



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

January 7, 2014

Mr. Andrew Cooper  
State Water Resources Control Board  
1001 I Street, 16<sup>th</sup> Floor  
Sacramento, CA 95814  
(sent via email to [USTClosuresComments@waterboards.ca.gov](mailto:USTClosuresComments@waterboards.ca.gov) and uploaded to the State Water Board GeoTracker website)

Subject: Comment Letter – ExxonMobil Corp. Case Closure Summary  
ACEH Response to Case Closure Proposed by State Water Resources Control Board  
Fuel Leak Case No. RO0000362 and GeoTracker Global ID No. T0600100537, Valero #3823, 2991 Hopyard Road, Pleasanton, CA 94566

To State Water Resources Control Board:

This correspondence presents the Alameda County Environmental Health (ACEH) response to the November 4, 2013, “*Notice of Opportunity for Public Comment*,” (Notice) for the fuel leak case at 2991 Hopyard Road, Pleasanton, CA 94566. The November 4, 2013 Notice indicates that the State Water Resources Control Board Cleanup Fund (Cleanup Fund) is planning to close the case over the objections of ACEH.

We believe that Cleanup Fund staff has not adequately considered possible effects on water supply wells in the area of the site. Some of the information presented in the “*Notice of Opportunity for Public Comment*,” is inaccurate and therefore, the analysis based on this information may not be valid. We do not agree with closure of the Valero #3823 fuel leak case at this time. We request that the Cleanup Fund retract the proposed closure and allow ACEH to resume regulatory oversight in order to collect sufficient data to evaluate horizontal and vertical migration of MTBE following shutdown of the groundwater extraction system. Specific issues are described below.

#### Nearest Water Supply Well

The Notice indicates that the nearest water supply well is an inactive well located 963 feet northeast (upgradient) of the site. This information is incorrect. The nearest water supply well is the City of Pleasanton Municipal Well No. 7, which is located approximately 250 feet northwest of the site. City of Pleasanton Municipal Well No. 7 is not currently in use but potentially could be used in the future. Zone 7 Water Agency Municipal Well Hopyard No. 9 is located approximately 950 feet northeast of the site. Zone 7 Municipal Well Hopyard No. 6 is located approximately 1,400 northwest of the site. Pumping of approximately 5 million gallons of water per day was initiated from Hopyard Well No. 6 in April 2012. The pumping of Hopyard No. 6 caused water levels at the site to drop approximately 10 feet (see Attachment 1), indicating that the site is hydraulically connected to the aquifers used by the municipal wells. Pumping of Hopyard No. 6 stopped in early October 2012. In response to the cessation of pumping, groundwater elevations at the site in December 2012 partially recovered as much as 6 feet from September 2012 groundwater levels.

### Affected Groundwater

The Notice indicates that “the petroleum release is limited to shallow soil and groundwater,” and that the “affected groundwater is not currently being used as a source of drinking water, and it is highly unlikely that the affected groundwater will be used as a source of drinking water in the foreseeable future.” These statements do not accurately represent the site hydrogeology and contaminant distribution. During the groundwater sampling event in June 2013, MTBE was detected in groundwater from monitoring well MW-8 at concentrations ranging from 13 to 39 micrograms per liter (see Vertical Plume Migration below). Monitoring well MW-8 is screened from 118 to 132 feet bgs and the City of Pleasanton Municipal Well No. 7 is screened from 120 to 400 feet bgs. Therefore, the MTBE-affected groundwater is within the same aquifer as the one being utilized by City of Pleasanton Well No. 7 and Hopyard Well No. 6 (see cross section in Attachment 2).

### Plume Stability

The Notice states that remaining “petroleum hydrocarbon constituents are limited and stable, and concentrations are decreasing.” We do not believe that the existing groundwater data support this conclusion. A groundwater extraction system (GWES) has operated periodically at the site since March 2001. Attachment 3 shows MTBE concentrations over time in Zone 1 well VR-2 and the periods of operation of the GWES. Due to declining concentrations, the GWES was shut down on October 27, 2004. Following the GWES shutdown, MTBE concentrations increased in several monitoring wells including VR-2. The GWES was re-started on March 23, 2007 and MTBE concentrations generally decreased across the site. Following the recommendation by the Cleanup Fund for case closure, the GWES was shutdown on February 12, 2013 and has not operated since. Only one groundwater monitoring event (June 2013) has taken place since GWES shutdown in February 2013. As can be seen on Attachment 3, rebound in groundwater concentrations was not observed in well VR-2 immediately following the 2004 shutdown. Based on the previous data collected following a GWES shutdown, one groundwater monitoring event is not sufficient to demonstrate plume stability following shutdown of the GWES. The GWES has affected groundwater concentrations and controlled the plume to various degrees since March 2001. Attachment 4 shows a graph of concentration versus distance from the site during operation of the GWES and non-operation of the GWES. As shown on Attachment 4, concentrations were higher during the period when the GWES was not operating. It is not valid to predict future plume stability based on data which largely represents plume control by the GWES. As discussed in the next section, the graphs of Groundwater Trends presented in the Notice are also not valid.

