ExxonMobil
Refining and Supply Company
Downstream - Safety, Health & Environment
Environmental Remediation

2300 Clayton Road, Suite 1250
P.O. Box 4032
Concord, CA 94524-4032
(925) 246-8747 Telephone
(925) 246-8798 Facsimile
gene.n.ortega@exxon.com

Gene N. Ortega
Territory Manager
Global Remediation – US Retail

ExxonMobil
Refining & Supply

September 10, 2001

SEP 17 2001

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

RE: Former Exxon RAS #7-0235/2225 Telegraph Avenue, Oakland, California.

Dear Mr. Hwang:

Attached for your review and comment is a document entitled ***Well Installation Report,*** dated September 7, 2001, for the above referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Novato, California, and details the results of well installation 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 Well Installation Report, dated September 7, 2001.

cc: w/ attachment
Mr. Stephen Hill, California Regional Water Quality Control Board, San Francisco Bay Region

cc: w/o attachment
Mr. Scott Thompson, Environmental Resolutions, Inc.

ENVIRONMENTAL RESOLUTIONS, INC.

September 7, 2001
ERI 222903.R02

SEP 17 2001

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

Subject: Well Installation Report for Former Exxon Service Station 7-0235, 2225 Telegraph Avenue, Oakland, California.

Mr. Ortega:

At the request of ExxonMobil Refining and Supply (formerly Exxon Company U.S.A) (ExxonMobil), Environmental Resolutions, Inc. (ERI) conducts environmental activities at the subject site. This report documents the drilling of one off-site monitoring well in the vicinity of the subject site. Field activities were performed on April 6, 2001, in general accordance with ERI's *Work Plan for Soil and Groundwater Investigation Report* (Work Plan), dated May 11, 2000. The purpose of this work is to evaluate the lateral and vertical extent of dissolved hydrocarbons and methyl tertiary butyl ether (MTBE) downgradient of the subject site.

BACKGROUND

The site is located on the southwest corner of Telegraph Avenue and West Grand Avenue in Oakland, California, as shown on the Site Vicinity Map (Plate 1). The locations of existing underground storage tanks (USTs), dispenser islands, and other select site features are shown on the Generalized Site Plan (Plate 2). Based on quarterly groundwater monitoring data, depth to water (DTW) measurements across the site have fluctuated from approximately 11 to 14 feet below ground surface (bgs), and groundwater appears to flow towards the southeast with a hydraulic gradient from 0.012 to 0.030. A Groundwater Rose Diagram depicting groundwater flow directions since Fourth Quarter 1997 is shown on Plate 2.

WELL INSTALLATION

ERI performed the work in accordance with a site safety plan and ERI's standard field protocol (Attachment A). Approval of this investigation was provided by the Alameda County Health Care Services Agency in a letter dated July 6, 2000 (Attachment B). Prior to drilling, ERI obtained an excavation permit from the City of Oakland, Building and Planning Department (Attachment C), and a drilling permit from the Alameda County Public Works Department (Attachment D).

On April 6, 2001, ERI observed Gregg Drilling Company (Gregg) of Martinez, California, drill one soil boring and install one groundwater monitoring well (MW6J) using a hollow-stem auger drill drilling rig. Locations of existing groundwater monitoring wells and the newly installed well are shown on Plate 2. The boring log for monitoring well MW6J illustrating well construction details and

descriptions of soil encountered is included as Attachment E.

Soil samples were collected in accordance with the Work Plan and used to evaluate lithologic characteristics at the boring location. Soil samples were screened in the field to evaluate the presence or absence of petroleum hydrocarbons using a photoionization detector (PID). Results of the PID screening are included on the Boring Log in Attachment E.

Select soil samples collected from the boring were submitted under Chain-of-Custody protocol to Southern Petroleum Laboratories, Inc. (SPL), a California state-certified laboratory. The analytical laboratory report and Chain-of-Custody record are included in Attachment F. Soil samples were analyzed for total hydrocarbons as diesel (TPHd); total petroleum hydrocarbons as gasoline (TPHg); total petroleum hydrocarbons as motor oil (TPHmo); methyl tertiary butyl ether (MTBE); and benzene, toluene, ethylbenzene, and total xylenes (BTEX) using the laboratory methods listed in Table 1.

Soil generated during drilling was collected and stored on site in two 55-gallon drums pending characterization and disposal. ERI collected composite soil sample from the drummed soil and submitted the sample to SPL for analysis of TPHg, TPHd, and TPHmo using EPA Method 8015B, BTEX using EPA Method 8021B, total lead using EPA Method 6010, and halogenated volatile organic compounds (HVOCs) using EPA Method 8260B. The soil was transported to Vasco Road Landfill in Livermore, California by Dillard Trucking Company (Dillard) of Byron, California, under direct contact to ExxonMobil. Soil disposal documentation is provided in Attachment G. Rinsate and purge water generated during well development and sampling was collected and stored on site in one 55-gallon drum. Water will be stored on site pending transportation and disposal to an ExxonMobil approved facility.

MONITORING WELL DEVELOPMENT AND SAMPLING

Development activity for the newly installed groundwater monitoring well MW6J was performed on July 5, 2001, using a surge-and-pump technique, as outlined in ERI's field protocol. Initial Sampling of the newly installed well was conducted on July 5, 2001, in conjunction with quarterly monitoring of the previously existing wells. Results were reported under separate cover.

HYDROGEOLOGY

The results of this and previous investigations indicate that sediment underlying the site consists of silty clay, sand, and clay. During this investigation, groundwater was initially encountered approximately 11 feet bgs, in silty clay.

CONCLUSIONS

ERI collected soil samples for laboratory analysis at 5-foot intervals. Residual BTEX was detected at 20 feet bgs. In ERI's opinion, the concentrations detected do not warrant additional assessment downgradient from the subject site.

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.

ERI recommends signed copies of this report be forwarded to the following:

Mr. Scott Seery
Alameda County Health Care Services Agency
Environmental Health Services
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

Please call ERI's project manager, Mr. Scott D. Thompson (415) 382-5987, with any questions or comments regarding this report.

Sincerely,
Environmental Resolutions, Inc.

Lyz A. Cullmann
Staff Geologist

John B. Bobbit
R.G. 4313

REGISTERED GEOLOGIST JOHN BRILEY BOBBIT No. 4313 STATE OF CALIFORNIA

Attachments:

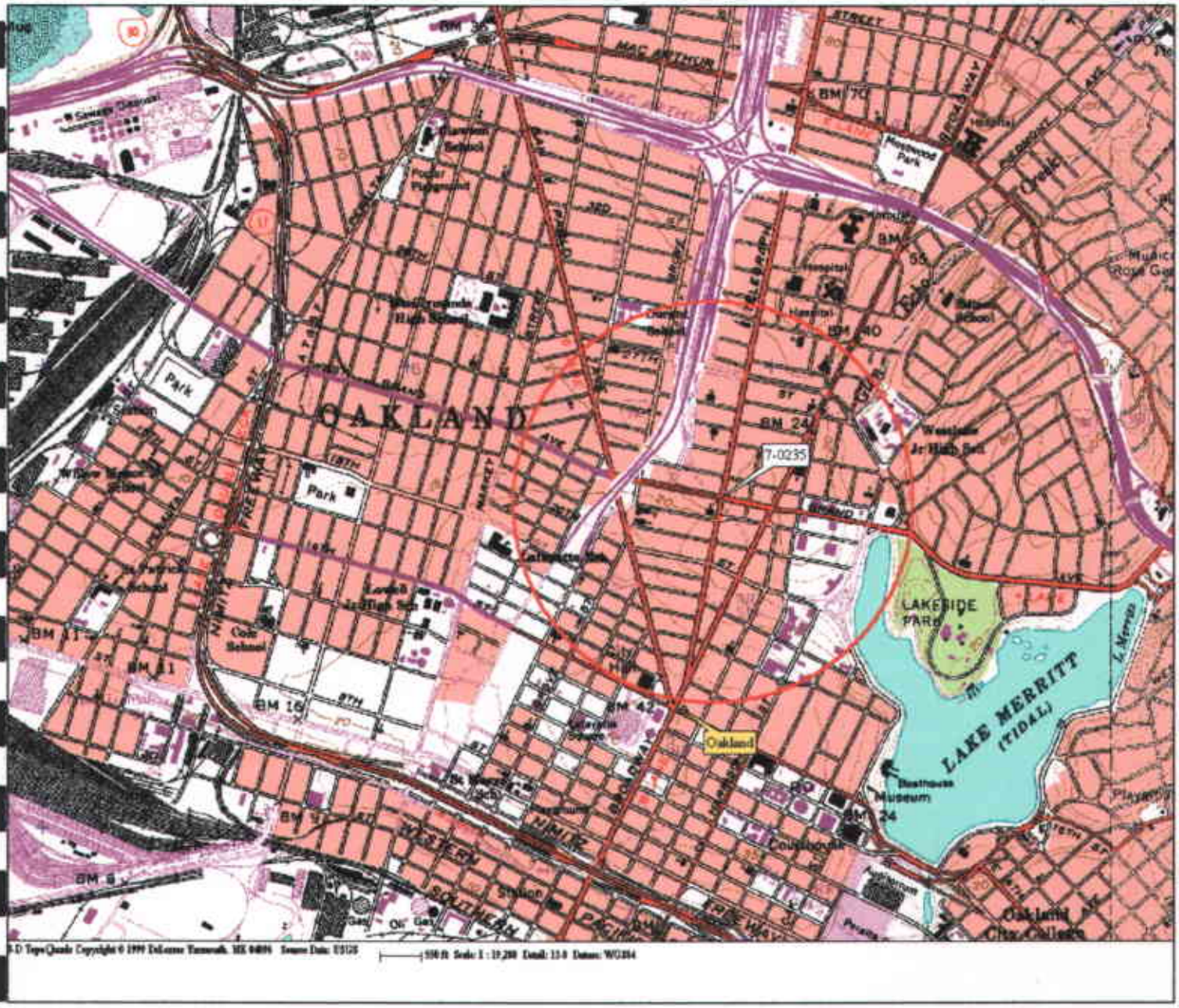
Table 1:	Analytical Laboratory Results of Soil Samples
Plate 1:	Site Vicinity Map
Plate 2:	Generalized Site Plan
Attachment A:	Field Protocol
Attachment B:	Alameda County Health Care Services Agency Letter, Dated July 6, 2000.
Attachment C:	Excavation Permit
Attachment D:	Drilling Permit
Attachment E:	Unified Soil Classification System and Symbol Key and Soil Boring Logs
Attachment F:	Analytical Laboratory Report and Chain-of-Custody Record
Attachment G:	Soil Disposal Documentation

