

**ExxonMobil**  
**Refining & Supply Company**  
Global Remediation

Gene N. Ortega  
Project Manager  
Global Remediation – US Retail

25A Crescent Drive, #407  
Pleasant Hill, California 95423  
(925) 246-8747 Telephone  
(925) 246-8798 Facsimile  
gene.n.ortega@exxonmobil.com

RD 390

**ExxonMobil**  
**Refining & Supply**

September 11, 2003

**Alameda County**

Mr. Amir Gholami  
Alameda County Health Care Services Agency  
Department of Environmental Health  
1131 Harbor Bay Parkway, Room 250  
Alameda, California 94502-6577

OCT 12 2003

**Environmental Health**

RE: Former Exxon RAS #7-0238/2200 East 12<sup>th</sup> Street, Oakland California.

Dear Mr. Gholami:

Attached for your review and comment is a letter report entitled **Well Installation Report**, dated September 9, 2003, for the above-referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Novato, California, and details well installation activities at the subject site.

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

Sincerely,

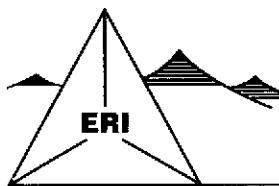


Gene N. Ortega  
Project Manager

Attachment: ERI's Well Installation Report, dated September 9, 2003.

cc: w/ attachment  
Mr. Chuck Headlee, California Regional Water Quality Control Board, San Francisco Bay Region  
Mr. Joseph A. Aldridge, Valero Energy Corporation

w/o attachment  
Mr. Rob A. Saur, Environmental Resolutions, Inc.



## **ENVIRONMENTAL RESOLUTIONS, INC.**

September 9, 2003  
ERI 229312.R21

Mr. Gene N. Ortega  
ExxonMobil Refining & Supply – Global Remediation  
25A Crescent Drive, #407  
Pleasant Hill, California 94523

Alameda County  
OCT 9 2003  
Environmental Health

Subject: Well Installation Report, Former Exxon Service Station, 2200 East 12<sup>th</sup> Street,  
Oakland, California.

Mr. Ortega:

At the request of ExxonMobil Oil Corporation (ExxonMobil), Environmental Resolutions, Inc. (ERI) observed the installation of four dual-phase extraction (DPE) wells (DPE1 through DPE4) at the subject site. The wells were installed as part of a DPE remediation system to facilitate remediation of hydrocarbon-impacted soil and groundwater beneath the site. The work was performed in accordance with ERI's *Corrective Action Plan* (CAP) dated September 19, 2001, as approved by the Alameda County Health Care Services (the County) in a letter dated April 3, 2003 (Attachment A).

### **BACKGROUND**

The site is located on the southwestern corner of East 12<sup>th</sup> Street and 22<sup>nd</sup> Avenue in Oakland, California, as shown on the Site Vicinity Map (Plate 1). The locations of the underground storage tanks (USTs), dispenser islands, groundwater monitoring wells, and other select site features are shown on the Generalized Site Plan (Plate 2).

According to information provided by ExxonMobil, Texaco operated a service station at this site until 1988. In October 1988, ownership of the station transferred from Texaco to ExxonMobil. ExxonMobil operated a service station at the site from 1988 to 2000. In June 2000, ExxonMobil transferred the ownership of the station to Valero Refining Company. The site is currently an operating Valero Station and is in full working order.

### **FIELD WORK**

#### **Scope of Work**

The purpose of the DPE well installation was to facilitate remediation of hydrocarbon-impacted groundwater and soil beneath the site. The work was performed in accordance with ERI's CAP, a site-specific health and safety plan that was kept on site during field operations, and ERI's field protocol (Attachment B). ERI obtained well installation permits from the Alameda County Public Works Department (the County) prior to performing the field work. Copies of the permits are provided in Attachment C.

### **Soil Borings**

On June 4 and 5, 2003, ERI's geologist observed Cascade Drilling, Inc. (Cascade) of Rancho Cordova, California, drill four soil borings and install four dual-phase extraction wells (DPE1 through DPE4) using a hollow-stem auger drill rig. DPE1 through DPE4 were set to 20 feet below ground surface (bgs) with a screened interval from 5 to 20 feet bgs in a silty clay to sandy silty layer. The locations of the dual-phase extraction wells are shown on Plate 2. A summary of well information is presented in Table 1.

ERI's geologist identified the soil samples collected from the borings using visual and manual methods, and classified the samples according to the Unified Soil Classification System (USCS) (Attachment D). Descriptions of the materials encountered are presented on the boring logs (Attachment D).

ERI submitted select soil samples from the borings to Test America Incorporated (Test America), a California state-certified laboratory, under Chain-of-Custody protocol. Analytical laboratory reports and Chain-of-Custody records are included in Attachment E. Select soil samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) using EPA Method 8015B; methyl tertiary butyl ether (MTBE), and benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA Method 8021B; and fuel oxygenates and lead scavengers using EPA Method 8260B. Results of laboratory analysis of soil samples are presented in Table 2.

Approximately 20 cubic yards of soil were generated during drilling activities, stockpiled, covered with plastic sheeting, and temporarily stored on site pending disposal. ERI collected one composite soil sample (four brass sleeves) from the stockpiled soil and submitted to Test America for analysis of TPHg using EPA Method 8015; MTBE and BTEX using EPA Method 8021B; volatile organic compounds (VOCs) using EPA Method 8260B; and total lead using EPA Method 6010B. Results of laboratory analysis of stockpiled soil are presented in Table 2. The soil was transported to BFI in Livermore, California, by Dillard Trucking Company (Dillard) of Byron, California, working under direct contract to ExxonMobil. Disposal documentation is provided in Attachment F.

Rinsate water was stored on site in four 55-gallon drums pending disposal by ERI. At the request of ExxonMobil, on July 1, 2003, ERI transported the water to Romic Environmental Technology (Romic) in East Palo Alto, California. Disposal documentation is provided in Attachment F.

## **RESULTS**

### **Constituent Distribution**

Gasoline-range hydrocarbons (TPHg) were not present in detectable concentrations in the soil samples collected during this investigation. MTBE was detected in all the samples collected (S-20-DPE1 through S-20-DPE4) at concentrations up to 2.36 milligrams per kilogram (mg/Kg). Benzene and total xylenes were detected in samples collected from S-20-DPE1 and S-20-DPE3 at 0.0011, and 0.0033 mg/Kg respectively. Select VOCs were detected in samples collected from S-20-DPE1, S-20-DPE2, and in the composite stockpile sample SP1-1-(1-4) at concentrations up to 0.644 mg/Kg. Total lead (Pb) was detected in the composite stockpile sample at a concentration of 7.83 mg/Kg.

## DOCUMENT DISTRIBUTION

ERI recommends copies of this report be forwarded to:

Mr. Amir Gholami  
Alameda County Health Care Services Agency  
Department of Environmental Health  
1131 Harbor Bay Parkway, Room 250  
Alameda, California 94502-6577

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

Mr. Joseph A. Aldridge  
Valero Energy Corporation  
685 West Third Street  
Hanford, California 93230

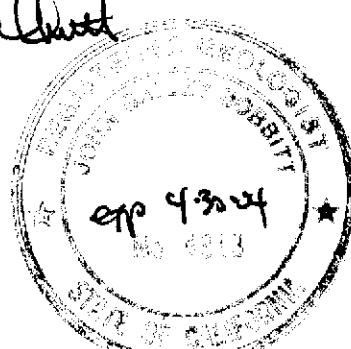
Please call Mr. Rob A. Saur, ERI's project manager for the site, at (415) 382-9105 with any questions regarding this report.

Sincerely,  
Environmental Resolutions, Inc.

*J Clark*

Jennifer Clark  
Staff Scientist

*John B. Bobbitt*  
John B. Bobbitt  
R.G. 4313



Attachments: Table 1: Well Information  
Table 2: Analytical Laboratory Results of Soil Samples

Plate 1: Site Vicinity Map  
Plate 2: Generalized Site Plan

Attachment A: Alameda County Health Care Services Approval Letter Dated April 3, 2003

Attachment B: Field Protocol

Attachment C: Well Installation Permits

Attachment D: Unified Soil Classification System, Symbol Key, and Boring Logs

Attachment E: Laboratory Analysis Reports and Chain-of-Custody Records

Attachment F: Soil and Water Disposal Documentation

**TABLE 1**  
**WELL INFORMATION**  
Former Exxon Service Station 7-0238  
2200 East 12th Street  
Oakland, California  
(Page 1 of 1)

Well Designation	Date	Casing Diameter (inches)	Measured Depth (feet)	Screen Interval	DTW
DPE1	6/5/2003	4	20 ft	5 to 20 ft bgs	NA
DPE2	6/4/2003	4	20 ft	5 to 20 ft bgs	15 ft
DPE3	6/4/2003	4	20 ft	5 to 20 ft bgs	15 ft
DPE4	6/5/2003	4	20 ft	5 to 20 ft bgs	NA

Notes:

DPE1 = Dual-phase extraction well #1.  
DTW = Depth to water.  
ft bgs = Feet below ground surface.  
NA = Not available.

**TABLE 2**  
**ANALYTICAL LABORATORY RESULTS OF SOIL SAMPLES**  
Former Exxon Service Station 7-0238  
2200 East 12th Street  
Oakland, California  
(Page 1 of 1)

Well ID #	Sampling Date	Sample Depth (feet bgs)	TPHg	MTBE	B	T	E	X	Total Lead	Select VOCs	VOCs
			<			mg/Kg				>	
S-20-DPE1	06/05/03	20	<5	2.03/2.36a	0.0011	<0.001	<0.001	<0.001	---	b	---
S-20-DPE2	06/04/03	20	<5	0.165/0.102a	<0.001	<0.001	<0.001	<0.001	---	c	---
S-20-DPE3	06/04/03	20	<5	0.089/0.0317a	<0.001	<0.001	<0.001	0.0033	---	ND	---
S-20-DPE4	06/05/03	20	<5	0.047/0.0356a	<0.001	<0.001	<0.001	<0.001	---	ND	---
SP1-1-(1-4)	06/05/03	---	<5	0.261	0.0076/<0.002a	0.0041/<0.002a	0.1303/0.0048a	0.079/0.0066a	7.83	---	d

Notes:

- TPHg = Total petroleum hydrocarbons as gasoline analyzed using EPA Method 8015B.
- MTBE = Methyl tertiary butyl ether analyzed using EPA Method 8021B.
- BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA Method 8021B.
- Total Lead = Total lead analyzed using EPA Method 6010B.
- Select VOCs = Select volatile organic compounds (fuel oxygenates and lead scavengers) analyzed using EPA Method 8260B.
- VOCs = Volatile organic compounds (full suite) analyzed using EPA Method 8260B.
- < = Less than the stated laboratory reporting limit.
- = Not analyzed or measured.
- bgs = Below ground surface.
- mg/Kg = Milligrams per kilogram.
- ND = Not detected.
- a = Confirmed using EPA Method 8260B.
- b = Tertiary butyl alcohol detected at 0.644 mg/Kg.
- c = Tertiary butyl alcohol detected at 0.41 mg/Kg.
- d = Acetone: 0.0501 mg/Kg; carbon disulfide: 0.00368 mg/Kg; isopropylbenzene: 0.00219 mg/Kg; naphthalene: 0.0105 mg/Kg; n-ropylbenzene: 0.00805 mg/Kg; 1,2,4-trimethylbenzene: 0.0061 mg/Kg; and 1,3,5-trimethylbenzene: 0.00249 mg/Kg.



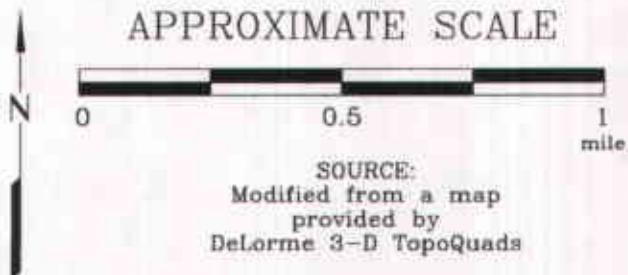
FN 2293TOPO

#### EXPLANATION



1/2-mile radius circle

#### APPROXIMATE SCALE



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

#### **SITE VICINITY MAP**

FORMER EXXON SERVICE STATION 7-0238  
2200 East 12th Street  
Oakland, California

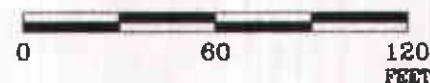


PROJECT NO.	2293
PLATE	1

N



APPROXIMATE SCALE



SOURCE:  
Modified from a map  
provided by  
Morrow Surveying

FN: 22930005

#### EXPLANATION

MW9I  
◆ Groundwater Monitoring Well

DPE4  
▣ Dual-Phase Extraction Well



**GENERALIZED SITE PLAN**  
FORMER EXXON SERVICE STATION 7-0238  
2200 East 12th Street  
Oakland, California

PROJECT NO.

2293

PLATE

2

**ATTACHMENT A**

**ALAMEDA COUNTY HEALTH CARE SERVICES  
APPROVAL LETTER DATED APRIL 3, 2003**

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



APR 08 2003

BY:.....

April 3, 2003

Mr. Gene Ortega  
ExxonMobil Oil Company  
2300 Clayton Road, Suite 250  
Concord, CA 94520

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

Dear Mr. Ortega:

Subject: Wong's Exxon, R00000390, 2200 E.12<sup>th</sup> St.Oakland  
CA 94606

Hi Paula:

I have reviewed the files regarding the above referenced site. I have also left a message for your consultant approving ERI's Corrective Action Plan Addendum (CAP Addendum) concerning the above referenced site dated February 14 2003. Per my phone call regarding ERI's Corrective Action Plan Addendum (CAP Addendum) for Former Exxon Service Station located at 2200 East 12th Street, Oakland, California, dated February 14, 2003, has been approved. You may proceed with the permitting process necessary to install wells DPE1 through DPE4.

Please call me at (510) 567-6876 if you have any questions.

Sincerely,

Handwritten signature of Amir K. Gholami.

Amir K. Gholami, REHS  
Hazardous Materials Specialist

C:Ms. Paula Sime, ERI, 73 Digital Drive, Suite 100, Novato  
CA 94949-5791  
D. Drogos, A. Gholami

**ATTACHMENT B**

**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) and a private utility locator 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 5 feet 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 10 to 15 feet below the uppermost zone of saturation or 5 feet into any competent clay layer (aquitard) encountered beneath the water-bearing zone. If an aquitard is encountered, the boring is terminated and backfilled with bentonite before installing a groundwater monitoring well.