### Groundwater Trends

The Notice includes three graphs of MTBE concentrations in the section entitled, “Groundwater Trends,” which are included as Attachments 5 and 6. None of the graphs are valid representations of concentration trends for the site. The graph for well VR2 shows MTBE concentrations from December 2008 until October 2012. The groundwater extraction system was operating during this entire time period. Plotting a trend line through this shortened period of time for well VR-2 to represent long-term groundwater concentrations for the site is misleading.

The graph for well PMW-4 (Downgradient well on Attachment 5) shows one value of 0.5 µg/L for MTBE on March 4, 2009 and eight zero values for the time period from July 2009 to October 2012. A downward

trend line is drawn from the single positive value through the zero values. All groundwater sampling results for MTBE in well PMW-4 during the time period shown on the graph were not detected above a reporting limit of 0.5 micrograms per liter ( $\mu\text{g/L}$ ). The first value on the graph is shown as the reporting limit of 0.5  $\mu\text{g/L}$  and the remaining values are shown as zero although all data are reported by the laboratory as not detected above a reporting limit of 0.5  $\mu\text{g/L}$ . Depicting the values differently and drawing a downward trend line through not detected values is not valid.

The graph for well MW5S (Attachment 6) shows MTBE concentrations from December 2008 through May 2013. Similar to the graph for well PMW-4, all values on the graph are actually not detected above a reporting limit of 0.5  $\mu\text{g/L}$ . The first four values on the graph are estimated values between the reporting limit and method detection limit. The last five values on the graph were reported by the laboratory as not detected above a reporting limit of 0.5  $\mu\text{g/L}$  without an estimated value. The graph shows the last five values as zero but shows estimated concentrations for the first four values on the graph. The downward trend line which begins at 0.25  $\mu\text{g/L}$  and extends below zero is not valid.

If the graphs shown in the Notice were used to evaluate groundwater trends, those evaluations may need to be re-considered.

#### Vertical Plume Migration

MTBE was not detected in groundwater from well MW-8 at concentrations above water quality criteria until the most recent sampling event in June 2013. The increase in MTBE concentrations may have been caused by the pumping of Hopyard Well No. 6, which lowered water levels across the site and created a downward vertical gradient (see Attachment 1). The downward migration of MTBE observed in data from monitoring well MW-8 also demonstrates that the plume is not stable.

#### Groundwater-Specific Criteria for Low-Threat Closure Policy

The Notice indicates that the site meets Scenario 1 of the Groundwater-Specific Criteria in the Low-Threat Closure Policy. Please see the table below, which compares site data to the LTCP groundwater specific criteria. As shown on the table, the site does not meet any of the LTCP scenarios.

LTCP GROUNDWATER SPECIFIC CRITERIA					
Site Data		LTCP Scenario 1 Criteria (ppb)	LTCP Scenario 2 Criteria (ppb)	LTCP Scenario 3 Criteria (ppb)	LTCP Scenario 4 Criteria (ppb)
Plume Length	>100 feet and <250 feet (MTBE has been detected in well MW-8, which is approximately 100 feet horizontally from the former tank pit. The plume extends more than 100 feet vertically to the screen zone of well MW-8.)	<100 feet	<250 feet	<250 feet	<1,000 feet
Free Product	No free product	No free product	No free product	Removed to maximum extent practicable	No free product
Plume Stable or Decreasing	Not stable or decreasing	Stable or decreasing	Stable or decreasing	Stable or decreasing for minimum of 5 Years	Stable or decreasing
Distance to Nearest Water Supply Well	Approximately 250 feet	>250 feet	>1,000 feet	>1,000 feet	>1,000 feet
Distance to Nearest Surface Water and Direction	500 feet north	>250 feet	>1,000 feet	>1,000 feet	>1,000 feet
Property Owner Willing to Accept a Land Use Restriction?	Not applicable	Not applicable	Not applicable	Yes	Not applicable
GROUNDWATER CONCENTRATIONS					
Constituent	Current Site Maximum (ppb)	LTCP Scenario 1 Criteria (ppb)	LTCP Scenario 2 Criteria (ppb)	LTCP Scenario 3 Criteria (ppb)	LTCP Scenario 4 Criteria (ppb)
Benzene	6.1	No criteria	3,000	No criteria	1,000
MTBE	11	No criteria	1,000	No criteria	1,000
Scenario 5: If the site does not meet scenarios 1 through 4, has a determination been made that under current and reasonably expected future scenarios, the contaminant plume poses a low threat to human health and safety and to the environment and water quality objectives will be achieved within a reasonable time frame?			No		

