3^{10} - 8^{45} = 0.6

ENVIRONMENTAL PROTECTION
95 MAR 29 PM 12: 55

enviros®

① Verify ULP filed yes
② Tank manifests get
③ Bills of lading for soil disposal and GW disposal
④ include location of conductor casing ✓
⑤ PSA to delineate extent of soil + GW contamination

March 23, 1995

Mr. Ed Ralston
Unocal Corporation-CERT
P.O. Box 5155
San Ramon, California 94583

RE: STORAGE TANK REPLACEMENT OBSERVATION REPORT
Unocal Service Station No. 7176
7850 Amador Valley Road
Dublin, California

Dear Mr. Ralston:

Enviros, Inc. is pleased to transmit a copy of the Storage Tank Replacement Observation Report dated March 23, 1995. This report documents field activities conducted during underground storage tank replacement.

If you have any questions, please call me at 707-935-4856.

Sincerely,
Enviros, Inc.

David J. Vossler
Project Manager

cc: Ms. Eva Chu, Alameda County Health Care Services Agency
95132.01 files

Enviros, Inc. 270 Perkins Street P.O. Box 259 Sonoma, California 95476-0259 Tel 707 / 935-4850 Fax 707 / 935-6649

Unocal Petroleum Products & Chemicals Division
Unocal Corporation
2929 East Imperial Highway, P.O. Box 2390
Brea, California 92622-2390
Facsimile (714) 572-7116

UNOCAL 76

November 16, 1994

Ms. Eva Chu
Alameda County Environmental Health
1131 Harbor Bay Parkway, Room 250
Alameda, CA 94502

RE: UNOCAL SERVICE STATION # 7176
7850 AMADOR VALLEY BLVD @ REGION
DUBLIN, CALIFORNIA 94568

Dear Eva:

Enclosed, please find a completed Underground Storage Tank Unauthorized Release Report for the above referenced Unocal service station.

Petroleum hydrocarbon contamination was detected at this facility during a waste-oil tank removal project today.

Unocal CERT Engineer, Mr. Edward Ralston has been assigned to further investigate this case. Ed can be reached as follows:

Mr. Edward Ralston
Unocal CERT Department
2000 Crow Canyon Place, Suite 400
San Ramon, California 94583
(510) 277-2311

Your cooperation and assistance regarding this matter is greatly appreciated. Should you have any questions, please call me at (714) 572-7653.

Sincerely,

Lynda S. Chalom
Leak Reporting Coordinator

LSC/lc
Enclosure
cc: G. Abramo - T.M.
S. Mui - Dealer
E. Ralston
J.M. Tyson
Leak Reporting File

Prepared for:

Unocal Corporation
P.O. Box 5155
San Ramon, California

Prepared by:

Enviros, Inc.

STORAGE TANK REPLACEMENT OBSERVATION REPORT

Unocal Service Station No. 7176
7850 Amador Valley Road
Dublin, California

March 23, 1995 ***95132.01***

enviros®

March 23, 1995

Mr. Ed Ralston
Unocal Corporation-CERT
P.O. Box 5155
San Ramon, California

RE: STORAGE TANK REPLACEMENT OBSERVATION REPORT
Unocal Service Station No. 7176
7850 Amador Valley Boulevard
Dublin, California

Dear Mr. Ralston:

This report summarizes field activities performed by Enviros, Inc. (Enviros) in November 1994, at the above referenced site (Plates 1 and 2). The activities performed include environmental oversight and soil sampling during the replacement of three gasoline and one diesel underground storage tanks (USTs) and related product piping, and the removal of one waste oil tank and one sand/water separator. The scope of work presented in this document was performed at the request of Unocal Corporation-CERT (Unocal).

Soil samples were collected to evaluate whether petroleum hydrocarbons had impacted the soil in the areas described above. An Enviros geologist was present on-site to observe and monitor field activities. Enviros also acted as liaison between Unocal, Gettler-Ryan Inc. (the construction contractor), and Alameda County Health Care Services Agency (ACHCSA). Field work documented in this report was performed to comply with State of California and ACHCSA guidelines. Storage tank removal operations and sampling results are presented below.

Site Description and Background

The subject property is located at the southwest corner of Amador Valley Boulevard and Regional Street in Dublin, California. The site was initially a former Gulf Service Station and later was operated as a Fill-Em-Fast Service Station. The original service station configuration during these ownership's is unknown. In 1985, Unocal purchased the station and the recent remodeling performed in November 1995 is the only recorded service station upgrade on record.

The gasoline tanks during this investigation were located on the east side of the station building, and the waste oil tank was located on the south side of the service station building. One 280-gallon single-wall steel waste oil tank, and one 10,000-gallon single-wall steel diesel tank were removed on November 8, 1994. One 10,000-gallon single-wall steel regular unleaded gasoline tank, one 10,000-gallon single-wall steel mid-grade unleaded gasoline tank, and one 10,000-gallon single-wall steel super unleaded gasoline tank were removed on November 10, 1994. Two new 12,000-gallon glasteel gasoline USTs were installed in the east end of the enlarged former fuel tank excavation by Gettler-

Ryan in November 1994 . Tank removal and related overexcavations and soil sampling were witnessed or approved by representatives from ACHCSA.

Regional and Local Geology/Hydrogeology

The site is located within the Dublin subbasin, which is the west part of the Livermore Valley Basin at the foot of the Dublin Hills. The sediments underlying the Livermore Valley Basin consist of Recent alluvium of Pleistocene to Pliocene age, consisting of thick gravel deposits, interbedded with sand and clay. The Calaveras Fault is located approximately 1/2-mile west of the site (Engineering and Associates Report, Exxon Service Station, February 1992).

Native soils encountered beneath the site are alluvial sediments consisting of sandy to silty clays (CL). An Exxon service station located east of the site has documented sandy to silty clays with lenses of gravelly sand. The depth to groundwater is approximately 20 feet below grade (fbg) and groundwater flow direction is suspected to be topographically controlled, flowing east to southeast.

Removal of Underground Storage Tanks

The five tanks were treated with dry ice prior to removal. The tanks were inspected for holes, cracks, pitting, and signs of failure after removal. The four fuel tanks were in good condition with no visible signs of failure or leaking, and limited rust on the outer surfaces. The waste oil tank had eight holes in the bottom of the tank that ranged in size from a pinhole to 0.5-inches in diameter. All sides of the waste oil tank were rusted and pitted. Associated single-wall steel and fiberglass product piping was inspected before and after removal and had no visible signs of failure or leaking. The tanks were transported by Erickson, Inc. to their Richmond, California facility for disposal.

Soil Sampling Procedures

Representative soil samples were collected by pushing clean stainless steel sample tubes into the soil until completely filled. The tubes were removed, both ends were covered with teflon tape and sealed with plastic end caps. The samples were labeled, placed into a cooler with ice, entered onto a Chain-of-Custody record, and transported to Sequoia Analytical (Sequoia), a state certified environmental laboratory located in Redwood City, California.

Soil samples from the tank excavations, sand/water separator, and product piping trenches were collected with either an excavator bucket or were hand-driven. The top 1 to 3 inches of soil were removed, after which the samples were collected and handled as described above. The soil stockpile samples were collected by removing the top 6 to 12 inches of soil and repeating the procedure described above. The stockpile samples consisted of four subsamples that were composited in the laboratory and analyzed as one sample.

Sampling and Analytical Results

The analytical results for each of the areas sampled are discussed below. Soil sample locations are shown on Plate 3 and soil stockpile locations on Plate 4. Chemical analytical data are summarized in Tables 1 and 2. The laboratory analytical reports are presented in Appendix A.

Fuel Tank Excavation

Fourteen soil samples designated UX-1 through UX-14 were collected from the fuel tank excavation. Samples UX-1 and UX-2, collected from below the former diesel tank at approximately 14 fbg, were analyzed for total petroleum hydrocarbons calculated as diesel (TPH-D) according to EPA Method 8015 (Modified) and benzene, toluene, ethylbenzene and total xylenes (BTEX) according to EPA Method 8020. Samples UX-3 through UX-8, collected from below the gasoline tanks at approximately 15 to 15.5 fbg, were analyzed for total petroleum hydrocarbons calculated as gasoline (TPH-G) according to EPA Method 8015 (Modified) and BTEX. In addition, samples UX-3, UX-4, and UX-8 were analyzed for total lead according to EPA Method 6010. Samples UX-9 through UX-14, collected from the excavation sidewalls at 15 to 17 fbg, were analyzed for TPH-G, TPH-D, and BTEX.

Initial analytical results (UX-1 through UX-8) indicated TPH-D, TPH-G, and BTEX compounds were present in soils below the former USTs. Therefore, the UST area was overexcavated to approximately 20 fbg and confirmation samples UX-9 through UX-14 ranged from ND to 230 ppm TPH-G, 1.6 to 75 ppm TPH-D, and were ND for benzene.

Waste Oil Tank Excavation and Sand/Water Separator

Soil sample UW-1 was collected from below the waste oil tank at a depth of approximately 8 fbg and was analyzed for TPH-G, TPH-D, BTEX, oil and grease (O&G) according to Standard Methods 5520 E&F, volatile organic compounds according to EPA Method 8240 (8240), semi-volatile organic compounds according to EPA Method 8270 (8270), and 5 ICAP Metals according to EPA Method 6010. The sample results were ND for all analytes.

Soil sample UOW-1 was collected below the sand/water separator at approximately 6 fbg and analyzed for the same waste oil suite analytes as soil sample UW-1. The sample was ND for all analytes except ICAP metals. Low metal concentrations were detected in soils, however, concentrations were below applicable regulatory limits.

Product Piping Trench

Eleven soil samples designated UT-1 through UT-11 were collected from beneath the dispenser islands. All samples were analyzed for TPH-G, TPH-D, and BTEX except for UT-3 and UT-4 which were analyzed for TPH-G and BTEX only. Soil samples UT-1 through UT-4 were collected at approximately 3.5 fbg and sampling results indicated hydrocarbons were detected in the UT-2 and UT-4 sampling areas. These areas were overexcavated and confirmation samples UT-5 through UT-11 were collected at depths ranging from 8 to 19.5 fbg. Analytical results indicate that low levels of TPH-G and TPH-D are present in soils.

Soil Stockpile Samples

A total of 1,863.26 tons of soil were excavated and stockpiled during field activities. Soil stockpile sample UWS-1A-D was collected from the waste oil tank excavation stockpile and analyzed for TPH-G, TPH-D, BTEX, O&G, 8240, 8270, soluble threshold limit concentration (STLC) CAM 17 metals, and reactivity, corrosivity, and ignitability (RCI). Soil stockpile samples US-1A-D through US-16A-D were collected from the fuel tank excavation, product line trenches, and related overexcavations. Soil sample US-1A-D was analyzed for TPH-D and BTEX. Soil samples US-2A-D through US-16A-D were analyzed for TPH-G, TPH-D, BTEX, and total lead. In addition, sample US-3A-D was analyzed for RCI.

Soil and Groundwater Remedial Activities

A total of 1,863.26 tons of hydrocarbon-impacted soils were excavated at the site. These soils were stockpiled and sampled (soil samples UWS-1A-D and US-1A-D through US-16A-D). The impacted soils were transported by Gettler-Ryan to BFI Vasco Road Landfill, an approved disposal facility, located in Livermore, California. A total of 1,048.26 tons of soil were accepted as Class III material and 814.93 tons were accepted as Class II material.

Prior to installation of the new fuel tanks, two 6-inch diameter, 0.020-inch slotted conductor casings were installed in the pea gravel of the fuel tank excavation. These casings are used to monitor depth to water and to remove groundwater from the excavation. To date, approximately 5,000 gallons of hydrocarbon-impacted groundwater have been purged from the UST excavation by Rust Industrial Cleaning Services of Benicia, California using vacuum trucks. The impacted groundwater was transported to the Unocal Refinery, an approved treatment facility, located in Rodeo, California. Additional impacted groundwater will be purged from the site as described in the recommendations section of this report.

Summary

Three 10,000-gallon gasoline tanks, one 10,000-gallon diesel tank, one 280-gallon waste oil tank, and related product piping were removed on November 8, and 10, 1994. A sand/water separator was also decommissioned at this time. After removal, no holes, cracks or signs of failure were observed in the gasoline and diesel tanks, and associated product piping. The waste oil tank contained eight holes in the bottom of the tank ranging in size from a pinhole to 0.5-inches in diameter. Groundwater was encountered in the fuel tank excavation at approximately 20 fbg.

A total of 27 soil samples were collected and analyzed for hydrocarbons in the areas described above. The sampling results indicate that soils in the vicinity of the waste oil tank and sand/water separator were not impacted by petroleum hydrocarbons. Detectable concentrations of TPH-G and TPH-D remain is soils below the fuel tanks and the eastern ends of the product dispensers.

Hydrocarbon remediation efforts include the following: (1) removal of the main hydrocarbon sources which include the USTs, sand/water separator, and related product piping, (2) excavation of 1,863.26 tons of hydrocarbon-impacted soils, and (3) pumping of approximately 5,000 gallons of hydrocarbon-impacted groundwater from the UST excavation for disposal at the Unocal Refinery.

Recommendations

Enviros recommends a limited soil and groundwater investigation be performed. The purpose of the investigation is to provide additional subsurface information to evaluate the extent of hydrocarbon-impacted soils and groundwater on the site. Enviros also recommends continued pumping of hydrocarbon-impacted groundwater from the conductor casings located in the fuel tank area. Vacuum trucks have been scheduled to remove the water on a regular basis and periodic groundwater sampling of the conductor casing and/or monitoring wells will be performed in conjunction with water removal.

Distribution

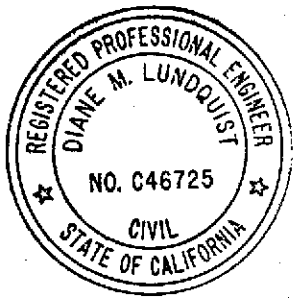
Enviros recommends that a copy of this report be sent to Ms. Eva Chu of the ACHCSA.

If you have any questions, please call.

Enviros, Inc.

Clyde J. Galantine
Geologist

Diane M. Lundquist, P.E.
Senior Engineer
C46725



Attachments:

	Table 1.	Soil Analytical Data
	Table 2.	Soil Stockpile Analytical Data
	Plate 1.	Vicinity Map
	Plate 2.	Site Plan
	Plate 3.	Soil Sample Location Map
	Plate 4.	Soil Stockpile Location Map
	Appendix A:	Laboratory Analytical Reports and Chain-of-Custody Records

TABLE 1
SOIL ANALYTICAL DATA

7850 Amador Valley Road
Dublin, California

SAMPLE NO.	SAMPLE DEPTH (FEET)	SAMPLE DATE	ANALYSIS DATE	TPH-D (PPM)	TPH-G (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYL BENZENE (PPM)	XYLENES (PPM)	TTLC LEAD (PPM)	O&G (PPM)	8270 (PPB)	8240 (PPB)
UW-1	8	11/8/94	11-9-94	ND	ND	ND	ND	ND	ND	ND*	ND	ND	ND
UOW-1	6	11/8/94	11-9-94	ND	ND	ND	ND	ND	ND	7.1*	ND	ND	ND
UT-1	3.5	11/8/94	11-9-94	ND	ND	ND	ND	ND	ND	--	--	--	--
UT-2	3.5	11/8/94	11-9-94	1,300	100**	ND	ND	ND	0.13	--	--	--	--
UT-3	3.5	11/8/94	11-9-94	--	3.1	0.017	0.25	0.097	0.56	--	--	--	--
UT-4	3.5	11/8/94	11-9-94	--	2,200**	ND	26	36	300	--	--	--	--
UT-5 (CS)	11	11/10/94	11-15-94	25***	740**	ND	6.5	20	110	--	--	--	--
UT-6 (CS)	11	11/10/94	11-15-94	1.1***	ND	ND	ND	ND	0.0070	--	--	--	--
UT-7 (CS)	19.5	11/30/94	12/2/94	50***	1,300**	ND	31	26	150	--	--	--	--
UT-8 (CS)	12	11/30/94	12/2/94	24***	180**	ND	3.8	3.0	19	--	--	--	--
UT-9 (CS)	8	11/30/94	12/2/94	ND	180**	ND	ND	ND	0.59	--	--	--	--
UT-10 (CS)	8	11/30/94	12/2/94	12	140**	ND	0.62	0.84	12	--	--	--	--
UT-11 (CS)	11	11/30/94	12/2/94	1.3***	5.1**	ND	ND	0.014	0.078	--	--	--	--
UX-1	14	11/8/94	11-9-94	9,100	--	0.98	1.8	2.7	3.4	--	--	--	--
UX-2	14	11/8/94	11-9-94	ND	--	ND	ND	ND	0.011	--	--	--	--
UX-3	15.5	11/10/94	11-14-94	--	1,600	1.6	54	24	220	ND	--	--	--
UX-4	15.5	11/10/94	11-14-94	--	1,500**	ND	11	16	160	ND	--	--	--
UX-5	15.5	11/10/94	11-14-94	--	5.2**	0.021	0.022	0.030	0.14	--	--	--	--
UX-6	15	11/10/94	11-14-94	--	11**	0.011	0.067	0.046	0.40	--	--	--	--
UX-7	15	11/10/94	11-14-94	--	2.8**	0.0062	ND	0.016	0.16	--	--	--	--
UX-8	15	11/10/94	11-14-94	--	150	0.22	3.5	2.1	21	ND	--	--	--
UX-9 (CS)	16	11/10/94	11-15-94	36	41**	ND	0.074	0.43	0.37	--	--	--	--
UX-10 (CS)	16	11/10/94	11-15-94	75	27**	ND	0.062	0.29	0.049	--	--	--	--
UX-11 (CS)	17	11/11/94	11-18-94	15***	200**	ND	1.2	0.94	13	--	--	--	--
UX-12 (CS)	17	11/11/94	11-18-94	15***	230**	ND	2.6	3.0	24	--	--	--	--
UX-13 (CS)	15	11/11/94	11-18-94	1.6***	ND	ND	ND	ND	0.0060	--	--	--	--
UX-14 (CS)	17	11/11/94	11-19-94	16***	210**	ND	0.78	0.98	9.7	--	--	--	--

TABLE 1
SOIL ANALYTICAL DATA

7850 Amador Valley Road
Dublin, California

CS	= Confirmation Sample
TPH-G	= Total Petroleum Hydrocarbons calculated as Gasoline
TPH-D	= Total Petroleum Hydrocarbons calculated as Diesel
TTLC	= Total Threshold Limit Concentration
O&G	= Oil and Grease
8270	= Semi-Volatile Organics
8240	= Volatile Organics
PPM	= Parts Per Million
PPB	= Parts Per Billion
UW	= Waste Oil Excavation Sample Designation
UOW	= Sand/Water Separator Sample Designation
UT	= Trench Sample Designation
UX	= UST Excavation Sample Designation
*	= See Appendix A for remaining metals analytical data.
**	= Non Gas Mix and/or Weathered Gas
***	= Non Diesel Mix

Note: Analyses designated as ND were reported as not detected. See analytical reports for detection limits.