TABLE 1
ANALYTICAL LABORATORY RESULTS OF SOIL SAMPLES
Exxon Service Station 7-0235
2225 Telegraph Avenue
Oakland, California

Sample ID	Date Sampled	TPHd	TPHg	MTBE	B	T	E	X	Total Lead	HVOCs	TPHmo
		<.....mg/Kg.....>									
S-5-MW6J	4/6/01	<2	<1	<0.01	<0.001	<0.001	<0.001	<0.001	---	---	<10
S-10-MW6J	4/6/01	<2	<5	<0.01	<0.005	<0.005	<0.005	<0.005	---	---	<10
S-15-MW6J	4/6/01	<2	<1	<0.01	<0.001	<0.001	<0.001	<0.001	---	---	<10
S-20-MW6J	4/6/01	<2	<1	<0.01	<0.001	<0.001	0.013	0.037	---	---	<10
SP-1-1(1-4)	4/6/01	<2	<1	<0.01	---	---	---	---	4.68	ND	<10

Notes:

S-5-MW6J	=	Soil sample-depth in feet below ground surface - boring number.
SP-1-1	=	Stockpile soil sample - depth in feet below ground surface.
TPHg	=	Total petroleum hydrocarbons as gasoline analyzed using modified EPA Method 8015M.
TPHd	=	Total petroleum hydrocarbons as diesel 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 8260B.
Lead	=	Total lead analyzed using EPA Method 6010B.
HVOCs	=	Halogenated volatiles organic compounds using EPA Method 8260.
TPHmo	=	Total petroleum hydrocarbons as motor oil analyzed using Modified EPA Method 8015M.
ND	=	Analyses not detected at or above the laboratory method detection limit.
mg/Kg	=	Milligrams per Kilogram.
---	=	Not Analyzed/Not Applicable.



FN 2229Topo

EXPLANATION

1/2–mile radius circle

N

APPROXIMATE SCALE

0 0.5 1 mile

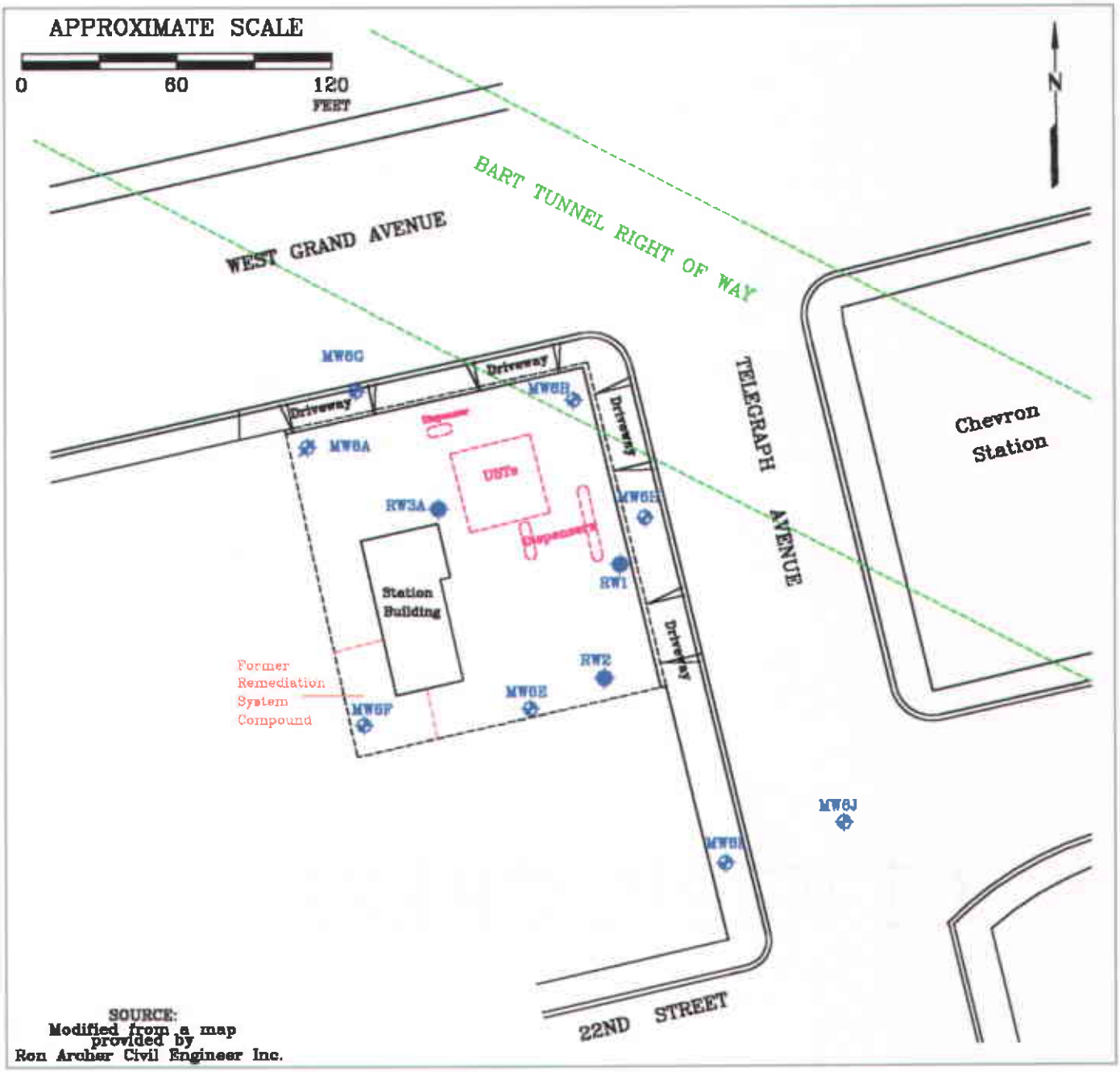
SOURCE:
Modified from a map
provided by
DeLorme 3–D TopoQuads

ENVIRONMENTAL RESOLUTIONS, INC.

SITE VICINITY MAP

FORMER EXXON SERVICE STATION 7–0235
2225 Telegraph Avenue
Oakland, California

PROJECT NO.
2229
PLATE
1



SOURCE:
Modified from a map provided by
Ron Archer Civil Engineer Inc.

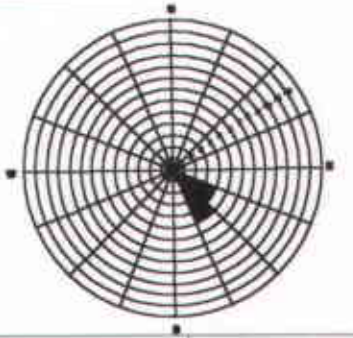
FN 22290003

EXPLANATION

MW6J
Groundwater Monitoring Well

MW6A
Destroyed Groundwater Monitoring Well

RW3A
Groundwater Recovery Well



ENVIRONMENTAL RESOLUTIONS, INC.

