ExxonMobil
Refining and Supply Company

Downstream - Safety, Health & Environment Environmental Remediation

2300 Clayton Road, Suite 1250 P.O. Box 4032 Concord, CA 94524-4032 (925) 246-8768 Telephone (925) 246-8798 Facsimile darin.l.rouse@exxon.com Darin L. Rouse Senior Engineer Environmental Remediation 106g

ExonMobil

Refining & Supply
SEP - 7 PM 3: 55

September 1, 2000

Mr. Frank Codd Alameda County Public Works Agency Water Resources Section 399 Elmhurst Street Hayward, California 94544-1395

RE: Former Exxon RAS #7-0236/6630 East 14th Street, Oakland, Čalifornia.

Dear Mr. Codd:

Attached for your review and comment is a document entitled *Groundwater Monitoring Well Destruction*, dated August 24, 2000, for the above referenced site. The document was prepared by Environmental Resolutions, Inc. (ERI) of Novato, California, and details the destruction of six groundwater monitoring wells at the subject site.

If you have any questions or comments, please contact me at (925) 246-8768.

Sincerely

Darin L. Rouse Semor Engineer

Attachment:

ERI's Groundwater Monitoring Well Destruction, dated August 24, 2000.

cc:

w/attachment

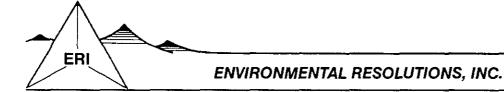
Mr. Barney Chan, Alameda County Health Care Services Agency, Environmental Health Services

Mr. Stephen Hill, California Regional Water Quality Control Board, San Francisco Bay Region

Ms. Lisa Mofoyama, Resources for Community Development

w/o attachment

Mr. James F. Chappell, Environmental Resolutions, Inc.



August 24, 2000 ERI 200914.R01

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

Subject:

Groundwater Monitoring Well Destruction at Former Exxon Service Station 7-0236,

6600 East 14th Street, Oakland, California.

Mr. Rouse:

At the request of ExxonMobil Refining and Supply (formerly known as Exxon Company, U.S.A.) (ExxonMobil), Environmental Resolutions, Inc. (ERI) performs environmental activities at the subject site and adjacent properties. This letter documents the destruction of six groundwater monitoring wells (MW2 through MW6 and MW8) at the subject site. The location of the site is shown on the Site Vicinity Map (Plate 1). The locations of the destroyed wells are shown on the Generalized Site Plan (Plate 2).

ERI performed the field work in accordance with well destruction permits issued by the Alameda County Public Works Agency, dated July 18, 2000 (Attachment A), and a site-specific Health and Safety Plan. The Alameda County Health Care Services Agency provided written concurrence to destroy the wells in a letter dated July 11, 2000 (Attachment B). Well construction logs are included as Attachment C.

On August 9, 2000, ERI observed Woodward Drilling Company, Inc. (Woodward) of Rio Vista, California, destroy the groundwater monitoring wells. ERI measured and recorded the total depth of the wells. The results of well sounding are presented in Table 1. The wells were destroyed by drilling out the top two feet of casing, filter pack, and grout seal. The remaining casing was pressure-grouted with a cement/bentonite slurry from the total depth to two feet immediately below ground surface. The borehole was filled with concrete from two feet below ground surface to the ground surface.

ERI recommends forwarding copies of this report to:

Mr. Frank Codd Alameda County Public Works Agency Water Resources Section 399 Elmhurst Street Hayward, California 94544-1395 Mr. Barney Chan Alameda County Health Care Services Agency Environmental Health Services 1131 Harbor Bay Parkway, Room 250 Alameda, California 94502-6577

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

Ms. Lisa Motoyama Resources For Community Development 2131 University Avenue, Suite 224 Berkeley, California 94704

Please call Mr. James F. Chappell at (415) 382-4323 with any questions regarding this project.

Sincerely,

Environmental Resolutions, Inc.

James F. Chappell

Assistant Project Manager

Brita Ellewit

Jokn B. Bobbitt R.G. 4313

Attachments:

Table 1:

Well Information Data

Plate 1:

Site Vicinity Map

Plate 2:

Generalized Site Plan

Attachment A: Well Destruction Permits

Attachment B: Alameda County Health Care Services Agency Letter

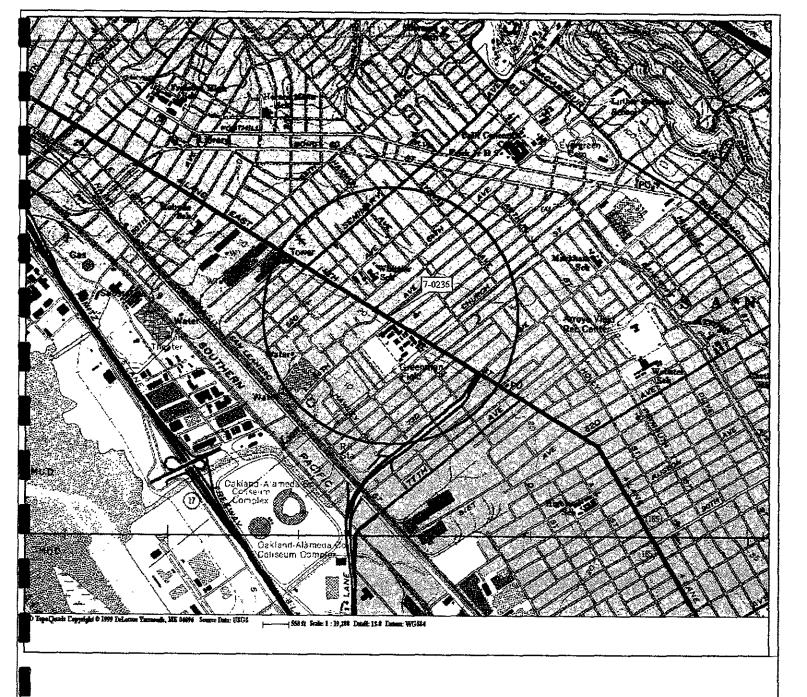
Dated July 11, 2000

Attachment C: Well Construction Logs

### TABLE 1

WELL INFORMATION TABLE
Former Exxon Service Station 7-0236 6600 East 14th Street Oakland, California (Page 1 of 1)

