TRANSMITTAL

TO: Mr. David De Witt

Tosco Marketing Company

2000 Crow Canyon Place, Suite 400

San Ramon, California 94583

DATE:

June 16, 1999

PROJ. #:

140229.02

SUBJECT:

Work Plan

Tosco 76 Branded Facility

No. 11120

6400 Dublin Boulevard Dublin, California

FROM:

Clyde J. Galantine Project Geologist

Gettler-Ryan Inc.

6747 Sierra Court, Suite J

Dublin, California 94568

WE ARE SENDING YOU:

DESCRIPTION

1 June 16, 1999 Limited Subsurface Investigation Report

THESE ARE TRANSMITTED as checked below:

[] For review and comment [] Approved as submitted [] Resubmit _ copies for approval

[X] As requested [] Approved as noted [] Submit _ copies for distribution

[] For approval [] Return for corrections [] Return _ corrected prints

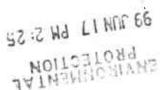
COMMENTS:

[X] For Your Files

Enclosed is one copy of the above report. If you have any questions or comments, please call me at (925) 551-7555.

cc:

Eva Chu, Alameda County Health Care Services Agency Scott Hooton, BP Oil Company



June 16, 1999

Mr. David De Witt Tosco Marketing Company 2000 Crow Canyon Place, Suite 400 San Ramon, California 94583

Subject:

Limited Subsurface Investigation Report Tosco 76 Branded Facility No. 11120 6400 Dublin Boulevard Dublin, California

Dear Mr. De Witt;

This report summarizes the results of a limited subsurface investigation performed by Gettler-Ryan Inc. (GR) on May 14, 1999 at the above site. The work was performed at the request of Tosco Marketing Company (Tosco) to evaluate current groundwater quality beneath the subject site since BP Oil abandoned aoo previously installed groundwater monitoring wells. The scope of work included: advancing two soil borings using a GeoProbe® rig: collecting grab groundwater samples from the borings for chemical analysis; and preparing a report documenting the work. This work was requested by Ms. Eva Chu of Alameda County Health Care Services Agency (ACHCSA) in a conversation with a Tosco representative on May 9, 1999.

SITE DESCRIPTION

The site is an active service station dispensing 76 products located on the south corner of Dublin Boulevard and Dougherty Road in Dublin, California. The current facilities consist of a building housing a convenience market, two dispenser islands, two gasoline underground storage tanks (USTs) that share a common pit immediately northwest of the station building, and an above ground propane tank located near the western property boundary. Locations of pertinent site features are shown on Figure 1.

FIELD WORK

Field work was conducted in accordance with GR's Field Methods and Procedures (enclosed) and the Site Safety Plan dated May 4, 1999. A permit is not required for GeoProbe borings in Alameda County. Underground Service Alert was notified and an independent line locator was employed prior to drilling at the site.

Drilling Activities

On May 14, 1999, a GR geologist observed Gregg Drilling and Testing, Inc. (C57 #485165) drilling two on-site soil borings (HP-1 and HP-2) at the location shown on Figure 1. The borings were advanced to approximately 25 feet bgs using GeoProbe® technology with a cone penetrometer rig.

A grab groundwater sample was collected from each of the borings as required by ACHCSA. The samples were collected by using 1-inch diameter slotted temporary well casing and stainless steel bailer. Upon completion of sample collection, the borings were backfilled with bentonite from the total depth to approximately 3 inches below the ground surface. The borings were capped with asphalt at the surface level.

Laboratory Analysis

Grab groundwater samples HP-1 and HP-2 were analyzed by Sequoia Analytical in Walnut Creek, California (ELAP #1271) for Total Petroleum Hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, and xylenes (BTEX), and methyl tert-butyl ether (MtBE) by Environmental Protection Agency (EPA) Methods 8015Modified/8020 and MtBE by EPA Method 8260. Copies of the laboratory analytical reports and chain-of-custody records are enclosed.

GROUNDWATER ANALYTICAL RESULTS

TPHg or BTEX were not detected in the grab groundwater samples collected from borings HP-1 or HP-2. Groundwater sample HP-1 contained 3,800 parts per billion (ppb) of MtBE by EPA Method 8020 and 4,800 ppb of MtBE by EPA Method 8260. Groundwater sample HP-2 contained 18,000 ppb of MtBE by EPA Method 8020 and 22,000 ppb of MtBE by EPA Method 8260. Groundwater analytical data are summarized in Table 1.