GENERALIZED SITE PLAN

FORMER EXXON SERVICE STATION 7-0235
2225 Telegraph Avenue
Oakland, California

PROJECT NO.
2229

PLATE
2

ATTACHMENT A

FIELD PROTOCOL

FIELD PROTOCOL

Site Safety Plan

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

Soil Borings and Sampling

Prior to drilling of borings and construction of wells, ERI acquires necessary permits from the appropriate agency(ies). ERI also contacts Underground Service Alert (USA) before drilling to help locate public utility lines at the site. ERI observes the driller hand-probe and hand-auger boring locations to a depth of approximately 4 feet below ground surface (bgs) and a diameter greater than the soil boring diameter before drilling to reduce the risk of damaging underground structures.

Soil borings are drilled with a B-57 (or similar) drill rig equipped with 8-inch diameter, hollow-stem augers. Auger flights and sampling equipment are steam-cleaned before use to minimize the possibility of crosshole contamination. The rinsate is containerized and stored on site. ERI will coordinate with ExxonMobil for appropriate recycling or disposal of the rinsate.

Drilling is performed under the observation of a field geologist, and the earth materials in the borings are identified using visual and manual methods, and classified as drilling progresses using the Unified Soil Classification System. Soil borings are drilled to approximately 15 feet bgs.

During drilling, soil samples are collected at 5-foot intervals, obvious changes in lithology, and just above the groundwater surface. Samples are collected with a California-modified, split-spoon sampler equipped with laboratory-cleaned brass sleeves. Samples are collected by advancing the auger to a point just above the sampling depth and driving the sampler into the soil. The sampler is 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 is counted and recorded to give an indication of soil consistency.

Soil samples are 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 analyses are sealed promptly with Teflon® tape, and plastic caps. The samples are labeled and placed in iced storage for transport to the laboratory. Chain-of-Custody Records are 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 are in our report. Cuttings generated during drilling are placed on plastic sheeting and covered and left at the site. ERI coordinates with ExxonMobil for the soil to be removed to an appropriate disposal facility.

Monitoring Well Construction

Monitoring wells are constructed in borings using thread-jointed, 2-inch inner diameter, Schedule 40 polyvinyl chloride (PVC) casing. No chemical cements, glues, or solvents are used in well construction. The screened portion of each well consists of factory-perforated casing with 0.020-inch wide slots. If unconfined aquifer conditions exist, the well screen is installed from the total depth of each well to approximately 10 feet above the uppermost water-bearing unit. If confined conditions exist, the uppermost water-bearing unit is screened exclusively. Unperforated casing is installed from the top of each screen to the ground surface. The annular space in the well is packed with number 3 sand to approximately 1 to 2 feet above the slotted interval. A bentonite plug is added above the sand pack to prevent cement from entering the well pack. The remaining annulus is backfilled to grade with a slurry of Portland cement.

The monitoring wells are protected with a traffic-rated steel utility box equipped with a galvanized sheet steel skirt. The box has a watertight seal to protect against surface-water infiltration. The design of this box discourages vandalism and reduces the possibility of accidental disturbance of the well.

Well Development

ERI waits a minimum of 24 hours before development of the monitoring wells to allow the grout to seal. Initially, a water sample is collected for subjective analysis before development of the monitoring wells. This sample is collected from near the water surface in the well with a Teflon® bailer cleaned with a laboratory-grade detergent and deionized water. The wells are developed with a surge block and pump. Well development continues 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. ERI coordinates with ExxonMobil for disposal of the purged water.

Groundwater Sampling Protocol

The static water level and separate-phase product level, if present, in each well that contains water and/or separate-phase product are measured with an 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 B

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY LETTER DATED JULY 6, 2000

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

July 6, 2000

Darin Rouse, Senior Engineer
Exxon Co., U.S.A.
ExxonMobil
Refining & Supply
Safety, Health and Environment
Environmental Engineering
P.O. Box 4032
Concord, CA 94524-4032

Dear Mr. Rouse:

Subject: Exxon RAS #7-0235, 2225 Telegraph Ave., Oakland, CA
StId 1039

"Soil and Groundwater Investigation..." dated May 11, 2000, by Environmental Resolutions, Inc., was reviewed. Geoprobe borings, GP1 and GP2, were NonDetect (ND) for Total Purgeable Petroleum Hydrocarbons as Gasoline (TPPHg), benzene, toluene, ethyl benzene, xylene (BTEX), Methyl Tertiary-Butyl Ether (MTBE) in soil and groundwater samples except for groundwater sample, W-12-GP2, which had 100 ug/l TPPHg. The proposed well installation is approved with additional soil and groundwater analyses for TPH-Motor Oil using modified EPA Method 8015, and MTBE. Also, groundwater recovery well, RW1, is to be included in future sampling events and all groundwater samples are to include analysis for TPH-Motor Oil.

If you have any questions, call me at (510) 567-6746.

Sincerely,

Don Hwang
Hazardous Materials Specialist

cc: Jim Chappell, Environmental Resolutions, Inc., 73 Digital Dr., Suite 100, Novato, CA 94949-5791

file

ATTACHMENT C

EXCAVATION PERMIT

Office of Planning and Building

EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERING

PERMIT NUMBER		SITE ADDRESS/LOCATION
X0100485		2225 TELEGRAPH AV
APPROX. START DATE	APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number)
CONTRACTOR'S LICENSE # AND CLASS		CITY BUSINESS TAX #

ATTENTION:

1) State law requires that the contractor/owner call *Underground Service Alert (USA)* two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1 (800) 642-2444. UNDERGROUND SERVICE ALERT (USA) #: 94535

2) **48 hours prior to starting work, YOU MUST CALL (510) 238-3651 TO SCHEDULE AN INSPECTION.** call 510-238-6633 & Construction

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than $500):

☐ I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

☐ I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).

☐ I am exempt under Sec. _____, B&PC for this reason _____.

WORKER'S COMPENSATION

☐ I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).

Policy # _____ Company Name _____

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars ($100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

Signature of Permittee L Kris Cullmann ☐ Agent for ☐ Contractor ☐ Owner Date 3-1-01

STATE STREET LAST RESURFACED	SPECIAL PAVING DETAIL REQUIRED? ☐ YES ☐ NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) ☐ YES ☐ NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) ☐ YES ☐ NO
ISSUED BY		DATE ISSUED 3-1-01	

ATTACHMENT D

DRILLING PERMIT

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-5554 MARLON MAGALLANES/FRANK CODD (510) 670-5783
FAX (510)782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT Former Exxon Service Station 7-0235
2225 Telegraph Avenue
Oakland, CA

CLIENT
Name Exxon Mobil Refining + Supply
Address P.O. Box 4032 Phone (925) 246-8790
City Concord Zip 94524-4032

APPLICANT
Name Environmental Resolutions, Inc.
Fax (415) 382-8156
Address 73 Digital Drive Phone (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

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

DRILLING METHOD:

Mud Rotary	☐	Air Rotary	☐	Auger	☒
Cable	☐	Other	☐		

DRILLER'S NAME Woodward Grea
DRILLER'S LICENSE NO. ~~748679~~ 485465
exp. 7-31-01 C-57 HIC

WELL PROJECTS
Drill Hole Diameter 8 in. Maximum
Casing Diameter 2 in. Depth 20 ft.
Surface Seal Depth 5 ft. Owner's Well Number MW65

GEOTECHNICAL PROJECTS
Number of Borings _____ Maximum
Hole Diameter _____ in. Depth _____ ft.

ESTIMATED STARTING DATE 2-1-01
ESTIMATED COMPLETION DATE _____

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

APPLICANT'S SIGNATURE Tom Culig DATE 12-20-00

PLEASE PRINT NAME Tom Culig

FOR OFFICE USE

PERMIT NUMBER WO1-040
WELL NUMBER _____
APN _____

PERMIT CONDITIONS
Circled Permit Requirements Apply

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

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

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

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

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

F. WELL DESTRUCTION
See attached requirements for destruction of shallow wells. Send a map of work site. A different permit application is required for wells deeper than 45 feet.

(G.) SPECIAL CONDITIONS
NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.
See attached Condition.

APPROVED _____ DATE 1-17-01

Rev.6-5-00

ATTACHMENT E

UNIFIED SOIL CLASSIFICATION SYSTEM AND SYMBOL KEY AND SOIL BORING LOGS

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
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.