TABLE 2
SOIL STOCKPILE ANALYTICAL DATA

7850 Amador Valley Road
Dublin, California

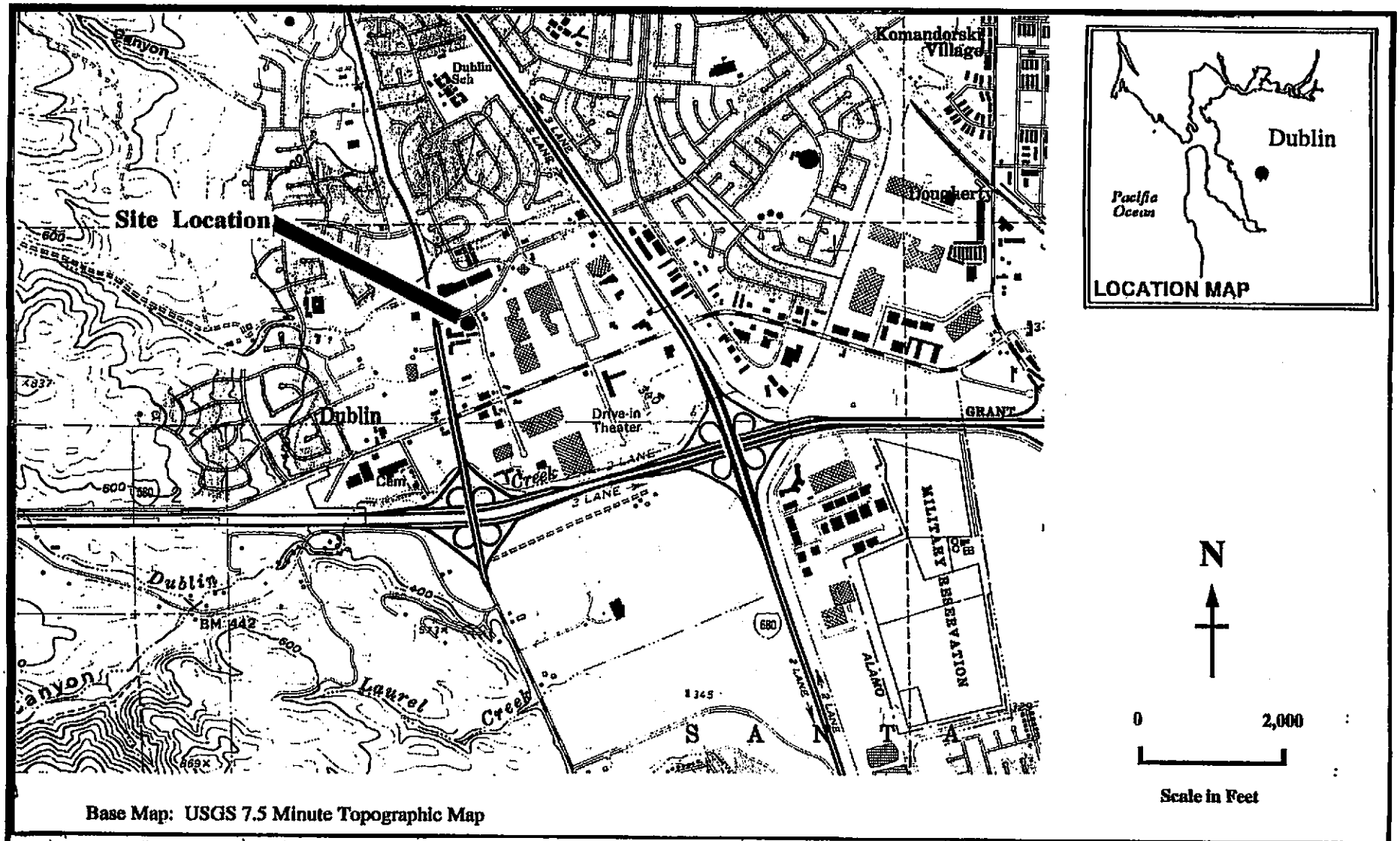
SAMPLE NO.	SAMPLE DATE	ANALYSIS DATE	TPH-D (PPM)	TPH-G (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYL BENZENE (PPM)	XYLENES (PPM)	TTLC LEAD (PPM)	RCI	O&G (PPM)	8270 (PPB)	8240 (PPB)
UWS-1A-D	11/9/94	11-14-94	ND	ND	ND	ND	ND	ND	*	**	ND	ND	ND
US-1A-D	11/9/94	11-10-94	33***	--	ND	0.054	0.072	0.63	--	--	--	--	--
US-2A-D	11/9/94	11-10-94	3.5***	2.3	ND	0.013	0.0062	0.16	ND	--	--	--	--
US-3A-D	11/10/94	11-14-94	340	110****	ND	0.22	0.81	4.3	ND	**	--	--	--
US-4A-D	11/10/94	11-11-94	58	54****	ND	ND	0.35	1.4	ND	--	--	--	--
US-5A-D	11/10/94	11-11-94	27***	ND	ND	ND	ND	ND	--	--	--	--	--
US-6A-D	11/10/94	11-11-94	46***	21****	ND	ND	ND	0.11	ND	--	--	--	--
US-7A-D	11/13/94	11-14-94	35***	140****	ND	ND	0.55	8.8	ND	--	--	--	--
US-8A-D	11/13/94	11-14-94	130	130****	ND	0.57	1.0	9.4	ND	--	--	--	--
US-9A-D	11/13/94	11-14-94	160***	160****	ND	1.7	1.8	15	ND	--	--	--	--
US-10A-D	11/13/94	11-14-94	11***	66****	ND	0.55	0.61	5.1	ND	--	--	--	--
US-11A-D	11/13/94	11-14-94	13***	79****	ND	0.71	0.85	8.5	ND	--	--	--	--
US-12A-D	11/13/94	11-14-94	29***	230****	ND	0.69	0.78	18	ND	--	--	--	--
US-13A-D	11/13/94	11-14-94	12***	50****	ND	0.15	0.13	3.8	ND	--	--	--	--
US-14A-D	12-6-94	12/7/94	24***	390****	ND	5.9	3.8	43	ND	--	--	--	--
US-15A-D	12-6-94	12/7/94	21***	1,600****	ND	47	25	170	ND	--	--	--	--
US-16A-D	12-6-94	12/7/94	3.6***	ND	ND	ND	ND	0.0053	ND	--	--	--	--

TABLE 2
SOIL STOCKPILE ANALYTICAL DATA

7850 Amador Valley Road
Dublin, California

TPH-G	= Total Petroleum Hydrocarbons calculated as Gasoline.
TPH-D	= Total Petroleum Hydrocarbons calculated as Diesel.
TTLC	= Total Threshold Limiting Concentration
RCI	= Reactivity, Corrosivity and Ignitability.
O&G	= Oil and Grease.
8270	= Semi-Volatile Organics.
8240	= Volatile Organics.
PPM	= Parts Per Million
PPB	= Parts Per Billion
UWS	= Waste Oil Soil Stockpile Designation.
US	= Soil Stockpile Designation
*	= Reported as Soluble Threshold Limit Concentration for dissolved metals. See Appendix A for remaining metals analytical data.
**	= See Appendix A for analytical data.
***	= Non Diesel Mix
****	= Weathered Gasoline

Note: Analyses designated as ND were reported as not detected. See analytical reports for detection limits.



Base Map: USGS 7.5 Minute Topographic Map

PLATE

1

VICINITY MAP
Unocal Service Station No. 7176
7850 Amador Valley Road
Dublin, California

enviros®
E4/94132

Drawn By: CJG Date: 12-22-94

Approved By: CJG Date: 12/22/94

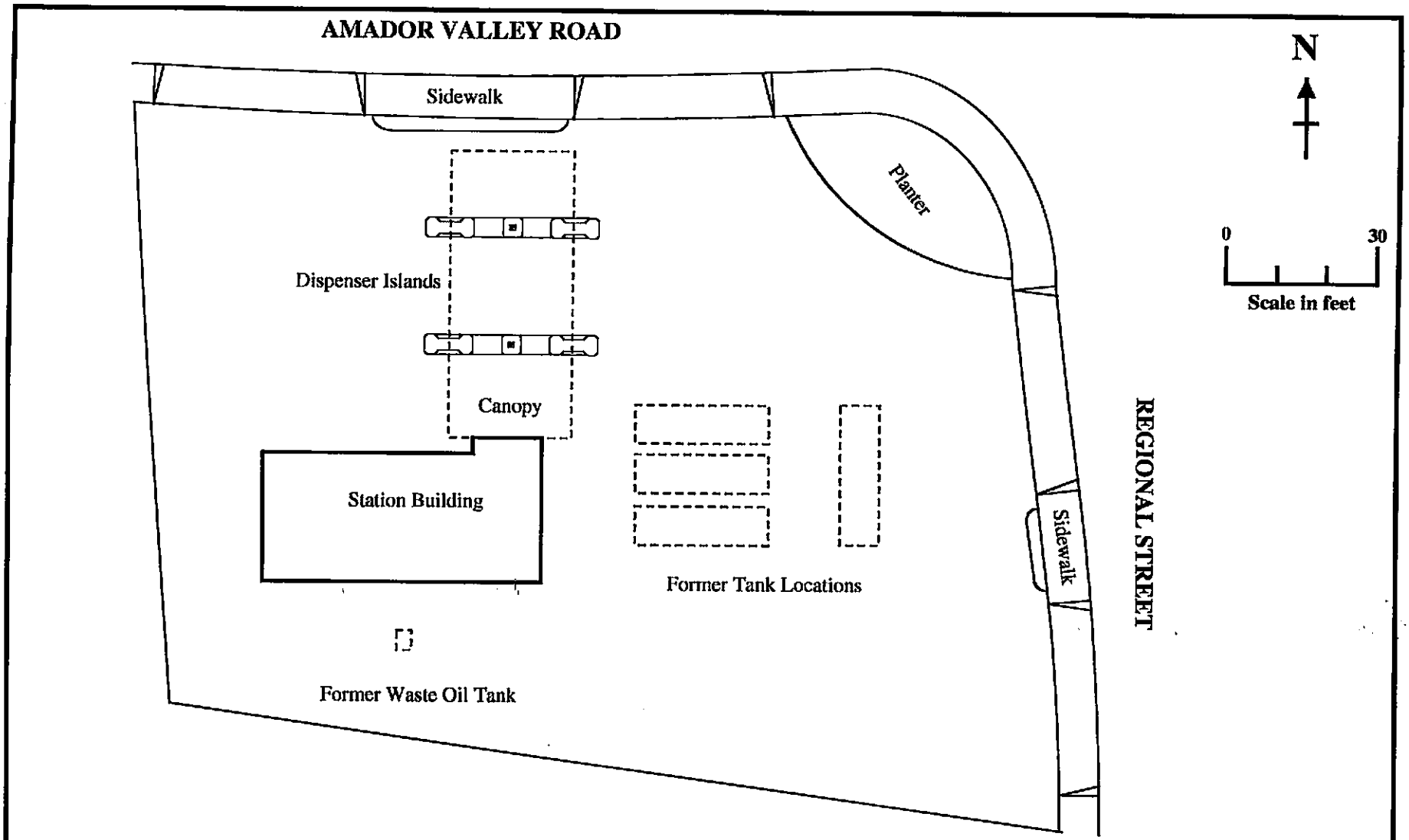


PLATE
2

SITE PLAN
Unocal SS No. 7176
7850 Amador Valley Boulevard
Dublin, California

enviros®
95132.01

Drawn By: GLV | Date: 11-26-94 | Approved By: [illegible] | Date: 3/23/95

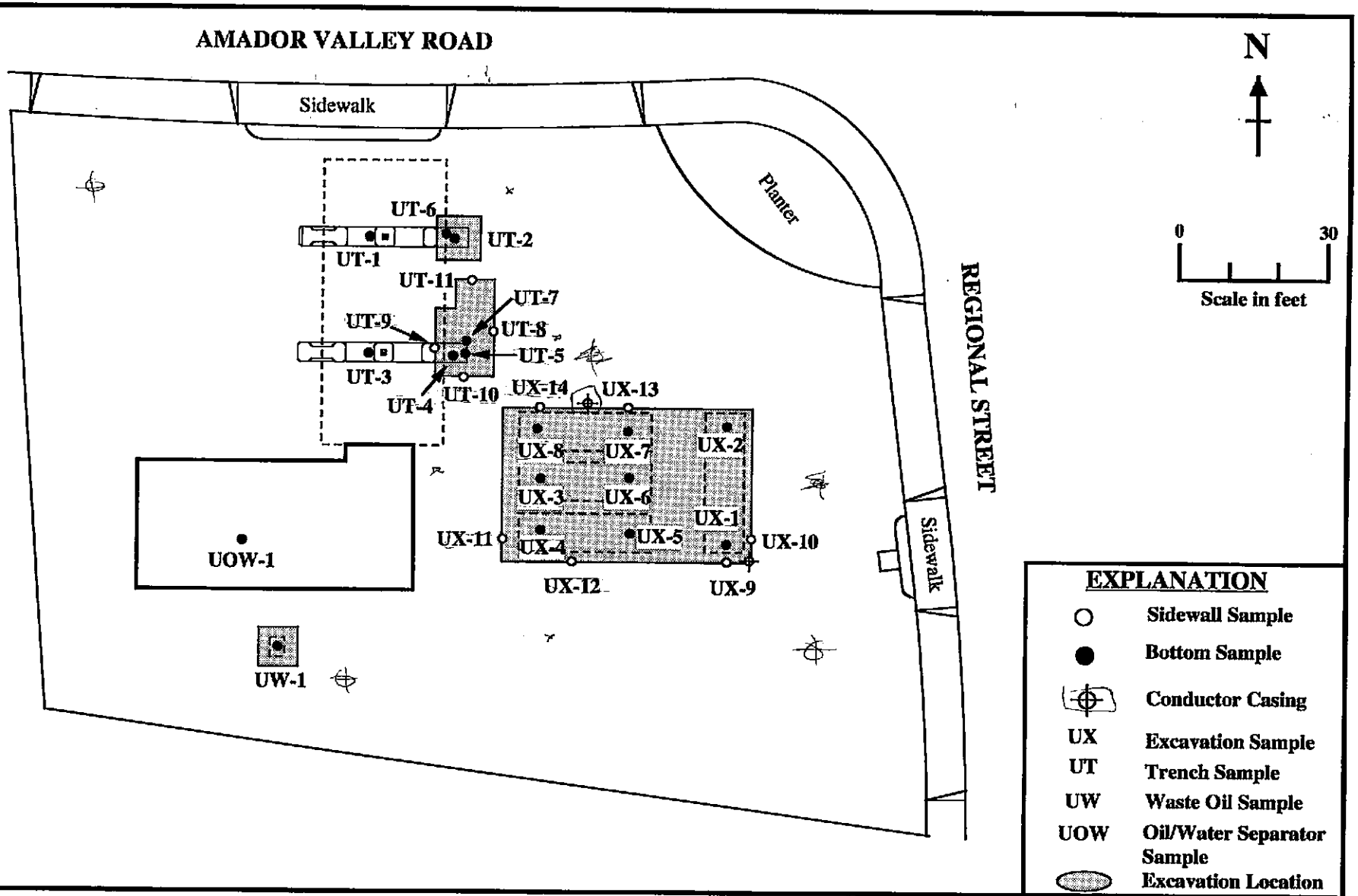


PLATE
3

SOIL SAMPLE LOCATION MAP
Unocal SS No. 7176
7850 Amador Valley Boulevard
Dublin, California

enviros®
95132.01

Drawn By: GLV | Date: 11-26-94 | Approved By: [illegible] | Date: 3/23/95

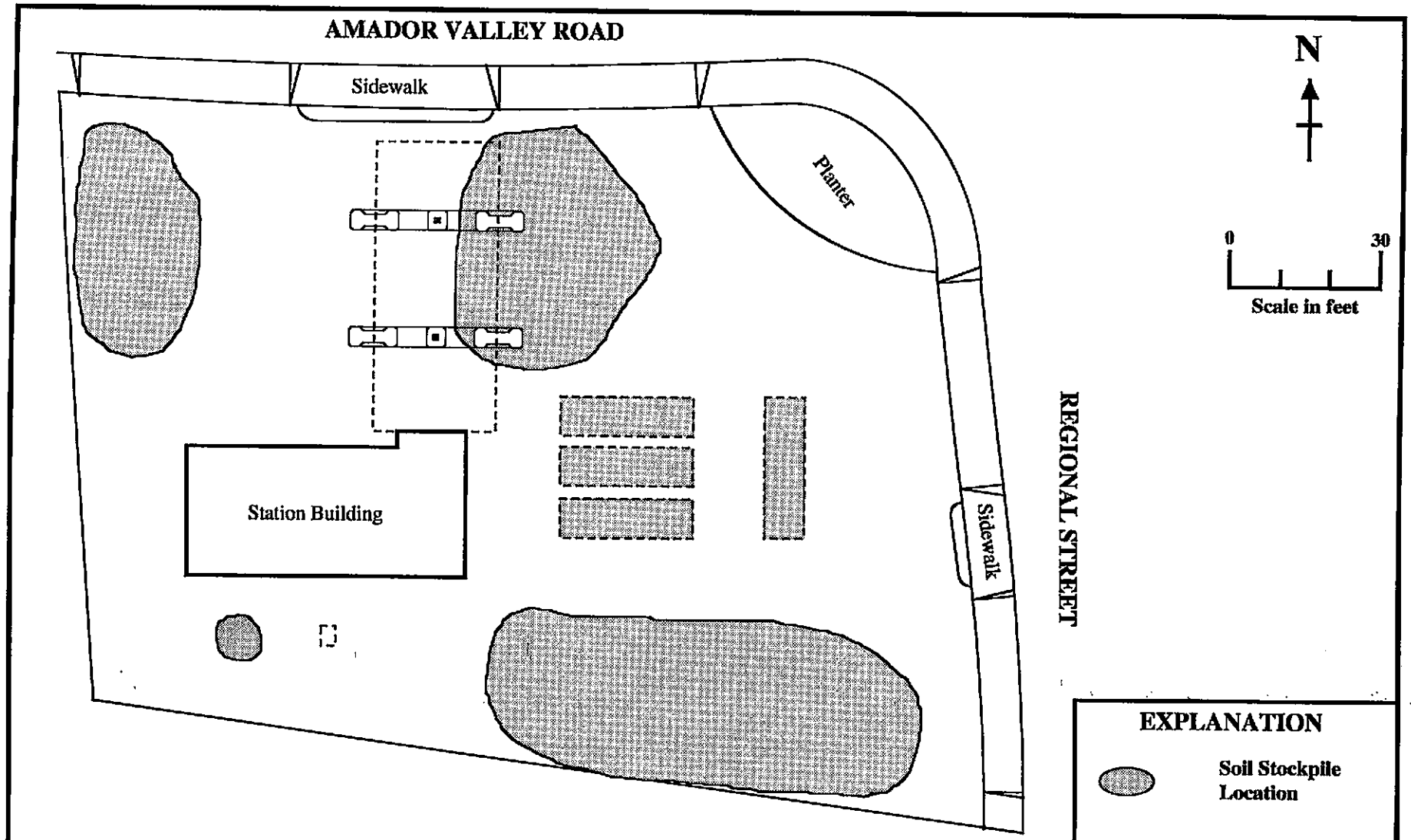


PLATE
4

SOIL STOCKPILE LOCATION MAP
Unocal SS No. 7176
7850 Amador Valley Boulevard
Dublin, California

enviros®
95132.01

Drawn By: GLV | Date: 11-26-94 | Approved By: [illegible] | Date: 3/23/95

APPENDIX A

Laboratory Analytical Reports and

Chain-of-Custody Records

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin

Lab Proj. ID: 9411490

Sampled: 11/08/94
Received: 11/08/94
Analyzed: see below

Reported: 11/09/94

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9411490-04				
Sample Desc : SOLID, UW-1				
TRPH (SM 5520 E&F)	mg/Kg	11/09/94	50	N.D.

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UT-1
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9411490-01

Sampled: 11/08/94
Received: 11/08/94
Extracted: 11/08/94
Analyzed: 11/09/94
Reported: 11/09/94

Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	92

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

SEQUOIA ANALYTICAL - ELAP #1210

David Olive
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UT-1
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9411490-01

Sampled: 11/08/94
Received: 11/08/94
Extracted: 11/09/94
Analyzed: 11/09/94
Reported: 11/09/94

QC Batch Number: GC110994BTEXEXA
Instrument ID: GCHP-01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	100

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

SEQUOIA ANALYTICAL - ELAP #1210

Ted Olive
Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UT-3
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9411490-02

Sampled: 11/08/94
Received: 11/08/94
Extracted: 11/09/94
Analyzed: 11/09/94
Reported: 11/09/94

QC Batch Number: GC110994BTEXEXA
nstrument ID: GCHP-01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	3.1
Benzene	0.0050	0.017
Toluene	0.0050	0.25
Ethyl Benzene	0.0050	0.097
Xylenes (Total)	0.0050	0.56
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	104

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

SEQUOIA ANALYTICAL - ELAP #1210

dd Olive
oject Manager

Sequoia Analytical

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/08/94
19411 Riverside Dr.	Sample Descript: UX-2	Received: 11/08/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/09/94
	Analysis Method: EPA 8020	Analyzed: 11/09/94
Attention: CGalantine/DVossler	Lab Number: 9411490-03	Reported: 11/09/94

QC Batch Number: GC110994BTEXEXA
Instrument ID: GCHP-18

BTEX Distinction

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl benzene	0.0050	N.D.
Xylenes (Total)	0.0050	0.011

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	98

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/08/94
19411 Riverside Dr.	Sample Descript: UX-2	Received: 11/08/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/08/94
	Analysis Method: EPA 8015 Mod	Analyzed: 11/09/94
Attention: CGalantine/DVossler	Lab Number: 9411490-03	Reported: 11/09/94

nstrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	93

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

SEQUOIA ANALYTICAL - ELAP #1210

dd Olive
Project Manager

Sequoia Analytical

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UW-1
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9411490-04

Sampled: 11/08/94
Received: 11/08/94
Extracted: 11/08/94
Analyzed: 11/09/94
Reported: 11/09/94

nstrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel Chromatogram Pattern:	1.0	N.D.