CONCLUSIONS

Based on analytical results from samples collected during this investigation, it appears that shallow groundwater in the vicinity of borings HP-1 and HP-2 has been impacted by MtBE.

DISTRIBUTION

GR recommends that a copy of this report be forwarded to Ms. Eva Chu at Alameda County Health Care Services Agency at 1131 Harbor Bay Parkway, 2nd Floor, Alameda, California 94502 and Mr. Scott Hooton at BP Oil Company at 295 SW 41st Street, Building 13, Suite N, Reston, Washington 98055-4931.

If you have any questions regarding this report, please call us in our Dublin office at (925) 551-7555.

Sincerely,

Gettler-Ryan Inc.

Clyde J. Galantine

Project Geologist

Stephen J. Carter Senior Geologist

R.G. 5577

Attachments:

Table 1.

Groundwater Chemical Analytical Data

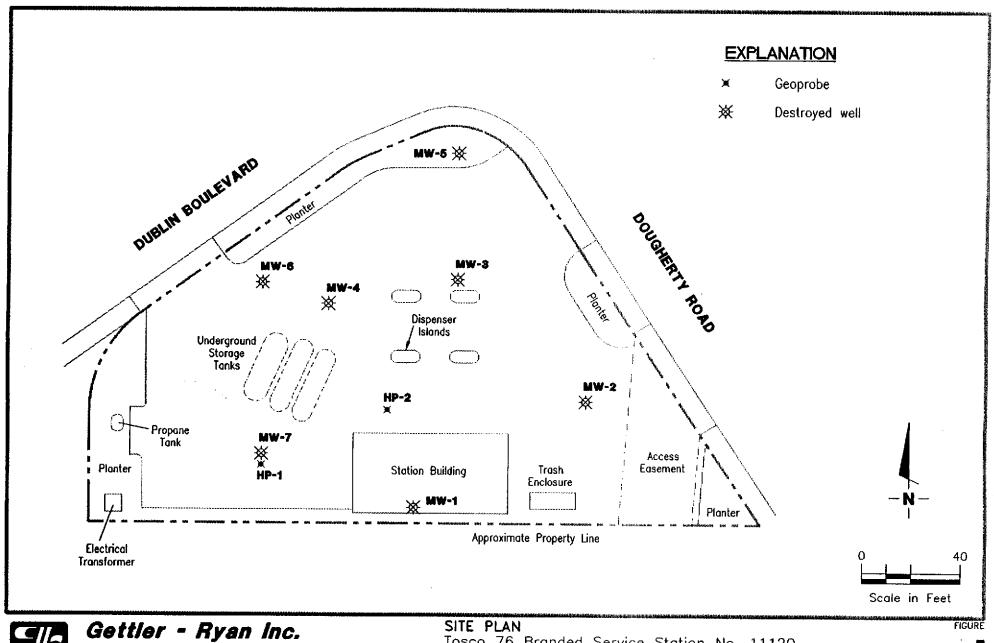
Figure 1

Site Plan

GR Field Methods and Procedures

Laboratory Reports and Chain-of-Custody Forms

No. 5577





REVIEWED BY

6747 Sierra Ct., Suite J Dublin, CA 94568

(925) 551-7555

Tosco 76 Branded Service Station No. 11120 6400 Dublin Boulevard Dublin, California

DATE 06/99

REVISED DATE

JOB NUMBER 140229.02

TABLE 1 - GROUNDWATER ANALYTICAL DATA

Tosco 76 Branded Facility No. 11120 6400 Dublin Boulevard Dublin, California

Sample No.	Sample Date	Floating Product (ft.)	TPHg (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Xylenes (ppb)	MtBE by 8020 (ppb)	MtBE by 8260 (ppb)
HP-l	5/14/99	0.0	ND	ND	ND	ND	ND	3,800	4,8001
HP-2	5/14/99	0.0	ND	ND	ND	ND	ND	18,000	22,000 ¹

EXPLANATION:

TPHg = Total Petroleum Hydrocarbons as gasoline

BTEX = benzene, toluene, ethylbenzene, and xylenes

MtBE = Methyl tertiary butyl ether

ND = not detected

ft. = feet

ft. MSL = feet relative to Mean Sea Level.

ppb = parts per billion

--- = not applicable

ANALYTICAL LABORATORY:

Sequoia Analytical (ELAP #1271)

ANALYTICAL METHODS:

TPHg/BTEX/MtBE = EPA Methods 8015 Modified/8020 MtBE = EPA Method 8260

¹ = Analyzed past EPA recommended holding time. Use for qualitive confirmation of BTEX, only.

