ExxonMobil
Refining and Supply Company
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

ExxonMobil
Refining & Supply

December 14, 2000

Mr. Scott Seery
Alameda County Health Agency
1131 Harbor Bay Parkway
Alameda, CA 94501-6577

Subject: Former Exxon RAS #7-3399, 2991 Hopyard Road, Pleasanton, California

Dear Mr. Seery:

Attached for your review and comment is a copy of the *Report of Groundwater Monitoring, Third Quarter 2000* for the above-referenced site. The report was prepared by ETIC Engineering, Inc. of Walnut Creek, California, and summarizes the results of the September 2000 sampling event. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached report is true and correct.

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

Sincerely,

FOR

Darin L. Rouse
Senior Engineer

Attachment: ETIC Groundwater Monitoring Report dated December 2000

c: w/attachment:
Mr. Chuck Headlee – Regional Water Quality Control Board, San Francisco Bay Region
Mr. Matthew Katen – Zone 7 Water Agency
Mr. Stephen Cusenza – City of Pleasanton Public Works Department
Mr. Thomas Elson – Luhdorff and Scalmanini Consulting Engineers
Mr. Winson B. Low – Valero Energy Corporation

c: w/o attachment:
Ms. Christa Marting - ETIC Engineering, Inc.

LETTER OF TRANSMITTAL

ETIC Engineering, Inc.

144 Mayhew Way
Walnut Creek, California 94596

Tel: (925) 977-7914
Fax: (925) 977-7915

TO:

Mr. Scott Seery
Alameda County Health Agency
1131 Harbor Bay Parkway
Alameda, CA 94501-6577

DATE: 15 December 2000		
PROJECT NO.	TASK	DEPT
TM3399	4C	WC
RE:		

ENCLOSED ARE THE FOLLOWING ITEMS:

NO. COPIES	DESCRIPTION
1	Report of Groundwater Monitoring and ExxonMobil cover letter for Former Exxon RS 7-3399, 2991 Hopyard Road, Pleasanton, California
1	Letter from ETIC describing remediation system under construction

THESE ARE TRANSMITTED AS CHECKED BELOW:

☒ For your use ☐ As requested ☐ For review and comment ☐ For your information

☐ Other:

MESSAGE:

As requested, please find enclosed a description of the remediation system under construction at Former RS 7-3399. Also enclosed is a copy of the third quarter groundwater monitoring report for your files.

Please call me if you have any questions. Thank you.

COPY TO: file

SIGNED _____
Joseph Muehleck

Sent via:
☐ Federal Express Priority ☑ Federal Express Standard ☐ Federal Express 2-Day ☐ Express Mail
☐ Priority Mail ☐ Hand delivery ☐ Courier Service ☐ UPS Ground
☐ First Class Mail
☐ Other _____

ETIC
Engineering, Inc.

13 December 2000

Mr. Scott Seery
Alameda County Health Agency
1131 Harbor Bay Parkway
Alameda, CA 94501-6577

Subject: Former Exxon RS 7-3399, 2991 Hopyard Road, Pleasanton, California

Dear Mr. Seery:

As requested, ETIC Engineering, Inc. (ETIC), on behalf of ExxonMobil Refining and Supply Company (ExxonMobil), is sending this letter to provide additional information regarding the remediation project which is under construction at the above-referenced site. The remediation system design plans are attached for your reference.

ETIC conducted short duration pumping tests on wells MW9, VR1, OW2, and PMW2 in June and July 2000. Vapor samples were collected from wells PMW1, PMW2, PMW3, PMW6, OW1, OW2, and VR1. ETIC used the results of this testing along with the findings from soil and groundwater investigations and quarterly groundwater monitoring to design an overall remediation strategy. A summary of the site's background and hydrogeology was presented in the May 2000 Work Plan for Well Installation. The findings and the proposed strategy for remediation are outlined below.

As described in the May 2000 Work Plan, groundwater is encountered in several vertically distinct zones at the site:

- **The Perched Zone** – depth to water has been observed at approximately 10 feet below ground surface (bgs). Monitoring wells PMW1-PMW6 (screened from approximately 6 to 16 feet bgs) and underground storage tank (UST) observation wells OW1 and OW2 (screened from near surface to approximately 12 feet bgs and constructed entirely within the current UST backfill) are in this zone. Well VR1 appears to cross this zone, although water has been encountered at an approximate depth of 20 feet bgs since routine gauging began in June 1999 in this well. Well VR1 is screened from approximately 10 to 30 feet bgs and is installed in the former UST over-excavation area.

- **Zone 1** - a clayey sand to gravel zone from approximately 35 to 55 feet bgs. Monitoring wells MW1, MW4, MW5S, MW7, MW9 (replaced by MW9A as outlined in the October 2000 Work Plan for Well Replacement [well installation report to be submitted]), MW10, MW11, and VR2 are screened in this zone. A silty clay from approximately 55 to 67 feet bgs underlying this zone is indicated in the areas explored.

144 Mayhew Way, Walnut Creek, CA 94596 • *Phone:* 925.977.7914 • *Fax:* 925.977.7915 • *License No.* 624022

- Zone 2 - a silty sand to gravelly sand from approximately 67 to 82 feet bgs. Monitoring wells MW5D and MW13 are screened in this zone. A clay layer from approximately 82 to 120 feet bgs is indicated beneath Zone 2 in areas explored.

- Zone 3 - a silty sand to gravel, which begins at approximately 120 feet bgs. Monitoring wells MW8, MW12A, and MW14 are screened in this zone.

Groundwater Extraction System

The highest concentrations of methyl t-butyl ether (MTBE) in groundwater have been detected in samples collected from wells in the Perched Zone. In Zone 1, only samples from wells MW9 and VR2 have had consistently elevated concentrations of petroleum hydrocarbons or MTBE in groundwater. Groundwater extraction is initially proposed from wells OW2 and VR1 in the Perched Zone, and from well MW9A in Zone 1. In anticipation of the possible need for future groundwater extraction from other wells, underground piping is also being installed to wells OW1, PMW2, and PMW5 in the Perched Zone.

Based on the pumping test results, the groundwater yield from the Perched Zone is low, and may be seasonally dependent on shallow recharge. A maximum flow rate of 5 gallons per minute (gpm) is expected from well OW2, and a maximum flow rate of 10 gpm is expected from well VR1. It is anticipated that flow rates from these wells will have to be reduced once the reservoir of water in the more permeable UST and former UST over-excavation backfill is depleted and groundwater recharge reaches equilibrium with the surrounding formation. Groundwater extraction in the Perched Zone is intended to reduce the mass of MTBE and petroleum hydrocarbons in groundwater, control potential migration of dissolved chemicals, and provide hydraulic control.

In Zone 1, groundwater extraction from well MW9A at a sustainable rate of approximately 10 gpm is anticipated. Groundwater extraction in Zone 1 is intended to reduce the mass of MTBE and petroleum hydrocarbons in groundwater, control potential migration of dissolved chemicals, and provide hydraulic control.

Groundwater Treatment and Discharge

Extracted groundwater will be pumped from the extraction wells to the existing treatment compound via underground double-contained pipes. Groundwater will be treated by pre-filtration, and by adsorption by granular activated carbon (GAC) to remove dissolved chemicals to meet the discharge permit limits. A permit to discharge the treated groundwater has been obtained from the Dublin-San Ramon Services District and is in effect.

Future Soil Remediation

Vapor samples were collected from wells PMW1, PMW2, PMW3, PMW6, OW1, OW2, and VR1 in June 2000. Samples were collected by purging at least 3 well casing volumes of air using a vacuum pump and then filling a tedlar bag via vacuum chamber. Petroleum hydrocarbons were not detected at concentrations greater than or equal to laboratory reporting limits, except for toluene in the sample collected from VR1 at a concentration of 0.352 µg/L. MTBE was detected in samples collected from

PMW2 at concentration of 12 µg/L (EPA Method 8020) and OW2 at concentrations of 1.62 µg/L (EPA Method 8020) and 1.85 µg/L (EPA Method 8260). A copy of the analytical report is attached. MTBE was not detected at concentrations greater than or equal to laboratory reporting limits in any other vapor samples collected. Based on these results, soil vapor extraction (SVE) will not be immediately implemented at the site. Underground SVE piping is being installed to wells OW1, OW2, PMW5, and VR1 to facilitate SVE in the event that changes in site conditions indicate SVE may be effective.

If SVE is implemented in the future, extracted vapors will likely be treated by GAC. A new air discharge permit must be issued by the Bay Area Air Quality Management District if SVE is implemented.

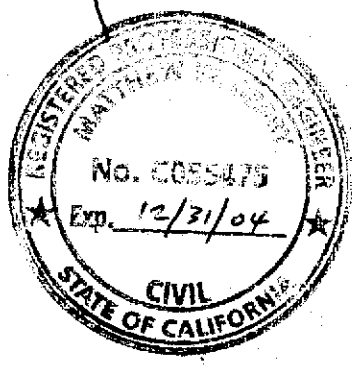
As previously discussed, construction of the remediation system has begun, and is expected to be completed during the first quarter of 2001. We will notify you prior to starting operation. The operational status and remedial progress will be reported in the quarterly groundwater monitoring reports.

Please call Doug Oram or Joseph Muehleck if you have any questions or need any additional information.