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	95

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

EQUOIA ANALYTICAL - ELAP #1210

...Olive
...ct Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/08/94
19411 Riverside Dr.	Sample Descript: UW-1	Received: 11/08/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/09/94
	Analysis Method: 8015Mod/8020	Analyzed: 11/09/94
Attention: CGalantine/DVossler	Lab Number: 9411490-04	Reported: 11/09/94

QC Batch Number: GC110994BTEXEXA
Instrument ID: GCHP-07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	80

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros	Client Project ID:	Unocal #7176, Dublin		
19411 Riverside Dr.	Matrix:	Solid		
Sonoma, CA 95476				
Attention: C. Galantine/D. Vossler	Work Order #:	9411490	-01, 03, 04	Reported: Nov 10, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC1108940HBTEXA
Analy. Method:	EPA 8015 Mod.
Prep. Method:	EPA 3550
Analyst:	B.All
MS/MSD #:	9411216-9
Sample Conc.:	27
Prepared Date:	11/8/94
Analyzed Date:	11/9/94
Instrument I.D.#:	GCHP5B
Conc. Spiked:	15 mg/kg
Result:	37.3
MS % Recovery:	67
Dup. Result:	28.4
MSD % Recov.:	9.3
RPD:	27
RPD Limit:	

LCS #:	BLK110894
Prepared Date:	11/8/94
Analyzed Date:	11/9/94
Instrument I.D.#:	GCHP4B
Conc. Spiked:	15 mg/kg
LCS Result:	9.9
LCS % Recov.:	66

MS/MSD LCS Control Limits	28-122

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The 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

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros	Client Project ID:	Unocal #7176, Dublin	
19411 Riverside Dr.	Matrix:	Solid	
Sonoma, CA 95476			
Attention: C. Galantine/D. Vossler	Work Order #:	9411490 -01 - 04	Reported: Nov 10, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC110994BTEXEXA	GC110994BTEXEXA	GC110994BTEXEXA	GC110994BTEXEXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	R.Geckler	R.Geckler	R.Geckler	R.Geckler
MS/MSD #:	G9411380-1	G9411380-1	G9411380-1	G9411380-1
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/9/94	11/9/94	11/9/94	11/9/94
Analyzed Date:	11/9/94	11/9/94	11/9/94	11/9/94
Instrument I.D.#:	GCHP1	GCHP1	GCHP1	GCHP1
Conc. Spiked:	0.20 mg/kg	0.20 mg/kg	0.20 mg/kg	0.60 mg/kg
Result:	0.18	0.19	0.19	0.57
MS % Recovery:	90	95	95	95
Dup. Result:	0.19	0.19	0.19	0.57
MSD % Recov.:	95	95	95	95
RPD:	5.4	0.0	0.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

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

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Enviros	Client Project ID:	Unocal #7176, Dublin	
19411 Riverside Dr.	Matrix:	Solid	
Sonoma, CA 95476			
Attention: C. Galantine/D. Vossler	Work Order #:	9411490 - 04	Reported: Nov 10, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Total Recoverable Petroleum Hyd.
QC Batch#:	OP1108945520EXA
Analy. Method:	SM5520EF
Prep. Method:	-

Analyst:	A.Pina
MS/MSD #:	9411219-01
Sample Conc.:	N.D.
Prepared Date:	11/8/94
Analyzed Date:	11/9/94
Instrument I.D.#:	MANUAL
Conc. Spiked:	1000 mg/kg
Result:	1000
MS % Recovery:	100
Dup. Result:	1100
MSD % Recov.:	110
RPD:	9.5
RPD Limit:	0-50

LCS #:	BLK110894
Prepared Date:	11/8/94
Analyzed Date:	11/9/94
Instrument I.D.#:	MANUAL
Conc. Spiked:	1000 mg/kg
LCS Result:	940
LCS % Recov.:	94

MS/MSD	60-140
LCS	70-110
Control Limits	

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The 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

UNOCAL 76

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[redacted] • East 11115 Montgomery, Suite B • Spokane, WA 99206 • (509) 924-9200
[redacted] • 15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-9800

Company Name: Enviros	Project Name: Unocal #7176
Address: P.O. Box 259	UNOCAL Project Manager: Ed Ralston
City: Sonoma State: CA Zip Code: 95476	Release #:
Telephone: 707-935-4850 FAX #: 707-735-4855	Site #: 7850 Amador Valley Rd Dublin
Report To: C Galantino/D Vossler Sampler: Clyde Galantine	QC Data: ☐ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

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

☐ Drinking Water ☐ Waste Water ☐ Other

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

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	TPH-G, BTEX	TPH-D	O&G 5520	8240	8270	ICAPS metal	BTEX		Comments
1. UT-1	11/8/94 3:45	Soil	1	tube		X	X						9411490	-01
2. UT-3	11/8/94 4:10	"	1	"		X								-02
3.														
4. UX-2	11/8/94 4:30	"	1	"			X				X			-03
5.														
6. UW-1	11/8/94 3:30	"	1	"		X	X	X	X	X	X		-04	Run 8240, 8270, ICAP on 5 Day TAT (Normal)
7.														
8.														
9.														
10.														Ha·C

Relinquished By: Clyde Galantine	Date: 11/8/94	Time: 18:15	Received By:	Date: / Time:
Relinquished By:	Date:	Time:	Received By:	Date: / Time:
Relinquished By:	Date:	Time:	Received By Lab: Suzanne	Date: 11-9-94 Time: 1815

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

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? _____

Signature: _____ Company: _____ Date: _____

Pink - Client
Yellow - Laboratory
White - Laboratory

Sequoia Analytical

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RECEIVED
NOV 18 1994

Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin

Lab Proj. ID: 9411491

Sampled: 11/08/94
Received: 11/08/94
Analyzed: see below

Reported: 11/15/94

LABORATORY ANALYSIS

Lab No: 9411491-01
Sample Desc : SOLID, UW-1

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Cadmium	mg/Kg	11/09/94	0.50	0.56
Chromium	mg/Kg	11/09/94	0.50	35
Lead	mg/Kg	11/09/94	5.0	N.D.
Nickel	mg/Kg	11/09/94	2.5	39
Zinc	mg/Kg	11/09/94	0.50	37

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/08/94
19411 Riverside Dr.	Sample Descript: UW-1	Received: 11/08/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/11/94
	Analysis Method: EPA 8240	Analyzed: 11/11/94
Attention: CGalantine/DVossler	Lab Number: 9411491-01	Reported: 11/15/94

QC Batch Number: MS1109948240EXA
nstrument ID: F3

Volatile Organics (EPA 8240)

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

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/08/94
19411 Riverside Dr.	Sample Descript: UW-1	Received: 11/08/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/11/94
	Analysis Method: EPA 8240	Analyzed: 11/11/94
Attention: CGalantine/DVossler	Lab Number: 9411491-01	Reported: 11/15/94

QC Batch Number: MS1109948240EXA
Instrument ID: F3

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Surrogates	Control Limits %		% Recovery
1,2-Dichloroethane-d4	70	121	93
Toluene-d8	81	117	102
4-Bromofluorobenzene	74	121	94

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/08/94
19411 Riverside Dr.	Sample Descript: UW-1	Received: 11/08/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/09/94
	Analysis Method: EPA 8270	Analyzed: 11/10/94
Attention: CGalantine/DVossler	Lab Number: 9411491-01	Reported: 11/15/94

QC Batch Number: MS1107948270EXA
Instrument ID: F4

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzyl alcohol	250	N.D.
Bis(2-chloroethoxy)methane	250	N.D.
Bis(2-chloroethyl)ether	250	N.D.
Bis(2-chloroisopropyl)ether	250	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	250	N.D.
Butyl benzyl phthalate	250	N.D.
4-Chloroaniline	500	N.D.
2-Chloronaphthalene	250	N.D.
4-Chloro-3-methylphenol	250	N.D.
2-Chlorophenol	250	N.D.
4-Chlorophenyl phenyl ether	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Dibenzofuran	250	N.D.
Di-n-butyl phthalate	500	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	250	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	250	N.D.
Diethyl phthalate	250	N.D.
2,4-Dimethylphenol	250	N.D.
Dimethyl phthalate	250	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.

Sequoia Analytical

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UW-1
Matrix: SOLID
Analysis Method: EPA 8270
Lab Number: 9411491-01

Sampled: 11/08/94
Received: 11/08/94
Extracted: 11/09/94
Analyzed: 11/10/94
Reported: 11/15/94

QC Batch Number: MS1107948270EXA
Instrument ID: F4

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
2,4-Dinitrotoluene	250	N.D.
2,6-Dinitrotoluene	250	N.D.
Di-n-octyl phthalate	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Hexachlorobenzene	250	N.D.
Hexachlorobutadiene	250	N.D.
Hexachlorocyclopentadiene	500	N.D.
Hexachloroethane	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Isophorone	250	N.D.
2-Methylnaphthalene	250	N.D.
2-Methylphenol	250	N.D.
4-Methylphenol	250	N.D.
Naphthalene	250	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	250	N.D.
2-Nitrophenol	250	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	250	N.D.
N-Nitroso-di-n-propylamine	250	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	250	N.D.
Phenol	250	N.D.
Pyrene	250	N.D.
1,2,4-Trichlorobenzene	250	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	250	N.D.

Surrogates	Control Limits %		% Recovery
2-Fluorophenol	25	121	74
Phenol-d5	24	113	73
Nitrobenzene-d5	23	120	71
2-Fluorobiphenyl	30	115	60
2,4,6-Tribromophenol	19	122	61
p-Terphenyl-d14	18	137	67

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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Enviros	Client Project ID:	Unocal #7176, Dublin	
19411 Riverside Dr.	Matrix:	Solid	
Sonoma, CA 95476			
Attention: C. Galantine/D. Vossler	Work Order #:	9411491 01	Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME1109946010MD	ME1109946010MD	ME1109946010MD	ME1109946010MD
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050
Analyst:	C. Medefesser	C. Medefesser	C. Medefesser	C. Medefesser
MS/MSD #:	941149101	941149101	941149101	941149101
Sample Conc.:	N.D.	0.56	35	39
Prepared Date:	11/9/94	11/9/94	11/9/94	11/9/94
Analyzed Date:	11/9/94	11/9/94	11/9/94	11/9/94
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/kg	100 mg/kg	100 mg/kg	100 mg/kg
Result:	110	110	140	140
MS % Recovery:	110	110	105	101
Dup. Result:	110	110	130	130
MSD % Recov.:	110	110	95	91
RPD:	0.0	0.0	7.4	7.4
RPD Limit:	0-30	0-30	0-30	0-30
LCS #:	BLK110994	BLK110994	BLK110994	BLK110994
Prepared Date:	11/9/94	11/9/94	11/9/94	11/9/94
Analyzed Date:	11/9/94	11/9/94	11/9/94	11/9/94
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/kg	100 mg/kg	100 mg/kg	100 mg/kg
LCS Result:	100	100	100	100
LCS % Recov.:	100	100	100	100
MS/MSD Control Limits	75-125	75-125	75-125	75-125
LCS Control Limits	75-125	75-125	75-125	75-125

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The 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.

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C. Galantine/D. Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411491 01
Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS1109948240EXA	MS1109948240EXA	MS1109948240EXA	MS1109948240EXA	MS1109948240EXA
Analy. Method:	EPA 8240	EPA 8240	EPA 8240	EPA 8240	EPA 8240
Prep. Method:	EPA 8240	EPA 8240	EPA 8240	EPA 8240	EPA 8240
Analyst:	B. Pitamah	B. Pitamah	B. Pitamah	B. Pitamah	B. Pitamah
MS/MSD #:	941149204	941149204	941149204	941149204	941149204
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/9/94	11/9/94	11/9/94	11/9/94	11/9/94
Analyzed Date:	11/10/94	11/10/94	11/10/94	11/10/94	11/10/94
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	2500 µg/kg	2500 µg/kg	2500 µg/kg	2500 µg/kg	2500 µg/kg
Result:	1800	2100	2400	2200	2200
MS % Recovery:	72	84	96	88	88
Dup. Result:	2000	2100	2400	2200	2200
MSD % Recov.:	80	84	96	88	88
RPD:	11	0.0	0.0	0.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50	0-50

LCS #:					
Prepared Date:					
Analyzed Date:					
Instrument I.D.#:					
Conc. Spiked:					
LCS Result:					
LCS % Recov.:					

MS/MSD LCS Control Limits	DL-234	71-157	37-151	47-150	37-160

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C. Galantine/D. Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411491 01

Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Phenol	2-Chlorophenol	1,4-Dichloro benzene	N-Nitroso-Di-N-propylamine
QC Batch#:	MS1107948270EXA	MS1107948270EXA	MS1107948270EXA	MS1107948270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	EPA 3550
Analyst:	L. Duong	L. Duong	L. Duong	L. Duong
MS/MSD #:	941103709	941103709	941103709	941103709
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/7/94	11/7/94	11/7/94	11/7/94
Analyzed Date:	11/7/94	11/7/94	11/7/94	11/7/94
Instrument I.D.#:	H5	H5	H5	H5
Conc. Spiked:	5000 µg/kg	5000 µg/kg	5000 µg/kg	5000 µg/kg
Result:	3200	3300	3000	3900
MS % Recovery:	64	66	60	78
Dup. Result:	3200	3300	3100	4000
MSD % Recov.:	64	66	62	80
RPD:	0.0	0.0	3.3	2.5
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				

MS/MSD LCS Control Limits	5-112	23-134	20-124	DL-230

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C. Galantine/D. Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411491 01

Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	1,2,4-Trichloro benzene	4-Chloro-3 Methylphenol	Acenaphthene	N-Nitrophenol
QC Batch#:	MS1107948270EXA	MS1107948270EXA	MS1107948270EXA	MS1107948270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	EPA 3550
Analyst:	L. Duong	L. Duong	L. Duong	L. Duong
MS/MSD #:	941103709	941103709	941103709	941103709
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/7/94	11/7/94	11/7/94	11/7/94
Analyzed Date:	11/7/94	11/7/94	11/7/94	11/7/94
Instrument I.D.#:	H5	H5	H5	H5
Conc. Spiked:	5000 µg/kg	5000 µg/kg	5000 µg/kg	5000 µg/kg
Result:	3200	3500	3000	3400
MS % Recovery:	64	70	60	68
Dup. Result:	3300	3500	3000	3300
MSD % Recov.:	66	70	60	66
RPD:	3.1	0.0	0.0	3.0
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				

MS/MSD LCS Control Limits	44-142	22-147	47-145	DL-132

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

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Enviros	Client Project ID:	Unocal #7176, Dublin	
19411 Riverside Dr.	Matrix:	Solid	
Sonoma, CA 95476			
Attention: C. Galantine/D. Vossler	Work Order #:	9411491 01	Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
QC Batch#:	MS1107948270EXA	MS1107948270EXA	MS1107948270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550
Analyst:	L. Duong	L. Duong	L. Duong
MS/MSD #:	941103709	941103709	941103709
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	11/7/94	11/7/94	11/7/94
Analyzed Date:	11/7/94	11/7/94	11/7/94
Instrument I.D.#:	H5	H5	H5
Conc. Spiked:	5000 µg/kg	5000 µg/kg	5000 µg/kg
Result:	3300	3100	3400
MS % Recovery:	66	62	68
Dup. Result:	3400	3100	3300
MSD % Recov.:	68	62	66
RPD:	3.0	0.0	3.0
RPD Limit:	0-50	0-50	0-50

LCS #:			
Prepared Date:			
Analyzed Date:			
Instrument I.D.#:			
Conc. Spiked:			
LCS Result:			
LCS % Recov.:			

MS/MSD LCS Control Limits	39-139	14-176	52-115

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

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

UNOCAL 76

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☐ 18939 120th Ave., N.E., Suite 101 • Bothell, WA 98011 • (206) 481-9200
☐ East 11115 Montgomery, Suite B • Spokane, WA 99206 • (509) 924-9200
☐ 15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-6900

Company Name: Enviros	Project Name: Unocal #7176
Address: P.O. Box 259	UNOCAL Project Manager: Ed Ralston
City: Sonoma State: CA Zip Code: 95476	Release #:
Telephone: 707-935-4850 FAX #: 707-935-4855	Site #: 7850 Amador Valley Rd Dublin
Report To: C Galantine/D Vossler Sampler: Clyde Galantine	QC Data: ☐ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

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

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 #	TPH-G, BTEX	TPH-D	O&G 5520	8240	8270	ICAPS metal	BTEX		Comments
1. UT-1	11/8/94 3:45	Soil	1	tube		X	X						9411491	
2. UT-3	11/8/94 4:10	"	1	"		X								
3.														
4. UX-2	11/8/94 4:30	"	1	"			X				X			
5.														
6. UW-1	11/8/94 3:30	"	1	"		X	X	X	X	X	X		-01	Run 8240, 8270 ICAP on 5 Day TAT (Normal)
7.														
8.														
9.														
10.														11° C

Relinquished By: Clyde Galantine	Date: 11/8/94	Time: 18:15	Received By:	Date: Time:
Relinquished By:	Date:	Time:	Received By:	Date: Time:
Relinquished By:	Date:	Time:	Received By Lab: Suzanne Hu	Date: 11.9.94 Time: 1815

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

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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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Client Proj. ID: Unocal #7176, Dublin
Lab Proj. ID: 9411492

Sampled: 11/07/94
Received: 11/08/94
Analyzed: see below

Attention: CGalantine/DVossler

Reported: 11/16/94

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9411492-04				
Sample Desc : SOLID,UOW-1				
Cadmium	mg/Kg	11/09/94	0.50	N.D.
Chromium	mg/Kg	11/09/94	0.50	31
Lead	mg/Kg	11/09/94	5.0	7.1
Nickel	mg/Kg	11/09/94	2.5	35
TRPH (SM 5520 E&F)	mg/Kg	11/09/94	50	N.D.
Zinc	mg/Kg	11/09/94	0.50	35

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UT-2
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9411492-01

Sampled: 11/07/94
Received: 11/08/94
Extracted: 11/11/94
Analyzed: 11/15/94
Reported: 11/16/94

Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	50	1300
Chromatogram Pattern:		Diesel

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	0 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UT-2
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9411492-01

Sampled: 11/07/94
Received: 11/08/94
Extracted: 11/09/94
Analyzed: 11/09/94
Reported: 11/16/94

QC Batch Number: GC110994BTEXEXA
Instrument ID: GCHP-18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**20**	**100**
Benzene	0.10	N.D.
Toluene	0.10	N.D.
Ethyl Benzene	0.10	N.D.
Xylenes (Total)	**0.10**	**0.13**
Chromatogram Pattern:		
Non Gas Mix		**>C8**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	101

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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nviros
19411 Riverside Dr.
onoma, CA 95476

ttention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UT-4
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9411492-02

Sampled: 11/07/94
Received: 11/08/94
Extracted: 11/09/94
Analyzed: 11/09/94
Reported: 11/16/94

C Batch Number: GC110994BTEXEXA
trument ID: GCHP-18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	500	2200
enzene	2.5	N.D.
oluene	2.5	26
Ethyl Benzene	2.5	36
Xylenes (Total)	2.5	300
hromatogram Pattern:		
eathered Gas		C7-C12

Surrogates	Control Limits %		% Recovery
rifluorotoluene	70	130	101

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

EQUOIA ANALYTICAL - ELAP #1210

odd Olive
ject Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UX-1
Matrix: SOLID
Analysis Method: EPA 8020
Lab Number: 9411492-03

Sampled: 11/07/94
Received: 11/08/94
Extracted: 11/09/94
Analyzed: 11/09/94
Reported: 11/16/94

QC Batch Number: GC110994BTEXEXA
Instrument ID: GCHP-18

BTEX Distinction

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Benzene	0.10	0.98
Toluene	0.10	1.8
Ethyl benzene	0.10	2.7
Xylenes (Total)	0.10	3.4

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	222 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/07/94
19411 Riverside Dr.	Sample Descript: UX-1	Received: 11/08/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/11/94
	Analysis Method: EPA 8015 Mod	Analyzed: 11/15/94
Attention: CGalantine/DVossler	Lab Number: 9411492-03	Reported: 11/16/94

Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	500	9100
Chromatogram Pattern:		Diesel

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	0 Q

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

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Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UOW-1
Matrix: SOLID
Analysis Method: EPA 8240
Lab Number: 9411492-04

Sampled: 11/07/94
Received: 11/08/94
Extracted: 11/09/94
Analyzed: 11/11/94
Reported: 11/16/94

QC Batch Number: MS1109948240EXA
Instrument ID: F2

Volatile Organics (EPA 8240)

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

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UOW-1
Matrix: SOLID
Analysis Method: EPA 8240
Lab Number: 9411492-04

Sampled: 11/07/94
Received: 11/08/94
Extracted: 11/09/94
Analyzed: 11/11/94
Reported: 11/16/94

QC Batch Number: MS1109948240EXA
Instrument ID: F2

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Surrogates	Control Limits %		% Recovery
1,2-Dichloroethane-d4	70	121	80
Toluene-d8	81	117	91
4-Bromofluorobenzene	74	121	86

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

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Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UOW-1
Matrix: SOLID
Analysis Method: EPA 8270
Lab Number: 9411492-04

Sampled: 11/07/94
Received: 11/08/94
Extracted: 11/09/94
Analyzed: 11/10/94
Reported: 11/16/94

QC Batch Number: MS1107948270EXA
Instrument ID: F4

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzyl alcohol	250	N.D.
Bis(2-chloroethoxy)methane	250	N.D.
Bis(2-chloroethyl)ether	250	N.D.
Bis(2-chloroisopropyl)ether	250	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	250	N.D.
Butyl benzyl phthalate	250	N.D.
4-Chloroaniline	500	N.D.
2-Chloronaphthalene	250	N.D.
4-Chloro-3-methylphenol	250	N.D.
2-Chlorophenol	250	N.D.
4-Chlorophenyl phenyl ether	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Dibenzofuran	250	N.D.
Di-n-butyl phthalate	500	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	250	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	250	N.D.
Diethyl phthalate	250	N.D.
2,4-Dimethylphenol	250	N.D.
Dimethyl phthalate	250	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.

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nviros
19411 Riverside Dr.
Sonoma, CA 95476

ttention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UOW-1
Matrix: SOLID
Analysis Method: EPA 8270
Lab Number: 9411492-04

Sampled: 11/07/94
Received: 11/08/94
Extracted: 11/09/94
Analyzed: 11/10/94
Reported: 11/16/94

QC Batch Number: MS1107948270EXA
trument ID: F4

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
,4-Dinitrotoluene	250	N.D.
2,6-Dinitrotoluene	250	N.D.
i-n-octyl phthalate	250	N.D.
luoranthene	250	N.D.
luorene	250	N.D.
Hexachlorobenzene	250	N.D.
lexachlorobutadiene	250	N.D.
lexachlorocyclopentadiene	500	N.D.
lexachloroethane	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
sophorone	250	N.D.
-Methylnaphthalene	250	N.D.
-Methylphenol	250	N.D.
4-Methylphenol	250	N.D.
Naphthalene	250	N.D.
-Nitroaniline	500	N.D.
-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	250	N.D.
-Nitrophenol	250	N.D.
-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	250	N.D.
N-Nitroso-di-n-propylamine	250	N.D.
entachlorophenol	500	N.D.
henanthrene	250	N.D.
Phenol	250	N.D.
Pyrene	250	N.D.
,2,4-Trichlorobenzene	250	N.D.
,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	250	N.D.

Surrogates	Control Limits %		% Recovery
2-Fluorophenol	25	121	66
Phenol-d5	24	113	77
itrobenzene-d5	23	120	66
-Fluorobiphenyl	30	115	65
2,4,6-Tribromophenol	19	122	61
-Terphenyl-d14	18	137	65

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

EQUOIA ANALYTICAL - ELAP #1210

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roject Manager

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nviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/07/94
19411 Riverside Dr.	Sample Descript: UOW-1	Received: 11/08/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/11/94
	Analysis Method: EPA 8015 Mod	Analyzed: 11/14/94
ttention: CGalantine/DVossler	Lab Number: 9411492-04	Reported: 11/16/94

trument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

nalyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	N.D.
hromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
-Pentacosane (C25)	50	150	90

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

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oject Manager

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nviros
19411 Riverside Dr.
Sonoma, CA 95476

ttention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UOW-1
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9411492-04

Sampled: 11/07/94
Received: 11/08/94
Extracted: 11/09/94
Analyzed: 11/09/94
Reported: 11/16/94

C Batch Number: GC110994BTEXEXA
strument ID: GCHP-18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
enzene	0.0050	N.D.
oluene	0.0050	N.D.
thyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
hromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
rifluorotoluene	70	130	93

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

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viros
19411 Riverside Dr.
Sonoma, CA 95476
ention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Lab Proj. ID: 9411492

Received: 11/08/94
Reported: 11/16/94

LABORATORY NARRATIVE

Q- Diesel surrogate was diluted below detection limit.

