

California Regional Water Quality Control Board
Santa Ana Region
Staff Report
August 28, 2009

ITEM: 9

SUBJECT: Review of Board Staff's Approach in Implementing Cleanup and Abatement Order (CAO) No. 98-112 – Wahl's Texaco, 40553 Big Bear Boulevard, Big Bear Lake, California

INTRODUCTION

McWhirter Real Estate & Investment Company (responsible party) has requested that the Board review a request by Board staff that a remedial action plan be completed in accordance with Item 4 of CAO No. 98-112. The Board members may provide direction to Board staff regarding this matter.

BACKGROUND

The Wahl's Texaco site, a retail gasoline station, is located in the mountain resort community of Big Bear Lake (see attached vicinity map). The groundwater aquifer in this area is currently utilized for municipal/drinking water production, and provides a substantial groundwater resource for businesses and residents that occupy the mountain lake community. In addition, the aquifer underlying the City of Big Bear Lake represents a significant potential future supply, which may be utilized to address additional demand associated with new development.

Site investigations were first initiated in May 1990, after free product was encountered in a groundwater test well. Results from the installation of three monitoring wells confirmed that soil and groundwater beneath the site had been impacted by petroleum hydrocarbon contamination from an unauthorized release by the underground storage tank (UST) system components. Following discovery of the release, the UST system was removed and replaced with a double-walled fuel dispensing system. Remedial excavation was reportedly performed to remove approximately 200 tons of impacted soil during the UST removal and upgrade.

On July 24, 1991, Regional Board staff requested that additional groundwater wells be installed to determine the extent of hydrocarbon contamination. Regional Board staff reiterated this request in correspondence dated May 21, 1992, May 10, 1995, October 17, 1995, April 15, 1998 and July 14, 1998. Regional Board staff also requested that regular monitoring and sampling be conducted to evaluate trends in contaminant concentrations. Of particular concern was the presence/detection of the emerging contaminant methyl tert butyl ether (MtBE), which was analyzed for the first time during the 3rd Quarter 1995 monitoring event (at staff's request), and

detected in all three site wells at concentrations ranging from 220 micrograms per liter ($\mu\text{g/L}$) to 18,000 $\mu\text{g/L}$.

Regional Board staff also met with the responsible party's legal counsel, Duke L. Peters, and consultant, Advanced GeoEnvironmental, on May 8 and July 2, 1998 to discuss the status of site contamination. During these meetings, Board staff reaffirmed previous requests that the extent of contamination be delineated through further site investigation. Legal counsel for the responsible party disputed the need for additional site investigations and requested that the matter be presented to the Board for review.

On September 23, 1998, the Executive Officer issued a letter requesting that additional onsite and offsite monitoring wells be installed to define the full extent of contamination. Based on the elevated levels of contamination being reported in existing groundwater wells, the Executive Officer also indicated that corrective action could be necessary to mitigate impacts associated with the site. The agency correspondence further indicated that the matter would be scheduled for consideration at the next Board meeting, with a staff recommendation to adopt a Cleanup and Abatement Order.

Testimony regarding this matter was presented to the Board at a hearing on November 20, 1998. Following this hearing, Cleanup and Abatement Order No. 98-112 was adopted by the Board. CAO No. 98-112 required the McWhirter Real Estate and Investment Company to perform additional assessment to further delineate groundwater contamination. Between June 1999 and June 2006, sixteen additional groundwater monitoring wells were installed to further define the extent of dissolved-phase contamination beneath, adjacent to and downgradient of the site to the north and northwest. Under CAO No. 98-112, corrective action measures, including high-vacuum vapor extraction and groundwater recovery (pump and treat), were also initiated to mitigate soil and groundwater contamination.

According to information provided in the First Quarter 2009 Progress Report, the pump and treat system has removed and treated more than 8 million gallons of impacted groundwater since extraction efforts were initiated in 2000. During the First Quarter 2009, the highest concentration of MtBE was detected in MW-1 (6,300 $\mu\text{g/L}$) located along the northern boundary of the site. In addition, MtBE was reported at 800 $\mu\text{g/L}$ in offsite well MW-16, situated northwest of the site, beyond Big Bear Boulevard (see attached site map showing well locations and MtBE concentrations). Historical monitoring data, collected over the last 15 years, have illustrated that levels of dissolved-phase contamination, particularly MtBE, fluctuate as a result of seasonal changes in the water table. However, based on recent findings, additional offsite characterization is warranted to delineate the extent of MtBE contamination (beyond MW-16) that exceeds the regulatory standard of 50 $\mu\text{g/L}$.

The responsible party failed to submit a quarterly groundwater monitoring and remedial progress report for the Second Quarter 2009 period. Although the status of remedial efforts is unknown, it is our understanding that limited operation and maintenance of the groundwater extraction system was performed during the recent reporting period. In addition, we understand that quarterly groundwater sampling efforts were not performed during the Second Quarter.

DISCUSSION

Regional Board staff is concerned that the elevated concentrations of MtBE being observed in onsite and offsite wells will not be mitigated in a timely matter, without an expansion of the current remedial efforts. Further, absent corrective action, MtBE contamination will continue to migrate offsite. Recent correspondence from the responsible party challenges the need for any further corrective action. Legal counsel for the responsible party has suggested that passive natural attenuation be employed to reduce the levels of contamination until adequate concentration reductions are achieved through dilution, dispersion and degradation mechanisms. Regional Board staff does not believe that natural attenuation is an appropriate remedial strategy for addressing subsurface contamination associated with the site. When considering the magnitude and extent of contamination associated with the site, natural attenuation would not result in timely reduction in mass with concurrent plume capture/interception of migrating contamination.

Counsel for the responsible party has suggested that natural attenuation is an appropriate corrective action approach because site contamination does not threaten Big Bear Lake. Although Regional Board staff would agree that the plume is unlikely to impact the Lake in the short term, the contamination does affect the underlying aquifer. Regional Board staff considered the threat to both these water bodies when reviewing the proposal for natural remediation offered by the responsible party's counsel.

Groundwater monitoring results indicate that significant levels of dissolved-phase MtBE have already migrated nearly 200 feet northwest of the site. Because contaminant migration has already occurred despite historical efforts to prevent it through groundwater extraction, offsite migration will continue toward the lake in the absence of an active response to reduce further movement. For this reason, continued active corrective action is warranted to reduce groundwater contamination in source areas and minimize further offsite migration.

Counsel for the responsible party has also contended that natural remediation (no action) is an appropriate remedy because site impacts do not threaten any active groundwater production wells. Board staff's position is that evaluation of the threat posed by the existing contamination should not be limited to existing production wells alone. Since this agency is responsible for protecting both current and future beneficial uses of groundwater resources within its jurisdiction, allowing the elevated contaminant concentrations associated with the McWhirter

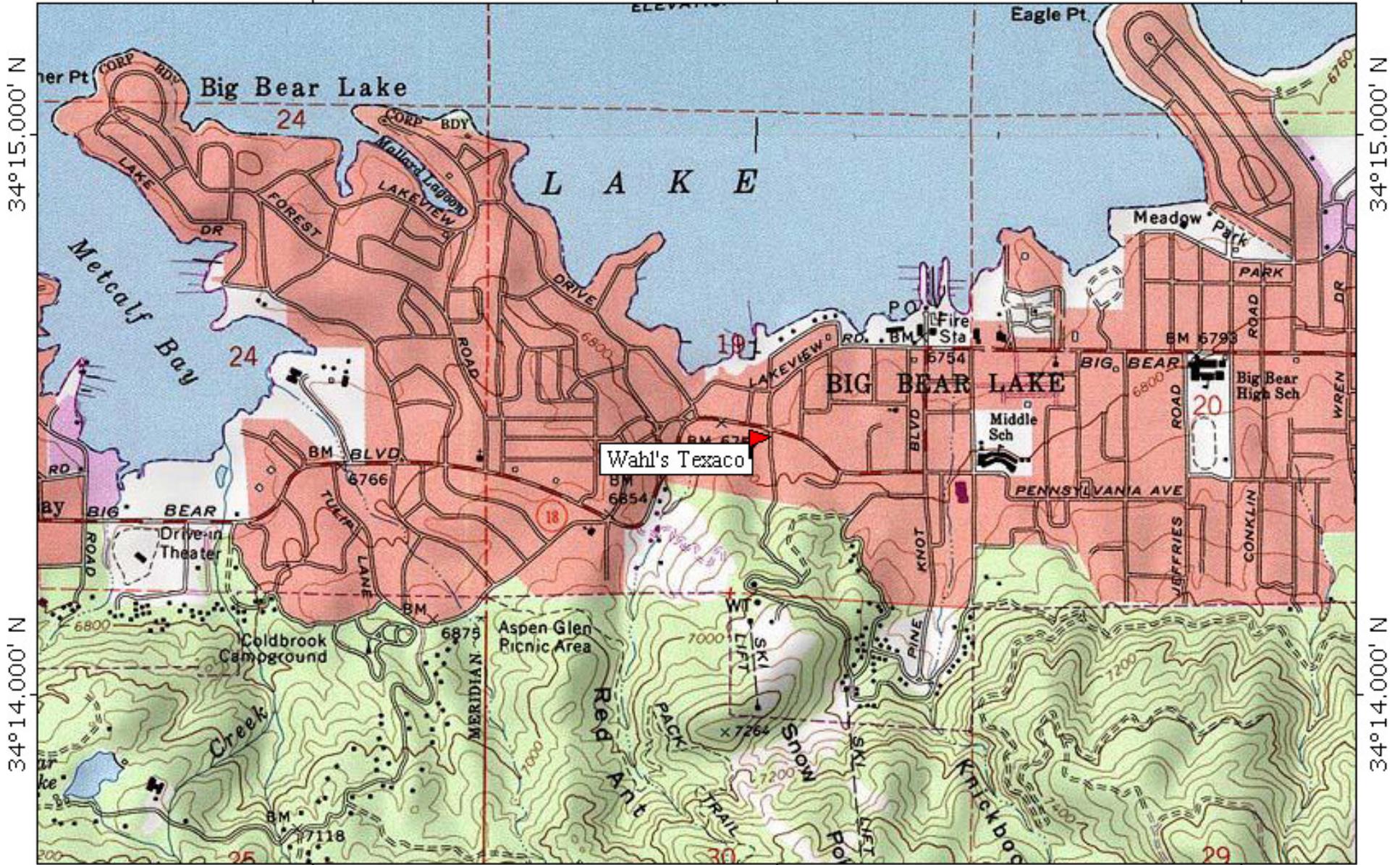
property to go unmitigated in an area of such sensitive and limited resources would not be consistent with the agency's obligation to protect such resources for future utilization. Local water purveyors are actively conducting aquifer utilization studies throughout the area in order to identify additional locations for municipal water production, and therefore, the resource must be protected.

Lastly, counsel for the responsible party has stated that, in the absence of Underground Storage Tank Cleanup Fund (USTCF) reimbursement, the cost of remediation would be potentially ruinous and unduly burdensome to his client. According to available state records, the responsible party has already received more than \$1.3 million in reimbursement from the USTCF and is eligible to receive approximately \$200,000 of additional funds. Although the USTCF denied the responsible party's request for additional funding under a claim for a second release (due to insufficient evidence), the decision did not preclude the petitioner from receiving additional reimbursement under the existing claim. Regardless, the availability (or lack thereof) of financial benefits provided by the USTCF is not an appropriate justification to postpone or forgo cleanup. As the owner of the Wahl's Texaco site, McWhirter Real Estate & Investment Company is responsible for the petroleum release and its cleanup. In fact, the responsible party's assertion that a second release may have occurred would seem to emphasize the need for continued and/or additional corrective action, rather than "natural remediation" as the responsible party has proposed.

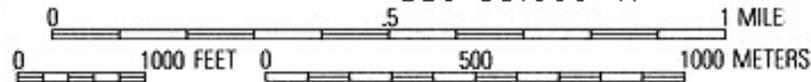
Additional supplemental information was provided by the responsible party's counsel in response to the Executive Officer's letter (dated July 7, 2009) requiring that a remedial action plan be submitted in accordance with item 4 of CAO No. 98-112. The responsible party's counsel requested that the Board review staff's approach in implementing CAO No. 98-112. A copy of the statement submitted by the responsible party's counsel is included with this Staff Report.

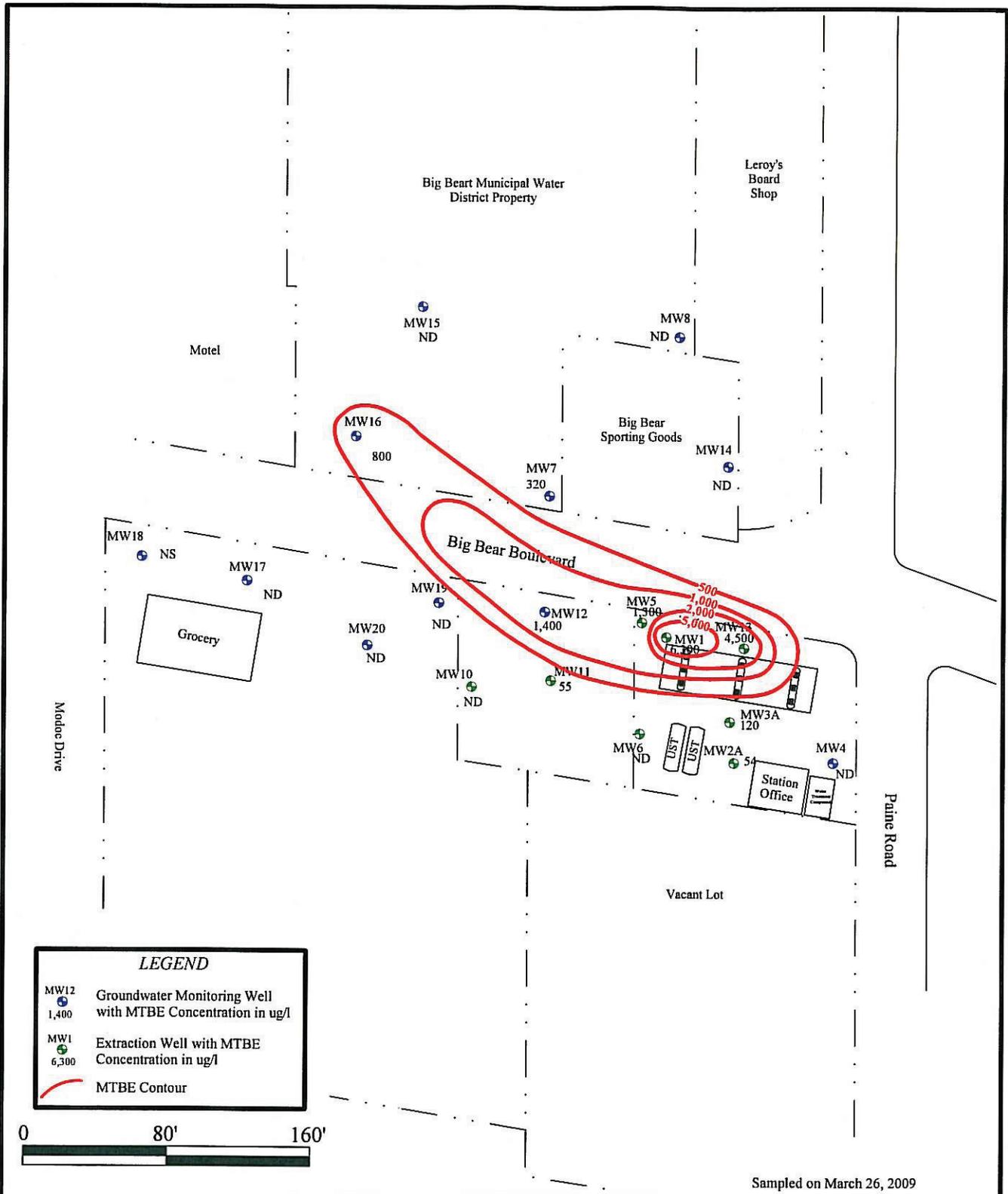
CONCLUSION

This matter has been scheduled as an information item only at this time. Staff will implement any direction provided by Board members in this matter. This matter may also be scheduled for action by the Board at a future meeting if appropriate.



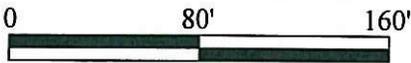
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LEGEND

MW12 1,400	Groundwater Monitoring Well with MTBE Concentration in ug/l
MW1 6,300	Extraction Well with MTBE Concentration in ug/l
	MTBE Contour



Scale: 1" = 80'

Sampled on March 26, 2009

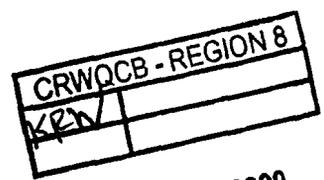
Leymaster Environmental Consulting, LLC
 5500 E. Atherton St., Suite 210
 Long Beach, CA 90815

MTBE Contours	
40553 Big Bear Boulevard Big Bear Lake, CA	
Figure 4	April 13, 2009

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Duke L. Peters, Attorney at Law
State Bar No. 94626
1901 Ave. of the Stars, Ste. 1900
Los Angeles, California 90067
(310) 284-5715
Fax: (310) 552-0713

Attorney for Petitioner
McWhirter Real Estate & Investment Co., Inc.



JUL 29 2009



STATE OF CALIFORNIA
REGIONAL WATER RESOURCES CONTROL BOARD
FOR THE SANTA ANA REGION

In re the Petition of)
) Case No. 083002579T
) CAO No. 98-112
)
) **PETITION FOR REVIEW OF**
18 McWhirter Real Estate Investment Co., Inc.) **STAFF DECISION ORDERING**
) **SUBMITTAL OF STUDY FOR**
19) **CORRECTIVE ACTION**
20)

McWhirter Real Estate & Investment Co., Inc. ("Petitioner"), the owner of real property currently improved as a Chevron-branded gasoline station located at 40553 Big Bear Blvd., Big Bear Lake, California ("Site"), hereby petitions to the Regional Water Quality Control Board for the Santa Ana Region ("Board") for a review of a staff decision dated July 7, 2009, issued over the signature of the Board's executive officer, Gerard Thibeault, directing Petitioner to submit, by no later than September 7, 2009, a feasibility study for further

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3 corrective action at the Site (Exhibit 1).

4 **1. FACTUAL AND PROCEDURAL BACKGROUND:**

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6 Petitioner's site at 40553 Big Bear Blvd., Big Bear Lake, California (petitioner itself
7 has a business address of 10523 Penfield Ave., Chatsworth, California 91311) was found in
8 1990 to have leaking underground tanks; UST Cleanup Fund Claim No. 3226 was filed in
9 1991 and approved. The Site was initially under the jurisdiction of the San Bernardino County
10 Environmental Health Services Division, but Board involvement with the Site dated back to
11 mid-1991 (Exhibit 6). For the first eight years of the Site's history following the discovery of
12 the release from the UST's, the only corrective action and remedial steps ordered and
13 undertaken (other than the removal and replacement of the UST's with double-walled tanks
14 and quantities of affected soil) included the installation and periodic monitoring of four on-
15 site monitoring wells, despite MTBE concentrations noted to be as high as 18,000µg/L
16 (Exhibit 7).
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19 The "hands-off" approach by the Regional Board ended with a meeting on May 8,
20 1998 at the offices of Petitioner's then-environmental consultant, Advanced GeoEnvironmental,
21 attended by Ms. Leslie Alford and Mr. Ken Williams of the Board staff, which was followed
22 by a meeting at Board offices on July 2, 1998 (a copy of the transcript of the meeting is
23 attached hereto as Exhibit 11). As indicated on Mr. Thibeault's letter of September 23, 1998
24 (Exhibit 8) additional on-site and off-site monitoring wells were required, and the possibility
25 of active remediation was held out. Petitioner's request that the need for additional measures
26 be determined at the Board level resulted, at the instance and request of Board staff, in the
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issuance of a C.A.O.¹

The Board staff's sudden shift in attitude towards this site was apparently prompted by a letter dated March 3, 1998 from Michael Perry, the then-general manager of the Department of Water and Power for the City of Big Bear Lake (Exhibit 10), in which Mr. Perry expressed concern over contamination emanating from a USA Gasoline site (NOT Petitioner's site) which, as may be seen from the map appended thereto, lies upgradient of several drinking water wells. Mr. Perry also indicated telephonically, at the July 2, 1998 meeting, that his organization was considering the installation of a well near the Big Bear Marina, which lies along the lake directly north of the Site (Exhibit 11, page 28).

Subsequent to the events of 1998, at the behest of Board staff, Petitioners installed several new on-site wells and, by March of 2000, there were a total of fourteen wells installed on or off-site. A groundwater extraction and treatment system, utilizing four of the existing wells, was installed in June, 2000, and the groundwater pump and treat system continues in operation to this day. A high-vacuum extraction system was installed in February, 2002 and removed with Board staff permission in January, 2003. Three additional off-site monitoring wells were installed in April, 2001 and new groundwater extraction wells installed in April, 2003, bringing to 20 the number of regularly-sampled monitoring wells (see maps and tables

¹ The request by the Board staff for issuance of a C.A.O. against a simple gasoline station, the owners of which, although protesting the need for additional or costly remedial measures and availing themselves of their administrative appellate rights, had never actually *refused* a directive to take particular measures (as is evidenced by the fact that the UST Cleanup Fund has *never* failed to honor a reimbursement request by Petitioners relative to this site, something that would not have occurred were Petitioners in fact out of compliance) must be seen as unusual.

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2 of Groundwater Monitoring and Remediation Progress Report, First Quarter 2009, Exhibit 4) .

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4 The monitoring well which has historically had the highest observable quantity of
5 MTBE, MW 11, near the former tank bed, which had exhibited a level of MTBE of 210,000
6 $\mu\text{g/L}$ in September, 2004, had seen its MTBE level drop dramatically to 55 $\mu\text{g/L}$ in the first
7 quarter, 2009 monitoring event (Exhibit 4) and a sample recently-taken exhibited an MTBE
8 level of only 17 $\mu\text{g/L}$ (Exhibit 13).

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10 Readings from another well which have been of special interest to Board staff are
11 those from MW 16, which lies northwest of the Site, across Big Bear Blvd (two off-site
12 wells, MW 8, and MW 14, which lie to the north, have produced nothing but "non-detect"
13 readings, and another well, MW 15, which lies to the north of MW 16, has also produced
14 nothing but "non-detect" readings). MW 16 manifested an MTBE level of 680 $\mu\text{g/L}$ in
15 December, 2007 and, after decreasing substantially, rose again to 800 $\mu\text{g/L}$ in March, 2009.
16 However, a sample taken on July 15, 2009 showed an MTBE level of only 170 $\mu\text{g/L}$ (Exhibit
17 14).
18

19 Despite the generally lower MTBE readings, and the almost insignificant BTEX and
20 TPH-g readings from all wells, the Board staff, per a letter dated February 18, 2009 from Ms.
21 Valerie Jahn-Bull (Exhibit 2) demanded that Petitioner produce a feasibility study with
22 recommendations for further testing and/or corrective action. Petitioner's counsel sent a letter
23 in reply on April 6, 2009 (Exhibit 3) expressing the belief that the site ought be allowed to
24 naturally remediate. Concern was further expressed over the facts that, as the Petitioner's
25 original UST Cleanup Fund claim for the site was nearly exhausted, a new claim based
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upon the belief that there had been a second release in the course of a 2004 dispenser upgrade had thus far been denied, and the UST Cleanup Fund is not currently paying out any reimbursement requests, Petitioners would effectively be forced to expend significant sums out of their own personal funds which they could not afford. Therefore, the new measures being demanded for the Site were not cost-effective.

In response, the aforementioned letter from Mr. Thibeault (Exhibit 1) was sent.

2. THE RELIEF SOUGHT BY PETITIONER

Petitioner, McWhirter Real Estate & Investment Co., Inc. seeks the abrogation of the directive contained within Exhibit 1 that it submit, on or before September 7, 2009, a feasibility study for further corrective action at the site, and Petitioner further seeks a Board determination that the Site ought be deemed and considered a "low-risk" site, in accordance with the "Clarification of Low-Risk Designation of Fuel Contaminated Site" dated September 4, 1996 and posted on the Board's website (Exhibit 12).

Petitioner further seeks an Order of this Board staying, pending the exhaustion of Petitioner's administrative appellate rights, the said directive for the submission of a feasibility study for further corrective action.

3. HOW PETITIONER WOULD BE HARMED BY THE STAFF DECISION

Petitioner has already expended about \$1.35 million of the \$1.5 million available to it for corrective action costs relative to the Site for Claim 3226. It is reasonably estimated that an additional \$500,000 of corrective action costs will be required to "wind-up" the existing remediation efforts AND to prepare the feasibility study and perform new and

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further corrective action. Petitioners would be subject to substantial, and potentially financially-ruinous, unreimbursed corrective action costs, which they would have to bear from their personal funds.

This Board issued its decision of 11/20/98 upon the representations of Board staff that the corrective action was required, that the site was in an environmentally-sensitive area due to its location in close proximity to Big Bear Lake, and partially upon the further representations that the UST Cleanup Fund would pay for the corrective action costs, and such costs would not unduly financially burden the site owner. The Petitioner, at the 11/20/98 proceeding, had argued in part that it is a small corporation wholly-owned by a family trust, the beneficiaries of which are retired individuals of limited means, and could not bear the financial burden of significant unreimbursed corrective action costs.

If the Final Staff Decision is allowed to stand, part of the premise and one of the presumptions of the Regional Board in issuing the CAO - that petitioner would not be forced to bear the financial burden - would be proven to have been unwarranted.

4. WHY THE FINAL STAFF DECISION IS ERRONEOUS

A. THE SITE POSES NO THREAT TO EXISTING DRINKING WATER WELLS, NOR TO ANY POTENTIAL FUTURE DRINKING WATER WELLS, NOR TO BIG BEAR LAKE, AND OTHERWISE MEETS THE CRITERIA FOR A "LOW-RISK" SITE

i. THE SOURCE OF THE CONTAMINATION, AND THE FREE PRODUCT, HAVE BEEN REMOVED

It is not disputed that the source of the contamination - the original underground tanks - was removed in 1990, along with sizeable quantities of contaminated soil (Exhibits 4, 6). A

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2 possible second source of contamination, a spill in the course of a dispenser upgrade during
3 September, 2004, was a one-time event. Therefore, the first listed criteria (of six) for allowing
4 a site to be regarded as "low-risk" is met.
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6 **ii. THE SITE HAS BEEN ADEQUATELY CHARACTERIZED**

7 The Site contains 15 on-site wells and 5 off-site wells. Groundwater flow direction is
8 well established, from many years of data, as being to the northwest. Two off-site wells (MW
9 14 and MW 8) lie directly to the north of the Site and have consistently shown "non-detect"
10 levels of contamination. An off-site well to the northwest, MW 16, did exhibit an MTBE
11 reading of 800 µg/L in March, 2009, but this is believed by the consultant to have been
12 anomalous, the result of a high water table and/or a sampling error. The recent sample taken
13 from MW 16 shows a level of only 170 µg/L, and a well to its north, MW 15, has consistently
14 produced readings of "non-detect."
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17 Additional off-site wells, given the fairly low level of MTBE exhibited in MW 16,
18 and the "non-detect" readings of the other off-site wells, would be superfluous.

19 **iii. THE SITE PRESENTS NO SIGNIFICANT RISK TO HUMAN HEALTH**

20 This factor, listed as fifth, is also not reasonably in dispute. The Site has been a
21 working gasoline station continuously since 1991 after replacement of the underground tanks,
22 is regularly patronized by the public, and has never been contended to pose a risk to human
23 health.
24

25 **iv. THE SITE POSES NO RISK TO SURFACE WATERS, WATER WELLS,
26 OR OTHER SENSITIVE RECEPTORS**

27 Items 4, "No water wells, deeper drinking water aquifers, surface water, or other
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2 sensitive receptors are likely to be impacted" and 6, "The site presents no significant risk to
3 the environment" overlap, will be treated as addressing essentially the same matters, and will
4 be discussed in terms of: a) the threat, if any, to Big Bear Lake; and b) the threat, if any, posed
5 to existing drinking water wells.
6

7 a) The Lake:

8 Petitioner has repeatedly contended that the Site poses no realistic threat
9 whatsoever to Big Bear Lake. In the letter to Ms. Jahn-Bull of April 6, 2009 (Exhibit 3),
10 there was appended a joint declaration of Mark Leymaster and Mark Slater, both geologists
11 and environmental consultants with many years of experience. Both men declared, under
12 penalty of perjury, that the Site posed no risk to the lake (Exhibit 5).
13

14 This conclusion is supported by application of the well-known and established method
15 for determining the rate of groundwater flow, Darcy's Law, official notice of which is hereby
16 requested.² Darcy's law states that groundwater flow velocity, V_s , (in cm/sec) equals the
17 hydraulic gradient, dh/dl (determined empirically for a given site) times the hydraulic
18 conductivity for the soil in question, k , divided by the soil porosity for the area, n .³
19

20 Or, $V_s = (k * dh/dl) / n$.

21 The soil in the area is clay/ silty clay, of very low hydraulic conductivity, the figure of
22 which can range from 10^{-5} to 10^{-9} .⁴ The hydraulic gradient for the area has been determined
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25 ² An administrative agency can take official notice of matters within the expertise of its
26 members. Franz v. Bd. of Medical Quality Assurance, 31 C.3d 124, 140 (1982).

27 ³ See LaGrega, M, Buckingham, P., and Evans, J., Hazardous Waste Management , at pages
28 148 - 161.

⁴ Id, page 161

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2 to be .04, and the soil porosity to be .25. Even using figures for hydraulic conductivity on the
3 high side (10 -5) and given a distance of MW 16 to the lake along the axis of known
4 groundwater flow direction of about 750 feet, it would require hundreds of years for anything
5 from MW 16 to reach the lake. By that time, of course, the substances would have long since
6 evaporated, diffused, or attenuated.⁵
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8 The Board staff, it is submitted, has offered not a scintilla of evidence to show that the
9 Site poses a genuine risk to the lake, and have responded to the joint declaration of Mssrs.
10 Leymaster and Slater with little more than bromides. The exceedingly remote possibility of
11 anything emanating from the Site actually reaching the lake should not be seen as justifying
12 extraordinary or costly additional remedial efforts.
13

14 b) Existing Drinking Water Wells:

15 From the map attached to Mr. Michael Perry's letter dated March 3, 1998 (Exhibit 10)
16 and from the maps provided by Petitioner's consultant and which are attached hereto as
17 Exhibits 16 and 17, the closest production drinking water wells, the "Knickerbocker" well and
18 the "Pennsylvania" well, are well to the east of, and upgradient from, the Site. The Site poses
19 no possible threat to them.
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21 The foregoing is corroborated by the letter dated April 27, 2005 from the State Water
22 Resources Control board (Exhibit 9), wherein it was stated that the Site was not required to
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25 _____
26 ⁵ Groundwater velocity (cm/sec.) = .00001 (hydraulic conductivity) * .04 (hydraulic gradient) /
27 .25 (soil porosity) = .0000016 cm/sec. Distance to the lake from MW16 is 750 feet * 12 * 2.54
28 = 22,860 cm. 22,860 cm / .0000016 = 1.42875 EE 10. sec. 1.42875 EE 10 /3,600 /24 / 365 =
453.53 years. Mr. Slater will, at the hearing, attest to the *bona fides* of the foregoing.