GETTLER - RYAN FIELD METHODS AND PROCEDURES

Site Safety Plan

Field work performed by Gettler-Ryan, Inc. (GR) is conducted in accordance with GR's Health and Safety Plan and the Site Safety Plan. GR personnel and subcontractors who perform work at the site are briefed on the of these plans contents prior to initiating site work. The GR geologist or engineer at the site when the work is performed acts as the Site Safety Officer. GR utilizes a photoionization detector (PID) to monitor ambient conditions as part of the Health and Safety Plan.

Collection of Soil Samples

Exploratory soil borings are drilled by a California-licensed well driller. A GR geologist is present to observe the drilling, collect soil samples for description, physical testing, and chemical analysis, and prepare a log of the exploratory soil boring. Soil samples obtained with a Geoprobe® rig are collected from the soil boring with a split-barrel sampling device fitted with 1-inch-diameter, clean brass or plastic liners. The Geoprobe® drives the sampling device approximately 24 inches, and the filled sampler is then retrieved from the boring. The encountered soil is described using the Unified Soil Classification System (ASTM 2488-84) and the Munsell Soil Color Chart.

After removal from the sampling device, soil samples for chemical analysis are covered on both ends with teflon sheeting or aluminum foil, capped, labeled, and placed in a cooler with blue ice for preservation. A chain-of-custody form is initiated in the field and accompanies the selected soil samples to the analytical laboratory. Samples are selected for chemical analysis based on:

- a. depth relative to underground storage tanks and existing ground surface
- b. depth relative to known or suspected groundwater
- c. presence or absence of contaminant migration pathways
- d. presence or absence of discoloration or staining
- e. presence or absence of obvious gasoline hydrocarbon odors
- f. presence or absence of organic vapors detected by headspace analysis

Field Screening of Soil Samples

A PID is used to perform head-space analysis in the field for the presence of organic vapors from the soil sample. This test procedure involves removing some soil from one of the sample tubes not retained for chemical analysis and immediately covering the end of the tube with a plastic cap. The PID probe is inserted into the headspace inside the tube through a hole in the plastic cap. Head-space screening results are recorded on the boring log. Head-space screening procedures are performed and results recorded as reconnaissance data. GR does not consider field screening techniques to be verification of the presence or absence of hydrocarbons.

Grab Groundwater Sampling

A temporary PVC screen is installed in the boring to facilitate a grab groundwater sample collection if necessary. Samples of groundwater are collected from the surface of the water in each boring using the teflon bailer or a pump. The water samples are decanted into laboratory-supplied containers appropriate for the anticipated analyses. Sample containers are then labeled and promptly placed in chilled storage for transport to the analytical laboratory. A Chain-of-Custody Record is initiated and updated throughout handling of the samples, and accompanies the samples to the laboratory certified by the State of California for analyses requested



680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 1455 McDowell Blvd. North, Ste. D 1551 Industrial Road

Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 San Carlos, CA 94070-4111

(650) 364-9600 (925) 988-9600 (916) 921-9600 (707) 792-1865 (650) 232-9600

Reported:

FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342 FAX (650) 232-9612

Gettler-Ryan - Dublin 6747 Sierra Court, Suite J Dublin, CA 94568 Attention: Clyde Galantine

Client Project ID: Sample Matrix: Analysis Method:

First Sample #:

Tosco #11120, Dublin

Water

EPA 5030/8015 Mod./8020

905-1679

Sampled: May 14, 1999 Received:

May 17, 1999 Jun 4, 1999

TOTAL PURGEABLE PETROLEUM HYDROCARBONS with BTEX / MTBE

Analyte	Reporting Limit µg/L	Sample I.D. 905-1679 HP-1	Sample I.D. 905-1680 HP-2		
Purgeable Hydrocarbons	50	N.D.	N.D.		
Benzene	0.50	N.D.	N:D.		
Toluene	0.50	N.D.	N.D.		
Ethyl Benzene	0.50	N.D.	N.D.		
Total Xylenes	0.50	N.D.	N.D.		
MTBE	2.5	3,800	18,000		
hromatogram Pat	ttern:	••			

Quality Control Data

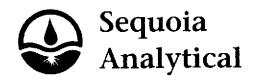
Report Limit Multiplication Factor:	4.0	20
Date Analyzed:	5/24/99	5/24/99
Instrument Identification:	HP-4	HP-4
Surrogate Recovery, %: (QC Limits = 70-130%)	93	97

Purgeable Hydrocarbons are quantitated against a fresh gasoline standard. Analytes reported as N.D. were not detected above the stated reporting limit.