QUOIA ANALYTICAL

odd Olive
oject Manager

Sequoia Analytical

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C Galantine/D Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411492 -04

Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME1109946010MD	ME1109946010MD	ME1109946010MD	ME1109946010MD
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050
Analyst:	C. Medefesser	C. Medefesser	C. Medefesser	C. Medefesser
MS/MSD #:	94114911	94114911	94114911	94114911
Sample Conc.:	N.D.	0.56	35	39
Prepared Date:	11/9/94	11/9/94	11/9/94	11/9/94
Analyzed Date:	11/9/94	11/9/94	11/9/94	11/9/94
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/Kg	100 mg/Kg	100 mg/Kg	100 mg/Kg
Result:	110	110	140	140
MS % Recovery:	110	110	105	101
Dup. Result:	110	110	130	130
MSD % Recov.:	110	110	95	91
RPD:	0.0	0.0	7.4	7.4
RPD Limit:	0-30	0-30	0-30	0-30
LCS #:	BLK110994	BLK110994	BLK110994	BLK110994
Prepared Date:	11/9/94	11/9/94	11/9/94	11/9/94
Analyzed Date:	11/9/94	11/9/94	11/9/94	11/9/94
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/Kg	100 mg/Kg	100 mg/Kg	100 mg/Kg
LCS Result:	100	100	100	100
LCS % Recov.:	100	100	100	100
MS/MSD Control Limits	75-125	75-125	75-125	75-125
LCS Control Limits	75-125	75-125	75-125	75-125

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The 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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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C Galantine/D Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411492 -04
Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	TRPH
QC Batch#:	OP1108945520EXA
Analy. Method:	SM 5520 EF
Prep. Method:	N/A
Analyst:	A. Pina
MS/MSD #:	941121901
Sample Conc.:	N.D.
Prepared Date:	11/8/94
Analyzed Date:	11/9/94
Instrument I.D.#:	Manual
Conc. Spiked:	1000mg/Kg
Result:	1000
MS % Recovery:	100
Dup. Result:	1100
MSD % Recov.:	110
RPD:	9.5
RPD Limit:	50

LCS #:	BLK110894
Prepared Date:	11/8/94
Analyzed Date:	11/9/94
Instrument I.D.#:	Manual
Conc. Spiked:	1000mg/Kg
LCS Result:	940
LCS % Recov.:	94

MS/MSD	60-140
LCS	70-110
Control Limits	

SEQUOIA ANALYTICAL

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Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C Galantine/D Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411492 -01-04
Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC110994BTEXEXA	GC110994BTEXEXA	GC110994BTEXEXA	GC110994BTEXEXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler
MS/MSD #:	G94113801	G94113801	G94113801	G94113801
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/9/94	11/9/94	11/9/94	11/9/94
Analyzed Date:	11/9/94	11/9/94	11/9/94	11/9/94
Instrument I.D.#:	GCHP1	GCHP1	GCHP1	GCHP1
Conc. Spiked:	0.20 mg/Kg	0.20 mg/Kg	0.20 mg/Kg	0.60 mg/Kg
Result:	0.18	0.19	0.19	0.57
MS % Recovery:	90	95	95	95
Dup. Result:	0.19	0.19	0.19	0.57
MSD % Recov.:	95	95	95	95
RPD:	5.4	0.0	0.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:					
Prepared Date:					
Analyzed Date:					
Instrument I.D.#:					
Conc. Spiked:					
LCS Result:					
LCS % Recov.:					

MS/MSD					
LCS	71-133	72-128	72-130	71-120	L
Control Limits	55-145	47-149	47-155	56-140	S

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C Galantine/D Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411492 -01, 03, 04

Reported: Nov 17, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC1111940HBPEXA
Analy. Method:	EPA 8015 Mod.
Prep. Method:	-
Analyst:	N.Herrera
MS/MSD #:	
Sample Conc.:	
Prepared Date:	
Analyzed Date:	
Instrument I.D.#:	
Conc. Spiked:	
Result:	
MS % Recovery:	
Dup. Result:	
MSD % Recov.:	
RPD:	
RPD Limit:	

LCS #:	BLK111194BS
Prepared Date:	11/11/94
Analyzed Date:	11/11/94
Instrument I.D.#:	GCHP5B
Conc. Spiked:	15 mg/kg
LCS Result:	12.7
LCS % Recov.:	85

MS/MSD LCS Control Limits	28-122

SEQUOIA ANALYTICAL

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Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C Galantine/D Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411492 -04

Reported: Nov 17, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS1109948240EXA	MS1109948240EXA	MS1109948240EXA	MS1109948240EXA	MS1109948240EXA
Analy. Method:	EPA 8240	EPA 8240	EPA 8240	EPA 8240	EPA 8240
Prep. Method:	8240	8240	8240	8240	8240
Analyst:	B.P.	B.P.	B.P.	B.P.	B.P.
MS/MSD #:	941149204	941149204	941149204	941149204	941149204
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/9/94	11/9/94	11/9/94	11/9/94	11/9/94
Analyzed Date:	11/10/94	11/10/94	11/10/94	11/10/94	11/10/94
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	2500 ug/kg	2500 ug/kg	2500 ug/kg	2500 ug/kg	2500 ug/kg
Result:	1800	2100	2400	2200	2200
MS % Recovery:	72	84	96	88	88
Dup. Result:	2000	2100	2400	2200	2200
MSD % Recov.:	80	84	96	88	88
RPD:	11	0.0	0.0	0.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50	0-50
LCS #:					
Prepared Date:					
Analyzed Date:					
Instrument I.D.#:					
Conc. Spiked:					
LCS Result:					
LCS % Recov.:					
MS/MSD LCS Control Limits	DL-234	71-157	37-151	47-150	37-160

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The 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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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C Galantine/D Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411492 -04

Reported: Nov 17, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Phenol	2-Chlorophenol	1,4-Dichloro benzene	N-Nitroso-Di-N-propylamine
QC Batch#:	MS1107948270EXA	MS1107948270EXA	MS1107948270EXA	MS1107948270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3350	EPA 3350	EPA 3350	EPA 3350
Analyst:	L.Duong	L.Duong	L.Duong	L.Duong
MS/MSD #:	9411037-09	9411037-09	9411037-09	9411037-09
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/7/94	11/7/94	11/7/94	11/7/94
Analyzed Date:	11/7/94	11/7/94	11/7/94	11/7/94
Instrument I.D.#:	H5	H5	H5	H5
Conc. Spiked:	5000 ug/kg	5000 ug/kg	5000 ug/kg	5000 ug/kg
Result:	3200	3300	3000	3900
MS % Recovery:	64	66	60	78
Dup. Result:	3200	3300	3100	4000
MSD % Recov.:	64	66	62	80
RPD:	0.0	0.0	3.3	2.5
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:

Prepared Date:
Analyzed Date:
Instrument I.D.#:
Conc. Spiked:

LCS Result:
LCS % Recov.:

MS/MSD LCS Control Limits	5-112	23-134	20-124	DL-230

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C Galantine/D Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411492 -04

Reported: Nov 17, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	1,2,4-Trichloro benzene	4-Chloro-3 Methylphenol	Acenaphthene	N-Nitrophenol
QC Batch#:	MS1107948270EXA	MS1107948270EXA	MS1107948270EXA	MS1107948270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3350	EPA 3350	EPA 3350	EPA 3350
Analyst:	L.Duong	L.Duong	L.Duong	L.Duong
MS/MSD #:	9411037-09	9411037-09	9411037-09	9411037-09
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/7/94	11/7/94	11/7/94	11/7/94
Analyzed Date:	11/7/94	11/7/94	11/7/94	11/7/94
Instrument I.D.#:	H5	H5	H5	H5
Conc. Spiked:	5000 ug/kg	5000 ug/kg	5000 ug/kg	5000 ug/kg
Result:	3200	3500	3000	3400
MS % Recovery:	64	70	60	68
Dup. Result:	3300	3500	3000	3300
MSD % Recov.:	66	70	60	66
RPD:	3.1	0.0	0.0	3.0
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				

MS/MSD LCS Control Limits	44-142	22-147	47-145	DL-132

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C Galantine/D Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411492 -04

Reported: Nov 17, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
QC Batch#:	MS1107948270EXA	MS1107948270EXA	MS1107948270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3350	EPA 3350	EPA 3350
Analyst:	L.Duong	L.Duong	L.Duong
MS/MSD #:	9411037-09	9411037-09	9411037-09
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	11/7/94	11/7/94	11/7/94
Analyzed Date:	11/7/94	11/7/94	11/7/94
Instrument I.D.#:	H5	H5	H5
Conc. Spiked:	5000 ug/kg	5000 ug/kg	5000 ug/kg
Result:	3300	3100	3400
MS % Recovery:	66	62	68
Dup. Result:	3400	3100	3300
MSD % Recov.:	68	62	66
RPD:	3.0	0.0	3.0
RPD Limit:	0-50	0-50	0-50

LCS #:			
Prepared Date:			
Analyzed Date:			
Instrument I.D.#:			
Conc. Spiked:			
LCS Result:			
LCS % Recov.:			

MS/MSD LCS Control Limits	39-139	14-176	52-115

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

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

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☐ 18939 120th Ave., N.E., Suite 101 • Bothell, WA 98011 • (206) 481-9200
☐ East 11115 Montgomery, Suite B • Spokane, WA 99206 • (509) 924-9200
☐ 15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-9800

Company Name: Enviros	Project Name: Unocal #7176
Address: P.O. Box 259	UNOCAL Project Manager: Ed Ralston
City: Sonoma State: CA Zip Code: 95476	Release #:
Telephone: 707-935-4850 FAX #: 707-935-4855	Site #: 7850 Amador Valley Rd, Dublin
Report To: CGalantine/D.Vossler Sampler: Clyde Galantine	QC Data: ☐ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

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

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 #	TPH-G, BTEX	TPH-D	BTEX	8240	8270	TCAPS metal	Oil & Grease		Comments
1. UT-2	11/7/94 4:00	Soil	1	tube	1	X	X							
2. UT-4	11/7/94 4:15	"	1	tube	2	X								94 11492
3.														
4. UX-1	11/7/94 4:20	"	1	Tube	3		X	X						
5.														
6. UOW-1	11/7/94 3:15	"	1	tube	4	X	X		X	X	X	X		
7.														
8.														
9.														
10.														16°C

Relinquished By: Clyde Galantine	Date: 11/8/94	Time: 18:15	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab:	Date: 11-8-94	Time: 1015

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

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? _____

Signed: Company: Date:

Pink - Client
Yellow - Laboratory
White - Laboratory

Sequoia Analytical

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UX-3
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9411709-01

Sampled: 11/10/94
Received: 11/10/94
Extracted: 11/14/94
Analyzed: 11/14/94
Reported: 11/17/94

QC Batch Number: GC111494BTEXEXA
Instrument ID: GCHP-01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	100	1600
Benzene	0.50	1.6
Toluene	0.50	54
Ethyl Benzene	0.50	24
Xylenes (Total)	0.50	220
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	101

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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nviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/10/94
19411 Riverside Dr.	Sample Descript: UX-4	Received: 11/10/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/14/94
	Analysis Method: 8015Mod/8020	Analyzed: 11/14/94
ttention: CGalantine/DVossler	Lab Number: 9411709-02	Reported: 11/17/94

C Batch Number: GC111494BTEXEXA
rument ID: GCHP-07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	400	1500
enzene	2.0	N.D.
oluene	2.0	11
Ethyl Benzene	2.0	16
Xylenes (Total)	2.0	160
Chromatogram Pattern:		
eathered Gas		C6-C12

Surrogates	Control Limits %		% Recovery
ifluorotoluene	70	130	94

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

QUOIA ANALYTICAL - ELAP #1210

odd Olive
ject Manager

Sequoia Analytical

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nviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/10/94
19411 Riverside Dr.	Sample Descript: UX-5	Received: 11/10/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/14/94
	Analysis Method: 8015Mod/8020	Analyzed: 11/14/94
ttention: CGalantine/DVossier	Lab Number: 9411709-03	Reported: 11/17/94

QC Batch Number: GC111494BTEXEXA
Instrument ID: GCHP-01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**1.0**	**5.2**
Benzene	**0.0050**	**0.021**
Toluene	**0.0050**	**0.022**
Ethyl Benzene	**0.0050**	**0.030**
Xylenes (Total)	**0.0050**	**0.14**
Chromatogram Pattern:		
Weathered Gas		**C8-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	88

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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nviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/10/94
19411 Riverside Dr.	Sample Descript: UX-6	Received: 11/10/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/14/94
	Analysis Method: 8015Mod/8020	Analyzed: 11/14/94
ttention: CGalantine/DVossler	Lab Number: 9411709-04	Reported: 11/17/94

QC Batch Number: GC111494BTEXEXA
Instrument ID: GCHP-06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	11
Benzene	0.0050	0.011
Toluene	0.0050	0.067
Ethyl Benzene	0.0050	0.046
Xylenes (Total)	0.0050	0.40
Chromatogram Pattern:		
Weathered Gas		C7-C12

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	82

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UX-7
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9411709-05

Sampled: 11/10/94
Received: 11/10/94
Extracted: 11/14/94
Analyzed: 11/14/94
Reported: 11/17/94

QC Batch Number: GC111494BTEXEXA
Instrument ID: GCHP-01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**1.0**	**2.8**
Benzene	**0.0050**	**0.0062**
Toluene	0.0050	N.D.
Ethyl Benzene	**0.0050**	**0.016**
Xylenes (Total)	**0.0050**	**0.16**
Chromatogram Pattern:		
Weathered Gas		**C8-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	91

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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nviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/10/94
19411 Riverside Dr.	Sample Descript: UX-8	Received: 11/10/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/14/94
	Analysis Method: 8015Mod/8020	Analyzed: 11/14/94
ttention: CGalantine/DVossler	Lab Number: 9411709-06	Reported: 11/17/94

QC Batch Number: GC111494BTEXEXA
Instrument ID: GCHP-01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	10	150
Benzene	0.050	0.22
Toluene	0.050	3.5
Ethyl Benzene	0.050	2.1
Xylenes (Total)	0.050	21
Chromatogram Pattern:		Gas

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	103

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/10/94
19411 Riverside Dr.	Sample Descript: UX-9	Received: 11/10/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/15/94
	Analysis Method: EPA 8015 Mod	Analyzed: 11/15/94
Attention: CGalantine/DVossler	Lab Number: 9411709-07	Reported: 11/17/94

QC Batch Number: GC111094OHBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	36
Chromatogram Pattern:		DIESEL

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	83

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UX-9
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9411709-07

Sampled: 11/10/94
Received: 11/10/94
Extracted: 11/14/94
Analyzed: 11/14/94
Reported: 11/17/94

QC Batch Number: GC111494BTEXEXA
Instrument ID: GCHP-01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**5.0**	**41**
Benzene	0.025	N.D.
Toluene	**0.025**	**0.074**
Ethyl Benzene	**0.025**	**0.43**
Xylenes (Total)	**0.025**	**0.37**
Chromatogram Pattern:		
Non Gas Mix		**C6-C12+**
Weathered Gas		**C8-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	94

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/10/94
19411 Riverside Dr.	Sample Descript: UX-10	Received: 11/10/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/15/94
	Analysis Method: EPA 8015 Mod	Analyzed: 11/15/94
Attention: CGalantine/DVossler	Lab Number: 9411709-08	Reported: 11/17/94

QC Batch Number: GC111094OHBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	75
Chromatogram Pattern:		DIESEL

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	112

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/10/94
19411 Riverside Dr.	Sample Descript: UX-10	Received: 11/10/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/14/94
	Analysis Method: 8015Mod/8020	Analyzed: 11/14/94
Attention: CGalantine/DVossler	Lab Number: 9411709-08	Reported: 11/17/94

QC Batch Number: GC111494BTEXEXA
Instrument ID: GCHP-06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**5.0**	**27**
Benzene	0.025	N.D.
Toluene	**0.025**	**0.062**
Ethyl Benzene	**0.025**	**0.29**
Xylenes (Total)	**0.025**	**0.049**
Chromatogram Pattern:		
Gas & Non Gas Mix		**+C6-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	105

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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viros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/10/94
19411 Riverside Dr.	Sample Descript: UT-5	Received: 11/10/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/15/94
	Analysis Method: EPA 8015 Mod	Analyzed: 11/15/94
tention: CGalantine/DVossler	Lab Number: 9411709-09	Reported: 11/17/94

QC Batch Number: GC111094OHBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	25
Chromatogram Pattern:		DIESEL+
on Diesel Mix		<C14

Surrogates	Control Limits %		% Recovery
Pentacosane (C25)	50	150	105

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/10/94
19411 Riverside Dr.	Sample Descript: UT-5	Received: 11/10/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/14/94
	Analysis Method: 8015Mod/8020	Analyzed: 11/14/94
Attention: CGalantine/DVossler	Lab Number: 9411709-09	Reported: 11/17/94

QC Batch Number: GC111494BTEXEXA
Instrument ID: GCHP-01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**100**	**740**
Benzene	0.50	N.D.
Toluene	**0.50**	**6.5**
Ethyl Benzene	**0.50**	**20**
Xylenes (Total)	**0.50**	**110**
Chromatogram Pattern:		
Weathered Gas		**C8-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	97

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

EQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/10/94
19411 Riverside Dr.	Sample Descript: UT-6	Received: 11/10/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/15/94
	Analysis Method: EPA-8015 Mod	Analyzed: 11/15/94
Attention: CGalantine/DVossler	Lab Number: 9411709-10	Reported: 11/17/94

QC Batch Number: GC111094OHBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	**1.0**	**1.1**
Chromatogram Pattern:		
Non Diesel Mix		**C9-C21**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	110

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UT-6
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9411709-10

Sampled: 11/10/94
Received: 11/10/94
Extracted: 11/14/94
Analyzed: 11/14/94
Reported: 11/17/94

QC Batch Number: GC111494BTEXEXA
Instrument ID: GCHP-01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	**0.0050**	**0.0070**
Chromatogram Pattern:		
Weathered Gas		**C8-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	91

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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Enviros	Client Project ID:	Unocal, #7176, Dublin	
19411 Riverside Dr.	Matrix:	Solid	
Sonoma, CA 95476			
Attention: C.Galantine/D.Vossler	Work Order #:	9411709 -01 - 10	Reported: Nov 17, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC111494BTEXEXA	GC111494BTEXEXA	GC111494BTEXEXA	GC111494BTEXEXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	5030	5030	5030	5030
Analyst:	R.Geckler	R.Geckler	R.Geckler	R.Geckler
MS/MSD #:	G94111365-02	G94111365-02	G94111365-02	G94111365-02
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/14/94	11/14/94	11/14/94	11/14/94
Analyzed Date:	11/14/94	11/14/94	11/14/94	11/14/94
Instrument I.D.#:	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	0.20 mg/kg	0.20 mg/kg	0.20 mg/kg	0.60 mg/kg
Result:	0.16	0.81	0.20	0.58
MS % Recovery:	80	90	100	97
Dup. Result:	0.16	0.19	0.20	0.59
MSD % Recov.:	80	95	100	98
RPD:	0.0	5.4	0.0	1.7
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The 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

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C.Galantine/D.Vossler

Client Project ID: Unocal, #7176, Dublin
Matrix: Solid
Work Order #: 9411709 07 - 10

Reported: Nov 17, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC1110940HBTEXB
Analy. Method:	EPA 8015 Mod.
Prep. Method:	3550

Analyst:	B. Ali
MS/MSD #:	9411216-11
Sample Conc.:	6.2
Prepared Date:	11/10/94
Analyzed Date:	11/13/94
Instrument I.D.#:	GCHP5
Conc. Spiked:	15 mg/kg
Result:	19
MS % Recovery:	85
Dup. Result:	21
MSD % Recov.:	99
RPD:	10
RPD Limit:	0-50

LCS #:	
Prepared Date:	
Analyzed Date:	
Instrument I.D.#:	
Conc. Spiked:	
LCS Result:	
LCS % Recov.:	

MS/MSD LCS Control Limits	28-122

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

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

[redacted] [redacted] [redacted] [redacted] [redacted] ❑ [redacted]Ches[redacted] Driv[redacted]lwoo[redacted] CA [redacted] • (41[redacted]-960[redacted] ❑ 1[redacted]20th [redacted]N.E., [redacted]01 • [redacted], WA[redacted]1 • (2[redacted]1-92[redacted]

UNOCAL 76

❑ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 ❑ East 11115 Montgomery, Suite B • Spokane, WA 99206 • (509) 924-9200
❑ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600 ❑ 15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-9800

Company Name: Enviros | Project Name: Unocal #7176
Address: P.O. Box 259 | UNOCAL Project Manager: Ed Ralston
City: Sonoma State: CA Zip Code: 95476 | Release #:
Telephone: 707-935-4850 FAX #: 707-935-4855 | Site #: 7850 Amador Valley Rd, Dublin
Report To: C Galantine/D Vossler Sampler: Clyde Galantine | QC Data: ❑ Level D (Standard) ❑ Level C ❑ Level B ❑ Level A

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

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 #	TPH-G, BTEX	TPH-Diesel								Comments
1. UX-3	11/10/94 11:45	soil	1	tube		X									9411709-01
2. UX-4	11:50	↓	↓	↓		X									-02
3. UX-5	12:10					X									-03
4. UX-6	12:15					X									-04
5. UX-7	12:30					X									-05
6. UX-8	12:35					X									-06
7. UX-9	12:20					X	X								-07
8. UX-10	12:25					X	X								-08
9. UT-5	12:40					X	X								-09
10. UT-6	12:45					X	X								21°C -10

Relinquished By: Clyde Galantine	Date: 11/10/94	Time: 18:10	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab: Suzanne [signature]	Date: 11.10.94	Time: 1810

Were Samples Received in Good Condition? ❑ Yes ❑ No Samples on Ice? ❑ Yes ❑ No Method of Shipment ______ Page __ of __

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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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin

Lab Proj. ID: 9411E41

Sampled: 11/10/94
Received: 11/10/94
Analyzed: see below

Reported: 11/30/94

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9411E41-01 Sample Desc : **SOLID, UX-3**				
Lead	mg/Kg	11/24/94	5.0	N.D.
Lab No: 9411E41-02 Sample Desc : **SOLID, UX-4**				
Lead	mg/Kg	11/24/94	5.0	N.D.
Lab No: 9411E41-03 Sample Desc : **SOLID, UX-8**				
Lead	mg/Kg	11/24/94	5.0	N.D.

