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January 30, 2008

Mr. Jerry Wickham
Alameda County Environmental Health
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

Subject: ***In Situ* Ozone Oxidation System Installation & Startup Report**
Omega Termite
807 75th Avenue
Oakland, California
AEI Project No. 262157

Dear Mr. Wickham:

AEI Consultants (AEI) is pleased to provide you with the recently completed *"In Situ Ozone Oxidation System Installation & Startup Report"* prepared for the above-referenced property. A single portable document format (PDF) of this report has been uploaded to the Alameda County Environmental Health file transfer program (ftp) site and the GeoTracker information system. A copy of this report has also been forwarded to Mr. Sunil Ramdass at the California Underground Storage Tank Cleanup Fund.

Should you have any questions or comments, or need any additional information, please feel free to contact me or Ricky Bradford at (925) 944-2899, ext. 148.

Sincerely,
AEI Consultants

Richard J. Bradford
Senior Staff Engineer
rbradford@aeiconsultants.com

RB/

Enclosure

cc: Mr. Sunil Ramdass, UST Cleanup Fund, 1001 I Street, Sacramento, CA 94224

January 30, 2008

IN SITU OZONE OXIDATION SYSTEM INSTALLATION AND STARTUP REPORT

807 75th Avenue
Oakland, California

AEI Project No. 262157
ACEH Case No. RO0000508

Prepared For

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1.0 INTRODUCTION

AEI Consultants (AEI) has prepared this *In Situ* Ozone Oxidation System Installation and Startup Report for the Alameda County Environmental Health Department (ACEH) on behalf of Omega Termite Control, Inc. (Omega) located at 807 75th Avenue in the City of Oakland, Alameda County, California (Figure 1). AEI has been retained by Omega to provide environmental engineering and consulting services for the investigation and mitigation of the release of fuel hydrocarbons from the former underground storage tanks (USTs) that impacted the soil and groundwater at the subject property. The ongoing investigation and mitigation of the release is being performed under the direction of the AECH Local Oversight Program (LOP). ACEH previously requested and authorized a scope of work to install two additional deeper-zone monitoring wells and an ozone sparging system as an interim mitigation of the fuel release. This report has been prepared to document the deeper-zone monitoring well installation and the installation and startup of an ozone sparging system. This report also summarizes and discusses operation and maintenance (O&M) data for the first eight (8) months of steady state operations (approximately June 2007 thru January 2008).

2.0 SITE DESCRIPTION & HISTORY

The site is located in an industrial area of the City of Oakland on the northern corner of the intersection of 75th Avenue and Snell Street, which is just east of San Leandro Street. The property is approximately 10,000 square feet in size and is currently developed with two buildings occupied by Omega Termite Control, Inc. The near surface water body is Arroyo Creek, which is located at the northern property boundary, approximately 75 feet north of well MW-6.

- On September 15, 1996, AEI removed three gasoline underground storage tanks (USTs) from the subject property. The tanks consisted of one 8,000-gallon UST, one 1,000-gallon UST, and one 500-gallon UST. Soil and groundwater samples collected during the tank removal activities indicated that a fuel release had occurred from the UST system. The excavation was not immediately backfilled and soil removed from the excavation was stockpiled on the northern portion of the property.
- In October 1997, soil and groundwater samples were collected from six soil borings (BH-1 through BH-6). Low to moderate concentrations of total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethyl benzene, and xylenes (BTEX), and methyl tert-butyl ether (MTBE) were detected in the soil and groundwater samples collected from theses temporary borings.
- In 1999 soil samples collected from the stockpiled soil contained non-detectable to low concentrations of TPH-g. Mr. Barney Chan of the ACEH approved the stockpiled soil for reuse in the excavation.
- In June 1999, four groundwater monitoring wells (MW-1 through MW-4), screened from approximately 5 to 20 feet bgs were installed by AEI. Low to elevated concentrations of

TPH-g and BTEX were detected in groundwater samples subsequently collected from these wells.

- In March 2000, under the direction of ACEH, the excavation was extended to 29 by 48 feet in size and to 8 feet deep at the east end and 11.5 at the west end. An additional 500-gallon UST was discovered at the eastern end of the excavation and was removed under the direction of Oakland Fire Services Agency (OFSA). This tank appeared to have been used for waste oil storage. Approximately 7,400 gallons of hydrocarbon-impacted groundwater was pumped from the excavation, treated on-site, and discharged to the sanitary sewer system under an EBMUD Groundwater Discharge Permit Soil was stockpiled on the northern portion of the property. Six additional soil samples were collected from the sidewalls and bottom of the excavation. The resulting excavation was backfilled with pea gravel to bridge the water table and the remainder of the excavation was filled with soil from the first excavation and imported fill. A 4-icnh PVC casing identified as TW-5 was installed in the backfill.

- On October 9 and 10, 2003, eight soil borings (SB-7 through SB-14) were advanced on and off-site along Snell Street and 75th Avenue. Borings SB-7 through SB-13 were advanced to depths ranging from 15 to 20 feet bgs to evaluate the lateral extent of soil and groundwater contamination in the first groundwater encountered (Shallow Zone) at the site. Boring SB-14 was advanced to a depth of 30 feet bgs to determine if the hydrocarbon release had impacted the second aquifer at the site. Borings SB-7, SB-9, SB-1, SB-11 SB-12, and SB-13 essentially defined the horizontal extent of the hydrocarbon plume in the groundwater to the west, south and east. A thin layer of clayey sand was in SB-14 at a depth of 20 feet bgs (Intermediate Zone) with hydrocarbon odor, but water samples could not be collected from the direct push boring. Permeable gravel (Deeper Zone) was encountered at a depth of approximately 29 feet bgs. Groundwater samples collected from this interval contained TPH-g and TPH-d at 2,300 µg/L and 72,000 µg/L, respectively, which indicated that the Deeper Zone had been significantly impacted by fuel hydrocarbons.

- A report summarizing the observations and results of the October 9 and 10, 2003 soil and groundwater investigation was submitted to Amir Gholami of ACEH on November 18, 2003 and re-submitted to Jerry Wickham, ACEH on September 23, 2005.

- On February 15 and February 16, 2006, AEI advanced five soil borings advanced to total depths ranging from 14 to 33 feet bgs and completed the borings as groundwater monitoring wells (MW-6 through MW-10). Well MW-6 was completed as a Shallow Zone well and wells MW-7 through MW-10 were completed as Deep Zone wells. Low to moderate concentrations TPH-g, TPH-d, TPH-mo were detected in the soil and groundwater samples collected from these borings. The observations and results are discussed further in AEI's "*Deeper Aquifer Soil & Groundwater Investigation Report",* dated April 28, 2006.

- On AEI submitted a work plan for the installation of two additional Deep Zone monitoring wells and ozone sparing system to provide *in situ* oxidation of fuel

hydrocarbons onsite and increase dissolved oxygen concentrations to enhance natural biodegradation.

- On December 18, 2006, AEI installed two Deep Zone monitoring wells (MW-11 and MW-12) each to a total depth of 35 feet bgs, screened from approximately 25 to 35 feet bgs. On January 2, 2007, low to moderate concentrations of TPH-g, TPH-d, and TPH-mo were detected in the first groundwater samples collected from wells.

3.0 GEOLOGY AND HYDROGEOLOGY

The site is located at an elevation approximately 11 feet above mean sea level (msl). The site is essentially flat; however, the general topography of the area slopes gently to the west. The surface sediments at the site are mapped as Holocene natural levee and basin deposits (Qhl and Qhb, OF 97-97, E.J. Helley and R.W. Graymer). The Natural Levee Deposits (Holocene) are described as "loose, moderately to well-sorted sandy or clayey silt grading to sandy or silty clay". The Basin Deposits (Holocene) are described as "very fine silty clay to clay deposits occupying flat-floored basins at the distal edge of alluvial fans adjacent to the bay mud (Qhbm)". The presence of gravels in several of the onsite soil borings indicates that stream channel deposits are also present.

Based on the soil borings advanced by AEI, the near surface sediments beneath the site can be divided into several water bearing zones which are separated by clay layers. Sediments immediately below the surface consist of black to gray brown to olive brown silty clay depths ranging from 7.5 to 10 feet bgs. No groundwater was encountered during drilling of this interval.

The surface clay is underlain by variable and somewhat discontinuous silty sand and clayey silt, which make up the Shallow Zone. The Shallow Zone extends from the base of the surface clay to depths ranging from 18 to 21 feet bgs. This zone has low to medium permeability. Groundwater is typically seen in the first permeable silt or sand encountered during drilling of this interval. Once encountered, groundwater level typically stabilizes at a depth of 5 feet bgs or less, indicating the zone is at least a semi-confined aquifer.

The Shallow Zone is underlain by several feet of moderately dry light olive brown to yellowish brown clay except in MW-7, which was drilled through the former tank hold. In MW-7, obviously contaminated and reduced dark greenish gray clay was encountered. At depths ranging from 18 ft (MW-9) to 21 feet (MW-8) bgs a second (intermediate) discontinuous water bearing zone (Intermediate Zone) is present. The Intermediate Zone consists of discontinuous gravel, clayey gravel, and silty sand, clayey sand, and clayey silt which are interbedded with clay layers. Permeability in the intermediate zone ranges from high (gravel) to poor (clayey silt). The intermediate zone is separated from the lower permeable zone by a layer of brown silty clay that ranges in thickness of 2 to 7 feet. A third water bearing zone (Deeper Zone) was encountered at a depth of approximately 27 to 28 feet bgs. The lower permeable zone is made up of clayey silt, clayey sand, clean sand and sandy gravel.

Historic water level measurements indicate a highly variable flow direction. Refer to Table 2 for more information on the historic groundwater flow direction and hydraulic gradient.

4.0 SITE CONCEPTUAL MODEL

Petroleum hydrocarbons were released into the soil and groundwater from USTs previously located on the site. Groundwater sample analytical data indicates that TPH-g, TPH-d, TPH-mo, and BTEX are present in both the Shallow Zone and Deep Zone groundwater beneath the site. The lateral impact to the shallow groundwater appears for the most part to be limited to the site. The predominant hydrocarbons present in the Shallow Zone are gasoline range hydrocarbons. High concentrations of hydrocarbons and light non-aqueous phase liquid (LNAPL) are also present in the Deep Zone in the areas of boring SB-14 and deeper well MW-9. The predominant hydrocarbons in the deeper zone are diesel range hydrocarbons. Adsorbed phase hydrocarbons subsist in the soil underlying the former tank hold and adjacent to the shallow and deeper zone aquifers.

Overall hydrocarbon concentrations have slowly declined in the Shallow Zone and Deep Zone wells with the exception of MW-2 where hydrocarbon concentrations were increasing prior to the installation and startup of the subject ozone sparging system. Refer to Appendix C for an illustration of the site conceptual model.

5.0 OZONE SPARGING SYSTEM & DESIGN

5.1 Ozone Sparging Technology

In situ ozone oxidation was selected to target dissolved and adsorbed phase petroleum hydrocarbon contaminants within the upper, intermediate, and lower aquifers, smear zone, and capillary fringe. Ozone (O_3) with an electrochemical potential of 2.07V is one of the most powerful oxidants available for *in situ* chemical oxidation. Petroleum hydrocarbons, including BTEX and MTBE, and numerous other organic compounds are amenable to treatment using ozone sparging technology. Ozone directly oxidizes gaseous, free, sorbed, and dissolved phase hydrocarbons converting them to harmless carbon dioxide and water. Ozone is very unstable and rapidly decomposes to diatomic oxygen (1.23V) following injection into groundwater. Powerful free radicals such as the hydroxyl (OH^-) radical (2.86V) are also generated during ozone oxidation. Ozone also reacts with natural organic matter to form aldehydes, organic acids, such as formic and acetic acid, aldo- and ketoacids, and other byproducts such as hydrogen peroxide (1.78V). *In situ* ozone oxidation involves the introduction of ozone blended with air into the subsurface using vertical or horizontal injection wells. Ozone can be applied to the vadose or saturated zone, but is most often injected 10 to 15 feet below the water table using sparge points (micro-porous diffusers) or short 2 to 3-foot sections of stainless steel slotted well screen. Ozone sparging into the saturated zone shares many similarities with air sparging which increases volatilization, supplies oxygen for aerobic

biodegradation, and may promote some degree of groundwater mixing (Johnson et al, 1998).

5.2 System Design & Specifications

The mass transport and transfer mechanisms for ozone sparging are analogous to air sparging, which has been extensively investigated by Ahlfeld *et al.*, 1993 and 1994; Hein *et al.*, 1997; Johnson, 1998; and Brooks *et al.*, 1999. Therefore, standard air sparging design practices and guidelines apply to ozone sparging. The design or effective treatment radius of influence (ROI) is used to determine the sparge well spacing and increases as the depth of the sparge point below the water table increases. The standard design approach recommend by Leeson, *et al*., 2002 is to space wells 15-feet apart and stems from the understanding of air distributions in nearly homogenous and highly-permeable soils. Other professionals recommend 10 feet of ROI for every 5 feet below the water table and some suggest a radius of influence of 12, 20, 30, and 65 feet for sparge points installed 5, 10, 20, and 50 feet below the water table, respectively (Kerfoot, 2006). AEI is currently operating a successful KVA C-sparge™ system in predominately low permeability clay and bay mud (Qhbm) soils at a site approximately 0.5 miles away. Based on AEI's experience at this site, a 30-foot well spacing was selected to be reasonable and not cost prohibitive. The sparge well locations and design ROI are shown on Figure 5.

Because ozone is unstable and highly reactive it cannot be stored or transported and is therefore produced onsite using a specially designed ozone sparging system. Ozone is generated by corona discharge at concentrations ranging from 4 to 10% by weight by passing a 90% pure oxygen source through two high voltage electrodes separated by a dielectric and discharge gap. This silent electrical discharge disassociates oxygen molecules to form ozone. Major system components include an ozone generator, oxygen concentrator, ozone compressor, air and boost compressors, ozone gas injection system, programmable logic controller (PLC), and various instrumentation and controls.

An H_2O Engineering, Inc. ozone sparge unit (Model No. OSU-20-52) was selected and installed as shown on the system layout plan (Figure 2). The ozone sparge is powered by a single phase 120V 30 Amp circuit from a small subpanel tied into the existing distribution panel.

Some of the OSU-20-52 specifications and features as stated by H_2O Engineering, Inc. are summarized below:

- 20 sparge point manifold with stainless steel solenoid valves and ½" Kynar® compression fittings
- PSA oxygen concentrator with 90% purity, pressure gage and flow meter
- Ozone generator output: 52 grams/hour (2.72 lbs/day) @ up to 6% by weight

- Individual sparge point and total system cycle time recorder
- Lag time between cycles adjustable from 0 -240 minutes
- Time control of individual sparge points from 0 – 99 minutes
- Adjustable flow rates from 0.6 to 3.8 cubic feet per minute (maximum)
- Maximum operating pressure of 50 psig and beak-through up to 100 psig
- Electrical requirements are 120VAC and 30FLA
- High pressure alarm shuts down individual sparge point
- Thermal protection and high temperature alarm (shutdown at 140°F)
- Internal ozone alarm adjustable from 0.1 to 1 ppm stops ozone generation while oxygen/air injection continues
- Built-in high flow cooling and exhaust fans w/ an additional 12-inch 2,000 cfm cooling fan installed inside the equipment shed

Additional information on the system components, process description, procedures, safety, troubleshooting, operations and maintenance (O&M), parts lists, and wiring diagrams, is provided in the H_2O Engineering, Inc. *"Ozone Sparge Unit – OSU20-52 User Guide"* and vendor product data sheets, which are not included in this report but are available upon request.

6.0 OZONE SPARGE POINT INSTALLATION

AEI installed eight (8) ozone sparge wells (OZ-1 through OZ-8) on December 18, 2007. Because the subject site is stratified with multiple zones of permeable sediments, seven (7) of the sparge wells (OZ-2 through OZ-8) were nested constructions of two sparge points completed at depths of approximately 15 and 35 feet below ground surface (bgs), respectively. OZ-1 was a single completion drilled to a depth of approximately 17 feet bgs. When drilling and installing the sandpack around OZ-6 the lead auger was lost and left in the borehole around the sparge point. On December 20, 2007, a second nested replacement sparge well (OZ-9) was installed adjacent to OZ-6 using a CME-75 running 8.25-inch hollow stem augers. Final sparge point placement depths were based on observations in the field by the supervising geologist Robert Flory, PG. Refer to the boring logs in Appendix B for the final well construction details and description of the soils encountered. The final ozone sparge well locations are shown on Figure 2. The ozone sparge wells were surveyed relative to each other and mean sea level by Morrow Surveying (LS No. 4650) on January 12, 2007 with accuracy appropriate for GeoTracker uploads. The survey included the property boundaries, existing monitoring wells, and locations of onsite structures.

6.1 Permits & Clearances

Well installation permits were obtained from the Alameda County Public Works Agency (ACPWA) prior to installing the nested ozone sparge wells. The borehole locations were identified with white marking paint and USA North was notified at least 3 days prior to drilling. In addition, each borehole was cleared with a hand auger to 5-feet bgs to check for underground utilities or other structures.

6.2 Health & Safety Meeting

Prior to drilling, a site safety meeting was held at a designated command post near the working area to review the Health and Safety Plan (HASP). Working hazards and emergency procedures were discussed at this meeting, including an explanation of the hazards of the known or suspected chemicals of interest as well as the location and route to the nearest hospital. All site personnel were in modified Level D personal protection equipment. The work area or "exclusion zone" was established with orange cones and/or barricades and warning tape to delineate the zone where hard hats and steel-toed shoes must be worn and where unauthorized personnel will not be allowed. A site safety plan conforming to Part 1910.120 (i) (2) of 29 CFR was available on site at all times during the project.

6.3 Sparge Point Installation

The nested ozone sparge wells were constructed of 1-inch schedule 80 PVC flush-threaded riser with Viton® o-rings and a 1.5-inch diameter by 18-inch long sparge point (micro-porous diffuser). The boreholes for the nested sparge points were drilled with a CME-85 drilling rig running 10.5-inch hollow-stem augers. The borings were first drilled to the bottom of the deeper water-bearing zone at approximately 35 feet bgs. Then two 1-inch risers were assembled with sparge points, coupled together with prefabricated 2-inch spacers and lowered down the hollow stem augers as a single unit. A sand pack consisting of #2/12 Monterey sand was placed around and extended 1-foot above the deeper sparge point. A bentonite seal was then placed and hydrated above the sand interval to the bottom of the shallower water-bearing zone at approximately 17 feet bgs. A sand pack was placed around and extended 1-foot above the shallower sparge point. A 2-foot bentonite seal was placed above the sand interval and finished to 24-inches below the surface with cement grout to facilitate the conduit and ozone tubing installation. The surface completion consisted of a 18-inch inside diameter by 21-inch outside diameter traffic-rated well box set in a 24-inch square by 4-inch thick concrete pad. Well pads located in site thoroughfares (OZ-1 and OZ-8) were reinforced with 3/8-inch rebar.