Sincerely,

Joseph Muehleck
Project Manager

Matthew W. Derby, P.E.
Senior Engineer



cc: Mr. Darin Rouse, ExxonMobil Refining and Supply Company
Mr. Matthew Katen, Zone 7 Water Agency
Mr. Winson B. Low, Valero Energy Corporation

Attachments: Remediation System Design Plans, Laboratory Analytical Report

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Remediation System Design Plans

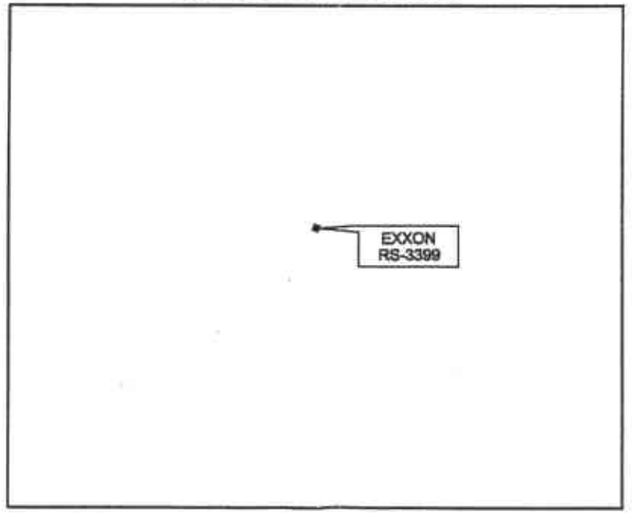
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

ExxonMobil
Refining & Supply

DESIGN PACKAGE

Exxon RS 7-3399
2991 Hopyard Road
Pleasanton, California

SITE LOCATION MAP



DRAWING INDEX

DRAWING No.	TITLE
GD-01	SITE LOCATION MAP
SD-01	SITE PLAN
SD-02	SITE PLAN WITH TRENCH LAYOUT
CD-01	EQUIPMENT COMPOUND LAYOUT
ID-01	PROCESS & INSTRUMENTATION DIAGRAM
AD-01	CONSTRUCTION DETAILS (PAGE 1 OF 4)
AD-02	CONSTRUCTION DETAILS (PAGE 2 OF 4)
AD-03	CONSTRUCTION DETAILS (PAGE 3 OF 4
AD-04	CONSTRUCTION DETAILS (PAGE 4 OF 4)
ED-01	SINGLE LINE DIAGRAM AND ELECTRICAL NOTES

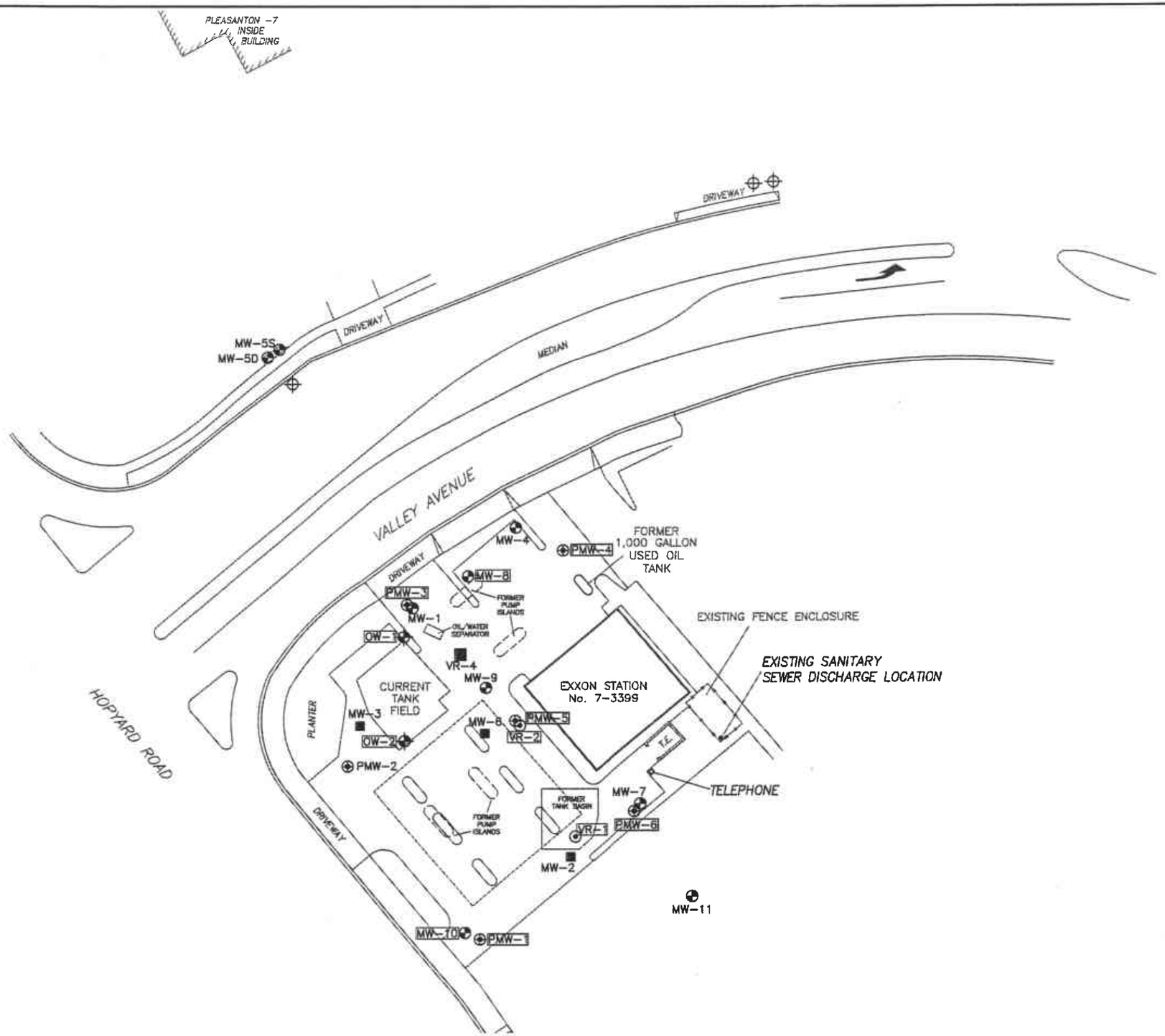
OWNER
ExxonMobil Refining and Supply Company
2300 Clayton Road, Suite 1250
Concord, California, 94520

ENGINEER
ETIC Engineering, Inc.
144 Mayhew Way
Walnut Creek, California, 94596
Phone: (925) 977-7914

SITE LOCATION MAP
EXXON RS 7-3399
2991 HOPYARD ROAD, PLEASANTON, CALIFORNIA

ETIC Engineering, Inc.

REVISION NO.	DATE	NOTES			
			DESIGN: MATT DERBY	DRAWING: GD-01	REVISION: 01
			DRAWN: STEPHEN LWIN		
			DATE: 09/16/2000	FILENAME: 3399GD01.DWG	
			PROJECT NUMBER: CP3399		



LEGEND:

OW-1 ⊕	OBSERVATION WELL LOCATION
MW-1 ◔	MONITORING WELL LOCATION
VR-1 ⊙	VAPOR EXTRACTION WELL LOCATION
MW-2 ■	DESTROYED MONITORING WELL
PMW-1 ⊕	PERCHED MONITORING WELL LOCATION
⊕	PROPOSED GROUNDWATER MONITORING WELL LOCATION

N

0 25 50

Scale (feet)

Adapted from Delta Environmental Consultants, Inc. drawings.

SITE PLAN
EXXON RS 7-3399
2991 HOPYARD ROAD, PLEASANTON, CALIFORNIA

ETIC Engineering, Inc.

DESIGN:	MATT DERBY	DRAWING: SD-01	REVISION: 01
DRAWN:	STEPHEN LWIN		
DATE:	08/18/2000	FILENAME: 3399SD01.DWG	
PROJECT NUMBER:	CP3399		

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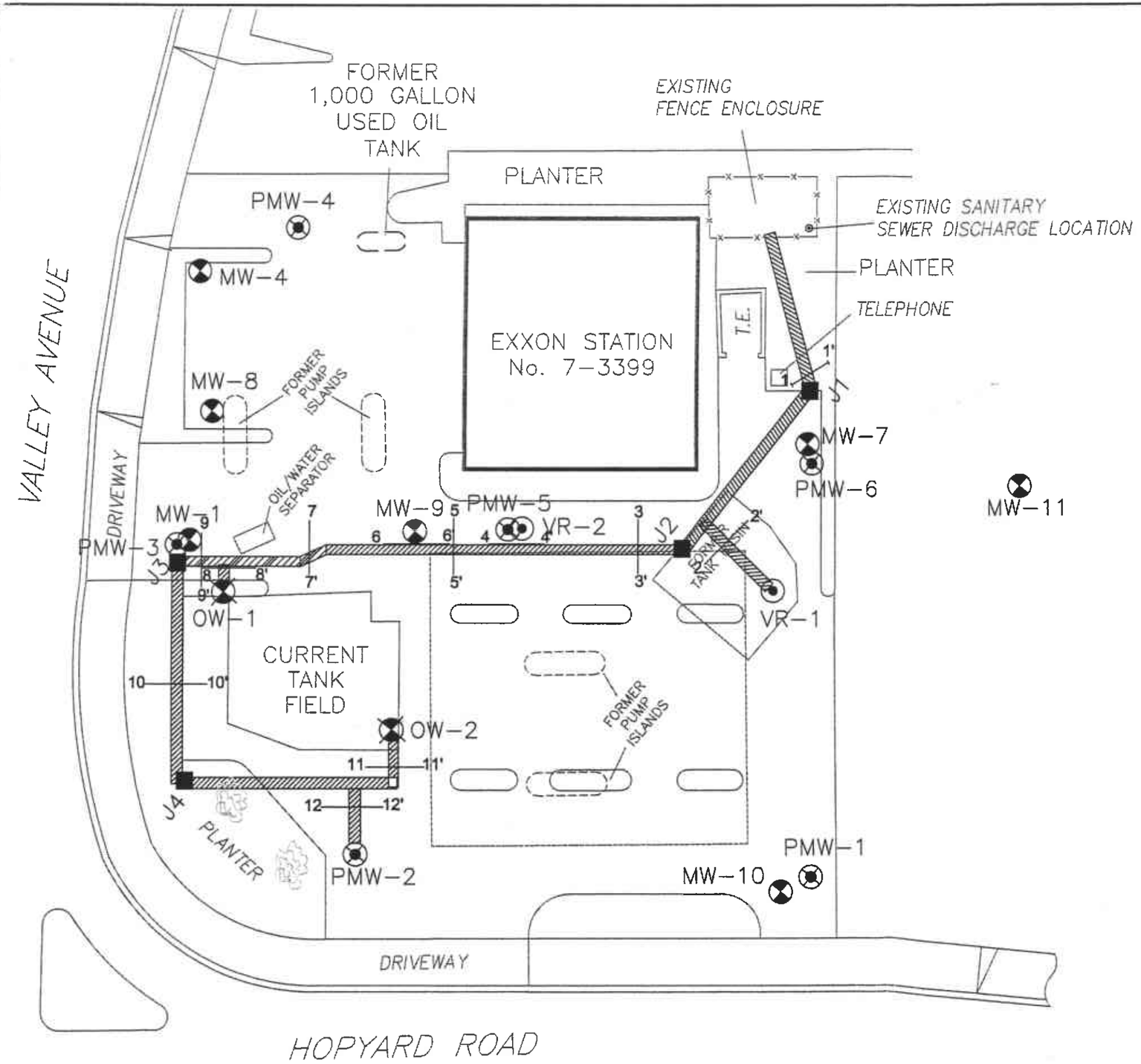


