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Refining & Supply Company

Gene N. Ortega
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ExxonMobil
Refining & Supply

July 11, 2001

Mr. Scott Seery
Alameda County Health Care Services Agency
Environmental Health Services Division
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

JUL 16 2001

RE: Former Exxon RAS #7-3567/3192 Santa Rita Road, Pleasanton, California.

Dear Mr. Seery:

Attached for your review and comment is a letter report entitled ***Soil and Groundwater Investigation and Quarterly Monitoring Report,*** dated July 11, 2001, for the above referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Novato, California, and documents the installation of one groundwater monitoring well (MW8) and the laboratory analytical results of concurrent soil sampling. The report also presents the results of quarterly groundwater monitoring and sampling activities at the subject site.

If you have any questions or comments, please contact me at (925) 246-8747.

Sincerely,

Gene N. Ortega
Territory Manager

Attachment: ERI's Soil and Groundwater Investigation and Quarterly Monitoring Report, dated July 11, 2001.

cc: w/ attachment
Mr. Stephen Hill, California Regional Water Quality Control Board, San Francisco Bay Region
Mr. Winson B. Low, Environmental and Safety Affairs Department

w/o attachment
Mr. James F. Chappell, Environmental Resolutions, Inc.

ENVIRONMENTAL RESOLUTIONS, INC.

July 11, 2001
ERI 243103.R03

JUL 16 2001

Mr. Gene N. Ortega
ExxonMobil Refining and Supply
P.O. Box 4032
Concord, California 94524-4032

Subject: Soil and Groundwater Investigation and Quarterly Groundwater Monitoring Report, Second Quarter 2001, Former Exxon Service Station 7-3567, 3192 Santa Rita Road, Pleasanton, California.

Mr. Ortega:

At the request of ExxonMobil Refining and Supply (formerly Exxon Company, U.S.A.) (ExxonMobil), Environmental Resolutions, Inc. (ERI) performed a soil and groundwater investigation at the subject site. The soil and groundwater investigation was requested in a letter from the Alameda County Health Care Services Agency (the County) dated December 7, 2000 (Attachment A). The purpose of this investigation was to further evaluate the stratigraphy and extent of petroleum hydrocarbons in soil and groundwater underlying the southern end of the subject site. This document also includes the results of quarterly groundwater monitoring for the second quarter 2001.

BACKGROUND

The site is located on the southeastern corner of Santa Rita Road and Los Positas Boulevard as shown on the Site Vicinity Map (Plate 1). The locations of underground storage tanks (USTs), dispenser islands, and other selected site features are shown on the Generalized Site Plan (Plate 2).

Prior to this investigation, seven on-site groundwater monitoring wells (MW1 through MW7) existed at the site. Based on quarterly groundwater monitoring data, historical depth to water (DTW) measurements have ranged from approximately 14 to 51 feet below ground surface (bgs). Historical and recent monitoring data are summarized in Table 1. The range of DTW values and sediment composition suggests that the monitoring wells are screened in different water-bearing zones. MW1, MW2, and MW5 are screened exclusively in a shallow clay zone, which has a historical DTW range of approximately 14 to 29 feet bgs and a corresponding groundwater elevation range from approximately 312 to 327 feet above mean sea level (msl). MW7 is screened in a clayey sand zone, which has a historical DTW range of approximately 24 to 26 feet bgs and a corresponding groundwater elevation range of 315 to 318 feet above msl. MW3, MW4, MW6 are screened across a deeper, gravelly sediment, which has a historical DTW range from approximately 32 to 50 feet bgs and a corresponding groundwater elevation range of approximately 292 to 310 feet above msl. Based on the difference in sediment composition and groundwater elevations, ERI concludes that the two water-bearing zones (the shallow clay and deeper gravelly sediments) have limited hydraulic connection. Well construction logs for the groundwater monitoring wells are included in Attachment B. A summary of well information is presented in Table 2.

FIELD INVESTIGATIONS

Scope of Work

The work was performed in accordance with ERI's *Work Plan for Soil and Groundwater Investigation* (Work Plan) and the *Addendum to Work Plan,* dated June 16, 2000, approved by the County in a letter dated January 25, 2001 (Attachment A), and ERI's standard protocol (Attachment C), and a site-specific Health and Safety Plan. Prior to beginning field activities, ERI obtained well installation permits from the Alameda County Zone 7 Water Agency (Attachment D).

Field Investigations

On March 16, 2001, ERI observed Gregg Drilling and Testing Inc. (Gregg) of Martinez, California, drill one soil boring and install one groundwater monitoring well (MW8) using a hollow-stem auger drill rig. Monitoring well MW8 was set to 70 feet bgs with a screen interval from 55 to 70 feet bgs in a sandy gravel layer. Locations of existing groundwater monitoring wells and the newly installed groundwater monitoring well are shown on Plate 2. ERI staff identified the sediment samples collected during drilling using visual and manual methods, and classified the samples according to the Unified Soil Classification System (USCS) boring log, which illustrates well construction details and descriptions of soil encountered, is included as Attachment E. Cross sections are included as Plates 3 and 4.

Soil samples were continuously collected and used to evaluate lithologic characteristics at the site. Select soil samples collected from the borings were submitted under Chain-of-Custody protocol to Southern Petroleum Laboratories, Inc. (SPL), a state-certified laboratory. Analytical laboratory reports and Chain-of-Custody records are included in Attachment F. Soil samples were analyzed for total hydrocarbons as diesel (TPHd); total petroleum hydrocarbons as gasoline (TPHg); and benzene, toluene, ethylbenzene, and total xylenes (BTEX); and methyl tertiary butyl ether (MTBE) using the laboratory methods listed in Table 3. Results of laboratory analysis of soil samples are presented in Table 3.

Soil generated during drilling was collected, contained in drums, and stored on site. ERI collected a composite sample from the stockpiled soil and submitted the sample to SPL for analysis of TPHg, TPHd, BTEX, total lead using EPA Method 6010, and halogenated volatile organic compounds (HVOCs) using EPA Method 8010. The soil will be transported to BFI Landfill in Livermore, California, by Dillard Trucking Company (Dillard) of Byron, California, under direct contact to ExxonMobil.

Monitoring Well Development and Sampling

ERI personnel attempted to develop groundwater monitoring well MW8 on April 9, 2001, using a surge-and-pump technique, as outlined in ERI's field protocol (Attachment C). The well was not developed because it did not contain water.

On April 11, 2001, ERI measured depth to water (DTW) and collected groundwater samples from selected monitoring wells for laboratory analysis for the second quarter 2001 event. Groundwater

monitoring and sampling were performed in accordance with ERI's groundwater sampling protocol (Attachment C). Rinsate and purge water generated during well development and sampling were collected and stored on site in two 55-gallon drums, pending characterization and disposal.

Laboratory Analyses And Results

ERI submitted the groundwater samples to SPL, under Chain-of-Custody protocol. The samples were analyzed for TPHd, TPHg, BTEX, MTBE, and the fuel oxygenates: tertiary amyl methyl ether (TAME), tertiary butyl alcohol (TBA), and ethyl tertiary butyl ether (ETBE) using the methods listed in the notes in Table 1. The laboratory analysis report and Chain-of-Custody record are attached (Attachment F). Cumulative results of laboratory analyses of groundwater samples are summarized in Table 1. Analytical results of recent groundwater samples are presented on Plate 5.

During this quarterly monitoring event, diesel-range hydrocarbons were reportedly detected in the groundwater samples. Diesel-range hydrocarbons were also reportedly detected in the bailer blank samples at similar concentrations. ERI considers the analytical results for the diesel-range hydrocarbons for this sampling event suspect, and is currently evaluating the validity of the reported detections.

Calculated hydraulic gradient and groundwater flow direction for the deeper gravel water-bearing zone and upper clay water bearing zone are presented on Plates 6 and 7, respectively.

CONCLUSIONS

Prior to the recent soil and groundwater investigation, ERI identified two water-bearing zones. To further evaluate site stratigraphy at the southern end of the site and to delineate the vertical and horizontal extent of the MTBE plume in this direction, ERI installed one groundwater monitoring well. ERI installed the groundwater monitoring well screened across the sandy gravel layer located at approximately 56 feet bgs. This layer contained water at the time of the well installation on March 16, 2001, but was dry at the time of sampling on April 11, 2001.

Site Stratigraphy

There is an upper clayey unit that extends from the ground surface to approximately 40 feet bgs. This clay layer contains lenses of silt and sand. The clayey layer yields water to groundwater monitoring wells MW1, MW2, MW5, and MW7.

Sediment from approximately 40 feet to approximately 50 feet bgs consists of silt and sand. Sediment from 50 feet to approximately 70 feet (the total depth of the investigation) consists of sandy gravel. Wells MW3, MW4, MW6, and MW8 are screened in this layer.

Based on the results of this investigation the upper clay and the deeper gravel appear to be separate lithologic units with limited hydraulic connectivity.

Constituent Distribution

Gasoline-range hydrocarbons (TPHd, MTBE, and BTEX) were not present in detectable concentrations in soil samples collected during this investigation.

MTBE has been detected in water samples collected from the upper clay unit at up to 220 micrograms per liter (ug/L). MTBE has been detected in water samples collected in the deeper gravel zone at up to 710 ug/L.

TPHg, BTEX, and MTBE were not detected in soil samples collected during a baseline environmental investigation on December 11 and 12, 1998 (ERI, 1998). TPHd was detected in three samples at a maximum concentration of 19 mg/Kg at 25 feet bgs.

TPHg, BTEX, and MTBE were not detected in soil samples collected during a Soil and Groundwater Investigation on July 18 and 19, 2000 (ERI, 2000). TPHd was detected in one sample at a maximum concentration of 3.8 mg/Kg at 30 feet bgs.

Based on the results of this investigation and previous investigations, the soil at this site does not appear to be impacted by TPHg, BTEX, and MTBE. In ERI's opinion, these constituents do not warrant additional assessment.

RECOMMENDATIONS

ERI recommends the re-development and sampling of groundwater monitoring well MW8 when water is again present, and the continued groundwater monitoring and sampling of all wells to evaluate groundwater flow direction, hydraulic gradient and hydrocarbon concentrations at the site. ERI recommends discontinuation of analyses for the oxygenates, except MTBE.

LIMITATIONS

This report was prepared in accordance with generally accepted standards of environmental practice in California at the time this investigation was performed. This report has been prepared for ExxonMobil, and any reliance on this report by third parties shall be at such party's sole risk.

DOCUMENT DISTRIBUTION

ERI recommends forwarding copies of this report to:

Mr. Scott Seery
Alameda County Health Care Services Agency
Environmental Health Services Division
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Mr. Stephen Hill
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Mr. Winson B. Low
Environmental Health and Safety Affairs Department
One Valero Place, MS-06E
San Antonio, Texas 78212

Please call Mr. Scott R. Graham, ERI's project manager for this site, at (415) 382-5989 if you have any questions regarding this report.

Sincerely,
Environmental Resolutions, Inc.

Thomas D. Culig
Staff Geologist

John B. Bobbitt
R.G. 4313

Attachments:

	Table 1:	Cumulative Groundwater Monitoring and Sampling Data
	Table 2:	Well Information Data
	Table 3:	Analytical Laboratory Results of Soil Samples
	Plate 1:	Site Vicinity Map
	Plate 2:	Generalized Site Plan
	Plate 3	Cross Section A-A'
	Plate 4:	Cross Section B-B'
	Plate 5:	Hydrocarbon Concentration Map
	Plate 6:	Groundwater Elevation Map Lower-Water Bearing Zone
	Plate 7:	Groundwater Elevation Map Upper-Water Bearing Zone

Attachment A: Alameda County Health Care Services Letters Dated December 7, 2000 and January 25, 2001
Attachment B: Well Construction Logs
Attachment C: Field Protocol
Attachment D: Well Drilling Permit
Attachment E: Unified Soil Classification System Symbol Key and Boring Log
Attachment F: Laboratory Analysis Reports and Chain-of-Custody Records

REFERENCES

Environmental Resolutions, Inc. December 26, 1998. Report for a Baseline Environmental Investigation at Exxon Station 7-3567, 3192 Santa Rita Road, Pleasanton, California. Job No. 243103SS.L02

Environmental Resolutions, Inc. October 19, 2000. Soil and Groundwater Investigation and Quarterly Groundwater Monitoring for Third Quarter 2000 at Former Exxon Service Station 7-3567, 3192 Santa Rita Road, Pleasanton, California. Job No. 243103.R02

Environmental Resolutions, Inc. January 16, 2001. Workplan for Soil and Groundwater Investigation at Former Exxon Service Station 7-3567, 3192 Santa Rita Road, Pleasanton, California. Job No. 243103.W02

Environmental Resolutions, Inc. June 15, 2001. Addendum to Work Plan for Exxon Service Station 7-3567, 3192 Santa Rita Road, Pleasanton, California. Job No. 243103SS.L02

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Well ID# (TOC)	Sampling Date	SUBJ	DTW	Elev.	TPHd	TPHg	MTBE	B	T	E	X	VOCs
		<	feet	>	<		ug/L					>
MW1	11/17/98	NLPH	21.90	318.96	<50	<50	<2.5	<0.5	<0.5	<0.5	<0.5	---
(340.86)	03/15/99	NLPH	21.15	319.71	<50	<50	<2.5	<0.5	<0.5	<0.5	<0.5	---
	06/25/99	NLPH	20.34	320.52	a	<50	<2.0	<0.5	<0.5	<0.5	<0.5	---
	09/24/99	NLPH	20.42	320.44	<50	<50	24.6	<0.5	<0.5	<0.5	<0.5	---
	12/22/99	NLPH	21.11	319.75	<61	<50	<2	<0.5	<0.5	<0.5	<0.5	---
	03/07/00	NLPH	14.12	326.74	57	<50	220	<0.5	<0.5	<0.5	<0.5	---
	06/06/00	NLPH	17.79	323.07	<50	<50	5.4	<0.5	<0.5	<0.5	<0.5	---
	07/31/00	NLPH	19.02	321.84	<50	<50	51/38d	<0.5	<0.5	<0.5	<0.5	ND**
	10/10/00	NLPH	18.56	322.30	<50	<50	63	<0.5	<0.5	<0.5	<0.5	---
	01/11/01	NLPH	21.43	319.43	<50	<50	110/98d	<0.5	<0.5	<0.5	<0.5	---
	04/11/01	**NLPH**	**19.83**	**321.03**	**960e**	**<50**	**29/33d**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**
MW2	11/17/98	NLPH	20.42	320.19	91	<50	17/23d	1.5	<0.5	0.98	2.6	---
(340.61)	03/15/99	NLPH	28.35	312.26	90	<50	12/12.5d	0.73	1.1	2.4	2.2	---
	06/25/99	NLPH	25.20	315.41	a	<50	<2.0	<0.5	<0.5	<0.5	<0.5	---
	09/24/99	NLPH	23.93	316.68	<50	<50	3.06	<0.5	<0.5	<0.5	<0.5	---
	12/22/99	NLPH	23.39	317.22	<56	<50	<2	<0.5	<0.5	<0.5	<0.5	---
	03/07/00	NLPH	17.08	323.53	52	<50	<2	<0.5	0.80	<0.5	<0.5	---
	06/06/00	NLPH	21.01	319.60	<50	<50	<2	<0.5	<0.5	<0.5	<0.5	---
	07/31/00	NLPH	22.08	318.53	<50	<50	6.8/<5d	<0.5	<0.5	<0.5	<0.5	ND**
	10/10/00	NLPH	22.35	318.26	<50	<50	<2	<0.5	<0.5	<0.5	<0.5	---
	01/11/01	NLPH	23.74	316.87	<50	<50	<2	0.54	<0.5	<0.5	<0.5	---
	04/11/01	**NLPH**	**22.34**	**318.27**	**760e**	**<50**	**<2**	**<0.5**	**1.4**	**<0.5**	**<0.5**	**---**
MW3	11/17/98	NLPH	36.58	306.37	120	<50	180/220d	<0.5	<0.5	<0.5	<0.5	---
(342.95)	03/15/99	NLPH	40.01	302.94	180	<50	290/314d	<0.5	<0.5	<0.5	<0.5	---
	06/25/99	NLPH	46.83	296.12	a	<50	107/113d	<0.5	<0.5	<0.5	<0.5	---
	9/24/99[b]	NLPH	47.71	295.24	---	---	---	---	---	---	---	---
	12/22/99	NLPH	43.82	299.13	140	<50	65	<0.5	<0.5	<0.5	<0.5	---
	03/07/00	NLPH	32.75	310.20	<50	<50	82	<0.5	0.88	<0.5	<0.5	---
	06/06/00	NLPH	36.05	306.90	<50	<50	140	<0.5	<0.5	0.82	<0.5	---
	07/31/00	NLPH	36.77	306.18	<50	<50	230/160d	<0.5	<0.5	<0.5	<0.5	ND**
	10/10/00	NLPH	35.82	307.13	<50	<50	200	<0.5	<0.5	<0.5	<0.5	---
	01/11/01	NLPH	38.08	304.87	<50	<50	280/230d	<0.5	<0.5	<0.5	<0.5	---
	04/11/01	**NLPH**	**36.03**	**306.92**	**1,000e**	**<50**	**240/280d**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**---**

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Well ID# (TOC)	Sampling Date	SUBJ	DTW	Elev	TPHd	TPHg	MTBE	B	T	E	X	VOCs
		<	feet	>	<			ug/L				>
MW4	11/17/98	NLPH	50.20	292.76	72	<50	4.1/3.5d	<0.5	<0.5	<0.5	<0.5	---
(342.96)	03/15/99	NLPH	47.93	295.03	91	<50	280/260d	<0.5	<0.5	<0.5	<0.5	---
	6/25/99[b]	NLPH	48.15	294.81	---	---	---	---	---	---	---	---
	9/24/99[b]	NLPH	49.29	293.67	---	---	---	---	---	---	---	---
	12/22/99	NLPH	49.33	293.63	b	---	---	---	---	---	---	---
	03/07/00	NLPH	49.05	293.91	190	<50	710	<0.5	0.84	<0.5	<0.5	---
	06/06/00	NLPH	49.02	293.94	110	<50	460	<0.5	<0.5	<0.5	<0.5	---
	07/31/00	NLPH	49.13	293.83	<50	<50	480/490d	<0.5	<0.5	<0.5	<0.5	ND**
	10/10/00	NLPH	40.08	302.88	c	c	c	c	c	c	c	c
	01/11/01	NLPH	36.41	306.55	110	<50	27/21d	<0.5	<0.5	<0.5	<0.5	---
	04/11/01	**NLPH**	**36.43**	**306.53**	**870e**	**<50**	**3.6/14d**	**<0.5**	**0.56**	**<0.5**	**<0.5**	**---**
MW5	07/31/00	---	dry	dry	b	b	b	b	b	b	b	---
(342.87)	10/10/00	NLPH	29.12	313.75	150	<50	4.2	<0.5	<0.5	<0.5	<0.5	---
	01/11/01	NLPH	28.89	313.98	b	b	b	b	b	b	b	---
	04/11/01	**NLPH**	**28.23**	**314.64**	**b**	**b**	**b**	**b**	**b**	**b**	**b**	**---**
MW6	07/31/00	NLPH	39.72	301.33	<50	<50	<2/<5	<0.5	<0.5	<0.5	<0.5	ND**
(341.05)	10/10/00	NLPH	40.12	300.93	<50	c	c	c	c	c	c	c
	01/11/01	NLPH	46.13	294.92	<50	<50	<2	<0.5	<0.5	<0.5	<0.5	---
	04/11/01	**NLPH**	**45.40**	**295.65**	**b**	**b**	**b**	**b**	**b**	**b**	**b**	**---**
MW7	07/31/00	NLPH	24.22	317.51	150	<50	13/8d	<0.5	<0.5	<0.5	<0.5	ND**
(341.73)	10/10/00	NLPH	24.09	317.64	1,500	c	c	c	c	c	c	c
	01/11/01	NLPH	25.86	315.87	330	<50	6.9/7d	0.55	<0.5	<0.5	<0.5	---
	04/11/01	**NLPH**	**24.28**	**317.45**	**980e**	**<250**	**<10**	**<2.5**	**<2.5**	**<2.5**	**<2.5**	**---**
MW8	**04/11/01**	**---**	**dry**	**dry**	**b**	**b**	**b**	**b**	**b**	**b**	**b**	**---**
(341.44)												

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Notes:

TOC	=	Elevation of top of well casing; in feet above mean sea level.
SUBJ	=	Results of subjective evaluation, liquid-phase hydrocarbon thickness (HT) in feet.
DTW	=	Depth to water.
Elev.	=	Elevation of groundwater in feet above mean sea level.
NLPH	=	No liquid-phase hydrocarbons present in well.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using modified EPA Method 8015.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using modified EPA Method 5030/8015 (modified).
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B.
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8021B.
VOC's	=	Volatile organic compounds analyzed using EPA Method 8260B.
ug/L	=	Micrograms per liter.
a	=	No result because of sample loss during laboratory fire.
b	=	Well contained an insufficient amount of water to collect a sample.
c	=	Samples were damaged during transportation to laboratory.
d	=	MTBE confirmed using EPA Method 8260.
e	=	Diesel-range hydrocarbons detected in bailer blank; result is suspect.
<	=	Not detected at or above the stated laboratory method detection limit.
ND	=	Not detected at or above the stated laboratory method detection limit for the following constituents: 1,2-Dibromoethane, 1,2-Dichloroethane, 2-Nitropropane, Di-isopropyl ether, tertiary butyl alcohol, tertiary amyl methyl ether, tertiary butyl ethyl ether.
---	=	Not Analyzed/Not Applicable.

