked:	2500	2500	2500	2500	2500
Units:	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
LCS Batch#:	BLK062893	BLK062893	BLK062893	BLK062893	BLK062893
Date Prepared:	6/28/93	6/28/93	6/28/93	6/28/93	6/28/93
Date Analyzed:	6/28/93	6/28/93	6/28/93	6/28/93	6/28/93
Instrument I.D.#:	F3	F3	F3	F3	F3
LCS % Recovery:	96	96	96	96	100
Control Limits:	59-172	62-137	66-142	59-139	60-133
MS/MSD Batch #:	3FB2314	3FB2314	3FB2314	3FB2314	3FB2314
Date Prepared:	6/28/93	6/28/93	6/28/93	6/28/93	6/28/93
Date Analyzed:	6/28/93	6/28/93	6/28/93	6/28/93	6/28/93
Instrument I.D.#:	F3	F3	F3	F3	F3
Matrix Spike % Recovery:	104	116	108	116	112
Matrix Spike Duplicate % Recovery:	96	84	84	104	104
Relative % Difference:	8.0	32	25	11	7.4

Please Note:
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Eileen A. Manning
Project Manager

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3FE7701

Reported: Jul 8, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Phenol	2-Chlorophenol	1,4-Dichloro-benzene	N-Nitroso-Di-N-propylamine	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenol
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel	E. Manuel	E. Manuel
Conc. Spiked:	100	100	50	50	50	100
Units:	ng	ng	ng	ng	ng	ng
LCS Batch#:	BLK062993	BLK062993	BLK062993	BLK062993	BLK062993	BLK062993
Date Prepared:	6/29/93	6/29/93	6/29/93	6/29/93	6/29/93	6/29/93
Date Analyzed:	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93
Instrument I.D.#:	F4	F4	F4	F4	F4	F4
LCS % Recovery:	84	88	78	94	94	101
Control Limits:	26-90	25-102	28-104	41-126	38-107	26-103
MS/MSD Batch #:	3FB2315	3FB2315	3FB2315	3FB2315	3FB2315	3FB2315
Date Prepared:	6/29/93	6/29/93	6/29/93	6/29/93	6/29/93	6/29/93
Date Analyzed:	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93
Instrument I.D.#:	F4	F4	F4	F4	F4	F4
Matrix Spike % Recovery:	88	90	76	94	90	111
Matrix Spike Duplicate % Recovery:	78	85	70	86	84	91
Relative % Difference:	12	5.7	8.2	8.9	6.9	20

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3FE7701

Reported: Jul 8, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Acenaphthene	4-Nitrophenol	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel	E. Manuel
Conc. Spiked:	50	100	50	100	50
Units:	ng	ng	ng	ng	ng
LCS Batch#:	BLK062993	BLK062993	BLK062993	BLK062993	BLK062993
Date Prepared:	6/29/93	6/29/93	6/29/93	6/29/93	6/29/93
Date Analyzed:	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93
Instrument I.D.#:	F4	F4	F4	F4	F4
LCS % Recovery:	84	110	88	71	116
Control Limits:	31-137	11-114	28-89	17-109	35-142
MS/MSD Batch #:	3FB2315	3FB2315	3FB2315	3FB2315	3FB2315
Date Prepared:	6/29/93	6/29/93	6/29/93	6/29/93	6/29/93
Date Analyzed:	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93
Instrument I.D.#:	F4	F4	F4	F4	F4
Matrix Spike % Recovery:	82	120	82	88	112
Matrix Spike Duplicate % Recovery:	72	96	70	83	100
Relative % Difference:	13	22	16	5.8	11

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Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil

QC Sample Group: 3FE7701

Reported: Jul 8, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Total Recoverable Petroleum Hydrocarbons	Cyanide	Sulfide
Method:	SM 5520 EF	EPA 9010	EPA 9030
Analyst:	Shkidt/Nelson	A. Savva	K. Newberry
Conc. Spiked:	1000	3.4	10
Units:	mg/kg	mg/kg	mg/kg
LCS Batch#:	BLK062693	LCS070293	LCS070293
Date Prepared:	6/26/93	7/2/93	7/2/93
Date Analyzed:	6/28/93	7/2/93	7/2/93
Instrument I.D.#:	N.A.	N.A.	N.A.
LCS % Recovery:	85	99	111
Control Limits:	70-110	80-120	80-120
MS/MSD Batch #:	3FA4006	3F96601	3FE6901
Date Prepared:	6/26/93	6/25/93	7/2/93
Date Analyzed:	6/28/93	6/25/93	7/2/93
Instrument I.D.#:	N.A.	N.A.	N.A.
Matrix Spike % Recovery:	72	98	108
Matrix Spike Duplicate % Recovery:	70	97	104
Relative % Difference:	2.8	1.0	3.8

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3FE7701

Reported: Jul 8, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	pH	Flashpoint
Method:	EPA 9045	Shell Open Cup
Analyst:	K. Follett	K. Newberry
Units:	pH units	N.A.
Date:	7/1/93	7/2/93
Sample #:	3FE7709	3FE7701
Sample Concentration:	6.6	Negative
Sample Duplicate Concentration:	6.6	Negative
% RPD:	0.0	N.A.
Control Limits:	0-30	N.A.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Liquid

QC Sample Group: 3FE7701

Reported: Jul 8, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Beryllium	Cadmium	Chromium	Nickel
Method:	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7
Analyst:	C. Medefesser	C. Medefesser	C. Medefesser	C. Medefesser
Conc. Spiked:	1.0	1.0	1.0	1.0
Units:	mg/L	mg/L	mg/L	mg/L
LCS Batch#:	BLK070693	BLK070693	BLK070693	BLK070693
Date Prepared:	7/6/93	7/6/93	7/6/93	7/6/93
Date Analyzed:	7/6/93	7/6/93	7/6/93	7/6/93
Instrument I.D.#:	MTJA-2	MTJA-2	MTJA-2	MTJA-2
LCS % Recovery:	102	98	98	97
Control Limits:	75-125	75-125	75-125	75-125
MS/MSD Batch #:	3G06601	3G06601	3G06601	3G06601
Date Prepared:	7/6/93	7/6/93	7/6/93	7/6/93
Date Analyzed:	7/6/93	7/6/93	7/6/93	7/6/93
Instrument I.D.#:	MTJA-2	MTJA-2	MTJA-2	MTJA-2
Matrix Spike % Recovery:	97	98	95	92
Matrix Spike Duplicate % Recovery:	94	95	92	91
Relative % Difference:	3.1	3.1	3.2	1.1

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Liquid

QC Sample Group: 3FE7701

Reported: Jul 8, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Mercury	Selenium
Method:	EPA 245.1	EPA 270.2
Analyst:	A. McDonald	S. Chin
Conc. Spiked:	0.0020	0.050
Units:	mg/L	mg/L
LCS Batch#:	BLK070793	BLK070693
Date Prepared:	7/7/93	7/6/93
Date Analyzed:	7/7/93	7/6/93
Instrument I.D.#:	MPE-2	MTJA-3
LCS % Recovery:	105	91
Control Limits:	90-110	75-125
MS/MSD Batch #:	3G12401	3F87508
Prepared:	7/7/93	7/6/93
Analyzed:	7/7/93	7/6/93
Inst I.D.#:	MPE-2	MTJA-3
Spike very:	99	41
ike % ry:	97	45
%	2.0	9.3

ICAL

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

SHELL OIL COMPANY 305-9401
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6-30-93
Page 1 of 3

Site Address: 2724 Castro Valley Blvd, Castro Valley
WIC#: 204-1381-0407
Shell Engineer: Randy Oclowski
Phone No.: 714 520-3395 Fax #: 520-3469
Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFORNIA 95110
Consultant Contact: Mike Hurd
Phone No.: 408 441-7500 Fax #: 441-7539
Comments:
Sampled by: Charles Melancon
Printed Name: Charles Melancon

LAB: Sequoia

CHECK ONE (1) BOX ONLY	CT/DT
G.W. Monitoring	☐ 4461
Site Investigation	☒ 4441
Soil Classify/Disposal	☐ 4442
Water Classify/Disposal	☐ 4443
Soil/Air Rem. or Sys. O & M	☐ 4452
Water Rem. or Sys. O & M	☐ 4453
Other	☐

TURN AROUND TIME: 24 hours ☒; 48 hours ☐; 15 days ☐ (Normal); Other ☐ _____

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: _____

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	8270 (CAM)	5520 E&F	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
* SW-5, 3'.	6/30/93		X			1		X				X	X	X					Soil	do these samples first, highest priority
* SW-6, 4'.																				
* SW-7, 4'.																				
* WW-5, 4'.																				
* WW-6, 4'.																				
NW-8, 3'.																				2nd priority
NW-9, 4'.																				
* T4, 3'.																				

	Printed Name	Date	Time		Printed Name	Date	Time
Relinquished By (signature): Charles Melancon	Charles Melancon	6-30-93	4:00	Received (signature): M Doden	M Doden	6/30/93	1605
Relinquished By (signature): M Doden	M Doden	6/30/93	1720	Received (signature):		Date:	Time:
Relinquished By (signature):		Date:	Time:	Received (signature): Gregg Mandell	Gregg Mandell	6/30/93	1720

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev. 7/17/93

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6-30-93
Page 2 of 3

Site Address: 2724 Castro Valley Blvd, Castro Valley

WIC#: 204-1381-0407

Shell Engineer: Randy Orlowski
Phone No.: 714 520-3395
Fax #: 520-3469

Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFORNIA 95110

Consultant Contact: Mike Hurd
Phone No.: 408 441-7500
Fax #: 441-7539

Comments:

Sampled by: Charles Melancon

Printed Name: Charles Melancon

LAB: Sequoia

CHECK ONE (1) BOX ONLY		CT/DT
G.W. Monitoring	☐	4461
Site Investigation	☒	4441
Soil Classify/Disposal	☐	4442
Water Classify/Disposal	☐	4443
Soil/Air Rem. or Sys. O & M	☐	4452
Water Rem. or Sys. O & M	☐	4453
Other	☐	

TURN AROUND TIME: 24 hours ☒; 48 hours ☐; 15 days ☐ (Normal); Other ☐ ____

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: _____

Analysis Required: TPH (EPA 8015 Mod. Gas); TPH (EPA 8015 Mod. Diesel); BTEX (EPA 8020/602); Volatile Organics (EPA 8240); Test for Disposal; Combination TPH 8015 & BTEX 8020; 8020 (CA); 5520 E&F; Asbestos; Container Size; Preparation Used; Composite Y/N

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
EF-8, 5'	6/30/93		X			1	Soil	2nd Priority
EF-9, 5'	↓		↓			1	↓	
EF-10, 5'	↓		↓			1	↓	
EF-11, 5'	↓		↓			1	↓	

Relinquished By (signature)	Printed Name	Date/Time	Received (signature)	Printed Name	Date/Time
Charles Melancon	Charles Melancon	Date: 6-30-93 Time: 7:00	M Doden	M Doden	Date: 6/30/93 Time: 1605
M Doden	M Doden	Date: 6/30/93 Time: 1720			Date: Time:
		Date: Time:			Date: Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

SHELL OIL COMPANY 205-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6-30-93
Page 3 of 3

Site Address: 2724 Castro Valley Blvd, Castro Valley
WIC#: 204-1381-0407
Shell Engineer: Randy Orlowski
Phone No.: 714-520-3395
Fax #: 520-3469
Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFORNIA 95110
Consultant Contact: Mike Hurd
Phone No.: 408 441-7500
Fax #: 441-7539
Comments:
Sampled by: Charles Mclancon
Printed Name: Charles Mclancon

LAB: Sequoia

CHECK ONE (1) BOX ONLY	CT/DT
G.W. Monitoring	☐ 4461
Site Investigation	☐ 4441
Soil Classify/Disposal	☒ 4442
Water Classify/Disposal	☐ 4443
Soil/Air Rem. or Sys. O & M	☐ 4452
Water Rem. or Sys. O & M	☐ 4453
Other	☐

TURN AROUND TIME: 24 hours ☐ 48 hours ☐ 15 days ☐ (Normal) Other ☒ 5day

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: _____

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	~~Total Oil & Grease~~ 5520 E&F	Combination TPH 8015 & BTEX 8020	RCI	8270	~~Asbestos~~ STLC CAM 17	~~Container Size~~ STLC 1P6	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
01A SP-4A	6/30/93		X			1	X			X	X		X	X	X	X		Y	Soil/Spoils	Comp 9306E7
02A SP-4B	"		"			1	"			"	"		"	"	"	"		Y	"	"
03A SP-4C	"		"			1	"			"	"		"	"	"	"		Y	"	"
04A SP-4D	"		"			1	"			"	"		"	"	"	"		Y	"	"

Relinquished By (signature)	Printed Name	Date/Time	Received (signature)	Printed Name	Date/Time
Charles Mclancon	Charles Mclancon	Date: 6-30-93 Time: 4:00	M Dodea	M Dodea	Date: 6/30/93 Time: 16:05
M Dodea	M Dodea	Date: 6/30/93 Time: 1730			Date: Time:
		Date: Time:			Date: Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Shell Oil Chain of Custody

CLIENT NAME: & PEG

REC. BY (PRINT): GM

MASTER LOG NO. / PAGE: 9306E77

DATE OF LOG-IN: 07/01/93

CIRCLE THE APPROPRIATE RESPONSE

1. Custody Seal(s): Present / (Absent) — Intact / Broken*
2. Custody Seal Nos.:
3. Chain-of-Custody Records: (Present) / Absent*
4. Traffic Reports or Packing List: Present / (Absent)
5. Airbill: Airbill / Sticker — Present / (Absent)
6. Airbill No.:
7. Sample Tags: (Present) / Absent* — Sample Tag Nos.: (Listed) / Not Listed on Chain-of-Custody
8. Sample Condition: (Intact)/Broken*/Leaking*
9. Does information on custody reports, traffic reports and sample tags agree? (Yes) / No*
10. Proper Preservatives Used: (Yes) / No*
11. Date Rec. at Lab: 6-30-93
12. Time Rec. at Lab: 1720

LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
	A1	SW-5, 3'	Core	Soil	6/30	
		SW-6, 4'				
		SW-7 4'				
		WW-5, 4'				
		WW-6 4'				
		NW-8, 3'				
		NW-9' 4'				
		I4 3'				
		EF-8, 5'				
		EF-9, 5'				
		EF-10, 5'				
		EF-11, 5'				
01	A	SP-4A				Composite
	B	SP-4B				
	C	SP-4C				
	D	SP-4D				

*Resolved, contact Project Manager and attach record of resolution

Form SC001

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Project: 305-94.01/Shell, Castro Valley

Enclosed are the results from 12 soil samples received at Sequoia Analytical on June 30,1993. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
3FE5701	Soil, SW-5, 3'	6/30/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3FE5702	Soil, SW-6, 4'	6/30/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3FE5703	Soil, SW-7, 4'	6/30/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3FE5704	Soil, WW-5, 4'	6/30/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3FE5705	Soil, WW-6, 4'	6/30/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3FE5706	Soil, NW-8, 3'	6/30/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3FE5707	Soil, NW-9, 4'	6/30/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3FE5708	Soil, T4, 3'	6/30/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3FE5709	Soil, EF-8, 5'	6/30/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3FE5710	Soil, EF-9, 5'	6/30/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3FE5711	Soil, EF-10, 5'	6/30/93	EPA 3550/8015

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SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
			EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3FE5712	Soil, EF-11, 5'	6/30/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 30, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jun 30, 1993
San Jose, CA 95110	Analysis Method:	EPA 3550/8015	Reported:	Jul 1, 1993
Attention: Mike Hurd	First Sample #:	3FE5701		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 3FE5701 SW-5, 3'	Sample I.D. 3FE5702 SW-6, 4'	Sample I.D. 3FE5703 SW-7, 4'	Sample I.D. 3FE5704 WW-5, 4'	Sample I.D. 3FE5705 WW-6, 4'	Sample I.D. 3FE5706 NW-8, 3'
Extractable Hydrocarbons	1.0	N.D.	N.D.	1.9	N.D.	N.D.	N.D.
Chromatogram Pattern:		--	--	Non-diesel mix C9 - C15	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Extracted:	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93
Date Analyzed:	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93
Instrument Identification:	HP 5A	HP 5A	HP 5A	HP 5A	HP 5A	HP 5A

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

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(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 30, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jun 30, 1993
San Jose, CA 95110	Analysis Method:	EPA 3550/8015	Reported:	Jul 1, 1993
Attention: Mike Hurd	First Sample #:	3FE5707		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 3FE5707 NW-9, 4'	Sample I.D. 3FE5708 T4, 3'	Sample I.D. 3FE5709 EF-8, 5'	Sample I.D. 3FE5710 EF-9, 5'	Sample I.D. 3FE5711 EF-10, 5'	Sample I.D. 3FE5712 EF-11, 5'
Extractable Hydrocarbons	1.0	N.D.	N.D.	N.D.	N.D.	5.0	N.D.
Chromatogram Pattern:		--	--	--	--	Non-diesel mix C12 - C16 + > C17	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Extracted:	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93
Date Analyzed:	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93
Instrument Identification:	HP 5A	HP 5A	HP 5A	HP 5A	HP 5A	HP 5A

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 30, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jun 30, 1993
San Jose, CA 95110	Analysis Method:	EPA 5030/8015/8020	Reported:	Jul 1, 1993
Attention: Mike Hurd	First Sample #:	3FE5701		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 3FE5701 SW-5, 3'	Sample I.D. 3FE5702 SW-6, 4'	Sample I.D. 3FE5703 SW-7, 4'	Sample I.D. 3FE5704 WW-5, 4'	Sample I.D. 3FE5705 WW-6, 4'	Sample I.D. 3FE5706 NW-8, 3'
Purgeable Hydrocarbons	1.0	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Benzene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		--	--	--	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Analyzed:	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93
Instrument Identification:	GCHP-18	GCHP-18	GCHP-18	GCHP-18	GCHP-18	GCHP-18
Surrogate Recovery, %: (QC Limits = 70-130%)	97	102	97	102	99	103