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 photo-ionization 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. 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 either be treated on site or removed to an appropriate recycling or disposal facility.

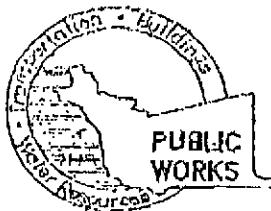
### Dual-Phase Extraction Well Construction

Sparge wells are constructed in borings using thread-jointed, 4-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 4-inch diameter casing with a screen size of 10-30 microns. Unperforated casing is installed from the top of each screen to the ground surface. The annular space in the well is packed with number 2/16 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 dual-phase extraction 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.

**ATTACHMENT C**

**WELL INSTALLATION PERMITS**



## ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION  
399 ELMHURST ST, HAYWARD CA 94541-1395  
PHONE (510) 670 6633 James Voo  
FAX (510) 782-1939

APPLICANTS, PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS  
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

## DRILLING PERMIT APPLICATION

## FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT  
Former Exxon Service Station 7-0238  
3200 East 12th Street  
Oakland, California

ENT  
Exxon Mobile Oil Corporation  
1000 Clayton Rd, Ste 1250 Phone (925) 246-8747  
Concord, CA Zip 94520

APPLICANT  
Environmental Resolutions, Inc.  
13 Digital Dr., Ste 100 Phone (415) 382-1856  
Novato, CA Zip 94949

## TYPE OF PROJECT

□ Construction	Geotechnical Investigation
□ Shallow Protection	□ General
□ Water Supply	□ Contamination
□ Irrigation	□ Well Destruction
□ Dual-Phase Extraction	

## PROPOSED WATER SUPPLY WELL USE

New Domestic	□	Replacement Domestic	□
Municipal	□	Irrigation	□
Industrial	□	Other	□

## DRILLING METHOD:

□ Mud Rotary	□	Air Rotary	□	Auger	<input checked="" type="checkbox"/>
Cable	□	Other	□		

DRILLER'S NAME Woodward Drilling, Inc. Cascade Drilling

DRILLER'S LICENSE NO 67-910079 717510

## PROJECTS

Drill Hole Diameter	<u>12</u>	in.	Maximum	
Casing Diameter	<u>11</u>	in.	Depth	<u>20</u> ft
Surface Seal Depth	<u>10.3</u>	ft	Owner's Well Number	<u>DPE1</u>

## GEOTECHNICAL PROJECTS

Number of Borings	<u>1</u>	Maximum	
Hole Diameter	<u>12</u> in.	Depth	<u>20</u> ft

BORING DATE June 5, 2003 June 4th, 2003

AMPLIFICATION DATE June, 6, 2003 June 5th, 2003

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

At the request of Alameda County:

APPLICANT'S SIGNATURE: J. Montes DATE 5-87-03

PERMITS PRINT NAME: PAULIA SIME / ERIC

Rev.9-18-02

## FOR OFFICE USE

PERMIT NUMBER WD3-0527  
WELL NUMBER \_\_\_\_\_  
AFN \_\_\_\_\_

PERMIT CONDITIONS  
*(Circle Permit Requirements Apply)*

## A. GENERAL

1. A permit application should be submitted so as to arrive at the ACPPWA office five days prior to proposed starting date.
2. Submit to ACPPWA 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 FISHTOMETERS**
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 composed cuttings.

## E. CATHODIC

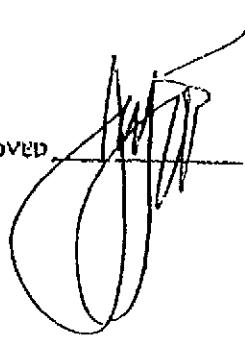
Fill bore hole anode zone with concrete placed by tremie.

## F. WELL DESTRUCTION

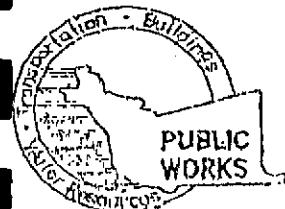
Send a map of work site. A separate permit is required for wells deeper than 45 feet.

G. SPECIAL CONDITIONS MWH 1

**NOTE:** One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED 

DATE 5/29/03



## ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION  
390 ELMHURST ST, HAYWARD CA 94541-1395  
PHONE: (510) 670-6633 James Yoo  
FAX: (510) 782-1939

APPLICANT'S PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS  
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

## DRILLING PERMIT APPLICATION

## FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT  
Former Exxon Service Station #0238  
3201 East 12th Street  
Oakland, California

PERMIT HOLDER  
Exxon Mobil Oil Corporation  
Address: 2200 Clayton Rd, Ste 1250 Phone: (925) 246-8547  
Concord Zip: 94520

APPLICANT  
Environmental Resolution, Inc.  
333 Digital Dr., Ste. 100 Phone: (415) 382-1586  
Nevada Zip: 94949

TYPE OF PROJECT  
New Construction Geotechnical Investigation  
Cathodic Protection General   
Water Supply Contamination   
Monitoring Well Destruction

APPROVED WATER SUPPLY WELL USE  
New Domestic  Replacment Domestic   
Municipal  Irrigation   
Industrial  Other

DRILLING METHOD  
Hand Rotary  Air Rotary  Auger   
Cable  Other

DRILLER'S NAME: Woodward Drilling, Inc. Cascade Drilling  
DRILLER'S LICENSE NO: C-57-710079 711510

WELL PROJECTS  
Diameter: 12 in. Maximum Depth: 20 ft.  
Casing Diameter: 4 in. Owner's Well Number: DPE2  
Surface Seal Depth: 1-3 ft.

GEOTECHNICAL PROJECTS  
Number of borings: 1 Maximum Depth: 10 ft.  
Hole Diameter: 1 in.

STARTING DATE: June 3, 2003 - June 4th, 2003

COMPLETION DATE: June 6, 2003 - June 5th, 2003

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

At the Request of ExxonMobil:

APPLICANT'S SIGNATURE: PAUL SIME DATE: 5-27-03

PLEASE PRINT NAME: PAULA SIME /ERT/ REV. 9-15-02

## FOR OFFICE USE

PERMIT NUMBER: W03-0528  
WELL NUMBER:  
APN:

PERMIT CONDITIONS  
Circle Permit Requirements Apply

## A. GENERAL

1. A permit application should be submitted so as to arrive at the ACWA office five days prior to proposed starting date.
2. Submit to ACWA 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 concrete grout/sand mixture. Upper two-thirds feet replaced in kind or with compacted cuttings.

## E. CATHODIC

Fill hole anode zone with concrete placed by tremie.

## F. WELL DESTRUCTION

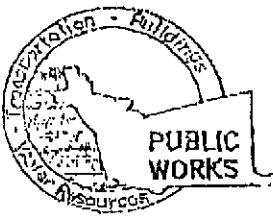
Send a map of work site. A separate permit is required for wells deeper than 45 feet.

## G. SPECIAL CONDITIONS: PAWT 1

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED

DATE: 5-29-03



# ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION  
399 ELMHURST ST. HAYWARD CA. 94541-1395  
PHONE (510) 670-6633 James Yoo  
FAX (510) 782-1939

APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS  
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

## DRILLING PERMIT APPLICATION

### FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT  
Former Exxon Service Station 3-02-38  
2200 East Park Street  
Oakland, California

OWNER  
Name Exxon Mobil Oil Corporation  
Address 2200 Clayton Rd, Ste 1250 Phone (925) 246-8747  
City Concord Zip 94520

APPLICANT  
Name Environmental Resolutions, Inc.  
Address 131 Digital Dr, Ste 100 Phone (415) 562-1856  
City Novato Zip 94949

### TYPE OF PROJECT

Well Construction	Geotechnical Investigation
Cathodic Protection	General
Water Supply	Contamination
Monitoring	Well Destruction
Dual-Phase Extraction	
PROPOSED WATER SUPPLY WELL USE	
New Domestic	Replacements Domestic
Municipal	Irrigation
Industrial	Other

### DRILLING METHOD:

Mud Rotary  Air Rotary  Auger

Drillers Name Woodward Drilling, Inc. Cascade Drilling

DRILLER'S LICENSE NO. 657-410079 D17510

### WELL PROJECTS

Drill Hole Diameter 12 in. Maximum Depth 20 ft  
Casing Diameter 4 in. Owner's Well Number DPEB  
Surface Seal Depth 6-3 ft

### GEOTECHNICAL PROJECTS

Number of Boreings \_\_\_\_\_  
Bore Diameter \_\_\_\_\_ in.

Maximum Depth \_\_\_\_\_ ft

STARTING DATE June 5/2003 - June 4th, 2003

COMPLETION DATE July 5, 2003 - June 5-11, 2003

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

At the request of Exco/ABR

APPLICANT'S SIGNATURE PAUL SIMEI /ERT/ DATE 5-27-03

PLEASE PRINT NAME PAUL SIMEI /ERT/ DATE 5-27-03

REV. 9-18-02

### FOR OFFICE USE

PERMIT NUMBER 603-0529  
WELL NUMBER \_\_\_\_\_  
APN \_\_\_\_\_

### PERMIT CONDITIONS

Circle Permit Requirements Apply

#### A. GENERAL

1. A permit application should be submitted no less than 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 THERMOMETERS

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

Fil hole anode zone with concrete placed by tremie.

#### F. WELL DESTRUCTION

Send a map of work site. A separate permit is required for wells deeper than 45 feet.

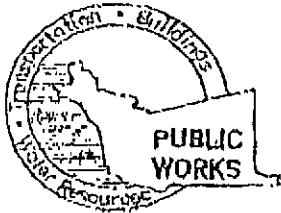
#### G. SPECIAL CONDITIONS MWL-I

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED

DATE

5-27-03



## ALAMEDA COUNTY PUBLIC WORKS AGENCY

## WATER RESOURCES SECTION

309 ELMHURST ST, HAYWARD CA 94541-3395  
PHONE (510) 670-6633 James Yoo  
FAX (510) 781-1939

APPLICANTS: PLEASE ATTACH A SITE MAP FOR ALL DRILLING PERMIT APPLICATIONS  
DESTRUCTION OF WELLS OVER 45 FEET REQUIRES A SEPARATE PERMIT APPLICATION

## DRILLING PERMIT APPLICATION

## FOR APPLICANT TO COMPLETE

## LOCATION OF PROJECT

Former Exxon Service Station #0238  
2300 East 12th Street  
Oakland, California

## CLIENT

Name Exxon Mobil Oil Corporation  
Address 2300 Clayton Rd, Ste 1250 Phone (925) 246-8747  
City Concord Zip 94520

## APPLICANT

Name Environmental Resolutions, Inc.  
Address 73 Digital Dr, Ste 100 Phone (415) 382-1850  
City Sausalito Zip 94949

## TYPE OF PROJECT

Well Construction	<input checked="" type="checkbox"/>	Geotechnical Investigation	<input type="checkbox"/>
Cathodic Protection	<input checked="" type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input checked="" type="checkbox"/>	Contamination	<input type="checkbox"/>
Monitoring	<input checked="" type="checkbox"/>	Well Destruction	<input checked="" type="checkbox"/>
Dual-Phase Extraction	<input checked="" type="checkbox"/>		

## PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

## DRILLING METHOD:

Mad Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S NAME Woodward Drilling Inc. Cascade Drilling

DRILLER'S LICENSE NO C-57; AN079 717510

## WELL PROJECTS

Drill Hole Diameter	<u>12</u>	In.	Maximum
Casing Diameter	<u>4</u>	In.	Depth <u>30</u> ft.
Surface Seal Depth	<u>7 1/3</u>	ft.	Owner's Well Number <u>DPF24</u>

## GEOTECHNICAL PROJECTS

Number of Bore(s)	<u>1</u>	in.	Maximum
Hole Diameter	<u>12</u>	in.	Depth <u>30</u> ft.

STARTING DATE June 15/2003 JUNE 4TH, 2003

COMPLETION DATE June 16/2003 JUNE 5TH, 2003

I hereby agree to comply with all requirements of this permit equal Alameda County Ordinance No. 73-68.  
At the request of Exxon Mobil:

APPLICANT'S SIGNATURE Paula Sime / ERI DATE 5-27-03

PLEASE PRINT NAME PAULA SIME / ERI

Rev.9-18-02

## FOR OFFICE USE

PERMIT NUMBER W03-0530  
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 PIROMETERS

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. GEOPHYSICAL

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

Send a map of work site. A separate permit is required for wells deeper than 45 feet.

## G. SPECIAL CONDITIONS

MWT 1

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

APPROVED

DATE 5-27-03

**ATTACHMENT D**

**UNIFIED SOIL CLASSIFICATION SYSTEM,  
SYMBOL KEY, AND BORING LOGS**

# UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS		LTR	DESCRIPTION	MAJOR DIVISIONS		LTR	DESCRIPTION
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	GW	Well-graded gravels or gravel sand mixtures, little or no fines	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
		GP	Poorly-graded gravels or gravel sand mixture, little or no fines			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		GM	Silty gravels, gravel-sand-clay mixtures			OL	Organic silts and organic silt-clays of low plasticity
		GC	Clayey gravels, gravel-sand-clay mixtures			MH	Inorganic silts, micaceous or diatomaceous fine-grained sandy or silty soils, elastic silts
	SAND AND SANDY SOILS	SW	Well-graded sands or gravelly sands, little or no fines		SILTS AND CLAYS LL>50	CH	Inorganic clays of high plasticity, fat clays
		SP	Poorly-graded sands or gravelly sands, little or no fines			OH	Organic clays of medium to high plasticity
		SM	Silty sands, sand-silt mixtures			Pt	Peat and other highly organic soils
		SC	Clayey sands, sand-clay mixtures	HIGHLY ORGANIC SOILS			

## WELL DESIGN

	DEPTH THROUGH WHICH SAMPLER IS DRIVEN		SAND PACK
	RELATIVELY UNDISTURBED SAMPLE		BENTONITE ANNULAR SEAL
	MISSED SAMPLE		NEAT CEMENT ANNULAR SEAL
	GROUNDWATER LEVEL OBSERVED FROM FIRST WET SOIL SAMPLE IN BORING		BLANK PVC
	STATIC GROUNDWATER LEVEL		MACHINE-SLOTTED PVC
OVM	ORGANIC VAPOR METER READING IN PARTS PER MILLION	S-10	SAMPLE NUMBER
PID	PHOTO-IONIZATION DETECTOR READING IN PARTS PER MILLION		

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 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.