TABLE 2
WELL INFORMATION DATA
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Well	Installation Date	Top of Casing Elevation	Screened Interval	First-Encountered Groundwater	DTW Range	Average DTW	Elevation Range	Average Elevation
		<		Feet				>
MW1	11/12/98	340.86	20-35	25.0	14-22	19.38	318-326	321.48
MW2	11/12/98	340.61	20-35	26.5	17-28	22.65	312-323	317.96
MW3	11/11/98	342.95	35-50	41.5	32-48	39.60	295-310	303.35
MW4	11/11/98	342.96	35-50	50.0	40-50	48.02	292-302	294.94
MW5	07/18/00	342.87	20-30	---	29-30	29.12	313-314	313.75
MW6	07/19/00	341.05	43-53	32.0	39-40	39.92	301.13	301.13
MW7	07/18/00	341.73	39-49	38.0	24-25	24.15	317-318	317.57
MW8	03/16/01	341.44	55-70	39.5	---	---	---	---

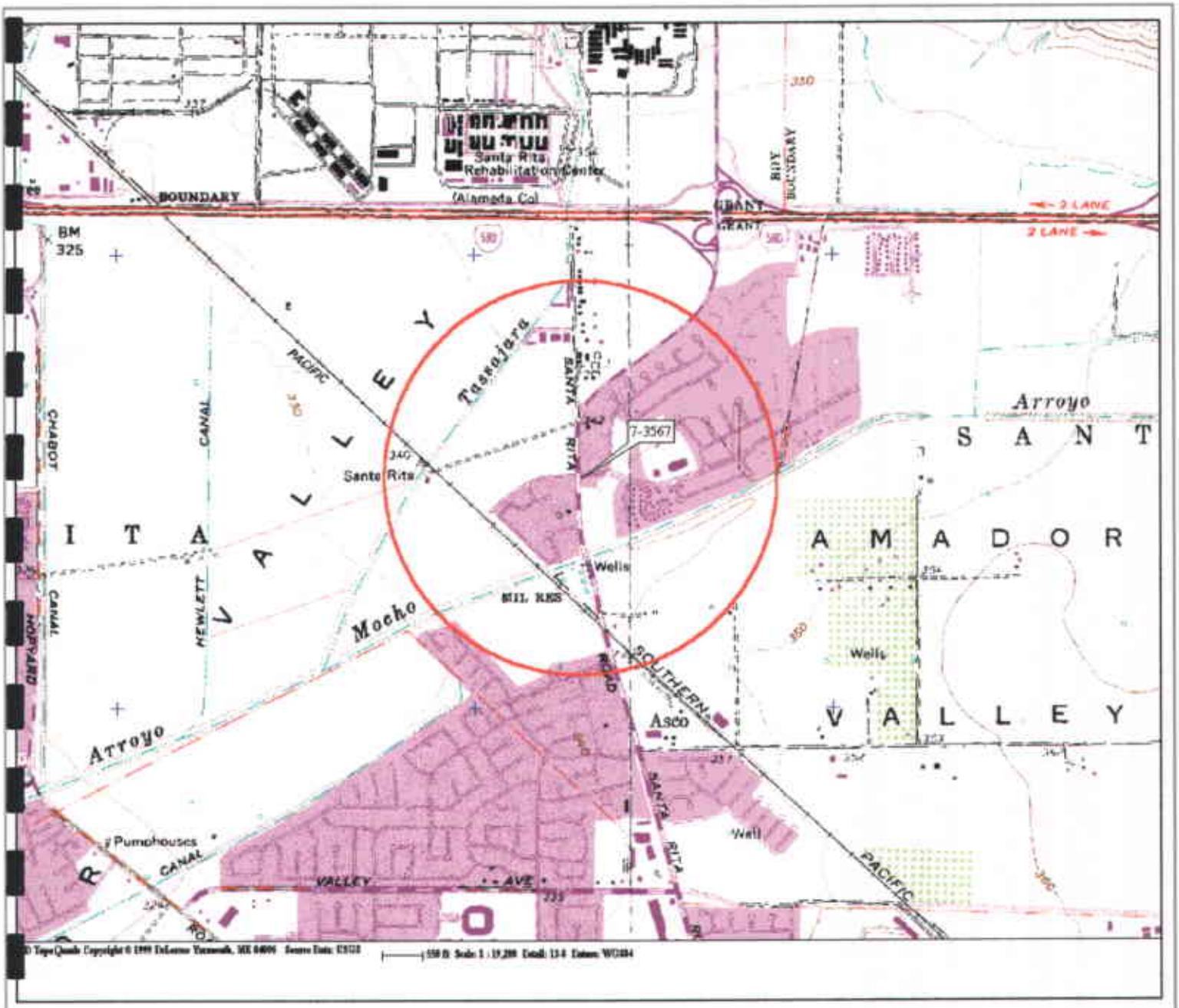
Notes:
--- = Not Applicable
Values are based on data recorded from November 17, 1998 through March 16, 2001.

TABLE 3
ANALYTICAL LABORATORY RESULTS OF SOIL SAMPLES
Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California

Sample ID	Date Sampled	Sample Depth (Feet)	TPHd	TPHg	MTBE	B	T	E	X	Total Lead	HVOCs
			<				mg/kg				>
S-15-MW8	3/16/01	15	<2	<1	<0.001	<0.001	<0.001	<0.001	<0.001	---	---
S-30-MW8	3/16/01	30	<2	<1	<0.0017	<0.001	<0.001	<0.001	<0.001	---	---
SP-1-(1-4)	3/16/01	---	<2	<1	<0.0022	<0.001	<0.001	<0.001	0.001	8.11	ND

Notes:

S-15-MW8	=	Soil sample-depth in feet below ground surface-boring number.
SP-1-(1-4)	=	Stockpile soil sample-depth in feet below ground surface.
TPHd	=	Total petroleum hydrocarbons as diesel analyzed using EPA Method 8015M.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using modified EPA Method 8015M.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B.
MTBE	=	Methyl tertiary butyl ether analyzed using EPA Method 8021B.
Lead	=	Total lead analyzed using EPA Method 6010B.
ND	=	Analytes not detected at or above the laboratory method detection limit.
mg/kg	=	Milligrams per Kilogram.
---	=	Not Analyzed/Not Applicable.



FN 2431Topo

EXPLANATION

1/2-mile radius circle

N

APPROXIMATE SCALE

0 0.5 1 mile

SOURCE:
Modified from a map
provided by
DeLorme 3-D TopoQuads

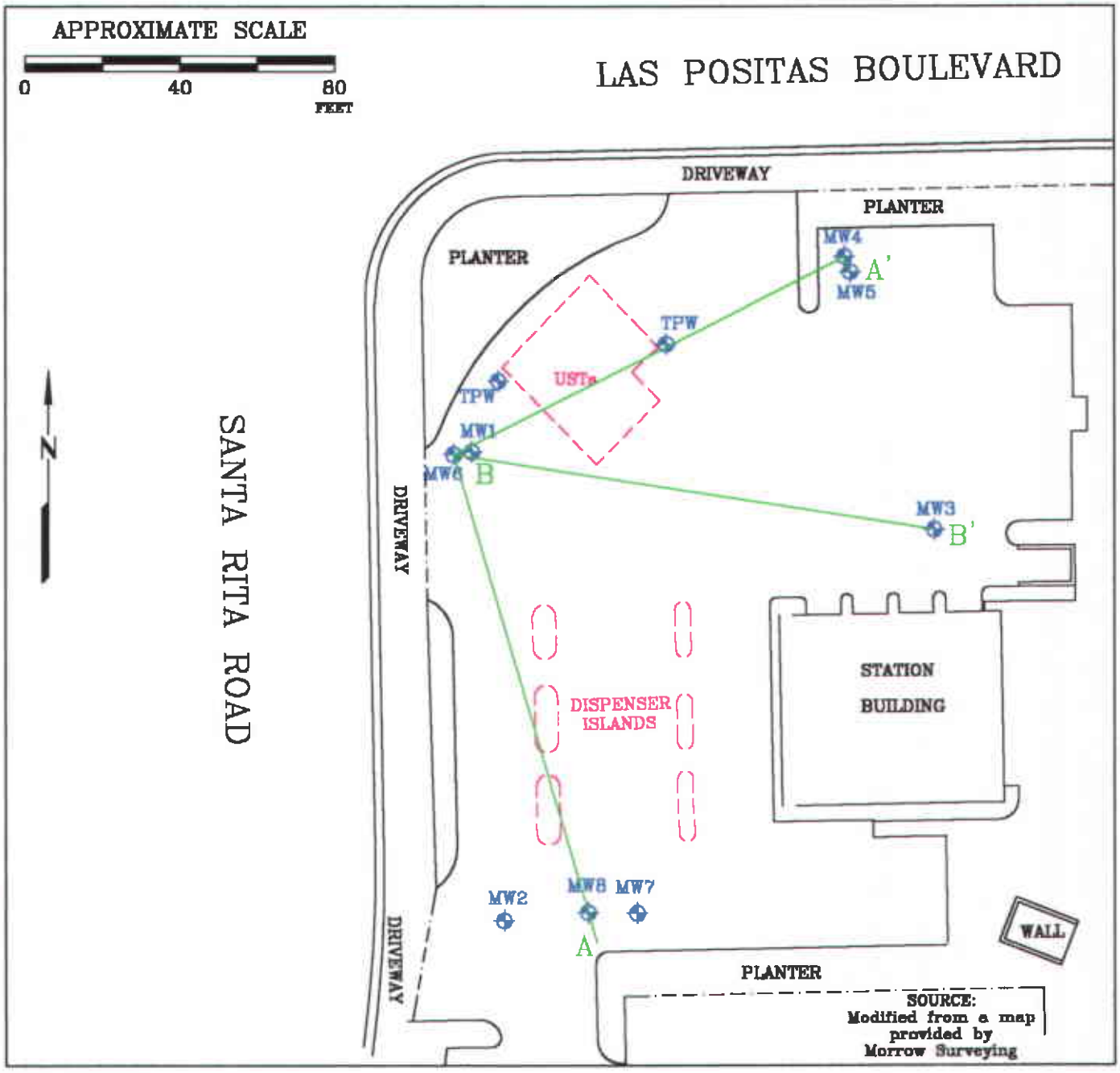
ENVIRONMENTAL RESOLUTIONS, INC.

SITE VICINITY MAP

FORMER EXXON SERVICE STATION 7-3567
3192 Santa Rita Road
Pleasanton, California

PROJECT NO. 2431

PLATE 1



FN 24310003

EXPLANATION

MW4 Groundwater Monitoring Well

TPW Tank Pit Well

B——B' Cross Section

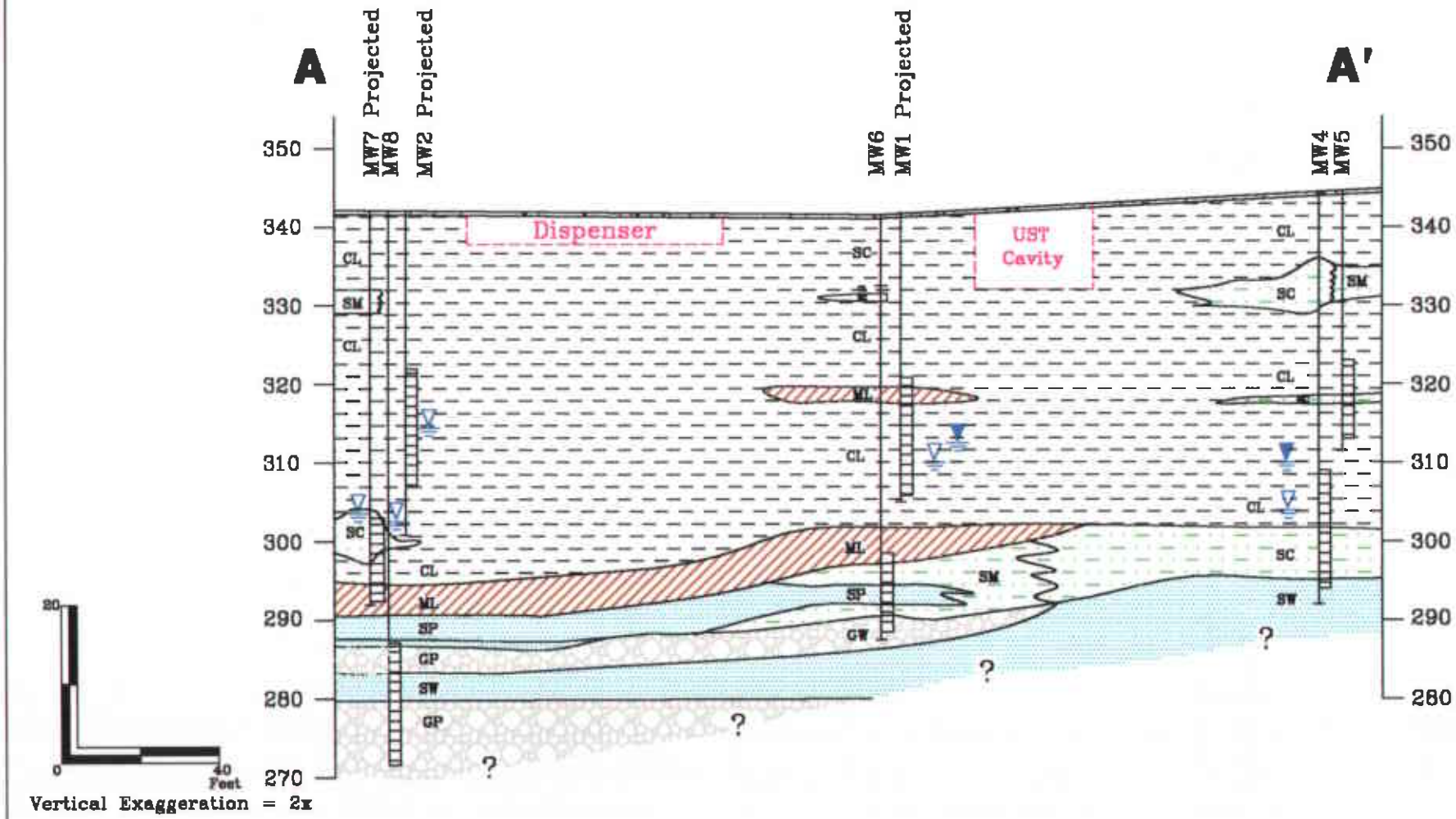
ENVIRONMENTAL RESOLUTIONS, INC.

GENERALIZED SITE PLAN

FORMER EXXON SERVICE STATION 7-3567
3192 Santa Rita Road
Pleasanton, California

PROJECT NO.
2431

PLATE
2



FN 2431EXAA

ERI ENVIRONMENTAL RESOLUTIONS, INC.

