



GETTLER-RYAN INC.

ENVIRONMENTAL PROTECTION

98 OCT 21 PM 2:02

TRANSMITTAL

TO: Mr. Robert Weston
Alameda County Department of
Environmental Health
1131 Harbor Bay Pkwy., Suite 250
Alameda, California 94502-6577

DATE: October 19, 1998
PROJ. #: 140165.02-1

SUBJECT: Tank Removal Report
Former Tosco 76 Branded
Facility No. 1871
96 Mac Arthur Blvd.
Oakland, California

FROM:

David J. Vossler
Project Manager
Gettler-Ryan Inc.
6747 Sierra Court, Suite J
Dublin, California 94568

WE ARE SENDING YOU:

COPIES	DATED	DESCRIPTION
1	October 19, 1998	Underground Storage Tank and Product Piping Removal Report

THESE ARE TRANSMITTED as checked below:

- For review and comment Approved as submitted Resubmit __ copies for approval
- As requested Approved as noted Submit __ copies for distribution
- For approval Return for corrections Return __ corrected prints
- For Your Files

COMMENTS:

At the request of Tosco Marketing Company, We are sending one copy of the referenced report for your files. If you have any questions, please call me at (925) 551-7555.

cc: Ms. Tina Berry, Tosco Marketing Company



GETTLER-RYAN INC.

October 19, 1998

Ms. Tina Berry
Tosco Marketing Company
2000 Crow Canyon Place, Suite 400
San Ramon, California 94583

Subject: Soil Sampling During Underground Storage Tank and Piping Removal at Former Tosco 76 Branded Facility No. 1871, 96 Mac Arthur Boulevard, Oakland, California.

Dear Ms. Berry:

At the request of Tosco Marketing Company, Gettler-Ryan Inc. (GR) conducted a soil investigation following site demolition activities performed by John's Excavating of Santa Rosa, California at the subject site. Construction activities consisted of demolition of all above ground facilities and removing the underground storage tanks (USTs) and all associated piping. The purpose was to assess the presence of petroleum impact in the soil near the former gasoline and waste oil USTs and beneath the former product pump islands. The scope of work included: observing removal of the former USTs; collecting and analyzing soil and groundwater samples from the UST pit excavations, soil from the former product island excavations, former hoist excavations, and the soil stockpiles; evaluating soil disposal options; and preparing a report documenting the work.

SITE DESCRIPTION

The subject site (formerly a service station that contained two gasoline USTs and one waste oil UST) is located on the north corner of the intersection of Mac Arthur Boulevard and Harrison Street in Oakland, California (Figure 1). The underground and aboveground facilities, including the station building and two product dispenser islands, were demolished and removed from the site. The site is currently a vacant lot. Five groundwater monitoring wells have been installed at the site. Pertinent site features and the existing wells are shown on Figure 2.

FIELD WORK

Sampling was performed in accordance with the GR Field Methods and Procedures (attached). All soil and groundwater samples collected during this investigation were delivered under chain-of-custody to Sequoia Analytical Laboratory located in Walnut Creek, California (ELAP #1271). Analytical methods and results are summarized in Table 1. Copies of the laboratory analytical reports and chain-of-custody records are attached. Mr. Robert Weston of the Alameda County Department of Environmental Health (ACDEH) was present at the site to observe former UST removal and sample collection. Mr. Hernan E. Gomez of the City of Oakland Fire Services Agency was also present during UST removal operations.

140165.02

Gasoline and Waste Oil UST Removal and Soil Sampling

On May 11, 1998, two 12,000-gallon double-walled steel unleaded gasoline USTs, and one 550-gallon double-walled steel waste oil UST, were uncovered and removed from the site. Upon removal, the USTs were visually inspected for evidence of failure. No holes or cracks were observed in the tanks. The USTs were removed from the site and disposed of by ECI of Richmond, California.

Limits of the former gasoline and waste oil UST pits are shown on Figure 2. The former gasoline and waste oil UST pit backfill material consisted of pea gravel. Native soil in the vicinity of the former gasoline and waste oil UST pits consisted of silty clay and sandy clay. Groundwater was encountered in the gasoline UST pit at depths of 12 to 12.5 feet below ground surface (bgs), and in the waste oil UST pit at a depth of approximately 11.5 feet bgs, thus prohibiting the collection of soil samples from beneath the USTs.

Following UST removal, one groundwater sample (Water-FT) was collected from the gasoline UST pit, and one groundwater sample (Water-WO) was collected from the waste oil UST pit. Four soil samples (SW1 through SW4) were collected from the sidewalls of the gasoline UST pit at depths of approximately 11.5 feet bgs. One soil sample, labeled WO1, was collected from the sidewall of the waste oil UST pit at a depth of approximately 11.0 feet bgs. Due to obvious hydrocarbon odor and discoloration noted in the west sidewall of the gasoline UST pit (in the vicinity of samples SW3 and SW4) additional excavation was performed as shown on Figure 2. On May 12, 1998, groundwater was observed to stabilize in the gasoline UST pit at a depth of approximately 11.25 to 11.5 feet bgs. Two additional soil samples, labeled SW3-5 and SW4-5, were collected from the sidewall at lateral distances of 5 feet from sample locations SW3 and SW4, respectively, at depths of approximately 11.0 feet bgs. All excavated soil was sampled prior to subsequent disposal. All soil and groundwater samples from the former UST pit excavations were analyzed for Total Petroleum Hydrocarbons as gasoline (TPHg), Benzene, Toluene, Ethylbenzene, and Xylenes (BTEX), and Methyl tert-butyl ether (MTBE). In addition, soil and water samples from the former waste oil UST pit excavation were also analyzed for Total Petroleum Hydrocarbons as diesel (TPHd), Oil and Grease (O&G), Halogenated Volatile Organic Compounds (HVOCs), Semi-Volatile Organics (SVOCs), and the metals cadmium, chromium, lead, nickel, and zinc.

East sidewall soil samples from the gasoline UST pit showed non-detectable concentrations of TPHg. However, west sidewall soil samples (SW3 and SW4) contained TPHg at 2,000 ppm and 1,800 ppm, respectively. Soil samples SW3-5 and SW4-5, collected following additional excavation, showed concentrations of TPHg at 5 ppm and non-detectable, respectively. MTBE in all soil samples from the gasoline UST pit ranged between 1.9 ppm and 16 ppm. Soil sample WO1 from the waste oil UST pit showed non-detectable concentrations of TPHg, BTEX, TPHd, HVOCs, SVOCs, and MTBE. O&G was detected at 140 ppm. Water samples collected from the former gasoline and waste oil UST pits contained 620 ppm and 0.090 ppm of TPHg, respectively, with non-detectable concentrations of benzene and MTBE.

Product Line Removal and Soil Sampling

The former product dispensers and 2-inch-diameter single-wall product lines were removed. On May 11, 1998, GR personnel collected two soil samples (P1 and P2) from the former two product pump islands at depths of approximately 4.0 feet bgs. Former product islands, product line trenches and sample locations are shown on Figure 2. Soil in the vicinity of the former product line trenches and dispensers consisted of clayey silt. The soil samples collected from the former product islands were analyzed for TPHg, BTEX, and MTBE. Sample P1 showed non-detectable concentrations of TPHg and BTEX with 0.74 ppm MTBE. Sample P2 showed 15 ppm of TPHg and non-detectable concentrations of benzene and MTBE.

Stockpile Sampling

Soil generated during UST and piping replacement activities was stockpiled at the site, sampled, and subsequently transported to Forward, Inc. disposal facility in Manteca, California. On May 12, 1998, eight composite soil samples, labeled SP1(A-D), SP1(E-H), SP1(I-L), SP1(M-P), SP1(Q-T), SP1(U-X), SP1(Y,Z,1,2), and SP1(3,4,5,6), were collected from approximately 780 cubic yards of stockpiled soil generated from excavations performed in the vicinity of the gasoline USTs and piping. In addition, one composite soil sample, labeled WOS P1, was collected from approximately 70 cubic yards of stockpiled soil generated from the waste oil UST pit. All stockpile samples were collected from arbitrary locations on the stockpiled soil for disposal characterization.

SOIL DISPOSAL

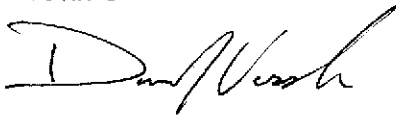
On May 8, 12 and 13, 1998, Denbeste Transportation, Inc. of Windsor, California, removed the soil stockpiles from the site and transported total of 1252.78 tons of soil to the Forward, Inc. disposal facility in Manteca, California. Copies of soil disposal documentation are attached.

If you should have any questions please call us in Dublin at (510) 551-7555.

Sincerely,
Gettler-Ryan Inc.



Hagop Kevork
P.E. C55734



David J. Vossler
Project Manager

Attachments: Tables 1. Analytical Results
Figure 1. Vicinity Map
Figure 2. Site Plan/Sample Location Map
GR Field Methods and Procedures
Copies of Soil Disposal Documentation
Laboratory Analytical Reports and Chain-of-Custody Records

Table 1 - Chemical Analytical Data
 Former Tosco 76 Branded Facility No. 1871
 96 Mac Arthur Boulevard
 Oakland, California

Sample ID	Date Collected	Sample Depth (feet)	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-Benzene (ppm)	Xylenes (ppm)	MTBE (ppm)	TPHd (ppm)	O&G (ppm)	HVOCs (ppm)	SVOCs (ppm)
GASOLINE UST PIT EXCAVATION (SOIL)												
SW1 ✓	5/11/98	11.5	ND	ND	ND	ND	ND	1.9	NR	NR	NR	NR
SW2 ✓	5/11/98	11.5	ND	0.031	ND	ND	0.015	3.8	NR	NR	NR	NR
SW3 ✓	5/11/98	11.5	2,000	9.7	29	38	150	16	NR	NR	NR	NR
SW4 ✓	5/11/98	11.5	1,800	5.5	82	49	290	15	NR	NR	NR	NR
SW3-5* ✓	5/12/98	11.0	5.0 ⁴	0.049	0.051	0.050	0.20	6.6	NR	NR	NR	NR
SW4-5* ✓	5/12/98	11.0	ND	0.080	ND	ND	0.039	12	NR	NR	NR	NR
WASTE OIL UST PIT EXCAVATION (SOIL)												
WO1 ✓	5/11/98	11.0	ND	ND	ND	ND	ND	ND	ND	140	ND	ND
PRODUCT PUMP ISLANDS (SOIL)												
P1	5/11/98	4.0	ND	ND	ND	ND	ND	0.74	NR	NR	NR	NR
P2	5/11/98	4.0	15 ³	ND	0.056	0.10	0.19	ND	NR	NR	NR	NR
DISPOSAL CHARACTERIZATION SAMPLE (SOIL FROM WASTE OIL UST PIT)												
WO SP1	5/12/98	NA	ND	ND	ND	ND	0.014	NR	6.8 ⁵	110	ND	ND ⁶
Sample ID	Date Collected	Sample Depth (feet)	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-Benzene (ppb)	Xylenes (ppb)	MTBE (ppb)	TPHd (ppb)	O&G (ppm)	HVOCs (ppb)	SVOCs (ppb)
GASOLINE UST PIT EXCAVATION (WATER)												
Water-FT	5/11/98	NA	620,000	ND	18,000	13,000	83,000	ND	NR	NR	NR	NR
WASTE OIL UST PIT EXCAVATION (WATER)												
Water-WO	5/11/98	NA	90 ⁴	ND	ND	ND	ND	ND	890 ¹	ND	ND ²	ND

Table 1 - Chemical Analytical Data
 Former Tosco 76 Branded Facility No. 1871
 96 Mac Arthur Boulevard
 Oakland, California

Sample ID	Date Collected	Sample Depth (feet)	TPHg (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-Benzene (ppm)	Xylenes (ppm)	Total Lead (ppm)
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DISPOSAL CHARACTERIZATION SAMPLES

SP1 (A-D)	5/12/98	NA	ND	ND	ND	ND	0.015	19
SP1 (E-H)	5/12/98	NA	170 ³	2.9	0.74	0.78	3.2	2.2
SP1 (I-L)	5/12/98	NA	60	1.5	5.5	6.6	27	5.9
SP1 (M-P)	5/12/98	NA	380	1.6	5.6	7.5	34	4.6
SP1 (Q-T)	5/12/98	NA	50	0.32	0.90	0.81	3.5	4.9
SP1 (U-X)	5/12/98	NA	1,200	9.0	26	28	100	2.1
SP1 (Y,Z,1,2)	5/12/98	NA	130	0.94	2.8	2.3	12	3.5
SP1 (3,4,5,6)	5/12/98	NA	13 ⁴	0.36	0.57	0.22	0.92	1.9

Sample ID	Date Collected	Sample Depth (feet)	Lead (ppm)	Chromium (ppm)	Nickel (ppm)	Zinc (ppm)	Cadmium (ppm)	TPHhf (ppm)
WO1	5/11/98	11.0	1.0	18	21	61	ND	NR ✓
WO SP1	5/12/98	NA	3.0	30	56	57	ND	NR
Water-WO	5/11/98	NA	ND	0.051	0.087	0.110	ND	NR <i>ok</i>
H-1	5/12/98	8.0	NR	NR	NR	NR	NR	ND
H-2	5/12/98	8.0	NR	NR	NR	NR	NR	ND