ENVIRONMENTAL RESOLUTIONS, INC.

PROJECT 2229

UNIFIED SOIL CLASSIFICATION SYSTEM AND LOG OF BORINGS SYMBOL KEY

FORMER EXXON SERVICE STATION 7-0235
2225 Telegraph Avenue
Oakland, California

ATTACHMENT

ENVIRONMENTAL RESOLUTIONS, INC.

Project No.: 222903X Boring: MW6J Plate: 1 OF 1
Site: Former Exxon Service Station 7-0235 Date: 4/06/01
Drill Contractor: Gregg Drilling
Sample Method: Split Spoon Geologist: John B. Bobbitt
Drill Rig: Rhino D - 15 Bore Hole Diameter: 8" Signature:
Location: Center of intersection between Registration: R.G. 4313
Telegraph Avenue and 22nd Avenue Logged by: Lyz Cullmann

DEPTH (ft)	BLOW COUNTS	PID/OVM (ppm)	SAMPLE	COLUMN	USCS	GEOLOGIC DESCRIPTION	WELL DESIGN
			a/c			1 foot of asphalt	
			road base			road base to 3.5 feet	
5		0			CL	Silty clay, brown, moist, medium plasticity	
10		0					
15		0			SM	Fine- to coarse-grained sand with some silt, brown, wet (85% sand, 15% silt)	
20		0			CL	Grades to brown silty clay, wet	
						Total depth at 23 feet bgs Groundwater encountered at 11 feet.	

Casing Diameter: 2" Slot Size: 0.20 , Sand Size: 2/12 , Grout: Portland Cement

FN: 222903MW6J

ATTACHMENT F

ANALYTICAL LABORATORY REPORT AND CHAIN-OF-CUSTODY RECORD

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

EXXON Company U.S.A.

Certificate of Analysis Number:

01040258

Report To:		Project Name:	222903X
Environmental Resolution, Inc.		Site:	7-0235
Scott Thompson		Site Address:	2225 Telegraph Ave.
73 Digital Drive Suite 100			Oakland CA
Novato		PO Number:	EWR#21040346
California		State:	California
94949-		State Cert. No.:	1903
ph: (415) 382-9105	fax: (415) 382-1856	Date Reported:	7/3/01

This Report Contains A Total Of 25 Pages

Excluding This Page

And

Chain Of Custody

7/3/01

Date

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

Case Narrative for:

EXXON Company U.S.A.

Certificate of Analysis Number:

01040258

Report To:		Project Name:	222903X
Environmental Resolution, Inc.		Site:	7-0235
Scott Thompson		Site Address:	2225 Telegraph Ave.
73 Digital Drive Suite 100			Oakland CA
Novato		PO Number:	EWR#21040346
California		State:	California
94949-		State Cert. No.:	1903
ph: (415) 382-9105	fax: (415) 382-1856	Date Reported:	7/3/01

Per Liz, via phone conversation, on May 2, 2001, the sample ID's "MW65" were corrected to "MW6J". Enclosed is the revised report. Please place the original chain of custody in this report.

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
Senior Project Manager

7/3/01
Date

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

EXXON Company U.S.A.

Certificate of Analysis Number:

01040258

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

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

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

Project Name: 222903X
Site: 7-0235
Site Address: 2225 Telegraph Ave.
Oakland CA
PO Number: EWR#21040346
State: California
State Cert. No.: 1903
Date Reported: 7/3/01

Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COC ID	HOLD
S-5-MW6J	01040258-01	Soil	4/6/01 10:55:00 AM	4/10/01 10:00:00 AM		☐
10-MW6J	01040258-02	Soil	4/6/01 11:00:00 AM	4/10/01 10:00:00 AM		☐
15-MW6J	01040258-03	Soil	4/6/01 11:05:00 AM	4/10/01 10:00:00 AM		☐
S-20-MW6J	01040258-04	Soil	4/6/01 11:10:00 AM	4/10/01 10:00:00 AM		☐
SP-1-(1-4)-COMP	01040258-05	Soil	4/6/01 11:20:00 AM	4/10/01 10:00:00 AM		☐

Sonia West — 7/3/01

Sonia 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 S-5-MW6J **Collected:** 4/6/01 10:55:00 **SPL Sample ID:** 01040258-01

Site: 7-0235

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		04/20/01 5:31	AM	647035
Surr: n-Pentacosane	103	%	20-154	1		04/20/01 5:31	AM	647035

Prep Method	Prep Date	Prep Initials
SW3550B	04/11/2001 13:24	J_L

GASOLINE RANGE ORGANICS				**MCL**	**CA_GRO**	**Units: mg/Kg**		
Gasoline Range Organics	ND		1		1	04/18/01 15:50	FB	642456
Surr: 1,4-Difluorobenzene	93.0	%	72-153		1	04/18/01 15:50	FB	642456
Surr: 4-Bromofluorobenzene	106	%	51-149		1	04/18/01 15:50	FB	642456
PURGEABLE AROMATICS				**MCL**	**SW8021B**	**Units: mg/Kg**		
Benzene	ND		0.001		1	04/18/01 15:50	TM	642346
Ethylbenzene	ND		0.001		1	04/18/01 15:50	TM	642346
Toluene	ND		0.001		1	04/18/01 15:50	TM	642346
m,p-Xylene	ND		0.001		1	04/18/01 15:50	TM	642346
o-Xylene	ND		0.001		1	04/18/01 15:50	TM	642346
Xylenes,Total	ND		0.001		1	04/18/01 15:50	TM	642346
Surr: 1,4-Difluorobenzene	90.9	%	59-127		1	04/18/01 15:50	TM	642346
Surr: 4-Bromofluorobenzene	106	%	48-156		1	04/18/01 15:50	TM	642346
SEMIVOLATILE HYDROCARBONS				**MCL**	**SW8015B**	**Units: mg/Kg**		
Motor Oil (C28-C40)	ND		10		1	04/20/01 5:31	AM	647368
Surr: n-Pentacosane	103	%	20-154		1	04/20/01 5:31	AM	647368

Prep Method	Prep Date	Prep Initials
SW3550B	04/11/2001 13:24	J_L

VOLATILE ORGANICS BY METHOD 8260B				**MCL**	**SW8260B**	**Units: mg/Kg**		
Methyl tert-butyl ether	ND		0.01		1	04/16/01 21:32	NL	640004
Surr: 1,2-Dichloroethane-d4	90.0	%	70-120		1	04/16/01 21:32	NL	640004
Surr: 4-Bromofluorobenzene	96.0	%	74-130		1	04/16/01 21:32	NL	640004
Surr: Toluene-d8	92.0	%	80-140		1	04/16/01 21:32	NL	640004

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-10-MW6J **Collected:** 4/6/01 11:00:00 **SPL Sample ID:** 01040258-02

Site: 7-0235

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		04/20/01 10:59	AM	647038
Surr: n-Pentacosane	100	%	20-154	1		04/20/01 10:59	AM	647038

Prep Method	Prep Date	Prep Initials
SW3550B	04/11/2001 13:24	J_L

GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: mg/Kg**		
Gasoline Range Organics	ND		5	5		04/20/01 2:52	FB	644258
Surr: 1,4-Difluorobenzene	93.7	%	72-153	5		04/20/01 2:52	FB	644258
Surr: 4-Bromofluorobenzene	108	%	51-149	5		04/20/01 2:52	FB	644258
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: mg/Kg**		
Benzene	ND		0.005	5		04/20/01 2:52	FB	644238
Ethylbenzene	ND		0.005	5		04/20/01 2:52	FB	644238
Toluene	ND		0.005	5		04/20/01 2:52	FB	644238
m,p-Xylene	ND		0.005	5		04/20/01 2:52	FB	644238
o-Xylene	ND		0.005	5		04/20/01 2:52	FB	644238
Xylenes,Total	ND		0.005	5		04/20/01 2:52	FB	644238
Surr: 1,4-Difluorobenzene	92.8	%	59-127	5		04/20/01 2:52	FB	644238
Surr: 4-Bromofluorobenzene	109	%	48-156	5		04/20/01 2:52	FB	644238
SEMIVOLATILE HYDROCARBONS			**MCL**	**SW8015B**		**Units: mg/Kg**		
Motor Oil (C28-C40)	ND		10	1		04/20/01 10:59	AM	647371
Surr: n-Pentacosane	100	%	20-154	1		04/20/01 10:59	AM	647371