### Site Remediation

Soil vapor extraction feasibility testing was conducted using well MW-9A on December 17 and 18, 2012. An effective radius of influence of 127 feet was observed during the test; however, the mass removal rate was less than 0.005 pounds per hour. Based on the data collected during the two day event, Cardno ERI concluded that SVE events were not a feasible remedial option for the site. ACEH was not able to issue directives for the feasibility testing because the Cleanup Fund recommended the case for closure in April 2012. ACEH believes that if plume migration is occurring, additional remedial options should be evaluated.

### Responsible Parties

According to County of Alameda Assessor's records, the property was purchased by VLROPLEASANTON LLC in December 2012. VLROPLEASANTON LLC was not identified as a responsible party in the Notice and it is not clear whether they were provided with the Notice. We have copied VLROPLEASANTON LLC on this correspondence. If the Cleanup Fund retracts the proposed closure, ACEH can resume normal regulatory oversight including identification of responsible parties.

### Conclusion

The recommendation to close this case is not justified based on the case data. We request that the Cleanup Fund retract the proposed closure and allow ACEH to resume regulatory oversight in order to accomplish the following:

- Collect sufficient data to evaluate horizontal and vertical migration of MTBE following shutdown of the GWES.
- If valid groundwater trends indicate plume migration, evaluate the feasibility of other cleanup options for the MTBE in groundwater.

If you have any questions regarding this case, please call Jerry Wickham at (510) 567-6791.

Sincerely,

Jerry Wickham, California PG 3766, CEG 1177, and CHG 297  
Senior Hazardous Materials Specialist

Dilan Roe  
LOP Manager

Attachment 1: Vertical Heads in Downgradient Wells  
Attachment 2: Geologic Cross Section A-A'  
Attachment 3: Concentrations Over Time in Well VR-2  
Attachment 4: MTBE Concentrations vs. Distance  
Attachment 5: Groundwater Trends from Notice  
Attachment 6: Groundwater Trends from Notice

cc: Jennifer Sedlachek (*Sent via E-mail to: [jennifer.c.sedlachek@exxonmobil.com](mailto:jennifer.c.sedlachek@exxonmobil.com)*), ExxonMobil,  
4096 Piedmont, #194, Oakland, CA 94611

Steve Asmann, Steve's Valero, 2991 Hopyard Road, Pleasanton, CA 94566

Bruce Morrison, Kirk D. Morrison Trust et al., 224 Woodward Avenue, Sausalito, CA 90623-1066

VLROPLEASANTON LLC, 4072 19<sup>th</sup> Street, San Francisco, CA 94114-2562

Danielle Stefani, Livermore Pleasanton Fire Department, 3560 Nevada St, Pleasanton, CA 94566  
(*Sent via E-mail to: [dstefani@lpfire.org](mailto:dstefani@lpfire.org)*)

Colleen Winey (QIC 8021), Zone 7 Water Agency, 100 North Canyons Pkwy, Livermore, CA 94551  
(*Sent via E-mail to: [cwiney@zone7water.com](mailto:cwiney@zone7water.com)*)

Abbas Masjedi, City of Pleasanton, P.O. Box 520, Pleasanton, CA 94566-0802 (*Sent via E-mail to: [AMasjedi@cityofpleasantonca.gov](mailto:AMasjedi@cityofpleasantonca.gov)*)

Cardno ERI, Attn: Rebekah Westrup, 601 North McDowell, Petaluma, CA 94954 (*Sent via E-mail to: [rebekah.westrup@cardno.com](mailto:rebekah.westrup@cardno.com)*)

Lisa Babcock, SWRCB, UST Cleanup Fund, P.O. Box 223, Sacramento, CA 95812 (*Sent via email to [Lisa.Babcock@waterboards.ca.gov](mailto:Lisa.Babcock@waterboards.ca.gov)*)

Robert Trommer, SWRCB, UST Cleanup Fund, P.O. Box 223, Sacramento, CA 95812 (*Sent via email to [Bob.Trommer@waterboards.ca.gov](mailto:Bob.Trommer@waterboards.ca.gov)*)