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2 perform Enhanced Leak Detection (ELD) testing, as it was not within 1,000 feet of a public
3 drinking water well. It is further corroborated by the fact that, although Mr. Perry expressed
4 serious concern in both his letter (Exhibit 10) and in his telephonic remarks at the July 2, 1998
5 meeting (Exhibit 11) over the threat posed by the USA Petroleum station to his existing wells,
6 he made no mention of the Site posing such a threat; his concern with respect to the Site was
7 limited to the proposed well at the Big Bear Marina, due north of the Site. But that proposed
8 well has, despite the passage of ten years' time, never come to fruition and, as is explained in
9 greater detail below, will never be installed.
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12 The Board staff has not, in either the letter of Mr. Thibeault (Exhibit 1) nor that of Ms.
13 Jahn-Bull (Exhibit 2) contended that the Site poses a threat to any *existing* wells.

14 Accordingly, the remaining issue is whether or not the Site poses any realistic threat to
15 any possible future wells installed in proximity to it, or to the aquifer from which such wells
16 would draw their water.
17

18 **v. THE SITE POSES NO THREAT TO ANY POTENTIAL BENEFICIAL USES**
19 **OF THE AQUIFER WHICH IT OVERLIES**

20 The final criteria for a low-risk site to be addressed is the third listed, which, in the
21 first alternative, states "The site does not overlie presently utilized or potential drinking water
22 aquifers." It is this criteria which Mr. Thibeault, in his letter of July 7, 2009, placed primary
23 reliance in arguing that the Site requires further remediation as "local water purveyors are
24 actively conducting aquifer utilization studies throughout the area, in order to identify
25 additional locations for potential municipal water supply production..."
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27 Although Petitioner agrees that the Big Bear Lake water department has indeed
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2 sought new locations for the installation of water wells, any contention that there are plans to
3 install such wells in proximity to the Site, or that the Site would pose a threat to any such new
4 wells, would be misplaced and have no basis in fact.
5

6 Attached hereto as Exhibit 15 is a memorandum from Mr. Mark Slater to Petitioner's
7 attorney memorializing a meeting and conversation Mr. Slater had with Mr. William LaHaye
8 of the Department of Public Works, City of Big Bear Lake. Therein, Mr. LaHaye indicated
9 that there are *no plans* to install any water wells in the vicinity of the Site, and this is due to
10 both the clay-based soil in the area, which makes for low yield, and high manganese and
11 fluoride concentrations.
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13 Furthermore, Mr. LaHaye indicated that his organization's wells are drilled to bedrock,
14 about 200 to 400 feet below the surface. Contaminants from the Site could not reasonably be
15 expected to penetrate to a greater depth than 40 to 50 feet.
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17 In summary, the contention that the Site threatens potentially beneficial uses of the
18 aquifer it overlies (which, as Mr. Slater also points out, is in effect a separate and discrete
19 aquifer than that from which existing production wells draw their water) is strained and is
20 devoid of evidentiary support.
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22 **B. THE STAFF FAILED TO PERFORM A COST/BENEFIT ANALYSES OR**
23 **TAKE INTO ACCOUNT ECONOMIC CONSIDERATIONS IN DEMANDING**
24 **FURTHER, COSTLY REMEDIATION EFFORTS AT THE SITE**

25 Water Code section 13267 expressly requires a regional board, when it requires a
26 polluter to furnish "technical or monitoring program reports" to ensure that the "burden,
27 including costs, of these reports shall bear a reasonable relationship to the need for the
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2 report[s] and the benefit to be obtained from the reports." City of Arcadia v. State Water
3 Resources Control Board, 135 CA 4th 1392 (2006).
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5 What petitioner was requested by the staff to submit by September 7, 2009 is
6 unquestionably a "technical or monitoring program report" within the meaning of Water Code
7 section 13267(a), and it is submitted that a common sense reading of the statute is that the
8 term "technical or monitoring program report" encompasses the actual costs of corrective
9 action and monitoring activity embraced by such a report, not merely the costs of the
10 paperwork.
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12 The staff directive fails to properly take into account the costs and benefits, and the
13 economic impact upon Petitioner, beyond purporting to express regret over the fact that
14 Petitioner's second UST Cleanup Fund application for the Site has not been approved.
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16 Petitioner, both in 1998 and currently with the joint declaration of Mssrs. Leymaster
17 and Slater (Exhibit 5) and the Darcy's Law analyses, has shown that the Site poses no risk
18 whatsoever to Big Bear Lake; the Board staff merely states that "contamination from your
19 property do not appear to have reached Big Bear Lake to date, and may not affect the
20 waterbody in the short term." There is no effort whatsoever made by the Board staff to gauge
21 or quantify the actual risk, if any, to the lake, and the Board staff points to no objective data in
22 support of its contentions, beyond a bare reference to the March, 2009 readings from MW 16.
23

24 Similarly, the Board staff assertion that "[h]owever, an equally appropriate receptor
25 threatened or at risk from the associated contamination is the underlying aquifer" is devoid of
26 anything other than bromides. There was no effort made to gauge or quantify the actual risk
27
28

1
2 posed by the Site to potential drinking water sources, and Petitioner's repeated assertions that
3 existing water wells are not threatened in the least by the Site are completely un rebutted and
4 uncontroverted.
5

6 Furthermore, the assertion made by Petitioner's counsel (Exhibit 3) that the Big Bear
7 Department of Water and Power has abandoned plans to install any water wells at the Big
8 Bear Marina (corroborated by the interview of Mr. Slater with Mr. La Haye of the City of Big
9 Bear Lake, Exhibit 15) - which, as mentioned previously, was the *raison d' ere* for the 1998
10 "push" for additional wells and remediation at the Site (Exhibit 4, page 28, 33-37) is
11 completely un rebutted.
12

13 As Petitioner pointed out in Section 4 above, the UST Cleanup Fund cannot be
14 depended upon to pay for the costs of any new remediation efforts, with Petitioner's principals
15 forced to bear the costs from their limited personal means. Before such extreme financial
16 hardship is inflicted, and given further the dire financial picture which surrounds the UST
17 Cleanup Fund, Petitioner, its principals, and the Fund deserve at least a scintilla of evidence
18 that the Site poses a genuine risk to some beneficial use. This burden cannot be met through
19 the exclusive use of bromides about beneficial uses of aquifers, or of migration to the lake
20 which will in all likelihood never materialize.
21

22 **5. THE BOARD SHOULD STAY THE STAFF DIRECTIVE FOR**
23 **SUBMISSION OF A FEASIBILITY STUDY**

24 The foregoing discussion demonstrates that the Site poses no threat to drinking water
25 supplies, actual or potential, nor to Big Bear Lake, and it is undisputed that it poses no
26 *imminent* threat to anything. The financial hardship to Petitioners in complying with the staff
27

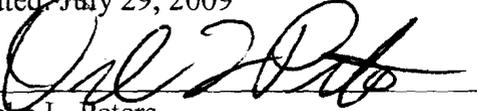
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directive outweighs any need for further corrective action, given the lack of harm to any environmental receptors, and certainly outweighs any need for a feasibility study by September 7. Petitioners ought be allowed to pursue their administrative appellate rights in the interim.

6. CONCLUSION

For the reasons set out above, the staff decision of July 7 ought be overruled, the Site treated as a low-risk site with minimal, if any, new monitoring requirements.

Dated: July 29, 2009



Duke L. Peters
Attorney for Petitioner
McWhirter Real Estate & Investment Co., Inc.

Tab 1



California Regional Water Quality Control Board

Santa Ana Region



Linda S. Adams
Secretary for
Environmental Protection

3737 Main Street, Suite 500, Riverside, California 92501-3348
Phone (951) 782-4130 • FAX (951) 781-6288 • TDD (951) 782-3221
www.waterboards.ca.gov/santaana

Arnold Schwarzenegger
Governor

July 7, 2009

Donna McWhirter
McWhirter Real Estate and Investment Company
10523 Penfield Avenue
Chatsworth, CA 91311

**Subject: FORMER WAHL'S TEXACO
CLEANUP & ABATEMENT ORDER (CAO) NO. 98-112
40553 BIG BEAR BOULEVARD, BIG BEAR LAKE, CALIFORNIA
RWQCB CASE NO. 083601573T**

Dear Ms. McWhirter:

Our agency has reviewed your recent submittal, *Groundwater Monitoring and Remediation Progress Report, First Quarter 2009, Former Wahl's Texaco/Big Bear Chevron Service Station* (dated April 13, 2009). This document was prepared by your consultant, Leymaster Environmental Consulting, Inc (LEC). In addition, we are in receipt of written correspondence from your attorney, Duke L. Peters, dated April 6 and 28, 2009.

BACKGROUND

The groundwater aquifer in this area is currently utilized for municipal/drinking water production, and provides a substantial groundwater resource for businesses and residents that occupy the mountain lake community of Big Bear. In addition, the aquifer underlying the City of Big Bear Lake represents a significant potential future supply, which may be utilized to address additional consumption associated with city development.

Historical monitoring data for the site demonstrates that the groundwater flow direction is to the north/northwest, and illustrates that levels of dissolved-phase contamination, particularly methyl tertiary butyl ether (MtBE), can fluctuate as a result of seasonal changes in the water table. During the First Quarter 2009, the highest concentrations of MtBE were observed in onsite well MW-1 (6,300 micrograms per liter [$\mu\text{g/L}$]), located in the northern portion of the site, adjacent to the western dispenser island. However, MtBE was also reported at a historical maximum of 800 $\mu\text{g/L}$ in offsite well MW-16, located approximately 175 feet northwest of the site. Based on these results, it is apparent that significant levels of MtBE have migrated to the northwest, beneath Big Bear Boulevard and neighboring properties. As a result, additional offsite groundwater assessment may be necessary to delineate the furthest most extent of dissolved-phase MtBE contamination beyond well MW-16.

California Environmental Protection Agency



Groundwater extraction began in June 2000 and continues to present day. Since startup, the pump and treat system has removed, treated and discharged approximately 8,046,667 gallons of groundwater to the sanitary sewer. Currently, eight extraction wells (e.g. MW-1, MW-2A, MW-3A, MW-5, MW-6, MW-10A, MW-11A and MW-13) are being utilized for groundwater recovery/hydraulic control of dissolved-phase petroleum hydrocarbon and MtBE impacts adjacent to and downgradient of both the USTs and dispenser islands. Between February 2002 and January 2004, high-vacuum vapor extraction was conducted to remove hydrocarbons contamination in the vadose zone near the underground storage tanks (USTs). Dual-phase extraction was terminated following rebound testing, which indicated non-detect/asymptotic vapor concentrations in shallow soil beneath the site.

REQUIREMENT FOR CORRECTIVE ACTION

Our agency is concerned that the elevated concentrations of MtBE being observed in onsite and offsite wells will not be mitigated in a timely manner, without additional remedial efforts. Further, absent corrective action, MtBE contamination will likely continue to migrate offsite. Based on previous conversations with your consultant and information provided in quarterly remedial progress reports, it was our understanding that LEC, acting on your behalf, was completing a feasibility study to evaluate additional corrective action strategies, which could be utilized to help expedite this cleanup and achieve case closure. However, recent correspondence from your attorney, Duke L. Peters, indicates that you now feel that no corrective action is justified. We have considered current site conditions and additional information/rationale presented by your attorney. Our agency does not agree with the conclusion that natural attenuation is an appropriate remedial strategy for addressing subsurface contamination associated with this site.

Your attorney has suggested that natural remediation be considered an appropriate corrective action approach for addressing hydrocarbon impacts beneath and downgradient of the site because the site contamination does not threaten Big Bear Lake. Regional Board staff would agree that the current dimensions of contamination from your property do not appear to have reached Big Bear Lake to date, and may not impact the waterbody in the short term. However, an equally appropriate receptor threatened or at risk from the associated contamination is the underlying aquifer. Our agency considered the threat to both these receptors when evaluating your proposal for natural remediation.

Groundwater monitoring results indicate that significant levels of dissolved-phase MtBE have already migrated nearly 200 feet downgradient of the site, to the extent that the plume is no longer adequately defined by the current monitoring network. Because contaminant migration has already occurred despite the ongoing groundwater extraction efforts being performed to prevent it, it is evident that the contamination will continue to persist and migrate toward the lake in the absence of any active response to prevent further travel. For this reason, continued corrective action is necessary to reduce groundwater contamination in the source areas beneath and adjacent to the USTs/dispensers and provide the necessary hydraulic control to prevent further offsite migration.



Mr. Peters has also suggested that natural remediation is an acceptable remedy for addressing site contamination on grounds that the impacts do not threaten any active groundwater production wells. This agency is responsible for protecting both current and future beneficial uses of groundwater resources within its jurisdiction, and allowing the elevated contaminant concentrations associated with your property to go unmitigated in an area of such sensitive and limited resources would be inconsistent with our responsibilities to protect such resources. Since local water purveyors are actively conducting aquifer utilization studies throughout the area, in order to identify additional locations for potential municipal water supply production, the resource must be protected. Again, when considering the magnitude and extent of groundwater contamination associated with the site, natural attenuation would not address agency objectives for timely reduction in contaminant mass with concurrent plume capture/interception of migrating contamination.

Lastly, your attorney has stated that, in the absence of Underground Storage Tank Cleanup Fund (USTCF) reimbursement, the cost of remediation would be potentially ruinous and unduly burdensome to you. According to our records, you have already received more than \$1.3 million in reimbursement from the state USTCF. Additionally, you are eligible to receive funds not to exceed \$1.5 million in total reimbursement for this cleanup project. Although the USTCF recently ruled that insufficient evidence was available to support your claim of a second release near the dispensers, their decision to deny additional funding does not preclude you from reimbursement under your existing claim and it certainly does not exonerate you of your obligation to mitigate contamination associated with the unauthorized release at your property. The availability (or lack thereof) of financial benefits provided by the USTCF is not an appropriate justification to postpone or forgo cleanup. Further, your asserted position that a second release may have occurred would, in fact, seem to call for continued remedial efforts, rather than the approach of tolerance (e.g. natural remediation) toward the contamination that you have proposed.

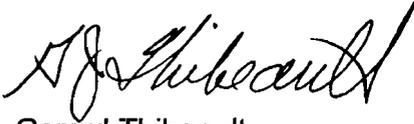
In our correspondence dated February 18, 2009, Regional Board staff requested that a feasibility study, including recommendations for additional corrective action (remedial action plan), be submitted by April 30, 2009. However, this report has not yet been received. Additional remedial action is required to mitigate subsurface contamination associated with the site. Therefore, in accordance with Item 4 of CAO No. 98-112, a remedial action plan (developed as a result of a feasibility study) must be submitted within 60 days (September 7, 2009). Failure to submit a remedial action plan by September 7, 2009, which reasonably addresses the need for groundwater cleanup, may result in the issuance of an administrative civil liability complaint, in accordance with Section 13350 of the California Water Code, assessing monetary penalties in an amount up to \$5,000 per day for each day after September 7, 2009 that the remedial action plan is not submitted. Board staff will determine the need and scope for further offsite groundwater assessment, pursuant to Item 3 of CAO No. 98-112, once additional information has been generated to evaluate groundwater flow/gradient and contaminant concentration trends in key monitoring points, particularly MW-16.



McWhirter Real Estate & Investment Co.
Former Wahl's Texaco Station

If you have any questions, please contact Kenneth Williams or Valerie Jahn-Bull, at (951) 782-4496 or (951) 782-4903, respectively.

Sincerely,



Gerard Thibeault
Executive Officer
Regional Water Quality Control Board
Santa Ana Region

Addressee: Donna McWhirter, McWhirter Estate & Investments Company
1minidriver@gmail.com

cc: Mark Slater – Leymaster Environmental Consulting, Inc., [mslater@leymaster.net](mailto:m Slater@leymaster.net)
James Young – SWRCB, Cleanup Fund, jyoung@waterboards.ca.gov
Duke L. Peters – attorney at law, dukelaw2@hotmail.com

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Tab 2



California Regional Water Quality Control Board

Santa Ana Region



Linda S. Adams
Secretary for
Environmental Protection

3737 Main Street, Suite 500, Riverside, California 92501-3348
Phone (951) 782-4130 • FAX (951) 781-6288 • TDD (951) 782-3221
www.waterboards.ca.gov/santsana

Arnold Schwarzenegger
Governor

February 18, 2009

Donna McWhirter
McWhirter Real Estate and Investment Company
10523 Penfield Avenue
Chatsworth, CA 91311

**Subject: FORMER WAHL'S TEXACO
CLEANUP & ABATEMENT ORDER (CAO) NO. 98-112
40553 BIG BEAR BOULEVARD
BIG BEAR LAKE, CALIFORNIA
RWQCB CASE NO. 083601573T**

Dear Ms. McWhirter:

Our agency has reviewed your recent submittal, *Groundwater Monitoring and Remediation Progress Report, Third Quarter 2008, Former Wahl's Texaco/Big Bear Chevron Service Station* (dated October 29, 2008). This document was prepared by your consultant, Leymaster Environmental Consulting, Inc (LEC).

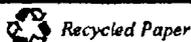
BACKGROUND

A groundwater pump and treat system has operated at the site since June 2000, resulting in the removal and treatment of approximately 7,624,346 gallons of impacted groundwater. In addition, a high-vacuum vapor extraction system (HVES) operated at the site from February 2002 through January 2004 to remove hydrocarbons contamination in the vadose zone near the underground storage tanks (USTs). Currently, eight (8) wells, located adjacent and downgradient of the USTs (e.g. MW2A, MW5, MW6, MW10A and MW11A) and dispenser islands (MW1, MW3A and MW-13), are being utilized for groundwater extraction (pump and treat) of MtBE and other hydrocarbon constituents.

Current and historical monitoring data indicate that contaminant concentrations, particularly methyl tertiary butyl ether (MtBE) concentrations, continue to fluctuate from quarter to quarter. According to your report, the highest concentrations of MtBE continue to be observed in MW-11 (9,400 micrograms per liter [$\mu\text{g/L}$]), located downgradient of the UST area. However, elevated concentrations of MtBE (up to 3,900 $\mu\text{g/L}$) were also observed in wells located adjacent to the dispenser islands. Based on available data, your consultant has suggested that the seasonal fluctuations are an indicator that residual adsorbed contamination is present in soil beneath and adjacent the USTs and dispenser areas.

Our agency is concerned that contaminant concentrations in groundwater may not be mitigated in a timely manner, without additional effort to reduce source area contamination. During the last few reporting periods, LEC stated that they were in the

California Environmental Protection Agency



Donna McWhirter
McWhirter Real Estate & Investment Co.
Former Wahl's Texaco Station

- 2 -

February 18, 2009

process of evaluating additional methods of remediation, which could be utilized to help expedite this cleanup project and achieve case closure. Although our agency agreed to allow you and your consultant additional time to research potential remedial options and resolve outstanding issues with respect to reimbursement eligibility, sufficient time has passed to resolve these matters. In fact, based on correspondence dated December 22, 2008, your recent efforts to appeal the Underground Storage Tank Cleanup Fund (USTCF) decision, which denied eligibility for a second release, were unsuccessful. Although it is unfortunate that additional funding could not be secured, this agency is requiring that the feasibility study, including appropriate recommendations for additional testing and/or corrective action, be completed without further delay.

In accordance with Item 4 of CAO No. 98-112, the required document should be submitted for agency review by no later than April 30, 2009.

If you have any questions, please contact me at (951) 782-4903.

Sincerely,



Valerie Jahn-Bull
Environmental Scientist
Underground Storage Tank Section

Addressee: Donna McWhirter, McWhirter Estate & Investments Company
1minidriver@gmail.com

cc: Catherine Richards – San Bernardino County Fire, crichards@sbcfire.org
Mark Slater – Leymaster Environmental Consulting, Inc., m Slater@leymaster.net
James Young – SWRCB, Cleanup Fund, jyoung@waterboards.ca.gov

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California Environmental Protection Agency



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Tab 3

DUKE L. PETERS
ATTORNEY AT LAW
1901 AVENUE OF THE STARS, SUITE 1900
LOS ANGELES, CALIFORNIA 90067

(310) 284-5715
FAX (310) 552-0713

April 6, 2009

Valerie Jahn-Bull
California Regional Water Quality Control Board
Santa Ana Region
3737 Main St., Ste. 500
Riverside, California 92501-3348

Re: 40553 Big Bear Blvd, Big Bear Lake, Your Correspondence Dated February 18, 2009

Dear Ms. Jahn-Bull:

As you may be aware, my office represents the McWhirter Real Estate & Investment Co., Inc., the landowner of the above-referenced site.

In your correspondence, you indicated that you are requiring a feasibility study by April 30 for future testing and/or remedial action. Be advised that my clients are of the view, particularly given the current financial situation as respects the UST Fund, that the cost-effective solution for this site is natural remediation.

You refer to the fact that the site is subject to a Cleanup and Abatement Order. I would like to revisit the issues which led to the adoption by the Board on November 20, 1998 of the Order.

In a meeting at your offices with Mr. Ken Williams, Ms. Leslie Alford, and my client's then-environmental consultant, Dr. Joshua Ong on July 2, 1998, which meeting was transcribed by a court reporter, and at the subsequent meeting of the Board on November 20, 1998, I argued that the predominant direction of groundwater flow was to the west, there was no danger of the site contaminating the lake, and that the existing drinking water wells (specifically including the "Pennsylvania Well" and the "Knickerbocker Well") were too far west of the site to possibly be affected by it. Mr. Williams argued that there was a possibility of contaminating the lake, and also of affecting a potential drinking water well at the Big Bear Marina, due north of the site.

Another issue raised by me was that the costs of remediation would be potential ruinous and unduly burdensome for the landowner. Mr. Williams, in his presentation to the Board, represented that the UST Fund would pay for the remediation efforts.

Subsequent events have proven each of Mr. William's assertions to be incorrect, and have rendered the premise(s) and the rationale(s) underlying the issuance of the CAO to be false. The proposed water well at the Big Bear Marina was never built, despite the passage of over ten

years. Three groundwater monitoring wells, MW8, MW14, and MW15, were installed four years ago directly to the north of the site and have produced nothing but "non-detect" readings. If there were any possibility of the hydrocarbon contamination emanating from the site reaching either the lake or the Big Bear Marina site, there would have been some detectable concentrations appearing at one or more of these three wells.

As you are aware, the UST Fund is not currently disbursing funds for corrective action costs, the remediation costs at this site have very nearly exhausted the allowable limit under the UST Cleanup Fund regulations, and our application for a new UST Fund claim for the site has been thus far denied, albeit a request for a Final Division Determination is pending. The assertion that the investigation and remediation efforts would not be financially deleterious to the landowners has been rendered inaccurate by events.

If you do not accept natural remediation as an acceptable method of dealing with the remaining underground hydrocarbon issues at this site, then we will have no option but to petition the Board to revisit the issues involved relative to its issuance of the CAO, reprise the contentions previously made by us as reinforced by the subsequent facts and events (both geological and financial), and seek either a modification or a rescinding of the CAO. Failing action by the Board to our satisfaction, we would then seek a writ of administrative mandamus from the courts. We simply cannot allow continued use of the CAO as a cudgel to bludgeon my clients into undertaking financially prohibitive, unreasonable, and cost-ineffective remediation efforts.

Sincerely



Duke L. Peters

Attorney for McWhirter Real Estate & Investment Co., Inc.

cc: Client
Leymaster Environmental Consulting

encl.

Tab 4

LEYMASTER ENVIRONMENTAL CONSULTING, LLC

April 13, 2009

Ms. Donna McWhirter
McWhirter Real Estate and Investment Co., Inc.
10523 Penfield Avenue
Chatsworth, California 91311

Subject: Groundwater Monitoring and Remediation Progress Report, First Quarter 2009, Former Wahl Texaco/Big Bear Chevron Service Station

Dear Ms. McWhirter:

In accordance with your request and at the direction of the California Regional Water Quality Control Board, Santa Ana Region, we have performed quarterly groundwater monitoring and operated/maintained remediation systems at the above location. The enclosed report describes the procedures and findings of these activities for your review.

The opportunity to provide this service is greatly appreciated. If you have any questions regarding this matter, please feel free to call our office at (562) 799-9866.

Sincerely,

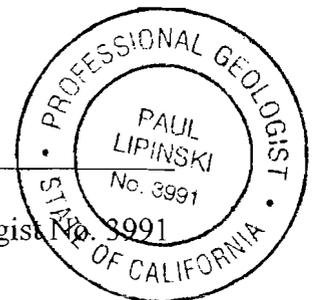
Leymaster Environmental Consulting, LLC



Mark Slater
Project Geologist



Paul Lipinski
California Professional Geologist No. 3991



Copy to: Ms. Valerie Jahn, SARWQCB

5500 E. Atherton Street, Suite 210
Long Beach, CA 90815
Office: (562) 799-9866 Fax: (562) 799-1963
www.leymaster.net

Groundwater Monitoring and Remediation Progress Report First Quarter 2009

**Former Wahl Texaco/Big Bear Chevron Service Station
40553 Big Bear Boulevard, Big Bear Lake, California
SARWQCB Case No. 083002579T, C.A.O. No. 98-112**

1.0. INTRODUCTION

Leymaster Environmental Consulting, LLC (LEC) was retained by McWhirter Real Estate and Investment Co., Inc. to perform quarterly groundwater monitoring and to operate and maintain a groundwater extraction and treatment system at Big Bear Chevron, 40553 Big Bear Boulevard, Big Bear Lake, California. These activities were required by the California Regional Water Quality Control Board, Santa Ana Region (SARWQCB) in Cleanup and Abatement Order (CAO) 98-112. A detailed scope of work is described in Section 3.0.

2.0. SITE INFORMATION AND BACKGROUND

The subject property is located in a commercial/residential area in the City of Big Bear Lake, California, at an elevation of approximately 6,765 feet. Residential areas are situated to the south and commercial/retail areas to the north, west and east of the property. Big Bear Lake is approximately 750 feet north of the site. Topography in the immediate area slopes to the north-northwest.

The service station on the property was formerly operated as Wahl Texaco and most recently as Big Bear Chevron. The current tenant has occupied the property for approximately six years. This site has been utilized as a service station for a number of years and there are no plans for a change in usage. The current fueling system includes two 10,000-gallon underground storage tanks (USTs) and six dispensers. One UST contains premium gasoline and the second tank is split between regular gasoline and diesel fuel. The USTs are located in the southwestern portion of the property. The general site layout is depicted on Figure 1 – *Site Plan*.

2.1. PREVIOUS ENVIRONMENTAL INVESTIGATIONS

Blakely Environmental, Inc. (BEI) reported that Toxic Technology, Inc. installed three groundwater monitoring wells and two vadose-zone wells on the subject property in May 1990. Following detection of a fuel leak in 1991, three USTs were removed from the site.

Hydrocarbon-impacted soil encountered below the USTs was excavated and removed. Two 10,000 USTs were installed to replace the removed USTs. BEI conducted quarterly groundwater monitoring in October 1993, December 1993 and April 1994.

During groundwater monitoring conducted in June 1994, dissolved-phase hydrocarbons were detected in monitoring well MW1. Total petroleum hydrocarbons as gasoline (TPH-g) were detected in the sample from MW1 at 1.47 milligrams per liter (mg/l) and benzene, toluene, ethylbenzene and xylenes (BTEX compounds) were detected at concentrations ranging from 96 to 220 micrograms per liter ($\mu\text{g/l}$).

During the third quarter monitoring event in 1995, methyl tert-butyl ether (MTBE) was detected in three monitoring wells at concentrations ranging from 220 $\mu\text{g/l}$ in the sample from MW1 to 18,000 $\mu\text{g/l}$ in the sample from MW3.

In December 1998, the District Attorney's office of the County of San Bernardino issued Cleanup and Abatement Order No. 98-112, requiring the installation of additional monitoring wells on and off-site to assess the groundwater contamination and to determine whether remediation would be necessary.

Several monitoring wells were reconstructed, relocated and installed in June 1999. Quarterly monitoring has continued since then.

The fuel dispensers and associated piping at the site were upgraded in October and November 1999. During soil sampling beneath the former dispensers, elevated soil concentrations of gasoline and associated compounds were encountered. As a result, over-excavation activities were conducted beneath the three dispenser islands.

Six additional monitoring wells (MW10 through MW15) were installed in March 2000, bringing the number of on- and off-site wells to fourteen. Analyses of soil samples taken from the pilot borings showed detectable concentrations of MTBE in most of the samples, particularly in the sample obtained at two feet below the surface in the boring for MW13. Quarterly monitoring was performed shortly after installation of the monitoring wells and concentrations of TPH-g, BTEX compounds and MTBE were detected in the samples from most wells, with the highest concentration of MTBE occurring in the sample from MW2A (48,000 $\mu\text{g/l}$). During this sampling event, tertiary butyl alcohol (TBA) was detected in for the first time, with the highest concentration in the sample from MW2A.

At the direction of the SARWQCB, a groundwater extraction and treatment system utilizing four of the existing monitoring wells (MW2A, MW3A, MW5 and MW6) was installed in June 2000. This system continuously extracts impacted groundwater and treats it through a four-stage carbon treatment process. Following treatment, the

processed groundwater is discharged into the municipal sewer system. The groundwater extraction and treatment systems continue to operate. A system update is included in this report.

In October 2000, an extended vapor-extraction test using a high-vacuum extraction system (HVES) was conducted. The test was moderately successful.

Three additional monitoring wells (MW16 through MW18) were installed in April 2001. Quarterly monitoring of the existing fourteen wells was conducted on March 26, 2001, and the three new wells were sampled on April 17, 2001. Laboratory results indicated that the newly installed monitoring wells defined the plume to the north, east and west.

An HVES was placed in operation at the site in February 2002. Due to cold weather and high-altitude effects on the system, startup was difficult. The system became fully operational on March 25, 2002, and remained operational until December 2002, when the owner of the property on which the HVES was located requested that it be removed. The HVES was removed in January 2003. Permitting and property ownership issues delayed relocation of the HVES until June 2003.

Due to increasing MTBE concentrations in the samples from MW10 and MW11, two groundwater extraction wells (MW10A and MW11A) were installed adjacent to MW10 and MW11 in April 2003. These wells were equipped with submersible pumps and were connected to the groundwater extraction system. These wells were also connected to the HVES when it was relocated in June 2003. As of June 2003 there were six wells (MW2A, MW3A, MW5, MW6, MW10A and MW11A) connected to the groundwater extraction system and five wells (MW2A, MW5, MW6, MW10A and MW11A) connected to the HVES.

Rebound testing of the HVES was conducted from February 9 through April 13, 2004. Several influent samples were obtained and none of the samples contained detectable concentrations of gasoline or associated compounds. The HVES system was removed in November 2004.

Annual Electronic Leak Monitoring System Inspection and Certification, including integrity testing of the central dispenser containment pan, was conducted on May 21, 2004. All secondary containment systems passed testing requirements. Site notes from the inspection indicated that the sensors were not programmed for fail-safe and that the overfill alarm and emergency shut-off switches were not operational. All items were repaired on the day of the inspection.

In September 2004, the dispensers were again upgraded by the current tenant. Reportedly, this was an above-ground upgrade only and the dispenser pans were not disturbed.

As directed in a SARWQCB letter dated December 22, 2004, two additional wells, (MW1 and MW13) were connected to the groundwater extraction and treatment system in July 2005.

A three day vapor-extraction pilot study was conducted from September 20 to September 22, 2005. A positive displacement vapor-extraction system was connected to monitoring wells MW1 and MW13 while the submersible pumps remained in operation. Influent vapor samples were taken twice daily. Analytical results from the vapor samples indicated that no compounds of concern were present in the influent stream.

Two additional groundwater monitoring wells (MW19 and MW20) were installed on June 22, 2006. The locations of all wells are depicted on Figure 1.

Quarterly monitoring has continued through March 2009.

2.2. GEOLOGIC SETTING

Big Bear Chevron is located in the San Bernardino Mountains, which are part of the Transverse Ranges Geomorphic Province. The Transverse Ranges are characterized by great topographic contrasts and are divisible into thirteen topographic and geologic units. The San Bernardino Mountains, one of these divisions, are composed predominately of gneisses, schists, plutonic rocks and some Paleozoic sedimentary rocks (California Division of Mines, 1954, *Geology of Southern California*, Bulletin 170).