LEGEND:

OW-1	OBSERVATION WELL LOCATION
MW-1	MONITORING WELL LOCATION
VR-1	VAPOR EXTRACTION WELL LOCATION
PMW-1	PERCHED MONITORING WELL LOCATION
	JUNCTION BOX
	PROPOSED/EXISTING TRENCH
	EXISTING TREES

NOTE: PAVEMENT IS REINFORCED CONCRETE

0 12.5 25
Scale (feet)

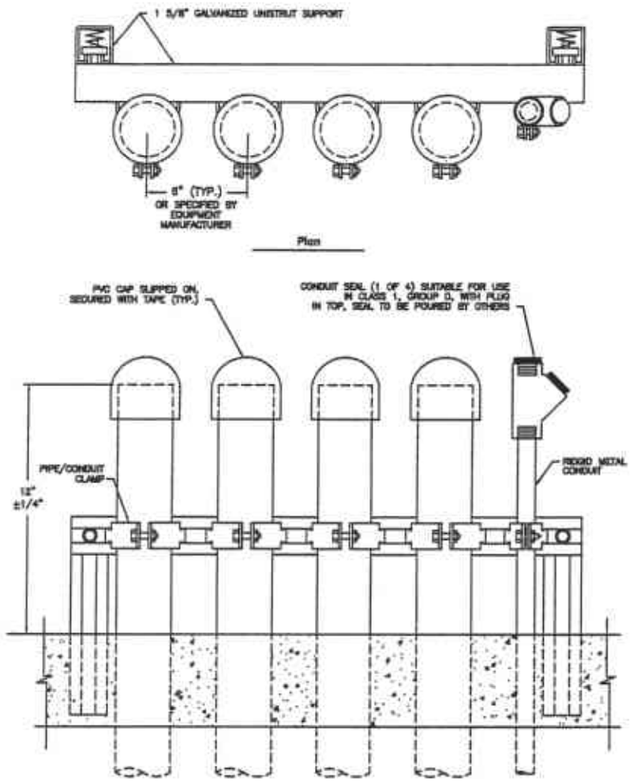
Adapted from Delta Environmental Consultants, Inc. drawings.

SITE PLAN WITH TRENCH LAYOUT
EXXON RS 7-3399
2991 HOPYARD ROAD, PLEASANTON, CALIFORNIA

ETIC Engineering, Inc.

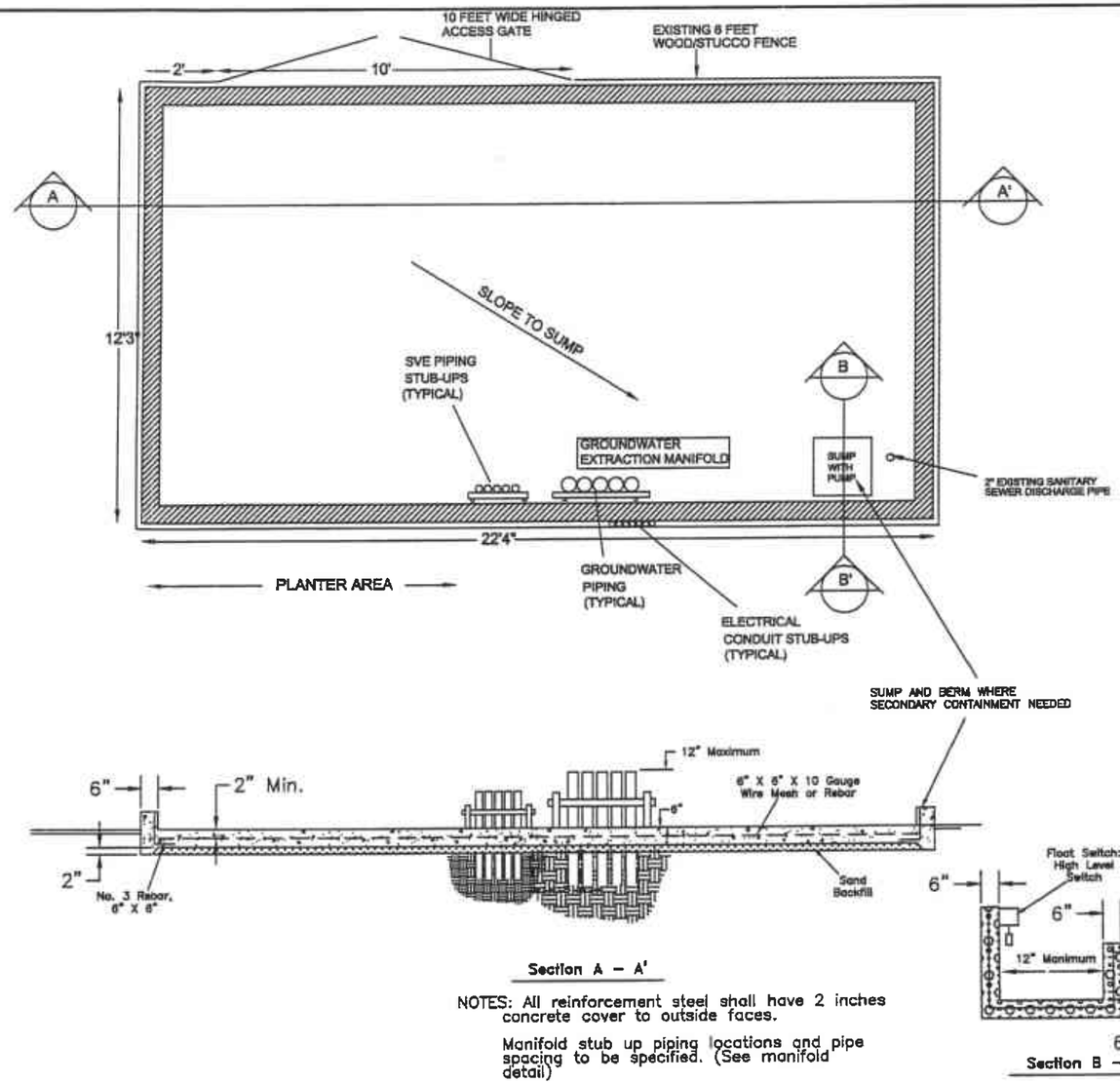
DESIGN:	MATT DERBY	DRAWING: SD-02	REVISION: 01
DRAWN:	STEPHEN LWIN		
DATE:	06/16/2006	FILENAME: 3399SD02.DWG	
PROJECT NUMBER:	CP3399		

FILENAME: F:\PROJECTS\3399\PLOTS\3399SD02.DWG 06/16/06



A

PIPING STUB-UP DETAIL
(TYPICAL)



NOTES: All reinforcement steel shall have 2 inches concrete cover to outside faces.

Manifold stub up piping locations and pipe spacing to be specified. (See manifold detail)

SVE and groundwater piping stub up within bermed area.

Pull up wire mesh to keep centered in pad.

B

REINFORCED CONCRETE EQUIPMENT PAD

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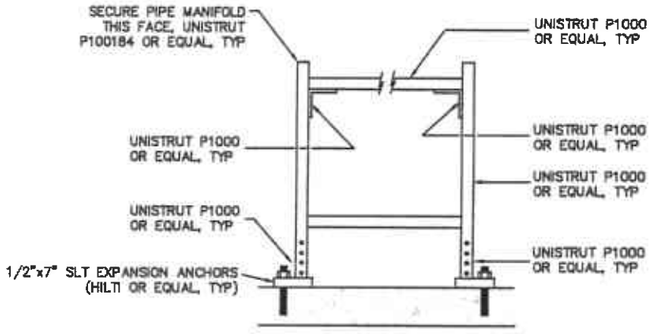
CONSTRUCTION DETAILS
EXXON RS 7-3399

2991 HOPYARD ROAD, PLEASANTON, CALIFORNIA

ETIC Engineering, Inc.