6.4 Soil Description, Sampling & Analyses

Borehole logging and sample collection was performed by Robert Flory, an AEI California-licensed Professional Geologist. The physical characteristics of the soils encountered (i.e., moisture content, odor, consistency, texture, color, etc.) were described on boring logs according to the Unified Soil Classification System. Using a modified California split spoon sampler at least one soil sample was collected and retained for possible analysis from each 5-feet drilled and at breaks in lithology as determined by at the supervising geologist. Samples were collected into 6-inch brass liners, sealed with Teflon tape and plastic end caps, labeled with unique identifiers, entered onto the chain of custody record, and placed in a cooler with a mixture of water and ice pending transportation to the laboratory. A duplicate sample was placed in a 1-quart zipper locking bag and the headspace was screened for the presence of organic vapors using a Mini-Rae Classic Plus photo-ionization detector. Samples were transported under proper chain of custody protocol to McCampbell Analytical, Inc. of Pittsburg, California (Department of Health Services Certification No. 1644) and were analyzed for TPH-g, TPH-d, and TPH-mo by Method SW8015Cm and BTEX & MTBE by Method SW8021B.

6.5 Equipment Decontamination, Waste Storage & Disposal

Drilling and sampling equipment, including split spoon sampling barrels, drilling rods, hollow stem augers were decontaminated between samples using a steam cleaner and/or a triple rinse system containing Alconox ™ or similar detergent. Soil cuttings were temporarily stored onsite in a 30 cubic yard soil bin outfitted with a 6-mil plastic liner. On March 1, 2007, approximately 12.3 tons of soil was transported and disposed under a non-hazardous waste manifest (Manifest No. 80784) at Keller Canyon Landfill located in Pittsburg, California. A copy of the non-hazardous waste manifest is included as Appendix F.

7.0 SYSTEM INSTALLATION & STARTUP

7.1 Electrical Subpanel Installation

Bay West Electric, Inc., a California C-10 licensed electrician, was contracted to permit and install a separate electrical circuit and sub-panel for the ozone sparge unit. A 120V 60Hz single-phase circuit was run from the main distribution panel to a predetermined location at the rear of the building. A weatherproof subpanel was installed on the outside of the building in a location shown on Figure 2. The ozone sparge unit was wired to a 30 amp circuit breaker installed inside the subpanel. A 2,000 cfm adjustable ventilation fan with high, medium, and low speeds was wired to a 15 amp circuit breaker installed inside the subpanel. This completed the electrical installation.

7.2 Trenching, Conduit & Tubing Installation

AEI trenched the site and installed the conveyance conduit and ozone tubing from January 29 through February 1, 2007. Since the ½-inch PerFluoroAlkoxy (PFA) ozone-resistant tubing costs anywhere from $4 to $8 per foot, the trench layout was designed to minimize the conduit runs and tubing costs. The extent of the trenching was marked with white paint and USA north was notified at least 72-hours prior to trenching. Trenching was conducted using a mini-excavator equipped with a 16 or 24-inch toothed bucket. The majority of the excavated soil was placed next to the trench for reuse. Excess soil was loaded into a 30 cubic yard soil bin lined with 6-mil plastic using a skid-steer loader. The soil bin was covered with more 6 mil plastic and the lid was closed and secured at the end of each day. The trenches were excavated to approximately 24 to 30-inches below grade (depending upon utility conflicts) and leveled on the bottom with a 2-inch layer of fine-grained backfill sand of PGE engineering specification. 2-inch schedule 40 PVC electrical-grade conduit was installed from the ozone sparge unit to the sparge wells. The immediate areas around the conduits were backfilled with fine sand to about 4-inches above the conduits at which point native soils were placed into the trench and compacted in 8 to 12-inch lifts. AEI technicians pulled the PFA tubing through the conduit in continuous runs using an electrical fish tape or nylon pull rope and a high-suction vacuum cleaner. The PFA tubing was then leak tested with the system in oxygen only mode. The PFA tubing was connected to sparge wells using well head connections constructed of schedule 80 PVC, 316 stainless steel, and Kynar® fittings on February 13, 2007. Refer to Figure 6 for the location of the conduit and tubing runs.

7.3 System Installation and Startup

The ozone sparge unit was installed and connected to the sparge well on February 13, 2007. The above-ground portion of the ozone sparge united consists of the ozone sparge unit and internal components and locking storage shed anchored to a 3-foot by 7-foot by 4-inch thick re-enforced concrete foundation located at the north corner of the main onsite building. To protect the system from physical damage, 4-inch crash posts constructed with steel pipe, concrete, and rebar were installed in front of the system. An AEI engineer and senior field technician conducted the shakedown testing, including functional performance checks of all system mechanical and electrical components, ozone leak testing, and programming. The ozone sparge unit was started in oxygen mode and re-checked for leaks at the manifold and wellheads. Leaks at the manifold and wellhead connections were repaired, retested, and passed inspection on February 27, 2007 and the ozone sparge unit was started up on March 8, 2007.

8.0 OPERATIONS & MAINTENANCE

Routine operations and maintenance (O&M) activities are performed on a monthly and quarterly basis as recommended by H_2O Engineering, Inc. and manufactures of the various system components. The following system operational parameters are measured and recorded on field data sheets during each O&M visit. Please refer to Appendix D for a summary of this data.

- Internal ozone, high pressure, and high temperature alarms
- Sparge point backpressure (temporary reprogramming sometimes required)
- Individual sparge point dwell and system lag times
- Individual sparge point and total system runtime
- Sparge points operating status as enable or disabled and ozone or oxygen
- Ozone flow rate and delivery pressure
- Ozone reactor pressure and oxygen flow rate
- O_2 moisture indicator status (blue, white or pink)
- Cooling fan status
- Pressure buildup at monitoring wells

9.0 VAPOR MITIGATION MEASURES

Hydrocarbon odors were noticed by the office manager the morning of March 9, 2007 and the main power to the system was turned off. AEI immediately mobilized to the site with a Mini-RAE Plus Classic (Model No. PGM-76IS) photo-ionization gas detector to check for hydrocarbon vapors inside the building and crawlspace. The smell of fuel hydrocarbon was most notably present in an unoccupied office currently used as storage and smaller storage closet located at the north rear corner of the building, closest to ozone sparge wells OZ-6 and OZ-7. Organic vapor concentrations up to 6 parts per million (ppm) were detected in this unoccupied space and the windows and doors were opened for ventilation. The highest hydrocarbon concentrations (up to 75 ppm) were detected in the crawlspace, three old unused floor vents, approximately 12 by 24-inches is size and directly open to the crawlspace (up to 30 ppm), and a small storage closet containing the main HVAC distribution duct (30 ppm). No organic vapors were identified inside the distribution ductwork of HVAC system.

The main supply duct is approximately 24 inches in diameter and is supplied by the air handling unit located in the attic. The HVAC distribution ducts are located in the crawlspace and supply air to the building through new floor vents. Elevated levels of organic vapors in the storage closet can be attributed to a 1 to 2-inch circular gap between the subfloor and main HVAC distribution duct and because the door was closed. This gap and the old unused floor vents were both major vapor migration pathways from the crawlspace to inside the building and were immediately sealed with plywood and caulking.

The crawlspace air was also checked for the presence of organic vapors. Concentrations of organic vapors ranging from 5 to 100 ppm were identified in the crawlspace at the north, north-west, and north-east sides of the building. No organic vapors were detected in the crawlspace at the west, south-west, south, and south-east sides of the building. The two (2) access doors to the crawlspace, one at the south-east and one at the northwest sides of the building were opened and allowed to ventilate overnight with the system off. The March 9, 2007 PID screening data is shown on Figure 7.

On March 12, 2007 AEI remobilized to the site to test for the presence organic vapors inside the building and crawlspace. No organic vapors were detected inside the building or crawlspace with the PID. Based on this, the crawlspace was deemed safe for entry and further inspection. A section of the metal building skirt was removed to access the crawlspace, since no access doors were provided at the rear of the building. An AEI engineer entered the crawlspace equipped with a full face air purifying respirator with an organic vapor cartridge in the event that unsafe concentrations of hydrocarbons were detected while in the crawlspace. No organic vapors were detected in the crawlspace with a PID, but a faint hydrocarbon odor was noticed. Further inspection of the crawlspace revealed the presence of highly fractured soils throughout the crawlspace with the largest fractures identified at the north end closest to the ozone sparge unit. The extent and depth of the vertical fractures were probed and gauged with 12-inch long by 3/8-inch diameter flat head screw driver. The entire length of the screwdriver was easily inserted into many of the larger fractures, which suggests that the fractures may extend into the capillary fringe and close to the shallow water table. Because the site is overlain by baserock and groundwater is very shallow (clays expand when saturated) these vertical fractures were not readily identified during routine site inspections or any pervious soil and groundwater investigations. However these ubiquitous vertical fractures are commonly observed in non plastic clays found in the Bay Area. The ozone sparge unit remained off while AEI contacted and discussed the circumstances with ACEH and developed mitigation plan.

9.2 Vapor Mitigation Technology

A mitigation approach using a combination of direct crawlspace ventilation (DCV) and sub-membrane depressurization (SMD) were tested and evaluated through a trial period of field testing between April and May 2007. DCV was not as effective at reducing concentrations of hydrocarbons in the crawlspace as SMD was. Since radon mitigation standards are currently being applied to vapor intrusion mitigation, the DCV and SMD were designed and installed according to EPA's recommended residential radon mitigation standards. This voluntary, consensus-based standard was developed and issued by the American Society for Testing and Materials (ASTM) International, and is identified as *"Standard Practice for Installing Radon Mitigation Systems in Existing Low-Rise Residential Building"* (ASTM E2121-03, 2003). A large study of active soil depressurization systems installed at 300 residential homes in Denver, Colorado to control indoor air concentrations of 1,1 DCE concluded that standard techniques used for radon mitigation are highly effective at remediating the indoor air pathway (Folkes

and Kurz, 2002).

9.2.1 Direct Crawl Space (DCS) Ventilation

Direct crawl space ventilation is generally a more cost-effective (less labor intensive) mitigation measure for crawlspaces than SMD, but has a much lower potential for success because of the effects of backdrafting, stagnation zones and incomplete vapor capture. DCV involves installing a network of slotted lateral pipes of 4-inch in diameter spaced from 5 to 15 feet apart and suspended from the floor joints about 1 foot above the crawlspace floor. The slotted laterals are connected to a common header which is connected to a centrifugal fan with an outlet pipe installed above the roof line of the building. Sample ports and differential pressure gages are installed on the common header to monitor vacuum and vapor concentrations. DCV was installed but not considered effective at reducing the concentration of hydrocarbons in the crawlspace to below the ppmv level and was modified for SMD.

9.2.2 Sub-Membrane Depressurization (SMD)

Sub-membrane depressurization (both active and passive) uses similar components but costs much more (more labor intensive) to install than DCV. However, SMD has a higher potential for success because a physical vapor barrier traps and prevents vapors from entering the crawlspace. Vapors are collected under the vapor barrier and driven to the surface by a 90 to 120 watt centrifugal fan in active SMD. Passive SMD relies on blocking vapors from entering the crawlspace, diffusion, and a pressure differential created by atmospheric conditions or a wind-driven turbine fan. Currently, the Bay Area Air Quality Management District (BAAQMD) requires permits for mechanically-driven centrifugal fan systems but not for passive systems installed with or without wind turbines. SMD also involves installing a network of slotted lateral pipes network rested on the crawlspace floor and covered with 6-mil plastic sheeting which is secured to the building footings and any internal support pillars. The installation costs for SMD can be 3 to 4 times the cost of DCV which is mainly attributed to the labor involved with carefully placing a liner over the slotted pipe network and sealing it to the foundation footings. The life expectancy of a typical 6-mil poly vapor barrier is about 10 years with proper care and maintenance. This will provide adequate protection beyond the expected remediation project timeframe. The SMD system is inspected monthly along with system O&M. Since DCV failed to meet the performance criteria of reducing the concentrations of hydrocarbons to below the ppmv level, a non-mechanical (passive) SMD system was installed with the option of upgrading to an active system, which would require a BAAQMD permit.

9.3 Indoor Air and Crawlspace Air Sampling

On April 10, 2007, background indoor air and crawlspace air samples were collected using a 6-Liter laboratory-evacuated Summa canister equipped with an 8-hour time-integrated flow controller. The ozone sparing system was shutdown one week prior to sampling. An AEI engineer set up the Summas canisters at approximately 7:30 am and returned seven hours later to collect the canisters once the vacuum remaining in each canister was approximately 5 inches of mercury. The Summas were transported under proper chain protocol to McCampbell Analytical, Inc. of Pittsburg, California (Department of Health Services Certification No. 1644). The Summas were analyzed for TPH-g by modified EPA TO-3 and for BTEX & MTBE by modified EPA Method TO-15.

The system was restarted on May 7, 2007. The building air, crawl space air, and the SMD system piping were monitored daily with a PID and/or FID for the first week after restarting the ozone sparge unit. Organic vapors were not detected by the PID in the building air or crawlspace air. Organic vapors were however detected in the ventilation pipes of the passive SMD system stack piping at concentrations ranging from 21 to 76 ppmv in SMD-1 and from ND<1.0 to 4.3 in SMD-2. On May 14, 2007, indoor air and crawlspace air samples were collected and analyzed using the procedures and methods described above. To reduce the potential for picking up trace concentration of VOCs, the samples were collected approximately one (1) week after installing the SMD system. This allowed additional time for the Liquid Nails® adhesive to fully cure and the fumes to be transported out of the crawlspace.

The indoor air and crawlspace air sampling results were evaluated and compared against the baseline crawl space samples collected on April 10, 2007 and data from air monitoring stations published by the BAAQMD for two (2) locations near the site, monitoring stations #1018 – Davie Tennis Stadium located at 198 Oak Road and #1024 located at 2419 Filbert Street Piedmont and Oakland, respectively. The results of the samples analyses are presented below and compared to the BAAQMD monitoring station and RWQCB ESLs in Tables 10A (data in $\mu g/m^3$) and 10B (data in ppbv).

9.4 Results and Discussion

On March 9, 2007, elevated concentration of fuel hydrocarbon vapors were detected in the crawlspace and indoor air of the main building onsite. Upon inspecting the crawlspace, extensive vertical fractures and gaps in the building subfloor were readily identified as the most probable cause. DCV was installed but not as effective at reducing the concentration of hydrocarbons in the crawlspace to below the ppmv level and was modified for passive SMD.

The PID screening results for the first 5-days after restarting the ozone sparge unit indicate the SMD system was effectively reducing the concentrations of organic vapors in the building air and crawlspace after installation Significant concentrations of

organic vapors greater than or equal to the concentrations initially detected inside the building on in crawlspace were detected by the PID in the stack piping of the SMD system indicated. No organic vapors or odors have been detected inside the building by AEI or onsite personnel since installing the SMD system and restarting the ozone sparge unit.

On May 14, 2007, benzene, toluene, ethylbenzene, and xylenes were detected in one indoor air sample (BA-1) at concentrations of 2.1, 3.0, 4.8, and 22 $\mu g/m^3$, respectively. MTBE was not detected at or above than the laboratory reporting limit of 0.036 $\mu g/m^3$. Benzene, toluene, ethylbenzene, and xylenes were detected in one crawlspace air sample (CS-1) at concentrations of 11, 7.7, 1.7, and 5.8 $\mu g/m^3$, respectively. MTBE was not detected at or above the laboratory reporting limit.

The concentrations of benzene increased slightly inside the building (from 1.2 to 2.2 $\mu g/m^3$) and crawlspace (from 0.80 to 11 $\mu g/m^3$). Benzene concentrations inside the building were still in the range of background concentration in Oakland and comparable to the concentration detected during the April 10, 2007 background sampling event. With the exception of Benzene at 2.1 $\mu g/m^3$, the background and May 14, 2007 concentrations of toluene, ethylbenzene, and xylenes were below the ESLs for commercial land use and consistent with background concentrations reported by the BAAQMD in the greater Oakland area.

Low VOC Liquid Nails® Builder's Choice (BC-490) subfloor and construction adhesive was used to seal the 6-mil plastic sheeting to the concrete footing and pillars. As indicated on the MSDS sheet, benzene, toluene, and other unnamed, lighter-range petroleum distillates are ingredients. The existence of these and other unknown volatile organic compounds (VOCs) in Liquid Nails® adhesive complicates the interpretation of the indoor and crawlspace air sample results.

The ozone sparge unit was restarted on May 7, 2007. The passive SMD system is currently meeting the design objectives and upgrading the system to active SMD, which will require a BAAQMD permit, is not recommended at this time. The ozone sparge system was restarted on

10.0RESULTS & OBSERVATIONS

10.1 System Dwell Time, Lag Time, and Cycle Time

The ozone sparge unit was restarted on May 9, 2007 following the installation of a passive SMD system. The first monthly O&M visit occurred on June 7, 2007. The dwell time is defined as the runtime per sparge point and the lag time is the system rest time between each sparge cycle. Once the dwell times are programmed, the ozone sparge unit operates the sparge points in sequence from 1 to 11 while the PLC continuously monitors various system parameters, such the ozone delivery pressure.

The system was initially programmed to run for 4 minutes per sparge point. This was increased to 8 minutes per sparge point in July 2007 and was reduced to 5 minutes per sparge point in August 2007. The dwell time was increased back to 8 minutes per sparge point in September 2007. The dwell time will was 8 minutes per sparge point from September 2007 through January 2008.

10.2 System Runtimes

The total runtimes as of January 17, 2008 for shallower ozone sparge wells OZ-1S, OZ-2S, OZ-7S, and OZ-8S were all approximately 152 hours. The total runtime for OZ-3S and OZ-6S were both approximately 181 hours. The total runtime for OZ-4S and OZ-5S were approximately 160 and 135 hours, respectively. The total runtime for OZ-9S, which was turned on in October 2007, was about 60 hours.

The total runtimes as of January 17, 2008 for deeper ozone sparge wells OZ-2D, OZ-7D, and OZ-8D were all approximately 180 hours. The total runtime for OZ-3D and OZ-4D were both approximately 150 hours. The total runtime for OZ-5D and OZ-D were approximately 91 and 173 hours, respectively. The total runtime for OZ-5D was much lower because the ozone delivery pressure has increased from about 25 psig to 55 psig. OZ-9 has been off since the system was restarted on May 9, 2007, because the lead auger was lost and left in the borehole around the sparge point.