Well Designation	Date	Casing Diameter (inches)	Measured Depth (feet)		
MW2	8/9/00	4	25		
MW3	8/9/00	4	25		
MW4	8/9/00	2	22.5		
MW5	8/9/00	2	25		
MW6	8/9/00	4	23		
MW8	8/9/00	2	25		







1/2-mile radius circle

# APPROXIMATE SCALE

SOURCE:

Modified from a map
provided by

DeLorme 3-D TopoQuads

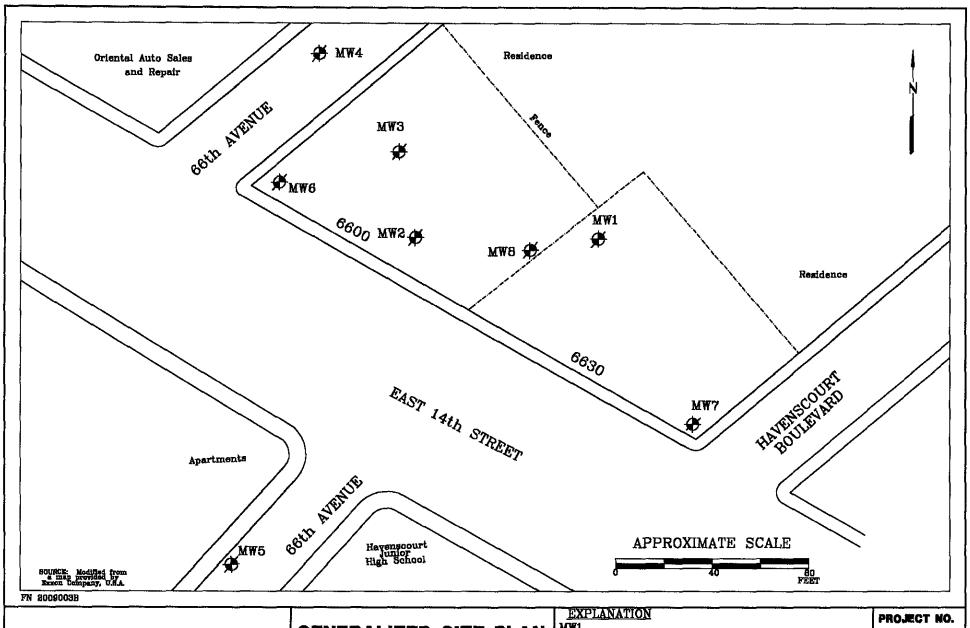


#### SITE VICINITY MAP

FORMER EXXON SERVICE STATION 7-0236 6600 East 14th Street Oakland, California PROJECT NO. 2009

PLATE

mile





#### **GENERALIZED SITE PLAN**

Former
Exxon Service Station 7-0236
6600 East 14th Street
Oakland, California

<u> ĽiX.</u>	<u>PLANATION</u>			
MW1		Groundwater		
<b>4</b>	Destroyed	Groundwater	Monitoring	Wel

2009 PLATE

April 25, 2000

# ATTACHMENT A WELL DESTRUCTION PERMIT



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

for applicant to complete	FOR OFFICE USE
LOCATION OF PROJECT Former Exam Station 7-0236	
	PERMIT NUMBER WOO-45/
6600 East 14th Street Ook And, California	WELL NUMBER
THE MEDITION OF THE PERSON OF	DEDICAT CONTRACT
CLIENT	PERMIT CONDITIONS Circled Permit Requirements Apply
Name Exxon Mobil Refining and Sweet	A GENERAL
Address P.O. BOX 4032 Phone (925) 246-8768 City Concord (0 Zip 04524	A permit application should be submitted so as to
Concord Ca Zip 04524	arrive at the ACPWA office five days prior to
APPLICANT	/,\Pioposed starting date.
Name Environmental Resolutions, Inc.	3. Submit to ACPWA within 60 days after completion of
	permitted original Department of Water Resources- Well Completion Report.
Thone (U/2) 20 - uto 1	Permit is void if project not began within 90 days of
City Nevator Co Zip 94949	abbroval date
·	B. WATER SUPPLY WELLS
Type of project	I. Minimum surface seal thickness is two inches of
Well Construction Geotechnical Investigation	coment grout placed by tremie.
Calhodic Protection II General O	2. Minimum seal depth is 50 feet for municipal and
Water Supply D Contamination D	Industrial wells or 20 feet for domestic and irrigation
Monitoring   Well Destruction	wells unless a lesser depth is specially approved. C. GROUNDWATER MONITORING WELLS
ROPOSED WATER SUPPLY WELL USE	INCLUDING PIEZOMETERS
	1. Minimum surface seal thickness is two mehes of
Advanced	cement grout placed by tremis.
Industrial D	2. Minimum scal depth for monitoring wells is the
other	maximum depth practicable or 20 feet
PRILLING METHOD:	D. GEOTECHNICAL
Mud Rolary O Air Rolary O Auger O	Backfill bore hole by tremic with coment grout or come
Cable [] Other []	groutsand mixture Upper two-three feet replaced in his or with compacted cuttings.
ORILLER'S NAME Woodword Drilling	E. CATHODIC
RILLER'S MARKE DOODS CODY OF DITTING	Fill hole anode your with concerns placed by
ORILLER'S LICENSE NO. <u>C57</u> 710079	(F) WELL DESTRUCTION
	See attached requirements for destruction of snal-ou
	wells. Send a map of work site. A different permit
UPLL PROJECTS A 14	G. SPECIAL CONDITIONS
VELL PROJECTS # // Drill Hole Dianteter 8 7/0 in. Maximum	at at reput to COUNTI TO IZ
Casing Diameter 2"-4" in. Depth 26 A.	NOTE: One application must be submitted for each well or well
Surface Seal Depth 2-5 ft. Owner's Well Number MW2	activation, multiple bonnes on one application are acceptable
EOTECHNICAL PROJECTS	for geotechnical and contamination investigations
Number of Borings Maximum	
Hole Diameter in. Depth ft.	
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STIMATED STARTING DATE 8/14/00 STIMATED COMPLETION DATE 8/15/00	ALT DO
	APPROVED
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PRICANTIS SIGNATURE AMAN INC. MAIN	( ) ( )
DATE_	\ \ \ \ \ \ \
LEASE PRINT NAME James F. Changell Bon	