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 30, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jun 30, 1993
San Jose, CA 95110	Analysis Method:	EPA 5030/8015/8020	Reported:	Jul 1, 1993
Attention: Mike Hurd	First Sample #:	3FE5707		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 3FE5707 NW-9, 4'	Sample I.D. 3FE5708 T4, 3'	Sample I.D. 3FE5709 EF-8, 5'	Sample I.D. 3FE5710 EF-9 5'	Sample I.D. 3FE5711 EF-10, 5'	Sample I.D. 3FE5712 EF-11, 5'
Purgeable Hydrocarbons	1.0	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Benzene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Ethyl Benzene	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Total Xylenes	0.0050	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Chromatogram Pattern:		--	--	--	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0	1.0	1.0
Date Analyzed:	6/30/93	6/30/93	6/30/93	6/30/93	7/1/93	6/30/93
Instrument Identification:	GCHP-18	GCHP-18	GCHP-18	GCHP-18	GCHP-1	GCHP-18
Surrogate Recovery, %: (QC Limits = 70-130%)	109	109	105	106	100	113

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 30, 1993
2025 Gateway Place, Suite 440	Matrix Descript:	Soil	Received:	Jun 30, 1993
San Jose, CA 95110	Analysis Method:	SM 5520 E&F (Gravimetric)	Extracted:	Jun 30, 1993
Attention: Mike Hurd	First Sample #:	3FE5701	Analyzed:	Jul 1, 1993
			Reported:	Jul 1, 1993

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Sample Number	Sample Description	Oil & Grease mg/kg
3FE5701	SW-5, 3'	N.D.
3FE5702	SW-6, 4'	N.D.
3FE5703	SW-7, 4'	N.D.
3FE5704	WW-5, 4'	N.D.
3FE5705	WW-6, 4'	N.D.
3FE5706	NW-8, 3'	N.D.
3FE5707	NW-9, 4'	N.D.
3FE5708	T4, 3'	N.D.
3FE5709	EF-8, 5'	N.D.
3FE5710	EF-9, 5'	N.D.
Detection Limits:		**50**

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jun 30, 1993
2025 Gateway Place, Suite 440	Matrix Descript:	Soil	Received: Jun 30, 1993
San Jose, CA 95110	Analysis Method:	SM 5520 E&F (Gravimetric)	Extracted: Jun 30, 1993
Attention: Mike Hurd	First Sample #:	3FE5711	Analyzed: Jul 1, 1993
			Reported: Jul 1, 1993

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Sample Number	Sample Description	Oil & Grease mg/kg
3FE5711	EF-10, 5'	79
3FE5712	EF-11, 5'	99

Detection Limits:	**50**

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3FE5701-12

Reported: Jul 1, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Diesel	Total Recoverable Petroleum Hydrocarbons
Method:	EPA 8015	SM 5520 EF
Analyst:	V. Nunzir	M. Shkidt
Conc. Spiked:	15	1000
Units:	mg/kg	mg/kg
LCS Batch#:	VBLK063093	BLK063093
Date Prepared:	6/30/93	6/30/93
Date Analyzed:	6/30/93	7/1/93
Instrument I.D.#:	HP 5A	N.A.
LCS % Recovery:	73	80
Control Limits:	50-150	70-110
MS/MSD Batch #:	3FE5712	3FE5709
Date Prepared:	6/30/93	6/30/93
Date Analyzed:	6/30/93	7/1/93
Instrument I.D.#:	HP 5A	N.A.
Matrix Spike % Recovery:	67	100
Matrix Spike Duplicate % Recovery:	73	100
Relative % Difference:	8.6	0.0

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3FE5701-12

Reported: Jul 1, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	E. Cunanan	E. Cunanan	E. Cunanan	E. Cunanan
Conc. Spiked:	0.20	0.20	0.20	0.60
Units:	mg/kg	mg/kg	mg/kg	mg/kg
LCS Batch#:	GBLK063093	GBLK063093	GBLK063093	GBLK063093
Date Prepared:	6/30/93	6/30/93	6/30/93	6/30/93
Date Analyzed:	6/30/93	6/30/93	6/30/93	6/30/93
Instrument I.D.#:	GCHP-18	GCHP-18	GCHP-18	GCHP-18
LCS % Recovery:	85	85	85	87
Control Limits:	60-140	60-140	60-140	60-140
MS/MSD Batch #:	3FA9411	3FA9411	3FA9411	3FA9411
Date Prepared:	6/30/93	6/30/93	6/30/93	6/30/93
Date Analyzed:	6/30/93	6/30/93	6/30/93	6/30/93
Instrument I.D.#:	GCHP-18	GCHP-18	GCHP-18	GCHP-18
Matrix Spike % Recovery:	75	75	80	78
Matrix Spike Duplicate % Recovery:	75	75	75	77
Relative % Difference:	0.0	0.0	6.5	1.3

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

9306E57

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: ____________

Date: 6-30-93
Page 1 of 3

Site Address: 2724 Castro Valley Blvd, Castro Valley

WIC#: 204-1381-0407

Shell Engineer: Randy Orlowski
Phone No.: 714 520-3395
Fax #: 520-3469

Consultant Name & Address:
PACIFIC ENVIRONMENTAL GROUP, INC.
2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFONRIA 95110

Consultant Contact: Mike Hurd
Phone No.: 408 441-7500
Fax #: 441-7539

Comments:

Sampled by: Charles Melancon
Printed Name: Charles Melancon

LAB: Sequoia

CHECK ONE (1) BOX ONLY	CT/DT	
G.W. Monitoring	4461	☐
Site Investigation	4441	☒
Soil Classify/Disposal	4442	☐
Water Classify/Disposal	4443	☐
Soil/Air Rem. or Sys. O & M	4452	☐
Water Rem. or Sys. O & M	4453	☐
Other		☐

TURN AROUND TIME
- 24 hours ☒
- 48 hours ☐
- 16 days ☐ (Normal)
- Other ☐ ______

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: ____________

Analysis Required

	Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	~~8270~~ (circled)	5520 E&F	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS	
*	SW-5, 3'	6/30/93		X			1		X				X	X	X					Soil	do these	01A
*	SW-6, 4'	↓		↓			↓		↓				↓	↓	↓					↓	samples	02A
*	SW-7, 4'	↓		↓			↓		↓				↓	↓	↓					↓	*first,	03A
*	WW-5, 4'	↓		↓			↓		↓				↓	↓	↓					↓	highest	04A
*	WW-6, 4'	↓		↓			↓		↓				↓	↓	↓					↓	priority	05A
	NW-8, 3'	↓		↓			↓		↓				↓	↓	↓					↓	2nd priority	06A
	NW-9, 4'	↓		↓			↓		↓				↓	↓	↓					↓		07A
*	T4, 3'	↓		↓			↓		↓				↓	↓	↓					↓		08A

Relinquished By (signature):	Printed Name:	Date/Time	Received (signature):	Printed Name:	Date/Time
Charles Melancon	Charles Melancon	Date: 6-30-93 Time: 4:00	M Doden	M Doden	Date: 6/30/93 Time: 1605
M Doden	M Doden	Date: 6/30/93 Time: 1720			Date: Time:
		Date: Time:	G Mandell	Gregg Mandell	Date: 6/30/93 Time: 1720

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev. 1/7/93

Shell Oil Chn of Custody

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6-30-93
Page 2 of 3

Site Address: 2724 Castro Valley Blvd, Castro Valley

WIC#: 204-1381-0407

Shell Engineer: Randy Orlowski — Phone No.: 714 520-3395 Fax #: 520-3469

Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFORNIA 95110

Consultant Contact: Mike Hurd — Phone No.: 408 441-7500 Fax #: 441-7539

Comments:

Sampled by: Charles Melancon

Printed Name: Charles Melancon

LAB: Sequoia

CHECK ONE (1) BOX ONLY	CT/DT
G.W. Monitoring	☐ 4461
Site Investigation	☒ 4441
Soil Classify/Disposal	☐ 4442
Water Classify/Disposal	☐ 4443
Soil/Air Rem. or Sys. O & M	☐ 4452
Water Rem. or Sys. O & M	☐ 4453
Other	☐

TURN AROUND TIME: 24 hours ☒ / 48 hours ☐ / 15 days ☐ (Normal) / Other ☐ ____

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: _____

Analysis Required: TPH (EPA 8015 Mod. Gas); TPH (EPA 8015 Mod. Diesel); BTEX (EPA 8020/602); Volatile Organics (EPA 8240); Test for Disposal; Combination TPH 8015 & BTEX 8020; 8270 (CAM); 5520 E&F; Asbestos; Container Size; Preparation Used; Composite Y/N

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS	
EF-8, 5'	6/30/93		X			1	Soil	2nd Priority	09A
EF-9, 5'						1			10A
EF-10, 5'						1			11A
EF-11, 5'						1			12A

	Printed Name:	Date:	Time:	Received (signature):	Printed Name:	Date:	Time:
Relinquished By (signature): Charles Melancon	Charles Melancon	6-30-93	4:00	M Doden	M Doden	6/30/93	1600
Relinquished By (signature): M Doden	M Doden	6/30/93	1720				
Relinquished By (signature):							

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev. 7/17/93

Shell Oil Chain of Custody

SEQUOIA ANALYTICAL — SAMPLE RECEIPT LOG

CLIENT NAME: & PEG
REC. BY (PRINT): GM

MASTER LOG NO. / PAGE: 9306E57
DATE OF LOG-IN: 6/30

CIRCLE THE APPROPRIATE RESPONSE

1. Custody Seal(s): Present / (Absent) — Intact / Broken*
2. Custody Seal Nos.:
3. Chain-of-Custody Records: (Present) / Absent*
4. Traffic Reports or Packing List: Present / (Absent)
5. Airbill: Airbill / Sticker — Present / (Absent)
6. Airbill No.:
7. Sample Tags: (Present) / Absent* — Sample Tag Nos.: (Listed) / Not Listed on Chain-of-Custody
8. Sample Condition: (Intact) / Broken* / Leaking*
9. Does information on custody reports, traffic reports and sample tags agree? (Yes) / No*
10. Proper Preservatives Used: (Yes) / No*
11. Date Rec. at Lab: 6-30-93
12. Time Rec. at Lab: 1720

LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
01	A	SW-5, 3'	Core	Soil	6/30	
02		SW-6, 4'				
03		SW-7, 4'				
04		WW-5, 4'				
05		WW-6, 4'				
06		NW-8, 3'				
07		NW-9, 4'				
08		T4, 3'				
09		EF-8, 5'				
10		EF-9, 5'				
11		EF-10, 5'				
12		EF-11, 5'				
	A	SP-4A				Composite
	B	SP-4B				
	C	SP-4C				
	D	SP-4D				

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

Form SC001

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Project: 305-94.01/Shell, Castro Valley

Enclosed are the results from 1 soil sample received at Sequoia Analytical on June 30,1993. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
3FE7701	Soil, SP-4A to 4D comp	6/30/93	STLC Metals Reactivity, Corrosivity, & Ignitability EPA 5030/8015 EPA 8240 EPA 8270 SM 5520 E&F (Gravimetric)

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 30, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jun 30, 1993
San Jose, CA 95110	Analysis Method:	EPA 5030/8015	Reported:	Jul 8, 1993
Attention: Mike Hurd	First Sample #:	3FE7701		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 3FE7701 SP-4A to 4D comp
Purgeable Hydrocarbons	1.0	N.D.
Chromatogram Pattern:		--

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Analyzed:	7/5/93
Instrument Identification:	GCHP-2
Surrogate Recovery: (QC Limits = 70-130%)	98

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 30, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-4A to 4D comp	Received:	Jun 30, 1993
San Jose, CA 95110	Analysis Method:	EPA 8240	Analyzed:	Jul 2, 1993
Attention: Mike Hurd	Lab Number:	3FE7701	Reported:	Jul 8, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	500	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
cis-1,2-Dichloroethene	100	N.D.
trans-1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis-1,3-Dichloropropene	100	N.D.
trans-1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	250	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 30, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-4A to 4D comp	Received:	Jun 30, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jul 2, 1993
Attention: Mike Hurd	Lab Number:	3FE7701	Analyzed:	Jul 2, 1993
			Reported:	Jul 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Aniline	100	N.D.
Anthracene	100	N.D.
Benzidine	2,500	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 30, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-4A to 4D comp	Received:	Jun 30, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jul 2, 1993
Attention: Mike Hurd	Lab Number:	3FE7701	Analyzed:	Jul 2, 1993
			Reported:	Jul 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 30, 1993
2025 Gateway Place, Suite 440	Matrix Descript:	Soil	Received:	Jun 30, 1993
San Jose, CA 95110	Analysis Method:	SM 5520 E&F (Gravimetric)	Extracted:	Jul 1, 1993
Attention: Mike Hurd	First Sample #:	3FE7701	Analyzed:	Jul 2, 1993
			Reported:	Jul 8, 1993

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg
3FE7701	SP-4A to 4D comp	140

Detection Limits:	**50**

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 30, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-4A to 4D comp	Received:	Jun 30, 1993
San Jose, CA 95110			Analyzed:	Jul 1-2, 1993
Attention: Mike Hurd	Lab Number:	3FE7701	Reported:	Jul 8, 1993

CORROSIVITY, IGNITABILITY, AND REACTIVITY

Analyte	Detection Limit	Sample Results
Corrosivity:		
pH	N.A.	6.6
Ignitability:		
Flashpoint (Shell Open Cup)	N.A.	Negative
Reactivity:		
Sulfide, mg/kg	13	N.D.
Cyanide, mg/kg	0.50	N.D.
Reaction with water	N.A.	Negative

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jun 30, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-4A to 4D comp	Received:	Jun 30, 1993
San Jose, CA 95110			Extracted:	Jul 6, 1993
Attention: Mike Hurd	Lab Number:	3FE7701	Reported:	Jul 8, 1993

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

	Soluble Threshold Limit Concentration Waste Extraction Test			Total Threshold Limit Concentration		
Analyte	**STLC Max. Limit** (mg/L)	**Detection Limit** (mg/L)	**Analysis Result** (mg/L)	**TTLC Max. Limit** (mg/kg)	**Detection Limit** (mg/kg)	**Analysis Result** (mg/kg)
Antimony	15	0.10	0.14	500	5.0	-
Arsenic	5.0	0.10	N.D.	500	5.0	-
Barium	100	0.10	8.3	10,000	5.0	-
Beryllium	0.75	0.010	0.023	75	0.50	-
Cadmium	1.0	0.010	N.D.	100	0.50	-
Chromium (VI)	5.0	0.0050	-	500	0.050	-
Chromium	560	0.010	0.30	2,500	0.50	-
Cobalt	80	0.050	0.66	8,000	2.5	-
Copper	25	0.010	0.21	2,500	0.50	-
Lead	5.0	0.10	0.27	1,000	5.0	-
Mercury	0.20	0.00020	N.D.	20	0.010	-
Molybdenum	350	0.050	N.D.	3,500	2.5	-
Nickel	20	0.050	1.0	2,000	2.5	-
Selenium	1.0	0.050	N.D.	100	5.0	-
Silver	5.0	0.010	N.D.	500	0.50	-
Thallium	7.0	0.10	N.D.	700	5.0	-
Vanadium	24	0.050	0.70	2,400	2.5	-
Zinc	250	0.010	1.7	5,000	0.50	-
Asbestos	-	10	-	10,000	100	-
Fluoride	180	0.10	-	18,000	1.0	-

TTLC results are reported as mg/kg of wet weight. Asbestos results are reported as fibers/g.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3FE7701

Reported: Jul 8, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	E. Cunanan	E. Cunanan	E. Cunanan	E. Cunanan
Conc. Spiked:	0.20	0.20	0.20	0.60
Units:	mg/kg	mg/kg	mg/kg	mg/kg
LCS Batch#:	GBLK070293	GBLK070293	GBLK070293	GBLK070293
Date Prepared:	7/2/93	7/2/93	7/2/93	7/2/93
Date Analyzed:	7/5/93	7/5/93	7/5/93	7/5/93
Instrument I.D.#:	GCHP-3	GCHP-3	GCHP-3	GCHP-3
LCS % Recovery:	90	95	100	97
Control Limits:	60-140	60-140	60-140	60-140
MS/MSD Batch #:	3FE5712	3FE5712	3FE5712	3FE5712
Date Prepared:	7/2/93	7/2/93	7/2/93	7/2/93
Date Analyzed:	7/2/93	7/2/93	7/2/93	7/2/93
Instrument I.D.#:	GCHP-18	GCHP-18	GCHP-18	GCHP-18
Matrix Spike % Recovery:	80	80	90	90
Matrix Spike Duplicate % Recovery:	80	85	90	92
Relative % Difference:	0.0	6.1	0.0	2.2

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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SEQUOIA ANALYTICAL

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3FE7701

Reported: Jul 8, 1993

QUALITY CONTROL DATA REPORT

ANALYTE:	1,1-Dichloro-ethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
Method:	EPA 8240	EPA 8240	EPA 8240	EPA 8240	EPA 8240
Analyst:	S. Hoffmann	S. Hoffmann	S. Hoffmann	S. Hoffmann	S. Hoffmann
Conc. Spiked:	2500	2500	2500	2500	2500
Units:	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
LCS Batch#:	BLK062893	BLK062893	BLK062893	BLK062893	BLK062893
Date Prepared:	6/28/93	6/28/93	6/28/93	6/28/93	6/28/93
Date Analyzed:	6/28/93	6/28/93	6/28/93	6/28/93	6/28/93
Instrument I.D.#:	F3	F3	F3	F3	F3
LCS % Recovery:	96	96	96	96	100
Control Limits:	59-172	62-137	66-142	59-139	60-133
MS/MSD Batch #:	3FB2314	3FB2314	3FB2314	3FB2314	3FB2314
Date Prepared:	6/28/93	6/28/93	6/28/93	6/28/93	6/28/93
Date Analyzed:	6/28/93	6/28/93	6/28/93	6/28/93	6/28/93
Instrument I.D.#:	F3	F3	F3	F3	F3
Matrix Spike % Recovery:	104	116	108	116	112
Matrix Spike Duplicate % Recovery:	96	84	84	104	104
Relative % Difference:	8.0	32	25	11	7.4

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Eileen A. Manning
Project Manager

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3FE7701

Reported: Jul 8, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Phenol	2-Chlorophenol	1,4-Dichloro-benzene	N-Nitroso-Di-N-propylamine	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenol
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel	E. Manuel	E. Manuel
Conc. Spiked:	100	100	50	50	50	100
Units:	ng	ng	ng	ng	ng	ng
LCS Batch#:	BLK062993	BLK062993	BLK062993	BLK062993	BLK062993	BLK062993
Date Prepared:	6/29/93	6/29/93	6/29/93	6/29/93	6/29/93	6/29/93
Date Analyzed:	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93
Instrument I.D.#:	F4	F4	F4	F4	F4	F4
LCS % Recovery:	84	88	78	94	94	101
Control Limits:	26-90	25-102	28-104	41-126	38-107	26-103
MS/MSD Batch #:	3FB2315	3FB2315	3FB2315	3FB2315	3FB2315	3FB2315
Date Prepared:	6/29/93	6/29/93	6/29/93	6/29/93	6/29/93	6/29/93
Date Analyzed:	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93
Instrument I.D.#:	F4	F4	F4	F4	F4	F4
Matrix Spike % Recovery:	88	90	76	94	90	111
Matrix Spike Duplicate % Recovery:	78	85	70	86	84	91
Relative % Difference:	12	5.7	8.2	8.9	6.9	20