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C.Galantine/D. Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411E41 -01 - 03

Reported: Nov 30, 1994

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel	
	EPA 6010	EPA 6010	EPA 6010	EPA 6010	S
QC Batch#:	ME1123946010MDB	ME1123946010MDB	ME1123946010MDB	ME1123946010MDB	
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010	L
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050	
Analyst:	C.Medefesser	C.Medefesser	C.Medefesser	C.Medefesser	
MS/MSD #:	9411E86-1	9411E86-1	9411E86-1	9411E86-1	
Sample Conc.:	N.D.	0.81	21	27	
Prepared Date:	11/23/94	11/23/94	11/23/94	11/23/94	
Analyzed Date:	11/24/94	11/24/94	11/24/94	11/24/94	
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2	
Conc. Spiked:	100 mg/kg	100 mg/kg	100 mg/kg	100 mg/kg	
Result:	99	95	110	120	
MS % Recovery:	99	94	89	93	
Dup. Result:	98	94	110	110	
MSD % Recov.:	98	93	89	83	
RPD:	1.0	1.1	0.0	8.7	
RPD Limit:	0-30	0-30	0-30	0-30	
LCS #:	BLK112394	BLK112394	BLK112394	BLK112394	
Prepared Date:	11/23/94	11/23/94	11/23/94	11/23/94	
Analyzed Date:	11/24/94	11/24/94	11/24/94	11/24/94	
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2	
Conc. Spiked:	100 mg/kg	100 mg/kg	100 mg/kg	100 mg/kg	
LCS Result:	100	99	100	100	
LCS % Recov.:	100	99	100	100	
MS/MSD	75-125	75-125	75-125	75-125	
LCS	75-125	75-125	75-125	75-125	
Control Limits					

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The 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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☐ East 11115 Montgomery, Suite B • Spokane, WA 99206 • (509) 924-9
☐ 15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-98

Company Name: Enviros	Project Name: Unocal #7176
Address: P.O. Box 259	UNOCAL Project Manager: Ed Ralston
City: Sonoma State: CA Zip Code: 95476	Release #:
Telephone: 707-935-4850 FAX #: 707-935-4855	Site #: 7850 Admador Valley Rd, Dublin
Report To: CGalantine/D Vossler Sampler: Clyde Galantine	QC Data: ☐ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

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

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 #	TPH-G BTEX	TPH-Diesel	Comments
1. UX-3	11/10/94 11:45	soil	1	tube		X		9411709-01
2. UX-4	11:50					X		-02
3. UX-5	12:10					X		-03
4. UX-6	12:15					X		-04
5. UX-7	12:30					X		-05
6. UX-8	12:35					X		-06
7. UX-9	12:20					X	X	-07
8. UX-10	12:25					X	X	-08
9. UT-5	12:40					X	X	-09
10. UT-6	12:45					X	X	21°C -10

Relinquished By: Clyde Galantine	Date: 11/10/94	Time: 18:10	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab:	Date: 11-10-94	Time: 1810

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

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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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/30/94
19411 Riverside Dr.	Sample Descript: UT-7	Received: 11/30/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 12/02/94
	Analysis Method: EPA 8015 Mod	Analyzed: 12/02/94
Attention: CGalantine/DVossler	Lab Number: 9411106-01	Reported: 12/07/94

QC Batch Number: GC1129940HBPEXB
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	50
Chromatogram Pattern:		
Non Diesel Mix		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	122

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/30/94
19411 Riverside Dr.	Sample Descript: UT-7	Received: 11/30/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 12/02/94
	Analysis Method: 8015Mod/8020	Analyzed: 12/02/94
Attention: CGalantine/DVossler	Lab Number: 9411I06-01	Reported: 12/07/94

QC Batch Number: GC120294BTEXEXA
Instrument ID: GCHP-18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**100**	**1300**
Benzene	0.50	N.D.
Toluene	**0.50**	**31**
Ethyl Benzene	**0.50**	**26**
Xylenes (Total)	**0.50**	**150**
Chromatogram Pattern:		
Weathered Gas		**C6-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	111

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/30/94
19411 Riverside Dr.	Sample Descript: UT-8	Received: 11/30/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 12/02/94
	Analysis Method: EPA 8015 Mod	Analyzed: 12/02/94
Attention: CGalantine/DVossler	Lab Number: 9411I06-02	Reported: 12/07/94

QC Batch Number: GC1130940HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	24
Chromatogram Pattern:		
Non Diesel Mix		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	126

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UT-8
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9411l06-02

Sampled: 11/30/94
Received: 11/30/94
Extracted: 12/02/94
Analyzed: 12/02/94
Reported: 12/07/94

QC Batch Number: GC120294BTEXEXA
Instrument ID: GCHP-18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**25**	**180**
Benzene	0.12	N.D.
Toluene	**0.12**	**3.8**
Ethyl Benzene	**0.12**	**3.0**
Xylenes (Total)	**0.12**	**19**
Chromatogram Pattern:		
Weathered Gas		**C7-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	93

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

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Project Manager

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/30/94
19411 Riverside Dr.	Sample Descript: UT-9	Received: 11/30/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 12/02/94
	Analysis Method: EPA 8015 Mod	Analyzed: 12/02/94
Attention: CGalantine/DVossier	Lab Number: 9411I06-03	Reported: 12/07/94

QC Batch Number: GC1130940HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	133

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

SEQUOIA ANALYTICAL - ELAP #1210

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Project Manager

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/30/94
19411 Riverside Dr.	Sample Descript: UT-9	Received: 11/30/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 12/02/94
	Analysis Method: 8015Mod/8020	Analyzed: 12/02/94
Attention: CGalantine/DVossler	Lab Number: 9411106-03	Reported: 12/07/94

QC Batch Number: GC120294BTEXEXA
Instrument ID: GCHP-18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**25**	**180**
Benzene	0.12	N.D.
Toluene	0.12	N.D.
Ethyl Benzene	0.12	N.D.
Xylenes (Total)	**0.12**	**0.59**
Chromatogram Pattern:		
Weathered Gas		**C7-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	92

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/30/94
19411 Riverside Dr.	Sample Descript: UT-10	Received: 11/30/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 12/02/94
	Analysis Method: EPA 8015 Mod	Analyzed: 12/02/94
Attention: CGalantine/DVossler	Lab Number: 9411106-04	Reported: 12/07/94

QC Batch Number: GC1130940HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	12
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	135

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

SEQUOIA ANALYTICAL - ELAP #1210

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Project Manager

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/30/94
19411 Riverside Dr.	Sample Descript: UT-10	Received: 11/30/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 12/02/94
	Analysis Method: 8015Mod/8020	Analyzed: 12/02/94
Attention: CGalantine/DVossler	Lab Number: 9411106-04	Reported: 12/07/94

QC Batch Number: GC120294BTEXEXA
Instrument ID: GCHP-18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**20**	**140**
Benzene	0.10	N.D.
Toluene	**0.10**	**0.62**
Ethyl Benzene	**0.10**	**0.84**
Xylenes (Total)	**0.10**	**12**
Chromatogram Pattern:		
Weathered Gas		**C7-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	87

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UT-11
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9411106-05

Sampled: 11/30/94
Received: 11/30/94
Extracted: 12/02/94
Analyzed: 12/02/94
Reported: 12/07/94

QC Batch Number: GC1130940HBPEXA
Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	1.3
Chromatogram Pattern:		
Non Diesel Mix		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	122

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/30/94
19411 Riverside Dr.	Sample Descript: UT-11	Received: 11/30/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 12/02/94
	Analysis Method: 8015Mod/8020	Analyzed: 12/02/94
Attention: CGalantine/DVossler	Lab Number: 9411I06-05	Reported: 12/07/94

QC Batch Number: GC120294BTEXEXA
Instrument ID: GCHP-18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**1.0**	**5.1**
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	**0.0050**	**0.014**
Xylenes (Total)	**0.0050**	**0.078**
Chromatogram Pattern:		
Weathered Gas		**C8-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	86

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C. Galantine/D. Vossler

Client Project ID: Unocal, #7176, Dublin
Matrix: Solid
Work Order #: 9411106 -01 - 05
Reported: Dec 7, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
QC Batch#:	GC120294BTEXEXA	GC120294BTEXEXA	GC120294BTEXEXA	GC120294BTEXEXA	GC1129940HBPTEXB
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015 Mod.
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 3550
Analyst:	R.Geckler	R.Geckler	R.Geckler	R.Geckler	B.Ali
MS/MSD #:	9411G84-21	9411G84-21	9411G84-21	9411G84-21	9411G37-03
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	
Prepared Date:	12/2/94	12/2/94	12/2/94	12/2/94	
Analyzed Date:	12/2/94	12/2/94	12/2/94	12/2/94	
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18	
Conc. Spiked:	0.20 mg/kg	0.20 mg/kg	0.20 mg/kg	0.60 mg/kg	
Result:	0.20	0.21	0.21	0.62	
MS % Recovery:	100	105	105	103	
Dup. Result:	0.19	0.20	0.20	0.59	
MSD % Recov.:	95	100	100	98	
RPD:	5.1	4.9	4.9	5.0	
RPD Limit:	0-50	0-50	0-50	0-50	

LCS #:	BLK122994
Prepared Date:	11/29/94
Analyzed Date:	12/2/94
Instrument I.D.#:	GCHP5A
Conc. Spiked:	15 mg/kg
LCS Result:	12
LCS % Recov.:	71

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140	38-122

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The 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

UNOCAL 76

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☐ 18939 120th Ave., N.E., Suite 101 • Bothell, WA 98011 • (206) 481-9200
☐ East 11115 Montgomery, Suite B • Spokane, WA 99206 • (509) 924-9200
☐ 15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-9800

Company Name: Enviros	Project Name: Unocal #7176
Address: P.O. Box 259 94132.01	UNOCAL Project Manager: Ed Ralston
City: Sonoma State: CA Zip Code: 95476	Release #:
Telephone: 707-935-4850 FAX #: 707-935-4855	Site #: 7176 5870 Amador Valley Rd Dublin
Report To: CGalantine/D Vosder Sampler: Clyde Galantine	QC Data: ☐ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

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

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 #	TPH-G/BTEX	TPH-D	Comments
1. UT-7	11/30/94 10:20	Soil	1	tube	9411F06-01	X	X	
2. UT-8	10:25				-02	X	X	
3. UT-9	10:35				-03	X	X	
4. UT-10	10:42				-04	X	X	
5. UT-11	11:00				-05	X	X	
6.								
7.								11°C
8.								
9.								
10.								

Relinquished By: Clyde Galantine	Date: 11/30/94	Time: 1300	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab:	Date: 11/30/94	Time: 1300

Were Samples Received in Good Condition? ☐ Yes ☐ No Samples on Ice? ☐ Yes ☐ No Method of Shipment_____ Page __ of __

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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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/11/94
19411 Riverside Dr.	Sample Descript: UX-11	Received: 11/11/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/18/94
	Analysis Method: EPA 8015 Mod	Analyzed: 11/18/94
Attention: CGalantine/DVossler	Lab Number: 9411A16-01	Reported: 11/21/94

QC Batch Number: GC111894OHBPEXA
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	15
Chromatogram Pattern:		
Non Diesel Mix		**<C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	94

RECEIVED
NOV 23 1994

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/11/94
19411 Riverside Dr.	Sample Descript: UX-11	Received: 11/11/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/17/94
	Analysis Method: 8015Mod/8020	Analyzed: 11/17/94
Attention: CGalantine/DVossler	Lab Number: 9411A16-01	Reported: 11/21/94

QC Batch Number: GC111794BTEXEXB
Instrument ID: GCHP-18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**50**	**200**
Benzene	0.25	N.D.
Toluene	**0.25**	**1.2**
Ethyl Benzene	**0.25**	**0.94**
Xylenes (Total)	**0.25**	**13**
Chromatogram Pattern:		
Weathered Gas		**C7-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	97

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/11/94
19411 Riverside Dr.	Sample Descript: UX-12	Received: 11/11/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/18/94
	Analysis Method: EPA 8015 Mod	Analyzed: 11/18/94
Attention: CGalantine/DVossler	Lab Number: 9411A16-02	Reported: 11/21/94

QC Batch Number: GC111894OHBPEXA
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	15
Chromatogram Pattern:		
Non Diesel Mix		**<C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	92

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UX-12
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9411A16-02

Sampled: 11/11/94
Received: 11/11/94
Extracted: 11/17/94
Analyzed: 11/17/94
Reported: 11/21/94

QC Batch Number: GC111794BTEXEXB
Instrument ID: GCHP-18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**50**	**230**
Benzene	0.25	N.D.
Toluene	**0.25**	**2.6**
Ethyl Benzene	**0.25**	**3.0**
Xylenes (Total)	**0.25**	**24**
Chromatogram Pattern:		
Weathered Gas		**C7-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	96

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

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/11/94
19411 Riverside Dr.	Sample Descript: UX-13	Received: 11/11/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/18/94
	Analysis Method: EPA 8015 Mod	Analyzed: 11/18/94
Attention: CGalantine/DVossler	Lab Number: 9411A16-03	Reported: 11/21/94

QC Batch Number: GC111894OHBPEXA
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	1.6
Chromatogram Pattern:		
Non Diesel Mix		<C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	95

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/11/94
19411 Riverside Dr.	Sample Descript: UX-13	Received: 11/11/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/17/94
	Analysis Method: 8015Mod/8020	Analyzed: 11/17/94
Attention: CGalantine/DVossler	Lab Number: 9411A16-03	Reported: 11/21/94

QC Batch Number: GC111794BTEXEXB
Instrument ID: GCHP-01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	**0.0050**	**0.0060**
Chromatogram Pattern:		
Weathered Gas		**C9-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	75

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UX-14
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9411A16-04

Sampled: 11/11/94
Received: 11/11/94
Extracted: 11/18/94
Analyzed: 11/19/94
Reported: 11/21/94

QC Batch Number: GC111894OHBPEXA
Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	16
Chromatogram Pattern:		
Non Diesel Mix		<C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	97

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

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/11/94
19411 Riverside Dr.	Sample Descript: UX-14	Received: 11/11/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/17/94
	Analysis Method: 8015Mod/8020	Analyzed: 11/17/94
Attention: CGalantine/DVossler	Lab Number: 9411A16-04	Reported: 11/21/94

QC Batch Number: GC111794BTEXEXB
Instrument ID: GCHP-01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**50**	**210**
Benzene	0.25	N.D.
Toluene	**0.25**	**0.78**
Ethyl Benzene	**0.25**	**0.98**
Xylenes (Total)	**0.25**	**9.7**
Chromatogram Pattern:		
Weathered Gas		**C8-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	89

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

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Enviros	Client Project ID:	Unocal #7176, Dublin	
19411 Riverside Dr.	Matrix:	Solid	
Sonoma, CA 95476			
Attention: C. Galantine/D.Vossler	Work Order #:	9411A16 -01	Reported: Nov 21, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Diesel
QC Batch#:	GC1118940HBPEXA
Analy. Method:	EPA 8015 Mod.
Prep. Method:	EPA 3550

Analyst:	B. Ali
MS/MSD #:	9411A16-3
Sample Conc.:	1.6 mg/kg
Prepared Date:	11/18/94
Analyzed Date:	11/18/94
Instrument I.D.#:	GCHP4B
Conc. Spiked:	15 mg/kg
Result:	14
MS % Recovery:	81
Dup. Result:	14
MSD % Recov.:	81
RPD:	0.0
RPD Limit:	0-50

LCS #:	
Prepared Date:	
Analyzed Date:	
Instrument I.D.#:	
Conc. Spiked:	
LCS Result:	
LCS % Recov.:	

MS/MSD LCS Control Limits	28-122

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The 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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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C. Galantine/D.Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411A16 -01 - 04

Reported: Nov 21, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC111794BTEXEXA	GC111794BTEXEXA	GC111794BTEXEXA	GC111794BTEXEXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	C.Donohue	C.Donohue	C.Donohue	C.Donohue
MS/MSD #:	G9411777-5	G9411777-5	G9411777-5	G9411777-5
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/17/94	11/17/94	11/17/94	11/17/94
Analyzed Date:	11/17/94	11/17/94	11/17/94	11/17/94
Instrument I.D.#:	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	0.20 mg/kg	0.20 mg/kg	0.20 mg/kg	0.60 mg/kg
Result:	0.19	0.20	0.20	0.59
MS % Recovery:	95	100	100	98
Dup. Result:	0.18	0.19	0.19	0.56
MSD % Recov.:	90	95	95	93
RPD:	5.4	5.1	5.1	5.2
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	
Prepared Date:	
Analyzed Date:	
Instrument I.D.#:	
Conc. Spiked:	
LCS Result:	
LCS % Recov.:	

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The 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

UNOCAL 76

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☐ East 11115 Montgomery, Suite B • Spokane, WA 99206 • (509) 924-9200
☐ 15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-9800

Company Name: Enviros	Project Name: Unocal #7176
Address: P.O. Box 259	UNOCAL Project Manager: Ed Ralston
City: Sonoma State: CA Zip Code: 95476	Release #:
Telephone: 707-935-4850 FAX #: 707-935-4855	Site #: 7850 Amador Valley Rd Dublin
Report To: CGalantine/DVossler Sampler: Clyde Galantine	QC Data: ☐ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

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

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 #	Comments
1.	UX-11	11/11/94 9:25	Soil	1	tube	01 A	HOLD
2.	UX-12	9:10		1		02	
3.	UX-13	10:25		1		03	
4.	UX-14	10:30		1		04	
5.							
6.							9411A16
7.							
8.							
9.							
10.							

Relinquished By: Clyde Galantine	Date: 11/11/94	Time: 16:30	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab:	Date: 11-11-94	Time: 1630

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

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

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nviros
19411 Riverside Dr.
Sonoma, CA 95476

Client Proj. ID: Unocal #7176, Dublin

Lab Proj. ID: 9411598

Sampled: 11/09/94
Received: 11/09/94
Analyzed: see below

ttention: CGalantine/DVossler

Reported: 11/16/94

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9411598-02				
Sample Desc : SOLID,US-2A-D (comp 4)				
Lead	mg/Kg	11/14/94	5.0	N.D.
Lab No: 9411598-03				
Sample Desc : SOLID,UWS-1A-D (comp 4)				
Flash Point	**Celsius**	**11/11/94**	**25**	**>100**
pH	**pH Units**	**11/10/94**	**N/A**	**7.6**
TRPH (SM 5520 E&F)	mg/Kg	11/10/94	50	N.D.

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

EQUOIA ANALYTICAL - ELAP #1210

odd Olive
oject Manager

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nviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/09/94
19411 Riverside Dr.	Sample Descript: US-1A-D (comp 4)	Received: 11/09/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/10/94
	Analysis Method: EPA 8020	Analyzed: 11/10/94
ttention: CGalantine/DVossler	Lab Number: 9411598-01	Reported: 11/16/94

QC Batch Number: GC111094BTEXEXA
rument ID: GCHP-06

BTEX Distinction

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Benzene	0.010	N.D.
Toluene	**0.010**	**0.054**
thyl benzene	**0.010**	**0.072**
ylenes (Total)	**0.010**	**0.63**

urrogates	Control Limits %		% Recovery
rifluorotoluene	70	130	101

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

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: US-1A-D (comp 4)
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9411598-01

Sampled: 11/09/94
Received: 11/09/94
Extracted: 11/11/94
Analyzed: 11/14/94
Reported: 11/16/94

Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	33
Chromatogram Pattern:		
Non Diesel Mix		<C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	92

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

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nviros
19411 Riverside Dr.
Sonoma, CA 95476

ttention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: US-2A-D (comp 4)
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9411598-02

Sampled: 11/09/94
Received: 11/09/94
Extracted: 11/11/94
Analyzed: 11/14/94
Reported: 11/16/94

trument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	3.5
Chromatogram Pattern:		
ion Diesel Mix		>C14

Surrogates	Control Limits %		% Recovery
-Pentacosane (C25)	50	150	88

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

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: US-2A-D (comp 4)
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9411598-02

Sampled: 11/09/94
Received: 11/09/94
Extracted: 11/10/94
Analyzed: 11/10/94
Reported: 11/16/94

QC Batch Number: GC111094BTEXEXA
Instrument ID: GCHP-06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**1.0**	**2.3**
Benzene	0.0050	N.D.
Toluene	**0.0050**	**0.013**
Ethyl Benzene	**0.0050**	**0.0062**
Xylenes (Total)	**0.0050**	**0.16**
Chromatogram Pattern:		**Gas**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	79

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

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nviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/09/94
19411 Riverside Dr.	Sample Descript: UWS-1A-D (comp 4)	Received: 11/09/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/14/94
	Analysis Method: EPA 8240	Analyzed: 11/15/94
ttention: CGalantine/DVossler	Lab Number: 9411598-03	Reported: 11/16/94

QC Batch Number: MS1109948240EXA
trument ID: F2

Volatile Organics (EPA 8240)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acetone	500	N.D.
enzene	100	N.D.
romodichloromethane	100	N.D.
romoform	100	N.D.
Bromomethane	100	N.D.
Butanone	500	N.D.
arbon disulfide	100	N.D.
arbon tetrachloride	100	N.D.
Chlorobenzene	100	N.D.
hloroethane	100	N.D.
Chloroethyl vinyl ether	500	N.D.
hloroform	100	N.D.
Chloromethane	100	N.D.
ibromochloromethane	100	N.D.
1-Dichloroethane	100	N.D.
2-Dichloroethane	100	N.D.
1,1-Dichloroethene	100	N.D.
s-1,2-Dichloroethene	100	N.D.
ans-1,2-Dichloroethene	100	N.D.
2-Dichloropropane	100	N.D.
cis-1,3-Dichloropropene	100	N.D.
ans-1,3-Dichloropropene	100	N.D.
thylbenzene	100	N.D.
-Hexanone	500	N.D.
Methylene chloride	250	N.D.
Methyl-2-pentanone	500	N.D.
yrene	100	N.D.
1,2,2-Tetrachloroethane	100	N.D.
Tetrachloroethene	100	N.D.
oluene	100	N.D.
1,1-Trichloroethane	100	N.D.
1,2-Trichloroethane	100	N.D.
Trichloroethene	100	N.D.
richlorofluoromethane	100	N.D.
nyl acetate	100	N.D.