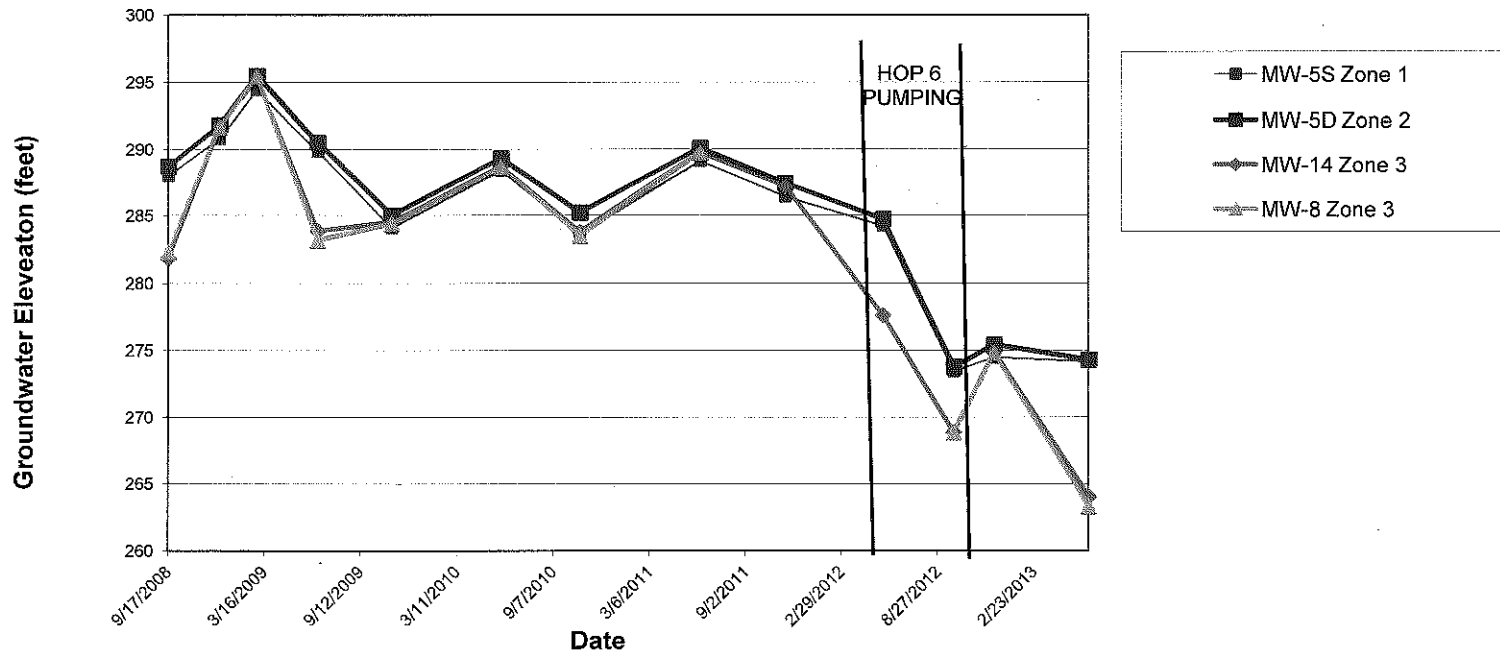
Chuck Headlee, San Francisco Bay RWQCB, 1515 Clay Street, Suite 1400, Oakland, CA 94512  
(*Sent via email to [Chuck.Headlee@waterboards.ca.gov](mailto:Chuck.Headlee@waterboards.ca.gov)*)