CROSS-SECTION A-A'

FORMER
EXXON SERVICE STATION 7-3567
3192 Santa Rita Road
Pleasanton, California

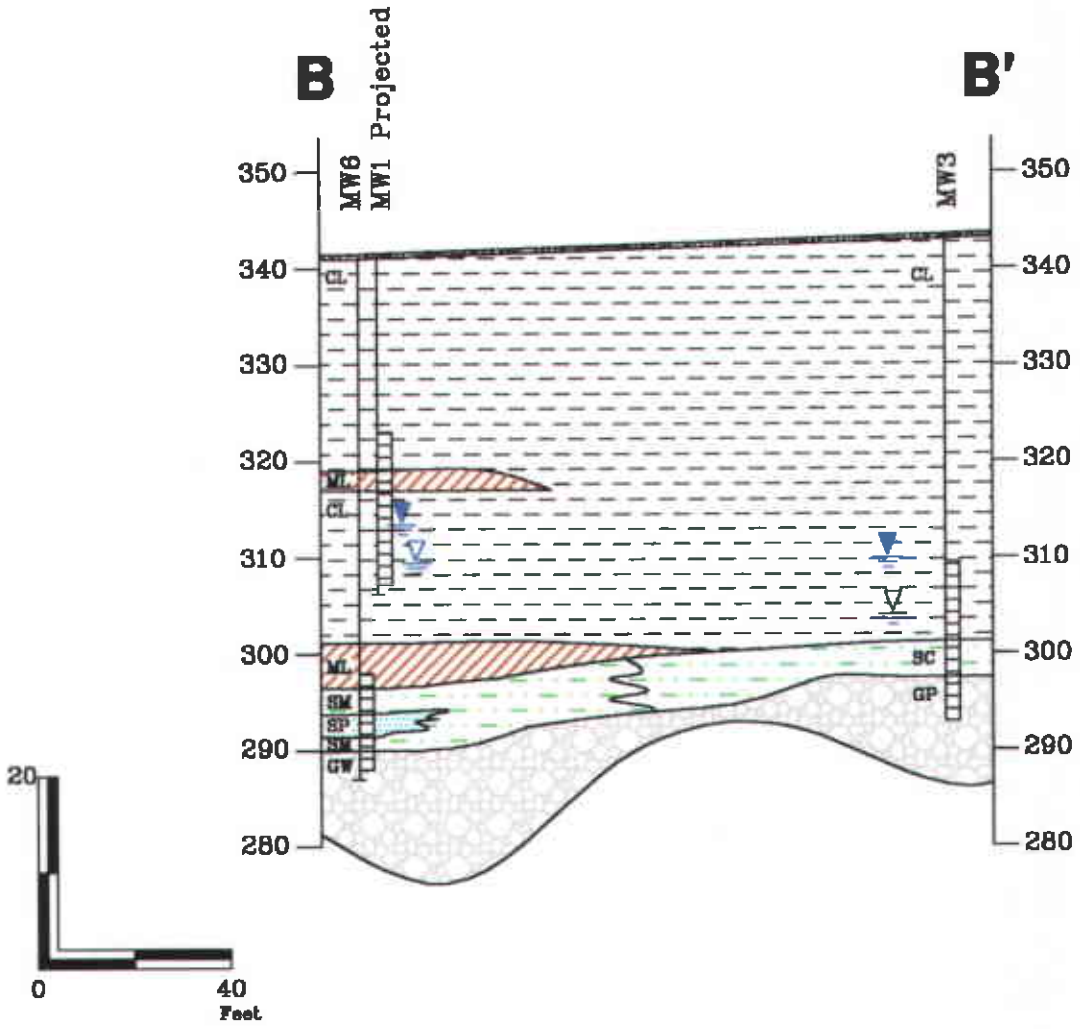
EXPLANATION

- Clay
- Silty Sand
- Sand
- Clayey Sand
- Sandy Gravel
- Sandy/Clayey Silt
- First encountered groundwater
- Static groundwater
- Screened Interval of Well

PROJECT NO. 2431

PLATE 3

August 21, 2000



Vertical Exaggeration = 2x

FN 2431SXBB

EXPLANATION

- Clay
- Sandy/Clayey Silt
- Clayey Sand
- Silty Sand
- Gravelly Sand
- Sand
- Static Groundwater
- First Encountered Groundwater
- Screened Interval of Well

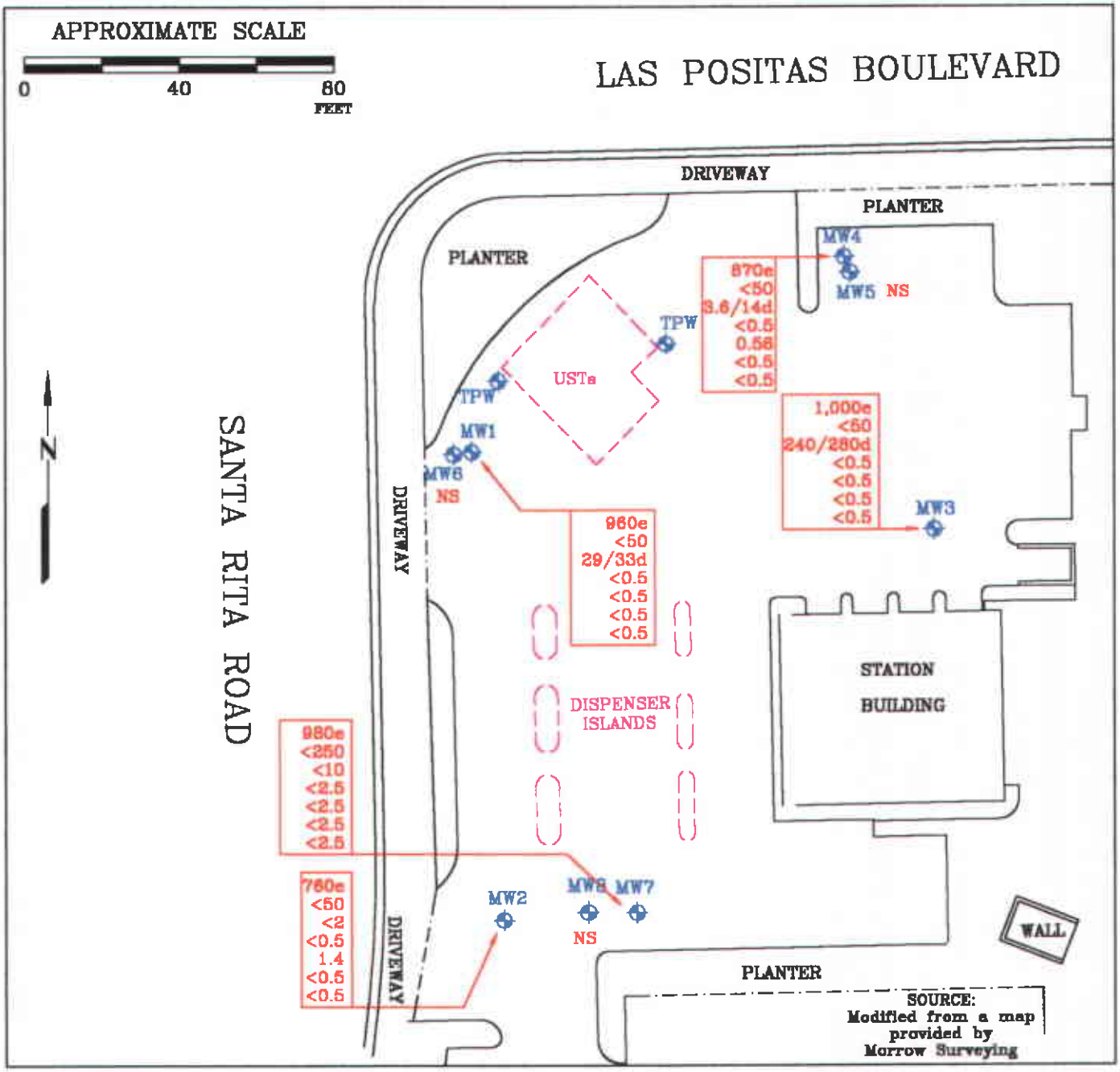
ENVIRONMENTAL RESOLUTIONS, INC.

CROSS-SECTION B-B'

FORMER EXXON SERVICE STATION 7-3567
3192 Santa Rita Road
Pleasanton, California

PROJECT NO. 2431

PLATE 4



FN 24310003

EXPLANATION

MW4 — Groundwater Monitoring Well

TPW — Tank Pit Well

Groundwater Concentrations in ug/L
Sampled April 11, 2001

1,000e	Total Petroleum Hydrocarbons as Diesel
<50	Total Petroleum Hydrocarbons as Gasoline
240/280d	Methyl Tertiary Butyl Ether
<0.5	Benzene
<0.5	Toluene
<0.5	Ethylbenzene
<0.5	Total Xylenes
<	Less Than the Stated Laboratory Detection Limit
ug/L	Micrograms per Liter
NS	Not Sampled

d MTBE confirmed using EPA Method 8260

e Diesel-range hydrocarbons detected in bailer blank, result is suspect.

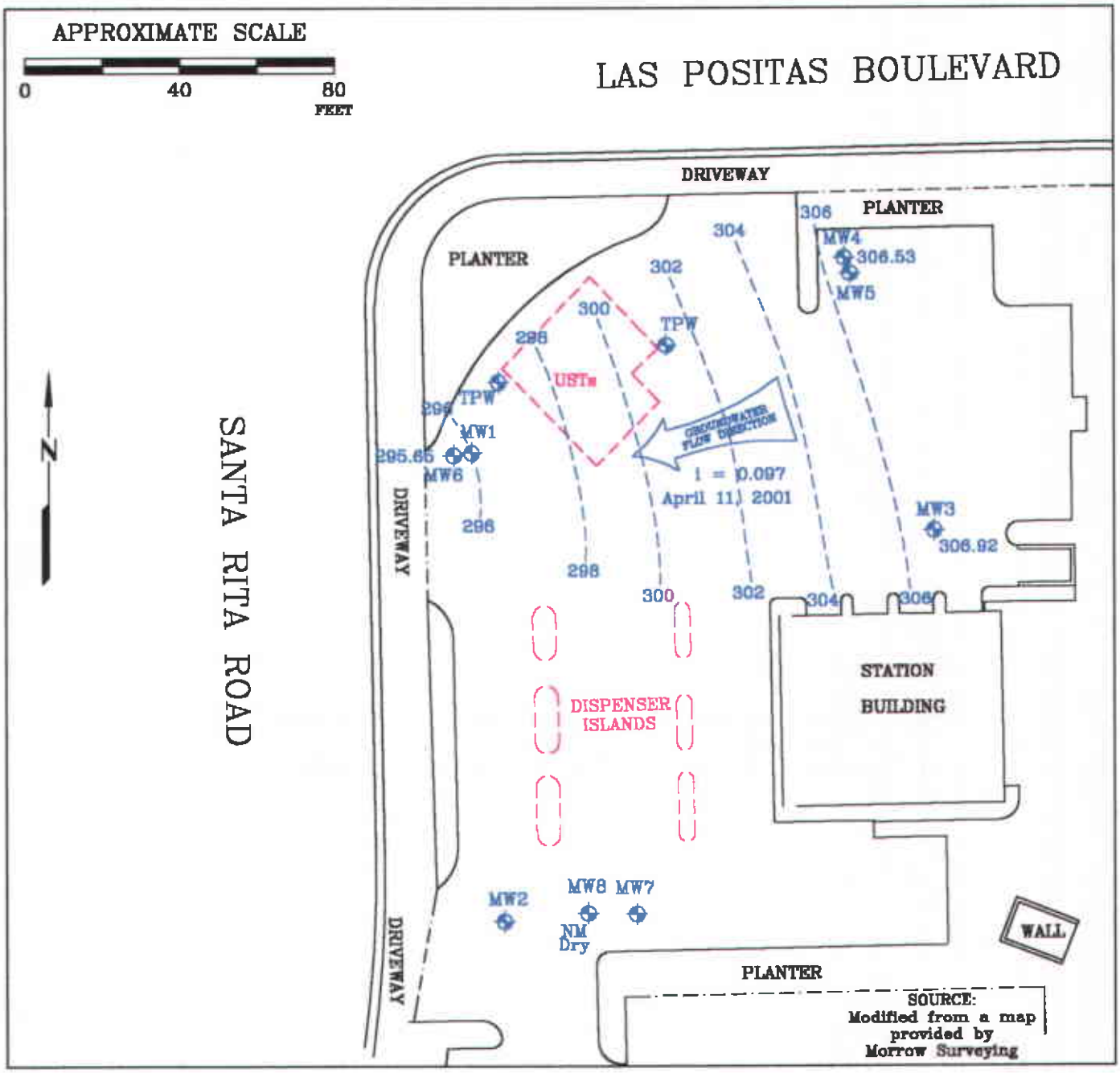
ENVIRONMENTAL RESOLUTIONS, INC.

HYDROCARBON CONCENTRATION MAP

FORMER EXXON SERVICE STATION 7-3567
3192 Santa Rita Road
Pleasanton, California

PROJECT NO. 2431

PLATE 5



FN 24310003

EXPLANATION

MW4 — Groundwater Monitoring Well

313.98 — Groundwater elevation in feet, datum is mean sea level

TPW — Tank Pit Well

i = Interpreted Hydraulic Gradient

NM = Not Measured

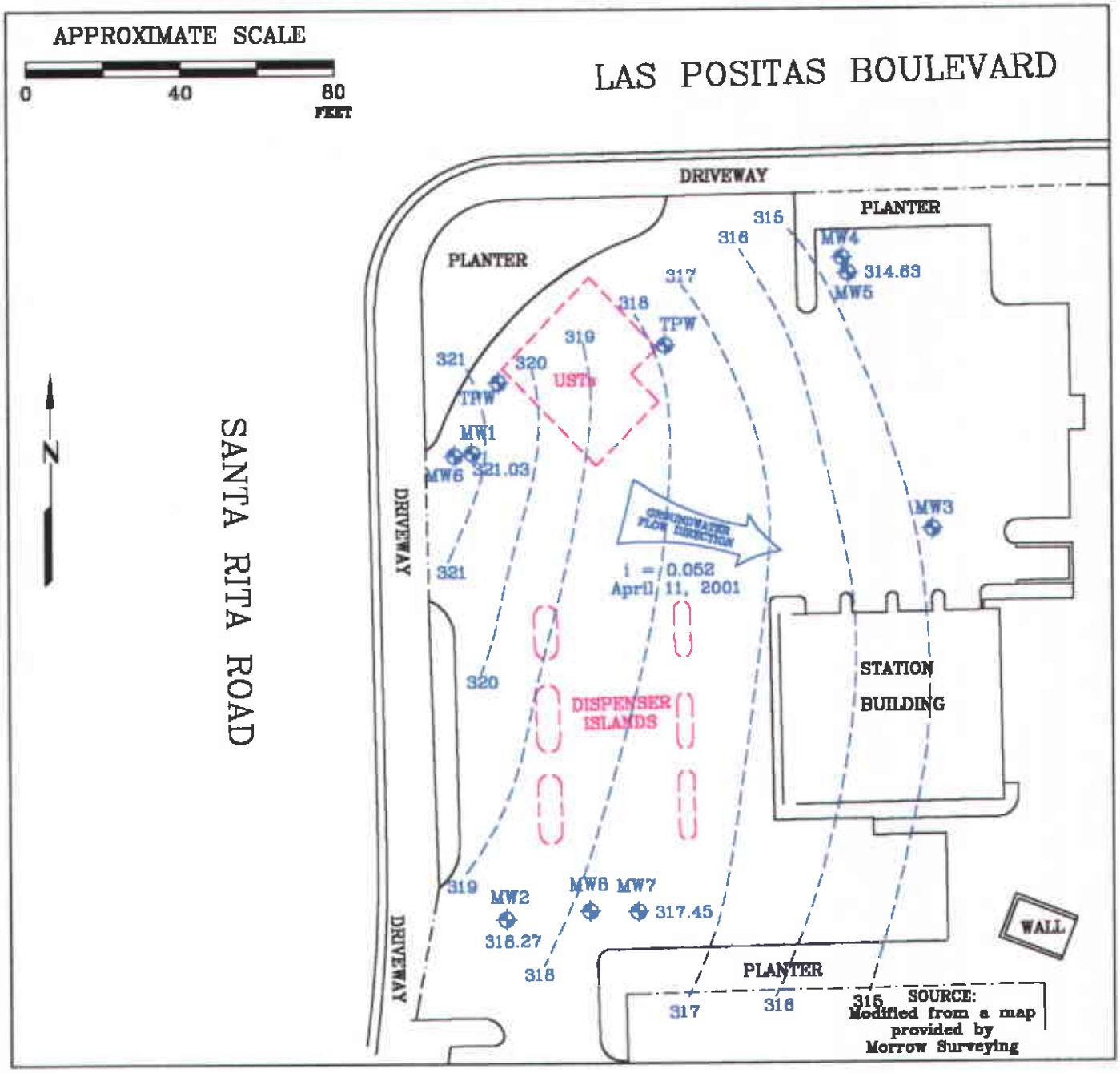
ENVIRONMENTAL RESOLUTIONS, INC.

GROUNDWATER ELEVATION MAP
LOWER WATER-BEARING ZONE

FORMER EXXON SERVICE STATION 7-3567
3192 Santa Rita Road
Pleasanton, California

PROJECT NO. 2431

PLATE 6



FN 24310003

EXPLANATION

MW4 — Groundwater Monitoring Well

306.53 — Groundwater elevation in feet, datum is mean sea level

TPW — Tank Pit Well

i = Interpreted Hydraulic Gradient

ENVIRONMENTAL RESOLUTIONS, INC.

GROUNDWATER ELEVATION MAP
UPPER WATER BEARING ZONE

FORMER EXXON SERVICE STATION 7-3567
3192 Santa Rita Road
Pleasanton, California

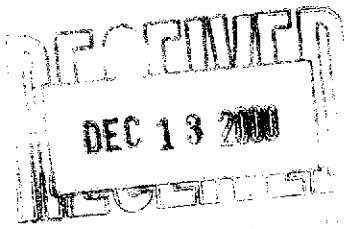
PROJECT NO. 2431

PLATE 7

ATTACHMENT A

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY LETTERS DATED DECEMBER 7, 2000 AND JANUARY 25, 2001

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director



243103X

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

December 7, 2000

STID 1932

Mr. Darin Rouse
ExxonMobil Refining and Supply
P.O. Box 4032
Concord, CA 94524-4032

RE: Exxon Service Station #7-3567, 3192 Santa Rita Road, Pleasanton

Dear Mr. Rouse:

This office has reviewed the October 9, 2000 Environmental Resolutions, Inc. (ERI) report entitled, *"Soil and Groundwater Investigation and Quarterly Groundwater Monitoring for Third Quarter 2000"*, documenting work that was recently completed at the subject site. This report documents the July 2000 installation of monitoring wells MW- 5, -6, and -7, and presents the results of the sampling and monitoring of both the new and existing monitoring wells at this site.

Well MW-5 was constructed at the north end of the site and screened to monitor a shallow, fine-grained interval at a depth anticipated to be consistent with the screened intervals of wells MW-1 and –2. Well MW-5 reportedly did not produce a sufficient quantity of water to sample during the July event. Wells MW-6 and -7 were intended to penetrate into and monitor a deeper gravelly sand zone identified during the previous investigation. Prior to the recent investigation, only wells MW-3 and -4 appeared to be screened in this deeper zone.

A review of well logs and cross-sections provided in the recent ERI report reveals that MW-7 was not completed in the targeted gravelly sand layer, as it does not appear to penetrate into that zone. MW-7 terminates in a silt layer that may overlie the gravelly sand, and is screened across a water-bearing lens of clayey sand/sandy clay that, based on reported stabilized water elevations, may be hydraulically connected to the shallower zone monitored by neighboring well MW-2.

After consultation with Matt Katen of the Zone 7 Water Agency, we have concluded that further work is necessary to provide a complete evaluation of site stratigraphy at the southern end of the site, and a determination of potential groundwater impacts that may be present there. The primary purpose of this work, therefore, is to identify the presence of the gravelly sand layer (or stratigraphic equivalent) and to sample groundwater from that zone.

Please submit a workplan for the installation of a single, continuously-cored sampling point in a location adjacent to well MW-7. The scope of this task may be satisfied with either a Geoprobe® -type, push-tool investigation with a grab groundwater sample, or the installation of a permanent well. Should ExxonMobil choose the push-tool option, a permanent well may be required should impacts be discovered.

The requested workplan is due within 45 days.

Please call me at (510) 567-6783 should you have any questions.

Sincerely,

Scott O. Seery, CHMM
Hazardous Materials Specialist

cc: Tom Peacock, ACDEH
Steve Cusenza, Pleasanton Public Works Department
Chuck Headlee, RWQCB
Matt Katen, Zone 7
Danielle Stefani, Livermore-Pleasanton Fire Department
Jim Chappell, Environmental Resolutions, Inc.
73 Digital Drive, Ste. 100, Novato, CA 94949-5791

2931037

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

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

January 25, 2001

STID 1932

Mr. Darin Rouse
Exxon Company, U.S.A.
P.O. Box 4032
Concord, CA 94524-4032

RE: Exxon Service Station #7-3567, 3192 Santa Rita Road, Pleasanton

Dear Mr. Rouse:

We are in receipt of the January 16, 2001 Environmental Resolutions, Inc. (ERI) workplan proposing the installation of a single well (MW-8) at the south end of the subject site. Well MW-8 is intended to monitor the deeper gravelly sand zone that is expected to be encountered at depths of approximately 50' below grade. This workplan was submitted under Exxon cover dated January 18, 2001.