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3FE7701

Reported: Jul 8, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Acenaphthene	4-Nitrophenol	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel	E. Manuel
Conc. Spiked:	50	100	50	100	50
Units:	ng	ng	ng	ng	ng
LCS Batch#:	BLK062993	BLK062993	BLK062993	BLK062993	BLK062993
Date Prepared:	6/29/93	6/29/93	6/29/93	6/29/93	6/29/93
Date Analyzed:	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93
Instrument I.D.#:	F4	F4	F4	F4	F4
LCS % Recovery:	84	110	88	71	116
Control Limits:	31-137	11-114	28-89	17-109	35-142
MS/MSD Batch #:	3FB2315	3FB2315	3FB2315	3FB2315	3FB2315
Date Prepared:	6/29/93	6/29/93	6/29/93	6/29/93	6/29/93
Date Analyzed:	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93
Instrument I.D.#:	F4	F4	F4	F4	F4
Matrix Spike % Recovery:	82	120	82	88	112
Matrix Spike Duplicate % Recovery:	72	96	70	83	100
Relative % Difference:	13	22	16	5.8	11

SEQUOIA ANALYTICAL

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Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3FE7701

Reported: Jul 8, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Total Recoverable Petroleum Hydrocarbons	Cyanide	Sulfide
Method:	SM 5520 EF	EPA 9010	EPA 9030
Analyst:	Shkidt/Nelson	A. Savva	K. Newberry
Conc. Spiked:	1000	3.4	10
Units:	mg/kg	mg/kg	mg/kg
LCS Batch#:	BLK062693	LCS070293	LCS070293
Date Prepared:	6/26/93	7/2/93	7/2/93
Date Analyzed:	6/28/93	7/2/93	7/2/93
Instrument I.D.#:	N.A.	N.A.	N.A.
LCS % Recovery:	85	99	111
Control Limits:	70-110	80-120	80-120
MS/MSD Batch #:	3FA4006	3F96601	3FE6901
Date Prepared:	6/26/93	6/25/93	7/2/93
Date Analyzed:	6/28/93	6/25/93	7/2/93
Instrument I.D.#:	N.A.	N.A.	N.A.
Matrix Spike % Recovery:	72	98	108
Matrix Spike Duplicate % Recovery:	70	97	104
Relative % Difference:	2.8	1.0	3.8

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Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil

QC Sample Group: 3FE7701

Reported: Jul 8, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	pH	Flashpoint
Method:	EPA 9045	Shell Open Cup
Analyst:	K. Follett	K. Newberry
Units:	pH units	N.A.
Date:	7/1/93	7/2/93
Sample #:	3FE7709	3FE7701
Sample Concentration:	6.6	Negative
Sample Duplicate Concentration:	6.6	Negative
% RPD:	0.0	N.A.
Control Limits:	0-30	N.A.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Liquid

QC Sample Group: 3FE7701

Reported: Jul 8, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Beryllium	Cadmium	Chromium	Nickel
Method:	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7
Analyst:	C. Medefesser	C. Medefesser	C. Medefesser	C. Medefesser
Conc. Spiked:	1.0	1.0	1.0	1.0
Units:	mg/L	mg/L	mg/L	mg/L
LCS Batch#:	BLK070693	BLK070693	BLK070693	BLK070693
Date Prepared:	7/6/93	7/6/93	7/6/93	7/6/93
Date Analyzed:	7/6/93	7/6/93	7/6/93	7/6/93
Instrument I.D.#:	MTJA-2	MTJA-2	MTJA-2	MTJA-2
LCS % Recovery:	102	98	98	97
Control Limits:	75-125	75-125	75-125	75-125
MS/MSD Batch #:	3G06601	3G06601	3G06601	3G06601
Date Prepared:	7/6/93	7/6/93	7/6/93	7/6/93
Date Analyzed:	7/6/93	7/6/93	7/6/93	7/6/93
Instrument I.D.#:	MTJA-2	MTJA-2	MTJA-2	MTJA-2
Matrix Spike % Recovery:	97	98	95	92
Matrix Spike Duplicate % Recovery:	94	95	92	91
Relative % Difference:	3.1	3.1	3.2	1.1

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Liquid

QC Sample Group: 3FE7701

Reported: Jul 8, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Mercury	Selenium
Method:	EPA 245.1	EPA 270.2
Analyst:	A. McDonald	S. Chin
Conc. Spiked:	0.0020	0.050
Units:	mg/L	mg/L
LCS Batch#:	BLK070793	BLK070693
Date Prepared:	7/7/93	7/6/93
Date Analyzed:	7/7/93	7/6/93
Instrument I.D.#:	MPE-2	MTJA-3
LCS % Recovery:	105	91
Control Limits:	90-110	75-125
MS/MSD Batch #:	3G12401	3F87508
Date Prepared:	7/7/93	7/6/93
Date Analyzed:	7/7/93	7/6/93
Instrument I.D.#:	MPE-2	MTJA-3
Matrix Spike % Recovery:	99	41
Matrix Spike Duplicate % Recovery:	97	45
Relative % Difference:	2.0	9.3

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: ____________

Date: 6-30-93
Page 3 of 3

Site Address: 2724 Castro Valley Blvd, Castro Valley

WIC#: 204-1381-0407

Shell Engineer: Randy Orlowski
Phone No.: 714 520-3395
Fax #: 520-3469

Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFONRIA 95110

Consultant Contact: Mike Hurd
Phone No.: 408 441-7500
Fax #: 441-7539

Comments:

Sampled by: Charles Melancon (signature)

Printed Name: Charles Melancon

LAB: Sequoia

CHECK ONE (1) BOX ONLY — CT/DT

- [ ] G.W. Monitoring 4461
- [ ] Site Investigation 4441
- [x] Soil Classify/Disposal 4442
- [ ] Water Classify/Disposal 4443
- [ ] Soil/Air Rem. or Sys. O & M 4452
- [ ] Water Rem. or Sys. O & M 4453
- [ ] Other

TURN AROUND TIME

- [ ] 24 hours
- [ ] 48 hours
- [ ] 15 days (Normal)
- [x] Other 5day

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: ____________

Analysis Required

	Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	~~Test for Disposal~~ 5520 E&F	Combination TPH 8015 & BTEX 8020	RCI	8270	~~Asbestos~~ STLC CAM 17	~~Container Size~~ STLC Pb	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
01A	SP-4A	6/30/93		X			1	X			X	X		X	X	X	X		Y	Soil/Spoils	Composite 9306E7
02A	SP-4B	↓		↓			1	↓			↓	↓		↓	↓	↓	↓		Y	↓	
03A	SP-4C	↓		↓			1	↓			↓	↓		↓	↓	↓	↓		Y	↓	
04A	SP-4D	↓		↓			1	↓			↓	↓		↓	↓	↓	↓		Y	↓	

Relinquished By (signature)	Printed Name	Date / Time	Received (signature)	Printed Name	Date / Time
Charles Melancon (signature)	Charles Melancon	Date: 6-30-93 Time: 4:00	M Doden (signature)	M Doden	Date: 6/30/93 Time: 1605
M Doden (signature)	M Doden	Date: 6/30/93 Time: 1720			Date: Time:
		Date: Time:			Date: Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Shell Oil Chn of Custody

CLIENT NAME: & PEG
REC. BY (PRINT): GM

MASTER LOG NO. / PAGE: 9306E77
DATE OF LOG-IN: 07/01/93

CIRCLE THE APPROPRIATE RESPONSE

1. Custody Seal(s): Present / (Absent)
   Intact / Broken*
2. Custody Seal Nos.:
3. Chain-of-Custody Records: (Present) / Absent*
4. Traffic Reports or Packing List: Present / (Absent)
5. Airbill: Airbill / Sticker
   Present / (Absent)
6. Airbill No.:
7. Sample Tags: (Present) / Absent*
   Sample Tag Nos.: (Listed) / Not Listed on Chain-of-Custody
8. Sample Condition: (Intact)/Broken*/Leaking*
9. Does information on custody reports, traffic reports and sample tags agree? (Yes) / No*
10. Proper Preservatives Used: (Yes) / No*
11. Date Rec. at Lab: 6-30-93
12. Time Rec. at Lab: 1720

LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
	A	SW-5, 3'	Core	Soil	6/30	
		SW-6, 4'				
		SW-7 4'				
		WW-5, 4'				
		WW-6, 4'				
		NW-8, 3'				
		NW-9, 4'				
		I 4, 3'				
		EF-8, 5'				
		EF-9, 5'				
		EF-10, 5'				
		EF-11, 5'				
01	A	SP-4A				Composite
	B	SP-4B				
	C	SP-4C				
	D	SP-4D				

*If circled, contact Project Manager and attach record of resolution

Form SC001

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 6-30-93
Page 2 of 3

Site Address: 2724 Castro Valley Blvd, Castro Valley
WIC#: 204-1381-0407
Shell Engineer: Randy Orlowski
Phone No.: 714 520-3395 Fax #: 520-3469
Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFORNIA 95110
Consultant Contact: Mike Hurd
Phone No.: 408 441-7500 Fax #: 441-7539
Comments:
Sampled by: Charles Melancon
Printed Name: Charles Melancon

LAB: Sequoia

CHECK ONE (1) BOX ONLY		CT/DT
G.W. Monitoring	☐	4461
Site Investigation	☒	4441
Soil Classify/Disposal	☐	4442
Water Classify/Disposal	☐	4443
Soil/Air Rem. or Sys. O & M	☐	4452
Water Rem. or Sys. O & M	☐	4453
Other	☐	

TURN AROUND TIME: 24 hours ☒ | 48 hours ☐ | 15 days ☐ (Normal) | Other ☐ ____

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: _____

Analysis Required: TPH (EPA 8015 Mod. Gas); TPH (EPA 8015 Mod. Diesel); BTEX (EPA 8020/602); Volatile Organics (EPA 8240); Test for Disposal; Combination TPH 8015 & BTEX 8020; 8240 (CH); 5520 E&F; Asbestos; Container Size; Preparation Used; Composite Y/N

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
EF-8, 5'	6/30/93		X			1	Soil	2nd Priority
EF-9, 5'						1		
EF-10, 5'						1		
EF-11, 5'						1		

Relinquished By (signature)	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
Charles Melancon	Charles Melancon	6-30-93	4:00	M Doden	M Doden	6/30/93	1600
M Doden	M Doden	6/30/93	1720				

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Project: 305-94.01/Shell, Castro Valley

Enclosed are the results from 8 soil samples received at Sequoia Analytical on July 1,1993. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
3G03501	Soil, LNW-1, 10'	7/1/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3G03502	Soil, LSW-1, 10'	7/1/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3G03503	Soil, LEW-1, 10'	7/1/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3G03504	Soil, LEW-2, 10'	7/1/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3G03505	Soil, LWW-1, 10'	7/1/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3G03506	Soil, LWW-2, 10'	7/1/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3G03507	Soil, EF-12, 14'	7/1/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3G03508	Soil, EF-13, 14'	7/1/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 1, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jul 1, 1993
San Jose, CA 95110	Analysis Method:	EPA 5030/8015/8020	Reported:	Jul 6, 1993
Attention: Mike Hurd	First Sample #:	3G03501		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 3G03501 LNW-1, 10'	Sample I.D. 3G03502 LSW-1, 10'	Sample I.D. 3G03503 LEW-1, 10'	Sample I.D. 3G03504 LEW-2, 10'	Sample I.D. 3G03505 LWW-1, 10'	Sample I.D. 3G03506 LWW-2, 10'
Purgeable Hydrocarbons	1.0	N.D.	9.2	1,500	1.3	1,300	560
Benzene	0.0050	N.D.	0.048	3.3	N.D.	5.8	2.7
Toluene	0.0050	N.D.	0.022	9.5	N.D.	N.D.	1.2
Ethyl Benzene	0.0050	N.D.	0.074	14	0.022	13	6.9
Total Xylenes	0.0050	N.D.	0.12	86	0.025	43	45
Chromatogram Pattern:		--	Gas+Non-gas C4 - C12	Gas+Non-gas C4 - C12	Non-gas > C7	Gas+ Non-gas C4 - C12	Gas+ Non-gas > C8

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	50	1.0	250	50
Date Analyzed:	7/5/93	7/5/93	7/5/93	7/5/93	7/5/93	7/5/93
Instrument Identification:	GCHP-3	GCHP-3	GCHP-3	GCHP-2	GCHP-3	GCHP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	92	122	127	97	125	130

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 1, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jul 1, 1993
San Jose, CA 95110	Analysis Method:	EPA 5030/8015/8020	Reported:	Jul 6, 1993
Attention: Mike Hurd	First Sample #:	3G03507		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 3G03507 EF-12, 14'	Sample I.D. 3G03508 EF-13, 14'
Purgeable Hydrocarbons	1.0	N.D.	N.D.
Benzene	0.0050	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.
Ethyl Benzene	0.0050	N.D.	N.D.
Total Xylenes	0.0050	0.011	0.021
Chromatogram Pattern:		--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Analyzed:	7/5/93	7/5/93
Instrument Identification:	GCHP-2	GCHP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	96	96

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 1, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jul 1, 1993
San Jose, CA 95110	Analysis Method:	EPA 3550/8015	Reported:	Jul 6, 1993
Attention: Mike Hurd	First Sample #:	3G03501		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 3G03501 LNW-1, 10'	Sample I.D. 3G03502 LSW-1, 10'	Sample I.D. 3G03503 LEW-1, 10'	Sample I.D. 3G03504 LEW-2, 10'	Sample I.D. 3G03505 LWW-1, 10'	Sample I.D. 3G03506 LWW-2, 10'
Extractable Hydrocarbons	1.0	N.D.	2.4	190	71	810	95
Chromatogram Pattern:		--	Non-diesel < C13	Non-diesel < C13	Non-diesel < C13	Non-diesel < C13	Non-diesel < C14

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	20	5.0	100	20
Date Extracted:	7/1/93	7/1/93	7/1/93	7/1/93	7/1/93	7/1/93
Date Analyzed:	7/1/93	7/2/93	7/2/93	7/2/93	7/2/93	7/2/93
Instrument Identification:	GCHP-5 INJ. B	GCHP-5 INJ. B	GCHP-5 INJ. B	GCHP-5 INJ. B	GCHP-5 INJ. B	GCHP-5 INJ. B

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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680 Chesapeake Drive • Redwood City, CA 94063
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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 1, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jul 1, 1993
San Jose, CA 95110	Analysis Method:	EPA 3550/8015	Reported:	Jul 6, 1993
Attention: Mike Hurd	First Sample #:	3G03507		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 3G03507 EF-12, 14'	Sample I.D. 3G03508 EF-13, 14'
Extractable Hydrocarbons	1.0	N.D.	2.1
Chromatogram Pattern:		--	Diesel + Non-diesel mix < C12

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Extracted:	7/1/93	7/1/93
Date Analyzed:	7/2/93	7/1/93
Instrument Identification:	GCHP-5 INJ. B	GCHP-5 INJ. B

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 1, 1993
2025 Gateway Place, Suite 440	Matrix Descript:	Soil	Received:	Jul 1, 1993
San Jose, CA 95110	Analysis Method:	SM 5520 E&F (Gravimetric)	Extracted:	Jul 1, 1993
Attention: Mike Hurd	First Sample #:	3G03501	Analyzed:	Jul 2, 1993
			Reported:	Jul 6, 1993

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Sample Number	Sample Description	Oil & Grease mg/kg
3G03501	LNW-1, 10'	N.D.
3G03502	LSW-1, 10'	N.D.
3G03503	LEW-1, 10'	89
3G03504	LEW-2, 10'	54
3G03505	LWW-1, 10'	870
3G03506	LWW-2, 10'	200
3G03507	EF-12, 14'	N.D.
3G03508	3F-13, 14'	N.D.

Detection Limits:	**50**

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil

QC Sample Group: 3G03501-08

Reported: Jul 6, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	E. Cunanan	E. Cunanan	E. Cunanan	E. Cunanan
Conc. Spiked:	0.20	0.20	0.20	0.60
Units:	mg/kg	mg/kg	mg/kg	mg/kg
LCS Batch#:	GBLK070293	GBLK070293	GBLK070293	GBLK070293
Date Prepared:	7/2/93	7/2/93	7/2/93	7/2/93
Date Analyzed:	7/5/93	7/5/93	7/5/93	7/5/93
Instrument I.D.#:	GCHP-3	GCHP-3	GCHP-3	GCHP-3
LCS % Recovery:	90	95	100	97
Control Limits:	60-140	60-140	60-140	60-140
MS/MSD Batch #:	3FE5712	3FE5712	3FE5712	3FE5712
Date Prepared:	7/2/93	7/2/93	7/2/93	7/2/93
Date Analyzed:	7/2/93	7/2/93	7/2/93	7/2/93
Instrument I.D.#:	GCHP-18	GCHP-18	GCHP-18	GCHP-18
Matrix Spike % Recovery:	80	80	90	90
Matrix Spike Duplicate % Recovery:	80	85	90	92
Relative % Difference:	0.0	6.1	0.0	2.2

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil

QC Sample Group: 3G03501-08

Reported: Jul 6, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Diesel	Total Recoverable Petroleum Hydrocarbons
Method:	EPA 8015	SM 5520 EF
Analyst:	C. Lee	Shkidt/Nelson
Conc. Spiked:	15	1000
Units:	mg/kg	mg/kg
LCS Batch#:	DBLK070193	BLK063093
Date Prepared:	7/1/93	6/30/93
Date Analyzed:	7/1/93	7/1/93
Instrument I.D.#:	GCHP-5 INJ. B	N.A.
LCS % Recovery:	67	80
Control Limits:	50-150	70-110
MS/MSD Batch #:	3G03508	3FE5709
Date Prepared:	7/1/93	6/30/93
Date Analyzed:	7/1/93	7/1/93
Instrument I.D.#:	GCHP-5 INJ. B	N.A.
Matrix Spike % Recovery:	73	100
Matrix Spike Duplicate % Recovery:	51	100
Relative % Difference:	35	0.0

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

SHELL OIL COMPANY 205-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No.: _____

Date: 7-1-93
Page 1 of 1

LAB: Sequoia

Site Address: 3724 Castro Valley Blvd, Castro Valley
FIC#: 204-1381-0407

Shell Engineer: Randy Orlowski
Phone No (714) 520-3395
Fax #: 520-3312

Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC
2025 Gateway Place, Suite 440
San Jose, California 95110
(408) 441-7500 FAX (408) 441-7539

Consultant Contact: Mike Hurd
Phone No.
Fax #:

Comments:

Sampled By: Charles Melancon
Printed Name: Charles Melancon

CHECK ONE (1) BOX ONLY	CT/DT
Quarterly Monitoring	☐ 5461
Site Investigation	☒ 5441
Soil for disposal	☐ 5442
Water for disposal	☐ 5443
Air Sample- Sys O&M	☐ 5452
Water Sample - Sys O&M	☐ 5453
Other	☐

TURN AROUND TIME: 24 hours ☒ ; 48 hours ☐ ; 15 days ☐ (Normal) ; Other ☐ _____
NOTE: Notify Lab as soon as possible of 24/48 hrs. TAT.