10.3 Ozone Delivery Rates & Backpressures

The ozone injection rates have ranged from approximately 1.5 to 2 standard cubic feet per minute (scfm) per sparge point. The ozone delivery pressure is the shallower sparge points have ranged from approximately 10 to 30 psig. The ozone delivery pressure in the deeper sparge points have ranged from 20 to 30 psig. The backpressure at OZ-5D has steadily increased to over 55 psig and exceeded the capacity of the ozone sparge unit. Dissolved ions and metals such as iron, calcium, magnesium, and manganese are oxidized by ozone, causing them to precipitate out of solution and collect around the sparge point and sandpack. This well has been turned off pending further evaluation and treatment with approximately 1 gallon of 50% solution of food-grade citric acid according to procedures recommended by H_2O Engineering, Inc (H_2O Engineering, 2007). A copy of the cleaning procedure is included as Appendix H.

The ozone delivery flow rates and backpressures are summarized in Table 8 and shown on Figures 11 and 12.

10.4 Mass of Ozone Injected

The total mass of ozone injected in each sparge wells has been estimated based on the flow rate recorded during each monthly O&M visit and the actual concentration of ozone generated (in ppmv) at various pressures from testing and data provided by H_2O

Engineering, Inc. All measured flow rates in actual cubic feet per minute (acfm) were converted to standard cubic feet per minute (scfm) using the ozone delivery pressure and outlet temperature.

The total mass of ozone injected (per well) into shallower ozone sparge wells has ranged from approximately 4.2 pounds (OZ-9S) to 12.2 pounds (OZ-6S). The total mass of ozone injected (per well) into deeper ozone sparge wells has ranged from approximately 4.8 pounds (OZ-5D) to 12 pounds (OZ-8D). As of January 17, 2008, the total mass of ozone injected into the shallower and deeper ozone sparge wells has been estimated at 82 and 72 pounds, respectively. Therefore, approximately 154 pounds of ozone has been delivered to the subsurface through all of the ozone sparge wells. Refer to Table 9 for the ozone mass injection estimates and assumptions. Figures 13, 14, and 15 shows the total mass of ozone injected per sparge well and all wells combined.

10.5 Hydrocarbons, Dissolved Oxygen and ORP

Overall, the dissolved oxygen (DO) concentration have increased and the oxidation-reduction potential (ORP) has become increasing positive most notably in the Deeper Zone wells MW-7, MW-9, MW-11, and MW-12. The DO concentrations have increased from less than 1 mg/L to almost 20 mg/L and 14 mg/L in wells MW-11 and MW-12, respectively. The DO concentrations have not increased significantly in any of the Shallow Zone monitoring wells.

10.6 Bubbling and Pressure Buildup

Qualitative indicators of air distribution, such as bubbling, gurgling noises, and artesian well conditions provide important information on the magnitude and lateral extent of the ozone/air channel distribution. The magnitude of the pressure response provides a measure of the subsurface permeability. In highly permeable soils the groundwater pressure may remain elevated from ten minutes to a few hours and from tens of hours to days at stratified sites with low permeability layers. Pressure buildup during the startup and shutdown of air sparging system provides information on whether or not air is being stratigraphically trapped below the water table.

Bubbling, gurgling noises, and water flowing out of the wells have been observed in deep water bearing zone wells MW-7 and MW-11 when sparging on OZ-7D and OZ-9D, respectively. This is not uncommon at sites with shallow water tables. It takes approximately 2.0 psig to raise the water level to the surface from 4 to 5 feet bgs. Some bubbling has also been identified in MW-8 and MW-10, but artesian conditions have not been observed.

Elevated pressure has been observed in MW-11 for up to one (1) week after shutting down the air sparging system, which indicates the site is stratified and low-permeability lenses are present between Deep Zone and Shallow Zone. The magnitude of the

pressure buildup and lateral extent indicate that permeable to moderately permeable soils are present in the Deep Zone.

11.0 CONCLUSIONS & RECOMMENDATIONS

An *in situ* ozone oxidation system was designed and installed to address absorbed and dissolved phase contamination in the shallow, intermediate, and deeper water bearing zones at the subject site. Concentrations of TPH-g, TPH-d, TPH-mo, and BTEX have overall decreased, particularly in the mostly more-permeable sediments in the Deeper Zone. Smaller decreases have occurred in the mostly less-permeable sediments in the Shallow Zone. The system operated sporadically to not at all during the first 2 to 3 months after installation because of hydrocarbons vapors migrating into the building and crawlspace. A passive SMD system was installed to prevent vapor from entering the crawlspace and building. The ozone sparging system has reached steady state operation and ran almost continuously from June 2007 through January 2008 (about 8 months). The system is estimated to operate for a minimum of 12 to 18 months before rebound testing should be performed. The next groundwater monitoring and sampling in event is scheduled to occur in January 2008.

11.1 Performance Monitoring

The January 19, 2007 (1st Quarter, 2007) monitoring episode and the historic record of groundwater monitoring and reporting represent baseline groundwater conditions. Groundwater at the site is currently monitored on a quarterly basis, which should provide adequate data on TPH-g, TPH-d, TPH-mo, and BTEX for performance monitoring. More frequent monitoring is not planned and is unlikely to provide enough useful information to justify the cost of the sampling and laboratory analyses. It is recommended that the system operation and performance be evaluated on a quarterly to semi-annual basis.

11.2 Modified Groundwater Monitoring and Sampling Procedures

AEI proposes to shutdown the system at least one day, but no more than one week, prior to conducting routine groundwater monitoring and sampling events to help relieve pressure buildup in the subsurface. For safety reasons and to prevent short circuiting of ozone and air to the surface, monitoring wells that have developed pressure were fitted with threaded caps and pressure relief valves. All other monitoring wells were fitted with lockable and water-tight expanding well caps.

Before the pressure is released from wells equipped with threaded caps and pressure relief valves (i.e., MW-7, MW-8, MW-9, MW-10, MW-11, and MW-12), it will be measured in inches of water with a Dwyer Magnehelic® differential pressure gage (ranges of 0-10, 0-50, 0-100, and 0-200 in. H_2O). The monitoring well vapor will also be sampled and analyzed for total volatile hydrocarbons, methane, oxygen, and carbon dioxide using an RKI Instruments Eagle multi-gas detector and for ozone using

EcoSensors ozone detector. This data will be used to monitor worker health and safety, ozone degradation to oxygen, and *in situ* biodegradation. After the pressure is recorded and a sample is collected and analyzed by the gas detectors, the relief valve will then be closed and the gage removed. The valve will slowly be reopened and once the pressure has dissipated, the well cap will be unthreaded and removed for sampling. Once all of the well caps have been removed, the wells are allowed to equilibrate for a minimum of 30 minutes prior to measuring the static water levels. Groundwater samples will be collected and analyzed for TPH-g, TPH-d, and TPH-mo by Method SW8015Cm and MBTEX by Method SW8021B using procedures and methods described in quarterly monitoring reports.

Well sampling for natural attenuation parameters, such as total (Fe3+) and dissolved (Fe2+) iron, sulfates and sulfide, and nitrates has not been included in the previous scope of work and is not recommended at this time, but may be considered as *in situ* oxidation and biodegradation proceeds.

11.3 Annual O&M Report

After the first year of steady state operation (May 2008) and after the 2nd quarter, 2008 groundwater monitoring and reporting episode, AEI will prepare an annual System Operations and Maintenance and Performance Evaluation report for ACEH. The report will also include an operations and maintenance data summary including, cycle timing, runtimes, ozone delivery pressures and injection flow rates and groundwater sample analytical data. The total mass of ozone (in pounds) injected into each sparge point will be presented. The average daily mass injection rates (pounds per day) will also be included. The dissolved oxygen and ORP in the deep and shallow zone wells will be plotted over time. The ozone delivery pressure over time will also be plotted. The mass of ozone injected per well for the shallow ozone sparge points, deep ozone sparge points, and total system will be presented. An evaluation of contaminant reduction rates and estimate treatment times will be including along with recommendations, if necessary, for changes alteration or expansion of treatment program. Treatment progress will also be evaluated in the startup report and in subsequent regular quarterly groundwater monitoring reports. The system evaluation will be overseen and reported under the seal of an AEI California registered professional geologist or engineer.

12.0 REFERENCES

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13.0CLOSING STATEMENT AND SIGNATURES

AEI has prepared this report for Alameda County Environmental Health on behalf of Omega Termite, Inc., located at 807 75th Avenue in the City of Oakland, Alameda County, California. This report documents the installation and startup of an *In Situ* Ozone Oxidation system for the mitigation of a fuel release from the former underground storage tanks (USTs) that impacted the soil and groundwater at the subject property. The recommendations rendered in this report were based on previous field investigations and laboratory testing of soil and groundwater samples. This report does not reflect subsurface variations that may exist between sampling points. These variations cannot be anticipated, nor could they be entirely accounted for, in spite of exhaustive additional testing. This plan should not be regarded as a guarantee that no further contamination, beyond that which could have been detected within the scope of this investigation is present beneath the said property or that all contamination present at the site will be treated or removed. Undocumented, unauthorized releases of hazardous material, the remains of which are not readily identifiable by visual inspection and are of different chemical constituents, are difficult and often impossible to detect within the scope of a chemical specific investigation that may or may not become apparent at a later time. All specified work was performed in accordance with generally accepted practices in environmental engineering, engineering geology, and hydrogeology fields under the direction of appropriate registered professional(s).

We look forward to hearing your comments regarding this report. Should you have any questions or need any additional information, please contact Mr. Bradford or Mr. McIntyre at (925) 944-2899.

Sincerely,
AEI Consultants

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Bob Flory, PG
Senior Project Geologist

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10/31/08
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Alameda, California 94502

GeoTracker (electronic copy)

FIGURES

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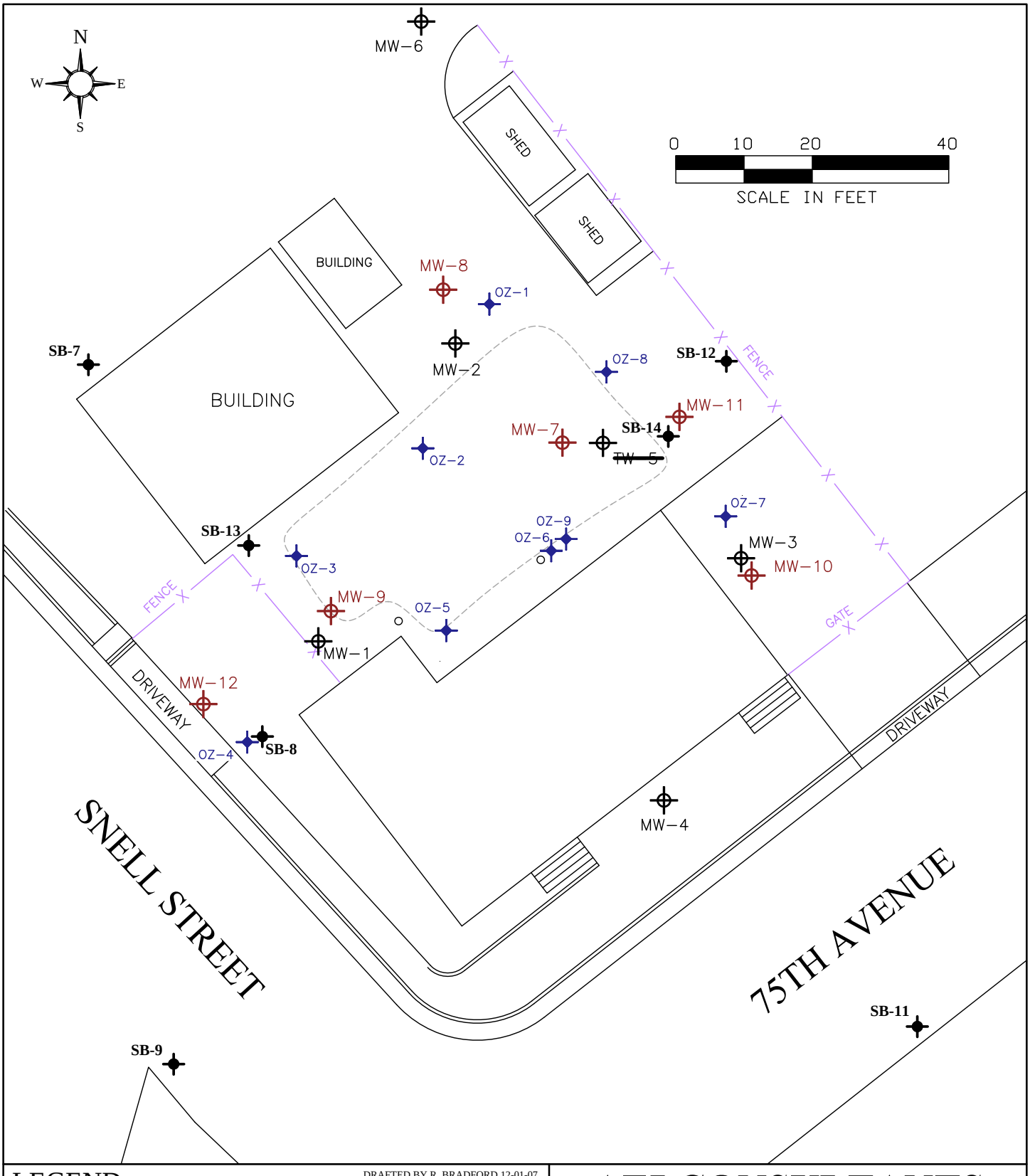
AEI CONSULTANTS

2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

SITE LOCATION MAP

807 75th AVENUE
OAKLAND, CALIFORNIA

FIGURE 1
PROJECT NO. 262157



LEGEND

- MONITORING WELL (SHALLOW)
- MONITORING WELL (DEEP)
- SOIL BORING
- OZONE SPARGE POINT(S)

SHALLOW WELLS SCREEDED FROM ~5 TO 20 FT BGS

DEEP WELLS SCREENED FROM ~25 TO 30 FT BGS

DRAFTED BY R. BRADFORD 12-01-07
REVISED BY R. BRADFORD 12-18-07

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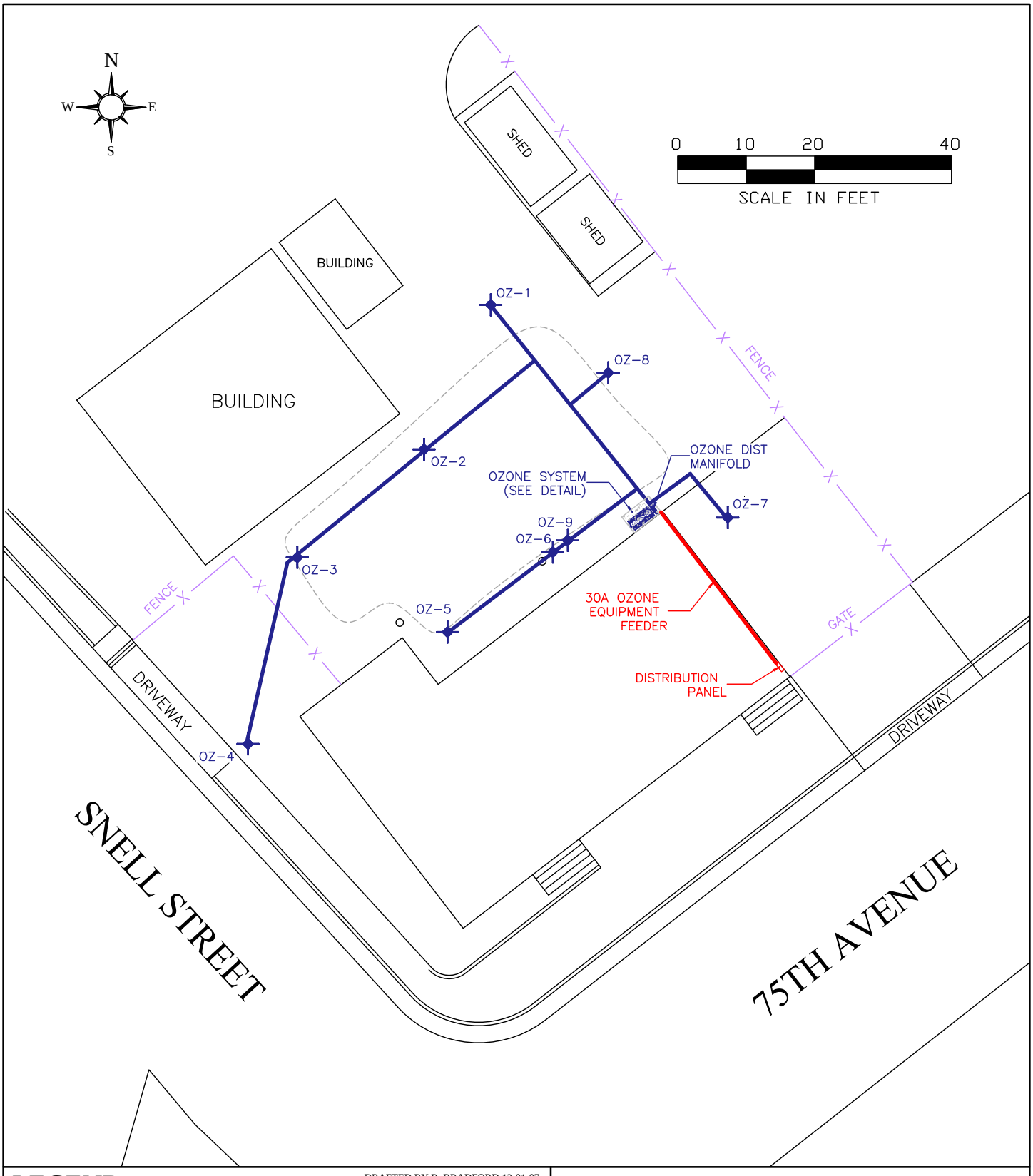
2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

SITE PLAN

807 75th AVENUE
OAKLAND, CALIFORNIA

FIGURE 2

PROJECT NO. 262157



LEGEND

- MONITORING WELL (SHALLOW)
- MONITORING WELL (DEEP)
- SOIL BORING
- OZONE SPARGE POINT(S)
- OZONE TRENCHING
  (~24"W BY 30"D)
  2" SCH40 PVC PROTECTIVE CONDUIT
  W/ 1/2" O.D. BY 3/8" I.D. PFA TUBING
- ELECTRICAL
  30A 60HZ SINGLE PHASE 120V