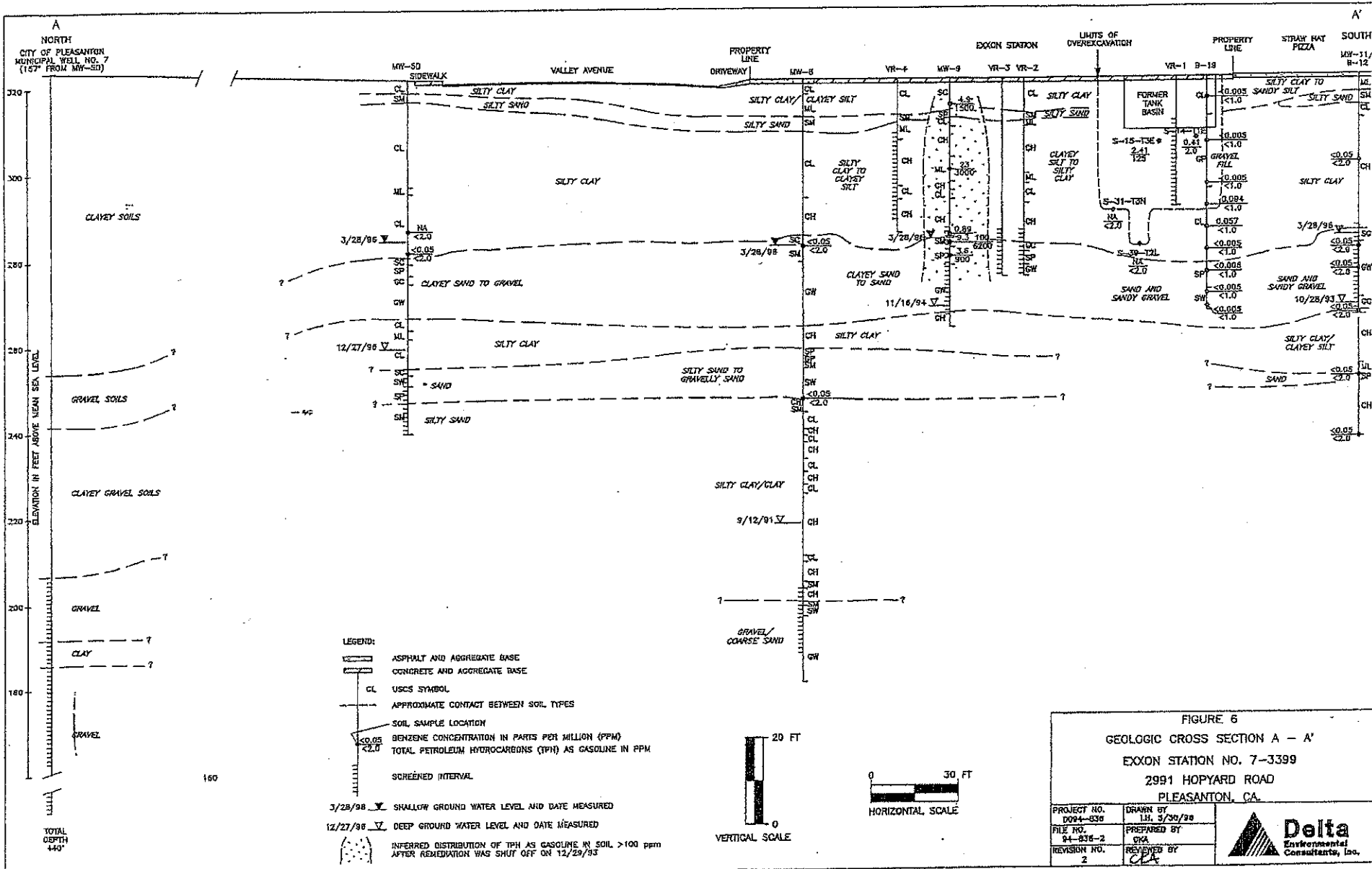
Dilan Roe, ACEH (*Sent via E-mail to: [dilan.roe@acgov.org](mailto:dilan.roe@acgov.org)*)

Jerry Wickham, ACEH (*Sent via E-mail to: [jerry.wickham@acgov.org](mailto:jerry.wickham@acgov.org)*)