Table 1 - Chemical Analytical Data
 Former Tosco 76 Branded Facility No. 1871
 96 Mac Arthur Boulevard
 Oakland, California

EXPLANATION:

ND = none detected
 NA = not applicable
 ppm = parts per million
 ppb = parts per billion
 NR = analysis not requested
 MTBE = methyl tert-butyl ether

ANALYTICAL LABORATORY:

Sequoia Analytical (ELAP # 1271)

NOTES:

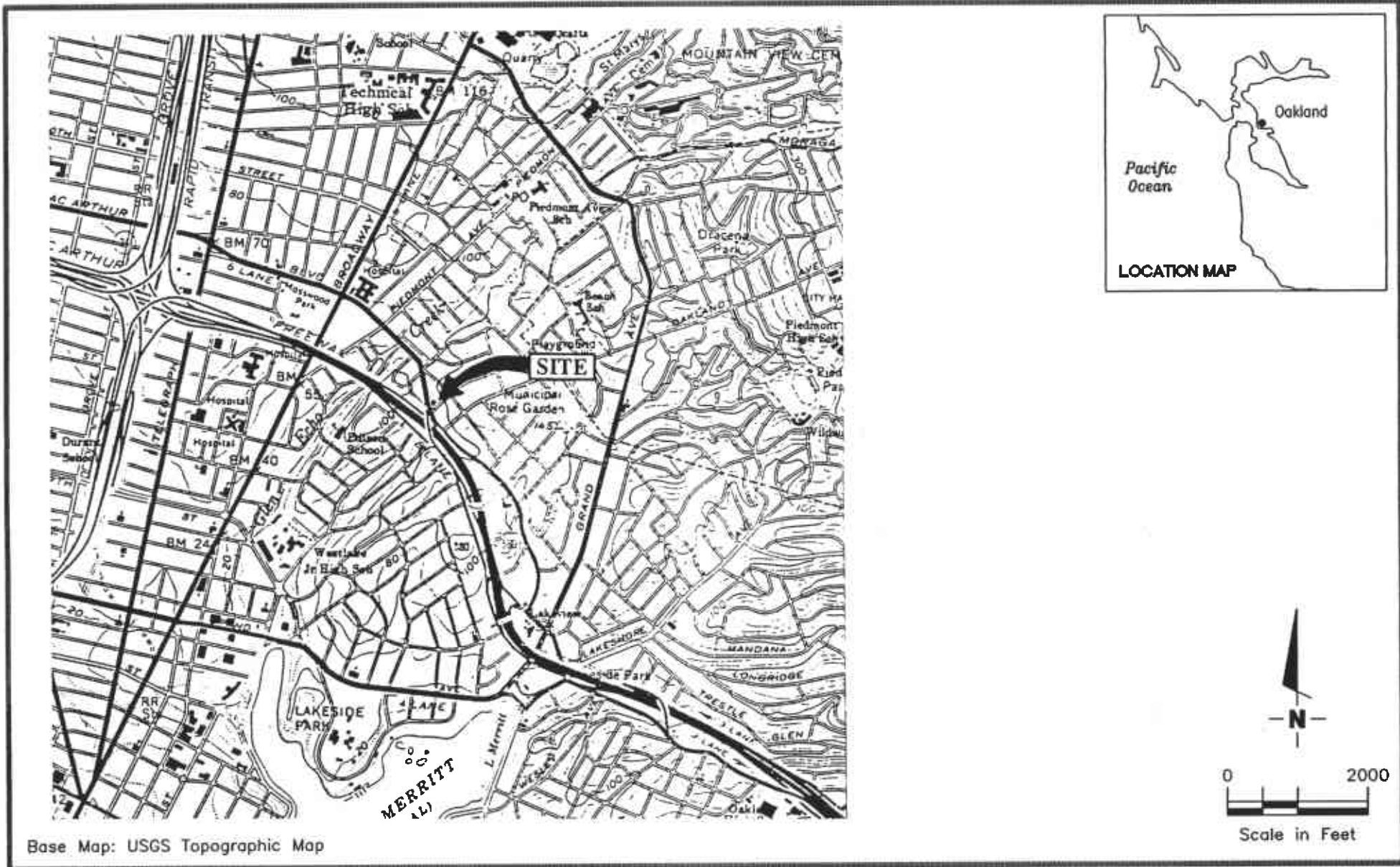
- ¹ = Laboratory reports indicates unidentified hydrocarbons <C14
- ² = None of the analytes detected except bromodichloromethane (5.8 ppb), chloroform (14 ppb), dibromochloromethane (1.9 ppb), 1,4-dichlorobenzene (0.89 ppb), 1,2-dichlorobenzene (2.8 ppb), and tetrachloroethene (1.7 ppb).
- ³ = Laboratory reports indicates gasoline and unidentified hydrocarbons >C8
- ⁴ = Laboratory reports indicates gasoline and discrete peaks
- ⁵ = Laboratory reports indicates unidentified hydrocarbons >C16
- ⁶ = None of the analytes detected except for phenanthrene (350 ppb), pyrene (380 ppb), and fluoranthene (380 ppb).
- * = 5 feet lateral distance from initial sample.

ANALYTICAL METHODS:

TPHg = Total Petroleum Hydrocarbons as gasoline according to EPA Method 8015 Modified.
 TPHd = Total Petroleum Hydrocarbons as diesel according to EPA Method 8015 Modified.
 TPHhf = Total Petroleum Hydrocarbons as hydraulic fluid according to EPA Method 8015 Modified.
 O&G = Total recoverable petroleum oil according to Standard Methods 5520 E&F(Gravimetric).
 HVOCs = Halogenated volatile organic compounds according to EPA Method 8010.
 SVOCs = Semi-volatile organic compounds according to EPA Method 8270.
 Metals = EPA Method 6010.

<u>Contaminant</u>	<u>PRGs (ug/l)</u>	<u>MCLs (ppb)</u>
* Bromodichlorometh	0.18	All TTHM > 80
* chloroform	0.16	
* dibromochlorometh	1.0	
1,2-dichlorobenzene	370	600
* tetrachloroethene	1.1	5

* PRGs exceeded for these constituents for Tap Water.



Base Map: USGS Topographic Map



Gettler - Ryan Inc.

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

VICINITY MAP

Former Tosco 76 Branded Facility No. 1871
 96 MacArthur Boulevard
 Oakland, California

FIGURE

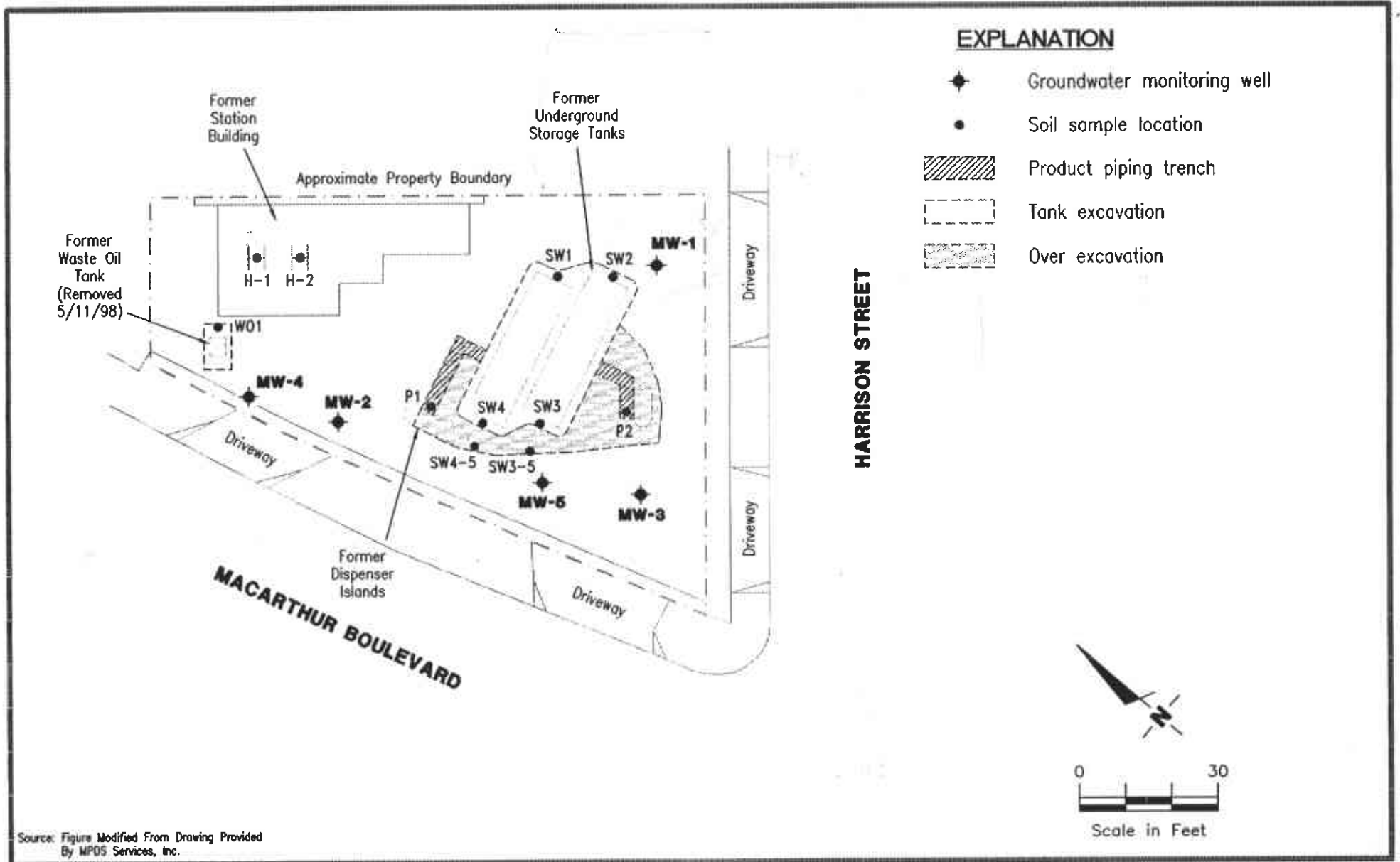
1

JOB NUMBER
 140165

REVIEWED BY

DATE
 July, 1998

REVISED DATE



Gettler - Ryan Inc.

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

SITE PLAN/SOIL SAMPLE LOCATION MAP
Former Tosco 76 Branded Facility No. 1871
96 MacArthur Boulevard
Oakland, California

FIGURE
2

JOB NUMBER
140165.02

REVIEWED BY

DATE
July, 1998

REVISED DATE

GETTLER-RYAN INC.

FIELD METHODS AND PROCEDURES

Site Safety Plan

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

Collection of Samples

Soil samples are collected from the wall or base of the excavation with a hand-driven sampling device fitted with a 2-inch-diameter, clean brass tube or stainless steel liner. If safety considerations preclude collection of the samples with the drive sampler, the excavating equipment is used to bring soil from the pit wall to the surface, where a sample tube is filled by driving it into the soil in the excavator's bucket. After removal from the sampling device, sample tubes are covered on both ends with teflon sheeting, capped, labeled, and placed in a cooler with blue ice for preservation. A chain-of-custody form is initiated in the field and accompanies the selected soil samples to the analytical laboratory.

If it is necessary to collect a sample of groundwater standing in the UST pit, the sample is collected by lowering a new, clean teflon bailer into the pit from a safe position along the pit wall. Once filled and retrieved, the groundwater in the bailer is carefully decanted into the appropriate containers supplied by the analytical laboratory. If required, preservative is added to the sample bottles by the laboratory prior to delivery. The samples are then labeled and placed in a cooler with blue ice for preservation. A chain-of-custody form is initiated in the field and accompanies the selected soil samples to the analytical laboratory.

Field Screening of Soil Samples

A PID is used to perform head-space analysis in the field for the presence of organic vapors from soil samples. This test procedure involves placing a small amount of the soil to be screened in a sealable plastic bag. The bag is warmed in the sun to allow organic compounds in the soil sample to volatilize. The PID probe is inserted through the wall of the bag and into the headspace inside, and the meter reading is recorded in the field notes. An alternative method involves placing a plastic cap over the end of the sample tube. The PID probe is placed through a hole in the plastic cap, and vapors with the covered tube measured. Head-space screening is performed and results recorded as reconnaissance data only. GR does not consider field screening techniques to be verification of the presence or absence of hydrocarbons.

Storing and Sampling of Soil Stockpiles

Excavated material is stockpiled on and covered with plastic sheeting. Stockpile samples are collected and analyzed for disposal classification on the basis of one composite sample per 100 cubic yards of soil. Stockpile samples are composed of four discrete soil samples, each collected from an arbitrary location on the stockpile. The four discrete samples are then composited in the laboratory prior to analysis. Each discrete stockpile sample is collected by removing the upper 12 to 18 inches of soil, and then driving the stainless steel or brass sample tube into the stockpiled material with a mallet or drive sampler. The sample tubes are then covered on both ends with teflon sheeting, capped, labeled, and placed in a cooler with blue ice for preservation. A chain-of-custody form is initiated in the field and accompanies the selected soil samples to the analytical laboratory. Stockpiled soils are covered with plastic sheeting after completion of sampling.