The cited ERI workplan has been accepted with the following change:

- Sampling of the completed well shall not occur any less than 24, and preferably 72, hours following well development

Please contact me at (510) 567-6783 when field work has been scheduled.

Sincerely,

Scott O. Seery, CHMM
Hazardous Materials Specialist

cc: Steve Cusenza, Pleasanton Public Works Department
Chuck Headlee, RWQCB
Matt Katen, Zone 7
Danielle Stefani, Livermore-Pleasanton Fire Department
Jim Chappell, Environmental Resolutions, Inc.
73 Digital Drive, Ste. 100, Novato, CA 94949-5791

ATTACHMENT B

WELL CONSTRUCTION LOGS

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2431 Boring: #6/MW1 Plate: APPENDIX

Site: Exxon Station 7-3567 Date: 11/12/98

Drill Contractor: Woodward

Sample Method: Split Spoon Geologist: STEVE M. ZIGAN

Drill Rig: B-57 Bore Hole Diameter: 8" Signature:

Location: Western corner of underground tank field Registration: R.G. 4333

Logged by: Dave Arndal

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION	WELL DESIGN
						6" concrete	
					CL	Clay with some silt, black, slightly damp, medium plasticity	
5							
10	17	0					
15	22	0				trace of organic material	
20	27	0					
25	29	0				trace fine gravel, grayish-brown, wet, poor plasticity	
						damp, medium plasticity, no gravel	
30	22	0				trace fine gravel, dark gray, poor plasticity	
35	44	0					
						Total Depth = 36 1/2 feet Groundwater encountered at 25 feet	
40							

Casing Diameter: 2" , Slot Size: 0.020" , Sand Size: #3 , Grout: Portland Type 1/II

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2431 Boring: B4/MW2 Plate: APPENDIX
Site: Exxon Station 7-3567 Date: 11/12/98
Drill Contractor: Woodward
Sample Method: Split Spoon Geologist: STEVE M. ZIGAN
Drill Rig: B-57 Bore Hole Diameter: 8" Signature:
Location: Southwestern corner of dispenser island canopy Registration: R.G. 4333
Logged by: Dave Arndal

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION
5	7	0				FILL
10	16	0			CL	Clay with trace silt, very dark gray, moist, medium plasticity, areas of mottled oxidation with organics, poor plasticity
15	23	0				
20	23	0				caliche nodules
25		0				
30		0				damp, medium plasticity
35	46	0				grayish-brown
40						light olive-brown

Total Depth = 41 1/2 feet
Groundwater encountered at 26 1/2 feet

WELL DESIGN

Casing Diameter: 2" , Slot Size: 0.020" , Sand Size: #3 , Grout: Portland Type I/II

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2431 Boring: B1/MW3 Plate: 1 OF 2
Site: Exxon Station 7-3567 Date: 11/11/98
Drill Contractor: Woodward
Sample Method: Split Spoon Geologist: STEVE M. ZIGAN
Drill Rig B-57 Bore Hole Diameter: 8" Signature Steve M Zigan
Location North of eastern half of station building Registration: R.G. 4333
Logged by: Dave Arndal

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION	WELL DESIGN
						6" concrete	
					CL	Clay with some silt, dark olive-brown, slightly damp, low plasticity	
5	34	0					
10	15	0				olive-gray, high plasticity	
15	31	0				very dark grayish brown, medium plasticity	
20	28	0				slightly mottled, very dark grayish-brown and light gray, low plasticity	
25	29	0				trace small organics (roots)	
30	51	0				no organics	
35	36	0				olive-brown, caliche nodules up to 1/4", trace organics	
40							

(Continued downward on next page.)

Casing Diameter: 2", Slot Size 0.020", Sand Size #3, Grout Portland Type I/II

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2431 Boring: B1/MW3 Plate: 2 OF 2
Site: Exxon Station 7-3567 Date: 11/11/98
Drill Contractor: Woodward
Sample Method: Split Spoon Geologist: STEVE M. ZIGAN
Drill Rig: B-57 Bore Hole Diameter: 8" Signature
Location: North of eastern half of station building Registration: R.G. 4333
Logged by: Dave Arndal

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION (Continued downward from previous page.)	WELL DESIGN
40		0			CL	Clay with some silt, olive-brown, caliche nodules up to 1/4", trace organics	
					SC	Clayey sand, fine-grained, dark yellowish-brown, wet	
45	76	0					
					GP	Sandy gravel, gravel up to 3/4", fine-grained sand, dark yellowish-brown, wet	
50	76/8						
						Total Depth = 51 1/2 feet Groundwater encountered at 41 1/2 feet	
55							
60							
65							
70							
75							
80							

Casing Diameter: 2" Slot Size: 0.020" Sand Size: #3 Grout: Portland Type I/II

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2431 Boring: B2/MW4 Plate: 1 OF 2
Site: Exxon Station 7-3567 Date: 11/11/98
Drill Contractor: Woodward
Sample Method: Split Spoon Geologist: STEVE M. ZIGAN
Drill Rig B-57 Bore Hole Diameter 8" Signature
Location Central northern property line Registration: R.G. 4332
Logged by: Jen Schulte

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	USCS	GEOLOGIC DESCRIPTION
				6" concrete
			CL	Clay with some silt, very dark gray, damp, medium plasticity
5	23	0		
			SC	Clayey sand, dark gray, damp, low plasticity
10	14	0		
15	8	0	CL	Clay with some silt, dark gray, moist, medium plasticity
20	24	0		caliche nodules, trace organics/woody fiber
25	16	0		gray with mottled oxidation
			SC	Clayey sand, gray, damp, low plasticity
			CL	Clay with trace silt, very dark gray, moist, medium plasticity
30	31	0		
35	25	0		dark grayish-brown, trace organics and mottled oxidation
				light olive-brown, caliche areas
40	42			(Continued downward on next page.)

WELL DESIGN

Casing Diameter: 2", Slot Size: 0.020", Sand Size: #3, Grout: Portland Type I/II

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2431 Boring: B2/MW4 Plate: 2 OF 2
Site: Exxon Station 7-3567 Date: 11/11/98
Drill Contractor: Woodward
Sample Method: Split Spoon Geologist: STEVE M. ZIGAN
Drill Rig: B-57 Bore Hole Diameter 8" Signature
Location Central northern property line Registration R.G. 4333
Logged by Jen Schulte

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION (Continued downward from previous page.)	WELL DESIGN
40	42	0			CL	Clay with trace silt, light olive-brown, moist, medium plasticity	
					SC	Clayey sand, fine-grained, light olive-brown, moist	
45	28	0				with grayish-brown areas	
					SW	Gravelly sand, gravel up to 1", fine-grained, light olive-brown, wet	
50	74/10"	▼ 0					

Total Depth = 51 1/2 feet
Groundwater encountered at 50 feet

55
60
65
70
75
80

Casing Diameter: 2" Slot Size: 0.020" Sand Size: #2 Grout: Portland Type I/II

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2431 Boring: MW5 Plate: APPENDIX

Site: Former Exxon Service Station 7-3567 Date: 7/18/00

Drill Contractor: Woodward Drilling

Sample Method: Continuous Geologist: JOHN B. BOBBIT

Drill Rig: B57 Bore Hole Diameter: 8" Signature: [signature]

Location: 4 Feet South of MW4 Registration: R.G. 4313

85 Feet North of Station Building Logged by: Tom Culig

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION	WELL DESIGN
						6" concrete	
						Clay, gray, wet, high plasticity	
5					CL		
						iron oxidation	
10						Silty sand, gray, damp	
					SM		
						wet	
						Silty clay, gray, medium plasticity, dry	
15							
						calcium carbonate nodules	
20					CL		
25					SC	Clayey sand with silt, light gray, high plasticity, damp, low density	
						Sandy clay, gray, low plasticity, high density	
					CL		
30							
						Total depth at 31 feet. No groundwater encountered.	
35							

Casing Diameter: 2" Slot Size: 0.020", Sand Size: #3, Grout: Portland Type I/II

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2431 Boring: MW6 Plate: 1 of 2

Site: Former Exxon Service Station 7-3567 Date: 7/19/00

Drill Contractor: Woodward Drilling

Sample Method: Continuous Geologist: JOHN B. BOBBITT

Drill Rig: B57 Bore Hole Diameter: 6" Signature:

Location: 4 Feet West of MW1 Registration: R.G. 4313

25 Feet East of Santa Rita Road Logged by: Tom Culig

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION	WELL DESIGN
						6" concrete	
						Clayey sand, brown, wet	
5					SC		
					CL	Sandy clay, brown, moist, high plasticity	
10					SC	Clayey sand, brown, wet	
						Sandy clay	
						silty clay, dark gray, high plasticity	
15					CL		
						small nodules of calcium carbonate, medium plasticity, very dense	
20							
						Clayey silt, light gray, moist, high plasticity	
					ML		
25						Clay with trace of silt, dark gray, little mottled iron oxidation, moderate plasticity, high density	
						trace of small gravel	
30						no gravel, up to 1/4" nodules of calcium carbonate	
					CL		
						encountered water at 9:40am	
35						clay with trace amounts of silt, medium plasticity, very dense, no sign lithologic changes upon encountering water	
						clay, lighter gray color, iron oxidation, trace organics, calcium nodules up to 1/4"	
						silty clay, gray/light brown, large calcium nodules organics	
40						(Continued downward on next page)	

Casing Diameter: 2" Slot Size: 0.020", Sand Size: #3, Grout: Portland Type I/II

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2431 Boring: MW6 Plate: 2 OF 2

Site: Former Exxon Service Station 7-3567 Date: 7/19/00

Drill Contractor: Woodward Drilling

Sample Method: Continuous Geologist: JOHN B. BOBBITT

Drill Rig: B57 Bore Hole Diameter: 8" Signature: JBBobbitt

Location: 4 Feet West of MW1 Registration: R.G. 4313

25 Feet East of Santa Rita Road Logged by: Tom Culig

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION	WELL DESIGN
						(Continued downward from previous page) clayey silt with very fine-grained sand, gray/ brown organics	
					ML		
45					SM	Silty sand, brown, high plasticity	
					SP	Sand with trace pebbles, wet, very loose with some pebbles to 1/2" increasing pebble content, angular to sub-angular	
50					SM	Silty sand with 1/4" gravel	
					GW	Sandy gravel with 1/4"-2" pebbles	
55						Total depth at 54 feet. Groundwater encountered at 32 feet.	

Casing Diameter: 2" Slot Size: 0.020", Sand Size: #3, Grout Portland Type I/II

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2431 Boring: MW7 Plate: 1 OF 2

Site: Former Exxon Service Station 7-3567 Date: 7/18/00

Drill Contractor: Woodward Drilling

Sample Method: Continuous Geologist: JOHN B. BOBBITT

Drill Rig: B57 Bore Hole Diameter: 8" Signature: JB Bobbitt

Location: 35 Feet East of MW2 Registration: R.G. 4313

18 Feet South of Dispenser Islands Logged by: Tom Culig

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION	WELL DESIGN
						6" concrete	
						Clay, brown, high plasticity	
5					CL	silty clay	
10					SM	Silty sand, black/brown, wet	
						brown color, high plasticity	
						Silty clay, dark brown, high plasticity	
15						clay with little silt, dark gray/black, moderate plasticity, massive layer, no bedding, very dense	
20						gray color, higher plasticity	
25					CL	clay with trace of silt and sand, gray/brown, wet, less dense as overlying bed	
						clay with very small traces of silt and iron oxide	
30							
35						small white nodules of calcium carbonate larger nodules	
						clay with traces of silt, light brown	
					SC	Clayey sandy, wet, very low density	
40						(Continued downward on next page)	

Casing Diameter: 2" Slot Size: 0.020", Sand Size: #3, Grout: Portland Type I/II

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 2431 Boring: MW7 Plate: 2 OF 2

Site: Former Exxon Service Station 7-3567 Date: 7/18/00

Drill Contractor: Woodward Drilling

Sample Method: Continuous Geologist: JOHN B. BOBBITT

Drill Rig: B57 Bore Hole Diameter: 8" Signature: JB Bobbitt

Location: 35 Feet East of MW2 Registration: R.G. 4313

18 Feet South of Dispenser Islands Logged by: Tom Culig

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION (Continued downward from previous page)	WELL DESIGN
					SC	higher density clayey sand, dark brown, wet, very loose	
45					CL	Clay with traces of sand, light brown	
					SC	Clayey sand, dark brown, wet, very loose	
					CL	Sandy clay, light brown, very dense, moderate plasticity	
					ML	Clayey silt with traces of sand, bands of iron oxide, high plasticity	
50						Total depth at 50 feet. Groundwater encountered at 38 feet.	

Casing Diameter: 2" Slot Size: 0.020", Sand Size: #3, Grout: Portland Type I/II

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 243103X Boring: MW8 Plate: 1 OF 2
Site: 7-3567 Date: 3/16/01
Drill Contractor: GREG DRILLING
Sample Method: Split Spoon Geologist: John B. Bobbitt
Drill Rig: B-57 Bore Hole Diameter: 8 Signature:
Location: 19 feet south of southwestern dispenser island. Registration: R.G. 4313
Logged by: Tom Culig

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION	WELL DESIGN
						6" Conrete Clay dark, brown,high plasticity	
5	3 4 4					Silty clay, brown	
10	3 4 5					Clay, dark gray, medium plasticity, oxidation	
15	4 7 8					Clay with little silt, dark brown/grey moderate plasticity, very dense	
20	5 8 12					dark grey, caliche nodules	
25	5 9 12				CL	Clay with trace of silt, gray brown, dry	
30	4 7 12					Gray, traces of iron oxide	
35						White nodules of calcium carbonate	
	4 8 14						
40	7 10 15	▼				Larger nodules, higher density, wet	

Casing Diameter: 2" Slot Size: 0.020", Sand Size: #3, Grout: Portland Type I/II

N 243imw8

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 243103X Boring: MW8 Plate: 2 of 2
Site: 7-3567 Date: 3/16/01
Drill Contractor: GREG DRILLING
Sample Method: Split Spoon Geologist: John B. Bobbitt
Drill Rig: B-57 Bore Hole Diameter: 8 Signature:
Location: 19 feet south of southwest dispenser island. Registration: R.G. 4313
Logged by: Tom Culig

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION (Continued downward from previous page)	WELL DESIGN
	4 5 9				CL		
					SC	Clayey sand, gray/brown, wet	
						Sandy clay, brown, wet	
45	4 5 7				CL	Clay with traces of silt, light brown, wet	
	13 22					Sandy clay, brown, iron oxide	
	10 16 7				ML	Clayey silt with traces of sand, high plasticity Increasing sand, bands of iron oxide	
50	10 16 9						
	16 13 22				SP	Sand with pebbles up to 1 inch subrounded, dry - moist, trace silt	
55	16 20 25				SW	Gravelly sand, pebbles up to 1 inch	
	15 21 26				GP	Sandy gravel	
60	18 17 35				SW	Gravelly sand	
	31 38 44	▼					
	30 32				GP	Sandy gravel, gravel up to 1 inch, subrounded, wet	
65	35 37					Pebbles up to 1 3/4 inch, subangular	
	45 40 26						
70	45 50					Total depth at 70 feet. Groundwater encountered at 39.5 feet and 62 feet.	

Casing Diameter: 2" Slot Size: 0.020", Sand Size: #3, Grout: Portland Type I/II

243103mw8

ATTACHMENT C

FIELD PROTOCOL AND GROUNDWATER SAMPLING PROTOCOL

FIELD PROTOCOL

Site Safety Plan

Field work will be performed by ERI personnel in accordance with a Site Safety Plan developed for the site. This plan describes the basic safety requirements for the subsurface investigation and the drilling of soil borings at the work site. The Site Safety Plan is applicable to personnel and subcontractors of ERI. Personnel at the site are informed of the contents of the Site Safety Plan before work begins. A copy of the Site Safety Plan is kept at the work site and is available for reference by appropriate parties during the work. The ERI geologist will act as the Site Safety Officer.

Drilling of Soil Borings

Prior to the drilling of the soil boring, ERI will acquire necessary permits from the appropriate agency(ies). ERI will also contact Underground Service Alert (USA) and a private underground utility locator (per ExxonMobil protocol) before drilling to help locate public utility lines at the site. ERI will clear the proposed location to a depth of approximately 4 or 8 feet (depending on the location), before drilling to reduce the risk of damaging underground structures.

The soil boring will be drilled with a B57 (or similar) drill rig with hollow-stem auger. Auger flights and sampling equipment will be steam-cleaned before use to minimize the possibility of crosshole contamination. The rinsate will be containerized and stored on site. ERI will coordinate with ExxonMobil for appropriate disposal of the rinsate.

Drilling will be performed under the observation of a field geologist, and the earth materials in the boring will be identified using visual and manual methods, and classified as drilling progresses using the Unified Soil Classification System. Soil boring MW8 will be drilled to a maximum of 70 feet bgs.

During drilling, soil samples will be continuously collected. Samples will be collected with a California-modified, split-spoon sampler equipped with laboratory-cleaned brass sleeves. Samples will be collected by advancing the auger to a point just above the sampling depth and driving the sampler into the soil. The sampler will be driven 18 inches with a standard 140-pound hammer repeatedly dropped 30 inches. The number of blows required to drive the sampler each successive 6-inch interval will be counted and recorded to give an indication of soil consistency.

Soil samples will be monitored with a photoionization detector (PID), which measures hydrocarbon concentrations in the ambient air or headspace above the soil sample. Field instruments such as the PID are useful for indicating relative levels of hydrocarbon vapors, but do not detect concentrations of hydrocarbons with the same precision as laboratory analyses. Soil samples selected for possible chemical analysis will be sealed promptly with Teflon® tape and plastic caps. The samples will be labeled and placed in iced storage for transport to the laboratory. Chain of Custody Records will be initiated by the geologist in the field, updated throughout handling of the samples, and sent with the samples to the laboratory. Copies of these records will be in the final report. Cuttings generated during drilling will be placed on plastic sheeting and covered and left at the site. ERI will coordinate with ExxonMobil for the soil to be removed to an appropriate disposal facility.

Well Construction

The monitoring wells will be constructed in the borings using thread-jointed, 2-inch inner diameter, Schedule 40 polyvinyl chloride (PVC) casing. No chemical cements, glues, or solvents will be used in well construction. The screened portion of the wells will consist of factory-perforated casing with 0.020-inch wide slots. Unperforated casing will be installed from the top of each screen to the ground surface. The annular space in the wells will be packed with number 3 Monterey sand to approximately one foot above the slotted interval and a surged and refilled bentonite plug will be added above the sand pack to prevent cement from entering the well pack. The remaining annulus will be backfilled to grade with a slurry of cement and bentonite powder.

The wells will be protected with a locking cap and a traffic-rated, cast-steel utility box equipped with a steel skirt. The box has a watertight seal to protect against surface-water infiltration.