PROJECT 2293

## UNIFIED SOIL CLASSIFICATION SYSTEM AND LOG OF BORINGS SYMBOL KEY

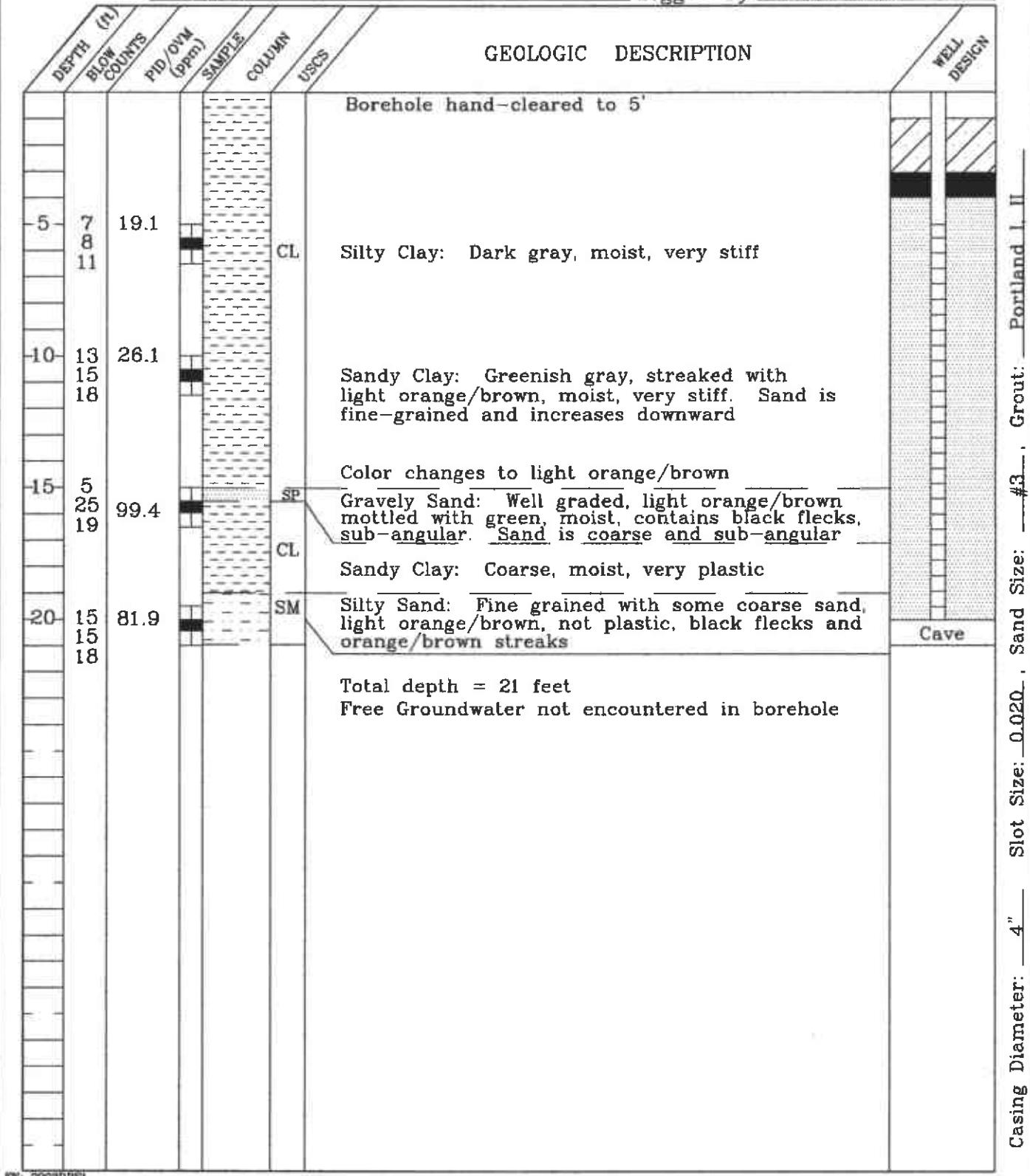
Former Exxon Service Station 7-0238  
2200 East 12th Street  
Oakland, California

Appendix

D



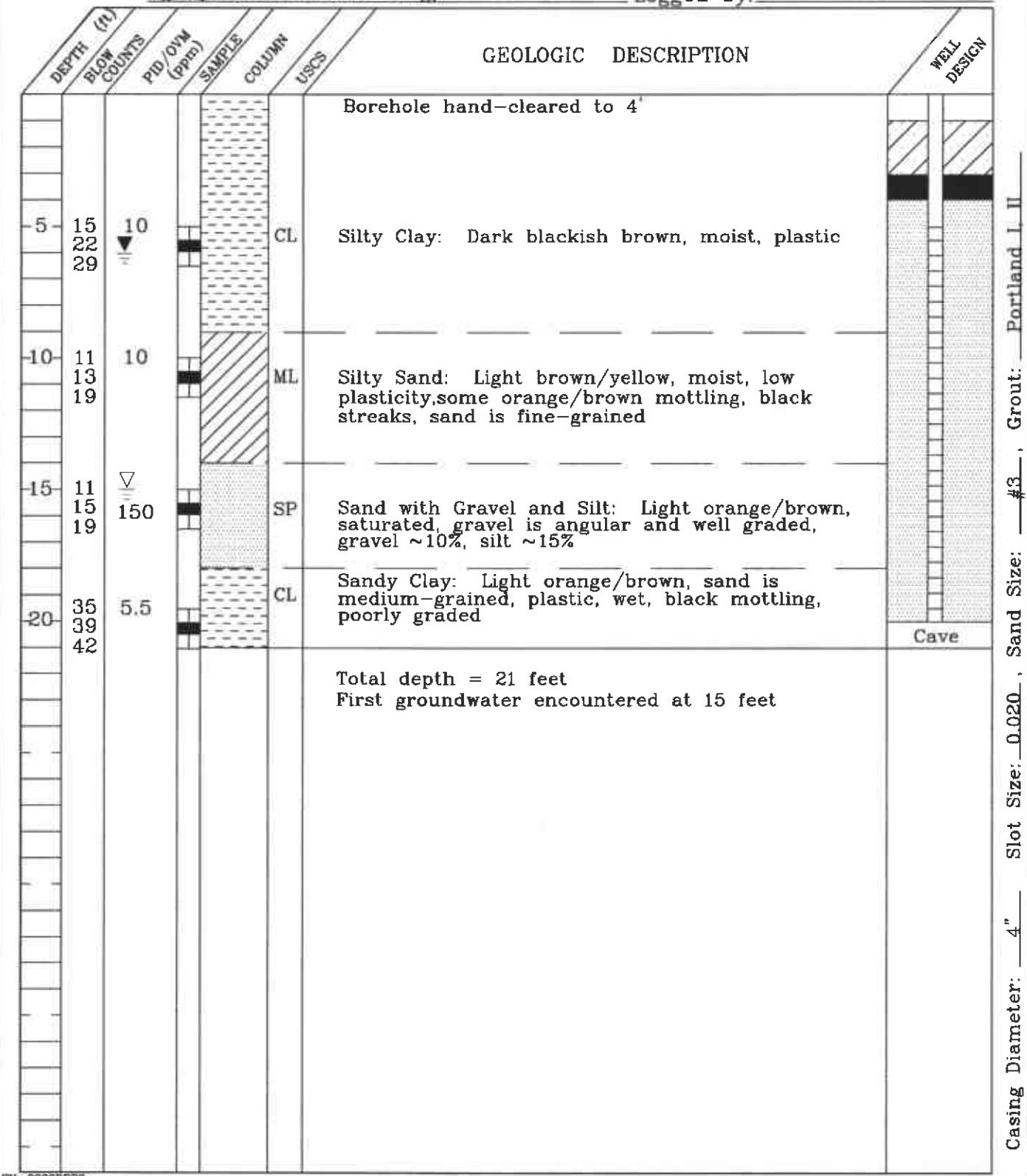
Project No.: 2293 Boring: DPE1 Plate: 1 OF 1  
Site: Former Exxon Service Station 7-0238 Date: 6/5/03  
Drill Contractor: Cascade  
Sample Method: Split spoon sampler Geologist: John B. Bobbitt  
Drill Rig: Hollow-stem auger Bore Hole Diameter: 10' Signature: *JB*  
Location: 11 ft. southwest of northern most pump Registration: R.G. 4313  
island Logged by: Paula Sime





Project No.: 2293 Boring: DPE2 Plate: 1 OF 1  
Site: Former Exxon Service Station 7-0238 Date: 6/4/03  
Drill Contractor: Cascade

Sample Method: Hollow-stem auger/Split-spoon sampler Geologist: John B. Bobbitt  
Drill Rig: Hollow-stem auger Bore Hole Diameter: 10' Signature: J.B. Bobbitt  
Location: 20' southwest of Station building entrance Registration: R.G. 4313  
(perpendicular to building) Logged by: Paula Sime





Project No.: 2293 Boring: DPE3 Plate: 1 OF 1

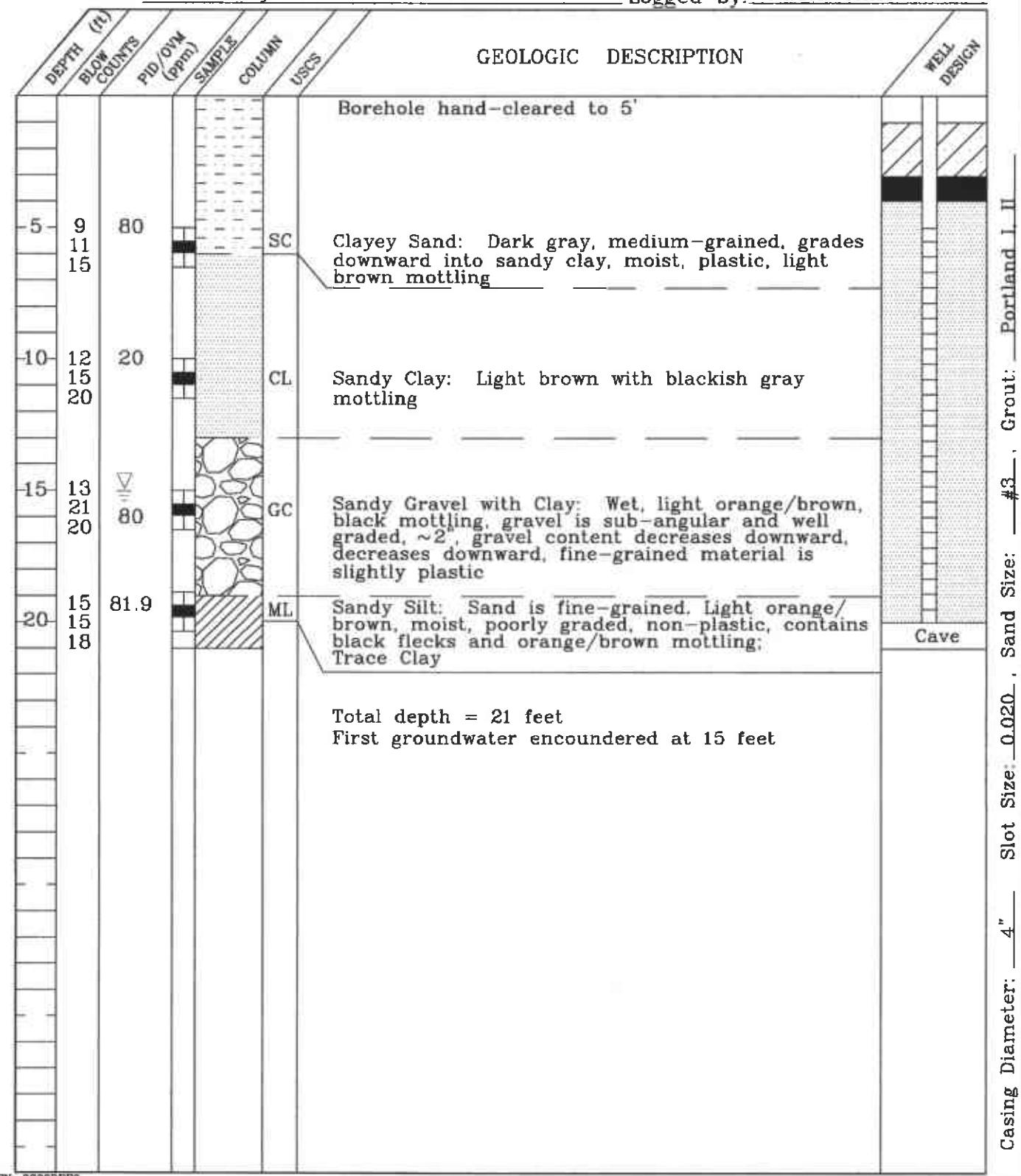
Site: Former Exxon Service Station 7-0238 Date: 6/4/03

Drill Contractor: Cascade

Sample Method: Split-spoon sampler Geologist: John B. Bobbitt

Drill Rig: Hollow-stem auger Bore Hole Diameter: 10' Signature: JB Clark

Location: 6' southeast of southern planter boundary at north end of site Registration: R.G. 4313  
Logged by: Paula Sime





Project No.: 2293 Boring: DPE4 Plate: 1 OF 1  
Site: Former Exxon Service Station 7-0238 Date: 6/5/03  
Drill Contractor: Cascade