DRAFTED BY R. BRADFORD 12-01-07
REVISED BY R. BRADFORD 12-18-07

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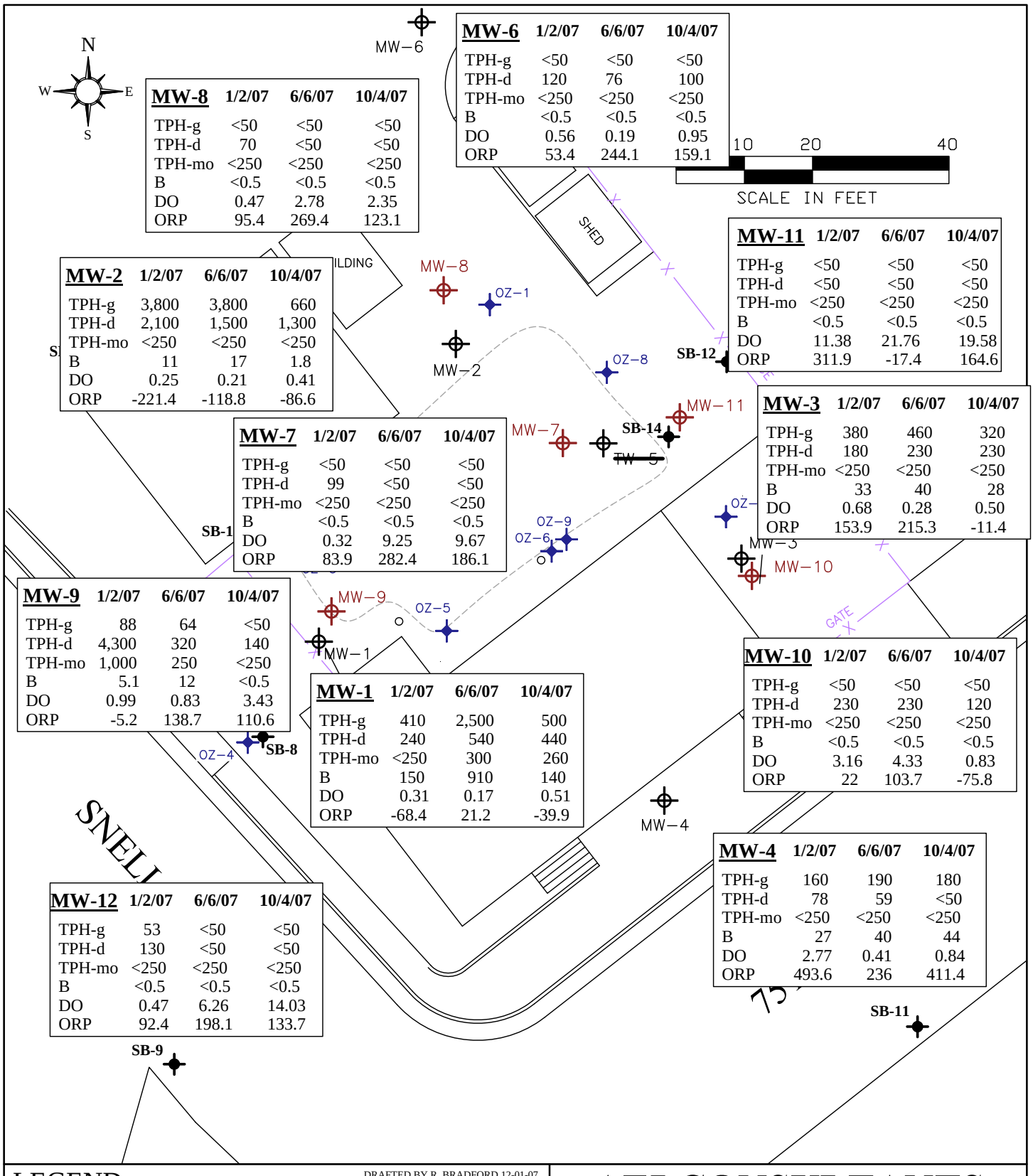
2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

SYSTEM LAYOUT PLAN

807 75th AVENUE
OAKLAND, CALIFORNIA

FIGURE 3

PROJECT NO. 262157



MW-6	1/2/07	6/6/07	10/4/07
TPH-g	<50	<50	<50
TPH-d	120	76	100
TPH-mo	<250	<250	<250
B	<0.5	<0.5	<0.5
DO	0.56	0.19	0.95
ORP	53.4	244.1	159.1

MW-8	1/2/07	6/6/07	10/4/07
TPH-g	<50	<50	<50
TPH-d	70	<50	<50
TPH-mo	<250	<250	<250
B	<0.5	<0.5	<0.5
DO	0.47	2.78	2.35
ORP	95.4	269.4	123.1

MW-11	1/2/07	6/6/07	10/4/07
TPH-g	<50	<50	<50
TPH-d	<50	<50	<50
TPH-mo	<250	<250	<250
B	<0.5	<0.5	<0.5
DO	11.38	21.76	19.58
ORP	311.9	-17.4	164.6

MW-2	1/2/07	6/6/07	10/4/07
TPH-g	3,800	3,800	660
TPH-d	2,100	1,500	1,300
TPH-mo	<250	<250	<250
B	11	17	1.8
DO	0.25	0.21	0.41
ORP	-221.4	-118.8	-86.6

MW-3	1/2/07	6/6/07	10/4/07
TPH-g	380	460	320
TPH-d	180	230	230
TPH-mo	<250	<250	<250
B	33	40	28
DO	0.68	0.28	0.50
ORP	153.9	215.3	-11.4

MW-7	1/2/07	6/6/07	10/4/07
TPH-g	<50	<50	<50
TPH-d	99	<50	<50
TPH-mo	<250	<250	<250
B	<0.5	<0.5	<0.5
DO	0.32	9.25	9.67
ORP	83.9	282.4	186.1

MW-9	1/2/07	6/6/07	10/4/07
TPH-g	88	64	<50
TPH-d	4,300	320	140
TPH-mo	1,000	250	<250
B	5.1	12	<0.5
DO	0.99	0.83	3.43
ORP	-5.2	138.7	110.6

MW-1	1/2/07	6/6/07	10/4/07
TPH-g	410	2,500	500
TPH-d	240	540	440
TPH-mo	<250	300	260
B	150	910	140
DO	0.31	0.17	0.51
ORP	-68.4	21.2	-39.9

MW-10	1/2/07	6/6/07	10/4/07
TPH-g	<50	<50	<50
TPH-d	230	230	120
TPH-mo	<250	<250	<250
B	<0.5	<0.5	<0.5
DO	3.16	4.33	0.83
ORP	22	103.7	-75.8

MW-4	1/2/07	6/6/07	10/4/07
TPH-g	160	190	180
TPH-d	78	59	<50
TPH-mo	<250	<250	<250
B	27	40	44
DO	2.77	0.41	0.84
ORP	493.6	236	411.4

MW-12	1/2/07	6/6/07	10/4/07
TPH-g	53	<50	<50
TPH-d	130	<50	<50
TPH-mo	<250	<250	<250
B	<0.5	<0.5	<0.5
DO	0.47	6.26	14.03
ORP	92.4	198.1	133.7

LEGEND

- MONITORING WELL (SHALLOW)
- MONITORING WELL (DEEP)
- SOIL BORING
- OZONE SPARGE POINT(S)

SHALLOW WELLS SCREEDED FROM ~5 TO 20 FT BGS

DEEP WELLS SCREENED FROM ~25 TO 30 FT BGS

TPH-g = Total Petroleum Hydrocarbons as gasoline (ug/L)
TPH-d = Total Petroleum Hydrocarbons as diesel (ug/L)
TPH-mo = Total Petroleum Hydrocarbons as motor oil (ug/L)
B = Benzene (ug/L)
DO = Dissolved Oxygen (mg/L)
ORP = Oxidation-Reduction Potential (-eV)

DRAFTED BY R. BRADFORD 12-01-07
REVISED BY R. BRADFORD 12-18-07

AEI CONSULTANTS

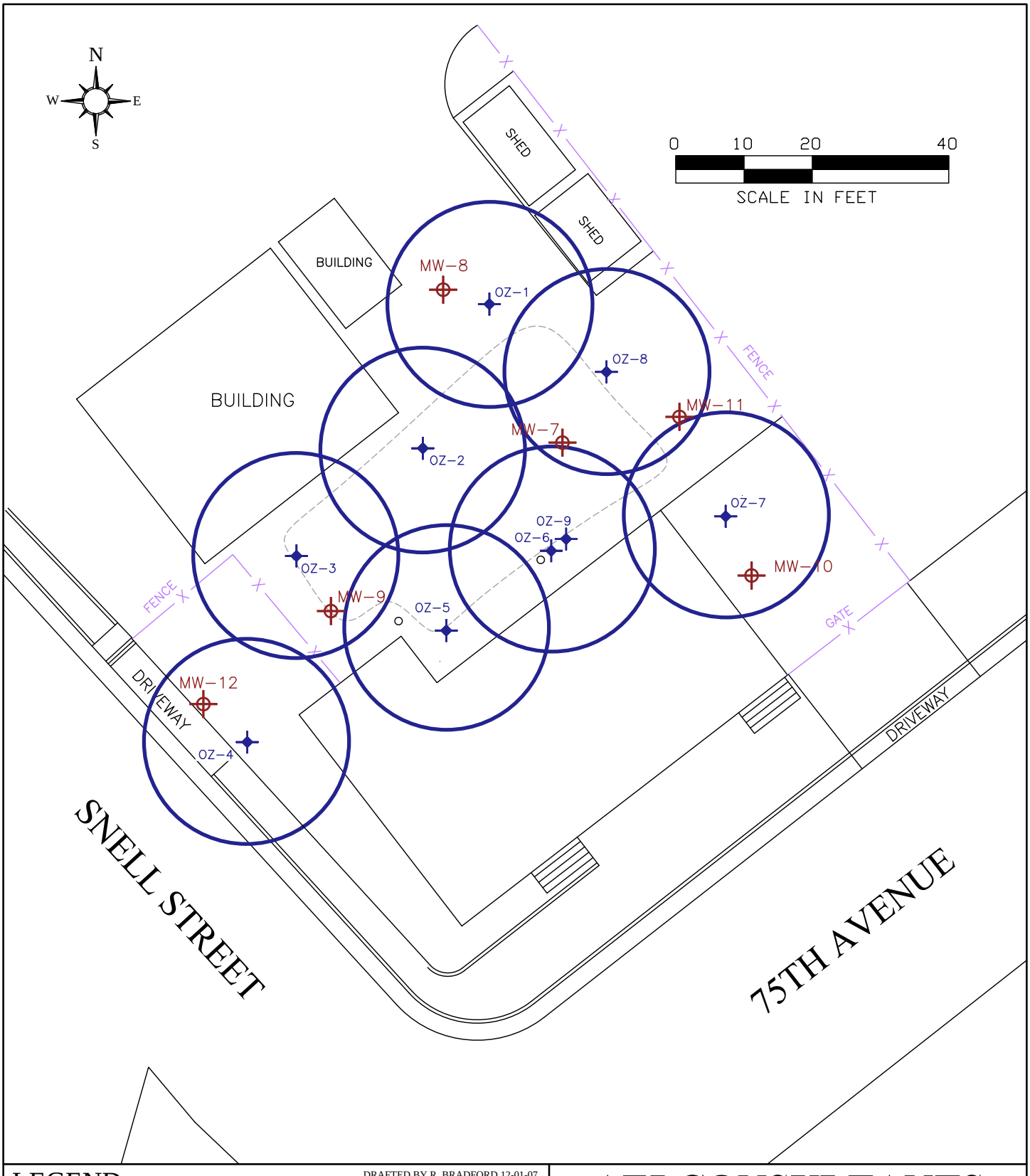
2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

GROUNDWATER ANALYTICALS (w/ DO & ORP DATA)

807 75th AVENUE
OAKLAND, CALIFORNIA

FIGURE 4

PROJECT NO. 262157



LEGEND

- MONITORING WELL (SHALLOW)
- MONITORING WELL (DEEP)
- SOIL BORING
- OZONE SPARGE POINT(S)

APPROX. OZONE ROI = 15 FEET

*BUBBLING AND ARTESIAN WELL CONDITIONS OBSERVED IN MW-7, 10 and 11 WHEN SPARGING INTO OZ-7D AND OZ-9D

NO OZONE, BUT ELEVATED OXYGEN LEVELS HAVE BEEN MEASURED IN THESE WELLS

DRAFTED BY R. BRADFORD 12-01-07
REVISED BY R. BRADFORD 12-18-07

AEI CONSULTANTS

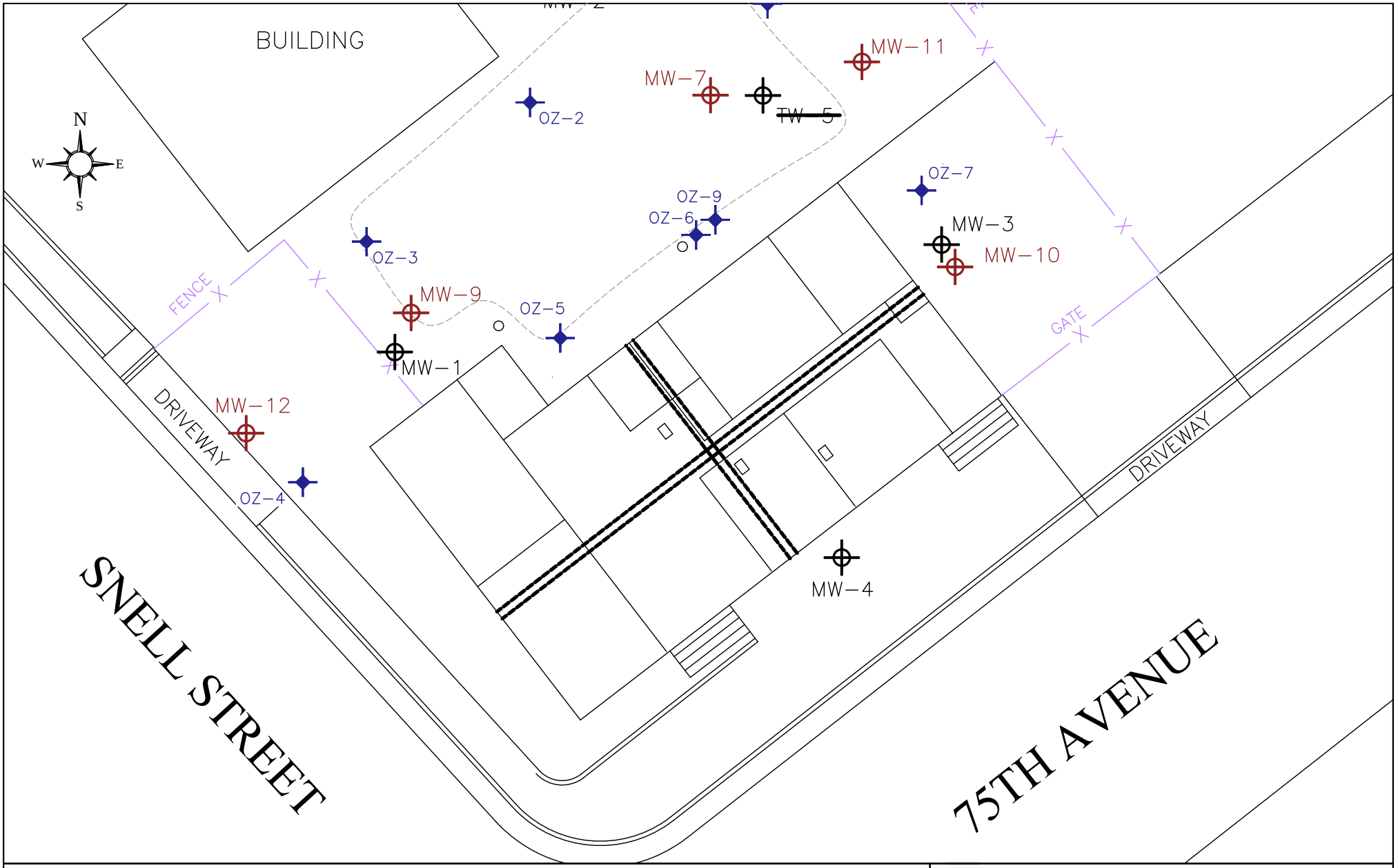
2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

ESTIMATED OZONE RADIUS OF INFLUENCE

807 75th AVENUE
OAKLAND, CALIFORNIA

FIGURE 5

PROJECT NO. 262157



LEGEND

- MONITORING WELL (SHALLOW)
- MONITORING WELL (DEEP)
- SOIL BORING
- OZONE SPARGE POINT(S)
- BUILDING FOOTING/SUPPORT PILLARS
- OLD FLOOR VENTS (COVERED WITH PLYWOOD AND SEALED W/ CAULKING)

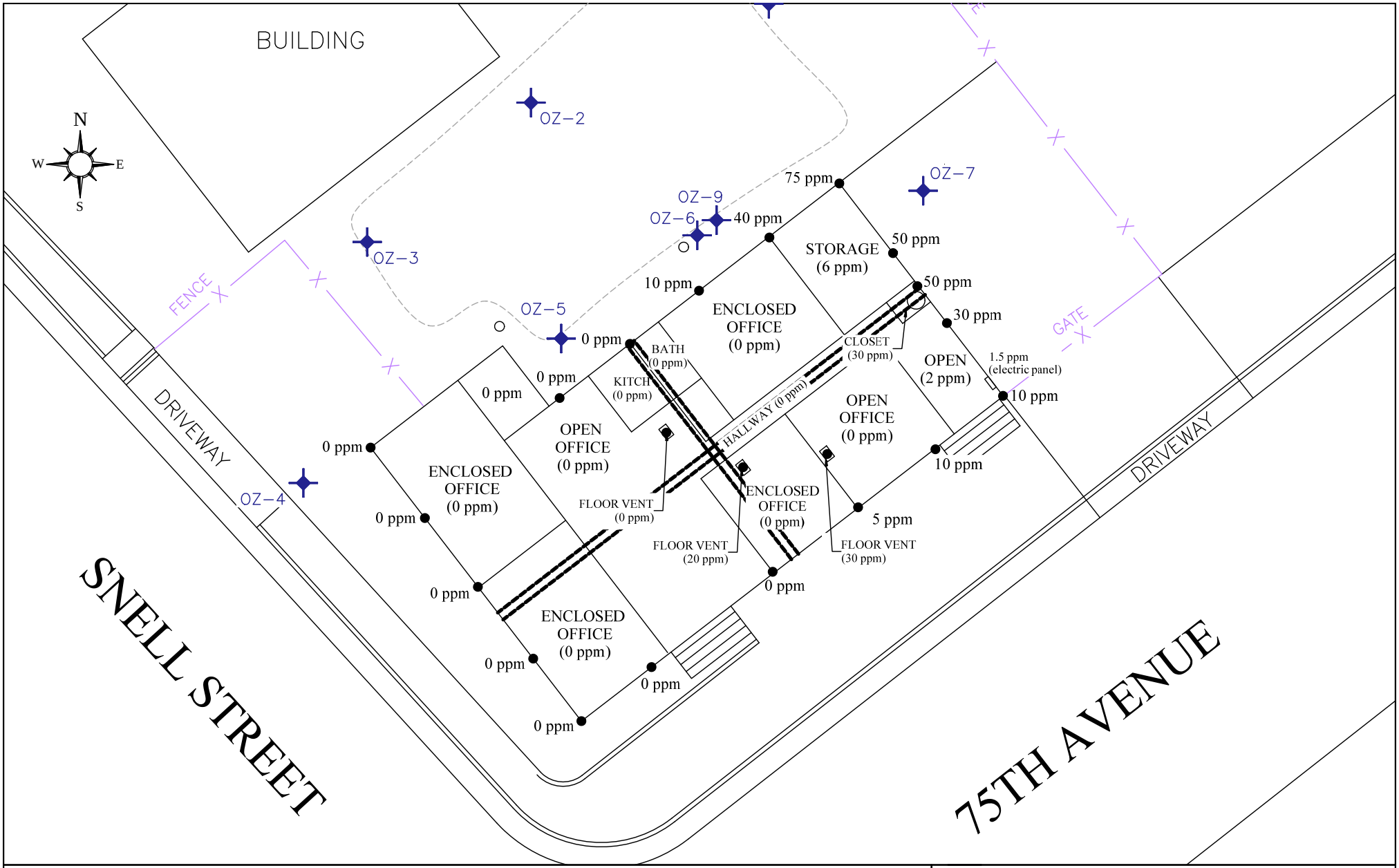
DRAFTED BY R. BRADFORD 12-01-07
REVISED BY R. BRADFORD 12-18-07

