WEST & ASSOCIATES
ENVIRONMENTAL ENGINEERS, INC.

NO FURTHER ACTION REQUEST (NFAR) AND CASE CLOSURE SUMMARY

Tower Mart #182
130 Pleasant Valley Road
Diamond Springs, CA 95
Placer County File #00077
RWQCB Case #090096

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EXECUTIVE SUMMARY

The original unauthorized release at this location was discovered in June 1997 when routine product inventory measurements revealed that one of the USTs had lost a significant volume of gasoline. A 4-inch well was promptly installed in the UST pit backfill material to facilitate removal of floating product by vacuum truck. A total of 3,600 gallons of gasoline and water were removed in this manner and another 220 gallons were pumped out two weeks later. A 6-inch thick floating product layer was reduced to just a sheen by pumping from this “tank well” during the first few weeks after the release was discovered.

In November 1999 a site investigation was initiated by installing three soil groundwater monitoring wells in the area surrounding the UST pit. These wells were reported to contain TPH-g at concentrations ranging up to 8,600 µg/L and MtBE at concentrations up to 89,000 µg/L. Soil samples collected during the installation of these wells had very low concentrations of TPH-g, BTEX compounds, and MtBE, so it was concluded that the fractured bedrock lithology prevented the accumulation of any significant contaminant mass in the vadose zone.

A sensitive receptor survey performed in December 2000 found only one domestic well and Lake Patterson within the study area. The domestic well was not in use at the time and has subsequently been removed. Lake Patterson, A man-made recreational lake, in not used as a source of potable water and has never been impacted by the release from this Site.

A total of 26 additional monitoring wells and two extraction wells were installed from 2001 to 2004. Extraction well EW-1, located along the edge of the UST pit, was found to contain 31,000 µg/L MtBE during the initial sampling event in December 2001. A step drawdown test on this well confirmed that it was capable of producing a sustained yield of only 1-2 gallons per minute (gpm), but even at this low flow rate all 12 monitoring wells installed at the time were within its capture zone.

The groundwater remediation program initiated in 2002 began with off-haul of extracted water to a regional treatment facility and progressed to on-site treatment once a discharge permit was obtained from the El Dorado Irrigation District (EID), the agency responsible for the sanitary sewer system. The treatment system was based on ozone oxidation of the extracted groundwater due to the high concentrations of MtBE present.

A second extraction well, EW-2, was installed 200 feet downgradient from EW-1 in 2004. This well produced a sustained yield of 3-4 gpm but had lower concentrations of MtBE, so the system was modified to use aqueous carbon adsorption for groundwater treatment. The EID permit only allowed discharge of pre-approved batches of treated water, so a Report of Waste Discharge (ROWD) was submitted to the RWQCB for evaluation. This ROWD was approved, and RWQCB issued a Notice of Applicability (NOA) permitting discharge in accordance with General Order #R5-2003-0044.

A small soil vapor extraction (SVE) system was installed and operated from July 2005 to December 2008. This system removed vapor-phase COCs from smear zone soils and prevented any potential vapor intrusion into the convenience store, thereby eliminating the need to perform a soil vapor survey.

Additional testing performed during the 1st quarter of 2009 confirmed that no significant contaminant mass remained in the impacted groundwater or surrounding soil, so the remediation system was turned off and and post-remediation monitoring initiated. The USTs were replaced with new, larger double-walled tanks in July 2010. Soil removed from the UST pit to accommodate the larger USTs (actually more rock than soil) contained very low concentrations of TPH-g and MtBE, confirming that no significant contaminant mass remained in the area immediately surrounding the initial release.

The initial response effort removed nearly 4,000 gallons of free product and groundwater from the tank well. The magnitude of the release remaining after this initial response has been estimated at nearly 1,000 pounds of TPH-g and MtBE, of which only 17 pounds were in soil. The total mass of TPH-g and MtBE initially dissolved in groundwater was estimated to be 981 pounds.

Estimates of the current mass of each COC remaining in soil and groundwater are as follows:

> 10 pounds TPH-g in soil, negligible amounts of BTEX compounds and MtBE in soil; 0.13 pounds TPH-g in groundwater, negligible amounts of BTEX compounds in groundwater and 0.27 pounds MtBE in groundwater.

In summary, the initial release has been remediated and the Site has been determined to be a good candidate for case closure at this time. The lateral and vertical extent of groundwater contamination has been determined by installing and sampling a total of 32 groundwater monitoring and extraction wells. Groundwater remediation has been accomplished using a pump-and-treat program along with a small SVE system over a period of 6 years, reducing the average concentrations of dissolved COCs by more than 99%. A few of the wells still have TPH-g and/or MtBE at concentrations that exceed water quality objectives (WQOs). The concentrations of MtBE these wells are decreasing at a rate that should allow WQOs to be reached in less than 25 years, without any impact to potential sensitive receptors. A Tier 1 Risk Assessment has confirmed that residual soil and groundwater concentrations do not pose a threat to human health or the environment.

TABLE OF CONTENTS

1.0 INTRODUCTION

West & Associates Environmental Engineers, Inc. (W&A) prepared this No Further Action Request (NFAR) report for the Tower Mart #182 (formerly Cheaper! #182) located at 130 Pleasant Valley Road in Diamond Springs, El Dorado County, California (the Site) on behalf of Tower Energy Group and in accordance with the requirements of the El Dorado County Environmental Management Department (EDCEMD) and the Regional Water Quality Control Board, Central Valley Region (RWQCB). This NFAR presents a detailed description and history of the environmental remediation program performed at the Site as described in the Tri-Regional Board Staff Recommendations for Preliminary Investigation and Evaluation of Underground Tank Sites, Appendix A, Reports (Central Valley Regional Water Quality Control Board, 2004).

2.0 SITE DESCRIPTION

The Site is located on the southeast corner of Pleasant Valley Road (Highway 49) and Patterson Road in Diamond Springs, California (*Figure 1*). It is currently a Tower Mart gas station owned by Tower Energy Group and operating as Tower Mart #182. The three 12,000-gallon fiberglass USTs that were originally installed in 1982 were replaced in summer of 2010 with new, double-walled 12,000-gallon USTs. The Site also has two dispenser islands, a convenience store, and a large paved area on the triangular northeast section that is frequently used to park large trucks and recreational vehicles. The Site is bounded by vacant land in all directions, including an agricultural "stock pond" to the east and northeast.

Surface elevation at the Site ranges from 1,742 to 1,746 feet above mean sea level (amsl). The Site is located on a gently sloping lot with a gradient to the northeast and occupies 3 acres. *Figure 2* presents the location of the Site in relation to these surface features and the current layout of the Site showing the USTs, dispensers, and the convenience store.

3.0 SITE HISTORY

<u>June 1997</u>

A leak from one of the gasoline tanks was discovered in June 1997 during routine inventory measurement of product levels in the USTs. It is believed that the leak occurred from a small rupture created by repeated use of the dip stick to measure fuel levels, which punctured the tank bottom. The UST pit is surrounded by weathered bedrock, so a large portion of the gasoline release was confined to the UST pit.

A 4-inch diameter well was installed in the backfill material to a depth of 12 feet below ground surface (bgs). Groundwater and gasoline were pumped out of this well using a vacuum truck as soon as the well was completed. Approximately 2,200 gallons were removed from the well on June 24th and another 1,400 gallons on June 26th. The floating free product layer was reduced from 6 inches to less than ½ inch as a result of these two events. Additional pumping of smaller quantities remaining in the well during the first part of July further reduced the floating product layer, so that only a sheen remained after pumping on July 9th. This well, designated the "tank well", remained in place and has been used in assessment and remediation activities for the duration of the program.

November 1999

Parker Environmental Services installed three groundwater monitoring wells around the perimeter of the USTs to evaluate the presence of soil and groundwater contamination underlying the Site. Monitoring wells MW-1 through MW-3 and the tank well were first sampled on November 29, 1999. These wells were reported to contain TPH-g at concentrations ranging up to 9,600 µg/L and MtBE at concentrations ranging up to 89,000 µg/L. MW-2 was also found to contain BTEX compounds in excess of water quality objectives (WQOs). Based on this data these analytes were designated the constituents of concern (COCs) for this Site.

Two soil samples were collected from each of the three boreholes. TPH-g was not detected in any of these samples. BTEX was reported in the samples from borehole MW-3 at negligible concentrations (<0.1 mg/kg). MtBE was reported in 4 of the 6 samples at concentrations ranging up to 10 mg/kg, also very low in comparison with the groundwater results. *Table 1* contains the results of these soil samples and all other soil samples analyzed during the remediation program at this Site.

November – December 2000

H_2OGEOL performed a sensitive receptor survey (SRS) to identify all wells, surface water bodies, schools, and other sensitive receptors located within 2,000 feet of the Site's boundaries. The survey reported no water supply wells and only two domestic wells within the study area. These wells were not in use and have subsequently been removed. Surface water bodies included Lake Patterson, a man-made lake used for recreational purposes but not as a source of drinking water, and three stock ponds. No schools or other sensitive receptors were identified in the SRS.

August – December 2001

H_2OGEOL installed monitoring wells MW-4 through MW-12 to further assess the extent of groundwater contamination surrounding the USTs, piping and dispenser islands. By the August 2001 groundwater monitoring event the concentrations of TPH-g and MtBE in MW-3 reached 86,000 µg/L and 110,000 µg/L, respectively. All of the new wells installed in 2001 had TPH-g and MtBE at concentrations greater than WQOs, with several of them having MtBE between 1,900 µg/L and 13,000 µg/L. The fact that these wells are located around three sides of the UST and dispenser area indicated that the plume was not migrating in a single direction, but rather radiating out in several directions from the source area.

Extraction well EW-1 was also installed in December 2001. This 4-inch well, located between MW-2 and MW-4, had 31,000 µg/L of MtBE in the December 2001 sampling event.

December 2001 – January 2002

H_2OGEOL performed a step drawdown test, constant rate test, and capture zone analysis on EW-1 to determine whether this well could provide effective plume control and to establish the optimal long-term rate for groundwater extraction. The data gathered during these tests was used to recommend a flow rate of 1-2 gallons per minute (gpm) during the dry season and 2-3 gpm during the wet season. Even at 1 gpm the potentiometric surface maps showed that all 12 monitoring wells were within the capture zone for EW-1.

February - March 2002

H_2OGEOL installed six soil borings and four additional monitoring wells more than 100 feet further away from the source area in the primary downgradient direction (SSW to SSE). TPH-g was detected in two of the ten soil samples analyzed, at concentrations ranging up to 2.9 mg/kg. MtBE was detected in several of the soil samples, at concentrations ranging up to 0.9 mg/kg. These soil sample results are included on *Table 1*.

Well MW-23 was reported to contain 4,000 µg/L TPH-g and 4,600 µg/L MtBE, confirming that the groundwater plume had traveled across the vacant lot south of the Site and potentially underneath the Lake Oaks Mobile Home Community south of the vacant lot. In addition, H_2OGEOL installed one new monitoring well (MW-20) on the north side of the Site to determine whether the contamination had spread off-site in this direction.

The work plan describing installation of these wells also recommended five new wells to the east of the Site (MW-15 to MW-19) and two new wells to the west of the Site (MW-21 and MW-22), but both adjacent property owners required additional information prior to granting access to their properties. This is why the well numbering was out of sequence at the time MW-13, MW-14, MW-20 and MW-23 were installed.

May – October 2002

Interim remedial action was initiated by installing a submersible pump in EW-1 and extracting groundwater at 1-2 gpm. The extracted groundwater was initially pumped into a 6,000-gallon poly tank and transported off-site to a regional treatment facility while the permit application for discharge of treated groundwater was being processed by the El Dorado Irrigation District (EID).

In October 2002 EID issued Permit No. DC-02-183 for discharge to the sanitary sewer. This permit only allowed batch discharge of the treated groundwater, with approval of analytical results required prior to the discharge of each batch. In order to accommodate the remediation goal of pumping continuously from EW-1 to maintain a cone of depression, two 20,000-gallon holding tanks were mobilized to the site. This provided enough capacity to analyze and discharge the treated groundwater in one tank while filling the other one, thereby permitting continuous extraction while meeting the permit requirements.

The groundwater remediation system selected for this Site was based on using ozone to oxidize MtBE and other petroleum compounds dissolved in groundwater. The system included a five pound per day ozone generator, oxygen concentrator, air compressor, two 6,000-gallon poly tanks to provide enough residence time for the ozone oxidation process, two 1,000-pound carbon vessels for polishing, and associated process control instrumentation.

October – November 2002

H_2OGEOL installed five additional monitoring wells (MW-24 to MW-28) further to the south to determine whether the groundwater plume extended into the mobile home park. Three of these wells were near the west arm of Patterson Lake, the recreational surface water body that was a potential sensitive receptor. Well MW-19 was also installed on the northeast corner of the property at this time. All of these new wells were clean except for MW-24, which contained 10,000 µg/L MtBE. This well is located nearly 100 feet south of MW-13, but is still a few hundred feet north of the west arm of Patterson Lake.

August - September 2003

After receiving an access agreement from the neighboring property owner, H_2OGEOL installed the remaining four wells in the stock pond to the east of the Site (MW-15 to MW-18). The initial groundwater sample from one of these wells (MW-16) contained 3,600 µg/L of MtBE as well as significant concentrations of TPH-g and BTEX compounds.

August 2004

H_2OGEOL installed the final three monitoring wells, including MW-21 and MW-22 across Highway 49 to the north of the Site and MW-29 located 100 feet south of MW-23. All three of these wells proved to be clean. A second extraction well, EW-2, was also installed at this time. This well, centered between MW-13 and MW-23, is 200 feet downgradient from EW-1. A step drawdown test and capture zone analysis performed by H_2OGEOL confirmed that this well could exert hydraulic control on the downgradient portion of the groundwater plume, so it was connected to the treatment system. The sustained yield from EW-2 was estimated to be 4 gpm. The piping run from EW-2 included a section that crossed underneath Patterson Street, so an encroachment permit was required for this portion of the work.

September - October 2004

Based on the combined flow rate of 5-6 gpm from EW-1 and EW-2, it was cumbersome to operate a continuous extraction and treatment program while only being able to discharge treated water on a batch basis. The other two options, i.e. converting the EID permit to allow continuous discharge and receiving RWQCB approval for discharge to land, were explored simultaneously. In the end EID refused to modify the treated water discharge permit and insisted that only pre-approved batches could be discharged into the sanitary sewer system.

It was determined that treated groundwater could better be managed by discharging it to land under a permit to be obtained from the RWQCB. W&A prepared a Report of Waste Discharge (ROWD) in accordance with the requirements of Order No. R5-2003-0044, the Region 5 General Order for land disposal of treated groundwater from sites with petroleum fuel pollution. RWQCB issued a Notice of Applicability on September 28, 2004 approving discharge of treated groundwater at this Site. The initial plan, to re-inject this treated water into two upgradient monitoring wells, proved impractical when it was determined that the percolation rate was insufficient to handle the volume of treated water generated. A subsequent plan, involving installation of a percolation trench, was implemented as described below.

July 2005

A small soil vapor extraction (SVE) system was installed to accelerate removal of VOCs from “smear zone” soils. The system was connected to EW-1, EW-2, and the wells immediately surrounding the UST pit (MW-1, MW-2, MW-3 and the tank well). VOCs extracted at a vacuum of 3-5 inches of mercury were initially treated using a catalytic oxidizer. When the concentrations dropped significantly after the first few months of operation, the oxidizer was replaced with two 1,000-pound vapor phase activated carbon vessels.

October 2006

An infiltration gallery (i.e. percolation trench) was installed in the parking lot close to the treatment compound. Underground piping was installed from the treatment compound to the trench and hydraulic capacity testing was performed to confirm that the trench could handle up to 6 gpm on a continuous basis. No groundwater mounding was observed during the first several days of discharge, so the trench was backfilled and the overlying area resurfaced. This trench effectively received all treated groundwater generated for the remainder of the remediation program at this Site.

January 2007

H_2OGEOL responded to a request by the RWQCB for a soil vapor survey with a report that explained why this survey was unnecessary. The rationale was based on the fact that there has never been a significant contaminant mass in soil, the downgradient trailer park structures all have sealed undersides in accordance with ITRC standards, and the SVE system prevents any potential intrusion of VOCs into the convenience store building. The RWQCB reviewed and approved this report, as documented in their letter dated February 6, 2007. In fact the SVE system was kept in operation until December 2008, long after any VOCs were detected in the incoming vapor stream, to make sure that vapor intrusion into the convenience store building was not a legitimate concern.

January – March 2009

Although most of the contaminant mass had been removed by the end of 2008, a few of the groundwater monitoring wells still had significant concentrations of MtBE and/or TPH-g. A test program was performed to see whether high vacuum dual phase extraction (HVDPE) could effectively reduce these residual concentrations to acceptable levels. A mobile HVDPE system was used to test several of the monitoring wells and extraction well EW-1, collecting vapor samples as well as before and after groundwater samples from each well. It was concluded that the remaining contaminant mass in the vicinity of these wells was quite low and that HVDPE, using either a mobile or a fixed system, was not cost effective. The remediation system was turned off at this time and demobilized from the Site a few months later.

July 2010

The single-walled fiberglass USTs originally installed in 1982 were replaced with larger double-walled tanks meeting all the latest requirements for secondary containment and monitoring. The leaking UST had been repaired and kept in service by the previous Site owner when the release occurred in 1997. During the expansion of the UST pit excavated backfill material and “soil” (actually removed by breaking the fractured bedrock into pieces that could be picked up with an excavator bucket and thumb attachment), was stockpiled, sampled, and found to contain very low concentrations of petroleum hydrocarbons. These results confirmed that no significant contaminant mass remained in the area immediately surrounding the USTs.

August 2010

H_2OGEOL destroyed seven monitoring wells, three of which were damaged when the UST pit was expanded. The other four were upgradient or have been clean every time they were sampled.

3.1 Groundwater Monitoring

Groundwater monitoring was performed once in 1999 and 2000; quarterly from the beginning of 2001 to the end of 2006; semi-annually from 2007 to 2009; and once in 2010. The current agreement with EDCEMD is that the wells will only be sampled once every other year, so the next scheduled sampling event is during the first quarter of 2012. These sampling events included sampling of all installed wells through August 2008.

A total of 29 monitoring wells, one "tank well" and two groundwater extraction wells have been installed at the Site since 1999. The sampling program was significantly reduced beginning in February 2009, with only 10 wells being sampled during the 2009 and 2010 events.

In the most recent quarterly monitoring event performed during the 1st quarter of 2010, COC concentrations ranged up to 1,070 µg/L TPH-g and 615 µg/L MtBE in MW-3 and MW-10, (respectively). The highest off-site concentrations reported were 138 µg/L TPH-g and 145 µg/L MtBE (both in MW-13).

Figure 2 shows the locations of the 29 groundwater monitoring wells, tank well, and 2 extraction wells relative to the site and nearby surface features. *Table 2* presents a summary of groundwater analytical results from all quarterly monitoring events through 2010, including samples collected from all the 32 monitoring and extraction wells described above. Well construction details for all 32 wells are shown on *Table 3*.

3.2 Technical Reports

The reports describing the above-referenced activities are listed on *Table 4*. Copies of the major reports on this list will be provided upon request or are available on GeoTracker.

4.0 SITE GEOLOGY AND HYDROGEOLOGY

4.1 Geology

Near surface soils at the Site ranged from pebbly sandy silts with rock fragments to gravelly sandy clay and clayey silt with shale fragments. Beneath these soils there are slate fractured meta tuff and/or siltstone units of the undifferentiated Jurassic-Triassic meta-volcanic or the upper Jurassic marine sedimentary/meta-sedimentary rocks. Monitoring wells installed with a hollow stem auger have encountered refusal at approximately 30 feet bgs, indicating that fractured bedrock is present this depth.

Copies of the boring logs for monitoring well and remediation well boreholes are included in *Attachment C*.

4.2 Hydrogeology

Hydrologically, the Site is situated in the upper drainage basin of Deadman Creek, upstream along the ridge line between two stream branches that have been impounded behind a dam on the main channel. This dam was installed to form Patterson Lake, a small reservoir around which the Lake Oaks Mobile Community was developed. As a result of this hydrologic setting, the direction and slope of the potentiometric surface derived from wells installed during the site assessment program has demonstrated that the Site is situated on a groundwater divide.

The shallow groundwater beneath the Site ranges from approximately 6 to 20 feet below ground surface (bgs) at elevations from 1,722 to 1,736 feet above mean sea level (amsl). *Figure 3* is a map showing the approximate potentiometric surface for the monitoring wells at the site on February 13, 2010. This map shows the northeasterly groundwater gradient directions beneath the northern portion of the property and southwesterly to southeasterly gradient directions beneath the southern portion of the property that have been observed in all potentiometric surface measurements to date. It is therefore meaningless to report the average gradient and direction of the potentiometric surface for groundwater at this Site.

5.0 SENSITIVE RECEPTOR SURVEY

H_2OGEOL performed a Sensitive Receptor Survey in late 2000 to determine whether any surface water bodies, municipal wells, domestic (i.e. private) wells, or other sensitive receptors were present within 2,000 feet of the Site. There were two wells found within the 2,000-foot search radius at that time, the closest being cross-gradient and more than 500 feet away. This well was removed in 2006. The other well, located 1,500 feet southwest of the Site, was not in use and has also been removed.

Patterson Lake, a man-made recreational surface water body, is situated downgradient of the southwesterly directed portion of the plume that originated at the Site. The lake has functioned as a hydraulic barrier, reducing the groundwater gradient in its area and slowing the advancement of the plume. This lake is not used as a source of drinking water, but its waters could provide a source of dermal contact or incidental ingestion if impacted by the plume. The three seasonal stock ponds located within the survey area are not considered potential sources of human contact or consumption.

Groundwater as a potential source vapor emanations was addressed in a workplan dated January 26, 2007 indicating that there were no areas that could potentially be impacted to investigate. This was affirmed in the workplan approval letter from the Regional Board dated February 6, 2007.

6.0 SITE CHARACTERIZATION AND GROUNDWATER MONITORING ACTIVITIES

The Site has been fully characterized by a series of assessment activities performed from 1999 to 2010. Soil samples were collected from a total of 10 locations, including the area immediately surrounding the UST pit, at depths above and below the depth to first encountered water (6 to 20 feet bgs). Groundwater samples have been collected from 32 locations, i.e. the 29 monitoring wells, tank well, and 2 extraction wells.

6.1 Soil Sampling Results

Soil sampling was initially performed in conjunction with installation of the first three monitoring wells (MW-1 to MW-3) in November 1999. No detectable TPH-g concentrations and very low BTEX concentrations were reported in the soil samples from all three borings. MtBE was present in several of these soil samples at concentrations ranging up to 10 mg/kg.

Ten soil samples were also collected from several boreholes advanced in the vacant lot south of the Site in February 2002. TPH-g was detected in two of these samples at concentrations ranging up to 2.9 mg/kg. MtBE was reported in several of the samples at low concentrations, ranging up to 0.9 mg/kg.

No other soil samples were analyzed during the course of this site assessment and remediation program. The Site and the surrounding area are on fractured bedrock, so it was evident that this release did not result in a significant contaminant mass being present in the unsaturated zone (as is usually the case). Visual and olfactory examination of the hollow stem auger soil cuttings obtained while installing the monitoring wells confirmed that no significant soil contamination was present in the vadose zone soils.

The leaking UST was repaired (not replaced) when this release was discovered. All three USTs installed in 1982 were replaced with larger USTs in July 2010. Soil “excavated” to expand the UST pit was stockpiled on Site and sampled to determine the best option for disposal. This soil was predominately a fractured bedrock matrix, so it was prepared by breaking up the rock with a hydraulic hammer prior to removal with the excavator bucket. Six samples of the stockpiled “soil” were analyzed to determine the best option for off-site disposal. These samples were reported to contain no detectable concentrations of TPH-g, BTEX compounds or MtBE, up to 6 mg/kg of TPH-d, and up to 14 mg/kg of total lead. The total lead concentrations are typical of background levels in the area.

6.2 Groundwater Monitoring Results

Groundwater underlying and downgradient from the Site has been fully characterized by the various sampling and monitoring activities performed over the last 13 years. The highest groundwater concentrations reported for most analytes were in the August 2001 sample from MW-3, which had 86,000 µg/L TPH-g and 110,000 µg/L MtBE. The highest concentrations of benzene and total BTEX compounds were reported in the August 2001 sample from MW-4, at 770 µg/L and 8,690 µg/L, respectively.

The concentrations of all COCs in the groundwater monitoring wells were greatly reduced by the first quarter of 2010. In most wells the concentration of MtBE, the primary COC, were 2 to 3 orders of magnitude lower than they were when first sampled. The only well that did not show a declining trend was MW-17, located in the stock pond to the east of the Site. This well had 900 µg/L MtBE when last sampled in August 2009.

Table 2 presents a summary of groundwater results from all quarterly monitoring events through the first quarter of 2010. The most recent quarterly groundwater monitoring report by H_2OGEOL is available on GeoTracker. All previous quarterly monitoring reports are incorporated by reference.

7.0 REMEDIATION ACTIVITIES

The combination of soil vapor extraction (SVE) and groundwater remediation from 2001 to 2009 has effectively removed the contaminant mass and reduced the concentrations of petroleum hydrocarbons remaining in groundwater to concentrations that are approaching Water Quality Objectives (WQOs). The concentrations of COCs in the monitoring wells that do not currently meet WQOs are expected to reach WQOs within 15 to 25 years, without any adverse impacts to sensitive receptors in the meantime.

7.1 Soil Remediation

Active soil remediation performed at this Site consisted primarily of the soil vapor extraction (SVE) performed from 2005 to 2009. A 5-Hp SVE blower removed vapors from the exposed soil column in EW-1 and EW-2 and the vapor stream was treated by carbon adsorption. In addition, contaminated soil in the vicinity of the USTs that were the source of this release was removed by overexcavation when the USTs were replaced during the summer of 2010. Natural attenuation probably reduced the concentrations of COCs in impacted smear zone soils over the years, particularly in areas of low TPH-g concentration that are more amenable to microbial oxidation.

7.2 Groundwater Remediation

The concentrations of COCs in groundwater were reduced between 1997 and 2008 by the initial free product removal effort, operation of the groundwater extraction and treatment system, and to some degree by natural attenuation. By the end of 2008 the SVE and groundwater treatment system operation had reduced the concentrations of COCs in monitoring and extraction wells at the Site by an average of more than 99%. The only COCs present in any well at concentrations greater than WQOs were TPH-g and MtBE.

As shown graphically on the attached *Figure MW-1 through Figure EW-2*, taken from the most recent H_2OGEOL groundwater monitoring report, the concentrations of MtBE in the wells not currently meeting WQOs show a clear declining trend in all wells except MW-17. Based on a regression analysis of the data, these wells are expected to reach WQOs within 15 to 25 years.

8.0 CONTAMINANT MASS EVALUATION

The amount of product lost from the UST as a result of this release is estimated to be a few thousand gallons. Most of this was recovered during the first few weeks after the release by vacuum truck extraction of free product from the tank well. The contaminant mass present after this initial response but prior to soil and groundwater remediation is estimated as follows:

<u>Mass in Soil – TPH-g</u>

The original volume of contaminated soil is estimated by assuming an affected area of 9,000 square feet, 5 feet thick.

Soil Volume = (9,000 SF x 5 ft thick) / (27 CF/CY) ≈ 1,667 CY

Soil Mass = 1,667 CY x 2,700 lb/CY = 4,500,000 lb ≈ 2,045,000 kg of soil

The 6 soil samples collected from the MW-1, MW-2 and MW-3 boreholes were all MD < 1 mg/kg TPH-g, so a “worst case” assumption is that the average TPH-g concentration in impacted soil = 1 mg/kg

Mass of TPH-g = 2,045,000 kg x 1 mg/kg x 10^{-3} = 2,045 g ≈ 4.51 lb ≈ 0.5 gallons

Mass in Soil – Benzene

Soil Mass = 2,045,000 kg (as calculated above)

Average Benzene concentration = (0.005 x 4 + 0.015 + 0.022) / 6 ≈ 0.01 mg/kg

Mass of Benzene = 2,045,000 kg x 0.01 mg/kg x 10^{-3} ≈ 20.5 g ≈ 0.045 lb ≈ 0.007 gallons

Mass in Soil - MtBE

Soil Mass = 2,045,000 kg (as calculated above)

Average MtBE concentration = (0.05*2 + 0.23 + 0.27 + 2.3 + 10) / 6 ≈ 2.82 mg/kg

Mass of MtBE = 2,045,000 kg x 2.82 mg/kg x 10^{-3} ≈ 5,760 g ≈ 12.7 lb ≈ 1.95 gallons

Mass in Groundwater – TPH-g

The contaminant mass in groundwater prior to soil and groundwater remediation is very difficult to calculate. A "worst-case" assumption would be as follows:

Estimate the volume of groundwater in the aquifer, assuming an affected area of 50,000 SF x 8 ft thick = 400,000 CF and a porosity of 20%.

Groundwater Volume = 400,000 CF x 0.2 = 80,000 CF x 7.48 gallons/CF = 598,400 gallons

Maximum TPH-g Concentration in Groundwater = 86,000 µg/L = 86 mg/L

Mass of TPH-g = 598,400 gallons x 3.78 L/gallon x 86 mg/L x 10^{-3} g/mg ≈ 194,528 g

194,528 g ≈ 428.9 lb ≈ 66.0 gallons

Mass in Groundwater – Benzene

Groundwater Volume = 598,400 gallons (as calculated above)

Maximum Benzene Concentration in Groundwater = 770 µg/L = 0.77 mg/L

Mass of TPH-g = 598,400 gallons x 3.78 L/gallon x 0.77 mg/L x 10^{-3} g/mg ≈ 1,742 g

1,742 g ≈ 3.84 lb ≈ 0.59 gallons

Mass in Groundwater – MtBE

Groundwater Volume = 598,400 gallons (as calculated above)

Maximum MtBE Concentration in Groundwater = 110,000 µg/L = 110 mg/L

Mass of MtBE = 598,400 gallons x 3.78 L/gallon x 110 mg/L x 10^{-3} g/mg = 248,814 g

248,814 g ≈ 548.5 lb ≈ 84.4 gallons

The estimate of total contaminant mass released from the USTs at this Site, based on these calculations, is as follows:

Mass adsorbed in soil: 17 lb

Mass dissolved in groundwater: 981 lb

Total Mass: 998 lb ≈ 154 gallons (TPH-g + MtBE)

The contaminant mass remaining after soil and groundwater remediation is very difficult to estimate. Based on "worst case" assumptions, residual contaminant mass is estimated as follows:

Residual Mass in Soil

Soil mass = 2,045,000 kg (as calculated above)

TPH-g = (0.025 mg/kg) x 2,045,000 kg) x 10^{-3} = 51.12 g ≈ 0.11 lb ≈ 0.017 gallons

Benzene = (0.005 mg/kg) x (2,045,000 kg) x 10^{-3} = 10.22 g ≈ 0.022 lb ≈ 0.003 gallons

MtBE = (0.5 mg/kg) x (2,045,000 kg) x 10^{-3} = 102.24 g ≈ 0.22 lb ≈ 0.034 gallons

Residual Mass in Groundwater

For groundwater calculations assume an 8-foot thick aquifer and 20% porosity.

Groundwater volume = (180 Ft) x (120 Ft) x (8 Ft) x (0.20) = 43,200 CF of water
(43,200 CF) x (7.48 gallons/CF) = 323,136 gallons of groundwater

Residual TPH-g Concentration in Groundwater = 50 µg/L = 0.05 mg/L

Mass of TPH-g = 323,136 gallons x 3.78 L/gallon x 0.05 mg/L x 10^{-3} g/mg ≈ 61.1 g

61.1 g ≈ 0.13 lb ≈ 0.02 gallons

Mass in Groundwater – Benzene

Groundwater Volume = 323,136 gallons (as calculated above)

Residual Benzene Concentration in Groundwater = 5 µg/L = 0.005 mg/L

Mass of TPH-g = 323,136 gallons x 3.78 L/gallon x 0.005 mg/L x 10^{-3} g/mg ≈ 6.11 g

6.11 g ≈ 0.013 lb ≈ 0.002 gallons

Mass in Groundwater – MtBE

Groundwater Volume = 323,136 gallons (as calculated above)

Average Residual MtBE Concentration in Groundwater = 100 µg/L = 0.1 mg/L

Mass of MtBE = 323,136 gallons x 3.78 L/gallon x 0.1 mg/L x 10^{-3} g/mg ≈ 122 g

122 g ≈ 0.27 lb ≈ 0.04 gallons

The estimate of total residual mass remaining after soil and groundwater remediation is as follows:

Mass remaining in soil:	0.33 lb
Mass remaining in groundwater:	0.40 lb
Total Mass:	**0.74 lb ≈ 0.11 gallons**

9.0 TIER 1 RISK ASSESSMENT

A Tier 1 Risk Assessment was performed by comparing available soil and groundwater data with the Environmental Screening Levels (ESLs) published in the San Francisco Bay Area RWQCB document titled “Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater” (May 2008 edition). No soil samples have been analyzed at this Site since 2002. During the installation of monitoring wells MW-1 through MW-3 in 1998 soil samples were collected from these three boreholes. Additional soil samples were analyzed in 2002 during the installation of monitoring wells MW-13, MW-20 and MW-23. The highest concentrations of COCs reported in these soil samples were 10 mg/kg (10,000 µg/kg) of MtBE and 2.9 mg/kg (2,900 µg/kg) of TPH-g at depths of more than 10 feet bgs.

The ESL for TPH-g in soil at a commercial site where groundwater could be used as a resource, as shown on *Table C-2* of the screening document, is 83 mg/kg (i.e. 83,000 µg/kg). The highest concentration of TPH-g ever reported in soil is 2.9 mg/kg, substantially lower than this ESL.

Table C-2 lists the ESL for MtBE as 23 µg/kg, the value listed in the column for Groundwater Protection (Soil Leaching). This is not a relevant concern at this Site, however, because of the extensive groundwater assessment and remediation program already completed. The column for Direct Exposure lists an ESL of 1,000mg/kg (1,000,000 µg/kg), which is 100 times greater than the highest value reported. It is concluded that residual COC concentrations in soil, therefore, do not present a credible risk to human health in terms of potential inhalation or dermal exposure.

With regard to potential exposure pathways from residual groundwater contamination, *Table E-1* in the referenced screening document is titled "Groundwater Screening Levels for Evaluation of Potential Vapor Intrusion Concerns". This table lists ESLs for volatile organic compounds present in gasoline (notably BTEX compounds and MtBE) that are much greater than the concentrations reported in any of the wells during the 2009 and 2010 monitoring events. In particular, the ESL of 80,000 µg/l for MtBE is higher than any concentration reported at the Site since 2001 and at least 100 times greater than the highest concentration reported in 2010. It is logical to conclude, therefore, that the potential for direct or indoor air exposure from residual groundwater contamination is not a viable concern and that a soil vapor survey is not necessary.

10.0 CONCLUSIONS AND RECOMMENDATIONS

The Site has been fully characterized by a series of assessment activities performed from 1997 to 2010. Soil samples have been collected from a total of 10 locations at depths above and below first encountered water. Groundwater samples have been collected on multiple occasions from the 29 monitoring wells and 2 extraction wells installed during this assessment and remediation program.