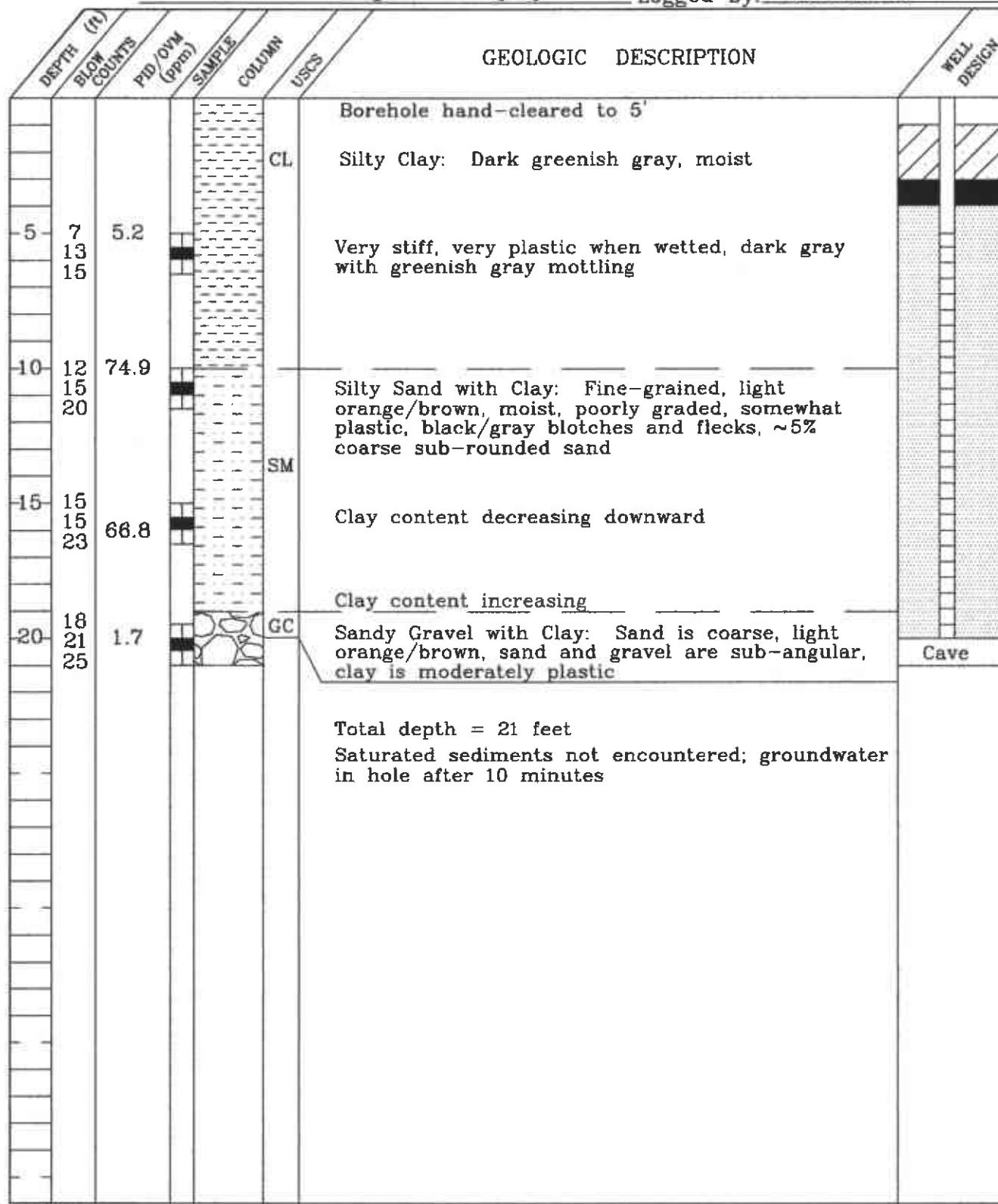
Sample Method: Split-spoon sampler

Geologist: John B. Bobbitt

Drill Rig: Hollow-stem auger Bore Hole Diameter: 10' Signature: *JB Blum*

Location: 16' south of the edge of the west pump island  
and 27' west of the edge of the east pump island

Registration: R.G. 4313  
Logged by: Paula Sime



**ATTACHMENT E**

**LABORATORY ANALYSIS REPORTS  
AND CHAIN-OF-CUSTODY RECORDS**

# TestAmerica

ANALYTICAL TESTING CORPORATION

2960 FOSTER CREIGHTON DRIVE • NASHVILLE, TENNESSEE 37204  
800-765-0980 • 615-726-3404 FAX

6/18/03

BRI - NORTHERN CA 3876  
PAULA SIME  
73 DIGITAL DRIVE, SUITE 100  
NOVATO, CA 94949

RECEIVED  
JUN 19 2003  
BY: \_\_\_\_\_

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project identified below:

Project Name: EXXONMOBIL 7-0238

Project Number: .

Laboratory Project Number: 335124.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980.

Sample Identification	Lab Number	Collection Date
-----	-----	-----
S-20-DPE1	03-A89706	6/ 5/03
S-20-DPE2	03-A89707	6/ 4/03
S-20-DPE3	03-A89708	6/ 4/03
S-20-DPE4	03-A89709	6/ 5/03

# TestAmerica

ANALYTICAL TESTING CORPORATION

2960 FOSTER CREIGHTON DRIVE • NASHVILLE, TENNESSEE 37204  
800-765-0980 • 615-726-3404 FAX

Page 2

Sample Identification

Lab Number

Collection Date

These results relate only to the items tested.  
This report shall not be reproduced except in full and with  
permission of the laboratory.

Report Approved By:



Report Date: 6/18/03

Paul E. Lane, Jr., Lab Director

Gail A. Lage, Technical Serv.

Michael H. Dunn, M.S., Technical Director

Glenn L. Norton, Technical Serv.

Johnny A. Mitchell, Dir. Technical Serv.

Kelly S. Comstock, Technical Serv.

Eric S. Smith, Assistant Technical Director

Pamela A. Langford, Technical Serv.

Roxanne L. Connor, Technical Services

Laboratory Certification Number: 01168CA

**ANALYTICAL REPORT**

ERI - NORTHERN CA 3876  
PAULA SIME  
73 DIGITAL DRIVE, SUITE 100  
NOVATO, CA 94949

Lab Number: 03-A89706  
Sample ID: S-20-DPE1  
Sample Type: Soil  
Site ID: 7-0238

Project:

Date Collected: 6/ 5/03  
Time Collected: 11:28

Project Name: EXXONMOBIL 7-0238  
Sampler: PAULA SIME

Date Received: 6/10/03  
Time Received: 8:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<b>*GENERAL CHEMISTRY PARAMETERS*</b>									
% Dry Weight	85.9	%		1	6/11/03		M. Ricke	CLP	5136
<b>*ORGANIC PARAMETERS*</b>									
Benzene	0.0011	mg/kg	0.001	1	6/12/03	10:47	J. Redmond	8021B	5009
Ethylbenzene	ND	mg/kg	0.001	1	6/12/03	10:47	J. Redmond	8021B	5009
Toluene	ND	mg/kg	0.001	1	6/12/03	10:47	J. Redmond	8021B	5009
Xylenes, total	ND	mg/kg	0.001	1	6/12/03	10:47	J. Redmond	8021B	5009
MTEB	2.03	mg/kg	0.252	50	6/13/03	13:23	J. Redmond	8021B	8574
TPH (Gasoline Range)	ND	mg/kg	5	1	6/12/03	10:47	J. Redmond	8015B	5009
<b>*VOLATILE ORGANICS*</b>									
Ethyl-t-butylether	ND	mg/kg	0.002	1	6/17/03	14:41	J. Adams	8260B	1062
Methyl-t-amyl ether	ND	mg/kg	0.002	1	6/17/03	14:41	J. Adams	8260B	1062
Tertiary butyl alcohol	0.644	mg/kg	0.0502	1	6/17/03	14:41	J. Adams	8260B	1062
1,2-Dibromoethane	ND	mg/kg	0.00201	1	6/17/03	14:41	J. Adams	8260B	1062
1,2-Dichloroethane	ND	mg/kg	0.002	1	6/17/03	14:41	J. Adams	8260B	1062
Methyl-t-butyl ether	2.36	mg/kg	0.1	50	6/18/03	9:44	J. Adams	8260B	1827
Diisopropyl ether	ND	mg/kg	0.01	1	6/17/03	14:41	J. Adams	8260B	1062

Sample report continued . . .

# TestAmerica

ANALYTICAL TESTING CORPORATION

2960 FOSTER CREIGHTON DRIVE • NASHVILLE, TENNESSEE 37204  
800-765-0980 • 615-726-3404 FAX

## ANALYTICAL REPORT

Laboratory Number: 03-A89706  
Sample ID: S-20-DPE1  
Project:  
Page 2

### Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
Volatile Organics	4.98 g	5.0 ml	6/11/03	9:25	J. Hunter	5035
BTX Prep	4.97 g	5.0 ml	6/ 5/03	11:28	J. Redmond	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	89.	65. - 119.
VOA Surr 1,2-DCA-d4	111.	58. - 139.
VOA Surr Toluene-d8	98.	71. - 127.
VOA Surr, 4-BFB	98.	60. - 141.
VOA Surr, DBFM	112.	67. - 126.

### LABORATORY COMMENTS:

ND = Not detected at the report limit.  
B = Analyte was detected in the method blank.  
J = Estimated Value below Report Limit.  
E = Estimated Value above the calibration limit of the instrument.  
# = Recovery outside Laboratory historical or method prescribed limits.  
All results reported on a wet weight basis.  
Received in brass tube.

End of Sample Report.

**ANALYTICAL REPORT**

ERI - NORTHERN CA 3876  
PAULA SIME  
73 DIGITAL DRIVE, SUITE 100  
NOVATO, CA 94949

Lab Number: 03-A89707  
Sample ID: S-20-DPE2  
Sample Type: Soil  
Site ID: 7-0238

Project:

Date Collected: 6/ 4/03  
Time Collected: 12:18

Project Name: EXXONMOBIL 7-0238  
Sampler: PAULA SIME

Date Received: 6/10/03  
Time Received: 8:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Date	Analysis Time	Analyst	Method	Batch
<b>*GENERAL CHEMISTRY PARAMETERS*</b>									
% Dry Weight	77.1	%		1	6/11/03		M. Ricke	CLP	5137
<b>*ORGANIC PARAMETERS*</b>									
Benzene	ND	mg/kg	0.001	1	6/12/03	11:19	J. Redmond	8021B	5009
Ethylbenzene	ND	mg/kg	0.001	1	6/12/03	11:19	J. Redmond	8021B	5009
Toluene	ND	mg/kg	0.001	1	6/12/03	11:19	J. Redmond	8021B	5009
Xylenes, total	ND	mg/kg	0.001	1	6/12/03	11:19	J. Redmond	8021B	5009
MTBE	0.165	mg/kg	0.005	1	6/12/03	11:19	J. Redmond	8021B	5009
TPH (Gasoline Range)	ND	mg/kg	5	1	6/12/03	11:19	J. Redmond	8015B	5009
<b>*VOLATILE ORGANICS*</b>									
Ethyl-t-butylether	ND	mg/kg	0.002	1	6/17/03	15:11	J. Adams	8260B	1062
Methyl-t-amyl ether	ND	mg/kg	0.002	1	6/17/03	15:11	J. Adams	8260B	1062
Tertiary butyl alcohol	0.41	mg/kg	0.0502	1	6/17/03	15:11	J. Adams	8260B	1062
1,2-Dibromoethane	ND	mg/kg	0.00201	1	6/17/03	15:11	J. Adams	8260B	1062
1,2-Dichloroethane	ND	mg/kg	0.002	1	6/17/03	15:11	J. Adams	8260B	1062
Methyl-t-butyl ether	0.102	mg/kg	0.002	1	6/17/03	15:11	J. Adams	8260B	1062
Diisopropyl ether	ND	mg/kg	0.01	1	6/17/03	15:11	J. Adams	8260B	1062

Sample report continued . . .

2960 FOSTER CREIGHTON DRIVE • NASHVILLE, TENNESSEE 37204  
800-765-0980 • 615-726-3404 FAX

## ANALYTICAL REPORT

Laboratory Number: 03-A89707  
Sample ID: S-20-DPE2  
Project:  
Page 2

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Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
Volatile Organics	4.98 g	5.0 ml	6/11/03	9:45	J. Hunter	5035
BTX Prep	4.89 g	5.0 ml	6/ 4/03	12:18	J. Redmond	5035

Surrogate	# Recovery	Target Range
UST surr-Trifluorotoluene	89.	65. - 119.
VOA Surr 1,2-DCA-d4	116.	58. - 139.
VOA Surr Toluene-d8	100.	71. - 127.
VOA Surr, 4-BFB	99.	60. - 141.
VOA Surr, DBFM	108.	67. - 126.

### LABORATORY COMMENTS:

ND = Not detected at the report limit.

B = Analyte was detected in the method blank.

J = Estimated Value below Report limit.

E = Estimated Value above the calibration limit of the instrument.

# = Recovery outside Laboratory historical or method prescribed limits.

All results reported on a wet weight basis.

Received in brass tube.

End of Sample Report.

## ANALYTICAL REPORT

ERI - NORTHERN CA 3876  
 PAULA SIME  
 73 DIGITAL DRIVE, SUITE 100  
 NOVATO, CA 94949

Lab Number: 03-A89708  
 Sample ID: S-20-DPE3  
 Sample Type: Soil  
 Site ID: 7-0238

Project:	Date Collected: 6/4/03
Project Name: EXXONMOBIL 7-0238	Time Collected: 14:45
Sampler: PAULA SIME	Date Received: 6/10/03
	Time Received: 8:00
	Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<b>*GENERAL CHEMISTRY PARAMETERS*</b>									
% Dry Weight	83.5	%		1	6/11/03		M. Ricke	CLP	5137
<b>*ORGANIC PARAMETERS*</b>									
Benzene	ND	mg/kg	0.001	1	6/12/03	11:50	J. Redmond	8021B	5009
Ethylbenzene	ND	mg/kg	0.001	1	6/12/03	11:50	J. Redmond	8021B	5009
Toluene	ND	mg/kg	0.001	1	6/12/03	11:50	J. Redmond	8021B	5009
Xylenes, total	0.0033	mg/kg	0.001	1	6/12/03	11:50	J. Redmond	8021B	5009
MTBE	0.089	mg/kg	0.005	1	6/12/03	11:50	J. Redmond	8021B	5009
TPH (Gasoline Range)	ND	mg/kg	5	1	6/12/03	11:50	J. Redmond	8015B	5009
<b>*VOLATILE ORGANICS*</b>									
Ethyl-t-butylether	ND	mg/kg	0.002	1	6/18/03	10:45	J. Adams	8260B	1827
Methyl-t-amyl ether	ND	mg/kg	0.002	1	6/18/03	10:45	J. Adams	8260B	1827
Tertiary butyl alcohol	ND	mg/kg	0.0496	1	6/18/03	10:45	J. Adams	8260B	1827
1,2-Dibromoethane	ND	mg/kg	0.00198	1	6/18/03	10:45	J. Adams	8260B	1827
1,2-Dichloroethane	ND	mg/kg	0.002	1	6/18/03	10:45	J. Adams	8260B	1827
Methyl-t-butyl ether	0.0317	mg/kg	0.002	1	6/18/03	10:45	J. Adams	8260B	1827
Diisopropyl ether	ND	mg/kg	0.0099	1	6/18/03	10:45	J. Adams	8260B	1827

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 03-A89708  
Sample ID: S-20-DPE3  
Project:  
Page 2

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Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
Volatile Organics	5.04 g	5.0 ml	6/11/03	9:50	J. Hunter	5035
BTX Prep	4.99 g	5.0 ml	6/ 4/03	14:45	J. Redmond	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	89.	65. - 119.
VOA Surr 1,2-DCA-d4	126.	58. - 139.
VOA Surr Toluene-d8	98.	71. - 127.
VOA Surr, 4-BFB	99.	60. - 141.
VOA Surr, DBFM	117.	67. - 126.