The bedrock in the vicinity of the site consists of Cretaceous or Jurassic quartz monzonite (California Division of Mines and Geology, 1986, *Geologic Map of the San Bernardino Quadrangle*). Sediments encountered during drilling operations range from silty clay to medium-grained sand with silty clay being the most frequently observed sediment.

2.3. HYDROGEOLOGY AND HYDROLOGY

The nearest major surface water, Big Bear Lake, is approximately 750 feet north of the site. Numerous ephemeral streams are present east and west of the site.

Previous drilling activity indicates that several older drainage channels are present in the mountainous terrain south and west of the site. These older channels have been buried by more recent sedimentation and most likely control much of the subsurface groundwater flow south and west of the site.

Groundwater flow direction in the area surrounding Big Bear Chevron is generally to the north-northwest. Groundwater in the Big Bear area occurs in undifferentiated alluvium, is considered of "beneficial use" and is utilized primarily for municipal purposes.

3.0. SCOPE OF WORK

Eighteen monitoring and extraction wells were sampled on March 26, 2009. Extraction wells MW10A and MW11A were not sampled due to their proximity to MW10 and MW11 respectively.

4.0. GROUNDWATER MONITORING AND SAMPLING

In June 2007 the well casing of MW15 was damaged from boat trailer storage. The well has been repaired; however, the well head elevation has not been resurveyed following repair and the well was not used to develop groundwater contours.

After the depth to groundwater was measured, wells not connected to the groundwater extraction system were purged using low-flow sampling techniques to obtain samples from those wells not attached to the extraction system. Dedicated 12-volt submersible sampling pumps manufactured by Proactive Environmental Products were installed in each of the monitoring wells with the exception of MW18.

The sampling pumps were connected to a low-flow sampling controller. The controller was then connected to a 12-volt battery. Flow rates from the wells averaged approximately ½ gallon per minute. The volume of groundwater extracted from each well varied between 3 and 4 gallons. Temperature, pH, electrical conductivity and redox potential of the purged well water were monitored continuously using a Hanna water meter. The monitoring wells were purged until the temperature and pH stabilized to approximately 10%. Groundwater field sheets are included in Appendix A. Purged groundwater was placed in the influent tank of the groundwater treatment system.

After the monitored parameters stabilized, groundwater samples were obtained directly from the discharge hose of the sampling pump. Samples from the extraction wells were obtained from sample ports located at the well head or by lowering bailers directly into the well. The samples were taken in two EPA-approved 40-ml VOA-vials capped with Teflon-faced silicone septa and placed in a chilled container for transport to a State-certified laboratory.

The groundwater samples were transported under chain-of-custody to Cal Tech Environmental Laboratories for analysis. All samples were analyzed to determine concentrations of TPH-g and volatile organic compounds (VOCs) including fuel oxygenates using EPA Methods 8015M and 8260B, respectively.

5.0. GROUNDWATER ELEVATIONS

The casing elevations, depths to groundwater and groundwater elevations for the monitoring wells are summarized in Table 1.

Groundwater elevations increased in all the wells measured this quarter. Increases ranged from 1.72 feet in MW16 to 8.20 feet in MW10. The elevation increase in MW10 indicates that the extraction pump in the adjacent extraction well may not be working correctly.

The prevailing groundwater flow direction was to the north-northwest. Groundwater contours were not developed for Figure 2 due to the effects of groundwater extraction.

6.0. GROUNDWATER ANALYTICAL RESULTS

TPH-g was detected in 6 of the 18 groundwater samples collected during the March 2009 monitoring event. Concentrations ranged from 360 µg/l in the sample from MW7 to 8,000 µg/l in the sample from MW1. Figure 3 shows the groundwater TPH-g concentrations and contours. TPH-g was detected in the sample from MW14 during the December 2008 monitoring event but was not detected this quarter.

MTBE was detected in 9 of the 18 samples during the March 2009 monitoring event. Concentrations ranged from 54 µg/l in the sample from MW2A to 6,300 µg/l in the sample from MW1. An MTBE contour map is included as Figure 4.

Benzene, toluene, ethylbenzene, total xylenes (BTEX) and trimethylbenzenes were not detected in any of the samples this quarter. T-amyl methyl ether (TAME) was detected in the samples from MW1 (31 µg/l), MW5 (13 µg/l) and MW13 (40 µg/l). No other fuel oxygenates were detected this quarter.

The analytical results are summarized in Table 2. Previous groundwater analytical results are included in Appendix B. The Cal Tech Environmental Laboratories report is included in Appendix C.

7.0. REMEDIAL ACTION UPDATE

The following sections detail current remedial activities and evaluate the recent performance of the groundwater extraction system.

7.1. SYSTEM OPERATION AND PERFORMANCE

The groundwater extraction and treatment system operated continuously from December 3, 2008 to March 26, 2009

As of December 3, 2008, a total of 7,736,666 gallons of groundwater had been extracted, treated and discharged. Between December 3, 2008, and March 26, 2009, 305,002 gallons of groundwater were extracted, a cumulative total of 8,046,667 gallons.

Analytical data for the extraction wells from April 5, 2000, (the start date of the groundwater extraction system) to March 2009 are summarized in Table 3. Time vs. Concentration graphs for the eight extraction wells are included in Appendix D. Two graphs per well have been produced. The second graphs reflect a shorter time period, allowing for better evaluation of recent trends in the extraction wells.

In the March 2009 monitoring event, TPH-g concentrations in the extraction wells increased in some samples and decreased in others compared to the December 2008 monitoring event. The most notable increase occurred in MW5, where the TPH-g concentrations increased from below laboratory detection limits to 19 mg/l. A significant increase in TPH-g concentration, 1.9 mg/l to 4 mg/l also occurred in MW13. The most significant TPH-g decreases occurred in the samples from MW11, where the concentrations decreased from 15 mg/l to below laboratory detection limits and in MW6, where the TPH-g concentration decreased from 11 mg/l to below laboratory detection limits. Decreases in concentrations are often observed at times of high groundwater in these wells.

MTBE concentrations in the extraction wells followed a similar trend to TPH-g. The most notable increases in MTBE occurred in MW5, where the concentrations went from 43 µg/l in December 2008 to 1,300 µg/l in March 2009. Concentrations in MW1 also increased, from 2,400 µg/l to 6,300 µg/l. Notable decreases were seen in the March 2009 samples compared to the December 2008 samples. The concentration in MW11 decreased from 14,000 µg/l to 55 µg/l while the concentration in MW6 decreased from 9,600 µg/l to below laboratory detection limits.

Samples from MW2A have shown generally decreasing concentrations in recent sampling events. A slight increase in concentrations was observed in the September 2008 event; however, TPH-g concentrations have decreased in the last two quarters. MTBE concentrations increased slightly from 20 µg/l in the December 2008 event to 54 µg/l in the March 2009 event. Concentrations in the sample from MW3A spiked in the September 2008 event, probably due to broken process piping at the well head. Concentrations of TPH-g and MTBE dropped to below laboratory detection limits in the December 2008 monitoring event. In the March 2009 event TPH-g remained below laboratory limits; however, MTBE concentration increased to 120 µg/l.

MW5 sample concentrations have fluctuated. Additionally, samples from this well contained benzene, toluene and xylenes in the Fourth Quarter 2006 and First Quarter 2007 samples. In the December 2008 monitoring event, all contaminants of concern

(COCs) were below laboratory detection limits, with the exception of MTBE which was detected at 43 µg/l. A substantial increase in TPH-g (1,900 µg/l) and MTBE (1,300 µg/l) was observed this quarter.

With the exception of a spike seen in December 2007, concentrations of TPH-g in the samples from MW6 have generally decreased since March 2003. In the December 2008 monitoring event significant increases in both TPH-g and MTBE were observed. TPH-g concentrations increased from below laboratory detection limits in the September event to 11,000 µg/l in the December 2008 event. MTBE concentrations increased from below laboratory detection limits to 9,600 µg/l. Recent data indicate that increases in concentrations occur during December monitoring events in this extraction well. In the March 2009 monitoring event, concentrations were below laboratory detection limits for both TPH-g and MTBE.

With the exception of a spike in the sample from the December 2007 monitoring event, TPH-g concentrations in the samples from MW10 have also shown a generally decreasing trend since the March 2005 monitoring event. This quarter, both TPH-g and MTBE showed slight increases. Historical data from this well also indicates increases in concentrations in the December monitoring events. In the March 2009 monitoring event, concentrations were below laboratory detection limits for both TPH-g and MTBE.

Recent analytical results from extraction well MW11 have varied. Historical data from this well also indicates increases in concentrations in the December monitoring events. The submersible pump in this well is set approximately 10 feet deeper than the remaining extraction wells. This quarter TPH-g concentrations decreased from 15,000 µg/l to below laboratory detection limits and MTBE concentrations decreased from 14,000 µg/l to 55 µg/l compared to the December 2008 event. This pattern is usually seen at times of high groundwater.

TPH-g and MTBE concentrations in the samples from extraction well MW1 have fluctuated since December 2006, with an increasing trend observed in the last three quarters. This quarter TPH-g was detected at 8,000 µg/l and MTBE was detected at 11,000 µg/l. These are the highest concentrations detected in this extraction well since March 2005.

TPH-g and MTBE analytical results for the samples from extraction well MW13 have shown the greatest variance of any of the extraction wells since September 2005. The TPH-g concentrations this quarter increased from 1,900 µg/l to 4,600 µg/l compared to the December 2008 event and the MTBE concentrations increased from 1,800 µg/l to 4,500 µg/l. These are the highest concentrations seen in this extraction since December 2007.

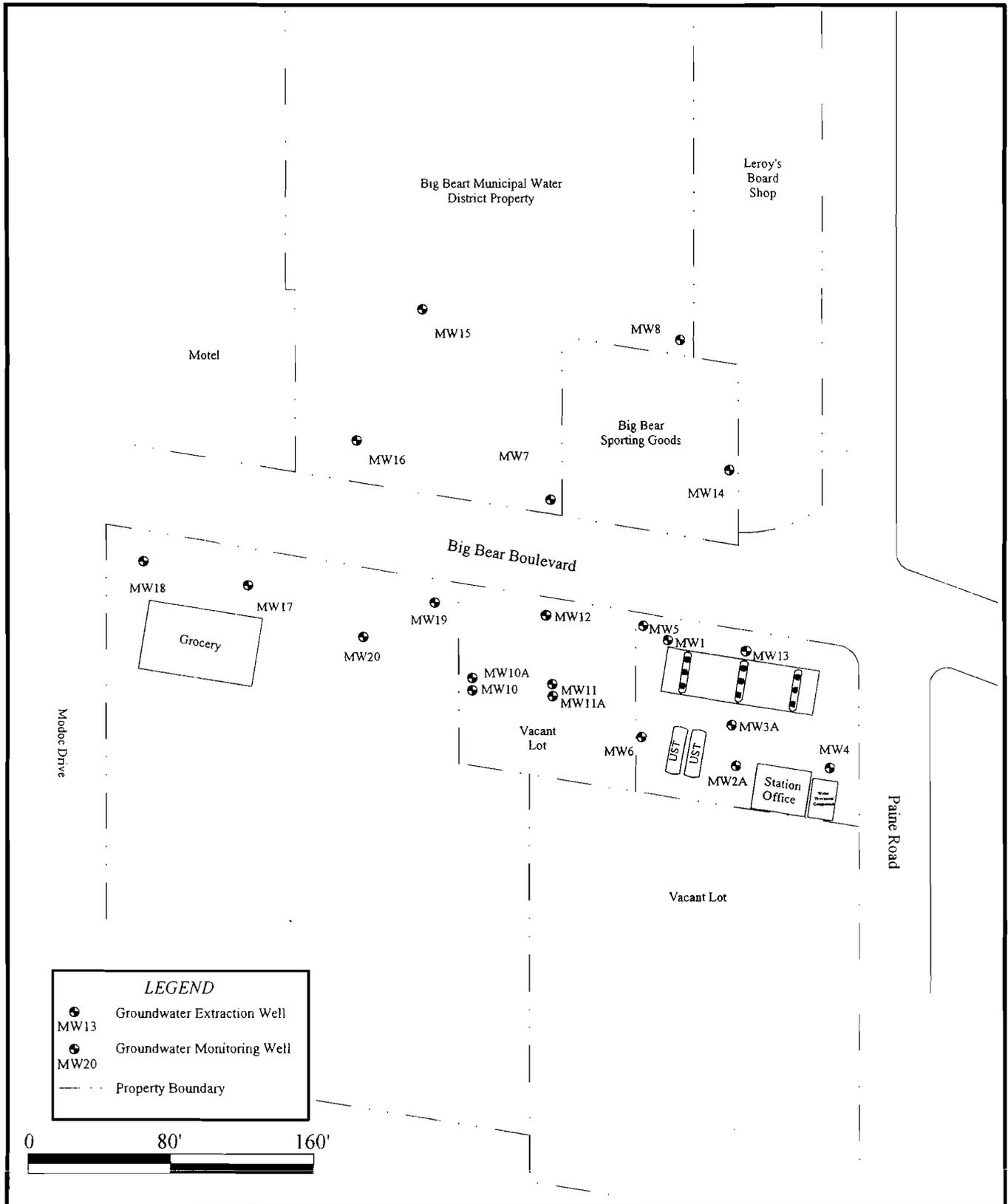
Of the downgradient wells, TPH-g concentrations decreased this quarter in monitoring well MW7 from 400 µg/l to 360 µg/l and MTBE concentrations decreased from 340 µg/l to 320 µg/l compared with the December 2008 event. TPH-g concentrations in monitoring well MW12 increased from 260 µg/l to 1,500 µg/l and MTBE concentrations increased from 220 µg/l to 1,400 µg/l. In monitoring well MW15 concentrations remained below laboratory detection limits. TPH-g concentrations in MW16 increased from 190 µg/l to 820 µg/l and MTBE concentrations increased from 150 µg/l to 800 µg/l. These are the highest concentrations ever observed in monitoring well MW16.

8.0. CONCLUSIONS AND RECOMMENDATIONS

Considering the existing site conditions and observations, the following conclusions and recommendations are presented:

- Detections of toluene, ethylbenzene and xylenes in monitoring well MW7 in the Third Quarter 2008 were not repeated in the Fourth Quarter 2008 or the First Quarter 2009.
- Detection of TPH-g in MW14 during the Fourth Quarter 2008 was not repeated this quarter.
- LEC will provide McWhirter Real Estate and Investment Co., Inc. with a feasibility study and recommendations for further corrective action.

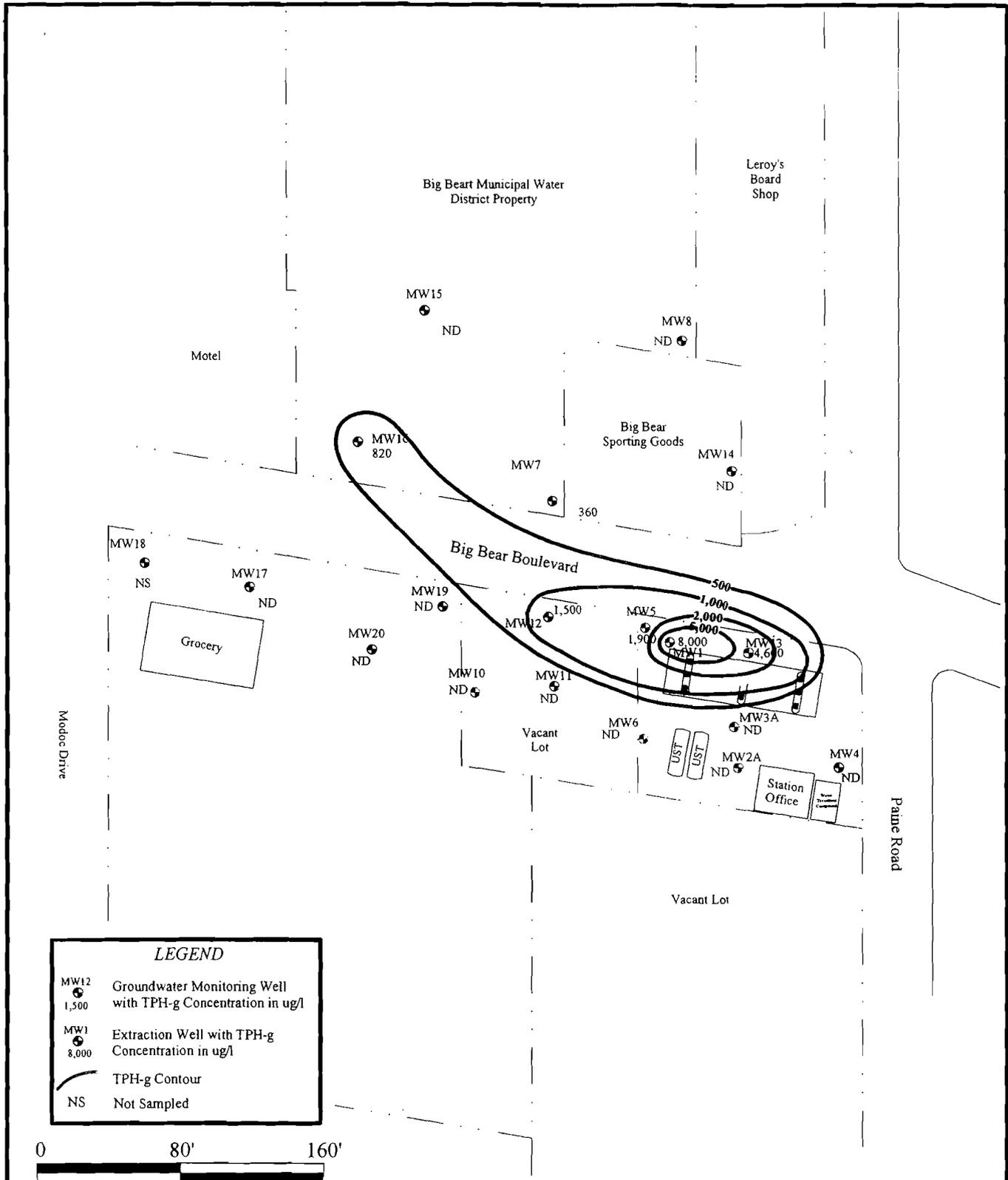
Figures



Leymaster Environmental Consulting, LLC
 5500 E. Atherton St., Suite 210
 Long Beach, CA 90815

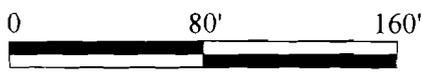
Site Plan	
40553 Big Bear Boulevard Big Bear Lake, CA	
Figure 1	April 13, 2009

Scale: 1" = 80'



LEGEND

MW12 1,500	Groundwater Monitoring Well with TPH-g Concentration in ug/l
MW1 8,000	Extraction Well with TPH-g Concentration in ug/l
—	TPH-g Contour
NS	Not Sampled

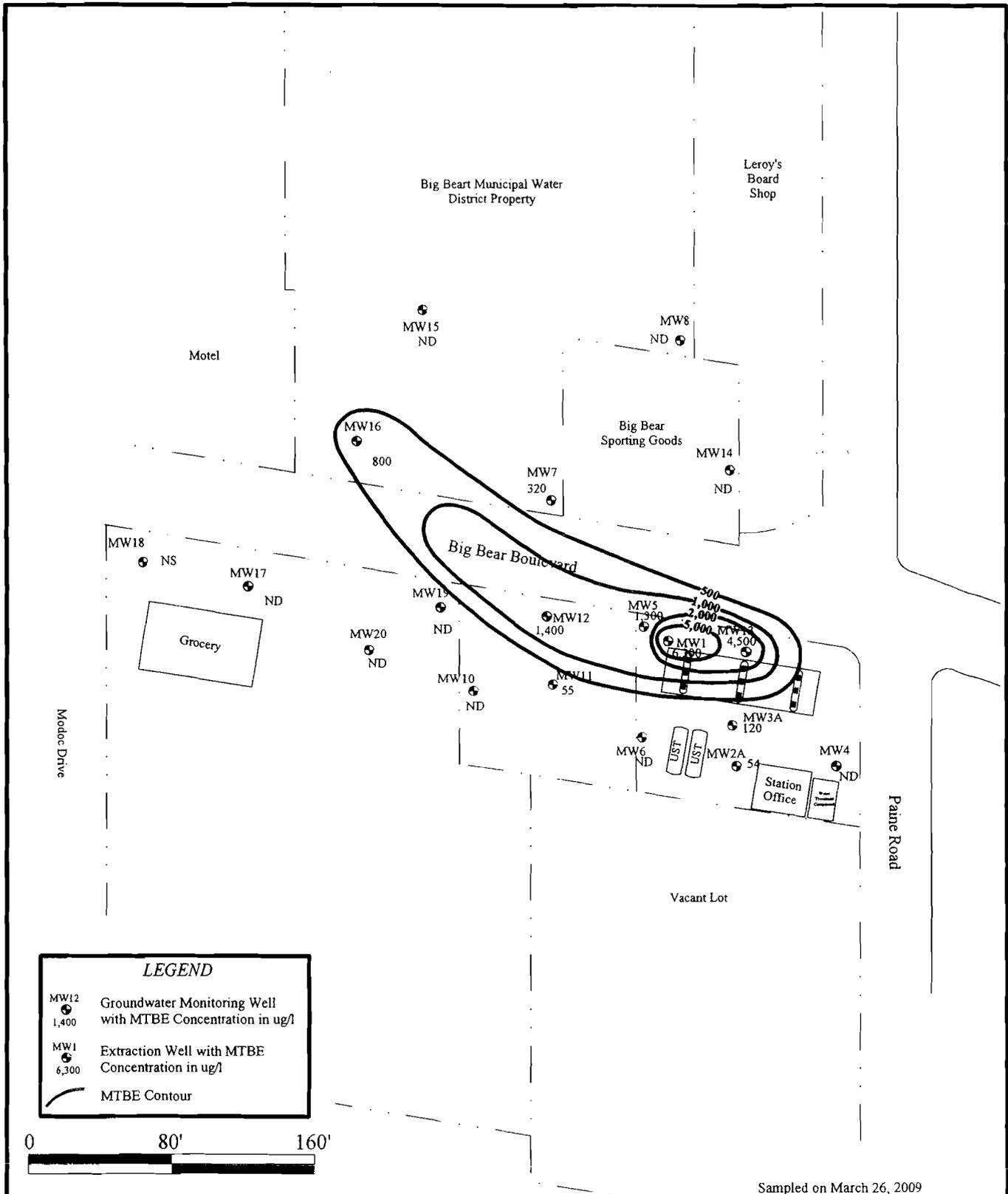


Sampled on March 26, 2009

Scale: 1" = 80'

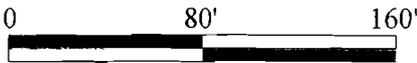
Leymaster Environmental Consulting, LLC
 5500 E. Atherton St., Suite 210
 Long Beach, CA 90815

TPH-g Concentrations
 40553 Big Bear Boulevard
 Big Bear Lake, CA
 Figure 3 April 13, 2009

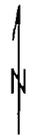


LEGEND

- MW12 1,400 Groundwater Monitoring Well with MTBE Concentration in ug/l
- MW1 6,300 Extraction Well with MTBE Concentration in ug/l
- MTBE Contour



Sampled on March 26, 2009



Scale: 1" = 80'

Leymaster Environmental Consulting, LLC 5500 E. Atherton St., Suite 210 Long Beach, CA 90815	MTBE Contours	
	40553 Big Bear Boulevard Big Bear Lake, CA	
	Figure 4	April 13, 2009

Tables

Table 2
Big Bear Texaco/Chevron - Current Groundwater Analytical Results
40553 Big Bear Boulevard
Big Bear Lake, California

Well Number	Sample Date	TPH-g (mg/l)	BTEX (ug/l)				Trimethyl-benzenes	MTBE (ug/l)	TBA/TAME (ug/l)
			Benzene	Toluene	Ethylbenzene	Xylenes			
MW1	6/23/05	6.8	550	17	140	130		3,600	<25/22
	9/21/05	8.3	350	26	<0.5	27		5,300	<25/22
	12/21/05	1.6	<0.5	<0.5	<0.5	<0.6		1,600	<25/6.3
	4/12/06	0.4	<0.5	<0.5	<0.5	<0.6		120	<25<1
	6/30/06	<0.050	<0.5	<0.5	<0.5	<0.6		13	<25/<1
	9/13/06	1.5	<0.5	<0.5	<0.5	<0.6		1,500	<25/16
	12/28/06	1.5	<0.5	<0.5	<0.5	<0.6		1,400	<25/24
	4/4/07	1.9	<0.5	<0.5	<0.5	<0.6		1,700	<25/23
	6/20/07	1.4	11	25	<0.5	76		760	<25/14
	10/2/07	Unable to sample. Control panel for submersible pump not operating.							
	12/27/07	1.0	<0.5	<0.5	<0.5	<1.2		880	<25/13
	3/28/08	1.3	<0.5	<0.5	<0.5	<1.2		1,300	<25/25
	6/12/08	2.8	<0.5	<0.5	<0.5	<1.0		2,600	<25/23
	9/16/08	2.3	<0.5	<0.5	<0.5	<1.0		2,200	<10/19
	12/4/08	4.4	<0.5	<0.5	12	21	34	2,400	<10/84
3/26/09	8.0	<0.5	<0.5	<0.5	<1	<2	6,300	<10/31	
MW2A	6/23/05	<0.050	<0.5	<0.5	<0.5	<0.6		13	<25/<1
	9/21/05	3.8	<0.5	<0.5	<0.5	<0.6		3,700	<25/49
	12/21/05	0.8	<0.5	<0.5	<0.5	<0.6		800	<25/6.0
	4/12/06	<0.050	<0.5	<0.5	<0.5	<0.6		37	<25<1
	6/30/06	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	9/13/06	1.7	<0.5	<0.5	<0.5	<0.6		1,600	<25/45
	12/28/06	0.9	<0.5	<0.5	<0.5	<0.6		750	<25/21
	4/4/07	<0.050	<0.5	<0.5	<0.5	<0.6		57	<25/17
	6/20/07	<0.050	<0.5	<0.5	<0.5	<0.6		33	<25/<1
	10/2/07	1.1	<0.5	<0.5	<0.5	<0.6		1,000	<25/35
	12/27/07	<0.050	<0.5	<0.5	<0.5	<1.2		98	<25/<1
	3/28/08	<0.050	<0.5	<0.5	<0.5	<1.2		11	<25/<1
	6/12/08	<0.050	<0.5	<0.5	<0.5	<1.0		39	<25/<1
	9/16/08	0.35	<0.5	<0.5	<0.5	<1		310	<10/<1
	12/4/08	0.29	<0.5	2.2	<0.5	25	6.5	20	<10/<1
3/26/09	<0.050	<0.5	<0.5	<0.5	<1	<2	54	<10/<1	
MW3A	6/23/05	<0.050	<0.5	<0.5	<0.5	<0.6		82	<25/<1
	9/21/05	0.14	<0.5	<0.5	<0.5	<0.6		140	<25/<1
	12/21/05	0.4	<0.5	<0.5	<0.5	<0.6		420	<25<1
	4/12/06	1.0	<0.5	<0.5	<0.5	<0.6		990	<25<1
	6/30/06	<0.050	<0.5	<0.5	<0.5	<0.6		30	<25/9.6
	9/13/06	1.8	<0.5	<0.5	<0.5	<0.6		1,600	<25/41
	12/28/06	2.0	<0.5	<0.5	<0.5	<0.6		1,900	<25/41
	4/4/07	2.0	<0.5	<0.5	<0.5	<0.6		1,900	<25/37
	6/20/07	<0.050	<0.5	<0.5	<0.5	<0.6		9.1	<25/<1
	10/2/07	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	12/27/07	<0.050	<0.5	<0.5	<0.5	<1.2		95	<25/<1
	3/28/08	<0.050	<0.5	<0.5	<0.5	<1.2		29	<25/<1
	6/12/08	<0.050	<0.5	<0.5	<0.5	<1.0		23	<25/<1
	9/16/08	1.3	<0.5	<0.5	<0.5	<1		1,200	<10/<1
	12/4/08	<0.050	<0.5	2.2	<0.5	<1	<2	<1	<10/<1
3/26/09	<0.050	<0.5	<0.5	<0.5	<1	<2	120	<10/<1	

Table 2
Big Bear Texaco/Chevron - Current Groundwater Analytical Results
40553 Big Bear Boulevard
Big Bear Lake, California

Well Number	Sample Date	TPH-g (mg/l)	BTEX (ug/l)				Trimethyl-benzenes	MTBE (ug/l)	TBA/TAME (ug/l)
			Benzene	Toluene	Ethylbenzene	Xylenes			
MW4	6/23/05	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	9/21/05	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	12/21/05	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	4/12/06	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	6/30/06	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	9/13/06	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	12/28/06	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	4/4/07	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	6/20/07	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	10/2/07	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	12/27/07	Unable to sample. Well covered by ice sheet.							
	3/28/08	Unable to sample. Well obstructed by large truck.							
	6/12/08	<0.050	<0.5	<0.5	<0.5	<1.0		<5	<25/<1
	9/16/08	<0.050	<0.5	<0.5	<0.5	<1		<5	<10/<1
	12/4/08	Well obstructed.							
3/26/09	<0.050	<0.5	<0.5	<0.5	<1	<2	<1	<10/<1	
MW5	6/23/05	2	<0.5	<0.5	<0.5	<0.6		2,000	<25/9.2
	9/21/05	2.9	<0.5	<0.5	<0.5	<0.6		2,700	<25/10
	12/21/05	1.1	<0.5	<0.5	<0.5	<0.6		1,100	<25/3.4
	4/12/06	0.23	<0.5	<0.5	<0.5	<0.6		200	<25/<1
	6/30/06	<0.050	<0.5	<0.5	<0.5	<0.6		10	<25/<1
	9/13/06	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	12/28/06	1.9	20	9.1	<0.5	11		1,400	<25/23
	4/4/07	1.9	<0.5	8.8	<0.5	9.6		1,300	<25/22
	6/20/07	0.8	<0.5	<0.5	<0.5	3.9		140	<25/<1
	10/2/07	1.2	<0.5	<0.5	<0.5	<0.6		1,200	<25/<1
	12/27/07	0.9	<0.5	<0.5	<0.5	<1.2		800	<25/3.8
	3/28/08	0.42	<0.5	<0.5	<0.5	<1.2		300	<25/<1
	6/12/08	0.6	<0.5	<0.5	<0.5	<1.0		530	<25/<1
	9/16/08	<0.050	<0.5	<0.5	<0.5	<1		<1	<10/1
	12/4/08	<0.050	<0.5	<0.5	<0.5	<1	<2	43	<10/<1
3/26/09	1.9	<0.5	<0.5	<0.5	<1	<2	1,300	<10/13	
MW6	6/23/05	6	<0.5	<0.5	<0.5	<0.6		5,900	<25/49
	9/21/05	6	<0.5	<0.5	<0.5	<0.6		5,900	<25/22
	12/21/05	3.4	<0.5	<0.5	<0.5	<0.6		3,300	<25/15
	4/12/06	0.2	<0.5	<0.5	<0.5	<0.6		180	<25/<1
	6/30/06	<0.050	<0.5	<0.5	<0.5	<0.6		23	<25/4.2
	9/13/06	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	12/28/06	5.6	<0.5	<0.5	<0.5	<0.6		5,500	<25/56
	4/4/07	<0.050	<0.5	<0.5	<0.5	<0.6		35	<25/<1
	6/20/07	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	10/2/07	1.2	<0.5	<0.5	<0.5	<0.6		1,200	<25/<1
	12/27/07	20	<0.5	<0.5	<0.5	<1.2		19,000	<25/3.8
	3/28/08	2.7	<0.5	<0.5	<0.5	<1.2		2,500	<25/29
	6/12/08	<0.050	<0.5	<0.5	<0.5	<1.0		<5	<25/<1
	9/16/08	<0.050	<0.5	<0.5	<0.5	<1		<5	<10/<1
	12/4/08	11.0	<0.5	<0.5	<0.5	<1	<2	9,600	<10/440
3/26/09	<0.050	<0.5	<0.5	<0.5	<1	<2	<1	<10/<1	