Well Development and Sampling

ERI will wait a minimum of 24 hours before development of the well to allow the grout to set. The wells will be developed with a surge block and pump. Well development will continue until the discharge water is clear of silt and sand. Clay-size sediments derived from the screened portion of the formation cannot be eliminated by well development. After the well has been allowed to stabilize, the wells will be checked for separate phase hydrocarbons using an interface probe. The thickness of any free phase hydrocarbons detected in the well will be recorded. If free phase hydrocarbons are encountered in a well, the well will not be purged, and the water will not be sampled for chemical analysis.

If no free phase hydrocarbons are detected after development, the groundwater monitoring wells will be purged of stagnant water and a sample will be collected for laboratory analysis. The wells will be purged of approximately 3 to 5 well volumes of water with a submersible pump, or until pH, conductivity, and temperature of the purged water have stabilized. Water purged from the wells will be transported by ERI for disposal at Romic, Inc., of East Palo Alto, California.

The well will be allowed to recover to at least 80 percent of static conditions, and a sample of the formation water will be collected with a disposable Teflon® bailer. The water will be transferred slowly from the bailer to laboratory-cleaned, 1 liter amber bottles and 40-milliliter glass vials for analyses by the laboratory. The glass vials will contain hydrochloric acid as a preservative. The sampler will check to see if headspace is present. If headspace is present, the sampler will collect more samples until none is present. Chain of Custody Record will be initiated in the field by the sampler, updated throughout handling of the samples, and sent along with the samples to the laboratory. A copy of the Chain of Custody Record will be included in our final report

GROUNDWATER SAMPLING PROTOCOL

The static water level and separate-phase product level, if present, in each well that contained water and/or separate-phase product are measured with a ORS Interface Probe, which is accurate to the nearest 0.01 foot. To calculate groundwater elevations and evaluate groundwater gradient, depth to water (DTW) levels are subtracted from top of casing elevations.

Groundwater samples collected for subjective evaluation are collected by gently lowering approximately half the length of a clean Teflon® or polypropylene bailer past the air-water interface (if possible) and collecting a sample from near the surface of the water in the well. The samples are checked for measurable free-phase hydrocarbons or sheen. If appropriate, free-phase hydrocarbons are removed from the well.

Before water samples are collected from the groundwater monitoring wells, the wells are purged until a minimum of three well casing volumes is purged and stabilization of the temperature, pH, and conductivity is obtained. Water samples from the wells that do not obtain stability of the temperature, pH, and conductivity are considered to be "grab samples". The quantity of water purged from each well is calculated as follows:

1 well casing volume = $\pi r^2 h(7.48)$ where:

r	=	radius of the well casing in feet.
h	=	column of water in the well in feet (depth to bottom - depth to water)
7.48	=	conversion constant from cubic feet to gallons
π	=	ratio of the circumference of a circle to its diameter

Gallons of water purged/gallons in 1 well casing volume = well casing volumes removed.

After purging, each well is allowed to recharge to at least 80% of the initial water level. Water samples from wells that do not recover at least 80% (due to slow recharging of the well) between purging and sampling are considered to be "grab samples". Water samples are collected with a new, disposable Teflon® or polypropylene bailer. The groundwater is carefully poured into selected sample containers (40-milliliter (ml) glass vials, 1,000 ml glass amber bottles, etc.), which are filled so as to produce a positive meniscus.

Depending on the required analysis, each sample container is preserved with hydrochloric acid, nitric acid, etc., or it is preservative free. The type of preservative used for each sample is specified on the chain of custody form.

Each vial and glass amber bottle is sealed with a cap containing a Teflon® septum, and subsequently examined for air bubbles to avoid headspace, which would allow volatilization to occur. The samples are promptly transported in iced storage in a thermally-insulated ice chest, accompanied by a Chain of Custody Record, to a California-certified laboratory.

ATTACHMENT D

ZONE 7 WATER AGENCY DRILLING PERMIT

ZONE 7 WATER AGENCY

5997 PARKSIDE DRIVE PLEASANTON, CALIFORNIA 94588-5127 VOICE (925) 484-2600 X235
FAX (925) 462-3914

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE

LOCATION OF PROJECT Former Exxon Service Station 7-3567
3192 Santa Rita Road
Pleasanton, California, 94566

CLIENT
Name Exxon Mobil Refining & Supply
Address PO BOX 4032 Voice (925) 246-8768
City Concord Zip 94524-4032

APPLICANT
Name Environmental Resolutions, Inc.
Attn: TOM CULIG Fax (415) 382-1856
Address 73 Digital Dr. Suite 100 Voice (415) 382-9105
City Novato Zip 94949

TYPE OF PROJECT

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

PROPOSED WATER SUPPLY WELL USE
Domestic ___ Industrial ___ Other ___
Municipal ___ Irrigation ___

DRILLING METHOD:
Mud Rotary ___ Air Rotary ___ Auger ✓
Cable ___ Other ___

DRILLER'S LICENSE NO. C-57 485165

WELL PROJECTS
Drill Hole Diameter 6 In. Maximum
Casing Diameter 2 In. Depth 70 ft.
Surface Seal Depth 2-5 ft. Number MW8

GEOTECHNICAL PROJECTS
Number of Borings ___ Maximum
Hole Diameter ___ In. Depth ___ ft.

ESTIMATED STARTING DATE 2-22-01
ESTIMATED COMPLETION DATE 2-22-01

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

APPLICANT'S SIGNATURE Tom Culig Date 1-15-01

PERMIT NUMBER 21033
WELL NUMBER 3S/1E 9D14
APN 946 1105 038 04

PERMIT CONDITIONS

Circled Permit Requirements Apply

(A.) GENERAL
1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.
2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
3. An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements.
4. A sample port is required on the discharge pipe near the wellhead.

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

D. GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.

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

F. WELL DESTRUCTION. See attached.

G. SPECIAL CONDITIONS

Approved Wyman Hong Date 2/7/01
Wyman Hong

8/6/99

ATTACHMENT E

UNIFIED SOIL CLASSIFICATION SYSTEM SYMBOL KEY AND BORING LOG

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS		LTR	DESCRIPTION
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	GW	Well-graded gravels or gravel sand mixtures, little or no fines
		GP	Poorly-graded gravels or gravel sand mixture, little or no fines
		GM	Silty gravels, gravel-sand-clay mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
	SAND AND SANDY SOILS	SW	Well-graded sands or gravelly sands, little or no fines
		SP	Poorly-graded sands or gravelly sands, little or no fines
		SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures

MAJOR DIVISIONS		LTR	DESCRIPTION
FINE GRAINED SOILS	SILTS AND CLAYS LL<50	ML	Inorganic silts and very fine-grained sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		OL	Organic silts and organic silt-clays of low plasticity
	SILTS AND CLAYS LL>50	MH	Inorganic silts, micaceous or diatomaceous fine-grained sandy or silty soils, elastic silts
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic clays of medium to high plasticity
HIGHLY ORGANIC SOILS		Pt	Peat and other highly organic soils

DEPTH THROUGH WHICH SAMPLER IS DRIVEN

RELATIVELY UNDISTURBED SAMPLE

MISSED SAMPLE

GROUNDWATER LEVEL OBSERVED FROM FIRST WET SOIL SAMPLE IN BORING

STATIC GROUNDWATER LEVEL

OVM — ORGANIC VAPOR METER READING IN PARTS PER MILLION

PID — PHOTO-IONIZATION DETECTOR READING IN PARTS PER MILLION

WELL DESIGN

SAND PACK

BENTONITE ANNULAR SEAL

NEAT CEMENT ANNULAR SEAL

BLANK PVC

MACHINE-SLOTTED PVC

S-10 — SAMPLE LOCATION

NR — NOT RECORDED

NA — NOT ANALYZED

BLOW/FT. REPRESENTS THE NUMBER OF BLOWS OF A 140-POUND HAMMER FALLING 30 INCHES TO DRIVE THE SAMPLER THROUGH THE LAST 12 INCHES OF AN 18-INCH OR 24-INCH PENETRATION.

DASHED LINES SEPARATING UNITS ON THE LOG REPRESENT APPROXIMATE BOUNDARIES ONLY. ACTUAL BOUNDARIES MAY BE GRADUAL. LOGS REPRESENT SUBSURFACE CONDITIONS AT THE BORING LOCATION AT THE TIME OF DRILLING ONLY.

ATTACHMENT F

LABORATORY ANALYSIS REPORTS AND CHAIN-OF-CUSTODY RECORDS

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054

EXXON Company U.S.A.

Certificate of Analysis Number:

01030603

Report To:		Project Name:	243103x	
Environmental Resolution, Inc.		Site:	7-3567	
Jim Chappell		Site Address:	3192 Santa Rita Rd.	
73 Digital Drive Suite 100			Pleasanton	CA
Novato		PO Number:	EWR#21040350	
California		State:	California	
94949-		State Cert. No.:	1903	
ph: (415) 382-9105	fax: (415) 382-1856	Date Reported:	3/28/01	

This Report Contains A Total Of 18 Pages

Excluding This Page

And

Chain Of Custody

3/28/01

Date

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Case Narrative for:

EXXON Company U.S.A.

Certificate of Analysis Number:

01030603

Report To:		Project Name:	243103x	
Environmental Resolution, Inc.		Site:	7-3567	
Jim Chappell		Site Address:	3192 Santa Rita Rd.	
73 Digital Drive Suite 100			Pleasanton	CA
Novato		PO Number:	EWR#21040350	
California		State:	California	
94949-		State Cert. No.:		
ph: (415) 382-9105	fax: (415) 382-1856	Date Reported:	3/28/01	

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Sonia West

West, Sonia
Senior Project Manager

3/29/01
Date

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

EXXON Company U.S.A.

Certificate of Analysis Number:

01030603

Report To: Environmental Resolution, Inc.
Jim Chappell
73 Digital Drive Suite 100

Novato
California
94949-
ph: (415) 382-9105 fax: (415) 382-1856

Fax To: Environmental Resolution, Inc.
Jim Chappell fax : (415) 382-1856

Project Name: 243103x
Site: 7-3567
Site Address: 3192 Santa Rita Rd.
Pleasanton CA
PO Number: EWR#21040350
State: California
State Cert. No.: 1903
Date Reported: 3/28/01

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
S-15-MW8	01030603-01	Soil	3/16/01 12:36:00 PM	3/20/01 11:14:15 AM		
S-30-MW8	01030603-02	Soil	3/16/01 1:08:00 PM	3/20/01 11:14:15 AM		
SP-1 (1-4)-MW8-COMP	01030603-03	Soil	3/16/01 5:00:00 PM	3/20/01 11:14:15 AM		

Sonia West
Senior Project Manager

3/28/01
Date

Joel Grice
Laboratory Director

Ted Yen
Quality Assurance Officer

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID S-15-MW8 **Collected:** 3/16/01 12:36:00 **SPL Sample ID:** 01030603-01

Site: 7-3567

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS			**MCL**	**CA_DRO**		**Units: mg/Kg**		
Diesel Range Organics	ND		2	1		03/26/01 19:46	AM	617657
Surr: n-Pentacosane	89.7	%	20-154	1		03/26/01 19:46	AM	617657

Prep Method	Prep Date	Prep Initials
SW3550B	03/21/2001 10:48	EE

GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: mg/Kg**		
Gasoline Range Organics	ND		1	1		03/21/01 16:32	FB	610696
Surr: 1,4-Difluorobenzene	94.3	%	72-153	1		03/21/01 16:32	FB	610696
Surr: 4-Bromofluorobenzene	103	%	51-149	1		03/21/01 16:32	FB	610696
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: mg/Kg**		
Benzene	ND		0.001	1		03/21/01 16:32	FB	610683
Ethylbenzene	ND		0.001	1		03/21/01 16:32	FB	610683
Methyl tert-butyl ether	ND		0.001	1		03/21/01 16:32	FB	610683
Toluene	ND		0.001	1		03/21/01 16:32	FB	610683
m,p-Xylene	ND		0.001	1		03/21/01 16:32	FB	610683
o-Xylene	ND		0.001	1		03/21/01 16:32	FB	610683
Xylenes,Total	ND		0.001	1		03/21/01 16:32	FB	610683
Surr: 1,4-Difluorobenzene	89.0	%	59-127	1		03/21/01 16:32	FB	610683
Surr: 4-Bromofluorobenzene	97.5	%	48-156	1		03/21/01 16:32	FB	610683

Sonia West

Sonia West
Project Manager

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID S-30-MW8 **Collected:** 3/16/01 1:08:00 **SPL Sample ID:** 01030603-02

Site: 7-3567

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS			**MCL**	**CA_DRO**		**Units: mg/Kg**		
Diesel Range Organics	ND		2	1		03/26/01 20:24	AM	617659
Surr: n-Pentacosane	89.7	%	20-154	1		03/26/01 20:24	AM	617659

Prep Method	Prep Date	Prep Initials
SW3550B	03/21/2001 10:48	EE

GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: mg/Kg**		
Gasoline Range Organics	ND		1	1		03/21/01 17:01	FB	610697
Surr: 1,4-Difluorobenzene	93.3	%	72-153	1		03/21/01 17:01	FB	610697
Surr: 4-Bromofluorobenzene	102	%	51-149	1		03/21/01 17:01	FB	610697
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: mg/Kg**		
Benzene	ND		0.001	1		03/21/01 17:01	FB	610684
Ethylbenzene	ND		0.001	1		03/21/01 17:01	FB	610684
Methyl tert-butyl ether	0.0017		0.001	1		03/21/01 17:01	FB	610684
Toluene	ND		0.001	1		03/21/01 17:01	FB	610684
m,p-Xylene	ND		0.001	1		03/21/01 17:01	FB	610684
o-Xylene	ND		0.001	1		03/21/01 17:01	FB	610684
Xylenes,Total	ND		0.001	1		03/21/01 17:01	FB	610684
Surr: 1,4-Difluorobenzene	91.9	%	59-127	1		03/21/01 17:01	FB	610684
Surr: 4-Bromofluorobenzene	98.8	%	48-156	1		03/21/01 17:01	FB	610684

Sonia West

Sonia West
Project Manager

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID SP-1 (1-4)-MW8-COMP **Collected:** 3/16/01 5:00:00 **SPL Sample ID:** 01030603-03

Site: 7-3567

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS				**MCL**	**CA_DRO**	**Units: mg/Kg**		
Diesel Range Organics	ND		2		1	03/26/01 21:02	AM	617662
Surr: n-Pentacosane	81.9	%	20-154		1	03/26/01 21:02	AM	617662

Prep Method	Prep Date	Prep Initials
SW3550B	03/21/2001 10:48	EE

GASOLINE RANGE ORGANICS				**MCL**	**CA_GRO**	**Units: mg/Kg**		
Gasoline Range Organics	ND		1		1	03/21/01 17:30	FB	610698
Surr: 1,4-Difluorobenzene	94.3	%	72-153		1	03/21/01 17:30	FB	610698
Surr: 4-Bromofluorobenzene	109	%	51-149		1	03/21/01 17:30	FB	610698

Sonia West

Sonia West
Project Manager

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID SP-1 (1-4)-MW8-COMP **Collected:** 3/16/01 5:00:00 **SPL Sample ID:** 01030603-03

Site: 7-3567

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
HALOGENATED VOLATILES ORGANIC COMPOUNDS			**MCL**	**SW8010B**		**Units: mg/Kg**		
1,1,1-Trichloroethane	ND		0.001	1		03/22/01 5:29	CJ	611598
1,1,2,2-Tetrachloroethane	ND		0.002	1		03/22/01 5:29	CJ	611598
1,1,2-Trichloroethane	ND		0.001	1		03/22/01 5:29	CJ	611598
1,1-Dichloroethane	ND		0.001	1		03/22/01 5:29	CJ	611598
1,1-Dichloroethene	ND		0.001	1		03/22/01 5:29	CJ	611598
1,2-Dichlorobenzene	ND		0.001	1		03/22/01 5:29	CJ	611598
1,2-Dichloroethane	ND		0.001	1		03/22/01 5:29	CJ	611598
1,2-Dichloropropane	ND		0.001	1		03/22/01 5:29	CJ	611598
1,3-Dichlorobenzene	ND		0.002	1		03/22/01 5:29	CJ	611598
1,4-Dichlorobenzene	ND		0.002	1		03/22/01 5:29	CJ	611598
Bromodichloromethane	ND		0.001	1		03/22/01 5:29	CJ	611598
Bromoform	ND		0.001	1		03/22/01 5:29	CJ	611598
Bromomethane	ND		0.001	1		03/22/01 5:29	CJ	611598
Carbon tetrachloride	ND		0.001	1		03/22/01 5:29	CJ	611598
Chlorobenzene	ND		0.001	1		03/22/01 5:29	CJ	611598
Chloroethane	ND		0.001	1		03/22/01 5:29	CJ	611598
Chloroform	ND		0.001	1		03/22/01 5:29	CJ	611598
Chloromethane	ND		0.001	1		03/22/01 5:29	CJ	611598
cis-1,2-Dichloroethene	ND		0.001	1		03/22/01 5:29	CJ	611598
cis-1,3-Dichloropropene	ND		0.001	1		03/22/01 5:29	CJ	611598
Dibromochloromethane	ND		0.001	1		03/22/01 5:29	CJ	611598
Dichlorodifluoromethane	ND		0.001	1		03/22/01 5:29	CJ	611598
Methylene chloride	ND		0.002	1		03/22/01 5:29	CJ	611598
Tetrachloroethene	ND		0.001	1		03/22/01 5:29	CJ	611598
trans-1,2-Dichloroethene	ND		0.001	1		03/22/01 5:29	CJ	611598
trans-1,3-Dichloropropene	ND		0.001	1		03/22/01 5:29	CJ	611598
Trichloroethene	ND		0.001	1		03/22/01 5:29	CJ	611598
Trichlorofluoromethane	ND		0.001	1		03/22/01 5:29	CJ	611598
Vinyl chloride	ND		0.001	1		03/22/01 5:29	CJ	611598
Surr: 3-Bromochlorobenzene	102	%	50-150	1		03/22/01 5:29	CJ	611598
METALS BY METHOD 6010B, TOTAL			**MCL**	**SW6010B**		**Units: mg/Kg**		
Lead	8.11		0.5	1		03/22/01 19:43	NS	612223

Prep Method	Prep Date	Prep Initials
SW3050B	03/21/2001 9:30	MW

Sonia West

Sonia West
Project Manager

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID SP-1 (1-4)-MW8-COMP **Collected:** 3/16/01 5:00:00 **SPL Sample ID:** 01030603-03

Site: 7-3567

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: mg/Kg**		
Benzene	ND		0.001	1		03/21/01 17:30	FB	610685
Ethylbenzene	ND		0.001	1		03/21/01 17:30	FB	610685
Methyl tert-butyl ether	0.0022		0.001	1		03/21/01 17:30	FB	610685
Toluene	ND		0.001	1		03/21/01 17:30	FB	610685
m,p-Xylene	0.001		0.001	1		03/21/01 17:30	FB	610685
o-Xylene	ND		0.001	1		03/21/01 17:30	FB	610685
Xylenes,Total	0.001		0.001	1		03/21/01 17:30	FB	610685
Surr: 1,4-Difluorobenzene	91.6	%	59-127	1		03/21/01 17:30	FB	610685
Surr: 4-Bromofluorobenzene	110	%	48-156	1		03/21/01 17:30	FB	610685

Sonia West

Sonia West
Project Manager

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J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

Quality Control Documentation

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

243103x

Analysis: Diesel Range Organics
Method: CA_DRO

WorkOrder: 01030603
Lab Batch ID: 11063

Method Blank

RunID: HP_V_010326C-617646 Units: mg/Kg
Analysis Date: 03/26/2001 16:35 Analyst: AM
Preparation Date: 03/21/2001 10:48 Prep By: EE Method SW3550B

Analyte	Result	Rep Limit
Diesel Range Organics	ND	2.0
Surr: n-Pentacosane	95.2	20-154

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01030603-01A	S-15-MW8
01030603-02A	S-30-MW8
01030603-03A	SP-1 (1-4)-MW8-COMP

Laboratory Control Sample (LCS)

RunID: HP_V_010326C-617648 Units: mg/Kg
Analysis Date: 03/26/2001 17:13 Analyst: AM
Preparation Date: 03/21/2001 10:48 Prep By: EE Method SW3550B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Diesel Range Organics	83.3	68	82	50	150

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01030601-01
RunID: HP_V_010326C-617653 Units: mg/Kg
Analysis Date: 03/26/2001 18:30 Analyst: AM
Preparation Date: 03/21/2001 10:48 Prep By: EE Method SW3550B

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Diesel Range Organics	ND	83.3	63	74.9	83.3	67	79.4	5.91	50	21	175

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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HOUSTON, TEXAS 77054
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Quality Control Report

EXXON Company U.S.A.