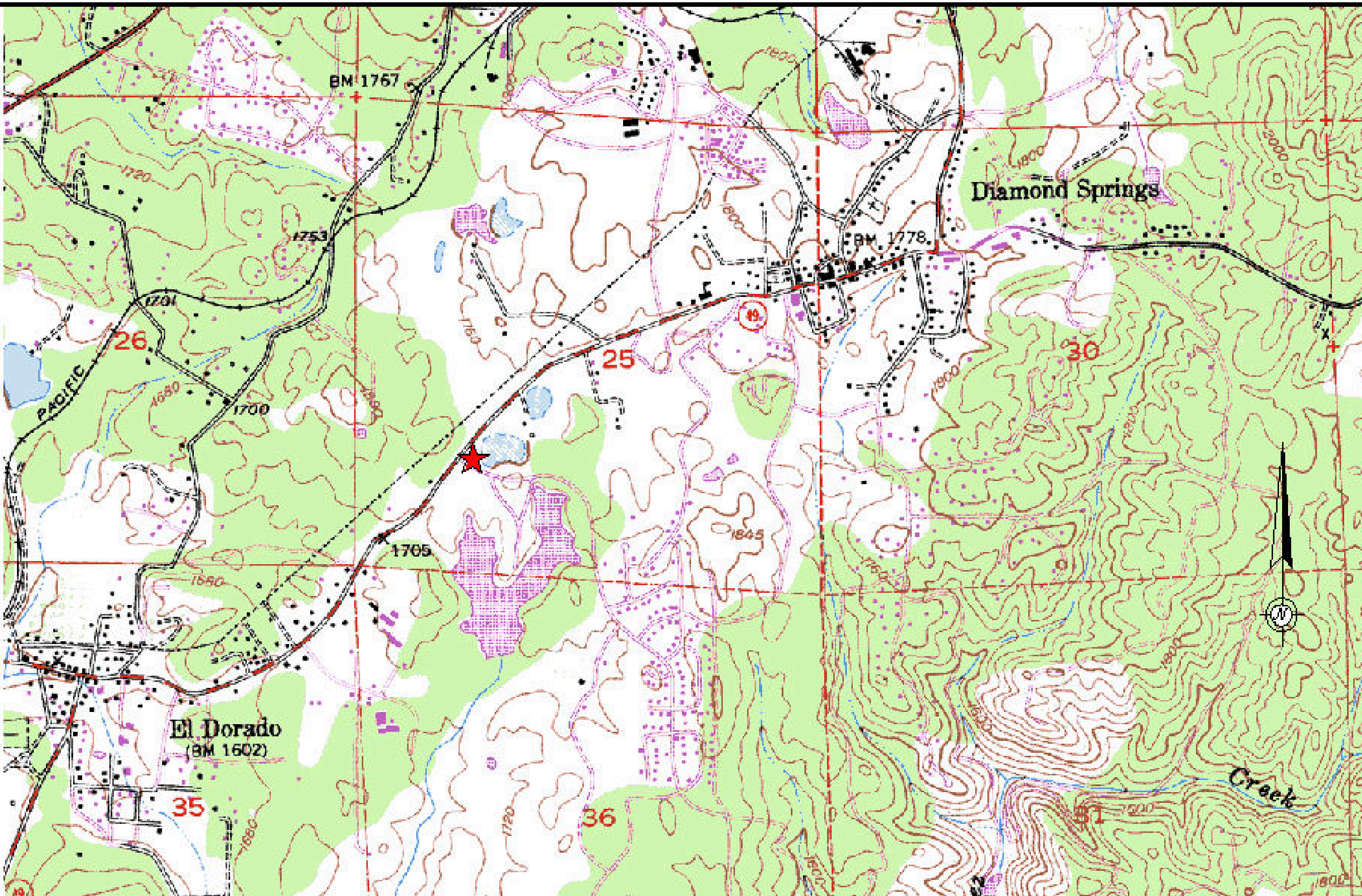
Active remediation using groundwater extraction and treatment in conjunction with some soil vapor extraction (SVE) has effectively reduced the concentrations of TPH-g and MtBE to levels that are at or will attain WQOs in all of the 29 monitoring wells, the tank well, and the two extraction wells. Trend analysis shows that WQOs are likely to be reached in all wells within 15 to 25 years, before impacted groundwater would reach any nearby downgradient sensitive receptors.

A Tier 1 Risk assessment has determined that residual concentrations of COCs at this Site do not pose a threat to human health in terms of potential inhalation or dermal exposure.

Based on these facts and the documentation provided with this NFAR, W&A recommends that the RWQCB issue a No Further Action Letter for this Site.

ATTACHMENT A

Figures



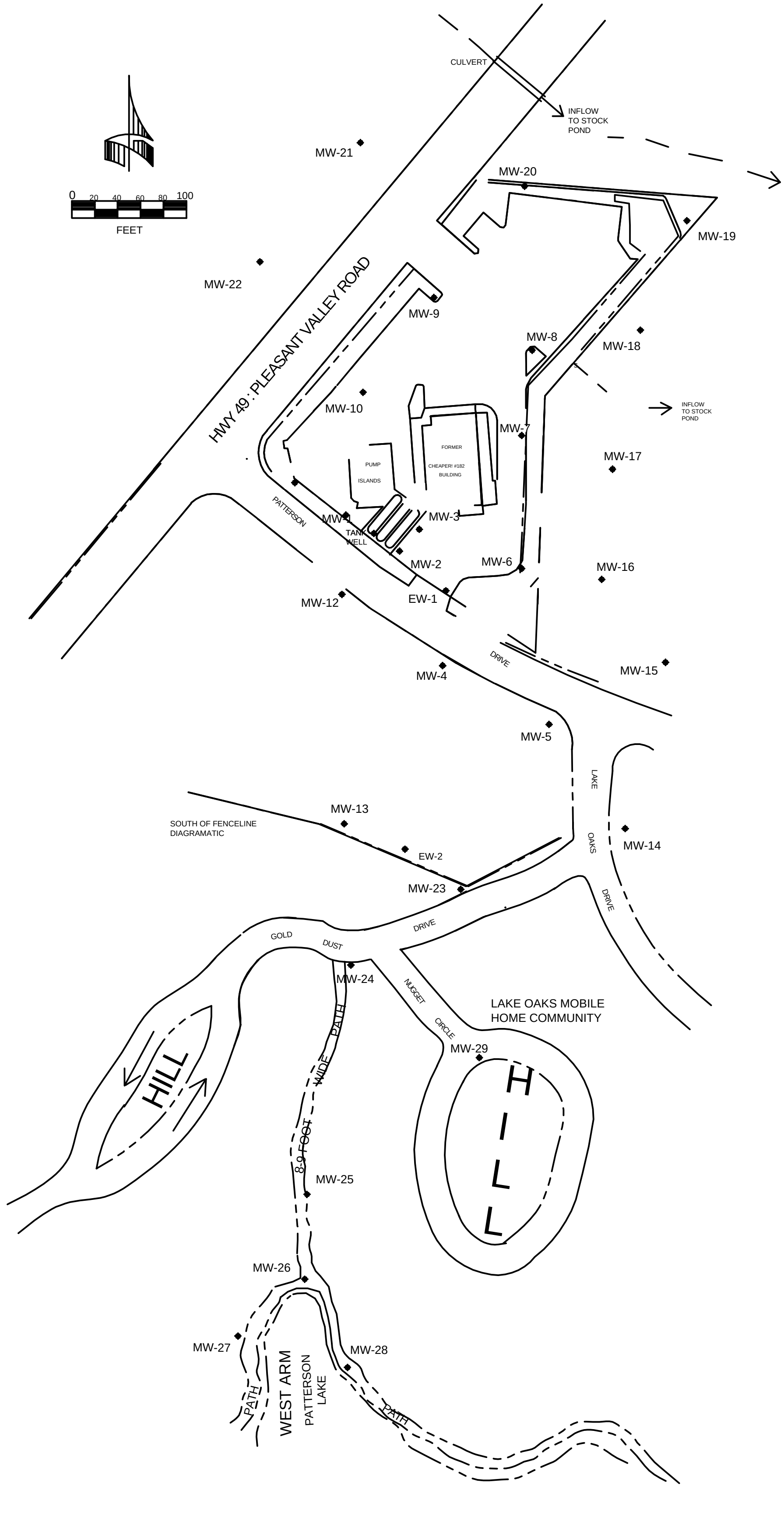
WEST & ASSOCIATES ENVIRONMENTAL ENGINEERS, INC.
PO Box 5891, Vacaville, CA 95696

Project Name: Former Cheaper! #182	Date: Sept 2008
Location: 130 Pleasant Valley Road, Diamond Springs	
Drawing By: DLG	Scale: None

Legend

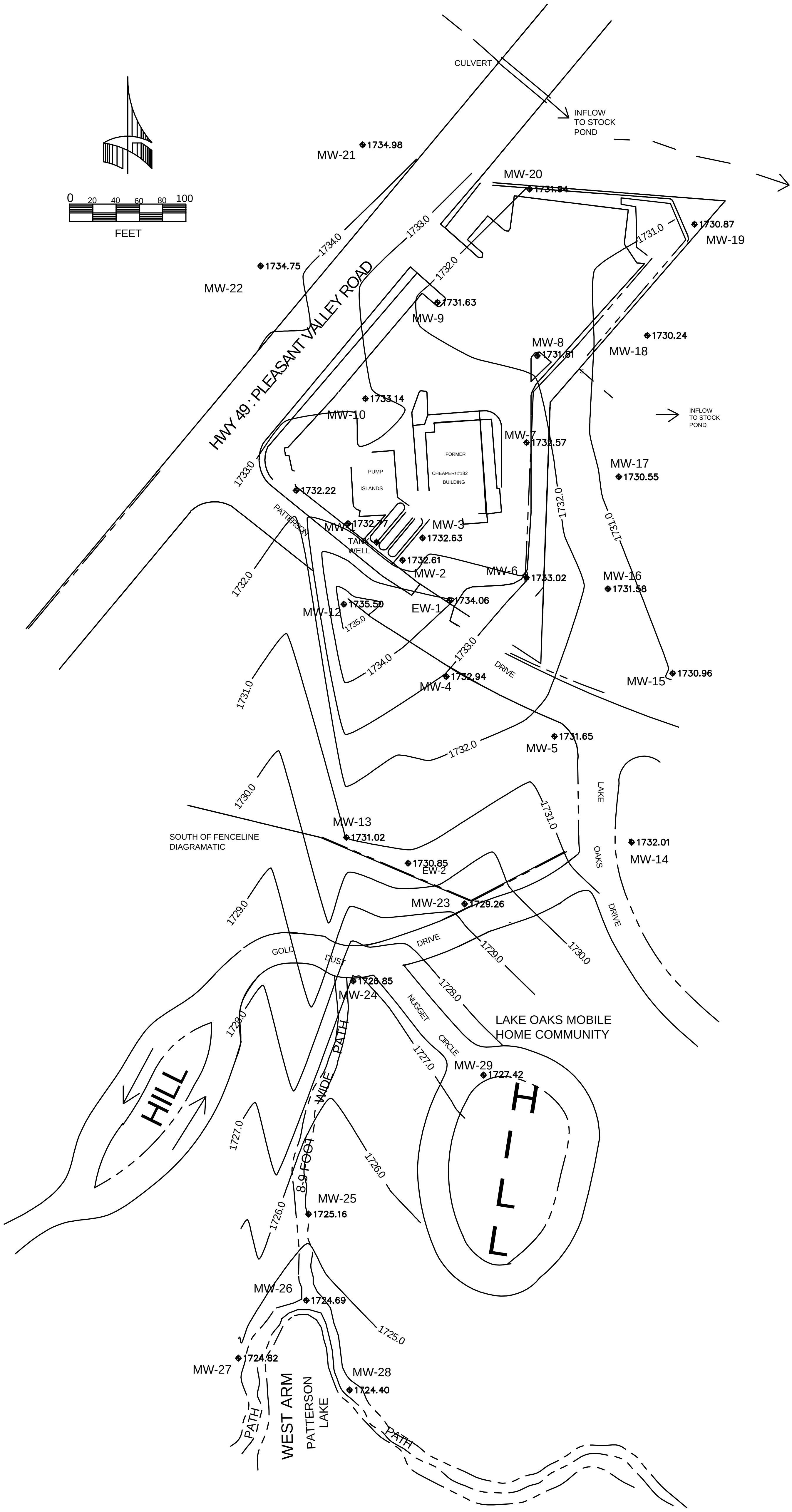
★ Site Location

FIGURE 1
Site Location



ALL SITE FEATURES APPROXIMATE. WELL LOCATIONS MW-1 TO MW-12, TW, & EW-1 FROM SURVEY BY ALAN R. DIVERS, SEPT. 2001. WELL LOCATIONS MW-13 TO MW-29, & EW-2 FROM SURVEY BY WEST ASSOCIATES, JULY 2004.

H2OGEOL A GROUND WATER CONSULTANCY	LOCATIONS OF WELLS, IMPORTANT NEARBY BUILDINGS, WATER BODIES AND OTHER SIGNIFICANT STRUCTIRES AND APPURTENANCES. FORMER CHEAPER! #182 130 PLEASANT VALLEY ROAD DIAMOND SPRINGS, CALIFORNIA	FIGURE 2



ALL SITE FEATURES APPROXIMATE. WELL LOCATIONS MW-1 TO MW-12, TW, & EW-1 FROM SURVEY BY ALAN R. DIVERS, SEPT. 2001. WELL LOCATIONS MW-13 TO MW-29, & EW-2 FROM SURVEY BY WEST ASSOCIATES, JULY 2004.

CONTOUR INTERVAL = 1.0 FEET AND AS LABELED.

H2OGEOL
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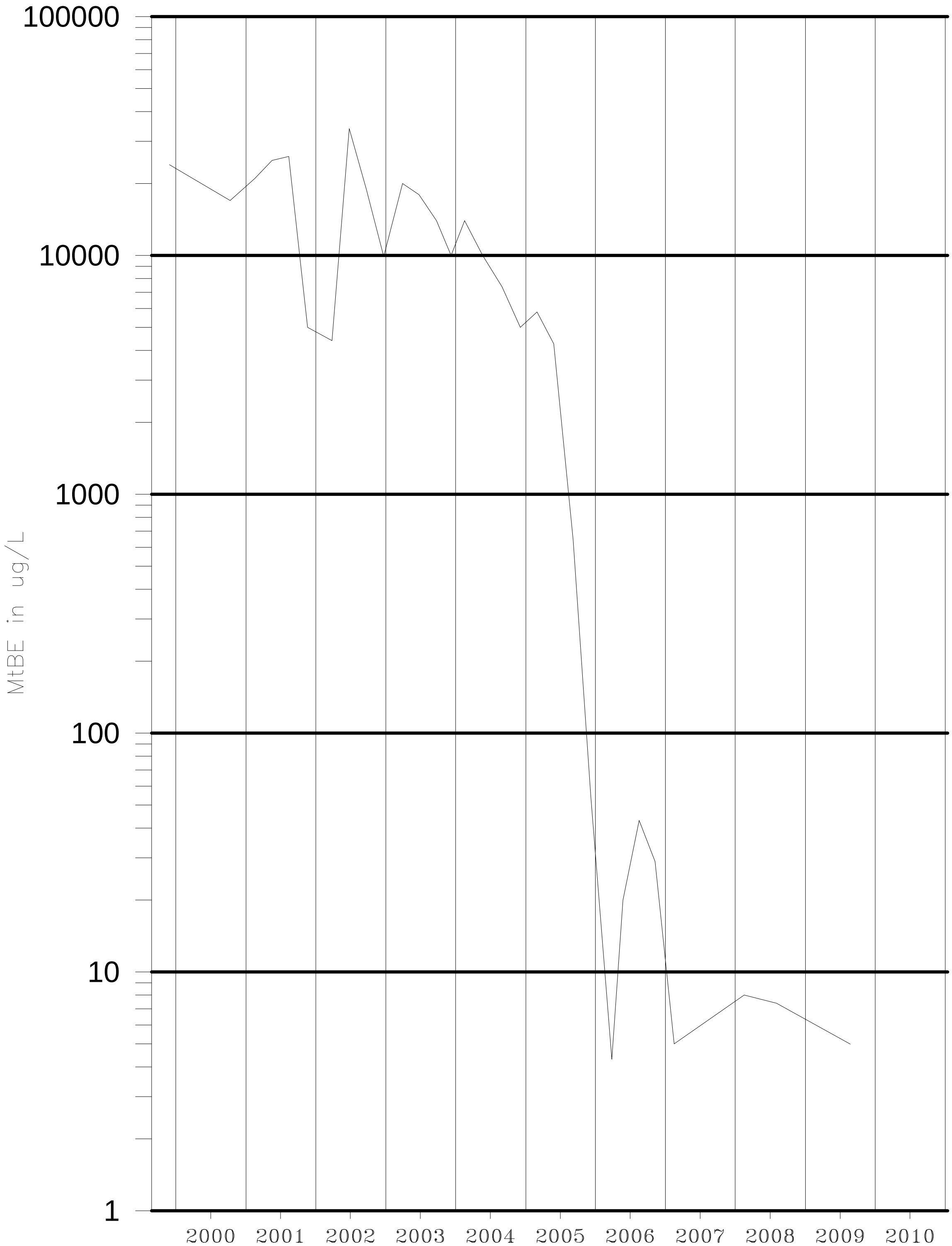
POTENTIOMETRIC SURFACE MAP - 02/13/10

FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CALIFORNIA

FIGURE 3

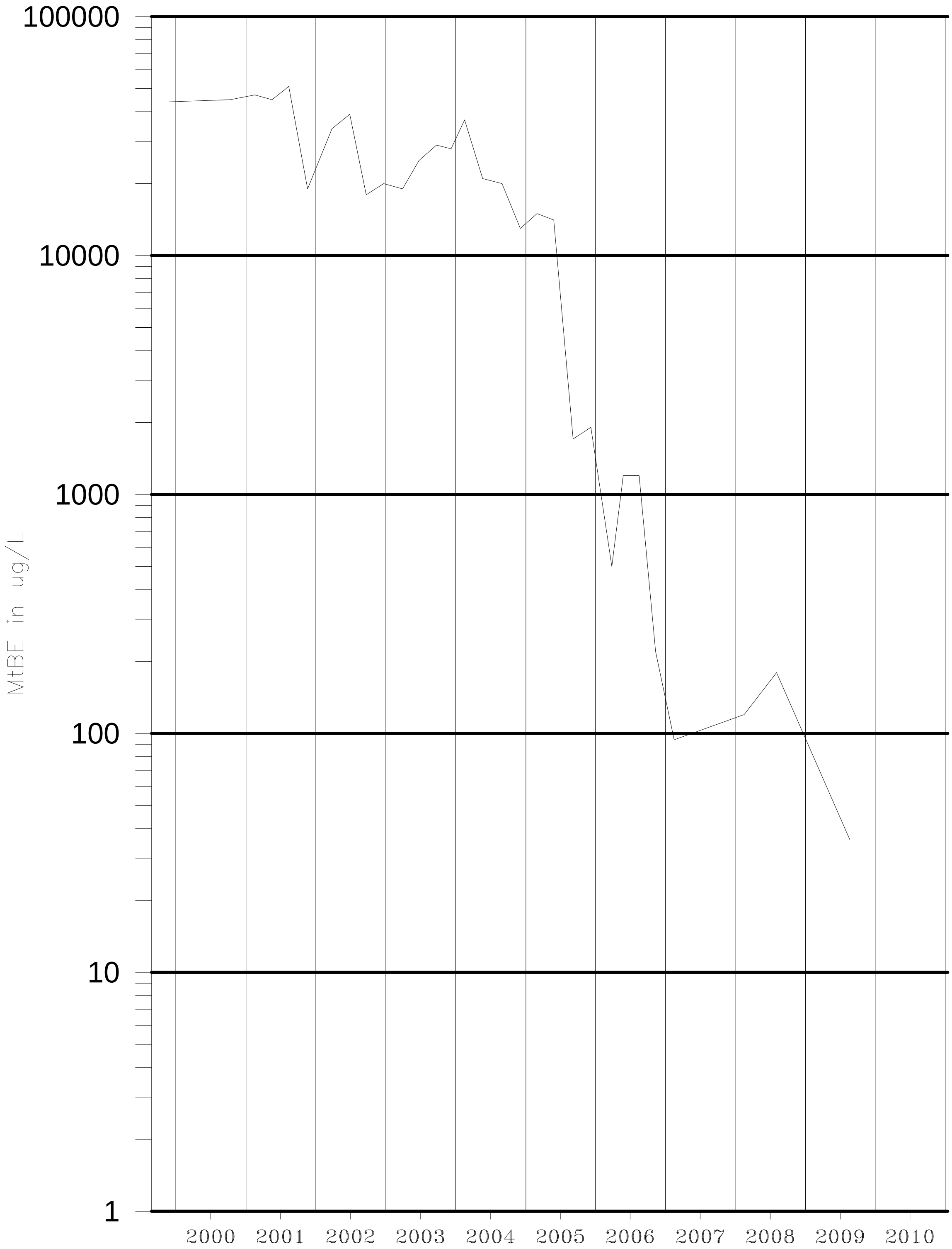


H2OGEOL
A GROUND WATER CONSULTANCY

CONCENTRATIONS OF MtBE OVER TIME
IN WELL MW-1, MONITORED ANNUALLY IN AUGUST

FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CA

FIGURE
MW-1

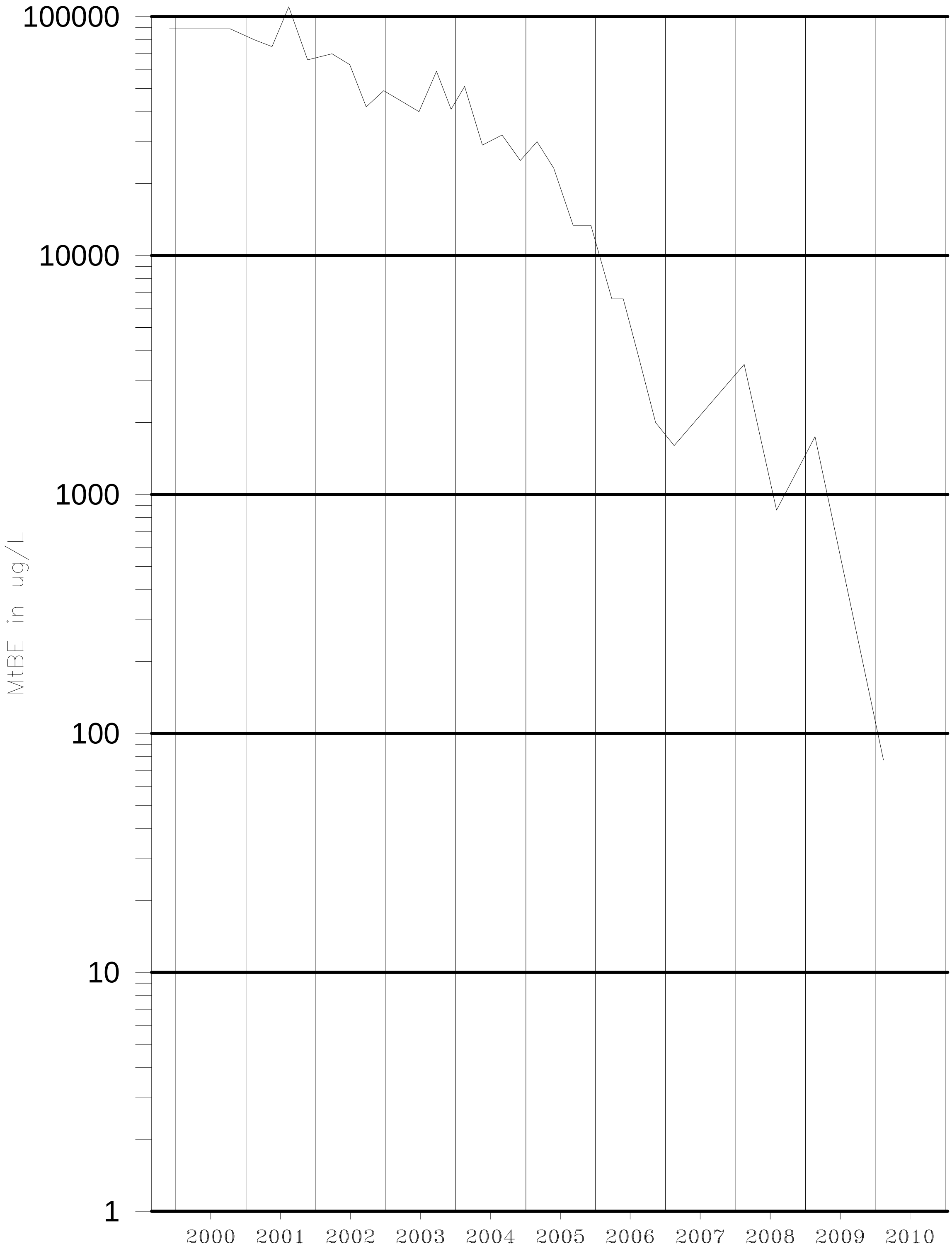


H2OGEOL
A GROUND WATER CONSULTANCY

CONCENTRATIONS OF MtBE OVER TIME
IN WELL MW-2, MONITORED ANNUALLY IN AUGUST

FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CA

FIGURE
MW-2



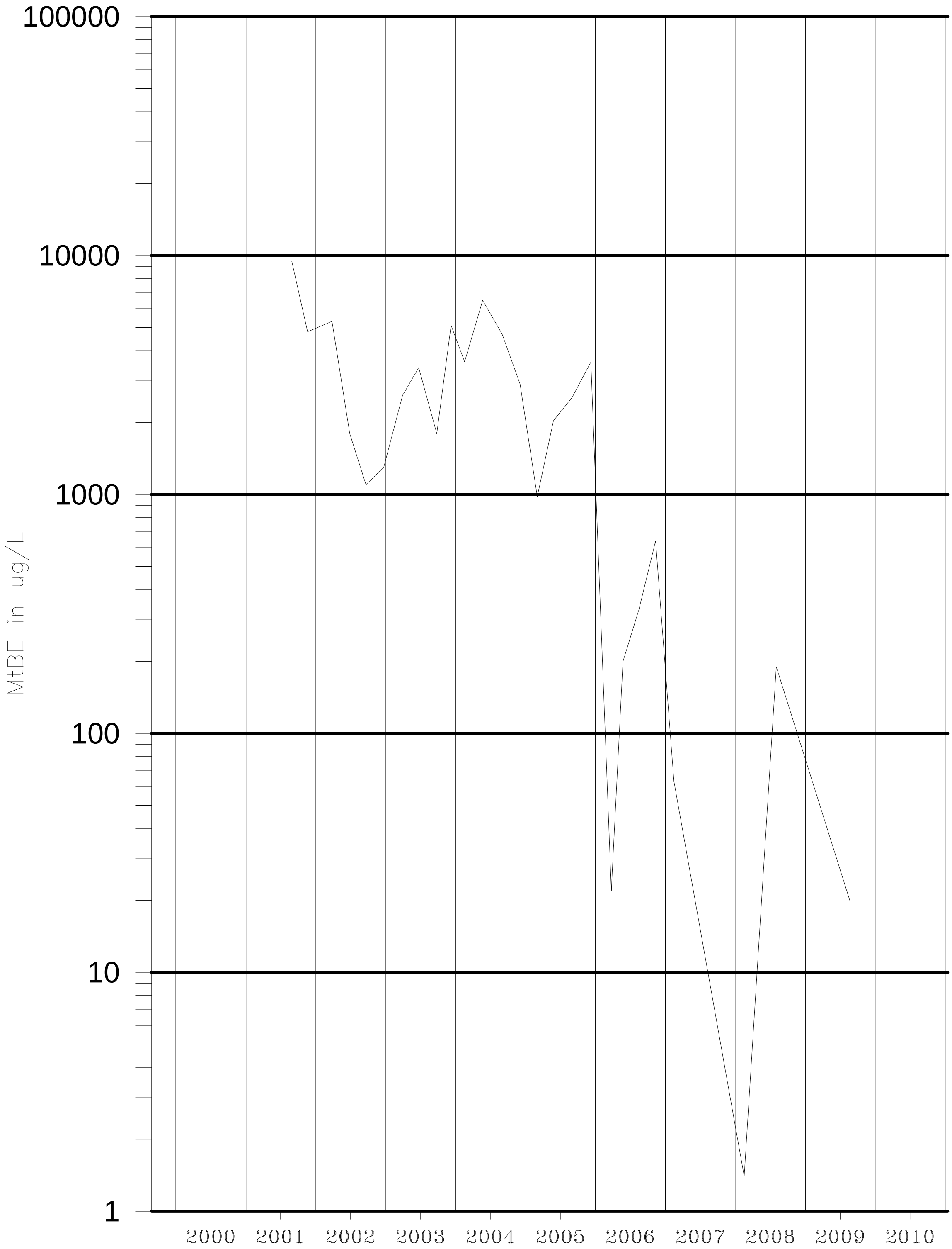
H2OGEOL
A GROUND WATER CONSULTANCY

CONCENTRATIONS OF MtBE OVER TIME
IN WELL MW-3, MONITORED ANNUALLY IN FEBRUARY

FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CA

FIGURE

MW-3

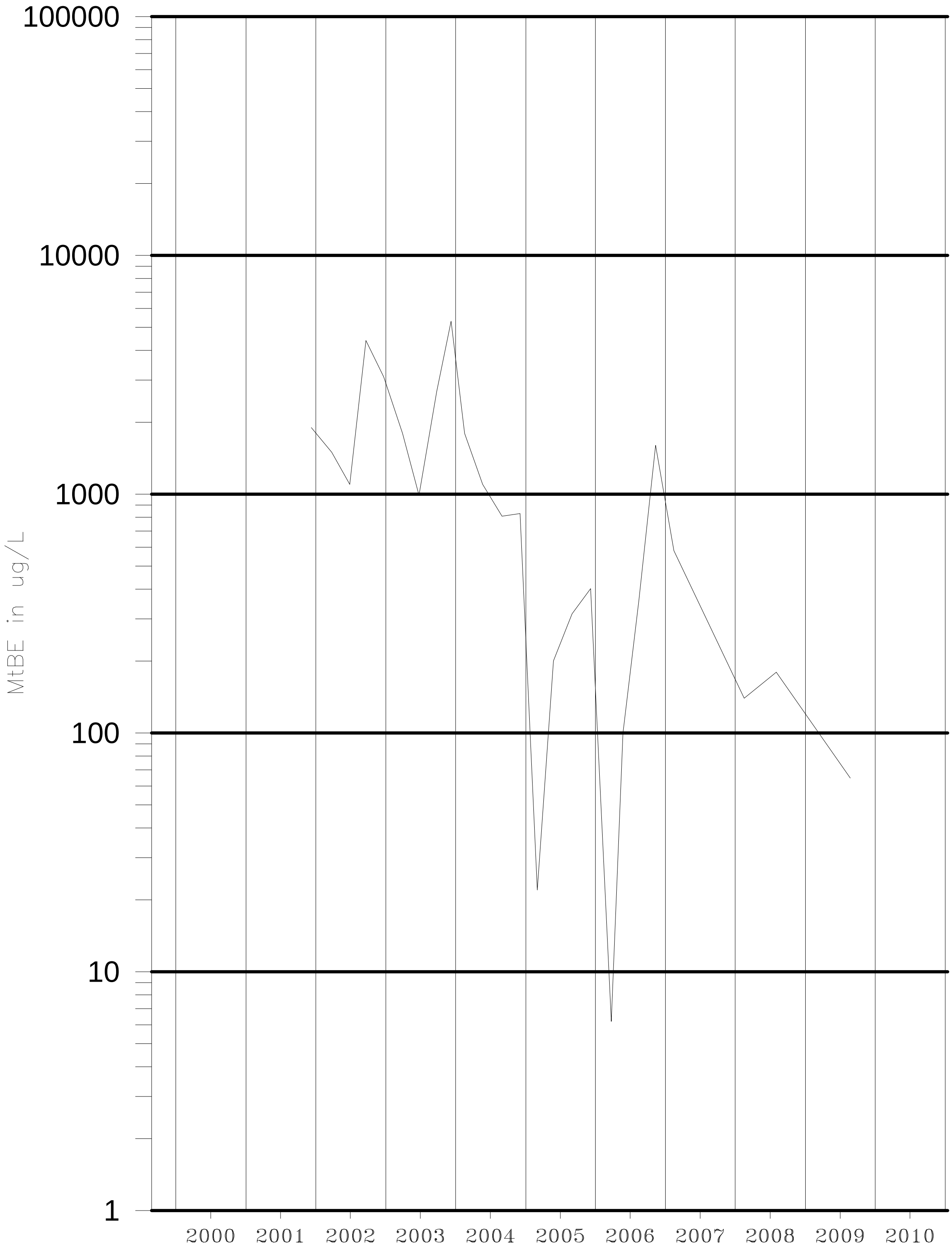


H2OGEOL
A GROUND WATER CONSULTANCY

CONCENTRATIONS OF MtBE OVER TIME
IN WELL MW-4, MONITORED ANNUALLY IN AUGUST

FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CA

FIGURE
MW-4

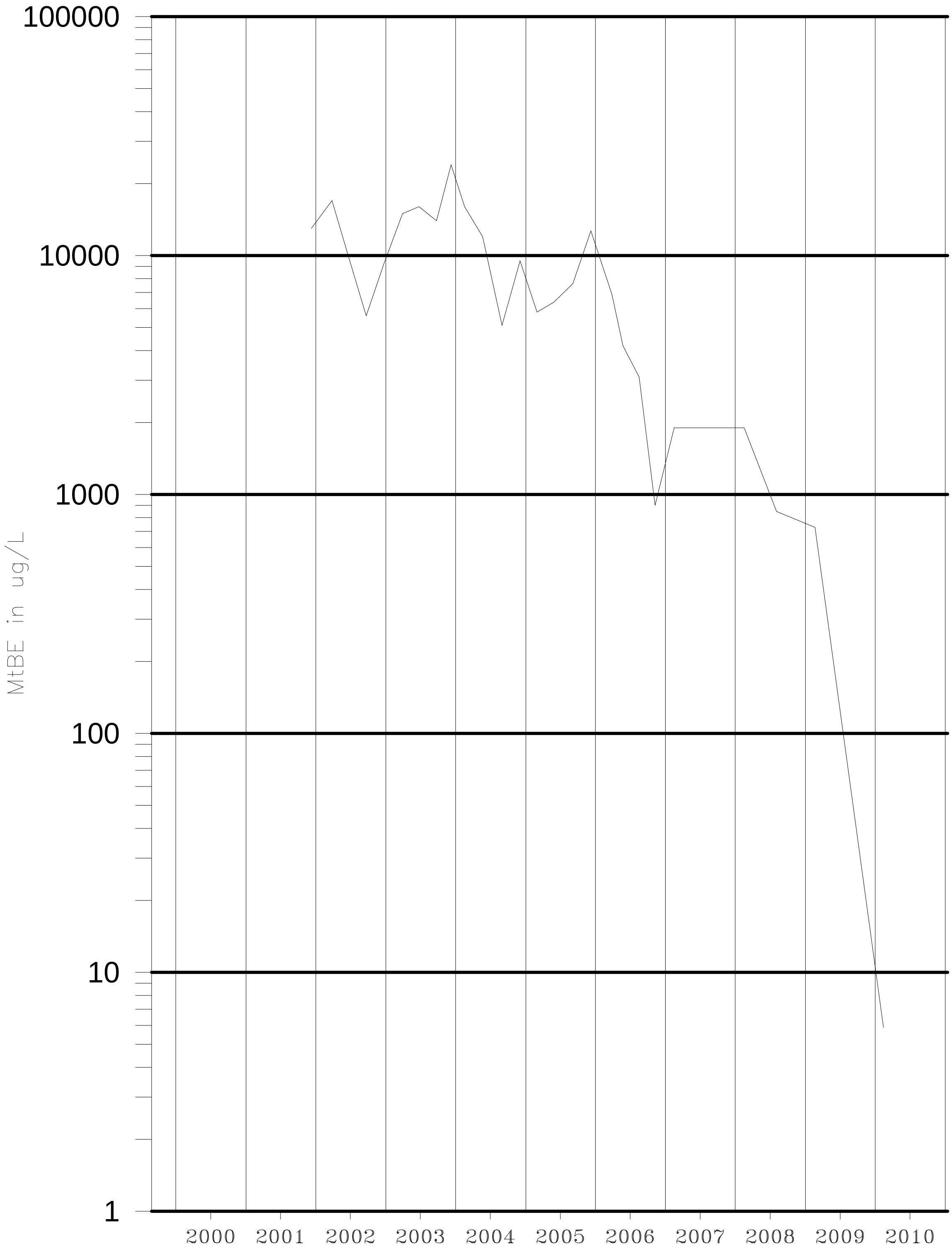


H2OGEOL
A GROUND WATER CONSULTANCY

CONCENTRATIONS OF MtBE OVER TIME
IN WELL MW-5, MONITORED ANNUALLY IN AUGUST

FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CA

FIGURE
MW-5

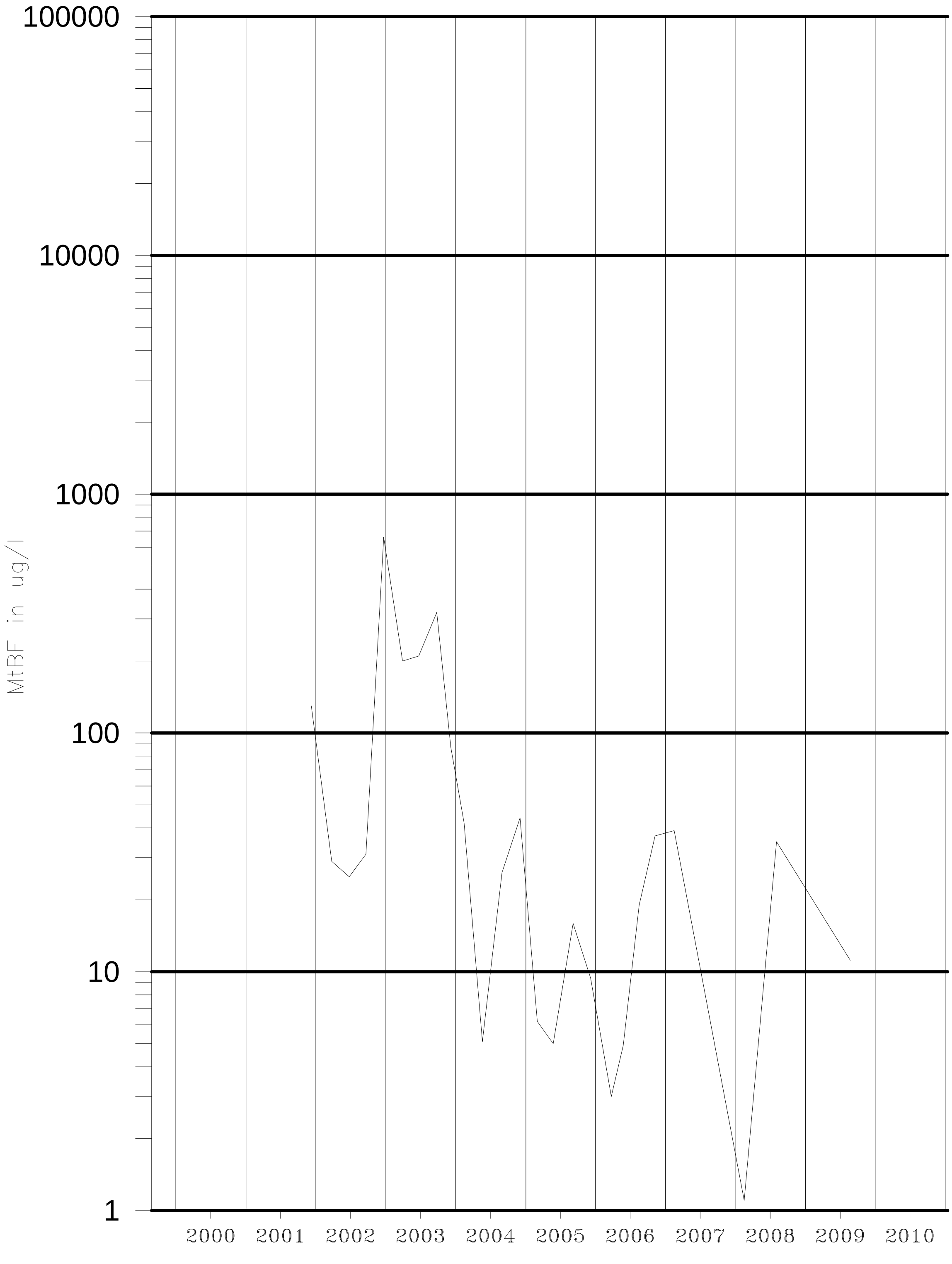


H2OGEOL
A GROUND WATER CONSULTANCY

CONCENTRATIONS OF MtBE OVER TIME
IN WELL MW-6, MONITORED ANNUALLY IN FEBRUARY

FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CA

FIGURE
MW-6

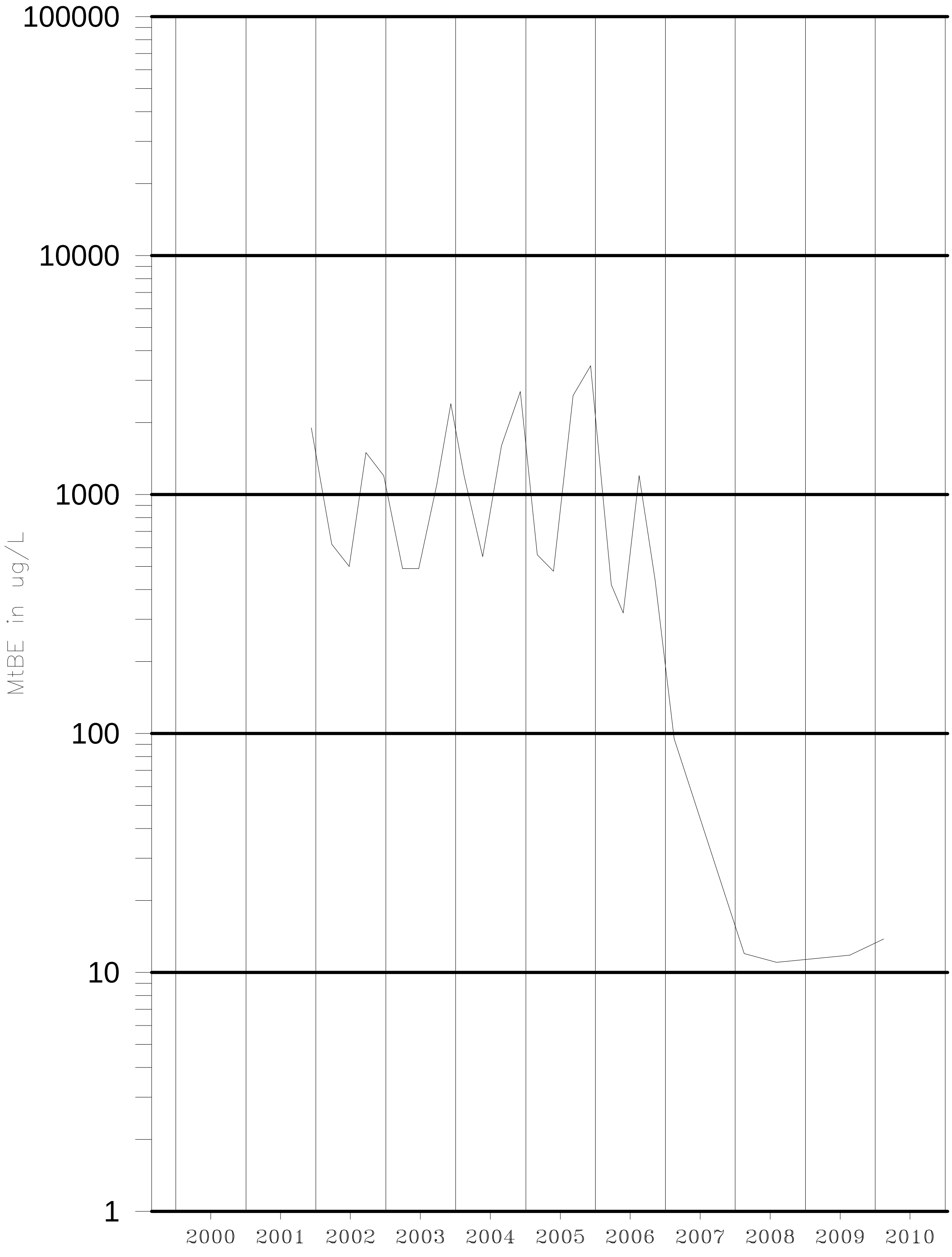


H2OGEOL A GROUND WATER CONSULTANCY

CONCENTRATIONS OF MtBE OVER TIME IN WELL MW-7, MONITORED ANNUALLY IN AUGUST

FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CA

FIGURE
MW-7

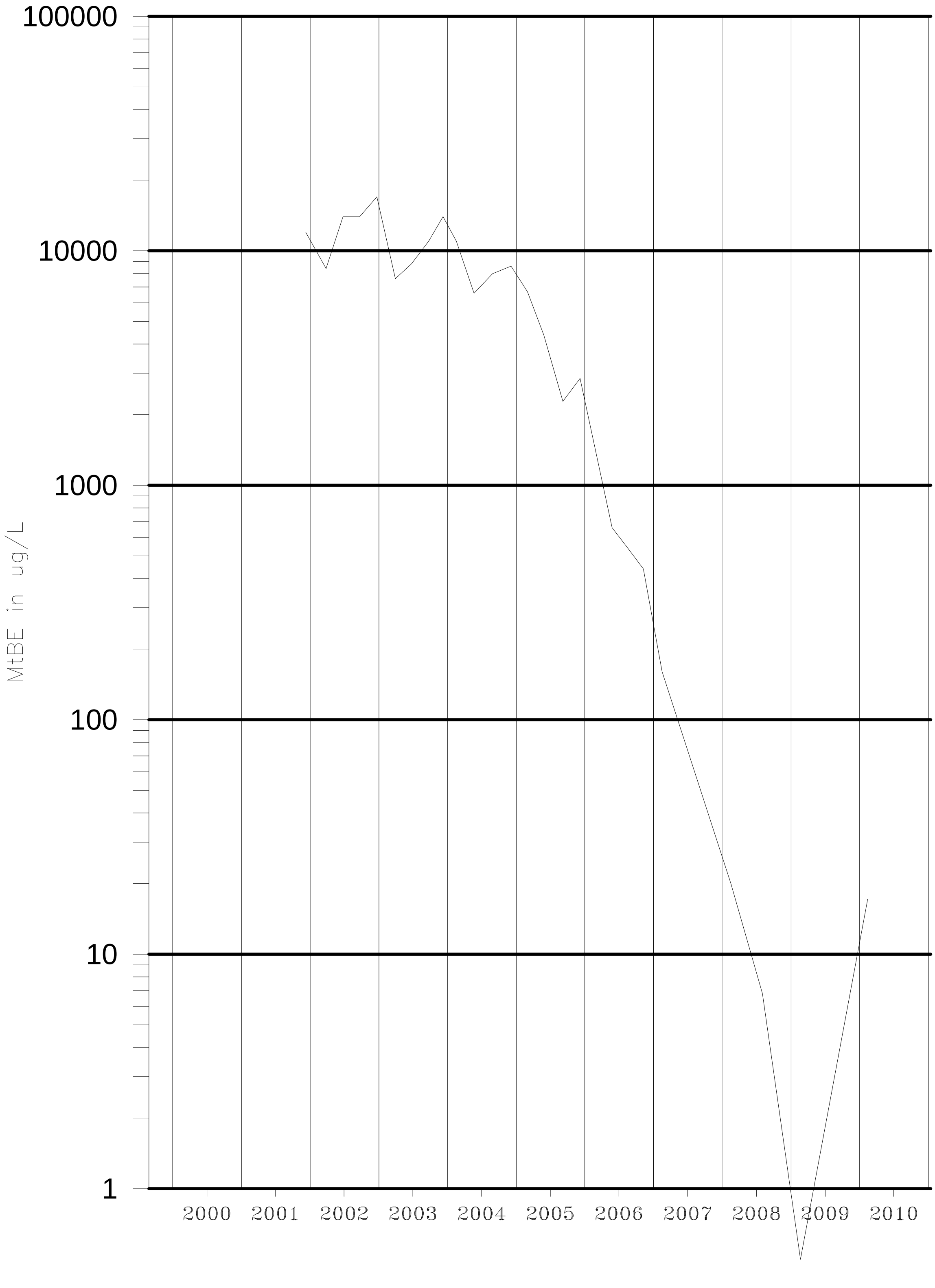


H2OGEOL
A GROUND WATER CONSULTANCY

CONCENTRATIONS OF MtBE OVER TIME
IN WELL MW-8, MONITORED ANNUALLY IN FEBRUARY

FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CA

FIGURE
MW-8

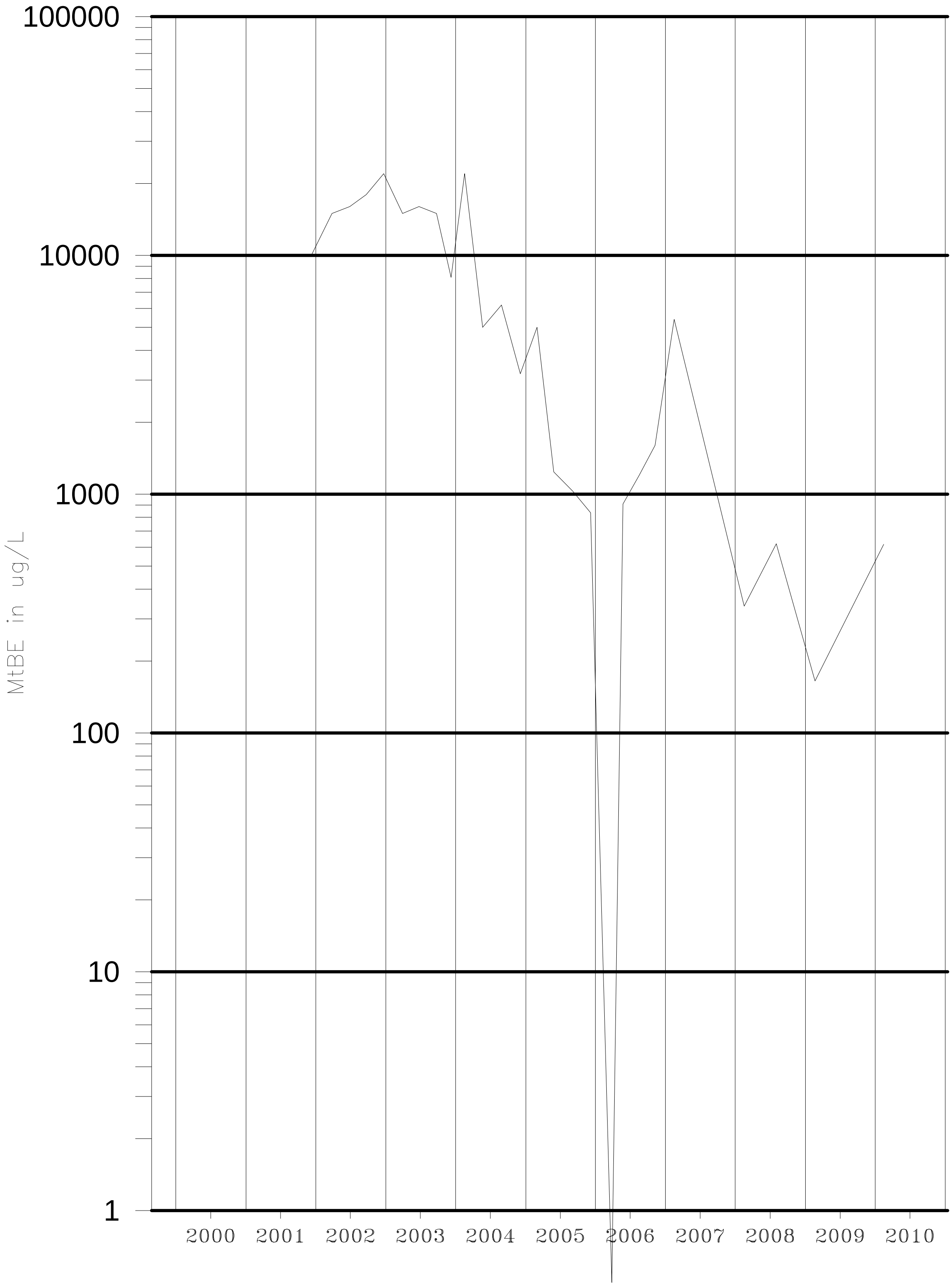


H2OGEOL
A GROUND WATER CONSULTANCY

CONCENTRATIONS OF MtBE OVER TIME
IN WELL MW-9, MONITORED ANNUALLY IN FEBRUARY

FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CA

FIGURE
MW-9



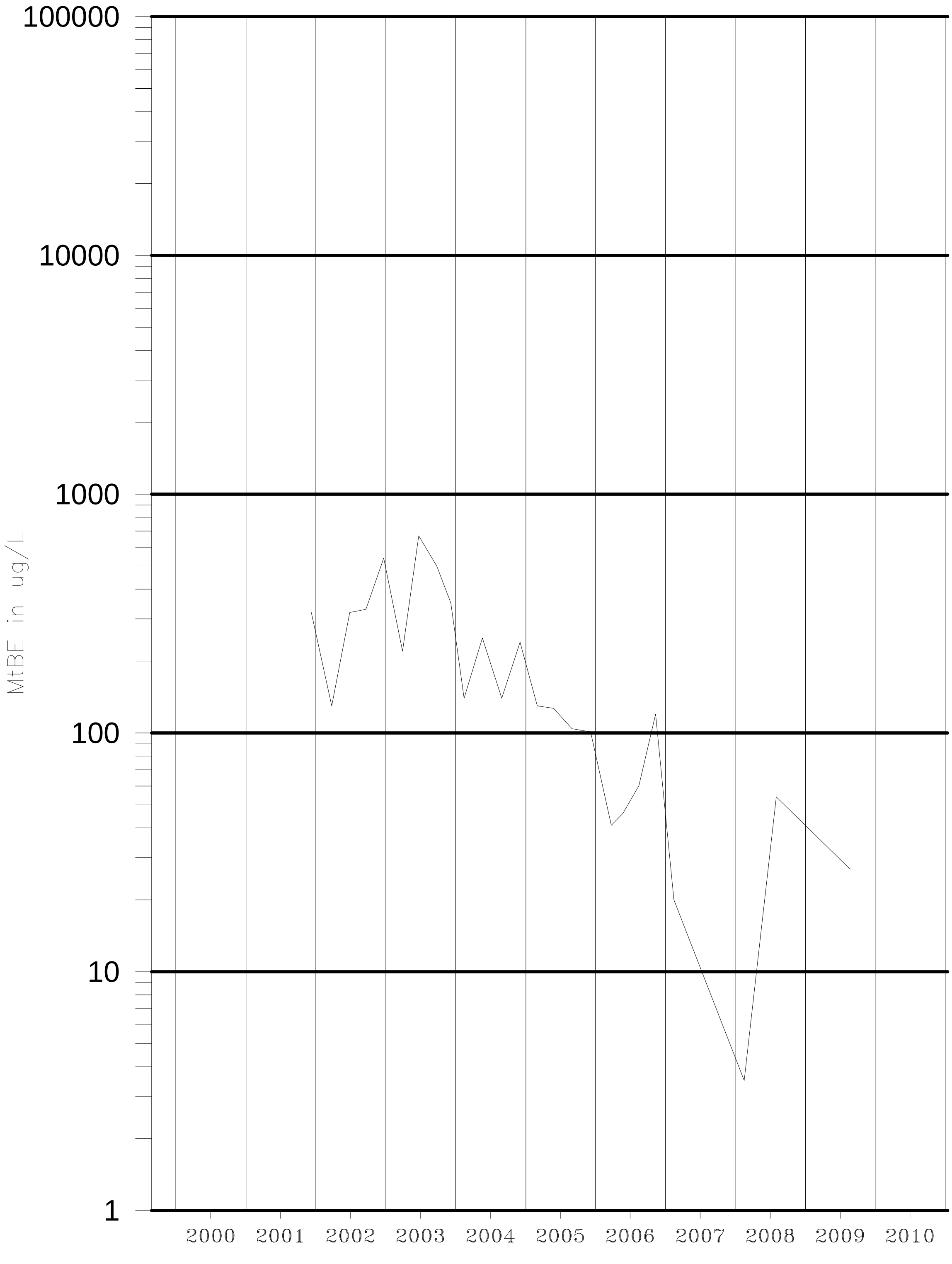
H2OGEOL
A GROUND WATER CONSULTANCY

CONCENTRATIONS OF MtBE OVER TIME
IN WELL MW-10, MONITORED SEMI-ANNUALLY
IN FEBRUARY AND AUGUST

FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CA

FIGURE

MW-10

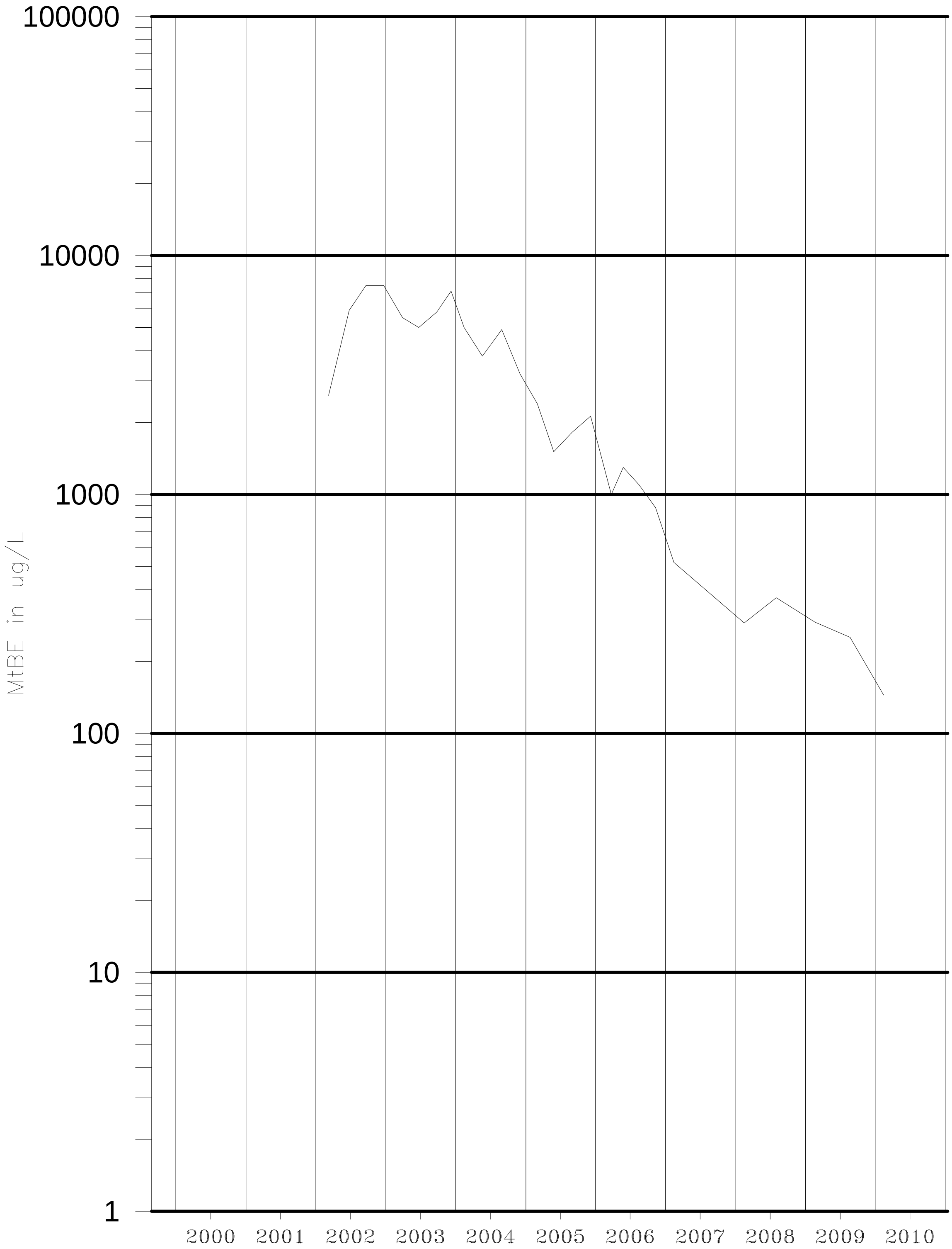


H2OGEOL
A GROUND WATER CONSULTANCY

CONCENTRATIONS OF MtBE OVER TIME
IN WELL MW-12, MONITORED ANNUALLY IN AUGUST

FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CA

FIGURE
MW-12



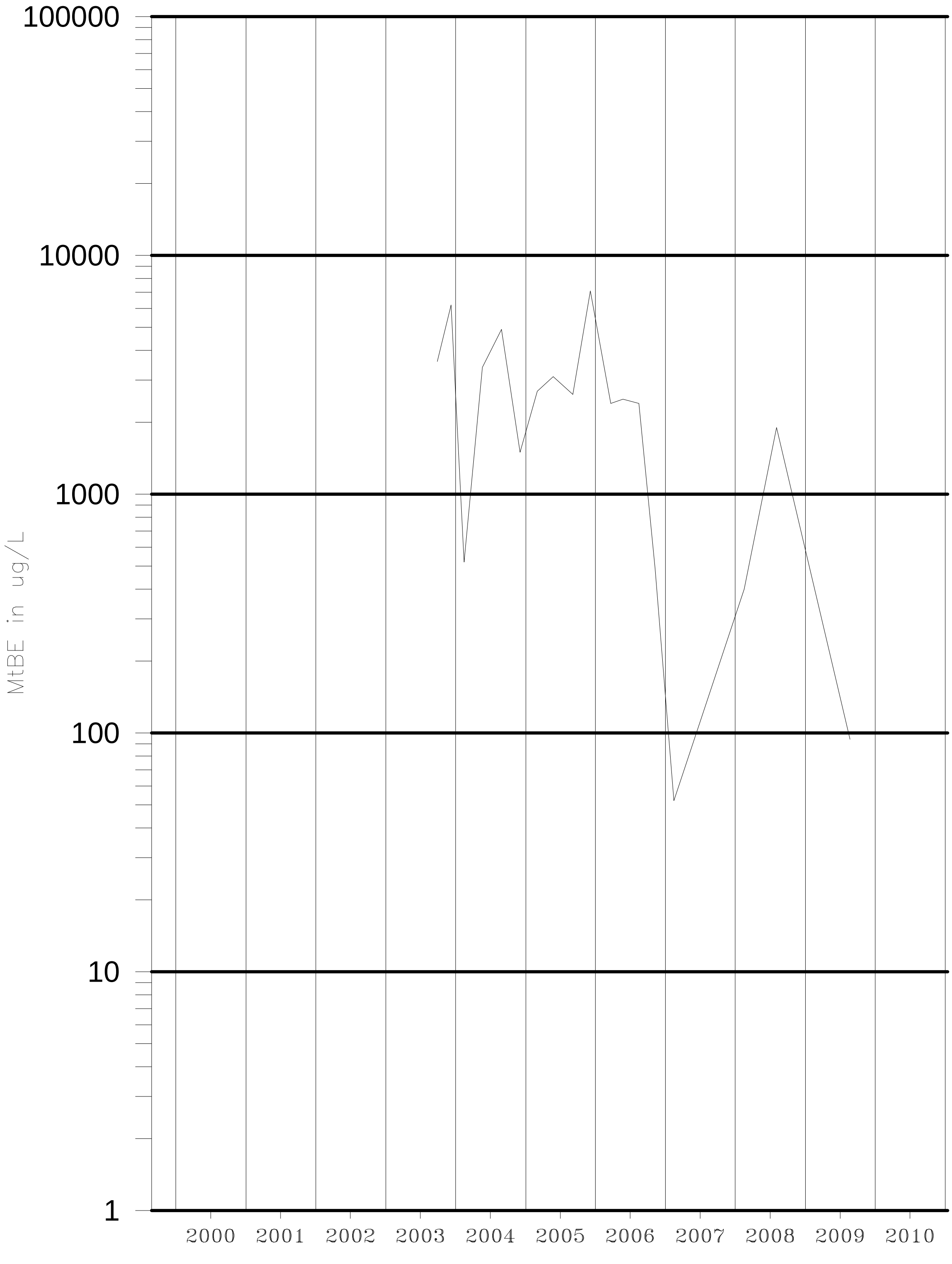
H2OGEOL
A GROUND WATER CONSULTANCY

**CONCENTRATIONS OF MtBE OVER TIME
IN WELL MW-13, MONITORED SEMI-ANNUALLY
IN FEBRUARY AND AUGUST**

**FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CA**

FIGURE

MW-13



H2OGEOL

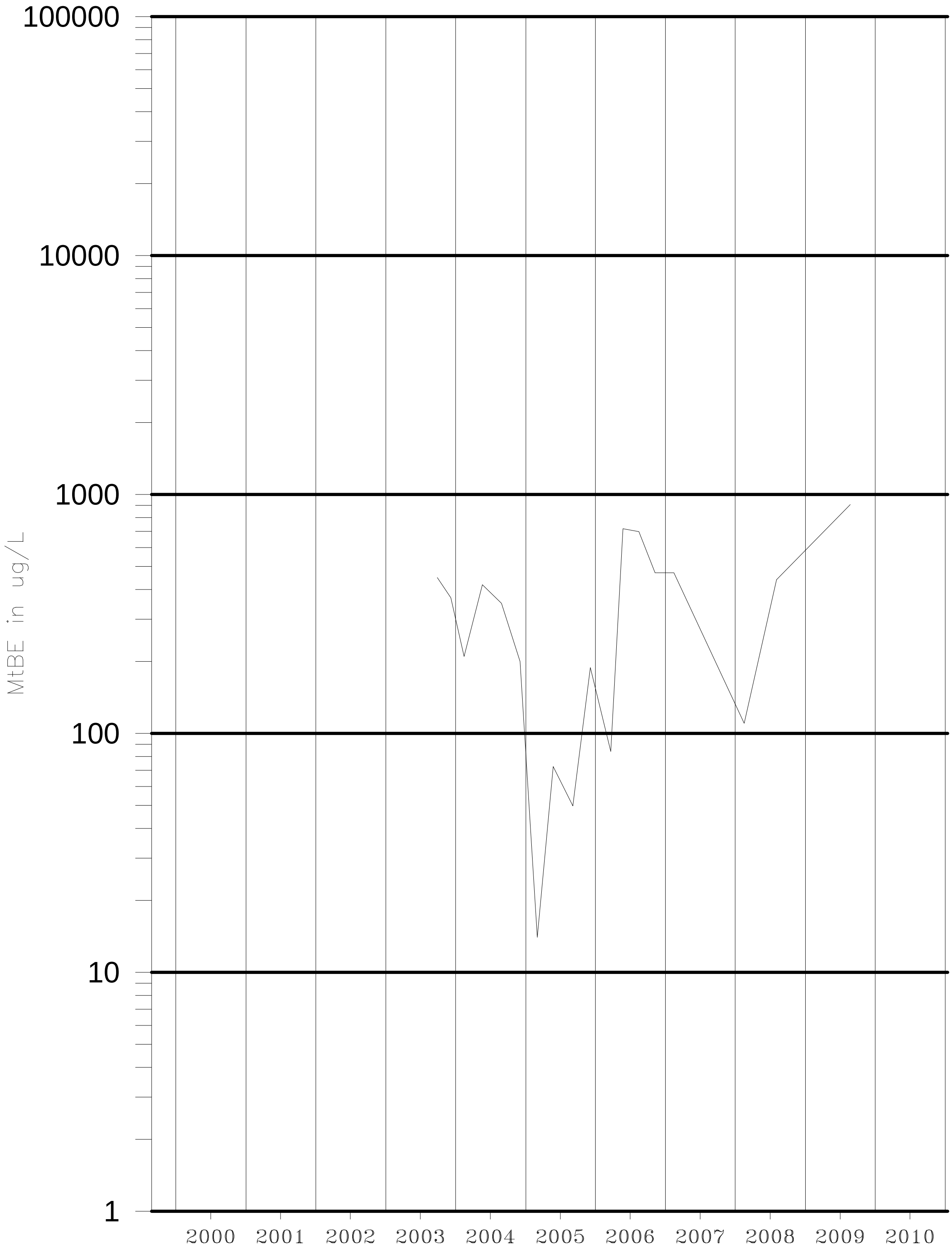
A GROUND WATER CONSULTANCY

CONCENTRATIONS OF MtBE OVER TIME
IN WELL MW-16, MONITORED ANNUALLY IN AUGUST

FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CA

FIGURE

MW-16

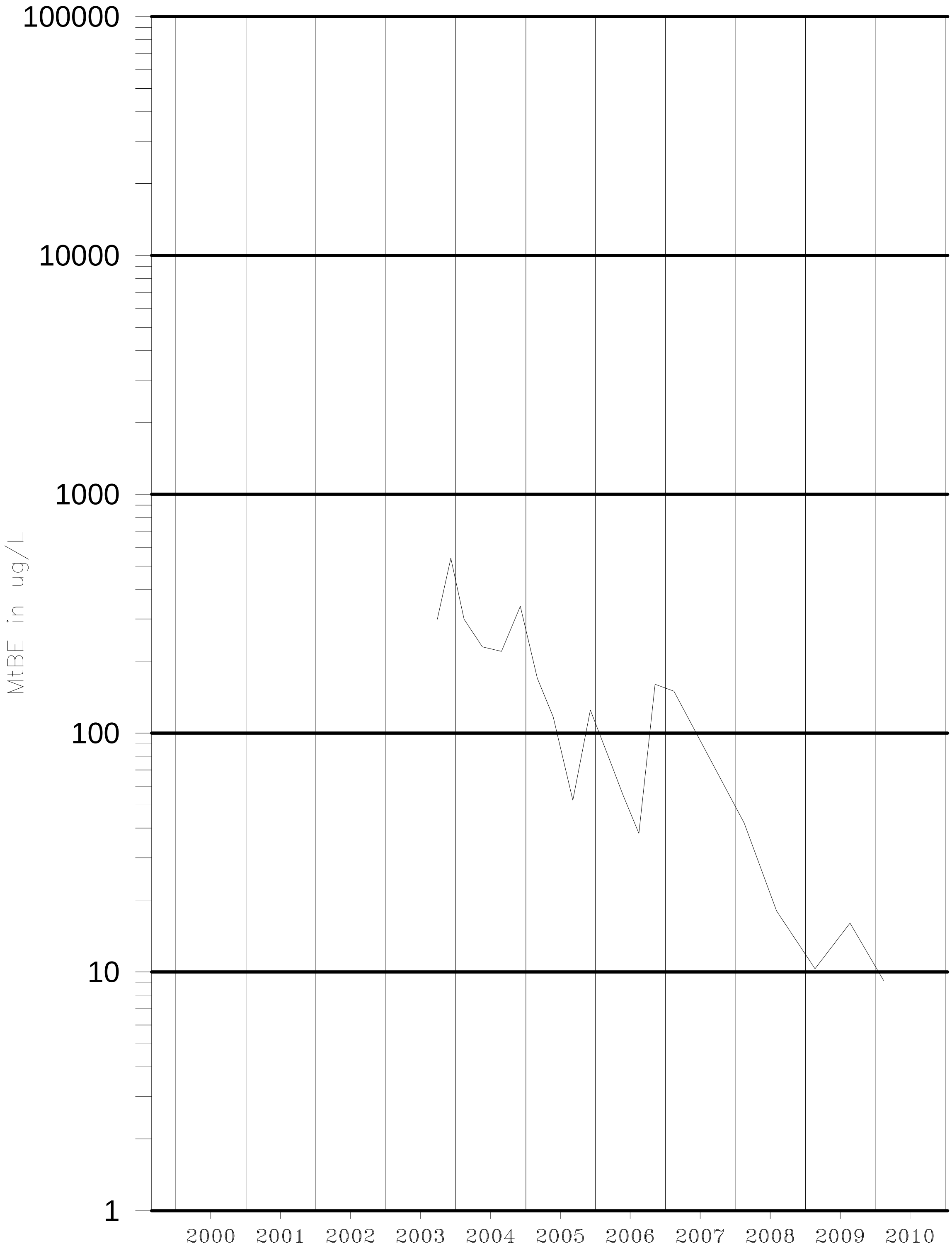


H2OGEOL
A GROUND WATER CONSULTANCY

CONCENTRATIONS OF MtBE OVER TIME IN WELL MW-17, MONITORED ANNUALLY IN AUGUST

FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CA

FIGURE
MW-17



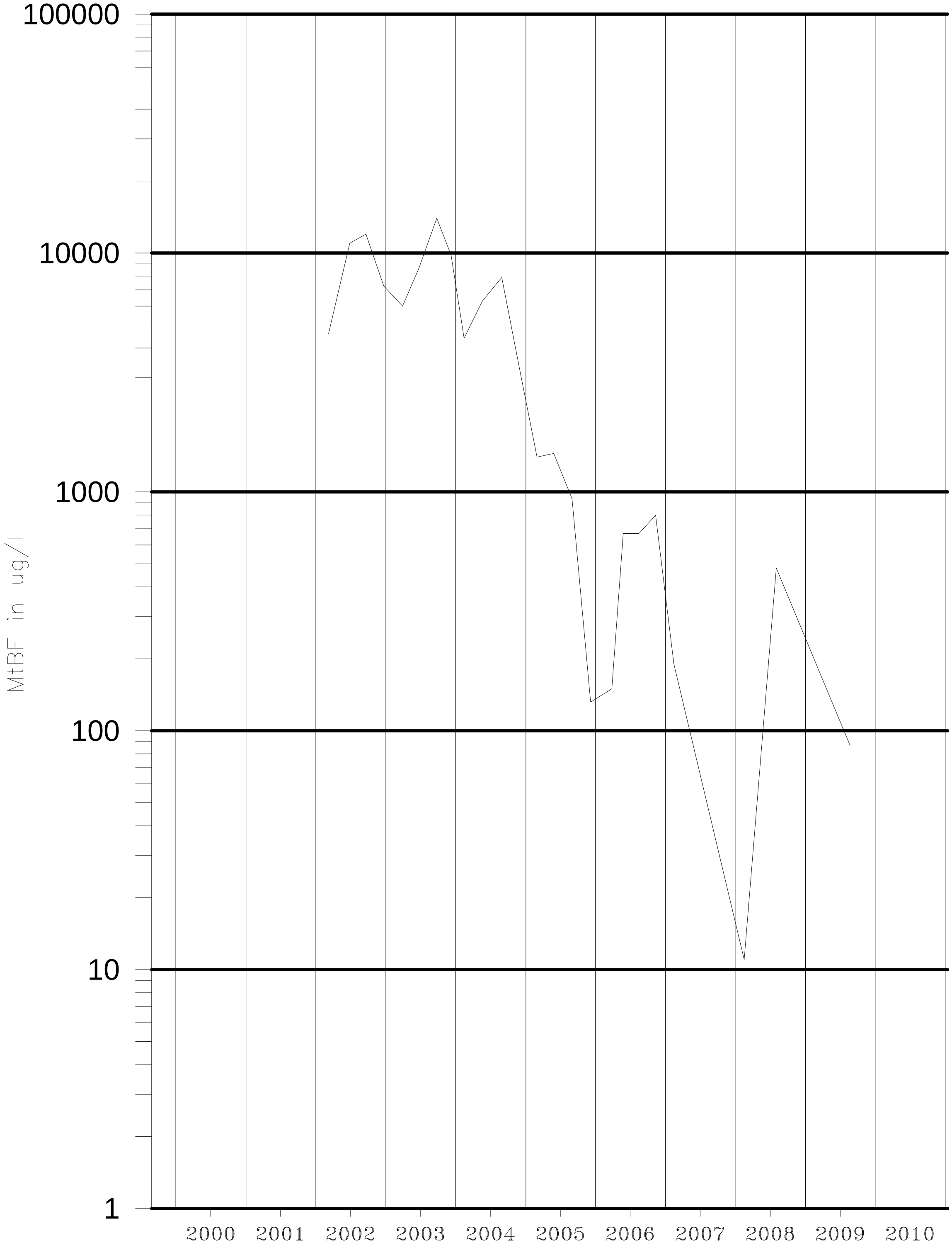
H2OGEOL
A GROUND WATER CONSULTANCY

CONCENTRATIONS OF MtBE OVER TIME
IN WELL MW-18, MONITORED SEMI-ANNUALLY
IN FEBRUARY AND AUGUST

FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CA

FIGURE

MW-18

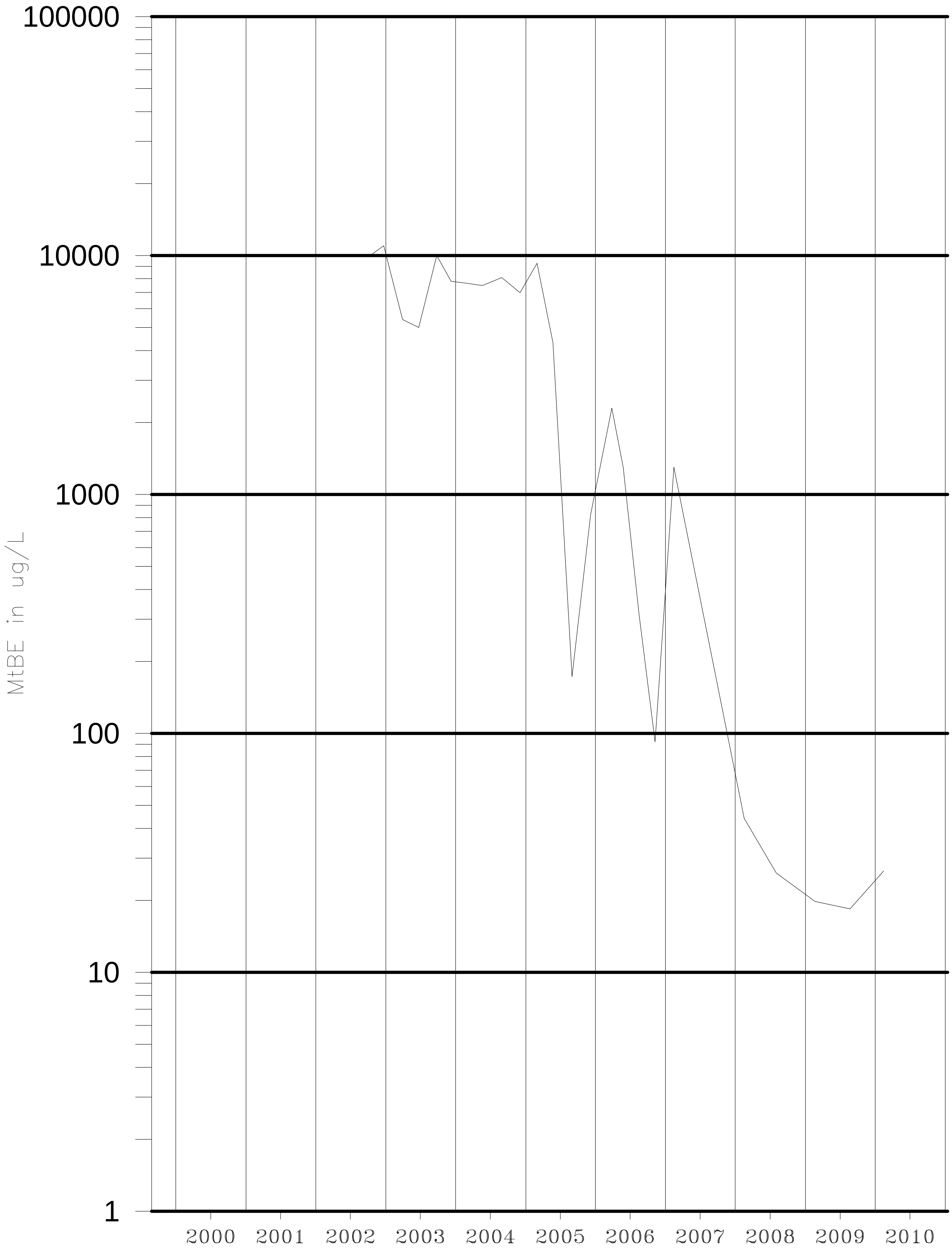


H2OGEOL
A GROUND WATER CONSULTANCY

CONCENTRATIONS OF MtBE OVER TIME
IN WELL MW-23, MONITORED ANNUALLY IN AUGUST

FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CA

FIGURE
MW-23

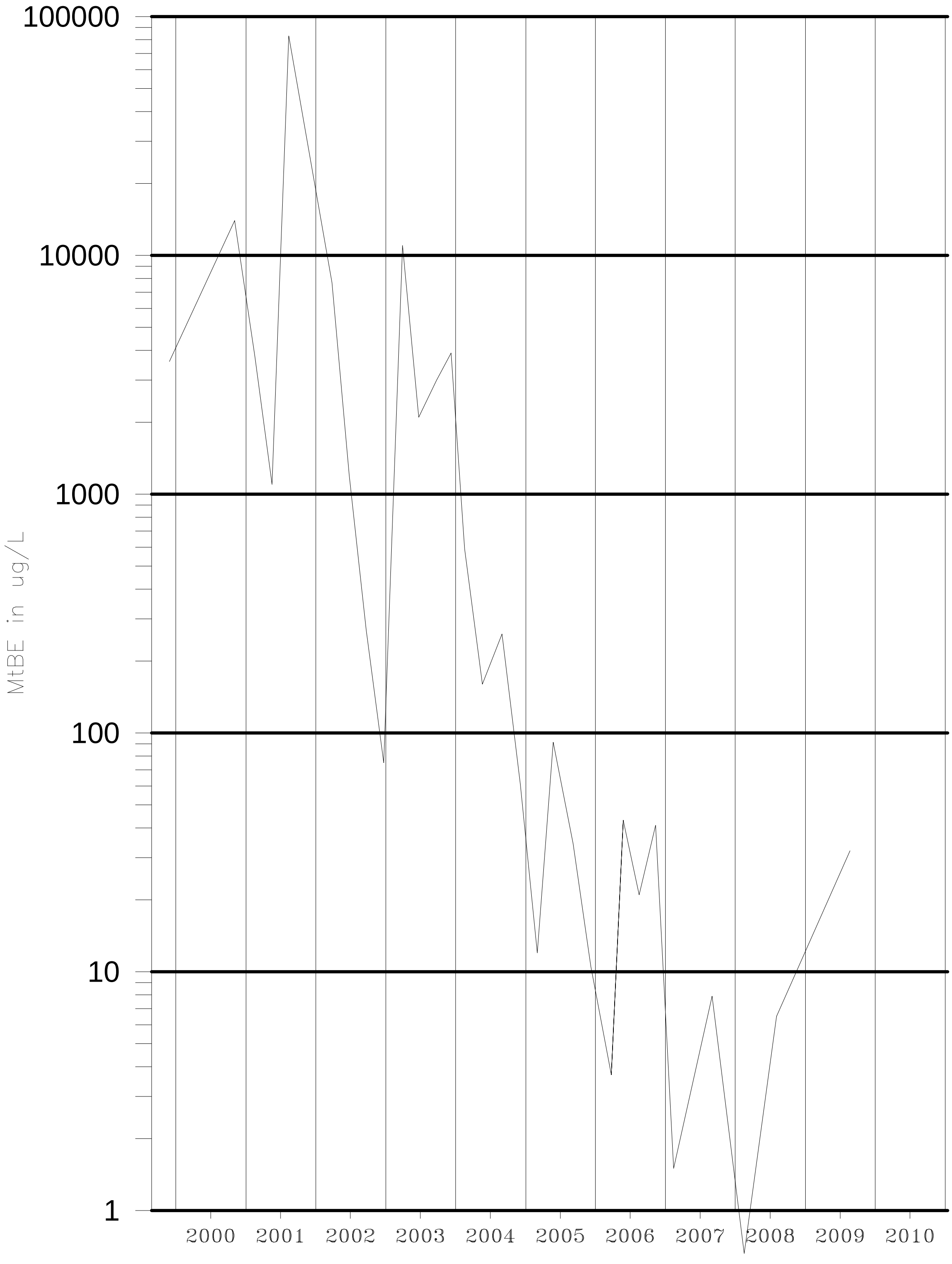


H2OGEOL
A GROUND WATER CONSULTANCY

CONCENTRATIONS OF MtBE OVER TIME
IN WELL MW-24, MONITORED SEMI-ANNUALLY
IN FEBRUARY AND AUGUST

FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CA

FIGURE
MW-24

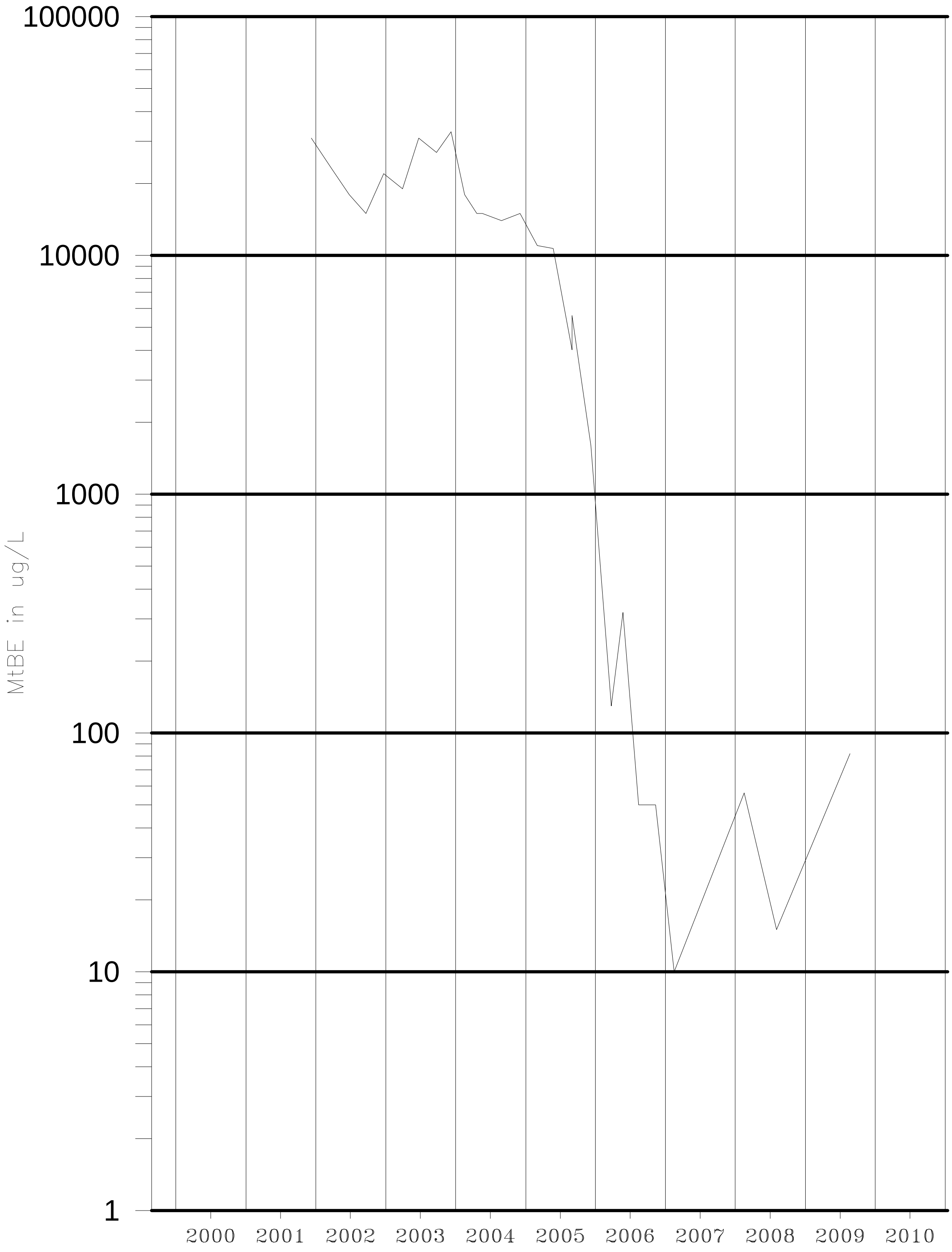


H2OGEOL!
A GROUND WATER CONSULTANCY

CONCENTRATIONS OF MtBE OVER TIME IN WELL TW, MONITORED ANNUALLY IN AUGUST

FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CA

FIGURE
TW

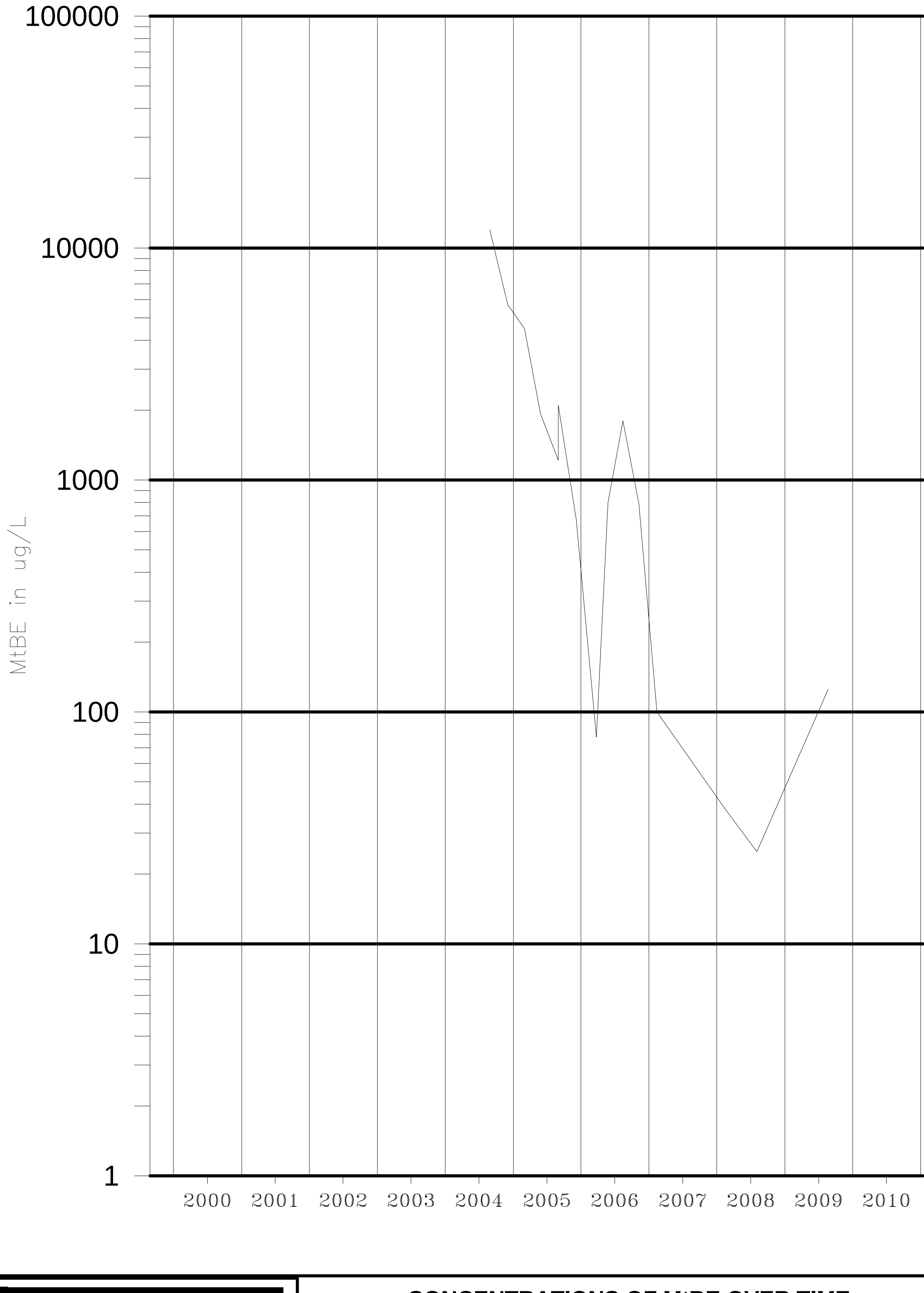


H2OGEOL
A GROUND WATER CONSULTANCY

CONCENTRATIONS OF MtBE OVER TIME
IN WELL EW-1, MONITORED ANNUALLY IN AUGUST

FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CA

FIGURE
EW-1



H2OGEOL
A GROUND WATER CONSULTANCY

CONCENTRATIONS OF MtBE OVER TIME
IN WELL EW-2, MONITORED ANNUALLY IN AUGUST

FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD, DIAMOND SPRINGS, CA

FIGURE
EW-2

ATTACHMENT B

Tables

TABLE 1
SOIL RESULTS
Tower Mart #182, 130 Pleasant Valley Rd, Diamond Springs
February 17, 2010

All Hydrocarbon Values in ug/l (PPB)

WELL ID	DATE SAMPLED	TPH (GAS)	MTBE	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES
MW-1/20	11/4/98	ND	0.23	ND	ND	ND	ND
MW-1/25	11/4/98	ND	ND	ND	ND	ND	ND
MW-2/20	11/4/98	ND	10	ND	ND	ND	ND
MW-2/25	11/4/98	ND	0.27	ND	ND	ND	ND
MW-3/5	11/4/98	ND	ND	0.022	0.092	0.011	0.086
MW-3/10	11/4/98	ND	2.3	0.015	0.013	0.017	0.049
MW-13 (9 ft)	2/11/02	2900	27	<5	<5	<5	<5
MW-13 (10.5 ft)	2/11/02	<1000	36	<5	<5	<5	<5
SSB4 (14.5 ft)	2/18/02	<1000	220	<5	<5	<5	7.0
SSB4 (22.5 ft)	2/18/02	<1000	200	<5	<5	<5	<5
SSB22 (10 ft)	2/18/02	<1000	170	<5	<5	<5	<5
SSB22 (12.5 ft)	2/18/02	<1000	490	<5	<5	12	24
SSB22A (10.5 ft)	2/18/02	1700	900	<5	<5	10	15
SSB22A (12.5 ft)	2/18/02	<1000	<5	<5	<5	<5	<5
SSB22B (10.5 ft)	2/18/02	<1000	<5	<5	<5	<5	<5
SSB23 (14.5 ft)	2/18/02	<1000	150	<5	<5	<5	<5

ABBREVIATIONS

TPH: Total Petroleum Hydrocarbons
ug/l: Micrograms per Liter
ND: None Detectable
MtBE: Methyl tert butyl ether

Table 2
SUMMARY GROUNDWATER ANALYTICAL RESULTS
FORMER CHEAPER! #182
130 PLEASANT VALLEY ROAD
DIAMOND SPRINGS, CALIFORNIA

(water analyte concentrations in micrograms per liter)

	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Total Xylene isomers	Methyl tert-butyl ether (MtBE)	tert-Butyl alcohol (TBA)	Di-isopropyl Ether (DIPE)	Ethyl tert-butyl ether (EtBE)	tert-Amyl methyl ether (TAME)	1,2-Dichloroethane (1,2-DCA)	Ethylene dibromide (EDB)	Ethanol
MW-1													
11/29/99	< 700	< 2	< 2	6.4	9.6	24000	< 2500	< 500	< 500	< 500			
10/10/00	< 500	< 0.6	3.9	< 0.61	< 1.1	17000	< 2500	< 500	< 500	< 500			
02/16/01	3700	< 13	< 13	< 13	110	21000	< 5000	<10000	< 5000	< 5000			
05/17/01	13000	< 50	< 50	< 50	< 50	25000	1100	< 2000	< 1000	< 1000			
08/13/01	22000	< 100	< 100	< 100	< 100	26000	Not analyzed due to high detection limits						