**LABORATORY COMMENTS:**

ND = Not detected at the report limit.

B = Analyte was detected in the method blank.

J = Estimated Value below Report Limit.

E = Estimated Value above the calibration limit of the instrument.

# = Recovery outside Laboratory historical or method prescribed limits.

All results reported on a wet weight basis.

Received in brass tube.

End of Sample Report.

**ANALYTICAL REPORT**

ERI - NORTHERN CA 3876  
PAULA SIME  
73 DIGITAL DRIVE, SUITE 100  
NOVATO, CA 94949

Lab Number: 03-A89709  
Sample ID: S-20-DPE4  
Sample Type: Soil  
Site ID: 7-0238

Project:  
Project Name: EXXONMOBIL 7-0238  
Sampler: PAULA SIME

Date Collected: 6/ 5/03  
Time Collected: 10:05  
Date Received: 6/10/03  
Time Received: 8:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<hr/>									
*GENERAL CHEMISTRY PARAMETERS*									
% Dry Weight	84.8	%		1	6/11/03		M. Ricke	CLP	5137
<hr/>									
*ORGANIC PARAMETERS*									
Benzene	ND	mg/kg	0.001	1	6/12/03	10:16	J. Redmond	8021B	5009
Ethylbenzene	ND	mg/kg	0.001	1	6/12/03	10:16	J. Redmond	8021B	5009
Toluene	ND	mg/kg	0.001	1	6/12/03	10:16	J. Redmond	8021B	5009
Xylenes, total	ND	mg/kg	0.001	1	6/12/03	10:16	J. Redmond	8021B	5009
MTBE	0.047	mg/kg	0.005	1	6/12/03	10:16	J. Redmond	8021B	5009
TPH (Gasoline Range)	ND	mg/kg	5	1	6/12/03	10:16	J. Redmond	8015B	5009
<hr/>									
*VOLATILE ORGANICS*									
Ethyl-t-butylether	ND	mg/kg	0.002	1	6/18/03	11:15	J. Adams	8260B	1827
Methyl-t-amyl ether	ND	mg/kg	0.002	1	6/18/03	11:15	J. Adams	8260B	1827
Tertiary butyl alcohol	ND	mg/kg	0.0503	1	6/18/03	11:15	J. Adams	8260B	1827
1,2-Dibromoethane	ND	mg/kg	0.00201	1	6/18/03	11:15	J. Adams	8260B	1827
1,2-Dichloroethane	ND	mg/kg	0.002	1	6/18/03	11:15	J. Adams	8260B	1827
Methyl-t-butyl ether	0.0356	mg/kg	0.002	1	6/18/03	11:15	J. Adams	8260B	1827
Diisopropyl ether	ND	mg/kg	0.0101	1	6/18/03	11:15	J. Adams	8260B	1827

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 03-A89709  
Sample ID: S-20-DPE4  
Project:  
Page 2

---

### Sample Extraction Data

#### Wt/Vol

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
Volatile Organics	4.97 g	5.0 ml	6/11/03	9:55	J. Hunter	5035
BTX Prep	5.22 g	5.0 ml	6/ 5/03	10:05	J. Redmond	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	86.	65. - 119.
VOA Surr 1,2-DCA-d4	105.	58. - 139.
VOA Surr Toluene-d8	98.	71. - 127.
VOA Surr, 4-BFB	99.	60. - 141.
VOA Surr, DBFM	98.	67. - 126.

### LABORATORY COMMENTS:

ND = Not detected at the report limit.

B = Analyte was detected in the method blank.

J = Estimated Value below Report Limit.

E = Estimated Value above the calibration limit of the instrument.

# = Recovery outside Laboratory historical or method prescribed limits.

All results reported on a wet weight basis.

Received in brass tube.

End of Sample Report.

**PROJECT QUALITY CONTROL DATA**

**Project Number:**

**Project Name:** EXXONMOBIL 7-0238

**Page:** 1

**Laboratory Receipt Date:** 6/10/03

**Matrix Spike Recovery**

Note: If Blank is referenced as the sample spiked, insufficient volume was received for the defined analytical batch for MS/MSD analysis on an true sample matrix. Laboratory reagent water was used for QC purposes.

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Sample
<b>**UST ANALYSIS**</b>								
Benzene	mg/kg	< 0.0010	0.0428	0.0500	86	42. - 150.	5009	03-a89814
Toluene	mg/kg	< 0.0010	0.0423	0.0500	85	34. - 149.	5009	blank
Ethylbenzene	mg/kg	< 0.0010	0.0429	0.0500	86	31. - 154.	5009	03-a89814
Xylenes, total	mg/kg	< 0.0010	0.0855	0.1000	86	55. - 142.	5009	03-a89814
MTBE	mg/kg	< 0.005	0.047	0.050	94	36. - 151.	5009	03-a89814
TPH (Gasoline Range)	mg/kg	< 5.00	9.95	10.0	100	70. - 134.	5009	blank
VOA Surr 1,2-DCA-d4	% Rec				134	58. - 139.	1062	
VOA Surr 1,2-DCA-d4	% Rec				134	58. - 139.	1827	
VOA Surr Toluene-d8	% Rec				106	71. - 127.	1062	
VOA Surr Toluene-d8	% Rec				106	71. - 127.	1827	
VOA Surr, 4-BFB	% Rec				112	60. - 141.	1062	
VOA Surr, 4-BFB	% Rec				112	60. - 141.	1827	
VOA Surr, DBFM	% Rec				125	67. - 126.	1062	
VOA Surr, DBFM	% Rec				125	67. - 126.	1827	

**Matrix Spike Duplicate**

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
<b>**UST PARAMETERS**</b>						
Benzene	mg/kg	0.0428	0.0340	22.92	30.	5009
Toluene	mg/kg	0.0423	0.0339	22.05	35.	5009
Ethylbenzene	mg/kg	0.0429	0.0337	24.02	37.	5009
Xylenes, total	mg/kg	0.0855	0.0667	24.70	47.	5009
MTBE	mg/kg	0.047	0.040	16.09	46.	5009
TPH (Gasoline Range)	mg/kg	9.95	9.37	6.00	24.	5009

Project QC continued . . .

## PROJECT QUALITY CONTROL DATA

Project Number:

Project Name: EXXONMOBIL 7-0238

Page: 2

Laboratory Receipt Date: 6/10/03

VOA Surr 1,2-DCA-d4	% Rec	83.	1062
VOA Surr 1,2-DCA-d4	% Rec	83.	1827
VOA Surr Toluene-d8	% Rec	110.	1062
VOA Surr Toluene-d8	% Rec	110.	1827
VOA Surr, 4-BFB	% Rec	100.	1062
VOA Surr, 4-BFB	% Rec	100.	1827
VOA Surr, DBFM	% Rec	71.	1062
VOA Surr, DBFM	% Rec	71.	1827

### Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
---------	-------	------------	--------------	------------	--------------	------------

**DST PARAMETERS**						
Benzene	mg/kg	0.1000	0.0948	95	71 - 132	5009
Toluene	mg/kg	0.1000	0.0938	94	68 - 129	5009
Ethylbenzene	mg/kg	0.1000	0.0943	94	71 - 131	5009
Xylenes, total	mg/kg	0.2000	0.1857	93	66 - 131	5009
MTBE	mg/kg	0.100	0.093	93	56 - 140	5009
MTBE	mg/kg	0.100	0.094	94	56 - 140	8574
TPH (Gasoline Range)	mg/kg	10.0	9.95	100	80 - 127	5009

### Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
---------	-------	------------	--------------	------------	--------------	------------

**VDA PARAMETERS**						
Ethyl-t-butylether	mg/kg	0.0500	0.0545	109	49 - 147	1062
Ethyl-t-butylether	mg/kg	0.0500	0.0644	129	49 - 147	1827
Methyl-t-amyl ether	mg/Kg	0.0500	0.0504	101	59 - 147	1062
Methyl-t-amyl ether	mg/Kg	0.0500	0.0624	125	59 - 147	1827
Tertiary butyl alcohol	mg/kg	0.500	0.465	93	36 - 167	1062
Tertiary butyl alcohol	mg/kg	0.500	0.673	135	36 - 167	1827
1,2-Dibromoethane	mg/kg	0.0500	0.0541	108	71 - 131	1062

Project QC continued . . .

**PROJECT QUALITY CONTROL DATA**

**Project Number:**

**Project Name:** EXXONMOBIL 7-0238

**Page:** 3

**Laboratory Receipt Date:** 6/10/03

**Laboratory Control Data**

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
1,2-Dibromoethane	mg/kg	0.0500	0.0632	126	71 - 131	1827
1,2-Dichloroethane	mg/kg	0.0500	0.0557	111	57 - 142	1062
1,2-Dichloroethane	mg/kg	0.0500	0.0625	125	57 - 142	1827
Methyl-t-butyl ether	mg/kg	0.0500	0.0576	115	58 - 142	1062
Methyl-t-butyl ether	mg/kg	0.0500	0.0686	137	58 - 142	1827
Diisopropyl ether	mg/kg	0.0500	0.0564	113	60 - 142	1062
Diisopropyl ether	mg/kg	0.0500	0.0628	126	60 - 142	1827
VOA Surr 1,2-DCA-d4	% Rec			105	58 - 139	1062
VOA Surr 1,2-DCA-d4	% Rec			115	58 - 139	1827
VOA Surr Toluene-d8	% Rec			103	71 - 127	1062
VOA Surr Toluene-d8	% Rec			101	71 - 127	1827
VOA Surr, 4-BFB	% Rec			99	60 - 141	1062
VOA Surr, 4-BFB	% Rec			101	60 - 141	1827
VOA Surr, DBFM	% Rec			108	67 - 126	1062
VOA Surr, DBFM	% Rec			106	67 - 126	1827

**Blank Data**

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
<b>**UST PARAMETERS**</b>					
Benzene	< 0.0010	mg/kg	5009	6/11/03	14:03
Toluene	< 0.0010	mg/kg	5009	6/11/03	14:03
Ethylbenzene	< 0.0010	mg/kg	5009	6/11/03	14:03
Xylenes, total	< 0.0010	mg/kg	5009	6/11/03	14:03
MTBE	< 0.005	mg/kg	5009	6/11/03	14:03
MTBE	< 0.005	mg/kg	8574	6/13/03	10:49
TPH (Gasoline Range)	< 5.00	mg/kg	5009	6/11/03	14:03

Project QC continued . . .

# TestAmerica

ANALYTICAL TESTING CORPORATION

2960 FOSTER CREIGHTON DRIVE • NASHVILLE, TENNESSEE 37204  
800-765-0980 • 615-726-3404 FAX

## PROJECT QUALITY CONTROL DATA

Project Number:

Project Name: EXXONMOBIL 7-0238

Page: 4

Laboratory Receipt Date: 6/10/03

### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
-----	-----	-----	-----	-----	-----
**UST PARAMETERS**					
UST surr-Trifluorotoluene	86.	% Recovery	5009	6/11/03	14:03
UST surr-Trifluorotoluene	89.	% Recovery	8574	6/13/03	10:49

### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
-----	-----	-----	-----	-----	-----
**VOA PARAMETERS**					
Ethyl-t-butylether	< 0.0003	mg/kg	1062	6/17/03	11:39
Ethyl-t-butylether	< 0.0003	mg/kg	1827	6/18/03	8:14
Methyl-t-amyl ether	< 0.0005	mg/kg	1062	6/17/03	11:39
Methyl-t-amyl ether	< 0.0005	mg/kg	1827	6/18/03	8:14
Tertiary butyl alcohol	< 0.0249	mg/kg	1062	6/17/03	11:39
Tertiary butyl alcohol	< 0.0249	mg/kg	1827	6/18/03	8:14
1,2-Dibromoethane	< 0.00060	mg/kg	1062	6/17/03	11:39
1,2-Dibromoethane	< 0.00060	mg/kg	1827	6/18/03	8:14
1,2-Dichloroethane	< 0.0004	mg/kg	1062	6/17/03	11:39
1,2-Dichloroethane	< 0.0004	mg/kg	1827	6/18/03	8:14
Methyl-t-butyl ether	< 0.0006	mg/kg	1062	6/17/03	11:39
Methyl-t-butyl ether	< 0.0006	mg/kg	1827	6/18/03	8:14
Diisopropyl ether	< 0.0006	mg/kg	1062	6/17/03	11:39
Diisopropyl ether	< 0.0006	mg/kg	1827	6/18/03	8:14
VOA Surr 1,2-DCA-d4	136.	% Rec	1062	6/17/03	11:39
VOA Surr 1,2-DCA-d4	129.	% Rec	1827	6/18/03	8:14
VOA Surr Toluene-d8	96.	% Rec	1062	6/17/03	11:39
VOA Surr Toluene-d8	93.	% Rec	1827	6/18/03	8:14
VOA Surr, 4-BFB	100.	% Rec	1062	6/17/03	11:39
VOA Surr, 4-BFB	102.	% Rec	1827	6/18/03	8:14

Project QC continued . . .