243103x

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 01030603
Lab Batch ID: R31939

Method Blank

RunID: HP_J_010321A-610682 Units: ug/Kg
Analysis Date: 03/21/2001 16:04 Analyst: FB

Analyte	Result	Rep Limit
Benzene	ND	1.0
Ethylbenzene	ND	1.0
Methyl tert-butyl ether	ND	1.0
Toluene	ND	1.0
m,p-Xylene	ND	1.0
o-Xylene	ND	1.0
Xylenes,Total	ND	1.0
Surr: 1,4-Difluorobenzene	88.3	59-127
Surr: 4-Bromofluorobenzene	97.7	48-156

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01030603-01A	S-15-MW8
01030603-02A	S-30-MW8
01030603-03A	SP-1 (1-4)-MW8-COMP

Laboratory Control Sample (LCS)

RunID: HP_J_010321A-610679 Units: ug/Kg
Analysis Date: 03/21/2001 12:03 Analyst: FB

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	50	52	104	60	120
Ethylbenzene	50	53	105	68	127
Methyl tert-butyl ether	50	54	108	64	126
Toluene	50	52	105	64	122
m,p-Xylene	100	100	105	68	129
o-Xylene	50	53	107	68	127
Xylenes,Total	150	153	102	68	129

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01030603-01
RunID: HP_J_010321A-610680 Units: ug/Kg
Analysis Date: 03/21/2001 14:09 Analyst: FB

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	ND	20	19	92.6	20	19	93.6	1.02	34	35	139
Ethylbenzene	ND	20	17	86.1	20	17	85.8	0.337	35	31	137
Methyl tert-butyl ether	ND	20	21	99.2	20	20	97.8	1.44	22	27	196

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

243103x

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 01030603
Lab Batch ID: R31939

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01030603-01
RunID: HP_J_010321A-610680 Units: ug/Kg
Analysis Date: 03/21/2001 14:09 Analyst: FB

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Toluene	ND	20	18	89.3	20	18	89.7	0.518	28	31	137
m,p-Xylene	ND	40	34	83.8	40	34	83.8	0.0137	38	19	144
o-Xylene	ND	20	17	86.1	20	17	86.4	0.254	57	25	139
Xylenes,Total	ND	60	51	85.0	60	51	85.0	0	38	19	144

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

243103x

Analysis: Gasoline Range Organics
Method: CA_GRO

WorkOrder: 01030603
Lab Batch ID: R31940

Method Blank

RunID: HP_J_010321B-610695 Units: mg/Kg
Analysis Date: 03/21/2001 16:04 Analyst: FB

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	1.0
Surr: 1,4-Difluorobenzene	91.0	72-153
Surr: 4-Bromofluorobenzene	102.0	51-149

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01030603-01A	S-15-MW8
01030603-02A	S-30-MW8
01030603-03A	SP-1 (1-4)-MW8-COMP

Laboratory Control Sample (LCS)

RunID: HP_J_010321B-610692 Units: mg/Kg
Analysis Date: 03/21/2001 12:32 Analyst: FB

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	0.61	61	53	137

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01030603-01
RunID: HP_J_010321B-610693 Units: mg/Kg
Analysis Date: 03/21/2001 15:06 Analyst: FB

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Gasoline Range Organics	ND	0.9	0.62	68.7	0.9	0.46	50.6	30.3	50	36	163

Qualifiers:

ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

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8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

243103x

Analysis: Halogenated Volatiles Organic Compounds **WorkOrder:** 01030603
Method: SW8010B **Lab Batch ID:** R31984

Method Blank

RunID: HP_X_010322B-611596 Units: ug/Kg
Analysis Date: 03/22/2001 4:12 Analyst: CJ

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01030603-03A	SP-1 (1-4)-MW8-COMP

Analyte	Result	Rep Limit
1,1,1-Trichloroethane	ND	1.0
1,1,2,2-Tetrachloroethane	ND	2.0
1,1,2-Trichloroethane	ND	1.0
1,1-Dichloroethane	ND	1.0
1,1-Dichloroethene	ND	1.0
1,2-Dichlorobenzene	ND	1.0
1,2-Dichloroethane	ND	1.0
1,2-Dichloropropane	ND	1.0
1,3-Dichlorobenzene	ND	2.0
1,4-Dichlorobenzene	ND	2.0
Bromodichloromethane	ND	1.0
Bromoform	ND	1.0
Bromomethane	ND	1.0
Carbon tetrachloride	ND	1.0
Chlorobenzene	ND	1.0
Chloroethane	ND	1.0
Chloroform	ND	1.0
Chloromethane	ND	1.0
cis-1,2-Dichloroethene	ND	1.0
cis-1,3-Dichloropropene	ND	1.0
Dibromochloromethane	ND	1.0
Dichlorodifluoromethane	ND	1.0
Methylene chloride	ND	2.0
Tetrachloroethene	ND	1.0
trans-1,2-Dichloroethene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
Trichloroethene	ND	1.0
Trichlorofluoromethane	ND	1.0
Vinyl chloride	ND	1.0
Surr: 3-Bromochlorobenzene	98.2	50-150

Laboratory Control Sample (LCS)

RunID: HP_X_010322B-611593 Units: ug/Kg
Analysis Date: 03/22/2001 0:59 Analyst: CJ

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1,1-Trichloroethane	20	20	102	70	130
1,1,2,2-Tetrachloroethane	20	18	92	70	130
1,1,2-Trichloroethane	20	21	107	70	130
1,1-Dichloroethane	20	21	106	70	130
1,1-Dichloroethene	20	20	100	70	130
1,2-Dichlorobenzene	20	19	96	70	130

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

243103x

Analysis: Halogenated Volatiles Organic Compounds
Method: SW8010B
WorkOrder: 01030603
Lab Batch ID: R31984

Laboratory Control Sample (LCS)

RunID: HP_X_010322B-611593 Units: ug/Kg
Analysis Date: 03/22/2001 0:59 Analyst: CJ

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,2-Dichloroethane	20	20	100	70	130
1,2-Dichloropropane	20	20	100	70	130
1,3-Dichlorobenzene	20	19	94	70	130
1,4-Dichlorobenzene	20	19	96	70	130
Bromodichloromethane	20	20	102	70	130
Bromoform	20	18	89	70	130
Bromomethane	20	20	100	70	130
Carbon tetrachloride	20	21	105	70	130
Chlorobenzene	20	21	103	70	130
Chloroethane	20	19	97	70	130
Chloroform	20	22	110	70	130
Chloromethane	20	20	99	70	130
cis-1,2-Dichloroethene	20	22	109	70	130
cis-1,3-Dichloropropene	20	24	119	70	130
Dibromochloromethane	20	22	108	70	130
Dichlorodifluoromethane	20	19	97	70	130
Methylene chloride	20	20	99	70	130
Tetrachloroethene	20	21	106	70	130
trans-1,2-Dichloroethene	20	20	102	70	130
trans-1,3-Dichloropropene	20	22	109	70	130
Trichloroethene	20	20	102	70	130
Trichlorofluoromethane	20	20	102	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01030597-01
RunID: HP_X_010322B-611594 Units: ug/Kg
Analysis Date: 03/22/2001 1:37 Analyst: CJ

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,1,1-Trichloroethane	ND	20	16	81.2	20	19	94.9	15.6	30	50	150
1,1,2,2-Tetrachloroethane	ND	20	13	65.3	20	16	81.8	22.5	30	50	150
1,2-Trichloroethane	ND	20	18	91.2	20	18	91.6	0.470	30	50	150

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

243103x

Analysis: Halogenated Volatiles Organic Compounds
Method: SW8010B
WorkOrder: 01030603
Lab Batch ID: R31984

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01030597-01
RunID: HP_X_010322B-611594 Units: ug/Kg
Analysis Date: 03/22/2001 1:37 Analyst: CJ

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,1-Dichloroethane	ND	20	18	87.7	20	18	91.9	4.66	30	50	150
1,1-Dichloroethene	ND	20	16	78.4	20	17	85.6	8.75	30	50	150
1,2-Dichlorobenzene	ND	20	10	52.2	20	12	57.7	10.0	30	50	150
1,2-Dichloroethane	ND	20	17	87.4	20	20	98.5	11.9	30	50	150
1,2-Dichloropropane	ND	20	17	86.2	20	18	90.4	4.66	30	50	150
1,3-Dichlorobenzene	ND	20	9.9	49.5 *	20	11	55.5	11.6	30	50	150
1,4-Dichlorobenzene	ND	20	10	51.0	20	12	58.3	13.4	30	50	150
Bromodichloromethane	ND	20	16	82.4	20	17	86.2	4.54	30	50	150
Bromoform	ND	20	15	73.6	20	17	82.7	11.6	30	50	150
Bromomethane	ND	20	16	80.5	20	17	86.6	7.31	30	50	150
Carbon tetrachloride	ND	20	15	76.2	20	17	86.3	12.5	30	50	150
Chlorobenzene	ND	20	14	69.9	20	16	78.4	11.6	30	50	150
Chloroethane	ND	20	17	84.9	20	19	93.4	9.47	30	50	150
Chloroform	ND	20	18	90.0	20	18	89.7	0.354	30	50	150
Chloromethane	ND	20	17	85.9	20	18	88.3	2.73	30	50	150
cis-1,2-Dichloroethene	ND	20	17	86.1	20	18	90.1	4.59	30	50	150
cis-1,3-Dichloropropene	ND	20	15	74.0	20	15	75.5	1.95	30	50	150
Dibromochloromethane	ND	20	18	87.9	20	17	86.0	2.21	30	50	150
Dichlorodifluoromethane	ND	20	15	75.9	20	18	92.0	19.1	30	50	150
Methylene chloride	ND	20	17	86.8	20	18	88.5	1.98	30	50	150
Tetrachloroethene	ND	20	13	65.7	20	15	76.6	15.4	30	50	150
trans-1,2-Dichloroethene	ND	20	17	86.1	20	18	89.3	3.70	30	50	150
trans-1,3-Dichloropropene	ND	20	14	71.2	20	15	73.8	3.47	30	50	150
Trichloroethene	ND	20	17	84.0	20	18	88.1	4.81	30	50	150
Trichlorofluoromethane	ND	20	15	75.3	20	18	87.9	15.5	30	50	150

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

243103x

Analysis: **Metals by Method 6010B, Total** WorkOrder: 01030603
Method: **SW6010B** Lab Batch ID: 11064-T

Method Blank

RunID: TJAT_010322C-612221 Units: mg/Kg
Analysis Date: 03/22/2001 19:31 Analyst: NS
Preparation Date: 03/21/2001 9:30 Prep By: MW Method SW3050B

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01030603-03A	SP-1 (1-4)-MW8-COMP

Analyte	Result	Rep Limit
Lead	ND	0.5

Laboratory Control Sample (LCS)

RunID: TJAT_010322C-612222 Units: mg/Kg
Analysis Date: 03/22/2001 19:36 Analyst: NS
Preparation Date: 03/21/2001 9:30 Prep By: MW Method SW3050B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Lead	138	130	N/A	105	170

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01030603-03
RunID: TJAT_010322C-612224 Units: mg/Kg
Analysis Date: 03/22/2001 19:48 Analyst: NS
Preparation Date: 03/21/2001 9:30 Prep By: MW Method SW3050B

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Lead	8.1	100	96.8	88.7	100	95.8	87.7	1.09	20	75	125

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

Sample Receipt Checklist

And

Chain of Custody

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Sample Receipt Checklist

Workorder:	01030603	Received By:	DS
Date and Time Received:	3/20/01 11:14:15 AM	Carrier name:	FedEx
Temperature:	3	Chilled by:	Water Ice

1.	**Shipping container/cooler in good condition?**	Yes ☑	No ☐	Not Present ☐	
2.	**Custody seals intact on shippping container/cooler?**	Yes ☐	No ☐	Not Present ☑	
3.	**Custody seals intact on sample bottles?**	Yes ☐	No ☐	Not Present ☑	
4.	**Chain of custody present?**	Yes ☑	No ☐		
5.	**Chain of custody signed when relinquished and received?**	Yes ☑	No ☐		
6.	**Chain of custody agrees with sample labels?**	Yes ☑	No ☐		
7.	Samples in proper container/bottle?	Yes ☑	No ☐		
8.	Sample containers intact?	Yes ☑	No ☐		
9.	**Sufficient sample volume for indicated test?**	Yes ☑	No ☐		
10.	**All samples received within holding time?**	Yes ☑	No ☐		
11.	Container/Temp Blank temperature in compliance?	Yes ☑	No ☐		
12.	**Water - VOA vials have zero headspace?**	Yes ☐	No ☐	Not Applicable ☑	
13.	**Water - pH acceptable upon receipt?**	Yes ☐	No ☐	Not Applicable ☑	

SPL Representative: _____ **Contact Date & Time:** _____

Client Name Contacted: _____

Non Conformance Issues: _____

Client Instructions: _____

[redacted] **EXXON COMPANY, USA.** [redacted] (West Coast)

C[redacted] OF CUSTODY RECORD NO: [redacted] Page 1 of 1

Exxon Engineer: Gene Ortega Phone: (925) 246-8747

Consultant Co. Name: Environmental Resolutions Inc Contact: James Chappell

Address: 73 Digital Drive suite 100, Novato, CA, 94949 Fax: (415) 382-1856

RAS #: 7-3567 Facility/State ID # (TN Only):

AFE # (Terminal Only): Consultant Project #: 243103X

Location: 3192 Santa Rita Road (City) Pleasanton (State) CA

[ ] EE [ ] C&M [ ] SDT

Consultant Work Release #: 21011095

Sampled By: Tom C.

ANALYSIS REQUEST: (CHECK APPROPRIATE BOX) — OTHER

SAMPLE I.D.	DATE	TIME	COMP	GRAB	MATRIX H2O	MATRIX SOIL	MATRIX AIR	OTHER	PRESERVATIVE	NO. OF CONTAINERS	CONTAINER SIZE	TPH/GC 8015 GRO ☒ 8015 DRO ☒	BTEX 8020 ☒ 602 ☐	MTBE 8020 ☒ 8260 ☐	OXYGENATES (7) 8260 ☐ 8260 ☐	O&G IR 413.1 ☐ GRAV 413.2 ☐	VOL 8260 ☐ 624 ☐	SEMI-VOL 8270 ☐ 625 ☐	PNA/PAH 8100 ☐ 8310 ☐ 8270 ☐	PCB/PEST 8081/8082 ☐ PCB ONLY ☐	TCLP FULL ☐ VOA ☐ SEMI-VOA ☐ PEST ☐ HERB ☐	METALS, TOTAL ☐ METALS, TCLP ☐	LEAD TOTAL 239.1 ☐ 7421 ☐ LEAD TCLP ☐	LEAD DISSOLVED ☐ LEAD TOTAL ☒	REACTIVITY ☐ CORROSIVITY ☐ FLASH POINT ☐	PURGEABLE HYDROCARBON 8010 ☒ 601 ☐	TPH/IR 418.1 ☐	TOX/TOH ☐	
S-15-MW8	3-16-01	12:36		X		X			ice	1	sleeve	X	X	X															
S-30-MW8	↓	13:08		X		↓			↓	1	↓	↓	↓	↓															
SP1-(1-4)-MW8	↓	17:00	X			↓			↓	4	↓	↓	↓	↓										X		X			

TAT

24 HR. ___* 72 HR. ___*

48 HR. ___* 96 HR. ___*

8 Business ✓ *Contact US Prior to Sending Sample

Other ___

EXXON UST CONTRACT NO. C41483

SPECIAL DETECTION LIMITS (Specify)

REMARKS: Composite SP1-(1-4) please

SPECIAL REPORTING REQUIREMENTS (Specify)

PDF [ ] [ ] EDD

FAX [ ] [ ] FAX C-O-C W/REPORT

LAB USE ONLY Lot # Storage Location

3°

QA/QC Level: Standard ☒ CLP [ ] Other [ ]

WORK ORDER #: 61030603 LAB WORK RELEASE #:

CUSTODY RECORD

Relinquished By Sampler:	Date	Time	Received By:
Tom C.	3-19-01	1:40	
Relinquished:	Date	Time	Received By:
Relinquished:	Date	Time	Received By: D'Anne Stilley 3/20/01
			Way Bill #: Cooler Temp:

Triplicate: Original - White Lab's Copy - Green Client Copy - Yellow

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

EXXON Company U.S.A.

Certificate of Analysis Number:

01040402

Report To:		Project Name:	243113x
Environmental Resolution, Inc.		Site:	7-3567
Scott Graham		Site Address:	3192 Santa Rita Rd.
73 Digital Drive Suite 100			Pleasanton CA
Novato		PO Number:	EWR#21040350
California		State:	California
94949-		State Cert. No.:	1903
ph: (415) 382-9105	fax: (415) 382-1856	Date Reported:	4/26/01

This Report Contains A Total Of 20 Pages

Excluding This Page

And

Chain Of Custody

4/26/01

Date

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Case Narrative for:

EXXON Company U.S.A.

Certificate of Analysis Number:

01040402

Report To:		Project Name:	243113x	
Environmental Resolution, Inc.		Site:	7-3567	
Scott Graham		Site Address:	3192 Santa Rita Rd.	
73 Digital Drive Suite 100			Pleasanton	CA
Novato		PO Number:	EWR#21040350	
California		State:	California	
94949-		State Cert. No.:		
ph: (415) 382-9105	fax: (415) 382-1856	Date Reported:	4/26/01	

One of the two 32oz containers for your sample "W-19-MW1" (SPL ID: 01040402-06) was received broken. However, there was sufficient sample volume received intact for analysis.

Please note that all samples for Diesel Range Organics had a Silica Gel Clean-up performed prior to analysis. Also, your sample "W-24-MW7" (SPL ID: 01040402-04) was analyzed for BTEX and MTBE by SW846 method 8021B at a dilution due to matrix interference (foaming sample).