FORWARD
INCORPORATED

P.O. Box 6336
1145 W. Charter Way • Stockton, CA 92506
(209) 466-4482 • (800) 204-4242 • FAX (209) 466-1067

June 4, 1998

RECEIVED

JUN 30 1998

GETTLER-RYAN INC.
GENERAL CONTRACTORS

Gettler-Ryan, Inc.
6747 Sierra Court, Suite J
Dublin, CA 94568

Attention: Haig Kavork

RE: **FORWARD, INC.** Approval No. 685822
Disposal of Petroleum Contaminated Soils from
Former Unocal No. 1871
96 MacArthur Blvd., Oakland CA

Dear Mr. Kavork:

FORWARD, INC. is pleased to confirm the disposal of 1,252.78 tons of soil from the referenced site. The material was received at our Manteca, California facility on 5/8/98, 5/12/98 and 5/13/98. The waste was placed in a Class II Class 2 waste management unit.

Approval for this material was based on the information provided in the waste profile and associated materials submitted by Gettler-Ryan on behalf of Tosco Marketing Company (Generator). Acceptance of the waste is subject to the "Terms and Conditions" agreed to and signed by the generator or agent thereof in the waste profile.

Thank you for the opportunity to be of service. Should you have any questions regarding this matter, please do not hesitate to contact our office at (800) 204-4242.

Sincerely,

FORWARD, INC.

Brad J. Bonner

Brad J. Bonner
Sales Manager

cc: Clyde Galantine, Gettler-Ryan

BJB/lis

F:\FORWARD\MERGE FORMS\CONSULTANT CONFIRMATION OF DISPOSAL

Date 06/03/98
Time 15:39:53

FORWARD, INC.

Page 1

MATERIAL ANALYSIS REPORT BY ACCOUNT

For the period / / - 06/02/98

Detailed report for sites 00 - 99

Accounts 685822 - 685822 Customer Tvoes - 2 Materials - ZZZZZZZZZZ Material Tvoes - 2

Date	Material	Type	Customer	Tvoe	Tickets	Count	Est. vol.	Act. Vol.	Est. Wt.	Actual Wt.	Charge
05/08/98	STOCKPILE	P	685822	B	01-083038	0	18	18	27.36	27.36	0.00
05/08/98	STOCKPILE	P	685822	B	01-083046	0	18	18	26.98	26.98	0.00
05/08/98	STOCKPILE	P	685822	B	01-083051	0	18	18	24.45	24.45	0.00
05/08/98	STOCKPILE	P	685822	B	01-083052	0	18	18	25.48	25.48	0.00
05/08/98	STOCKPILE	P	685822	B	01-083053	0	18	18	25.89	25.89	0.00
05/08/98	STOCKPILE	P	685822	B	01-083056	0	18	18	25.49	25.49	0.00
05/08/98	STOCKPILE	P	685822	B	01-083058	0	18	18	23.56	23.56	0.00
05/08/98	STOCKPILE	P	685822	B	01-083066	0	18	18	24.93	24.93	0.00
05/08/98	STOCKPILE	P	685822	B	01-083089	0	18	18	26.74	26.74	0.00
05/08/98	STOCKPILE	P	685822	B	01-083097	0	18	18	29.61	29.61	0.00
05/08/98	STOCKPILE	P	685822	B	01-083110	0	18	18	25.50	25.50	0.00
05/08/98	STOCKPILE	P	685822	B	01-083112	0	18	18	28.28	28.28	0.00
05/08/98	STOCKPILE	P	685822	B	01-083115	0	18	18	23.01	23.01	0.00
05/08/98	STOCKPILE	P	685822	B	01-083116	0	18	18	20.66	20.66	0.00
05/12/98	STOCKPILE	P	685822	B	01-083375	0	18	18	29.96	29.96	0.00
05/12/98	STOCKPILE	P	685822	B	01-083284	0	18	18	23.27	23.27	0.00
05/12/98	STOCKPILE	P	685822	B	01-083286	0	18	18	25.01	25.01	0.00
05/12/98	STOCKPILE	P	685822	B	01-083289	0	18	18	29.68	29.68	0.00
05/12/98	STOCKPILE	P	685822	B	01-083290	0	18	18	23.78	23.78	0.00
05/12/98	STOCKPILE	P	685822	B	01-083293	0	18	18	20.83	20.83	0.00
05/12/98	STOCKPILE	P	685822	B	01-083296	0	18	18	27.37	27.37	0.00
05/12/98	STOCKPILE	P	685822	B	01-083298	0	18	18	21.30	21.30	0.00
05/12/98	STOCKPILE	P	685822	B	01-083307	0	18	18	25.78	25.78	0.00
05/12/98	STOCKPILE	P	685822	B	01-083308	0	18	18	24.06	24.06	0.00
05/12/98	STOCKPILE	P	685822	B	01-083311	0	18	18	26.51	26.51	0.00
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05/12/98	STOCKPILE	P	685822	B	01-083351	0	18	18	33.72	33.72	0.00
05/12/98	STOCKPILE	P	685822	B	01-083352	0	18	18	23.94	23.94	0.00
05/12/98	STOCKPILE	P	685822	B	01-083354	0	18	18	24.05	24.05	0.00
05/12/98	STOCKPILE	P	685822	B	01-083356	0	18	18	25.16	25.16	0.00
05/12/98	STOCKPILE	P	685822	B	01-083358	0	18	18	26.07	26.07	0.00
05/12/98	STOCKPILE	P	685822	B	01-083363	0	18	18	27.98	27.98	0.00
05/12/98	STOCKPILE	P	685822	B	01-083364	0	18	18	27.01	27.01	0.00
05/12/98	STOCKPILE	P	685822	B	01-083371	0	18	18	28.84	28.84	0.00
05/12/98	STOCKPILE	P	685822	B	01-083372	0	18	18	32.91	32.91	0.00
05/13/98	STOCKPILE	P	685822	B	01-083401	0	18	18	25.54	25.54	0.00
05/13/98	STOCKPILE	P	685822	B	01-083403	0	18	18	25.04	25.04	0.00
05/13/98	STOCKPILE	P	685822	B	01-083406	0	18	18	23.91	23.91	0.00
05/13/98	STOCKPILE	P	685822	B	01-083407	0	18	18	28.27	28.27	0.00
05/13/98	STOCKPILE	P	685822	B	01-083416	0	18	18	25.24	25.24	0.00
05/13/98	STOCKPILE	P	685822	B	01-083426	0	18	18	28.30	28.30	0.00
05/13/98	STOCKPILE	P	685822	B	01-083432	0	18	18	29.90	29.90	0.00
05/13/98	STOCKPILE	P	685822	B	01-083433	0	18	18	23.22	23.22	0.00

Date 06/03/98
Time 15:39:53

FORWARD. INC.

Page 2

MATERIAL ANALYSIS REPORT BY ACCOUNT

For the period / / - 06/02/98

Detailed report for sites 00 - 99

Accounts 685822 - 685822 Customer Types - Z Materials - ZZZZZZZZZZ Material Types - Z

Date	Material	Type	Customer	Type	Tickets	Count	Est. vol.	Act. Vol.	Est. Wt.	Actual Wt.	Charge
05/13/98	STOCKPILE	P	685822	B	01-083435	0	18	18	27.85	27.85	0.00
05/13/98	STOCKPILE	P	685822	B	01-083443	0	18	18	22.17	22.17	0.00
TOSCO MARKETING (T.BERRY)					48	0	864	864	1252.78	1252.78	0.00
Average						0	18	18	26.00	26.00	0.00
Report Total					48	0	864	864	1252.78	1252.78	0.00
Report Average						0	18	18	26.00	26.00	0.00



Sequoia Analytical

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(510) 988-9600
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FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Matrix: Soil
Analysis Method: EPA 5030/8015 Mod. 7/8020
First Sample #: 805-1004

Sampled: May 11, 1998
Received: May 12, 1998
Reported: Jun 1, 1998

JUN 03 1998

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

GETTLER-RYAN INC.

GENERAL CONTRACTORS

Analyte	Reporting Limit µg/L	Sample I.D. 805-1004 SW1	Sample I.D. 805-1005 SW2	Sample I.D. 805-1006 SW3	Sample I.D. 805-1007 SW4	Sample I.D. 805-1008 P1	Sample I.D. 805-1009 P2
Purgeable Hydrocarbons	1.0	N.D.	N.D.	2,000	1,800	N.D.	15
Benzene	0.010	N.D.	0.031	9.7	5.5	N.D.	N.D.
Toluene	0.010	N.D.	N.D.	29	82	N.D.	0.056
Ethyl Benzene	0.010	N.D.	N.D.	38	49	N.D.	0.10
Total Xylenes	0.010	N.D.	0.015	150	290	N.D.	0.19
MTBE	0.050	1.9	3.8	16	15	0.74	N.D.
Chromatogram Pattern:		--	--	Gasoline	Gasoline	--	Gasoline & Unidentified Hydrocarbons >C8

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0	100	100	1.0	5.0
Date Analyzed:	5/15/98	5/15/98	5/15/98	5/15/98	5/15/98	5/15/98
Instrument Identification:	HP-4	HP-4	HP-4	HP-4	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 40-140%)	102	109	*	*	104	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, #1271

Please Note:

* Surrogate below reporting limit due to dilution.

Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Matrix: Soil
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: 805-1010

Sampled: May 11, 1998
Received: May 12, 1998
Reported: Jun 1, 1998

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

Analyte	Reporting Limit µg/L	Sample I.D. 805-1010 WO1
Purgeable Hydrocarbons	1.0	N.D.
Benzene	0.010	N.D.
Toluene	0.010	N.D.
Ethyl Benzene	0.010	N.D.
Total Xylenes	0.010	N.D.
MTBE	0.050	N.D.

Chromatogram Pattern:

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Analyzed:	5/18/98
Instrument Identification:	HP-4
Surrogate Recovery, %: (QC Limits = 40-140%)	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, #1271


Alan B. Kemp
Laboratory Director



Gettler-Ryan
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Matrix: Soil
Analysis Method: EPA 3510/8015 Mod.
First Sample #: 805-1010

Sampled: May 11, 1998
Received: May 12, 1998
Reported: Jun 1, 1998

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 805-1010 WO1
Extractable Hydrocarbons	1.0	N.D.

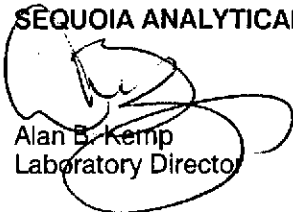
Chromatogram Pattern:

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Extracted:	5/14/98
Date Analyzed:	5/14/98
Instrument Identification:	HP-3B

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

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix Descript: Soil
Analysis Method: SM 5520 E&F (Gravimetric)
First Sample #: 805-1010

Sampled: May 11, 1998
Received: May 12, 1998
Extracted: May 15, 1998
Analyzed: May 18, 1998
Reported: Jun 1, 1998

TOTAL RECOVERABLE PETROLEUM OIL

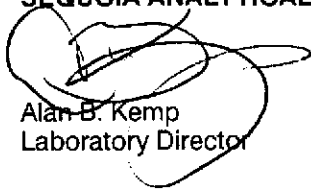
Sample Number	Sample Description	Oil & Grease mg/kg (ppm)	Detection Limit Multiplication Factor
805-1010	WO1	140	1.0

Detection Limits:

5.0

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

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director



**Sequoia
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FAX (510) 988-9673
FAX (916) 921-0100

Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Descript: Solid, WO1
Lab Number: 805-1010

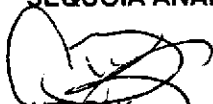
Sampled: May 11, 1998
Received: May 12, 1998
Analyzed: May 27, 1998
Reported: Jun 1, 1998

LABORATORY ANALYSIS

Analyte	Detection Limit mg/kg	Sample Results mg/L
Cadmium.....	0.50	N.D.
Chromium.....	0.50	18
Nickel.....	1.0	21
Lead.....	1.0	1.0
Zinc.....	1.0	61

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

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin	Client Project ID: Unocal #1871, Oakland	Sampled: May 11, 1998
6747 Sierra Court, Suite J	Sample Descript: Water, WO1	Received: May 12, 1998
Dublin, CA 94568	Analysis Method: EPA 5030/8010	Analyzed: May 15, 1998
Attention: Haig Kevork	Lab Number: 805-1010	Reported: Jun 1, 1998

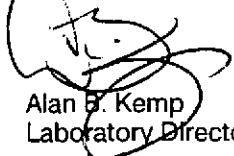
HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane.....	10	N.D.
Bromoform.....	10	N.D.
Bromomethane.....	20	N.D.
Carbon tetrachloride.....	10	N.D.
Chlorobenzene.....	10	N.D.
Chloroethane.....	20	N.D.
Chloroform.....	10	N.D.
Chloromethane.....	20	N.D.
Dibromochloromethane.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.
1,1-Dichloroethane.....	10	N.D.
1,2-Dichloroethane.....	10	N.D.
1,1-Dichloroethene.....	10	N.D.
cis-1,2-Dichloroethene.....	10	N.D.
trans-1,2-Dichloroethene.....	10	N.D.
1,2-Dichloropropane.....	10	N.D.
cis-1,3-Dichloropropene.....	10	N.D.
trans-1,3-Dichloropropene.....	10	N.D.
Methylene chloride.....	100	N.D.
1,1,1,2-Tetrachloroethane.....	10	N.D.
Tetrachloroethene.....	10	N.D.
1,1,1-Trichloroethane.....	10	N.D.
1,1,2-Trichloroethane.....	10	N.D.
Trichloroethene.....	10	N.D.
Trichlorofluoromethane.....	10	N.D.
Vinyl chloride.....	20	N.D.