AEI CONSULTANTS
2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

BUILDING DETAIL

807 75th AVENUE
OAKLAND, CALIFORNIA

FIGURE 6
PROJECT NO. 262157



LEGEND

- MONITORING WELL (SHALLOW)
- MONITORING WELL (DEEP)
- SOIL BORING
- OZONE SPARGE POINT(S)
- BUILDING FOOTING/SUPPORT PILLARS
- OLD FLOOR VENTS (COVERED WITH PLYWOOD AND SEALED W/ LIQUID NAILS)
- SAMPLE PORT/LOCATION
  ppm = parts per million by volume

DRAFTED BY R. BRADFORD 12-01-07
REVISED BY R. BRADFORD 12-18-07

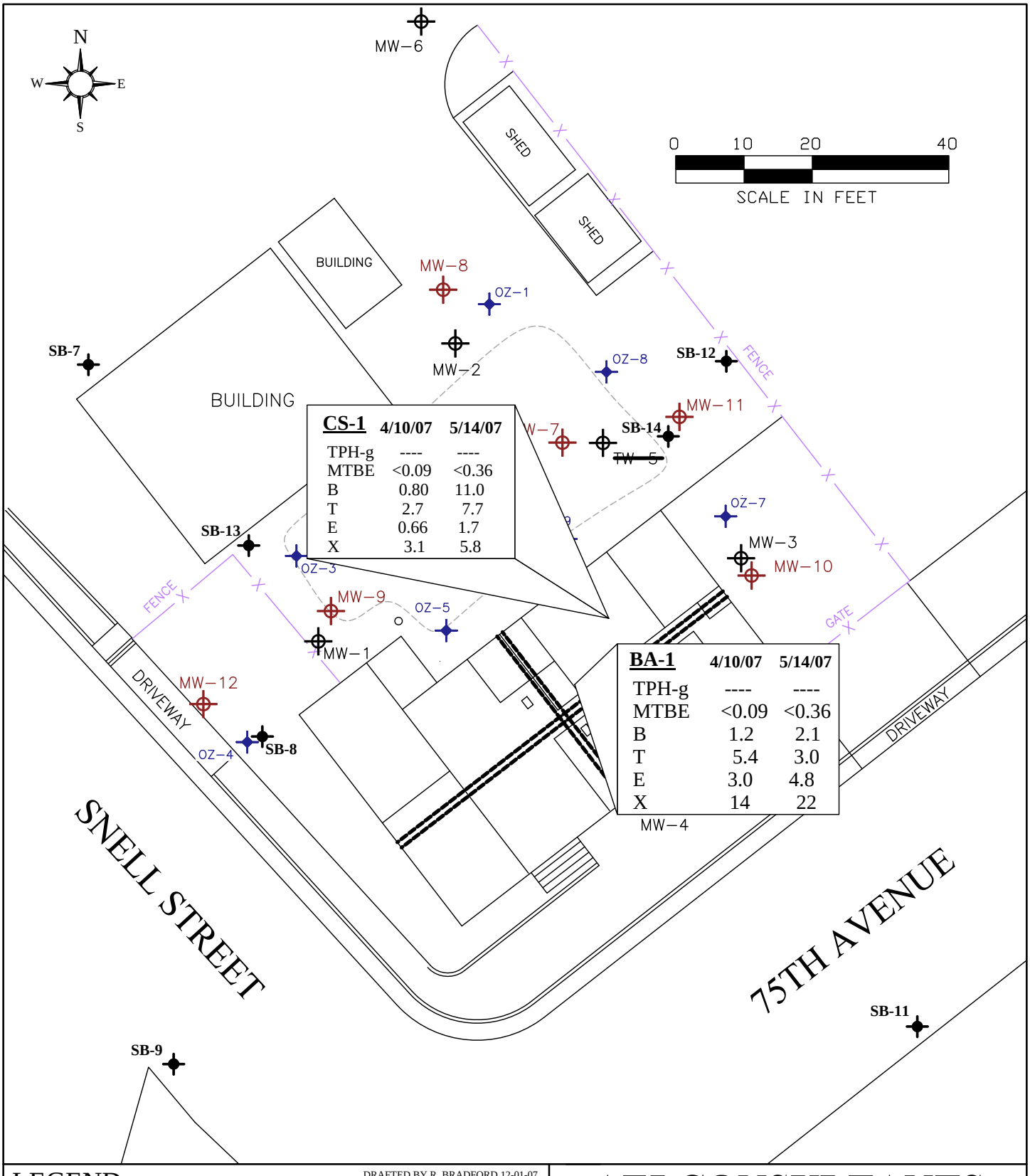
AEI CONSULTANTS

2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

PID SCREENING DATA (MARCH 9, 2007)

807 75th AVENUE
OAKLAND, CALIFORNIA

FIGURE 7
PROJECT NO. 262157



LEGEND

- MONITORING WELL (SHALLOW)
- MONITORING WELL (DEEP)
- SOIL BORING
- OZONE SPARGE POINT(S)

DRAFTED BY R. BRADFORD 12-01-07
REVISED BY R. BRADFORD 12-18-07

All data reported in ug/m^3

CS-1 = Crawl Space Sample
BA-1 = Building Air Sample

TPH-g = TPH as gasoline (Method TO-3)
B = Benzene (Method TO-15)
T = Toluene (Method TO-15)
E = Ethyl Benzene (Method TO-15)
X = Xylenes (Method TO-15)

AEI CONSULTANTS

2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

CRAWLSPACE & BUIDLING AIR ANALYTICLAS

807 75th AVENUE
OAKLAND, CALIFORNIA

FIGURE 8

PROJECT NO. 262157

FIGURE 9: DISSOLVED OXYGEN CONCENTRATIONS OVER TIME (SHALLOW WELLS)

Omega Termite, 1075 40th Street, Oakland, California

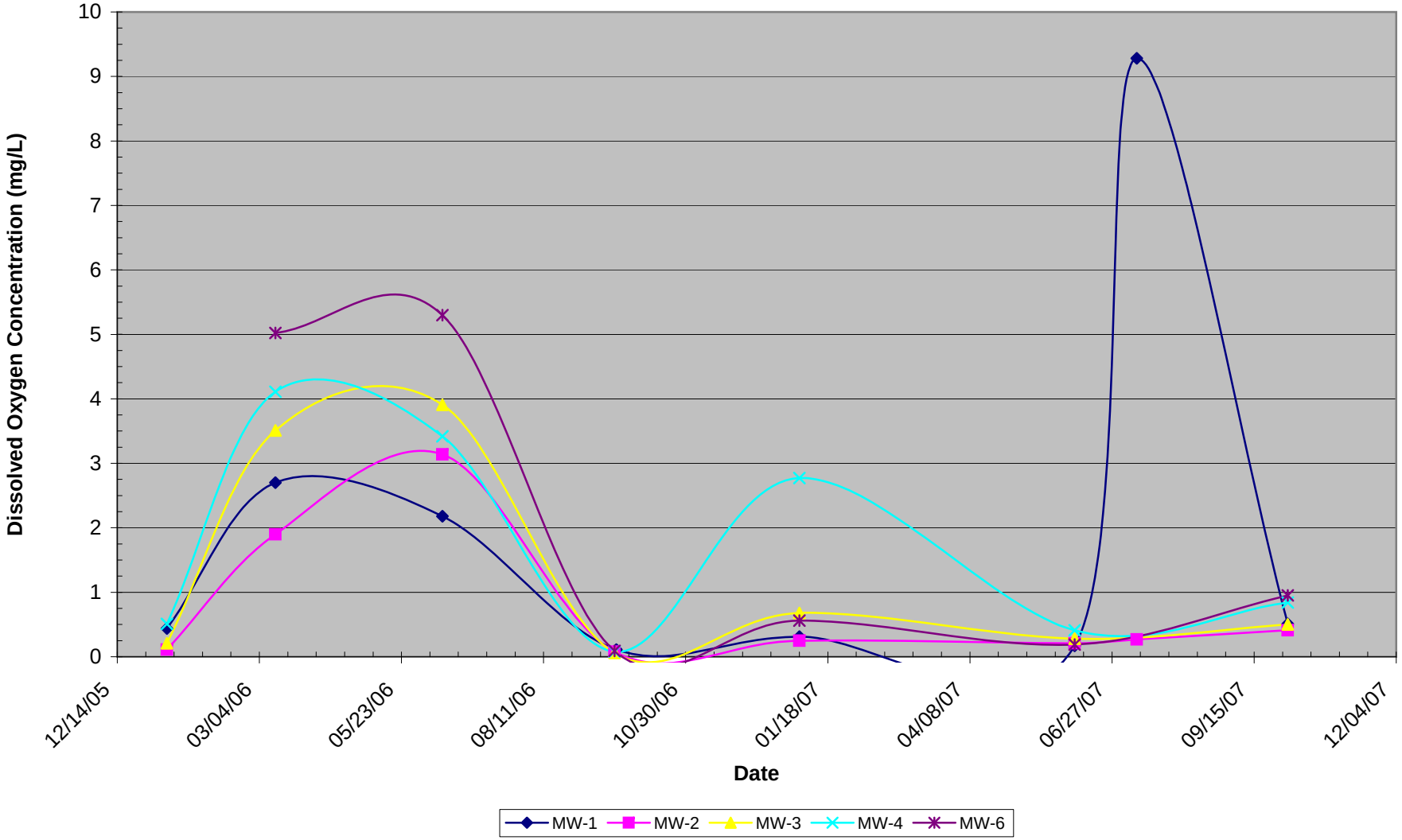


FIGURE 10: DISSOLVED OXYGEN CONCENTRATIONS OVER TIME (DEEP WELLS)

Omega Termite, 1075 40th Street, Oakland, California

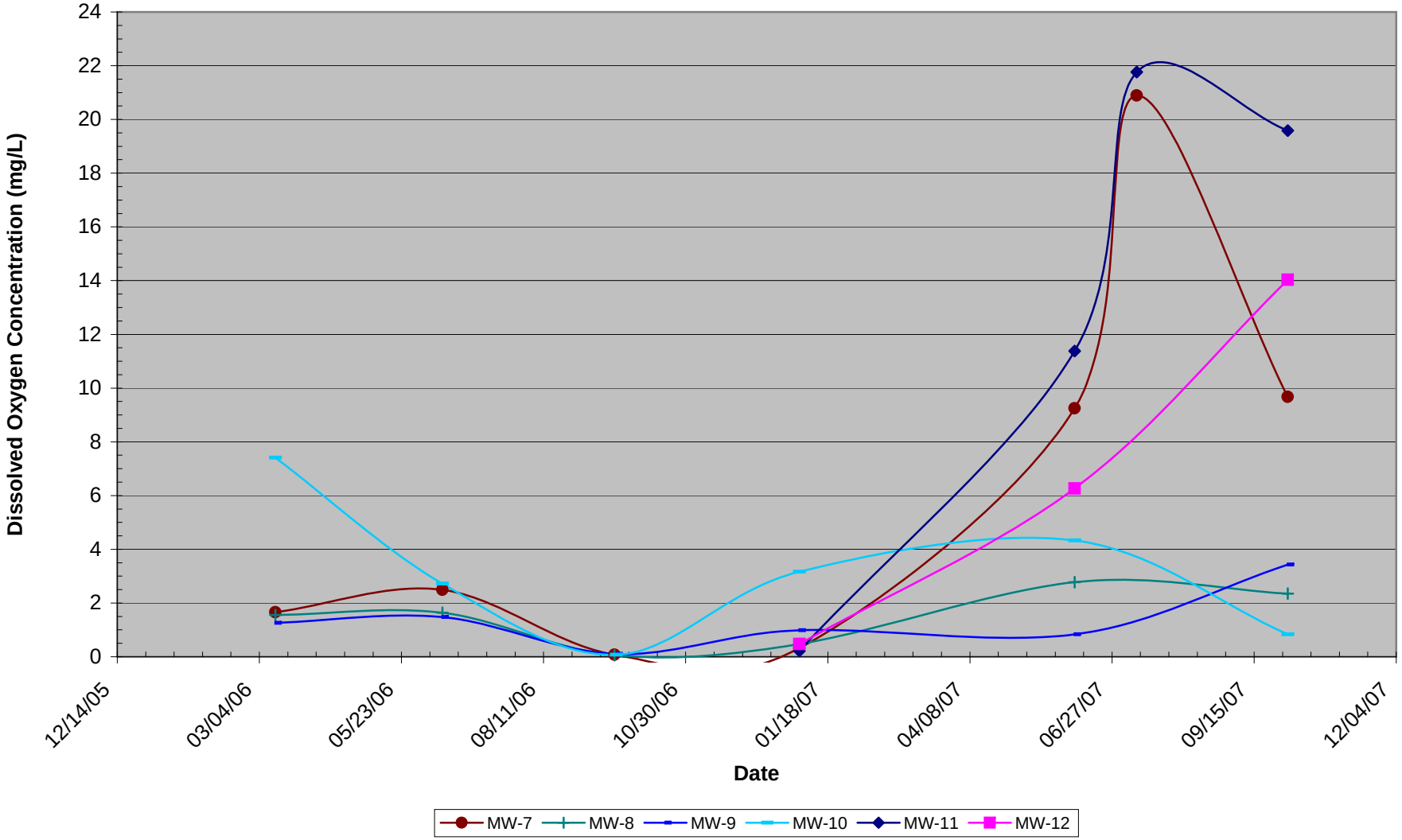


FIGURE 11: O3 DELIVERY PRESSURE VS TIME (SHALLOW WELLS)

Omega Termite, 807 75th Avenue, Oakland, California

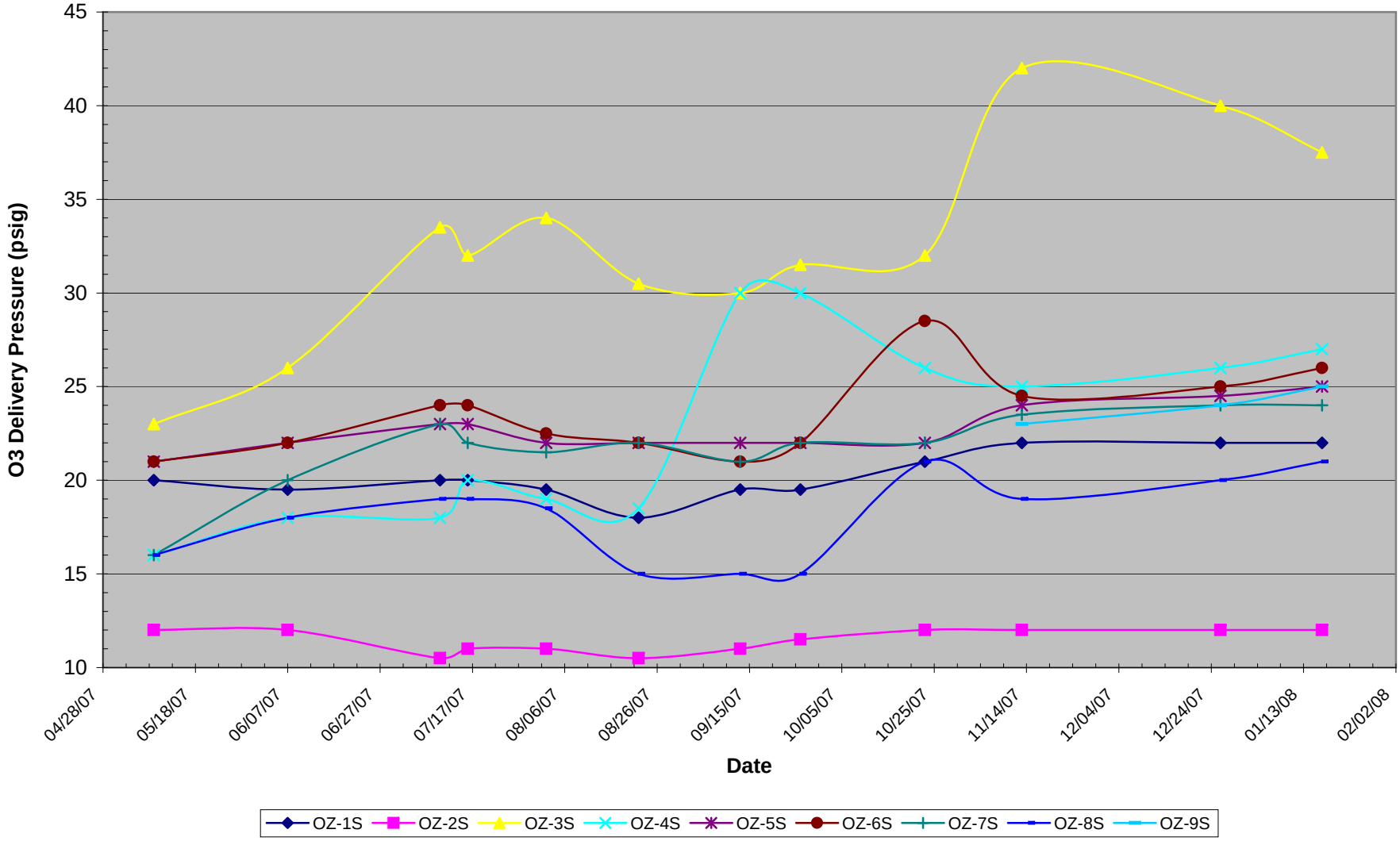


FIGURE 12: O3 DELIVERY PRESSURE VS TIME (DEEP WELLS)