11/19/01	< 10000	< 100	< 100	< 100	< 100	5000			"				
03/26/02	3300	< 25	< 25	< 25	< 25	4400			"				
06/25/02	18000	< 130	< 130	< 130	< 130	34000			"				
09/21/02	13000	< 130	< 130	< 130	< 250	19000			"				
12/22/02	7900	< 25	< 25	< 25	< 25	9900			"				
03/30/03	15000	< 130	< 130	< 130	< 130	20000			"				
06/24/03	14000	< 130	< 130	< 130	< 130	18000			"				
09/23/03	< 10000	< 100	< 100	< 100	< 200	14000			"				
12/08/03	< 10000	< 100	< 100	< 100	< 200	10000			"				
02/16/04	15000	< 100	< 100	< 100	< 200	14000							
05/21/04	10000	< 100	< 100	< 100	< 100	10000			"				
08/30/04	6500	< 50	< 50	< 50	< 50	7400			"				
12/03/04	< 5000	< 50	< 50	< 50	< 50	5000			"				
03/01/05	5300	< 50	< 50	< 50	< 50	5800			"				
05/28/05	630	< 0.5	< 0.5	0.9	1.6	4270			"				
09/07/05	91.3	< 0.5	< 0.5	1.2	1.7	648			"				
12/08/05	< 500	< 5.0	< 5.0	< 5.0	< 10.0	53.8	876	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	- - - -
03/27/06	160	1.0	1.5	7.1	16	4.3	100	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 50
05/25/06	100	0.31	0.53	2.2	7.1	20	1800	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 100
08/17/06	< 250	< 2.5	< 2.5	< 2.5	< 5.0	43	2200	< 5.0	< 2.5	< 2.5	< 2.5	< 2.5	- - - -
11/08/06	< 50	< 10	< 10	< 10	< 10	29	1500	< 10	< 10	< 10	< 10	< 10	< 1000
02/16/07	< 500	< 5	< 5	< 5	< 10	< 5	3000	< 10	< 5	< 5	< 5	< 5	- - - -
09/02/07	75	< 0.50	0.91	1.3	2.3	38	510	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	- - - -
02/17/08	< 500	< 0.50	< 0.50	1.1	1.4	8.0	3100	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	- - - -
	Sampled annually in August per February 27, 2009 letter.												
08/03/08	< 120	< 2.5	< 2.5	< 2.5	< 5.0	7.4	2200	< 25	< 25	< 25	< 2.5	< 2.5	
08/22/09	< 50	< 0.60	< 1.0	< 0.60	< 1.4	5.0	804	< 1.0	< 1.0	< 1.0	< 0.60	< 0.40	
MW-2													
11/29/99	9600	75	33	330	360	44000	< 5000	< 1000	< 1000	< 1000			
10/10/00	2200	46	20	73	29	45000	< 2500	< 500	< 500	550			
02/16/01	6900	< 25	< 25	< 25	< 25	47000	5400	< 5000	< 2500	< 2500			
05/17/01	21000	< 50	< 50	< 50	< 50	45000	< 2500	< 5000	< 2500	< 2500			
08/13/01	38000	< 100	< 100	< 100	< 100	51000	Not analyzed due to high detection limits						
11/19/01	16000	< 100	120	140	290	19000			"				
03/26/02	19000	< 100	< 100	< 100	< 100	34000			"				
06/27/02	22000	< 100	< 100	< 100	< 100	39000			"				
09/21/02	14000	< 100	< 100	< 100	< 200	18000			"				
12/22/02	21000	< 100	< 100	< 100	< 100	20000			"				
03/30/03	17000	< 100	< 100	< 100	< 100	19000			"				
06/24/03	24000	< 100	< 100	< 100	< 100	25000			"				
09/23/03	< 20000	< 200	< 200	< 200	< 400	29000			"				
12/08/03	< 20000	< 200	< 200	< 200	< 400	28000			"				
02/16/04	36000	< 250	< 250	< 250	< 500	37000			"				
05/21/04	18000	< 130	< 130	< 130	< 130	21000			"				
08/30/04	16000	< 130	< 130	< 130	< 130	20000			"				
12/03/04	< 13000	< 130	< 130	< 130	< 130	13000			"				

(water analyte concentrations in micrograms per liter)

	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Total Xylene isomers	Methyl tert-butyl ether (MtBE)	tert-Butyl alcohol (TBA)	Di-isopropyl Ether (DIPE)	Ethyl tert-butyl ether (EtBE)	tert-Amyl methyl ether (TAME)	1,2-Dichloroethane (1,2-DCA)	Ethylene dibromide (EDB)	Ethanol
MW-2, continued													
03/01/05	13000	< 130	< 130	< 130	< 130	15000			"				
05/28/05	1020	< 0.5	< 0.5	3.3	4.9	14100			"				
09/07/05	284	< 0.5	< 0.5	1.3	1.8	1710			"				
12/08/05	1200	< 10.0	< 10.0	< 10.0	< 20.0	1910	2770	< 10.0	< 10.0	24.0	< 10.0	< 10.0	
03/27/06	960	< 2.5	2.6	< 2.5	< 5.0	500	7800	< 2.5	< 2.5	6.0	< 2.5	< 2.5	< 250
05/26/06	720	0.17	0.29	1.3	2.3	1200	7400	< 0.50	1.1	16	< 0.50	< 0.50	< 100
08/17/06	< 1000	< 10.0	< 10.0	< 10.0	< 20.0	1200	9900	< 20.0	< 10.0	< 10.0	< 10.0	< 10.0	
11/10/06	150	< 50	< 50	< 50	< 50	220	8300	< 50	< 50	< 50	< 50	< 50	< 5000
02/16/07	< 1000	< 10	< 10	< 10	< 20	94	9000	< 20	< 10	< 10	< 10	< 10	
09/02/07	1000	< 1.0	1.3	24	9.0	164	970	< 2.0	< 1.0	3.5	< 1.0	< 1.0	
02/17/08	530	< 1.0	< 1.0	7.8	3.5	120	2400	< 2.0	< 1.0	1.8	< 1.0	< 1.0	
	Sampled annually in August per February 27, 2009 letter.												
08/03/08	620	< 2.0	< 2.0	14	< 4.0	180	1200	< 20	< 20	< 20	< 2.0	< 2.0	
08/22/09	449	< 1.5	< 2.5	2.4	< 3.5	35.8	1560	< 2.5	< 2.5	< 2.5	< 1.5	< 1.0	
MW-3													
11/29/99	< 2600	< 10	< 10	< 10	24	89000	20000	< 2500	< 2500	< 2500			
10/10/00	2900	< 2.5	19	< 3.9	< 10	89000	< 13000	< 2500	< 2500	< 2500			
02/16/01	14000	< 50	< 50	< 50	< 50	80000	7400	<10000	< 5000	< 5000			
05/17/01	40000	< 50	< 50	< 50	< 50	75000	5800	<:5000	< 2500	< 2500			
08/13/01	86000	< 250	< 250	< 250	< 250	110000	Not analyzed due to high detection limits						
11/19/01	45000	< 250	< 250	< 250	< 250	66000			"				
03/26/02	40000	< 250	< 250	< 250	< 250	70000			"				
06/27/02	44000	< 250	< 250	< 250	< 250	63000			"				
09/21/02	34000	< 250	< 250	< 250	< 500	42000			"				
12/22/02	47000	< 250	< 250	< 250	< 250	49000			"				
03/30/03	40000	< 250	< 250	350	750	44000			"				
06/24/03	46000	< 250	< 250	440	1200	40000			"				
09/23/03	27000	< 250	< 250	1500	3300	59000			"				
12/08/03	29000	< 250	< 250	< 250	< 500	41000			"				
02/16/04	< 50000	< 500	< 500	< 500	< 1000	51000			"				
05/20/04	27000	< 250	< 250	< 250	< 250	29000			"				
08/30/04	29000	< 250	< 250	< 250	< 250	32000			"				
12/03/04	< 25000	< 250	< 250	< 250	< 250	25000			"				
03/01/05	28000	< 250	< 250	< 250	< 250	30000			"				
05/28/05	8600	< 10	< 10	33.2	52.5	23200			"				
09/07/05	569	< 0.5	< 0.5	< 0.5	< 1.0	13400			"				
12/08/05	1250	< 0.5	6.0	11.6	31.4	13400			"				
03/27/06	< 10000	< 100	< 100	< 100	< 100	6600			"				
05/26/06	560	< 0.50	< 0.50	0.72	1.8	6600	2900	< 0.50	1.2	89	< 0.50	< 0.50	< 100
08/17/06	< 2500	< 25	< 25	< 25	< 50	3700	3300	< 50	< 25	< 25	< 25	< 25	
11/10/06	< 100	< 50	< 50	< 50	< 50	2000	7800	< 50	< 50	< 50	< 50	< 50	< 5000
02/16/07	< 2500	< 25	< 25	< 25	< 50	1600	6800	< 50	< 25	< 25	< 25	< 25	
09/02/07	430	< 2.5	< 2.5	3.0	< 5.0	220	2900	< 5.0	< 2.5	3.8	< 2.5	< 2.5	
02/17/08	2400	< 2.5	< 2.5	14	6.1	3500	5800	< 5.0	< 2.5	41	< 2.5	< 2.5	
08/03/08	750	< 5.0	< 5.0	11	< 10	860	2800	< 50	< 50	< 50	< 5.0	< 5.0	
	Sampled annually in February per February 27, 2009 letter.												
02/21/09	1810	< 6.0	< 10	< 6.0	35.6	1750	7550	< 10	< 10	< 10	< 6.0	< 4.0	
02/13/10	1070	< 3.0	< 5.0	38.1	27.2	77.6	4780	< 5.0	< 5.0	< 5.0	< 3.0	< 2.0	
MW-4													
08/28/01	30000	770	3200	820	3900	9500	< 500	< 1000	< 500	< 500	< 100	< 100	
11/19/01	20000	550	1500	830	2900	4800	Not analyzed due to high detection limits						
03/26/02	16000	400	1100	550	2200	5300			"				
06/27/02	8400	94	340	280	1000	1800			"				