Surrogates	Control Limit %	% Recovery
Dibromodifluoromethane.....	50	150
4-Bromofluorobenzene.....	50	150

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, #1271


 Alan B. Kemp
 Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Descript: Water, WO1
Analysis Method: EPA 8270
Lab Number: 805-1010

Sampled: May 11, 1998
Received: May 12, 1998
Extracted: May 18, 1998
Analyzed: May 19, 1998
Reported: Jun 1, 1998

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.
Benzidine.....	2,500	N.D.
Benzoic Acid.....	100	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.
Di-N-octyl phthalate.....	100	N.D.
Fluoranthene.....	100	N.D.
Fluorene.....	100	N.D.



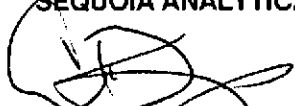
Gettler-Ryan - Dublin	Client Project ID: Unocal #1871, Oakland	Sampled: May 11, 1998
6747 Sierra Court, Suite J	Sample Descript: Water, WO1	Received: May 12, 1998
Dublin, CA 94568	Analysis Method: EPA 8270	Extracted: May 18, 1998
Attention: Haig Kevork	Lab Number: 805-1010	Analyzed: May 19, 1998
		Reported: Jun 1, 1998

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

Analyte	Detection Limit µg/kg	Sample Results µg/kg	
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.	
Surrogates			
	Control Limit %	% Recovery	
2-Fluorophenol.....	25	121.....	65
Phenol-d6.....	24	113.....	64
Nitrobenzene-d5.....	23	120.....	65
2-Fluorobiphenyl.....	30	115.....	75
2,4,6-Tribromophenol.....	19	122.....	79
4-Terphenyl-d14.....	18	137.....	85

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, #1271


 Alan B. Kemp
 Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Solid

QC Sample Group: 8051004-010

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP051898	SP051898	SP051898	SP051898
	8020EXA	8020EXA	8020EXA	8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD #:	8051010	8051010	8051010	8051010
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/18/98	5/18/98	5/18/98	5/18/98
Analyzed Date:	5/18/98	5/18/98	5/18/98	5/18/98
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	0.80 mg/Kg	0.80 mg/Kg	0.80 mg/Kg	2.4 mg/Kg
Result:	0.71	0.73	0.69	2.1
MS % Recovery:	89	91	86	88
Dup. Result:	0.73	0.76	0.71	2.2
MSD % Recov.:	91	95	89	92
RPD:	2.8	4.1	2.9	5.0
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	4LCS051898	4LCS051898	4LCS051898	4LCS051898
Prepared Date:	5/18/98	5/18/98	5/18/98	5/18/98
Analyzed Date:	5/18/98	5/18/98	5/18/98	5/18/98
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	17	18	17	52
LCS % Recov.:	85	90	85	87

MS/MSD LCS Control Limits	50-150	50-150	50-150	50-150
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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 matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Solid

QC Sample Group: 8051004-010

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene	Diesel
Method:	EPA 8010	EPA 8010	EPA 8010	EPA 8015M
Analyst:	N. Nelson	N. Nelson	N. Nelson	K. Grubb

MS/MSD	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene	Diesel
Batch#:	8051010	8051010	8051010	8051010
Date Prepared:	5/15/98	5/15/98	5/15/98	5/14/98
Date Analyzed:	5/15/98	5/15/98	5/15/98	5/14/98
Instrument I.D.#:	HP-7	HP-7	HP-7	HP-3B
Conc. Spiked:	200 µg/L	200 µg/L	200 µg/L	15 mg/kg
Matrix Spike % Recovery:	90	85	60	87
Matrix Spike Duplicate % Recovery:	85	85	65	93
Relative % Difference:	5.7	0.0	8.0	7.4
RPD Limit:	0-25	0-25	0-25	0-50

LCS Batch#:	LCS051598	LCS051598	LCS051598	LCS051498B
Date Prepared:	5/15/98	5/15/98	5/15/98	5/15/98
Date Analyzed:	5/15/98	5/15/98	5/15/98	5/18/98
Instrument I.D.#:	HP-7	HP-7	HP-7	HP-3B
LCS % Recovery:	95	95	75	87

% Recovery Control Limits:	60-140	60-140	60-140	60-140

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 matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Solid

QC Sample Group: 8051004-010

Reported: Jun 1, 1998

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
Prep. Method:	EPA 3510	EPA 3510	EPA 3510	EPA 3510	EPA 3510	EPA 3510
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	L. Diaz	L. Diaz	L. Diaz	L. Diaz	L. Diaz	L. Diaz

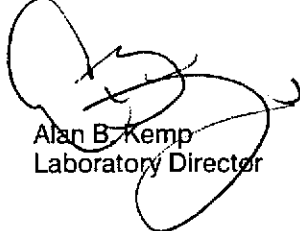
MS/MSD	Phenol	2-Chlorophenol	1,4-Dichloro-benzene	N-Nitroso-Di-N-propylamine	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenol
Batch#:	8050648	8050648	8050648	8050648	8050648	8050648
Date Prepared:	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98
Date Analyzed:	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98
Instrument I.D.#:	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1
Conc. Spiked:	5000 µg/L	5000 µg/L	3300 µg/L	3300 µg/L	3300 µg/L	5000 µg/L
Matrix Spike % Recovery:	58	68	58	76	64	66
Matrix Spike Duplicate % Recovery:	56	68	55	76	64	72
Relative % Difference:	3.5	0.0	5.4	0.0	0.0	8.7
RPD Limit:	0-40	0-40	0-40	0-40	0-40	0-40

LCS Batch#:	BLK051898B	BLK051898B	BLK051898B	BLK051898B	BLK051898B	BLK051898B
Date Prepared:	3/18/98	3/18/98	3/18/98	3/18/98	3/18/98	3/18/98
Date Analyzed:	3/19/98	3/19/98	3/19/98	3/19/98	3/19/98	3/19/98
Instrument I.D.#:	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1
LCS % Recovery:	62	80	73	88	79	78

% Recovery Control Limits:	Phenol	2-Chlorophenol	1,4-Dichloro-benzene	N-Nitroso-Di-N-propylamine	1,2,4-Trichloro-benzene	4-Chloro-3-Methylphenol
	26-90	25-102	28-104	41-126	38-108	26-103

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 matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin 6747 Sierra Court, Suite J Dublin, CA 94568 Attention: Haig Kevork	Client Project ID: Unocal #1871, Oakland Matrix: Solid	QC Sample Group: 8051004-010	Reported: Jun 1, 1998
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QUALITY CONTROL DATA REPORT

ANALYTE	Acenaphthene	4-Nitrophenol	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
Prep. Method:	EPA 3510	EPA 3510	EPA 3510	EPA 3510	EPA 3510
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	L. Diaz	L. Diaz	L. Diaz	L. Diaz	L. Diaz

MS/MSD	Acenaphthene	4-Nitrophenol	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
Batch#:	8050648	8050648	8050648	8050648	8050648
Date Prepared:	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98
Date Analyzed:	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98
Instrument I.D.#:	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1
Conc. Spiked:	3300 µg/L	5000 µg/L	3300 µg/L	5000 µg/L	3300 µg/L
Matrix Spike % Recovery:	64	80	73	86	85
Matrix Spike Duplicate % Recovery:	70	84	73	86	94
Relative % Difference:	9.0	4.8	0.0	0.0	10
RPD Limit:	0-40	0-40	0-40	0-40	0-40

LCS Batch#:	BLK051898B	BLK051898B	BLK051898B	BLK051898B	BLK051898B
Date Prepared:	3/18/98	3/18/98	3/18/98	3/18/98	3/18/98
Date Analyzed:	3/19/98	3/19/98	3/19/98	3/19/98	3/19/98
Instrument I.D.#:	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1
LCS % Recovery:	79	88	90	88	82

% Recovery Control Limits:	31-137	11-114	28-89	17-109	35-142
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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 matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

SEQUOIA ANALYTICAL, #1271

Albert B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Solid

QC Sample Group: 8051004-010

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

ANALYTE	Cadmium	Chromium	Lead	Nickel	Zinc
Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Analyst:	J. Kelly	J. Kelly	J. Kelly	J. Kelly	J. Kelly

MS/MSD					
Batch#:	8051608	8051608	8051608	8051608	8051608
Date Prepared:	5/21/98	5/21/98	5/21/98	5/21/98	5/21/98
Date Analyzed:	5/22/98	5/22/98	5/22/98	5/22/98	5/22/98
Instrument I.D.#:	MV-4	MV-4	MV-4	MV-4	MV-4
Conc. Spiked:	50 mg/L	50 mg/L	50 mg/L	50 mg/L	50 mg/L
Matrix Spike					
% Recovery:	95	72	116	76	60
Matrix Spike Duplicate %					
Recovery:	93	72	100	78	-
Relative %					
Difference:	2.1	0.0	11	1.9	17
RPD Limit:	0-20	0-20	0-20	0-20	0-20

LCS Batch#:	LCS052198A	LCS052198A	LCS052198A	LCS052198A	LCS052198A
Date Prepared:	5/21/98	5/21/98	5/21/98	5/21/98	5/21/98
Date Analyzed:	5/27/98	5/27/98	5/27/98	5/27/98	5/27/98
Instrument I.D.#:	MV-4	MV-4	MV-4	MV-4	MV-4
LCS %					
Recovery:	106	102	100	104	104

% Recovery					
Control Limits:	80-120	80-120	80-120	80-120	80-120

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director

Please Note:

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Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Soil

QC Sample Group: 8051004-010

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

ANALYTE	Oil & Grease
Method:	SM 5520
Analyst:	L. Diaz

MS/MSD

Batch#: BLK051598B

Date Prepared: 5/15/98

Date Analyzed: 5/18/98

Instrument I.D.#: Manual

Conc. Spiked: 5000 mg/kg

Matrix Spike

% Recovery: 112

Matrix Spike

Duplicate %

Recovery: 102

Relative %

Difference: 9.3

RPD Limit: 0-30

LCS Batch#: -

Date Prepared: -

Date Analyzed: -

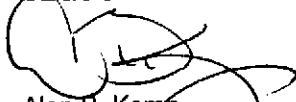
Instrument I.D.#: -

LCS %

Recovery: -

% Recovery	
Control Limits:	60-140

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director

Please Note:

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Consultant Company: **GETTLER-RYAN INC. J#140165** Project Name: **FORMER UNOCAL #1871 - OAKLAND**
 Address: **6747 Sierra Court, Suite J** UNOCAL Project Manager: **TINA BERRY**
 City: **DUBLIN** State: **CA** Zip Code: **94568** AFE #: **3805203**
 Telephone: **(510) 551-7555** FAX #: **551-7888** Site #, City, State: **96 MACARTHUR BLVD.**
 Report To: **HAIG KEVORK** Sampler: **HAIG KEVORK** QC Data: Level D (Standard) Level C Level B Level A

Turnaround 10 Work Days 5 Work Days 3 Work Days
 Time: 2 Work Days 1 Work Day 2-8 Hours
 CODE: Misc. Detect. Eval. Remed. Demol. Closure

Analyses Requested
 Drinking Water Waste Water Other

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	Analyses Requested										Comments	
						TPH-G	BTEX	MTBE	TPH-D	TOG	8010	8210	Cd/Cr/Pb	Zn/Ni			
1. SW1	5/11/98	SOIL	1	BRASS TUBE		✓	✓	✓									8051004
2. SW2	↓	↓	1	↓		✓	✓	✓									8051005
3. SW3	↓	↓	1	↓		✓	✓	✓									8051006
4. SW4	↓	↓	1	↓		✓	✓	✓									8051007
5. P1	↓	↓	1	↓		✓	✓	✓									8051008
6. P2	↓	↓	1	↓		✓	✓	✓									8051009
7. W01	↓	↓	1	↓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	8051010
8.																	
9.																	
10.																	