SEQUOIA ANALYTICAL, #1271

haine Dugley

lianne Fegley آلول Project Manager



680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 1455 McDowell Blvd. North, Ste. D 1551 Industrial Road Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 San Carlos, CA 94070-4111

(925) 988-9600 (916) 921-9600 (707) 792-1865 (650) 232-9600

(650) 364-9600

FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342 FAX (650) 232-9612

Gettler-Ryan - Dublin 6747 Sierra Court, Suite J Dublin, CA 94568 Attention: Clyde Galantine

Client Project ID: Sample Descript: Analysis Method: Tosco #11120, Dublin Water, HP-1 EPA 8260

Sampled: Received: Analyzed:

May 14, 1999 May 17, 1999 Jun 1, 1999

Lab Number:

905-1679

Reported:

Jun 1, 1999 Jun 4, 1999

MTBE by EPA 8260

Analyte

Detection Limit

Sample Results

μg/L

μg/L

Methyl t-Butyl Ether (MTBE).....

20

4,800

Surrogates

Control Limit %

% Recovery

Dibromofluoromethane...... 50

1

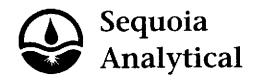
90

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

√ulianne Fegley Project Manager Please Note:

* Analyzed past EPA recommended holding time. Use for qualitative confirmation of BTEX, only.



680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 1455 McDowell Blvd. North, Ste. D 1551 Industrial Road

Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 San Carlos, CA 94070-4111

Redwood City, CA 94063

(925) 988-9600 (916) 921-9600 (707) 792-1865 (650) 232-9600

(650) 364-9600

FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342 FAX (650) 232-9612

FAX (650) 364-9233

Gettler-Ryan - Dublin 6747 Sierra Court, Suite J Dublin, CA 94568 Attention: Clyde Galantine

Client Project ID: Sample Descript: Analysis Method: Lab Number:

Tosco #11120, Dublin Water, HP-2 EPA 8260 905-1680

Sampled: May 14, 1999
Received: May 17, 1999
Analyzed: Jun 1, 1999
Reported: Jun 4, 1999

MTBE by EPA 8260

Analyte

Detection Limit µg/L

Sample Results µg/L

Methyl t-Butyl Ether (MTBE).....

100

22,000

Surrogates

Control Limit %

% Recovery

Dibromofluoromethane.....

150

90

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL, #1271

Julianne Fegley
Project Manager

Please Note

* Analyzed past EPA recommended holding time. Use for qualitative confirmation of BTEX, only.



680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 1455 McDowell Bivd. North, Ste. D 1551 Industrial Road Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834 Petaluma, CA 94954 San Carlos, CA 94070-4111

(925) 988-9600 (916) 921-9600 (707) 792-1865 (650) 232-9600

(650) 364-9600

FAX (650) 364-9233 FAX (925) 988-9673 FAX (916) 921-0100 FAX (707) 792-0342 FAX (650) 232-9612

Gettler-Ryan - Dublin 6747 Sierra Court, Suite J Dublin, CA 94568 Client Project ID: Matrix: Tosco #11120, Dublin Liquid

Attention: Clyde Galantine

QC Sample Group: 9051679-680

Reported:

Jun 4, 1999

QUALITY CONTROL DATA REPORT

ANALYTE	Вепzепе	Toluene	Ethyl	Xylenes	MTBE
			Benzene	•	
Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020	EPA 8260
Analyst:	J. Minkel	J. Minkel	J. Minkel	J. Minkel	N. Nelson
MS/MSD					
Batch#:	9051693	9051693	9051693	9051693	LCS053199
Date Prepared:	5/24/99	5/24/99	5/24/99	5/24/99	5/31/99
Date Analyzed:	5/24/99	5/24/99	5/24/99	5/24/99	5/31/99
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4	GC/MS-2
Conc. Spiked:	20 μg/L	20 μg/L	20 μg/L	60 μg/L	50 μg/L
Matrix Spike % Recovery:	95	80 _.	85	98	100
Matrix Spike Duplicate % Recovery:	100	85	90	100	106
Relative % Difference:	5.1	6.1	5.7	1.7	5.8
LCS Batch#:	4LCS052499	4LCS052499	4LCS052499	4LCS052499	-
Date Prepared:	5/24/99	5/24/99	5/24/99	5/24/99	_
Date Analyzed:	5/24/99	5/24/99	5/24/99	5/24/99	•
Instrument I.D.#:	HP-4	HP-4	HP-4	HP-4	•
LCS % Recovery:	95	80	85	98	-
% Recovery Control Limits:	70-130	70-130	70-130	70-130	70-130