Table 2, continued
(water analyte concentrations in micrograms per liter)

	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Total Xylene isomers	Methyl tert-butyl ether (MtBE)	tert-Butyl alcohol (TBA)	Di-isopropyl Ether (DIPE)	Ethyl tert-butyl ether (EtBE)	tert-Amyl methyl ether (TAME)	1,2-Dichloroethane (1,2-DCA)	Ethylene dibromide (EDB)	Ethanol
MW-4, continued													
09/20/02	9200	82	300	270	860	1100			"				
12/22/02	4100	51	140	90	250	1300			"				
03/29/03	6400	71	69	160	380	2600			"				
06/23/03	7600	62	62	150	370	3400			"				
09/25/03	6700	72	99	210	480	1800			"				
12/08/03	11000	200	490	360	820	5100			"				
02/16/04	21000	220	530	690	1800	3600			"				
05/21/04	14000	190	130	500	1000	6500			"				
08/30/04	13000	370	410	650	1500	4700			"				
12/02/04	17000	210	110	750	1500	2900			"				
03/03/05	7600	89	61	320	840	980			"				
05/27/05	17900	110	72.7	636	1633	2040			"				
09/01/05	29200	138	144	1100	2893	2550	< 500	< 50.0	< 50.0	67.3			
12/08/05	27300	195	158	1060	3455	3590	< 500	< 50.0	< 50.0	95.4	< 50.0	< 50.0	
03/24/06	2500	1.0	0.72	45	180	22	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 50
05/24/06	2600	7.8	2.9	110	180	200	< 100	< 5.0	< 5.0	5.2	< 5.0	< 5.0	< 100
08/16/06	9100	19	< 13	260	370	330	< 130	< 25	< 13	< 13	< 13	< 13	
11/10/06	6500	28	< 10	270	370	640	180	< 10	< 10	14	< 10	< 10	< 1000
02/15/07	1500	2.0	< 1.1	19	22	63	34	< 2.0	< 1.0	2.2	< 1.0	< 1.0	
09/02/07	8300	15	10	240	310	350	180	< 2.0	< 1.0	12	< 1.0	< 1.0	
02/17/08	910	< 1.0	< 1.0	2.7	< 2.0	1.4	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	
	Sampled annually in August per February 27, 2009 letter.												
08/02/08	5900	< 5.0	< 5.0	150	140	190	170	< 50	< 50	< 50	< 5.0	< 5.0	
08/22/09	199	< 0.30	< 0.50	6.1	2.8	19.9	85.5	< 0.50	< 0.50	0.54	< 0.30	< 0.20	
MW-5													
12/09/01	< 2500	< 50	< 50	< 50	< 50	1900	Not analyzed due to high detection limits						
03/25/02	1400	33	49	< 5.0	< 5.0	1500			"				
06/27/02	760	< 5.0	< 5.0	< 5.0	< 5.0	1100			"				
09/20/02	5700	64	< 25	60	95	4400			"				
12/22/02	4200	30	< 13	48	25	3100			"				
03/30/03	1800	< 13	< 13	< 13	< 13	1800			"				
06/24/03	1100	< 5.0	< 5.0	< 5.0	< 5.0	990							
09/25/03	< 1300	< 13	< 13	< 13	27	2700			"				
12/08/03	3800	< 25	31	< 25	57	5300			"				
02/16/04	< 2000	< 20	< 20	33	71	1800			"				
05/21/04	1100	< 10	< 10	< 10	< 10	1100			"				
08/30/04	< 1000	< 10	< 10	< 10	< 10	810			"				
12/02/04	1200	< 10	< 10	< 10	< 10	830			"				
03/03/05	54	< 0.50	< 0.50	1.1	1.5	22							
05/27/05	< 500	< 5.0	< 5.0	< 5.0	< 10	201	< 50.0	< 5.0	< 5.0	< 5.0			
09/01/05	< 500	< 5.0	< 5.0	< 5.0	< 10	316	< 50.0	< 5.0	< 5.0	< 5.0			
12/07/05	< 500	< 5.0	5.7	< 5.0	< 10.0	402	223	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
03/24/06	< 50	< 0.50	0.76	< 0.50	< 1.0	6.2	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 50
05/24/06	77	< 0.50	0.28	0.25	< 1.0	100	< 10	< 0.50	< 0.50	< 0.37	< 0.50	< 0.50	< 100
08/16/06	330	< 2.5	< 2.5	< 2.5	< 5.0	360	49	< 5.0	< 2.5	7.3	< 2.5	< 2.5	
11/10/06	380	< 50	< 50	< 50	< 50	1600	730	< 50	< 50	< 50	< 50	< 50	< 5000
02/15/07	< 500	< 5.0	< 5.0	< 5.0	< 10	580	230	< 10	< 5.0	< 5.0	< 5.0	< 5.0	
09/02/07	< 500	< 5.0	< 5.0	6.5	< 10	480	160	< 10	< 5.0	11	< 5.0	< 5.0	
02/17/08	50	< 0.50	< 0.50	< 0.50	< 1.0	140	110	< 1.0	< 0.50	1.7	< 0.50	< 0.50	
	Sampled annually in August per February 27, 2009 letter.												
08/02/08	120	< 1.0	< 1.0	< 1.0	< 2.0	180	< 20	< 10	< 10	< 10	< 1.0	< 1.0	
08/22/09	74.9	< 0.30	< 0.50	< 0.30	< 0.70	64.9	53.2	< 0.50	< 0.50	< 0.50	< 0.30	< 0.20	

Table 2, continued
(water analyte concentrations in micrograms per liter)

	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Total Xylene isomers	Methyl tert-butyl ether (MtBE)	tert-Butyl alcohol (TBA)	Di-isopropyl Ether (DIPE)	Ethyl tert-butyl ether (EtBE)	tert-Amyl methyl ether (TAME)	1,2-Dichloroethane (1,2-DCA)	Ethylene dibromide (EDB)	Ethanol
MW-6													
12/09/01	< 25000	< 500	500	< 500	1900	13000	Not analyzed due to high detection limits						
03/26/02	25000	230	810	570	2200	17000			"				
06/27/02	23000	130	1000	650	2800	9500			"				
09/21/02	19000	110	530	470	1400	5600			"				
12/22/02	15000	110	380	250	990	9200			"				
03/30/03	21000	180	400	430	1300	15000			"				
06/24/03	31000	260	530	530	1900	16000			"				
09/23/03	17000	150	260	460	1500	14000			"				
12/08/03	24000	190	470	530	1600	24000			"				
02/16/04	23000	190	330	580	1500	16000			"				
05/21/04	20000	190	230	560	1000	12000			"				
08/30/04	16000	< 130	< 130	300	650	5100			"				
12/02/04	23000	270	< 130	540	980	9500			"				
03/01/05	13000	< 130	< 130	230	710	5800			"				
05/28/05	9650	65.5	62.4	278	469	6370			"				
09/04/05	5350	272	91.6	594	< 100	7640			"				
12/08/05	14600	249	433	525	1460	12700			"				
03/27/06	19000	< 100	< 100	280	600	6900			"				
05/25/06	10000	55	34	170	620	4200	910	< 5.0	< 5.0	57	< 5.0	< 5.0	< 1000
08/17/06	13000	47	44	250	480	3100	1200	< 25	< 13	60	< 13	< 13	
11/08/06	5600	< 50	< 50	61	88	900	< 500	< 50	< 50	< 50	< 50	< 50	< 5000
02/16/07	4900	< 25	< 25	68	110	1900	730	< 25	13	< 13	< 13	< 13	
09/02/07	7300	< 13	< 13	85	65	1200	660	< 25	< 13	31	< 13	< 13	
02/17/08	2200	16	< 13	37	36	1900	390	< 25	< 13	33	< 13	< 13	
08/03/08	4000	< 5.0	< 5.0	41	28	850	780	< 50	< 50	< 50	< 5.0	< 5.0	
	Sampled annually in February per February 27, 2009 letter.												
02/21/09	2460	5.7	< 5.0	8.7	34.4	728	222	< 5.0	< 5.0	9.2	< 3.0	< 2.0	
02/13/10	< 25	< 0.30	< 0.50	< 0.30	< 0.70	5.9	8.9	< 0.50	< 0.50	< 0.50	< 0.30	< 0.20	
MW-7													
12/09/01	< 250	< 5.0	< 5.0	< 5.0	< 5.0	130	Not analyzed due to high detection limits						
03/25/02	190	32	47	4.6	23	29			"				
06/25/02	260	28	67	7.0	36	25			"				
09/20/02	< 50	< 0.50	0.89	< 0.50	1.7	31	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/21/02	< 500	28	49	8.3	26	660	160	< 10	< 5.0	13	< 5.0	< 5.0	
03/29/03	< 100	7.2	17	3.4	11	200	58	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	
06/23/03	< 250	< 2.5	< 2.5	< 2.5	< 2.5	210	< 25	< 5.0	< 2.5	3.0	< 2.5	< 2.5	
09/25/03	420	< 2.5	< 2.5	4.6	10	320	< 25	< 5.0	< 2.5	5.3	< 2.5	< 2.5	
12/07/03	90	0.55	0.68	1.0	2.6	87	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
02/15/04	56	< 0.50	0.89	< 0.50	1.4	42	< 5.0	< 1.0	< 0.50	1.0			
05/20/04	< 50	< 0.50	0.89	< 0.50	< 1.0	5.1	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/30/04	< 50	0.74	< 0.50	1.1	3.3	26	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/02/04	150	< 0.50	1.0	5.2	14	44	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
03/02/05	50	< 0.50	< 0.50	0.62	1.6	6.2	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
05/26/05	< 50	< 0.5	< 0.5	< 0.5	< 1.5	5.0	< 5.0	< 0.5	< 0.5	< 0.5			
09/07/05	< 50	< 0.5	< 0.5	0.6	< 1.0	15.9	< 5.0	< 0.5	< 0.5	< 0.5			
12/07/05	< 50	3.6	5.6	1.1	4.1	9.4	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
03/24/06	< 50	< 0.50	0.59	< 0.50	< 1.0	3.0	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 50
05/26/06	17	< 0.50	< 0.50	< 0.50	< 1.0	4.9	< 10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 100
08/17/06	< 50	< 0.50	< 0.50	< 0.50	< 1.0	19	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
11/08/06	< 50	< 0.5	0.76	< 0.5	< 0.5	37	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 50
02/16/07	53	< 0.50	< 0.50	< 0.50	1.1	39	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
09/02/07	< 50	< 0.50	< 1.4	< 1.3	2.5	25	< 5.0	< 1.0	< 0.50	0.60	< 0.50	< 0.50	
02/17/08	< 50	< 0.50	< 0.50	< 0.50	< 1.0	1.1	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
	Sampled annually in August per February 27, 2009 letter.												
08/03/08	49	0.63	0.53	2.6	6.2	35	< 10	< 5.0	< 5.0	< 5.0	< 0.50	< 0.50	
08/22/09	< 25	< 0.30	< 0.50	< 0.30	< 0.70	11.2	< 5.0	< 0.50	< 0.50	< 0.50	< 0.30	< 0.20	

Table 2, continued
(water analyte concentrations in micrograms per liter)

	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Total Xylene isomers	Methyl tert-butyl ether (MtBE)	tert-Butyl alcohol (TBA)	Di-isopropyl Ether (DIPE)	Ethyl tert-butyl ether (EtBE)	tert-Amyl methyl ether (TAME)	1,2-Dichloroethane (1,2-DCA)	Ethylene dibromide (EDB)	Ethanol
MW-8													
12/09/01	< 2500	< 50	< 50	< 50	< 50	1900	Not analyzed due to high detection limits						
03/25/02	620	12	22	< 2.5	< 2.5	620			"				
06/25/02	510	21	53	6.3	30	500			"				
09/20/02	1100	< 10	< 10	< 10	< 20	1500			"				
12/22/02	1000	< 5.0	< 5.0	< 5.0	< 5.0	1200			"				
03/29/03	540	< 5.0	12	< 5.0	< 5.0	490			"				
06/23/03	< 500	< 5.0	< 5.0	< 5.0	< 10	490	< 50	< 10	< 5.0	6.2	< 5.0	< 5.0	
09/25/03	710	< 5.0	< 5.0	< 5.0	< 10	1100	< 50	< 10	< 5.0	13	< 5.0	< 5.0	
12/07/03	2000	< 13	< 13	< 13	< 25	2400	< 130	< 25	< 13	< 13	< 13	< 13	
02/15/04	1300	< 10	< 10	< 10	24	1200	< 100	< 20	< 10	22			
05/21/04	750	< 5.0	< 5.0	8.0	19	550	< 50	< 10	< 5.0	6.2	< 5.0	< 5.0	
08/28/04	1100	< 5.0	< 5.0	< 5.0	< 10	1600	< 50	< 10	< 5.0	27	< 5.0	< 5.0	
12/03/04	1800	< 10	< 10	< 10	< 20	2700	< 100	< 20	< 10	38	< 10	< 10	
03/02/05	< 500	< 5.0	< 5.0	< 5.0	< 10	560	< 50	< 10	< 5.0	6.2	< 5.0	< 5.0	
05/27/05	< 500	< 5.0	< 5.0	< 5.0	< 15	478	< 50	< 5.0	< 5.0	5.5			
09/07/05	970	< 0.5	< 0.5	0.6	< 1.0	2600	< 5.0	< 0.5	< 0.5	25.2			
12/07/05	< 5000	< 50.0	< 50.0	< 50.0	< 100	3460	5460	< 50.0	< 50.0	< 50.0	< 50.0	< 50.0	
03/24/06	460	< 2.5	< 2.5	< 2.5	< 5.0	420	< 25	< 2.5	< 2.5	4.8	< 2.5	< 2.5	< 250
05/26/06	200	< 0.50	0.29	0.55	0.75	320	13	< 0.50	< 0.50	3.4	< 0.50	< 0.50	81
08/17/06	1200	< 10	< 10	< 10	< 20	1200	110	< 20	< 10	24	< 10	< 10	
11/08/06	< 50	< 5.0	< 5.0	< 5.0	< 5.0	440	76	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 50
02/16/07	< 50	< 0.50	0.70	< 0.50	< 1.0	95	< 5.0	< 1.0	< 0.5	1.6	< 0.50	< 0.50	
09/02/07	< 50	< 0.50	1.4	1.5	2.9	35	< 5.0	< 1.0	< 0.50	0.69	< 0.50	< 0.50	
02/17/08	< 50	< 0.50	< 0.50	< 0.50	< 1.0	12	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/03/08	30	< 0.50	< 0.50	2.2	5.1	11	< 10	< 5.0	< 5.0	< 5.0	< 0.50	< 0.50	
	Sampled annually in February per February 27, 2009 letter.												
08/21/09	< 25	< 0.30	< 0.50	< 0.30	< 0.70	11.8	< 5.0	< 0.50	< 0.50	< 0.50	< 0.30	< 0.20	
02/13/10	< 25	< 0.30	< 0.50	< 0.30	< 0.70	13.8	< 5.0	< 0.50	< 0.50	< 0.50	< 0.30	< 0.20	
MW-9													
12/09/01	< 25000	< 500	< 500	< 500	< 500	12000	Not analyzed due to high detection limits						
03/26/02	4800	< 25	33	< 25	< 25	8400			"				
06/25/02	8000	< 50	< 50	< 50	< 50	14000			"				
09/21/02	10000	< 50	< 50	< 50	< 100	14000			"				
12/21/02	13000	< 50	< 50	< 50	< 50	17000			"				
03/30/03	5900	< 50	< 50	< 50	< 50	7600			"				
06/24/03	10000	250	240	< 50	< 50	8800			"				
09/23/03	< 5000	< 50	< 50	< 50	< 100	11000			"				
12/08/03	< 5000	< 50	< 50	< 50	< 100	14000			"				
02/16/04	< 10000	< 100	100	< 100	230	11000			"				
05/21/04	5600	< 50	< 50	< 50	< 50	6600			"				
08/28/04	6500	< 50	< 50	< 50	< 50	8000			"				
12/03/04	8800	< 50	< 50	< 50	< 50	8600			"				
03/01/05	5900	< 50	< 50	< 50	< 50	6700			"				
05/28/05	657	< 0.5	1.3	7.2	11.5	4370			"				
09/07/05	290	< 0.5	< 0.5	2.8	4	2280			"				
12/07/05	462	2.0	4.6	1.6	4.7	2860			"				
03/27/06	< 2000	< 20	< 20	< 20	< 20	1100			"				
05/26/06	410	< 0.50	0.31	1.2	4.0	660	2100	< 0.50	0.44	8.9	< 0.50	< 0.50	< 100
08/17/06	550	< 5.0	< 5.0	< 5.0	< 10	540	3400	< 10	< 5.0	8.6	< 5.0	< 5.0	
11/09/06	< 50	< 10	< 10	< 10	< 10	440	420	< 10	< 10	< 10	< 10	< 10	< 1000
02/16/07	< 100	< 1.0	< 1.0	< 1.0	< 2.0	160	140	< 2.0	< 1.0	2.9	< 1.0	< 1.0	
09/02/07	< 50	< 0.50	0.78	1.1	2.6	29	41	< 1.0	< 0.50	0.70	< 0.50	< 0.50	
02/17/08	< 50	< 0.50	< 0.50	< 0.50	< 1.0	20	24	< 1.0	< 0.50	0.58	< 0.50	< 0.50	
08/02/08	< 25	< 0.50	< 0.50	0.77	< 1.0	6.8	< 10	< 5.0	< 5.0	< 5.0	< 0.50	< 0.50	
	Sampled annually in February per February 27, 2009 letter.												
02/21/09	< 25	< 0.30	< 0.50	< 0.30	< 0.70	< 0.50	97.1	< 0.50	< 0.50	< 0.50	< 0.30	< 0.20	
02/13/10	< 25	< 0.30	< 0.50	< 0.30	< 0.70	17.1	8.1	< 0.50	< 0.50	< 0.50	< 0.30	< 0.20	

Table 2, continued
(water analyte concentrations in micrograms per liter)

	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Total Xylene isomers	Methyl tert-butyl ether (MtBE)	tert-Butyl alcohol (TBA)	Di-isopropyl Ether (DIPE)	Ethyl tert-butyl ether (EtBE)	tert-Amyl methyl ether (TAME)	1,2-Dichloroethane (1,2-DCA)	Ethylene dibromide (EDB)	Ethanol
MW-10													
12/09/01	< 10000	< 200	< 200	< 200	< 200	10000	Not analyzed due to high detection limits						
03/26/02	8300	< 50	< 50	< 50	< 50	15000			"				
06/27/02	8600	< 50	< 50	< 50	< 50	16000			"				
09/21/02	13000	< 50	< 50	< 50	< 100	18000			"				
12/21/02	20000	< 100	< 100	< 100	< 100	22000			"				
03/30/03	14000	< 100	< 100	< 100	< 100	15000			"				
06/24/03	17000	490	440	< 100	< 100	16000			"				
09/23/03	< 10000	< 100	< 100	< 100	< 200	15000			"				
12/08/03	7100	< 50	< 50	< 50	< 100	8100			"				
02/16/04	< 20000	< 200	< 200	< 200	< 400	22000			"				
05/21/04	4400	< 25	< 25	< 25	< 25	5000			"				
08/28/04	5600	< 50	< 50	< 50	< 50	6200			"				
12/03/04	5200	< 50	< 50	< 50	< 50	3200			"				
03/01/05	7600	< 50	< 50	< 50	< 50	5000			"				
05/28/05	417	< 0.5	< 0.5	0.9	1.4	1240			"				
09/04/05	148	< 0.5	< 0.5	1.5	1.9	1030			"				
12/07/05	< 1000	< 10.0	< 10.0	< 10.0	< 20.0	836	< 100	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	
03/27/06	3100	< 0.50	0.88	< 0.50	< 1.0	< 0.50	360	< 0.50	0.69	72	< 0.50	< 0.50	< 50
05/25/06	420	< 0.50	0.27	0.49	0.66	910	110	< 0.50	< 0.50	13	< 0.50	< 0.50	< 100
08/17/06	940	< 5.0	< 5.0	< 5.0	< 10	1200	160	< 10	< 5.0	24	< 5.0	< 5.0	
11/08/06	120	< 50	< 50	< 50	< 50	1600	< 500	< 50	< 50	< 50	< 50	< 50	< 5000
02/16/07	< 2500	< 25	< 25	< 25	< 50	5400	710	< 50	< 25	< 25	< 25	< 25	
09/02/07	1100	< 5.0	5.4	< 5.0	18	900	1100	< 10	< 5.0	18	< 5.0	< 5.0	
02/17/08	< 500	< 5.0	< 5.0	< 5.0	< 10	340	4800	< 10	< 5.0	9.2	< 5.0	< 5.0	
08/02/08	430	< 5.0	< 5.0	< 5.0	< 10	620	520	< 50	< 50	< 50	< 5.0	< 5.0	
	Sampled semi-annually in February and August per February 27, 2009 letter.												
02/21/09	108	0.63	< 1.0	< 0.60	< 1.4	165	< 10	< 1.0	< 1.0	1.4	< 0.60	< 0.40	
02/13/10	585	< 3.0	< 5.0	< 3.0	< 7.0	615	2110	< 5.0	< 5.0	9.0	< 3.0	< 2.0	
MW-11													
12/09/01	< 100	< 2.0	< 2.0	< 2.0	< 2.0	120							
03/25/02	260	28	49	4.9	25	140							
06/25/02	300	30	74	8.5	34	200	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 25
09/20/02	61	< 0.50	1.5	< 0.50	2.6	54	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/21/02	< 250	21	37	6.3	22	230	64	< 5.0	< 2.5	< 2.5	< 2.5	< 2.5	
03/29/03	< 250	< 2.5	< 2.5	< 2.5	< 5.0	410	140	< 5.0	< 2.5	< 2.5	< 2.5	< 2.5	
06/24/03	< 50	< 0.50	< 0.50	0.75	1.8	15	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
09/25/03	380	0.62	1.6	8.1	24	3.5	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/07/03	< 50	< 0.50	< 0.50	0.53	1.3	1.1	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
02/15/04	58	< 0.50	< 0.50	< 0.50	< 1.0	110	7.6	< 1.0	< 0.50	0.64			
05/20/04	< 50	< 0.50	< 0.50	< 0.50	< 1.0	1.8	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/28/04	< 50	0.76	< 0.50	1.4	3.8	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/03/04	130	0.69	2.6	7.1	17	8.6	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
03/02/05	87	< 0.50	< 0.50	0.92	2.0	69	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
05/27/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	48.8	< 5.0	< 0.5	< 0.5	< 0.5			
09/07/05	< 50	< 0.5	< 0.5	0.9	1.1	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5			
12/07/05	< 50	4.4	5.7	1.1	3.3	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
03/24/06	66	0.90	0.99	0.55	< 1.0	67	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 50
05/24/06	22	< 0.50	< 0.50	0.26	< 1.0	6.7	< 10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 100
08/17/06	< 50	< 0.5	< 0.50	0.78	1.7	0.99	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
11/08/06	< 50	< 0.5	1.0	< 0.5	< 0.9	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 50
02/16/07	< 50	< 0.50	1.1	< 0.50	1.5	9.4	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
09/02/07	< 50	< 0.50	1.3	1.4	2.7	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
02/17/08	< 50	< 0.50	< 0.50	< 0.50	< 1.0	1.1	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/02/08	< 25	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 10	< 5.0	< 5.0	< 5.0	< 0.50	< 0.50	
	No longer sampled per February 27, 2009 letter.												

Table 2, continued
(water analyte concentrations in micrograms per liter)

	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Total Xylene isomers	Methyl tert-butyl ether (MtBE)	tert-Butyl alcohol (TBA)	Di-isopropyl Ether (DIPE)	Ethyl tert-butyl ether (EtBE)	tert-Amyl methyl ether (TAME)	1,2-Dichloroethane (1,2-DCA)	Ethylene dibromide (EDB)	Ethanol
MW-12													
12/09/01	< 170	< 2.0	< 2.0	< 2.0	< 2.0	320							
03/25/02	190	14	28	3.3	17	130							
06/27/02	59	< 1.0	< 1.0	< 1.0	< 2.0	320	23	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 50
09/20/02	240	< 1.0	< 1.0	< 1.0	2.2	330	< 10	< 2.0	< 1.0	2.1	< 1.0	< 1.0	
12/21/02	< 250	< 2.5	< 2.5	< 2.5	< 5.0	540	160	< 5.0	< 2.5	< 2.5	< 2.5	< 2.5	
03/29/03	< 100	< 1.0	< 1.0	< 1.0	< 2.0	220	77	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	
06/23/03	600	< 5.0	< 5.0	< 5.0	< 10	670	< 50	< 10	< 5.0	< 5.0	< 5.0	< 5.0	
09/25/03	< 500	< 5.0	< 5.0	< 5.0	< 10	500	< 50	< 10	< 5.0	< 5.0	< 5.0	< 5.0	
12/07/03	310	< 2.5	< 2.5	< 2.5	< 5.0	350	< 25	< 5.0	< 2.5	< 2.5	< 2.5	< 2.5	
02/15/04	110	< 0.5	< 0.5	< 0.5	< 1.0	140	12	< 1.0	< 0.5	< 0.5			
05/20/04	220	< 1.0	< 1.0	< 1.0	< 2.0	250	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	
08/29/04	150	< 1.0	< 1.0	1.3	3.7	140	11	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	
12/02/04	210	< 1.0	< 1.0	< 1.0	< 2.0	240	< 10	< 2.0	< 1.0	1.1	< 1.0	< 1.0	
03/02/05	130	< 1.0	< 1.0	< 1.0	< 2.0	130	< 10	< 2.0	< 1.0	1.1	< 1.0	< 1.0	
05/27/05	51.2	< 0.5	< 0.5	< 0.5	< 1.0	127	< 5.0	< 0.5	< 0.5	< 0.5			
09/01/05	87.3	< 0.5	< 0.5	< 0.5	< 1.0	104	< 5.0	< 0.5	< 0.5	< 0.5			
12/07/05	82.4	4.1	5.8	1.1	3.7	101	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
03/24/06	< 50	< 0.50	0.54	< 0.50	< 1.0	41	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 50
05/24/06	40	< 0.50	<.0.50	0.24	< 1.0	46	< 10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 100
08/16/06	76	< 0.50	<.0.50	0.24	< 1.0	60	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
11/10/06	< 50	< 2.5	< 2.5	< 2.5	< 2.5	120	< 25	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 250
02/15/07	< 50	< 0.50	0.71	< 0.50	1.4	20	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
09/02/07	180	< 0.50	1.7	1.2	3.0	260	11	< 1.0	< 0.50	1.3	< 0.50	< 0.50	
02/17/08	< 50	< 0.50	< 0.50	< 0.50	< 1.0	3.5	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
	Sampled annually in August per February 27, 2009 letter.												
08/02/08	96	< 0.50	< 0.50	3.9	3.3	54	24	< 5.0	< 5.0	< 5.0	< 0.50	< 0.50	
08/22/09	31.0	< 0.30	< 0.50	< 0.30	< 0.70	26.9	66.9	< 0.50	< 0.50	< 0.50	< 0.30	< 0.20	
MW-13													
03/08/02	2300	< 10	< 10	< 10	< 10	2600	Not analyzed due to high detection limits						
06/25/02	6400	< 50	< 50	< 50	< 50	5900			"				
09/20/02	6000	< 50	< 50	< 50	< 100	7500			"				
12/21/02	6300	< 25	< 25	< 25	< 25	7500			"				
03/29/03	4200	< 25	< 25	< 25	< 25	5500			"				
06/23/03	5200	< 25	< 25	< 25	< 25	5000			"				
09/25/03	< 2500	< 25	< 25	< 25	< 50	5800			"				
12/08/03	4100	< 25	< 25	< 25	< 50	7100			"				
02/15/04	8500	< 50	< 50	< 50	< 100	5000			"				
05/20/04	3200	< 25	< 25	< 25	< 25	3800			"				
08/29/04	3800	< 25	< 25	< 25	< 25	4900			"				
12/02/04	3700	< 25	< 25	< 25	34	3200			"				
03/03/05	2500	< 25	< 25	< 25	< 25	2400			"				
05/28/05	405	< 0.5	< 0.5	0.7	1.1	1510			"				
09/01/05	212	< 0.5	< 0.5	4.0	9.4	1820			"				
12/07/05	1040	< 10.0	< 10.0	< 10.0	< 20.0	2130			"				
03/24/06	1300	< 12	< 12	< 12	< 12	1000			"				
05/26/06	520	< 0.50	<.0.50	0.36	0.53	1300	190	< 0.50	< 0.50	14	< 0.50	< 0.50	< 100
08/16/06	< 1300	< 13	< 13	< 13	< 25	1100	360	< 25	< 13	< 13	< 13	< 13	
11/10/06	75	< 25	< 25	< 25	< 25	880	290	< 25	< 25	< 25	< 25	< 25	< 2500
02/15/07	< 500	< 5.0	< 5.0	< 5.0	< 10	520	290	< 10	< 5.0	< 5.0	< 5.0	< 5.0	
09/02/07	< 500	< 5.0	< 5.0	< 5.0	< 10	400	420	< 10	< 5.0	6.9	< 5.0	< 5.0	
02/17/08	< 500	< 5.0	< 5.0	< 5.0	< 10	290	110	< 10	< 5.0	8.2	< 5.0	< 5.0	
08/02/08	260	< 2.5	< 2.5	< 2.5	< 5.0	370	330	< 25	< 25	< 25	< 2.5	< 2.5	
	Sampled semi-annually in February and August per February 27, 2009 letter.												
02/21/09	186	< 1.2	< 2.0	< 1.2	< 2.8	292	90.6	< 2.0	< 2.0	< 2.0	< 1.2	< 0.80	
08/23/09	265	< 1.2	< 2.0	< 1.2	< 2.8	253	443	< 2.0	< 2.0	< 2.0	< 1.2	< 0.80	
02/13/10	138	< 0.6	< 1.0	< 0.6	< 1.4	145	336	< 1.0	< 1.0	< 1.0	< 0.6	< 0.40	

Table 2, continued
(water analyte concentrations in micrograms per liter)

	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Total Xylene isomers	Methyl tert-butyl ether (MtBE)	tert-Butyl alcohol (TBA)	Di-isopropyl Ether (DIPE)	Ethyl tert-butyl ether (EtBE)	tert-Amyl methyl ether (TAME)	1,2-Dichloroethane (1,2-DCA)	Ethylene dibromide (EDB)	Ethanol
MW-14													
03/08/02	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5							
06/27/02	< 50	< 0.5	< 0.5	< 0.5	< 0.5	0.68	< 5.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 25
09/20/02	< 2500	33	< 25	< 25	53	1900	< 250	< 50	< 25	41	< 25	< 25	
12/22/02	< 50	< 0.5	< 0.5	< 0.5	< 1.0	160	39	< 1.0	< 0.5	2.3	< 0.5	< 0.5	
03/29/03	< 50	< 0.5	< 0.5	< 0.5	< 1.0	4.9	< 5.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	
06/23/03	100	< 0.5	< 0.5	< 0.5	1.4	3.2	< 5.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	
09/25/03	< 50	< 0.5	< 0.5	0.75	2.4	1.5	< 5.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	
12/07/03	< 50	< 0.5	< 0.5	< 0.5	< 1.0	1.6	< 5.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	
02/15/04	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 5.0	< 1.0	< 0.5	< 0.5			
05/20/04	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 5.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	
08/28/04	61	1.1	< 0.50	1.8	4.3	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/01/04	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
02/28/05	< 50	< 0.50	< 0.50	0.70	1.4	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
05/24/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5			
09/01/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5			
12/06/05	< 50	3.1	4.4	0.9	2.9	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
03/23/06	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 50
05/24/06	14	< 0.50	< 0.50	0.29	< 1.0	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 100
08/15/06	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
11/07/06	< 50	0.53	1.7	< 0.5	1.2	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 50
02/14/07	< 50	< 0.50	0.68	< 0.50	< 1.0	17	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/31/07		Sampled annually in February per ltr 6 Feb 2007											
02/17/08	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
		No longer sampled per February 27, 2009 letter.											
MW-15													
08/19/03	< 50	< 0.5	< 0.5	< 0.5	< 1.0	4.9	< 5.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	
09/25/03	< 50	< 0.5	< 0.5	< 0.5	< 1.0	0.90	< 5.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	
12/07/03	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 5.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	
02/15/04	54	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 5.0	< 1.0	< 0.5	< 0.5			
05/19/04	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 5.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	
08/28/04	< 50	< 0.50	< 0.50	0.81	2.3	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/01/04	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
02/28/05	< 50	< 0.50	< 0.50	0.57	1.1	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
05/24/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5			
09/01/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5			
12/06/05	< 50	2.9	4.0	0.8	2.8	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
03/23/06	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 50
05/24/06	15	< 0.50	0.28	0.34	0.41	< 0.50	< 10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 100
08/16/06	82	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
11/07/06	< 50	< 0.5	0.84	< 0.5	< 0.5	< 0.50	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 50
02/14/07	< 50	< 0.50	0.61	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/31/07		Sampled annually in February per ltr 19 Dec 2006											
02/17/08	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
		No longer sampled per February 27, 2009 letter.											
MW-16													
09/27/03	< 2500	59	180	68	360	3600	< 250	< 50	< 25	82	< 25	< 25	
12/08/03	7200	85	< 50	140	200	6200	Not analyzed due to high detection limits						
02/15/04	540	< 5.0	< 5.0	< 5.0	< 10	520			"				
05/19/04	3100	< 25	< 25	< 25	< 25	3400			"				
08/28/04	3900	< 25	< 25	< 25	< 25	4900			"				
12/02/04	< 2500	< 25	< 25	< 25	< 25	1500			"				
03/03/05	3700	< 25	< 25	< 25	< 25	2700			"				
05/26/05	5450	< 50	61.8	124	191	3110			"				
09/04/05	655	51.2	< 0.5	42.5	5.8	2620			"				
12/05/05	2990	80.2	10.3	80.9	49.7	7100			"				
03/22/06	5200	< 50	< 50	< 50	< 50	2400			"				

Table 2, continued
(water analyte concentrations in micrograms per liter)