Analysis Required: TPH (EPA 8015 Mod. Gas); TPH (EPA 8015 Mod. Diesel); BTEX (EPA 8020/602); Volatile Organics (EPA 8240); Test for Disposal; 5520 E&F

Sample ID	Date	Soil	Water	Air	No. of cont.	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
LNW-1, 10'	7-1-93	X			1	2"x4"		N	UST/Soil	
LSW-1, 10'										
LEW-1, 10'										
LEW-2, 10'										
LWW-1, 10'										
LWW-2, 10'										
EF-12, 14'										
EF-13 14'										

Relinquished By (signature): Charles Melancon
Printed name: Charles Melancon
Received (signature):
Printed name:
Date: 7-1-93
Time: 1810

Relinquished By (signature):
Printed name:
Received (signature):
Printed name:
Date:
Time:

Relinquished By (signature):
Printed name:
Received (signature): Gregg Mandell
Printed name: Gregg Mandell
Date: 7-1-93
Time: 1810

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

SEQUOIA ANALY[illegible] SAMPLE RECEIPT [illegible]

CLIENT NAME: PEG
REC. BY (PRINT): GM

MASTER LOG NO. / PAGE: 9307035
DATE OF LOG-IN: 7-1-93

CIRCLE THE APPROPRIATE RESPONSE

1. Custody Seal(s): Present / (Absent) Intact / Broken*
2. Custody Seal Nos.:
3. Chain-of-Custody Records: (Present) / Absent*
4. Traffic Reports or Packing List: Present / (Absent)
5. Airbill: Airbill / Sticker Present / (Absent)
6. Airbill No.:
7. Sample Tags: (Present) / Absent* Sample Tag Nos.: (Listed) / Not Listed on Chain-of-Custody
8. Sample Condition: (Intact) / Broken* / Leaking*
9. Does information on custody reports, traffic reports and sample tags agree? (Yes) / No*
10. Proper Preservatives Used: (Yes) / No*
11. Date Rec. at Lab: 7-1-93
12. Time Rec. at Lab: 1810

LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
01	A	LNW-1, 10'	Core	Soil	7/1/93	
02		LSW-1, 10'				
03		LEW-1, 10'				
04		LEW-2, 10'				
05		LWW-1, 10'				
06		LWW-2, 10'				
07		EF-12, 14'				
08		EF-13, 14'				

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

Form SC001

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Project: 305-94.01/Shell, Castro Valley

Enclosed are the results from 2 soil samples received at Sequoia Analytical on July 2,1993. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
3G02901	Soil, EF-14, 6'	7/2/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3G02902	Soil, EF-15, 6'	7/2/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jul 2, 1993
San Jose, CA 95110	Analysis Method:	EPA 5030/8015/8020	Reported:	Jul 7, 1993
Attention: Mike Hurd	First Sample #:	3G02901		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 3G02901 EF-14, 6'	Sample I.D. 3G02902 EF-15, 6'
Purgeable Hydrocarbons	1.0	N.D.	N.D.
Benzene	0.0050	N.D.	N.D.
Toluene	0.0050	N.D.	N.D.
Ethyl Benzene	0.0050	N.D.	N.D.
Total Xylenes	0.0050	N.D.	N.D.
Chromatogram Pattern:		--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Analyzed:	7/6/93	7/6/93
Instrument Identification:	GCHP-18	GCHP-18
Surrogate Recovery, %: (QC Limits = 70-130%)	100	96

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jul 2, 1993
San Jose, CA 95110	Analysis Method:	EPA 3550/8015	Reported:	Jul 7, 1993
Attention: Mike Hurd	First Sample #:	3G02901		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 3G02901 EF-14, 6'	Sample I.D. 3G02902 EF-15, 6'
Extractable Hydrocarbons	1.0	N.D.	N.D.
Chromatogram Pattern:		--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Extracted:	7/6/93	7/6/93
Date Analyzed:	7/6/93	7/6/93
Instrument Identification:	GCHP-5 INJ.A	GCHP-5 INJ.A

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 2, 1993
2025 Gateway Place, Suite 440	Matrix Descript:	Soil	Received:	Jul 2, 1993
San Jose, CA 95110	Analysis Method:	SM 5520 E&F (Gravimetric)	Extracted:	Jul 7, 1993
Attention: Mike Hurd	First Sample #:	3G02901	Analyzed:	Jul 7, 1993
			Reported:	Jul 7, 1993

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Sample Number	Sample Description	Oil & Grease mg/kg
3G02901	EF-14, 6'	N.D.
3G02902	EG-15, 6'	N.D.

Detection Limits:	50

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3G02901-02

Reported: Jul 7, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler
Conc. Spiked:	0.20	0.20	0.20	0.60
Units:	mg/kg	mg/kg	mg/kg	mg/kg
LCS Batch#:	GBLK070693	GBLK070693	GBLK070693	GBLK070693
Date Prepared:	7/6/93	7/6/93	7/6/93	7/6/93
Date Analyzed:	7/6/93	7/6/93	7/6/93	7/6/93
Instrument I.D.#:	GCHP-18	GCHP-18	GCHP-18	GCHP-18
LCS % Recovery:	100	100	105	103
Control Limits:	60-140	60-140	60-140	60-140
MS/MSD Batch #:	3FD6605	3FD6605	3FD6605	3FD6605
Date Prepared:	7/6/93	7/6/93	7/6/93	7/6/93
Date Analyzed:	7/6/93	7/6/93	7/6/93	7/6/93
Instrument I.D.#:	GCHP-18	GCHP-18	GCHP-18	GCHP-18
Matrix Spike % Recovery:	95	95	95	95
Matrix Spike Duplicate % Recovery:	85	95	95	95
Relative % Difference:	11	0.0	0.0	0.0

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3G02901-02

Reported: Jul 7, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Diesel	Total Recoverable Petroleum Hydrocarbons
Method:	EPA 8015	SM 5520EF
Analyst:	C. Lee	M. Shkidt
Conc. Spiked:	15	1000
Units:	mg/kg	mg/kg
LCS Batch#:	DBLK070693	BLK070793
Date Prepared:	7/6/93	7/7/93
Date Analyzed:	7/6/93	7/7/93
Instrument I.D.#:	GCHP-5 INJ.A	N.A.
LCS % Recovery:	80	87
Control Limits:	50-150	70-110
MS/MSD Batch #:	3FE0405	BLK070793
Date Prepared:	7/6/93	7/7/93
Date Analyzed:	7/6/93	7/7/93
Instrument I.D.#:	GCHP-5 INJ.A	N.A.
Matrix Spike % Recovery:	5.3*	87
Matrix Spike Duplicate % Recovery:	0.0*	85
Relative % Difference:	200	2.3

*Matrix effect

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Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

SEQUOIA ANALYTICAL — SAMPLE RECEIPT LOG

CLIENT NAME: PEG
REC. BY (PRINT): JM

MASTER LOG NO. / PAGE: 9307029
DATE OF LOG-IN: 7-3-93

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
1. Custody Seal(s): Present / (Absent) Intact / Broken*	01	A	EF-14	Core	S	7-2	
2. Custody Seal Nos.: —	02	↓	EF-~~X~~15 JM.	↓	↓	↓	
3. Chain-of-Custody Records: (Present) / Absent*							
4. Traffic Reports or Packing List: Present / (Absent)							
5. Airbill: Airbill / Sticker (Present) / Absent							
6. Airbill No.: ←							
7. Sample Tags: (Present) / Absent* Sample Tag Nos.: (Listed) / Not Listed on Chain-of-Custody							
8. Sample Condition: (Intact)/Broken*/Leaking*							
9. Does information on custody reports, traffic reports and sample tags agree? (Yes) / No*							
10. Proper Preservatives Used: (Yes) / No*							
11. Date Rec. at Lab: 7-2-93							
12. Time Rec. at Lab: 17:30							

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

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 7-2-93
Page 1 of 3

Site Address: 2724 Castro Valley Blvd, Castro Valley
WIC#: 204-1381-0407
Shell Engineer: Randy Orlowski — Phone No.: 714 520-3395 Fax #: 520-3469
Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFORNIA 95110
Consultant Contact: Mike Hurd — Phone No.: 408 441-7500 Fax #: 441-7539
Comments:
Sampled by: Charles Melancon
Printed Name: Charles Melancon

LAB: Sequoia

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
G.W. Monitoring	☐ 4461	24 hours ☒
Site Investigation	☒ 4441	48 hours ☐
Soil Classify/Disposal	☐ 4442	15 days ☐ (Normal)
Water Classify/Disposal	☐ 4443	Other ☐ ____
Soil/Air Rem. or Sys. O & M	☐ 4452	NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.
Water Rem. or Sys. O & M	☐ 4453	
Other	☐	

UST AGENCY: _____

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	SS20 EPA		Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
EF-14, 6'	7/2/93		X			1	X	X				X	X						UST/Soil	9307029-01A
EF-15, 6'	↓		X			1		X				X	X						↓	↓ -02A

Relinquished By (signature)	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
Charles Melancon	Charles Melancon	7-2-93	12:30	M. Doden	M. Doden	7/2/93	1355
M. Doden	M. Doden	7/2/93	1615	[illegible]	FRED HOPKIN	7/2/93	1615
[illegible]	F. HOPKIN	7/2/93	1631	[illegible] #784	DELA REED	7-2-93	16:30

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev. 7/12/93

Shell Oil Chn. of Custody

Rec by: [illegible] P. HUFANO
7-2-93
1730

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 7-2-93
Page 1 of 3

Site Address: 2724 Castro Valley Blvd, Castro Valley
WIC#: 204-1381-0407
Shell Engineer: Randy Orlowski
Phone No.: 714 520-3345
Fax #: 520-3469
Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFORNIA 95110
Consultant Contact: Mike Hurd
Phone No.: 408 441-7500
Fax #: 441-7539
Comments:
Sampled by: Charles Melancon
Printed Name: Charles Melancon

LAB: Sequoia

CHECK ONE (1) BOX ONLY		CT/DT
G.W. Monitoring	☐	4461
Site Investigation	☒	4441
Soil Classify/Disposal	☐	4442
Water Classify/Disposal	☐	4443
Soil/Air Rem. or Sys. O & M	☐	4452
Water Rem. or Sys. O & M	☐	4453
Other	☐	

TURN AROUND TIME: 24 hours ☒ | 48 hours ☐ | 15 days ☐ (Normal) | Other ☐ ____

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: _____

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	Test for Disposal	Combination TPH 8015 & BTEX 8020	5520 E&F	Asbestos	Container Size	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
EF-14, 6'	7/2/93		X			1	~~X~~	X				X	X					UST/Soil	
EF-15, 6'	↓		X			1		X				X	X					↓	

Relinquished By (signature):	Printed Name:	Date:	Time:	Received (signature):	Printed Name:	Date:	Time:
Charles Melancon	Charles Melancon	7-2-93	12:30	M Doden	M. Doden	7/2/93	13:55
M Doden	M. Doden	7/2/93	1615	[illegible]	FRED HOPKIN	7/2/93	1615
Relinquished By (signature):	Printed Name:	Date:	Time:	Received (signature):	Printed Name:	Date:	Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev. 7/12/93 — Shell Oil Co. COC

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: ______

Date: 7-2-93
Page 2 of 3

Site Address: 2724 Castro Valley Blvd, Castro Valley

WIC#: 204-1381-0407

Shell Engineer: Randy Orlowski — **Phone No.:** 714 520-3395 **Fax #:** 520-3469

Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFONRIA 95110

Consultant Contact: Mike Hurd — **Phone No.:** 408 441-7500 **Fax #:** 441-7539

Comments:

Sampled by: Charles Melancon

Printed Name: Charles Melancon

Analysis Required

LAB: Sequoia

CHECK ONE (1) BOX ONLY	CT/DT	
G.W. Monitoring	☐	4461
Site Investigation	☐	4441
Soil Classify/Disposal	☒	4442
Water Classify/Disposal	☐	4443
Soil/Air Rem. or Sys. O & M	☐	4452
Water Rem. or Sys. O & M	☐	4453
Other	☐	

TURN AROUND TIME: 24 hours ☐ 48 hours ☒ 16 days ☐ (Normal) Other ☐ ____

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: ______

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	~~Test for Disposal~~ 5520 E&F	Combination TPH 8015 & BTEX 8020	RCI	8270	~~Asbestos~~ STLC/Pb	~~Container Size~~ STLC Cam 17	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
SP-5A	7/2/93		X			1	X			X	X		X	X	X	X		Y	Soil/Spoils	Composite
SP-5B	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	
SP-5C	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	
SP-5D	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	
SP-5E	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		Y	Soil/Spoils	Composite
SP-5F	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↑	
SP-5G	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	
SP-5H	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	

(SP-5A through SP-5D bracketed: "Composite"; SP-5E through SP-5H bracketed: "Composite")

Relinquished By (signature)	Printed Name	Date / Time	Received (signature)	Printed Name	Date / Time
Charles Melancon	Charles Melancon	Date: 7-2-93 Time: 12:30	M Doden	M Doden	Date: 7/2/93 Time: 1355
M Doden	M. Doden	Date: 7/2/93 Time: 1612	Fred Hopkins	Fred H[illegible]	Date: 7/2/93 Time: 1614
		Date: Time:			Date: Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev. 1/2/93 — Shell Oil Chn. of Custody

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD

Serial No: ______

Date: 7-2-93
Page 3 of 3

Site Address: 204-1381-0407

WIC#: 204-1381-0407

Shell Engineer: Randy Orlowski
Phone No.: 714 520-3365
Fax #: 520-5469

Consultant Name & Address:
PACIFIC ENVIRONMENTAL GROUP, INC.
2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFONRIA 95110

Consultant Contact: Mike Hurd
Phone No.: 408 441-7500
Fax #: 441-7539

Comments:

Sampled by: Charles Melancon

Printed Name: Charles Melancon

LAB: Sequoia

CHECK ONE (1) BOX ONLY	CT/DT
G.W. Monitoring ☐	4461
Site Investigation ☐	4441
Soil Classify/Disposal ☒	4442
Water Classify/Disposal ☐	4443
Soil/Air Rem. or Sys. O & M ☐	4452
Water Rem. or Sys. O & M ☐	4453
Other ☐	

TURN AROUND TIME:
24 hours ☐
48 hours ☒
16 days ☐ (Normal)
Other ☐

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: ______

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	~~Test for Disposal~~ 5520 E&F	Combination TPH 8015 & BTEX 8020	RCI	8270	~~Asbestos~~ STLC CAM 17	~~Container Size~~ STLC/Pb	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
SP-4E	7/2/93		X			1	X			X	X		X	X	X	X		Y	Soil/Spoils	Composite
SP-4F	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	
SP-4G	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	
SP-4H	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	
SP-6A	↓		X			1	↓			↓	↓		↓	↓	↓	↓		Y	Soil/Spoils	Composite
SP-6B	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	
SP-6C	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	
SP-6D	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	7/2/93

Relinquished By (signature):	Printed Name:	Date/Time:	Received (signature):	Printed Name:	Date/Time:
Charles Melancon	Charles Melancon	Date: 7-2-93 Time: 13:30	M Doden	M Doden	Date: 7/2/93 Time: 1355
M Doden	M. Doden	Date: 7/2/93 Time: 1615	[signature]	K HOR[illegible]	Date: 7/2/93 Time: 16:15
		Date: Time:			Date: Time:

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev. 1/12/93

Shell Oil Chn. of Custody

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Project: 305-94.01/Shell, Castro Valley

Enclosed are the results from 4 soil samples received at Sequoia Analytical on July 2,1993. The requested analyses are listed below:

SAMPLE #	SAMPLE DESCRIPTION	DATE OF COLLECTION	TEST METHOD
3G08001	Soil, SP-5A to 5D comp	7/2/93	Corrosivity, Reactivity, & Ignitability EPA 5030/8015 EPA 8240 EPA 8270 SM 5520 E&F (Gravimetric) STLC CAM 17 Metals
3G08002	Soil, SP-5E to 5H comp	7/2/93	Corrosivity, Reactivity, & Ignitability EPA 5030/8015 EPA 8240 EPA 8270 SM 5520 E&F (Gravimetric) STLC CAM 17 Metals
3G08003	Soil, SP-4E to 4H comp	7/2/93	Corrosivity, Reactivity, & Ignitability EPA 5030/8015 EPA 8240 EPA 8270 SM 5520 E&F (Gravimetric) STLC CAM 17 Metals
3G08004	Soil, SP-6A to 6D comp	7/2/93	Corrosivity, Reactivity, & Ignitability EPA 5030/8015 EPA 8240 EPA 8270 SM 5520 E&F (Gravimetric) STLC CAM 17 Metals

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received: Jul 2, 1993
San Jose, CA 95110	Analysis Method:	EPA 5030/8015	Reported: Jul 8, 1993
Attention: Mike Hurd	First Sample #:	3G08001	

TOTAL PURGEABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 3G08001 SP-5A to 5D comp	Sample I.D. 3G08002 SP-5E to 5H comp	Sample I.D. 3G08003 SP-4E to 4H comp	Sample I.D. 3G08004 SP-6A to 6D comp
Purgeable Hydrocarbons	1.0	410	140	38	N.D.
Chromatogram Pattern:		Non-gas > C8	Non-gas > C8	Non-gas > C8	--