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nviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/09/94
19411 Riverside Dr.	Sample Descript: UWS-1A-D (comp 4)	Received: 11/09/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/14/94
	Analysis Method: EPA 8240	Analyzed: 11/15/94
ttention: CGalantine/DVossler	Lab Number: 9411598-03	Reported: 11/16/94

QC Batch Number: MS1109948240EXA
strument ID: F2

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Vinyl chloride	100	N.D.
Total Xylenes	100	N.D.

Surrogates	Control Limits %		% Recovery
1,2-Dichloroethane-d4	70	121	95
oluene-d8	81	117	103
-Bromofluorobenzene	74	121	98

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

EQUOIA ANALYTICAL - ELAP #1210

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UWS-1A-D (comp 4)
Matrix: SOLID
Analysis Method: EPA 8270
Lab Number: 9411598-03

Sampled: 11/09/94
Received: 11/09/94
Extracted: 11/11/94
Analyzed: 11/14/94
Reported: 11/16/94

QC Batch Number: MS1108948270EXA
Instrument ID: H5

Semivolatile Organics (EPA 8270)

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
Acenaphthene	250	N.D.
Acenaphthylene	250	N.D.
Anthracene	250	N.D.
Benzoic Acid	500	N.D.
Benzo(a)anthracene	250	N.D.
Benzo(b)fluoranthene	250	N.D.
Benzo(k)fluoranthene	250	N.D.
Benzo(g,h,i)perylene	250	N.D.
Benzo(a)pyrene	250	N.D.
Benzyl alcohol	250	N.D.
Bis(2-chloroethoxy)methane	250	N.D.
Bis(2-chloroethyl)ether	250	N.D.
Bis(2-chloroisopropyl)ether	250	N.D.
Bis(2-ethylhexyl)phthalate	500	N.D.
4-Bromophenyl phenyl ether	250	N.D.
Butyl benzyl phthalate	250	N.D.
4-Chloroaniline	500	N.D.
2-Chloronaphthalene	250	N.D.
4-Chloro-3-methylphenol	250	N.D.
2-Chlorophenol	250	N.D.
4-Chlorophenyl phenyl ether	250	N.D.
Chrysene	250	N.D.
Dibenzo(a,h)anthracene	250	N.D.
Dibenzofuran	250	N.D.
Di-n-butyl phthalate	500	N.D.
1,2-Dichlorobenzene	250	N.D.
1,3-Dichlorobenzene	250	N.D.
1,4-Dichlorobenzene	250	N.D.
3,3-Dichlorobenzidine	500	N.D.
2,4-Dichlorophenol	250	N.D.
Diethyl phthalate	250	N.D.
2,4-Dimethylphenol	250	N.D.
Dimethyl phthalate	250	N.D.
4,6-Dinitro-2-methylphenol	500	N.D.
2,4-Dinitrophenol	500	N.D.

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UWS-1A-D (comp 4)
Matrix: SOLID
Analysis Method: EPA 8270
Lab Number: 9411598-03

Sampled: 11/09/94
Received: 11/09/94
Extracted: 11/11/94
Analyzed: 11/14/94
Reported: 11/16/94

QC Batch Number: MS1108948270EXA
Instrument ID: H5

Analyte	Detection Limit ug/Kg	Sample Results ug/Kg
2,4-Dinitrotoluene	250	N.D.
2,6-Dinitrotoluene	250	N.D.
Di-n-octyl phthalate	250	N.D.
Fluoranthene	250	N.D.
Fluorene	250	N.D.
Hexachlorobenzene	250	N.D.
Hexachlorobutadiene	250	N.D.
Hexachlorocyclopentadiene	500	N.D.
Hexachloroethane	250	N.D.
Indeno(1,2,3-cd)pyrene	250	N.D.
Isophorone	250	N.D.
2-Methylnaphthalene	250	N.D.
2-Methylphenol	250	N.D.
4-Methylphenol	250	N.D.
Naphthalene	250	N.D.
2-Nitroaniline	500	N.D.
3-Nitroaniline	500	N.D.
4-Nitroaniline	500	N.D.
Nitrobenzene	250	N.D.
2-Nitrophenol	250	N.D.
4-Nitrophenol	500	N.D.
N-Nitrosodiphenylamine	250	N.D.
N-Nitroso-di-n-propylamine	250	N.D.
Pentachlorophenol	500	N.D.
Phenanthrene	250	N.D.
Phenol	250	N.D.
Pyrene	250	N.D.
1,2,4-Trichlorobenzene	250	N.D.
2,4,5-Trichlorophenol	500	N.D.
2,4,6-Trichlorophenol	250	N.D.

Surrogates	Control Limits %		% Recovery
2-Fluorophenol	25	121	69
Phenol-d5	24	113	74
Nitrobenzene-d5	23	120	73
2-Fluorobiphenyl	30	115	71
2,4,6-Tribromophenol	19	122	65
p-Terphenyl-d14	18	137	78

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UWS-1A-D (comp 4)
Matrix: SOLID
Analysis Method: Title 22
Lab Number: 9411598-03

Sampled: 11/09/94
Received: 11/09/94

Analyzed: 11/15/94
Reported: 11/16/94

Inorganic Persistent and Bioaccumulative Toxic Substances : STLC

Analyte	Max. Limit mg/L	Detection Limit mg/L	Sample Results mg/L
Antimony, Sb	**15**	**0.10**	**0.12**
Arsenic, As	5.0	0.10	N.D.
Barium, Ba	**100**	**0.10**	**6.1**
Beryllium, Be	0.75	0.010	N.D.
Cadmium, Cd	1.0	0.010	N.D.
Chromium, Cr	**560**	**0.010**	**0.18**
Chromium, Cr (VI)	**5.0**	**0.0050**	**-**
Cobalt, Co	**80**	**0.050**	**0.22**
Copper, Cu	**25**	**0.010**	**0.13**
Lead, Pb	**5.0**	**0.10**	**0.13**
Mercury, Hg	0.2	0.00050	N.D.
Molybdenum, Mo	350	0.050	N.D.
Nickel, Ni	**20**	**0.050**	**0.70**
Selenium, Se	1.0	0.050	N.D.
Silver, Ag	5.0	0.010	N.D.
Thallium, Tl	7.0	0.10	N.D.
Vanadium, V	**24**	**0.050**	**0.30**
Zinc, Zn	**250**	**0.010**	**1.3**
Asbestos	**--**		**-**
Fluoride salts	**180**	**1.0**	**-**

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nviros
19411 Riverside Dr.
onoma, CA 95476

ttention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: UWS-1A-D (comp 4)
Matrix: SOLID
Analysis Method: Comb
Lab Number: 9411598-03

Sampled: 11/09/94
Received: 11/09/94

Analyzed: 11/11/94
Reported: 11/16/94

C Batch Number: IN111194084600A

Reactivity

nalyte	Detection Limit mg/Kg	Sample Results mg/Kg
Reactivity:		
ulfide	13	N.D.
yanide	0.50	N.D.
Reaction with Water		N.D.

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

EQUOIA ANALYTICAL - ELAP #1210

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oject Manager

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/09/94
19411 Riverside Dr.	Sample Descript: UWS-1A-D (comp 4)	Received: 11/09/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/11/94
	Analysis Method: EPA 8015 Mod	Analyzed: 11/14/94
Attention: CGalantine/DVossler	Lab Number: 9411598-03	Reported: 11/16/94

Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	96

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

SEQUOIA ANALYTICAL - ELAP #1210

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Project Manager

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nviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/09/94
19411 Riverside Dr.	Sample Descript: UWS-1A-D (comp 4)	Received: 11/09/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/10/94
	Analysis Method: 8015Mod/8020	Analyzed: 11/10/94
ttention: CGalantine/DVossler	Lab Number: 9411598-03	Reported: 11/16/94

QC Batch Number: GC111094BTEXEXA
Instrument ID: GCHP-06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
oluene	0.0050	N.D.
thyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
rifluorotoluene	70	130	87

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

QUOIA ANALYTICAL - ELAP #1210

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C. Galantine/D. Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411598 01-03

Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC111094BTEXEXA	GC111094BTEXEXA	GC111094BTEXEXA	GC111094BTEXEXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030
Analyst:	C. Donohue	C. Donohue	C. Donohue	C. Donohue
MS/MSD #:	941148406	941148406	941148406	941148406
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/10/94	11/10/94	11/10/94	11/10/94
Analyzed Date:	11/10/94	11/10/94	11/10/94	11/10/94
Instrument I.D.#:	GCHP7	GCHP7	GCHP7	GCHP7
Conc. Spiked:	0.20mg/kg	0.20mg/kg	0.20mg/kg	0.60 mg/kg
Result:	0.19	0.19	0.19	0.55
MS % Recovery:	95	95	95	92
Dup. Result:	0.19	0.19	0.19	0.57
MSD % Recov.:	95	95	95	95
RPD:	0.0	0.0	0.0	3.6
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140

SEQUOIA ANALYTICAL

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C. Galantine/D. Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411598 02

Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME1114946010MDC	ME1114946010MDC	ME1114946010MDC	ME1114946010MDC
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050
Analyst:	S. O'Donnell	S. O'Donnell	S. O'Donnell	S. O'Donnell
MS/MSD #:	941175804	941175804	941175804	941175804
Sample Conc.:	N.D.	0.54	35	44
Prepared Date:	11/14/94	11/14/94	11/14/94	11/14/94
Analyzed Date:	11/14/94	11/14/94	11/14/94	11/14/94
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/kg	100 mg/kg	100 mg/kg	100 mg/kg
Result:	95	92	130	130
MS % Recovery:	95	91	95	86
Dup. Result:	97	94	130	140
MSD % Recov.:	97	93	95	96
RPD:	2.1	2.2	0.0	7.4
RPD Limit:	0-30	0-30	0-30	0-30
LCS #:	BLK111494	BLK111494	BLK111494	BLK111494
Prepared Date:	11/14/94	11/14/94	11/14/94	11/14/94
Analyzed Date:	11/14/94	11/14/94	11/14/94	11/14/94
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/kg	100 mg/kg	100 mg/kg	100 mg/kg
LCS Result:	100	99	100	100
LCS % Recov.:	100	99	100	100
MS/MSD	75-125	75-125	75-125	75-125
LCS	75-125	75-125	75-125	75-125
Control Limits				

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C. Galantine/D. Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411598 03

Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Total. Recoverable Petroleum Hyd.
QC Batch#:	OP1108945520EXA
Analy. Method:	SM 5520 EF
Prep. Method:	-

Analyst:	A. Pina
MS/MSD #:	941121901
Sample Conc.:	N.D.
Prepared Date:	11/8/94
Analyzed Date:	11/9/94
Instrument I.D.#:	MANUAL
Conc. Spiked:	1000 mg/kg
Result:	1000
MS % Recovery:	100
Dup. Result:	1100
MSD % Recov.:	110
RPD:	9.5
RPD Limit:	0-50

LCS #:	BLK110894
Prepared Date:	11/8/94
Analyzed Date:	11/9/94
Instrument I.D.#:	MANUAL
Conc. Spiked:	1000 mg/kg
LCS Result:	940
LCS % Recov.:	94

MS/MSD	60-140
LCS	70-110
Control Limits	

SEQUOIA ANALYTICAL

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Enviros
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Sonoma, CA 95476
Attention: C. Galantine/D. Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411598 03

Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	pH	Flashpoint
QC Batch:	IN111094904500A	IN111194101000A
Analy. Method:	EPA 9045	EPA 1010
Prep Method:	N.A.	N.A.
Analyst:	Y. Arteaga	K. Newberry
Duplicate Sample #:	941158401	941159803
Prepared Date:	11/10/94	11/11/94
Analyzed Date:	11/10/94	11/11/94
Instrument I.D.#:	MANUAL	MANUAL
Sample Concentration:	8.0	> 100 °C
Dup. Sample Concentration:	8.0	> 100 °C
RPD:	0.0	0.0
RPD Limit:	0-30	0-5 °C

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

** RPD= Relative % Difference

9411598.EEE <4>

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Enviros
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Sonoma, CA 95476
Attention: C. Galantine/D. Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411598 03
Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Reactive Sulfide
QC Batch#:	IN111194084600A
Analy. Method:	SW 846
Prep. Method:	N.A.
Analyst:	K. Newberry
MS/MSD #:	
Sample Conc.:	
Prepared Date:	
Analyzed Date:	
Instrument I.D.#:	
Conc. Spiked:	
Result:	
MS % Recovery:	
Dup. Result:	
MSD % Recov.:	
RPD:	
RPD Limit:	

LCS #:	LCS111194
Prepared Date:	11/11/94
Analyzed Date:	11/11/94
Instrument I.D.#:	MANUAL
Conc. Spiked:	10 mg/L
LCS Result:	9.6
LCS % Recov.:	96

MS/MSD LCS Control Limits	80-120

SEQUOIA ANALYTICAL

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Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C. Galantine/D. Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Liquid
Work Order #: 9411598 03

Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
	STLC	STLC	STLC	STLC
QC Batch#:	ME1114946010MD	ME1114946010MD	ME1114946010MD	ME1114946010MD
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3010	EPA 3010	EPA 3010	EPA 3010
Analyst:	C. Medefesser	C. Medefesser	C. Medefesser	C. Medefesser
MS/MSD #:	941174901	941174901	941174901	941174901
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/14/94	11/14/94	11/14/94	11/14/94
Analyzed Date:	11/14/94	11/14/94	11/14/94	11/14/94
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L
Result:	1.0	0.98	0.95	0.97
MS % Recovery:	100	98	95	97
Dup. Result:	1.0	0.99	0.96	0.98
MSD % Recov.:	100	99	96	98
RPD:	0.0	1.0	1.0	1.0
RPD Limit:	0-30	0-30	0-30	0-30
LCS #:	BLK111494	BLK111494	BLK111494	BLK111494
Prepared Date:	11/14/94	11/14/94	11/14/94	11/14/94
Analyzed Date:	11/14/94	11/14/94	11/14/94	11/14/94
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	1.0 mg/L	1.0 mg/L	1.0 mg/L	1.0 mg/L
LCS Result:	1.0	1.0	0.98	0.99
LCS % Recov.:	100	100	98	99
MS/MSD Control Limits	75-125	75-125	75-125	75-125
LCS Control Limits	75-125	75-125	75-125	75-125

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SEQUOIA ANALYTICAL

Todd Olive
Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C. Galantine/D. Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411598 03

Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	1,1-Dichloroethene	Trichloroethene	Benzene	Toluene	Chloro-benzene
QC Batch#:	MS1109948240EXA	MS1109948240EXA	MS1109948240EXA	MS1109948240EXA	MS1109948240EXA
Analy. Method:	EPA 8240	EPA 8240	EPA 8240	EPA 8240	EPA 8240
Prep. Method:	EPA 8240	EPA 8240	EPA 8240	EPA 8240	EPA 8240
Analyst:	B. Pitamah	B. Pitamah	B. Pitamah	B. Pitamah	B. Pitamah
MS/MSD #:	941149204	941149204	941149204	941149204	941149204
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/9/94	11/9/94	11/9/94	11/9/94	11/9/94
Analyzed Date:	11/10/94	11/10/94	11/10/94	11/10/94	11/10/94
Instrument I.D.#:	F2	F2	F2	F2	F2
Conc. Spiked:	2500 µg/kg	2500 µg/kg	2500 µg/kg	2500 µg/kg	2500 µg/kg
Result:	1800	2100	2400	2200	2200
MS % Recovery:	72	84	96	88	88
Dup. Result:	2000	2100	2400	2200	2200
MSD % Recov.:	80	84	96	88	88
RPD:	11	0.0	0.0	0.0	0.0
RPD Limit:	0-50	0-50	0-50	0-50	0-50

LCS #:					
Prepared Date:					
Analyzed Date:					
Instrument I.D.#:					
Conc. Spiked:					
LCS Result:					
LCS % Recov.:					
MS/MSD LCS Control Limits	DL-234	71-157	37-151	47-150	37-160

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C. Galantine/D. Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Liquid
Work Order #: 9411598 03

Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Selenium	Mercury
	STLC	STLC
QC Batch#:	ME1114947000MDA	ME1115942451m4A
Analy. Method:	EPA 270.2	EPA 245.1
Prep. Method:	EPA 3020	EPA 245.1
Analyst:	W. Thant	N. Rocklein
MS/MSD #:	94175301	941024601
Sample Conc.:	N.D.	0.00012
Prepared Date:	11/14/94	11/15/94
Analyzed Date:	11/14/94	11/15/94
Instrument I.D.#:	MTJA3	MV1
Conc. Spiked:	0.050 mg/L	0.0040 mg/L
Result:	0.033	0.0036
MS % Recovery:	76	87
Dup. Result:	0.046	0.0036
MSD % Recov.:	92	87
RPD:	19	0.0
RPD Limit:	0-30	0-30

LCS #:	BLK111494	BLK111594
Prepared Date:	11/14/94	11/15/94
Analyzed Date:	11/14/94	11/15/94
Instrument I.D.#:	MTJA3	MV1
Conc. Spiked:	0.050 mg/L	0.0040 mg/L
LCS Result:	0.048	0.0037
LCS % Recov.:	96	93

MS/MSD LCS Control Limits	75-125	75-125

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

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

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C. Galantine/D. Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411598 03

Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Phenol	2-Chlorophenol	1,4-Dichloro benzene	N-Nitroso-Di-N-propylamine
QC Batch#:	MS1107948270EXA	MS1107948270EXA	MS1107948270EXA	MS1107948270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	EPA 3550
Analyst:	L. Duong	L. Duong	L. Duong	L. Duong
MS/MSD #:	941103709	941103709	941103709	941103709
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/7/94	11/7/94	11/7/94	11/7/94
Analyzed Date:	11/7/94	11/7/94	11/7/94	11/7/94
Instrument I.D.#:	H5	H5	H5	H5
Conc. Spiked:	5000 µg/kg	5000 µg/kg	5000 µg/kg	5000 µg/kg
Result:	3200	3300	3000	3900
MS % Recovery:	64	66	60	78
Dup. Result:	3200	3300	3100	4000
MSD % Recov.:	64	66	62	80
RPD:	0.0	0.0	3.3	2.5
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				

MS/MSD LCS Control Limits	5-112	23-134	20-124	DL-230

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C. Galantine/D. Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411598 03
Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	1,2,4-Trichloro benzene	4-Chloro-3 Methylphenol	Acenaphthene	N-Nitrophenol
QC Batch#:	MS1107948270EXA	MS1107948270EXA	MS1107948270EXA	MS1107948270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550	EPA 3550
Analyst:	L. Duong	L. Duong	L. Duong	L. Duong
MS/MSD #:	941103709	941103709	941103709	941103709
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	11/7/94	11/7/94	11/7/94	11/7/94
Analyzed Date:	11/7/94	11/7/94	11/7/94	11/7/94
Instrument I.D.#:	H5	H5	H5	H5
Conc. Spiked:	5000 µg/kg	5000 µg/kg	5000 µg/kg	5000 µg/kg
Result:	3200	3500	3000	3400
MS % Recovery:	64	70	60	68
Dup. Result:	3300	3500	3000	3300
MSD % Recov.:	66	70	60	66
RPD:	3.1	0.0	0.0	3.0
RPD Limit:	0-50	0-50	0-50	0-50
LCS #:				
Prepared Date:				
Analyzed Date:				
Instrument I.D.#:				
Conc. Spiked:				
LCS Result:				
LCS % Recov.:				
MS/MSD LCS Control Limits	44-142	22-147	47-145	DL-132

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C. Galantine/D. Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411598 03
Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	2,4-Dinitro-toluene	Pentachloro-phenol	Pyrene
QC Batch#:	MS1107948270EXA	MS1107948270EXA	MS1107948270EXA
Analy. Method:	EPA 8270	EPA 8270	EPA 8270
Prep. Method:	EPA 3550	EPA 3550	EPA 3550
Analyst:	L. Duong	L. Duong	L. Duong
MS/MSD #:	941103709	941103709	941103709
Sample Conc.:	N.D.	N.D.	N.D.
Prepared Date:	11/7/94	11/7/94	11/7/94
Analyzed Date:	11/7/94	11/7/94	11/7/94
Instrument I.D.#:	H5	H5	H5
Conc. Spiked:	5000 µg/kg	5000 µg/kg	5000 µg/kg
Result:	3300	3100	3400
MS % Recovery:	66	62	68
Dup. Result:	3400	3100	3300
MSD % Recov.:	68	62	66
RPD:	3.0	0.0	3.0
RPD Limit:	0-50	0-50	0-50

LCS #:			
Prepared Date:			
Analyzed Date:			
Instrument I.D.#:			
Conc. Spiked:			
LCS Result:			
LCS % Recov.:			

MS/MSD LCS Control Limits	39-139	14-176	52-115

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

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

UNOCAL 76

[redacted] Chesapeake Drive • Redwood City, CA [redacted] • (415) [redacted]
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☐ 1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600
☐ [redacted] 120th Ave. N.E., [redacted] 101 [redacted], WA [redacted] • ([redacted]) [redacted]
☐ East 11115 Montgomery, Suite B • Spokane, WA 99206 • (509) 924-9200
☐ 15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-9800

Company Name: Enviros	Project Name: Unocal # 7176
Address: P.O. Box 259	UNOCAL Project Manager: Ed Ralston
City: Sonoma State: CA Zip Code: 95476	Release #:
Telephone: 707-935-4850 FAX #: 707-935-4855	Site #: 7850 Amador Valley Rd Dublin
Report To: CGalantine/DVossler Sampler: Clyde Galantine	QC Data: ☐ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

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

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 #	TPH-G, BTEX	TPH-D	D&G 5520	8240	8270	CAM 17 STLC	RCI	STLC Pb	BTEX	Comments
1. US-1A-D	11/9/94 8:05	Soil	4>1	tube	01A-D		X							X	9411598
2. US-2A-D	11/9/94 8:25	"	4>1	"	02 "	X	X								
3.															
4. IWS-1A-D	11/9/94 9:15	"	4>1	"	03A D	X	X	X	X	X	X	X			
5.															
6.															
7.															
8.															
9.															
10.															