Table 2

Big Bear Texaco/Chevron - Current Groundwater Analytical Results

40553 Big Bear Boulevard
Big Bear Lake, California

Well Number	Sample Date	TPH-g (mg/l)	BTEX (ug/l)				Trimethyl-benzenes	MTBE (ug/l)	TBA/TAME (ug/l)
			Benzene	Toluene	Ethylbenzene	Xylenes			
MW7	6/23/05	<0.050	<0.5	<0.5	<0.5	<0.6		87	<25/<1
	9/21/05	0.18	<0.5	<0.5	<0.5	<0.6		180	<25/<1
	12/21/05	<0.050	<0.5	<0.5	<0.5	<0.6		32	<25/<1
	4/12/06	0.2	<0.5	<0.5	<0.5	<0.6		190	<25/<1
	6/30/06	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	9/13/06	<0.050	<0.5	<0.5	<0.5	<0.6		44	<25/<1
	12/28/06	0.1	<0.5	<0.5	<0.5	<0.6		100	<25/17
	4/4/07	0.120	<0.5	<0.5	<0.5	<0.6		97	<25/18
	6/20/07	<0.050	<0.5	<0.5	<0.5	<0.6		37	<25/<1
	10/2/07	<0.050	<0.5	<0.5	<0.5	<0.6		43	<25/<1
	12/27/07	0.300	<0.5	<0.5	<0.5	<1.2		270	<25/<1
	3/28/08	<0.050	<0.5	<0.5	<0.5	<1.2		61	<25/<1
	6/12/08	0.150	<0.5	<0.5	<0.5	<1.0		160	<25/<1
	9/16/08	2.400	<0.5	72	12	359		180	<10/<1
	12/4/08	0.400	<0.5	<0.5	<0.5	<1	<2	340	<10/12
3/26/09	0.360	<0.5	<0.5	<0.5	<1	<2	320	<10/<1	
MW8	6/23/05	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	9/21/05	Well obstructed by pontoons in boat yard. Not sampled.							
	12/21/05	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	4/12/06	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	6/30/06	Well placed on annual sampling							
	9/13/06	Well placed on annual sampling							
	12/28/06	<50	<0.5	<0.5	<0.5			<5	<25/<1
	4/4/07	Well placed on annual sampling							
	6/20/07	0.2	<0.5	<0.5	2.2	1.3		<5	<25/<1
	10/2/07	Well placed on annual sampling							
	12/27/07	Well placed on annual sampling							
	3/28/08	Well placed on annual sampling							
	6/12/08	<0.050	<0.5	<0.5	<0.5	<1.0		<5	<25/<1
	9/16/08	Well placed on annual sampling.							
12/4/08	Well placed on annual sampling.								
	3/26/09	<0.050	<0.5	<0.5	<0.5	<1.0	<2	<5	<25/<1
MW10	6/23/05	2	<0.5	<0.5	<0.5	<0.6		2,000	<25/5.8
	9/21/05	1	<0.5	<0.5	<0.5	<0.6		1,000	<25/4.5
	12/21/05	0.4	<0.5	<0.5	<0.5	<0.6		420	<25/<1
	4/12/06	1.2	<0.5	<0.5	<0.5	<0.6		1,200	<25/<1
	6/30/06	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	9/13/06	0.110	<0.5	<0.5	<0.5	<0.6		91	<25/<1
	12/28/06	0.230	<0.5	<0.5	<0.5	<0.6		230	<25/18
	4/4/07	0.250	<0.5	<0.5	<0.5	<0.6		240	<25/18
	6/20/07	<0.050	<0.5	<0.5	<0.5	<0.6		33	<25/<1
	10/2/07	0.220	<0.5	<0.5	<0.5	<0.6		210	<25/<1
	12/27/07	1.5	<0.5	<0.5	<0.5	<1.2		1,400	<25/15
	3/28/08	0.1	<0.5	<0.5	<0.5	<1.2		88	<25/<1
	6/12/08	<0.050	<0.5	<0.5	<0.5	<1.0		28	<25/<1
	9/16/08	<0.050	<0.5	<0.5	<0.5	<1		<5	<10/<1
12/4/08	0.2	<0.5	<0.5	<0.5	<1	<2	90	<25/<1	
3/26/09	<0.050	<0.5	<0.5	<0.5	<1	<2	<1	<10/<1	

Table 2
Big Bear Texaco/Chevron - Current Groundwater Analytical Results
 40553 Big Bear Boulevard
 Big Bear Lake, California

Well Number	Sample Date	TPH-g (mg/l)	BTEX (ug/l)				Trimethyl-benzenes	MTBE (ug/l)	TBA/TAME (ug/l)
			Benzene	Toluene	Ethylbenzene	Xylenes			
MW11	6/23/05	9	<0.5	<0.5	<0.5	<0.6		9,000	<25/79
	9/21/05	29	<0.5	<0.5	<0.5	<0.6		28,000	<25/160
	12/21/05	11	<0.5	<0.5	<0.5	<0.6		11,000	<25/26
	4/12/06	9.0	<0.5	<0.5	<0.5	<0.6		8,700	<25<1
	6/30/06	0.190	<0.5	<0.5	<0.5	<0.6		43	<25/6.8
	9/13/06	14	<0.5	<0.5	<0.5	<0.6		13,000	<25/99
	12/28/06	11	<0.5	<0.5	<0.5	<0.6		10,000	<25/76
	4/4/07	10	<0.5	<0.5	<0.5	<0.6		8,800	<25/66
	6/20/07	3.2	<0.5	<0.5	<0.5	<0.6		3,000	<25/16
	10/2/07	5.2	<0.5	<0.5	<0.5	<0.6		5,100	<25/40
	12/27/07	25	<0.5	<0.5	<0.5	<1.2		24,000	<25/260
	3/28/08	2.7	<0.5	<0.5	<0.5	<1.2		2,500	<25/31
	6/12/08	1.8	<0.5	<0.5	<0.5	<1.0		1,800	<25/34
	9/16/08	9.6	<0.5	<0.5	<0.5	<1		9,400	<10/<1
12/4/08	15.0	<0.5	<0.5	<0.5	<1	<2	14,000	<10/600	
3/26/09	<0.050	<0.5	<0.5	<0.5	<1	<2	55	<10/<1	
MW12	6/23/05	1.8	<0.5	<0.5	<0.5	<0.6		1,600	<25/3
	9/21/05	1.3	<0.5	<0.5	<0.5	<0.6		1,300	<25/<1
	12/21/05	0.4	<0.5	<0.5	<0.5	<0.6		370	<25/<1
	4/12/06	0.9	<0.5	<0.5	<0.5	<0.6		860	<25/<1
	6/30/06	<0.050	<0.5	<0.5	<0.5	<0.6		6.8	<25/<1
	9/13/06	0.8	<0.5	<0.5	<0.5	<0.6		760	<25/3.6
	12/28/07	0.8	<0.5	<0.5	<0.5	<0.6		750	<26/18
	4/4/07	1.2	<0.5	<0.5	<0.5	<0.6		1,200	<25/19
	6/20/07	0.2	<0.5	<0.5	<0.5	<0.6		190	<25/<1
	10/2/07	0.14	<0.5	<0.5	<0.5	<0.6		120	<25/<1
	12/27/07	1.8	<0.5	<0.5	<0.5	<1.2		1,700	<25/7.4
	3/28/08	<0.050	<0.5	<0.5	<0.5	<1.2		64	<25/<1
	6/12/08	0.4	<0.5	<0.5	<0.5	<1.0		380	<25/<1
	9/16/08	0.6	<0.5	<0.5	<0.5	<1		540	<10/<1
12/4/08	0.26	<0.5	<0.5	<0.5	<1	<2	220	<25/<1	
3/26/09	1.5	<0.5	<0.5	<0.5	<1	<2	1,400	<10/<1	
MW13	6/23/05	2.5	<0.5	<0.5	<0.5	9.6		1700	<25/31
	9/21/05	8.2	2,200	440	150	950		2,300	<25/17
	12/21/05	0.3	<0.5	440	<0.5	<0.6		300	<25/<1
	4/12/06	4.1	<0.5	440	<0.5	<0.6		4,100	<25/<1
	6/30/06	0.140	<0.5	440	<0.5	10		7.2	<25/<1
	9/13/06	1.7	<0.5	<0.5	<0.5	<0.6		1,600	<25/18
	12/28/06	1.4	<0.5	<0.5	<0.5	<0.6		1,300	<25/26
	4/4/07	1.0	<0.5	<0.5	<0.5	<0.6		960	<25/21
	6/20/07	0.26	<0.5	<0.5	<0.5	<0.6		230	<25/<1
	10/2/07	Unable to sample. Control panel for submersible pump not operating.							
	12/27/07	9.0	25	8.7	<0.5	26		6,700	<25/36
	3/28/08	0.9	<0.5	<0.5	<0.5	<1.2		850	<25/20
	6/12/08	0.8	<0.5	<0.5	<0.5	<1.0		680	<25/23
	9/16/08	4.2	7.4	<0.5	<0.5	<1		3,900	<10/<1
12/4/08	1.9	<0.5	<0.5	<0.5	<1	<2	1,800	<10/<1	
3/26/09	4.6	<0.5	<0.5	<0.5	<1	<2	4,500	<10/40	

Table 2
Big Bear Texaco/Chevron - Current Groundwater Analytical Results
40553 Big Bear Boulevard
Big Bear Lake, California

Well Number	Sample Date	TPH-g (mg/l)	BTEX (ug/l)				Trimethyl-benzenes	MTBE (ug/l)	TBA/TAME (ug/l)
			Benzene	Toluene	Ethylbenzene	Xylenes			
MW14	6/23/05	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	9/21/05	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	12/21/05	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	4/12/06	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	6/30/06	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	9/13/06	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	12/28/06	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	4/4/07	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	6/20/07	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	10/2/07	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	12/27/07	<0.050	<0.5	<0.5	<0.5	<1.2		31	<25/<1
	3/28/08	<0.050	<0.5	<0.5	<0.5	<1.2		<5	<25/<1
	6/12/08	<0.050	<0.5	<0.5	<0.5	<1.0		<5	<25/<1
	9/16/08	<0.050	<0.5	<0.5	<0.5	<1		<1	<25/<1
12/4/08	0.5	<0.5	<0.5	<0.5	<1	<2	<1	<10/<1	
3/26/09	<0.050	<0.5	<0.5	<0.5	<1	<2	<1	<10/<1	
MW15	6/23/05	<0.050	<0.5	<0.5	<0.5	<0.6		14	<25/<1
	9/21/05	Well obstructed by dredging debris in boat yard. Not sampled.							
	12/21/05	Well obstructed by dredging debris in boat yard. Not sampled.							
	4/12/06	Well obstructed by dredging debris in boat yard. Not sampled.							
	6/30/06	0.200	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	9/13/06	<0.050	<0.5	<0.5	<0.5	<0.6		12	<25/<1
	12/28/06	<0.050	<0.5	<0.5	<0.5	<0.6		18	<25/<1
	4/4/07	0.140	<0.5	<0.5	<0.5	<0.6		130	<25/<1
	6/20/07	Well casing broken below grade. Not sampled.							
	10/2/07	Well casing broken below grade. Not sampled.							
	12/27/07	<0.050	<0.5	<0.5	<0.5	<1.2		52	<25/<1
	3/28/08	<0.050	<0.5	<0.5	<0.5	<1.2		<5	<25/<1
	6/12/08	<0.050	<0.5	<0.5	<0.5	<1.0		<5	<25/<1
	9/16/08	<0.050	<0.5	<0.5	<0.5	<1		<5	<10/<1
12/4/08	<0.050	<0.5	<0.5	<0.5	<1	<2	<1	<10/<1	
3/26/09	<0.050	<0.5	<0.5	<0.5	<1	<2	<1	<10/<1	
MW16	6/23/05	<0.050	<0.5	<0.5	<0.5	<0.6		120	<25/<1
	9/21/05	0.24	<0.5	<0.5	<0.5	<0.6		240	<25/<1
	12/21/05	<0.050	<0.5	<0.5	<0.5	<0.6		54	<25/<1
	4/12/06	0.27	<0.5	<0.5	<0.5	<0.6		270	<25/<1
	6/30/06	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	9/13/06	0.200	<0.5	<0.5	<0.5	<0.6		190	<25/<1
	12/28/06	Well obstructed by boat trailer							
	4/4/07	<0.050	<0.5	<0.5	<0.5	<0.6		22	<25/<1
	6/20/07	Well obstructed by boat trailer							
	10/2/07	<0.050	<0.5	<0.5	<0.5	<0.6		32	<25/<1
	12/27/07	0.800	<0.5	<0.5	<0.5	<1.2		680	<25/<1
	3/28/08	<0.050	<0.5	<0.5	<0.5	<1.2		<5	<25/<1
	6/12/08	0.150	<0.5	<0.5	<0.5	<1.0		140	<25/<1
	9/16/08	0.300	<0.5	<0.5	<0.5	<1		280	<10/<1
12/4/08	0.190	<0.5	<0.5	<0.5	<1	<2	150	<10/<1	
3/26/09	0.820	<0.5	<0.5	<0.5	<1	<2	800	<10/<1	

Table 2
Big Bear Texaco/Chevron - Current Groundwater Analytical Results
40553 Big Bear Boulevard
Big Bear Lake, California

Well Number	Sample Date	TPH-g (mg/l)	BTEX (ug/l)				Trimethyl-benzenes	MTBE (ug/l)	TBA/TAME (ug/l)
			Benzene	Toluene	Ethylbenzene	Xylenes			
MW17	6/23/05	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	9/21/05	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	12/21/05	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	4/12/06	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	6/30/06	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	9/13/06	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	12/28/06	Well obstructed by snow bank. Not sampled.							
	4/4/07	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	6/20/07	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	10/2/07	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	12/27/07	Unable to sample. Well covered by ice sheet.							
	3/28/08	<0.050	<0.5	<0.5	<0.5	<1.2		<5	<25/<1
	6/12/08	<0.050	<0.5	<0.5	<0.5	<1.0		<5	<25/<1
	9/16/08	Well obstructed							
	12/4/08	<0.050	<0.5	<0.5	<0.5	<1	<2	<1	<10/<1
3/26/09	<0.050	<0.5	<0.5	<0.5	<1	<2	<1	<10/<1	
MW18	6/23/05	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	9/21/05	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	12/21/05	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	4/12/06	Well obstructed by snow bank. Not sampled.							
	6/30/06	Well placed on annual sampling							
	9/13/06	Well placed on annual sampling							
	12/28/06	Well placed on annual sampling							
	4/4/07	Well placed on annual sampling							
	6/20/07	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	10/2/07	Well placed on annual sampling.							
	12/27/07	Well placed on annual sampling							
	3/28/08	Well placed on annual sampling.							
	6/12/08	<0.050	<0.5	<0.5	<0.5	<1.0		<5	<25/<1
	9/16/08	Well placed on annual sampling.							
	12/4/08	Well placed on annual sampling.							
3/26/09	Well placed on annual sampling.								
MW19	6/30/06	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	9/13/06	0.120	<0.5	<0.5	<0.5	<0.6		120	<25/<1
	12/28/06	0.100	<0.5	<0.5	<0.5	<0.6		74	<25/<1
	4/4/07	<0.050	<0.5	<0.5	<0.5	<0.6		82	<25/<1
	6/20/07	<0.050	<0.5	<0.5	<0.5	<0.6		35	<25/<1
	10/2/07	<0.050	<0.5	<0.5	<0.5	<0.6		37	<25/<1
	12/27/07	0.180	<0.5	<0.5	<0.5	<1.2		170	<25/<1
	3/28/08	<0.050	<0.5	<0.5	<0.5	<1.2		<5	<25/<1
	6/12/08	<0.050	<0.5	<0.5	<0.5	<1.0		47	<25/<1
	9/16/08	0.160	<0.5	<0.5	<0.5	<1		140	<10/<1
	12/4/08	<0.050	<0.5	<0.5	<0.5	<1	<2	17	<10/<1
	3/26/09	<0.050	<0.5	<0.5	<0.5	<1	<2	<1	<10/<1

Table 2
Big Bear Texaco/Chevron - Current Groundwater Analytical Results
 40553 Big Bear Boulevard
 Big Bear Lake, California

Well Number	Sample Date	TPH-g (mg/l)	BTEX (ug/l)				Trimethyl-benzenes	MTBE (ug/l)	TBA/TAME (ug/l)
			Benzene	Toluene	Ethylbenzene	Xylenes			
MW20	6/30/06	0.270	<0.5	<0.5	<0.5	<0.5		<5	<25/<1
	9/13/06	<0.050	<0.5	<0.5	<0.5	<0.5		14	<25/<1
	12/28/06	<0.050	<0.5	<0.5	<0.5	<0.5		<5	<25/<1
	4/4/07	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	6/20/07	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	10/2/07	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	12/27/07	<0.050	<0.5	<0.5	<0.5	<0.6		<5	<25/<1
	3/28/08	<0.050	<0.5	<0.5	<0.5	<1.2		<5	<25/<1
	6/12/08	<0.050	<0.5	<0.5	<0.5	<1.0		<5	<25/<1
	9/16/08	<0.050	<0.5	<0.5	<0.5	<1.0		<5	<10/<1
	12/4/08	<0.050	<0.5	<0.5	<0.5	<1	<2	<1	<10/<1
	3/26/09	<0.050	<0.5	<0.5	<0.5	<1	<2	<1	<10/<1

< indicates below stated laboratory detection limit

Appendix B
Previous Groundwater Analytical Results

Table 1
Big Bear Texaco/Chevron - Previous and Current and Analytical Results

40553 Big Bear Boulevard
 Big Bear Lake, California

Sample Date	TPH-g (mg/l)	BTE&X (ug/l)				MtBE (ug/l)	TBA/TAM(2) (ug/l)
		Benzene	Toluene	Ethylbenzene	Xylenes		
MW1-8/09/90	-	44	44	830	144	--	
MW1-7/27/91	2.5	75	360	310	35	--	
MW1-8/10/91	0.6	5.4	4	1.4	6.6	--	
MW1-10/20/93	0.05	4	11	2	17	-	
MW1-12/30/93	2.8	22.6	254	17.3	374.4	--	
MW1-4/14/94	1.38	40	180	26	190	--	
MW1-6/16/94	1.47	110	220	96	220	--	
MW1-8/24/95	0.57	6	130	13	120	220	
MW1-5/20/98	--	290	7,500	1,200	8,400	6,500	
MW1-8/20/98	4.46	14.8	347	88.5	558	3,840	
MW1-5/19/99	5.12	ND	632	176	1240	2,740	
MW1-6/2/99	4.23	ND	215	58.6	528	4,160	
MW1-9/30/99	0.248	3.6	35.7	12	78.9	1,500	
MW1-12/20/99	ND	ND	2	ND	3.3	773	
MW1-4/5/00	2.3	8.5	140	65	400	1300	1200
MW1-7/5/00	7.2	28	<20	<20	1,080	4,600	<2,500
MW1-9/13/00	5	<0.5	<0.5	<0.5	<0.5	1,300	380
MW1-12/20/00	0.68	<0.5	<0.5	<0.5	<0.5	1,100	<25
MW1-3/26/01	2.9	160	110	800	460	860	--
MW1-6/13/01	5.4	470	120	120	1,560	2,600	ND
MW1-9/10/01	3.6	75	32	120	260	990	ND
MW1-12/6/01	4	150	23	46	216	930	ND
MW1-3/29/02	2.4	100	15	<0.5	300	1700	ND
MW1-6/4/02	0.46	<0.5	<0.5	<0.5	<0.6	620	<25/4.0(2)
MW1-9/24/02	0.24	<0.5	<0.5	<0.5	<0.6	150	<25/<1
MW1-1/24/03	1.7	<0.5	<0.5	<0.5	<0.6	1,800	<25/15
MW1-3/24/03	5.3	11	28	<0.5	1780	840	<25/11
MW1-6/24/03	1.1	2.3	9.6	4.9	37	610	<25/6.0
MW1-9/18/03	1.1	<0.5	<0.5	<0.5	<0.6	910	<25/14
MW1-12/9/03	1.3	22	<0.5	<0.5	16	1,300	<25/11
MW1-4/2/04	4.1	34	3.2	<0.5	660	790	<25/8.1
MW1-6/10/04	5.5	250	2.5	11	98	3,100	<25/17
MW1-9/13/04	0.85	<0.5	<0.5	<0.5	<0.6	800	<25/10
MW1-12/14/04	8.0	500	10	170	310	5,400	<25/<1
MW1-3/16/05	20.0	2000	31	170	1270	11,000	<25/77

Table 1

Big Bear Texaco/Chevron - Previous and Current Analytical Results (cont.)

40553 Big Bear Boulevard

Big Bear Lake, California

Sample Date	TPH-g (mg/l)	BTE&X (ug/l)				MtBE (ug/l)	TBA/TAM(2) (ug/l)
		Benzene	Toluene	Ethylbenzene	Xylenes		
MW2-8/10/91	ND	ND	ND	ND	ND	--	
MW2-10/20/93	ND	ND	ND	ND	ND	--	
MW2-12/30/93	ND	ND	ND	ND	ND	--	
MW2-4/14/94	ND	ND	1.3	ND	ND	--	
MW2-6/16/94	ND	ND	ND	ND	ND	--	
MW2-8/24/95	ND	ND	ND	ND	ND	5,600	
MW2-5/20/98	--	1.2	ND	ND	ND	120	
MW2-8/20/98	ND	1.81	3.38	1.73	7.13	36.4	
MW2-5/19/99	5.35	ND	ND	ND	ND	1,040	
Well Abandoned - Replaced with MW2A							
MW2A-6/2/99	10.4	ND	148	ND	ND	24,000	
MW2A-9/30/99	ND	ND	ND	ND	ND	59,700	
MW2A-12/20/99	ND	ND	ND	ND	ND	82,700	
MW2A-4/5/00	37	750	3500	<200	1750	110,000	48,000
MW2A-7/5/00	26	<100	<100	<100	500	96,000	28,000
MW2A-9/13/00	23	<0.5	<0.5	<0.5	<0.6	39,000	9,500
MW2A-10/24/00	<0.050	7	<0.5	<0.5	<0.6	1,700	130/7.0(2)
MW2A-12/20/00	17	<0.5	<0.5	<0.5	<0.6	37,000	450(2)
MW2A-3/26/01	46	<0.5	<0.5	<0.5	<0.6	36,000	1700/700(2)
MW2A-6/13/01	35	<0.5	<0.5	<0.5	<0.6	65,000	ND
MW2A-8/1/01	8.1	<0.5	<0.5	<0.5	<0.6	77,000	ND
MW2A-9/10/01	36	<0.5	<0.5	<0.5	<0.6	18,000	ND
MW2A-12/6/01	62	<0.5	<0.5	<0.5	<0.6	94,000	9100/1400(2)
MW2A-3/29/02	37	<0.5	<0.5	<0.5	<0.6	36,000	8300/530(2)
MW2A-6/4/02	17	<0.5	<0.5	<0.5	<0.6	17,000	<25/19(2)
MW2A-9/24/02	1.7	<0.5	<0.5	<0.5	<0.6	2,400	<25/5.4(2)
MW2A-1/24/03	1.9	<0.5	<0.5	<0.5	<0.6	1,100	<25/10
MW2A-3/24/03	<0.050	<0.5	<0.5	<0.5	<0.6	56	<25/<1
MW2A-6/24/03	1.2	<0.5	<0.5	<0.5	<0.6	640	<25/10
MW2A-9/18/03	1.1	<0.5	<0.5	<0.5	<0.6	660	<25/15
MW2A-12/9/03	2.0	<0.5	<0.5	<0.5	<0.6	2,000	<25/34
MW2A-4/2/04	0.31	<0.5	<0.5	<0.5	<0.6	310	<25/2.3
MW2A-6/10/04	4.50	<0.5	<0.5	<0.5	<0.6	3,500	<25/50
MW2A-9/13/04	4.60	<0.5	<0.5	<0.5	<0.6	4,900	<25/52
MW2A-12/14/04	9.70	<0.5	<0.5	<0.5	<0.6	9,600	<25/87
MW2A-3/16/05	0.45	6.1	<0.5	<0.5	<0.6	350	<25/5.8

Table 1

Big Bear Texaco/Chevron - Previous and Current Analytical Results (cont.)

40553 Big Bear Boulevard

Big Bear Lake, California

Sample Date	TPH-g (mg/l)	BTE&X (ug/l)				MtBE (ug/l)	TBA/TAM(2) (ug/l)
		Benzene	Toluene	Ethylbenzene	Xylenes		
MW3-10/20/93	ND	ND	ND	ND	ND	--	
MW3-12/30/93	ND	ND	ND	ND	ND	--	
MW3-4/14/94	ND	ND	ND	ND	ND	--	
MW3-6/16/94	ND	ND	ND	ND	ND	--	
MW3-8/24/95	ND	ND	ND	ND	ND	18,000	
MW3-5/20/98	--	ND	ND	ND	ND	17	
MW3-8/20/98	ND	ND	ND	ND	ND	711	
MW3-5/19/99	2.8	ND	ND	ND	12.2	ND	
MW3-6/2/99	6.51	ND	170	ND	ND	10,400	
MW3-9/30/99	ND	3.3	ND	ND	ND	ND	
MW3-12/20/99	ND	109	ND	ND	ND	144,000	
Well Abandoned - Replaced with MW3A							
MW3A-6/2/99	2.14	ND	ND	ND	ND	2,450	
MW3A-9/30/99	ND	ND	ND	ND	ND	ND	
MW3A-12/20/99	ND	ND	ND	ND	ND	101,000	
MW3A-4/5/00	7.6	<200	<200	<200	<300	55,000	35,000
MW3A-7/5/00	7.2	<100	<100	<100	<200	85,000	38,000
MW3A-9/13/00	26	<0.5	<0.5	<0.5	<0.6	42,000	3,800
MW3A-10/24/00	<0.050	<0.5	<0.5	<0.5	<0.6	200	ND
MW3A-12/20/00	1.8	<0.5	<0.5	<0.5	<0.6	2,300	ND
MW3A-3/26/01	56	<0.5	<0.5	<0.5	<0.6	47,000	22,000
MW3A-6/13/01	Well pump clogged with mud - not sampled						
MW3A-8/1/01	10	<0.5	<0.5	<0.5	<0.6	40,000	ND
MW3A-9/10/01	7.6	<0.5	<0.5	<0.5	<0.6	2,400	ND
MW3A-12/6/01	9.1	<0.5	<0.5	<0.5	<0.6	9,100	1300/100(2)
MW3A-3/29/02	88	<0.5	<0.5	<0.5	<0.6	85,000	34,000/870(2)
MW3A-6/4/02	0.27	<0.5	<0.5	<0.5	<0.6	350	<25/<1
MW3A-9/24/02	0.22	<0.5	<0.5	<0.5	<0.6	130	<25/<1
MW3A-1/24/03	2.90	<0.5	<0.5	<0.5	<0.6	2,800	<25/7.7
MW3A-3/24/03	2.30	<0.5	<0.5	<0.5	<0.6	3,000	<25/5.2
MW3A-6/24/03	3.20	<0.5	<0.5	<0.5	<0.6	3,200	<25/6.3
MW3A-9/18/03	4.30	<0.5	<0.5	<0.5	<0.6	4,300	<25/11
MW3A-12/9/03	0.20	<0.5	<0.5	<0.5	<0.6	200	<25/<1
MW3A-4/2/04	0.22	<0.5	<0.5	<0.5	<0.6	220	<25/<1
MW3A-6/10/04	0.20	<0.5	<0.5	<0.5	<0.6	180	<25/<1
MW3A-9/13/04	0.20	<0.5	<0.5	<0.5	<0.6	150	<25/<1
MW3A-12/14/04	0.55	<0.5	<0.5	<0.5	<0.6	550	<25/21
MW3A-3/16/05	0.60	<0.5	<0.5	<0.5	<0.6	550	<25/9.4

Table 1
Big Bear Texaco/Chevron - Previous and Current Analytical Results (cont.)

40553 Big Bear Boulevard
 Big Bear Lake, California

Sample Date	TPH-g (mg/l)	BTE&X (ug/l)				MtBE (ug/l)	TBA/TAM(2) (ug/l)
		Benzene	Toluene	Ethylbenzene	Xylenes		
MW4-8/09/90	ND	ND	ND	ND	ND	-	
MW4-8/10/91	ND	ND	ND	ND	ND	-	
MW4-10/20/93	ND	ND	ND	ND	ND	-	
MW4-12/30/93	ND	ND	ND	ND	ND	-	
MW4-4/14/94	ND	ND	ND	ND	ND	-	
MW4-6/16/94	ND	ND	ND	ND	ND	-	
MW4-8/24/95	ND	ND	ND	ND	ND	ND	
MW4-5/20/98	NA	ND	ND	ND	ND	ND	
MW4-5/19/99	ND	ND	ND	ND	ND	104	
MW4-6/2/99	ND	ND	ND	ND	ND	ND	
MW4-9/30/99	0.212	10.2	40.5	14.5	63.6	6.5	
MW4-12/20/99	ND	ND	ND	ND	ND	ND	
MW4-4/5/00	0.26	<0.5	4	0.74	4	<5	<50
MW4-7/5/00	0.22	<0.5	<0.5	<0.5	<0.6	230	370
MW4-9/13/00	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25
MW4-12/20/00	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<5
MW4-3/26/01	<0.050	<0.5	2	<0.5	<0.6	13	<25
MW4-6/13/01	0.075	<0.5	<0.5	<0.5	<0.6	<5.0	ND
MW4-9/10/01	0.11	<0.5	<0.5	<0.5	<0.6	60	ND
MW4-12/6/01	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	ND
MW4-4/4/02	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	ND
MW4-6/4/02	<0.050	<0.5	<0.5	<0.5	<0.6	<5	<25/<1
MW4-9/24/02	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW4-1/24/03	<0.050	<0.5	<0.5	<0.5	<0.6	16	<25/<1
MW4-3/24/03	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW4-6/24/03	0.63	<0.5	<0.5	<0.5	8.9	<5.0	<25/<1
MW4-9/18/03	0.1	<0.5	<0.5	<0.5	<0.6	100	<25/3.3
MW4-12/9/03	<0.050	<0.5	<0.5	<0.5	3.2	<5.0	<25/<1
MW4-4/2/04	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW4-6/10/04	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW4-9/13/04	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW4-12/14/04	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW4-3/16/05	<0.050	<0.5	<0.5	<0.5	<0.5	<5.0	<25/<1

Table 1
Big Bear Texaco/Chevron - Previous and Current Analytical Results (cont.)
 40553 Big Bear Boulevard
 Big Bear Lake, California

Sample Date	TPH-g (mg/l)	BTE&X (ug/l)				MtBE (ug/l)	TBA/TAM(2) (ug/l)
		Benzene	Toluene	Ethylbenzene	Xylenes		
MW5-6/2/99	0.758	ND	ND	ND	ND	752	
MW5-9/30/99	ND	ND	ND	ND	ND	454	
MW5-12/20/99	ND	ND	1.9	ND	ND	195	
MW5-4/5/00	0.29	<0.5	<0.5	3.1	12.65	480	410
MW5-7/5/00	3.9	140	<10	<10	76	8,500	3,000
MW5-9/13/00	2	<0.5	<0.5	<0.5	<0.6	2,200	<25
MW5-10/24/00	<0.050	<0.5	<0.5	<0.5	<0.6	19,000	1,100/560(2)
MW5-12/20/00	1.2	<0.5	<0.5	<0.5	<0.6	800	<5
MW5-3/26/01	0.25	<0.5	<0.5	<0.5	<0.6	290	<25
MW5-6/13/01	21	<0.5	<0.5	<0.5	<0.6	7,700	ND
MW5-8/1/01	6.2	<0.5	<0.5	<0.5	<0.6	37,000	ND
MW5-9/10/01	12	<0.5	<0.5	<0.5	<0.6	1,100	ND
MW5-12/6/01	2.0	<0.5	<0.5	<0.5	<0.6	1,600	ND
MW5-3/29/02	8.9	<0.5	<0.5	<0.5	<0.6	5,900	ND
MW5-6/4/02	2.4	<0.5	<0.5	<0.5	<0.6	3,900	<25/28(2)
MW5-9/24/02	5.0	<0.5	<0.5	<0.5	<0.6	4,300	<25/30(2)
MW5-1/24/03	3.2	<0.5	<0.5	<0.5	<0.6	3,400	<25/24(2)
MW5-3/24/03	0.8	7.7	<0.5	<0.5	5.2	5,500	<25/42(2)
MW5-6/24/03	26.0	<0.5	<0.5	<0.5	<0.6	21,000	<25/120
MW5-9/18/03	20.0	<0.5	<0.5	<0.5	<0.6	20,000	<25/45
MW5-12/9/03	3.5	<0.5	<0.5	<0.5	3.6	3,200	<25/22
MW5-4/2/04	4.1	<0.5	<0.5	<0.5	<0.6	3,900	<25/16
MW5-6/10/04	1.6	14	<0.5	<0.5	<0.6	1,400	<25/14
MW5-9/13/04	2.6	<0.5	<0.5	<0.5	<0.6	2,600	<25/17
MW5-12/14/04	5.4	<0.5	<0.5	<0.5	<0.6	5,400	<25/21
MW5-3/16/05	13.0	<0.5	<0.5	<0.5	<0.5	9,700	<25/160

Table 1
Big Bear Texaco/Chevron - Previous and Current Analytical Results (cont.)