GeoTracker, eFile

**Attachment 1  
Vertical Heads in Downgradient Wells**



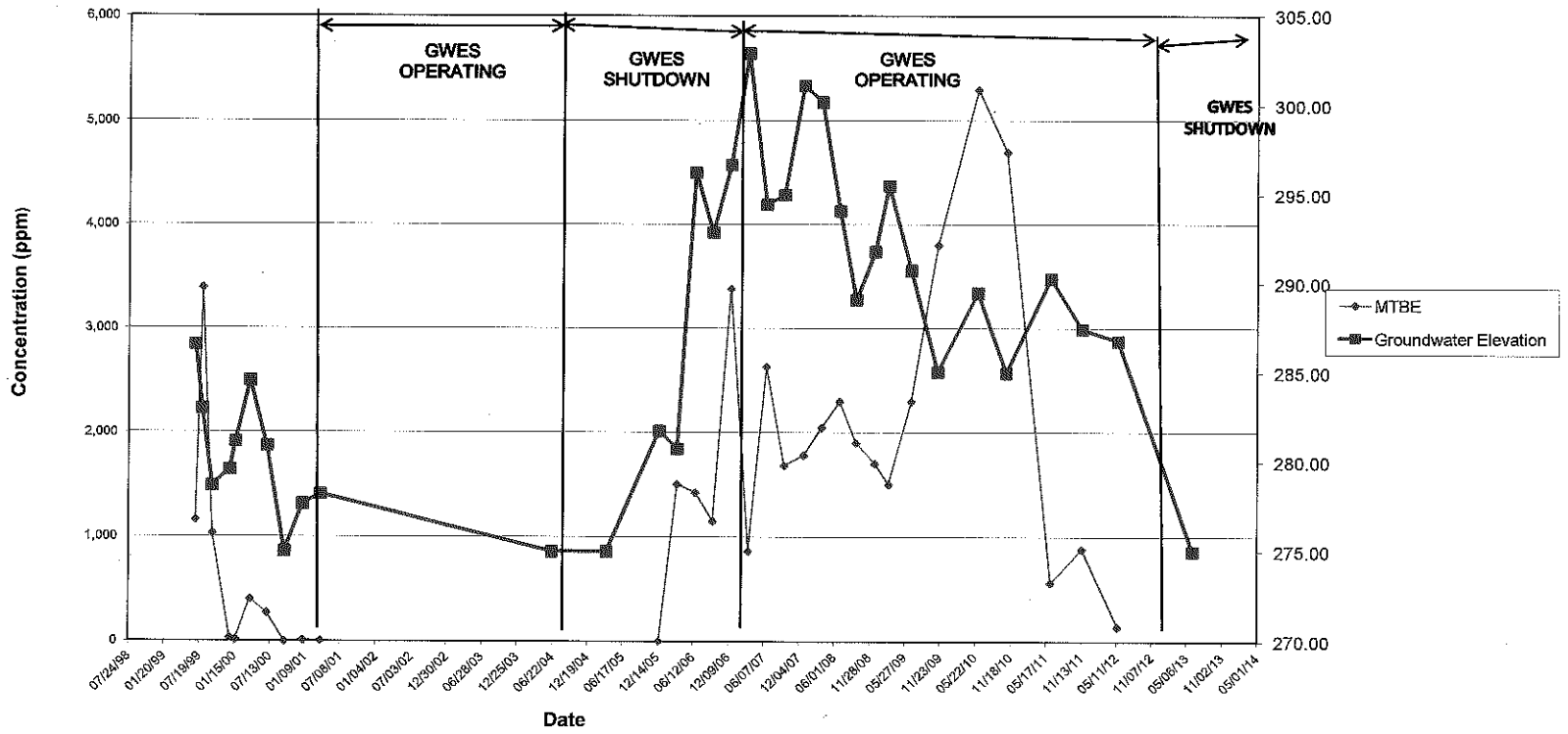


**FIGURE 6**  
**GEOLOGIC CROSS SECTION A - A'**  
 EXXON STATION NO. 7-3399  
 2991 HOPYARD ROAD  
 PLEASANTON, CA

PROJECT NO. D094-030	DRAWN BY LH, 5/20/98
FILE NO. 94-030-2	PREPARED BY SMA
REVISION NO. 2	REVIEWED BY CLA

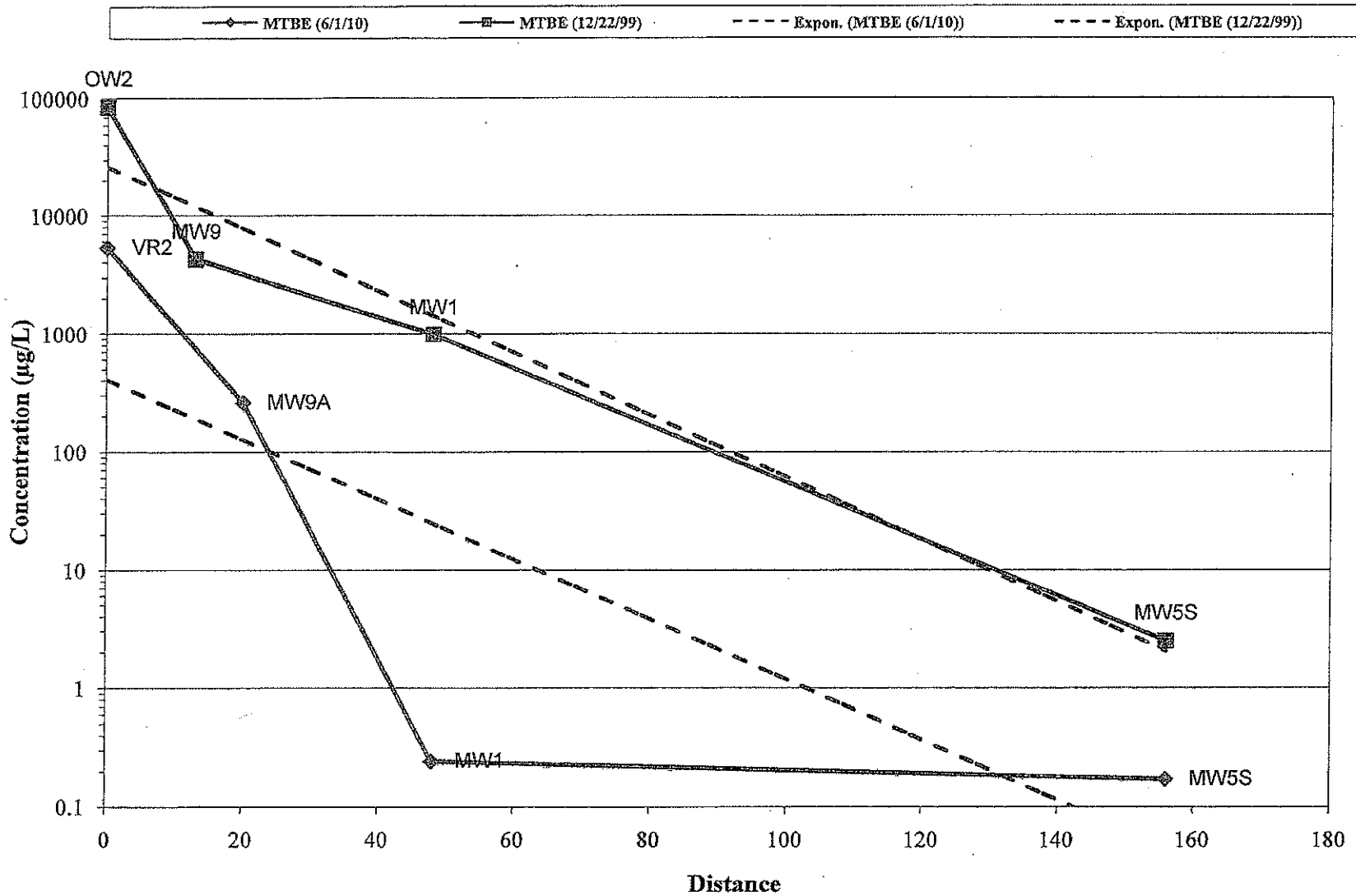