Relinquished By: Clyde Galantine	Date: 11/9/94	Time: 18:20	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab:	Date: 11/9/94	Time: 1820

Were Samples Received in Good Condition? ☐ Yes ☐ No Samples on Ice? ☐ Yes ☐ No 1.4°C Method of Shipment _____ Page __ of __

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? _____

Signature: Company: Date:

Pink - Client
Yellow - Laboratory
White - Laboratory

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Client Proj. ID: Unocal #7176, Dublin

Lab Proj. ID: 9411688

Sampled: 11/10/94
Received: 11/10/94
Analyzed: see below

Attention: CGalantine/DVossler

Reported: 11/14/94

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9411688-01				
Sample Desc : **SOLID, US-3A-D (comp 4)**				
Flash Point	**Celsius**	**11/11/94**	**25**	**>100**
Lead	mg/Kg	11/14/94	5.0	N.D.
pH	**pH Units**	**11/11/94**	**N/A**	**8.2**

RECEIVED
NOV 18 1994

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/10/94
19411 Riverside Dr.	Sample Descript: US-3A-D (comp 4)	Received: 11/10/94
Sonoma, CA 95476	Matrix: SOLID	
	Analysis Method: Comb	Analyzed: 11/14/94
Attention: CGalantine/DVossler	Lab Number: 9411688-01	Reported: 11/14/94

Reactivity

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
Reactivity:		
Sulfide	13	N.D.
Cyanide	0.010	N.D.
Reaction with Water		N.D.

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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Enviros	Client Project ID:	Unocal #7176, Dublin	
19411 Riverside Dr.	Matrix:	Solid	
Sonoma, CA 95476			
Attention: C. Galantine/D. Vossler	Work Order #:	9411688 01	Reported: Nov 15, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	pH	Flashpoint
QC Batch:	IN111094150100A	In111194101000A
Analy. Method:	EPA 150.1	EPA 1010
Prep Method:	N.A.	N.A.
Analyst:	Y. Arteaga	K. Newberry
Duplicate Sample #:	941158701	941168801
Prepared Date:	11/10/94	11/11/94
Analyzed Date:	11/10/94	11/11/94
Instrument I.D.#:	MANUAL	MANUAL
Sample Concentration:	7.9	> 100 °C
Dup. Sample Concentration:	7.9	> 100 °C
RPD:	0.0	0.0
RPD Limit:	0-30	0-5 °C

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

** RPD = Relative % Difference

Sequoia Analytical

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C. Galantine/D. Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411688 01

Reported: Nov 15, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Reactive Sulfide	Reactive Cyanide
QC Batch#:	IN111494084600A	IN110994084600A
Analy. Method:	SW 846	SW 846
Prep. Method:	N.A.	N.A.
Analyst:	K. Newberry	J. Heider
MS/MSD #:		
Sample Conc.:		
Prepared Date:		
Analyzed Date:		
Instrument I.D.#:		
Conc. Spiked:		
Result:		
MS % Recovery:		
Dup. Result:		
MSD % Recov.:		
RPD:		
RPD Limit:		

LCS #:	LCS111494	LCS111494
Prepared Date:	11/14/94	11/14/94
Analyzed Date:	11/14/94	11/14/94
Instrument I.D.#:	MANUAL	MANUAL
Conc. Spiked:	10 mg/L	0.20 mg/L
LCS Result:	10	0.029
LCS % Recov.:	100	140

MS/MSD LCS Control Limits	80-120	6.4-40

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C. Galantine/D. Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411688 01

Reported: Nov 15, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME1114946010MDC	ME1114946010MDC	ME1114946010MDC	ME1114946010MDC
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050
Analyst:	S. O'Donnell	S. O'Donnell	S. O'Donnell	S. O'Donnell
MS/MSD #:	941175804	941175804	941175804	941175804
Sample Conc.:	N.D.	0.54	35	44
Prepared Date:	11/14/94	11/14/94	11/14/94	11/14/94
Analyzed Date:	11/14/94	11/14/94	11/14/94	11/14/94
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/kg	100 mg/kg	100 mg/kg	100 mg/kg
Result:	95	92	130	130
MS % Recovery:	95	91	95	86
Dup. Result:	97	94	130	140
MSD % Recov.:	97	93	95	96
RPD:	2.1	2.2	0.0	7.4
RPD Limit:	0-30	0-30	0-30	0-30
LCS #:	BLK111494	BLK111494	BLK111494	BLK111494
Prepared Date:	11/14/94	11/14/94	11/14/94	11/14/94
Analyzed Date:	11/14/94	11/14/94	11/14/94	11/14/94
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/kg	100 mg/kg	100 mg/kg	100 mg/kg
LCS Result:	100	99	100	100
LCS % Recov.:	100	99	100	100
MS/MSD	75-125	75-125	75-125	75-125
LCS	75-125	75-125	75-125	75-125
Control Limits				

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

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UNOCAL 76

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18939 120th Ave., N.E., Suite 101 • Bothell, WA 98011 • (206) 481-9200
East 11115 Montgomery, Suite B • Spokane, WA 99206 • (509) 924-9200
15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-9800

Company Name: Enviros	Project Name: Unocal # 7176
Address: P.O. Box 259 94132.01	UNOCAL Project Manager: Ed Ralston
City: Sonoma State: CA Zip Code: 95476	Release #:
Telephone: 707-935-4850 FAX #: 707-935-4855	Site #: 7850 Amador Valley Rd, Dublin
Report To: C Galantine / D Vossler Sampler: Clyde Galantine	QC Data: ☐ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

Pink - Client

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

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

☐ Drinking Water ☐ Waste Water ☐ Other

Analyses Requested (4 of 5)

	Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	TPH-G BTEX	TPH-D	RCI	STLC Pb					Comments
1.	US-3A-D	11/10/94 9:15	soil	4→1	tubes	1A·D	X	X	X	X					2DAY TAT
2.	US-4A-D	11/10/94 9:40		4→1			X	X							for TPH-G,D,
3.	US-5A-D	11/10/94 3:40		4→1			X	X							BTEX
4.	US-6A-D	11/10/94 3:50	↓	4→1	↓		X	X							3 Day TAT
5.															for RCI &
6.															STLC Pb
7.															
8.															
9.															
10.															4·C

Yellow - Laboratory

White - Laboratory

Relinquished By: [signature]	Date: 11/10/94	Time: 18:10	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab: [signature]	Date: 11-10-94	Time: 1810

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

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: [redacted] Signature: [redacted] Company: [redacted] Date: [redacted]

Sequoia Analytical

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin

Lab Proj. ID: 9411814

Sampled: 11/10/94
Received: 11/10/94
Analyzed: see below

Reported: 11/15/94

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9411814-01				
Sample Desc : **SOLID, US-4A-D (comp 4)**				
Lead	mg/Kg	11/15/94	5.0	N.D.

RECEIVED
NOV 18 1994

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C Galantine/D Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411814 -01
Reported: Nov 15, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME1114946010MDC	ME1114946010MDC	ME1114946010MDC	ME1114946010MDC
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050
Analyst:	S. O'Donnell	S. O'Donnell	S. O'Donnell	S. O'Donnell
MS/MSD #:	9411758-4	9411758-4	9411758-4	9411758-4
Sample Conc.:	N.D	0.54	35	44
Prepared Date:	11/14/94	11/14/94	11/14/94	11/14/94
Analyzed Date:	11/14/94	11/14/94	11/14/94	11/14/94
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/kg	100 mg/kg	100 mg/kg	100 mg/kg
Result:	95	92	130	130
MS % Recovery:	95	91	95	86
Dup. Result:	97	94	130	140
MSD % Recov.:	97	93	95	96
RPD:	2.1	2.2	0.0	7.4
RPD Limit:	0-30	0-30	0-30	0-30
LCS #:	BLK111494	BLK111494	BLK111494	BLK111494
Prepared Date:	11/14/94	11/14/94	11/14/94	11/14/94
Analyzed Date:	11/14/94	11/14/94	11/14/94	11/14/94
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/kg	100 mg/kg	100 mg/kg	100 mg/kg
LCS Result:	100	99	100	100
LCS % Recov.:	100	99	100	100
MS/MSD Control Limits	75-125	75-125	75-125	75-125
LCS Control Limits	75-125	75-125	75-125	75-125

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The 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

UNOCAL 76

[redacted] Division [redacted] Drive [redacted] Woodland [redacted] CA [redacted] (916) [redacted] 6000 [redacted]

819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600
1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600
East 11115 Montgomery, Suite B • Spokane, WA 99206 • (509) 924-9200
15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-9800

Company Name: Enviros	Project Name: Unocal #7176
Address: P.O. Box 259 94132.01	UNOCAL Project Manager: Ed Ralston
City: Sonoma State: CA Zip Code: 95476	Release #:
Telephone: 707-935-4850 FAX #: 707-935-4855	Site #: 7850 Amador Valley Rd, Dublin
Report To: C Galantine/D Vossler Sampler: Clyde Galantine	QC Data: ☐ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

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

☐ Drinking Water ☐ Waste Water ☐ Other

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

Analyses Requested 9411689

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	TPH-G, BTEX	TPH-D	RCI	STLC Pb						Comments
1. US-3A-D	11/10/94 9:15	soil	4→1	tubes	1A-D	X	X	X	X						2DAY TAT for TPH-G,D, BTEX
2. US-4A-D	11/10/94 9:40	↓	4→1	↓		X	X								3 Day TAT for RCI & STLC Pb
3. US-5A-D	11/10/94 3:40	↓	4→1	↓		X	X								
4. US-6A-D	11/10/94 3:50	↓	4→1	↓		X	X								
5.															
6.															
7.															
8.															
9.															21·C
10.															

Relinquished By: Clyde Galantine	Date: 11/10/94	Time: 18:10	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab: Suzanne Hu	Date: 11-10-94	Time: 1810

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

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? _____

Signature: Company: Date: _____

Pink - Client
Yellow - Laboratory
White - Laboratory

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (415) 364-9600, FAX (415) 364-9233
1900 Bates Avenue, Suite L, Concord, CA 94520, (510) 686-9600, FAX (510) 686-9689
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin

Lab Proj. ID: 9411689

Sampled: 11/10/94
Received: 11/10/94
Analyzed: see below

Reported: 11/15/94

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9411689-04				
Sample Desc : **SOLID,US-6A-D (comp 4)**				
Lead	mg/Kg	11/14/94	5.0	N.D.

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/10/94
19411 Riverside Dr.	Sample Descript: US-3A-D (comp 4)	Received: 11/10/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/11/94
	Analysis Method: EPA 8015 Mod	Analyzed: 11/14/94
Attention: CGalantine/DVossler	Lab Number: 9411689-01	Reported: 11/15/94

Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	20	340
Chromatogram Pattern:		**DIESEL**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	0 Q

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/10/94
19411 Riverside Dr.	Sample Descript: US-3A-D (comp 4)	Received: 11/10/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/11/94
	Analysis Method: 8015Mod/8020	Analyzed: 11/11/94
Attention: CGalantine/DVossler	Lab Number: 9411689-01	Reported: 11/15/94

QC Batch Number: GC111194BTEXEXA
Instrument ID: GCHP-18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**10**	**110**
Benzene	0.050	N.D.
Toluene	**0.050**	**0.22**
Ethyl Benzene	**0.050**	**0.81**
Xylenes (Total)	**0.050**	**4.3**
Chromatogram Pattern:		
Non Gas Mix		**>C11+**
Weathered Gas		**C8-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	127

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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nviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/10/94
19411 Riverside Dr.	Sample Descript: US-4A-D (comp 4)	Received: 11/10/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/11/94
	Analysis Method: EPA 8015 Mod	Analyzed: 11/14/94
ttention: CGalantine/DVossler	Lab Number: 9411689-02	Reported: 11/15/94

trument ID: GCHP-4A

Total Extractable Petroleum Hydrocarbons (TEPH)

nalyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	58
hromatogram Pattern:		DIESEL

Surrogates	Control Limits %		% Recovery
-Pentacosane (C25)	50	150	102

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

EQUOIA ANALYTICAL - ELAP #1210

odd Olive
ject Manager

Sequoia Analytical

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: US-4A-D (comp 4)
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9411689-02

Sampled: 11/10/94
Received: 11/10/94
Extracted: 11/11/94
Analyzed: 11/11/94
Reported: 11/15/94

QC Batch Number: GC111194BTEXEXA
Instrument ID: GCHP-18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**10**	**54**
Benzene	0.050	N.D.
Toluene	0.050	N.D.
Ethyl Benzene	**0.050**	**0.35**
Xylenes (Total)	**0.050**	**1.4**
Chromatogram Pattern:		
Weathered Gas		**C8-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	114

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: US-5A-D (comp 4)
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9411689-03

Sampled: 11/10/94
Received: 11/10/94
Extracted: 11/14/94
Analyzed: 11/14/94
Reported: 11/15/94

Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	**1.0**	**27**
Chromatogram Pattern:		
Non Diesel Mix		**>C10**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	108

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/10/94
19411 Riverside Dr.	Sample Descript: US-5A-D (comp 4)	Received: 11/10/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/11/94
	Analysis Method: 8015Mod/8020	Analyzed: 11/11/94
Attention: CGalantine/DVossler	Lab Number: 9411689-03	Reported: 11/15/94

QC Batch Number: GC111194BTEXEXA
Instrument ID: GCHP-18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	98

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

EQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: US-6A-D (comp 4)
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9411689-04

Sampled: 11/10/94
Received: 11/10/94
Extracted: 11/14/94
Analyzed: 11/14/94
Reported: 11/15/94

Instrument ID: GCHP4B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	46
Chromatogram Pattern:		
Non Diesel Mix		>C9

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	112

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/10/94
19411 Riverside Dr.	Sample Descript: US-6A-D (comp 4)	Received: 11/10/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/11/94
	Analysis Method: 8015Mod/8020	Analyzed: 11/11/94
Attention: CGalantine/DVossler	Lab Number: 9411689-04	Reported: 11/15/94

QC Batch Number: GC111194BTEXEXA
Instrument ID: GCHP-18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**5.0**	**21**
Benzene	0.025	N.D.
Toluene	0.025	N.D.
Ethyl Benzene	0.025	N.D.
Xylenes (Total)	**0.025**	**0.11**
Chromatogram Pattern:		
Weathered Gas		**C9-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	108

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros	Client Project ID:	Unocal #7176, Dublin	
19411 Riverside Dr.	Matrix:	Solid	
Sonoma, CA 95476			
Attention: C. Galantine/D. Vossler	Work Order #:	9411689 01-04	Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
QC Batch#:	GC111194BTEXEXA	GC111194BTEXEXA	GC111194BTEXEXA	GC111194BTEXEXA	GC111194OHBPEXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015 mod.
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	
Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler	N.Herrera
MS/MSD #:	941149204	941149204	941149204	941149204	
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	
Prepared Date:	11/11/94	11/11/94	11/11/94	11/11/94	
Analyzed Date:	11/11/94	11/11/94	11/11/94	11/11/94	
Instrument I.D.#:	GCHP18	GCHP18	GCHP18	GCHP18	
Conc. Spiked:	0.20 mg/kg	0.20 mg/kg	0.20 mg/kg	0.60 mg/kg	
Result:	0.19	0.20	0.20	0.59	
MS % Recovery:	95	100	100	98	
Dup. Result:	0.18	0.20	0.20	0.58	
MSD % Recov.:	90	100	100	97	
RPD:	5.4	0.0	0.0	1.7	
RPD Limit:	0-50	0-50	0-50	0-50	
LCS #:					BLK111194BS
Prepared Date:					11/11/94
Analyzed Date:					11/11/94
Instrument I.D.#:					GCHP5B
Conc. Spiked:					15 mg/kg
LCS Result:					12.7 mg/kg
LCS % Recov.:					85
MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140	28-122

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The 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

9411689.EEE <1>

Sequoia Analytical

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Enviros	Client Project ID:	Unocal #7176, Dublin
19411 Riverside Dr.	Matrix:	Solid
Sonoma, CA 95476		
Attention: C. Galantine/D. Vossler	Work Order #:	9411689 04

Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME1114946010MDC	ME1114946010MDC	ME1114946010MDC	ME1114946010MDC
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050
Analyst:	S. O'Donnell	S. O'Donnell	S. O'Donnell	S. O'Donnell
MS/MSD #:	941175804	941175804	941175804	941175804
Sample Conc.:	N.D.	0.54	35	44
Prepared Date:	11/14/94	11/14/94	11/14/94	11/14/94
Analyzed Date:	11/14/94	11/14/94	11/14/94	11/14/94
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/kg	100 mg/kg	100 mg/kg	100 mg/kg
Result:	95	92	130	130
MS % Recovery:	95	91	95	86
Dup. Result:	97	94	130	140
MSD % Recov.:	97	93	95	96
RPD:	2.1	2.2	0.0	7.4
RPD Limit:	0-30	0-30	0-30	0-30
LCS #:	BLK111494	BLK111494	BLK111494	BLK111494
Prepared Date:	11/14/94	11/14/94	11/14/94	11/14/94
Analyzed Date:	11/14/94	11/14/94	11/14/94	11/14/94
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/kg	100 mg/kg	100 mg/kg	100 mg/kg
LCS Result:	100	99	100	100
LCS % Recov.:	100	99	100	100
MS/MSD Control Limits	75-125	75-125	75-125	75-125
LCS Control Limits	75-125	75-125	75-125	75-125

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The 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

UNOCAL 76

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1900 Bates Ave., Suite LM • Concord, CA 94520 • (510) 686-9600
[illegible] 1115 [illegible]ome[illegible]le B [illegible]ino, [illegible]200 [illegible]524-[illegible]
15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-9800

Company Name: Enviros	Project Name: Unocal #7176
Address: P.O. Box 259 94132,01	UNOCAL Project Manager: Ed Ralston
City: Sonoma State: CA Zip Code: 95476	Release #:
Telephone: 707-935-4850 FAX #: 707-935-4855	Site #: 7850 Amador Valley Rd, Dublin
Report To: CGalantine/DVossler Sampler: Clyde Galantine	QC Data: ☐ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

Pink - Client

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

☐ Drinking Water ☐ Waste Water ☐ Other

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

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	TPH-G, BTEX	TPH-D	RCI	STLC Pb	9411089	Comments
1. US-3A-D	11/10/94 9:15	soil	4→1	tubes	1 A-D	X	X	X	X		2DAY TAT for TPH-G,D, BTEX
2. US-4A-D	11/10/94 9:40	↓	4→1	↓	2	X	X				3 Day TAT for RCI & STLC Pb
3. US-5A-D	11/10/94 3:40		4→1		3	X	X				
4. US-6A-D	11/10/94 3:50	↓	4→1	↓	4 ↓	X	X				
5.											
6.											
7.											
8.											
9.											21·C
10.											

Yellow - Laboratory

White - Laboratory

Relinquished By: [signature]	Date: 11/10/94	Time: 18:10	Received By:	Date: Time:
Relinquished By:	Date:	Time:	Received By:	Date: Time:
Relinquished By:	Date:	Time:	Received By Lab: [signature]	Date: 11.10.94 Time: 1810

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

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: _____

Sequoia Analytical

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RECEIVED
NOV 18 1994

Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Client Proj. ID: Unocal #7176, Dublin
Lab Proj. ID: 9411758

Sampled: 11/11/94
Received: 11/11/94
Analyzed: see below

Attention: CGalantine/DVossler

Reported: 11/15/94

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9411758-01 Sample Desc : **SOLID,US-7A-D (comp 4)**				
Lead	mg/Kg	11/14/94	5.0	N.D.
Lab No: 9411758-02 Sample Desc : **SOLID,US-8A-D (comp 4)**				
Lead	mg/Kg	11/14/94	5.0	N.D.
Lab No: 9411758-03 Sample Desc : **SOLID,US-9A-D (comp 4)**				
Lead	mg/Kg	11/14/94	5.0	N.D.
Lab No: 9411758-04 Sample Desc : **SOLID,US-10A-D (comp 4)**				
Lead	mg/Kg	11/14/94	5.0	N.D.
Lab No: 9411758-05 Sample Desc : **SOLID,US-11A-D (comp 4)**				
Lead	mg/Kg	11/14/94	5.0	N.D.
Lab No: 9411758-06 Sample Desc : **SOLID,US-12A-D (comp 4)**				
Lead	mg/Kg	11/14/94	5.0	N.D.
Lab No: 9411758-07 Sample Desc : **SOLID,US-13A-D (comp 4)**				
Lead	mg/Kg	11/14/94	5.0	N.D.