Prep Method	Prep Date	Prep Initials
SW3550B	04/11/2001 13:24	J_L

VOLATILE ORGANICS BY METHOD 8260B			**MCL**	**SW8260B**		**Units: mg/Kg**		
Methyl tert-butyl ether	ND		0.01	1		04/17/01 11:49	NL	641430
Surr: 1,2-Dichloroethane-d4	88.0	%	70-120	1		04/17/01 11:49	NL	641430
Surr: 4-Bromofluorobenzene	98.0	%	74-130	1		04/17/01 11:49	NL	641430
Surr: Toluene-d8	92.0	%	80-140	1		04/17/01 11:49	NL	641430

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-15-MW6J **Collected:** 4/6/01 11:05:00 **SPL Sample ID:** 01040258-03

Site: 7-0235

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		04/20/01 11:37	AM	647039
Surr: n-Pentacosane	93.8	%	20-154	1		04/20/01 11:37	AM	647039

Prep Method	Prep Date	Prep Initials
SW3550B	04/11/2001 13:24	J_L

GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: mg/Kg**		
Gasoline Range Organics	ND		1	1		04/18/01 23:03	FB	642458
Surr: 1,4-Difluorobenzene	94.0	%	72-153	1		04/18/01 23:03	FB	642458
Surr: 4-Bromofluorobenzene	112	%	51-149	1		04/18/01 23:03	FB	642458
PURGEABLE AROMATICS			**MCL**	**SW8021B**		**Units: mg/Kg**		
Benzene	ND		0.001	1		04/18/01 23:03	TM	642368
Ethylbenzene	ND		0.001	1		04/18/01 23:03	TM	642368
Toluene	ND		0.001	1		04/18/01 23:03	TM	642368
m,p-Xylene	ND		0.001	1		04/18/01 23:03	TM	642368
o-Xylene	ND		0.001	1		04/18/01 23:03	TM	642368
Xylenes,Total	ND		0.001	1		04/18/01 23:03	TM	642368
Surr: 1,4-Difluorobenzene	93.6	%	59-127	1		04/18/01 23:03	TM	642368
Surr: 4-Bromofluorobenzene	116	%	48-156	1		04/18/01 23:03	TM	642368
SEMIVOLATILE HYDROCARBONS			**MCL**	**SW8015B**		**Units: mg/Kg**		
Motor Oil (C28-C40)	ND		10	1		04/20/01 11:37	AM	647372
Surr: n-Pentacosane	93.8	%	20-154	1		04/20/01 11:37	AM	647372

Prep Method	Prep Date	Prep Initials
SW3550B	04/11/2001 13:24	J_L

VOLATILE ORGANICS BY METHOD 8260B			**MCL**	**SW8260B**		**Units: mg/Kg**		
Methyl tert-butyl ether	ND		0.01	1		04/17/01 13:07	NL	641433
Surr: 1,2-Dichloroethane-d4	84.0	%	70-120	1		04/17/01 13:07	NL	641433
Surr: 4-Bromofluorobenzene	98.0	%	74-130	1		04/17/01 13:07	NL	641433
Surr: Toluene-d8	96.0	%	80-140	1		04/17/01 13:07	NL	641433

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-20-MW6J **Collected:** 4/6/01 11:10:00 **SPL Sample ID:** 01040258-04

Site: 7-0235

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		04/20/01 12:16	AM	647040
Surr: n-Pentacosane	92.1	%	20-154	1		04/20/01 12:16	AM	647040

Prep Method	Prep Date	Prep Initials
SW3550B	04/11/2001 13:24	J_L

GASOLINE RANGE ORGANICS				**MCL**	**CA_GRO**	**Units: mg/Kg**		
Gasoline Range Organics	ND		1		1	04/18/01 23:34	FB	642460
Surr: 1,4-Difluorobenzene	120	%	72-153		1	04/18/01 23:34	FB	642460
Surr: 4-Bromofluorobenzene	139	%	51-149		1	04/18/01 23:34	FB	642460
PURGEABLE AROMATICS				**MCL**	**SW8021B**	**Units: mg/Kg**		
Benzene	ND		0.001		1	04/18/01 23:34	TM	642369
Ethylbenzene	0.013		0.001		1	04/18/01 23:34	TM	642369
Toluene	ND		0.001		1	04/18/01 23:34	TM	642369
m,p-Xylene	0.037		0.001		1	04/18/01 23:34	TM	642369
o-Xylene	ND		0.001		1	04/18/01 23:34	TM	642369
Xylenes,Total	0.037		0.001		1	04/18/01 23:34	TM	642369
Surr: 1,4-Difluorobenzene	98.3	%	59-127		1	04/18/01 23:34	TM	642369
Surr: 4-Bromofluorobenzene	127	%	48-156		1	04/18/01 23:34	TM	642369
SEMIVOLATILE HYDROCARBONS				**MCL**	**SW8015B**	**Units: mg/Kg**		
Motor Oil (C28-C40)	ND		10		1	04/20/01 12:16	AM	647373
Surr: n-Pentacosane	92.1	%	20-154		1	04/20/01 12:16	AM	647373

Prep Method	Prep Date	Prep Initials
SW3550B	04/11/2001 13:24	J_L

VOLATILE ORGANICS BY METHOD 8260B				**MCL**	**SW8260B**	**Units: mg/Kg**		
Methyl tert-butyl ether	ND		0.01		1	04/17/01 13:33	NL	641434
Surr: 1,2-Dichloroethane-d4	86.0	%	70-120		1	04/17/01 13:33	NL	641434
Surr: 4-Bromofluorobenzene	96.0	%	74-130		1	04/17/01 13:33	NL	641434
Surr: Toluene-d8	94.0	%	80-140		1	04/17/01 13:33	NL	641434

Sonia West

Sonia West
Project Manager

Qualifiers:
ND/U - Not Detected at the Reporting Limit
B - Analyte detected in the associated Method Blank
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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

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

Client Sample ID S-SP-1-(1-4)-COMP **Collected:** 4/6/01 11:20:00 **SPL Sample ID:** 01040258-05

Site: 7-0235

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		04/20/01 12:54	AM	647041
Surr: n-Pentacosane	102	%	20-154	1		04/20/01 12:54	AM	647041

Prep Method	Prep Date	Prep Initials
SW3550B	04/11/2001 13:24	J_L

GASOLINE RANGE ORGANICS			**MCL**	**CA_GRO**		**Units: mg/Kg**		
Gasoline Range Organics	ND		1	1		04/19/01 0:06	FB	642462
Surr: 1,4-Difluorobenzene	96.0	%	72-153	1		04/19/01 0:06	FB	642462
Surr: 4-Bromofluorobenzene	114	%	51-149	1		04/19/01 0:06	FB	642462

METALS BY METHOD 6010B, TOTAL			**MCL**	**SW6010B**		**Units: mg/Kg**		
Lead	4.68		0.5	1		04/16/01 21:24	NS	639540

Prep Method	Prep Date	Prep Initials
SW3050B	04/12/2001 16:00	MME

SEMIVOLATILE HYDROCARBONS			**MCL**	**SW8015B**		**Units: mg/Kg**		
Motor Oil (C28-C40)	ND		10	1		04/20/01 12:54	AM	647374
Surr: n-Pentacosane	102	%	20-154	1		04/20/01 12:54	AM	647374

Prep Method	Prep Date	Prep Initials
SW3550B	04/11/2001 13:24	J_L

VOLATILE ORGANICS BY METHOD 8260B			**MCL**	**SW8260B**		**Units: mg/Kg**		
Methyl tert-butyl ether	ND		0.01	1		04/17/01 13:59	NL	641435
Surr: 1,2-Dichloroethane-d4	88.0	%	70-120	1		04/17/01 13:59	NL	641435
Surr: 4-Bromofluorobenzene	102	%	74-130	1		04/17/01 13:59	NL	641435
Surr: Toluene-d8	96.0	%	80-140	1		04/17/01 13:59	NL	641435

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-SP-1-(1-4)-COMP **Collected:** 4/6/01 11:20:00 **SPL Sample ID:** 01040258-05