**Attachment 3  
Concentrations over Time in Well VR-2**



# ATTACHMENT 4

Figure 5: MTBE Concentrations vs. Distance  
 FORMER EXXON RS 73399, 2991 Hopyard Road, Pleasanton, California



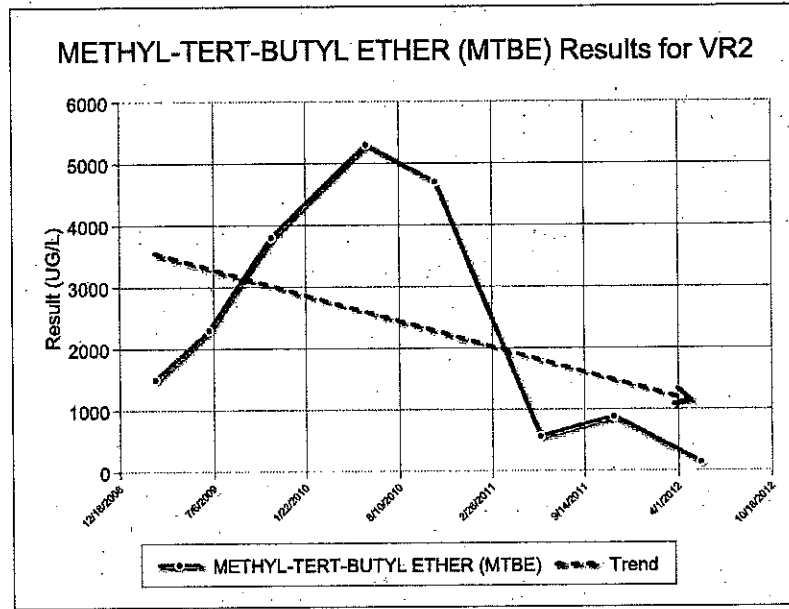
µg/L = Micrograms per liter

Note: Concentrations below the reporting limit are shown at the detection limit or one half of the detection limit if no detection limit is reported.