SEQUOIA ANALYTICAL, #1271

-fulianne Fegley Project Manager Please Note:

The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

												اسردن				Cł		_	<u>f-C</u>	ust	ody-Record
TOSO Tosos Marketing 6 2000 Day Carpen San Ranea, Callin	Company	Cone	ultant Pro ultant No ddroeo C	me 5747	ettle Sie	Tosco Dublin 14022 - Ryan Lyce C1 Tyde C	Blud 9.0 I F Sala	nc nite ntin	الطيار د تا د ح		lin C	<u>A</u> s	aboratory aboratory amples (alleation ignature)	/ Name / Releas Collected	(Phone)	Seg	925 14/9	نور	7?-	- W - Z: 9:16 Gala	15.496 intine
Sample Number	Lab Sample Number	Number of Containers	Matrix S = Soil A = Air W = Water C = Charcool	Type G = Grab C = Composite D = Discrate	Ilme	Somple Preservation	load (Yes or No.)	TPH Gar BTEX WANTBE (8016) (8020)	1PH Dissel (9015)	Oil and Grease (5520)	Purpeuble Halocarbons (8010)	Purpeable Aromotics (8020)	Purgeoble Organics (8240)	Extractable Organics of (8270)	Metals CACT-PLZn,MI (TCAP or AX)	260					DO NOT BILL TB-LB ANALYSIS Remorks
HP-1		4	W	G	3:15		Y	X								×					9051679
HP-2		4	ω	6	4:15	•	<u>Y</u>	1/2	<u></u>				<u> </u>			X					9051680
				7.	 		•				 - -										
								 					 		<u> </u>	-		 			
										 	-		-	<u>. </u>							
			_													<u> </u>				 	·
							<u> </u>	 	<u> </u>	-	<u> </u>		-	-		 			-	1	
		<u> </u>		<u> </u>		 				-				<u> </u>			<u> </u>				
Relinquished By Rylinquished By	Jalan (Stanoture)	L	G- Org	anization -R Inc	. s	Date/Time	45 // Re	celved E	by (Sign	the	Av (Slan	4	Organiza Organiza	Sel	5/ Do	te/Time イナイマ <u>ロイイ</u> te/Time			Turn A	24 46 5	me (Circle Choloe) Hre. Daye Daye Ontracted
Relinquished By	(Signature)		Out	panization		Date/Time				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	*		_		5/	1729	35				

CASE CLOSURE SUMMARY Leaking Underground Fuel Storage Tank Program

AGENCY INFORMATION

Date: June 18, 1999

Agency name: Alameda County-HazMat City/State/Zip: Alameda, CA 94502

Address: 1131 Harbor Bay Pkwy

Phone: (510) 567-6700

Responsible staff person: Eva Chu

Title: Hazardous Materials Spec.

II. CASE INFORMATION

Site facility name: BP Station No. 11120

Site facility address: 6400 Dublin Blvd, Dublin, CA 94568

RB LUSTIS Case No: N/A

Local Case No./LOP Case No.: 2095

URF filing date: 2/2/93

SWEEPS No: N/A

Responsible Parties:

Addresses:

Phone Numbers:

Scott Hooton

295 SW 41st Street

425/251-0667

BO Oil

Renton, WA 98055-4931

Tank No:	<u>Size in</u> gal.:	Contents:	Closed in-place or removed?:	<u>Date:</u>		
1	12,000	Gasoline	Removed	4/3/96		
2	10,000	"	<i>"</i>	и		
3	8,000	n	н	ĸ		
4	500	Waste Oil	"	u		

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: Unknown Site characterization complete? YES

Date approved by oversight agency: 10/19/98 Monitoring Wells installed? Yes

Number: 7

Proper screened interval? No, but adequate! Well MW-3 is screened from 14' to 19'bgs

Highest GW depth below ground surface: 4.39'

Lowest depth: 8.43' in MW-3

Flow direction: SE

Most sensitive current use: Commercial

Are drinking water wells affected?