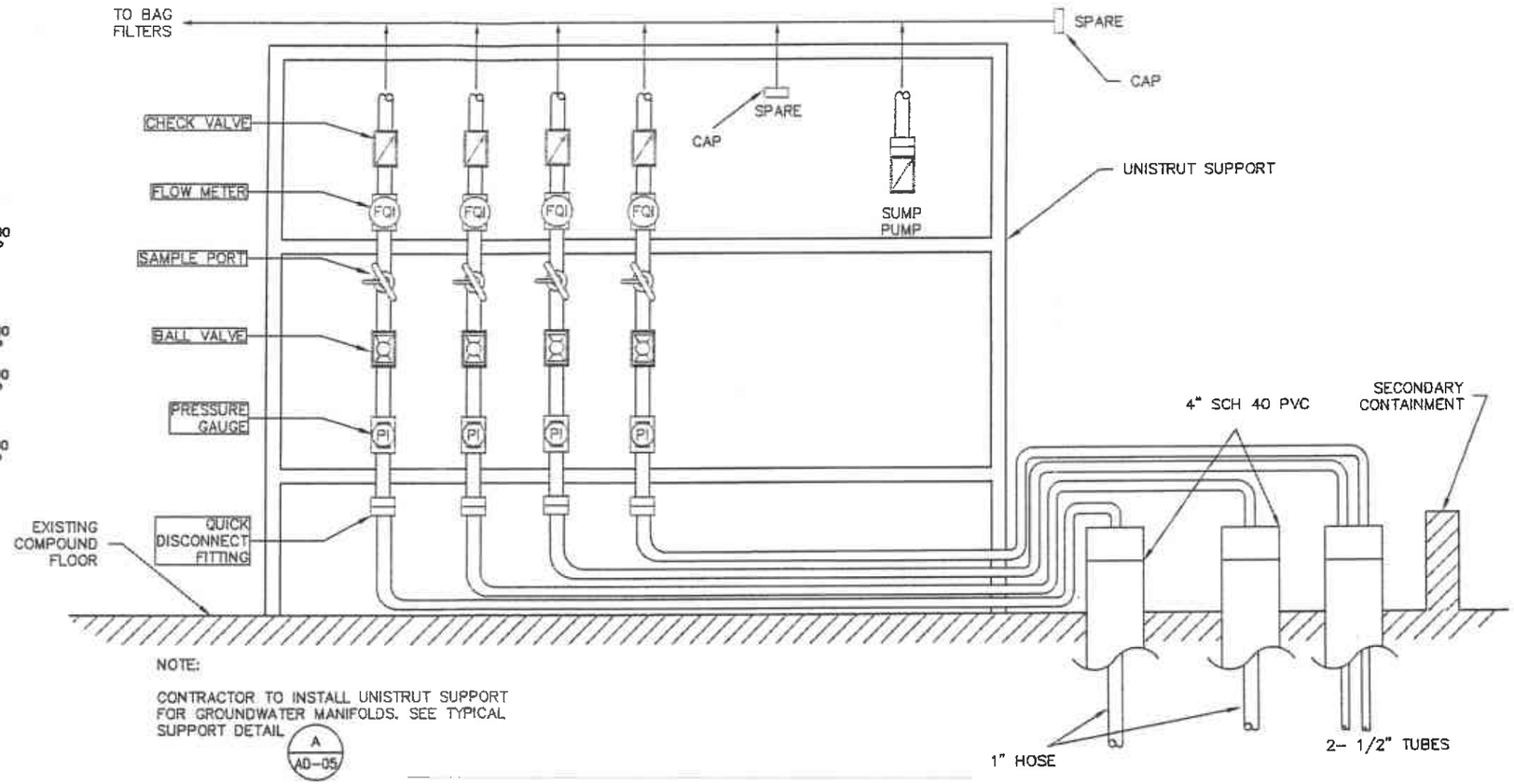
DESIGN: MATT DERBY		DRAWING: AD-02	REVISION: 01
DRAWN: STEPHEN LWIN			
DATE: 06/20/2000		FILENAME: 3399AD02.DWG	
PROJECT NUMBER: CP3399			



A

TYPICAL UNISTRUT SUPPORT DETAIL

NOTE:
Maximum spacing between supports is 5 feet.



NOTE:

CONTRACTOR TO INSTALL UNISTRUT SUPPORT FOR GROUNDWATER MANIFOLDS. SEE TYPICAL SUPPORT DETAIL A/AD-05

B

GROUNDWATER RECOVERY MANIFOLD DETAIL
(NOT TO SCALE)

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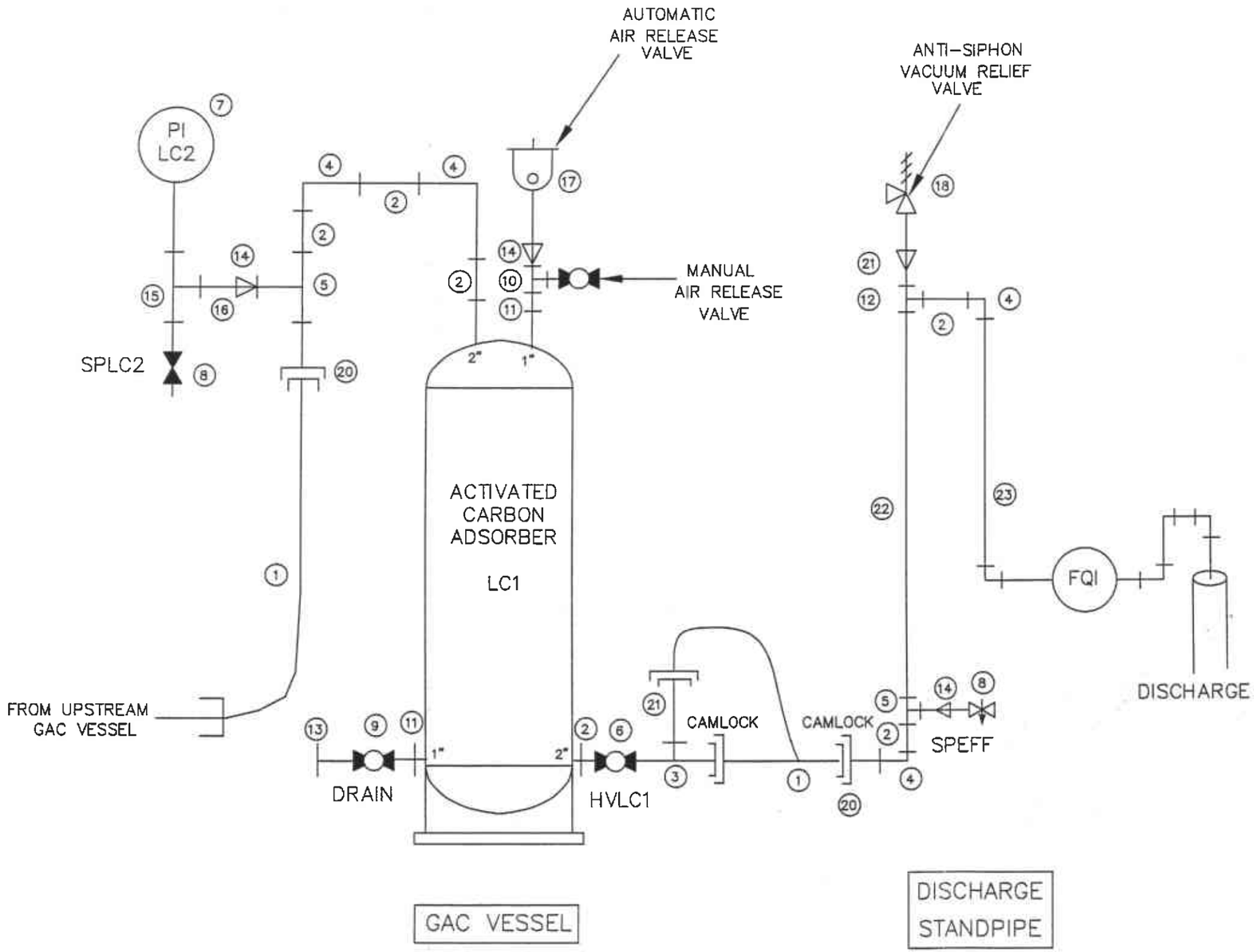
CONSTRUCTION DETAILS
EXXON RS 7-3399
2991, HOPYARD ROAD, PLEASANTON, CALIFORNIA

ETIC Engineering, Inc.

DESIGN: MATT DERBY		DRAWING: AD-03	REVISION: 01
DRAWN: STEPHEN LWIN			
DATE: 06/20/2000		FILENAME: 3399AD03.DWG	
PROJECT NUMBER: CP3399			



GAC FITTINGS PARTS LIST:

Parts Requested for Each GAC Vessel
GAC Vessel Model Requested: WaterLink/Barnebey & Sutcliffe TW72
Number of GAC Vessels Requested: 3

ID#	Qty. Required Per GAC Vessel	ITEM: GAC VESSEL HOSE AND FITTINGS SET	Manufacturer's Part Number (if available)
1	2	10 ft. X 2" Inlet Chemical Resistant Reinforced Hose 1-2" male and 1-2" female 'camlock' fitting each end, with double hose clamps each end.	-----
2	4	2" Galv. Nipple	-----
3	1	2" Galv. 'Street' Elbow	
4	2	2" Galv. Elbow	
5	1	2" X 2" X 1" Tee	
6	1	2" Brass Ball Valve	
7	1	1/4" Liquid-Filled Pressure Gauge - 0-30 psi	
8	1	1/4" Brass Labcock Valve(sample port) x 1/4" MPT	-----
9	1	1" Brass Ball Valve	One provided with TW72 vessel by manufacturer for air release, Additional one required for drain
10	1	1" Galv. Tee	---
11	2	1" Galv. Nipple	---
12	---	2" Galv. Tee	---
13	1	1" Galv. Plug	---
14	2	1" x 1/4" Galv. reducing bushing	---
15	1	1/4" Tee	---
16	1	1/4" Nipple	---
17	1	1/4" Air Release Valve	Watts FV4-M1 1/4" or equivalent
18	---		
19	1	2" Male Camlock x 2" MNPT	---
20	1	2" Female Camlock x 2" MNPT	---

	Qty. Required Per System	DISCHARGE STANDPIPE ASSEMBLY	
2	2	2" Galv. Nipple	---
4	2	2" Galv. Elbow	---
5	1	2" x 2" x 1" Tee	---
8	1	1/4" Brass Labcock Valve (sample port) x 1/4" MPT	---
12	1	2" Galv. Tee	---
14	1	1" x 1/4" Galv. reducing bushing	Watts N38 3/4" Vacuum Relief Valve or equivalent
18	1	3/4" Anti-Siphon Air Release Valve	---
20	1	2" Female Camlock x 2" MNPT	---
21	1	2" x 3/4" Galv. Reducing bushing	---
22	1	8 ft x2" Galv. threaded both ends	Contractor to provide and field install
23	1	Field installed Sch 80 PVC piping and fittings	Contractor to provide and field install

CONSTRUCTION DETAILS - GAC
EXXON RS 7-3399
2991 HOPYARD ROAD, PLEASANTON, CALIFORNIA

ETIC Engineering, Inc.