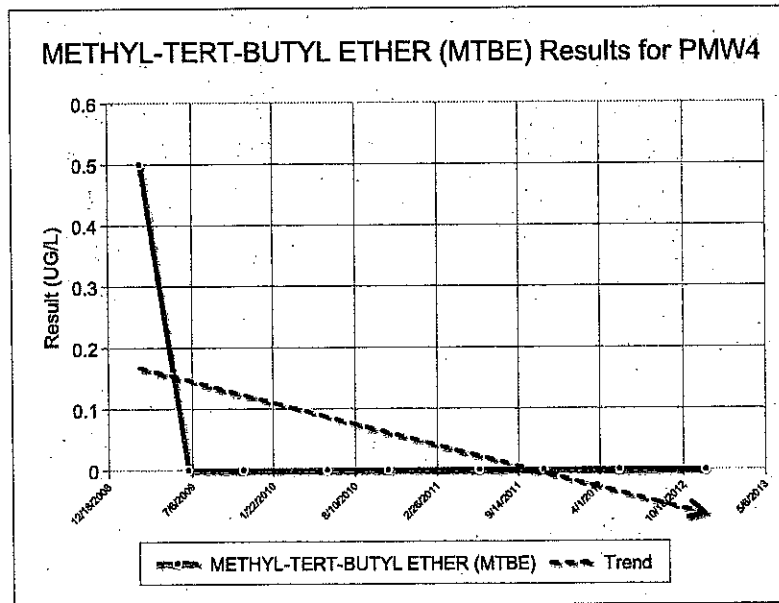
## Groundwater Trends

- There are more than 24 years of groundwater monitoring data for this Site. MTBE trends are shown below: Source area (VR2) and Downgradient (PMW4 and MW5s).

### Source Area Well



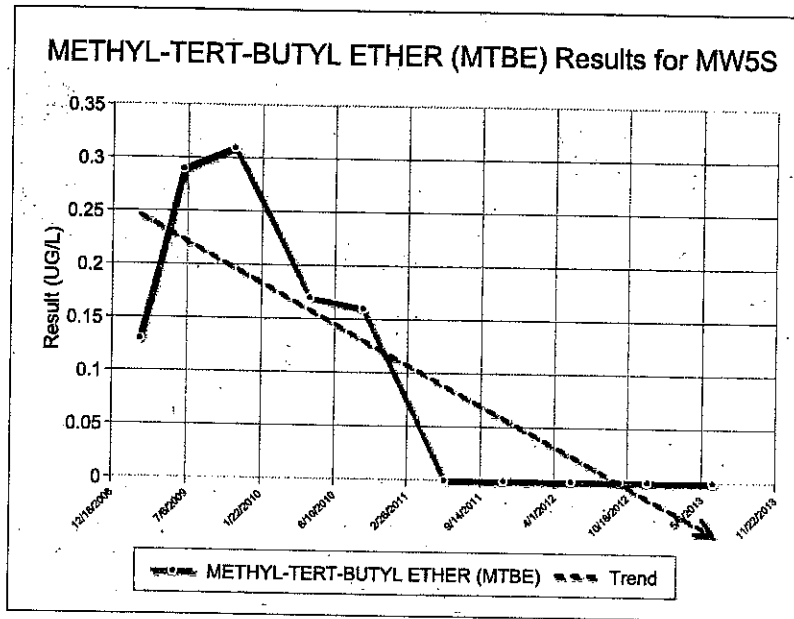
### Downgradient Wells



# ATTACHMENT 6

Exxon #7-3399/ Valero #3823  
2991 Hopyard Road, Pleasanton  
Claim No: 5330

August 2013



## Evaluation of Current Risk

- Estimate of Hydrocarbon Mass in Soil: None reported.
- Soil/Groundwater tested for MTBE: Yes.
- Oxygen Concentrations in Soil Vapor: None reported.
- Plume Length: <100 feet.
- Plume Stable or Decreasing: Yes.
- Contaminated Zone(s) Used for Drinking Water: No.
- Groundwater Risk from Residual Petroleum Hydrocarbons: The case meets Policy Criterion 1 by Class 1. The contaminant plume that exceeds water quality objectives is less than 100 feet in length. There is no free product. The nearest water supply well or surface water body is greater than 250 feet from the defined plume boundary.
- Indoor Vapor Risk from Residual Petroleum Hydrocarbons: The case meets the Policy Exclusion for Active Station. Soil vapor evaluation is not required because the Site is an active commercial petroleum fueling facility.
- Direct Contact Risk from Residual Petroleum Hydrocarbons: The case meets Policy Criterion 3a. Maximum concentrations in soil are less than those in Policy Table 1 for Commercial/Industrial use, and the concentration limits for a Utility Worker are not exceeded. There are no soil sample results in the case record for naphthalene. However, the relative concentration of naphthalene in soil can be conservatively estimated using the published relative concentrations of naphthalene and benzene in gasoline. Taken from Potter and Simmons (1998), gasoline mixtures contain approximately 2 percent benzene and 0.25 percent naphthalene. Therefore, benzene can be directly substituted for naphthalene concentrations with a safety factor of eight. Benzene concentrations from the Site are below the naphthalene thresholds in Policy Table 1. Therefore, the estimated naphthalene concentrations meet the thresholds in Table 1 and the Policy criteria for direct contact by a factor of eight. It is highly unlikely that naphthalene concentrations in the soil, if any, exceed the threshold.