Site: 7-0235

Analyses/Method	Result		Rep.Limit	Dil. Factor	QUAL	Date Analyzed	Analyst	Seq. #
VOLATILES ORGANIC COMPOUNDS			**MCL**	**SW8021B**		**Units: mg/Kg**		
1,1,1-Trichloroethane	ND		0.001	1		04/12/01 19:48	CJ	639718
1,1,2,2-Tetrachloroethane	ND		0.002	1		04/12/01 19:48	CJ	639718
1,1,2-Trichloroethane	ND		0.001	1		04/12/01 19:48	CJ	639718
1,1-Dichloroethane	ND		0.001	1		04/12/01 19:48	CJ	639718
1,1-Dichloroethene	ND		0.001	1		04/12/01 19:48	CJ	639718
1,2-Dichlorobenzene	ND		0.001	1		04/12/01 19:48	CJ	639718
1,2-Dichloroethane	ND		0.001	1		04/12/01 19:48	CJ	639718
1,2-Dichloropropane	ND		0.001	1		04/12/01 19:48	CJ	639718
1,3-Dichlorobenzene	ND		0.002	1		04/12/01 19:48	CJ	639718
1,4-Dichlorobenzene	ND		0.002	1		04/12/01 19:48	CJ	639718
Benzene	ND		0.001	1		04/12/01 19:48	CJ	639718
Bromodichloromethane	ND		0.001	1		04/12/01 19:48	CJ	639718
Bromoform	ND		0.001	1		04/12/01 19:48	CJ	639718
Bromomethane	ND		0.001	1		04/12/01 19:48	CJ	639718
Carbon tetrachloride	ND		0.001	1		04/12/01 19:48	CJ	639718
Chlorobenzene	ND		0.001	1		04/12/01 19:48	CJ	639718
Chloroethane	ND		0.001	1		04/12/01 19:48	CJ	639718
Chloroform	ND		0.001	1		04/12/01 19:48	CJ	639718
Chloromethane	ND		0.001	1		04/12/01 19:48	CJ	639718
cis-1,3-Dichloropropene	ND		0.001	1		04/12/01 19:48	CJ	639718
Dibromochloromethane	ND		0.001	1		04/12/01 19:48	CJ	639718
Dichlorodifluoromethane	ND		0.001	1		04/12/01 19:48	CJ	639718
Ethylbenzene	ND		0.001	1		04/12/01 19:48	CJ	639718
Methylene chloride	ND		0.002	1		04/12/01 19:48	CJ	639718
Tetrachloroethene	ND		0.001	1		04/12/01 19:48	CJ	639718
Toluene	ND		0.001	1		04/12/01 19:48	CJ	639718
trans-1,3-Dichloropropene	ND		0.001	1		04/12/01 19:48	CJ	639718
Trichloroethene	ND		0.001	1		04/12/01 19:48	CJ	639718
Trichlorofluoromethane	ND		0.001	1		04/12/01 19:48	CJ	639718
Vinyl chloride	ND		0.001	1		04/12/01 19:48	CJ	639718
cis-1,2-Dichloroethene	ND		0.001	1		04/12/01 19:48	CJ	639718
trans-1,2-Dichloroethene	ND		0.001	1		04/12/01 19:48	CJ	639718
Xylenes,Total	0.005		0.001	1		04/12/01 19:48	CJ	639718
Surr: 3-Bromochlorobenzene	97.8	%	50-150	1		04/12/01 19:48	CJ	639718
Surr: Fluorobenzene	91.8	%	50-130	1		04/12/01 19:48	CJ	639718

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.

222903X

Analysis: Diesel Range Organics
Method: CA_DRO

WorkOrder: 01040258
Lab Batch ID: 11505

Method Blank

RunID: HP_V_010420A-647033 Units: mg/Kg
Analysis Date: 04/20/2001 4:15 Analyst: AM
Preparation Date: 04/11/2001 13:24 Prep By: J_L Method SW3550B

Analyte	Result	Rep Limit
Diesel Range Organics	ND	2.0
Surr: n-Pentacosane	103.9	20-154

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01040258-01A	S-5-MW6J
01040258-02A	S-10-MW6J
01040258-03A	S-15-MW6J
01040258-04A	S-20-MW6J
01040258-05A	S-SP-1-(1-4)-COMP

Laboratory Control Sample (LCS)

RunID: HP_V_010420A-647034 Units: mg/Kg
Analysis Date: 04/20/2001 4:53 Analyst: AM
Preparation Date: 04/11/2001 13:24 Prep By: J_L Method SW3550B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Diesel Range Organics	83.3	84	101	50	150

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

Sample Spiked: 01040258-01
RunID: HP_V_010420A-647036 Units: mg/Kg
Analysis Date: 04/20/2001 9:41 Analyst: AM
Preparation Date: 04/11/2001 13:24 Prep By: J_L 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	73	85.1	83.3	79	93.0	8.85	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

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

Quality Control Report

EXXON Company U.S.A.

222903X

Analysis: Semivolatile Hydrocarbons
Method: SW8015B

WorkOrder: 01040258
Lab Batch ID: 11505A

Method Blank

RunID: HP_V_010423A-647366 Units: mg/Kg
Analysis Date: 04/20/2001 4:15 Analyst: AM
Preparation Date: 04/11/2001 13:24 Prep By: J_L Method SW3550B

Analyte	Result	Rep Limit
Motor Oil (C28-C40)	ND	10
Surr: n-Pentacosane	103.9	20-154

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01040258-01A	S-5-MW6J
01040258-02A	S-10-MW6J
01040258-03A	S-15-MW6J
01040258-04A	S-20-MW6J
01040258-05A	S-SP-1-(1-4)-COMP

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

Sample Spiked: 01040258-01
RunID: HP_V_010423A-647369 Units: mg/Kg
Analysis Date: 04/20/2001 9:41 Analyst: AM
Preparation Date: 04/11/2001 13:24 Prep By: J_L 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
Motor Oil (C28-C40)	ND	83	70	82.3	83	76	89.4	8.18	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

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Quality Control Report

EXXON Company U.S.A.

222903X

Analysis: Volatiles Organic Compounds
Method: SW8021B

WorkOrder: 01040258
Lab Batch ID: R33472

Method Blank

RunID: HP_X_010412A-639717 Units: ug/Kg
Analysis Date: 04/12/2001 19:09 Analyst: CJ

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01040258-05A	S-SP-1-(1-4)-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
Benzene	ND	1.0
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-1,3-Dichloropropene	ND	1.0
Dibromochloromethane	ND	1.0
Dichlorodifluoromethane	ND	1.0
Ethylbenzene	ND	1.0
Methylene chloride	ND	2.0
Tetrachloroethene	ND	1.0
Toluene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
Trichloroethene	ND	1.0
Trichlorofluoromethane	ND	1.0
Vinyl chloride	ND	1.0
cis-1,2-Dichloroethene	ND	1.0
trans-1,2-Dichloroethene	ND	1.0
Xylenes,Total	ND	1.0
Surr: 3-Bromochlorobenzene	108.2	50-150
Surr: Fluorobenzene	92.5	50-130

Laboratory Control Sample (LCS)

RunID: HP_X_010412A-639716 Units: ug/Kg
Analysis Date: 04/12/2001 17:51 Analyst: CJ

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1,1-Trichloroethane	20	18	92	50	150
1,1,2,2-Tetrachloroethane	20	20	102	50	150
1,1,2-Trichloroethane	20	19	95	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.

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Quality Control Report

EXXON Company U.S.A.

222903X

Analysis: Volatiles Organic Compounds
Method: SW8021B

WorkOrder: 01040258
Lab Batch ID: R33472

Laboratory Control Sample (LCS)

RunID: HP_X_010412A-639716 Units: ug/Kg
Analysis Date: 04/12/2001 17:51 Analyst: CJ

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1-Dichloroethane	20	19	96	50	150
1,1-Dichloroethene	20	19	94	50	150
1,2-Dichlorobenzene	20	20	98	50	150
1,2-Dichloroethane	20	20	98	50	150
1,2-Dichloropropane	20	18	88	50	150
1,3-Dichlorobenzene	20	20	99	50	150
1,4-Dichlorobenzene	20	20	100	50	150
Benzene	20	19	96	60	116
Bromodichloromethane	20	17	84	50	150
Bromoform	20	20	102	50	150
Bromomethane	20	20	100	50	150
Carbon tetrachloride	20	17	87	50	150
Chlorobenzene	20	20	100	50	150
Chloroethane	20	18	88	50	150
Chloroform	20	19	97	50	150
Chloromethane	20	18	88	50	150
cis-1,3-Dichloropropene	20	18	92	50	150
Dibromochloromethane	20	20	102	50	150
Dichlorodifluoromethane	20	16	81	50	150
Ethylbenzene	20	20	99	68	127
Methylene chloride	20	20	98	50	150
Tetrachloroethene	20	19	96	50	150
Toluene	20	19	95	64	122
trans-1,3-Dichloropropene	20	19	96	50	150
Trichloroethene	20	18	89	50	150
Trichlorofluoromethane	20	18	92	50	150
Vinyl chloride	20	18	90	50	150
cis-1,2-Dichloroethene	20	19	94	50	150
trans-1,2-Dichloroethene	20	19	97	50	150
Xylenes,Total	60	59	98	68	129

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

Sample Spiked: 01040258-05
RunID: HP_X_010412A-639714 Units: ug/Kg
Analysis Date: 04/12/2001 16:34 Analyst: CJ

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

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Quality Control Report

EXXON Company U.S.A.