WATER RESOURCES SECTION

J99 ELMHURST ST. HAYWARD CA. 94544-1395

PHONE (510) 670-5554 MARLON MAGALLANES/FRANK CODD (510) 670-5783

FAX (510)782-1939

DRILLING PERMIT	APPLICATION
FOR A STATE OF A STATE	
FOR APPLICANT TO COMPLETE	FOR OFFICE USE
LOCATION OF PROJECT Former Exxon Station 7-0236	PERMIT NUMBER WOO-450
	PERMIT NUMBER VVUO
6600 East 14th Street	WELL NUMBER APN
Oak budy California	
	PERMIT CONDITIONS
CLIENT	Circled Permit Requirements Apply
Name Exxon Mobil Refining and Supply	
Adoress P.O. 1308 4032 Phone (9:5) 244-8768	(A) GENERAL
City Concord Ca Zip 94524	A permit application should be submitted to as to
APPLICANT	proposed starting date.
Name Environmental Resolutions, Inc.	2) Submit to ACPWA within 60 days after completion of
East Id. at he	permitted original Department of Water Resources.
Address 73 Digital Drive Phone (45) 382-1856	/ Well Completion Report.
City Nova to Co, Zip 94909	1. Permit is void if project not begun within 90 days of
	B. WATER SUPPLY WELLS
TYPE OF PROJECT	1. Minimum surface seal thickness is two inches of
	sement grout placed by tremic.
Cathodia Protection	2. Minimum seal depth is 50 feet for municipal and
Water Supply C Contamination C	industrial wells or 20 feet for domestic and traingulor
Monitoring    Well Destruction	wells unless a lesser death is specially approved
	C. GROUNDWATER MONITORING WELLS
Proposed water supply well use	INCLUDING PIEZOMETERS
New Dosnestie	1. Minimum surface seal thickness is two inches of
Municipal C Imigation B	cement grout placed by tremin.
Industrial C Other O	2. Minimum scal depth for monitoring wells is the maximum depth peachcable or 20 feet
DRILLING METHOD:	D. GEOTECHNICAL
Marie Barrens D. C.	Backfill bore hale by tremie with coment group or expense
Cable C Other D	grountand mixture. Upper two-three feet replaced to kind
· · · · · · · · · · · · · · · · · · ·	or with compacted cuttings.
DRILLER'S NAME Wood word Drilling	E. CATHODIC
	F. WELL DESTRUCTION
DRILLER'S LICENSE NO. <u>C 57</u> 7/00 79	See attached requirements for destruction of shallow
	wells. Send a map of work site A different permit
	#DDIIC20308 is required for well demand the color
WELL PROJECTS # //	G. SPECIAL CONDITIONS
Drill Hole Diameter 8 - 10 m. Maximum	NOTE: One and the standard
Casing Diameter 2"-4" in. Depth 26 ft. Surface Scal Depth 2-5' ft. Owner's Well Number MWS	NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable
Surface Scal Depth 2'=5' n. Owner's Well Number MWS	for geolechnical and contamination investigations
Geotechnical projects	
Number of Bonngs Maximum	
Hole Diameter in. Depth ft.	
ESTIMATED STARTING DATE 8/14/00	1 10
ESTIMATED COMPLETION DATE \$/15/00	1.101) Dice of
	APPROVED DATE >18-00
hereby agree to comply with all requirements of this permit and Alameda County Ordi	DERCE NO. 73-68
APPLICANT'S SIGNATURE (FIA)	( ) ( )
DATEDATE	
PLEASE PRINT NAME James F. Changell Park	-5-00
KCA'D	טעיקיי
•	