Omega Termite, 807 75th Avenue, Oakland, California

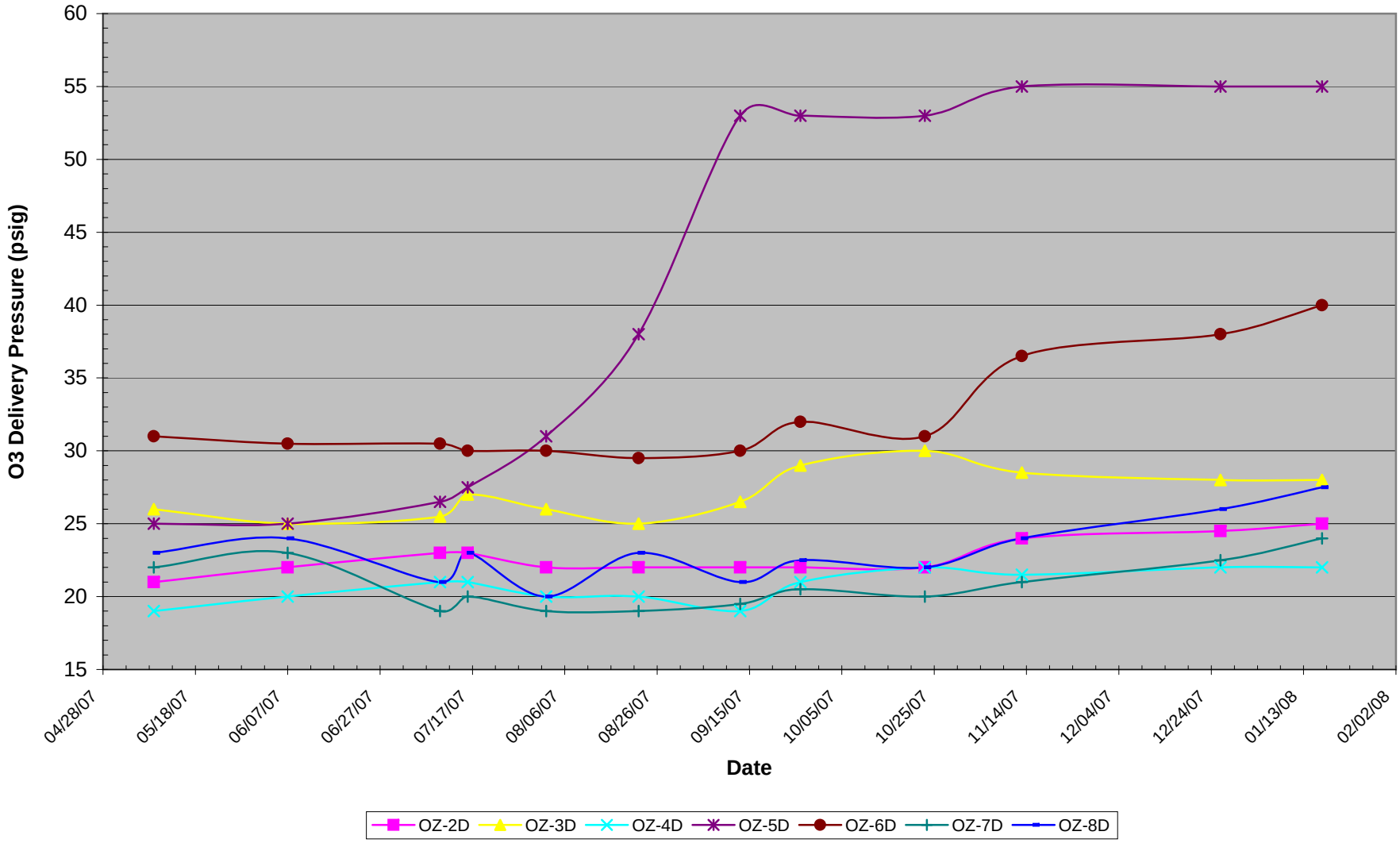


FIGURE 13: MASS OF OZONE INJECTED PER WELL (SHALLOW WELLS)

Omega Termite, 1075 40th Street, Oakland, California

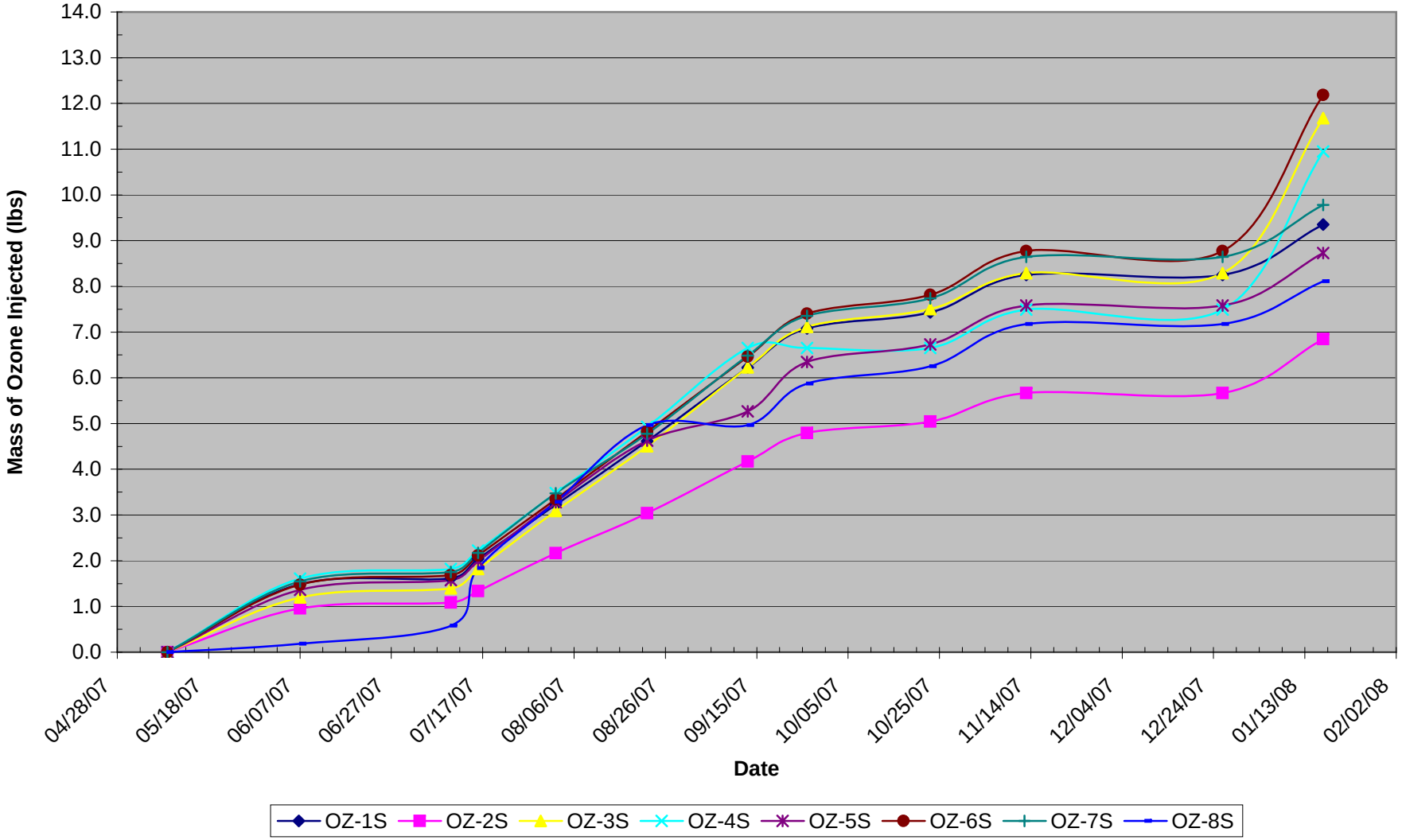


FIGURE 14: MASS OF OZONE INJECTED PER WELL (DEEP WELLS)

Omega Termite, 1075 40th Street, Oakland, California

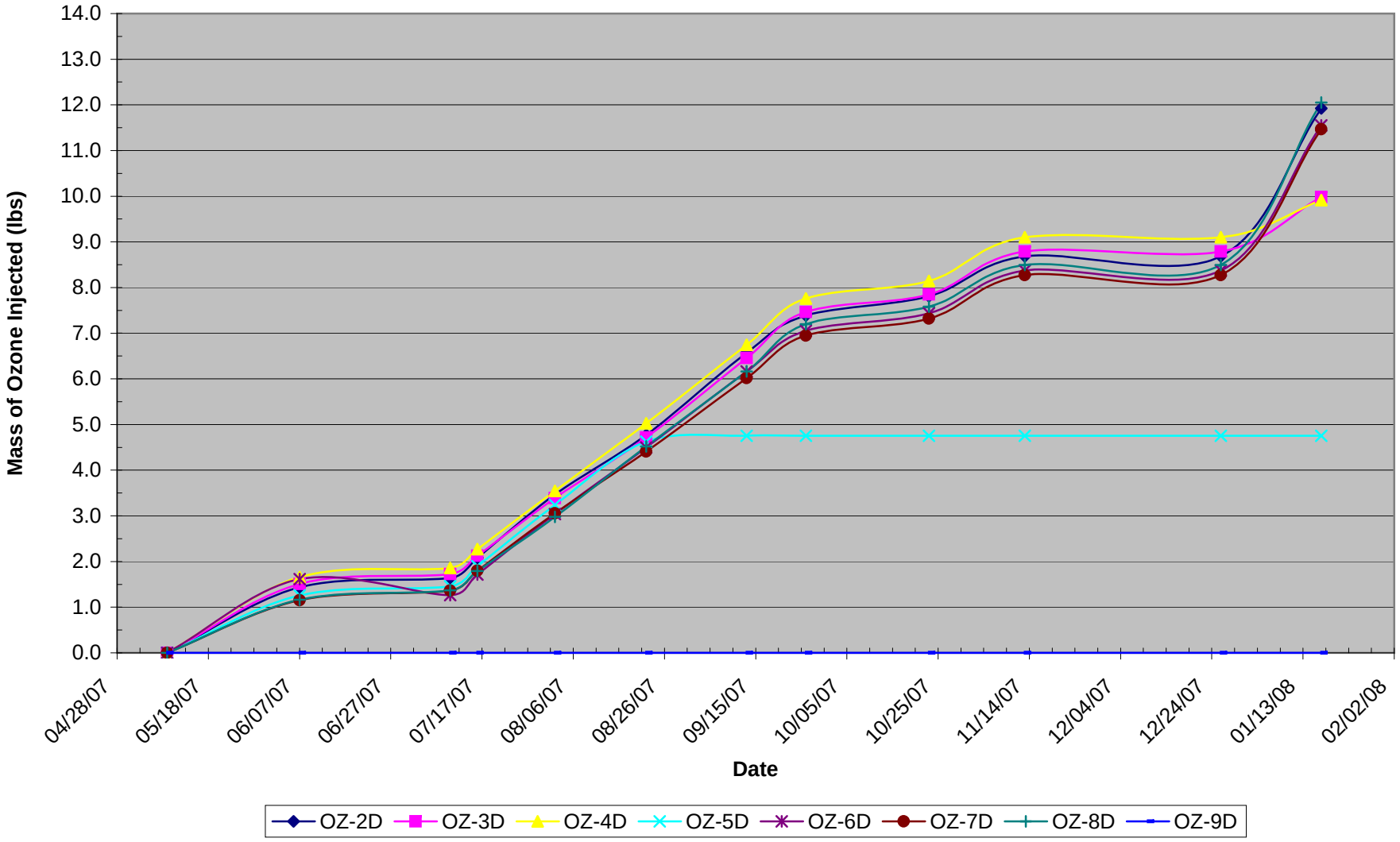
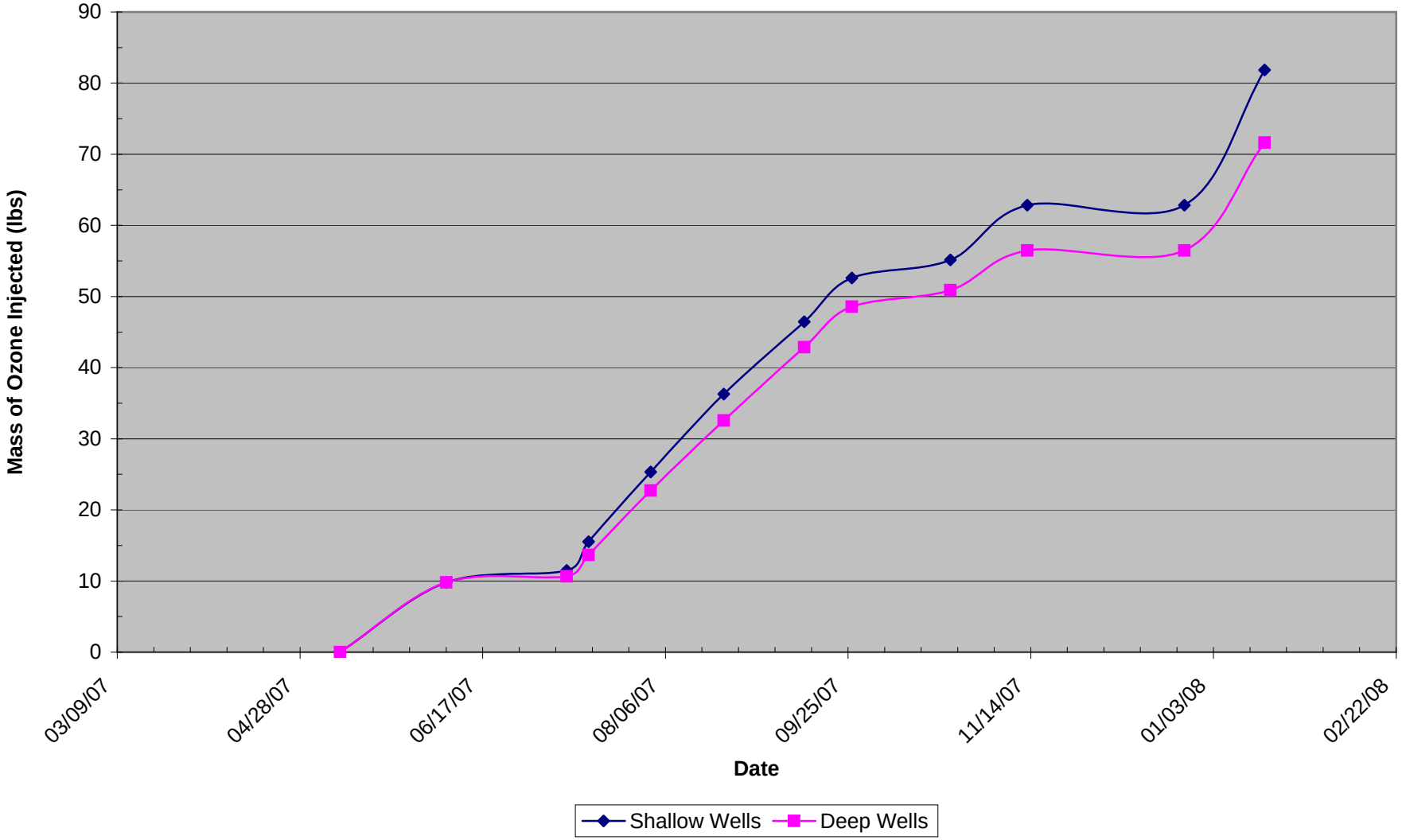


FIGURE 15: TOTAL MASS OF OZONE INJECTED TO DATE

Omega Termite, 1075 40th Street, Oakland, California



TABLES

TABLE 1: GROUNDWATER ELEVATION DATA
Omega Termite, 807 75th Ave., Oakland, CA

Well ID	Date	Well Elevation* (ft msl)	Depth to Water (ft toc)	Groundwater Elevation (ft msl)	Elevation Change (ft)
MW-1	07/30/99	10.68	5.82	4.86	----
	11/09/99	10.68	5.70	4.98	0.12
	02/23/00	10.68	2.84	7.84	2.86
	05/26/00	10.68	5.50	5.18	-2.66
	10/10/00	10.68	5.70	4.98	-0.20
	02/07/01	10.68	5.25	5.43	0.45
	05/25/01	10.68	5.25	5.43	0.00
	09/19/01	10.68	5.51	5.17	-0.26
	02/06/02	10.68	NM	NM	NM
	05/17/02	10.68	5.30	5.38	----
	08/20/02	10.68	5.39	5.29	-0.09
	01/10/03	10.68	4.11	6.57	1.28
	04/14/03	10.68	4.85	5.83	-0.74
	07/14/03	10.68	5.08	5.60	-0.23
	10/14/03	10.68	5.63	5.05	-0.55
	01/13/04	10.68	4.53	6.15	1.10
	04/15/04	10.68	5.14	5.54	-0.61
	07/15/04	10.68	5.42	5.26	-0.28
	10/18/04	10.68	5.24	5.44	0.18
	01/25/05	10.68	4.47	6.21	0.77
	04/19/05	10.68	4.66	6.02	-0.19
	07/18/05	10.68	4.91	5.77	-0.25
	10/18/05	10.68	5.24	5.44	-0.33
	11/03/05	10.68	5.31	5.37	-0.07
	01/11/06	10.68	4.08	6.60	1.23
	03/13/06	10.68	3.76	6.92	0.32
	06/15/06	10.68	4.79	5.89	-1.03
	08/02/06	10.68	5.14	5.54	-0.35
	09/20/06	10.68	5.38	5.30	-0.24
	01/02/07	10.68	4.64	6.04	0.74
	6/6/2007	10.68	5.14	5.54	-0.50
	10/04/07	**10.68**	**5.32**	**5.36**	**-0.18**
MW-2	07/30/99	12.15	6.64	5.51	----
	11/09/99	12.15	6.42	5.73	0.22
	02/23/00	12.15	3.31	8.84	3.11
	05/26/00	12.15	6.34	5.81	-3.03
	10/10/00	12.15	6.52	5.63	-0.18
	02/07/01	12.15	5.90	6.25	0.62
	05/25/01	12.15	6.08	6.07	-0.18
	09/19/01	12.15	6.53	5.62	-0.45
	02/06/02	12.15	5.72	6.43	0.81
	05/17/02	12.15	6.17	5.98	-0.45
	08/20/02	12.15	NM	NM	NM
	01/10/03	12.15	5.12	7.03	----