222903X

Analysis: Volatiles Organic Compounds
Method: SW8021B

WorkOrder: 01040258
Lab Batch ID: R33472

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	21	104	20	19	93.4	10.9	30	50	150
1,1,2,2-Tetrachloroethane	ND	20	24	120	20	21	106	12.8	30	50	150
1,1,2-Trichloroethane	ND	20	22	108	20	20	102	6.24	30	50	150
1,1-Dichloroethane	ND	20	21	105	20	18	90.9	14.7	30	50	150
1,1-Dichloroethene	ND	20	20	98.5	20	18	90.4	8.58	30	50	150
1,2-Dichlorobenzene	ND	20	18	90.8	20	17	85.3	6.33	30	50	150
1,2-Dichloroethane	ND	20	22	112	20	20	99.3	11.9	30	50	150
1,2-Dichloropropane	ND	20	20	97.9	20	19	95.3	2.68	30	50	150
1,3-Dichlorobenzene	ND	20	18	90.7	20	17	87.1	4.11	30	50	150
1,4-Dichlorobenzene	ND	20	18	92.3	20	17	85.1	8.02	30	50	150
Benzene	ND	20	19	95.6	20	19	94.3	1.42	30	50	150
Bromodichloromethane	ND	20	19	96.9	20	19	93.2	3.95	30	50	150
Bromoform	ND	20	23	113	20	21	104	7.97	30	50	150
Bromomethane	ND	20	23	113	20	19	95.7	16.4	30	50	150
Carbon tetrachloride	ND	20	20	99.7	20	19	96.3	3.49	30	50	150
Chlorobenzene	ND	20	19	96.7	20	18	90.8	6.24	30	50	150
Chloroethane	ND	20	18	92.4	20	17	84.9	8.47	30	50	150
Chloroform	ND	20	21	107	20	19	92.6	14.3	30	50	150
Chloromethane	ND	20	18	89.7	20	17	85.6	4.61	30	50	150
cis-1,3-Dichloropropene	ND	20	20	99.8	20	19	97.4	2.43	30	50	150
Dibromochloromethane	ND	20	22	108	20	21	105	2.96	30	50	150
Dichlorodifluoromethane	ND	20	19	94.1	20	17	87.2	7.64	30	50	150
Ethylbenzene	ND	20	20	100	20	20	100	0.376	30	50	150
Methylene chloride	ND	20	19	96.0	20	17	83.7	13.7	30	50	150
Tetrachloroethene	ND	20	20	97.7	20	19	93.8	4.12	30	50	150
Toluene	ND	20	19	96.0	20	19	96.1	.0536	30	50	150
trans-1,3-Dichloropropene	ND	20	21	105	20	20	99.6	5.72	30	50	150
Trichloroethene	ND	20	20	98.9	20	20	98.2	0.702	30	50	150
Trichlorofluoromethane	ND	20	20	99.1	20	19	94.9	4.40	30	50	150
Vinyl chloride	ND	20	19	92.8	20	18	87.6	5.77	30	50	150
cis-1,2-Dichloroethene	ND	20	21	106	20	18	88.4	17.9	30	50	150
trans-1,2-Dichloroethene	ND	20	21	103	20	18	89.7	13.4	30	50	150
Xylenes,Total	5.0	60	61	93.3	60	61	93.3	0	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

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8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
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Quality Control Report

EXXON Company U.S.A.

222903X

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 01040258
Lab Batch ID: R33620

Method Blank

RunID: HP_J_010418B-642344 Units: ug/Kg
Analysis Date: 04/18/2001 15:22 Analyst: TM

Analyte	Result	Rep Limit
Benzene	ND	1.0
Ethylbenzene	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	88.9	59-127
Surr: 4-Bromofluorobenzene	104.0	48-156

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01040258-01A	S-5-MW6J
01040258-03A	S-15-MW6J
01040258-04A	S-20-MW6J

Laboratory Control Sample (LCS)

RunID: HP_J_010418B-642336 Units: ug/Kg
Analysis Date: 04/18/2001 12:25 Analyst: TM

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	50	53	106	60	120
Ethylbenzene	50	52	105	68	127
Toluene	50	53	105	64	122
m,p-Xylene	100	110	105	68	129
o-Xylene	50	53	106	68	127
Xylenes,Total	150	163	109	68	129

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

Sample Spiked: 01040258-01
RunID: HP_J_010418B-642339 Units: ug/Kg
Analysis Date: 04/18/2001 13:23 Analyst: TM

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	21	106	20	18	91.3	14.5	34	35	139
Ethylbenzene	ND	20	20	102	20	18	89.1	13.5	35	31	137
Toluene	ND	20	21	104	20	18	90.0	14.1	28	31	137
m,p-Xylene	ND	40	41	102	40	36	89.5	13.2	38	19	144
o-Xylene	ND	20	20	102	20	18	91.5	11.1	57	25	139

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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Quality Control Report

EXXON Company U.S.A.

222903X

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 01040258
Lab Batch ID: R33620

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

Sample Spiked: 01040258-01
RunID: HP_J_010418B-642339 Units: ug/Kg
Analysis Date: 04/18/2001 13:23 Analyst: TM

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
Xylenes,Total	ND	60	61	102	60	54	90.0	12.2	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
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Quality Control Report

EXXON Company U.S.A.

222903X

Analysis: Gasoline Range Organics
Method: CA_GRO

WorkOrder: 01040258
Lab Batch ID: R33627

Method Blank

RunID: HP_J_010418C-642454 Units: mg/Kg
Analysis Date: 04/18/2001 15:22 Analyst: FB

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	1.0
Surr: 1,4-Difluorobenzene	92.0	72-153
Surr: 4-Bromofluorobenzene	105.7	51-149

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01040258-01A	S-5-MW6J
01040258-03A	S-15-MW6J
01040258-04A	S-20-MW6J
01040258-05A	S-SP-1-(1-4)-COMP

Laboratory Control Sample (LCS)

RunID: HP_J_010418C-642450 Units: mg/Kg
Analysis Date: 04/18/2001 12:54 Analyst: FB

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	0.92	92	53	137

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

Sample Spiked: 01040258-01
RunID: HP_J_010418C-642451 Units: mg/Kg
Analysis Date: 04/18/2001 14:25 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	0.86	95.1	0.9	0.82	91.5	3.88	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

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Quality Control Report

EXXON Company U.S.A.

222903X

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 01040258
Lab Batch ID: R33716

Method Blank

RunID: HP_J_010419B-644232 Units: ug/Kg
Analysis Date: 04/20/2001 0:27 Analyst: FB

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01040258-02A	S-10-MW6J

Analyte	Result	Rep Limit
Benzene	ND	1.0
Ethylbenzene	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	90.3	59-127
Surr: 4-Bromofluorobenzene	107.1	48-156

Laboratory Control Sample (LCS)

RunID: HP_J_010419B-644227 Units: ug/Kg
Analysis Date: 04/19/2001 21:33 Analyst: FB

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	50	49	99	60	120
Ethylbenzene	50	47	94	68	127
Toluene	50	48	97	64	122
m,p-Xylene	100	94	94	68	129
o-Xylene	50	47	95	68	127
Xylenes,Total	150	141	94	68	129

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

Sample Spiked: 01040553-07
RunID: HP_J_010419B-644228 Units: ug/Kg
Analysis Date: 04/19/2001 22:31 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	15	72.0	20	16	79.8	10.3	34	35	139
Ethylbenzene	1.5	20	11	48.2	20	12	51.5	6.69	35	31	137
Toluene	ND	20	15	67.5	20	13	60.0	11.8	28	31	137
m,p-Xylene	7.1	40	24	42.4	40	22	37.4	12.4	38	19	144
o-Xylene	2.5	20	11	43.4	20	11	42.7	1.45	57	25	139

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.

222903X

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 01040258
Lab Batch ID: R33716

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

Sample Spiked: 01040553-07
RunID: HP_J_010419B-644228 Units: ug/Kg
Analysis Date: 04/19/2001 22:31 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
X[illegible]nes,Total	9.6	60	35	42.3	60	33	39.0	8.20	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
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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
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HOUSTON, TEXAS 77054
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Quality Control Report

EXXON Company U.S.A.

222903X

Analysis: Gasoline Range Organics
Method: CA_GRO

WorkOrder: 01040258
Lab Batch ID: R33717

Method Blank

RunID: HP_J_010419C-644256 Units: mg/Kg
Analysis Date: 04/20/2001 0:27 Analyst: FB

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01040258-02A	S-10-MW6J

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	1.0
Surr: 1,4-Difluorobenzene	92.0	72-153
Surr: 4-Bromofluorobenzene	106.0	51-149

Laboratory Control Sample (LCS)

RunID: HP_J_010419C-644253 Units: mg/Kg
Analysis Date: 04/19/2001 22:02 Analyst: FB

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	1	100	53	137

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

Sample Spiked: 01040553-07
RunID: HP_J_010419C-644254 Units: mg/Kg
Analysis Date: 04/19/2001 23:29 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	0.4	40.6	0.9	0.34	34.8 *	15.3	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.