WATER RESOURCES SECTION

399 ELMHURST ST. HAYWARD CA. 94544-1395

PHONE (SID) 670-5554 MARLON MAGALLANES/FRANK CODD (510) 670-5781

FAX (SID)782-1939

IIT APPLICATION
FOR OFFICE USE _
(100 110 11
PERMIT NUMBER WO - 457 WELL NUMBER
APN
PERMIT CONDITIONS
Circled Permit Requirements Apply
(A) GENERAL
A permit application should be submitted so as to
proposed starting date.
2) Submit to ACPWA within 60 days after completion of permitted original Department of the permitted original Department or the permitted original Department o
/ K''' COMPIGNUM KENAM
3. Permit is vaid if project not begun within 90 days of
B. WATER SUPPLY WELLS
1. Minimum surface seal thickness is two in the
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2. Minimum seal depth is 50 feet for aunicipal and
industrial wells or 20 feet for domestic and irrigation wells unless a lessar depth is specially approved
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2.Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet
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or with compacted cuttings,  E. CATHODIC
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See stigehed requirements for destruction of snakeu
application as required 6
G. SPECIAL CONDITIONS
NOTE: One application must be submitted for each well or well destruction. Multiple horizon as a service of each well or well
destruction. Multiple borings on one application are acceptable for geolechnical and contamination investigations
1 /88
APPROVED TATE TILE-CO
NATE
15ance No. 73-68.
inance No. 73-68.
inance No. 73-68.
inance No. 73-68.



WATER RESOURCES SECTION

J99 ELMHURST ST. HAYWARD CA. 94544-1395

PHONE (510) 670-5554 MARLON MAGALLANES/FRANK CODD (510) 670-5783

FAX (510)782-1939

DRILLING PERMIT	APPLICATION
FOR APPLICANT TO COMPLETE	FOR OFFICE USE .
OCATION OF PROJECT Former Exam Station 7-0236	PERMIT NUMBER WOO - 453
600 East 14th Street	WELL NUMBER
ak hud, Colifornia	
MENT MALCH CO.	PERAIT CONDITIONS Circled Permit Requirements Apply
inc Exxon Mobil Refining and Supply Idress P.O. Box 4032 Phone (925) 246-8768	(A) GENERAL
Cancord Ca Zip 945 au	1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to
THE Environmental Resolutions, Inc.	proposed starting date.  2. Submit to ACPWA within 60 days after completion of
Fax (4/6) 382-1856	germitted original Department of Water Resources- Well Completion Report.
Gress 73 Digital Drive Phone (415) 382-1856 by Novato Ca, Zip 94949	3. Permit is void if project not begun within 90 days of approval date
,	B. WATER SUPPLY WELLS
PE OF PROJECT	<ol> <li>Minimum surface seal thickness is two inches of coment grout placed by tremie.</li> </ol>
Vell Construction Geotechnical Investigation Cathodic Protection G General O	2. Minimum seal depth is 50 feet for municipal and
Vater Supply D Contamination D	industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved
Monitoring 0 Well Dostruction	C. Groundwater Monitoring Wells
OPOSED WATER SUPPLY WELL USE New Domestic O Replacement Domestic O	INCLUDING PIEZOMETERS  1. Minimum surface seal thickness is two mehes of
New Domestic D Replacement Domestic D Municipal D Irrigation D	coment grout placed by tremic.  2. Minimum scal depth for monitoring wells is the
Industrial O Other O	maximum depth practicable or 20 feet
rilling method:	D. GEOTECHNICAL  Backfill bore hole by tremie with exment grout or com
Mud Rotary G Auger D  Cable G Other G	groudsand mixture. Upper two-three feet replaced in k or with compacted cuttings,
ULLER'S NAME Wood word Drilling	Ę. CATHODIC
ULLER'S LICENSENO. C57 7/0079	Fill hale anode zone with concrete placed by transe
GLEEK & LICENSTINO. CS / JOSEPH TO	See attached requirements for destruction of smaller wells. Send a map of work site. A different permit
ELL PROJECTS _# //	application is required for wells deeper than 45 feet G. SPECIAL CONDITIONS
Orill Hole Diameter 8 - 10 in. Maximum Casing Diameter 21-41 in. Depth 26 ft. Surface Seal Depth 2-5 ft. Owner's Well Number MW 5	NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geolechnical and contamination investigations.
OTECHNICAL PROJECTS  Number of Borings Maximum	
Hale Drameter la. Depth ft.	,.
TIMATED STARTING DATE 8/14/00 TIMATED COMPLETION DATE 8/15/00	APPROVED DATE 77-18
creby agree to comply with all requirements of this permit and Alameda County Ort	Sinance No. 73-68.
PLICANT'S SIGNATURE GOLD WELFILL DATE_	
	· · · · · · · · · · · · · · · · · · ·