# TestAmerica

ANALYTICAL TESTING CORPORATION

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800-765-0980 • 615-726-3404 FAX

## PROJECT QUALITY CONTROL DATA

Project Number:

Project Name: EXXONMOBIL 7-0238

Page: 5

Laboratory Receipt Date: 6/10/03

### Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
VOA Surr, DBFM	119.	# Rec	1062	6/17/03	11:39
VOA Surr, DBFM	111.	# Rec	1827	6/18/03	8:14

# = Value outside Laboratory historical or method prescribed QC limits.

End of Report for Project 335124

**TEST AMERICA ANALYTICAL**  
**TESTING CORP.-NASHVILLE**



**COOLER RECEIPT FORM**

BC#

335124

Client: *ERI*

Cooler Received On: 6/10/03 And Opened On: 6/10/03 By: Shawn Gracey

SL — C  
(Signature)

1. Temperature of Cooler when opened 11.0 Degrees Celsius
2. Were custody seals on outside of cooler? ..... YES...NO...NA  
a. If yes, how many, what kind and where: 1 (Front) Back/Side
3. Were custody seals on containers and intact? ..... NO...YES...NA
4. Were the seals intact, signed, and dated correctly? ..... YES...NO...NA
5. Were custody papers inside cooler? ..... YES...NO...NA
6. Were custody papers properly filled out (ink,signed,etc)? ..... YES...NO...NA
7. Did you sign the custody papers in the appropriate place? ..... YES...NO...NA
8. What kind of packing material used? Bubblewrap Peanuts Vermiculite Other None
9. Was sufficient ice used (if appropriate)? ..... YES...NO...NA
10. Did all bottles arrive in good condition( unbroken)? ..... YES...NO...NA
11. Were all bottle labels complete (#,date,signed,pres,etc)? ..... YES...NO...NA
12. Did all bottle labels and tags agree with custody papers? ..... YES...NO...NA
13. Were correct bottles used for the analysis requested? ..... YES...NO...NA
14. a. Were VOA vials received? ..... YES...NO...NA  
b. Was there any observable head space present in any VOA vial? ..... NO...YES...NA
15. Was sufficient amount of sample sent in each bottle? ..... YES...NO...NA
16. Were correct preservatives used? ..... YES...NO...NA  
If not, record standard ID of preservative used here \_\_\_\_\_
17. Was residual chlorine present? ..... NO...YES...NA
18. See attached for resolution of non-conformance:

Fed-Ex

UPS

Velocity

Airborne

Route

Off-street

Misc.



## Sample NonConformance/COC Revision Form

Initiated by:	Sgracey	Phone:	NC Closed	<input checked="" type="checkbox"/>
client Name:	ERI	SampleRange:	Date Closed	6/10/2003
Client contact:	PAULA SIME	SDG:		
client account:	3876	Analyst:	279	
Date Created:	6/10/2003	Supervisor:		
NC #:		NC Type:	NC Analytical 1	

**335124**

---

Process: Temperature Upon Receipt?                      Corrected By: LEAH KLINGENS  
Action: Corrected action not chosen                      Closed:  Lklingensmith

---

Comments: Comment added by: Sgracey on 6/10/2003 3:17:39 PM  
-----  
NC closed with-out comments

\*\*\*\*\*  
Comment added by: Lklingensmith on 6/10/2003 11:11:15 AM  
Continue with the analysis

\*\*\*\*\*  
Comment added by: Lklingensmith on 6/10/2003 11:11:06 AM  
Disregard comment @ 10:49

\*\*\*\*\*  
Comment added by: Lklingensmith on 6/10/2003 10:49:39 AM  
Per the client, do not analyze. Roy Stambaugh 6-6-03 @ 0920.

\*\*\*\*\*  
Comment added by: Lklingensmith on 6/10/2003 10:47:29 AM  
7365

\*\*\*\*\*  
Added Without Comments

**CHAIN OF CUSTODY RECORD**

Page 1 of 2

**TestAmerica**  
INCORPORATED  
(615) 726-0177      **335124**

(615) 726-0177

Nashville Division

2960 Foster Creighton  
Nashville, TN 37204

ExxonMobil

Consultant Name: Environmental Resolutions, Inc.  
Address: 73 Digital Drive, Suite 100  
City/State/Zip: Novato, California 94949  
Project Manager Paula Sime  
Telephone Number: (415) 382-4324  
ERI Job Number: 229312X  
Sampler Name: (Print) PAULA SIME  
Sampler Signature: 

ExxonMobil Engineer Gene N. Ortega  
Telephone Number (925) 246-8747  
Account #: 3876  
PO #: 4503003541  
Facility ID # 70238  
Global ID# T0500101343  
Site Address 2200 East 12th Street  
City, State Zip Oakland, California

TAT		PROVIDE:	Special Instructions: <b>Oxygenates include: TAME, MTBE, DIPE, ETBE, TBA, 1,2-DCA, &amp; EDB.</b>	Matrix			Analyze For:						
				Water	Soil	Vapor	TPHd 8015B	TPHg 8015B	BTEX 8021B	MTBE 8021B	Confirm MTBE 8260B	Oxygenates 8260B	VOCs 8260B
<input type="checkbox"/> 24 hour	<input type="checkbox"/> 72 hour	EDF Report FAX Results											
<input type="checkbox"/> 48 hour	<input type="checkbox"/> 96 hour												
<input checked="" type="checkbox"/> 8 day													
Sample ID / Description			DATE	TIME	COMP	GRAB	PRESERV	NUMBER					
S-5-DPE1	89706	6/10/03	112D		X	ice	1 brass		X	H	O	L	D
S-10-DPE1	7		1123		1	ice	1 brass		X	H	O	L	D
S-15-DPE1	8		1120			ice	1 brass		X	H	O	L	D
S-20-DPE1	9	↓	1128			ice	1 brass		X	X	X	X	X
S-5-DPE2	10	6/4/03	12:10			ice	1 brass		X	H	O	L	D
S-10-DPE2	11		12:12	↓		ice	1 brass		X	H	O	L	D
S-15-DPE2	12					ice	1 brass		X	H	O	L	D
S-20-DPE2	12	↓	12:18		X	ice	1 brass		X	X	X	X	X
S-5-DPE3	13	6/4/03	14:33		1	ice	1 brass		X	H	O	L	D
S-10-DPE3	14		14:37			ice	1 brass		X	H	O	L	D
S-15-DPE3	15		14:42			ice	1 brass		X	H	O	L	D
S-20-DPE3	89716	↓	14:45	✓		ice	1 brass		X	X	X	X	X
Relinquished by:	Date	Time	Received by:	Time	Time	Time	Laboratory Comments:						
<i>F.A.W. Jr.</i>	6-9-03	13:30					Temperature Upon Receipt: 11.6 Sample Containers Intact? VOAs Free of Headspace?						
Relinquished by:	Date	Time	Received by TestAmerica	Time	Time	Time							

## CHAIN OF CUSTODY RECORD

Page 2 of 2TestAmerica  
INCORPORATED

(615) 726-0177

**335124**

Nashville Division

2960 Foster Creighton

Nashville, TN 37204

ExxonMobil

Consultant Name: Environmental Resolutions, Inc.  
 Address: 73 Digital Drive, Suite 100  
 City/State/Zip: Novato, California 94949  
 Project Manager Paula Sime  
 Telephone Number: (415) 382-4324  
 ERI Job Number: 229312X  
 Sampler Name: (Print) PAULA SIME  
 Sampler Signature: [Signature]

ExxonMobil Engineer Gene N. Ortega

Telephone Number (925) 246-8747

Account #: 3876

PO #: 4503003541

Facility ID # 70238

Global ID# T0600101343

Site Address 2200 East 12th Street

City, State Zip Oakland, California

TAT	PROVIDE:	Special Instructions: <i>Oxygenates include: TAME, MTBE, DIPE, ETBE, TBA, 1,2-DCA, &amp; EDB.</i>	Matrix		Analyze For:												
			Water	Soil	Vapor	TPHd	8015B	TPHg	8015B	BTEX	8021B	MTBE	8021B	Confirm MTBE 8260B	Oxygenates 8260B	VOCs 8260B	Lead 6010B
<input type="checkbox"/> 24 hour	<input type="checkbox"/> 72 hour		X			H	O	L	D								
<input type="checkbox"/> 48 hour	<input type="checkbox"/> 96 hour				X		H	O	L	D							
<input checked="" type="checkbox"/> 8 day					X		H	O	L	D							
Sample ID / Description			DATE	TIME	COMP	GRAB	PRESERV	NUMBER									
S-5-DPE4			8/9/03	0957		X	ice	1 brass	X								
S-10-DPE4			18	1000			ice	1 brass	X								
S-15-DPE4			19	1003			ice	1 brass	X								
S-20-DPE4			8/9/03	1005		V	ice	1 brass	X		X	X	X	X		8/9/03	
Relinquished by:			Date	Time	Received by:				Time		Laboratory Comments:						
<i>E. H. Sime</i>			6-9-03	13:30							Temperature Upon Receipt: <u>11.6</u>						
Relinquished by:			Date	Time	Received by TestAmerica				Time		Sample Containers Intact? <u>Y</u>						
											VOAs Free of Headspace?						

# TestAmerica

ANALYTICAL TESTING CORPORATION

2960 FOSTER CREIGHTON DRIVE • NASHVILLE, TENNESSEE 37204  
800-765-0980 • 615-726-3404 FAX

6/13/03

RECEIVED  
JUN 16 2003

ERI - NORTHERN CA 3876

PAULA SIME

73 DIGITAL DRIVE, SUITE 100  
NOVATO, CA 94949

BY: -----

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project identified below:

Project Name: EXXONMOBIL 7-0238

Project Number: 229312X.

Laboratory Project Number: 335043.

An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report. If you have any questions relating to this analytical report, please contact your Laboratory Project Manager at 1-800-765-0980.

Sample Identification	Lab Number	Collection Date
-----	-----	-----
SP-1-(1-4)	03-A89377	6/ 5/03

These results relate only to the items tested.  
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By:

*Roxanne L Connor*

Report Date: 6/13/03

Paul E. Lane, Jr., Lab Director  
Michael H. Dunn, M.S., Technical Director  
Johnny A. Mitchell, Dir. Technical Serv.  
Eric S. Smith, Assistant Technical Director  
Roxanne L. Connor, Technical Services

Gail A. Lage, Technical Serv.  
Glenn L. Norton, Technical Serv.  
Kelly S. Comstock, Technical Serv.  
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 01168CA

**ANALYTICAL REPORT**

ERI - NORTHERN CA 3876  
PAULA SIME  
73 DIGITAL DRIVE, SUITE 100  
NOVATO, CA 94949

Lab Number: 03-A89377  
Sample ID: SP-1-(1-4)  
Sample Type: Soil  
Site ID: 7-0238

Project: 229312X  
Project Name: EXXONMOBIL 7-0238  
Sampler: PAULA SIME

Date Collected: 6/ 5/03  
Time Collected: 12:20  
Date Received: 6/10/03  
Time Received: 8:00  
Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
<b>*GENERAL CHEMISTRY PARAMETERS*</b>									
% Dry Weight	82.8	%		1	6/10/03	17:30	M. Rieke	CLP	4505
<b>*ORGANIC PARAMETERS*</b>									
Benzene	0.0076	mg/kg	0.001	1	6/11/03	6:34	J. Cochran	8021B	4502
Ethylbenzene	0.1303	mg/kg	0.001	1	6/11/03	6:34	J. Cochran	8021B	4502
Toluene	0.0041	mg/kg	0.001	1	6/11/03	6:34	J. Cochran	8021B	4502
Xylenes, total	0.079	mg/kg	0.001	1	6/11/03	6:34	J. Cochran	8021B	4502
MTBE	0.261	mg/kg	0.246	50	6/11/03	13:54	J. Cochran	8021B	6436
TPH (Gasoline Range)	ND	mg/kg	5	1	6/11/03	6:34	J. Cochran	8015B	4502
<b>*VOLATILE ORGANICS*</b>									
Acetone	0.0501	mg/kg	0.0497	1	6/11/03	8:23	J. Adams	8260B	5595
Benzene	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
Bromobenzene	ND	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
Bromoform	ND	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
Bromomethane	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
2-Butanone	ND	mg/kg	0.0497	1	6/11/03	8:23	J. Adams	8260B	5595
n-Butylbenzene	ND	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
sec-Butylbenzene	ND	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
t-Butylbenzene	ND	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
Carbon disulfide	0.00368	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
Carbon tetrachloride	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
Chlorobenzene	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
Chloroethane	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 03-A89377  
 Sample ID: SP-1-(1-4)  
 Project: 229312X →  
 Page 2

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
Chloroform	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
Chloromethane	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
2-Chlorotoluene	ND	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
4-Chlorotoluene	ND	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.00497	1	6/11/03	8:23	J. Adams	8260B	5595
Dibromochloromethane	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
1,2-Dibromoethane	ND	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
Dibromomethane	ND	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
1,2-Dichlorobenzene	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
1,3-Dichlorobenzene	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
1,4-Dichlorobenzene	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
Dichlorodifluoromethane	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
1,1-Dichloroethane	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
1,2-Dichloroethane	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
1,1-Dichloroethene	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
cis-1,2-Dichloroethene	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
trans-1,2-Dichloroethene	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
1,2-Dichloropropane	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
1,3-Dichloropropane	ND	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
2,2-Dichloropropane	ND	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
1,1-Dichloropropene	ND	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
cis-1,3-Dichloropropene	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
trans-1,3-Dichloropropene	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
Ethylbenzene	0.0048	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
Hexachlorobutadiene	ND	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
2-Hexanone	ND	mg/kg	0.00994	1	6/11/03	8:23	J. Adams	8260B	5595
Isopropylbenzene	0.00219	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
4-Isopropyltoluene	ND	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
4-Methyl-2-pentanone	ND	mg/kg	0.00994	1	6/11/03	8:23	J. Adams	8260B	5595
Methylene chloride	ND	mg/kg	0.005	1	6/11/03	8:23	J. Adams	8260B	5595
Naphthalene	0.0105	mg/kg	0.00497	1	6/11/03	8:23	J. Adams	8260B	5595
n-Propylbenzene	0.00805	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
Styrene	ND	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
Tetrachloroethene	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 03-A89377  
Sample ID: SP-1-(1-4)  
Project: 229312X —  
Page 3

Analyte	Result	Units	Report Limit	Dil Factor	Date	Analysis Time	Analyst	Method	Batch
Toluene	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
1,2,3-Trichlorobenzene	ND	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
1,2,4-Trichlorobenzene	ND	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
1,1,1-Trichloroethane	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
1,1,2-Trichloroethane	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
Trichloroethene	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
1,2,3-Trichloropropane	ND	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
1,2,4-Trimethylbenzene	0.0061	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
1,3,5-Trimethylbenzene	0.00249	mg/kg	0.00199	1	6/11/03	8:23	J. Adams	8260B	5595
Vinyl chloride	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
Xylenes (Total)	0.0066	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
Bromodichloromethane	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
Trichlorofluoromethane	ND	mg/kg	0.002	1	6/11/03	8:23	J. Adams	8260B	5595
<b>*METALS*</b>									
Lead	7.83	mg/kg	0.98	1	6/10/03	13:59	C. Johnson	6010B	4504

### Sample Extraction Data

Parameter	Extracted	Extract Vol	Date	Time	Analyst	Method
Volatile Organics	5.03 g	5.0 ml	6/10/03	10:45	J. Hunter	5035
STX Prep	5.08 g	5.0 ml	6/10/03	10:15	J. Cochran	5035

Surrogate	% Recovery	Target Range
UST surr-Trifluorotoluene	97.	65. - 119.
VOA Surr 1,2-DCA-d4	98.	58. - 139.
VOA Surr Toluene-d8	101.	71. - 127.
VOA Surr, 4-BFB	100.	60. - 141.