40553 Big Bear Boulevard
 Big Bear Lake, California

Sample Date	TPH-g (mg/l)	BTE&X (ug/l)				MtBE (ug/l)	TBA/TAM(2) (ug/l)
		Benzene	Toluene	Ethylbenzene	Xylenes		
MW6-6/2/99	3.71	ND	ND	ND	ND	8,750	
MW6-9/30/99	ND	ND	ND	ND	ND	41,400	
MW6-12/20/99	ND	ND	ND	ND	ND	24,700	
MW6-4/5/00	3.2	<10	<10	<10	<10	6400	3400
MW6-7/5/00	0.84	<100	<100	<100	<100	70,000	22,000
MW6-9/13/00	40	960	<0.5	<0.5	<0.6	92,000	9,200
MW6-10/24/00	<0.050	<0.5	120	<0.5	<0.6	98,000	13,000/1500(2)
MW6-12/20/00	68	<0.5	<0.5	<0.5	<0.6	100,000	<25
MW6-3/26/01	83	<0.5	<0.5	<0.5	<0.6	94,000	<25/1300(2)
MW6-6/13/01	89	<0.5	<0.5	<0.5	<0.6	77,000	ND
MW6-8/1/01	11	<0.5	<0.5	<0.5	<0.6	60,000	ND
MW6-9/10/01	140	<0.5	<0.5	<0.5	<0.6	11,000	ND
MW6-12/6/01	130	<0.5	<0.5	<0.5	<0.6	140,000	ND/1400(2)
MW6-3/29/02	250	<0.5	<0.5	<0.5	<0.6	180,000	ND
MW6-6/4/02	70	<0.5	<0.5	<0.5	<0.6	70,000	<25/760(2)
MW6-9/24/02	150	<0.5	<0.5	<0.5	<0.6	85,000	<25/220(2)
MW6-1/24/03	34	<0.5	<0.5	<0.5	<0.6	41,000	<25/240(2)
MW6-3/24/03	51	<0.5	<0.5	<0.5	<0.5	51,000	<25/210(2)
MW6-6/24/03	32	<0.5	<0.5	<0.5	<0.5	32,000	<25/95
MW6-9/18/03	22	<0.5	<0.5	<0.5	<0.6	22,000	<25/95
MW6-12/9/03	12	<0.5	<0.5	<0.5	2.2	12,000	<25/88
MW6-4/2/04	13	<0.5	<0.5	<0.5	<0.6	13,000	<25/64
MW6-6/10/04	19	110	<0.5	<0.5	<0.6	13,000	<25/110
MW6-9/13/04	10	<0.5	<0.5	<0.5	<0.6	9,300	<25/230
MW6-12/14/04	15	<0.5	<0.5	<0.5	<0.6	15,000	<25/92
MW6-3/16/05	11	<0.5	<0.5	<0.5	<0.6	9,700	<25/210

Table 1
Big Bear Texaco/Chevron - Previous and Current Analytical Results (cont.)

40553 Big Bear Boulevard
 Big Bear Lake, California

Sample Date	TPH-g (mg/l)	BTE&X (ug/l)				MtBE (ug/l)	TBA/TAM(2) (ug/l)
		Benzene	Toluene	Ethylbenzene	Xylenes		
MW7-6/2/99	0.254	ND	ND	ND	ND	408	
MW7-9/30/99	ND	ND	ND	ND	ND	76.4	
MW7-12/20/99	ND	ND	ND	ND	ND	131	
MW7-4/5/00	0.19	<0.5	<0.5	<0.5	<0.6	360	220
MW7-7/5/00	0.31	1.4	<0.5	<0.5	<0.6	580	350
MW7-9/13/00	0.36	<0.5	<0.5	<0.5	<0.6	300	30
MW7-12/20/00	0.11	<0.5	<0.5	<0.5	<0.6	170	<25
MW7-3/26/01	0.25	<0.5	<0.5	<0.5	<0.6	150	<25
MW7-6/13/01	0.16	<0.5	<0.5	<0.5	<0.6	200	ND
MW7-9/10/01	0.6	<0.5	<0.5	<0.5	<0.6	320	ND
MW7-12/6/01	0.2	<0.5	<0.5	<0.5	<0.6	190	ND
MW7-3/29/02	0.21	<0.5	<0.5	<0.5	<0.6	170	ND
MW7-6/4/02	0.081	<0.5	<0.5	<0.5	<0.6	99	<25/<1
MW7-9/24/02	0.1	<0.5	<0.5	<0.5	<0.6	160	<25/<1
MW7-1/24/03	0.28	<0.5	<0.5	<0.5	<0.6	100	<25/<1
MW7-3/24/03	0.13	<0.5	<0.5	<0.5	<0.6	73	<25/<1
MW7-6/24/03	0.16	<0.5	<0.5	<0.5	<0.6	140	<25/<1
MW7-9/18/03	0.42	20	82	11	94	310	<25/2.3
MW7-12/9/03	<0.050	<0.5	<0.5	<0.5	<0.6	50	<25/<1
MW7-4/2/04	0.06	<0.5	<0.5	<0.5	<0.6	64	<25/<1
MW7-6/10/04	0.17	<0.5	<0.5	<0.5	<0.6	170	<25/<1
MW7-9/13/04	0.11	<0.5	<0.5	<0.5	<0.6	110	<25/<1
MW7-12/14/04	<0.050	<0.5	<0.5	<0.5	<0.6	57	<25/<1
MW7-3/16/05	0.35	<0.5	<0.5	<0.5	<0.6	330	<25/2.2

Table 1
Big Bear Texaco/Chevron - Previous and Current Analytical Results (cont.)

40553 Big Bear Boulevard
 Big Bear Lake, California

Sample Date	TPH-g (mg/l)	BTE&X (ug/l)				MtBE (ug/l)	TBA/TAM(2) (ug/l)
		Benzene	Toluene	Ethylbenzene	Xylenes		
MW8-6/2/99	0.407	ND	ND	1.09	ND	ND	
MW8-9/30/99	0.051	ND	ND	ND	ND	ND	
MW8-12/20/99	0.13	ND	ND	ND	ND	ND	
MW8-4/5/00	0.3	0.86	<0.5	1.1	1.1	<5.0	<50
MW8-7/5/00	0.38	<0.5	<0.5	1.9	1.5	<5.0	<50
MW8-9/13/00	0.16	<0.5	<0.5	<0.5	<0.6	<5.0	<25
MW8-12/20/00	0.26	<0.5	<0.5	<0.5	<0.6	<5.0	<25
MW8-3/26/01	0.77	<0.5	<0.5	<0.5	<0.6	<5.0	<25
MW8-6/13/01	0.65	<0.5	<0.5	<0.5	<0.6	<5.0	ND
MW8-9/10/01	0.48	<0.5	<0.5	<0.5	<0.6	<5.0	ND
MW8-12/6/01	0.64	<0.5	<0.5	2.6	2.1	<5.0	ND
MW8-3/29/02	0.42	<0.5	<0.5	3.6	3.4	<5.0	ND
MW8-6/4/02	0.39	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW8-9/24/02	0.81	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW8-1/24/03	<0.050	<0.5	<0.5	<0.5	<0.6	9	<25/<1
MW8-3/24/03	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW8-6/24/03	0.52	<0.5	<0.5	3.0	2.2	<5.0	<25/<1
MW8-9/18/03	0.6	2.4	<0.5	3.7	2.5	<5.0	<25/3.7
MW8-12/9/03	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW8-4/2/04	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW8-6/10/04	0.64	<0.5	2	5.4	<0.6	<5.0	<25/<1
MW8-9/13/04	0.37	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW8-12/14/04	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW8-3/16/05	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1

Table 1
Big Bear Texaco/Chevron - Previous and Current Analytical Results (cont.)

40553 Big Bear Boulevard
 Big Bear Lake, California

Sample Date	TPH-g (mg/l)	BTE&X (ug/l)				MtBE (ug/l)	TBA/TAM(2) (ug/l)
		Benzene	Toluene	Ethylbenzene	Xylenes		
MW10-4/5/00	0.7	<2	<2	<2	<3	1400	1200
MW10-7/5/00	<0.05	<0.5	<0.5	<0.5	<0.6	450	130
MW10-9/13/00	1.9	<0.5	<0.5	<0.5	<0.6	3,500	2,500
MW10-12/20/00	4.8	<0.5	<0.5	<0.5	<0.6	7,100	<25
MW10-3/26/01	4.1	<0.5	<0.5	<0.5	<0.6	3,900	<25
MW10-6/13/01	1.2	<0.5	<0.5	<0.5	<0.6	840	ND
MW10-9/10/01	2.8	<0.5	<0.5	<0.5	<0.6	6,300	ND
MW10-12/6/01	7.5	<0.5	<0.5	<0.5	<0.6	9,200	1600/69(2)
MW10-3/29/02	2.0	<0.5	<0.5	<0.5	<0.6	2,800	ND/25(2)
MW10-6/4/02	1.3	<0.5	<0.5	<0.5	<0.6	1,900	<25/9(2)
MW10-9/24/02*	38.0	<0.5	<0.5	<0.5	<0.6	25,000	<25/170(2)
MW10-10/25/02**	2.3	<0.5	<0.5	<0.5	<0.6	3,000	<25/24(2)
MW10-1/24/03	51.0	<0.5	<0.5	<0.5	<0.6	39,000	<25/160(2)
MW10-3/24/03	10.0	<0.5	<0.5	<0.5	<0.6	9,500	<25/62(2)
MW10-6/24/03	9.0	<0.5	<0.5	<0.5	<0.6	8,700	<25/48(2)
MW10-9/18/03	12.0	<0.5	<0.5	<0.5	<0.6	12,000	<25/36
MW10-12/9/03	12.0	<0.5	<0.5	<0.5	<0.6	12,000	<25/30
MW10-4/2/04	15.0	<0.5	<0.5	<0.5	<0.6	15,000	<25/97
MW10-6/10/04	1.5	<0.5	<0.5	<0.5	<0.6	1,500	<25/5
MW10-9/13/04	3.1	<0.5	<0.5	<0.5	<0.6	2,900	<25/18
MW10-12/14/04	7.6	<0.5	<0.5	<0.5	<0.6	4,600	<25/32
MW10-3/16/05	8.8	<0.5	<0.5	<0.5	<0.6	8,700	<25/30

Table 1**Big Bear Texaco/Chevron - Previous and Current Analytical Results (cont.)**

40553 Big Bear Boulevard

Big Bear Lake, California

Sample Date	TPH-g (mg/l)	BTE&X (ug/l)				MtBE (ug/l)	TBA/TAM(2) (ug/l)
		Benzene	Toluene	Ethylbenzene	Xylenes		
MW11-4/5/00	0.51	<1	<1	<1	<1	1200	960
MW11-7/5/00	1.9	<20	<20	<20	<30	5,000	4,200
MW11-9/13/00	6.4	<0.5	<0.5	<0.5	<0.6	8,700	1,600
MW11-12/20/00	3.1	<0.5	<0.5	<0.5	<0.6	5,400	<25
MW11-3/26/01	5.9	<0.5	<0.5	<0.5	<0.6	5,900	<25
MW11-6/13/01	6.3	<0.5	<0.5	<0.5	<0.6	6,300	N.D.
MW11-9/10/01	12	<0.5	<0.5	<0.5	<0.6	5,800	ND
MW11-12/6/01	43.0	<0.5	<0.5	<0.5	<0.6	31,000	4400/260(2)
MW11-3/29/02	23.0	<0.5	<0.5	<0.5	<0.6	25,000	ND
MW11-5/8/02	15.0	<0.5	<0.5	<0.5	<0.6	16,000	2100/<1(2)
MW11-6/4/02	10.0	<0.5	<0.5	<0.5	<0.6	12,000	<25/120(2)
MW11-8/8/02	23.0	<0.5	<0.5	<0.5	<0.6	31,000	8300/<1(2)
MW11-9/24/02*	8	<0.5	<0.5	<0.5	<0.6	11,000	<25/920(2)
MW11-10/25-02**	52	<0.5	<0.5	<0.5	<0.6	42,000	<25/700(2)
MW11-1/24/03	140	<0.5	<0.5	<0.5	<0.6	110,000	<25/2,000(2)
MW11-3/24/03	70	<0.5	<0.5	<0.5	<0.6	67,000	<25/230(2)
MW11-6/24/03	23	<0.5	<0.5	<0.5	<0.6	23,000	<25/470
MW11-9/18/03	30	<0.5	<0.5	<0.5	<0.6	30,000	<25/480
MW11-12/9/03	56	<0.5	<0.5	<0.5	<0.6	56,000	<25/330
MW11-4/2/04	45	<0.5	<0.5	<0.5	<0.6	45,000	<25/480
MW11/6/10/04	66	<0.5	<0.5	<0.5	<0.6	66,000	<25/450
MW11-9/13/04	210	<0.5	<0.5	<0.5	<0.6	210,000	<25/420
MW11-12/14/04	31	<0.5	<0.5	<0.5	<0.6	31,000	<25/210
MW11-3/16/05	9	<0.5	<0.5	<0.5	<0.6	8,800	<25/7.7

Table 1
Big Bear Texaco/Chevron - Previous and Current Analytical Results (cont.)

40553 Big Bear Boulevard
 Big Bear Lake, California

Sample Date	TPH-g (mg/l)	BTE&X (ug/l)				MtBE (ug/l)	TBA/TAM(2) (ug/l)
		Benzene	Toluene	Ethylbenzene	Xylenes		
MW12-4/5/00	1.9	<5	<5	<5	<6	3200	2000
MW12-7/5/00	2.1	<20	<20	<20	<30	4,600	<2,500
MW12-9/13/00	5.1	<0.5	<0.5	<0.5	<0.6	9,400	<25
MW12-12/20/00	9.5	<0.5	<0.5	<0.5	<0.6	22,000	<25
MW12-3/26/01	5	<0.5	<0.5	<0.5	<0.6	4,300	<25
MW12-6/13/01	4.1	<0.5	<0.5	<0.5	<0.6	10,000	ND
MW12-9/10/01	13	<0.5	<0.5	<0.5	<0.6	7,300	ND
MW12-12/6/01	3.6	<0.5	<0.5	<0.5	<0.6	3,200	320/21(2)
MW12-3/29/02	1.2	<0.5	<0.5	<0.5	<0.6	1,700	ND
MW12-6/4/02	1.4	<0.5	<0.5	<0.5	<0.6	1,300	<25/9.3(2)
MW12-9/24/02	1.3	<0.5	<0.5	<0.5	<0.6	1,200	<25/10(2)
MW12-1/24/03	1.3	<0.5	<0.5	<0.5	<0.6	1,800	<25/22(2)
MW12-3/24/03	0.86	<0.5	<0.5	<0.5	<0.6	790	<25/21(2)
MW12-6/24/03	2.0	<0.5	<0.5	<0.5	<0.6	2,000	<25/7.5
MW12-9/18/03	3.0	<0.5	<0.5	<0.5	<0.6	2,800	<25/27
MW12-12/9/03	0.6	<0.5	<0.5	<0.5	<0.6	560	<25/3.8
MW12-4/2/04	1.4	<0.5	<0.5	<0.5	<0.6	1,400	<25/7.1
MW12-6/10/04	5.5	<0.5	<0.5	<0.5	<0.6	5,400	<25/42
MW12-9/13/04	4.4	<0.5	<0.5	<0.5	<0.6	4,400	<25/<1
MW12-12/14/04	1.1	<0.5	<0.5	<0.5	<0.6	1,100	<25/12
MW12-3/16/05	3.7	<0.5	<0.5	<0.5	<0.6	3,700	<25/14

Table 1
Big Bear Texaco/Chevron - Previous and Current Analytical Results (cont.)

40553 Big Bear Boulevard
 Big Bear Lake, California

Sample Date	TPH-g (mg/l)	BTE&X (ug/l)				MtBE (ug/l)	TBA/TAM(2) (ug/l)
		Benzene	Toluene	Ethylbenzene	Xylenes		
MW13-4/5/00	0.7	34	14	17	100	300	180
MW13-7/5/00	0.47	<1	<1	<1	<1	240	<100
MW13-9/13/00	0.09	<0.5	<0.5	<0.5	<0.6	190	<25
MW13-12/20/00	0.48	10	<0.5	<0.5	<0.6	470	<25
MW13-3/26/01	0.26	25	9	9	37	120	<25
MW13-6/13/01	1.5	71	<0.5	<0.5	<0.6	1,300	ND
MW13-9/10/01	1.1	<0.5	<0.5	<0.5	<0.6	170	ND
MW13-12/6/01	1.2	120	22	31	171	720	95/5.9(2)
MW13-3/29/02	0.97	<0.5	<0.5	<0.5	<0.6	540	29/11(2)
MW13-6/4/02	0.33	<0.5	<0.5	<0.5	<0.6	540	<25/11(2)
MW13-9/24/02	0.59	<0.5	<0.5	<0.5	<0.6	510	<25/<1
MW13-1/24/03	1.1	<0.5	<0.5	<0.5	<0.6	1,100	<25/20(2)
MW13-3/24/03	1.0	4.5	<0.5	<0.5	6.3	1,100	<25/21(2)
MW13-6/24/03	1.5	<0.5	<0.5	5.9	4.1	1,300	<25/16
MW13-9/18/03	2.0	<0.5	<0.5	<0.5	<0.6	2,000	<25/57
MW13-12/9/03	0.8	<0.5	<0.5	<0.5	<0.6	740	<25/12
MW13-4/2/04	3.7	220	7.6	11	58	1,400	<25/48
MW13-6/10/04	4.0	260	14	82	107	2,500	<25/28
MW13-9/13/04	1.5	<0.5	14	<0.5	<0.6	1,500	<25/<1
MW13-12/14/04	3.0	70	<0.5	3.1	29	2,900	<25/26
MW13-3/16/05	11.0	2400	36	220	710	2,900	<25/11

Table 1
Big Bear Texaco/Chevron - Previous and Current Analytical Results (cont.)

40553 Big Bear Boulevard
 Big Bear Lake, California

Sample Date	TPH-g (mg/l)	BTE&X (ug/l)				MtBE (ug/l)	TBA/TAM(2) (ug/l)
		Benzene	Toluene	Ethylbenzene	Xylenes		
MW14-4/5/00	1	0.96	3.1	5.8	3.7	55	>50
MW14-7/5/00	1.8	2	5.7	7.1	4.4	9.1	<50
MW14-9/13/00	0.35	<0.5	<0.5	<0.5	<0.6	<5.0	<25
MW14-12/20/00	1	<0.5	<0.5	<0.5	<0.6	<5.0	<25
MW14-3/26/01	0.95	<0.5	2	<0.5	<0.6	74	<25
MW14-6/13/01	2.1	<0.5	<0.5	<0.5	<0.6	13	ND
MW14-9/10/01	0.47	<0.5	<0.5	<0.5	<0.6	<5.0	ND
MW14-12/6/01	0.35	<0.5	<0.5	<0.5	<0.6	<5.0	ND
MW14-3/29/02	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	ND
MW14-6/4/02	0.39	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW14-9/24/02	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW14-1/24/03	<0.050	<0.5	<0.5	<0.5	<0.6	12	<25/<1
MW14-3/24/03	<0.050	<0.5	<0.5	<0.5	<0.6	37	<25/<1
MW14-6/24/03	<0.050	<0.5	<0.5	<0.5	<0.6	6.6	<25/<1
MW14-9/18/03	<0.050	<0.5	<0.5	<0.5	<0.6	19	<25/<1
MW14-12/9/03	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW14-4/2/04	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW14-6/10/04	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW14-9/113/04	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW14-12/14/04	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW14-3/16/05	<0.050	<0.5	<0.5	<0.5	<0.6	<5	<25/<1
MW15-4/5/00	<0.050	<0.5	<0.5	<0.5	<0.6	11	<50
MW15-7/5/00	<0.050	<0.5	<0.5	<0.5	<0.6	18	<50
MW15-9/13/00	0.055	<0.5	<0.5	<0.5	<0.6	17	<25
MW15-12/20/00	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25
MW15-3/26/01	<0.050	<0.5	<0.5	<0.5	<0.6	15	<25
MW15-6/13/01	<0.050	<0.5	<0.5	<0.5	<0.6	12	ND
MW15-9/10/01	0.11	<0.5	<0.5	<0.5	<0.6	10	ND
MW15-12/6/01	<0.050	<0.5	<0.5	<0.5	<0.6	7.2	ND
MW15-3/29/02	<0.050	<0.5	<0.5	<0.5	<0.6	13	ND
MW15-6/4/02	<0.050	<0.5	<0.5	<0.5	<0.6	13	<25/<1
MW15-9/24/02	<0.050	<0.5	<0.5	<0.5	<0.6	20	<25/<1
MW15-1/24/03	0.21	<0.5	<0.5	<0.5	<0.6	93	<25/<1
MW15-3/24/03	<0.050	<0.5	<0.5	<0.5	<0.6	10	<25/<1
MW15-6/24/03	<0.050	<0.5	<0.5	<0.5	<0.6	6.3	<25/<1
MW15-9/18/03	<0.050	<0.5	<0.5	<0.5	<0.6	8	<25/<1
MW15-12/9/03	<0.050	<0.5	<0.5	<0.5	<0.6	7.3	<25/<1
MW15-4/2/04	<0.050	<0.5	<0.5	<0.5	<0.6	10	<25/<1
MW15-6/10/04	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW15-9/13/04	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW15-12/14/04	<0.050	<0.5	<0.5	<0.5	<0.6	5.7	<25/<1
MW15-3/36/05	<0.050	<0.5	<0.5	<0.5	<0.6	30	<25/<1

Table 1
Big Bear Texaco/Chevron - Previous and Current Analytical Results (cont.)

40553 Big Bear Boulevard
 Big Bear Lake, California

Sample Date	TPH-g (mg/l)	BTE&X (ug/l)				MtBE (ug/l)	TBA/TAM(2) (ug/l)
		Benzene	Toluene	Ethylbenzene	Xylenes		
MW16-4/17/01	0.06	<0.5	<0.5	<0.5	<0.6	40	<25
MW16-6/13/01	0.095	<0.5	<0.5	<0.5	<0.6	97	ND
MW16-9/10/01	0.11	<0.5	<0.5	<0.5	<0.6	100	ND
MW16-12/6/01	0.12	<0.5	<0.5	<0.5	<0.6	89	ND
MW16-3/29/02	0.14	<0.5	<0.5	<0.5	<0.6	130	ND
MW16-6/4/02	0.088	<0.5	<0.5	<0.5	<0.6	110	<25/<1
MW16-9/24/02	0.2	<0.5	<0.5	<0.5	<0.6	170	<25/<1
MW16-1/24/03	<0.050	<0.5	<0.5	<0.5	<0.6	12	<25/<1
MW16-3/24/03	<0.050	<0.5	<0.5	<0.5	<0.6	180	<25/<1
MW16-6/24/03	0.13	<0.5	<0.5	<0.5	<0.6	95	<25/<1
MW16-9/18/03	0.32	<0.5	<0.5	<0.5	<0.6	300	<25/4.1
MW16-12/9/03	0.11	<0.5	<0.5	<0.5	<0.6	110	<25/<1
MW16-4/2/04	0.3	<0.5	<0.5	<0.5	<0.6	250	<25/<1
MW16-6/10/04	0.22	<0.5	<0.5	<0.5	<0.6	140	<25/<1
MW16-9/13/04	0.2	<0.5	<0.5	<0.5	<0.6	200	<25/<1
MW16-12/14/04	0.16	<0.5	<0.5	<0.5	<0.6	160	<25/<1
MW16-3/16/05	0.20	<0.5	<0.5	<0.5	<0.6	200	<25/<1
MW17-4/17/01	0.05	1.5	6	2.9	9.6	<5.0	<25
MW17-6/13/01	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	ND
MW17-9/10/01	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	ND
MW17-12/6/01	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	ND
MW17-3/29/02	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	ND
MW17-6/4/02	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW17-9/24/02	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW17-1/24/03	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW17-3/24/03	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW17-6/24/03	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW17-9/18/03	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW17-12/9/03	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW17-4/2/04	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW17-6/10/04	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW17-9/13/04	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/1
MW17-12/14/04	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW17-3/16/05	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1

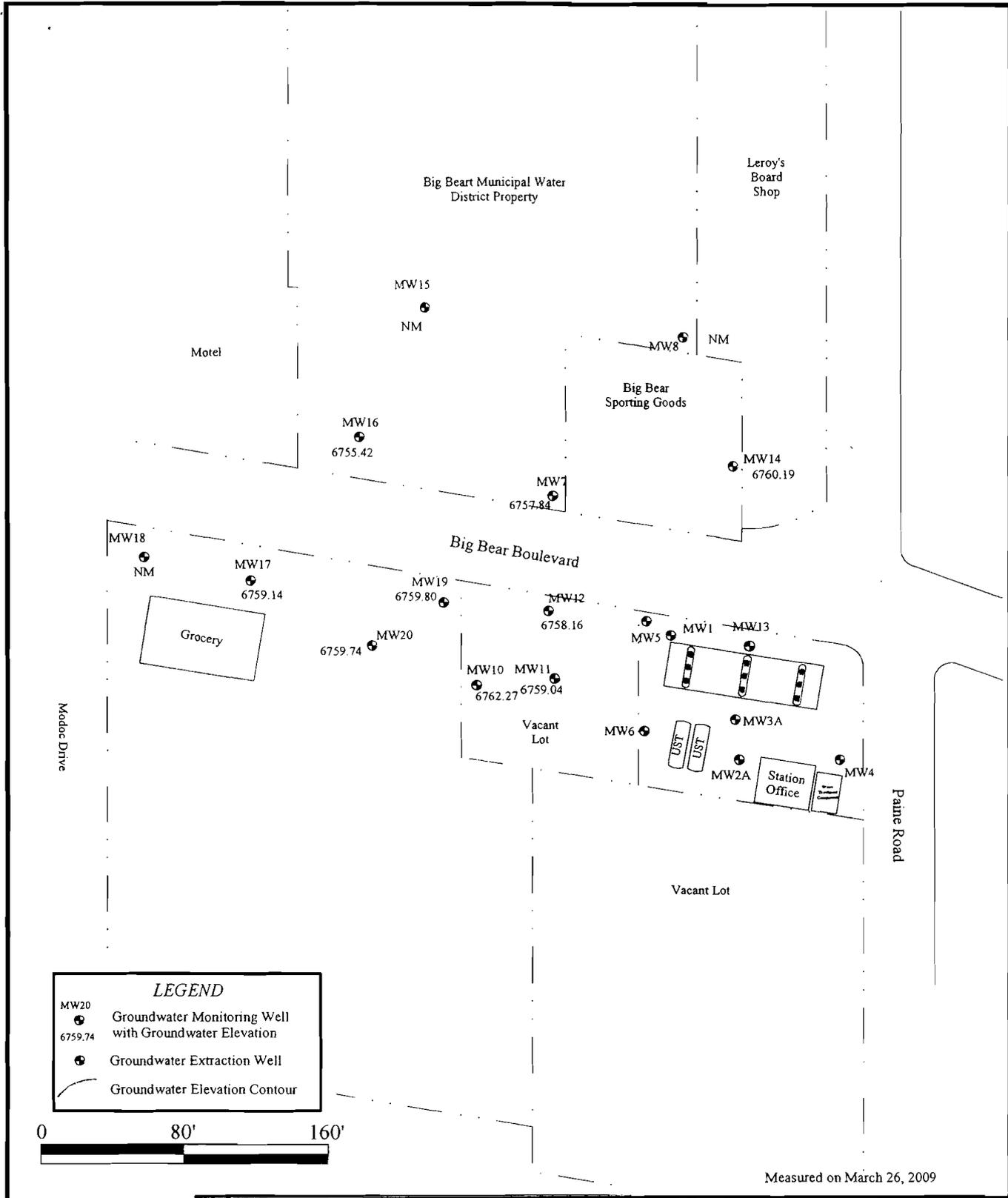
Table 1
Big Bear Texaco/Chevron - Previous and Current Analytical Results (cont.)

40553 Big Bear Boulevard
 Big Bear Lake, California

Sample Date	TPH-g (mg/l)	BTE&X (ug/l)				MtBE (ug/l)	TBA/TAM(2) (ug/l)
		Benzene	Toluene	Ethylbenzene	Xylenes		
MW18-4/17/01	0.055	1.7	7.3	3.7	12	<5.0	<25
MW18-6/13/01	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	ND
MW18-9/10/01	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	ND
MW18-12/6/01	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	ND
MW18-3/29/02	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	ND
MW18-6/4/02	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW18-9/24/02	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW18-1/24/03	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW18-3/24/03	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW18-6/24/03	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW18-9/18/03	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW18-12/9/03	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW18-4/2/04	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW18-6/10/04	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW18-9/13/04	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
MW18-12/14/04	Could not sample well. Snow bank from plow covering well.						
MW18-3/16/05	<0.050	<0.5	<0.5	<0.5	<0.6	<5.0	<25/<1
Influent - 12/14/05	4.5	<0.5	<0.5	<0.5	<0.6	4500	<25/25
Influent - 3/1/05	0.9	<0.5	<0.5	<0.5	<0.6	900	<25/5.3

* Based on non-purge samples collected on 10/25/02, sample numbers on MW10 and MW11 were reversed during the 9/24/02

** Non-purge sample



Measured on March 26, 2009

Scale: 1" = 80'

Leymaster Environmental Consulting, LLC
 5500 E. Atherton St., Suite 210
 Long Beach, CA 90815

Groundwater Elevations	
40553 Big Bear Boulevard Big Bear Lake, CA	
Figure 2	April 13, 2009

Tab 5

Leymaster Environmental Consulting, LLC

5500 E. Atherton St.
Suite 210
Long Beach, CA 90815

Office: (562) 799-9866
Fax: (562) 799-1963

DECLARATION OF MARK LEYMASTER AND MARK SLATER

We, Mark Leymaster and Mark Slater, hereby declare:

1. We are the President and Project Geologist, respectively, of Leymaster Environmental Consulting, LLC, and are each over the age of 18 years, and the following facts are within our personal knowledge, except where stated on information or belief, in which case, we believe it to be true, and if called upon as witnesses, we could testify competently thereto;

2. We have both been professionally involved for several years with the environmental remediation of the site at 40553 Big Bear Blvd., Big Bear Lake, California, on behalf of our client, the McWhirter Real Estate & Investment Co., Inc., and consider ourselves highly familiar with the issues concerning the site as respects the contamination of soil and groundwater by hydrocarbons derived from the unauthorized release of motor fuel;

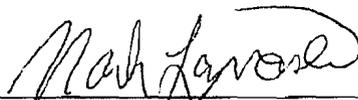
3. The vapor extraction unit previously installed at the site was removed upon our recommendation and with the agreement of the California Regional Water Control Board, Santa Ana Region. A groundwater extraction and treatment system is currently in operation.