WATER RESOURCES SECTION

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

DRILLING PERMI	IT APPLICATION
FOR APPLICANT TO COMPLETE	
LOCATION OF PROJECT Former Exam Station 7-0236 6600 Fast 14th Street Cak hady California	PERMIT NUMBER WOO-454 WELL NUMBER APN
CLIENT Name Exxon Mobil Refining and Supply Address P.O. Box 4032 Phone (925) 246-8768 City Concord Co Zip 94524  APPLICANT Name Environmental Resolutions, Inc. Address 73 Digital Rive Phone (445) 382-1856 Address 73 Digital Rive Phone (445) 382-4323 City Name to Ca, Zip 44949	PERMIT CONDITIONS  Circled Permit Requirements Apply  A. GENERAL  1. A permit application should be submitted so as to arrive as 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 Resourcessement in the completion Report.  3. Sermet is void if project not begun within 90 days of the completion days of the comp
TYPE OF PROJECT  Well Construction Geotechnical Investigation  Callodic Protection General  Water Supply G Contamination G	D. WATER SUPPLY WELLS  1. Minimum surface seal thickness is two inches of cement grout placed by tremie.  2. Minimum scal depth is 50 feet for municipal and Industrial wells or 20 feet for demands and industrial wells.
Monitoring	wells unless a lesser depth is specially approved  C. GROUNDWATER MONITORING WELLS  INCLUDING PIEZOMETERS  I. Minimum surface seal thickness is two inches of cement grout placed by tremic.  2. Minimum seal depth for monitoring wells is the
DRILLING METHOD:  Mud Rolary   Air Rolary   Auger   D  Cable   Other   D  DRILLER'S NAME Wood word Drilling	maximum depth practicable or 20 feet  D. GEOTECHNICAL  Backfill bore hole by tremie with earnest grout or earnest groutered in kind or with compacted cuttings.  E. CATHODIC
DRILLER'S LICENSE NO. C57 710079	Fill hald anode zone with concrete placed by tremie F. VELL DESTRUCTION  See attached requirements for destruction of shallow wells. Send a map of work sup A delicated and the send a map of work sup A delicated and the send a map of work sup A delicated and the send a map of work sup A delicated and the send a map of work sup A delicated and the send a map of work sup A delicated and the send and the send a map of work sup A delicated and the send and the
Orill Hole Diameter 8 - 10 in Maximum Depth 26 ft.  Surface Seal Depth 2 - 5 R. Owner's Well Number MW 6	application is required for wells deeper than 45 feet  G. SPECIAL CONDITIONS  NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for sentechnical and contamination investigations
CEOTECHNICAL PROJECTS  Number of Borings  Hole Diameter in. Depth ft.	A STATE OF THE STA
ESTIMATED STARTING DATE 8/14/00 ESTIMATED COMPLETION DATE 8/15/00  Thereby agree to comply with all requirements of this permit and Alagreda County Ordin	APPROVED DATE DATE
APPLICANT'S SIGNATURE JOHN OFFI DATE  PLEASE PRINT NAME JAMES F. Chappell Rev. 6.	
,	



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

DRILLING PERM	TT APPLICATION
FOR APPLICANT TO COMPLETE	, for office use
LOCATION OF PROJECT FORMER Exam Station 7-0236	LIOO 115
TOCK HOW OF PROJECT TOTAL ERRON - TRAIN 1-0236	PERMIT NUMBER WOO-455
6600 East 14th Street	WELL NUMBER
Oak had, California	APN
	hometen and the
CLIENT	PERMIT CONDITIONS Circled Permit Requirements Apply
Name Exxon Mobil Refining and Supply	Comment of the Manager of Manager
Address P.O. BOX 4032 Phone (925) 246-8768	( Λ. )GEŊEŔķī
City Concord Ca Zip 94524	1. A permit application should be submitted so as to
	ATTIVE AT ING ACPWA office five dave acids to
APPLICANT	proposed starting date,
Name Environmental Resolutions, Inc.	2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-
Address 73 Dig. tal Dive Phone (415) 382-1856  Address 73 Dig. tal Dive Phone (415) 382-1836	Well Completion Report.
City Nessa to Co. Zip 94949	3. Permit is void if project not begun within 40 days of
210 79709	l /Approval date
	B. WATER SUPPLY WELLS
TYPE OF PROJECT	<ol> <li>Minimum surface seal thickness is two inches of coment grout placed by tremie.</li> </ol>
Well Construction Geotechnical Investigation Cathodic Protection D. Ornerst	2. Minimum seal depth is 50 feet for municipal and
Water Complete	Industrial wells or 20 feet for domestic and irrigation
Manitorian	Wells unless a lesser depth is specially approved
econitoting U Well Destruction	C. GROUNDWATER MONITORING WELLS
PROPOSED WATER SUPPLY WELL USE	INCLUDING PIEZOMETERS
New Domestie D Replacement Domestic D	1. Minimum surface seal thickness is two inches of
Municipal O irrigation D	coment grout placed by tremic.
Industrial O Other D	2. Minimum seal depth for monitoring wells is the
	maximum depth practicable or 20 feet D. GEOTECHNICAL
DRILLING METHOD:  Mud Reserv G Air Reserv G Avers G	Backfill bore hole by tremic with cement grout or cemen.
	groutsand mixture. Upper two-three feet registered in kind
	or with compacted cuttings
DRILLER'S NAME Wood word Drilling	-E. CATHODIC
,	Fill hate anode zone with concrete placed by trame
DRILLER'S LICENSE NO. <u>C 57</u> 7/00 79	F. WELL DESTRUCTION
- <del></del>	See attached requirements for destruction of shallow wells. Send a map of work site. A different permit
	#Obligation is required for waits downed than 15 days
WELL PROJECTS # //	G. SPECIAL CONDITIONS
Drill Hole Diameter 8 - 10 in. Maximum	
Casing Diameter 27-47 in. Depth 26 ft.	NOTE: One application must be submitted for each well or well
Surface Seal Depth 2 -5 ft. Owner's Well Number MW &	Wall Volight, Middle Connes on one application are acceptable
CEOTECHNICAL PROJECTS	for geolechnical and contamination investigations
Number of Bonnes Maximum	
Hole Drameterin. Depth ft.	
• • • • • • • • • • • • • • • • • • • •	1 /
ESTIMATED STARTING DATE 8/15/00	5 10-1
ESTIMATED COMPLETION DATE 87/5/00	APPROVED TO THE TOTAL PARTY OF THE PROVED
I hereby agree to comply with all requirements of this permit and Alameda County O	OKIE
	1101074CE ND. 13-63( / /
APPLICANT'S SIGNATURE (AND WELFILL DATE	\
PLEASE PRINT NAME Sames F. Choppell Ro	9.6 -5.00
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#### ATTACHMENT B