Sample report continued . . .



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#### ANALYTICAL REPORT

Laboratory Number: 03-A89377  
Sample ID: SP-1-(1-4)  
Project: 229312X  
Page 4

Surrogate	# Recovery	Target Range
VOA Surr, DBFM	111.	67. - 126.

#### LABORATORY COMMENTS:

ND = Not detected at the report limit.  
B = Analyte was detected in the method blank.  
J = Estimated Value below Report Limit.  
E = Estimated Value above the calibration limit of the instrument.  
# = Recovery outside Laboratory historical or method prescribed limits.  
All results reported on a wet weight basis.  
Received sample in brass tubes.  
Sample received after 48 hours from sampling.

End of Sample Report.



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PROJECT QUALITY CONTROL DATA  
Project Number: 229312X  
Project Name: EXXONMOBIL 7-0238  
Page: 1  
Laboratory Receipt Date: 6/10/03

Matrix Spike Recovery

Note: If Blank is referenced as the sample spiked, insufficient volume was received for the defined analytical batch for MS/MSD analysis on an true sample matrix. Laboratory reagent water was used for QC purposes.

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
-----	-----	-----	-----	-----	-----	-----	-----	-----

\*\*VOA PARAMETERS\*\*

Benzene	mg/kg	< 0.0003	0.0474	0.0500	95	53. - 140.	5595	blank
Chlorobenzene	mg/kg	< 0.0006	0.0480	0.0500	96	43. - 145.	5595	blank
1,1-Dichloroethene	mg/kg	< 0.0007	0.0545	0.0500	109	53. - 137.	5595	blank
Toluene	mg/kg	< 0.0008	0.0595	0.0500	119	47. - 142.	5595	blank
Trichloroethene	mg/kg	< 0.0006	0.0457	0.0500	91	51. - 139.	5595	blank
VOA Surr 1,2-DCA-d4	% Rec				88	58. - 139.	5595	
VOA Surr Toluene-d8	% Rec				104	71. - 127.	5595	
VOA Surr, 4-BFB	% Rec				99	60. - 141.	5595	
VOA Surr, DBFM	% Rec				102	67. - 126.	5595	

Matrix Spike Recovery

Note: If Blank is referenced as the sample spiked, insufficient volume was received for the defined analytical batch for MS/MSD analysis on an true sample matrix. Laboratory reagent water was used for QC purposes.

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
-----	-----	-----	-----	-----	-----	-----	-----	-----

\*\*METALS\*\*

Lead	mg/kg	7.83	189.	200.	91	80 - 120	—	4504 03-AB9377
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Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
-----	-----	-----	-----	-----	-----	-----

\*\*VOA PARAMETERS\*\*

Project QC continued . . .

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**PROJECT QUALITY CONTROL DATA**

Project Number: 229312X

Project Name: EXXONMOBIL 7-0238

Page: 2

Laboratory Receipt Date: 6/10/03

**Matrix Spike Duplicate**

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
Benzene	mg/kg	0.0474	0.0340	32.92	34.	5595
Chlorobenzene	mg/kg	0.0480	0.0202	81.52#	44.	5595
1,1-Dichloroethene	mg/kg	0.0545	0.0497	9.21	35.	5595
Toluene	mg/kg	0.0595	0.0252	80.99#	39.	5595
Trichloroethene	mg/kg	0.0457	0.0279	48.37#	38.	5595
VOA Surr 1,2-DCA-d4	% Rec		94.			5595
VOA Surr Toluene-d8	% Rec		104.			5595
VOA Surr, 4-BFB	% Rec		99.			5595
VOA Surr, DBFM	% Rec		106.			5595

**Matrix Spike Duplicate**

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
<b>**METALS**</b>						
Lead	mg/kg	189.	189.	0.00	20	4504

**Laboratory Control Data**

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
<b>**UST PARAMETERS**</b>						
Benzene	mg/kg	0.1000	0.0991	99	71 - 132	4502
Toluene	mg/kg	0.1000	0.0985	98	68 - 129	4502
Ethylbenzene	mg/kg	0.1000	0.0975	98	71 - 131	4502
Xylenes, total	mg/kg	0.2000	0.1967	98	66 - 131	4502
MTBE	mg/kg	0.100	0.092	92	56 - 140	6436
TPH (Gasoline Range)	mg/kg	10.0	9.71	97	80 - 127	4502

Project QC continued . . .



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PROJECT QUALITY CONTROL DATA  
Project Number: 229312X  
Project Name: EXXONMOBIL 7-0238  
Page: 3  
Laboratory Receipt Date: 6/10/03

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
**VOA PARAMETERS**						
Acetone	mg/kg	0.250	0.200	80	40 - 154	5595
Benzene	mg/kg	0.0500	0.0463	93	75 - 127	5595
Bromobenzene	mg/kg	0.0500	0.0476	95	66 - 128	5595
Bromochloromethane	mg/kg	0.0500	0.0492	98	75 - 133	5595
Bromoform	mg/kg	0.0500	0.0427	85	57 - 140	5595
Bromomethane	mg/kg	0.0500	0.0419	84	49 - 154	5595
2-Butanone	mg/kg	0.250	0.206	82	56 - 149	5595
n-Butylbenzene	mg/kg	0.0500	0.0469	94	37 - 148	5595
sec-Butylbenzene	mg/kg	0.0500	0.0512	102	62 - 135	5595
t-Butylbenzene	mg/kg	0.0500	0.0519	104	66 - 131	5595
Carbon disulfide	mg/kg	0.0500	0.0514	103	59 - 138	5595
Carbon tetrachloride	mg/kg	0.0500	0.0455	91	61 - 134	5595
Chlorobenzene	mg/kg	0.0500	0.0495	99	74 - 125	5595
Chloroethane	mg/kg	0.0500	0.0446	89	59 - 147	5595
Chloroform	mg/kg	0.0500	0.0459	92	73 - 125	5595
Chloromethane	mg/kg	0.0500	0.0443	89	40 - 150	5595
2-Chlorotoluene	mg/kg	0.0500	0.0509	102	64 - 130	5595
4-Chlorotoluene	mg/kg	0.0500	0.0500	100	56 - 136	5595
1,2-Dibromo-3-chloropropane	mg/kg	0.0500	0.0382	76	55 - 145	5595
Dibromochloromethane	mg/kg	0.0500	0.0461	92	68 - 132	5595
1,2-Dibromoethane	mg/kg	0.0500	0.0466	93	71 - 131	5595
Dibromomethane	mg/kg	0.0500	0.0509	102	71 - 131	5595
1,2-Dichlorobenzene	mg/kg	0.0500	0.0472	94	38 - 152	5595
1,3-Dichlorobenzene	mg/kg	0.0500	0.0480	96	55 - 136	5595
1,4-Dichlorobenzene	mg/kg	0.0500	0.0451	90	54 - 134	5595
Dichlorodifluoromethane	mg/kg	0.0500	0.0471	94	44 - 156	5595
1,1-Dichloroethane	mg/kg	0.0500	0.0488	98	70 - 131	5595
1,2-Dichloroethane	mg/kg	0.0500	0.0416	83	57 - 142	5595
1,1-Dichloroethene	mg/kg	0.0500	0.0502	100	67 - 131	5595

Project QC continued . . .

**PROJECT QUALITY CONTROL DATA**  
**Project Number:** 229312X  
**Project Name:** EXXONMOBIL 7-0238  
**Page:** 4  
**Laboratory Receipt Date:** 6/10/03

**Laboratory Control Data**

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
cis-1,2-Dichloroethene	mg/kg	0.0500	0.0471	94	71 - 127	5595
trans-1,2-Dichloroethene	mg/kg	0.0500	0.0479	96	67 - 129	5595
1,2-Dichloropropane	mg/kg	0.0500	0.0500	100	74 - 130	5595
1,3-Dichloropropane	mg/kg	0.0500	0.0471	94	72 - 133	5595
2,2-Dichloropropane	mg/kg	0.0500	0.0479	96	58 - 132	5595
1,1-Dichloropropene	mg/kg	0.0500	0.0443	89	72 - 125	5595
cis-1,3-Dichloropropene	mg/kg	0.0500	0.0508	102	74 - 129	5595
trans-1,3-Dichloropropene	mg/kg	0.0500	0.0481	96	68 - 131	5595
Ethylbenzene	mg/kg	0.0500	0.0494	99	69 - 128	5595
Hexachlorobutadiene	mg/kg	0.0500	0.0456	91	41 - 147	5595
2-Hexanone	mg/kg	0.250	0.191	76	55 - 156	5595
Isopropylbenzene	mg/kg	0.0500	0.0473	95	67 - 131	5595
4-Isopropyltoluene	mg/kg	0.0500	0.0486	97	51 - 141	5595
4-Methyl-2-pentanone	mg/kg	0.250	0.190	76	56 - 151	5595
Methylene chloride	mg/kg	0.0500	0.0474	95	58 - 137	5595
Naphthalene	mg/kg	0.0500	0.0416	83	58 - 143	5595
n-Propylbenzene	mg/kg	0.0500	0.0513	103	57 - 137	5595
Styrene	mg/kg	0.0500	0.0503	101	72 - 130	5595
1,1,1,2-Tetrachloroethane	mg/kg	0.0500	0.0487	97	74 - 128	5595
1,1,2,2-Tetrachloroethane	mg/kg	0.0500	0.0423	85	69 - 137	5595
Tetrachloroethene	mg/kg	0.0500	0.0502	100	65 - 1330	5595
Toluene	mg/kg	0.0500	0.0508	102	72 - 128	5595
1,2,3-Trichlorobenzene	mg/kg	0.0500	0.0418	84	48 - 146	5595
1,2,4-Trichlorobenzene	mg/kg	0.0500	0.0418	84	31 - 155	5595
1,1,1-Trichloroethane	mg/kg	0.0500	0.0450	90	65 - 130	5595
1,1,2-Trichloroethane	mg/kg	0.0500	0.0472	94	72 - 133	5595
Trichloroethene	mg/kg	0.0500	0.0443	89	71 - 128	5595
1,2,3-Trichloropropene	mg/kg	0.0500	0.0415	83	64 - 139	5595
1,2,4-Trimethylbenzene	mg/kg	0.0500	0.0481	96	57 - 136	5595
1,3,5-Trimethylbenzene	mg/kg	0.0500	0.0515	103	60 - 135	5595
Vinyl chloride	mg/kg	0.0500	0.0488	98	62 - 141	5595

Project QC continued . . .

# TestAmerica

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**PROJECT QUALITY CONTROL DATA**  
**Project Number:** 229312X  
**Project Name:** EXXONMOBIL 7-0238  
**Page:** 5  
**Laboratory Receipt Date:** 6/10/03

**Laboratory Control Data**

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Xylenes (Total)	mg/kg	0.150	0.144	96	69 - 128	5595
Bromodichloromethane	mg/kg	0.0500	0.0511	102	68 - 133	5595
Trichlorofluoromethane	mg/kg	0.0500	0.0470	94	61 - 137	5595
VOA Surr 1,2-DCA-d4	% Rec			79	58 - 139	5595
VOA Surr Toluene-d8	% Rec			105	71 - 127	5595
VOA Surr, 4-BFB	% Rec			99	60 - 141	5595
VOA Surr, DBFM	% Rec			95	67 - 126	5595

**Laboratory Control Data**

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
<b>**METALS**</b>						
Lead	mg/kg	200.	199.	100	80 - 120	4504

**Continuing Calibration Verification**

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
<b>**METALS**</b>						

**Blank Data**

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
<b>**UST PARAMETERS**</b>					
Benzene	< 0.0010	mg/kg	4502	6/11/03	5:54
Toluene	< 0.0010	mg/kg	4502	6/11/03	5:54

Project QC continued . . .

# TestAmerica

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PROJECT QUALITY CONTROL DATA  
Project Number: 229312X  
Project Name: EXXONMOBIL 7-0238  
Page: 6  
Laboratory Receipt Date: 6/10/03

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Ethylbenzene	< 0.0010	mg/kg	4502	6/11/03	5:54
Xylenes, total	< 0.0010	mg/kg	4502	6/11/03	5:54
MTBE	< 0.005	mg/kg	6436	6/11/03	5:54
TPH (Gasoline Range)	< 5.00	mg/kg	4502	6/11/03	5:54

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
UST surr-Trifluorotoluene	96.	% Recovery	6436	6/11/03	5:54

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
**VOA PARAMETERS**					

Acetone	< 0.0103	mg/kg	5595	6/10/03	22:45
Benzene	< 0.0003	mg/kg	5595	6/10/03	22:45
Bromobenzene	< 0.00050	mg/kg	5595	6/10/03	22:45
Bromochloromethane	< 0.00050	mg/kg	5595	6/10/03	22:45
Bromoform	< 0.0008	mg/kg	5595	6/10/03	22:45
Bromomethane	< 0.0009	mg/kg	5595	6/10/03	22:45
2-Butanone	< 0.0210	mg/kg	5595	6/10/03	22:45
n-Butylbenzene	< 0.00070	mg/kg	5595	6/10/03	22:45
sec-Butylbenzene	< 0.00070	mg/kg	5595	6/10/03	22:45
t-Butylbenzene	< 0.00060	mg/kg	5595	6/10/03	22:45
Carbon disulfide	< 0.00040	mg/kg	5595	6/10/03	22:45
Carbon tetrachloride	< 0.0006	mg/kg	5595	6/10/03	22:45

Project QC continued . . .