4. We are unaware of any current or planned production water well in the Big Bear area which would be impacted in any respect by the migration of hydrocarbons emanating from the site, and we are of the further opinion that the possibility of any environmental degradation of Big Bear Lake on account of the migration of hydrocarbons emanating from the site is extremely low to non-existent.

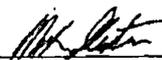
5. Our opinions expressed in the preceding paragraph are based in part upon the fact that, approximately 10 years ago, three groundwater

monitoring wells, MW8, MW14, and MW15, were installed to the northwest downgradient and across Big Bear Blvd from the site. Compounds of concern in the samples from MW8 have been below laboratory detection levels since December 2004, in MW14 since September 2002 and in MW15 since March 2003, including, but not limited to, MTBE. If contaminants migrating from the site were in any conceivable danger of reaching the lake or the Big Bear Marina site, at least some detectable concentrations would have appeared in the said monitoring wells.

We declare under penalty of perjury that the forgoing is true and correct and that this declaration was executed on April 6, 2009 at Long Beach, California.



Mark Leymaster



Mark Slater

Tab 6

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION
6809 INDIANA AVENUE, SUITE 200
RIVERSIDE, CALIFORNIA 92506
PHONE (714) 782-4130



July 24, 1991

Ms. Donna McWhirter, President
McWhirter Real Estate Investment Co.
6633 Valjean Ave.
Van Nuys, CA 91406

WAHL'S TEXACO, 40553 BIG BEAR BLVD., BIG BEAR LAKE; ADDITIONAL
GROUNDWATER INVESTIGATION

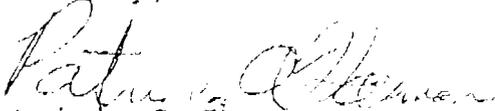
Dear Ms. McWhirter:

We have completed our review of the February 25, 1991, report prepared by your consultant Toxic Technology, Inc. We received the report May 13, 1991. The report contains the results of the removal of three underground storage tanks, installation of three groundwater monitoring wells and the collection and analysis of soil and groundwater samples.

According to the information in this report elevated levels of aromatic petroleum hydrocarbons are present in the groundwater in the vicinity of groundwater monitoring wells MW-2 and MW-3. Based on the information in this report we request the development of a work plan for additional groundwater monitoring wells to fully determine the extent of contamination. We request that a work plan and a schedule be submitted to this office by September 6, 1991.

If you should have any questions, please call me.

Sincerely,


Patricia A. Hannon
Engineering Geologist

cc: San Bernardino County Environmental Health Services, Rm
Ripley

PAH/wahls.1

Tab 7

STATE OF CALIFORNIA - CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

PETE WILSON, Governor

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SANTA ANA REGION

2010 IOWA AVENUE, SUITE 100

RIVERSIDE, CA 92507-2400

PHONE: (909) 782-4130

FAX: (909) 781-8288

95 OCT 18 AM 9:46



October 17, 1995

Ms. Donna McWhirter
McWhirter Real Estate and Investment Company
10523 Penfield Avenue
Chatsworth, CA 91311

**SUBJECT: RESPONSE TO THE GROUNDWATER MONITORING REPORT
BIG BEAR TEXACO
40553 BIG BEAR BOULEVARD
BIG BEAR LAKE, CA 92315
REGIONAL BOARD CASE NO. 083601573T**

Dear Ms. McWhirter:

This letter is in response to the submittal "Ground Water Monitoring Report - Third Quarter 1995, Texaco Service Station, 40553 Big Bear Blvd., Big Bear Lake, California" Your consultant, Advanced GeoEnvironmental, Inc., prepared this report.

Based on my site visit, the casing of MW-3 exhibited perforations from the surface to an unknown depth. MW-3 is located adjacent to one of the dispenser islands. In addition, MW-3 was not sealed with a water tight well box.

Based on our request, methyl tert-butyl ether (MTBE) was analyzed for all the groundwater samples collected at the site. Groundwater samples collected from MW-1 detected concentrations of total petroleum hydrocarbons (570 µg/l), benzene (8 µg/l), toluene (130 µg/l), ethyl benzene (96 µg/l) and xylene (120 µg/l).

MTBE was detected in groundwater samples collected from MW-1, MW-2 and MW-3 with concentrations of 220 µg/l, 5,600 µg/l and 18,000 µg/l, respectively. The detection of MTBE may suggest that a recent leak has occurred. The high level of MTBE in MW-3 could possible be the result of 1) a recent release from the dispenser, piping and/or USTs and/or 2) the perforations in the casing may have allowed surface spillage of gasoline to migrated through the perforations into the groundwater. MTBE was also encountered in groundwater samples collected from MW-1 and MW-2 suggesting that the release has migrated and the plume has not been fully characterized. High levels of benzene have been detected in MW-1 from previous sampling events.

Ms. Donna McWhirter

- 2 -

October 17, 1995

Based on review of this report and personal observations, monitoring well numbers MW-2 and MW-3 appear to be either damaged or poorly constructed. Therefore, we agree with your consultant to properly abandon and re-install these wells. In addition, we request that you provided this agency with the most recent tank testing results indicating that the USTs and piping are certified to be "tight."

Furthermore, as previously requested in our May 10, 1995 letter, we are requesting further delineation of the contamination plume. Please submit a work plan to this office by November 20, 1995 for our review. Additionally, please continue to conduct quarterly groundwater and sampling monitoring at this site.

If there are any questions or need further information, please contact me at (909) 782-4903.

Sincerely,



Leslie J. Alford
Associate Engineering Geologist
Pollutant Investigation Section

cc: Curtis Brundage - San Bernardino County of Environmental Health Services
Scott Traub/ Nuel Henderson, Jr.- Advanced GeoEnvironmental, Inc.
Vicki Bouvia - UST Clean Up Fund

LINE 11/17/95

Tab 8



California Regional Water Quality Control Board

Santa Ana Region



Peter M. Rooney
Secretary for
Environmental
Protection

Internet Address: [ht://www.swrcb.ca.gov](http://www.swrcb.ca.gov)
3737 Main Street, Suite 500, Riverside, California 92501-3339
Phone (909) 782-4130 • FAX (909) 781-6288

Pete Wilson
Governor

September 23, 1998

Ms. Donna McWhirter
McWhirter Real Estate and Investment Company
10523 Penfield Avenue
Chatsworth, CA 91311

**SUBJECT: REVIEW OF SUBMITTED LABORATORY RESULTS
BIG BEAR TEXACO
40553 BIG BEAR BOULEVARD
BIG BEAR LAKE, CA 92315
REGIONAL BOARD CASE NO. 083601573T**

Dear Ms. McWhirter:

On September 3, 1998, we received your laboratory results of the groundwater sampling that occurred on August 20, 1998 at the subject site. Your consultant, Advanced GeoEnvironmental, submitted these results for our review. Groundwater samples were collected by both your consultant and Leslie Alford of our Regional Board staff.

The analytical results indicate that high levels of methyl tertiary butyl ether (MtBE) were still detected in the down-gradient monitoring well, MW-1 (results ranged from 3,840 to 7,000 $\mu\text{g/l}$). Therefore, off-site investigation to fully define the extent of the contamination is necessary. In addition, we believe that replacement of damaged monitoring wells and further soil investigation near the underground storage tanks are necessary. Site cleanup may also be appropriate.

You have requested that this matter be presented to the Board for its review. Therefore, based on the latest analytical results, we plan to present a Cleanup and Abatement Order to the Board for its consideration at the November 20, 1998 Board Meeting. The Board meeting will be held at the Loma Linda City Council Chambers, at which time you will have an opportunity to address the Board regarding this matter. Prior to the Board meeting, a draft Cleanup and Abatement Order will be forwarded to you for your review and comments. In addition, you will receive an agenda for the Board meeting and a staff report that will be presented to the Board.

If you have any questions or need additional information, please contact me at 909-782-3284. In addition, you may contact either Kenneth R. Williams or Leslie Alford at 909-782-4496 or 909-782-4903, respectively.

Sincerely,

Gerard J. Thibeault
Executive Officer

California Environmental Protection Agency

Tab 9



State Water Resources Control Board

Division of Water Quality



Alan C. Lloyd, Ph.D.
Agency Secretary

1001 I Street, Sacramento, California 95814 ♦ (916) 341-5385
Mailing Address: P.O. Box 2231, Sacramento, California 95812
FAX (916) 341-5808 ♦ Internet Address: <http://www.waterboards.ca.gov>

Arnold Schwarzenegger
Governor

CERTIFIED MAIL NO. 70043 1680 0001 3199 9764

APR 27 2005

Ms. Donna McWhirter, President
McWhirter Real Estate and Inv. Co., Inc.
10523 Penfield Avenue
Chatsworth, CA 91311

Dear Ms. McWhirter:

APPROVAL OF REQUEST FOR RECONSIDERATION OF ENHANCED LEAK DETECTION (ELD) TESTING: BIG BEAR CHEVRON, 40553 BIG BEAR LAKE BOULEVARD, BIG BEAR LAKE, CALIFORNIA 92315

This letter is in response to your request for reconsideration of the requirement to perform ELD testing. We have reviewed your request and the supporting documents you provided, and we have consulted with the local permitting agency and water purveyor. The local agency has relocated your underground storage tank (UST) facility in our database, GeoTracker. As a result, we have determined that your UST facility is not subject to the ELD testing requirement. Based on the enclosed information, your request has been approved for the reason(s) indicated below.

UST system(s) is not within 1,000 feet of a public drinking water well.

If you have any questions, please contact Terry Snyder at (916) 341-5385.

Sincerely,

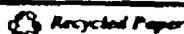
Elizabeth L. Haven, Manager
Underground Storage Tank Program

Enclosure(s)

cc: Mr. Ron Ripley
Supervising Environmental Health Specialist
San Bernardino County Fire Department
620 South E Street
San Bernardino, CA 92415

Mr. Scott Heule
Assistant General Manager
City of Big Bear Lake
P. O. Box 1929
Big Bear Lake, CA 92315-1919

California Environmental Protection Agency



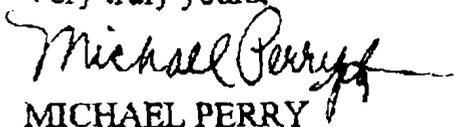
Tab 10

Leslie J. Alford
USA Gas Station #239/Case No. 083601236T
March 3, 1998
Page 2

Could you please send me a brief, written update as to the extent of this contamination, and what is being done to abate it? I need to give our City Council and DWP Board a report on this situation to assure them that our drinking water supply is not threatened by this action.

Thank you for your immediate attention and response to my request .

Very truly yours,



MICHAEL PERRY
General Manager

MJP:RLB

- cc: City Council
- City Manager
- Board of Commissioners (A)
- Dottie Saville
- Biff Snyder
- Steve Wilson
- USA Petroleum Corporation

USAgassta.asp/correa

FROM : CRUICE-REGION 9

PHONE NO. : 989 7816288

May. 11 1998 09:14AM PS



Oak Well

USA

Middle School Well

Knicbarbaker Well

Pennsylvania Well

Added McWhorter

New Park Well

New Park Well

Tab 11

THE CALIFORNIA WATER CONTROL BOARD MEETING, TAKEN ON: 07/02/98

JILIO & ASSOCIATES

Page 1 to Page 46

CONDENSED TRANSCRIPT AND CONCORDANCE
PREPARED BY:

JILIO & ASSOCIATES
3090 BRISTOL AVE. STE. 100 COSTA MESA CA 92626
445 S. FIGUEROA STE. 2700 LOS ANGELES CA 90071
Phone: 1-800-649-8787
FAX: 1-800-801-9148

Page 1

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
BOARD MEETING

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BOARD MEETING.
Thursday, July 2, 1998

Page 2

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
BOARD MEETING

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The board meeting taken before Jeanne Hron, Certified
Shorthand Reporter 10021 for the State of California,
commencing at 1:40 p.m., Thursday, July 2, 1998, at the
offices of California Regional Water Quality Control
Board, 3737 Main Street, Suite 500, Riverside
California 92501-3339.

Page 3

[1] APPEARANCES OF COUNSEL:
[2]
[3] REPRESENTING McWHIRTER REAL ESTATE AND INVESTMENT:
[4] Law Offices of DUKE L. PETERS
By: DUKE L. PETERS
Attorney at Law
[5] 1901 Avenue of the Stars
Suite 1240
[6] Los Angeles, California 90067
(310) 552-3123
[7]
[8] REPRESENTING CALIFORNIA REGIONAL WATER QUALITY CONTROL
[9] BOARD
[10] KENNETH R. WILLIAMS and LESLIE ALFORD
3737 Main Street
[11] Suite 500
Riverside, California 92501-3339
[12] (909) 782-4496
[13]
[14] ALSO PRESENT: JOSHUA ONG, GeoEnvironmental, Inc.
MICHAEL PERRY, Department of Water and
Power, Big Bear Lake, Ca. (Telephonically)
[15]
[16]
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Page 4

- [1] EXHIBITS
- [2]
- [3]
- [4] Exhibit No. Description Page
- [5] A January 18, 1996 letter 45
- [6] B May 15, 1998 Letter 45
- [7] C June 12, 1998 Letter 45
- [8] D March 3, 1998 Letter 45
- [9]
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Page 5

[1] CALIFORNIA REGIONAL
WATER QUALITY CONTROL BOARD
[2] BOARD MEETING
[3] Thursday, July 2, 1998
[4] Riverside, California
[5]

[6] MR. WILLIAMS: I think we
know why we're all
[7] here, to look at the new data and
see where we go from
[8] here.
[9] I do have to ask for some
clarification. We
[10] don't usually have a court reporter
at meetings like this
[11] so could you explain why you felt it
was important to have
[12] that?
[13] MR. PETERS: Well, in the
event some action is
[14] requested of us with which we do
not agree and which we do
[15] not feel is justified, of course, we
have administrative
[16] appellate remedies and it's vital to
have a clear record
[17] of the meeting. I hope it does not
cause any offense. I
[18] certainly hope we don't have any
contentious points at
[19] this meeting, but again, I have no
idea as I sit here now

[20] what your plans are given this
latest data. If it is
[21] something you intend to request
that my client do
[22] something which we feel is
unwarranted, we will exercise
[23] our remedies and it's good to have
it in the record.
[24] MR. WILLIAMS: Maybe we
should start out by
[25] having your consultant discuss the
data and discuss his

Page 6

[1] recommendations to you and see if
there's any point that
[2] we disagree.
[3] MR. ONG: We collected a set
of ground water
[4] samples. When did we actually do
that? Since we have a
[5] court reporter, I want to make
sure the -
[6] MR. PETERS: If you have an
extra copy of that,
[7] you might want to give a copy of
that -
[8] MR. ONG: This is the only
copy I have right
[9] now.
[10] MS. ALFORD: We have it.
[11] MR. PETERS: Give an extra
copy of your data for
[12] the court reporter.
[13] MR. WILLIAMS: We don't
need to make him read it
[14] into the record.
[15] MR. ONG: We collected
samples on May 20th and
[16] we got the results here, and as you
can see, the ground
[17] water for direction, based on the
data that we have, is
[18] flowing to the - call it westerly
direction with
[19] some southern components. And
the samples indicated that
[20] MW3, that's the well that had the
highest concentration of
[21] MTBE before, came back with an
MTBE concentration of only
[22] 18 or 17 parts per million. Only
MW1, which is located in
[23] a quote, unquote, "downgraded
direction" came back with a
[24] significantly higher MTBE than
what we had before. It
[25] went up from 220 parts per billion
to 6500 parts per

Page 7

[1] billion MW1 and it decreased

going back to MW3 now. It

[2] decreased from 18,000 parts per billion to 17 parts per

[3] billion.

[4] So it looks like the MTBE plume has migrated

[5] into the downgraded direction.

[6] MR. WILLIAMS: With the gradient essentially

[7] consistent with past measurements?

[8] MR. ONG: Yes. Based on the data that we have

[9] gathered up to this point, the ground water flow direction

[10] has been flowing to the – generally to the westerly

[11] direction. Sometimes there are some southerly components,

[12] like the most recent one. But previously, there were some

[13] northerly components, but in general, to the west.

[14] MR. PETERS: I'll interject. I would like –

[15] I'll hand this to Joshua. Perhaps you might make use of

[16] it in your discussion here, and I'd like to give the

[17] reporter an exhibit. It's a letter, my letterhead, dated

[18] January 18, '96 addressed to Ken Williams in which I point

[19] out the samples taken by – earlier samples taken by TTI

[20] as well as the last '95 data taken by Dr. Ong's company

[21] was consistent and the direction was in a west by

[22] northwest direction. We have a data for three different

[23] times of the year, May, August and December, and two

[24] different years, '90 and '95. And data is consistent.

[25] Dr. Ong's latest data is consistent with the

Page 8

[1] prior data, except perhaps you might elaborate, there has

[2] been a shift to the southerly direction away from the

[3] lake. It was west by northwest last time. It is now on a

[4] south by southwest by west.

[5] MR. ONG: It is now west by southwest.

[6] MR. WILLIAMS: The date of that letter was?

[7] MR. PETERS: January 18th,

'96.

[8] MR. WILLIAMS: So that was just talking about

[9] the data that was –

[10] MR. PETERS: '90 and late '95, correct.

[11] MR. WILLIAMS: So not including the most recent.

[12] And the range of measurements of gradient that we've seen,

[13] are essentially westerly, but they fluctuate on the order

[14] of 10 degrees? 50 degrees?

[15] MR. ONG: I would say 15, 20 degrees.

[16] MR. WILLIAMS: So they're pretty consistent?

[17] MR. ONG: Pretty consistent flowing to, again,

[18] generally the westerly direction.

[19] MR. WILLIAMS: But ranging between north of west

[20] to south of west?

[21] MR. ONG: Something like that.

[22] MR. PETERS: And the gradient is – would you

[23] characterize it as steep?

[24] MR. ONG: Fairly steep, judging by the fairly

[25] short distances that we are dealing with.

Page 9

[1] MR. WILLIAMS: What do you make of the one well

[2] that you didn't use in your grading measurements, the well

[3] that flowed when the cap was put on it? How do you

[4] interpret that phenomenon?

[5] MS. ALFORD: The artesian condition that

[6] occurred in MW4 when they removed the cap.

[7] MR. ONG: Rob was the one that worked on the

[8] ground water flow direction and he showed me – based on

[9] his data, he concluded that MW4 –

[10] MR. WILLIAMS: In the diagram we see in your

[11] report, it does not extend to the contouring to this

[12] point.

[13] MR. ONG: Right.

[14] MR. WILLIAMS: I mean, I think there is enough

[15] difference that you could, I guess, think that it was

[16] concluded, but it didn't appear

that it was.

[17] MR. ONG: He didn't draw the contour line in

[18] that area, but based on the three-point – several

[19] three-point problems that he solved – I'm not sure that

[20] you have this copy.

[21] MS. ALFORD: Yeah, but we discussed that because

[22] of the fact that it was an artesian that he was going to

[23] show both ways in the report. He was going to show it

[24] both ways with using that and without using that.

[25] MR. WILLIAMS: The point that I was trying to

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[1] get to is that the flowing and essentially the ground

[2] water gradient at or above the surface – or excuse me –

[3] the ground water elevation at or above the surface

[4] suggests a pretty steep gradient, and the direction, given

[5] that steepness, isn't quite certain. I would think that

[6] it would tend to flow in all directions potentially.

[7] MR. ONG: I could see that as a possibility.

[8] MR. WILLIAMS: So you touched on it appeared to

[9] be migrating downgradient?

[10] MR. ONG: Correct. Meaning based on the fact

[11] that MW1, which is not located directly in a downgradient

[12] direction, we could see an increase of MDB there. So one

[13] would assume that there is indeed a certain type of

[14] migration of the plume towards the downgradient direction.

[15] MR. WILLIAMS: So if we were to look for the

[16] problem that we saw earlier in the ground water, we would

[17] find it off site?

[18] MR. ONG: Possibly, or within the property

[19] limits itself. I don't know.

[20] MR. WILLIAMS: Let's just say beyond the

[21] existing well network?

[22] MR. ONG: We don't have a well that is located

[23] exactly in the downgradient

direction based on the most
 [24] recent flow direction that we got here, yes.
 [25] MR. WILLIAMS: Or downgradient of the highest

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[1] concentration?
 [2] MR. ONG: Correct.
 [3] MR. WILLIAMS: So there's some clear data needs
 [4] in terms of characterizing the extent of the problem where
 [5] it resides now?
 [6] MR. ONG: Judging by the fairly high
 [7] concentration, I would say so.
 [8] MR. WILLIAMS: For the record, we're being more
 [9] elaborate in our questions and answers than we would
 [10] normally, so that's why we're just laying the foundation.
 [11] MR. ONG: And you are formulating questions and
 [12] I'm formulating the answers very, very carefully now.
 [13] MR. WILLIAMS: I think that's the nature of
 [14] today. But what's your recommendation, sir?
 [15] MR. ONG: That remains to be seen. That's why
 [16] we put it down in the report that we'd like to discuss it
 [17] with you. Basically as such, we would like to talk to you
 [18] about additional steps. The conclusions that we drew from
 [19] our most recent monitoring are listed here. Now, the
 [20] recommendations remain to be seen. We would like to talk
 [21] about that. That's why we are here; is that correct?
 [22] MR. PETERS: Correct.
 [23] MR. WILLIAMS: So you formed no recommendations
 [24] on this point?
 [25] MR. ONG: Up to this point, no. When we

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[1] prepared the report, that's what I meant.
 [2] MR. WILLIAMS: Is that typical?
 [3] MR. ONG: No.
 [4] MR. WILLIAMS: So would you like us to provide
 [5] the recommendations?
 [6] MR. ONG: We'd like to

discuss the
 [7] recommendations.
 [8] MR. WILLIAMS: Sounds like there's nothing on
 [9] your side of the table to listen to in terms of
 [10] recommendations to see if we disagree with those
 [11] perceptions.
 [12] MR. PETERS: Well, the premise is that - by
 [13] recommendations you mean is there a need for additional
 [14] action beyond quarterly monitoring? If that is what
 [15] you are getting at, is continued quarterly monitoring in
 [16] order at this point only? Is there a need for additional
 [17] sampling points? That's the question I believe we are
 [18] faced with.
 [19] With respect to the argument that additional
 [20] sampling points are needed, prior to our last meeting you
 [21] provided us with a copy of a letter from Mr. Perry and a
 [22] copy of this map, which I assume was drawn by him, showing
 [23] the location of the existing ground water wells,
 [24] obviously, for the proposition that our station was some
 [25] threat - posing some threat to these wells.

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[1] I had, as you know, a conversation with
 [2] Mr. Perry by phone. Prior to hanging up with him, I asked
 [3] him if I may write a confirming letter memorializing our
 [4] conversation. He agreed. I received no response until
 [5] approximately one month later. I had made the following
 [6] assertions in my confirming letter -
 [7] MR. WILLIAMS: Maybe we can just hear the ones
 [8] that he confirmed.
 [9] MR. PETERS: Well, whether he confirms them or
 [10] not I think is beside the point. There's no specific
 [11] denial of my contentions in the letter. I asserted that
 [12] he had stated our site is too far upgradient to pose any

[13] threat to his existing wells. He specifically mentioned
 [14] the Pennsylvania and the Knickerbocker Wells because those
 [15] are the ones that are in proximity to our site. He did
 [16] mention there was a possibility, simply in the talking
 [17] stage, of another well being inserted at the Big Bear
 [18] Marina site.
 [19] And with respect to that well, after
 [20] describing the extent of the problem at our station, I did
 [21] mention we had several monitoring wells. One had shown
 [22] 18,000 parts per billion of MTBE near a dispenser. This
 [23] well was towards the middle of our property. And his
 [24] statement was, "I would be satisfied with monitoring at
 [25] this point."

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[1] MR. WILLIAMS: The dates of those letters?
 [2] MR. PETERS: My letter to him is May 15th, which
 [3] was the day of the conversation. His letter of response
 [4] was June 12th, '98. He says in his letter, "There appears
 [5] to be a misunderstanding of my statements." However, again
 [6] I note his letter of June 12th does not specifically
 [7] refute the contentions made in my letter. He simply
 [8] states, "The SARWQCB will determine a need for
 [9] remediation. Remediation has been required wherever there
 [10] is any threat to local ground water."
 [11] The fact that he asserts in his second paragraph
 [12] to "The SARWQCB are the regulators of UST's and they make
 [13] the determination of the need for monitoring and
 [14] remediation" is to me stating the obvious. And that your
 [15] agency determines the need for remediation also states the
 [16] obvious.
 [17] MR. WILLIAMS: Thank you for that recognition.
 [18] MR. PETERS: The point is, according to my
 [19] conversation with Mr. Perry as

captured on my May 15th
 [20] letter, this site does not pose a threat to any existing
 [21] wells or the proposed well at Big Bear Marina, if we want
 [22] to call it a proposed well. It's a possibility. There is
 [23] no mention of any other proposed wells.
 [24] From the gradient as determined by Dr. Ong, and
 [25] he indicates he's quite certain the flow direction is -

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[1] his calculation as to the flow direction is correct, and
 [2] given the distance between our site and the - both the
 [3] existing wells and the proposed well at the Big Bear
 [4] Marina site, this site does not pose a threat to any
 [5] existing or potential ground water wells.
 [6] Is that a correct statement, Dr. Ong? Is that
 [7] your view?
 [8] MR. WILLIAMS: Well, go ahead and answer.
 [9] MR. PETERS: You can answer the question.
 [10] MR. ONG: Judging by the location of those wells
 [11] on this map - I saw this map for the first time
 [12] today - it looks again, since ground water flow direction
 [13] at the point of site, which is over here (indicating), is
 [14] flowing to the westerly direction, which is roughly
 [15] parallel to the shore of the lake, for lack of a better
 [16] word, so it's not flowing towards the actual lake itself.
 [17] MR. WILLIAMS: Would you expect it to flow
 [18] through the lake -
 [19] MR. ONG: Not necessarily.
 [20] MR. WILLIAMS: - given the topography and the
 [21] relative elevation differences?
 [22] MR. ONG: Not necessarily. We have seen it at
 [23] another lake site that indeed the ground water flow
 [24] direction runs roughly parallel to the shore.
 [25] MR. WILLIAMS: And the elevation of the water

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[1] table here at the site compared to the lake is roughly how
 [2] much higher?
 [3] MR. ONG: I don't know.
 [4] MR. WILLIAMS: So you made the first statement
 [5] but you don't know the difference?
 [6] MR. ONG: I don't know the difference.
 [7] MR. WILLIAMS: Is it a relevant fact?
 [8] MR. ONG: It could be. It would be a relevant
 [9] fact, yes.
 [10] MR. WILLIAMS: So we have artesian conditions.
 [11] We have a steep gradient. We have no knowledge of the
 [12] relative difference to points lower, which is the lake
 [13] which all water ultimately flows to.
 [14] MR. ONG: Correct.
 [15] MR. WILLIAMS: How can we make the statement
 [16] that it's not a threat to the lake or -
 [17] MS. ALFORD: Even just local water.
 [18] MR. WILLIAMS: - potential well, or as we would
 [19] frame it, the ground water in general?
 [20] MS. ALFORD: Have you read Mike Perry's letter?
 [21] MR. ONG: Which one?
 [22] MS. ALFORD: In response to Duke's.
 [23] MR. WILLIAMS: The June 12th?
 [24] MS. ALFORD: Because he clearly states, "To
 [25] identify/quantify the extent of contamination." Clearly

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[1] the contamination has not be defined. And again he is -
 [2] MR. PETERS: When - go ahead.
 [3] MR. WILLIAMS: I'd like to put the two letters
 [4] into the record.
 [5] MR. PETERS: Yes, indeed, we will do that.
 [6] MR. WILLIAMS: Mr. Peters, your statement that
 [7] contamination will be perceived thus far as not a threat
 [8] to wells in existence, apparently is your own legal

[9] opinion.
 [10] MR. PETERS: No. It's based upon, in material
 [11] part, upon my conversation with Mr. Perry. That is his
 [12] statement to me.
 [13] MR. WILLIAMS: But Mr. Ong - or Dr. Ong.
 [14] Excuse me - had not rendered an opinion that you
 [15] incorporated into your opinion before today.
 [16] MR. PETERS: Render an opinion? Explain that.
 [17] MR. WILLIAMS: Did you ask him the question and
 [18] get his response before this meeting?
 [19] MR. PETERS: I did indeed in the meetings
 [20] with - well, without breaching attorney-client privilege,
 [21] I will state I have discussed with Dr. Ong - the question
 [22] is of whether or not our site is posing a threat to
 [23] existing wells or to the potential well at Big Bear
 [24] Marina. His response was in the negative, and I believe
 [25] he just made that response.

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[1] MR. WILLIAMS: But you gave an opinion before he
 [2] responded. Your opinion was incorporating what
 [3] information?
 [4] MR. PETERS: My opinion that this is not - our
 [5] site is not a threat to the existing or potential well?
 [6] MR. WILLIAMS: Yes.
 [7] MR. PETERS: In material part - well, it is
 [8] based upon my conversations with Dr. Ong prior to this
 [9] meeting. It is based upon my conversation with
 [10] Mr. Perry. It is based upon - I cannot qualify the
 [11] technical expert. My background is legal, although
 [12] technical and electrical engineering.
 [13] Common sense, our site is indeed upgradient, as
 [14] indicated by the flow direction of the existing wells and
 [15] also the Big Bear Marina site which -

[16] MR. WILLIAMS: And you're an expert on the [17] determination of flow directions in a general sense for [18] the community rather than in a very limited sense for the [19] site? It seems like it's an extrapolation from the site [20] data that the conclusion about the threat to the community [21] water supply - [22] MR. PETERS: Well, I would think deference [23] should be given to Mr. Perry's view as to what is and what [24] is not a threat to the community's water supply. And when [25] he states to me on the phone that our site is not a threat

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[1] to his existing wells, it's, quote, "too far upgradient," [2] unquote. Those are his words. And in the course of that [3] conversation, the one potential new well was mentioned. [4] That was at the Big Bear Marina site. And his statement [5] with respect to our station is, "What would you want to [6] see done with our station?" [7] "I would be satisfied with [8] monitoring." [9] Excuse me. [10] (Whereupon a discussion was held off the [11] record.) [12] MR. PETERS: So my expertise or lack thereof I [13] think is irrelevant. I'm relying upon the opinions of two [14] experts. [15] MS. ALFORD: But his letter states obviously [16] that there was some confusion of the conversation. So [17] when he received your letter, he wrote another letter [18] saying exactly how, because he said -

[19] MR. WILLIAMS: I think the relevant parts of his [20] letters, and I'll read them for the record are, "Our [21] valley depends on the ground water for 100 percent of our [22] drinking water, therefore, any threat of contamination is [23] of great concern to us."