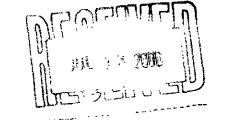
ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY LETTER, DATED JULY 11, 2000

#### ALAMEDA COUNTY

#### **HEALTH CARE SERVICES**

**AGENCY** 





DAVID J KEARS Agency Director

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

July 11, 2000 StID # 1068

Mr. Darin Rouse Exxon-Mobil P.O. Box 4032 Concord, CA 94524-4032

Re: Closure of Monitoring Wells for 6600 E. 14th St., Oakland CA 94621

Dear Mr. Rouse:

Our office has received concurrence from the Regional Water Quality Control Board on our recommendation for site closure of the above referenced location. This also includes the recommendation for no further action on 6630 E. 14<sup>th</sup> St. Prior to issuing the closure letter, our office requests the proper closure of six (6) existing monitoring wells installed on and off-site.

You may contact Alameda County Public Works Water Resources Section at (510) 670-5554 for specific requirements of well closure.

Please contact me at (510) 567-6765 if you have any questions.

Sincerely,

Barney M. Chan

Hazardous Materials Specialist

C: B. Chan, files

Ms. L. Motoyama, RCD, 2131 University Ave., Suite 224, Berkeley, CA 94704

Mr. J. Chappel, Environmental Resolutions, Inc., 73 Digital Drive, Suite 100, Novato, CA 94949-5791

wicirq6600E14th

# ATTACHMENT C WELL CONSTRUCTION LOGS

BOF	O E	FE G	XPL	SCIENCE, Inc ORATORY				CLIEN LOCA	T Exxo	n Company, U 4th St. & 66th	.S.A. Ave.,		BORING NO WELL NO. MW-2	
				EVATION _ 98.9		-	9	SAMPI CASIN	ER TYP G DATA	HOD <u>CME 75</u> E <u>Modified s</u> 4" PVC, 0.00 st Hazmat Drill	olit sp 20' sk	ots	IAM. 10°	
BLOWS PER 1/2 FOOT	CGI(PPM)	SAMPLE	DEPTH (Ft)	Well	nece	PROFILE	DEPTI DATE TIME		VATER	9.05' 3/15/91 0900				
<b>ळ</b> →	ŏ.	S			]=	<u>*</u>					DESC	CRIPTION	<del>,</del>	
			-0	Christy Box			3° Ae	nhait	5" Road	Base				
14,24, 26 11,13,			-2 -4 -6 -8	sch. 40 PVC Casing	CL		¥	CLAY: dark gray, moist, hard, medium plastic, ~ 10% silt, 1-2% oorganics.  SILTY CLAY: mottled(brown with olive patches), moist, very stiff, 5% medium						
12,18, 21			- 12 - 14 - 16 - 18	sch. 40 PVC .020	sc		SANI	to coarse grained sand.  SANDY CLAY: brown, wet, hard, low plasticity, medium-grained angular to subrounded sand, 1-3% root trace.						
18,25, 29	·    		- 20 - 22	Slot			Sam	ie, witl	n 10% gra	avel.				
10.01		-	- 24 -	8	경 C!		SILT	Ÿ ČĹĀ			ow to	medium plastic, 1-2% m	nedium-grained	
18,21, 28		H	26	<u> </u>		<u> </u>	<u> </u>	ב ישוכ		ounded sand.	FT D	ELOW GRADE		
			28	I.			BUF	THACT	ELIMINA.	LD A1 20.3 FE	. <b>.</b> . 0			
			30			<b>.</b>								
			32	Sano	#3 L	.ones	tar		Driven Sample	interval	五	Water level encounter		
_	丄		34	Dentico	u ur <b>A</b>	L AIIA			oanpie					

I

LOG BOF	RIN	F E G	XPL	ORATORY		<u>\</u>	CLIEN LOCA	TON	n Company, L 4th St. & 66th	J.S.A. Ave.,		BORING NO. WELL NO. MW-3
FIELD :	SKE	TC	OF	BORING LOCATION	4							! 
тор о	FC	ASIN	¥G El				SAMP CASIN	LER TYP	HOD CME 75 E Modified s 4° PVC, 0.0 st Hazmat Drill	plit sp 20' slo	oon ots	AM10*
8_	)		_	Well		D	EPTH TO	WATER	7.84*	$\perp$		
BLOVS PER 1/2 FOOT	CGI[PPM]	Ш	DEPTH (Ft)	r to	uş	D	ATE		3/15/91	$\bot$		
20	1) 16	SAMPLE	E	= \$ c=	UBCS PROFILE		IME		0900			
<b>6</b> –	Ø	Ś	ă		5   &	$oldsymbol{ol}}}}}}}}}}}}}}}}}}$				DESC	RIPTION	
•			-0	Christy Box			* Asphalt,	5" Road I	Base :			
10,16, 19	0		-4 -6 -8	sch. 40 PVC / St Casing	CL CL	¥	CLAY: dark san				astic, 5% rounded mediu	
10,12, 13 18,26, 24	0		- 12 - 14 - 16 - 18	sch. 40			Same, bed	med		graine	patches), moist, very st d sand, 5% gravel, 1% o	
14,16, 19			20 - 22 - 24	Slot End Cap			Same, no		moist vews		edium plastic, 1% rounc	· · · · · · · · · · · · · ·
12,14,		$\vdash$	t		CL			subi	n, moist, very s rounded gravel	to 1°.	Coloni plactic, 170 Toolic	
16			- 26 - 28	1/1		<u> </u>	BORING TERMNATED AT 25 FEET BELOW GRADE					
			- 30 - 32 - 34	Portland	Lone	star		Driven	interval	<b>革</b> 玄	Water level encountere	ed during drilling