Quality Control Data

Report Limit Multiplication Factor:	20	50	20	1.0
Date Analyzed:	7/7/93	7/7/93	7/7/93	7/6/93
Instrument Identification:	GCHP-7	GCHP-7	GCHP-7	GCHP-18
Surrogate Recovery: (QC Limits = 70-130%)	98	96	91	102

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-5A to 5D comp	Received: Jul 2, 1993
San Jose, CA 95110	Analysis Method:	EPA 8240	Analyzed: Jul 7, 1993
Attention: Mike Hurd	Lab Number:	3G08001	Reported: Jul 8, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	500	N.D.
Benzene	100	580
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	470
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	490
cis-1,2-Dichloroethene	100	N.D.
trans-1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis-1,3-Dichloropropene	100	N.D.
trans-1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	520
2-Hexanone	500	N.D.
Methylene chloride	250	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	580
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	440
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	3,200

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-5E to 5H comp	Received: Jul 2, 1993
San Jose, CA 95110	Analysis Method:	EPA 8240	Analyzed: Jul 7, 1993
Attention: Mike Hurd	Lab Number:	3G08002	Reported: Jul 8, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	1,000	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
cis-1,2-Dichloroethene	100	N.D.
trans-1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis-1,3-Dichloropropene	100	N.D.
trans-1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	250	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	690

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-4E to 4H comp	Received: Jul 2, 1993
San Jose, CA 95110	Analysis Method:	EPA 8240	Analyzed: Jul 7, 1993
Attention: Mike Hurd	Lab Number:	3G08003	Reported: Jul 8, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	500	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
cis-1,2-Dichloroethene	100	N.D.
trans-1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis-1,3-Dichloropropene	100	N.D.
trans-1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	500	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-6A to 6D comp	Received: Jul 2, 1993
San Jose, CA 95110	Analysis Method:	EPA 8240	Analyzed: Jul 7, 1993
Attention: Mike Hurd	Lab Number:	3G08004	Reported: Jul 8, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	500	N.D.
Benzene	100	N.D.
Bromodichloromethane	100	N.D.
Bromoform	100	N.D.
Bromomethane	100	N.D.
2-Butanone	500	N.D.
Carbon disulfide	100	N.D.
Carbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
Chloroethane	100	N.D.
2-Chloroethyl vinyl ether	500	N.D.
Chloroform	100	N.D.
Chloromethane	100	N.D.
Dibromochloromethane	100	N.D.
1,1-Dichloroethane	100	N.D.
1,2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
cis-1,2-Dichloroethene	100	N.D.
trans-1,2-Dichloroethene	100	N.D.
1,2-Dichloropropane	100	N.D.
cis-1,3-Dichloropropene	100	N.D.
trans-1,3-Dichloropropene	100	N.D.
Ethylbenzene	100	N.D.
2-Hexanone	500	N.D.
Methylene chloride	250	N.D.
4-Methyl-2-pentanone	500	N.D.
Styrene	100	N.D.
1,1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
Toluene	100	N.D.
1,1,1-Trichloroethane	100	N.D.
1,1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
Trichlorofluoromethane	100	N.D.
Vinyl acetate	100	N.D.
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

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680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-5A to 5D comp	Received:	Jul 2, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jul 6, 1993
Attention: Mike Hurd	Lab Number:	3G08001	Analyzed:	Jul 6, 1993
			Reported:	Jul 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-5A to 5D comp	Received: Jul 2, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted: Jul 6, 1993
Attention: Mike Hurd	Lab Number:	3G08001	Analyzed: Jul 6, 1993
			Reported: Jul 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	710
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	840
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Eileen A. Manning
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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-5E to 5H comp	Received: Jul 2, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted: Jul 6, 1993
Attention: Mike Hurd	Lab Number:	3G08002	Analyzed: Jul 6, 1993
			Reported: Jul 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-5E to 5H comp	Received:	Jul 2, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jul 6, 1993
Attention: Mike Hurd	Lab Number:	3G08002	Analyzed:	Jul 6, 1993
			Reported:	Jul 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	500
2-Nitroaniline	500	510
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-4E to 4H comp	Received:	Jul 2, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jul 6, 1993
Attention: Mike Hurd	Lab Number:	3G08003	Analyzed:	Jul 7, 1993
			Reported:	Jul 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	260
Acenaphthylene	100	N.D.
Anthracene	100	780
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	1,400
Benzo(b)fluoranthene	100	1,400
Benzo(k)fluoranthene	100	670
Benzo(g,h,i)perylene	100	210
Benzo(a)pyrene	100	1,000
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	1,400
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	380
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-4E to 4H comp	Received:	Jul 2, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jul 6, 1993
Attention: Mike Hurd	Lab Number:	3G08003	Analyzed:	Jul 7, 1993
			Reported:	Jul 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	4,100
Fluorene	100	810
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	270
Isophorone	100	N.D.
2-Methylnaphthalene	100	1,000
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	570
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	4,300
Phenol	100	N.D.
Pyrene	100	3,200
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Project Manager

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-6A to 6D comp	Received:	Jul 2, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jul 6, 1993
Attention: Mike Hurd	Lab Number:	3G08004	Analyzed:	Jul 6, 1993
			Reported:	Jul 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-6A to 6D comp	Received: Jul 2, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted: Jul 6, 1993
Attention: Mike Hurd	Lab Number:	3G08004	Analyzed: Jul 6, 1993
			Reported: Jul 8, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	N.D.
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

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Project Manager

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jul 2, 1993
2025 Gateway Place, Suite 440	Matrix Descript:	Soil	Received: Jul 2, 1993
San Jose, CA 95110	Analysis Method:	SM 5520 E&F (Gravimetric)	Extracted: Jul 7, 1993
Attention: Mike Hurd	First Sample #:	3G08001	Analyzed: Jul 7, 1993
			Reported: Jul 8, 1993

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/kg
3G08001	SP-5A to 5D comp	120
3G08002	SP-5E to 5H comp	51
3G08003	SP-4E to 4H comp	1,700
3G08004	SP-6A to 6D comp	N.D.

Detection Limits:	**50**

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-5A to 5D comp	Received: Jul 2, 1993
San Jose, CA 95110			Analyzed: Jul 3, 7, 1993
Attention: Mike Hurd	Lab Number:	3G08001	Reported: Jul 8, 1993

CORROSIVITY, IGNITABILITY, AND REACTIVITY

Analyte	Detection Limit	Sample Results
Corrosivity:		
pH	N.A.	8.1
Ignitability:		
Flashpoint (Shell Open Cup)	N.A.	Negative
Reactivity:		
Sulfide, mg/kg	13	N.D.
Cyanide, mg/kg	0.50	N.D.
Reaction with water	N.A.	Negative

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-5E to 5H comp	Received: Jul 2, 1993
San Jose, CA 95110			Analyzed: Jul 3, 7, 1993
Attention: Mike Hurd	Lab Number:	3G08002	Reported: Jul 8, 1993

CORROSIVITY, IGNITABILITY, AND REACTIVITY

Analyte	Detection Limit	Sample Results
Corrosivity:		
pH	N.A.	7.9
Ignitability:		
Flashpoint (Shell Open Cup)	N.A.	Negative
Reactivity:		
Sulfide, mg/kg	13	N.D.
Cyanide, mg/kg	0.50	N.D.
Reaction with water	N.A.	Negative

Analytes reported as N.D. were not present above the stated limit of detection.

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Eileen A. Manning
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Pacific Environmental Group	Client Project ID: 305-94.01/Shell, Castro Valley	Sampled:	Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Descript: Soil, SP-4E to 4H comp	Received:	Jul 2, 1993
San Jose, CA 95110		Analyzed:	Jul 3, 7, 1993
Attention: Mike Hurd	Lab Number: 3G08003	Reported:	Jul 8, 1993

CORROSIVITY, IGNITABILITY, AND REACTIVITY

Analyte	Detection Limit	Sample Results
Corrosivity:		
pH	N.A.	7.2
Ignitability:		
Flashpoint (Shell Open Cup)	N.A.	Negative
Reactivity:		
Sulfide, mg/kg	13	N.D.
Cyanide, mg/kg	0.50	N.D.
Reaction with water	N.A.	Negative

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-6A to 6D comp	Received: Jul 2, 1993
San Jose, CA 95110			Analyzed: Jul 3, 7, 1993
Attention: Mike Hurd	Lab Number:	3G08004	Reported: Jul 8, 1993

CORROSIVITY, IGNITABILITY, AND REACTIVITY

Analyte	Detection Limit	Sample Results
Corrosivity:		
pH	N.A.	7.1
Ignitability:		
Flashpoint (Shell Open Cup)	N.A.	Negative
Reactivity:		
Sulfide, mg/kg	13	N.D.
Cyanide, mg/kg	0.50	N.D.
Reaction with water	N.A.	Negative

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID: 305-94.01/Shell, Castro Valley	Sampled:	Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Descript: Soil, SP-5A to 5D comp	Received:	Jul 2, 1993
San Jose, CA 95110		Extracted:	Jul 8, 1993
Attention: Mike Hurd	Lab Number: 3G08001	Reported:	Jul 12, 1993

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

	Soluble Threshold Limit Concentration (Waste Extraction Test)			Total Threshold Limit Concentration		
Analyte	STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	TTLC Max. Limit (mg/kg)	Detection Limit (mg/kg)	Analysis Result (mg/kg)
Antimony	15	0.10	N.D.	500	5.0	-
Arsenic	5.0	0.10	N.D.	500	5.0	-
Barium	100	0.10	6.8	10,000	5.0	-
Beryllium	0.75	0.010	N.D.	75	0.50	-
Cadmium	1.0	0.010	0.017	100	0.50	-
Chromium (VI)	5.0	0.0050	-	500	0.050	-
Chromium	560	0.010	0.087	2,500	0.50	-
Cobalt	80	0.050	0.33	8,000	2.5	-
Copper	25	0.010	0.41	2,500	0.50	-
Lead	5.0	0.10	0.14	1,000	5.0	-
Mercury	0.20	0.0040	N.D.	20	0.010	-
Molybdenum	350	0.050	N.D.	3,500	2.5	-
Nickel	20	0.050	0.28	2,000	2.5	-
Selenium	1.0	0.040	N.D.	100	5.0	-
Silver	5.0	0.010	N.D.	500	0.50	-
Thallium	7.0	0.10	N.D.	700	5.0	-
Vanadium	24	0.050	0.33	2,400	2.5	-
Zinc	250	0.010	0.40	5,000	0.50	-
Asbestos	-	10	-	10,000	100	-
Fluoride	180	0.10	-	18,000	1.0	-

TTLC results are reported as mg/kg of wet weight. Asbestos results are reported as fibers/g.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID: 305-94.01/Shell, Castro Valley	Sampled:	Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Descript: Soil, SP-5E to 5H comp	Received:	Jul 2, 1993
San Jose, CA 95110		Extracted:	Jul 8, 1993
Attention: Mike Hurd	Lab Number: 3G08002	Reported:	Jul 12, 1993

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

	Soluble Threshold Limit Concentration (Waste Extraction Test)			Total Threshold Limit Concentration		
Analyte	STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	TTLC Max. Limit (mg/kg)	Detection Limit (mg/kg)	Analysis Result (mg/kg)
Antimony	15	0.10	N.D.	500	5.0	-
Arsenic	5.0	0.10	N.D.	500	5.0	-
Barium	100	0.10	7.5	10,000	5.0	-
Beryllium	0.75	0.010	N.D.	75	0.50	-
Cadmium	1.0	0.010	N.D.	100	0.50	-
Chromium (VI)	5.0	0.0050	-	500	0.050	-
Chromium	560	0.010	0.093	2,500	0.50	-
Cobalt	80	0.050	0.34	8,000	2.5	-
Copper	25	0.010	0.41	2,500	0.50	-
Lead	5.0	0.10	0.18	1,000	5.0	-
Mercury	0.20	0.00020	N.D.	20	0.010	-
Molybdenum	350	0.050	N.D.	3,500	2.5	-
Nickel	20	0.050	0.31	2,000	2.5	-
Selenium	1.0	0.040	N.D.	100	5.0	-
Silver	5.0	0.010	N.D.	500	0.50	-
Thallium	7.0	0.10	N.D.	700	5.0	-
Vanadium	24	0.050	0.37	2,400	2.5	-
Zinc	250	0.010	0.49	5,000	0.50	-
Asbestos	-	10	-	10,000	100	-
Fluoride	180	0.10	-	18,000	1.0	-

TTLC results are reported as mg/kg of wet weight. Asbestos results are reported as fibers/g.
Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID: 305-94.01/Shell, Castro Valley	Sampled:	Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Descript: Soil, SP-4E to 4H comp	Received:	Jul 2, 1993
San Jose, CA 95110		Extracted:	Jul 8, 1993
Attention: Mike Hurd	Lab Number: 3G08003	Reported:	Jul 12, 1993

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

	Soluble Threshold Limit Concentration (Waste Extraction Test)			Total Threshold Limit Concentration		
Analyte	STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	TTLC Max. Limit (mg/kg)	Detection Limit (mg/kg)	Analysis Result (mg/kg)
Antimony	15	0.10	N.D.	500	5.0	-
Arsenic	5.0	0.10	N.D.	500	5.0	-
Barium	100	0.10	9.6	10,000	5.0	-
Beryllium	0.75	0.010	0.019	75	0.50	-
Cadmium	1.0	0.010	N.D.	100	0.50	-
Chromium (VI)	5.0	0.0050	-	500	0.050	-
Chromium	560	0.010	0.29	2,500	0.50	-
Cobalt	80	0.050	0.52	8,000	2.5	-
Copper	25	0.010	0.41	2,500	0.50	-
Lead	5.0	0.10	0.35	1,000	5.0	-
Mercury	0.20	0.00020	N.D.	20	0.010	-
Molybdenum	350	0.050	N.D.	3,500	2.5	-
Nickel	20	0.050	0.77	2,000	2.5	-
Selenium	1.0	0.020	N.D.	100	5.0	-
Silver	5.0	0.010	N.D.	500	0.50	-
Thallium	7.0	0.10	N.D.	700	5.0	-
Vanadium	24	0.050	0.98	2,400	2.5	-
Zinc	250	0.010	1.9	5,000	0.50	-
Asbestos	-	10	-	10,000	100	-
Fluoride	180	0.10	-	18,000	1.0	-

TTLC results are reported as mg/kg of wet weight. Asbestos results are reported as fibers/g.
Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled: Jul 2, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-6A to 6D comp	Received: Jul 2, 1993
San Jose, CA 95110			Extracted: Jul 8, 1993
Attention: Mike Hurd	Lab Number:	3G08004	Reported: Jul 12, 1993

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

	Soluble Threshold Limit Concentration (Waste Extraction Test)			Total Threshold Limit Concentration		
Analyte	STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	TTLC Max. Limit (mg/kg)	Detection Limit (mg/kg)	Analysis Result (mg/kg)
Antimony	15	0.10	N.D.	500	5.0	-
Arsenic	5.0	0.10	N.D.	500	5.0	-
Barium	100	0.10	8.6	10,000	5.0	-
Beryllium	0.75	0.010	0.011	75	0.50	-
Cadmium	1.0	0.010	N.D.	100	0.50	-
Chromium (VI)	5.0	0.0050	-	500	0.050	-
Chromium	560	0.010	0.11	2,500	0.50	-
Cobalt	80	0.050	0.46	8,000	2.5	-
Copper	25	0.010	0.22	2,500	0.50	-
Lead	5.0	0.10	0.13	1,000	5.0	-
Mercury	0.20	0.00020	N.D.	20	0.010	-
Molybdenum	350	0.050	N.D.	3,500	2.5	-
Nickel	20	0.050	0.74	2,000	2.5	-
Selenium	1.0	0.040	N.D	100	5.0	-
Silver	5.0	0.010	N.D.	500	0.50	-
Thallium	7.0	0.10	N.D.	700	5.0	-
Vanadium	24	0.050	0.61	2,400	2.5	-
Zinc	250	0.010	0.38	5,000	0.50	-
Asbestos	-	10	-	10,000	100	-
Fluoride	180	0.10	-	18,000	1.0	-

TTLC results are reported as mg/kg of wet weight. Asbestos results are reported as fibers/g.
Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3G08001-04

Reported: Jul 12, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler
Conc. Spiked:	0.20	0.20	0.20	0.60
Units:	mg/kg	mg/kg	mg/kg	mg/kg
LCS Batch#:	GBLK070693	GBLK070693	GBLK070693	GBLK070693
Date Prepared:	7/6/93	7/6/93	7/6/93	7/6/93
Date Analyzed:	7/6/93	7/6/93	7/6/93	7/6/93
Instrument I.D.#:	GCHP-18	GCHP-18	GCHP-18	GCHP-18
LCS % Recovery:	100	100	105	103
Control Limits:	60-140	60-140	60-140	60-140
MS/MSD Batch #:	3FD6605	3FD6605	3FD6605	3FD6605
Date Prepared:	7/6/93	7/6/93	7/6/93	7/6/93
Date Analyzed:	7/6/93	7/6/93	7/6/93	7/6/93
Instrument I.D.#:	GCHP-18	GCHP-18	GCHP-18	GCHP-18
Matrix Spike % Recovery:	95	95	95	95
Matrix Spike Duplicate % Recovery:	85	95	95	95
Relative % Difference:	11	0.0	0.0	0.0

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Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3G08001-04

Reported: Jul 12, 1993

QUALITY CONTROL DATA REPORT

ANALYTE:	1,1-Dichloro-ethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
Method:	EPA 8240	EPA 8240	EPA 8240	EPA 8240	EPA 8240
Analyst:	S. Scott	S. Scott	S. Scott	S. Scott	S. Scott
Conc. Spiked:	2500	2500	2500	2500	2500
Units:	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg
LCS Batch#:	VBLK070793	VBLK070793	VBLK070793	VBLK070793	VBLK070793
Date Prepared:	7/7/93	7/7/93	7/7/93	7/7/93	7/7/93
Date Analyzed:	7/7/93	7/7/93	7/7/93	7/7/93	7/7/93
Instrument I.D.#:	MSF-3	MSF-3	MSF-3	MSF-3	MSF-3
LCS % Recovery:	88	84	88	92	88
Control Limits:	59-172	62-137	66-142	59-139	60-133
MS/MSD Batch #:	3G08004	3G08004	3G08004	3G08004	3G08004
Date Prepared:	7/7/93	7/7/93	7/7/93	7/7/93	7/7/93
Date Analyzed:	7/7/93	7/7/93	7/7/93	7/7/93	7/7/93
Instrument I.D.#:	MSF-3	MSF-3	MSF-3	MSF-3	MSF-3
Matrix Spike % Recovery:	92	92	92	96	92
Matrix Spike Duplicate % Recovery:	100	92	100	100	100
Relative % Difference:	8.3	0.0	8.3	4.1	8.3