	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Total Xylene isomers	Methyl tert-butyl ether (MtBE)	tert-Butyl alcohol (TBA)	Di-isopropyl Ether (DIPE)	Ethyl tert-butyl ether (EtBE)	tert-Amyl methyl ether (TAME)	1,2-Dichloroethane (1,2-DCA)	Ethylene dibromide (EDB)	Ethanol
MW-16, continued													
05/25/06	2600	44	68	80	160	2500	360	< 5.0	< 5.0	60	< 5.0	< 5.0	< 1000
08/16/06	2300	30	51	52	130	2400	850	< 25	< 13	< 13	< 13	< 13	
11/09/06	260	< 10	< 10	< 10	< 10	490	1700	< 10	< 10	< 10	< 10	< 10	< 1000
02/15/07	< 100	< 1.0	< 1.0	1.8	4.1	52	1200	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	
09/01/07	6100	< 1.0	49	180	540	1300	480	< 2.0	< 1.0	49	< 1.0	< 1.0	
02/16/08	2700	26	9.0	53	47	400	1300	< 2.0	< 1.0	16	< 1.0	< 1.0	
	Sampled annually in August per February 27, 2009 letter.												
08/03/08	9100	120	64	300	770	1900	1300	< 100	< 100	< 100	< 10	< 10	
08/23/09	614	5.9	3.3	17.3	44.1	94.3	1530	< 2.5	< 2.5	3.4	< 1.5	< 1.0	
MW-17													
09/27/03	< 25	< 2.5	< 2.5	< 2.5	< 5.0	450	< 25	< 5.0	< 2.5	6.8	< 2.5	< 2.5	
12/07/03	350	< 2.5	< 2.5	< 2.5	< 5.0	370	< 25	< 5.0	< 2.5	< 2.5	< 2.5	< 2.5	
02/15/04	260	< 2.5	< 2.5	< 2.5	< 5.0	210	< 25	< 5.0	< 2.5	< 2.5			
05/19/04	450	2.5	< 2.5	3.4	5.8	420	< 25	< 5.0	< 2.5	< 2.5	< 2.5	< 2.5	
08/28/04	360	< 2.5	< 2.5	< 2.5	< 5.0	350	< 25	< 5.0	< 2.5	< 2.5	< 2.5	< 2.5	
12/02/04	280	< 2.5	< 2.5	3.9	9.4	200	< 25	< 5.0	< 2.5	< 2.5	< 2.5	< 2.5	
03/03/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	14	< 5.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	
05/26/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	72.5	< 5.0	< 0.5	< 0.5	0.8			
09/04/05	60.3	< 0.5	< 0.5	0.6	< 1.0	49.7	< 5.0	< 0.5	< 0.5	0.5			
12/05/05	119	1.5	2.2	0.8	2.7	189	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
03/22/06	84	1.3	1.8	0.76	< 1.0	84	< 5.0	< 0.50	< 0.50	0.91	< 0.50	< 0.50	< 50
05/25/06	370	< 0.50	< 0.50	0.78	1.0	720	11	< 0.50	< 0.50	6.6	< 0.50	< 0.50	< 100
08/16/06	< 1000	< 10	< 10	< 10	< 20	700	< 100	< 20	< 10	< 10	< 10	< 10	
11/09/06	< 50	< 17	< 17	< 17	< 17	470	< 170	< 17	< 17	< 17	< 17	< 17	< 1700
02/15/07	< 250	< 2.5	< 2.5	< 2.5	< 5.0	470	< 25	< 5.0	< 2.5	< 2.5	< 2.5	< 2.5	
09/01/07	520	1.1	2.8	7.1	17	450	6.8	< 1.0	< 0.50	8.6	< 0.50	< 0.50	
02/16/08	< 50	< 0.50	< 0.50	< 0.50	< 1.0	110	16	< 1.0	< 0.50	0.91	< 0.50	< 0.50	
	Sampled annually in August per February 27, 2009 letter.												
08/03/08	440	< 5.0	< 5.0	< 5.0	< 10	440	< 100	< 50	< 50	< 50	< 5.0	< 5.0	
08/23/09	924	< 3.8	< 6.3	< 3.8	< 8.8	906	133	< 6.3	< 6.3	11.5	< 3.8	< 2.3	
MW-18													
09/27/03	< 250	< 2.5	< 2.5	< 2.5	< 5.0	300	< 25	< 5.0	< 2.5	3.4	< 2.5	< 2.5	
12/07/03	500	< 5.0	< 5.0	< 5.0	< 10	540	< 50	< 10	< 5.0	< 5.0	< 5.0	< 5.0	
02/15/04	320	< 2.5	< 2.5	< 2.5	< 5.0	300	28	< 5.0	< 2.5	3.7			
05/19/04	310	< 2.5	< 2.5	< 2.5	< 5.0	230	< 25	< 5.0	< 2.5	< 2.5	< 2.5	< 2.5	
08/28/04	250	1.5	< 1.0	2.3	5.6	220	< 10	< 2.0	< 1.0	2.4	< 1.0	< 1.0	
12/03/04	310	< 1.0	1.2	3.6	8.7	340	< 10	< 2.0	< 1.0	1.1	< 1.0	< 1.0	
03/03/05	150	< 1.0	< 1.0	< 1.0	< 2.0	170	< 10	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	
05/26/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	117	< 5.0	< 0.5	< 0.5	1.0			
09/04/05	62.8	< 0.5	< 0.5	0.6	1.1	52.4	< 5.0	< 0.5	< 0.5	< 0.5			
12/05/05	87.1	2.0	2.7	0.9	3.0	125	< 5.0	< 0.5	< 0.5	0.9	< 0.5	< 0.5	
03/22/06	75	< 0.50	< 0.50	< 0.50	< 1.0	75	< 5.0	< 0.50	< 0.50	0.51	< 0.50	< 0.50	< 50
05/25/06	47	< 0.50	< 0.50	0.78	1.0	55	< 10	< 0.50	< 0.50	0.33	< 0.50	< 0.50	< 100
08/16/06	79	< 0.50	< 0.50	< 0.50	< 1.0	38	< 5.0	< 0.50	< 0.50	0.51	< 0.50	< 0.50	
11/09/06	< 50	< 5.0	< 5.0	< 5.0	< 5.0	160	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 500
02/15/07	110	< 0.50	< 0.50	< 0.50	< 1.0	150	9.1	< 1.0	< 0.50	1.4	< 0.50	< 0.50	
09/01/07	120	< 0.50	2.0	3.0	7.7	72	< 5.0	< 1.0	< 0.50	1.2	< 0.50	< 0.50	
02/16/08	< 50	< 0.50	< 0.50	< 0.50	< 1.0	42	7.8	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/03/08	< 25	< 0.50	< 0.50	< 0.50	< 1.0	18	< 10	< 5.0	< 5.0	< 5.0	< 0.50	< 0.50	
	Sampled semi-annually in February and August per February 27, 2009 letter.												
02/21/09	< 25	< 0.30	< 0.50	< 0.50	< 0.70	10.3	< 5.0	< 0.50	< 0.50	< 0.50	< 0.30	< 0.20	
08/23/09	< 25	< 0.30	< 0.50	< 0.30	< 0.70	16.0	< 5.0	< 0.50	< 0.50	< 0.50	< 0.30	< 0.20	
02/13/10	< 25	< 0.30	< 0.50	< 0.30	< 0.70	9.2	< 5.0	< 0.50	< 0.50	< 0.50	< 0.30	< 0.20	

Table 2, continued
(water analyte concentrations in micrograms per liter)

	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Total Xylene isomers	Methyl tert-butyl ether (MtBE)	tert-Butyl alcohol (TBA)	Di-isopropyl Ether (DIPE)	Ethyl tert-butyl ether (EtBE)	tert-Amyl methyl ether (TAME)	1,2-Dichloroethane (1,2-DCA)	Ethylene dibromide (EDB)	Ethanol
MW-19													
10/12/02	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/21/02	< 50	< 0.50	< 0.50	2.9	7.6	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
03/29/03	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
06/23/03	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
09/22/03	< 50	< 0.50	< 0.50	< 0.50	1.9	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/07/03	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
02/15/04	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50			
05/19/04	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/28/04	51	0.53	< 0.50	0.81	2.4	1.5	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/01/04	< 50	< 0.50	< 0.50	< 0.5	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
03/03/05	< 50	< 0.50	< 0.50	1.4	3.1	0.5	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
05/26/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5			
09/04/05	< 50	< 0.5	< 0.5	0.8	1.4	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5			
12/05/05	< 50	2.7	3.3	1.1	3.7	4.9	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
03/22/06	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 50
05/25/06	15	< 0.50	< 0.50	0.60	0.78	3.6	64	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 100
06/20/06													
15 gal purge	< 50	< 0.50	< 0.50	< 0.50	< 1.0	2.4	15	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
60 gal purge	58	< 0.50	< 0.50	< 0.50	< 1.0	3.0	18	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
120 gal purge	< 50	< 0.50	< 0.50	< 0.50	< 1.0	1.9	15	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
08/16/06	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
11/09/06	< 50	< 0.5	0.95	< 0.5	0.92	0.53	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 50
02/15/07	< 50	< 0.50	0.81	< 0.50	< 1.0	6.9	57.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
09/01/07	< 50	< 0.50	1.2	1.9	5.4	1.8	150	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
02/16/08	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/03/08	< 25	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 10	< 5.0	< 5.0	< 5.0	< 0.50	< 0.50	
		No longer sampled per February 27, 2009 letter.											
MW-20													
03/08/02	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5							
06/25/02	250	37	85	9.2	37	0.90	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 25
09/20/02	< 50	0.73	2.6	< 0.50	3.1	0.81	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/21/02	240	25	40	5.9	22	12	5.1	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
03/29/03	< 50	5.7	14	2.7	9.2	1.5	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
06/23/03	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
09/22/03	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/07/03	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
02/15/04	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50			
05/19/04	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/28/04	56	0.85	< 0.50	1.3	3.3	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/01/04	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
03/02/05	< 50	< 0.50	< 0.50	1.0	2.4	0.76	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
05/26/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5			
09/04/05	< 50	< 0.5	< 0.5	0.6	< 1.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5			
12/06/05	< 50	3.8	5.4	1.1	3.8	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
03/24/06	< 50	0.50	0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 50
05/25/06	20	< 0.50	< 0.50	1.1	1.4	< 0.50	< 10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 100
08/16/06	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
11/08/06	< 50	< 0.5	0.72	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 50
02/14/07	< 50	< 0.50	0.97	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
09/01/07	74	< 0.50	1.7	1.5	3.9	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
02/17/08	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/03/08	67	2.0	1.4	4.5	7.5	2.2	< 10	< 5.0	< 5.0	< 5.0	< 0.50	< 0.50	
		No longer sampled per February 27, 2009 letter.											

Table 2, continued
(water analyte concentrations in micrograms per liter)

	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Total Xylene isomers	Methyl tert-butyl ether (MtBE)	tert-Butyl alcohol (TBA)	Di-isopropyl Ether (DIPE)	Ethyl tert-butyl ether (EtBE)	tert-Amyl methyl ether (TAME)	1,2-Dichloroethane (1,2-DCA)	Ethylene dibromide (EDB)	Ethanol
MW-21													
08/29/04	54	0.62	< 0.50	1.0	3.0	0.76	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/01/04	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
03/03/05	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
05/26/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5			
09/04/05	< 50	< 0.5	< 0.5	0.5	< 1.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5			
12/07/05	< 50	3.9	5.0	1.0	2.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
03/24/06	< 50	0.88	0.86	0.57	< 1.0	0.58	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 50
05/25/06	13	< 0.50	0.24	0.49	0.66	< 0.50	< 10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 100
08/16/06	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
11/07/06	< 50	< 0.5	1.1	< 0.5	0.9	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 50
02/14/07	< 50	< 0.50	0.57	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
09/01/07	< 50	< 0.50	1.7	1.7	3.7	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
02/16/08	< 50	< 0.50	< 0.50	0.64	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/03/08	< 25	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 10	< 5.0	< 5.0	< 5.0	< 0.50	< 0.50	
		No longer sampled per February 27, 2009 letter.											
MW-22													
08/29/04	60	< 0.50	0.56	0.85	1.2	2.4	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/01/04	< 50	< 0.50	< 0.50	< 0.50	< 1.0	0.56	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
03/03/05	< 50	< 0.50	< 0.50	0.52	< 1.0	< 0.5	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
05/26/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5			
09/04/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5			
12/07/05	< 50	3.2	3.6	0.7	1.4	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
03/23/06	< 50	< 0.50	0.57	< 0.50	< 1.0	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 50
05/25/06	20	0.26	0.55	1.3	1.6	0.94	< 10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 100
08/16/06	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
11/07/06	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 50
02/14/07	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
09/01/07	< 50	< 0.50	1.8	1.7	3.1	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
02/16/08	< 50	< 0.50	< 0.50	0.79	1.1	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/03/08	< 25	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 10	< 5.0	< 5.0	< 5.0	< 0.50	< 0.50	
		No longer sampled per February 27, 2009 letter.											
MW-23													
03/08/02	4000	32	< 13	< 13	25	4600	Not analyzed due to high detection limits						
06/27/02	12000	< 100	< 100	< 100	< 100	11000			"				
09/20/02	< 10000	< 100	< 100	< 100	< 200	12000			"				
12/22/02	7100	< 50	< 50	< 50	< 50	7300			"				
03/29/03	5500	< 50	< 50	< 50	< 50	6000			"				
06/23/03	8900	< 50	< 50	< 50	< 50	8600			"				
09/25/03	< 10000	< 100	< 100	< 100	< 200	14000			"				
12/08/03	7100	< 50	< 50	< 50	< 100	9800			"				
02/15/04	< 5000	< 50	< 50	< 50	< 100	4400			"				
05/20/04	5400	< 50	< 50	< 50	< 50	6300			"				
08/29/04	6200	< 50	< 50	< 50	< 50	7900			"				
12/02/04	< 5200	< 50	< 50	< 50	< 50	3200			"				
03/01/05	2300	< 10	< 10	< 10	< 10	1400			"				
05/28/05	383	< 0.5	< 0.5	0.8	1.1	1450			"				
09/01/05	229	0.7	1.3	7.0	16.9	936			"				
12/06/05	< 500	< 5.0	< 5.0	< 5.0	< 10.0	132	< 50.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	
03/27/06	170	< 0.50	0.72	< 0.50	< 1.0	150	130	< 0.50	< 0.50	1.5	< 0.50	< 0.50	< 50
05/26/06	340	< 0.50	< 0.50	0.37	0.37	670	870	< 0.50	0.24	11	< 0.50	< 0.50	< 100
08/15/06	1100	< 5.0	< 5.0	< 5.0	< 10	670	410	< 10	< 5.0	16	< 5.0	< 5.0	
11/10/06	93	< 10	< 10	< 10	< 10	800	1600	< 10	< 10	< 10	< 10	< 10	< 1000
02/15/07	< 100	< 1.0	< 1.0	< 1.0	< 2.0	190	58	< 2.0	< 1.0	3.4	< 1.0	< 1.0	
09/01/07	380	< 0.50	2.5	1.8	4.3	440	54	< 1.0	< 0.50	9.4	< 0.50	< 0.50	
02/17/08	< 50	< 0.50	< 0.50	< 0.50	< 1.0	11	9.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
	Sampled annually in August per February 27, 2009 letter.												
08/02/08	340	< 5.0	< 5.0	< 5.0	< 10	480	< 100	< 50	< 50	< 50	< 5.0	< 5.0	
08/22/09	131	< 0.75	< 1.3	< 0.75	< 1.8	87.0	831	< 1.3	< 1.3	1.8	< 0.75	< 0.50	

Table 2, continued
(water analyte concentrations in micrograms per liter)

	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Total Xylene isomers	Methyl tert-butyl ether (MtBE)	tert-Butyl alcohol (TBA)	Di-isopropyl Ether (DIPE)	Ethyl tert-butyl ether (EtBE)	tert-Amyl methyl ether (TAME)	1,2-Dichloroethane (1,2-DCA)	Ethylene dibromide (EDB)	Ethanol
MW-24													
10/12/02	< 5000	< 50	< 50	< 50	< 100	10000	< 500	< 100	< 50	160	< 50	< 50	
12/22/02	9400	< 50	< 50	< 50	< 50	11000	Not analyzed due to high detection limits						
03/29/03	5800	< 50	< 50	< 50	< 50	5400			"				
06/23/03	3600	< 25	27	< 25	< 25	5000			"				
09/25/03	< 5000	< 50	< 50	< 50	< 100	10000			"				
12/08/03	< 5000	< 50	< 50	< 50	< 100	7800			"				
02/15/04	< 10000	< 100	< 100	< 100	< 200	7700			"				
05/20/04	6400	< 50	< 50	< 50	< 50	7500			"				
08/29/04	6600	< 50	< 50	< 50	< 50	8100			"				
12/02/04	7000	< 50	< 50	< 50	< 50	7000			"				
03/01/05	8000	< 50	< 50	< 50	< 50	9300			"				
05/24/05	610	< 0.5	< 0.5	< 0.5	< 1.0	4320			"				
09/01/05	116	< 0.5	< 0.5	3.1	6.8	173			"				
12/06/05	524	< 5.0	< 5.0	< 5.0	< 10.0	825	1730	< 5.0	< 5.0	8.9	< 5.0	< 5.0	
03/27/06	2600	< 10	< 10	< 10	< 20	2300	2100	< 10	< 10	31	< 10	< 10	< 1000
05/26/06	670	< 0.50	0.26	0.91	2.3	1300	2400	< 0.50	0.48	17	< 0.50	< 0.50	< 100
08/15/06	580	< 5.0	< 5.0	< 5.0	< 10	320	2000	< 10	< 5.0	7.3	< 5.0	< 5.0	
11/09/06	< 50	< 5.0	< 5.0	< 5.0	< 5.0	92	1500	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 500
02/15/07	960	< 5.0	< 5.0	< 5.0	< 10	1300	1800	< 10	< 5.0	18.0	< 5.0	< 5.0	
09/01/07	< 100	< 1.0	1.0	1.1	2.6	20	770	< 2.0	< 1.0	1.0	< 1.0	< 1.0	
02/17/08	< 100	< 1.0	1.0	< 1.0	< 2.0	44	1100	< 2.0	< 1.0	1.7	< 1.0	< 1.0	
08/02/08	28	< 0.50	< 0.50	< 0.50	< 1.0	26	260	< 5.0	< 5.0	< 5.0	< 0.50	< 0.50	
	Sampled semi-annually in February and August per February 27, 2009 letter.												
02/21/09	32.4	< 0.30	< 0.50	< 0.30	< 0.70	19.8	246	< 0.50	< 0.50	< 0.50	< 0.30	< 0.20	
08/22/09	< 250	< 3.0	< 5.0	< 3.0	< 7.0	18.4	2620	< 5.0	< 5.0	< 5.0	< 3.0	< 2.0	
02/13/10	< 130	< 1.5	< 2.5	< 1.5	< 3.5	26.5	2460	< 2.5	< 2.5	< 2.5	< 1.5	< 1.0	
MW-25													
11/19/02	< 50	< 0.50	< 0.50	< 0.50	< 1.0	68	17	< 1.0	< 0.50	0.90	< 0.50	< 0.50	
12/22/02	< 50	< 0.50	< 0.50	< 0.50	< 1.0	39	10	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
03/29/03	< 50	< 0.50	< 0.50	0.59	< 1.0	3.8	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
06/23/03	< 50	< 0.50	< 0.50	< 0.50	< 1.0	2.9	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
09/25/03	< 50	< 0.50	< 0.50	0.69	1.9	5.3	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/07/03	< 50	< 0.50	< 0.50	< 0.50	< 1.0	6.1	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
02/15/04	< 50	< 0.50	< 0.50	< 0.50	< 1.0	2.5	< 5.0	< 1.0	< 0.50	< 0.50			
05/20/04	< 50	< 0.50	< 0.50	1.0	1.7	2.1	< 5.0	< 1.0	< 0.5	< 0.50	< 0.50	< 0.50	
08/27/04	70	< 0.50	< 0.50	< 0.50	< 1.0	4.8	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
11/30/04	< 50	< 0.50	< 0.50	< 0.50	1.1	2.3	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
03/02/05	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
05/24/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5			
08/31/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	1.1	< 5.0	< 0.5	< 0.5	< 0.5			
12/06/05	< 50	1.9	3.0	0.7	2.4	0.8	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
03/23/06	< 50	< 0.50	0.52	< 0.50	< 1.0	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 50
05/24/06	17	< 0.50	< 0.50	0.23	< 1.0	< 0.50	< 10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 100
08/15/06	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
11/09/06	< 50	< 0.5	0.68	< 0.5	< 0.5	0.58	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 50
02/14/07	< 50	< 0.50	0.68	< 0.50	1.2	0.72	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
09/02/07	< 50	< 0.50	0.84	1.2	3.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
02/16/08	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/02/08	< 25	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 10	< 5.0	< 5.0	< 5.0	< 0.50	< 0.50	
	No longer sampled per February 27, 2009 letter.												
MW-26													
11/19/02	< 50	< 0.50	< 0.50	< 0.50	< 1.0	12	5.5	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/22/02	< 50	< 0.50	< 0.50	< 0.50	< 1.0	25	7.7	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
03/29/03	< 50	< 0.50	< 0.50	< 0.50	< 1.0	18	5.6	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
06/23/03	50	< 0.50	< 0.50	< 0.50	< 1.0	8.7	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
09/25/03	< 50	< 0.50	< 0.50	< 0.50	< 1.0	12	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	

Table 2, continued
(water analyte concentrations in micrograms per liter)

	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Total Xylene isomers	Methyl tert-butyl ether (MtBE)	tert-Butyl alcohol (TBA)	Di-isopropyl Ether (DIPE)	Ethyl tert-butyl ether (EtBE)	tert-Amyl methyl ether (TAME)	1,2-Dichloroethane (1,2-DCA)	Ethylene dibromide (EDB)	Ethanol
MW-26, continued													
12/07/03	< 50	< 0.50	< 0.50	< 0.50	< 1.0	7.9	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
02/15/04	< 50	< 0.50	< 0.50	< 0.50	< 1.0	2.6	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
05/20/04	< 50	< 0.50	< 0.50	1.3	2.4	3.7	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/27/04	< 50	< 0.50	< 0.50	< 0.50	< 1.0	6.0	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
11/30/04	53	< 0.50	< 0.50	0.86	3.7	4.1	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
03/02/05	< 50	< 0.50	< 0.50	0.55	1.0	2.3	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
05/24/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	2.1	< 5.0	< 0.5	< 0.5	< 0.5			
08/31/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	2.6	< 5.0	< 0.5	< 0.5	< 0.5			
12/06/05	< 50	2.5	3.8	0.8	2.6	1.7	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
03/23/06	< 50	< 0.50	< 0.50	< 0.50	< 1.0	1.5	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 50
05/24/06	13	< 0.50	< 0.50	0.22	< 1.0	1.0	< 10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 100
08/15/06	< 50	< 0.50	< 0.50	< 0.50	< 1.0	1.4	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
11/09/06	< 50	< 0.5	< 0.5	< 0.5	< 0.5	0.8	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 50
02/14/07	< 50	< 0.50	0.56	< 0.50	1.0	0.9	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
09/02/07	< 50	< 0.50	0.71	1.1	2.6	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
02/16/08	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/02/08	< 25	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 10	< 5.0	< 5.0	< 5.0	< 0.50	< 0.50	
		No longer sampled per February 27, 2009 letter.											
MW-27													
11/19/02	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/22/02	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
03/29/03	< 50	< 0.50	< 0.50	0.60	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
06/23/03	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
09/25/03	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/07/03	< 50	< 0.50	< 0.50	< 0.50	< 1.0	0.64	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
02/15/04	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.5	< 0.5			
05/20/04	66	< 0.50	< 0.50	1.0	1.7	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/27/04	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
11/30/04	< 50	< 0.50	< 0.50	0.52	2.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
03/02/05	< 50	< 0.50	< 0.50	0.58	1.3	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
05/24/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5			
08/31/05	< 50	< 0.5	< 0.5	0.5	< 1.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5			
12/06/05	< 50	2.2	3.1	0.7	2.8	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
03/27/06	< 50	< 0.50	0.68	< 0.50	< 1.0	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 50
05/24/06	19	< 0.50	< 0.50	0.21	< 1.0	< 0.50	< 10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 100
08/15/06	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
11/09/06	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 50
02/14/07	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
09/02/07	< 50	< 0.50	1.3	1.7	2.9	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
02/16/08	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/02/08	< 25	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 10	< 5.0	< 5.0	< 5.0	< 0.50	< 0.50	
		No longer sampled per February 27, 2009 letter.											
MW-28													
11/19/02	< 50	< 0.50	< 0.50	< 0.50	< 1.0	4.3	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/22/02	< 50	< 0.50	< 0.50	< 0.50	< 1.0	3.3	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
03/29/03	< 50	< 0.50	< 0.50	< 0.50	< 1.0	1.8	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
06/23/03	< 50	< 0.50	< 0.50	< 0.50	< 1.0	0.80	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
09/25/03	< 50	< 0.50	< 0.50	0.86	2.2	< 0.5	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/07/03	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.5	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
02/15/04	53	< 0.50	< 0.50	0.59	< 1.0	< 0.5	< 5.0	< 1.0	< 0.50	< 0.50			
05/20/04	< 50	< 0.50	< 0.50	1.3	2.3	< 0.5	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/27/04	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
11/30/04	57	< 0.50	< 0.50	0.66	2.9	12	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
03/02/05	53	< 0.50	< 0.50	1.1	2.6	11	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
05/24/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	9.9	< 5.0	< 0.5	< 0.5	< 0.5			
08/31/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	12.1	< 5.0	< 0.5	< 0.5	< 0.5			

Table 2, continued
(water analyte concentrations in micrograms per liter)

	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Total Xylene isomers	Methyl tert-butyl ether (MtBE)	tert-Butyl alcohol (TBA)	Di-isopropyl Ether (DIPE)	Ethyl tert-butyl ether (EtBE)	tert-Amyl methyl ether (TAME)	1,2-Dichloroethane (1,2-DCA)	Ethylene dibromide (EDB)	Ethanol
MW-28, continued													
12/06/05	< 50	2.4	3.4	0.7	2.2	8.0	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
03/23/06	< 50	< 0.50	< 0.50	< 0.50	< 1.0	6.2	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 50
05/24/06	21	< 0.50	< 0.50	0.24	< 1.0	6.4	< 10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 100
08/15/06	< 50	< 0.5	< 0.5	< 0.5	< 1.0	6.1	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
11/09/06	< 50	< 0.5	< 0.5	< 0.5	< 0.5	5.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 50
02/14/07	< 50	< 0.50	< 0.50	< 0.50	< 1.0	3.4	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
09/02/07	< 50	< 0.50	1.4	2.0	3.2	4.6	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
02/16/08	< 50	< 0.50	< 0.50	< 0.50	< 1.0	3.3	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/02/08	< 25	< 0.50	< 0.50	< 0.50	< 1.0	4.0	< 10	< 5.0	< 5.0	< 5.0	< 0.50	< 0.50	
		No longer sampled per February 27, 2009 letter.											
MW-29													
08/28/04	64	1.2	< 0.50	2.1	5.1	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
12/01/04	< 50	0.62	5.6	< 0.50	2.7	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
03/01/05	98	< 0.50	< 0.50	0.78	1.5	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
05/24/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5			
09/01/05	< 50	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5			
12/06/05	< 50	3.3	3.0	0.6	< 1.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
03/23/06	< 50	< 0.50	0.63	< 0.50	< 1.0	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 50
05/24/06	16	< 0.50	< 0.50	0.32	< 1.0	< 0.50	< 10	< 0.50	< 0.50	0.36	0.18	< 0.50	< 100
08/15/06	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
11/07/06	< 50	< 0.5	1.2	< 0.5	0.96	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 50
02/14/07	< 50	< 0.50	0.88	< 0.50	1.1	< 0.5	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
09/01/07	50	< 0.50	1.4	1.3	3.3	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
02/17/08	< 50	< 0.50	< 0.50	< 0.50	< 1.0	< 0.50	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
08/02/08	< 25	< 0.50	< 0.50	< 0.50	< 1.0	< 1.0	< 10	< 5.0	< 5.0	< 5.0	< 0.50	< 0.50	
		No longer sampled per February 27, 2009 letter.											
TANK WELL													
11/29/99	8600	41	160	250	1500	3600	< 500	< 100	< 100	< 100			
11/03/00	26000	270	4600	920	6900	14000	< 1000	< 2000	< 1000	< 1000	< 200	< 200	
02/16/01	11000	24	250	160	2100	3800	440	< 500	< 250	< 250			
05/17/01	6000	28	78	79	1400	1100	270	< 100	< 50	< 50			
08/13/01	110000	280	7100	930	2800	83000							
11/19/01	The Tank Well that extends only to the bottom of the tank excavation was dry.												
03/26/02	6500	< 25	35	64	440	7700	Not analyzed due to high detection limits						
06/25/02	6800	< 25	130	130	690	1200			"				
09/21/02	8200	20	100	120	410	270			"				
12/21/02	1300	15	28	18	77	75	130	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	
03/30/03	6000	51	200	240	1900	11000	4700	< 100	< 50	< 50	< 50	< 50	
06/23/03	4400	30	76	37	280	2100	Not analyzed due to high detection limits						
09/23/03	6500	30	96	68	380	3000			"				
12/08/03	3300	87	71	60	190	3900			"				
02/16/04	3100	100	140	68	260	590			"				
05/20/04	830	17	41	26	80	160			"				
08/30/04	5400	160	1100	120	1600	260			"				
12/03/04	2200	8.5	14	73	270	61			"				
03/02/05	140	< 0.50	< 0.50	< 0.50	< 0.50	12			"				
05/26/05	539	15.0	48.8	24.3	69.9	91.3			"				
09/07/05	377	11.8	17.3	20.4	57.3	34.4			"				
12/08/05	210	5.0	6.7	5.5	27.1	10.5			"				
03/24/06	110	0.77	1.1	1.2	3.7	3.7			"				
05/26/06	250	6.7	21	13	37	43	< 10	< 0.50	< 0.50	2.3	< 0.50	< 0.50	85
03/24/06	110	0.77	1.1	1.2	3.7	3.7			"				
05/26/06	250	6.7	21	13	37	43	< 10	< 0.50	< 0.50	2.3	< 0.50	< 0.50	85
08/17/06	280	4.5	9.1	11	21	21	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
11/10/06	550	8.7	28	19	60	41	< 10	< 1.0	< 1.0	1.8	< 1.0	< 1.0	< 100
02/13/07	< 50	< 0.50	1.9	2.2	4.5	1.5	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	

Table 2, continued
(water analyte concentrations in micrograms per liter)

	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Total Xylene isomers	Methyl tert-butyl ether (MtBE)	tert-Butyl alcohol (TBA)	Di-isopropyl Ether (DIPE)	Ethyl tert-butyl ether (EtBE)	tert-Amyl methyl ether (TAME)	1,2-Dichloroethane (1,2-DCA)	Ethylene dibromide (EDB)	Ethanol
Tank Well, continued.													
09/02/07	300	2.3	12	13	44	7.9	< 5.0	< 1.0	< 0.50	< 0.75	< 0.50	< 0.50	
02/17/08	< 50	< 0.50	< 0.50	0.81	1.3	0.66	< 5.0	< 1.0	< 0.50	< 0.50	< 0.50	< 0.50	
	Sampled annually in August per February 27, 2009 letter.												
08/03/08	80	1.7	2.3	4.9	10	6.5	< 10	< 5.0	< 5.0	< 5.0	< 0.50	< 0.50	
08/22/09	536	8.0	8.5	25.2	65.8	32.0	57.5	< 0.50	< 0.50	2.0	< 0.30	< 0.20	
EW-1													
12/09/01	< 25000	< 500	< 500	< 500	< 500	31000	Not analyzed due to high detection limits						
03/26/02	13000	< 100	< 100	< 100	< 100	23000	"						
06/25/02	13000	< 100	< 100	< 100	< 100	18000	"						
09/20/02	12000	< 100	< 100	< 100	< 200	15000	"						
12/22/02	19000	< 100	< 100	< 100	< 100	22000	"						
03/29/03	18000	< 100	< 100	< 100	< 100	19000	"						
06/23/03	23000	510	530	< 100	< 100	31000	"						
09/23/03	19000	< 100	< 100	< 100	< 200	27000	"						
12/08/03	12000	< 100	< 100	< 100	< 200	33000	"						
02/16/04	14000	< 50	< 50	< 50	< 100	18000	"						
04/21/04	13000	< 100	< 100	< 100	< 100	15000	"						
05/20/04	12000	< 100	< 100	< 100	< 100	15000	"						
08/28/04	12000	< 100	< 100	< 100	< 100	14000	"						
12/02/04	15000	< 100	< 100	< 100	< 100	15000	"						
03/03/05	11000	< 100	< 100	< 100	< 100	11000	"						
05/26/05	867	< 0.5	< 0.5	< 0.5	< 1.0	10700	"						
08/31/05	299	< 0.5	< 0.5	< 0.5	< 1.0	4030	"						
08/31/05	< 5000	< 50	< 50	< 50	< 50	5600	Duplicate analysys by alternate laboratory.						
12/08/05	367	< 0.5	< 0.5	< 0.5	< 1.0	1600	Not analyzed due to high detection limits						
03/24/06	2700	18	< 10	120	77	130	"						
05/24/06	360	0.16	< 0.50	0.14	< 0.50	* 320	* 9100	< 0.50	0.82	2.4	< 0.50	< 0.50	< 100
				* = Higher of reported concentrations. MtBE also reported at 290 and TBA at 7200									
08/14/06	< 5000	< 50	< 50	< 50	< 100	< 50	9500	< 100	< 50	< 50	< 50	< 50	
11/10/06	< 50	< 50	< 50	< 50	< 50	< 50	11000	< 50	< 50	< 50	< 50	< 50	< 5000
02/16/07	< 1000	< 10	< 10	< 10	< 20	< 10	11000	< 20	< 10	< 10	< 10	< 10	
08/31/07	< 500	< 5.0	< 5.0	< 5.0	< 10	130	8800	< 10	< 5.0	5.8	< 5.0	< 5.0	
02/17/08	< 500	< 5.0	< 5.0	< 5.0	< 10	56	7900	< 10	< 5.0	< 5.0	< 5.0	< 5.0	
	Sampled annually in August per February 27, 2009 letter.												
08/03/08	< 250	< 5.0	< 5.0	< 5.0	< 10	15	3400	< 50	< 50	< 50	< 5.0	< 5.0	
08/23/09	960	< 0.75	< 1.3	4.2	1.8	81.7	701	< 1.3	< 1.3	< 1.3	< 0.75	< 0.50	
EW-2t													
06/24/04	23000	230	< 100	800	980	13000	< 1000	< 200	< 100	270	< 100	< 100	
EW-2													
08/28/04	13000	< 100	< 100	130	190	12000	Not analyzed due to high detection limits						
12/02/04	10000	99	300	230	900	5700	"						
03/03/05	12000	86	95	240	1400	4500	"						
05/28/05	904	13.5	6.0	29.8	96.2	1930	"						
08/31/05	2350	< 0.5	< 0.5	17.3	51.0	1220	"						
08/31/05	2800	26	< 13	14	42	2100	Duplicate analysys by alternate laboratory.						
12/07/05	399	< 0.5	< 0.5	2.4	3.4	673	Not analyzed due to high detection limits						
03/24/06	< 500	< 5.0	< 5.0	< 5.0	< 5.0	78	"						
05/26/06	1700	14	2.5	63	49	800	2200	< 5.0	< 5.0	14	< 5.0	< 5.0	< 1000
08/14/06	3300	< 25	< 25	< 25	130	1800	2000	< 50	< 25	< 25	< 25	< 25	
11/09/06	490	< 25	< 25	< 25	< 25	790	1100	< 25	< 25	< 25	< 25	< 25	< 2500
02/13/07	1800	6.0	< 2.5	51	66	100	1600	< 5.0	< 2.5	< 2.5	< 2.5	< 2.5	
08/31/07	160	0.81	< 0.50	2.9	< 1.0	73	1700	< 1.0	< 0.50	< 1.2	< 0.50	< 0.50	
02/17/08	920	1.9	< 1.0	20	11	38	1300	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	
	Sampled annually in August per February 27, 2009 letter.												
08/03/08	< 100	< 2.0	< 2.0	< 2.0	< 4.0	25	1000	< 20	< 20	< 20	< 2.0	< 2.0	
08/23/09	1460	1.6	< 2.5	11.0	3.5	125	1440	< 2.5	< 2.5	2.9	< 1.5	< 1.0	