[24] MR. PETERS: His letter is written, as I've [25] stated earlier, one month - almost one month after the

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[1] conversation. Mine was written the day of the [2] conversation. To the extent there is a conflict - look. [3] We do this all the time in law. [4] MR. WILLIAMS: Clearly he objects to your [5] statements. [6] MR. PETERS: No. He did not object, sir. Where [7] in the four corners of his letter does he - [8] MR. WILLIAMS: It says in the first line, "There [9] appears to be a misunderstanding of my statements." [10] MR. PETERS: What specific assertion made in my [11] letter is specifically controverse in his letter? Point [12] them out to me. [13] MR. WILLIAMS: Maybe he doesn't specifically [14] say, but he in general in the very first sentence - and [15] you know, what I would suggest that we do is contact [16] Mr. Perry. Should we contact him and let him speak for [17] himself and recreate that same conversation?

[18] MR. PETERS: Yeah. I'm going to - as far as [19] I'm concerned there is no - [20] MR. WILLIAMS: I'd like to insist on that. [21] MR. PETERS: You'd like to insist on that? I [22] happen to believe somebody from your office may have [23] contacted Mr. Perry after my letter to him and got him to [24] change a little bit. [25] MR. WILLIAMS: You feel that we script his

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[1] response and write his letters for him? Do you think [2] that's inappropriate that we contact him and ask his [3] opinion either now or in the past? [4] MR. PETERS: I find it very odd that he did not [5] see fit to controvert the assertions in my confirming

[6] letter of May 15th until nearly one month after the date [7] of the conversation. And I can tell you in a court of law [8] my letter would be presumed to more accurately reflect the [9] conversation given the fact it was written the day of the [10] conversation, not one month afterwards. [11] MR. WILLIAMS: You can write anything the day [12] of the conversation. If it's wrong, it's wrong regardless [13] of the date. I would suggest that his letter makes your [14] letter irrelevant. [15] MR. PETERS: I would say that's a rather extreme [16] position, sir. [17] MR. WILLIAMS: Essentially erase it from the [18] data that we should be concerned. His letter in the [19] middle paragraph says, "Your letter stated I indicated [20] that there was no need for mediation. I am not in that [21] position to make that determination. The Regional Water [22] Board are the regulators of UST's and they will make the [23] determination of needs for monitoring and remediation." [24] So he clearly disagrees with you and defers to our [25] position.

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[1] MR. PETERS: He is merely stating the obvious, [2] that your department and not his is the one who makes the [3] decision as to the need for remediation. [4] MR. WILLIAMS: And I think it's important to [5] realize that he had to make that point in regard to your [6] letters. He had to make the obvious point, which is in [7] contrast to your letter. [8] MR. PETERS: He is not contrasting my letter. He [9] has not specifically denied an assertion I made in my [10] letter. [11] MR. WILLIAMS: Let's get him on the phone and [12] let's put an end to this debate by listening to him.

[13] MR. PETERS: No, I don't -
 [14] MR. WILLIAMS: You would not want that?
 [15] MR. PETERS: Would I want that?
 [16] MR. WILLIAMS: For the record, you would not
 [17] want that input?
 [18] MR. PETERS: As far as I'm concerned, his letter
 [19] speaks for itself.
 [20] MR. WILLIAMS: It defers to us.
 [21] MR. PETERS: It defers to you and it does not
 [22] deny that he expressed the opinion, as memorialized in my
 [23] letter of May 15th, that there is no need for remediation
 [24] with respect to that site. Where is that denied? He
 [25] merely says the decision and the authority lies with your

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[1] office and not his.
 [2] MR. WILLIAMS: And we repeat -
 [3] MR. PETERS: Where does he deny that he stated
 [4] to me that this site does not need remediation, continued
 [5] monitoring, as far as he personally is concerned?
 [6] MR. WILLIAMS: Well, in that sense, he says -
 [7] in that sense, he can't concur with your position.
 [8] MR. PETERS: You're mischaracterizing his
 [9] letter.
 [10] MR. WILLIAMS: I don't think so. Let's get him
 [11] on the phone. We have his phone number and we'll take our
 [12] chances and see if he's available. Okay?
 [13] MR. PETERS: I'm not agreeing with this.
 [14] MR. WILLIAMS: Wouldn't you like the opportunity
 [15] to have your letter confirmed as relevant?
 [16] MR. PETERS: It has been confirmed as far as
 [17] there's a lack of any specific denial.
 [18] MR. WILLIAMS: I think self-confirmation is -
 [19] MR. PETERS: There's a lack of a specific
 [20] denial.

[21] MR. WILLIAMS: You could say anything to me -
 [22] MR. PETERS: You can say anything to me.
 [23] MR. WILLIAMS: - and if I don't respond, does
 [24] that mean it stands?
 [25] MR. PETERS: Yes indeed. That's the way we do

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[1] things in the law of business, sir. When you and I have a
 [2] conversation and I write a confirming letter and there's a
 [3] lack of a contrary letter coming in the other direction -
 [4] MR. WILLIAMS: It seems like then your
 [5] background and expertise is clearly legal and not
 [6] technical.
 [7] MR. PETERS: Whether it is or not is irrelevant.
 [8] I am relying on the opinions of two experts, one,
 [9] Mr. Perry and Dr. Ong.
 [10] MR. WILLIAMS: We are too.
 [11] MR. PETERS: Both are of the opinion there's no
 [12] need for a remediation.
 [13] MR. WILLIAMS: We'll get the other expert on the
 [14] phone whether you mind or not.
 [15] MS. ALFORD: I have to go get his phone number.
 [16] (Recess taken.)
 [17] MR. WILLIAMS: I'd just like to understand how
 [18] you feel your appellate rights would play out?
 [19] MR. PETERS: How I feel is irrelevant. They are
 [20] set forth in the Code of California Regulations.
 [21] MR. WILLIAMS: How do you understand the
 [22] process, because we're prepared to walk through them if
 [23] you wish?
 [24] MR. PETERS: There's no need for that. I don't
 [25] think it's germane to the purpose of this meeting.

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[1] MR. WILLIAMS: I'm saying ultimately in the
 [2] future we'll go through those steps with our senior - or
 [3] management with the Regional Board, if you wish, just so

[4] we understand what the steps are.
 [5] MR. PETERS: I think that's I don't know if
 [6] that's germane or helpful to this meeting. What will
 [7] happen in this meeting will happen and it's on record. If
 [8] some request was made of my client that he feels is
 [9] unwarranted, we'll take it a notch higher. We've done
 [10] that in the past, done it with UST Funds, and we'll do it
 [11] again.
 [12] MR. WILLIAMS: Clearly we feel additional work
 [13] is required. The 6500 in the most downgradient well is
 [14] disturbing to us. The recognition that the contamination
 [15] is migrating downgradient off site is disturbing to us.
 [16] MR. PETERS: We don't know that it's off site.
 [17] MR. WILLIAMS: No. That's the whole point of
 [18] putting additional wells in, is to find out if it's off
 [19] site. Clearly that question needs to be answered,
 [20] correct?
 [21] MR. PETERS: No. I don't believe that is a
 [22] correct conclusion.
 [23] (Whereupon, Mr. Perry interrupted the proceeding
 [24] on speaker phone.)
 [25] MR. PERRY: Should I identify myself?

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[1] MS. ALFORD: Yes, please.
 [2] MR. PERRY: Michael Perry, P-e-r-r-y, general
 [3] manager of the Department of Water and Power at the City
 [4] of Big Bear Lake.
 [5] MR. WILLIAMS: Mr. Perry, this is Ken Williams
 [6] and Leslie Alford from the Regional Water Board. And I'll
 [7] ask the other parties with us to identify themselves as
 [8] well.
 [9] Can you hear us okay?
 [10] MR. PERRY: Yeah, you're a little in the
 [11] distance, but if I concentrate, it's fine.
 [12] MR. WILLIAMS: We'll try to enunciate as much as

steps are possible.
 MR. PERRY: That would be appreciated.
 MR. ONG: Hi, Mr. Perry. My name is Joshua Ong and I'm with Advanced EcoEnvironmental, an environmental consulting company working for the McWhirters.
 MR. PETERS: This is Duke Peters, attorney for McWhirter Distributing - forgive me - McWhirter Real Estate and Investment Company.
 MR. WILLIAMS: So the point that we'd like to get your input on is regarding two letters that Mr. Peters sent to you and that you responded a month later, roughly.
 MR. PETERS: I'll address my letter to you of May 15th, 1998. Do you have a copy of that in front of

you?
 MR. PERRY: No, I don't, but I recall we spoke on the phone and then you sent me a letter, then I sent you a letter back.
 MR. PETERS: You sent the letter back nearly a month later. But I think it would be helpful if you had a copy of my letter in front of you.
 MR. PERRY: I don't know how soon I could accomplish that. I don't have a file.
 MS. ALFORD: I can fax it to you right now.
 What's your fax number?
 MR. PERRY: (909) 866-3184.
 MS. ALFORD: Okay. It's on its way.
 MR. WILLIAMS: Well, because that will take a few moments or minutes, why don't you just go through in general how the City of Big Bear gets their water supply.
 MR. PERRY: Correct. Would you like me to describe that?
 MR. WILLIAMS: Yeah. Just take your time because we'll have to fill a little bit of a pause here.
 MR. PERRY: All of our water is derived from

ground water that underlies the city here. We have vertical wells and slant wells that provide that.
 Back in the drought period, which would have been the late '80s, up through, I don't know, '90, '91, or

whenever it finally ended, we had a five- to seven-year drought here, and what occurred at that point in time was the existing wells drew down the ground water basins to the point where some of those wells literally dewatered the ground at that point and could no longer produce water. They had to be turned off and rested. And so we went out on an exploratory program to find new sites to drill wells in areas that had not been tapped before for ground water.
 We went towards the west and we were successful in the southwest area of the city, which is basically directly east of the Texaco station. We have two successful - well, actually one, two, three successful wells to the east of the Texaco station across the city there. Then our geologist identified an additional site which is north of the Texaco station there at the Municipal Water District property at the corner of Payne and Lakeview. And we have that as a proposed well site for our - for a future well to be drilled to supplement our domestic supply.
 The problem we're running into is we are beginning to get closer and closer to what we call our safe yield, which would be the total amount we could withdraw from the ground on an ongoing basis without injuring the ground water basins themselves. And once we

get to that safe yield position, we will need supplemental

supplies beyond ground water, which will be most likely treated waste water recharged back into the ground for supplemental supplies.
 To give you the idea of the cost of those two, for us to drill a well and pump the water out would run between \$100 and \$150 an acre foot for capital costs amortized and operational costs. To do the waste water reuse project, which would be the next phase after the ground water, runs on the order of \$2,000 an acre foot.
 So you can see that there is almost a factor of 20 in cost between the ground water and our next available alternative. And that's why it's important to us to protect the ground water and keep that available for the future growth of the city.
 Do you want me to run out to my fax machine and see if it's there?
 MR. PETERS: Please do.
 MR. PERRY: Okay. Stand by. (Recess taken.)
 MR. PERRY: Hello again.
 MR. PETERS: We're here.
 MR. PERRY: I have a copy of Duke's letter of May 15th and my response of June 12th.
 MR. PETERS: With respect to my letter of

May 15th, let's look at the first paragraph.
 MR. PERRY: Okay.
 MR. PETERS: The first sentence, we discussed, did we not, the contamination with U.S.A. Petroleum?
 MR. PERRY: Yes, sir.
 MR. PETERS: And we discussed your existing wells and we specifically mentioned the Pennsylvania Well and Knickerbocker Well?
 MR. PERRY: Yes, sir.
 MR. PETERS: And did you not state to me that our site at Big Bear Boulevard, west of Payne, is too far upgradient to pose a threat to the

existing wells, unlike
 [13] the U.S.A. Petroleum site?
 [14] MR. PERRY: Yeah. The odds that Texaco could
 [15] migrate towards the Pennsylvania and Knickerbocker are
 [16] much less than the site directly north of there. I'm not
 [17] a geologist, but there's quite a distance between the two
 [18] sites.
 [19] MR. PETERS: Let's go to the next paragraph. We
 [20] discussed, did we not, the proposed or possible well at
 [21] the Big Bear Marina site, did we not?
 [22] MR. PERRY: Yes. That's the one I just
 [23] mentioned at the corner of Payne and Lakeview.
 [24] MR. PETERS: That is only a proposed site; is
 [25] that correct?

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[1] MR. PERRY: That's correct. It's on our
 [2] planning for a future well site.
 [3] MR. PETERS: And did I describe to you in
 [4] general terms the contamination at our station, the fact
 [5] there was MTBE on it, the greatest concentration appeared
 [6] near the dispenser in the middle of the station? Is that
 [7] an accurate -
 [8] MR. PERRY: I'm sorry?
 [9] MR. PETERS: Did I or did I not describe to you
 [10] in general terms the extent as it was known at that time
 [11] of MTBE contamination at our station?
 [12] MR. PERRY: Yeah. As I recall, you discussed
 [13] the existing contamination that you were aware of at that
 [14] time.
 [15] MR. PETERS: So I did indicate to you we had
 [16] MTBE?
 [17] MR. PERRY: Yes.
 [18] MR. PETERS: And it was in the middle of the
 [19] station, a significant concentration?
 [20] MR. PERRY: I'm sorry. Say that last one again.
 [21] MR. PETERS: At a well

roughly in the middle of
 [22] the station, there was a significant concentration?
 [23] MR. PERRY: I don't recall that specifically,
 [24] but if that's the case, that's fine.
 [25] MR. PETERS: I realize now that, of course, the

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[1] Regional Water Board, Mr. Williams, and his organization
 [2] is the one with the authority to order remediation or some
 [3] specific action, but did we not discuss your personal
 [4] opinion as to the need of this site, remediation versus
 [5] continued monitoring?
 [6] MR. PERRY: I don't recall specifically. What I
 [7] recall is that I wanted to make sure that our site which
 [8] is downgradient is protected so that it will be available
 [9] to the community in the future.
 [10] MR. PETERS: Look at the last sentence of my
 [11] letter.
 [12] MR. PERRY: Right.
 [13] MR. PETERS: Are you saying that is not an
 [14] accurate characterization of your words to me, or do you
 [15] know as you sit here today?
 [16] MR. PERRY: I don't know what - I cannot tell
 [17] you. I cannot recollect exactly what I said. I would
 [18] only say in looking at that sentence today and when I
 [19] looked at that sentence and responded to you in my
 [20] June 12th, my position would be that I am not the one that
 [21] is responsible for making the determination on whether
 [22] it's monitoring or remediation. My input would be, like
 [23] I've said before, that we intend to drill a domestic well
 [24] downgradient. We want to make sure that that is never
 [25] threatened in any way.

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[1] MR. PETERS: Which well? Are you talking about
 [2] the one in Big Bear Marina?
 [3] MR. PERRY: Yes.
 [4] MR. WILLIAMS: Mike, this is Ken Williams. Is

[5] that the last well you intend to drill in Big Bear?
 [6] MR. PERRY: I'm sorry. Say that once again.
 [7] MR. WILLIAMS: That proposed well, is that the
 [8] last well that the City of Big Bear proposes to drill?
 [9] MR. PERRY: No, sir. There are other sites that
 [10] are identified in addition to this site. This was one of
 [11] the more promising sites that was identified by our
 [12] hydrogeologist.
 [13] MR. WILLIAMS: What kind of capture zone do you
 [14] expect those wells to have? I think general
 [15] answers. Broad? Narrow? Limited?
 [16] MR. PERRY: It's hard to say until you drill the
 [17] well. I mean, we have some, you know, that are affected
 [18] thousands and thousands of feet, depending upon the
 [19] movement of the ground water in the vicinity of that
 [20] well. So it really depends upon the movement of the
 [21] ground water down towards and through and past that well
 [22] site. But normally our well sites will have a very large
 [23] effect and can be affected by a very large area, as far as
 [24] the tributary area.
 [25] MR. WILLIAMS: And the pumping of those wells

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[1] will alter and affect the ground water in that capture
 [2] zone, you're saying?
 [3] MR. PERRY: Yeah. We will create a cone of
 [4] depression around the well that will affect the ground
 [5] water in that area and cause the surrounding ground water,
 [6] especially if it's moving in the direction of that general
 [7] well site, we will affect that water as it moves down
 [8] towards that well site, and then we will eventually
 [9] capture it.
 [10] MR. WILLIAMS: In speaking more generally, are
 [11] you comfortable with existing

contamination in the ground
 water within the community of Big
 Bear?
 MR. PERRY: I'm sorry. Say
 again.
 MR. WILLIAMS: Speaking in
 general, are you
 comfortable with sites where
 contamination exists in the
 ground water within the
 community of Big Bear?
 MR. PERRY: You need to be
 a little more
 specific. I don't understand. Are
 you talking about
 naturally occurring or the different
 gasoline stations we
 have, or what?
 MR. WILLIAMS: The
 different gasoline stations
 particularly.
 MR. PERRY: We are
 concerned and we've expressed
 a fairly strong concern about
 everything from Moonridge
 Fuel to U.S.A. to Texaco. MTBE,
 as you know, is a very

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great concern in the water
 community at this point and
 it's a serious threat.
 MS. ALFORD: So if there was
 a site left
 uncharacterized, would that be of
 concern?
 MR. PERRY: Sure. We want
 - I mean, as a
 provider of domestic water, we
 want to make sure that each
 petroleum site, whether it be a gas
 station or Snow Summit
 or Bear Mountain, you know,
 private industry, whether or
 not it's a public or private thing, we
 want to make sure
 it's known that there is no threat
 to the ground water
 from each of those sites. Does that
 answer the question?
 MR. WILLIAMS: Yeah.
 Regarding the
 conversations and the letters, the
 characterization we had
 at that point was roughly two years
 old. Since that time
 we've taken another round of the
 ground water sampling and
 we find that the concentration in
 the most downgradient
 well have increased so -

MR. PERRY: Is that still on
 property or is that
 off property?
 MR. WILLIAMS: Presently
 it's on property, but
 it's approaching the property line.
 MR. PETERS: And I think -
 MR. PERRY: Do we have any
 monitoring wells off
 property downgradient?
 MR. WILLIAMS: No, sir.

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MR. PETERS: And I would
 add, the well in the
 middle of the property which
 showed the greatest
 concentration of MTBE, the one
 which I alluded to in my
 conversation with you May 15th
 which is a concentration of
 18,000 parts per billion has now
 shrunk to, I believe it's
 75.
 MR. ONG: 17.
 MR. PETERS: 17 parts per
 billion. And another
 well also on the property,
 monitoring well too, showed a
 concentration of 5600 is now
 shrunk to 120. The only well
 which showed increase is the one
 in the downgradient
 direction, which I would add
 reinforces the contention
 we've been making all along that
 this resulted from a
 one-time spill. It is not a tank leak
 or line leak.
 MR. WILLIAMS: That hasn't
 been determined.
 MR. ONG: What is the last
 one you referred to,
 what is the before and after
 numbers on that one?
 MR. PETERS: The one in the
 downgradient
 direction, you mean?
 MR. PERRY: Yeah. You said
 there was one that
 increased and you didn't give the
 numbers on that one.
 MR. PETERS: Monitoring
 Well 1 is in the
 downgradient direction. It went
 from 220 up to 6500. The
 one upgrading of that near a
 dispenser which had the high
 concentration last time went down
 from 18,000 to 17, and

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one bit actually due south of that
 one also in the
 property went from 5600 down to
 120.
 MR. PERRY: You're saying
 the one went from
 18,000 down to 17?
 MR. PETERS: That's correct.
 MR. PERRY: My general
 response is that, you
 know, I'm a manager of a water
 department. I'm not a
 geologist. I'm not a water quality
 expert. And, you
 know, I rely upon the Water
 Quality Control Board, as I
 think all the water suppliers do, to
 use their best
 judgment in determining how to
 make sure I will never have
 a problem in my wells or my
 proposed wells with
 contamination. That's their job.
 And my job is to take
 the water and deliver it safely to
 the community. Their
 job is to make sure that water
 supply and resource is
 protected so that it's available for
 the people here
 locally.
 MR. PETERS: I just have one
 question.
 Subsequent to your receipt of my
 letter dated May 15th and
 prior to your responding letter of
 June 12th, did you have
 occasion to discuss my letter with
 either Ms. Alford or
 Mr. Williams?
 MR. PERRY: I believe I did,
 yes. I believe
 when I got your letter, I discussed
 it with one of the
 people there at the Water Quality
 Board.

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MS. ALFORD: Me, Leslie.
 MR. PETERS: And is that
 conversation what
 prompted you to write your letter
 of June 12th?
 MR. PERRY: Yeah. I wanted
 to make sure after
 talking to water quality that you
 guys understood that
 they're the ones that make the call.
 I'm not the one that
 makes the call on either
 monitoring or remediation, and I

[8]- wanted to make sure that you guys understood that and that
 [9] I didn't give any misimpression that I had some authority
 [10] over that decision.
 [11] MR. PETERS: Okay.
 [12] MR. WILLIAMS: Did you in general agree with
 [13] Mr. Peters' letter?
 [14] MR. PERRY: I'm sorry?
 [15] MR. WILLIAMS: Did you in general agree with
 [16] Mr. Peters' letter?
 [17] MR. PERRY: In what respect?
 [18] MS. ALFORD: No remediation was necessary.
 [19] MR. WILLIAMS: Especially the last line, that
 [20] you were satisfied with the current monitoring and that
 [21] that was no current need for remediation?
 [22] MR. PERRY: Like I say, I'm not privy to
 [23] anything about that site other than the one time that
 [24] Mr. Peters called me and told me what the monitoring was.
 [25] I don't have the big picture.

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[1] I mean, number one, I don't have the big
 [2] picture. Number two, I'm not trained to adequately judge
 [3] that. And so I would have to say that last sentence there
 [4] is something that I am not qualified nor informed enough
 [5] to make that statement.
 [6] MR. ONG: Mr. Perry, this is Joshua Ong again.
 [7] What is the depth of the aquifer which you withdraw the
 [8] ground water from typically?
 [9] MR. PERRY: I'm sorry. Could you say that once
 [10] again?
 [11] MR. ONG: What is the depth of the aquifer from
 [12] which you withdraw the ground water?
 [13] MR. PERRY: It varies. We have a lot of bedrock
 [14] with alluvial matter over the top of it. It can vary from
 [15] as little as 100 feet in some areas to probably 3- to 500
 [16] feet at the deepest point.
 [17] MS. ALFORD: What kind of

seals do you have?
 [18] MR. PERRY: We have 50-foot sanitary seals on
 [19] our wells.
 [20] MR. WILLIAMS: When the wells are pumped, do you
 [21] see shallow ground water effects?
 [22] MR. PERRY: I'm sorry. Can you say it again?
 [23] MR. WILLIAMS: When those wells are pumped, do
 [24] you see shallow ground water effects?
 [25] MR. PERRY: When we're pumping our wells -

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[1] MR. WILLIAMS: Yes.
 [2] MR. PERRY: - do you see shallow ground water
 [3] effects? Was that the question?
 [4] MR. WILLIAMS: That's correct.
 [5] MR. PERRY: Again, it varies on the soil. We
 [6] have some areas where we have can clay lenses at shallow
 [7] levels that might trap contaminants like we're talking
 [8] about in the top 20, 30 feet. In other areas we have
 [9] alluvial matter from ground zero and we can see effects.
 [10] So I don't know whether you've done enough
 [11] drilling on this site to do a horizontal profile to see
 [12] what that is like, but that would have to be done in order
 [13] to make a decision on a site specific answer like you're
 [14] talking about here.
 [15] MR. ONG: What is the typical diameter of the
 [16] cone of depression from a typical well in that area?
 [17] MR. PERRY: It depends again - I'm sorry to
 [18] always say it depends - but it depends on the soil
 [19] conditions as well as the amount of extraction that the
 [20] well accommodates. Some of our wells do as little as 80
 [21] gallons a minute. For example, that's the Knickerbocker
 [22] Well, that's referred to, I believe, in Mr. Peters'
 [23] letter. That's about 80 gallons a minute. The
 [24] Pennsylvania Well does maybe 150

gallons a minute. And
 [25] then we have other wells that do upwards of 250 gallons a

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[1] minute. The affected area, the cone of depression, could
 [2] range from 100 feet to several hundred feet.
 [3] MR. WILLIAMS: I think we're through
 [4] dissecting these letters, Mr. Perry and thank you for
 [5] your input as to the general drinking water supply for the
 [6] city.
 [7] MR. PERRY: I'm sorry. I didn't catch the first
 [8] part.
 [9] MR. WILLIAMS: I said I think we're done
 [10] discussing these letters and we thank you for your
 [11] discussion of the general drinking water supply for the
 [12] city. I'm looking around to see there's any more
 [13] questions.
 [14] MR. PERRY: If I can be of any more assistance,
 [15] let me know.
 [16] MR. WILLIAMS: It doesn't look like there's any
 [17] more questions. Thank you for your time.
 [18] MR. PERRY: Thank you. Have a good 4th of July.
 [19] MS. ALFORD: Thank you.
 [20] MR. PETERS: I have to go to move my car, by the
 [21] way.
 [22] MR. WILLIAMS: Do you want to continue after 15
 [23] minutes?
 [24] MR. PETERS: Yes, please.
 [25] MR. PETERS: Why don't we add for the record

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[1] this letter of March 3rd of Mr. Perry with this map of the
 [2] wells.
 [3] (Recess taken.)
 [4] MR. WILLIAMS: Were do you want to go from here?
 [5] MR. PETERS: Where do we want to go?
 [6] MR. WILLIAMS: Do you want to provide
 [7] recommendations or do you want us to?
 [8] MR. PETERS: Well, I'm

copy to have Dr. Ong provide a recommendation based on our insight of this problem and our belief as to the extent of the problem. I want to add, you indicated at the meeting you felt that was possibly the result of a dispenser leak. We had provided earlier a copy of a tank test which had been performed at the request - MR. WILLIAMS: You know, he didn't say what the leak was. We just said the contamination was in the ground water. We don't care if it's a fuel line leak, a fuel leak, an overspill event, someone putting gasoline down a well. We don't care. It's contamination in the ground water and it's migrating off site. It doesn't really

matter. MR. PETERS: It's not significant if it was a tank leak involving many hundreds of thousands of gallons versus a one-time spill involving 20, 30 or 40 gallons? MR. WILLIAMS: We know you'll never be able to

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[1] determine which of those it was. [2] MR. PETERS: We'll never be able to determine [3] with a reasonable degree of certainty? [4] MR. WILLIAMS: We know that a lot of leakage [5] goes undetected with conventional leak detection processes [6] and we see ground water contamination on sites in the [7] past, year after year. So the discussion of what's the [8] origin precisely is immaterial and just wastes time. [9] MR. PETERS: We don't think

[10] MR. WILLIAMS: We're going to ask for additional [11] wells, five additional wells on the property, three in the [12] north, the northwest, and westerly direction. And based [13] on the data from those wells, we're going to ask for two [14] wells off site on the other side of

the streets, depending [15] on what the data says as to the gradient and [16] concentration. And, you know, we expected to see [17] recommendations in the report. We expected to hear [18] recommendations today. They don't seem to be forthcoming. [19] MR. PETERS: We don't feel there's a need for [20] additional wells. Why should we be forthcoming with [21] recommendations that are not warranted by the [22] circumstances? [23] MR. WILLIAMS: Since you clearly required us to [24] respond in case you misrepresent or misestimate our

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[1] position, we'll respond directly. We're going to write a [2] letter saying these wells are required, quarterly [3] monitoring is required. If we don't get a response, a [4] positive response, within two weeks, we'll write an [5] investigative order. [6] MR. PETERS: Positive response within two weeks? [7] What sort of response? [8] MR. WILLIAMS: Concurring with the request. [9] MR. PETERS: Concurring with the request? [10] MR. WILLIAMS: Would you like to set up some [11] sort of alternative approach aside from doing nothing? [12] MR. PETERS: Aside from doing nothing? [13] MR. ONG: If I can maybe make a suggestion here? [14] Can we use the geoprobe first? [15] MR. WILLIAMS: We need gradients. Gradients are [16] so steep here, the artesian conditions are completely [17] phenomenal and suggest that there is something else going [18] on on the site rather than conventional ground water [19] probe. Geoprobes are a one-time sampling. We're never [20] sure if it's lower than the actual concentration, higher [21] than the actual concentration,

which actually would be [22] impossible. But either way, they don't provide a [23] permanent monitoring point and don't provide the ability [24] to measure gradients. If the gradients change, we want to [25] be able to see that so we can track the contaminations.

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[1] Then clearly it seems it's moving off the property. So [2] permanent wells is the only option. [3] Would you like to suggest some other [4] approach, some other time frame? [5] MR. PETERS: Well, I'd like to have Joshua [6] construct a - if you want to characterize it as [7] recommendations or I'll call it a rebuttal to your [8] recommendation and we'll make that part of the record. [9] You know - [10] MR. WILLIAMS: Concentrations are increasing on [11] a downgradient side. How would you respond to that? [12] MR. PETERS: We have what is obviously a [13] one-time spill involving in all likelihood a very small [14] amount of fuel. Not hundreds of gallons, not thousands of [15] gallons. That is demonstrated by the fact that the wells [16] which previously showed the highest level of concentration [17] in proximity to the dispenser have shrunk to almost [18] insignificant levels, 17. [19] MR. WILLIAMS: We have two years of ground water [20] flow. Whatever site spills, hundreds, thousands, tens of [21] gallons could have moved off site. You have no way of [22] knowing that. To dismiss it as a possibility is [23] shortsighted. [24] MR. PETERS: And it does not pose any threat to [25] existing or potential wells.

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[1] MR. WILLIAMS: Relying on your very meager [2] expertise in that area and no deference to Mr. Perry's [3] comments in our stated

jurisdiction to protect the ground
 [4] water to this community.
 [5] MR. PETERS: Well, I'm not
 relying on my meager
 [6] expertise. I'm relying on Mr. Ong -
 Dr. Ong's expertise
 [7] and on Mr. Perry's statement. He
 did not deny making the
 [8] statement to me. There was no
 denial that the statement
 [9] was made.
 [10] MR. WILLIAMS: Well, his
 statement using the
 [11] word "misunderstanding" speaks
 for itself.
 [12] MR. PETERS: No. You're
 mischaracterizing.
 [13] Don't mischaracterize his words,
 sir.
 [14] MR. WILLIAMS: This
 meeting is over. We're
 [15] going to send a letter asking for
 wells. You can respond
 [16] in writing. Thank you.
 [17] (Whereupon, at 2:50 p.m., the
 board meeting concluded.)
 [18] (Whereupon Exhibits A through
 E were marked for
 [19] identification by the Certified
 Shorthand Reporter.)
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Tab 12

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION**

3737 MAIN STREET, SUITE 500
RIVERSIDE, CA 92501-3339
PHONE: (909) 782-4130
FAX (909) 781-6288



September 4, 1996

Santa Ana Regional Board Supplemental Guidance Clarification of Low-Risk Designation of Fuel Contaminated Site

Introduction

These revisions to existing cleanup procedures will incorporate an understanding that some sites may pose very little threat to either human health and safety, the underlying water quality or to ecologic receptors. In contrast, there are sites of higher risk that will require immediate action and active remediation to protect human health and safety and the environment. In general, we believe that remediation may be considered adequate and successful while leaving limited amounts of contaminants in place. Additionally, minimal levels of groundwater impacts may be responded to simply by monitoring for the anticipated reductions caused by natural processes.

The criteria for "low-risk" soils cases will be based on an assessment of the threat to water quality, due to the mobility of the hydrocarbon contamination. Therefore, the criteria for the definition of "low-risk" groundwater cases shall be along the following two lines:

- 1) areas underlain by aquifers with non-drinking water beneficial use designations, and
- 2) the potential for reduction of petroleum constituent concentrations to Maximum Contaminant Levels through passive biodegradation processes within a reasonable timeframe.