Relinquished By: *[Signature]* Date: **5/12/98** Time: **7:00** Received By: _____ Date: _____ Time: _____
 Relinquished By: _____ Date: _____ Time: _____ Received By: _____ Date: _____ Time: _____
 Relinquished By: _____ Date: _____ Time: _____ Received By Lab: *[Signature]* Date: **5/12** Time: **1900**

Were Samples Received in Good Condition? Yes No Samples on Ice? Yes No Method of Shipment _____ Page **1** of **1**

To be completed upon receipt of report:
 1) Were the analyses requested on the Chain of Custody reported? Yes No If no, what analyses are still needed? _____
 2) Was the report issued within the requested turnaround time? Yes No If no, what was the turnaround time? _____
 Approved by: _____ Signature: _____ Company: _____ Date: _____

Pink - Client

Yellow - Laboratory

White - Laboratory



Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834

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(510) 988-9600
(916) 921-9600

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871-Oakland
Sample Matrix: Water
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: 805-0998

Sampled: May 12, 1998
Received: May 12, 1998
Reported: May 22, 1998

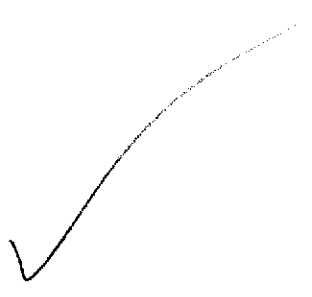
RECEIVED
JUN 05 1998

QC Batch Number: SP051598 SP051598
8020EXA 8020EXA

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX & MTBE

GETTLER-RYAN INC.
GENERAL ANALYTICAL SERVICES

Analyte	Reporting Limit mg/Kg	Sample I.D.	Sample I.D.
		805-0998 SW3-5	805-0998 SW4-5
Purgeable Hydrocarbons	1.0	5.0	N.D.
Benzene	0.010	0.049	0.080
Toluene	0.010	0.051	N.D.
Ethyl Benzene	0.010	0.050	N.D.
Total Xylenes	0.010	0.20	0.039
MTBE	0.050	6.6	12
Chromatogram Pattern:		Gasoline & Discrete Peaks	--



Quality Control Data

Report Limit Multiplication Factor:	2.5	5.0
Date Analyzed:	5/18/98	5/18/98
Instrument Identification:	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	102	120

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

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Julianne Fegley
Project Manager



Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8

Redwood City, CA 94063
Walnut Creek, CA 94598
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FAX (510) 988-9673
FAX (916) 921-0100

Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871-Oakland
Matrix: Solid

QC Sample Group: 8050998-999

Reported: May 22, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP051898	SP051898	SP051898	SP051898
	8020EXA	8020EXA	8020EXA	8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	K. Nill	K. Nill	K. Nill	K. Nill
MS/MSD #:	8051010	8051010	8051010	8051010
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/18/98	5/18/98	5/18/98	5/18/98
Analyzed Date:	5/18/98	5/18/98	5/18/98	5/18/98
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	0.80 mg/kg	0.80 mg/kg	0.80 mg/kg	2.4 mg/kg
Result:	0.71	0.73	0.69	2.1
MS % Recovery:	89	91	86	88
Dup. Result:	0.73	0.76	0.71	2.2
MSD % Recov.:	91	95	89	92
RPD:	2.8	4.1	2.9	5.0
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	4LCS051898	4LCS051898	4LCS051898	4LCS051898
Prepared Date:	5/18/98	5/18/98	5/18/98	5/18/98
Analyzed Date:	5/18/98	5/18/98	5/18/98	5/18/98
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	17	18	17	52
LCS % Recov.:	85	90	85	87

MS/MSD LCS Control Limits	50-150	50-150	50-150	50-150
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** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Julianne Fegley
Project Manager

Consultant Company: GETTLER-RYAN INC. J#140165		Project Name: FORMER UNOCAL #1871-OAKLAND	
Address: 6747 Sierra Court, Suite J		UNOCAL Project Manager: TINA BERRY	
City: DUBLIN	State: CA	Zip Code: 94568	AFE #: 1507990
Telephone: (510) 551-7555		FAX #: 551-7888	
Report To: HAIG KEVORK		Sampler: HAIG KEVORK	
		Site #, City, State: 96 MACARTHUR BLVD.	
		QC Data: <input checked="" type="checkbox"/> Level D (Standard) <input type="checkbox"/> Level C <input type="checkbox"/> Level B <input type="checkbox"/> Level A	

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

CODE: Misc. Detect. Eval. Remed. Demol. Closure

Drinking Water Waste Water Other

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	Analyses Requested			Comments
						TPH-G	BTEX	MTBE	
1. SW3-5	5/12/98	SOIL	1	BRASS		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	8050328
2. SW4-5	5/12/98	SOIL	1	TUBE		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	8050399
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									

Relinquished By: <i>[Signature]</i>	Date: 5/12/98	Time: 7:00	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab: <i>K. N. Ull</i>	Date: 5/12/98	Time: 1:00

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

To be completed upon receipt of report:

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

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

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

Pink - Client
Yellow - Laboratory
White - Laboratory



**Sequoia
Analytical**

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(510) 988-9600
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FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

RECEIVED

Gettler-Ryan - Dublin 6747 Sierra Court, Suite J Dublin, CA 94568 Attention: Haig Kevork	Client Project ID: Unocal #1871-Oakland Sample Matrix: Soil Analysis Method: EPA 3550/8015 Mod. First Sample #: 805-1000	Sampled: May 12, 1998 Received: May 12, 1998 Reported: Jun 1, 1998
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GETTLER-RYAN INC.

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS AS HYDRAULIC FLUID

Analyte	Reporting Limit mg/kg	Sample I.D. 805-1000 H-1	Sample I.D. 805-1001 H-2
Extractable Hydrocarbons	10	N.D.	N.D.

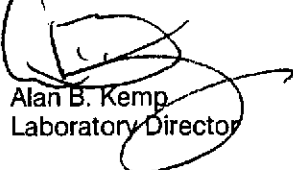
Chromatogram Pattern: -- --

Quality Control Data

Report Limit Multiplication Factor:	1.0	1.0
Date Extracted:	5/14/98	5/14/98
Date Analyzed:	5/18/98	5/14/98
Instrument Identification:	HP-3B	HP-3B

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

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871-Oakland
Matrix: Solid

QC Sample Group: 8051000-001

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	SP051498 8015EXB
Analy. Method:	EPA 8015 Mod.
Prep. Method:	EPA 3550
Analyst:	K. Grubb
MS/MSD #:	8051010
Sample Conc.:	N.D.
Prepared Date:	5/14/98
Analyzed Date:	5/14/98
Instrument I.D.#:	HP-3B
Conc. Spiked:	15 mg/kg
Result:	13
MS % Recovery:	87
Dup. Result:	14
MSD % Recov.:	93
RPD:	7.4
RPD Limit:	0-50

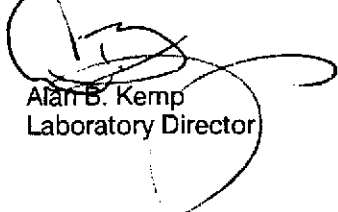
LCS #:	LCS051498B
Prepared Date:	5/14/98
Analyzed Date:	5/14/98
Instrument I.D.#:	HP-3B
Conc. Spiked:	15 mg/kg
LCS Result:	13
LCS % Recov.:	87

MS/MSD LCS Control Limits	60-140
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Please Note:
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** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director

Consultant Company: GETTLER-RYAN INC. J#140165			Project Name: FORMER UNOCAL #1871-OAKLAND		
Address: 6747 Sierra Court, Suite J			UNOCAL Project Manager: TINA BERRY		
City: DUBLIN	State: CA	Zip Code: 94568	AFE #: 9805291		
Telephone: (510) 551-7555 FAX #: 551-7888			Site #, City, State: 96 MACARTHUR BLVD.		
Report To: HAIG KEVORK		Sampler: HAIG KEVORK		QC Data: <input checked="" type="checkbox"/> Level D (Standard) <input type="checkbox"/> Level C <input type="checkbox"/> Level B <input type="checkbox"/> Level A	

Turnaround <input checked="" type="checkbox"/> 10 Work Days <input type="checkbox"/> 5 Work Days <input type="checkbox"/> 3 Work Days Time: <input type="checkbox"/> 2 Work Days <input type="checkbox"/> 1 Work Day <input type="checkbox"/> 2-8 Hours	<input type="checkbox"/> Drinking Water <input type="checkbox"/> Waste Water <input checked="" type="checkbox"/> Other	Analyses Requested
CODE: <input type="checkbox"/> Misc. <input type="checkbox"/> Detect. <input type="checkbox"/> Eval. <input type="checkbox"/> Remed. <input type="checkbox"/> Demol. <input type="checkbox"/> Closure		

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	Comments
1. H-1	5/12/98	SOIL	1	BRASS		8051000
2. H-2	5/12/98	SOIL	1	TUBE		8051001
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						

Relinquished By: <i>[Signature]</i>	Date: 5/12/98	Time: 7:00	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab: K. Kelly	Date: 5/12/98	Time: 1:00

Were Samples Received in Good Condition? Yes No
 Samples on Ice? Yes No
 Method of Shipment _____
 Page **1** of **1**

To be completed upon receipt of report:

1) Were the analyses requested on the Chain of Custody reported? Yes No If no, what analyses are still needed? _____
 2) Was the report issued within the requested turnaround time? Yes No If no, what was the turnaround time? _____

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

Pink - Client
 Yellow - Laboratory
 White - Laboratory



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Matrix: Water
Analysis Method: EPA 5030/8015 Mod 78020
First Sample #: 805-1002

Sampled: May 11, 1998
Received: May 12, 1998
Reported: Jun 1, 1998

RECEIVED

JUN 03 1998

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE
GETTLER-RYAN INC.
GENERAL CONTRACTORS

Analyte	Reporting Limit µg/L	Sample I.D. 805-1002 Water-FT	Sample I.D. 805-1003 Water-WO
Purgeable Hydrocarbons	50	620,000	90
Benzene	0.50	N.D.	N.D.
Toluene	0.50	18,000	N.D.
Ethyl Benzene	0.50	13,000	N.D.
Total Xylenes	0.50	83,000	N.D.
MTBE	2.5	N.D.	N.D.
Chromatogram Pattern:		Gasoline	Gasoline & Discrete Peaks

Quality Control Data

Report Limit Multiplication Factor:	10,000	1.0
Date Analyzed:	5/19/98	5/19/98
Instrument Identification:	HP-2	HP-2
Surrogate Recovery, %: (QC Limits = 70-130%)	108	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, #1271

Alan B. Kemp
Laboratory Director



Gettler-Ryan
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Matrix: Water
Analysis Method: EPA 3510/8015 Mod.
First Sample #: 805-1003

Sampled: May 11, 1998
Received: May 12, 1998
Reported: Jun 1, 1998

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit µg/L	Sample I.D. 805-1003 Water-WO
---------	----------------------------	--

Extractable
Hydrocarbons

50

890

Chromatogram Pattern:

Unidentified
Hydrocarbons
<C14

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Extracted:	5/15/98
Date Analyzed:	5/19/98
Instrument Identification:	HP-3B

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

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix Descript: Water
Analysis Method: SM 5520 B&F (Gravimetric)
First Sample #: 805-1003

Sampled: May 11, 1998
Received: May 12, 1998
Extracted: May 19, 1998
Analyzed: May 19, 1998
Reported: Jun 1, 1998

TOTAL RECOVERABLE PETROLEUM OIL

Sample Number	Sample Description	Oil & Grease mg/L (ppm)	Detection Limit Multiplication Factor
805-1003	Water-WO	N.D.	1.0

Detection Limits: 5.0

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

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director



Sequoia Analytical

680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8

Redwood City, CA 94063
Walnut Creek, CA 94598
Sacramento, CA 95834

(650) 364-9600
(510) 988-9600
(916) 921-9600

FAX (650) 364-9233
FAX (510) 988-9673
FAX (916) 921-0100

Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Descript: Water, Water-WO
Lab Number: 805-1003

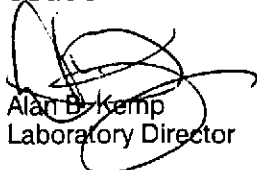
Sampled: May 11, 1998
Received: May 12, 1998
Analyzed: May 27, 1998
Reported: Jun 1, 1998

LABORATORY ANALYSIS

Analyte	Detection Limit mg/L	Sample Results mg/L
Cadmium.....	0.010	N.D.
Chromium.....	0.010	0.053
Nickel.....	0.010	0.055
Lead.....	0.020	N.D.
Zinc.....	0.020	0.065

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

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Descript: Water, Water-WO
Analysis Method: EPA 5030/8010
Lab Number: 805-1003

Sampled: May 11, 1998
Received: May 12, 1998
Analyzed: May 13, 1998
Reported: Jun 1, 1998

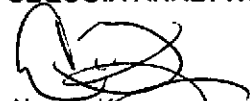
HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/L	Sample Results µg/L
Bromodichloromethane	0.50	5.8
Bromoform.....	0.50	N.D.
Bromomethane.....	1.0	N.D.
Carbon tetrachloride.....	0.50	N.D.
Chlorobenzene.....	0.50	N.D.
Chloroethane.....	1.0	N.D.
Chloroform	0.50	14
Chloromethane.....	1.0	N.D.
Dibromochloromethane	0.50	1.9
1,3-Dichlorobenzene.....	0.50	N.D.
1,4-Dichlorobenzene	0.50	0.89
1,2-Dichlorobenzene	0.50	2.8
1,1-Dichloroethane.....	0.50	N.D.
1,2-Dichloroethane.....	0.50	N.D.
1,1-Dichloroethene.....	0.50	N.D.
cis-1,2-Dichloroethene.....	0.50	N.D.
trans-1,2-Dichloroethene.....	0.50	N.D.
1,2-Dichloropropane.....	0.50	N.D.
cis-1,3-Dichloropropene.....	0.50	N.D.
trans-1,3-Dichloropropene.....	0.50	N.D.
Methylene chloride.....	5.0	N.D.
1,1,2,2-Tetrachloroethane.....	0.50	N.D.
Tetrachloroethene	0.50	1.7
1,1,1-Trichloroethane.....	0.50	N.D.
1,1,2-Trichloroethane.....	0.50	N.D.
Trichloroethene.....	0.50	N.D.
Trichlorofluoromethane.....	0.50	N.D.
Vinyl chloride.....	1.0	N.D.