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Sonia West

West, Sonia
Senior Project Manager

4/26/01
Date

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

EXXON Company U.S.A.

Certificate of Analysis Number:

01040402

Report To: Environmental Resolution, Inc.
Scott Graham
73 Digital Drive Suite 100

Novato
California
94949-
ph: (415) 382-9105 fax: (415) 382-1856

Fax To: Environmental Resolution, Inc.
Scott Graham fax : (415) 382-1856

Project Name: 243113x
Site: 7-3567
Site Address: 3192 Santa Rita Rd.
Pleasanton CA
PO Number: EWR#21040350
State: California
State Cert. No.: 1903
Date Reported: 4/26/01

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
B 3/30/01	01040402-01	Water	4/11/01	4/13/01 9:30:00 AM		☐
V-BB-MW2	01040402-02	Water	4/11/01 2:14:00 PM	4/13/01 9:30:00 AM		☐
W-BB-MW2	01040402-02	Water	4/11/01 2:14:00 PM	4/13/01 9:30:00 AM		☑
V-31-MW2	01040402-03	Water	4/11/01 2:16:00 PM	4/13/01 9:30:00 AM		☐
V-31-MW2	01040402-03	Water	4/11/01 2:16:00 PM	4/13/01 9:30:00 AM		☑
W-24-MW7	01040402-04	Water	4/11/01 2:31:00 PM	4/13/01 9:30:00 AM		☐
W-24-MW7	01040402-04	Water	4/11/01 2:31:00 PM	4/13/01 9:30:00 AM		☑
V-33-MW4	01040402-05	Water	4/11/01 2:47:00 PM	4/13/01 9:30:00 AM		☐
W-19-MW1	01040402-06	Water	4/11/01 2:56:00 PM	4/13/01 9:30:00 AM		☐
W-38-MW3	01040402-07	Water	4/11/01 3:08:00 PM	4/13/01 9:30:00 AM		☐

Sonia West 4/26/01

onia West Date
Senior Project Manager

Joel Grice
Laboratory Director

Ted Yen
Quality Assurance Officer

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID TB 3/30/01 **Collected:** 4/11/01 **SPL Sample ID:** 01040402-01

Site: 7-3567

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		50	1		04/14/01 14:10	D_R	638091
Surr: 1,4-Difluorobenzene	102	%	62-144	1		04/14/01 14:10	D_R	638091
Surr: 4-Bromofluorobenzene	95.7	%	44-153	1		04/14/01 14:10	D_R	638091
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		0.5	1		04/14/01 14:10	D_R	637981
Ethylbenzene	ND		0.5	1		04/14/01 14:10	D_R	637981
Methyl tert-butyl ether	ND		2	1		04/14/01 14:10	D_R	637981
Toluene	ND		0.5	1		04/14/01 14:10	D_R	637981
m,p-Xylene	ND		0.5	1		04/14/01 14:10	D_R	637981
o-Xylene	ND		0.5	1		04/14/01 14:10	D_R	637981
Xylenes,Total	ND		0.5	1		04/14/01 14:10	D_R	637981
Surr: 1,4-Difluorobenzene	101	%	72-137	1		04/14/01 14:10	D_R	637981
Surr: 4-Bromofluorobenzene	95.9	%	48-156	1		04/14/01 14:10	D_R	637981

Sonia West

Sonia West
Project Manager

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID W-BB-MW2 **Collected:** 4/11/01 2:14:00 **SPL Sample ID:** 01040402-02

Site: 7-3567

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS				**MCL**	**CA_DRO**	**Units: ug/L**		
Diesel Range Organics	800		50	1		04/20/01 19:59	AM	648608
Surr: n-Pentacosane	121	%	20-150	1		04/20/01 19:59	AM	648608

Prep Method	Prep Date	Prep Initials
SW3510B	04/13/2001 10:12	KL

GASOLINE RANGE ORGANICS				**MCL**	**CA_GRO**	**Units: ug/L**		
Gasoline Range Organics	ND		50		1	04/14/01 14:38	D_R	638092
Surr: 1,4-Difluorobenzene	100	%	62-144		1	04/14/01 14:38	D_R	638092
Surr: 4-Bromofluorobenzene	97.0	%	44-153		1	04/14/01 14:38	D_R	638092
PURGEABLE AROMATICS				**MCL**	**SW8021B**	**Units: ug/L**		
Benzene	ND		0.5		1	04/14/01 14:38	D_R	637985
Ethylbenzene	ND		0.5		1	04/14/01 14:38	D_R	637985
Methyl tert-butyl ether	ND		2		1	04/14/01 14:38	D_R	637985
Toluene	ND		0.5		1	04/14/01 14:38	D_R	637985
m,p-Xylene	ND		0.5		1	04/14/01 14:38	D_R	637985
o-Xylene	ND		0.5		1	04/14/01 14:38	D_R	637985
Xylenes,Total	ND		0.5		1	04/14/01 14:38	D_R	637985
Surr: 1,4-Difluorobenzene	101	%	72-137		1	04/14/01 14:38	D_R	637985
Surr: 4-Bromofluorobenzene	97.3	%	48-156		1	04/14/01 14:38	D_R	637985

Sonia West

Sonia West
Project Manager

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID W-31-MW2 **Collected:** 4/11/01 2:16:00 **SPL Sample ID:** 01040402-03

Site: 7-3567

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS				**MCL**	**CA_DRO**	**Units: ug/L**		
Diesel Range Organics	760		50	1		04/20/01 20:38	AM	648609
Surr: n-Pentacosane	113	%	20-150	1		04/20/01 20:38	AM	648609

Prep Method	Prep Date	Prep Initials
SW3510B	04/13/2001 10:12	KL

GASOLINE RANGE ORGANICS				**MCL**	**CA_GRO**	**Units: ug/L**		
Gasoline Range Organics	ND		50		1	04/15/01 11:24	D_R	638220
Surr: 1,4-Difluorobenzene	101	%	62-144		1	04/15/01 11:24	D_R	638220
Surr: 4-Bromofluorobenzene	99.7	%	44-153		1	04/15/01 11:24	D_R	638220
PURGEABLE AROMATICS				**MCL**	**SW8021B**	**Units: ug/L**		
Benzene	ND		0.5		1	04/16/01 13:18	D_R	638713
Ethylbenzene	ND		0.5		1	04/16/01 13:18	D_R	638713
Methyl tert-butyl ether	ND		2		1	04/16/01 13:18	D_R	638713
Toluene	1.4		0.5		1	04/16/01 13:18	D_R	638713
m,p-Xylene	ND		0.5		1	04/16/01 13:18	D_R	638713
o-Xylene	ND		0.5		1	04/16/01 13:18	D_R	638713
Xylenes,Total	ND		0.5		1	04/16/01 13:18	D_R	638713
Surr: 1,4-Difluorobenzene	101	%	72-137		1	04/16/01 13:18	D_R	638713
Surr: 4-Bromofluorobenzene	97.1	%	48-156		1	04/16/01 13:18	D_R	638713

Sonia West

Sonia West
Project Manager

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID W-24-MW7 **Collected:** 4/11/01 2:31:00 **SPL Sample ID:** 01040402-04

Site: 7-3567

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS				**MCL**	**CA_DRO**	**Units: ug/L**		
Diesel Range Organics	980		50	1		04/20/01 22:33	AM	648612
Surr: n-Pentacosane	80.8	%	20-150	1		04/20/01 22:33	AM	648612

Prep Method	Prep Date	Prep Initials
SW3510B	04/13/2001 10:12	KL

GASOLINE RANGE ORGANICS				**MCL**	**CA_GRO**	**Units: ug/L**		
Gasoline Range Organics	ND		250		5	04/15/01 11:51	D_R	638221
Surr: 1,4-Difluorobenzene	101	%	62-144		5	04/15/01 11:51	D_R	638221
Surr: 4-Bromofluorobenzene	97.4	%	44-153		5	04/15/01 11:51	D_R	638221
PURGEABLE AROMATICS				**MCL**	**SW8021B**	**Units: ug/L**		
Benzene	ND		2.5		5	04/15/01 11:51	D_R	638147
Ethylbenzene	ND		2.5		5	04/15/01 11:51	D_R	638147
Methyl tert-butyl ether	ND		10		5	04/15/01 11:51	D_R	638147
Toluene	ND		2.5		5	04/15/01 11:51	D_R	638147
m,p-Xylene	ND		2.5		5	04/15/01 11:51	D_R	638147
o-Xylene	ND		2.5		5	04/15/01 11:51	D_R	638147
Xylenes,Total	ND		2.5		5	04/15/01 11:51	D_R	638147
Surr: 1,4-Difluorobenzene	100	%	72-137		5	04/15/01 11:51	D_R	638147
Surr: 4-Bromofluorobenzene	98.5	%	48-156		5	04/15/01 11:51	D_R	638147

Sonia West

Sonia West
Project Manager

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MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID W-33-MW4 **Collected:** 4/11/01 2:47:00 **SPL Sample ID:** 01040402-05

Site: 7-3567

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS			**MCL**	**CA_DRO**		**Units: ug/L**		
Diesel Range Organics	870		50	1		04/20/01 23:12	AM	648613
Surr: n-Pentacosane	98.6	%	20-150	1		04/20/01 23:12	AM	648613

Prep Method	Prep Date	Prep Initials
SW3510B	04/13/2001 10:12	KL

GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		50	1		04/15/01 12:18	D_R	638222
Surr: 1,4-Difluorobenzene	105	%	62-144	1		04/15/01 12:18	D_R	638222
Surr: 4-Bromofluorobenzene	99.3	%	44-153	1		04/15/01 12:18	D_R	638222
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		0.5	1		04/15/01 12:18	D_R	638148
Ethylbenzene	ND		0.5	1		04/15/01 12:18	D_R	638148
Methyl tert-butyl ether	3.6		2	1		04/15/01 12:18	D_R	638148
Toluene	0.56		0.5	1		04/15/01 12:18	D_R	638148
m,p-Xylene	ND		0.5	1		04/15/01 12:18	D_R	638148
o-Xylene	ND		0.5	1		04/15/01 12:18	D_R	638148
Xylenes, Total	ND		0.5	1		04/15/01 12:18	D_R	638148
Surr: 1,4-Difluorobenzene	101	%	72-137	1		04/15/01 12:18	D_R	638148
Surr: 4-Bromofluorobenzene	97.9	%	48-156	1		04/15/01 12:18	D_R	638148
VOLATILE ORGANICS BY METHOD 8260B			**MCL**	**SW8260B**		**Units: ug/L**		
Methyl tert-butyl ether	14		5	1		04/19/01 8:06	LT	643638
Surr: 1,2-Dichloroethane-d4	110	%	62-119	1		04/19/01 8:06	LT	643638
Surr: 4-Bromofluorobenzene	98.0	%	78-123	1		04/19/01 8:06	LT	643638
Surr: Toluene-d8	112	%	74-122	1		04/19/01 8:06	LT	643638

Sonia West

Sonia West
Project Manager

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HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID W-19-MW1 **Collected:** 4/11/01 2:56:00 **SPL Sample ID:** 01040402-06

Site: 7-3567

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS			**MCL**	**CA_DRO**		**Units: ug/L**		
Diesel Range Organics	960		50	1		04/20/01 23:50	AM	648614
Surr: n-Pentacosane	112	%	20-150	1		04/20/01 23:50	AM	648614

Prep Method	Prep Date	Prep Initials
SW3510B	04/13/2001 10:12	KL

GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		50	1		04/16/01 11:50	D_R	638718
Surr: 1,4-Difluorobenzene	98.3	%	62-144	1		04/16/01 11:50	D_R	638718
Surr: 4-Bromofluorobenzene	95.3	%	44-153	1		04/16/01 11:50	D_R	638718
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		0.5	1		04/16/01 11:50	D_R	638711
Ethylbenzene	ND		0.5	1		04/16/01 11:50	D_R	638711
Methyl tert-butyl ether	29		2	1		04/16/01 11:50	D_R	638711
Toluene	ND		0.5	1		04/16/01 11:50	D_R	638711
m,p-Xylene	ND		0.5	1		04/16/01 11:50	D_R	638711
o-Xylene	ND		0.5	1		04/16/01 11:50	D_R	638711
Xylenes,Total	ND		0.5	1		04/16/01 11:50	D_R	638711
Surr: 1,4-Difluorobenzene	100	%	72-137	1		04/16/01 11:50	D_R	638711
Surr: 4-Bromofluorobenzene	96.0	%	48-156	1		04/16/01 11:50	D_R	638711
VOLATILE ORGANICS BY METHOD 8260B			**MCL**	**SW8260B**		**Units: ug/L**		
Methyl tert-butyl ether	33		5	1		04/19/01 8:34	LT	643639
Surr: 1,2-Dichloroethane-d4	108	%	62-119	1		04/19/01 8:34	LT	643639
Surr: 4-Bromofluorobenzene	98.0	%	78-123	1		04/19/01 8:34	LT	643639
Surr: Toluene-d8	112	%	74-122	1		04/19/01 8:34	LT	643639

Sonia West

Sonia West
Project Manager

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>MCL - Result Over Maximum Contamination Limit(MCL)
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MI - Matrix Interference

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Client Sample ID W-38-MW3 **Collected:** 4/11/01 3:08:00 **SPL Sample ID:** 01040402-07

Site: 7-3567

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
DIESEL RANGE ORGANICS			**MCL**	**CA_DRO**		**Units: ug/L**		
Diesel Range Organics	1000		50	1		04/21/01 0:29	AM	648615
Surr: n-Pentacosane	110	%	20-150	1		04/21/01 0:29	AM	648615

Prep Method	Prep Date	Prep Initials
SW3510B	04/13/2001 10:12	KL

GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: ug/L**		
Gasoline Range Organics	ND		50	1		04/16/01 12:43	D_R	638719
Surr: 1,4-Difluorobenzene	103	%	62-144	1		04/16/01 12:43	D_R	638719
Surr: 4-Bromofluorobenzene	96.7	%	44-153	1		04/16/01 12:43	D_R	638719
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: ug/L**		
Benzene	ND		0.5	1		04/16/01 12:43	D_R	638712
Ethylbenzene	ND		0.5	1		04/16/01 12:43	D_R	638712
Methyl tert-butyl ether	240		2	1		04/16/01 12:43	D_R	638712
Toluene	ND		0.5	1		04/16/01 12:43	D_R	638712
m,p-Xylene	ND		0.5	1		04/16/01 12:43	D_R	638712
o-Xylene	ND		0.5	1		04/16/01 12:43	D_R	638712
Xylenes,Total	ND		0.5	1		04/16/01 12:43	D_R	638712
Surr: 1,4-Difluorobenzene	102	%	72-137	1		04/16/01 12:43	D_R	638712
Surr: 4-Bromofluorobenzene	96.9	%	48-156	1		04/16/01 12:43	D_R	638712
VOLATILE ORGANICS BY METHOD 8260B			**MCL**	**SW8260B**		**Units: ug/L**		
Methyl tert-butyl ether	280		25	5		04/19/01 6:45	LT	643635
Surr: 1,2-Dichloroethane-d4	112	%	62-119	5		04/19/01 6:45	LT	643635
Surr: 4-Bromofluorobenzene	96.0	%	78-123	5		04/19/01 6:45	LT	643635
Surr: Toluene-d8	112	%	74-122	5		04/19/01 6:45	LT	643635

Sonia West

Sonia West
Project Manager

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
* - Surrogate Recovery Outside Advisable QC Limits
J - Estimated Value between MDL and PQL
>MCL - Result Over Maximum Contamination Limit(MCL)
D - Surrogate Recovery Unreportable due to Dilution
MI - Matrix Interference

Quality Control Documentation

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

243113x

Analysis: Diesel Range Organics
Method: CA_DRO

WorkOrder: 01040402
Lab Batch ID: 11549

Method Blank

RunID: HP_V_010420B-648606 Units: mg/L
Analysis Date: 04/20/2001 18:42 Analyst: AM
Preparation Date: 04/13/2001 10:12 Prep By: KL Method SW3510B

Analyte	Result	Rep Limit
Diesel Range Organics	ND	0.050
Surr: n-Pentacosane	92.6	20-150

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01040402-02C	W-BB-MW2
01040402-03C	W-31-MW2
01040402-04C	W-24-MW7
01040402-05C	W-33-MW4
01040402-06C	W-19-MW1
01040402-07C	W-38-MW3

Laboratory Control Sample (LCS)

RunID: HP_V_010420B-648607 Units: mg/L
Analysis Date: 04/20/2001 19:21 Analyst: AM
Preparation Date: 04/13/2001 10:12 Prep By: KL Method SW3510B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Diesel Range Organics	2.5	2.1	83	21	175

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01040402-03
RunID: HP_V_010420B-648610 Units: mg/L
Analysis Date: 04/20/2001 21:16 Analyst: AM
Preparation Date: 04/13/2001 10:12 Prep By: KL Method SW3510B

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Diesel Range Organics	0.76	1.25	0.23	-42.0 *	1.25	0.081	-54.0 *	25.0 *	20	21	175

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

243113x

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 01040402
Lab Batch ID: R33386

Method Blank

RunID: HP_R_010414B-637978 Units: ug/L
Analysis Date: 04/14/2001 13:02 Analyst: D_R

Samples In Analytical Batch:

Lab Sample ID	Client Sample ID
01040402-01A	TB 3/30/01
01040402-02A	W-BB-MW2

Analyte	Result	Rep Limit
Benzene	ND	0.50
Ethylbenzene	ND	0.50
Methyl tert-butyl ether	ND	2.0
Toluene	ND	0.50
m,p-Xylene	ND	0.50
o-Xylene	ND	0.50
Xylenes,Total	ND	0.50
Surr: 1,4-Difluorobenzene	99.3	72-137
Surr: 4-Bromofluorobenzene	101.1	48-156

Laboratory Control Sample (LCS)

RunID: HP_R_010414B-637974 Units: ug/L
Analysis Date: 04/14/2001 12:08 Analyst: D_R

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	50	44	89	70	130
Ethylbenzene	50	47	93	70	130
Methyl tert-butyl ether	50	49	97	70	130
Toluene	50	46	91	70	130
m,p-Xylene	100	94	94	70	130
o-Xylene	50	47	94	70	130
Xylenes,Total	150	141	94	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 0104280-12A
RunID: HP_R_010414B-637988 Units: ug/L
Analysis Date: 04/14/2001 15:05 Analyst: D_R

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	ND	20	24	119	20	24	119	0	21	32	164
hylbenzene	0.62	20	24	115	20	24	120	0	19	52	142
ethyl tert-butyl ether	ND	20	25	123	20	25	123	0	20	39	150

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

243113x

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 01040402
Lab Batch ID: R33386

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 0104280-12A
RunID: HP_R_010414B-637988 Units: ug/L
Analysis Date: 04/14/2001 15:05 Analyst: D_R

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Toluene	ND	20	23	114	20	23	116	0	20	38	159
m,p-Xylene	ND	40	47	116	40	47	118	0	17	53	144
o-Xylene	ND	20	23	116	20	23	117	0	18	53	143
Xylenes,Total	ND	60	70	117	60	70	117	0	18	53	144