DESIGN:	MATT DERBY	DRAWING: AD-04	REVISION: 01
DRAWN:	STEPHEN LWIN		
DATE:	08/14/2000	FILENAME: 3399AD04.DWG	
PROJECT NUMBER:	CP3399		

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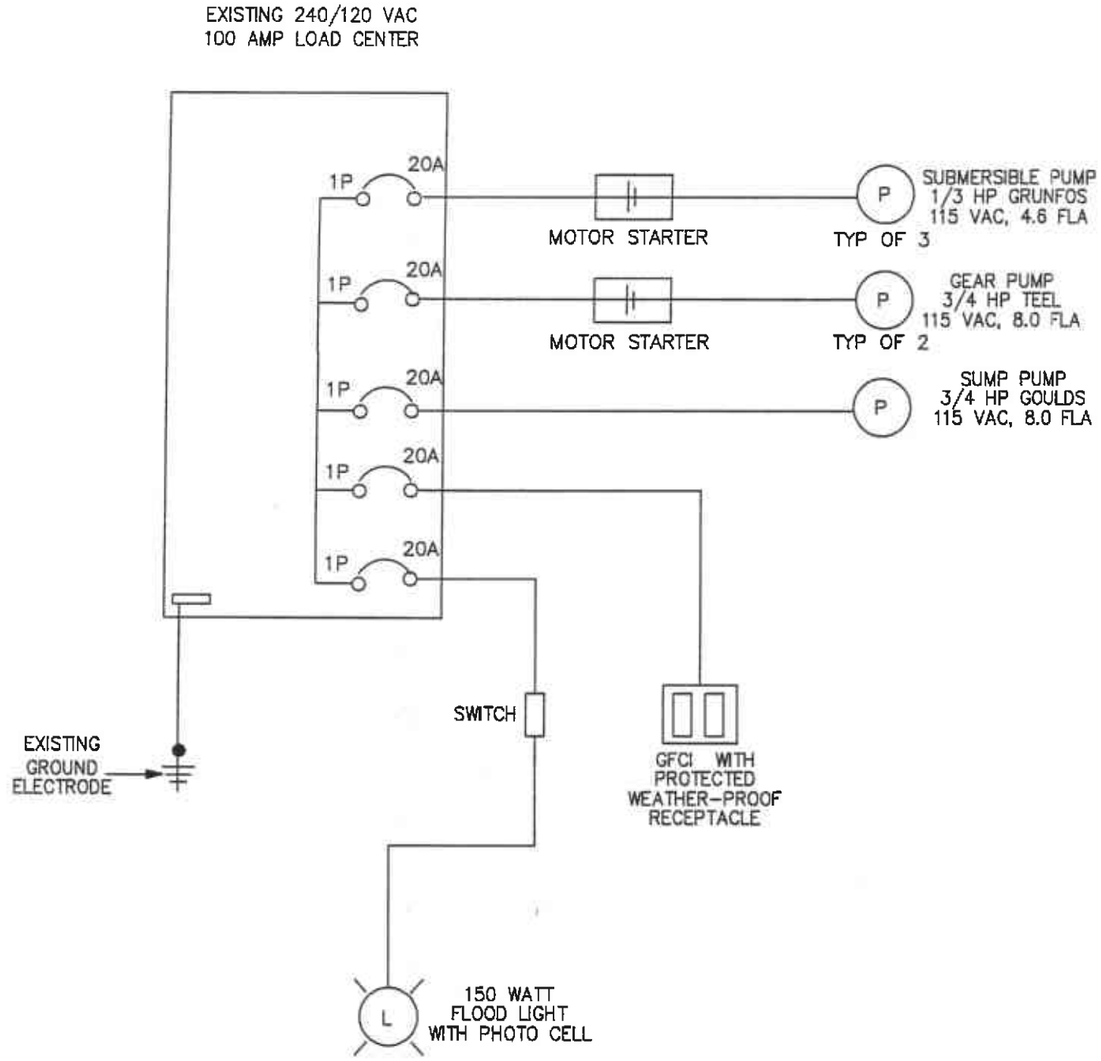

NOTES:

1. Electrical equipment shall comply with current requirements of State of California as set forth in the Title 8, Division of Industrial Safety, and with the latest issue of the National Electrical Code. Applicable provision in the several codes which is most restrictive shall apply and take precedence in all cases.
2. Electrical equipment shall conform to latest IEEE, NEMA, and USAISE standards where applicable.
3. All conduit unless otherwise specified shall be underwriters approved rigid steel of a high ductile quality, hot dipped galvanized in 10 foot lengths, threaded with coupling on one end, thread protector other end. Bends shall be factory made of field made with approved tools, with no heating to facilitate bending. All cut ends shall be square, reamed, and threaded to pipe thread length specifications. Use only sizes 3/4 in., 1 in., 1-1/2 in., 2 in., and in 1-in. increments from there on.
4. All boxes and conduit fittings shall be steel bolted, gasketted covers and screwed connections. Conduit joints shall be wrench tight, insuring good mechanical and electrical bond. Conduits stubbing into trenches shall be fitted with grounding type bushing, connected by a minimum of #8 wire to a grounding network. Place temporary caps on new embedded conduit. Spare embedded conduits shall have permanent caps. Clean and swab all embedded conduit. Embedded conduit shall be rigidly supported prior to backfill or encasement. Seal all embedded conduit joints with red lead or equal.
5. All conduit stubs shall be identified by means of brass or metallic tags, or equally permanent labels, identifying conduit by number according to print or conduit and cable schedule.
6. All power cable shall be 600 volt, single or three conductor copper, Class B stranded. Single conductor cable shall be type THHN (or THWN where necessary by code), 90 degrees celsius rating, GE SI #58174 or equal. Three conductor cable shall be XHHW, 90 degree celsius rating, GE SI #58174 or equal.
7. All control cable shall be 600 volt, Class C stranded, copper, #19/25, 90 degree celsius rating, shielded with ground.
8. Flexible conduit shall be sealitte or approved equal, with approved termination fittings for industrial installation. Length or run shall be no more than 6 feet, or less if local codes prevail. Flex runs to individual sensors or instruments shall be dead-ended, i.e., no daisy chain looping shall be allowed.
9. Conduit shall be attached using unistrut, spring nuts, and clamp type anchors, or raised one hole galvanized rigid conduit (GRC) metal base and strap assemblies. U-bolt clamp assemblies may be used on steel work only. No welding to existing structures will be done without the engineer's permission. Install conduit and supporting structures around equipment or machinery so as not to interfere with operation, maintenance, or sampling and testing. Anchor support structures into concrete with "red-head" type expansion anchors. Conduit terminations through sheet metal shall use Meyers hubs or Equal "O" ring sealing conduiette.
10. All material, wire, and fittings shall be installed as required to meet all applicable grounding, bonding, and equipment grounding code requirements.
11. Wire and cable terminations shall be crimped or bolted pressure type, copper connection only. Solder splices or lugs shall not be used. Control cable terminations shall be made with an approved ratchetting crimper meeting AISE standards for low current terminations.
12. All power and control wires or cables shall be tagged with wire numbers corresponding to schematics and/or conduit and cable schedules. Spare conductors shall be identified as such and shall be of sufficient length to reach any termination point in the cabinet of origin or termination.
13. All active devices, such as pumps, blowers, or other rotating equipment, shall be equipped with a hand-off-auto (H-O-A) control switch.
14. Minimum interrupting capacity of all circuit breakers shall be 10,000 amperes for all circuit breakers. Each breaker shall be identified as to its load and service.

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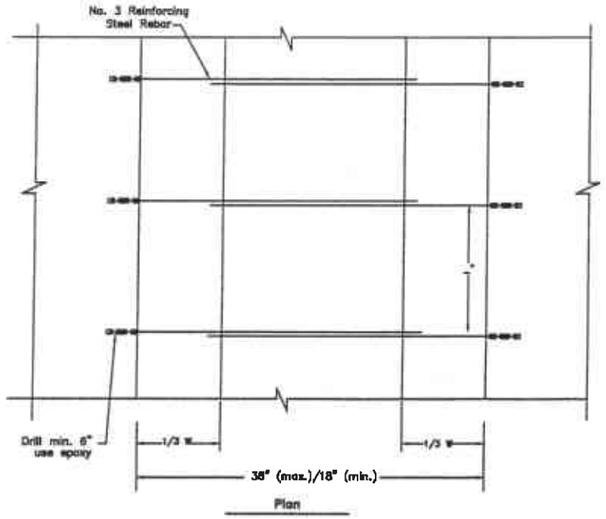
SINGLE LINE DIAGRAM AND ELECTRICAL NOTES
EXXON RS 7-3399

2991 HOPYARD, PLEASANTON, CALIFORNIA

ETIC Engineering, Inc.