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Reported: Jul 12, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Phenol	2-Chlorophenol	1,4-Dichloro-benzene	N-Nitroso-Di-N-propylamine	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenol
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel	E. Manuel	E. Manuel
Conc. Spiked:	100	100	50	50	50	100
Units:	ng	ng	ng	ng	ng	ng
LCS Batch#:	BLK062993	BLK062993	BLK062993	BLK062993	BLK062993	BLK062993
Date Prepared:	6/29/93	6/29/93	6/29/93	6/29/93	6/29/93	6/29/93
Date Analyzed:	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93
Instrument I.D.#:	F4	F4	F4	F4	F4	F4
LCS % Recovery:	84	88	78	94	94	101
Control Limits:	26-90	25-102	28-104	41-126	38-107	26-103
MS/MSD Batch #:	3FB2315	3FB2315	3FB2315	3FB2315	3FB2315	3FB2315
Date Prepared:	6/29/93	6/29/93	6/29/93	6/29/93	6/29/93	6/29/93
Date Analyzed:	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93
Instrument I.D.#:	F4	F4	F4	F4	F4	F4
Matrix Spike % Recovery:	88	90	76	94	90	111
Matrix Spike Duplicate % Recovery:	78	85	70	86	84	91
Relative % Difference:	12	5.7	8.2	8.9	6.9	20

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Matrix: Soil
QC Sample Group: 3G08001-04

Reported: Jul 12, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Acenaphthene	4-Nitrophenol	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	E. Manuel	E. Manuel	E. Manuel	E. Manuel	E. Manuel
Conc. Spiked:	50	100	50	100	50
Units:	ng	ng	ng	ng	ng
LCS Batch#:	BLK062993	BLK062993	BLK062993	BLK062993	BLK062993
Date Prepared:	6/29/93	6/29/93	6/29/93	6/29/93	6/29/93
Date Analyzed:	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93
Instrument I.D.#:	F4	F4	F4	F4	F4
LCS % Recovery:	84	110	88	71	116
Control Limits:	31-137	11-114	28-89	17-109	35-142
MS/MSD Batch #:	3FB2315	3FB2315	3FB2315	3FB2315	3FB2315
Date Prepared:	6/29/93	6/29/93	6/29/93	6/29/93	6/29/93
Date Analyzed:	6/30/93	6/30/93	6/30/93	6/30/93	6/30/93
Instrument I.D.#:	F4	F4	F4	F4	F4
Matrix Spike % Recovery:	82	120	82	88	112
Matrix Spike Duplicate % Recovery:	72	96	70	83	100
Relative % Difference:	13	22	16	5.8	11

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Matrix: Soil
QC Sample Group: 3G08001-04
Reported: Jul 12, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Total Recoverable Petroleum Hydrocarbons
Method:	SM 5520 EF
Analyst:	M. Shkidt
Conc. Spiked:	1000
Units:	mg/kg
LCS Batch#:	BLK070793
Date Prepared:	7/7/93
Date Analyzed:	7/7/93
Instrument I.D.#:	N.A.
LCS % Recovery:	87
Control Limits:	70-110
MS/MSD Batch #:	BLK070793
Date Prepared:	7/7/93
Date Analyzed:	7/7/93
Instrument I.D.#:	N.A.
Matrix Spike % Recovery:	87
Matrix Spike Duplicate % Recovery:	85
Relative % Difference:	2.3

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Matrix: Soil
QC Sample Group: 3G08001-04

Reported: Jul 12, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Beryllium	Cadmium	Chromium	Nickel
Method:	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7
Analyst:	M. Mistry	M. Mistry	M. Mistry	M. Mistry
Conc. Spiked:	1.0	1.0	1.0	1.0
Units:	mg/L	mg/L	mg/L	mg/L
LCS Batch#:	BLK070893	BLK070893	BLK070893	BLK070893
Date Prepared:	7/8/93	7/8/93	7/8/93	7/8/93
Date Analyzed:	7/9/93	7/9/93	7/9/93	7/9/93
Instrument I.D.#:	MTJA-2	MTJA-2	MTJA-2	MTJA-2
LCS % Recovery:	97	92	92	93
Control Limits:	75-125	75-125	75-125	75-125
MS/MSD Batch #:	3G20801	3G20801	3G20801	3G20801
Date Prepared:	7/8/93	7/8/93	7/8/93	7/8/93
Date Analyzed:	7/9/93	7/9/93	7/9/93	7/9/93
Instrument I.D.#:	MTJA-2	MTJA-2	MTJA-2	MTJA-2
Matrix Spike % Recovery:	96	91	90	93
Matrix Spike Duplicate % Recovery:	97	90	91	94
Relative % Difference:	1.0	1.1	1.1	1.1

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Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3G08001-04

Reported: Jul 12, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Mercury	Selenium	Mercury
Method:	EPA 245.1	EPA 7740	EPA 245.1
Analyst:	A. McDonald	W. Thant	A. McDonald
Conc. Spiked:	0.0020	0.050	0.0020
Units:	mg/L	mg/L	mg/L
LCS Batch#:	BLK070993	BLK070893	BLK071293
Date Prepared:	7/9/93	7/8/93	7/12/93
Date Analyzed:	7/9/93	7/9/93	7/12/93
Instrument I.D.#:	MPE-2	MTJA-3	MPE-2
LCS % Recovery:	102	109	91
Control Limits:	90-110	75-125	90-110
MS/MSD Batch #:	3G20801	3G09132	3G31801
Date Prepared:	7/9/93	7/8/93	7/12/93
Date Analyzed:	7/9/93	7/9/93	7/12/93
Instrument I.D.#:	MPE-2	MTJA-3	MPE-2
Matrix Spike % Recovery:	98	90	102
Matrix Spike Duplicate % Recovery:	100	94	104
Relative % Difference:	2.0	4.3	1.9

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QUALITY CONTROL DATA REPORT

ANALYTE	pH	Sulfide	Flashpoint	Cyanide
Method:	EPA 9045	EPA 9030	Shell Open Cup	SW 846
Analyst:	K. Follett	K. Newberry	K. Newberry	A. Savva
Units:	pH units	mg/kg	mg/kg	mg/L
Date:	7/2/93	7/6/93	7/2/93	7/6/93
Sample #:	3G040	3G04001	3FE7701	3G04001
Sample Concentration:	8.6	N.D.	Negative	N.D.
Sample Duplicate Concentration:	8.5	N.D.	Negative	N.D.
% RPD:	1.2	0.0	0.0	0.0
Control Limits:	0-30	0-20	±5.0	0-20

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: ______

Date: 7-2-93
Page 2 of 3

Site Address: 2724 Castro Valley Blvd, Castro Valley

WIC#: 204-1381-0407

Shell Engineer: Randy Orlowski
Phone No.: 714 520-3395
Fax #: 520-3469

Consultant Name & Address:
PACIFIC ENVIRONMENTAL GROUP, INC.
2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFONRIA 95110

Consultant Contact: Mike Hurd
Phone No.: 408 441-7500
Fax #: 441-7539

Comments:

Sampled by: Charles Melancon

Printed Name: Charles Melancon

LAB: Sequoia

CHECK ONE (1) BOX ONLY	CT/DT	
G.W. Monitoring	4461	☐
Site Investigation	4441	☐
Soil Classify/Disposal	4442	☒
Water Classify/Disposal	4443	☐
Soil/Air Rem. or Sys. O & M	4452	☐
Water Rem. or Sys. O & M	4453	☐
Other		☐

TURN AROUND TIME
- 24 hours ☐
- 48 hours ☒
- 16 days ☐ (Normal)
- Other ☐ ______

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.

UST AGENCY: ______

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	~~Test for Disposal~~ 5520 E&F	Combination TPH 8015 & BTEX 8020	RCI	8270	~~Asbestos~~ STLC/Pb	~~Container Size~~ STLC Cam 17	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
SP-5A	7/2/93		X			1	X			X	X		X	X	X	X		Y	Soil/Spoils	9307080 -01A Composite
SP-5B	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	-01B
SP-5C	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	-01C
SP-5D	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	-01D
SP-5E	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		Y	Soil/Spoils	-02A Composite
SP-5F	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	-02B
SP-5G	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	-02C
SP-5H	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	-02D

(SP-5A to SP-5D bracketed: "Composite"; SP-5E to SP-5H bracketed: "Composite")

Relinquished By (signature):	Printed Name:	Date/Time	Received (signature):	Printed Name:	Date/Time
[signature]	Charles Melancon	Date: 7-2-93 Time: 12:30	M Doden	M Doden	Date: 7/2/93 Time: 1355
M Doden	M. Doden	Date: 7/2/93 Time: 1615	Fred Hopkins	[signature]	Date: 7/2/93 Time: 1615
[signature]	F W Hopkins	Date: 7-2-93 Time: 16:30	[signature] for #784	Bela Feth	Date: 7-2-93 Time: 16:30

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev. 1/15/93 — Shell Oil Chn. of Custody

Rec by: [signature] 7-2-93/1830

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No:

Date: 7-2-93
Page 3 of 3

Site Address: 204-1381-0407
WIC#: 204-1381-0407
Shell Engineer: Randy Orlowski
Phone No.: 714 520-5395
Fax #: 520-5469
Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFONRIA 95110
Consultant Contact: Mike Hurd
Phone No.: 408 441-7500
Fax #: 441-7539
Comments:
Sampled by: Charles Melancon
Printed Name: Charles Melancon

LAB: Sequoia

CHECK ONE (1) BOX ONLY	CT/DT	TURN AROUND TIME
G.W. Monitoring ☐	4461	24 hours ☐
Site Investigation ☐	4441	48 hours ☒
Soil Classify/Disposal ☒	4442	15 days ☐ (Normal)
Water Classify/Disposal ☐	4443	Other ☐
Soil/Air Rem. or Sys. O & M ☐	4452	NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT.
Water Rem. or Sys. O & M ☐	4453	
Other ☐		

UST AGENCY:

Analysis Required

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	TPH (EPA 8015 Mod. Gas)	TPH (EPA 8015 Mod. Diesel)	BTEX (EPA 8020/602)	Volatile Organics (EPA 8240)	~~Test for Disposal~~ 5520 E&F	Combination TPH 8015 & BTEX 8020	RCI	8270	~~Asbestos~~ STLC CAM 17	~~Container Size~~ STLC/Pb	Preparation Used	Composite Y/N	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
SP-4E	7/2/93		X			1	X			X	X		X	X	X	X		Y	Soil/Spoils	9307080-03A Composite
SP-4F	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	-03B
SP-4G	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	~~-03~~ -03C
SP-4H	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	-03D
SP-6A	↓		X			1	↓			↓	↓		↓	↓	↓	↓		Y	Soil/Spoils	-04A Composite
SP-6B	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	-04B
SP-6C	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	-04C
SP-6D	↓		↓			↓	↓			↓	↓		↓	↓	↓	↓		↓	↓	-04D

Relinquished By (signature)	Printed Name	Date / Time	Received (signature)	Printed Name	Date / Time
Charles Melancon	Charles Melancon	Date: 7-2-93 Time: 12:30	M. Doden	M Doden	Date: 7/2/93 Time: 3:55
M. Doden	M. Doden	Date: 7/2/93 Time: 16:15	[signature]	K HOPKIN	Date: 7/2/93 Time: 16:15
[signature]	KW HOPKIN	Date: 7-2-93 Time: 1630	[signature] #84	BECA Kim	Date: 7-2-93 Time: 1630

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev. 1/15/93

Shell Oil Chain of Custody

Rec: [signature] P. HUFANO 7-2-93/1830

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: PEG
REC. BY (PRINT): JM

MASTER LOG NO. / PAGE: 9307080
DATE OF LOG-IN: 7-2-93

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
1. Custody Seal(s): Present / ~~Absent~~ Intact / Broken*	01	A	SP-5A	core	S	7/2	
2. Custody Seal Nos.: —		B	-5B				
		C	-5C				
3. Chain-of-Custody Records: (Present) / Absent*		D	-5D				
	02	A	-5E				
		B	-5F				
4. Traffic Reports or Packing List: Present / ~~Absent~~		C	-5G				
		D	-5H				
	03	A	-4E				
5. Airbill: Airbill / Sticker Present / ~~Absent~~		B	-4F				
		C	-4G				
		D	-4H				
6. Airbill No.: —	04	A	-6A				
		B	-6B				
7. Sample Tags: (Present) / Absent* Sample Tag Nos.: (Listed) / Not Listed on Chain-of-Custody		C	-6C				
		D	-6D				
8. Sample Condition: (Intact)/Broken*/Leaking*							
9. Does information on custody reports, traffic reports and sample tags agree? (Yes) / No*							
10. Proper Preservatives Used: (Yes) / No*							
11. Date Rec. at Lab: 7-2-93							
12. Time Rec. at Lab: 17:30							

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

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Project: 305-94.01/Shell, Castro Valley

Enclosed are the results from 6 soil samples received at Sequoia Analytical on July 12,1993. The requested analyses are listed below:

3G49501	Soil, LWW-3, 12'	7/12/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3G49502	Soil, LWW-4, 12'	7/12/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3G49503	Soil, EF-17, 15'	7/12/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3G49504	Soil, EF-18, 15'	7/12/93	EPA 3550/8015 EPA 5030/8015/8020 SM 5520 E&F (Gravimetric)
3G49505	Soil, SP-7A,B,C,D comp	7/12/93	Ignitability, Reactivity & Corrosivity STLC Metals EPA 5030/8015 EPA 8240 EPA 8270 SM 5520 E&F (Gravimetric)
3G49509	Soil, SP-7E,F,G,H comp	7/12/93	Ignitability, Reactivity & Corrosivity STLC Metals EPA 5030/8015 EPA 8240 EPA 8270 SM 5520 E&F (Gravimetric)

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 12, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jul 12, 1993
San Jose, CA 95110	Analysis Method:	EPA 3550/8015	Reported:	Jul 14, 1993
Attention: Mike Hurd	First Sample #:	3G49501		

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 3G49501 LWW-3, 12'	Sample I.D. 3G49502 LWW-4, 12'	Sample I.D. 3G49503 EF-17, 15'	Sample I.D. 3G49504 EF-18, 15'
Extractable Hydrocarbons	1.0	53	N.D.	N.D.	N.D.
Chromatogram Pattern:		Non-diesel mix < C15	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	1.0	1.0
Date Extracted:	7/12/93	7/12/93	7/12/93	7/12/93
Date Analyzed:	7/13/93	7/13/93	7/13/93	7/13/93
Instrument Identification:	GCHP-5 INJ. A	GCHP-5 INJ. A	GCHP-5 INJ. A	GCHP-5 INJ. A

Extractable Hydrocarbons are quantitated against a fresh diesel standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL
680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 12, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jul 12, 1993
San Jose, CA 95110	Analysis Method:	EPA 5030/8015/8020	Reported:	Jul 14, 1993
Attention: Mike Hurd	First Sample #:	3G49501		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX DISTINCTION

Analyte	Reporting Limit mg/kg	Sample I.D. 3G49501 LWW-3, 12'	Sample I.D. 3G49502 LWW-4, 12'	Sample I.D. 3G49503 EF-17, 15'	Sample I.D. 3G49504 EF-18, 15'
Purgeable Hydrocarbons	1.0	190	N.D.	N.D.	N.D.
Benzene	0.0050	0.72	0.014	0.015	0.0060
Toluene	0.0050	4.6	0.073	0.10	0.083
Ethyl Benzene	0.0050	4.3	N.D.	0.0080	0.0060
Total Xylenes	0.0050	26	0.011	0.028	0.030
Chromatogram Pattern:		Gas	--	--	--

Quality Control Data

Report Limit Multiplication Factor:	25	1.0	1.0	1.0
Date Analyzed:	7/12/93	7/12/93	7/12/93	7/12/93
Instrument Identification:	GCHP-18	GCHP-18	GCHP-18	GCHP-18
Surrogate Recovery, %: (QC Limits = 70-130%)	152*	106	107	105

*Coelution confirmed

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 12, 1993
2025 Gateway Place, Suite 440	Sample Matrix:	Soil	Received:	Jul 12, 1993
San Jose, CA 95110	Analysis Method:	EPA 5030/8015	Reported:	Jul 14, 1993
Attention: Mike Hurd	First Sample #:	3G49505		

TOTAL PURGEABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 3G49505 SP-7A,B,C,D comp	Sample I.D. 3G49509 SP-7E,F, G,H comp
Purgeable Hydrocarbons	1.0	100	200
Chromatogram Pattern:		Gas + Non-gas mix C9 - C12	Gas+Non-gas C9 - C12

Quality Control Data

Report Limit Multiplication Factor:	10	20
Date Analyzed:	7/13/93	7/13/93
Instrument Identification:	GCHP-18	GCHP-18
Surrogate Recovery: (QC Limits = 70-130%)	162*	118

*Coelution confirmed

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard.
Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 12, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-7A,B,C,D comp	Received:	Jul 12, 1993
San Jose, CA 95110	Analysis Method:	EPA 8240	Analyzed:	Jul 13, 1993
Attention: Mike Hurd	Lab Number:	3G49505	Reported:	Jul 14, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	900	N.D.
Benzene	180	350
Bromodichloromethane	180	N.D.
Bromoform	180	N.D.
Bromomethane	180	N.D.
2-Butanone	900	N.D.
Carbon disulfide	180	N.D.
Carbon tetrachloride	180	N.D.
Chlorobenzene	180	N.D.
Chloroethane	180	N.D.
2-Chloroethyl vinyl ether	900	N.D.
Chloroform	180	N.D.
Chloromethane	180	N.D.
Dibromochloromethane	180	N.D.
1,1-Dichloroethane	180	N.D.
1,2-Dichloroethane	180	N.D.
1,1-Dichloroethene	180	N.D.
cis-1,2-Dichloroethene	180	N.D.
trans-1,2-Dichloroethene	180	N.D.
1,2-Dichloropropane	180	N.D.
cis-1,3-Dichloropropene	180	N.D.
trans-1,3-Dichloropropene	180	N.D.
Ethylbenzene	180	2,700
2-Hexanone	900	N.D.
Methylene chloride	450	N.D.
4-Methyl-2-pentanone	900	N.D.
Styrene	180	N.D.
1,1,2,2-Tetrachloroethane	180	N.D.
Tetrachloroethene	180	N.D.
Toluene	180	2,700
1,1,1-Trichloroethane	180	N.D.
1,1,2-Trichloroethane	180	N.D.
Trichloroethene	180	N.D.
Trichlorofluoromethane	180	N.D.
Vinyl acetate	180	N.D.
Vinyl chloride	180	N.D.
Total Xylenes	180	18,000