TABLE 1: GROUNDWATER ELEVATION DATA
Omega Termite, 807 75th Ave., Oakland, CA

Well ID	Date	Well Elevation* (ft msl)	Depth to Water (ft toc)	Groundwater Elevation (ft msl)	Elevation Change (ft)
MW-2 cont.	04/14/03	12.15	4.98	7.17	0.14
	07/14/03	12.15	5.99	6.16	-1.01
	10/14/03	12.15	6.43	5.72	-0.44
	01/13/04	12.15	5.42	6.73	1.01
	04/15/04	12.15	6.02	6.13	-0.60
	07/15/04	12.15	5.27	6.88	0.75
	10/18/04	12.15	6.12	6.03	-0.85
	04/19/05	12.15	5.61	6.54	0.51
	07/18/05	12.15	5.84	6.31	-0.23
	10/19/05	12.15	6.17	5.98	-0.33
	11/03/05	12.15	6.21	5.94	-0.04
	01/11/06	12.15	5.11	7.04	1.10
	03/13/06	12.15	5.24	6.91	-0.13
	06/15/06	12.15	6.23	5.92	-0.99
	09/20/06	12.15	6.63	5.52	-0.40
	01/02/06	12.15	6.09	6.06	0.54
	6/6/2007	12.15	6.57	5.58	-0.48
	10/04/07	**12.15**	**6.63**	**5.52**	**-0.06**
MW-3	07/30/99	10.40	5.35	5.05	----
	11/09/99	10.40	5.11	5.29	0.24
	02/23/00	10.40	2.37	8.03	2.74
	05/26/00	10.40	4.98	5.42	-2.61
	10/10/00	10.40	5.24	5.16	-0.26
	02/07/01	10.40	4.73	5.67	0.51
	05/25/01	10.40	4.73	5.67	0.00
	09/19/01	10.40	5.07	5.33	-0.34
	02/06/02	10.40	4.69	5.71	0.38
	05/17/02	10.40	4.80	5.60	-0.11
	08/20/02	10.40	4.97	5.43	-0.17
	01/10/03	10.40	3.59	6.81	1.38
	04/14/03	10.40	5.40	5.00	-1.81
	07/14/03	10.40	4.69	5.71	0.71
	10/14/03	10.40	5.16	5.24	-0.47
	01/13/04	10.40	4.15	6.25	1.01
	04/15/04	10.40	4.73	5.67	-0.58
	07/15/04	10.40	5.03	5.37	-0.30
	10/18/04	10.40	4.85	5.55	0.18
	01/25/05	10.40	4.13	6.27	0.72
	04/19/05	10.40	4.23	6.17	-0.10
	07/18/05	10.40	4.56	5.84	-0.33
	10/18/05	10.40	4.82	5.58	-0.26
	11/03/05	10.40	4.87	5.53	-0.05
	01/11/06	10.40	3.62	6.78	1.25
	03/13/06	10.40	3.47	6.93	0.15
	06/15/06	10.40	4.38	6.02	-0.91
	08/02/06	10.40	4.69	5.71	-0.31
	09/20/26	10.40	4.84	5.56	-0.15
	01/02/07	10.40	3.73	6.67	1.11
	6/6/2007	10.40	4.70	5.70	-0.97
	10/04/07	**10.40**	**4.75**	**5.65**	**-0.05**

TABLE 1: GROUNDWATER ELEVATION DATA
Omega Termite, 807 75th Ave., Oakland, CA

Well ID	Date	Well Elevation* (ft msl)	Depth to Water (ft toc)	Groundwater Elevation (ft msl)	Elevation Change (ft)
MW-4	07/30/99	10.31	5.45	4.86	----
	11/09/99	10.31	5.31	5.00	0.14
	02/23/00	10.31	2.72	7.59	2.59
	05/26/00	10.31	5.07	5.24	-2.35
	10/10/00	10.31	5.32	4.99	-0.25
	02/07/01	10.31	4.73	5.58	0.59
	05/25/01	10.31	4.90	5.41	-0.17
	09/19/01	10.31	5.16	5.15	-0.26
	02/06/02	10.31	4.65	5.66	0.51
	05/17/02	10.31	4.90	5.41	-0.25
	08/20/02	10.31	5.02	5.29	-0.12
	01/10/03	10.31	3.78	6.53	1.24
	04/14/03	10.31	4.11	6.20	-0.33
	07/14/03	10.31	4.75	5.56	-0.64
	10/14/03	10.31	5.28	5.03	-0.53
	01/13/04	10.31	4.07	6.24	1.21
	04/15/04	10.31	4.70	5.61	-0.63
	07/15/04	10.31	5.09	5.22	-0.39
	10/18/04	10.31	4.86	5.45	0.23
	01/25/05	10.31	4.02	6.29	0.84
	04/19/05	10.31	4.17	6.14	-0.15
	07/18/05	10.31	4.49	5.82	-0.32
	10/18/05	10.31	4.83	5.48	-0.34
	11/03/05	10.31	4.88	5.43	-0.05
	01/11/06	10.31	3.58	6.73	1.30
	03/13/06	10.31	3.28	7.03	0.30
	06/15/06	10.31	4.37	5.94	-1.09
	09/20/06	10.31	4.86	5.45	-0.49
	01/02/07	10.31	4.17	6.14	0.69
	6/6/2007	10.31	4.68	5.63	-0.51
	10/04/07	**10.31**	**4.78**	**5.53**	**-0.10**
TW-5	09/19/01	----	6.59	----	----
	05/17/02	----	6.56	----	0.03
	08/20/02	----	6.62	----	-0.06
	01/10/03	----	4.66	----	1.96
	04/14/03	----	5.30	----	-0.64
	07/14/03	----	5.84	----	-0.54
	07/14/03	----	5.84	----	0.00
	10/14/03	----	6.08	----	-0.24
	01/13/04	----	4.83	----	1.25
	04/15/04	----	5.64	----	-0.81
	07/15/04	----	5.89	----	-0.25
	10/18/04	----	5.95	----	-0.06
	01/25/05	----	5.13	----	0.82
	04/19/05	----	5.27	----	-0.14
	07/18/05	----	5.76	----	-0.49
	10/18/05	----	6.04	----	-0.28
	11/03/05	----	6.09	----	-0.05
	01/11/06	----	4.72	----	1.37
	03/13/06	----	4.51	----	0.21
	04/26/06	----	5.02	----	-0.51
	01/02/07		***Well abandoned 12/20/06***		

TABLE 1: GROUNDWATER ELEVATION DATA
Omega Termite, 807 75th Ave., Oakland, CA

Well ID	Date	Well Elevation* (ft msl)	Depth to Water (ft toc)	Groundwater Elevation (ft msl)	Elevation Change (ft)
MW-6	03/13/06	12.35	5.69	6.66	----
	06/15/06	12.35	6.50	5.85	-0.81
	09/20/06	12.35	6.84	5.51	-0.34
	01/02/07	12.35	6.44	5.91	0.40
	6/6/2007	12.35	6.82	5.53	-0.38
	10/04/07	**12.35**	**6.83**	**5.52**	**-0.01**
MW-7	03/13/06	11.16	3.36	7.80	----
	06/15/06	11.16	3.95	7.21	-0.59
	09/20/06	11.16	4.77	6.39	-0.82
	01/02/07	11.16	4.17	6.99	0.60
	6/6/2007	11.16	4.69	6.47	-0.52
	10/04/07	**11.16**	**5.15**	**6.01**	**-0.46**
MW-8	03/13/06	12.42	4.64	7.78	----
	06/15/06	12.42	5.21	7.21	-0.57
	09/20/06	12.42	6.03	6.39	-0.82
	01/02/07	12.42	5.97	6.45	0.06
	6/6/2007	12.42	5.93	6.49	0.04
	10/04/07	**12.42**	**6.64**	**5.78**	**-0.71**
MW-9	03/13/06	11.22	4.32	6.90	----
	06/15/06	11.22	5.35	5.87	-1.03
	08/02/06	11.22	5.70	5.52	-0.35
	09/20/06	11.22	5.81	5.41	-0.11
	01/02/07	11.22	5.19	6.03	0.62
	6/6/2007	11.22	5.67	5.55	-0.48
	10/04/07	**11.22**	**5.89**	**5.33**	**-0.22**
MW-10	03/13/06	10.31	3.28	7.03	----
	06/15/06	10.31	4.34	5.97	-1.06
	08/02/06	10.31	4.66	5.65	-0.32
	09/20/06	10.31	4.79	5.52	-0.13
	01/02/07	10.31	4.26	6.05	0.53
	6/6/2007	10.31	4.66	5.65	-0.40
	10/04/07	**10.31**	**4.74**	**5.57**	**-0.08**
MW-11	01/02/07	10.96	3.94	7.02	----
	6/6/2007	10.96	4.51	6.45	-0.57
	10/04/07	**10.96**	**5.03**	**5.93**	**-0.52**
MW-12	01/02/07	10.46	3.43	7.03	----
	6/6/2007	10.46	3.81	6.65	-0.38
	10/04/07	**10.46**	**4.38**	**6.08**	**-0.57**

NOTES:
Wells surveyed 12/9/02 by Morrow Surveying, resurveyed on 3/02/06, 1/16/07 by Morrow Surveying
ft toc = depth to water measured from the top of well casing
NM - not measured
ft msl = feet above mean sea level

TABLE 2: GROUNDWATER ELEVATION & FLOW SUMMARY
Omega Termite, 807 75th Ave., Oakland, California

Episode #	Date	Average Elevation (ft)	Elevation Change (ft)	Flow Direction / Gradient
1	07/30/99	5.07	-	
2	11/09/99	5.25	0.18	0.0056 / SW
3	02/23/00	8.08	2.83	0.008 / S
4	05/26/00	5.41	-2.66	0.003 / SW
5	10/10/00	5.19	-0.22	0.0036 / S
6	02/07/01	5.73	0.54	0.008 / S
7	05/25/01	5.65	-0.09	0.006 / S
8	09/19/01	5.32	-0.33	0.004 / S
9	02/06/02	5.93	0.62	0.005 / SE
10	05/17/02	5.59	-0.34	0.003 / SW
11	08/20/02	5.34	-0.26	0.002 / S
12	01/10/03	6.74	1.40	0.006 / E-NE
13	04/14/03	6.05	-0.69	0.016 / E-NE
14	07/14/03	5.76	-0.29	.0017 / S-SE
15	10/14/03	5.26	-0.50	0.003 / SE
16	01/13/04	6.34	1.08	0.001 / W
17	04/15/04	5.74	h	0.001 / W
18	07/15/04	5.68	-0.05	0.001 / W
19	10/18/04	5.62	-0.07	0.002 / N
20	01/25/05	6.33	0.71	0.002 / N
21	04/19/05	6.16	-0.17	0.001 / N
22	07/18/05	5.85	-0.31	0.0004 / S
23	10/18/05	5.61	-0.24	0.0017 / SW
24	01/11/06	6.79	1.18	0.0047 / N
25	3/13/06	6.57	-0.21	Shallow Zone .0004 / NW
	3/13/06	7.38	----	Deeper zone 0.036 / S
26	6/15/06	5.92	-0.65	Shallow Zone 0.0004 / NW
	6/15/06	6.40	-0.98	Deeper zone 0.06 / S
27	9/20/06	5.52	-0.41	Shallow Zone 0.005 / SW
	9/20/06	5.93	-0.47	Deeper zone 0.004/ S
28	1/2/07	6.02	0.50	Shallow Zone 0.0004 / NW
	1/2/07	6.38	0.45	Deeper Zone 0.06 / S
29	6/6/07	6.04	0.02	Shallow Zone 0.0004 / NW
	6/6/07	5.67	-0.71	Deeper Zone 0.06 / S
30	**10/4/07**	**5.52**	**-0.50**	Shallow Zone 0.005 / SW
	10/4/07	**5.72**	**-0.66**	Deeper Zone 0.012/ S

NOTES:

Average water table elevation calculated using Microsoft Excel

Shallow Zone Wells: MW-1, MW-2, MW-3, MW-4, MW-6

Deeper Zone Wells: MW-7. MW-8, MW-9, MW-10, MW-11, MW-12

TABLE 3: GROUNDWATER SAMPLE ANALYTICAL DATA (W/ DO & ORP)

Omega Termite, 807 75th Ave., Oakland, CA

Well ID	Sample Date	DTW (ft toc)	TPH-g (ug/L)	TPH-d (ug/L)	TPH-mo (ug/L)	MTBE (ug/L)	MTBE (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl benzene (ug/L)	Xylenes (ug/L)	DO (mg/L)	ORP (-eV)
			EPA Method 8015			*8260B*	*EPA Method 8021B*					*Field Measurement*	
MW-1	07/30/99	5.82	2,700	---	---	---	ND<10	920	5.5	18	130		
	11/09/99	5.70	1,800	---	---	---	ND<20	430	1.5	26	60		
	02/23/00	2.84	3,800	---	---	---	ND<10	1,500	56	78	35		
	05/26/00	5.50	7,100	---	---	---	ND<10	2,800	70	220	81		
	10/10/00	5.70	980	---	---	---	ND<5.0	260	2.9	10	11		
	02/07/01	5.25	570	---	---	---	ND<5.0	150	1.8	4.9	9.3		
	05/25/01	5.25	18,000	---	---	---	ND<100	3,800	350	550	620		
	09/19/01	5.51	840	---	---	---	ND<5.0	190	4.0	4.6	5.3		
	05/17/02	5.30	13,000	920	---	---	ND<5.0	4,500	29	50	58		
	08/20/02	5.39	2,100	740	ND<5,000	---	ND<15	820	4.5	6.4	9.6		
	01/10/03	4.11	95	260	ND<5,000	---	ND<5.0	23	0.66	3.9	6.5		
	04/14/03	4.85	340	310	---	---	ND<5.0	87	1.3	4.3	5.6		
	07/14/03	5.08	750	700	---	---	ND<10	420	0.84	3.7	6.0		
	10/14/03	5.63	200	930	460	---	ND<5.0	62	0.83	2.2	2.7		
	01/13/04	4.53	510	440	ND<250	---	ND<5.0	190	1.7	11	18.0		
	04/15/04	5.14	740	490	ND<250	---	ND<10	240	ND<0.5	5.0	9.6		
	07/15/04	5.42	250	420	260	---	ND<5.0	78	ND<0.5	5.0	4.4		
	10/18/04	5.42	170	510	290	---	ND<5.0	33	0.75	1.7	3.5		
	01/25/05	4.47	240	390	ND<250	---	ND<5.0	86	0.82	1.3	3.0		
	04/19/05	4.66	5,100	460	ND<250	---	ND<50	2,100	5.2	13	84		
	07/18/05	4.91	3,300	700	350	---	ND<45	1,500	2.8	13	24		
	10/18/05	5.24	560	550	330	---	ND<5.0	190	ND<0.5	3.0	8.6		
	01/11/06	4.08	240	270	ND<250	---	ND<5.0	93	ND<0.5	1.3	3.4	0.44	-52.2
	03/13/06	3.76	840	260	ND<250	0.89	ND<5.0	330	1.3	5.1	17	2.7	-377.6
	06/15/06	4.79	3,200	640	320	---	ND<25	1,400	3.1	10	71	2.18	-0.9
	09/21/06	5.38	3,500	550	270	---	ND<25	1,700	ND<2.5	14	23	0.11	-82.5
	01/02/07	4.64	410	240	ND<250	---	ND<5.0	150	0.55	1.0	7	0.31	-68.4
	06/06/07	5.54	2,500	540	300	---	ND<20	910	3.4	7.7	55	0.17	21.2
	07/11/07	4.98	2,000	450	ND<250	---	ND<10	620	1.5	5.9	31	9.28	-105.3
	10/04/07	**5.32**	**500**	**440**	**260**	**---**	**ND<5.0**	**140**	**ND<0.5**	**1.8**	**8**	**0.51**	**-39.9**
MW-2	07/30/99	6.64	1,200	---	---	---	ND<10	29	2.5	51	100		
	11/09/99	6.42	1,300	---	---	---	ND<30	26	1.1	55	32		
	02/23/00	3.31	5,000	---	---	---	ND<10	200	18	390	440		
	05/26/00	6.34	2,700	---	---	---	ND<10	69	13	83	68		
	10/10/00	6.52	810	---	---	---	ND<10	17	4.7	42	46		
	02/07/01	5.90	2,600	---	---	---	ND<10	70	15	80	100		
	05/25/01	6.08	2,400	---	---	---	ND<5.0	75	16	85	100		
	09/19/01	6.53	1,200	---	---	---	ND<5.0	10	8.5	46	55		
	02/06/02	5.72	1,800	---	---	---	ND<50	14	11	58	59		
	05/17/02	6.17	2,000	860	---	---	8.1	19	1.1	0.75	88		
	01/10/03	5.12	2,000	910	ND<5000	---	ND<50	11	11	96	100		
	04/14/03	4.98	2,400	800	-	---	ND<10	16	10	100	73		
	07/14/03	5.99	1,900	970	-	---	ND<15	18	4.8	79	78		
	10/14/03	6.43	1,600	1,300	ND<250	---	ND<10	14	5.9	87	78		
	01/13/04	5.72	2,900	960	ND<250	---	ND<50	26	13	190	150		
	04/15/04	6.02	2,700	1,100	ND<250	---	ND<15	28	11	120	100		
	07/15/04	5.27	2,300	1,000	ND<250	---	ND<10	8.8	3.8	96	84		
	10/18/04	5.27	2,400	910	ND<250	---	ND<10	8.6	8.9	68	72		
	01/25/05	5.41	3,500	1,200	ND<250	---	ND<50	21	11	170	120		
	04/19/05	5.61	3,400	1,700	ND<250	---	ND<15	15	7.4	150	94		
	07/18/05	5.84	3,400	1,400	ND<250	---	ND<5.0	11	9.7	100	89		
	10/18/05	6.17	3,000	2,000	270	---	ND<5.0	8.4	6.7	88	86		

TABLE 3: GROUNDWATER SAMPLE ANALYTICAL DATA (W/ DO & ORP)