DESIGN: MATT DERBY	DRAWN: ED-01	REVISION: 01
DRAWN: STEPHEN LWIN		
DATE: 09/20/2000	FILENAME: 3399ED01.DWG	
PROJECT NUMBER: CP3399		

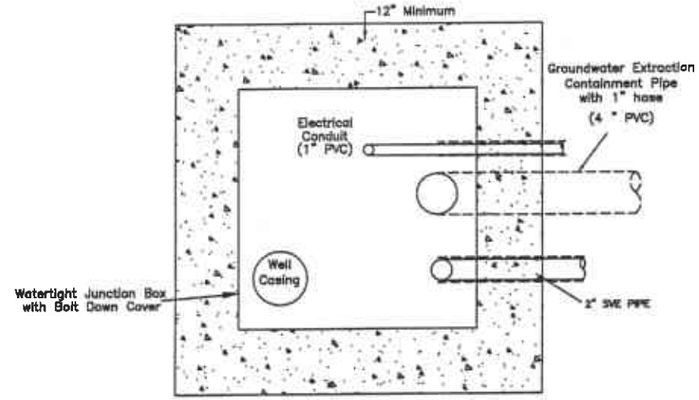


Plan

WELLHEAD SUMMARY

	Diameter	GWE	SVE			
MW-9	4"	X	--	1-4" PVC	1-1" Conduit	--
OW-1	4"	X	X	1-4" PVC	1-1" Conduit	1-2"PVC
OW-2	4"	X	X	1-4" PVC	1-1" Conduit	1-2"PVC
PMW-5	4"	(future)	X	1-4" PVC	1-1" Conduit	1-2"PVC
VR-1	4"	X	X	1-4" PVC	1-1" Conduit	1-2"PVC
VR-2	2"	---	---	--	--	--

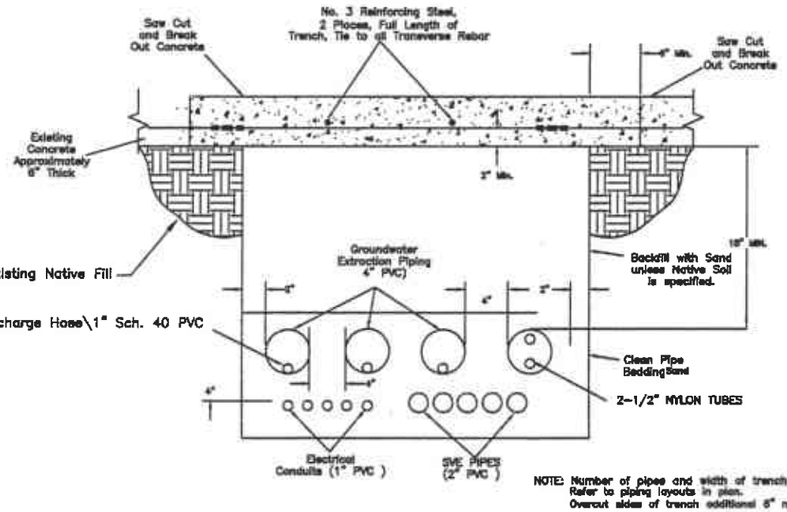
Notes:
- -MW9, VR1, have 1" hose each well and Grundfos pump each well
- -OW1, OW2 have 1/2" tubing to each well in same 4" containment (OW1 has individual 4" containment back to junction vault J3)
- -1" PVC sch 40 conduit spare conduit from compound to end of trench near OW2
- -4" pipe has pull station boxes at 4 locations (J1, J2, J3, J4)
- -Electrical conduit may utilize pull station boxes J1, J2, J3, J4 XP seal-offs may be required



Notes: Well piping varies. Refer to wellhead summary

B

EXTRACTION WELL VAULT PLAN (TYPICAL)



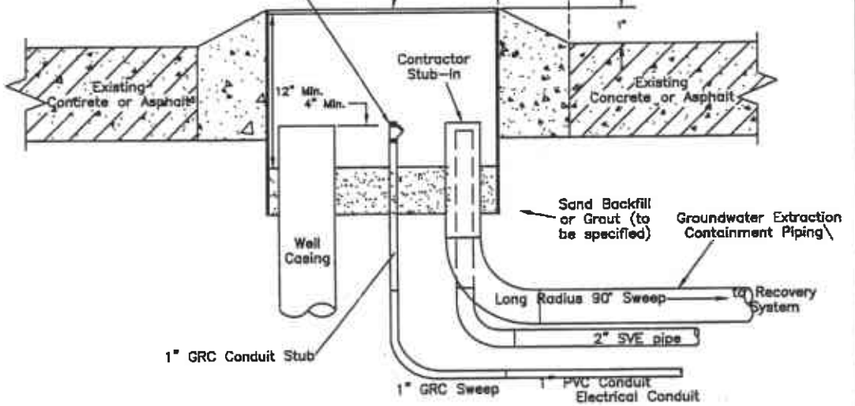
NOTE: Number of pipes and width of trench will vary. Refer to piping layouts in plan. Overcut sides of trench additional 6" min per side

TRENCH PIPING SCHEDULE

SECTION	TRENCH WIDTH (Inches)	GROUNDWATER CONTAINMENT (4" PVC sch 40)	ELECTRICAL CONDUIT (1" PVCsch 40 w/ Galv. Rigid sweeps and XP seals)	SVE PIPING (2" PVC sch 40)
1-1'	24" min	5	6	5
2-2'	24" min	1	1	1
3-3'	24" min	4	5	4
4-4'	24" min	1	1	1
5-5'	24" min	3	4	3
6-6'	24" min	1	1	0
7-7'	24" min	2	3	3
8-8'	24" min	1	1	1
9-9'	24" min	3	2	2
10-10'	24" min	2	2	2
11-11'	24" min	1	2	1

A

TYPICAL PIPE TRENCH CROSS-SECTION
EXISTING CONCRETE SURFACED AREA



C

EXTRACTION WELL VAULT CROSS-SECTION (TYPICAL)

CONSTRUCTION DETAILS
EXXON RS 7-3399
2991 HOPYARD ROAD, PLEASANTON, CALIFORNIA

ETIC Engineering, Inc.

DESIGN:	MATT DERBY	DRAWING: AD-01	REVISION: 01
DRAWN:	STEPHEN LWIN		
DATE:	08/16/2000	FILENAME: 3399AD01.DWG	
PROJECT NUMBER:	CP3399		

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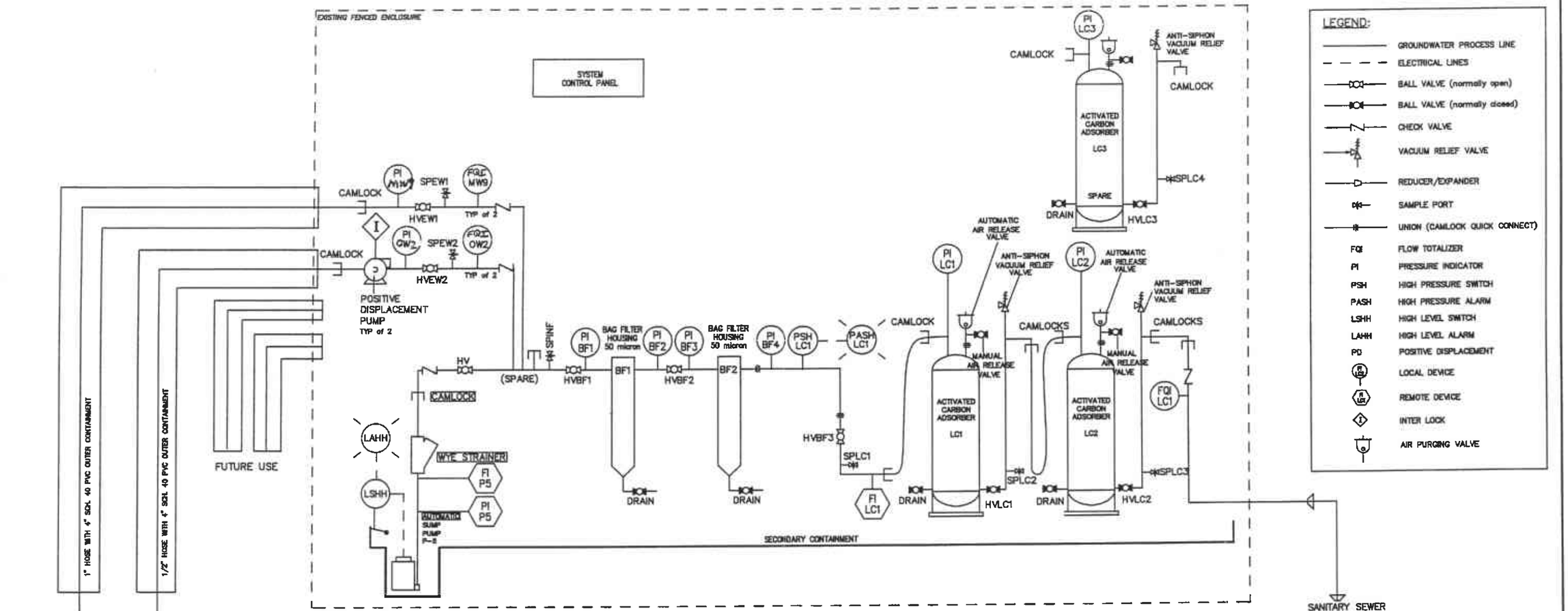

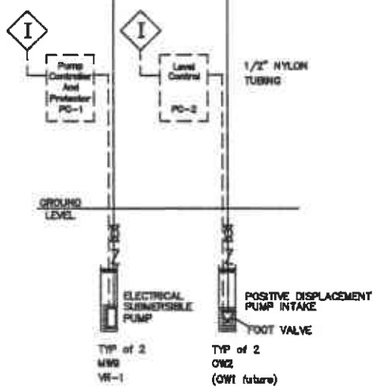

NOTE:
REFER TO SITE PLAN FOR LOCATION AND EXISTING PIPING LENGTH/LAYOUT

ELECTRICAL RECOVERY WELLS

(ug/L) PARAMETERS:	POSITION				
	OW1	OW2	MW-9	PMW-5	VR-1
BENZENE	12	31.1	870	<1.0	<1.0
TOLUENE	1.41	<5	380	<1.0	<1.0
ETHYLBENZENE	<1	<5	<5	<1.0	<1.0
XYLENES	7.2	20.6	2,190	<1.0	<1.0
TPH-g	360	410	7,300	<50	<50
TPH-d	N/A	N/A	N/A	N/A	N/A
MTBE	44,000	177,000	4,300	890	5,500
LEAD	NM	NM	<0.005	<0.005	NM
IRON	NM	NM	NM	NM	NM
HARDNESS	NM	NM	NM	NM	NM
pH	N/A	N/A	6.9	10.9	7.2
TEMPERATURE	N/A	N/A	68.8	65.8	67.3
	(Future Use)			(Future Use)	

Source: Maximum values of four quarters 8/99-4/00.