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

243113x

Analysis: Gasoline Range Organics
Method: CA_GRO

WorkOrder: 01040402
Lab Batch ID: R33391

Method Blank

RunID: HP_R_010414C-638090 Units: mg/L
Analysis Date: 04/14/2001 13:02 Analyst: D_R

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01040402-01A	TB 3/30/01
01040402-02A	W-BB-MW2

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.050
Surr: 1,4-Difluorobenzene	104.7	62-144
Surr: 4-Bromofluorobenzene	99.0	44-153

Laboratory Control Sample (LCS)

RunID: HP_R_010414C-638089 Units: mg/L
Analysis Date: 04/14/2001 12:35 Analyst: D_R

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	0.78	78	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01040280-16
RunID: HP_R_010414C-638093 Units: mg/L
Analysis Date: 04/14/2001 16:11 Analyst: D_R

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Gasoline Range Organics	ND	0.9	0.94	104	0.9	0.94	104	0.363	36	36	160

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

243113x

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 01040402
Lab Batch ID: R33395

Method Blank

RunID: HP_R_010415A-638139 Units: ug/L
Analysis Date: 04/15/2001 5:55 Analyst: D_R

Analyte	Result	Rep Limit
Benzene	ND	0.50
Ethylbenzene	ND	0.50
Methyl tert-butyl ether	ND	2.0
Toluene	ND	0.50
m,p-Xylene	ND	0.50
o-Xylene	ND	0.50
Xylenes,Total	ND	0.50
Surr: 1,4-Difluorobenzene	100.4	72-137
Surr: 4-Bromofluorobenzene	98.8	48-156

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01040402-03A	W-31-MW2
01040402-04A	W-24-MW7
01040402-05A	W-33-MW4
01040402-06A	W-19-MW1
01040402-07A	W-38-MW3

Laboratory Control Sample (LCS)

RunID: HP_R_010415A-638138 Units: ug/L
Analysis Date: 04/15/2001 5:00 Analyst: D_R

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	50	44	89	70	130
Ethylbenzene	50	46	92	70	130
Methyl tert-butyl ether	50	49	98	70	130
Toluene	50	45	91	70	130
m,p-Xylene	100	92	92	70	130
o-Xylene	50	46	93	70	130
Xylenes,Total	150	138	92	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01040429-01
RunID: HP_R_010415A-638140 Units: ug/L
Analysis Date: 04/15/2001 6:22 Analyst: D_R

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Benzene	ND	20	14	68.1	20	18	91.1	28.9 *	21	32	164
Ethylbenzene	ND	20	21	107	20	22	110	2.59	19	52	142
Methyl tert-butyl ether	ND	20	25	123	20	25	126	2.13	20	39	150

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

243113x

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 01040402
Lab Batch ID: R33395

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01040429-01
RunID: HP_R_010415A-638140 Units: ug/L
Analysis Date: 04/15/2001 6:22 Analyst: D_R

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Toluene	ND	20	16	80.8	20	20	98.1	19.3	20	38	159
m,p-Xylene	ND	40	38	94.2	40	38	95.8	1.66	17	53	144
o-Xylene	ND	20	21	105	20	22	108	2.34	18	53	143
Xylenes,Total	ND	60	59	98.3	60	60	100	1.68	18	53	144

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

243113x

Analysis: Gasoline Range Organics
Method: CA_GRO
WorkOrder: 01040402
Lab Batch ID: R33399

Method Blank

RunID: HP_R_010415B-638212 Units: mg/L
Analysis Date: 04/15/2001 5:55 Analyst: D_R

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.050
Surr: 1,4-Difluorobenzene	105.7	62-144
Surr: 4-Bromofluorobenzene	96.3	44-153

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01040402-03A	W-31-MW2
01040402-04A	W-24-MW7
01040402-05A	W-33-MW4
01040402-06A	W-19-MW1
01040402-07A	W-38-MW3

Laboratory Control Sample (LCS)

RunID: HP_R_010415B-638211 Units: mg/L
Analysis Date: 04/15/2001 5:27 Analyst: D_R

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	0.75	75	70	130

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01040401-11
RunID: HP_R_010415B-638213 Units: mg/L
Analysis Date: 04/15/2001 7:17 Analyst: D_R

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Gasoline Range Organics	0.32	0.9	1	77.9	0.9	1	76.1	2.40	36	36	160

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Quality Control Report

EXXON Company U.S.A.

243113x

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 01040402
Lab Batch ID: R33685

Method Blank

RunID: K_010419A-643634 Units: ug/L
Analysis Date: 04/19/2001 6:18 Analyst: LT

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01040402-05B	W-33-MW4
01040402-06B	W-19-MW1
01040402-07B	W-38-MW3

Analyte	Result	Rep Limit
Methyl tert-butyl ether	ND	5.0
Surr: 1,2-Dichloroethane-d4	112.0	62-119
Surr: 4-Bromofluorobenzene	100.0	78-123
Surr: Toluene-d8	114.0	74-122

Laboratory Control Sample (LCS)

RunID: K_010419A-643633 Units: ug/L
Analysis Date: 04/19/2001 5:23 Analyst: LT

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1-Dichloroethene	50	51	102	61	145
Benzene	50	52	104	76	127
Chlorobenzene	50	50	100	75	130
Toluene	50	49	98	76	125
Trichloroethene	50	50	100	71	120

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01040402-07
RunID: K_010419A-643636 Units: ug/L
Analysis Date: 04/19/2001 7:12 Analyst: LT

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
1,1-Dichloroethene	ND	250	210	84	250	210	84	0	14	38	172
Benzene	ND	250	240	96	250	220	88	9	11	66	134
Chlorobenzene	ND	250	240	96	250	210	84	13 *	13	67	115
Toluene	ND	250	230	92	250	200	80	14 *	13	59	125
Trichloroethene	ND	250	220	88	250	190	76	15 *	14	61	134

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
J - Estimated value between MDL and PQL
MI - Matrix Interference
D - Recovery Unreportable due to Dilution
* - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

Sample Receipt Checklist

And

Chain of Custody

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

Sample Receipt Checklist

Workorder:	01040402	Received By:	DS
Date and Time Received:	4/13/01 9:30:00 AM	Carrier name:	FedEx
Temperature:	4	Chilled by:	Water Ice

1.	**Shipping container/cooler in good condition?**	Yes ☑	No ☐	Not Present ☐	
2.	**Custody seals intact on shippping container/cooler?**	Yes ☐	No ☐	Not Present ☑	
3.	**Custody seals intact on sample bottles?**	Yes ☐	No ☐	Not Present ☑	
4.	**Chain of custody present?**	Yes ☑	No ☐		
5.	**Chain of custody signed when relinquished and received?**	Yes ☑	No ☐		
6.	**Chain of custody agrees with sample labels?**	Yes ☑	No ☐		
7.	**Samples in proper container/bottle?**	Yes ☑	No ☐		
8.	**Sample containers intact?** 1.One liter was received broken for ID#W-19-MW1	Yes ☐	No ☑		
9.	**Sufficient sample volume for indicated test?**	Yes ☑	No ☐		
10.	**All samples received within holding time?**	Yes ☑	No ☐		
11.	**Container/Temp Blank temperature in compliance?**	Yes ☑	No ☐		
12.	**Water - VOA vials have zero headspace?**	Yes ☑	No ☐	Not Applicable ☐	
13.	**Water - pH acceptable upon receipt?**	Yes ☑	No ☐	Not Applicable ☐	

SPL Representative: West, Sonia
Contact Date & Time: 4/16/01 5:00:00 PM
Client Name Contacted: Scott Graham

Non Conformance Issues: 1.One liter remaining for analysis

Client Instructions: Notified client via e-mail.

0104402

EXXON COMPANY, USA. (West Coast)

CHAIN OF CUSTODY RECORD NO. ______ Page 1 of 1

Exxon Engineer: GENE ORTEGA Phone: (925) 246-
Consultant Co. Name: ERI Contact: SCOTT GRAHAM
Address: 73 DIGITAL DRIVE Fax: (415) 382-1856
SUITE 100 NOVATO CA 94949
RAS #: 7-3567 Facility/State ID # (TN Only):
AFE # (Terminal Only): Consultant Project #: 243113X
Location: 3192 SANTA RITA Rd (City) PLEASANTON (State) CA
☐ EE ☐ C&M ☐ SDT
Consultant Work Release #: 21040350
Sampled By: MAHONEY

ANALYSIS REQUEST: (CHECK APPROPRIATE BOX) / **OTHER**

SAMPLE I.D.	DATE	TIME	COMP.	GRAB	MATRIX H2O	MATRIX SOIL	MATRIX AIR	OTHER	PRESERVATIVE	NO. OF CONTAINERS	CONTAINER SIZE	TPH/GC 8015 GRO ☒ 8015 DRO ☒ *	BTEX 8020 ☒ 602 ☐	MTBE 8020 ☒ 8260 ☒ *	OXYGENATES (7) 8260 ☐	O&G IR 413.1 ☐ GRAV. 413.2 ☐	VOL. 8260 ☐ 624 ☐	SEMI-VOL 8270 ☐ 625 ☐	PNA/PAH 8100 ☐ 8310 ☐ 8270 ☐	PCB/PEST 8081/8082 ☐ PCB ONLY ☐	TCLP FULL☐ VOA☐ SEMI-VOA☐ PEST☐ HERB☐	METALS, TOTAL ☐ METALS, TCLP ☐	LEAD, TOTAL 239.1 ☐ 7421 ☐ LEAD, TCLP ☐	LEAD, DISSOLVED ☐ LEAD TOTAL ☐	REACTIVITY ☐ CORROSIVITY ☐ FLASH POINT ☐	PURGEABLE HYDROCARBON 8010 ☐ 8010 ☐ 601 ☐	TPH/IR 418.1 ☐	TOX/TOH ☐	
TB	3/30	—			X				HCL	2	40	X	X	X															
W-BB-MW2	4/11 ↓	1444			↓				HCL/ICE ↓	3/1	40/1L ↓	↓	↓	↓															
W-31-MW2		1446								3/2 ↓																			
W-24-MW7		1431																											
W-33-MW4		1447																											
W-19-MW1		1456																											
W-38-MW3		1508																											

RUSH

TAT
24 HR. ___* 72 HR. ___*
48 HR. ___* 96 HR. ___*
8 Business ☒ *Contact US Prior to Sending Sample
Other ___

EXXON UST CONTRACT NO. C41483

QA/QC Level
Standard ☒ CLP ☐ Other ☐ ______

SPECIAL DETECTION LIMITS (Specify)

SPECIAL REPORTING REQUIREMENTS (Specify)
PDF ☐ ☐ EDD
FAX ☐ ☐ FAX C-O-C W/REPORT

REMARKS: * CONFIRM MTBE HITS W/EPA 8260
* Add Silica GEL cleanup to diesel EPA 8015 (CS)
8230611559425.0 recip.

LAB USE ONLY Lot # Storage Location
950 4°
WORK ORDER #: 0104402 LAB WORK RELEASE #:

CUSTODY RECORD

Relinquished By Sampler:	Date	Time	Received By:
Johnus Mahoney ERI	4/12/01	1415	
Relinquished:	Date	Time	Received By:
Relinquished:	Date	Time	Received By: D Amno Stolle 4/13/01 930 Way Bill #: Cooler Temp:

Triplicate: Original • White Lab's Copy • Green Client Copy • Yellow

Environmental Resolutions, Inc.

FIELD WORK REQUEST

ERI Job Number: 243113
Office Task code: 02
Field Task code: 01
Project Manager: Scot Graham
Staff Geologist: Tom Culig
Site: 7-3567
Location: 3192 Santa Rita Road
Pleasanton, California
County: Alameda

Field Person: John M./Royce

Dates: 4/11/01

TOTAL BUDGETED TIME
9 Hours. Report Time & Sign Off!

WORK REQUESTED

For second quarter, 2001 DTW should be measured in wells MW1 through MW8. Groundwater samples collected from MW1 through MW8 should be submitted for laboratory analysis for BTEX and MTBE using EPA method 8020, and TPPHg and TEPHd using EPA method 8015 (modified). Confirm MTBE by 8260. Remember Trip Blank. Follow ERI SOPs. **Add silica gel cleanup to diesel.** Talk to Scott G. about removal of 2 drums.

	DTW	Sample	Analytical Suite	TEPHd	TPPHg	MTBE	B
MW6	Y	Y	TEPHd, TPPHg, MTBE, BTEX	<50	<50	<2	<0.5
MW2	Y	Y	TEPHd, TPPHg, MTBE, BTEX	<50	<50	<2	0.54
MW7	Y	Y	TEPHd, TPPHg, MTBE, BTEX	333	<50	6.9	0.55
MW5	Y	Y	TEPHd, TPPHg, MTBE, BTEX	---	---	---	---
MW4	Y	Y	TEPHd, TPPHg, MTBE, BTEX	110	<50	27	<0.5
MW1	Y	Y	TEPHd, TPPHg, MTBE, BTEX	<50	<50	110	<0.5
MW3	Y	Y	TEPHd, TPPHg, MTBE, BTEX	<50	<50	280	<0.5
MW8	Y	Y	TEPHd, TPPHg, MTBE, BTEX	---	---	---	---

Sample in the order listed. Collect three 40 ml VOAs, and 2 amber liters from each well. Also, collect a bailer blank before sampling MW6 and run analyses. Give C of C and field notes to PM for review. SPL is the contract lab. **Call office with any questions and to check in. Report time!**

LOCAL GOVERNMENT CONTACT: Mr. Scott Seary
SAFETY PLAN NUMBER: 2431-1.SSP DATE: 12/06/94
EXXON CONTACT: Mr. Gene Ortega
CONTRACT NUMBER: 21040350

POTENTIAL CONTAMINANTS		EQUIPMENT:
(X)	GASOLINE	PID:_____
(X)	DIESEL	PUMP: Bring Pump
( )	USED OIL	OTHER: Bailers, DTW Tape, Decon Equipment, Well Repair Tools , Sampling Equipment, H & S Equipment, Drum labels
( )	OTHER: _____	

HOURS EXCEEDING BUDGET GO TO NONBILLABLE TIME

Samplers Signature:_____ Date:_____
Actual Hours:_____

DAILY FIELD REPORT

ENVIRONMENTAL RESOLUTIONS, INC.

PROJECT: EXXON 7-3567 JOB # + ACTIVITY: 243113X

SUBJECT: QM & SAMPLING DATE: 11 APR 01

EQUIPMENT USED: SHEET: 1 OF 1

NAME: MAHONEY PROJECT MNGR: SG

ONSITE: 1040

CHECK IN W/ STATION MANAGER

OPEN ALL WELLS // SET UP DECON STATION // TAKE PRE-PURGE DTW // PURGE WELLS // TAKE POST PURGE DTWS // SAMPLE WELLS // CLOSE ALL WELLS

CLEAN UP SITE & INFORM STATION MANAGER OF DEPARTURE

PURGE VOL ≈ 40 GALS + 10 GALS DECON H2O

OFFSITE: 1530

73 Digital Drive, Suite 100, Novato, California 94949 415 - 382 - 9105 (Fax 415 - 382 - 1856)

White - Project Manager Yellow - O&M Binder Pink - Onsite O&M Binder

WATER SAMPLING SITE STATUS

Date: 11 APR 0

EWM: _____

Inspector: MAHONEY

ERI Job Number 243113X Station No. 7-3567 Site Address 392 SANTA RHARA PLEASANTON

Well No.		Well Head Screws	Rubber Gasket	Well Cap Locking	Lock on Well Cap	Concrete Well Seal	Well Head PVC	Water in Well Vault			Fence/Gate Condition	# Drums	Drum Contents	Building Condition	Site Appearance	Comments
		N R ok	N R ok	N R ok	N R ok	N R ok	N R ok	Y N					A W E	G V O		
6W	2"	ok	ok	Y	Y	N	ok	N								
2	2"	ok	ok	Y	Y	N	ok	N								NEEDS TO BE GROUTED
7	2"	ok	ok	Y	Y	ok	ok	Y								
5	2"	ok	ok	Y	Y	ok	ok	N								
4	2"	ok	ok	Y	Y	ok	ok	N								
1	2"	ok	N	Y	Y	ok	ok	Y								NEEDS GASKET
3	2"	ok	ok	Y	N	ok	ok	Y								NEEDS LOCK
8	2"	ok	ok	Y	N	ok	ok	N								" "

N = Not Repairable in time available - see comments
R = Repaired - see comments
ok No action needed
Y = Yes
N = No

S = Soil
W = Water
E = Empty

G = Graffiti on Walls
V = Vagrants (or evidence of)
O = Open (not secure)

Rev:10
FN:WATE

Project #	Location#	Date:	Sampler
243113X	7-3567	11/20/01	MAHONEY

Well ID	Case Diameter	Odor/Shee	Total Depth	Pre-Purge DTW	DTP	Product Thickness	TOC	Elevation	Notes
MW 6	2"	N/N	51.63	45.40					
2	↓	N/N	35.15	22.34					
7	↓	N/N	49.34	24.28					
5	↓	N/N	30.39	28.23					
4	↓	N/N	49.72	36.43					
1	↓	N/N	34.52	19.83					
3	↓	N/N	45.12	36.03					
8	↓	—	68.50	—		WEll	IS		DRY —

[redacted]

VO[redacted] = [redacted] DTW [redacted] = [redacted]
0.163 for a 2" inside diameter well casing
0.652 for a 4" inside diameter well casing
1.467 for a 6" inside diameter well casing
0.041 1"

Well ID	Time	Case Volume	Purge Volume	Temp	Cond	PH	Post Purge DTW	80% Rechg	BB	40mil	Amber		Comments Well Box Condit
MW6		2											
			2	* 1 CS Vol = 1.01 gals ... could not									
			4	draw this amount out of well ... no H2O									
			6	pumped at all									
MW2	1215	3					31.32	N	1414	1416	1416		
	1218		3	70.0	2.65	7.22							
	1223		6	70.5	2.50	7.25							
	1229		9	70.6	2.57	7.25							
MW7	1235	5					24.29	Y		1431	1431		
	1240		5	69.2	2.26	7.36							
	1244		10	69.2	2.13	7.37							
	1248		15	69.1	2.17	7.21							
MW5		1											
			1										
			2	* 1 CS Vol = .35 gals ... could not									
			3	draw this amount out of well..									
				no H2O to pump									

MP

[redacted] FIELD CREW: Mahoney ANALYSIS [redacted] ✓

* Case volume = (TD-DTW) X F ...ere Fa
0.163 for a 2" inside diameter well casing
0.652 for a 4" inside diameter well casing
1.467 for a 6" inside diameter well casing
0.041 1"

Well ID	Time	Case Volume	Purge Volume	Temp	Cond	PH	Post Purge DTW	80% Recha	BD	40mil	Amber	Commemts Well Box Condit
MW4	1259	3					33.75	4		1447	1445	
	1303		3	65.8	8.04	7.06						Dry AFT 3 gals
			6									
			9									
MW1	1311	3					19.88	4		1456	1456	
	1315		3	69.1	2.02	7.34						
	1318		6	69.4	1.93	7.40						
	1322		9	69.5	1.89	7.40						
MW3	1329	2					38.41	4		1508	1508	
	1333		2	68.1	2.32	7.07						
	1337		4	68.1	2.53	7.05						
			6									Dry AFT 4 gals

MP