**PROJECT QUALITY CONTROL DATA**

**Project Number:** 229312X

**Project Name:** EXXONMOBIL 7-0238

**Page:** 7

**Laboratory Receipt Date:** 6/10/03

**Blank Data**

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Chlorobenzene	< 0.0006	mg/kg	5595	6/10/03	22:45
Chloroethane	< 0.0010	mg/kg	5595	6/10/03	22:45
Chloroform	< 0.0007	mg/kg	5595	6/10/03	22:45
Chloromethane	< 0.0005	mg/kg	5595	6/10/03	22:45
2-Chlorotoluene	< 0.00060	mg/kg	5595	6/10/03	22:45
4-Chlorotoluene	< 0.00040	mg/kg	5595	6/10/03	22:45
1,2-Dibromo-3-chloropropane	< 0.00070	mg/kg	5595	6/10/03	22:45
Dibromochloromethane	< 0.0006	mg/kg	5595	6/10/03	22:45
1,2-Dibromoethane	< 0.00060	mg/kg	5595	6/10/03	22:45
Dibromomethane	< 0.00090	mg/kg	5595	6/10/03	22:45
1,2-Dichlorobenzene	< 0.0004	mg/kg	5595	6/10/03	22:45
1,3-Dichlorobenzene	< 0.0006	mg/kg	5595	6/10/03	22:45
1,4-Dichlorobenzene	< 0.0005	mg/kg	5595	6/10/03	22:45
Dichlorodifluoromethane	< 0.0006	mg/kg	5595	6/10/03	22:45
1,1-Dichloroethane	< 0.0008	mg/kg	5595	6/10/03	22:45
1,2-Dichloroethane	< 0.0004	mg/kg	5595	6/10/03	22:45
1,1-Dichloroethene	< 0.0007	mg/kg	5595	6/10/03	22:45
cis-1,2-Dichloroethene	< 0.0004	mg/kg	5595	6/10/03	22:45
trans-1,2-Dichloroethene	< 0.0007	mg/kg	5595	6/10/03	22:45
1,2-Dichloropropane	< 0.0008	mg/kg	5595	6/10/03	22:45
1,3-Dichloropropane	< 0.00040	mg/kg	5595	6/10/03	22:45
2,2-Dichloropropane	< 0.00070	mg/kg	5595	6/10/03	22:45
1,1-Dichloropropene	< 0.00080	mg/kg	5595	6/10/03	22:45
cis-1,3-Dichloropropene	< 0.0006	mg/kg	5595	6/10/03	22:45
trans-1,3-Dichloropropene	< 0.0005	mg/kg	5595	6/10/03	22:45
Ethylbenzene	< 0.0005	mg/kg	5595	6/10/03	22:45
Hexachlorobutadiene	< 0.00050	mg/kg	5595	6/10/03	22:45
2-Hexanone	< 0.00650	mg/kg	5595	6/10/03	22:45
Isopropylbenzene	< 0.00060	mg/kg	5595	6/10/03	22:45
4-Isopropyltoluene	< 0.00070	mg/kg	5595	6/10/03	22:45
4-Methyl-2-pentanone	< 0.00360	mg/kg	5595	6/10/03	22:45

Project QC continued . . .

# TestAmerica

ANALYTICAL TESTING CORPORATION

2960 FOSTER CREIGHTON DRIVE • NASHVILLE, TENNESSEE 37204  
800-765-0980 • 615-726-3404 FAX

**PROJECT QUALITY CONTROL DATA**  
**Project Number:** 229312X  
**Project Name:** EXXONMOBIL 7-0238  
**Page:** 8  
**Laboratory Receipt Date:** 6/10/03

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Methylene chloride	< 0.0007	mg/kg	5595	6/10/03	22:45
Naphthalene	< 0.00100	mg/kg	5595	6/10/03	22:45
n-Propylbenzene	< 0.00050	mg/kg	5595	6/10/03	22:45
Styrene	< 0.00040	mg/kg	5595	6/10/03	22:45
1,1,1,2-Tetrachloroethane	< 0.00060	mg/kg	5595	6/10/03	22:45
1,1,2,2-Tetrachloroethane	< 0.0007	mg/kg	5595	6/10/03	22:45
Tetrachloroethene	< 0.0005	mg/kg	5595	6/10/03	22:45
Toluene	< 0.0008	mg/kg	5595	6/10/03	22:45
1,2,3-Trichlorobenzene	< 0.00070	mg/kg	5595	6/10/03	22:45
1,2,4-Trichlorobenzene	< 0.00050	mg/kg	5595	6/10/03	22:45
1,1,1-Trichloroethane	< 0.0008	mg/kg	5595	6/10/03	22:45
1,1,2-Trichloroethane	< 0.0005	mg/kg	5595	6/10/03	22:45
Trichloroethene	< 0.0006	mg/kg	5595	6/10/03	22:45
1,2,3-Trichloropropane	< 0.00070	mg/kg	5595	6/10/03	22:45
1,2,4-Trimethylbenzene	< 0.0008	mg/kg	5595	6/10/03	22:45
1,3,5-Trimethylbenzene	< 0.00060	mg/kg	5595	6/10/03	22:45
Vinyl chloride	< 0.0010	mg/kg	5595	6/10/03	22:45
Xylenes (Total)	< 0.0013	mg/kg	5595	6/10/03	22:45
Bromodichloromethane	< 0.0009	mg/kg	5595	6/10/03	22:45
Trichlorofluoromethane	< 0.0005	mg/kg	5595	6/10/03	22:45
VOA Surr 1,2-DCA-d4	96.	% Rec	5595	6/10/03	22:45
VOA Surr Toluene-d8	98.	% Rec	5595	6/10/03	22:45
VOA Surr, 4-BFB	101.	% Rec	5595	6/10/03	22:45
VOA Surr, DBFM	102.	% Rec	5595	6/10/03	22:45

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed

\*\*METALS\*\*

Project QC continued . . .

# TestAmerica

ANALYTICAL TESTING CORPORATION

2960 FOSTER CREIGHTON DRIVE • NASHVILLE, TENNESSEE 37204  
800-765-0980 • 615-726-3404 FAX

PROJECT QUALITY CONTROL DATA  
Project Number: 229312X  
Project Name: EXXONMOBIL 7-0238  
Page: 9  
Laboratory Receipt Date: 6/10/03

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Analysis Date	Analysis Time
Lead	< 0.52	mg/kg	4504	6/10/03	13:59

# = Value outside Laboratory historical or method prescribed QC limits.

End of Report for Project 335043

TEST AMERICA ANALYTICAL  
TESTING CORP.-NASHVILLE



COOLER RECEIPT FORM

BC#

335043

Client:

*ERI*

Cooler Received On: 6/10/03 And Opened On: 6/10/03 By: Shawn Gracey

*S L G J*  
(Signature)

1. Temperature of Cooler when opened 11.0 Degrees Celsius
2. Were custody seals on outside of cooler?.....YES...NO...NA
3. a. If yes, how many, what kind and where: 1 (Front/Back/Side)  
Were custody seals on containers and intact?.....NO...YES...NA
4. Were the seals intact, signed, and dated correctly?.....YES...NO...NA
5. Were custody papers inside cooler?.....YES...NO...NA
6. Were custody papers properly filled out (ink,signed,etc)?.....YES...NO...NA
7. Did you sign the custody papers in the appropriate place?.....YES...NO...NA
8. What kind of packing material used? Bubblewrap Peanuts Vermiculite Other None
9. Was sufficient ice used (if appropriate)?.....YES...NO...NA
10. Did all bottles arrive in good condition( unbroken)?.....YES...NO...NA
11. Were all bottle labels complete (#,date,signed,pres,etc)?.....YES...NO...NA
12. Did all bottle labels and tags agree with custody papers?.....YES...NO...NA
13. Were correct bottles used for the analysis requested?.....YES...NO...NA
14. a. Were VOA vials received?.....YES...NO...NA  
b. Was there any observable head space present in any VOA vial?.....NO...YES...NA
15. Was sufficient amount of sample sent in each bottle?.....YES...NO...NA
16. Were correct preservatives used?.....YES...NO...NA  
If not, record standard ID of preservative used here \_\_\_\_\_
17. Was residual chlorine present?.....NO...YES...NA
18. See attached for resolution of non-conformance:

Fed-Ex

UPS

Velocity

Airborne

Route

Off-street

Misc.

**CHAIN OF CUSTODY RECORD**

Page 1 of 1



(615) 726-0177

Nashville Division

2960 Foster Greighton

Nashville, TN 37204

ExxonMobil

335043

**Consultant Name:** Environmental Resolutions, Inc.  
**Address:** 73 Digital Drive, Suite 100  
**City/State/Zip:** Novato, California 94949  
**Project Manager** Paula Sime  
**Phone Number:** (415) 382-4324  
**ERI Job Number:** 229312X  
**Sampler Name: (Print)** PAULINA SIME  
**Sampler Signature:** 

ExxonMobil Engineer Gene N. Ortega

Telephone Number (925) 246-8747

Account #: 3876

PO #: 4503003541

Facility ID # 70238

Global ID# T0600101343

**Site Address** 2200 East 12th Street

**City, State Zip** Oakland, California

# ALERT

DATE: 6-9-03

CLIENT NAME: ECI

CLIENT CODE: 3876

## ALERT INFORMATION:

Date to receive cooler ~~6-10-03~~

How many samples are there

What tests will be on the coc

Project Name 7-0238

Project Number

Will a copy of the coc be faxed?

## Purpose of the ALERT

- Changing turnaround?
- Changing tests or canceling?
- Changing Project Name?
- Changing Project Number?
- Heads-up

4 tubes  
composite to  
one

620, BTEX/MITRE  
by 8021, VOC's  
no MITRE by 8260

Pb.

Paula Sime

Thanks!

Leah  
X 254

## Leah Klingensmith

---

**From:** Paul Lane  
**Sent:** Monday, June 09, 2003 4:20 PM  
**To:** Leah Klingensmith  
**Cc:** Ashley Morris; Mark Hollingsworth  
**Subject:** RE: Rush ?

Make sure login knows about the composite part so it gets tagged for that and let me know the numbers once tagged.

-----Original Message-----

**From:** Leah Klingensmith  
**Sent:** Monday, June 09, 2003 1:51 PM  
**To:** Paul Lane  
**Cc:** Ashley Morris; Mark Hollingsworth  
**Subject:** RE: Rush ?  
**Importance:** High

This one is coming in tomorrow. ERI(3876) Four brass tubes, composite into one. 24hr TAT for GRO, BTEX/MTBE by 8021, VOC no MTBE by 8260 and Pb. Facility ID# 7-0238

-----Original Message-----

**From:** Paul Lane  
**Sent:** Wednesday, June 04, 2003 3:03 PM  
**To:** Leah Klingensmith  
**Subject:** RE: Rush ?

yes

-----Original Message-----

**From:** Leah Klingensmith  
**Sent:** Wednesday, June 04, 2003 11:08 AM  
**To:** Paul Lane  
**Subject:** Rush ?

Can we turn in 24hrs. 5 soils for GRO, BTEX + oxy's and Pb? To arrive either Fri. or Sat. ERI - Novato, CA

Leah R. Klingensmith  
National Accounts - Project Manager  
TestAmerica, Inc.  
2960 Foster Creighton Drive  
Nashville, TN 37204  
1-800-765-0980 x 1254  
Fax: 615-726-3404  
lklingensmith@testamericainc.com

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# TestAmerica

INCORPORATED

## Sample NonConformance/COC Revision Form

Initiated by:	Sgracey	Phone:	NC Closed	<input checked="" type="checkbox"/>
client Name:	ENVIRONMENTAL	SampleRange:	89377	Date Closed
Client contact:	PAULA SIME	SDG:	335043	6/10/2003
client account:	3876	Analyst:	279	
Date Created:	6/10/2003	Supervisor:		
NC #:	89377	NC Type:	NC Analytical 1	—

Process: Temperature Upon Receipt?

Corrected By: LEAH KLINGENS

Action: Corrected action not chosen

Closed:  Lklingensmith

Comments: Comment added by: Sgracey on 6/10/2003 3:17:50 PM  
NC closed with out comments

\*\*\*\*\*  
Comment added by: Lklingensmith on 6/10/2003 11:11:55 AM  
Continue with the analysis. Per Paula Sime. 6-10-03 @1111.

\*\*\*\*\*  
Received cooler at 11.6 degrees C. Client used one bag of ice in bottom of cooler with samples  
sitting on top. Most not touching ice. Run??? RUSH PROJECT.

**ATTACHMENT F**

**SOIL AND WATER DISPOSAL DOCUMENTATION**

59924

RE: PUBLIC SERVICES VASCO ROAD, LLC  
4001 Vasco Road, Livermore, California 94551 • (925) 447-0491

TICKET # 789  
CARRIER NUMBER DILLARD/EXXON  
JK# 17814  
CT# 17814  
PROFILE # 02149

DATE: 06/24/2003

TIME: 14:20 - 14:21

GENERATOR: 02149 EXXON-MOBIL 117-0238  
ORIGIN: OAKLAND  
LICENSE:  
COMMENT:

GROSS: 67800 LBS  
TARE: 31000 LBS Manual  
NET: 36800 LBS

WASTE	QUANTITY	UNIT	RATE	AMOUNT
30 TONS	18.40	T		

RECEIVED  
JUN 26 2003

Tax

I certify that I have not disposed  
of any liquid or hazardous waste.

DRIVER

Weighmaster:

Total:  
Francisco Sanchez

RECYCLING

All children must remain in vehicles.  
Absolutely no salvaging allowed.

WARNING: Transporting any unauthorized  
hazardous waste to this facility for disposal is  
prohibited by law. Persons violating this prohibition  
are subject to civil and criminal prosecution.



## REPUBLIC SERVICES VASCO ROAD, LLC

4001 N. Vasco Road, Livermore, California 94551 • (925) 447-0491

60512

TICKET: 416373  
CUSTOMER: DILL / DILLARD/EXXON  
TRUCK: 3  
ACCT#: 3007814  
PROFILE: 1002149

DATE: 06/25/2003

TIME: 16:38 - 16:38

GENERATOR: 1002149 / EXXON-MOBILE 17-0238  
ORIGIN: 110 OAKLAND  
LICENSE:  
COMMENT:

GROSS: 55380 LBS  
TARE: 31000 LBS  
NET: 24380 LBS

WASTE	QUANTITY	UNIT	RATE	AMOUNT
-------	----------	------	------	--------

ADD:

12.19

RECEIVED  
JUN 27 2003

WARNING: Transporting any unauthorized hazardous waste to this facility for disposal is prohibited by law. Persons violating this prohibition are subject to civil and criminal prosecution.

I certify that I have not disposed of any liquid or hazardous waste.

Total: \_\_\_\_\_  
Francisco Sanchez

Weighmaster:

DRIVER:

RECYCLING