WELL CONSTRUCTION DETAILS

WELL	TOTAL DEPTH	CASING DIAMETER	BOREHOLE DIAMETER	DEPTH TO WATER	SCREEN INTERVAL	SCREEN SLOT
OW1	12.35	4"	N/A	10.96'	UNK	N/A
OW2	12.78	4"	N/A	10.05'	UNK	N/A
MW-9	54.5	4"	N/A	40.55'	34.5-54.5	0.020"
PMW-5	16	4"	N/A	13.19'	8-16	0.010"
VR-1	30	4"	N/A	21.3'	10-30	0.020"

FLOW RATES

	POSITION	CASING DIAMETER	EXPECTED FLOW
IN	FQI OW1	4"	0 gpm
	FQI OW2	4"	5 gpm
	FQI MW-9	4"	10 gpm
	FQI PMW-5	4"	0 gpm
	FQI VR-1	4"	10 gpm

PRESSURES

POSITION	EXPECTED PRESSURE	EXPECTED FLOW
PI-BF1	<100 psi	
FI-LC1		25 gpm
PI-LC1	<75 psi	
PI-LC2	<75 psi	
PI-P5	45 psi	
F1-P5		10 gpm

LIQUID PHASE CARBON

(ug/L) PARAMETERS:	SPLC1 *	SPLC3
BENZENE	54	<5
TOLUENE	2	<5
ETHYLBENZENE	2	<5
XYLENES	8	<5
TPH-g	148	<50
TPH-d	50	<50
MTBE	4172	<5
LEAD	<5.0	NA
IRON	NA	NA
HARDNESS	NA	NA
pH	7.0	6<pH<10.5
TEMPERATURE	11°C	NA

* Based on 6/00 QM results

GROUNDWATER SYSTEM PROCESS FLOW DIAGRAM
EXXON RS 7-3399
2991 HOPYARD ROAD, PLEASANTON, CALIFORNIA

ETIC Engineering, Inc.

DESIGNED	MATT DERBY	DRAWING	REVISION
DRAWN	STEPHEN LUNN	ID-01	01
DATE	09/28/2000	FILENAME	
PROJECT NUMBER	CP3399	3399EQM.DWG	

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PLANTER AREA

10 FEET WIDE HINGED
ACCESS GATE

EXISTING 6 FEET
WOOD/STUCCO FENCE

2'

10'

EXISTING CIRCUIT
BREAKER PANEL
AND GFCI OUTLET

OVERHEAD
LIGHT

CONTROL PANEL

12'3"

CARBON
ADSORBER
LC1-"A"

2" OUTLET

1" DRAIN

2" INLET

CARBON
LC2-"B"

2" OUTLET

1" DRAIN

2" INLET

CARBON
LC3 SPARE-"C"

2" OUTLET

1" DRAIN

2" INLET

SLOPE TO SUMP

FILTERS

SUMP
WITH
PUMP

2" EXISTING SANITARY
SEWER DISCHARGE PIPE

GROUNDWATER
EXTRACTION MANIFOLD

22'4"

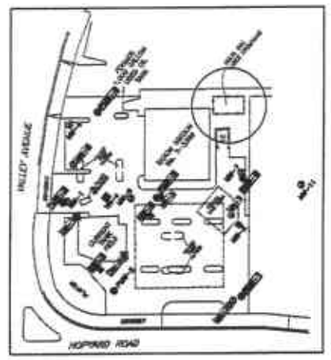
SVE PIPING
STUB-UPS
(TYPICAL)

GROUNDWATER
PIPING
(TYPICAL)

ELECTRICAL
CONDUIT STUB-UPS
(TYPICAL)

PLANTER AREA

PLANTER AREA



N

0 1 2

Scale (feet)

Adapted from Delta Environmental Consultants, Inc. drawings.

EQUIPMENT COMPOUND LAYOUT
EXXON RS 7-3399
2991 HOPYARD ROAD, PLEASANTON, CALIFORNIA

ETIC Engineering, Inc.	DESIGN: MATT DERBY	DRAWING: CD-01	REVISION: 01
	DRAWN: STEPHEN LWIN		
	DATE: 06/16/2000	FILENAME: 3399CD01.DWG	
	PROJECT NUMBER: CP3399		

FILENAME: F:\Projects\73399\Public\3399Capital\win3399\3399CD01.DWG 06/16/00

Laboratory Analytical Report

Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308
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September 28, 2000

Joe Muehleck
ETIC Engineering Inc - WC (Exxon)
144 Mayhew Way
Walnut Creek, CA 94596

RE: Exxon 7-3399 / MJF0204

Dear Joe Muehleck

Enclosed are the results of analyses for sample(s) received by the laboratory on June 7, 2000.

Please note this report was revised on 9/28/00 to add Methyl Tert-butyl ether results requested by the client.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ron Chew
Project Manager

CA ELAP Certificate Number 1210

Sequoia Analytical

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FAX (408) 782-6308
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ETIC Engineering Inc - WC (Exxon)	Project:	Exxon	Sampled: 6/6/00
144 Mayhew Way	Project Number:	7-3399	Received: 6/7/00
Walnut Creek, CA 94596	Project Manager:	Joe Muehleck	Reported: 9/28/00 13:47

ANALYTICAL REPORT FOR SAMPLES:

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
PMW1-1	MJF0204-01	Air	6/6/00
PMW6-1	MJF0204-02	Air	6/6/00
VR1-2	MJF0204-03	Air	6/6/00
VR1-2	MJF0204-04	Air	6/6/00
PMW3-1	MJF0204-05	Air	6/6/00
PMW2-1	MJF0204-06	Air	6/6/00
OW1-1	MJF0204-07	Air	6/6/00
OW1-1	MJF0204-08	Air	6/6/00
OW2-1	MJF0204-09	Air	6/6/00
OW2-1	MJF0204-10	Air	6/6/00
VR-1	MJF0204-11	Air	6/6/00

Sequoia Analytical - Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Ron Chew, Project Manager

Sequoia Analytical

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ETIC Engineering Inc - WC (Exxon)	Project:	Exxon	Sampled: 6/6/00
144 Mayhew Way	Project Number:	7-3399	Received: 6/7/00
Walnut Creek, CA 94596	Project Manager:	Joe Muehleck	Reported: 9/28/00 13:47

Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT
Sequoia Analytical - Morgan Hill

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
PMW1-1			**MJF0204-01**				**Air**	
Purgeable Hydrocarbons	0F08002	6/8/00	6/8/00	DHS LUFT	10.0	ND	ug/l	
Benzene	"	"	"	DHS LUFT	0.100	ND	"	
Toluene	"	"	"	DHS LUFT	0.100	ND	"	
Ethylbenzene	"	"	"	DHS LUFT	0.100	ND	"	
Xylenes (total)	"	"	"	DHS LUFT	0.100	ND	"	
Methy Tert-butyl ether	"	"	"	DHS LUFT	0.100	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*70-130*		*90.5*	*%*	
PMW6-1			**MJF0204-02**				**Air**	
Purgeable Hydrocarbons	0F08002	6/8/00	6/8/00	DHS LUFT	10.0	ND	ug/l	
Benzene	"	"	"	DHS LUFT	0.100	ND	"	
Toluene	"	"	"	DHS LUFT	0.100	ND	"	
Ethylbenzene	"	"	"	DHS LUFT	0.100	ND	"	
Xylenes (total)	"	"	"	DHS LUFT	0.100	ND	"	
Methy Tert-butyl ether	"	"	"	DHS LUFT	0.100	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*70-130*		*110*	*%*	
VR1-2			**MJF0204-03**				**Air**	
Purgeable Hydrocarbons	0F08002	6/8/00	6/8/00	DHS LUFT	10.0	ND	ug/l	
Benzene	"	"	"	DHS LUFT	0.100	ND	"	
Toluene	"	"	"	DHS LUFT	0.100	**0.352**	"	
Ethylbenzene	"	"	"	DHS LUFT	0.100	ND	"	
Xylenes (total)	"	"	"	DHS LUFT	0.100	ND	"	
Methy Tert-butyl ether	"	"	"	DHS LUFT	0.100	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*70-130*		*79.5*	*%*	
PMW3-1			**MJF0204-05**				**Air**	
Purgeable Hydrocarbons	0F08002	6/8/00	6/8/00	DHS LUFT	10.0	ND	ug/l	
Benzene	"	"	"	DHS LUFT	0.100	ND	"	
Toluene	"	"	"	DHS LUFT	0.100	ND	"	
Ethylbenzene	"	"	"	DHS LUFT	0.100	ND	"	
Xylenes (total)	"	"	"	DHS LUFT	0.100	ND	"	
Methy Tert-butyl ether	"	"	"	DHS LUFT	0.100	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*70-130*		*82.0*	*%*	
PMW2-1			**MJF0204-06**				**Air**	
Purgeable Hydrocarbons	0F08002	6/8/00	6/8/00	DHS LUFT	10.0	ND	ug/l	
Benzene	"	"	"	DHS LUFT	0.100	ND	"	
Toluene	"	"	"	DHS LUFT	0.100	ND	"	
Ethylbenzene	"	"	"	DHS LUFT	0.100	ND	"	
Xylenes (total)	"	"	"	DHS LUFT	0.100	ND	"	
Methy Tert-butyl ether	"	"	"	DHS LUFT	0.100	**12.0**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*70-130*		*77.0*	*%*	