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 12, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-7E,F,G,H comp	Received:	Jul 12, 1993
San Jose, CA 95110	Analysis Method:	EPA 8240	Analyzed:	Jul 13, 1993
Attention: Mike Hurd	Lab Number:	3G49509	Reported:	Jul 14, 1993

VOLATILE ORGANICS by GC/MS (EPA 8240)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acetone	1,700	N.D.
Benzene	330	690
Bromodichloromethane	330	N.D.
Bromoform	330	N.D.
Bromomethane	330	N.D.
2-Butanone	1,700	N.D.
Carbon disulfide	330	N.D.
Carbon tetrachloride	330	N.D.
Chlorobenzene	330	N.D.
Chloroethane	330	N.D.
2-Chloroethyl vinyl ether	1,700	N.D.
Chloroform	330	N.D.
Chloromethane	330	N.D.
Dibromochloromethane	330	N.D.
1,1-Dichloroethane	330	N.D.
1,2-Dichloroethane	330	N.D.
1,1-Dichloroethene	330	N.D.
cis-1,2-Dichloroethene	330	N.D.
trans-1,2-Dichloroethene	330	N.D.
1,2-Dichloropropane	330	N.D.
cis-1,3-Dichloropropene	330	N.D.
trans-1,3-Dichloropropene	330	N.D.
Ethylbenzene	330	3,400
2-Hexanone	1,700	N.D.
Methylene chloride	830	N.D.
4-Methyl-2-pentanone	1,700	N.D.
Styrene	330	N.D.
1,1,2,2-Tetrachloroethane	330	N.D.
Tetrachloroethene	330	N.D.
Toluene	330	880
1,1,1-Trichloroethane	330	N.D.
1,1,2-Trichloroethane	330	N.D.
Trichloroethene	330	N.D.
Trichlorofluoromethane	330	N.D.
Vinyl acetate	330	N.D.
Vinyl chloride	330	N.D.
Total Xylenes	330	20,000

Analytes reported as N.D. were not present above the stated limit of detection. Because matrix effects and/or other factors required additional sample dilution, detection limits for this sample have been raised.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 12, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-7A,B,C,D comp	Received:	Jul 12, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jul 12, 1993
Attention: Mike Hurd	Lab Number:	3G49505	Analyzed:	Jul 13, 1993
			Reported:	Jul 14, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 12, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-7A,B,C,D comp	Received:	Jul 12, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jul 12, 1993
Attention: Mike Hurd	Lab Number:	3G49505	Analyzed:	Jul 13, 1993
			Reported:	Jul 14, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	640
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	590
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 12, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-7E,F,G,H comp	Received:	Jul 12, 1993
San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jul 12, 1993
Attention: Mike Hurd	Lab Number:	3G49509	Analyzed:	Jul 13, 1993
			Reported:	Jul 14, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Acenaphthene	100	N.D.
Acenaphthylene	100	N.D.
Anthracene	100	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	100	N.D.
Benzo(b)fluoranthene	100	N.D.
Benzo(k)fluoranthene	100	N.D.
Benzo(g,h,i)perylene	100	N.D.
Benzo(a)pyrene	100	N.D.
Benzyl alcohol	100	N.D.
Bis(2-chloroethoxy)methane	100	N.D.
Bis(2-chloroethyl)ether	100	N.D.
Bis(2-chloroisopropyl)ether	100	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	100	N.D.
Butyl benzyl phthalate	100	N.D.
4-Chloroaniline	100	N.D.
2-Chloronaphthalene	100	N.D.
4-Chloro-3-methylphenol	100	N.D.
2-Chlorophenol	100	N.D.
4-Chlorophenyl phenyl ether	100	N.D.
Chrysene	100	N.D.
Dibenz(a,h)anthracene	100	N.D.
Dibenzofuran	100	N.D.
Di-N-butyl phthalate	500	N.D.
1,3-Dichlorobenzene	100	N.D.
1,4-Dichlorobenzene	100	N.D.
1,2-Dichlorobenzene	100	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	100	N.D.
Diethyl phthalate	100	N.D.
2,4-Dimethylphenol	100	N.D.
Dimethyl phthalate	100	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.
2,4-Dinitrotoluene	100	N.D.
2,6-Dinitrotoluene	100	N.D.

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San Jose, CA 95110	Analysis Method:	EPA 8270	Extracted:	Jul 12, 1993
Attention: Mike Hurd	Lab Number:	3G49509	Analyzed:	Jul 13, 1993
			Reported:	Jul 14, 1993

SEMI-VOLATILE ORGANICS by GC/MS (EPA 8270)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Di-N-octyl phthalate	100	N.D.
Fluoranthene	100	N.D.
Fluorene	100	N.D.
Hexachlorobenzene	100	N.D.
Hexachlorobutadiene	100	N.D.
Hexachlorocyclopentadiene	100	N.D.
Hexachloroethane	100	N.D.
Indeno(1,2,3-cd)pyrene	100	N.D.
Isophorone	100	N.D.
2-Methylnaphthalene	100	540
2-Methylphenol	100	N.D.
4-Methylphenol	100	N.D.
Naphthalene	100	540
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	100	N.D.
2-Nitrophenol	100	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	100	N.D.
N-Nitroso-di-N-propylamine	100	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	100	N.D.
Phenol	100	N.D.
Pyrene	100	N.D.
1,2,4-Trichlorobenzene	100	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	100	N.D.

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 12, 1993
2025 Gateway Place, Suite 440	Matrix Descript:	Soil	Received:	Jul 12, 1993
San Jose, CA 95110	Analysis Method:	SM 5520 E&F (Gravimetric)		
Attention: Mike Hurd	First Sample #:	3G49501	Analyzed:	Jul 8, 1993
			Reported:	Jul 14, 1993

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

Sample Number	Sample Description	Oil & Grease mg/kg
3G49501	LWW-3, 12'	N.D.
3G49502	LWW-4, 12'	N.D.
3G49503	EF-17, 15'	N.D.
3G49504	EF-18, 15'	N.D.
3G49505	SP-7A,B,C,D comp	N.D.
3G49509	SP-7E,F,G,H comp	N.D.

Detection Limits:	**50**

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID:	305-94.01/Shell, Castro Valley	Sampled:	Jul 12, 1993
2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-7A,B,C,D comp	Received:	Jul 12, 1993
San Jose, CA 95110			Analyzed:	Jul 13, 1993
Attention: Mike Hurd	Lab Number:	3G49505	Reported:	Jul 14, 1993

CORROSIVITY, IGNITABILITY, AND REACTIVITY

Analyte	Detection Limit	Sample Results
Corrosivity:		
pH	N.A.	8.1
Ignitability:		
Flashpoint (Shell Open Cup)	N.A.	Negative
Reactivity:		
Sulfide, mg/kg	13	N.D.
Cyanide, mg/kg	0.50	N.D.
Reaction with water	N.A.	Negative

Analytes reported as N.D. were not present above the stated limit of detection.

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2025 Gateway Place, Suite 440	Sample Descript:	Soil, SP-7E,F,G,H comp	Received:	Jul 12, 1993
San Jose, CA 95110			Analyzed:	Jul 13, 1993
Attention: Mike Hurd	Lab Number:	3G49509	Reported:	Jul 14, 1993

CORROSIVITY, IGNITABILITY, AND REACTIVITY

Analyte	Detection Limit	Sample Results
Corrosivity:		
pH	N.A.	8.1
Ignitability:		
Flashpoint (Shell Open Cup)	N.A.	Negative
Reactivity:		
Sulfide, mg/kg	13	N.D.
Cyanide, mg/kg	0.50	N.D.
Reaction with water	N.A.	Negative

Analytes reported as N.D. were not present above the stated limit of detection.

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Pacific Environmental Group	Client Project ID: 305-94.01/Shell, Castro Valley	Sampled:	Jul 12, 1993
2025 Gateway Place, Suite 440	Sample Descript: Soil, SP-7A,B,C,D comp	Received:	Jul 12, 1993
San Jose, CA 95110		Extracted:	Jul 15, 1993
Attention: Mike Hurd	Lab Number: 3G49505	Reported:	Jul 16, 1993

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

	Soluble Threshold Limit Concentration (Waste Extraction Test)			Total Threshold Limit Concentration		
Analyte	**STLC Max. Limit** (mg/L)	**Detection Limit** (mg/L)	**Analysis Result** (mg/L)	**TTLC Max. Limit** (mg/kg)	**Detection Limit** (mg/kg)	**Analysis Result** (mg/kg)
Antimony	15	0.10	N.D.	500	5.0	-
Arsenic	5.0	0.10	N.D.	500	5.0	-
Barium	100	0.10	8.6	10,000	5.0	-
Beryllium	0.75	0.010	N.D.	75	0.50	-
Cadmium	1.0	0.010	N.D.	100	0.50	-
Chromium (VI)	5.0	0.0050	-	500	0.050	-
Chromium	560	0.010	0.047	2,500	0.50	-
Cobalt	80	0.050	0.39	8,000	2.5	-
Copper	25	0.010	0.28	2,500	0.50	-
Lead	5.0	0.10	0.12	1,000	5.0	-
Mercury	0.20	0.00040	N.D.	20	0.010	-
Molybdenum	350	0.050	N.D.	3,500	2.5	-
Nickel	20	0.050	0.28	2,000	2.5	-
Selenium	1.0	0.025*	N.D.	100	5.0	-
Silver	5.0	0.010	N.D.	500	0.50	-
Thallium	7.0	0.10	N.D.	700	5.0	-
Vanadium	24	0.050	0.28	2,400	2.5	-
Zinc	250	0.010	0.20	5,000	0.50	-
Asbestos	-	10	-	10,000	100	-
Fluoride	180	0.10	-	18,000	1.0	-

TTLC results are reported as mg/kg of wet weight. Asbestos results are reported as fibers/g.
Analytes reported as N.D. were not present above the stated limit of detection.

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Please Note:
*Detection Limit raised due to matrix interferences.

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2025 Gateway Place, Suite 440	Sample Descript: Soil, SP-7E,F,G,H comp	Received: Jul 12, 1993
San Jose, CA 95110		Extracted: Jul 15, 1993
Attention: Mike Hurd	Lab Number: 3G49509	Reported: Jul 16, 1993

INORGANIC PERSISTENT AND BIOACCUMULATIVE TOXIC SUBSTANCES

	Soluble Threshold Limit Concentration (Waste Extraction Test)			Total Threshold Limit Concentration		
Analyte	STLC Max. Limit (mg/L)	Detection Limit (mg/L)	Analysis Result (mg/L)	TTLC Max. Limit (mg/kg)	Detection Limit (mg/kg)	Analysis Result (mg/kg)
Antimony	15	0.10	N.D.	500	5.0	-
Arsenic	5.0	0.10	N.D.	500	5.0	-
Barium	100	0.10	8.8	10,000	5.0	-
Beryllium	0.75	0.010	N.D.	75	0.50	-
Cadmium	1.0	0.010	N.D.	100	0.50	-
Chromium (VI)	5.0	0.0050	-	500	0.050	-
Chromium	560	0.010	0.13	2,500	0.50	-
Cobalt	80	0.050	0.33	8,000	2.5	-
Copper	25	0.010	0.34	2,500	0.50	-
Lead	5.0	0.10	0.11	1,000	5.0	-
Mercury	0.20	0.00040	0.00067	20	0.010	-
Molybdenum	350	0.050	N.D.	3,500	2.5	-
Nickel	20	0.050	0.39	2,000	2.5	-
Selenium	1.0	0.025*	N.D.	100	5.0	-
Silver	5.0	0.010	N.D.	500	0.50	-
Thallium	7.0	0.10	N.D.	700	5.0	-
Vanadium	24	0.050	0.43	2,400	2.5	-
Zinc	250	0.010	0.33	5,000	0.50	-
Asbestos	-	10	-	10,000	100	-
Fluoride	180	0.10	-	18,000	1.0	-

TTLC results are reported as mg/kg of wet weight. Asbestos results are reported as fibers/g.
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2025 Gateway Place, Suite 440
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Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3G49501-04

Reported: Jul 16, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Diesel

Method:	EPA 8015
Analyst:	C. Lee
Conc. Spiked:	15
Units:	mg/kg
LCS Batch#:	DBLK070693
Date Prepared:	7/6/93
Date Analyzed:	7/7/93
Instrument I.D.#:	GCHP-5 INJ. A
LCS % Recovery:	67
Control Limits:	50-150

MS/MSD Batch #:	3G08501
Date Prepared:	7/6/93
Date Analyzed:	7/7/93
Instrument I.D.#:	GCHP-5 INJ. A
Matrix Spike % Recovery:	0.0*
Matrix Spike Duplicate % Recovery:	0.0*
Relative % Difference:	0.0*

*Matrix effect

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Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3G49501-06

Reported: Jul 16, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl-Benzene	Xylenes
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler
Conc. Spiked:	0.20	0.20	0.20	0.60
Units:	mg/kg	mg/kg	mg/kg	mg/kg
LCS Batch#:	GBLK071293	GBLK071293	GBLK071293	GBLK071293
Date Prepared:	7/12/93	7/12/93	7/12/93	7/12/93
Date Analyzed:	7/12/93	7/12/93	7/12/93	7/12/93
Instrument I.D.#:	GCHP-1	GCHP-1	GCHP-1	GCHP-1
LCS % Recovery:	105	100	110	110
Control Limits:	60-140	60-140	60-140	60-140
MS/MSD Batch #:	3G17011	3G17011	3G17011	3G17011
Date Prepared:	7/12/93	7/12/93	7/12/93	7/12/93
Date Analyzed:	7/12/93	7/12/93	7/12/93	7/12/93
Instrument I.D.#:	GCHP-1	GCHP-1	GCHP-1	GCHP-1
Matrix Spike % Recovery:	100	100	105	107
Matrix Spike Duplicate % Recovery:	100	100	105	102
Relative % Difference:	0.0	0.0	0.0	4.8

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Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3G49505-06

Reported: Jul 16, 1993

QUALITY CONTROL DATA REPORT

ANALYTE:	1,1-Dichloro-ethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
Method:	EPA 8240	EPA 8240	EPA 8240	EPA 8240	EPA 8240
Analyst:	S. Hoffmann	S. Hoffmann	S. Hoffmann	S. Hoffmann	S. Hoffmann
Conc. Spiked:	2500	2500	2500	2500	2500
Units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
LCS Batch#:	VBLK071293	VBLK071293	VBLK071293	VBLK071293	VBLK071293
Date Prepared:	7/12/93	7/12/93	7/12/93	7/12/93	7/12/93
Date Analyzed:	7/12/93	7/12/93	7/12/93	7/12/93	7/12/93
Instrument I.D.#:	MSF-3	MSF-3	MSF-3	MSF-3	MSF-3
LCS % Recovery:	72	72	76	76	76
Control Limits:	59-172	62-137	66-142	59-139	60-133
MS/MSD Batch #:	3G08501	3G08501	3G08501	3G08501	3G08501
Date Prepared:	7/12/93	7/12/93	7/12/93	7/12/93	7/12/93
Date Analyzed:	7/12/93	7/12/93	7/12/93	7/12/93	7/12/93
Instrument I.D.#:	MSF-3	MSF-3	MSF-3	MSF-3	MSF-3
Matrix Spike % Recovery:	80	84	84	88	88
Matrix Spike Duplicate % Recovery:	88	92	96	96	100
Relative % Difference:	9.5	9.1	13	8.7	13

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Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3G49505-06

Reported: Jul 16, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Phenol	2-Chlorophenol	1,4-Dichloro-benzene	N-Nitroso-Di-N-propylamine	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenol
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	G. Meyer	G. Meyer	G. Meyer	G. Meyer	G. Meyer	G. Meyer
Conc. Spiked:	100	100	50	50	50	100
Units:	ng	ng	ng	ng	ng	ng
LCS Batch#:	BLK071293	BLK071293	BLK071293	BLK071293	BLK071293	BLK071293
Date Prepared:	7/12/93	7/12/93	7/12/93	7/12/93	7/12/93	7/12/93
Date Analyzed:	7/13/93	7/13/93	7/13/93	7/13/93	7/13/93	7/13/93
Instrument I.D.#:	F4	F4	F4	F4	F4	F4
LCS % Recovery:	85	86	76	98	84	79
Control Limits:	26-90	25-102	28-104	41-126	38-107	26-103
MS/MSD Batch #:	3G08501	3G08501	3G08501	3G08501	3G08501	3G08501
Date Prepared:	7/12/93	7/12/93	7/12/93	7/12/93	7/12/93	7/12/93
Date Analyzed:	7/13/93	7/13/93	7/13/93	7/13/93	7/13/93	7/13/93
Instrument I.D.#:	F4	F4	F4	F4	F4	F4
Matrix Spike % Recovery:	76	72	66	88	72	75
Matrix Spike Duplicate % Recovery:	60	65	56	70	64	61
Relative % Difference:	24	10	16	23	12	21

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Matrix: Soil

QC Sample Group: 3G49505-06

Reported: Jul 16, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Acenaphthene	4-Nitrophenol	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	G. Meyer	G. Meyer	G. Meyer	G. Meyer	G. Meyer
Conc. Spiked:	50	100	50	100	50
Units:	ng	ng	ng	ng	ng
LCS Batch#:	BLK071293	BLK071293	BLK071293	BLK071293	BLK071293
Date Prepared:	7/12/93	7/12/93	7/12/93	7/12/93	7/12/93
Date Analyzed:	7/13/93	7/13/93	7/13/93	7/13/93	7/13/93
Instrument I.D.#:	F4	F4	F4	F4	F4
LCS % Recovery:	82	83	78	104	104
Control Limits:	31-137	11-114	28-89	17-109	35-142
MS/MSD Batch #:	3G08501	3G08501	3G08501	3G08501	3G08501
Date Prepared:	7/12/93	7/12/93	7/12/93	7/12/93	7/12/93
Date Analyzed:	7/13/93	7/13/93	7/13/93	7/13/93	7/13/93
Instrument I.D.#:	F4	F4	F4	F4	F4
Matrix Spike % Recovery:	70	79	70	107	86
Matrix Spike Duplicate % Recovery:	60	76	60	94	74
Relative % Difference:	15	3.9	15	13	15

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Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3G49501-06