Table 3
Well Construction Data
Tower Mart #182
130 Pleasant Valley Road
Diamond Springs, CA

Well ID	Date Installed	Borehole Diameter (inches)	Well Diameter (inches)	T.O.C to Screen (feet)	Screened Interval (feet)	Total Depth (feet)	Notes
1	11/4/98	8	2	20	11.5	31.5	Destroyed
2	11/4/98	8	2	20	13.2	33.2	Destroyed
3	11/4/98	8	2	20	9.6	29.6	Destroyed
4	8/17/01	9.25	2	10	20	30.4	
5	12/3/01	9.25	2	15	14.5	29.8	
6	12/4/01	9.25	2	15	15	30.4	
7	12/4/01	9.25	2	20	24.5	44.9	
8	12/3/01	9.25	2	20	24.5	44.9	
9	12/4/01	9.25	2	15	15	30.5	
10	12/4/01	9.25	2	15	15	30.4	
11	12/4/01	9.25	2	15	15	30.5	
12	12/4/01	9.25	2	15	15	30.2	
13	2/11/02	9.25	2	15.5	15	31.0	
14	2/18/02	9.25	2	15.5	25	30.8	
15	8/16/03	6	2	18	9.5	43.2	
16	9/25/03	6	2	12	30	21.8	
17	9/23/03	6	2	9	20.5	39.5	
18	9/23/03	6	2	9	13	30.0	
19	10/4/02	8	2	16.5	15.5	30.0	Destroyed
20	2/11/02	9.25	2	23.5	20	39.6	Destroyed
21	8/24/04	8	2	13	20	33.5	Destroyed
22	8/24/04	8	2	20	20	40.5	Destroyed
23	2/18/02	9.25	2	15.5	14.5	30.5	
24	10/4/02	8	2	19.5	20	40.0	
25	11/13/02	8.5	2	14	15	29.5	
26	11/13/02	8.5	2	14.5	14.5	29.5	
27	11/15/02	8.5	2	14	15	29.4	
28	11/14/02	8.5	2	18.5	15	33.9	
29	7/23/04	8	2	20	29	49.4	
EW-1	12/3/01	15	8	20	14.5	35.0	
EW-2	7/8/04	12	6	10	39.5	50.0	
Tank Well	6/24/97	10	4	2	10	12.0	

TABLE 4
LIST OF REPORTS
Tower Mart #182
130 Pleasant Valley Road
Diamond Springs

Date	Company	Title
August 2000	Parker Environmental	Environmental Site Investigation
November 2000	H_2OGEOL	Preliminary Sensitive Receptor Survey
December 2000	H_2OGEOL	Addenda (2) to Sensitive Receptor Survey
December 2000	H_2OGEOL	Problem Assessment Workplan
December 2001	H_2OGEOL	Additional Borehole Groundwater Investigation, Monitoring Well Installation, and Extraction Well Installation
May 2002	H_2OGEOL	Step Drawdown Test, Constant Rate Test and Capture Zone Analysis of Well EW-1
December 2002	H_2OGEOL	Installation of Additional Monitoring Wells MW-24 to MW-28
September 2003	H_2OGEOL	Installation of Monitoring Wells MW-15 to MW-18
June 2004	West & Associates	Application for Land Disposal of Treated Groundwater Under Order No R5-2003-0044
September 2004	H_2OGEOL	Installation of Monitoring Wells MW-21, MW-22 and MW-29
January 2007	H_2OGEOL	Soil Vapor Intrusion Workplan
April 2009	West & Associates	High Vacuum Dual Phase Extraction Test Report
August 2010	H_2OGEOL	Workplan for Upgradient and Cross Well Abandonment
August 2010	H_2OGEOL	Fuel System Removal Soil Sampling Report
August 2010	H_2OGEOL	Well Abandonments During August 2010
1999 through 2010	Various	Groundwater Monitoring and Remediation System Reports

Copies of the H_2OGEOL and West & Associates reports can be provided upon request. More recent reports, beginning with the 3rd Quarter 2005 Groundwater Monitoring Report, are available on GeoTracker (Global ID #T0601700077).

ATTACHMENT C

Boring Logs

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. BH4/MW-4 Sheet 1 of 2

Project No.:	Date: 08/17 & 24/01	Drilling Co. V&W Drilling	Drill Model Mobile B-61
Client: The Customer Company		Drilling Method-Rotary Auger	Borehole Diameter 9.25-in
Location: Across Patterson from former Cheaper! #182		Finished Well Rim Elevation 1742.61	Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA		Borehole BH4 was completed as a monitoring well MW-4.	
Logged by: GDL		Sample and cuttings log.	

Water Level	23.10	16.69		
Time	12:23	9:40		
Date	8/17/2001	8/24/2001		

Field Soil Description (all contacts uncertain).

Sampling Blowcounts	RECOVERY feet	Depth test	Sample	Soil Sample Number	USCS Soil Symbol	Field Soil Description	Well construction
							8-in street box
		1				Range of arrow - solid stem auger drilling. 5.5 inch reamed to 7.25 inch	Neat Cement Grout; 2-inch PVC casing and screen.
		4–5			ML/SM	Brownish yellow 10YR 6/8 sandy to gravelly clayey silt/ /clayey silty sand, No odor.	
		8					Bentonite Seal
		9.5			?		
		13				Brownish yellow 10YR 6/8 clayey gravelly fine to medium sand with rock fragments. No odor.	screen openings = 0.020 inch
		18–19			SP	Brownish yellow 10YR 6/8 clayey gravelly fine to medium sand with rock fragments. Distinct odor.	
		23				First Encountered Water at 23.1 Feet.	
		23–24				Yellowish brown 10YR 5/8 silty clayey fine to medium sand.	
		26				Yellowish brown 10YR 5/8 silty clayey fine to medium sand.	LONESTAR No. 3 Sand
		28				Very slightly weathered to unweathered slate.	

H2OGEOL A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

Location: Across Patterson from former Cheaper! #182

130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. BH4/MW-4 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description	
		29					Very slightly weathered to unweathered slate.	
		30					Total Well Depth = 30.38 Feet. (below reference mark)	PLUG
		31			Total Depth 31.1 (below grade)		Auger refusal at 31.1 feet.	
		32						
		33						
		34						
		35						
		36						
		37						

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-5 Sheet 1 of 2

Project No.: Date: 12/03/01	Drilling Co. V&W Drilling Drill Model Mobile B-61
Client: The Customer Company	Drilling Method-Rotary Auger Borehole Diameter 9.25-in
Location: Across Patterson from former Cheaper! #182	Finished Well Rim Elevation 1743.70 Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA	Borehole was completed as a monitoring well MW-5.
Logged by: GDL	Sample and cuttings log.

Water Level	15.00			
Time	10:00			
Date	12/9/2001			

Sampling Blowcounts	RECOVERY feet	Depth test	Sample	Soil Sample Number	USCS Soil Symbol	Field Soil Description (all contacts uncertain).	Well construction
							8-in street box
		1					Neat Cement Grout
		2					
		3					
		4					
		5					
6					CL/ML	Reddish yellow 7.5YR 6/6 gravelly sandy silty clay/clayey silt.	
7		6				No odor.	
9							
		7					
		8					
		9			?		
		10					
2						Dark yellowish brown 10YR4/6 gravelly sandy silty clay.	
2		11				No odor.	
4							Bentonite Seal
		12			CL		
		13					
		14			?		
		15					
16						Strong brown 7.5YR 5/8 very sandy gravelly silty clay/clayey silt.	
50/4-in.		16			CL/ML	No odor.	
		17					
		18			?		
		19					
		20				White 8/1 (due to rock dust) variably weathered to unweathered	
50/2-in,						schistose rock. Where not hard breaks into sandy clayay silt. No odor.	
		21					
		22					LONESTAR No. 3 Sand
		23					
		24					
		25				White 8/1 (due to rock dust) variably weathered to unweathered	
50/2-in,		26				schistose rock. Where not hard breaks into sandy clayay silt. No odor. ▽	
						First Encountered Water at 26± Feet.	
		27					
		28					

2-inch PVC casing and screen.

screen openings = 0.020 inch

H2OGEOL A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

Location: Across Patterson from former Cheaper! #182

130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-5 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description	
		29						PLUG
50/1-in,		30					Total Well Depth = 29.85 Feet. (below reference mark)	
		31			Total Depth 30.4 (below grade)		White 8/1 (due to rock dust) variably weathered to unweathered schistose rock. Where not hard breaks into sandy clayay silt. No odor. Auger refusal at 30.4 feet.	
		32						
		33						
		34						
		35						
		36						
		37						

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-6 Sheet 1 of 2

Project No.: Date: 12/04/01	Drilling Co. V&W Drilling Drill Model BK81
Client: The Customer Company	Drilling Method-Rotary Auger Borehole Diameter 9.25-in
Location: Former Cheaper! #182	Finished Well Rim Elevation 1744.44 Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA	Borehole was completed as a monitoring well MW-6.
Logged by: GDL	Sample and cuttings log.

Water Level	14.35			
Time	9:53			
Date	12/9/2001			

Sampling Blowcounts	RECOVERY feet	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description (all contacts uncertain).
		0					8-in street box
		1					Neat Cement Grout
		5					Dark yellowish brown 10YR 4/6 silty clay. No odor.
		10					Dark yellowish brown 10YR4/6 gravelly sandy silty clay. No odor.
		11				CL	Bentonite Seal. Driller broke 2-inch irrigation main obcruing FEW.
		14					Measured Water Level. First Encountered Water Not Noticeable ▽
		15					Dark yellowish brown 10YR4/6 gravelly sandy silty clay. No odor.
		20					Dark yellowish brown 10YR4/6 gravelly sandy silty clay. No odor.
		22				?	LONESTAR No. 3 Sand
		25					Gray N6/ variably weathered to unweathered slate. No odor.
		28					

2-inch PVC casing and screen.

screen openings = 0.020 inch

BOREHOLE LITHOLOGIC LOG

Location: Former Cheaper! #182

130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-6 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description	
		29						
		30					Gray N6/ variably weathered to unweathered slate. No odor.	PLUG
		31			Total Depth 30.5 (below grade)		Total Well Depth = 30.37 Feet. (below reference mark)	
		32						
		33						
		34						
		35						
		36						
		37						

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-7 Sheet 1 of 2

Project No.:	Date: 12/04/01	Drilling Co. V&W Drilling	Drill Model BK81
Client: The Customer Company		Drilling Method-Rotary Auger	Borehole Diameter 9.25-in
Location: Former Cheaper! #182		Finished Well Rim Elevation 1744.06	Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA		Borehole was completed as a monitoring well MW-7.	
Logged by: GDL		Sample and cuttings log.	

Water Level	12.77			
Time	9:51			
Date	12/9/2001			

Field Soil Description (all contacts uncertain).

Sampling Blowcounts	RECOVERY feet	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description
		1					
		2					
		3					
		4					
4, 5, 5		5					Dark yellowish brown 10YR 4/6 pebbly, fine to medium sandy, silty clay. No odor.
		6					
		7					
		8				CL	
		9					
3, 3, 4		10					Dark yellowish brown 10YR4/6 gravelly sandy silty clay. No odor.
		11					
		12					
		13				?	
		14					
50/4-inch		15					White 8/1 (due to rock dust) variably weathered to unweathered schistose rock. Where not hard breaks into sandy clayay silt. No odor.
		16					
		17					
		18					
		19					
36, 50/4-inch		20					White 8/1 (due to rock dust) variably weathered to unweathered schistose rock. Where not hard breaks into sandy clayay silt. No odor.
		21					
		22					
		23					
		24					
50/3-inch		25					White 8/1 (due to rock dust) variably weathered to unweathered schistose rock. Where not hard breaks into sandy clayay silt. No odor.
		26					
		27					
		28					

Well construction: 8-in street box; Neat Cement Grout; Bentonite Seal; LONESTAR No. 3 Sand; 2-inch PVC casing and screen.

BOREHOLE LITHOLOGIC LOG

Location: Former Cheaper! #182

130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-7 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description
		29					
50/5-inch		30					White 8/1 (due to rock dust) variably weathered to unweathered schistose rock. Where not hard breaks into sandy clayay silt. No odor.
		31					
		32					
		33					LONESTAR No. 3 Sand
		34					
50/3-inch		35					White 8/1 (due to rock dust) variably weathered to unweathered schistose rock. Where not hard breaks into sandy clayay silt. No odor.
		36					
		37					
		38					
		39					First Encountered Water at 40± Feet. ▽
50/5-inch		40					White 8/1 (due to rock dust) variably weathered to unweathered schistose rock. Where not hard breaks into sandy clayay silt. No odor.
		41					
		42					
		43					
		44					Total Well Depth = 44.90 Feet. (below reference mark)
50/5-inch		45			Total Depth 45.5 (below grade)		White 8/1 (due to rock dust) variably weathered to unweathered schistose rock. Where not hard breaks into sandy clayay silt. No odor.
		46					
		47					
		48					
		49					
		50					

screen openings = 0.020 inch

PLUG

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-8 Sheet 1 of 2

Project No.:	Date: 12/03/01	Drilling Co. V&W Drilling	Drill Model Mobile B-61
Client: The Customer Company		Drilling Method-Rotary Auger	Borehole Diameter 9.25-in
Location: Former Cheaper! #182		Finished Well Rim Elevation 1743.62	Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA		Borehole was completed as a monitoring well MW-8.	
Logged by: GDL		Sample and cuttings log.	

Water Level	13.33			
Time	9:47			
Date	12/9/2001			

Sampling Blowcounts	RECOVERY feet	Depth test	Sample	Soil Sample Number	USCS Soil Symbol	Field Soil Description (all contacts uncertain).	Well construction
		0–1			CL	Light olive brown 2.5Y 5/6 silty clay. No odor.	8-in street box; Neat Cement Grout
		4			?		
3, 3, 6		5–6			ML	Dark brown 10YR 5/8 pebbly, fine to coarse sandy, clayey silt. No odor.	
		9.5			?		
3, 5, 3		10–11			CL	Dark yellowish brown 10YR4/4 pebbly silty clay. No odor.	
		14.5			?		
50/4-inch		15–16				White 8/1 (due to rock dust) variably weathered to unweathered schistose rock. Where not hard breaks into sandy clayay silt. No odor.	Bentonite Seal
50/6-inch		20–21				White 8/1 (due to rock dust) variably weathered to unweathered schistose rock. Where not hard breaks into sandy clayay silt. No odor.	LONESTAR No. 3 Sand
50/6-inch		25–26				White 8/1 (due to rock dust) variably weathered to unweathered schistose rock. Where not hard breaks into sandy clayay silt. No odor.	
		28					

2-inch PVC casing and screen.

H2OGEOL A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

Location: Former Cheaper! #182

130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-8 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description	
		29						screen openings = 0.020 inch
50/4-inch		30					White 8/1 (due to rock dust) variably weathered to unweathered schistose rock. Where not hard breaks into sandy clayay silt. No odor.	
		31						
		32						
		33					LONESTAR No. 3 Sand	
		34						
50/4-inch		35					White 8/1 (due to rock dust) variably weathered to unweathered schistose rock. Where not hard breaks into sandy clayay silt. No odor.	
		36						
		37						
		38						
		39						
50/3-inch		40					White 8/1 (due to rock dust) variably weathered to unweathered schistose rock. Where not hard breaks into sandy clayay silt. No odor.	
		41						
		42						
		43					First Encountered Water at 43± Feet. ▽	
		44						
50/3-inch		45					Total Well Depth = 44.90 Feet. (below reference mark)	PLUG
		46			Total Depth 45.4 (below grade)		White 8/1 (due to rock dust) variably weathered to unweathered schistose rock. Where not hard breaks into sandy clayay silt. No odor.	
		47						
		48						
		49						
		50						

A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-9 Sheet 1 of 2

Project No.:	Date: 12/04/01	Drilling Co. V&W Drilling	Drill Model Mobile B-61
Client: The Customer Company		Drilling Method-Rotary Auger	Borehole Diameter 9.25-in
Location: Former Cheaper! #182		Finished Well Rim Elevation 1743.53	Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA		Borehole was completed as a monitoring well MW-9.	
Logged by: GDL		Sample and cuttings log.	

Water Level	12.93			
Time	9:45			
Date	12/9/2001			

Sampling Blowcounts	RECOVERY feet	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description (all contacts uncertain).	Well construction
								8-in street box
		1						Neat Cement Grout
		2						
		3						
		4						
		5				CL/ML	Yellowish brown 10YR 5/4 silty clay/clayey silt. No odor.	
		6						
		7						
		8						
		9				?		
		10					Light yellowish brown 10YR 6/4 clayey silt. No odor.	
		11				ML		Bentonite Seal
		12						
		13						
		14				?		
		15					Brownish yellow 10YR 6/6 clayey silt. No odor.	
		16						
		17				ML		
		18						
		19						
		20						
		21				?		
		22						LONESTAR No. 3 Sand
		23						
		24						
		25					First Encountered Water at 25± Feet.	
		26					White 8/1 (due to rock dust) variably weathered to unweathered schistose rock. Where not hard breaks into sandy clayay silt. No odor.	
		27						
		28						

2-inch PVC casing and screen.

screen openings = 0.020 inch

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BOREHOLE LITHOLOGIC LOG

Location: Former Cheaper! #182

130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-9 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description
		29					
		30					Total Well Depth = 30.52 Feet. (below reference mark) PLUG
		31			Total Depth 31 (below grade)		White 8/1 (due to rock dust) variably weathered to unweathered schistose rock. Where not hard breaks into sandy clayay silt. No odor.
		32					
		33					
		34					
		35					
		36					
		37					

H2OGEOL
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BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-10 Sheet 1 of 2

Project No.: Date: 12/04/01	Drilling Co. V&W Drilling Drill Model BK81
Client: The Customer Company	Drilling Method-Rotary Auger Borehole Diameter 9.25-in
Location: Former Cheaper! #182	Finished Well Rim Elevation 1743.70 Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA	Borehole was completed as a monitoring well MW-10.
Logged by: GDL	Sample and cuttings log.

Water Level	12.93			
Time	9:45			
Date	12/9/2001			

Field Soil Description (all contacts uncertain).

Sampling Blowcounts	RECOVERY feet	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description
							8-in street box
		1					Neat Cement Grout
		2					
		3					
		4					
		5				CL	
6							Dark yellowish brown 10YR4/4 silty clay.
8		6					No odor.
10							
		7					
		8					
		9				?	
		10					
3							Light yellowish brown 10YR 6/4 fine to coarse sandy clayey silt.
3		11					No odor.
5						ML	Bentonite Seal
		12					
		13					
		14				?	
		15					
3							Dark yellowish brown 10YR4/4 fine to coarse sandy silty clay.
8		16					No odor.
12						CL	
		17					
		18					
		19				?	
		20					
4							Light yellowish brown 10YR 6/4 fine to coarse sandy clayey silt.
7		21					No odor.
10							
		22					LONESTAR No. 3 Sand
		23					
		24				ML	
		25					
4							Light yellowish brown 10YR 6/4 fine to coarse sandy clayey silt.
8		26					No odor.
9							
		27					
		28					

2-inch PVC casing and screen.

screen openings = 0.020 inch

H2OGEOL A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

Location: Former Cheaper! #182

130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-10 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description	
		29					First Encountered Water at 29± Feet. ▽	
		30				ML		
5							Total Well Depth = 30.42 Feet.	PLUG
7		31					(below reference mark)	
10							Light yellowish brown 10YR 6/4 fine to coarse sandy clayey silt.	
		32			Total Depth 31.5 (below grade)		No odor.	
		33						
		34						
		35						
		36						
		37						

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-11 Sheet 1 of 2

Project No.: Date: 12/04/01	Drilling Co. V&W Drilling Drill Model BK81
Client: The Customer Company	Drilling Method-Rotary Auger Borehole Diameter 9.25-in
Location: Former Cheaper! #182	Finished Well Rim Elevation 1742.70 Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA	Borehole was completed as a monitoring well MW-11.
Logged by: GDL	Sample and cuttings log.

Water Level	11.38			
Time	9:32			
Date	12/9/2001			

Depth (feet)	USCS Soil Symbol	Field Soil Description (all contacts uncertain).	Well construction
0			8-in street box
1			Neat Cement Grout
5	CL	Reddish yellow 7.5YR 7/6 silty clay. No odor.	2-inch PVC casing and screen.
8	?		
10		Brownish yellow 10YR 6/6 silty clay. No odor.	
11	CL		Bentonite Seal
13	?		
15	CL	Dark yellowish brown 10YR4/4 fine to coarse sandy silty clay. No odor.	screen openings = 0.020 inch
17.5	?		
18		Very dark grayish brown 2.5Y 3/2 to dark gray N4/ silty clay. No odor.	
20	CL	Light gray N7/ silty clay. No odor.	
22			LONESTAR No. 3 Sand
24	?		
25		Gray to dark gray N4-N5/ variably weathered to unweathered slate. No odor.	
27			First Encountered Water at 27± Feet. ▽
28			

Column headings: Sampling Blowcounts; RECOVERY feet; Depth test; Sample; Soil Sample Number; Graphic Soil Symbol; USCS Soil Symbol.

H2OGEOL A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

Location: Former Cheaper! #182

130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-11 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description	
		29						
		30					Gray to dark gray N4-N5/ variably weathered to unweathered slate. No odor. Total Well Depth = 30.53 Feet. (below reference mark)	PLUG
		31			Total Depth 31 (below grade)			
		32						
		33						
		34						
		35						
		36						
		37						

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-12 Sheet 1 of 2

Project No.:	Date: 12/04/01	Drilling Co. V&W Drilling	Drill Model Mobile B-61
Client: The Customer Company		Drilling Method-Rotary Auger	Borehole Diameter 9.25-in
Location: Across Patterson from former Cheaper! #182		Finished Well Rim Elevation 1741.74	Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA		Borehole was completed as a monitoring well MW-12.	
Logged by: GDL		Sample and cuttings log.	

Water Level	11.38			
Time	9:24			
Date	12/9/2001			

Field Soil Description (all contacts uncertain).

Sampling Blowcounts	RECOVERY feet	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description	Well construction
								8-in street box
		1				CL	Dark yellowish brown 10YR4/4 fine to coarse sandy silty clay. No odor.	Neat Cement Grout
		2				?		
		3						
		4						
50/4-inch		5					Very pale brown 10YR 8/3 very weathered schistose rock that breaks to fine to coarse sand. No odor.	
		6						
		7						
		8						
		9						
50/2-inch		10					Very pale brown 10YR 8/3 very weathered schistose rock that breaks to fine to coarse sand. No odor.	
		11						Bentonite Seal
		12						
		13						
		14						
50/6-inch		15					Very pale brown 10YR 8/3 very weathered schistose rock that breaks to fine to coarse sand. No odor.	
		16						
		17				?		
		18						
		19					First Encountered Water at 19± Feet. ▽	
50/6-inch		20					Gray to dark gray N4-N5/ variably weathered to unweathered slate. No odor.	
		21						
		22						LONESTAR No. 3 Sand
		23						
		24						
50/6-inch		25					Gray to dark gray N4-N5/ variably weathered to unweathered slate. No odor.	
		26						
		27						
		28						

2-inch PVC casing and screen.

screen openings = 0.020 inch

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BOREHOLE LITHOLOGIC LOG

Location: Across Patterson from former Cheaper! #182

130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-12

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description	
		29						
							Gray to dark gray N4-N5/ variably weathered to unweathered slate.	
50/5-inch		30					No odor. Total Well Depth = 30.21 Feet.	PLUG
		31			Total Depth 30.5 (below grade)		(below reference mark)	
		32						
		33						
		34						
		35						
		36						
		37						

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-13 Sheet 1 of 2

Project No.: Date: 02/11/02	Drilling Co. V&W Drilling Drill Model Mobile B-61
Client: The Customer Company	Drilling Method-Rotary Auger Borehole Diameter 9.25-in
Location: Across Patterson from former Cheaper! #182	Finished Well Rim Elevation Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA	Borehole was completed as a monitoring well MW-13.
Logged by: GDL	Sample and cuttings log.

Water Level	6.58			
Time	10:28			
Date	3/2/2002			

Sampling Blowcounts	RECOVERY feet	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description (all contacts uncertain).	Well construction
				MW-13/				8-in street box
		1				SC	Dark brown 10YR 3/3 clayey gravelly sand. No odor.	First Encountered Water at 1.5 Feet. ▽
		2						Perched water in surfacial gravels.
		3						Neat Cement Grout
		4						
		5				ML	Reddish yellow 7.5YR 6/6 gravelly sandy clayey silt with abundant large fragments weathered rock. No odor.	
		6						
		7						
		8						
2								
3								
4		9	■	9-9.5		ML	Very dark grayish brown2.5 Y 3/2 sandy clayey silt. Pedogenic soil with root filaments. No odor.	
3		10						
6			■	10.5-11		ML	Dark olive gray 5Y 3/2 gravelly sandy clayey silt. No odor.	
9		11						Bentonite Seal
50/6-inch		12				ML	Brownish yellow 10YR 6/8 clayey sandy silt. No odor.	
		13						
26		14						
50/5-inch		15				ML	Yellowish brown 10YR 5/6 sandy silt with preserved slate structure. No odor.	
		16						
30								
50		17						
		18						
50/5-inch								
		19						
20		20					Gray to dark gray N4-N5/ variably weathered to unweathered slate. No odor.	
50/5-inch		21						
		22						LONESTAR No. 3 Sand
50/4-inch								
		23						
50/5-inch		24						
		25					Gray to dark gray N4-N5/ variably weathered to unweathered slate. No odor.	
		26						
		27						
		28						

2-inch PVC casing and screen.

screen openings = 0.020 inch

H2OGEOL A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

Location: South end lot across Patterson from former Cheaper! #182

130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-13 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description	
		29						
		30					Gray to dark gray N4-N5/ variably weathered to unweathered slate.	
50/3-inch							No odor.	
								PLUG
		31			Total Depth 31.0 (below grade)		Total Well Depth = 30.96 Feet. (below reference mark)	
		32						
		33						
		34						
		35						
		36						
		37						

BOREHOLE LITHOLOGIC LOG

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE No. MW-14 Sheet 1 of 2

Project No.: Date: 02/18/02
Client: The Customer Company
Location: Across Patterson from former Cheaper! #182
130 Pleasant Valley Road, Diamond Spgs, CA
Logged by: GDL

Drilling Co. V&W Drilling Drill Model Mobile B-61
Drilling Method-Rotary Auger Borehole Diameter 9.25-in
Finished Well Rim Elevation Datum: ground surface
Borehole was completed as a monitoring well MW-14.
Sample and cuttings log.

Water Level	10.61			
Time	10:24			
Date	3/8/2002			

Field Soil Description (all contacts uncertain).

Sampling Blowcounts	RECOVERY feet	Depth test	USCS Soil Symbol	Field Soil Description
		0–1	ML	Dark yellowish brown 10YR 4/6 gravelly sandy silt. No odor.
		1.5–3.5	SM	Dark yellowish brown 10YR 4/6 silty gravelly sand. No odor.
		3.5–6.5	ML	Dark yellowish brown 10YR 4/6 gravelly sandy silt. No odor.
		6.5–9	ML	Yellow 10YR 7/8 weathered schistose rock that breaks to pebbly silt. No odor.
50/2-inch		10		Very pale brown 10YR 8/3 weathered schistose rock that breaks No odor.
		17		Dry above fracture
		18		First Encountered Water at 18± Feet.
		18–19		Fracture interval. Very pale brown 10YR 8/3 very weathered schistose rock breaks to fine to coarse sand. No odor. Dry below fracture.
		20		Very pale brown 10YR 8/3 weathered schistose rock that breaks No odor.
		25		Very pale brown 10YR 8/3 weathered schistose rock that breaks No odor.

Well construction notes: 8-in street box; First Encountered Water at 1.5 Feet.; Perched water in surfacial gravels.; Neat Cement Grout; Bentonite Seal; LONESTAR No. 3 Sand

2-inch PVC casing and screen.

screen openings = 0.020 inch

Depth: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 **28**

H2OGEOL A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

Location: South end lot across Patterson from former Cheaper! #182
130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-14 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description	
		29						
		30					Very pale brown 10YR 8/3 weathered schistose rock that breaks to fine to coarse sand. No odor.	PLUG
		31			Total Depth 31.0 (below grade)		Total Well Depth = 30.76 Feet. (below reference mark)	
		32						
		33						
		34						
		35						
		36						
		37						

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-15 Sheet 1 of 2

Project No.: Date: 08/13 & 16/03	Drilling Co. V&W Drilling Drill Model: CME-BK81HD & Mobile B-80
Client: The Customer Company	Drilling Method-Rotary Auger/Air Borehole Diameter 6-in
Location: Former Cheaper! #182	Finished Well Rim Elevation Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA	Borehole was completed as a monitoring well MW-15.
Logged by: GDL Property to east along Patterson Drive	Sample and cuttings log.

Water Level	16.52			
Time	14:36			
Date	8/19/2003			

Field Soil Description (all contacts uncertain). ToC -0.29

Sampling Blowcounts	RECOVERY feet	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description	Well
								Well completed with 8-inch flush type cover.
		1						Neat Cement Grout
		2				ML	Olive yellow 2.5Y6/8fine to medium sandy silt.	
		3						
		4						
22		5					Base of fill.	
50/4-in		6					Dark yellowish brown 10YR 4/4 and (not mottled) very pale brown 10YR 8/4 weathered schistose phase rock. Fragments to sandy silt.	2-inch PVC casing and screen.
		7						
		8						
		9						
50/5-in		10					Same as above.	
		11				ML		
		12						
		13						
		14						
50/3-in		15						Bentonite Seal
		16						
		17						
		18					Third auger hole TD 18 total refusal within 150 square foot area. Borehole continued with rotary air hammer drilling.	
		19						
		20					Variably weathered schistose rock continues to different depths within the 150 square foot work area.	screen openings = 0.020 inch
		21						
		22						
		23					Second auger hole TD 22.5 total refusal.	
		24						
		25				H Rx	First auger hole TD 24.5 total refusal.	
		26					Light greenish gray 10GY 7/1 quartz and chlorite bearing schistose phase rock.	
		27						LONESTAR No. 3 Sand
		28						

BOREHOLE LITHOLOGIC LOG

Location: Former Cheaper! #182

130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-15 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description
		29					
		30				H Rx	Light greenish gray 10GY 7/1 quartz and chlorite bearing schistose phase rock.
		31					
		32					
		33					LONESTAR No. 3 Sand
		34					Fracture interval 34± feet. First Encountered Water at 34± Feet. ▽
		35				H Rx	Light greenish gray 10GY 7/1 quartz and chlorite bearing schistose phase rock.
		36					
		37					
		38					
		39				H Rx	Light greenish gray 10GY 7/1 quartz and chlorite bearing schistose phase rock.
		40					
		41					
		42					
		43					Fracture interval 43± feet. Total Well Depth = 43.23 Feet. (below reference mark)
		44				H Rx	Light greenish gray 10GY 7/1 quartz and chlorite bearing schistose phase rock.
		45			Total Depth 45 (below grade)		
		46					
		47					
		48					
		49					
		50					

screen openings = 0.020 inch

PLUG

A GROUND WATER CONSULTANCY

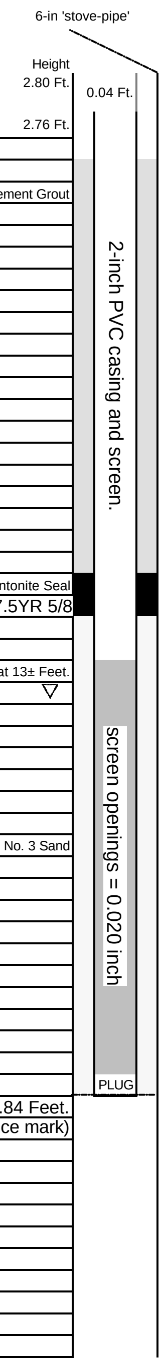
BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-16 Sheet 1 of 2

Project No.:	Date: 09/25/03	Drilling Co. V&W Drilling	Drill Model CME 850
Client: The Customer Company		Drilling Method-Rotary Auger	Borehole Diameter 6-in
Location: Former Cheaper! #182		Finished Well Rim Elevation	Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA		Borehole was completed as a monitoring well MW-16.	
Logged by: GDL		Sample and cuttings log.	

Water Level	14.01		
Time	15:53		
Date	9/25/2003		

Sampling Blowcounts	RECOVERY feet	Depth test	USCS Soil Symbol	Field Soil Description (all contacts uncertain).
		1		Very pale brown 10YR 8/4 granuley silt.
		2	ML	
		3		
		4		Transitional change from 'soil' to weathered rock.
20,26,35		5		
		6		Yellow 10YR 7/6 and light yellowish brown 10YR 6/4 weathered rock. Fragments to sandy silt. Strong brown 7.5YR 5/8 along crushed fracture traces.
		7	wRx	
		8		
		9		
38, 38/2-In.		10		Yellow 10YR 7/6 and light yellowish brown 10YR 6/4 weathered rock. Fragments to sandy silt. Strong brown 7.5YR 5/8 along crushed fracture traces.
		11		
		12	wRx	First Encountered Water at 13± Feet.
		13		
		14		
45/2-In.		15		Decreasing weathering, variably hard weathered rock.
		16		
		17		
		18		
		19		
45/3-In.		20		Pale yellow 5Y 6/3 weathered schist.
		21	wRx	
		22		Hard rock. No further advancement.
		23	Total Depth 22.3 (below grade)	
		24		
		25		
		26		
		27		
		28		



H2OGEOL A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

Location: Former Cheaper! #182

130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-18 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description	
		29				Rx		LONESTAR No. 2/12 Sand
		30			Total Depth 30 (below grade)		Very hard slate. Total Well Depth = 31.96 Feet. (below reference mark)	PLUG
		31						
		32						
		33						
		34						
		35						
		36						
		37						
		38						
		39						
		40						
		41						
		42						
		43						
		44						
		45						
		46						
		47						
		48						
		49						
		50						

BOREHOLE LITHOLOGIC LOG

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE No. MW-17 Sheet 1 of 2

Project No.: Date: 09/23/03	Drilling Co. V&W Drilling Drill Model CME 850
Client: The Customer Company	Drilling Method-Rotary Auger Borehole Diameter 6-in
Location: Former Cheaper! #182	Finished Well Rim Elevation Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA	Borehole was completed as a monitoring well MW-17.
Logged by: GDL	Sample and cuttings log.