Sequoia Analytical

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ETIC Engineering Inc - WC (Exxon)	Project:	Exxon	Sampled: 6/6/00
144 Mayhew Way	Project Number:	7-3399	Received: 6/7/00
Walnut Creek, CA 94596	Project Manager:	Joe Muehleck	Reported: 9/28/00 13:47

Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT
Sequoia Analytical - Morgan Hill

Analyte	Batch Number	Date Prepared	Date Analyzed	Specific Method	Reporting Limit	Result	Units	Notes*
OW1-1			**MJF0204-07**				**Air**	
Purgeable Hydrocarbons	0F08002	6/8/00	6/8/00	DHS LUFT	10.0	ND	ug/l	
Benzene	"	"	"	DHS LUFT	0.100	ND	"	
Toluene	"	"	"	DHS LUFT	0.100	ND	"	
Ethylbenzene	"	"	"	DHS LUFT	0.100	ND	"	
Xylenes (total)	"	"	"	DHS LUFT	0.100	ND	"	
Methy Tert-butyl ether	"	"	"	DHS LUFT	0.100	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*70-130*		*77.5*	*%*	
OW2-1			**MJF0204-09**				**Air**	
Purgeable Hydrocarbons	0F08002	6/8/00	6/8/00	DHS LUFT	10.0	ND	ug/l	
Benzene	"	"	"	DHS LUFT	0.100	ND	"	
Toluene	"	"	"	DHS LUFT	0.100	ND	"	
Ethylbenzene	"	"	"	DHS LUFT	0.100	ND	"	
Xylenes (total)	"	"	"	DHS LUFT	0.100	ND	"	
Methy Tert-butyl ether	"	"	"	DHS LUFT	0.100	**1.62**	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	*70-130*		*81.0*	*%*	

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ETIC Engineering Inc - WC (Exxon)	Project:	Exxon	Sampled: 6/6/00
144 Mayhew Way	Project Number:	7-3399	Received: 6/7/00
Walnut Creek, CA 94596	Project Manager:	Joe Muehleck	Reported: 9/28/00 13:47

MTBE by EPA Method 8260A
Sequoia Analytical - San Carlos

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
VR1-2			**MJF0204-04**				**Air**	
Methyl tert-butyl ether	0060030	6/9/00	6/9/00		0.200	ND	ug/l	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*76.0-114*		*101*	%	
OW1-1			**MJF0204-08**				**Air**	
Methyl tert-butyl ether	0060030	6/9/00	6/9/00		0.200	ND	ug/l	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*76.0-114*		*99.4*	%	
OW2-1			**MJF0204-10**				**Air**	
Methyl tert-butyl ether	0060030	6/9/00	6/9/00		0.200	**1.85**	ug/l	
Surrogate: 1,2-Dichloroethane-d4	"	"	"	*76.0-114*		*99.4*	%	

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ETIC Engineering Inc - WC (Exxon)	Project:	Exxon	Sampled: 6/6/00
144 Mayhew Way	Project Number:	7-3399	Received: 6/7/00
Walnut Creek, CA 94596	Project Manager:	Joe Muehleck	Reported: 9/28/00 13:47

Total Purgeable Hydrocarbons (C6-C12) and BTEX by DHS LUFT/Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 0F08002	**Date Prepared: 6/8/00**					**Extraction Method: EPA 5030B [P/T]**				
Blank	**0F08002-BLK1**									
Purgeable Hydrocarbons	6/8/00			**ND**	ug/l	**50.0**				
Benzene	"			**ND**	"	**0.500**				
Toluene	"			**ND**	"	**0.500**				
Ethylbenzene	"			**ND**	"	**0.500**				
Xylenes (total)	"			**ND**	"	**0.500**				
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*10.5*	"	*70-130*	*105*			
LCS	**0F08002-BS1**									
Benzene	6/8/00	10.0		10.3	ug/l	70-130	103			
Toluene	"	10.0		10.0	"	70-130	100			
Ethylbenzene	"	10.0		9.49	"	70-130	94.9			
Xylenes (total)	"	30.0		29.7	"	70-130	99.0			
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*11.2*	"	*70-130*	*112*			
Matrix Spike	**0F08002-MS1**		**MJF0182-02**							
Benzene	6/8/00	10.0	ND	10.2	ug/l	60-140	**102**			
Toluene	"	10.0	ND	9.94	"	60-140	**99.4**			
Ethylbenzene	"	10.0	ND	9.60	"	60-140	**96.0**			
Xylenes (total)	"	30.0	ND	29.5	"	60-140	**98.3**			
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*11.1*	"	*70-130*	*111*			
Matrix Spike Dup	**0F08002-MSD1**		**MJF0182-02**							
Benzene	6/8/00	10.0	ND	9.37	ug/l	60-140	**93.7**	25	**8.48**	
Toluene	"	10.0	ND	9.02	"	60-140	**90.2**	25	**9.70**	
Ethylbenzene	"	10.0	ND	8.57	"	60-140	**85.7**	25	**11.3**	
Xylenes (total)	"	30.0	ND	26.9	"	60-140	**89.7**	25	**9.22**	
Surrogate: a,a,a-Trifluorotoluene	"	*10.0*		*10.8*	"	*70-130*	*108*			

Sequoia Analytical

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ETIC Engineering Inc - WC (Exxon)	Project:	Exxon	Sampled: 6/6/00
144 Mayhew Way	Project Number:	7-3399	Received: 6/7/00
Walnut Creek, CA 94596	Project Manager:	Joe Muehleck	Reported: 9/28/00 13:47

MTBE by EPA Method 8260A/Quality Control
Sequoia Analytical - San Carlos

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit / Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
Batch: 0060030	**Date Prepared: 6/7/00**					**Extraction Method: EPA 5030B [P/T]**				
Blank	**0060030-BLK1**									
Methyl tert-butyl ether	6/8/00			**ND**	ug/l	**2.00**				
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*54.6*	"	*70.0-121*	*109*			
Blank	**0060030-BLK2**									
Methyl tert-butyl ether	6/8/00			**ND**	ug/l	**2.00**				
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*50.5*	"	*76.0-114*	*101*			
Blank	**0060030-BLK3**									
Methyl tert-butyl ether	6/9/00			**ND**	ug/l	**2.00**				
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*46.4*	"	*76.0-114*	*92.8*			
LCS	**0060030-BS1**									
Methyl tert-butyl ether	6/7/00	50.0		42.2	ug/l	70.0-130	84.4			
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*45.1*	"	*70.0-121*	*90.2*			
LCS	**0060030-BS2**									
Methyl tert-butyl ether	6/8/00	50.0		46.0	ug/l	70.0-130	92.0			
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*49.7*	"	*76.0-114*	*99.4*			
LCS	**0060030-BS3**									
Methyl tert-butyl ether	6/9/00	50.0		48.6	ug/l	70.0-130	97.2			
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*50.5*	"	*76.0-114*	*101*			
Matrix Spike	**0060030-MS1**		**L006010-08**							
Methyl tert-butyl ether	6/7/00	50.0	ND	41.4	ug/l	60.0-140	**82.8**			
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*47.0*	"	*70.0-121*	*94.0*			
Matrix Spike Dup	**0060030-MSD1**		**L006010-08**							
Methyl tert-butyl ether	6/7/00	50.0	ND	46.5	ug/l	60.0-140	**93.0**	25.0	**11.6**	
Surrogate: 1,2-Dichloroethane-d4	"	*50.0*		*53.3*	"	*70.0-121*	*107*			

Sequoia Analytical

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ETIC Engineering Inc - WC (Exxon)	Project:	Exxon	Sampled:	6/6/00
144 Mayhew Way	Project Number:	7-3399	Received:	6/7/00
Walnut Creek, CA 94596	Project Manager:	Joe Muehleck	Reported:	9/28/00 13:47

Notes and Definitions

#	Note
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
Recov.	Recovery
RPD	Relative Percent Difference

Sequoia Analytical
680 Chesapeake Dr.
Redwood City, CA 94063
(650) 364-9600 • FAX (650) 364-9233

EXXON COMPANY, U.S.A.

P.O. Box 2180, Houston, TX 77002-7426

CHAIN OF CUSTODY

Page 1 of 1

Consultant's Name: ETIC			
Address: 144 RAYMER WAY WALNUT CREEK, CA 94596		Site Location: 2991 HOPYARD PLEASANTON	
Project #: T/1 3399	Consultant Project #: T/1 3399	Consultant Work Release #: 20002958	
Project Contact: JOE MUEHLECK	Phone #: 925 977-7914	Laboratory Work Release #: 20005406	
EXXON Contact: DARIN ROUSE	Phone #: 925 246-8768	EXXON RAS #: 7-3399	
Sampled by (print): GREG MASON / JOE MUEHLECK	Sampler's Signature:	REPORT RESULTS IN ug/L	
Shipment Method: COURRIER	Air Bill #:		

TAT: ☐ 24 hr ☐ 48 hr ~~☐ 72 hr~~ ☐ 96 hr ☐ Standard (10 day) MJF0205

ANALYSIS REQUIRED

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	CONFIRM MTBE BY 8260		Temperature:_____ Inbound Seal: Yes No Outbound Seal: Yes No
PMW1-1	6/6/00	1255	AIR	—	1	01	X					
PMW6-1	6/6/00	1305		—		02						"
VR1-1		1315		—			— —			X		HOLD 1 2 3
VR1-2		1335		—		03				X		
~~PMW5-1~~		~~1345~~										BAG DEFLATED SN 6/6/00
PMW3-1		1400		—		04						
PMW2-1		1410		—		05						
OW1-1		1420		—		06				X		
OW2-1		1430		—	2	07				X		

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
	6/7/00	12:00		6/7/00	12:00	CONFIRM MTBE BY 8260 IF DETECTED ABOVE
	6/7/00	12:21	MH	6/7/00	14:36	

Pink - Client
Yellow - Sequoia
White - Sequoia