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: US-7A-D (comp 4)
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9411758-01

Sampled: 11/11/94
Received: 11/11/94
Extracted: 11/14/94
Analyzed: 11/14/94
Reported: 11/15/94

Instrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	35
Chromatogram Pattern:		
Non Diesel Mix		<C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	100

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

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: US-7A-D (comp 4)
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9411758-01

Sampled: 11/11/94
Received: 11/11/94
Extracted: 11/14/94
Analyzed: 11/14/94
Reported: 11/15/94

QC Batch Number: GC111494BTEXEXA
Instrument ID: GCHP-07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**100**	**140**
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	**0.50**	**0.55**
Xylenes (Total)	**0.50**	**8.8**
Chromatogram Pattern:		
Weathered Gas		**C8-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	97

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

SEQUOIA ANALYTICAL - ELAP #1210

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: US-8A-D (comp 4)
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9411758-02

Sampled: 11/11/94
Received: 11/11/94
Extracted: 11/14/94
Analyzed: 11/14/94
Reported: 11/15/94

Instrument ID: GCHP5B

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	20	130
Chromatogram Pattern:		DIESEL

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	0 Q

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

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Todd Olive
Project Manager

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nviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/11/94
19411 Riverside Dr.	Sample Descript: US-8A-D (comp 4)	Received: 11/11/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/14/94
	Analysis Method: 8015Mod/8020	Analyzed: 11/14/94
ttention: CGalantine/DVossler	Lab Number: 9411758-02	Reported: 11/15/94

QC Batch Number: GC111494BTEXEXA
Instrument ID: GCHP-07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**100**	**130**
Benzene	0.50	N.D.
Toluene	**0.50**	**0.57**
Ethyl Benzene	**0.50**	**1.0**
Xylenes (Total)	**0.50**	**9.4**
Chromatogram Pattern:		
Weathered Gas		**C8-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	99

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

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/11/94
19411 Riverside Dr.	Sample Descript: US-9A-D (comp 4)	Received: 11/11/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/14/94
	Analysis Method: EPA 8015 Mod	Analyzed: 11/14/94
Attention: CGalantine/DVossler	Lab Number: 9411758-03	Reported: 11/15/94

nstrument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	10	**160**
Chromatogram Pattern:		
Non Diesel Mix		**<C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	0 Q

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

EQUOIA ANALYTICAL - ELAP #1210

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roject Manager

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nviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/11/94
19411 Riverside Dr.	Sample Descript: US-9A-D (comp 4)	Received: 11/11/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/14/94
	Analysis Method: 8015Mod/8020	Analyzed: 11/14/94
ttention: CGalantine/DVossler	Lab Number: 9411758-03	Reported: 11/15/94

C Batch Number: GC111494BTEXEXA
rument ID: GCHP-07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**100**	**160**
enzene	0.50	N.D.
oluene	**0.50**	**1.7**
Ethyl Benzene	**0.50**	**1.8**
Xylenes (Total)	**0.50**	**15**
hromatogram Pattern:		
eathered Gas		**C8-C12**

Surrogates	Control Limits %		% Recovery
ifluorotoluene	70	130	94

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

QUOIA ANALYTICAL - ELAP #1210

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nviros
19411 Riverside Dr.
Sonoma, CA 95476

ttention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: US-10A-D (comp 4)
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9411758-04

Sampled: 11/11/94
Received: 11/11/94
Extracted: 11/14/94
Analyzed: 11/14/94
Reported: 11/15/94

strument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	11
Chromatogram Pattern:		
Non Diesel Mix		**<C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	97

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

SEQUOIA ANALYTICAL - ELAP #1210

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nviros
19411 Riverside Dr.
Sonoma, CA 95476

ttention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: US-10A-D (comp 4)
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9411758-04

Sampled: 11/11/94
Received: 11/11/94
Extracted: 11/14/94
Analyzed: 11/14/94
Reported: 11/15/94

QC Batch Number: GC111494BTEXEXA
trument ID: GCHP-07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**20**	**66**
enzene	0.10	N.D.
oluene	**0.10**	**0.55**
thyl Benzene	**0.10**	**0.61**
Xylenes (Total)	**0.10**	**5.1**
Chromatogram Pattern:		
eathered Gas		**C8-C12**

urrogates	Control Limits %		% Recovery
rifluorotoluene	70	130	91

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

EQUOIA ANALYTICAL - ELAP #1210

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nviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/11/94
19411 Riverside Dr.	Sample Descript: US-11A-D (comp 4)	Received: 11/11/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/14/94
	Analysis Method: EPA 8015 Mod	Analyzed: 11/14/94
ttention: CGalantine/DVossler	Lab Number: 9411758-05	Reported: 11/15/94

trument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

nalyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	13
hromatogram Pattern:		
on Diesel Mix		**<C24**

urrogates	Control Limits %		% Recovery
-Pentacosane (C25)	50	150	109

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

SEQUOIA ANALYTICAL - ELAP #1210

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: US-11A-D (comp 4)
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9411758-05

Sampled: 11/11/94
Received: 11/11/94
Extracted: 11/14/94
Analyzed: 11/14/94
Reported: 11/15/94

QC Batch Number: GC111494BTEXEXA
Instrument ID: GCHP-01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**50**	**79**
Benzene	0.25	N.D.
Toluene	**0.25**	**0.71**
Ethyl Benzene	**0.25**	**0.85**
Xylenes (Total)	**0.25**	**8.5**
Chromatogram Pattern:		
Weathered Gas		**C8-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	96

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

SEQUOIA ANALYTICAL - ELAP #1210

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nviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/11/94
19411 Riverside Dr.	Sample Descript: US-12A-D (comp 4)	Received: 11/11/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/14/94
	Analysis Method: EPA 8015 Mod	Analyzed: 11/14/94
ttention: CGalantine/DVossler	Lab Number: 9411758-06	Reported: 11/15/94

trument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

nalyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	29
hromatogram Pattern:		
on Diesel Mix		<C24

urrogates	Control Limits %		% Recovery
Pentacosane (C25)	50	150	112

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

QUOIA ANALYTICAL - ELAP #1210

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ject Manager

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/11/94
19411 Riverside Dr.	Sample Descript: US-12A-D (comp 4)	Received: 11/11/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/14/94
	Analysis Method: 8015Mod/8020	Analyzed: 11/14/94
Attention: CGalantine/DVossler	Lab Number: 9411758-06	Reported: 11/15/94

QC Batch Number: GC111494BTEXEXA
Instrument ID: GCHP-18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**50**	**230**
Benzene	0.25	N.D.
Toluene	**0.25**	**0.69**
Ethyl Benzene	**0.25**	**0.78**
Xylenes (Total)	**0.25**	**18**
Chromatogram Pattern:		
Weathered Gas		**C8-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	115

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

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viros
9411 Riverside Dr.
Sonoma, CA 95476

tention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: US-13A-D (comp 4)
Matrix: SOLID
Analysis Method: EPA 8015 Mod
Lab Number: 9411758-07

Sampled: 11/11/94
Received: 11/11/94
Extracted: 11/14/94
Analyzed: 11/14/94
Reported: 11/15/94

rument ID: GCHP5A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	12
hromatogram Pattern:		
on Diesel Mix		**<C24**

Surrogates	Control Limits %		% Recovery
Pentacosane (C25)	50	150	98

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

QUOIA ANALYTICAL - ELAP #1210

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nviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 11/11/94
19411 Riverside Dr.	Sample Descript: US-13A-D (comp 4)	Received: 11/11/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 11/14/94
	Analysis Method: 8015Mod/8020	Analyzed: 11/14/94
ttention: CGalantine/DVossler	Lab Number: 9411758-07	Reported: 11/15/94

C Batch Number: GC111494BTEXEXA
trument ID: GCHP-01

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	25	50
enzene	0.12	N.D.
oluene	0.12	0.15
thyl Benzene	0.12	0.13
Xylenes (Total)	0.12	3.8
hromatogram Pattern:		
eathered Gas		C8-C12

urrogates	Control Limits %		% Recovery
rifluorotoluene	70	130	99

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

EQUOIA ANALYTICAL - ELAP #1210

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oject Manager

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C. Galantine/D. Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411758 01-07

Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME1114946010MDC	ME1114946010MDC	ME1114946010MDC	ME1114946010MDC
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050
Analyst:	S. O'Donnell	S. O'Donnell	S. O'Donnell	S. O'Donnell
MS/MSD #:	941175804	941175804	941175804	941175804
Sample Conc.:	N.D.	0.54	35	44
Prepared Date:	11/14/94	11/14/94	11/14/94	11/14/94
Analyzed Date:	11/14/94	11/14/94	11/14/94	11/14/94
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/kg	100 mg/kg	100 mg/kg	100 mg/kg
Result:	95	92	130	130
MS % Recovery:	95	91	95	86
Dup. Result:	97	94	130	140
MSD % Recov.:	97	93	95	96
RPD:	2.1	2.2	0.0	7.4
RPD Limit:	0-30	0-30	0-30	0-30

LCS #:	BLK111494	BLK111494	BLK111494	BLK111494
Prepared Date:	11/14/94	11/14/94	11/14/94	11/14/94
Analyzed Date:	11/14/94	11/14/94	11/14/94	11/14/94
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/kg	100 mg/kg	100 mg/kg	100 mg/kg
LCS Result:	100	99	100	100
LCS % Recov.:	100	99	100	100

MS/MSD	75-125	75-125	75-125	75-125
LCS	75-125	75-125	75-125	75-125
Control Limits				

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The 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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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100

Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C. Galantine/D. Vossler

Client Project ID: Unocal #7176, Dublin
Matrix: Solid
Work Order #: 9411758 01-07

Reported: Nov 16, 1994

COC #:

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
QC Batch#:	GC111494BTEXEXA	GC111494BTEXEXA	GC111494BTEXEXA	GC111494BTEXEXA	GC1111940HBPEXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015 mod.
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	
Analyst:	R. Geckler	R. Geckler	R. Geckler	R. Geckler	N.Herrera
MS/MSD #:	9411136502	9411136502	9411136502	9411136502	
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	
Prepared Date:	11/14/94	11/14/94	11/14/94	11/14/94	
Analyzed Date:	11/14/94	11/14/94	11/14/94	11/14/94	
Instrument I.D.#:	GCHP6	GCHP6	GCHP6	GCHP6	
Conc. Spiked:	0.20 mg/kg	0.20 mg/kg	0.20 mg/kg	0.60 mg/kg	
Result:	0.16	0.18	0.20	0.58	
MS % Recovery:	80	90	100	97	
Dup. Result:	0.16	0.19	0.20	0.59	
MSD % Recov.:	80	95	100	98	
RPD:	0.0	5.4	0.0	1.7	
RPD Limit:	0-50	0-50	0-50	0-50	

LCS #:	BLK111194BS
Prepared Date:	11/11/94
Analyzed Date:	11/11/94
Instrument I.D.#:	GCHP5B
Conc. Spiked:	15 mg/kg
LCS Result:	12.7 mg/kg
LCS % Recov.:	85

MS/MSD LCS Control Limits	55-145	47-149	47-155	56-140	28-122

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The 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

UNOCAL 76

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☐ East 11115 Montgomery, Suite B • Spokane, WA 99206 • (509) 924-9200
☐ 15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-9800

Company Name: Enviros 94132.01	Project Name: Unocal #7176
Address: P.O. Box 259	UNOCAL Project Manager: Ed Ralston
City: Sonoma State: CA Zip Code: 95476	Release #:
Telephone: 707-935-4850 FAX #: 707-935-4855	Site #: 7850 Amador Valley Rd, Dublin
Report To: CGalantine/D Vossler Sampler: Clyde Galantine	QC Data: ☐ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

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

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 #	TPH-G; BTEX	TPH-Diesel	TLC Pb							Comments
1. US-7A-D	11/11/94 11:20	Soil	4→1	tube		X	X	X							9411758-01
2. US-8A-D	11:35					X	X	X							-02
3. US-9A-D	11:45					X	X	X							-03
4. US-10A-D	12:00					X	X	X							-04
5. US-11A-D	12:30					X	X	X							-05
6. US-12A-D	12:45					X	X	X							-06
7. US-13A-D	12:55					X	X	X							-07
8.															
9.															
10.															

Relinquished By: Clyde Galantine	Date: 11/11/94	Time: 16:30	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab:	Date: 11-11-94	Time: 1630

Were Samples Received in Good Condition? ☐ Yes ☐ No Samples on Ice? ☐ Yes ☐ No Method of Shipment_____ Page __ of __

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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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin

Lab Proj. ID: 9412291

Sampled: 12/06/94
Received: 12/06/94
Analyzed: see below

Reported: 12/08/94

LABORATORY ANALYSIS

Analyte	Units	Date Analyzed	Detection Limit	Sample Results
Lab No: 9412291-01 Sample Desc : **SOLID, US-14A-D (comp 4)**				
Lead	mg/Kg	12/07/94	5.0	N.D.
Lab No: 9412291-02 Sample Desc : **SOLID, US-15A-D (comp 4)**				
Lead	mg/Kg	12/07/94	5.0	N.D.
Lab No: 9412291-03 Sample Desc : **SOLID, US-16A-D (comp 4)**				
Lead	mg/Kg	12/07/94	5.0	N.D.

Project No. 94132
RPT ____ PF X BF ____
1 ___ 2 ___ 3 ___ 4 ___ 5 ___ X

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 12/06/94
19411 Riverside Dr.	Sample Descript: US-14A-D (comp 4)	Received: 12/06/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 12/06/94
	Analysis Method: EPA 8015 Mod	Analyzed: 12/07/94
Attention: CGalantine/DVossler	Lab Number: 9412291-01	Reported: 12/08/94

Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	24
Chromatogram Pattern:		Diesel
Discrete Peak		Yes

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	93

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

SEQUOIA ANALYTICAL - ELAP #1210

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 12/06/94
19411 Riverside Dr.	Sample Descript: US-14A-D (comp 4)	Received: 12/06/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 12/06/94
	Analysis Method: 8015Mod/8020	Analyzed: 12/06/94
Attention: CGalantine/DVossler	Lab Number: 9412291-01	Reported: 12/08/94

QC Batch Number: GC120694BTEXEXB
Instrument ID: GCHP-18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**100**	**390**
Benzene	0.50	N.D.
Toluene	**0.50**	**5.9**
Ethyl Benzene	**0.50**	**3.8**
Xylenes (Total)	**0.50**	**43**
Chromatogram Pattern:		
Weathered Gas		**C6-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	99

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 12/06/94
19411 Riverside Dr.	Sample Descript: US-15A-D (comp 4)	Received: 12/06/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 12/06/94
	Analysis Method: EPA 8015 Mod	Analyzed: 12/07/94
Attention: CGalantine/DVossler	Lab Number: 9412291-02	Reported: 12/08/94

Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	21
Chromatogram Pattern: **Non Diesel Mix**		**C9-C24**

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	108

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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Enviros
19411 Riverside Dr.
Sonoma, CA 95476

Attention: CGalantine/DVossler

Client Proj. ID: Unocal #7176, Dublin
Sample Descript: US-15A-D (comp 4)
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9412291-02

Sampled: 12/06/94
Received: 12/06/94
Extracted: 12/06/94
Analyzed: 12/06/94
Reported: 12/08/94

QC Batch Number: GC120694BTEXEXB
Instrument ID: GCHP-18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	**500**	**1600**
Benzene	2.5	N.D.
Toluene	**2.5**	**47**
Ethyl Benzene	**2.5**	**25**
Xylenes (Total)	**2.5**	**170**
Chromatogram Pattern:		
Weathered Gas		**C6-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	93

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 12/06/94
19411 Riverside Dr.	Sample Descript: US-16A-D (comp 4)	Received: 12/06/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 12/06/94
	Analysis Method: EPA 8015 Mod	Analyzed: 12/07/94
Attention: CGalantine/DVossler	Lab Number: 9412291-03	Reported: 12/08/94

Instrument ID: GCHP4A

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TEPH as Diesel	1.0	3.6
Chromatogram Pattern:		
Non Diesel Mix		C9-C24

Surrogates	Control Limits %		% Recovery
n-Pentacosane (C25)	50	150	100

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
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Enviros	Client Proj. ID: Unocal #7176, Dublin	Sampled: 12/06/94
19411 Riverside Dr.	Sample Descript: US-16A-D (comp 4)	Received: 12/06/94
Sonoma, CA 95476	Matrix: SOLID	Extracted: 12/06/94
	Analysis Method: 8015Mod/8020	Analyzed: 12/06/94
Attention: CGalantine/DVossler	Lab Number: 9412291-03	Reported: 12/08/94

QC Batch Number: GC120694BTEXEXB
Instrument ID: GCHP-18

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	**0.0050**	**0.0053**
Chromatogram Pattern:		
Weathered Gas		**C7-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	90

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

SEQUOIA ANALYTICAL - ELAP #1210

Todd Olive
Project Manager

Sequoia Analytical

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Enviros	Client Project ID:	Unocal, #7176, Dublin			
19411 Riverside Dr.	Matrix:	Solid			
Sonoma, CA 95476					
Attention: C. Galantine/D. Vossler	Work Order #:	9412291	-01- 03	Reported:	Dec 8, 1994

QUALITY CONTROL DATA REPORT

Analyte:	Beryllium	Cadmium	Chromium	Nickel
QC Batch#:	ME1206946010MDC	ME1206946010MDC	ME1206946010MDC	ME1206946010MDC
Analy. Method:	EPA 6010	EPA 6010	EPA 6010	EPA 6010
Prep. Method:	EPA 3050	EPA 3050	EPA 3050	EPA 3050
Analyst:	S.O'Donnell	S.O'Donnell	S.O'Donnell	S.O'Donnell
MS/MSD #:	9412178-1	9412178-1	9412178-1	9412178-1
Sample Conc.:	N.D.	N.D.	27	16
Prepared Date:	12/6/94	12/6/94	12/6/94	12/6/94
Analyzed Date:	12/7/94	12/7/94	12/7/94	12/7/94
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/kg	100 mg/kg	100 mg/kg	100 mg/kg
Result:	100	96	120	110
MS % Recovery:	100	96	93	94
Dup. Result:	100	95	120	110
MSD % Recov.:	100	95	93	94
RPD:	0.0	1.0	0.0	0.0
RPD Limit:	0-30	0-30	0-30	0-30
LCS #:	BLK120694	BLK120694	BLK120694	BLK120694
Prepared Date:	12/6/94	12/6/94	12/6/94	12/6/94
Analyzed Date:	12/7/94	12/7/94	12/7/94	12/7/94
Instrument I.D.#:	MTJA2	MTJA2	MTJA2	MTJA2
Conc. Spiked:	100 mg/kg	100 mg/kg	100 mg/kg	100 mg/kg
LCS Result:	110	100	100	100
LCS % Recov.:	110	100	100	100
MS/MSD Control Limits	75-125	75-125	75-125	75-125
LCS Control Limits	75-125	75-125	75-125	75-125

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

Please Note:
The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The 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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Enviros
19411 Riverside Dr.
Sonoma, CA 95476
Attention: C. Galantine/D. Vossler

Client Project ID: Unocal, #7176, Dublin
Matrix: Solid
Work Order #: 9412291 -01- 03
Reported: Dec 8, 1994

QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
QC Batch#:	GC120694BTEXEXB	GC120694BTEXEXB	GC120694BTEXEXB	GC120694BTEXEXB	GC1206940HBPEXA
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8015 M
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030	EPA 3550
Analyst:	E.Cunanan	E.Cunanan	E.Cunanan	E.Cunanan	M.Balatti
MS/MSD #:	9412109-03	9412109-03	9412109-03	9412109-03	9412291-01
Sample Conc.:	N.D.	N.D.	N.D.	N.D.	24
Prepared Date:	12/6/94	12/6/94	12/6/94	12/6/94	12/6/94
Analyzed Date:	12/6/94	12/6/94	12/6/94	12/6/94	12/7/94
Instrument I.D.#:	GCHP1	GCHP1	GCHP1	GCHP1	GCHP4A
Conc. Spiked:	0.20 mg/kg	0.20 mg/kg	0.20 mg/kg	0.60 mg/kg	15 ug/kg
Result:	0.18	0.19	0.19	0.57	39
MS % Recovery:	90	95	95	95	100
Dup. Result:	0.19	0.19	0.20	0.58	45
MSD % Recov.:	95	95	100	97	140
RPD:	5.4	0.0	5.1	1.7	33
RPD Limit:	0-50	0-50	0-50	0-50	0-50

LCS #:	BLK120694
Prepared Date:	12/6/94
Analyzed Date:	12/7/94
Instrument I.D.#:	GCHP4A
Conc. Spiked:	15 ug/kg
LCS Result:	10
LCS % Recov.:	67

MS/MSD LCS Control Limits	Benzene	Toluene	Ethyl Benzene	Xylenes	Diesel
	55-145	47-149	47-155	56-140	38-122

SEQUOIA ANALYTICAL

Todd Olive
Project Manager

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

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☐ 15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-9800

Company Name: Enviros	Project Name: Unocal #7176
Address: P.O. Box 259	UNOCAL Project Manager: Ed Ralston
City: Sonoma State: CA Zip Code: 95476	Release #:
Telephone: 707-935-4850 FAX #: 707-935-4855	Site #: 7176 7850 Amador Valley Blvd, Dublin
Report To: CGalantine/DVossler Sampler: Clyde Galantine	QC Data: ☐ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

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

☐ Drinking Water ☐ Waste Water ☐ Other

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

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	TPH-G, BTEX	TPH-Diesel	TTLC Pb	Comments
1. US-14A-D	12/6/94	Soil	4÷1	Tube	01 A D	X	X	X	9412291
2. US-15A-D	↓	↓	↓	↓	02	X	X	X	
3. US-16A-D	↓	↓	↓	↓	03	X	X	X	
4.									
5.									
6.									
7.									
8.									
9.									
10.									ilc

Relinquished By: Clyde Galantine	Date: 12/6/94	Time: 13:45	Received By:	Date: Time:
Relinquished By:	Date:	Time:	Received By:	Date: Time:
Relinquished By:	Date:	Time:	Received By Lab:	Date: 12-6-94 Time: 1345

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

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: [redacted] Signature: [redacted] Company: [redacted] Date: [redacted]

Pink - Client
Yellow - Laboratory
White - Laboratory