LO	TON G OF RINC	EXI			CE TORY					CLIENT Exxon	30 E. 14th Street, Oakland		WELL NO. MW-4
	FIELD	SKET	CH (	OF B	ORING L	OCATI	ON						Page 1 of 1
	тор	OF C			URE 2 EVATIO	N <u>19</u> 4	<u>46°</u>			SAMPLER TYPE CASING DATA 2°	DD Hollow Stem Auger Split spoon 'Sch. 40 PVC: 2.5' Blank t Hazmat Drilling Corporat		AM8"
		Ê		6		<del></del>			D	EPTH TO WATER	17	7.76	
	Ê	rPH-G (ppm)	щ	DEPTH (fbg)	Well			끸	D	ATE	3/26/92	4/6/9	2
	(mdd) Gic	Ĭ	SAMPLE	Ë	19	JSUC	USCS	PROFILE		TME 10:20 AM 12:00 PM			
	ď	۴	Ś	۵	_	3	=	<u>a</u>			DESCRIPT	ION	
			ł	- 0	"		┢─	<b>&gt;&gt;</b>		ASPHALT 3"/C	oarse gravel subgrade		
				2	2" diam. Sch. 40						lack, slightly moist, very	stiff; trace fine	- to
			l	· - 4	PVC Casing					medium-graine	d sand, low plasticity.		
	0			•	Ousing				j	04760436		176 2	
				- 6 -	'						live-green, slightly mois d sand, low plasticity.	t, very stm; trac	e tine- to
				-8					÷	•			!
	0			- 10 -			CL			SILTY CLAY: be plasticity.	rown, moist, very stiff; v	ery fine-graine	d sand, low
				- 12 -						CANDY CLAY		Enc. to modius	
ļ	0			- 14 -	2" diam.					sand, some coa	brown, moist, very stiff; arse-grained sand and t	race fine grave	l, low
				- 16	Sch. 40 PVC				_	plasticity.			
ļ				- - 18	0.020° slotting				<del></del>		brown, wet, firm; fine-to-		
	a			- - 20						gravel, low plas	g coarse-grained sand a licity.	ulu likreasiig	iii le
ļ				•									
į				- 22	End Cap								
ļ				- 24 L			1						
				- 26				1//		Borehole termin	ated at approximately 2	25-1/2 feet belo	w grade
ļ													
1									•				
_													

	TON					4	ALLEY A			PROJECT NO: CLIENT Exxon	<u>30-0491-01</u> DATE DRILL RAS #7-0236	ED 3/26/92	WELL NO. MW-5		
	G OF		PLC	HA	TORY		- 1			LOCATION 6630 E. 14th Street, Oakland, California					
ВС	MINC	•						<u>A</u>		LOGGED BY J. D		OVED BY			
													Page 1 of 1		
	FIELD	SKET	CH (	OF B	ORING LO	CAH	ON			DON LING METLY	DD Hollow Stem Auger	HOLE D	AM 8"		
[			٥٥٦		unc a					SAMPLER TYPE					
			SEt	: PKS	URE 2						Sch. 40 PVC: 2.5' Blank ,	22,5' Screen			
•	<b>T</b> 00	05.0		ור בו	LEVATION	1 16 0	5				t Hazmat Drilling Corporatio				
	101	OF C	ASII	AC EI	LEVATION	1925									
		Ê		â	- co				D	EPTH TO WATER	18'	10.			
	E	ГРН-G (ррм)	ш	ОЕРТН (159)	Well Construction			щ		ATE	3/26/92		/92		
	PID (ppm)	9	SAMPLE	H	nstr		SOSD	PROFILE	Т	IME	11:50 AM	<u> </u>	PM		
Ī	윤	ם	SA	DEI	နိုပိ	)	Sn	<u>स</u>			DESCRIPTIO	N N			
				-0						ACDUAL TOWAS	ne gravel subgrade				
ļ				-	2" diam. Sch. 40				_		lack, slightly moist, stiff; t	race fine- to			
1				- 2	PVC	孔.					d sand, low plasticity.	. •-•			
				4	Casing		1								
7	0			<b>t</b> ,		排	}			SILTY CLAV: h	rown, moist, stiff; fine- to	coarse-grain	ed sand.		
				6			CL			low plasticity.	TOWN, MOISE, SUM, MISS TO	COLLIDO G. C.			
5			}	8		1	1						inod		
1	0			10		目			-	SANDY CLAY: sand, low plast	brown, moist, very stiff; f	ine- to coarse	grained		
				[ "			1		_	- Salia, iom piasi	roity.				
1		1		12	1 1		1								
				14	2" diam.	倡	-		Γ-	CLAYEY SANS	D: brown, wet, medium de	nse; medium	-grained		
	.0			┡	Sch. 40		1			sand, trace fine	grained and coarse-grain	ned sand and	trace fine		
				16	PVC 0.020*					gravel.	NOV CLAV-brown wat i	madium dens	e.		
				18					$\bar{\lambda}$	rnedium-graine	NDY CLAY: brown, wet, I d sand.	neoram dens			
1	0			f	, ,		SC		1						
	ľ			20		目			1						
7	"			22											
				24	End Cap				1						
				[~		围	<u>.                                    </u>		1						
	l			26	1					Borehole termi	nated at approximately 29	5-1/2 feet bek	ow grade		
		1			ļ							-			
5					1										
Į.															
	1		1									•			
7															
				ł					-						
<b>5</b> )	Ì	ì	1	1	1										