Surrogates	Control Limit %	% Recovery
Dibromodifluoromethane.....	50	150
4-Bromofluorobenzene.....	50	150

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

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Descript: Water, Water-WO
Analysis Method: EPA 8270
Lab Number: 805-1003

Sampled: May 11, 1998
Received: May 12, 1998
Extracted: May 18, 1998
Analyzed: May 20, 1998
Reported: Jun 1, 1998

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

Analyte	Detection Limit µg/L	Sample Results µg/L
Acenaphthene.....	5.0	N.D.
Acenaphthylene.....	5.0	N.D.
Anthracene.....	5.0	N.D.
Benzoic Acid.....	10	N.D.
Benzo(a)anthracene.....	5.0	N.D.
Benzo(b)fluoranthene.....	5.0	N.D.
Benzo(k)fluoranthene.....	5.0	N.D.
Benzo(g,h,i)perylene.....	5.0	N.D.
Benzo(a)pyrene.....	5.0	N.D.
Benzyl alcohol.....	5.0	N.D.
Bis(2-chloroethoxy)methane.....	5.0	N.D.
Bis(2-chloroethyl)ether.....	5.0	N.D.
Bis(2-chloroisopropyl)ether.....	5.0	N.D.
Bis(2-ethylhexyl)phthalate.....	10	N.D.
4-Bromophenyl phenyl ether.....	5.0	N.D.
Butyl benzyl phthalate.....	5.0	N.D.
4-Chloroaniline.....	10	N.D.
2-Chloronaphthalene.....	5.0	N.D.
4-Chloro-3-methylphenol.....	5.0	N.D.
2-Chlorophenol.....	5.0	N.D.
4-Chlorophenyl phenyl ether.....	5.0	N.D.
Chrysene.....	5.0	N.D.
Dibenz(a,h)anthracene.....	5.0	N.D.
Dibenzofuran.....	5.0	N.D.
Di-N-butyl phthalate.....	10	N.D.
1,3-Dichlorobenzene.....	5.0	N.D.
1,4-Dichlorobenzene.....	5.0	N.D.
1,2-Dichlorobenzene.....	5.0	N.D.
3,3-Dichlorobenzidine.....	10	N.D.
2,4-Dichlorophenol.....	5.0	N.D.
Diethyl phthalate.....	5.0	N.D.
2,4-Dimethylphenol.....	5.0	N.D.
Dimethyl phthalate.....	5.0	N.D.
4,6-Dinitro-2-methylphenol.....	10	N.D.
2,4-Dinitrophenol.....	10	N.D.
2,4-Dinitrotoluene.....	5.0	N.D.
2,6-Dinitrotoluene.....	5.0	N.D.
Di-N-octyl phthalate.....	5.0	N.D.
Fluoranthene.....	5.0	N.D.
Fluorene.....	5.0	N.D.



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Descript: Water, Water-WO
Analysis Method: EPA 8270
Lab Number: 805-1003

Sampled: May 11, 1998
Received: May 12, 1998
Extracted: May 18, 1998
Analyzed: May 20, 1998
Reported: Jun 1, 1998


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

Analyte	Detection Limit µg/L	Sample Results µg/L
Hexachlorobenzene.....	5.0	N.D.
Hexachlorobutadiene.....	5.0	N.D.
Hexachlorocyclopentadiene.....	10	N.D.
Hexachloroethane.....	5.0	N.D.
Indeno(1,2,3-cd)pyrene.....	5.0	N.D.
Isophorone.....	5.0	N.D.
2-Methylnaphthalene.....	5.0	N.D.
2-Methylphenol.....	5.0	N.D.
4-Methylphenol.....	5.0	N.D.
Naphthalene.....	5.0	N.D.
2-Nitroaniline.....	10	N.D.
3-Nitroaniline.....	10	N.D.
4-Nitroaniline.....	10	N.D.
Nitrobenzene.....	5.0	N.D.
2-Nitrophenol.....	5.0	N.D.
4-Nitrophenol.....	10	N.D.
N-Nitrosodiphenylamine.....	5.0	N.D.
N-Nitroso-di-N-propylamine.....	5.0	N.D.
Pentachlorophenol.....	10	N.D.
Phenanthrene.....	5.0	N.D.
Phenol.....	5.0	N.D.
Pyrene.....	5.0	N.D.
1,2,4-Trichlorobenzene.....	5.0	N.D.
2,4,5-Trichlorophenol.....	10	N.D.
2,4,6-Trichlorophenol.....	5.0	N.D.

Surrogates	Control Limit %	% Recovery
2-Fluorophenol.....	21 100.....	47
Phenol-d6.....	10 100.....	30
Nitrobenzene-d5.....	35 114.....	75
2-Fluorobiphenyl.....	43 116.....	81
2,4,6-Tribromophenol.....	10 123.....	91
4-Terphenyl-d14.....	33 141.....	95

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, #1271


Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Liquid

QC Sample Group: 8051002-003

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC051998 802002A	GC051998 802002A	GC051998 802002A	GC051998 802002A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb
MS/MSD #:	8050910	8050910	8050910	8050910
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/19/98	5/19/98	5/19/98	5/19/98
Analyzed Date:	5/19/98	5/19/98	5/19/98	5/19/98
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
Result:	19	19	20	58
MS % Recovery:	95	95	100	97
Dup. Result:	16	16	16	49
MSD % Recov.:	80	80	80	82
RPD:	17	17	22	17
RPD Limit:	0-20	0-20	0-20	0-20

LCS #:	2LCS051998	2LCS051998	2LCS051998	2LCS051998
Prepared Date:	5/19/98	5/19/98	5/19/98	5/19/98
Analyzed Date:	5/19/98	5/19/98	5/19/98	5/19/98
Instrument I.D.#:	HP-2	HP-2	HP-2	HP-2
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	17	17	17	53
LCS % Recov.:	85	85	85	88

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130
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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 matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Liquid

QC Sample Group: 8051002-003

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

ANALYTE	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene	Diesel
Method:	EPA 8010	EPA 8010	EPA 8010	EPA 8015M
Analyst:	N. Nelson	N. Nelson	N. Nelson	K. Grubb

MS/MSD Batch#:	8050960	8050960	8050960	BLK051598A
Date Prepared:	5/13/98	5/13/98	5/13/98	5/15/98
Date Analyzed:	5/13/98	5/13/98	5/13/98	5/18/98
Instrument I.D.#:	HP-7	HP-7	HP-7	HP-3B
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	500 µg/L
Matrix Spike % Recovery:	95	95	80	72
Matrix Spike Duplicate % Recovery:	95	90	65	82
Relative % Difference:	0.0	5.4	21	13
RPD Limit:	0-25	0-25	0-25	0-50

LCS Batch#:	LCS051398A	LCS051398A	LCS051398A	LCS051598A
Date Prepared:	5/13/98	5/13/98	5/13/98	5/15/98
Date Analyzed:	5/13/98	5/13/98	5/13/98	5/18/98
Instrument I.D.#:	HP-7	HP-7	HP-7	HP-3B
LCS % Recovery:	95	95	75	62

% Recovery Control Limits:	60-140	60-140	60-140	60-140
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Please Note:

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SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Liquid

QC Sample Group: 8051002-003

Reported: Jun 1, 1998

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
Prep. Method:	EPA 3510	EPA 3510	EPA 3510	EPA 3510	EPA 3510	EPA 3510
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	L. Diaz	L. Diaz	L. Diaz	L. Diaz	L. Diaz	L. Diaz

MS/MSD Batch#:	BLK051898A	BLK051898A	BLK051898A	BLK051898A	BLK051898A	BLK051898A
Date Prepared:	5/18/98	5/18/98	5/18/98	5/18/98	5/18/98	5/18/98
Date Analyzed:	5/20/98	5/20/98	5/20/98	5/20/98	5/20/98	5/20/98
Instrument I.D.#:	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1
Conc. Spiked:	150 µg/L	150 µg/L	100 µg/L	100 µg/L	100 µg/L	150 µg/L
Matrix Spike % Recovery:	32	73	67	79	75	80
Matrix Spike Duplicate % Recovery:	29	73	63	80	70	73
Relative % Difference:	11	0.0	6.2	1.3	6.9	8.7
RPD Limit:	0-30	0-30	0-30	0-30	0-30	0-30

LCS Batch#:	-	-	-	-	-	-
Date Prepared:	-	-	-	-	-	-
Date Analyzed:	-	-	-	-	-	-
Instrument I.D.#:	-	-	-	-	-	-
LCS % Recovery:	-	-	-	-	-	-

% Recovery Control Limits:	12-110	27-123	36-97	41-116	39-98	23-97
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SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director

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 matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Liquid

QC Sample Group: 8051002-003

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

ANALYTE	Acenaphthene	4-Nitrophenol	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
Prep. Method:	EPA 3510	EPA 3510	EPA 3510	EPA 3510	EPA 3510
Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Analyst:	L. Diaz	L. Diaz	L. Diaz	L. Diaz	L. Diaz

MS/MSD	BLK051898A	BLK051898A	BLK051898A	BLK051898A	BLK051898A
Batch#:	BLK051898A	BLK051898A	BLK051898A	BLK051898A	BLK051898A
Date Prepared:	5/18/98	5/18/98	5/18/98	5/18/98	5/18/98
Date Analyzed:	5/20/98	5/20/98	5/20/98	5/20/98	5/20/98
Instrument I.D.#:	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1	GC/MS 1
Conc. Spiked:	100 µg/L	150 µg/L	100 µg/L	150 µg/L	100 µg/L
Matrix Spike % Recovery:	77	37	80	87	87
Matrix Spike Duplicate % Recovery:	73	31	75	87	93
Relative % Difference:	5.3	20	6.5	0.0	6.7
RPD Limit:	0-30	0-30	0-30	0-30	0-30

LCS Batch#:	-	-	-	-	-
Date Prepared:	-	-	-	-	-
Date Analyzed:	-	-	-	-	-
Instrument I.D.#:	-	-	-	-	-
LCS % Recovery:	-	-	-	-	-

% Recovery Control Limits:	12-110	27-123	36-97	41-116	39-98
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Please Note:

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SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Liquid

QC Sample Group: 8051002-003

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

ANALYTE	Nickel	Cadmium	Chromium	Lead	Zinc
Method:	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7
Analyst:	J. Kelly	J. Kelly	J. Kelly	J. Kelly	J. Kelly

MS/MSD					
Batch#:	8051353	8051353	8051353	8051353	8051353
Date Prepared:	5/26/98	5/26/98	5/26/98	5/26/98	5/26/98
Date Analyzed:	5/27/98	5/27/98	5/27/98	5/27/98	5/27/98
Instrument I.D.#:	MV-4	MV-4	MV-4	MV-4	MV-4
Conc. Spiked:	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L
Matrix Spike					
% Recovery:	82	84	80	80	83
Matrix Spike Duplicate % Recovery:	82	83	80	77	82
Relative % Difference:	0.0	1.2	0.0	3.8	1.2
RPD Limit:	0-20	0-20	0-20	0-20	0-20

LCS Batch#:	LCS052698A	LCS052698A	LCS052698A	LCS052698A	LCS052698A
Date Prepared:	5/26/98	5/26/98	5/26/98	5/26/98	5/26/98
Date Analyzed:	5/27/98	5/27/98	5/27/98	5/27/98	5/27/98
Instrument I.D.#:	MV-4	MV-4	MV-4	MV-4	MV-4
LCS % Recovery:	83	84	80	80	82

% Recovery Control Limits:	80-120	80-120	80-120	80-120	80-120
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Please Note:
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SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Water

QC Sample Group: 8051002-003

Reported: Jun 1, 1998

QUALITY CONTROL DATA REPORT

ANALYTE	Oil & Grease
Method:	SM 5520
Analyst:	N. Van Slambrook

MS/MSD
Batch#: BLK051998B
Date Prepared: 5/19/98
Date Analyzed: 5/19/98
Instrument I.D.#: Manual
Conc. Spiked: 100 mg/L

Matrix Spike
% Recovery: 130

Matrix Spike Duplicate %
Recovery: 120

Relative %
Difference: 8.0
RPD Limit: 0-30

LCS Batch#: LCS051998B
Date Prepared: 5/19/98
Date Analyzed: 5/19/98
Instrument I.D.#: Manual

LCS %
Recovery: 110

% Recovery	
Control Limits:	60-140

Please Note:

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SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director

Consultant Company: **GETTLER-RYAN INC. J#140165** Project Name: **FORMER UNOCAL #1871 - OAKLAND**
 Address: **6747 Sierra Court, Suite J** UNOCAL Project Manager: **TINA BERRY**
 City: **DUBLIN** State: **CA** Zip Code: **94568** AFE #: **9805292**
 Telephone: **(510) 551-7555** FAX #: **551-7888** Site #, City, State: **96 MACARTHUR BLVD.**
 Report To: **HAIG KEVORK** Sampler: **HAIG KEVORK** QC Data: Level D (Standard) Level C Level B Level A

Turnaround 10 Work Days 5 Work Days 3 Work Days
 Time: 2 Work Days 1 Work Day 2-8 Hours
 CODE: Misc. Detect. Eval. Remed. Demol. Closure

Drinking Water Waste Water Other
 Analyses Requested:

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	Analyses Requested										Comments	
						TPH-G	BTEX	MTBE	TPH-D	TOG	8010	8210	CD/G/Pb	Zn/Cu			
1. WATER-FT	5/11/98	H2O	3	VOA		✓	✓	✓									8051002
2. WATER-WO	5/11/98	H2O	6	VOA AMBIER		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	8051003
3.																	
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