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
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Quality Control Report

EXXON Company U.S.A.

222903X

Analysis: Metals by Method 6010B, Total
Method: SW6010B

WorkOrder: 01040258
Lab Batch ID: 11540-T

Method Blank

RunID: TJAT_010416D-639531 Units: mg/Kg
Analysis Date: 04/16/2001 20:33 Analyst: NS
Preparation Date: 04/12/2001 16:00 Prep By: MME Method SW3050B

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01040258-05A	S-SP-1-(1-4)-COMP

Analyte	Result	Rep Limit
Lead	ND	0.5

Laboratory Control Sample (LCS)

RunID: TJAT_010416D-639532 Units: mg/Kg
Analysis Date: 04/16/2001 20:39 Analyst: NS
Preparation Date: 04/12/2001 16:00 Prep By: MME Method SW3050B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Lead	138	107	N/A	105	170

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

Sample Spiked: 01040321-01
RunID: TJAT_010416D-639534 Units: mg/Kg
Analysis Date: 04/16/2001 20:51 Analyst: NS
Preparation Date: 04/12/2001 16:00 Prep By: MME 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	7.0	100	94	87.0	100	94.7	87.7	0.774	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
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* - 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.

222903X

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 01040258
Lab Batch ID: R33430

Method Blank

RunID: M_010416A-638757 Units: ug/Kg
Analysis Date: 04/16/2001 12:15 Analyst: NL

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01040258-01A	S-5-MW6J

Analyte	Result	Rep Limit
Methyl tert-butyl ether	ND	10
Surr: 1,2-Dichloroethane-d4	86.0	70-120
Surr: 4-Bromofluorobenzene	96.0	74-130
Surr: Toluene-d8	94.0	80-140

Laboratory Control Sample (LCS)

RunID: M_010416A-638755 Units: ug/Kg
Analysis Date: 04/16/2001 11:49 Analyst: NL

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1-Dichloroethene	50	43	86	59	172
Benzene	50	48	96	66	142
Chlorobenzene	50	54	108	60	133
Toluene	50	50	100	59	139
Trichloroethene	50	50	100	62	137

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

Sample Spiked: 01040205-01
RunID: M_010416A-638771 Units: ug/Kg
Analysis Date: 04/16/2001 14:13 Analyst: NL

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	50	44	88	50	43	86	2	22	59	172
Benzene	ND	50	45	90	50	43	86	5	21	66	142
Chlorobenzene	ND	50	45	90	50	42	84	7	21	60	133
Toluene	ND	50	44	88	50	42	84	5	21	59	139
Trichloroethene	ND	50	47	94	50	45	90	4	24	62	137

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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Quality Control Report

EXXON Company U.S.A.

222903X

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 01040258
Lab Batch ID: R33563

Method Blank

RunID: M_010417A-641429 Units: ug/Kg
Analysis Date: 04/17/2001 11:23 Analyst: NL

Analyte	Result	Rep Limit
Methyl tert-butyl ether	ND	10
Surr: 1,2-Dichloroethane-d4	86.0	70-120
Surr: 4-Bromofluorobenzene	100.0	74-130
Surr: Toluene-d8	92.0	80-140

Samples in Analytical Batch:

Lab Sample ID	Client Sample ID
01040258-02A	S-10-MW6J
01040258-03A	S-15-MW6J
01040258-04A	S-20-MW6J
01040258-05A	S-SP-1-(1-4)-COMP

Laboratory Control Sample (LCS)

RunID: M_010417A-641428 Units: ug/Kg
Analysis Date: 04/17/2001 10:57 Analyst: NL

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
1,1-Dichloroethene	50	48	96	59	172
Benzene	50	49	98	66	142
Chlorobenzene	50	48	96	60	133
Toluene	50	47	94	59	139
Trichloroethene	50	50	100	62	137

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

Sample Spiked: 01040258-02
RunID: M_010417A-641431 Units: ug/Kg
Analysis Date: 04/17/2001 12:14 Analyst: NL

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	50	45	90	50	43	86	5	22	59	172
Benzene	ND	50	42	84	50	38	76	10	21	66	142
Chlorobenzene	ND	50	42	84	50	38	76	10	21	60	133
Toluene	ND	50	39	78	50	38	76	3	21	59	139
Trichloroethene	ND	50	45	90	50	43	86	5	24	62	137

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

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Sample Receipt Checklist

And

Chain of Custody

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

Sample Receipt Checklist

Workorder:	01040258	Received By:	DS
Date and Time Received:	4/10/01 10:00:00 AM	Carrier name:	FedEx
Temperature:	3	Chilled by:	Water Ice

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

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

Client Name Contacted: _____

Non Conformance Issues: _____

Client Instructions: _____

0104[illegible]258

EXXON COMPANY, USA. (West Coast)

CHAIN OF CUSTODY RECORD NO. ______ Page 1 of 1

Exxon Engineer: Gene Ortega Phone:

Consultant Co. Name: ERI Contact: Scott Thompson

Address: 73 Digital Dr. Ste 100 Novato, CA 94949 Fax: 415-382-1856

RAS #: 7-0235 Facility/State ID # (TN Only):

AFE # (Terminal Only): Consultant Project #: 222903X

Location: 2225 Telegraph Ave (City) Oakland (State) CA

☐ EE ☐ C&M ☐ SDT

Consultant Work Release #: 21011092

Sampled By: [illegible]

ANALYSIS REQUEST: (CHECK APPROPRIATE BOX)

SAMPLE I.D.	DATE	TIME	COMP.	GRAB	MATRIX H_2O	MATRIX SOIL	MATRIX AIR	OTHER	PRESERVATIVE	NO. OF CONTAINERS	CONTAINER SIZE	TPH/GC 8015 GRO ☒ 8015 DRO ☒ + motor oil	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 ☐ 601 ☐	TPH/IR 418.1 ☐	TOX/TOH ☐	OTHER: HVOCs
S-5-MW65	04/06/01	10:55	Soil			X			Ice	1		X	X	X															
S-10-MW65	04/06/01	11:00	↓			X			↓	↓	Bags	↓	↓	↓															
S-15-MW65	04/06/01	11:25	↓			X			↓	↓	Bags	↓	↓	↓															
S-20-MW65	04/06/01	11:10	↓			X			↓	↓	Bags	↓	↓	↓															
S-Sp-1-(1-4)		11:20								1	↓	X	X	X										X		(4)			X

320361155894 SO 5 lbs

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: S-Sp1 (1) thru S-Sp1-4 Composite into 1 Sample

SPECIAL REPORTING REQUIREMENTS (Specify)

PDF ☐ EDD ☐

FAX ☐ FAX C-O-C W/REPORT ☐

QA/QC Level

Standard ☐ CLP ☐ Other ☐

LAB USE ONLY Lot # Storage Location

3° [illegible]

WORK ORDER #: 0104025S LAB WORK RELEASE #:

CUSTODY RECORD

Relinquished By Sampler:	Date	Time	Received By:
[illegible] Cullmann	04/06/01	5:30	
Relinquished:	Date	Time	Received By:
Relinquished:	Date	Time	Received By: Dawn Stelly 4/10/01 1000
			Way Bill #: Cooler Temp:

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

ATTACHMENT G

SOIL DISPOSAL DOCUMENTATION

Dillard Trucking, Inc. dba

Dillard Environmental Services

P. O. Box 579 · Byron, CA 94514
Phone (925) 634-6850 – Fax (925) 634-0569
EPA #CAD982523433 · D.T.S.C. #1715 · CA LIC #624665-A HAZ

Via Fax (415) 382-1856

June 18, 2001

Ms. Lyz Cullmann
Environmental Resolutions, Inc.
73 Digital Drive, Suite 100
Novato, CA 94949

RE: **EXXON #7-0235**
2225 Telegraph Avenue
Oakland, CA

Dear Ms. Cullmann:

Please be advised that two (2) drums of petroleum contaminated soils from the referenced site has been removed. The drums were transported for disposal to Republic-Vasco Landfill in Livermore, California on June 8, 2001.

Should you have any questions, please do not hesitate to call.

Sincerely,

Dillard Trucking, Inc. dba,
DILLARD ENVIRONMENTAL SERVICES

Lynette Smith
Customer Service

/Attachments