No Aquifer name: Dublin Subbasin-

Is surface water affected?

Nearest affected SW name: NA

Off-site beneficial use impacts (addresses/locations): None

Report(s) on file? YES Where is report(s) filed? Alameda County

1131 Harbor Bay Pkwy Alameda, CA 94502

Treatment and Disposal of Affected Material:

MaterialAmount
(include units)Action (Treatment)
or Disposal w/destination)Date

Tank 4 USTs Soil 1,370 cy

Other Tetrachloroethene (PCE) 0.0076

Disposed at BFI Landfill, Livermore

Apr-June 1996

ND

6.7

Maximum Documented Contaminant Concentrations - - Before and After Cleanup Soil (ppm) Water (ppb) Contaminant <u>Before</u>3 Before¹ After² After⁴ 520 TPH (Gas) 2.700 14,000 6,200 ND TPH (Diesel) 570 500 0.52 Benzene 3.2 ND 1,600 Toluene 21 34 280 ND Ethylbenzene 2,100 ND **Xylenes** 180 ND₆ **MTBE** 37.000⁵ NA

NOTE: 1. soil samples collected at time of UST removal at 10'bgs, 4/96 (PCE from waste oil pit)

2. no overexcavation performed at the site after the tanks were removed

- 3. grab groundwater sample collected from gasoline tank pit at time of removal, 4/96 (PCE from gasoline pit)
- 4. most recent groundwater sampling results, 6/98 (PCE conc. from well MW-1 in 10/92)
- 5. maximum concentration measured using Method 8020 from well MW-3 in 9/95
- 6. results using EPA Method 8260, 6/98 (see attached Table 7)

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the
Regional Board Basin Plan?
Does completed corrective action protect potential beneficial uses per the
Regional Board Basin Plan?
Does corrective action protect public health for current land use? YES
Site management requirements: A site safety plan must be prepared for construction workers in the event excavation/trenching is proposed in the vicinity of residual soil and groundwater contamination. Should corrective action be reviewed if land use changes? YES, hydrocarbon contamination in soil must be addressed/re-evaluated if site use changes or a building is to be constructed over the area of residual contamination.

Monitoring wells Decommissioned: No, pending site closure

Number Decommissioned: 0 Number Retained: 7. MW-1 is inaccessible (building built over it)

List enforcement actions taken: None List enforcement actions rescinded: NA

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Eva Chu Title: Haz Mat Specialist

Signature: Date:

Reviewed by

Name: Larry Seto Title: Senior Haz Mat Specialist

Signature: Date:

Name: Thomas Peacock Title: Supervisor

Signature: Date:

VI. RWQCB NOTIFICATION

Date Submitted to RB: RB Response:

RWQCB Staff Name: Chuck Headlee Title: EG

Signature: Date:

VII. ADDITIONAL COMMENTS, DATA, ETC.

The site is currently an active gasoline service station.

In October 1992 four exploratory borings (B-1 through B-4) were drilled at the site and converted into groundwater monitoring wells MW-1 through MW-4, respectively. Groundwater was first encountered at 16' to 17' bgs, stabilizing at "9' bgs. Groundwater appeared to be under confined conditions, thus, the wells were screened from "14' to 19'bgs. Two soil samples were collected from each boring and analyzed for TPHg, TPHd, BTEX, TOG, and HVOC. Groundwater was analyzed for TPHg TPHd, and BTEX. Water from well MW-1, near the used oil UST, was also analyzed for HVOC and TOG. Hydrocarbon constituents were identified in soil and groundwater from borings B-3/MW-3 and B-4/MW-4. (See Figs 1, 2, and Tables 1, 2)

In April 1993 three additional groundwater monitoring wells, MW-5 through MW-7, were drilled to further define the extent of soil and groundwater contamination. In addition, an exploratory boring, LB-1, was drilled and logged continuously from 9.5' to 30.5'bgs to better characterize the first water bearing zone. No significant levels of hydrocarbons were detected in soil and groundwater from these borings. Groundwater was initially encountered at ~16.5' to 20.5'bgs and stabilized at ~5'bgs. A second water bearing zone was encountered in boring LB-1 at 29'bgs. A step draw-down aquifer test was performed on well MW-6. The results of the draw-down test indicate that the maximum sustainable yield from MW-6 is approximately 2.0 gpm. (See Fig 3 and Table 3)