Relinquished By: <i>[Signature]</i>	Date: 5/12/98	Time: 7:00	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab: <i>[Signature]</i>	Date: 5/12/98	Time: 1900

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

To be completed upon receipt of report:
 1) Were the analyses requested on the Chain of Custody reported? Yes No If no, what analyses are still needed? _____
 2) Was the report issued within the requested turnaround time? Yes No If no, what was the turnaround time? _____
 Approved by: _____ Signature: _____ Company: _____ Date: _____

Pink - Client

Yellow - Laboratory

White - Laboratory



Gettler-Ryan - Dublin
6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Matrix: Soil
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: 805-0988

Sampled: May 12, 1998
Received: May 12, 1998
Reported: May 21, 1998

QC Batch Number: SP051598 8020EXA SP051598 8020EXA SP051598 8020EXA SP051598 8020EXA SP051598 8020EXA SP051598 8020EXA

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX

Analyte	Reporting Limit mg/Kg	Sample I.D. 805-0988 SP1 (A-D)	Sample I.D. 805-0989 SP1 (E-H)	Sample I.D. 805-0990 SP1 (I-L)	Sample I.D. 805-0991 SP1 (M-P)	Sample I.D. 805-0992 SP1 (Q-T)	Sample I.D. 805-0993 SP1 (U-X)
Purgeable Hydrocarbons	1.0	N.D.	170	60	380	50	1,200
Benzene	0.0050	N.D.	2.9	1.5	1.6	0.32	9.0
Toluene	0.0050	N.D.	0.74	5.5	5.6	0.90	26
Ethyl Benzene	0.0050	N.D.	0.78	6.6	7.5	0.81	28
Total Xylenes	0.0050	0.015	3.2	27	34	3.5	100

Chromatogram Pattern: -- Gasoline & Unidentified Hydrocarbons > C8 Gasoline Gasoline Gasoline Gasoline

Quality Control Data

Report Limit Multiplication Factor:	1.0	10	20	50	50	100
Date Analyzed:	5/15/98	5/15/98	5/15/98	5/15/98	5/15/98	5/15/98
Instrument Identification:	HP-4	HP-4	HP-4	HP-4	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 40-140%)	107	147^	*	*	*	*

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

SEQUOIA ANALYTICAL, #1271

Please Note:

^Surrogate outside of upper control limit due to peak coelution.

*Surrogate recovery below lower control limit due to dilution.


Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin 6747 Sierra Court, Suite J Dublin, CA 94568 Attention: Haig Kevork	Client Project ID: Unocal #1871, Oakland Sample Matrix: Soil Analysis Method: EPA 5030/8015 Mod./8020 First Sample #: 805-0994	Sampled: May 12, 1998 Received: May 12, 1998 Reported: May 21, 1998
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QC Batch Number: SP051598 SP051598

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX

Analyte	Reporting Limit mg/Kg	Sample I.D. 805-0994 SP1 (Y,Z,1,2)	Sample I.D. 805-0995 SP1 (3,4,5,6)
Purgeable Hydrocarbons	1.0	130	13
Benzene	0.0050	0.94	0.36
Toluene	0.0050	2.8	0.57
Ethyl Benzene	0.0050	2.3	0.22
Total Xylenes	0.0050	12	0.92

Chromatogram Pattern: Gasoline Gasoline & Discrete Peaks

Quality Control Data

Report Limit Multiplication Factor:	20	5.0
Date Analyzed:	5/15/98	5/18/98
Instrument Identification:	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 40-140%)	*	119

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

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director

Please Note:

*Surrogate recovery below lower control limit due to dilution.



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Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Matrix: Soil
Analysis Method: EPA 5030/8015 Mod./8020
First Sample #: 805-0996

Sampled: May 12, 1998
Received: May 12, 1998
Reported: May 21, 1998

QC Batch Number: SP051598

8020EXA
TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX

Analyte	Reporting Limit mg/Kg	Sample I.D. 805-0996 WO SP1
Purgeable Hydrocarbons	2.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Total Xylenes	0.0050	0.014

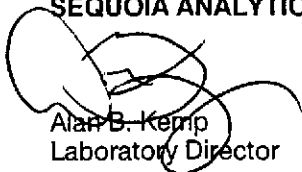
Chromatogram Pattern: ..

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Analyzed:	5/18/98
Instrument Identification:	HP-4
Surrogate Recovery, %: (QC Limits = 40-140%)	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, #1271


Alan B. Kerrip
Laboratory Director



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Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Matrix: Soil
Analysis Method: EPA 3550/8015 Mod.
First Sample #: 805-0996

Sampled: May 12, 1998
Received: May 12, 1998
Reported: May 21, 1998

QC Batch Number:

SP051998

8015EXA

TOTAL EXTRACTABLE PETROLEUM HYDROCARBONS

Analyte	Reporting Limit mg/kg	Sample I.D. 805-0996 WO SP1
Extractable Hydrocarbons	1.0	6.8

Chromatogram Pattern:

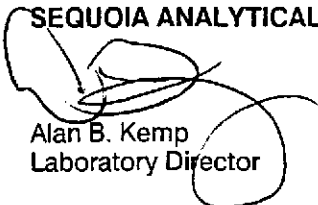
Unidentified
Hydrocarbons
>C16

Quality Control Data

Report Limit Multiplication Factor:	1.0
Date Extracted:	5/19/98
Date Analyzed:	5/19/98
Instrument Identification:	HP-3A

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

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director



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Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix Descript: Soil
Analysis Method: SM 5520 E&F (Gravimetric)
First Sample #: 805-0996

Sampled: May 12, 1998
Received: May 12, 1998
Extracted: May 15, 1998
Analyzed: May 18, 1998
Reported: May 21, 1998

TOTAL RECOVERABLE PETROLEUM OIL

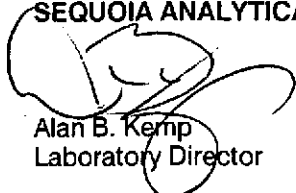
Sample Number	Sample Description	Oil & Grease mg/kg (ppm)	Detection Limit Multiplication Factor	QC Batch Number
805-0996	WO SP1	110	1.0	SP0515985520EXA

Detection Limits:

50

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

SEQUOIA ANALYTICAL, #1271


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Client Project ID: Unocal #1871, Oakland
Sample Descript: Soil, WO SP1
Analysis Method: EPA 5030/8010
Lab Number: 805-0996

Sampled: May 12, 1998
Received: May 12, 1998
Analyzed: May 18, 1998
Reported: May 21, 1998

QC Batch Number: SP0515988010EXA

Instrument ID: HP-7

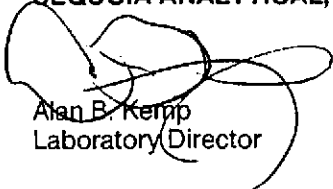
HALOGENATED VOLATILE ORGANICS (EPA 8010)

Analyte	Detection Limit µg/kg	Sample Results µg/kg
Bromodichloromethane.....	10	N.D.
Bromoform.....	10	N.D.
Bromomethane.....	20	N.D.
Carbon tetrachloride.....	10	N.D.
Chlorobenzene.....	10	N.D.
Chloroethane.....	20	N.D.
Chloroform.....	10	N.D.
Chloromethane.....	20	N.D.
Dibromochloromethane.....	10	N.D.
1,2-Dichlorobenzene.....	10	N.D.
1,3-Dichlorobenzene.....	10	N.D.
1,4-Dichlorobenzene.....	10	N.D.
1,1-Dichloroethane.....	10	N.D.
1,2-Dichloroethane.....	10	N.D.
1,1-Dichloroethene.....	10	N.D.
cis-1,2-Dichloroethene.....	10	N.D.
trans-1,2-Dichloroethene.....	10	N.D.
1,2-Dichloropropane.....	10	N.D.
cis-1,3-Dichloropropene.....	10	N.D.
trans-1,3-Dichloropropene.....	10	N.D.
Methylene chloride.....	100	N.D.
1,1,2,2-Tetrachloroethane.....	10	N.D.
Tetrachloroethene.....	10	N.D.
1,1,1-Trichloroethane.....	10	N.D.
1,1,2-Trichloroethane.....	10	N.D.
Trichloroethene.....	10	N.D.
Trichlorofluoromethane.....	10	N.D.
Vinyl chloride.....	20	N.D.

Surrogates	Control Limit %	% Recovery
Dibromodifluoromethane.....	50	150
4-Bromofluorobenzene.....	50	150

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

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
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Client Project ID: Unocal #1871, Oakland
Sample Descript: Soil, WO SP1
Analysis Method: EPA 8270
Lab Number: 805-0996

Sampled: May 12, 1998
Received: May 12, 1998
Extracted: May 18, 1998
Analyzed: May 19, 1998
Reported: May 21, 1998

QC Batch Number: SP0518988270EXB

Instrument ID: MS-1

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

Analyte	Detection Limit µg/kg	Sample Results µg/kg
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-Nitrosodimethylamine.....	100	N.D.
N-Nitrosodiphenylamine.....	100	N.D.
N-Nitroso-di-N-propylamine.....	100	N.D.
Pentachlorophenol.....	500	N.D.
Phenanthrene.....	100	350
Phenol.....	100	N.D.
Pyrene.....	100	380
1,2,4-Trichlorobenzene.....	100	N.D.
2,4,5-Trichlorophenol.....	500	N.D.
2,4,6-Trichlorophenol.....	100	N.D.
Surrogates	Control Limit %	% Recovery
2-Fluorophenol.....	25	121
Phenol-d6.....	24	113
Nitrobenzene-d5.....	23	120
2-Fluorobiphenyl.....	30	115
2,4,6-Tribromophenol.....	19	122
4-Terphenyl-d14.....	18	137

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

SEQUOIA ANALYTICAL, #1271

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Client Project ID: Unocal #1871, Oakland
Sample Descript: Soil, WO SP-1
Lab Number: 805-0996

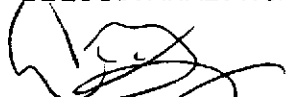
Sampled: May 12, 1998
Received: May 12, 1998
Extracted: May 18, 1998
Analyzed: May 18, 1998
Reported: May 21, 1998

LUFT METALS

Analyte	Detection Limit mg/kg	Sample Results mg/kg	QC Batch Number	Instrument ID
Cadmium.....	0.50	N.D.	ME0518986010MDA	MV-4
Chromium.....	0.50	30	ME0518986010MDA	MV-4
Lead.....	1.0	3.0	ME0518986010MDA	MV-4
Nickel.....	1.0	56	ME0518986010MDA	MV-4
Zinc.....	1.0	57	ME0518986010MDA	MV-4

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

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
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Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Descript: Soil
Analysis for: Lead
First Sample #: 805-0988


Sampled: May 12, 1998
Received: May 12, 1998
Digested: May 18, 1998
Analyzed: May 18, 1998
Reported: May 21, 1998

LABORATORY ANALYSIS FOR: Lead

Sample Number	Sample Description	Detection Limit mg/kg	Sample Result mg/kg	QC Batch Number	Instrument ID
805-0988	SP1 (A-D)	1.0	19	ME0518986010MDA	MV-4
805-0989	SP1 (E-H)	1.0	2.2	ME0518986010MDA	MV-4
805-0990	SP1 (I-L)	1.0	5.9	ME0518986010MDA	MV-4
805-0991	SP1 (M-P)	1.0	4.6	ME0518986010MDA	MV-4
805-0992	SP1 (Q-T)	1.0	4.9	ME0518986010MDA	MV-4
805-0993	SP1 (U-X)	1.0	2.1	ME0518986010MDA	MV-4
805-0994	SP1 (Y,Z,1,2)	1.0	3.5	ME0518986010MDA	MV-4
805-0995	SP1 (3,4,5,6)	1.0	1.9	ME0518986010MDA	MV-4

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

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director



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Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Sample Descript: Soil, WO SP1
Analysis Method: EPA 8270
Lab Number: 805-0996

Sampled: May 12, 1998
Received: May 12, 1998
Extracted: May 18, 1998
Analyzed: May 19, 1998
Reported: May 21, 1998

QC Batch Number: SP0518988270EXB

Instrument ID: MS-1

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.
2,4-Dinitrotoluene.....	100	N.D.
2,6-Dinitrotoluene.....	100	N.D.
Di-N-octyl phthalate.....	100	N.D.
Fluoranthene.....	100	380
Fluorene.....	100	N.D.