	ALTON GEOSCIENCE LOG OF EXPLORATORY BORING										PROJECT NO	WELL NO. MW-6				
	f	FIELD SKETCH OF BORING LOCATION							Page 1 of 1							
	SEE FIGURE 2										DRILLING METHOD Hollow Stem Auger HOLE DIAM. 10"  SAMPLER TYPE Split spoon/Continuous Core  CASING DATA 4" Sch. 40 PVC: 2.5' Blank, 20' Screen					
	TOP OF CASING ELEVATION 18.79						<u>79'</u>			DRILLER West Hazmat Drilling Corporation						
			٦			Ę				D	EPTH TO WATER	18.5	8.29	3'		
		PID (ppm)	TPH-G (ppm)	SAMPLE	DEPTH (lbg)	Well		SS	<u>"</u> [	ATE	3/26/92	4/6/9	92			
										ī	IME	2:00 PM	12:00	PM		
				SAB		္ နိုင္ငံ	3	SOSO	I E		·	DESCRIPT	ION			
r		-0														
		- 4" diam.						**************************************		_	ASPHALT 3"/fine gravel subgrade					
		2 Sch. 40 PVC							SILTY CLAY: black, slightly moist, very stiff; trace coarse-grained sand, trace fine gravel, intermittent color							
		4 Casing							:	changes to olive-green, low plasticity.						
					-											
1							<u></u>			/ SANDY CLAY: brown, slightly moist, very stiff; medium- to						
Bŧ		0			8			CL		coarse-grained sand, trace fine gravel, low plasticity.						
• í					10		H					own, slightly moist, ver		dium- to		
H					L i						<i></i>	sand, moderate plastici				
		12							SANDY CLAY: brown, slightly moist, very stiff; fine- to coarse-grained sand, trace fine gravel, low plasticity.							
					14	4 diam.	1	1			CLAYEY SAND: brown, moist, medium dense; medium- to					
	į	0 Sch. 40 Sch.			1	SC			coarse-grained sand, trace fine gravel, some olive-green mottling							
ı					פו ד	0.020*		-			CLAY(6" layer):	brown, slightly moist, v	ery stiff; low pla	asticity.		
B					18	slotting	1	]		$\nabla$	•	brown, moist, stiff; fine				
		0			20		1	CL	<b>-</b> -		fine gravel, low		<del>-</del> -	، حب سب عدد عدر <sub>مدر ع</sub> ي		
					22	End Cap				CLAY: brown, slightly moist, very stiff; moderate to high		h				
		0								plasticity, black wavy vertical streaks.						
		24									Borehole terminated st approximately 23 feet below grade					
					26							,	•			
I																
•						1										
					1											
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	1															
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•		1	l	1	<b>\</b>	<u> </u>										

	$\Lambda$	<del></del>	<u> </u>								
~/				Project No.: 2009 Boring: B8/MW8 Plate: 1	OF 1	_,					
	ERI	ENVIRON	MENTAL LUTIONS, INC.	Site: Former Exxon Service Station 7-0236 Date: Drill Contractor Woodward	01/10/97	<del>7</del> —-					
S	amp		<del></del>		71C A N	_					
Sample Method <u>Split Spoon</u> <u>Geologist STEVE M ZIGAN</u> Drill Rig <u>B57</u> Bore Hole Diameter: <u>8</u> Signature											
L	ocat	ion <u>B</u> e	etween So	ends of former dispenser Registration: R.G. 4333							
	_	<u>is</u>	lands.	Logged by: Scott Grat		_					
	\$\$\\ \\$\\ \\$\\ \\$\\ \\$\\ \\$\\ \\$\\ \\$\	10 1 20 V	A CHE COL	<del></del>	WELL SESIES	÷					
$\vdash$	-			Fill, sandy gravel  CH Clay, black, damp, trace of very fine-grained sand							
-				CH Clay, black, damp, trace of very fine-grained sand		1.					
-	1					11					
5	30	6.0		CL Silty clay, olive-gray moist some very fine-grays	- V/// V// -						
	30	0.0		CL Silty clay, olive-gray, moist, some very fine-grained sand, trace of gravel to 1/4" diameter	d	cemen					
ļ	-					cei					
-	-		======			eat					
-	1					Ne					
<del>-</del> 10-	47	383		thomationing to an 1 2							
				transitioning to sandy clay, olive—gray, moist, orange and black mottling, fine—grained, some		Grout:					
				gravels		Gre					
		▼			[ E]	-					
15-	40	<u>=</u>				112					
				light brown, wet, increasing gravels		2					
						Size					
20-	13	2.0		transitioning to silty clay, brown, wet		1					
						Sand					
-						-					
					<u> </u>	010					
25	1.0	6.0		trace of silt, lens of gravels to 3/8" diameter at 25 feet		0.0					
20	10	6.0		Total depth = 25 feet	F	4 1 1					
				Groundwater encountered at 14.5 feet	ļ	Size:					
						, ,					
						Slot					
-30-						-					
						ژي پئ					
						1 1					
-35-						Diameter					
$\vdash$						am					
					: :	ĺĺĺ					
						Well					
40					ļ						