The first criterion will be designed to gauge the involvement of the affected groundwater in the recharge of drinking water aquifers. The main questions will generally be whether the site overlies either presently or potentially usable drinking water aquifers. In those areas not considered to recharge sources of drinking water, moderate levels of contamination left in-place will be tolerated after the release has been defined and the source material has been removed.

The second criterion for the definition of "low-risk" will be based on the recognition that low levels of contamination can be expected to diminish to levels within water quality objectives within a reasonable period of time due to the effects of natural processes. Monitoring of the chemical and hydrologic conditions at the site will be used to gauge the effectiveness of the remedial efforts and assess the progress of natural processes. It is assumed that subsurface conditions are highly variable and that there is always some uncertainty associated with site assessment activities.

Low Risk Soils Case

Definition:

- 1) The leak has been stopped and ongoing sources of contamination have been removed or remediated.

The tank or appurtenant structure that leaked must be repaired or permanently closed per Chapter 7, Section 2672 of the UST regulations.

Soil which contains sufficient mobile constituents (leachate, vapors or liquid flow) to seriously degrade groundwater quality or result in a significant threat to human health, safety or the environment should be considered a source. When appropriate, source removal should be performed to either remove or reduce the concentrations within the contaminated soils. An appropriate soil cleanup level would be one where the concentration of the leachate does not exceed the "leachate evaluation standards" for the contaminant of concern.

Source removal may take the form of soil excavation, free product removal, vapor extraction of the affected soil volume, or other measures intended to reduce the quantity of mobile hydrocarbon materials in the subsurface. Each site needs a determination of the cost-effectiveness of the various techniques for source reduction, taking into account the degree of risk reduction required, the soil types, amount of free product or mobile phase materials present, preferential pathways, and other factors which affect hydrocarbon movement.

To evaluate the mobility of the contamination within the soil column, one approach is through the use of empirical leaching tests. Leaching tests should be performed on multiple soil samples utilizing standard procedures (such as EPA Method 1311 - TCLP, modified, or Method 1312 - SPLP). Other acceptable approaches may include chemical migration modeling, preferably in combination with the results of TCLP or SPLP tests. Chemical migration models should account for the present distribution of fuel constituents, based on plausible initial conditions, using the same physical parameters used to project future contaminant migration. Thus, models should be able to account for contaminant distribution from the past to the present, as well as in the future. Soil models should be submitted to overseeing agency staff for acceptance.

Soil contamination which creates exposure to vapors or other hazardous conditions, and may be a threat to human health, safety or the environment should also be considered a source.

- 2) **The site has been adequately characterized according to the requirements of the oversight agency.**

The extent of the subsurface impact should be defined to the degree that is necessary to determine if the site poses a threat to human health, safety, or the environment or other nearby sensitive receptors. The degree of characterization of environmental contamination required must be sufficient to accurately and comprehensively demonstrate conditions at the site. The definition of environmental contamination to non-detect levels is not required at all sites.

The contaminants of concern (target analytes) should be appropriate to the release event and include BTEX, MTBE, and any other compounds which have physical qualities which would allow significant migration in the subsurface soil and/or ground water. The use of Total Petroleum Hydrocarbon (TPH) analysis should be used for gross definition of contaminant migration and not for the purposes of verifying regulatory compliance.

- 3) **No groundwater impacts currently exist or are to occur at levels above applicable water quality objectives.**

By definition, soils only cases do not have groundwater impacts. Verification of the presence or absence of ground water impacts may be a necessary aspect of the characterization phase of some soils only cases.

Unless designated not to be a source of drinking water, all ground water within the Santa Ana Region should be considered to be a potential source of drinking water. Applicable water quality objectives for the constituents of concern may be found in the Water Quality Control Plan for the Santa Ana Region.

- 4) **The site presents no significant risk to human health and safety.**

Significant risks to human health and safety include the creation of fire and explosion hazards from the migration and accumulation of fuel vapor into structures or subsurface utilities (e.g., storm drains, sewer systems, utility vaults, etc.). The mitigation of these risks would necessitate immediate or timely corrective actions, depending on the type and severity of the risk posed.

Site mitigation strategies which include elements of "Risk Based Corrective Action (RBCA) may provide an acceptable methodology to perform a tiered risk analysis of the threats to human health and to ecologic receptors from petroleum release sites. RBCA methodology usually incorporates elements of U. S. EPA risk assessment practices to determine non-site-specific (e.g., generic risk-based screening levels) and site specific cleanup levels that are protective of human health and environmental resources. The responsible party may wish to propose a RBCA approach for consideration by the regulatory agencies.

- 5) The site presents no significant risk to the environment, in that no surface water or other sensitive receptors are likely to be impacted.

If the site has a potential to significantly impact surface waters, wetlands or other sensitive receptors, it should not be considered low risk. RBCA methodologies have no specific guidance for evaluating environmental risk, although the basic framework is appropriate if site specific exposure pathways and ecological receptors are included.

Management Strategy

Low risk soils cases should be closed once it has been determined that site conditions conform to the above criteria.

Typically, this closure will follow an adequate degree of characterization and, if necessary, the performance of source removal activities. In areas without a drinking water beneficial use designation, human health and safety and ecologic concerns will be the determining factors. With the "low risk" site designation, further remediation is not required.

If the most sensitive permitted use (e.g., residential) is not protected by the site cleanup levels achieved at the site, then other forms of restrictions or notifications for the site may be appropriate. Such determinations should be made by the local land use permitting agency. If fuel contaminated soils are subsequently disturbed, additional remedial or mitigative measures may be appropriate at the site. A significant change of land use would prompt reevaluation of site status.

Low Risk Groundwater Cases

Definition:

- 1) The leak has been stopped and ongoing sources, including free product, have been removed or remediated. (See Low Risk Soils Cases Definition #1).

Free product shall be removed to the extent practicable per Chapter 5, Section 2655 of the UST regulations.

- 2) The site has been adequately characterized. (See Low Risk Soils Cases Definition #2).

- 3a) The site does not overlie presently utilized or potential drinking water aquifers.

For the purposes of defining "low risk" ground water cases only, areas which are underlain by aquifers with non-drinking water beneficial use designations are:

- 1. Areas seaward of the Eastern Branch of the Newport-Inglewood Fault Zone. (Please refer to the appropriate Alquist-Priolo Earthquake Fault Zone Map for the trace of this fault).
- 2. Areas overlying formational materials which do not recharge adjacent aquifer units or supply drinking water to individuals.

Due to the high degree of variability of threat from pollution and ground water utilization, areas of fractured bedrock will be handled on a case-by-case basis.

or

- 3b) The concentration of the core portion of the contaminated groundwater either never exceeded or has been reduced to "low risk" threshold concentrations.

Impacts to groundwater in which the concentration of the core of the plume are below the "low risk" threshold values (given below) are not considered to pose a significant risk to the current or future beneficial uses of the aquifer.

<u>Constituent</u>	<u>MCLs</u>	<u>"Low risk" threshold</u>
Benzene	1 ppb	250 ppb
Toluene	150 ppb	300 ppb
Ethylbenzene	680 ppb	680 ppb
Xylene	1750 ppb	1750 ppb

Passive biodegradation processes are anticipated to act to continuously reduce the contaminant concentrations over time. Impacts in excess of the "low risk" threshold values listed above will be monitored through chemical analysis of organic and inorganic parameters and physical measurements of the groundwater elevations.

The presence of other chemical constituents at a site (such as chlorinated solvents or methyl tertiary butyl ether (MTBE)) will result in a greater degree of regulatory concern and, thus, would not allow for the automatic designation of "low risk" for such a site.

- 4) No water wells, deeper drinking water aquifers, surface water, or other sensitive receptors are likely to be impacted.
- 5) The site presents no significant risk to human health.
- 6) The site presents no significant risk to the environment.

If the site has a potential to significantly impact beneficial uses of surface waters, wetlands, or other sensitive receptors, it shall not be considered appropriately designated as a "low-risk" site.

Management Strategy

In general, sites located in "low risk" groundwater areas may cease active remediation after obtaining agency approval. At sites designated as "low-risk", based on the threshold concentrations, remediation through natural attenuation (passive biodegradation, etc.) would be the preferred remedial option with respect to the protection of groundwater.

Monitoring of the contaminant concentrations and other chemical indicators of biological activity would be necessary to confirm the ongoing nature of these processes. As an inherent part of remediation through natural attenuation, long-term monitoring will be required to evaluate the efficiency of this mitigation strategy. The objectives of this monitoring would be to confirm contaminant mass removal, the adequacy and constancy of the rate of biologic degradation activity, and the consistency of hydrologic patterns.

The frequency of monitoring events and the number of monitoring points may be adjusted by the regulatory agencies after site characterization is completed. Quarterly groundwater monitoring may be appropriate in the early stages of the investigative or remedial phase when the extent of contamination, seasonal groundwater fluctuations, and other site-specific factors are being evaluated.

After these factors have been verified, the degree of monitoring may be reduced, either in terms of frequency of sampling events, the number of monitoring wells involved, or the suite of chemical analyses required. Monitoring would be concluded when either Maximum Contaminant Levels have been achieved or when rates of degradation have been clearly established and the achievement of Maximum Contaminant Levels can be predicted with an adequate degree of certainty.

Tab 13

CAL TECH Environmental Laboratories



6814 Rosecrans Avenue. Paramount, CA 90723-3146
 Telephone: (562) 272-2700 Fax: (562) 272-2789

ANALYTICAL RESULTS*

CTEL Project No: CT-0907077

Client Name: McWhirter Real Estates
 10523 Penfield Ave.
 Chatsworth, CA 91311

Phone: (562) 799-9866

Fax: (562) 799-1963

Attention: Ms. Donna McWhirter / Mark Leymaster

Project ID: Global ID: T0607100176

Project Name: Big Bear Chevron #150

Date Sampled: 07/15/09 @ 10:00 am

Matrix: Water

Date Received: 07/15/09 @ 13:30 p.m.

Date Analyzed: 07/15/09

Laboratory ID: 0907-077-1

Client Sample ID: MW11

Dilution: 1

Method

Units:

**Detection
Limit**

Dichlorodifluoromethane	ND	EPA 8260B	ug/L	1
Chloromethane	ND	EPA 8260B	ug/L	1
Vinyl Chloride	ND	EPA 8260B	ug/L	0.5
Bromomethane	ND	EPA 8260B	ug/L	1
Chloroethane	ND	EPA 8260B	ug/L	1
Trichlorofluoromethane	ND	EPA 8260B	ug/L	1
Iodomethane	ND	EPA 8260B	ug/L	1
Acetone	ND	EPA 8260B	ug/L	10
1,1-Dichloroethene	ND	EPA 8260B	ug/L	1
t-Butyl Alcohol (TBA)	ND	EPA 8260B	ug/L	10
Methylene Chloride	ND	EPA 8260B	ug/L	10
Freon 113	ND	EPA 8260B	ug/L	5
Carbon disulfide	ND	EPA 8260B	ug/L	1
trans,1,2-Dichloroethene	ND	EPA 8260B	ug/L	1
Methyl-tert-butyl-ether(MtBE)	17	EPA 8260B	ug/L	1
1,1-Dichloroethane	ND	EPA 8260B	ug/L	1
Vinyl acetate	ND	EPA 8260B	ug/L	50
Diisopropyl Ether (DIPE)	ND	EPA 8260B	ug/L	1
Methyl Ethyl Ketone	ND	EPA 8260B	ug/L	10
cis,1,2-Dichloroethene	ND	EPA 8260B	ug/L	1
Bromochloromethane	ND	EPA 8260B	ug/L	1
Chloroform	ND	EPA 8260B	ug/L	1
2,2-Dichloropropane	ND	EPA 8260B	ug/L	1
Ethyl-t-butyl ether (ETBE)	ND	EPA 8260B	ug/L	1
1,1,1-Trichloroethane	ND	EPA 8260B	ug/L	1
1,2-Dichloroethane	ND	EPA 8260B	ug/L	0.5
1,1-Dichloropropene	ND	EPA 8260B	ug/L	1
Carbon Tetrachloride	ND	EPA 8260B	ug/L	0.5
Benzene	ND	EPA 8260B	ug/L	0.5
t-Amyl Methyl Ether (TAME)	ND	EPA 8260B	ug/L	1
1,2-Dichloropropane	ND	EPA 8260B	ug/L	1
Trichloroethene	ND	EPA 8260B	ug/L	1
Dibromomethane	ND	EPA 8260B	ug/L	1
Bromodichloromethane	ND	EPA 8260B	ug/L	1
2-Chloroethylvinylether	ND	EPA 8260B	ug/L	5
cis,1,3-Dichloropropene	ND	EPA 8260B	ug/L	1
4-Methyl-2-pentanone(MI)	ND	EPA 8260B	ug/L	10
trans,1,3-Dichloropropene	ND	EPA 8260B	ug/L	1
Toluene	ND	EPA 8260B	ug/L	0.5
1,1,2-Trichloroethane	ND	EPA 8260B	ug/L	1

(Continued)

CTEL Project No: CT-0907077

Project ID: Global ID: T0607100176
 Project Name: Big Bear Chevron #150

Laboratory ID: 0907-077-1
 Client Sample ID: MW11

		Method	Units	Detection Limit
1,2-Dibromoethane(EDB)	ND	EPA 8260B	ug/L	0.5
1,3-Dichloropropane	ND	EPA 8260B	ug/L	1
Dibromochloromethane	ND	EPA 8260B	ug/L	1
2-Hexanone	ND	EPA 8260B	ug/L	10
Tetrachloroethene	ND	EPA 8260B	ug/L	1
Chlorobenzene	ND	EPA 8260B	ug/L	1
1,1,1,2-Tetrachloroethane	ND	EPA 8260B	ug/L	1
Ethylbenzene	ND	EPA 8260B	ug/L	0.5
m,p-Xylene	ND	EPA 8260B	ug/L	0.5
Bromofom	ND	EPA 8260B	ug/L	1
Styrene	ND	EPA 8260B	ug/L	1
o-Xylene	ND	EPA 8260B	ug/L	0.5
1,1,2,2-Tetrachloroethane	ND	EPA 8260B	ug/L	1
1,2,3-Trichloropropane	ND	EPA 8260B	ug/L	1
Isopropylbenzene	ND	EPA 8260B	ug/L	1
Bromobenzene	ND	EPA 8260B	ug/L	1
2-Chlorotoluene	ND	EPA 8260B	ug/L	1
n-Propylbenzene	ND	EPA 8260B	ug/L	1
4-Chlorotoluene	ND	EPA 8260B	ug/L	1
1,3,5-Trimethylbenzene	ND	EPA 8260B	ug/L	1
tert-Butylbenzene	ND	EPA 8260B	ug/L	1
1,2,4-Trimethylbenzene	ND	EPA 8260B	ug/L	1
sec-Butylbenzene	ND	EPA 8260B	ug/L	1
1,3-Dichlorobenzene	ND	EPA 8260B	ug/L	1
1,4-Dichlorobenzene	ND	EPA 8260B	ug/L	1
p-Isopropyltoluene	ND	EPA 8260B	ug/L	1
1,2-Dichlorobenzene	ND	EPA 8260B	ug/L	1
n-Butylbenzene	ND	EPA 8260B	ug/L	1
1,2 Dibromo-3-Chloropropane	ND	EPA 8260B	ug/L	1
1,2,4-Trichlorobenzene	ND	EPA 8260B	ug/L	1
Naphthalene	ND	EPA 8260B	ug/L	1
1,2,3-Trichlorobenzene	ND	EPA 8260B	ug/L	1
Hexachlorobutadiene	ND	EPA 8260B	ug/L	1
Gasoline Range Organic	ND	EPA 8015M	ug/L	50

ND = Not Detected at the indicated Detection Limit

SURROGATE SPIKE	% SURROGATE RECOVERY	Control Limit
Dibromofluoromethane	92	70-130
1,2 Dichloromethaned4	90	70-130
Toluene-d8	102	70-130
Bromofluorobenzene	115	70-130


 Greg Tejirian
 Laboratory Director

*The results are base upon the sample received.

Cal Tech Environmental Laboratories, Inc. ELAP ID #: 2424

Chain of Custody Record

Client: McWhirter Real Estate
 Contact: Donna
 Address: 10523 Penfield Ave.
Chatsworth, CA 91311
 Project: 40553 BBB
 Sampled By: Mark Slater / [Signature]
Name/Signature

Phone: _____
 Fax: _____

Turn Around Time
 Rush _____
 Normal

Analyses Requested

Lab ID Number	Field ID	Date/Time Sampled	Bottle Type	No.	Preserv.	Matrix	Analyses Requested										Comments								
	MW11	7-15-09/10:00	40ml VOA	2	Ice	H ₂ O	✓	✓																	
	Please e-mail report to <u>slaterml@aol</u>																								

Relinquished: [Signature]

Date / Time: _____

Received: _____

Dispatched: _____

Date / Time: _____

Carrier: _____

I hereby authorize the performance of the above indicated tests.

[Signature]

Date / Time: 07/15/09 1:30pm Received by lab: [Signature]

Tab 14

CAL TECH Environmental Laboratories



6814 Rosecrans Avenue. Paramount, CA 90723-3146
 Telephone: (562) 272-2700 Fax: (562) 272-2789

ANALYTICAL RESULTS*

CTEL Project No: CT-0907078

Client Name: McWhirter Real Estates
 10523 Penfield Ave.
 Chatsworth, CA 91311

Phone: (562) 799-9866

Fax: (562) 799-1963

Attention: Ms. Donna McWhirter / Mark Leymaster

Project ID: Global ID: T0607100176

Project Name: Big Bear Chevron #150

Date Sampled: 07/15/09 @ 10:30 am

Matrix: Water

Date Received: 07/15/09 @ 13:30 p.m.

Date Analyzed: 07/15/09

Laboratory ID: 0907-078-1

Client Sample ID: MW16

Dilution: 1

		Method	Units:	Detection Limit
Dichlorodifluoromethane	ND	EPA 8260B	ug/L	1
Chloromethane	ND	EPA 8260B	ug/L	1
Vinyl Chloride	ND	EPA 8260B	ug/L	0.5
Bromomethane	ND	EPA 8260B	ug/L	1
Chloroethane	ND	EPA 8260B	ug/L	1
Trichlorofluoromethane	ND	EPA 8260B	ug/L	1
Iodomethane	ND	EPA 8260B	ug/L	1
Acetone	ND	EPA 8260B	ug/L	10
1,1-Dichloroethene	ND	EPA 8260B	ug/L	1
t-Butyl Alcohol (TBA)	ND	EPA 8260B	ug/L	10
Methylene Chloride	ND	EPA 8260B	ug/L	10
Freon 113	ND	EPA 8260B	ug/L	5
Carbon disulfide	ND	EPA 8260B	ug/L	1
trans,1,2-Dichloroethene	ND	EPA 8260B	ug/L	1
Methyl-tert-butyl-ether(MtBE)	170	EPA 8260B	ug/L	1
1,1-Dichloroethane	ND	EPA 8260B	ug/L	1
Vinyl acetate	ND	EPA 8260B	ug/L	50
Diisopropyl Ether (DIPE)	ND	EPA 8260B	ug/L	1
Methyl Ethyl Ketone	ND	EPA 8260B	ug/L	10
cis,1,2-Dichloroethene	ND	EPA 8260B	ug/L	1
Bromochloromethane	ND	EPA 8260B	ug/L	1
Chloroform	ND	EPA 8260B	ug/L	1
2,2-Dichloropropane	ND	EPA 8260B	ug/L	1
Ethyl-t-butyl ether (ETBE)	ND	EPA 8260B	ug/L	1
1,1,1-Trichloroethane	ND	EPA 8260B	ug/L	1
1,2-Dichloroethane	ND	EPA 8260B	ug/L	0.5
1,1-Dichloropropene	ND	EPA 8260B	ug/L	1
Carbon Tetrachloride	ND	EPA 8260B	ug/L	0.5
Benzene	ND	EPA 8260B	ug/L	0.5
t-Amyl Methyl Ether (TAME)	ND	EPA 8260B	ug/L	1
1,2-Dichloropropane	ND	EPA 8260B	ug/L	1
Trichloroethene	ND	EPA 8260B	ug/L	1
Dibromomethane	ND	EPA 8260B	ug/L	1
Bromodichloromethane	ND	EPA 8260B	ug/L	1
2-Chloroethylvinylether	ND	EPA 8260B	ug/L	5
cis,1,3-Dichloropropene	ND	EPA 8260B	ug/L	1
4-Methyl-2-pentanone(MI)	ND	EPA 8260B	ug/L	10
trans,1,3-Dichloropropene	ND	EPA 8260B	ug/L	1
Toluene	ND	EPA 8260B	ug/L	0.5
1,1,2-Trichloroethane	ND	EPA 8260B	ug/L	1

(Continued)

CTEL Project No: CT-0907078

Project ID: Global ID: T0607100176
 Project Name: Big Bear Chevron #150

Laboratory ID:	0907-078-1	Method	Units	Detection Limit
Client Sample ID:	MW16			
1,2-Dibromoethane(EDB)	ND	EPA 8260B	ug/L	0.5
1,3-Dichloropropane	ND	EPA 8260B	ug/L	1
Dibromochloromethane	ND	EPA 8260B	ug/L	1
2-Hexanone	ND	EPA 8260B	ug/L	10
Tetrachloroethene	ND	EPA 8260B	ug/L	1
Chlorobenzene	ND	EPA 8260B	ug/L	1
1,1,1,2-Tetrachloroethane	ND	EPA 8260B	ug/L	1
Ethylbenzene	ND	EPA 8260B	ug/L	0.5
m,p-Xylene	ND	EPA 8260B	ug/L	0.5
Bromoform	ND	EPA 8260B	ug/L	1
Styrene	ND	EPA 8260B	ug/L	1
o-Xylene	ND	EPA 8260B	ug/L	0.5
1,1,2,2-Tetrachloroethane	ND	EPA 8260B	ug/L	1
1,2,3-Trichloropropane	ND	EPA 8260B	ug/L	1
Isopropylbenzene	ND	EPA 8260B	ug/L	1
Bromobenzene	ND	EPA 8260B	ug/L	1
2-Chlorotoluene	ND	EPA 8260B	ug/L	1
n-Propylbenzene	ND	EPA 8260B	ug/L	1
4-Chlorotoluene	ND	EPA 8260B	ug/L	1
1,3,5-Trimethylbenzene	ND	EPA 8260B	ug/L	1
tert-Butylbenzene	ND	EPA 8260B	ug/L	1
1,2,4-Trimethylbenzene	ND	EPA 8260B	ug/L	1
sec-Butylbenzene	ND	EPA 8260B	ug/L	1
1,3-Dichlorobenzene	ND	EPA 8260B	ug/L	1
1,4-Dichlorobenzene	ND	EPA 8260B	ug/L	1
p-Isopropyltoluene	ND	EPA 8260B	ug/L	1
1,2-Dichlorobenzene	ND	EPA 8260B	ug/L	1
n-Butylbenzene	ND	EPA 8260B	ug/L	1
1,2 Dibromo-3-Chloropropane	ND	EPA 8260B	ug/L	1
1,2,4-Trichlorobenzene	ND	EPA 8260B	ug/L	1
Naphthalene	ND	EPA 8260B	ug/L	1
1,2,3-Trichlorobenzene	ND	EPA 8260B	ug/L	1
Hexachlorobutadiene	ND	EPA 8260B	ug/L	1
Gasoline Range Organic	180	EPA 8015M	ug/L	50

ND = Not Detected at the indicated Detection Limit

SURROGATE SPIKE	% SURROGATE RECOVERY	Control Limit
Dibromofluoromethane	99	70-130
1,2 Dichloromethane d4	96	70-130
Toluene-d8	102	70-130
Bromofluorobenzene	121	70-130



Greg Tejtian
 Laboratory Director

*The results are base upon the sample received.

Cal Tech Environmental Laboratories, Inc. ELAP ID #: 2424

CAL TECH Environmental Laboratories



6814 Rosecrans Avenue, Paramount, CA 90723-3146
 Telephone: (562) 272-2700 Fax: (562) 272-2789

Lab Job No. 07-078

Page 1 of 1

Chain of Custody Record

Client: McWhirter Real Estate

Phone: _____

Turn Around Time

Contact: Diana

Fax: _____

Rush _____

Address: 10523 Penfield Ave

Normal

Chatsworth, CA 91311

Project: 40553 BBB

Sampled By: Mark Slater / [Signature]
 Name/Signature

Analyses Requested

Lab ID Number	Field ID	Date/Time Sampled	Bottle Type	No.	Preserv.	Matrix	Analyses Requested										Comments						
	MW16	7-15-09/10:30	4044 VOK	2	Ice	H ₂ S	✓	✓															
Please e-mail report to slaterml@aol																							

Relinquished [Signature]

Date / Time: _____

Received: _____

Dispatched: _____

Date / Time: _____

Carrier: _____

I hereby authorize the performance of the above indicated tests.
[Signature]

Date / Time: 07/15/09 1:30pm

Received by lab: [Signature]

Tab 15

Duke,

The following is a summary of items discussed on July 15, 2009, with Mr. William S. La Haye, Water Resources Manager, Department of Public Works, City of Big Bear Lake.

In August 2001 GEOSCIENCE Support Services, Inc. produced a report re-evaluating maximum perennial yield from groundwater wells in the Big Bear area. This report included a map showing watershed areas including the area where Big Bear Chevron is located. Considering the number of drainages located along the southern side of Big Bear Lake, a watershed area could be considered a discreet aquifer. I have attached a copy of the portion of the map that includes Big Bear Chevron. This area is referred to as the Village Subunit.

I asked Mr. La Haye if the City of Big Bear had any plans to install drinking water wells in the vicinity of Big Bear Chevron. Mr. La Haye indicated there are no plans to install any wells in this area due low yield resulting from clayey soil. Additionally there are water quality issues due to high manganese and fluoride concentrations.

Mr. La Haye stated that typical drinking water wells are drilled to bedrock, usually encountered at 200 to 400 feet and that the wells are screened at the bottom. Even if there were wells located close to Big Bear Chevron, the contaminants would not reach a depth greater than 40 to 50 feet.

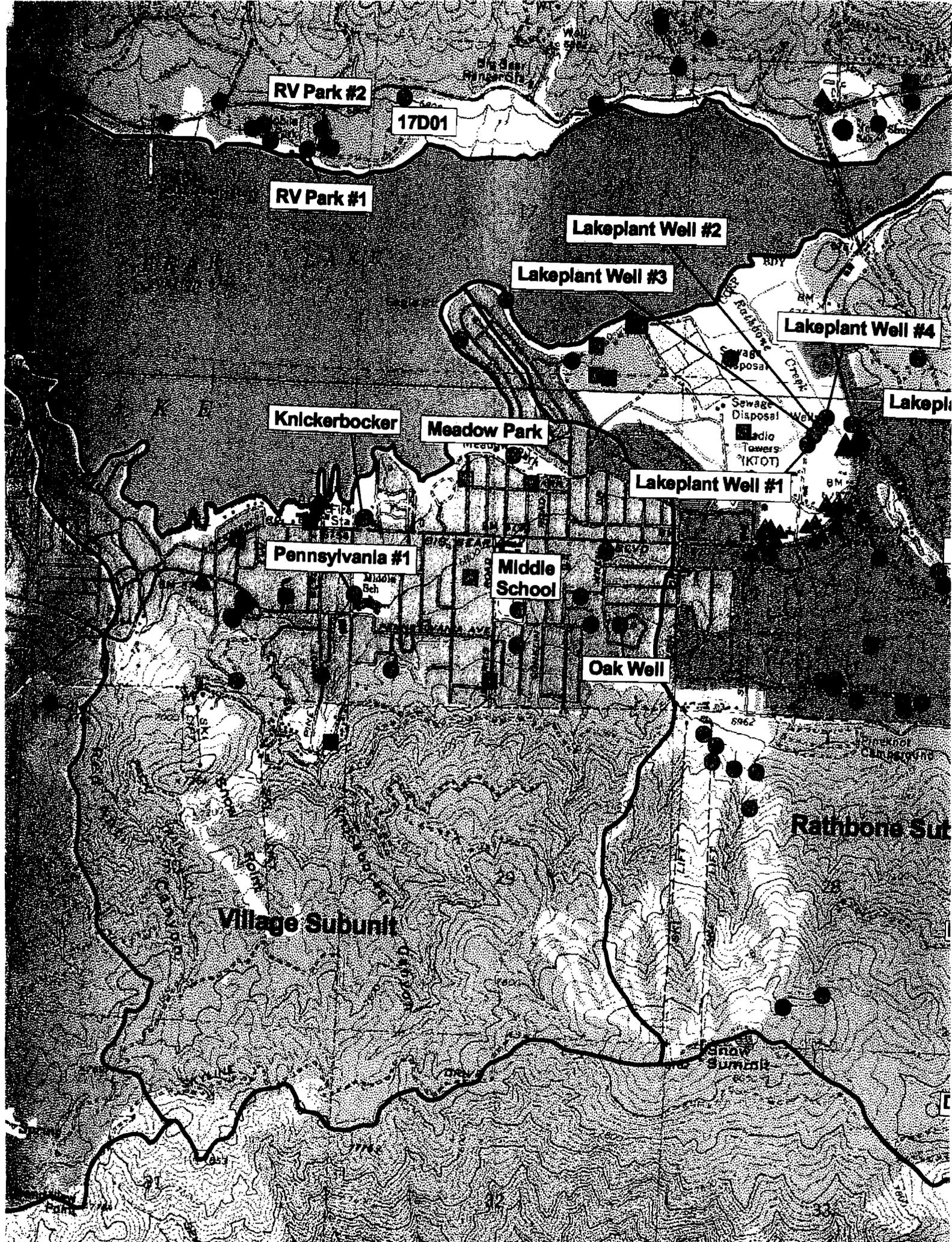
Mr. La Haye also allowed me to copy a map that shows wells in the vicinity of Big Bear Chevron. Based on this map, there no wells down gradient from Big Bear Chevron. On this map the green fill indicates "status unknown". Circles with one line through them indicate a private wells, circles with a cross indicate DWP test wells, circles filled with blue indicate active drinking water wells. Squares are irrigation wells.

The station, based on northwest flow, is approximately 950 feet from the lake. MW16 is approximately 740 feet from the lake.

I hope this information is helpful,

Mark Slater

Tab 16



RV Park #2

17D01

RV Park #1

Lakeplant Well #2

Lakeplant Well #3

Lakeplant Well #4

Lakeplant Well #5

Knickerbocker

Meadow Park

Lakeplant Well #1

Pennsylvania #1

Middle School

Oak Well

Village Subunit

Rathbone Subunit

Penaw Subunit

Tab 17



Proof of Service by Federal Express Overnight Delivery

I am employed in the County of Los Angeles, State of California. I am over the age of 18 years and not a party to this action. My business address is 1901 Ave of the Stars, Ste. 1900, Los Angeles, CA 90067.

On July 28, 2009, I caused the document(s) described as:

Petition of McWhirter Real Estate & Investment Co., Inc. to California Regional Water Quality Control Board for the Santa Ana Region for Review of Final Staff Decision

to be served by Federal Express upon the person(s) shown below:

Ken Williams
California Regional Water Quality Control Board
Santa Ana Region
3737 Main Street, Suite 500
Riverside, California 92501

by placing a true and correct copy in a Federal Express envelope(s), addressed as above, sealing said envelope(s), with Federal Express next-day delivery fees prepaid and depositing it at a Federal Express office at Los Angeles, California.

Executed on July 28, 2009 at Los Angeles, California. I declare under penalty of perjury that the foregoing is true and correct.



Duke L. Peters