Water Level	12.55		
Time	15:52		
Date	9/25/2003		

6-in 'stove-pipe'
Height 2.80 Ft.
0.18 Ft.
2.62 Ft.

Sampling Blowcounts	RECOVERY feet	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description (all contacts uncertain).
		1					Yellowish brown 10YR 5/8 sandy granuley silt. Neat Cement Grout
		2				ML	
		3					
		4				?	
5,8,15		5					White 5Y 8/2 sandy granuley clayey silt.
		6					
		7					
		8				ML	Bentonite Seal
		9					
28, 30/3-In.		10					White 5Y 8/2 sandy granuley clayey silt. Distinct roac fragments.
		11					
		12				wRx	Transitional change from 'soil' to weathered rock. LONESTAR No. 3 Sand
		13					
		14					First Encountered Water at 14.5± Feet. ▽
21,17,32		15					Pale yellow 5Y 8/4 weathered rock fragmented to slightly clayey sandy granular silt. Hint of moisture.
		16				wRx	
		17					
		18					
		19					Variably hard weathered rock.
50/6-In.		20				hwRx	Hard weathered slate
		21					
		22					
		23					Increasing hardness.
		24					
30/3-In.		25					
		26				hwRx	Hard weathered rock. No recovery.
		27					Water bearing fracture. No water accumulation in borehole beneath. Appears "dry".
		28					

2-inch PVC casing and screen.

screen openings = 0.020 inch

H2OGEOL A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

Location: Former Cheaper! #182

130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-17

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description
							LONESTAR No. 3 Sand
		29					
30/3-In.		30				wRx	Hard weathered rock. No recovery.
		31					
		32					
		33					
		34					
30/2-In.		35				wRx	Hard weathered rock. No recovery.
		36					
		37					
		38					
		39					
		40			Total Depth 39.5 (below grade)		Hard rock. No further advancement. Total Well Depth = 42.08 Feet. (below reference mark)
		41					
		42					
		43					
		44					
		45					
		46					
		47					
		48					
		49					
		50					

screen openings = 0.020 inch

PLUG

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-18 Sheet 1 of 2

Project No.: Date: 09/23/03	Drilling Co. V&W Drilling Drill Model CME 850
Client: The Customer Company	Drilling Method-Rotary Auger Borehole Diameter 6-in
Location: Former Cheaper! #182	Finished Well Rim Elevation Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA	Borehole was completed as a monitoring well MW-18.
Logged by: GDL	Sample and cuttings log.

Water Level	10.00			
Time	15:50			
Date	9/25/2003			

6-in 'stove-pipe'
Height 2.80 Ft. 0.34 Ft. 2.46 Ft.

Sampling Blowcounts	RECOVERY feet	Depth test	USCS Soil Symbol	Field Soil Description (all contacts uncertain).
				0.25 Sedge sod.
		1		Very pale brown 10YR 8/4 granuley silt. Neat Cement Grout
		2	ML	
		3		
		4		Transitional change from 'soil' to weathered rock.
22, 50/6-In.		5		
		6		Pale yellow 5Y 7/3 hard weathered rock that fragments to granular silt.
		7	wRx	
		8		Bentonite Seal
		9		
20, 25, 33		10		Gray 5G 6/1 weathered slate banded with pale yellow 5Y 6/3 weathered schist. Fragments to granular, pebbly silt.
		11		
		12	wRx	LONESTAR No. 3 Sand
		13		
		14		First Encountered Water at 14.5± Feet.
				Water bearing fracture. ▽
50/3-In.		15		No recovery.
		16	wRx	
		17		
		18	HRx	Hard rock.
		19		Variably hard weathered rock.
50/3-In.		20		Gray 5G 6/1 weathered slate and pale yellow 5Y 6/3 weathered schist. Fragments to granular coarse sand.
		21	wRx	
		22		
		23		
50/1-In.		24	Total Depth 24 (below grade)	Hard rock. No further advancement. Total Well Depth = 26.60 Feet. (below reference mark)
		25		
		26		
		27		
		28		

2-inch PVC casing and screen.

screen openings = 0.020 inch

PLUG

H2OGEOL A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

Location: Former Cheaper! #182

130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-18 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description	
		29				Rx	LONESTAR No. 2/12 Sand	
		30			Total Depth 30 (below grade)		Very hard slate. Total Well Depth = 31.96 Feet. (below reference mark)	PLUG
		31						
		32						
		33						
		34						
		35						
		36						
		37						
		38						
		39						
		40						
		41						
		42						
		43						
		44						
		45						
		46						
		47						
		48						
		49						
		50						

BOREHOLE LITHOLOGIC LOG

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE No. MW-19 Sheet 1 of 2

Project No.: Date: 10/04/02	Drilling Co. V&W Drilling / Drill Model CME 75
Client: The Customer Company	Drilling Method-Rotary Auger / Borehole Diameter 8-in
Location: Former Cheaper! #182	Finished Well Rim Elevation / Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA	Borehole was completed as a monitoring well MW-19.
Logged by: GDL	Sample and cuttings log.

Water Level	22.50		
Time	10:52		
Date	10/4/2002		

8-in 'stove-pipe'
Height 2.4 Ft.

Sampling Blowcounts	RECOVERY feet	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description (all contacts uncertain).	Well construction
							0.2 Sedge sod.	
		1					Yellow 10YR 7/6 clayey silt. No odor.	Neat Cement Grout
		2						
		3						
		4						
		5				ML		
		6					Yellowish brown 10YR 5/6 pebbly (angular) clayey silt.	
		7						
		8						
		9					Yellowish brown 10YR 5/6 clayey silt with 20±% rock fragments.	
		10						
		11				Rx		
		12						Bentonite Seal
		13					Dark yellowish brown 10YR 4/6 weathered schistose rock	
		14				ML	ground to rocky clayey silt.	LONESTAR No. 2/12 Sand
		15						
		16					Very hard.	
		17					Dark gray 10YR 4/1 softer weathered slate.	
		18				Rx		
		19						
		20					Hard slate.	First Encountered Water at 21± Feet.
		21						▽
		22						
		23						
		24						
		25				Rx	Dark gray 10YR 4/1 weathered slate.	
		26						
		27					Softer interval, possible fracture.	
		28						

H2OGEOL A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

Location: Former Cheaper! #182

130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-19 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description	
		29				Rx	LONESTAR No. 2/12 Sand	
		30			Total Depth 30 (below grade)		Very hard slate. Total Well Depth = 31.96 Feet. (below reference mark)	PLUG
		31						
		32						
		33						
		34						
		35						
		36						
		37						
		38						
		39						
		40						
		41						
		42						
		43						
		44						
		45						
		46						
		47						
		48						
		49						
		50						

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-20 Sheet 1 of 2

Project No.:	Date: 02/11/02	Drilling Co. V&W Drilling	Drill Model Mobile B-61
Client: The Customer Company		Drilling Method-Rotary Auger	Borehole Diameter 9.25-in
Location: Former Cheaper! #182		Finished Well Rim Elevation	Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA		Borehole was completed as a monitoring well MW-20.	
Logged by: GDL		Sample and cuttings log.	

Water Level	6.35			
Time	10:51			
Date	3/8/2002			

Field Soil Description (all contacts uncertain).

Sampling Blowcounts	RECOVERY feet	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description	Well
								8-in street box
		1				GC	Landscape fill. Clayey gravel/gravelly clay.	
								Neat Cement Grout
		2						
		3						
		4						
2		5					Yellowish brown 10YR 5/4 clayey silt. No odor.	
4		6						
6								
		7				ML		
		8						
		9				?		
50/5-inch		10					Very pale brown 10YR 8/4 variably weathered schistose rock. No odor.	
		11						
		12						
		13						
		14						
		15					Very pale brown 10YR 8/4 variably weathered schistose rock.	
50/6-inch		16					No odor.	
		17						
		18						
		19						
		20					Very pale brown 10YR 8/4 variably weathered schistose rock.	
30							No odor.	
50/3-inch		21						
		22						Bentonite Seal
		23					Increasing resistence to drilling.	
		24						
50/4-inch		25					Very pale brown 10YR 8/4 variably weathered schistose rock.	
		26					No odor.	
		27						LONESTAR No. 3 Sand
		28						

2-inch PVC casing and screen.

H₂OGEOL A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

Location: Former Cheaper! #182

130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-20 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description
		29					
		30					Very pale brown 10YR 8/4 variably weathered schistose rock.
50/4-inch							No odor.
		31					
		32					
		33					LONESTAR No. 3 Sand
		34					
		35					
10							Very pale brown 10YR 8/4 variably weathered schistose rock.
50/6-inch		36					No odor.
							First Encountered Water at 36.2± Feet. ▽
		37					
		38					
		39					Very pale brown 10YR 8/4 variably weathered schistose rock.
		40					No odor.
50/5-inch							Total Well Depth = 39.60 Feet.
		41			Total Depth 40.5 (below grade)		(below reference mark)
		42					
		43					
		44					
		45					
		46					
		47					
		48					
		49					
		50					

screen openings = 0.020 inch

PLUG

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-21 Sheet 1 of 2

Project No.: Date: 08/24/04	Drilling Co. V&W Drilling Drill Model CME BK81HD
Client: The Customer Company	Drilling Method-Rotary Auger Borehole Diameter 8-in
Location: Across Hwy 49 from Former Cheaper! #182	Finished Well Rim Elevation Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA	Borehole was completed as a monitoring well MW-21.
Logged by: GDL	Sample and cuttings log.

Water Level	16.17		
Time	15:43		
Date	08/27/04		

8-in 'stove-pipe'
Height 1.19 Ft.

Depth	USCS Soil Symbol	Field Soil Description (all contacts uncertain).	Well construction
0		0.5 Loose soil & leaf litter..	
1	ML	Reddish yellow 7.5YR 6/6 slightly (angular) gravelly silt.	
3			Neat Cement Grout
4		Yellowish red 5YR 5/8 sandy silt.	
5	ML	Yellowish brown 10YR 5/4 sandy clayey silt.	
10		Yellowish brown 10YR 5/4 sandy clayey silt.	
12			Bentonite Seal
14			LONESTAR No. 3 Sand
17		Light yellowish brown 10YR 6/4 sandy clayey silt.	
18	Rx	Very hard schistose rock.	
19	ML	Light yellowish brown 10YR 6/4 sandy clayey silt.	
21	Rx	Very hard schistose rock.	
22	wRx/ Rx	Variable hardness schistose phase weathered rock.	First Encountered Water at 23± Feet.
24	wRx	Light olive brown 2.5Y 5/6 sandy clayey silt (auger fragmentation) with schist fragments.	
26	wRx	Yellowish red 5YR 5/8 slightly weathered slate (ground).	
28			

Column headings: Sampling Blowcounts; RECOVERY feet; Depth test; Sample; Soil Sample Number; Graphic Soil Symbol; USCS Soil Symbol

H$_2$OGEOL A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

Location: Former Cheaper! #182

130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-21 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description	
							Increasing hardness.	
		29					LONESTAR No. 3 Sand	
		30				wRx	Yellowish red 5YR 5/8 slightly weathered slate ground to clayey silt.	
		31						
		32						
		33						Plug
		34			Total Depth 33.5 (below grade)		Total Well Depth = 34.72 Feet. (below reference mark)	
		35						
		36						
		37						
		38						
		39						
		40						
		41						
		42						
		43						
		44						
		45						
		46						
		47						
		48						
		49						
		50						

H2OGEOL A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-22 Sheet 1 of 2

Project No.: Date: 08/24/04	Drilling Co. V&W Drilling Drill Model CME BK81HD
Client: The Customer Company	Drilling Method-Rotary Auger Borehole Diameter 8-in
Location: Former Cheaper! #182	Finished Well Rim Elevation Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA	Borehole was completed as a monitoring well MW-22.
Logged by: GDL	Sample and cuttings log.

Water Level	18.54			
Time	15:39			
Date	08/27/04			

Columns: Sampling Blowcounts | RECOVERY feet | Depth test | Sample | Soil Sample Number | Graphic Soil Symbol | USCS Soil Symbol

Field Soil Description (all contacts uncertain). ToC = -0.41

Depth (ft)	USCS Soil Symbol	Field Soil Description	Well construction
0–0.75		0.75 Loose soil & leaf litter..	8-in street box
1–3	ML	Strong brown 7.5YR 5/8 very rocky (angular) sandy gravelly silt. Transitional loss of angular rock fragments.	Neat Cement Grout
3–9	ML	Yellowish brown 10YR 6/4 clayey silt. No odor.	
9–18	ML	Light yellowish brown 10YR 6/5 sandy silt. Yellow 10YR 8/6 sandy silt.	Bentonite Seal
18–20	wRx	Weathered yellow slate.	
20–23	ML	Very pale brown 10YR 7/4 sandy silt.	LONESTAR No. 3 Sand
23–28	Rx	Hard gray slate. Probable fracture at 27 +/- feet. Softer gray slate below first encountered water, possibly due to drill bit lubrication.	First Encountered Water at 27± Feet.

2-inch PVC casing and screen.

Depth: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

H2OGEOL A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

Location: Former Cheaper! #182

130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-22 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description	
		29						screen openings = 0.020 inch
		30				Rx	Gray slate.	
		31						
		32						
		33					LONESTAR No. 3 Sand	
		34						
		35				Rx	Gray slate.	
		36						
		37						
		38						
		39				Rx	Gray slate.	
		40					Total Well Depth = 40.85 Feet. (below reference mark)	PLUG
		41			Total Depth 40.5 (below grade)			
		42						
		43						
		44						
		45						
		46						
		47						
		48						
		49						
		50						

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-23 Sheet 1 of 2

Project No.: Date: 02/18/02	Drilling Co. V&W Drilling Drill Model Mobile B-61
Client: The Customer Company	Drilling Method-Rotary Auger Borehole Diameter 9.25-in
Location: Across Patterson from former Cheaper! #182	Finished Well Rim Elevation Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA	Borehole was completed as a monitoring well MW-23.
Logged by: GDL	Sample and cuttings log.

Water Level	7.84			
Time	10:22			
Date	3/8/2002			

Field Soil Description (all contacts uncertain).

Sampling Blowcounts	RECOVERY feet	Depth test	Sample	Soil Sample Number	USCS Soil Symbol	Field Soil Description	Well construction
							8-in street box
		1			ML	Strong brown 7.5 TR 5/8 sandy silt. ▽	
						No odor.	First Encountered Water at 0.8 Feet.
		2					Perched water in surfacial silts.
		3					Neat Cement Grout
		4					
		5					
		6					
		7					
		8					
		9					
1		10				Strong brown 7.5 TR 5/8 clayey silt.	
3		11				No odor.	
12							Bentonite Seal
		12					
7						Strong brown 7.5 TR 5/8 clayey silt.	
16		13				No odor.	
20							
		14			ML	Dark reddish brown 3YR 3/3 gravelly sandy clayey silt.	
						No odor.	
		15					
35						Gray to dark gray N4-N5/ variably weathered to unweathered slate.	
50/2-inch		16				No odor.	
		17					
		18					
		19					
		20				Gray to dark gray N4-N5/ variably weathered to unweathered slate.	
		21				No odor.	
		22					LONESTAR No. 3 Sand
		23					
		24					
		25				Gray to dark gray N4-N5/ variably weathered to unweathered slate.	
		26				No odor.	
		27					
		28					

2-inch PVC casing and screen.

screen openings = 0.020 inch

H2OGEOL A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

Location: South end lot across Patterson from former Cheaper! #182

130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-23 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description	
		29						
		30					Gray to dark gray N4-N5/ variably weathered to unweathered slate. No odor.	PLUG
		31			Total Depth 31.0 (below grade)		Total Well Depth = 30.51 Feet. (below reference mark)	
		32						
		33						
		34						
		35						
		36						
		37						

A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-24 Sheet 1 of 2

Project No.: Date: 10/04/02	Drilling Co. V&W Drilling Drill Model CME 75
Client: The Customer Company	Drilling Method-Rotary Auger Borehole Diameter 8-in
Location: Lake Oaks Mobile Estates across Patterson	Finished Well Rim Elevation Datum: ground surface
from 130 Pleasant Valley Road, Diamond Spgs, CA	Borehole was completed as a monitoring well MW-24.
Logged by: GDL	Sample and cuttings log.

Water Level				
Time				
Date				

Depth test	USCS Soil Symbol	Field Soil Description (all contacts uncertain).	Well construction
0		0.3 Ft. sod. 0.5 Ft. DG fill	8-in street box
1–7	CL	Strong brown 7.5 YR 4/6 sandy silty clay.	Neat Cement Grout
7		Color transition. Increasding silt fraction.	
7–17	ML	Reddish yellow 7.5 YR 7/6 sandy clayey silt.	Bentonite Seal (approx. 13–15)
17–19.5	CL	Dark yellowish brown 10YR 4/4 sandy very silty clay.	
19.5–20.5	ML	Dark yellowish brown 10YR 4/4 sandy very clayay silt. Ground weathered slate.	
20.5–21	Rx	Hard slate.	
21–24.5	ML	Dark yellowish brown 10YR 4/2 sandy very clayay silt. Ground weathered slate.	LONESTAR No. 2/12 Sand
24.5–28	Rx	Dark grayish brown 10YR 4/2 variably weathered to unweathered slate.	

2-inch PVC casing and screen.

screen openings = 0.020 inch

H2OGEOL A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

Location:
0

BOREHOLE No. MW-24 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description
		29					
		30				Rx	Gray to dark gray N4-N5/ variably weathered to unweathered slate. No odor.
		31					
		32					First Encountered Water at 32-33 Feet. Softer interval, possible fracture.
		33					
		34					LONESTAR No. 2/12 Sand
		35					Gray slate.
		36				Rx	
		37					
		38					
		39					Probable open fracture. During construction took 1.5 Cu. Ft. sand.
		40			Total Depth 40.0 (below grade)		Total Well Depth = 39.42 Feet. (below reference mark)
		41					
		42					
		43					
		44					
		45					
		46					
		47					
		48					
		49					
		50					

screen openings = 0.020 inch

PLUG

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-25 Sheet 1 of 2

Project No.: Date: 11/13/02	Drilling Co. V&W Drilling Drill Model CME 850
Client: The Customer Company	Drilling Method-Rotary Auger Borehole Diameter 8.5-in
Location: Lake Oaks Mobile Estates across Patterson	Finished Well Rim Elevation Datum: ground surface
from 130 Pleasant Valley Road, Diamond Spgs, CA	Borehole was completed as a monitoring well MW-25.
Logged by: GDL	Sample and cuttings log.

Water Level	23.50	13.40	10.2
Time	11:46	12:01	12:15
Date	11/13/02	11/13/02	11/13/02

Depth test	USCS Soil Symbol	Field Soil Description (all contacts uncertain).
0		0.4 Trail gravel. 8-in street box
1–3	CL	Strong brown 7.5 YR 3/4 gravelly silty clay.
3–7	ML	Neat Cement Grout First Encountered Water at 5 Feet. Dark yellowish brown 10YR 4/4 granuley very clayey silt. ▽ Perched soil water. Dry by 10 Ft.
7–10	ML	Dark brown 10YR 4/3 sandy very clayey silt. Above 10 feet is possibly fill.
10–18	Rx	Harder. Entered weathered slate. Bentonite Seal Increasing hardness Weathered slate, breaks to fragments.
18–21	CL	Olive brown 2.5Y 4/4 sandy silty clay. Throughly weathered stratum or weatherd dry fracture zone. Increasing fragmentation size.
21–23	ML	LONESTAR No. 3 Sand Olive brown 2.5Y 4/4 sandy clayey silt fragments dominate. Ground weathered slate.
23–28	Rx	Increasing hardness. Very hard gray slate.

Column headings: Sampling Blowcounts | RECOVERY feet | Depth test | Sample | Soil Sample Number | Graphic Soil Symbol | USCS Soil Symbol

Depth scale: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

2-inch PVC casing and screen.

screen openings = 0.020 inch

BOREHOLE LITHOLOGIC LOG

Location:

0

BOREHOLE No. MW-25 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description
						Rx	Water bearing fracture. Water level rises rapidly.
		29					Second Encountered Water at 29 Feet.
							Very hard gray slate. Total Well Depth = 29.49 Feet.
		30			Total Depth 29.5 (below grade)		(below reference mark)
		31					
		32					
		33					
		34					
		35					
		36					
		37					
		38					
		39					
		40					
		41					
		42					
		43					
		44					
		45					
		46					
		47					
		48					
		49					
		50					

PLUG

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-26 Sheet 1 of 1

Project No.: Date: 11/13/02
Client: The Customer Company
Location: Lake Oaks Mobile Estates across Patterson from 130 Pleasant Valley Road, Diamond Spgs, CA
Logged by: GDL

Drilling Co. V&W Drilling Drill Model CME 850
Drilling Method-Rotary Auger Borehole Diameter 8.5-in
Finished Well Rim Elevation Datum: ground surface
Borehole was completed as a monitoring well MW-26.
Sample and cuttings log.

Water Level	15.40			
Time	15:07			
Date	11/13/02			

Depth test	USCS Soil Symbol	Field Soil Description (all contacts uncertain).	Well construction
0		0.4 Trail gravel.	8-in street box
2	CL	Strong brown 7.5 YR 3/4 gravelly silty clay.	Neat Cement Grout
4			First Encountered Water at 4 Feet.
5	ML	Dark yellowish brown 10YR 4/4 sandy very clayey silt.	
9	Rx	Harder. Entered weathered slate.	Bentonite Seal
16		Very hard pale yellow 2.5Y 7/4 slate.	
17	Rx	Very hard schistose rock.	
17		Softer slate.	
18		Possible fracture.	
20	Rx	Hard pale yellow slate.	
22			LONESTAR No. 3 Sand
26	Rx	Very hard pale yellow slate.	
27			Total Well Depth = 27.35 Feet. (below reference mark)
28	Total Depth 27.5 (below grade)	Bit refusal at 27.5 feet.	PLUG

2-inch PVC casing and screen.

screen openings = 0.020 inch

Columns: Sampling Blowcounts | RECOVERY feet | Depth test | Sample | Soil Sample Number | Graphic Soil Symbol | USCS Soil Symbol

H2OGEOL A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

Location:

0

BOREHOLE No. ____________ Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description
						Rx	Water bearing fracture. Water level rises rapidly. ∇
		29					Second Encountered Water at 29 Feet.
							Very hard gray slate. Total Well Depth = 29.49 Feet.
		30			Total Depth 29.5 (below grade)		(below reference mark)
		31					
		32					
		33					
		34					
		35					
		36					
		37					
		38					
		39					
		40					
		41					
		42					
		43					
		44					
		45					
		46					
		47					
		48					
		49					
		50					

PLUG

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-27 Sheet 1 of 2

Project No.: Date: 11/15/02	Drilling Co. V&W Drilling Drill Model CME 850
Client: The Customer Company	Drilling Method-Rotary Auger Borehole Diameter 8.5-in
Location: Lake Oaks Mobile Estates across Patterson	Finished Well Rim Elevation Datum: ground surface
from 130 Pleasant Valley Road, Diamond Spgs, CA	Borehole was completed as a monitoring well MW-27.
Logged by: GDL	Sample and cuttings log.

Water Level	20.20			
Time	10:10			
Date	11/15/02			

Depth test	USCS Soil Symbol	Field Soil Description (all contacts uncertain).
0		0.15 sod. (8-in street box)
2	CL	Strong brown 7.5 YR 3/4 gravelly silty clay.
3		Neat Cement Grout
5	ML	Dark yellowish brown 10YR 4/4 granuley very clayey silt.
6		First Encountered Water at 6 Feet. ▽
8		Dark brown 10YR 4/3 sandy very clayey silt.
9		Harder. Entered weathered slate.
10		Bentonite Seal
15	Rx	Very hard pale yellow 2.5Y 7/4 slate.
17		Soft at 17 feet.
18		Possible fracture zone.
22		LONESTAR No. 3 Sand
26	Rx	Hard light gray slate.
28		

2-inch PVC casing and screen.

screen openings = 0.020 inch

BOREHOLE LITHOLOGIC LOG

Location: Lake Oaks Mobile Estates across Patterson

from 130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-27 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description	
						Rx	Water bearing fracture. Water level rises rapidly.	
		29					Hard light gray slate. Total Well Depth = 29.37 Feet. (below reference mark)	PLUG
		30			Total Depth 29.7 (below grade)			
		31						
		32						
		33						
		34						
		35						
		36						
		37						
		38						
		39						
		40						
		41						
		42						
		43						
		44						
		45						
		46						
		47						
		48						
		49						
		50						

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-28 Sheet 1 of 2

Project No.: Date: 11/14/02	Drilling Co. V&W Drilling Drill Model CME 850
Client: The Customer Company	Drilling Method-Rotary Auger Borehole Diameter 8.5-in
Location: Lake Oaks Mobile Estates across Patterson	Finished Well Rim Elevation Datum: ground surface
from 130 Pleasant Valley Road, Diamond Spgs, CA	Borehole was completed as a monitoring well MW-28.
Logged by: GDL	Sample and cuttings log.

Water Level	16.00			
Time	11:52			
Date	11/14/02			

Depth	USCS Soil Symbol	Field Soil Description (all contacts uncertain).	Well notes
0		0.4 Trail gravel.	8-in street box
2	CL	Strong brown 7.5 YR 3/4 gravelly silty clay.	
3			Neat Cement Grout
5		Dark yellowish brown 10YR 4/4 granuley very clayey silt.	
6			First Encountered Water at 6.5 Feet. ▽
7	ML		Perched soil water. Dry by 9 Ft.
8		Dark yellowish brown 10YR 4/4 sandy very clayey silt.	
10			Second Encountered Water at 11 Feet.
11		Harder. Entered weathered slate.	▽ Perched soil water. Dry by 14 Ft.
12		Increasing hardness	
13	Rx	Chips of gray and black slate.	
16		Hard slate.	Bentonite Seal
16		Moist fracture zone.No apparent free water.	
17		Light yellowish brown 10YR 6/4 weathered slate chips.	
18		Increasing hardness	
19		Hard slate.	
20		Sfot.	
22		Increasing hardness	LONESTAR No. 3 Sand
23		Hard slate.	
26	Rx	Very hard gray slate.	
28			

Column headings: Sampling Blowcounts | RECOVERY feet | Depth test | Sample | Soil Sample Number | Graphic Soil Symbol | USCS Soil Symbol

2-inch PVC casing and screen.

screen openings = 0.020 inch

H2OGEOL A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

Location: Lake Oaks Mobile Estates across Patterson
from 130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-28 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description
		29				Rx	Hard light yellowish brown slate.
		30					Third Encountered Water at 30.5 Feet. Water bearing fracture 30.5 feet. Water level rose rapidly. ∇
		31					
		32				Rx	
		33					Very hard light yellowish brown slate.
		34			Total Depth 34.05 (below grade)		Total Well Depth = 33.89 Feet. (below reference mark) PLUG
		35					
		36					
		37					
		38					
		39					
		40					
		41					
		42					
		43					
		44					
		45					
		46					
		47					
		48					
		49					
		50					

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. MW-29 Sheet 1 of 2

Project No.: Date: 07/23/04	Drilling Co. V&W Drilling Drill Model CME BK81HD
Client: The Customer Company	Drilling Method-Rotary Auger Borehole Diameter 8-in
Location: Lake Oaks Mobile Estates across Patterson	Finished Well Rim Elevation Datum: ground surface
from 130 Pleasant Valley Road, Diamond Spgs, CA	Borehole was completed as a monitoring well MW-29.
Logged by: GDL	Sample and cuttings log.

Water Level	20.85			
Time	08:15			
Date	07/27/04			

Depth	USCS Soil Symbol	Field Soil Description (all contacts uncertain).	Well construction (ToC = -0.29)
		0.2 Ft. Asphalt	8-in street box
	ML	Yellowish brown 10YR 5/8 rounded pebble (to 1.75-inch) coarse sandy silt.	
1–2	ML	Yellowish brown 10YR 5/8 coarse sandy silt.	
3			Neat Cement Grout
9	ML	Dark yellowish brown 10YR 4/6 sandy silt (weathered rock).	
15		hardening	
17			Bentonite Seal
19	ML	Light yellowish brown 10YR 6/4 clayey silt with scattered slate rock fragments.	
20	Rx	Hard slate.	
21–22			LONESTAR No. 2/12 Sand
22	ML	Light yellowish brown 10YR 6/4 clayey silt with scattered slate rock fragments.	
23.5	Rx	Hard slate.	
24.5	Rx	Ground weathered slate.	
26	Rx	Light brownish gray 10YR 6/2 ground soft slate.	
28			

2-inch PVC casing and screen.

screen openings = 0.020 inch

Column headings: Sampling Blowcounts; RECOVERY feet; Depth test; Sample; Soil Sample Number; Graphic Soil Symbol; USCS Soil Symbol

H2OGEOL A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

Location: Lake Oaks Mobile Estates across Patterson
from 130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. MW-29 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description
		29					Hard slate.
		30				Rx	Gray to dark gray N4-N5/ ground soft slate.
		31					Hard slate.
		32				Rx	
		33					
		34					Hard slate. LONESTAR No. 2/12 Sand
		35					First Encountered Water at 35.5 Feet.
							Dark gray slate. ▽
		36				Rx	
		37					
		38					
		39					Black slate
		40					
		41					
		42					
		43					
		44					
		45				Rx	
		46					
		47					
		48					
		49					
		50			Total Depth 50.0 (below grade)		Total Well Depth = 49.43 Feet. (below reference mark)

screen openings = 0.020 inch

PLUG

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. EW-1 Sheet 1 of 2

Project No.: Date: 12/03/01	Drilling Co. V&W Drilling Drill Model BK81
Client: The Customer Company	Drilling Method-Rotary Auger Borehole Diameter 15-in
Location: Former Cheaper! #182	Finished Well Rim Elevation 1742.94 Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA	Borehole was completed as a monitoring well EW-1.
Logged by: GDL	Sample and cuttings log.

Water Level	12.98			
Time	9:57			
Date	12/9/2001			

Field Soil Description (all contacts uncertain).

Depth (feet)	USCS Soil Symbol	Field Soil Description	Well Construction
0–1		Full depth - solid stem auger drilling of 5.5 inch pilot hole, then reamed to 15 inch	24-in street box; Neat Cement Grout
4–5	ML/SM	Yellow 10YR 8/8 pebbbly silty clayey fine to coarse sand/ gravelly clayey silt. No odor.	
11	?		
15	SC	Dark yellowish brown 10YR 4/6 gravelly silty clayey sand. No odor.	
16			Bentonite Seal
22		Yellow 10YR 8/6 gravelly sitly clayey sand. No odor.	
24	?		
25			First Encountered Water at 25± Feet. ▽
26–27		White 8/1 (due to rock dust) variably weathered to unweathered schistose rock. Where not hard breaks into sandy clayay silt. No odor.	LONESTAR No. 2/12 Sand

Column headings: Sampling Blowcounts; RECOVERY feet; Depth test; Sample; Soil Sample Number; Graphic Soil Symbol; USCS Soil Symbol

Depth scale: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

8-inch PVC casing and screen.

screen openings = 0.020 inch

BOREHOLE LITHOLOGIC LOG

Location: Across Patterson from former Cheaper! #182
130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. EW-1 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description
		29					White 8/1 (due to rock dust) variably weathered to unweathered schistose rock. Where not hard breaks into sandy clayay silt. No odor.
		30					
		31					
		32					
		33					
		34					White 8/1 (due to rock dust) variably weathered to unweathered schistose rock. Where not hard breaks into sandy clayay silt. No odor.
		35					Total Well Depth = 35 Feet. (below reference mark)
		36			Total Depth 35.5 (below grade)		Auger refusal at 35.5 feet.
		37					

PLUG

H2OGEOL
A GROUND WATER CONSULTANCY

BOREHOLE LITHOLOGIC LOG

BOREHOLE No. EW-2 Sheet 1 of 2

Project No.:	Date: 06/22 & 07/08/04	Drilling Co. V&W Drilling	Drill Model CME BK81
Client: The Customer Company		Drilling Method-Rotary Auger	Borehole Diameter 12-in
Location: Former Cheaper! #182		Finished Well Rim Elevation	Datum: ground surface
130 Pleasant Valley Road, Diamond Spgs, CA		Borehole EW-2t was completed as extraction well EW-2.	
Logged by: GDL		Sample and cuttings log.	

Water Level	14.41	14.75		
Time	08:55	08:45		
Date	07/21/04	07/23/04		

Field Soil Description (all contacts uncertain).

Sampling Blowcounts	RECOVERY feet	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description	Well
		0–1				SC	Dark brown 10YR 3/3 clayey gravelly sand. No odor.	18-in street box; Neat Cement Grout
		5				ML	Dark yellowish brown 10YR 4/6 gravelly sandy silt. No odor.	
		9						Bentonite Seal
		10–11				? ML ?	Dark olive gray 5Y 3/2 gravelly sandy clayey silt. No odor.	
		12–13				ML	Dark olive gray 5Y 3/2 sandy clayey silt.	
		15–16				ML	Dark olive gray 5Y 3/2 sandy clayey silt. First Encountered Water at 16± Feet. ▽	
		20				wRx	Gray to dark gray N4-N5/ variably weathered to unweathered slate. No odor.	
		22						LONESTAR No. 3 Sand
		25				wRx	Gray to dark gray N4-N5/ variably weathered to unweathered slate. No odor.	
		28						

6-inch PVC casing and screen.

H2OGEOL A GROUND WATER CONSULTANCY

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130 Pleasant Valley Road, Diamond Spgs, CA

BOREHOLE No. EW-2 Sheet 2 of 2

Sampling Blowcounts	PID/FID HNu/OVA reading	Depth test	Sample	Soil Sample Number	Graphic Soil Symbol	USCS Soil Symbol	Field Soil Description
		29					
		30				wRx	Gray to dark gray N4-N5/ variably weathered to unweathered slate. No odor.
		31					
		32					
		33				?	LONESTAR No. 3 Sand
		34					
		35				Rx	Gray to dark gray N4-N5/ unweathered slate. No odor.
		36					
		37					
		38					
		39					
		40				Rx	Gray to dark gray N4-N5/ unweathered slate. No odor.
		41					
		42					
		43					
		44					Very hard rock.
		45				Rx	Gray to dark gray N4-N5/ unweathered slate. No odor.
		46					
		47					
		48					
		49					
		50			Total Depth 50 Ft. (below grade)	Rx	Gray to dark gray N4-N5/ unweathered slate. No odor. Total Well Depth = 48.14 Feet. (below reference mark)

screen openings = 0.020 inch

PLUG