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Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Solid

QC Sample Group: 8050988-996

Reported: May 21, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel	Oil & Grease
QC Batch#:	SP051598 8020EXA	SP051598 8020EXA	SP051598 8020EXA	SP051598 8020EXA	SP051498 8015EXB	SP051598 5520EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015	SM 5520
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 3550	SM 5520
Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb	K. Grubbs	L. Diaz
MS/MSD #:	8050476	8050476	8050476	8050476	8051010	BLK051598B
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/15/98	5/15/98	5/15/98	5/15/98	5/14/98	5/15/98
Analyzed Date:	5/15/98	5/15/98	5/15/98	5/15/98	5/14/98	5/18/98
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4	HP-3B	Manual
Conc. Spiked:	0.80 mg/kg	0.80 mg/kg	0.80 mg/kg	2.4 mg/kg	15 mg/kg	500 mg/kg
Result:	0.88	0.89	0.84	2.7	13	5600
MS % Recovery:	110	111	105	113	87	112
Dup. Result:	0.89	0.91	0.86	2.7	14	5100
MSD % Recov.:	111	114	108	113	93	102
RPD:	1.1	2.2	2.4	0.0	7.4	9.3
RPD Limit:	0-25	0-25	0-25	0-25	0-50	0-30

LCS #:	4LCS051598	4LCS051598	4LCS051598	4LCS051598	LCS051998	-
Prepared Date:	5/15/98	5/15/98	5/15/98	5/15/98	5/19/98	-
Analyzed Date:	5/15/98	5/15/98	5/15/98	5/15/98	5/19/98	-
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4	HP-3B	-
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L	15 mg/kg	-
LCS Result:	19	19	18	58	14	-
LCS % Recov.:	95	95	90	97	93	-

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130	60-140	-
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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 matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

SEQUOIA ANALYTICAL, #1271


Alan B. Kemp
Laboratory Director



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Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Solid

QC Sample Group: 8050988-996

Reported: May 21, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	SP051598 8020EXA	SP051598 8020EXA	SP051598 8020EXA	SP051598 8020EXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	D. Newcomb	D. Newcomb	D. Newcomb	D. Newcomb
MS/MSD #:	8050476	8050476	8050476	8050476
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/15/98	5/15/98	5/15/98	5/15/98
Analyzed Date:	5/15/98	5/15/98	5/15/98	5/15/98
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	0.80 mg/kg	0.80 mg/kg	0.80 mg/kg	2.4 mg/kg
Result:	0.88	0.89	0.84	2.7
MS % Recovery:	110	111	105	113
Dup. Result:	0.89	0.91	0.86	2.7
MSD % Recov.:	111	114	108	113
RPD:	1.1	2.2	2.4	0.0
RPD Limit:	0-25	0-25	0-25	0-25

LCS #:	4LCS051898	4LCS051898	4LCS051898	4LCS051898
Prepared Date:	5/18/98	5/18/98	5/18/98	5/18/98
Analyzed Date:	5/18/98	5/18/98	5/18/98	5/18/98
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4
Conc. Spiked:	20 µg/L	20 µg/L	20 µg/L	60 µg/L
LCS Result:	17	18	17	52
LCS % Recov.:	85	90	85	87

MS/MSD LCS Control Limits	70-130	70-130	70-130	70-130
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SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director

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 matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference



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6747 Sierra Court, Suite J
Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Solid

QC Sample Group: 8050988-996

Reported: May 21, 1998

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloro-ethene	Trichloro-ethene	Chloro-benzene
QC Batch#:	SP051598 8010EXA	SP051598 8010EXA	SP051598 8010EXA
Analy. Method:	EPA 8010	EPA 8010	EPA 8010
Prep. Method:	EPA 5030	EPA 5030	EPA 5030
Analyst:	N. Nelson	N. Nelson	N. Nelson
MS/MSD #:	8051010	8051010	8051010
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	5/15/98	5/15/98	5/15/98
Analyzed Date:	5/15/98	5/15/98	5/15/98
Instrument I.D.#:	HP-7	HP-7	HP-7
Conc. Spiked:	200 µg/Kg	200 µg/Kg	200 µg/Kg
Result:	180	170	12
MS % Recovery:	90	85	60
Dup. Result:	170	170	130
MSD % Recov.:	85	85	65
RPD:	5.7	0.0	8.0
RPD Limit:	0-25	0-25	0-25

LCS #:	LCS051898	LCS051898	LCS051898
Prepared Date:	5/18/98	5/18/98	5/18/98
Analyzed Date:	5/18/98	5/18/98	5/18/98
Instrument I.D.#:	HP-7	HP-7	HP-7
Conc. Spiked:	200 µg/Kg	200 µg/Kg	200 µg/Kg
LCS Result:	180	170	140
LCS % Recov.:	90	85	70

MS/MSD LCS Control Limits	60-140	60-140	60-140
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** MS = Matrix Spike, MSD = MS Duplicate, RPD = Relative % Difference

SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director



Gettler-Ryan - Dublin
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Dublin, CA 94568
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QC Sample Group: 8050988-996

Reported: May 21, 1998

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
QC Batch#:	SP051898 8270EXB	SP051898 8270EXB	SP051898 8270EXB	SP051898 8270EXB	SP051898 8270EXB	SP051898 8270EXB
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	EPA 3550	EPA 3550	EPA 3550
Analyst:	L. Diaz	L. Diaz	L. Diaz	L. Diaz	L. Diaz	L. Diaz
MS/MSD #:	8050648	8050648	8050648	8050648	8050648	8050648
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98
Analyzed Date:	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98
Instrument I.D.#:	GC/MS-1	GC/MS-1	GC/MS-1	GC/MS-1	GC/MS-1	GC/MS-1
Conc. Spiked:	5000 µg/kg	5000 µg/kg	3300 µg/kg	3300 µg/kg	3300 µg/kg	5000 µg/kg
Result:	2900	3400	1900	2500	2100	3300
MS % Recovery:	58	68	58	76	64	66
Dup. Result:	2800	3400	1800	2500	2100	3600
MSD % Recov.:	56	68	55	76	64	72
RPD:	3.5	0.0	5.4	0.0	0.0	8.7
RPD Limit:	0-40	0-40	0-40	0-40	0-40	0-40

LCS #:	BLK051898B	BLK051898B	BLK051898B	BLK051898B	BLK051898B	BLK051898B
Prepared Date:	3/18/98	3/18/98	3/18/98	3/18/98	3/18/98	3/18/98
Analyzed Date:	3/19/98	3/19/98	3/19/98	3/19/98	3/19/98	3/19/98
Instrument I.D.#:	GC/MS-1	GC/MS-1	GC/MS-1	GC/MS-1	GC/MS-1	GC/MS-1
Conc. Spiked:	5000 µg/kg	5000 µg/kg	3300 µg/kg	3300 µg/kg	3300 µg/kg	5000 µg/kg
LCS Result:	3100	4000	2400	2900	2600	3900
LCS % Recov.:	62	80	73	88	79	78

MS/MSD LCS Control Limits	47-107	59-97	54-93	55-114	60-95	54-100
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** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

SEQUOIA ANALYTICAL, #1271

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Laboratory Director

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 Dublin, CA 94568
 Attention: Haig Kevork

 Client Project ID: Unocal #1871, Oakland
 Matrix: Solid

QC Sample Group: 8050988-996

Reported: May 21, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Acenaphthene	4-Nitrophenol	2,4-Dinitro- toluene	Pentachloro- phenol	Pyrene
QC Batch#:	SP051898 8270EXB	SP051898 8270EXB	SP051898 8270EXB	SP051898 8270EXB	SP051898 8270EXB
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	EPA 3550	EPA 3550
Analyst:	L. Diaz	L. Diaz	L. Diaz	L. Diaz	L. Diaz
MS/MSD #:	8050648	8050648	8050648	8050648	8050648
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98
Analyzed Date:	5/11/98	5/11/98	5/11/98	5/11/98	5/11/98
Instrument I.D.#:	GC/MS-1	GC/MS-1	GC/MS-1	GC/MS-1	GC/MS-1
Conc. Spiked:	3300 µg/kg	5000 µg/kg	3300 µg/kg	5000 µg/kg	3300 µg/kg
Result:	2100	4000	2400	430	2800
MS % Recovery:	64	80	73	86	85
Dup. Result:	2300	4200	2400	4300	3100
MSD % Recov.:	70	84	73	86	94
RPD:	9.1	4.9	0.0	0.0	10
RPD Limit:	0-40	0-40	0-40	0-40	0-40

LCS #:	BLK051898B	BLK051898B	BLK051898B	BLK051898B	BLK051898B
Prepared Date:	3/18/98	3/18/98	3/18/98	3/18/98	3/18/98
Analyzed Date:	3/19/98	3/19/98	3/19/98	3/19/98	3/19/98
Instrument I.D.#:	GC/MS-1	GC/MS-1	GC/MS-1	GC/MS-1	GC/MS-1
Conc. Spiked:	3300 µg/kg	5000 µg/kg	3300 µg/kg	5000 µg/kg	3300 µg/kg
LCS Result:	2600	4400	2700	4400	2700
LCS % Recov.:	78	88	90	88	82

MS/MSD LCS Control Limits	51-96	21-114	45-100	22-117	50-114
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 Laboratory Director



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Dublin, CA 94568
Attention: Haig Kevork

Client Project ID: Unocal #1871, Oakland
Matrix: Solid

QC Sample Group: 8050988-996

Reported: May 21, 1998

QUALITY CONTROL DATA REPORT

Analyte:	Cadmium	Chromium	Nickel	Lead	Zinc	Mercury
QC Batch#:	ME051898 6010MDA	ME051898 6010MDA	ME051898 6010MDA	ME051898 6010MDA	ME051898 6010MDA	ME051598 7471MDA
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010	EPA 6010	EPA 7471
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050	EPA 3050	EPA 7471
Analyst:	J. Kelly	J. Kelly	J. Kelly	J. Kelly	J. Kelly	T. Le
MS/MSD #:	8050657	8050657	8050657	8050657	8050657	8051010
Sample Conc.:	N.D.	14 mg/kg	12 mg/kg	1.8 mg/kg	19 mg/kg	0.040 mg/kg
Prepared Date:	5/18/98	5/18/98	5/18/98	5/18/98	5/18/98	5/15/98
Analyzed Date:	5/18/98	5/18/98	5/18/98	5/18/98	5/18/98	5/15/98
Instrument I.D.#:	MV-4	MV-4	MV-4	MV-4	MV-4	MV-1
Conc. Spiked:	50 mg/kg	50 mg/kg	50 mg/kg	50 mg/kg	50 mg/kg	0.10 mg/kg
Result:	50	62	62	49	68	0.12
MS % Recovery:	100	96	100	94	98	80
Dup. Result:	51	69	64	54	67	0.13
MSD % Recov.:	102	110	104	104	96	90
RPD:	2.0	11	3.2	9.7	1.5	8.0
RPD Limit:	0-20	0-20	0-20	0-20	0-20	0-20

LCS #:	LCS051898	LCS051898	LCS051898	LCS051898	LCS051898	LCS051598
Prepared Date:	5/18/98	5/18/98	5/18/98	5/18/98	5/18/98	5/15/98
Analyzed Date:	5/18/98	5/18/98	5/18/98	5/18/98	5/18/98	5/15/98
Instrument I.D.#:	MV-4	MV-4	MV-4	MV-4	MV-4	MV-1
Conc. Spiked:	50 mg/kg	50 mg/kg	50 mg/kg	50 mg/kg	50 mg/kg	0.10 mg/kg
LCS Result:	52	53	50	51	51	0.097
LCS % Recov.:	104	106	100	102	102	97

MS/MSD LCS Control Limits	80-120	80-120	80-120	80-120	80-120	75-125
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SEQUOIA ANALYTICAL, #1271

Alan B. Kemp
Laboratory Director

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Consultant Company: **GETTLER-RYAN INC. J#140165** Project Name: **FORMER UNOCAL #1871-OAKLAND**
 Address: **6747 Sierra Court, Suite J** UNOCAL Project Manager: **TINA BERRY**
 City: **DUBLIN** State: **CA** Zip Code: **94568** AFE #: **9505258**
 Telephone: **(510) 551-7555** FAX #: **551-7888** Site #, City, State: **96 MACARTHUR BLVD.**
 Report To: **HAIG KEVORK** Sampler: **HAIG KEVORK** QC Data: Level D (Standard) Level C Level B Level A

Turnaround 10 Work Days 5 Work Days 3 Work Days
 Time: 2 Work Days 1 Work Day 2-8 Hours
 CODE: Misc. Detect. Eval. Remed. Demol. Closure

Drinking Water Waste Water Other
 Analyses Requested:

TPH-G	BTEX	TOTAL Pb	TOG 5520	8240	8270	CAM/17 Metals
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Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	TPH-G	BTEX	TOTAL Pb	TOG 5520	8240	8270	CAM/17 Metals	Comments
1. SPI(A-D)	5/12/98	SOIL	4	BRASS TUBES		✓	✓	✓					8050988
2. SPI(E-H)			4			✓	✓	✓					8050989
3. SPI(I-L)			4			✓	✓	✓					8050990
4. SPI(M-P)			4			✓	✓	✓					8050991
5. SPI(Q-T)			4			✓	✓	✓					8050992
6. SPI(U-X)			4			✓	✓	✓					8050993
7. SPI(Y,Z,12)			4			✓	✓	✓					8050994
8. SPI(3,4,5A)			4			✓	✓	✓					8050995
9. WOSPI			4						✓	✓	✓	✓	8050996
10.													

Relinquished By: <i>[Signature]</i>	Date: 5/12/98	Time: 7:00	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab: <i>[Signature]</i>	Date: 5/12/98	Time: 1:00

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

To be completed upon receipt of report:
 1) Were the analyses requested on the Chain of Custody reported? Yes No If no, what analyses are still needed? _____
 2) Was the report issued within the requested turnaround time? Yes No If no, what was the turnaround time? _____
 Approved by: _____ Signature: _____ Company: _____ Date: _____

Pink - Client
 Yellow - Laboratory
 White - Laboratory