Reported: Jul 16, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Total Recoverable Petroleum Hydrocarbons
Method:	SM 5520EF
Analyst:	M. Shkidt
Conc. Spiked:	1000
Units:	mg/kg
LCS Batch#:	BLK070893
Date Prepared:	7/8/93
Date Analyzed:	7/8/93
Instrument I.D.#:	N.A.
LCS % Recovery:	82
Control Limits:	70-110
MS/MSD Batch #:	3FD6612
Date Prepared:	7/8/93
Date Analyzed:	7/8/93
Instrument I.D.#:	N.A.
Matrix Spike % Recovery:	94
Matrix Spike Duplicate % Recovery:	91
Relative % Difference:	3.2

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SEQUOIA ANALYTICAL

680 Chesapeake Drive • Redwood City, CA 94063
(415) 364-9600 • FAX (415) 364-9233

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Mike Hurd

Client Project ID: 305-94.01/Shell, Castro Valley
Matrix: Soil
QC Sample Group: 3G49505-06

Reported: Jul 16, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	pH	Reactive Cyanide	Ignitability	Reactive Sulfide
Method:	EPA 9045	SW 846	Open Cup	EPA 9030
Analyst:	Y. Arteaga	A. Savva	K. Follett	K. Follett
Units:	pH units	mg/kg	N.A.	mg/L
Date:	7/13/93	7/13/93	7/13/93	7/13/93
Sample #:	3G49509-12 comp	3G49505-08 comp comp	3G49505-08 comp	3G49505-08 comp
Sample Concentration:	8.1	N.D.	Negative	N.D.
Sample Duplicate Concentration:	8.1	N.D.	Negative	N.D.
% RPD:	0.0	0.0	0.0	0.0
Control Limits:	0-30	±20	N.A.	±20

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Eileen A. Manning
Project Manager

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Matrix: Liquid
QC Sample Group: 3G49505, 09

Reported: Jul 16, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Beryllium	Cadmium	Chromium	Nickel
Method:	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7
Analyst:	M. Mistry	M. Mistry	M. Mistry	M. Mistry
Conc. Spiked:	1.0	1.0	1.0	1.0
Units:	mg/L	mg/L	mg/L	mg/L
LCS Batch#:	BLK071593	BLK071593	BLK071593	BLK071593
Date Prepared:	7/15/93	7/15/93	7/15/93	7/15/93
Date Analyzed:	7/16/93	7/16/93	7/16/93	7/16/93
Instrument I.D.#:	MTJA-2	MTJA-2	MTJA-2	MTJA-2
LCS % Recovery:	97	99	94	100
Control Limits:	75-125	75-125	75-125	75-125
MS/MSD Batch #:	3G21903	3G21903	3G21903	3G21903
Date Prepared:	7/15/93	7/15/93	7/15/93	7/15/93
Date Analyzed:	7/16/93	7/16/93	7/16/93	7/16/93
Instrument I.D.#:	MTJA-2	MTJA-2	MTJA-2	MTJA-2
Matrix Spike % Recovery:	95	97	92	95
Matrix Spike Duplicate % Recovery:	96	99	94	98
Relative % Difference:	1.0	2.0	2.2	3.1

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

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Matrix: Liquid
QC Sample Group: 3G49505, 09

Reported: Jul 16, 1993

QUALITY CONTROL DATA REPORT

ANALYTE	Mercury	Selenium
Method:	EPA 245.1	EPA 270.2
Analyst:	A. McDonald	F. Contreras
Conc. Spiked:	0.0020	50
Units:	mg/L	µg/L
LCS Batch#:	BLK071693	BLK071593
Date Prepared:	7/16/93	7/15/93
Date Analyzed:	7/16/93	7/16/93
Instrument I.D.#:	MPE-2	MTJA-1
LCS % Recovery:	102	92
Control Limits:	90-110	75-125
MS/MSD Batch #:	3G35703	BLK071593
Date Prepared:	7/16/93	7/15/93
Date Analyzed:	7/16/93	7/16/93
Instrument I.D.#:	MPE-2	MTJA-1
Matrix Spike % Recovery:	80	50
Matrix Spike Duplicate % Recovery:	82	26
Relative % Difference:	2.5	63

SEQUOIA ANALYTICAL

Eileen A. Manning
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation and analytical methods employed for the samples. The LCS % recovery data is used for validation of sample batch results. Due to matrix effects, the QC limits for MS/MSD's are advisory only and are not used to accept or reject batch results.

CLIENT NAME: [redacted]

REC. BY (PRINT): [redacted]

MASTER LOG NO. / PAGE: 9307495

DATE OF LOG-IN: 7-12-93

CIRCLE THE APPROPRIATE RESPONSE		LAB SAMPLE #	DASH #	CLIENT IDENTIFICATION	CONTAINER DESCRIPTION	SAMPLE MATRIX	DATE SAMP.	REMARKS: CONDITION (ETC)
1. Custody Seal(s):	Present / (Absent) Intact / Broken*	1	A	LWW-3, 12	core	S	7/12	
2. Custody Seal Nos.:		2		LWW-4, 12				
3. Chain-of-Custody Records:	(Present) / Absent*	3		EF-17, 15				
4. Traffic Reports or Packing List:	Present / (Absent)	4		EF-18, 15				
5. Airbill:	Airbill / Sticker Present / (Absent)	5		SP-7A				comp
6. Airbill No.:		6		B				
7. Sample Tags:	(Present) / Absent*	7		C				
Sample Tag Nos.:	(Listed) / Not Listed on Chain-of-Custody	8		D				comp
8. Sample Condition:	(Intact) Broken* / Leaking*	9		E				
9. Does information on custody reports, traffic reports and sample tags agree?	(Yes) / No*	10		F				
10. Proper Preservatives Used:	(Yes) / No*	11		G				
11. Date Rec. at Lab:	7/12/93	12		H				
12. Time Rec. at Lab:	1635							

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

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 7-12-93
Page 1 of 2

Site Address: 2724 Castro Valley Blvd, Castro Valley
WIC#: 204-1381-0407
Shell Engineer: Randy Orlowski
Phone No.: 714 520-3395
Fax #: 520-3312
Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFORNIA 95110
Consultant Contact: Mike Hurd
Phone No.: 408 441-7500
Fax #: 441-7539
Comments:
Sampled by: Charles Melancon
Printed Name: Charles Melancon

LAB: Sequoia

CHECK ONE (1) BOX ONLY | CT/DT
- G.W. Monitoring ☐ 4461
- Site Investigation ☒ 4441
- Soil Classify/Disposal ☐ 4442
- Water Classify/Disposal ☐ 4443
- Soil/Air Rem. or Sys. O & M ☐ 4452
- Water Rem. or Sys. O & M ☐ 4453
- Other ☐

TURN AROUND TIME
- 24 hours ☒
- 48 hours ☐
- 15 days ☐ (Normal)
- Other ☐ _____

NOTE: Notify Lab as soon as Possible of 24/48 hrs. TAT

UST AGENCY: _____

Analysis Required: TPH (EPA 8015 Mod. Gas); TPH (EPA 8015 Mod. Diesel); BTEX (EPA 8020/602); Volatile Organics (EPA 8240); Test for Disposal; Combination TPH 8015 & BTEX 8020; 5520 E&F; Asbestos; Container Size; Preparation Used; Composite Y/N

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
LWW-3, 12'	7/12/93		X			1	UST/Soil	9307495
LWW-4, 12'						1		
EF-17, 15'						1		
EF-18, 15'						1		

Relinquished By (signature)	Printed Name	Date	Time	Received (signature)	Printed Name	Date	Time
Charles Melancon	Charles Melancon	7-12-93	3:00	M Doden	M Doden	7/12/93	1530
M Doden	M Doden	7/12/93	1639				
				Laura Arnold	L. ARNOLD	7/12/93	1635

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev. 7/17/91

Shell Oil Co. Chain of Custody

SHELL OIL COMPANY 305-94.01
RETAIL ENVIRONMENTAL ENGINEERING - WEST

CHAIN OF CUSTODY RECORD
Serial No: _____

Date: 7-12-93
Page 2 of 2

Site Address: 2724 Castro Valley Blvd, Castro Valley
WIC#: 204-1381-0407
Shell Engineer: Randy Orlowski
Phone No.: 714 520-3395 Fax #: 520-3312
Consultant Name & Address: PACIFIC ENVIRONMENTAL GROUP, INC. 2025 GATEWAY PLACE, Ste. 440 SAN JOSE, CALIFORNIA 95110
Consultant Contact: Mike Hurd
Phone No.: 408 441-7500 Fax #: 441-7539
Comments:
Sampled by: Charles Melancon
Printed Name: Charles Melancon

LAB: Sequoia

CHECK ONE (1) BOX ONLY		CT/DT
G.W. Monitoring	☐	4461
Site Investigation	☐	4441
Soil Classify/Disposal	☒	4442
Water Classify/Disposal	☐	4443
Soil/Air Rem. or Sys. O & M	☐	4452
Water Rem. or Sys. O & M	☐	4453
Other	☐	

TURN AROUND TIME: 24 hours ☒ CM; 48 hours ☒; 15 days ☐ (Normal); Other ☐ ____

NOTE: Notify Lab as soon as Possible of 24/48 hrs TAT

930795

UST AGENCY: _____

Analysis Required: TPH (EPA 8015 Mod. Gas); TPH (EPA 8015 Mod. Diesel); BTEX (EPA 8020/602); Volatile Organics (EPA 8240); Test for Disposal 5520 E&F; Combination TPH 8015 & BTEX 8020; RCI; 8270; Asbestos STLC CAM 17; Container size STLC/TCLP; Preparation Used; Composite Y/N

Sample ID	Date	Sludge	Soil	Water	Air	No. of conts.	MATERIAL DESCRIPTION	SAMPLE CONDITION/ COMMENTS
SP-7A	7/12/93		X			1	UST/Spoils	Composite
SP-7B						1		
SP-7C						1		
SP-7D						1		
SP-7E			X			1	UST/Spoils	Composite
SP-7F						1		
SP-7G						1		
SP-7H						1		

	Printed Name	Date/Time		Printed Name	Date/Time
Relinquished By (signature): Charles Melancon	Charles Melancon	Date: 7-12-93 Time: 3:09	Received (signature): M Doden	M Doden	Date: 7/12/93 Time: 1530
Relinquished By (signature): M Doden	M Doden	Date: 7/12/93 Time: 1630	Received (signature):		Date: Time:
Relinquished By (signature):		Date: Time:	Received (signature): Laura Arnold	L. Arnold	Date: 7/12/93 Time: 1635

THE LABORATORY MUST PROVIDE A COPY OF THIS CHAIN-OF-CUSTODY WITH INVOICE AND RESULTS

Rev. 7/17/93 — Shell Oil Chain of Custody

ATTACHMENT C

SUMMARY OF COMPACTION TESTING

SEIDELMAN ASSOCIATES, INC.

SOILS AND FOUNDATION ENGINEERS · ENGINEERING GEOLOGISTS · CIVIL ENGINEERS · SURVEYORS
1415 Oakland Boulevard, Suite 102 • Walnut Creek, CA 94596 • (510) 930-0646 • FAX (510) 930-0828

October 25, 1993

Mr. Michael Hurd
Pacific Environmental Group
2025 Gateway Place, Suite #440
San Jose, California 95110

Dear Mr. Hurd:

The following is a summary of compaction testing dates and results for the Shell station on 2724 Castro Valley Boulevard in Castro Valley, California. The station is situated on the corner of Castro Valley Boulevard to the south and Lake Chabot Road to the west. Material for the fill was imported to the site from the Dumbarton Quarry and consisted of 3/4" Class II A|B. The pit which was backfilled was in the far northeast corner of the site and was located precariously close to an existing structure which was also monitored for cracking or other settlement related to the excavation.

For the imported fill, the optimum compaction is 145 pounds per cubic foot (pcf) at a moisture content of 7.0%. This information is based off the compaction curves done by Dumbarton Quarry Associates and supplied by your firm dated September 1, 1993. The following table is a listing of the on-site compaction tests done by this office for the soils using an optimum moisture content of 7% and an optimum dry density of 145 pcf.

Elev. (feet)	Area	Date	Moisture Content (%)	Dry Density (pcf)	Relative Compaction (%)
1.5	West Center	9/2/93	5.7	127.25	88
1.5	East Center	9/2/93	7.2	125	86
2.5	East Center	9/2/93	8.7	127.25	88
3.5	Northeast Corner	9/2/93	6.8	125	86
3.5	Southeast Corner	9/2/93	5	126.25	87
3.5	East Center	9/2/93	7.7	124	86
5	Northeast Corner	9/3/93	7.8	130.75	90
5	Southeast Corner	9/3/93	7.2	128.75	89
6	North Center	9/3/93	8.2	134	92
6	Southeast Corner	9/3/93	7.8	131.25	91

Elev. (feet)	Area	Date	Moisture Content (%)	Dry Density (pcf)	Relative Compaction (%)
6	Northeast Corner	9/3/93	7.1	133	92
7	Northeast Corner	9/3/93	8.1	136	94
7	Southeast Corner	9/3/93	7.1	137.75	95
7	West Center	9/3/93	8.8	138.75	96
8	North Center	9/3/93	7.2	145	100
8	Southeast Corner	9/3/93	8.3	140.75	97
8	Southwest Corner	9/3/93	6.6	142.5	98
9	Northeast Corner	9/3/93	7.3	137.5	95
9	South Center	9/3/93	8.8	139.25	96
9	West Center	9/3/93	9.5	137	94
10	Northeast Corner	9/3/93	7.4	135	93
10	Southeast Corner	9/3/93	8.1	136.5	94
10	Southwest Corner	9/3/93	8.4	145.25	100
12	Northeast Corner	9/7/93	7.2	135.25	93
12	Southeast Corner	9/7/93	7.3	143.5	99
12	West Center	9/7/93	8.3	142.25	98
13	North Center	9/7/93	7.1	134	92
13	Southeast Corner	9/7/93	6.9	134.75	93
13	Southwest Corner	9/7/93	6.9	148.25	102
14	Northeast Corner	9/7/93	8	144	99
14	South Center	9/7/93	7.4	138.25	95
14	Northwest Corner	9/7/93	8	131.5	91
15	Northeast Corner	9/7/93	6.8	143.25	99
15	Southeast Corner	9/7/93	7.4	137.75	95
15	West Center	9/7/93	6.9	147.75	102

Elev. (feet)	Area	Date	Moisture Content (%)	Dry Density (pcf)	Relative Compaction (%)
16	North Center	9/7/93	7.4	131.25	91
16	Southeast Corner	9/7/93	7.5	132.5	91
16	Southwest Corner	9/7/93	6.9	140.75	97
17	Northeast Corner	9/7/93	6.5	133.75	92
17	South Center	9/7/93	8.3	136.25	94
17	Southwest Corner	9/7/93	7.9	133.5	92
18	North Center	9/7/93	7.8	131.25	91
18	East Center	9/7/93	7.6	141.75	98
19	Northeast Corner	9/8/93	6.4	135.75	94
19	Southeast Corner	9/8/93	8.4	140.25	97
19	Southwest Corner	9/8/93	8.1	135	93
20	North Center	9/8/93	6.7	126.5	87
20	East Center	9/8/93	8	137.5	95
20	Southwest Corner	9/8/93	8.6	137.25	95
21	Northeast Corner	9/8/93	8.1	138.75	96
21	Southeast Corner	9/8/93	7.1	127.5	88
21	Southwest Corner	9/8/93	6.7	145.75	101
22	North Center	9/8/93	6.7	137.75	95
22	East Center	9/8/93	7.2	132	91
22	Southwest Corner	9/8/93	7.7	136	94
23	Northeast Corner	9/8/93	5.4	147	101
23	East Center	9/8/93	6.9	138.5	96
23	Southeast Corner	9/8/93	6.1	135.75	94
23	Southwest Corner	9/8/93	6.6	139.75	96
24	North Center	9/9/93	4.7	134.75	93
24	Center	9/9/93	5.5	139.75	96
24	East Center	9/9/93	5.9	139.25	96

Elev. (feet)	Area	Date	Moisture Content (%)	Dry Density (pcf)	Relative Compaction (%)
26	Southwest Corner	9/10/93	6.4	136.25	94
27	Northeast Corner	9/10/93	7.2	132.5	91
27	East Center	9/10/93	7.6	134.75	93
27	Southwest Corner	9/10/93	8.2	137.75	95
28	Northeast Corner	9/10/93	6.6	136.5	94
28	Southeast Corner	9/10/93	7.5	133.5	92
28	Southwest Corner	9/10/93	6.6	139.75	96

All laboratory compaction testing was done using the ASTM D-1557 standard. All field compaction testing was performed using a nuclear gauge at a depth of 8" for 12" lifts at the dates indicated on the tables.

In addition to monitoring of the placement of the imported fill, our engineer on the site recorded events pertaining to activity of the excavation. At the start of fill placement on September 2, 1993, standing water was observed at the bottom of the excavation to a depth of approximately four feet. This water was removed and placed in a plastic-lined holding pond and the remaining 6 to 12 inches of sludge was also removed to be taken off-site at a later date. After this process, firm material was encountered and placement of the fill began immediately on top of this material to prevent groundwater from recollecting on the bottom of the excavation. Fill material at the greater depths was placed quickly to prevent water seepage from de-compacting the in-place lifts. A heavier compactor was brought in the following day (September 3) to better walk the lifts into place. All compaction was done using a static loader with no vibratory equipment.

On September 8, 1993, the steep north bank started to crack and collapse due to drying of the soils. This bank was of special concern for it was immediately adjacent to the existing structure to the north and could possibly undermine the foundation of the building. The owner was asked to monitor the situation in his building and asked to turn off an adjacent large air compressor which vibrated the floor near the excavation and could have aggravated the foundation situation. A buttress of fill material was placed against the side of the north wall of the excavation to further fortify the wall and prevent any undermining of the foundation. During this time, the air compressor had been left on by the building owner causing shaking of the ground in the area. No further cracking has been noted by the engineer or the owner until September 10 when grading contractor briefly turned on the vibratory machinery on the upper few feet of fill. The engineer immediately contacted

the contractor to shut off the equipment after a complaint from the neighboring owner. Inspection of the building by the engineer revealed no interior cracks of the building. Small cracks noted on the exterior of the building were quite possibly present before vibration of the ground. Aside from these incidents, no other problems were encountered during the fill placement operation.

If you have any question, please give us a call.

Sincerely,
SEIDELMAN ASSOCIATES, INC.

Paul Seidelman
President

R. Travis Deane
Staff Engineer