Omega Termite, 807 75th Ave., Oakland, CA

Well ID	Sample Date	DTW (ft toc)	TPH-g (ug/L)	TPH-d (ug/L)	TPH-mo (ug/L)	MTBE (ug/L)	MTBE (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl benzene (ug/L)	Xylenes (ug/L)	DO (mg/L)	ORP (-eV)
MW-2 continued	01/11/06	5.11	3,400	1,700	ND<250	---	ND<90	18	9.4	170	87	0.11	-77.9
	03/13/06	5.24	3,400	1,200	ND<250	0.76	ND<50	20	9.4	110	80	1.9	-458.3
	06/15/06	6.23	2,200	2,400	270	---	ND<10	8.4	ND<1.0	81	72	3.14	-81.7
	09/20/06	6.63	2,400	860	ND<250	---	ND<50	12	13	46	65	0.08	-63.9
	01/02/07	6.09	3,800	2,100	ND<250	---	ND<25	11	7.6	110	120	0.25	-221.4
	06/06/07	6.57	3,800	1,500	ND<250	---	ND<20	17	17	75	58	0.21	-118.8
	07/11/07	6.44	5,300	2,900	480	---	ND<17	10	8	47	72	0.27	-138.4
	10/04/07	**6.63**	**660**	**1,300**	**ND<250**	**---**	**ND<5.0**	**1.8**	**0.83**	**40**	**45**	**0.41**	**-86.6**
MW-3	07/30/99	5.35	2,700	---	---	---	ND<10	220	15	130	230		
	11/09/99	5.11	3,100	---	---	---	15	440	8.8	150	96		
	02/23/00	2.37	1,800	---	---	---	ND<15	180	11	82	79		
	05/26/00	4.98	1,600	---	---	---	6.4	140	10	69	63		
	10/10/00	5.24	1,100	---	---	---	ND<10	110	4.4	63	51		
	02/07/01	4.73	1,100	---	---	---	ND<10	130	5.1	68	65		
	05/25/01	4.73	1,200	---	---	---	ND<6.0	120	5.4	69	64		
	09/19/01	5.07	800	---	---	---	<5.0	78	3.5	52	37		
	02/06/02	4.69	1,100	---	---	---	ND<10	130	4.7	77	71		
	05/17/02	4.80	2,800	810	---	2.0	ND<50	410	23	160	210		
	08/20/02	4.97	780	270	ND<5000	---	ND<10	110	2.8	63	41		
	01/10/03	3.59	1,100	510	ND<5000	---	ND<20	160	3.4	98	84		
	04/14/03	5.40	690	230	-	---	ND<5.0	60	2.3	44	34		
	07/14/03	4.69	900	380	-	---	ND<5.0	130	2.0	70	43		
	10/14/03	5.16	500	200	ND<250	---	ND<10	50	2.3	37	18		
	01/13/04	4.15	1,500	400	ND<250	---	ND<30	200	6.2	120	88		
	04/15/04	4.73	1,100	280	ND<250	---	ND<15	130	3.7	75	53		
	07/15/04	5.03	610	240	ND<250	---	ND<5.0	73	2.1	51	29		
	10/18/04	5.03	370	270	ND<250	---	ND<5.0	45	1.2	47	28		
	01/25/05	4.13	840	300	ND<250	---	ND<5.0	85	2.4	68	45		
	04/19/05	4.23	1,100	380	ND<250	---	ND<5.0	140	4.0	95	59		
	07/18/05	4.66	740	290	ND<250	---	ND<5.0	98	2.0	70	35		
	10/18/05	4.82	420	220	ND<250	---	ND<5.0	38	1.1	35	16		
	01/11/06	3.73	740	260	ND<250	---	ND<5.0	75	2.5	60	32	0.21	341.3
	03/13/06	3.76	1,300	380	ND<250	1.1	ND<17	90	2.5	87	72	3.51	-316.7
	06/15/06	4.38	670	300	ND<250	---	ND<5.0	76	1.3	60	40	3.91	298.3
	09/20/06	4.84	510	300	310	---	ND<17	49	ND<1.7	50	36	0.06	93.3
	01/02/07	4.73	380	180	ND<250	---	ND<5.0	33	1.3	32	17	0.68	153.9
	06/06/07	4.70	460	230	ND<250	---	ND<5.0	40	1.9	39	22	0.28	215.3
	10/04/07	**4.75**	**320**	**230**	**ND<250**	**---**	**ND<5.0**	**28**	**ND<0.5**	**29**	**17**	**0.5**	**-11.4**
MW-4	07/30/99	5.45	340	---	---	---	ND<10	57	2.2	8.5	6.8		
	11/09/99	5.31	1,000	---	---	---	ND<10	220	<0.5	17	7.1		
	02/23/00	2.72	980	---	---	---	ND<5.0	260	7	33	27		
	05/26/00	5.07	760	---	---	---	5.7	170	4.8	22	13		
	10/10/00	5.32	520	---	---	---	ND<10	130	2.3	22	10		
	02/07/01	4.73	680	---	---	---	ND<8.0	180	3.7	29	21		
	05/25/01	4.90	1,700	---	---	---	ND<10	510	9.6	44	46		
	09/19/01	5.16	680	---	---	---	ND<10	200	2.6	33	12		
	02/06/02	4.65	710	---	---	---	ND<15	220	2.8	40	21		
	05/17/02	4.90	1,300	190	---	3.3	ND<10	330	5.6	61	51		
	08/20/02	5.02	580	120	ND<5,000	---	ND<5.0	160	1.7	34	13		
	01/10/03	3.78	800	85	ND<5,000	---	ND<20	240	2.5	46	28		
	04/14/03	4.11	850	120	---	---	ND<10	220	2.7	47	26		

TABLE 3: GROUNDWATER SAMPLE ANALYTICAL DATA (W/ DO & ORP)

Omega Termite, 807 75th Ave., Oakland, CA

Well ID	Sample Date	DTW (ft toc)	TPH-g (ug/L)	TPH-d (ug/L)	TPH-mo (ug/L)	MTBE (ug/L)	MTBE (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl benzene (ug/L)	Xylenes (ug/L)	DO (mg/L)	ORP (-eV)
MW-4 continued	07/14/03	4.75	780	170	---	---	ND<20	220	1.4	44	23		
	10/14/03	5.25	420	110	ND<250	---	ND<5.0	120	0.95	31	8.2		
	01/13/04	4.07	120	69	ND<250	---	ND<10	30	0.52	8.1	4.7		
	04/15/04	4.70	660	120	ND<250	---	ND<25	200	2.2	39	24		
	07/15/04	5.09	500	92	ND<250	---	ND<5.0	130	1.3	35	15		
	10/18/04	5.09	350	18	ND<250	---	ND<5.0	76	0.68	22	4.9		
	01/25/05	4.02	580	110	ND<250	---	ND<5.0	140	1.2	37	20		
	04/19/05	4.17	790	130	ND<250	---	ND<5.0	200	1.7	51	28		
	07/18/05	4.49	490	140	ND<250	---	ND<5.0	140	0.99	36	11		
	10/18/05	4.83	320	84	ND<250	---	ND<5.0	72	0.59	20	4.4		
	01/11/06	3.58	310	98	ND<250	---	ND<5.0	88	0.65	26	9.0	0.51	71.7
	03/13/06	3.58	490	77	ND<250	1.9	ND<5.0	92	0.88	31	15	4.11	118.3
	06/15/06	4.37	460	86	ND<250	---	ND<25	93	ND<0.5	29	9.2	3.42	274.9
	09/20/06	4.86	260	170	360	---	ND<10	63	ND<0.5	23	4.7	0.08	390.8
	01/02/07	4.17	160	78	ND<250	---	ND<5.0	27	ND<0.5	10	2.0	2.77	493.6
	06/06/07	4.68	190	59	ND<250	---	ND<5.0	40	ND<0.5	14	3.6	0.41	236
	10/04/07	**4.78**	**180**	**ND<50**	**ND<250**	**---**	**ND<5.0**	**44**	**ND<0.5**	**12**	**2.2**	**0.84**	**411.4**
TW-5	10/10/00	---	5,800	2,900	ND<250	---	ND<50	650	60	190	230		
	02/07/01	---	720	650	450	---	ND<5.0	6.0	4.5	3.2	4.5		
	05/25/01	---	370	420	ND<250	---	ND<5.0	13.0	4.1	1.6	1.3		
	09/19/01	6.59	15,000	2,700,000[1]	1,100,000[1]	---	530	29	2.7	14	240		
	02/06/02	---	280	55,000	18,000[1]	---	ND<5.0	2.3	0.74	ND<0.5	0.70		
	05/17/02	6.56	480	41,000	---	ND<5.0	ND<5.0	1.6	1.1	0.8	ND<0.5		
	08/20/02	6.62	240	21,000	ND<5,000	---	ND<5.0	8.0	1.2	1.1	0.54		
	01/10/03	4.66	ND<50	1,300	ND<5,000	---	ND<5.0	5.4	0.58	ND<0.5	1.10		
	4/14/2003	5.30	160	2,300	---	---	ND<5.0	18	5.7	5.9	16		
	7/14/2003	5.84	100	16,000	---	---	ND<5.0	1.2	0.77	0.63	1.2		
	10/14/03	6.08	120	10,000	4,600	---	ND<5.0	1.6	1.6	ND<0.5	1.2		
	01/13/04	4.83	110	2,100	1,400	---	ND<5.0	8.4	1.2	ND<0.5	3.9		
	04/15/04	5.64	170	2,200	1,100	---	ND<5.0	2.5	1.2	ND<0.5	5.1		
	07/15/04	5.89	81	3,000	1,600	---	ND<5.0	5	1.3	0.85	4.1		
	10/18/04	5.89	230	3,700	1,600	---	ND<5.0	0.54	3.4	ND<0.5	0.93		
	01/25/05	5.13	63	750	640	---	ND<5.0	ND<0.5	0.78	ND<0.5	1.3		
	04/19/05	5.27	ND<50	1,100	660	---	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5		
	07/18/05	5.76	ND<50	770	490	---	ND<5.0	ND<0.5	0.88	ND<0.5	ND<0.5		
	10/18/05	6.04	78	1,600	1,100	---	ND<5.0	ND<0.5	1.6	ND<0.5	ND<0.5		
	01/11/06	4.72	ND<50	680	550	ND<0.5	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5		
	03/13/06	4.51	ND<50	180	260	ND<0.5	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5		
	06/15/06	--	*Not sampled because well damaged - scheduled for proper destruction*										
	01/02/07	--	***Well abandoned on December 20, 2006***										

TABLE 3: GROUNDWATER SAMPLE ANALYTICAL DATA (W/ DO & ORP)

Omega Termite, 807 75th Ave., Oakland, CA

Well ID	Sample Date	DTW (ft toc)	TPH-g (ug/L)	TPH-d (ug/L)	TPH-mo (ug/L)	MTBE (ug/L)	MTBE (ug/L)	Benzene (ug/L)	Toluene (ug/L)	Ethyl benzene (ug/L)	Xylenes (ug/L)	DO (mg/L)	ORP (-eV)
MW-6	03/13/06	5.69	87	160	310	ND<0.5	ND<5.0	ND<0.5	0.83	1.3	0.80	5.02	-341.1
	06/15/06	6.50	ND<50	110	ND<250	---	ND<5.0	ND<0.5	ND<0.5	1.0	0.58	5.3	60.3
	09/20/06	6.84	ND<50	59	ND<250	---	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.09	103.2
	01/02/07	6.44	ND<50	120	ND<250	---	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.56	53.4
	06/06/07	6.82	ND<50	76	ND<250	---	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.19	244.1
	10/04/07	**6.83**	**ND<50**	**100**	**ND<250**	**---**	**ND<5.0**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**0.95**	**159.1**
MW-7	03/13/06	3.36	460	3,500	360	ND<0.5	ND<5.0	2.5	1.0	ND<0.5	3.3	1.66	-354.8
	06/15/06	3.95	ND<50	520	ND<250	--	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.49	36.9
	09/20/06	4.77	ND<50	150	ND<250	--	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.08	
	01/02/07	4.17	ND<50	99	ND<250	--	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.32	83.9
	06/06/07	4.69	ND<50	ND<50	ND<250	--	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	9.25	282.4
	07/11/07	--	67	150	ND<250	--	ND<5.0	17	ND<0.5	ND<0.5	ND<0.5	20.89	-20.5
	10/04/07	**5.15**	**ND<50**	**ND<50**	**ND<250**	**--**	**ND<5.0**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**9.67**	**186.1**
MW-8	03/13/06	4.64	280	130	ND<250	ND<0.5	ND<5.0	ND<0.5	2.0	ND<0.5	1.3	1.55	-370.6
	06/15/06	5.21	ND<50	140	ND<250	--	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.64	25.4
	09/20/06	6.03	ND<50	65	ND<250	--	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.06	84.6
	01/02/07	5.97	ND<50	70	ND<250	--	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.47	95.4
	06/06/07	5.93	ND<50	ND<50	ND<250	--	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.78	269.4
	10/04/07	**6.64**	**ND<50**	**ND<50**	**ND<250**	**--**	**ND<5.0**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**2.35**	**123.1**
MW-9	03/13/06	4.32	1,100	14,000[1]	4,100	2.4	ND<5.0	85	1.8	0.64	100	1.26	-438.1
	06/15/06	5.35	460	2,100	710	--	ND<5.0	170	0.73	1.3	8.3	1.48	22.9
	09/21/06	5.81	130	1,400	460	--	ND<5.0	20	1.2	ND<0.5	2.6	0.1	91.8
	01/02/07	5.19	88	4,300	1,000	--	ND<5.0	5.1	0.67	ND<0.5	ND<0.5	0.99	-5.2
	06/06/07	5.67	64	320	250	--	ND<5.0	12	ND<0.5	ND<0.5	ND<0.5	0.83	138.7
	10/04/07	**5.89**	**ND<50**	**140**	**ND<250**	**--**	**ND<5.0**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**3.43**	**110.6**
MW-10	03/13/06	3.28	ND<50	220	ND<250	2.7	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	7.41	-344.1
	06/15/06	4.38	ND<50	300	ND<250	--	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2.72	20.3
	09/21/06	4.79	ND<50	280	460	--	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	0.08	13.9
	01/02/07	4.66	ND<50	230	ND<250	--	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.16	22
	06/06/07	4.66	ND<50	230	ND<250	--	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.33	103.7
	10/04/07	**4.74**	**ND<50**	**120**	**ND<250**	**--**	**ND<5.0**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**0.83**	**-75.8**
MW-11	01/02/07	3.94	160	2,700	ND<250	--	ND<5.0	ND<0.5	ND<0.5	ND<0.5	1.7	0.22	45.9
	06/06/07	4.51	ND<50	ND<50	ND<250	--	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	11.38	311.9
	07/11/07	--	ND<50	ND<50	ND<250	--	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<0.5	21.76	-17.4
	10/04/07	**5.03**	**ND<50**	**ND<50**	**ND<250**	**--**	**ND<5.0**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**19.58**	**164.6**
MW-12	01/02/07	3.43	53	130	ND<250	--	1.4	ND<0.5	ND<0.5	ND<0.5	0.95	0.47	92.4
	06/06/07	3.81	ND<50	ND<50	ND<250	--	ND<5.0	ND<0.5	ND<0.5	ND<0.5	ND<5.0	6.26	198.1
	10/04/07	**4.38**	**ND<50**	**ND<50**	**ND<250**	**--**	**ND<5.0**	**ND<0.5**	**ND<0.5**	**ND<0.5**	**ND<5.0**	**14.03**	**133.7**

NOTES:

TPH-g = total petroleum hydrocarbons as gasoline

TPH-d = total petroleum hydrocarbons as diesel

TPH-mo = total petroleum hydrocarbons as motor oil

MTBE = methyl tert-butyl ether

1 = light non-aqueous phase liquid

µg/L = micrograms per liter (parts per billion)

----- not sampled

ND = not detected

TABLE 4: GROUNDWATER SAMPLE ANALYTICAL DATA (FUEL OXYGENATES)
Omega Termite, 807 75th Ave., Oakland, CA

Well ID	Date	TAME (ug/L)	TBA (ug/L)	EDB (ug/L)	1,2-DCA (ug/L)	DIPE (ug/L)	ETBE (ug/L)	MTBE (ug/L)
MW-1	01/02/07	<0.5	9.7	<0.5	4.6	<0.5	<0.5	0.97
MW-2	01/02/07	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-3	01/02/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.55
MW-4	01/02/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.0
MW-9	01/02/07	<0.5	<0.5	<0.5	0.62	<0.5	<0.5	1.6
MW-10	01/02/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.1
MW-11	01/02/07	<0.5	<0.5	<0.5	2.9	<0.5	<0.5	<0.5
MW-12	01/02/07	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

NOTES:

µg/L = micrograms per liter (parts per billion)

TAME	tert-Amyl methyl ether	DIPE	Diisopropyl ether
TBA	t-Butyl alcohol	ETBE	Ethyl ter-butyl ether
EDB	1,2-Dibomoethane	MTBE	Methyl-t-butyl ether
1,2-DCA	1,2-Dichloroethane		

TABLE 5: SOIL SAMPLE ANALYTICAL DATA
Omega Termite, 807 75th Street, Oakland, CA

Sample ID	Date	TPH-g (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	MTBE (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl benzene (mg/kg)	Xylenes (mg/kg)
MW-12-14	12/18/06	ND<1.0	ND<1.0	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-12-24	12/18/06	ND<1.0	ND<1.0	---	ND<0.05	0.094	ND<0.005	ND<0.005	ND<0.005
MW-11-26	12/18/06	29	61	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-11-31	12/18/06	ND<1.0	ND<1.0	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
OZ-1-12	12/21/06	ND<1.0	ND<1.0	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
OZ-2-17.5	12/19/06	6.3	1.9	---	ND<0.05	0.19	ND<0.005	0.046	0.011
OZ-2-34	12/19/06	ND<1.0	ND<1.0	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
OZ-3-21	12/19/06	ND<1.0	3.4	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
OZ-4-31	12/18/06	ND<1.0	ND<1.0	---	ND<0.05	0.015	ND<0.005	ND<0.005	ND<0.005
OZ-5-16	12/21/06	34	22	---	ND<0.50	0.63	0.13	0.42	1.4
OZ-5-31	12/21/06	1.3	4.0	---	ND<0.05	0.047	ND<0.005	0.011	0.041
OZ-6-11	12/21/06	31	22	---	ND<0.25	0.18	0.14	ND<0.025	0.064
OZ-6-21	12/21/06	17	22	---	ND<0.05	0.10	ND<0.005	ND<0.005	0.034
OZ-6-26	12/21/06	200	240	---	ND<0.50	ND<0.050	ND<0.050	0.067	0.17
OZ-7-29	12/20/06	12	5.9	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
OZ-8-11	12/20/06	9.4	2.0	---	ND<0.05	0.012	0.047	0.040	0.026
OZ-8-31	12/20/06	28	19	---	ND<0.10	0.016	0.15	0.32	0.17
MW6-10.5	02/15/06	ND<1.0	1.1	ND<5.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW7-21.5	02/16/06	350	1,500	ND<50	ND<2.0	ND<0.2	ND<0.2	0.23	0.71
MW7-31	02/16/06	4	6.4	ND<5.0	ND<0.05	ND<0.005	0.0091	0.0092	0.0083
MW7-32	02/16/06	15	73	ND<5.0	ND<0.05	0.006	0.026	0.018	0.023
MW8-27	02/15/06	ND<1.0	ND<1.0	ND<5.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW9-29	02/16/06	ND<1.0	ND<1.0	ND<5.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW10-25	02/15/06	69	290	ND<5.0	ND<0.05	ND<0.005	ND<0.005	0.046	0.12
SB7-10	10/09/03	ND<1.0	---	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB8-15	10/09/03	ND<1.0	---	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB9-15	10/09/03	ND<1.0	---	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB10-15	10/09/03	ND<1.0	---	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB11-15	10/09/03	ND<1.0	ND<1.0	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB12-15	10/10/03	ND<1.0	ND<1.0	ND <5.0	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
SB13-14	10/10/03	ND<1.0	--	--	ND<0.05	0.049	ND<0.005	0.014	0.019
SB14-4.5	10/10/03	360	130	ND <5.0	ND<2.5	1.4	1.5	8	37
SB14-9.5	10/10/03	800	240	8.2	ND<2.0	2.9	3.5	16	71
SB14-28.0	10/10/03	37	45	ND <5.0	ND<0.05	ND<0.005	ND<0.005	0.015	0.11

TABLE 5: SOIL SAMPLE ANALYTICAL DATA
Omega Termite, 807 75th Street, Oakland, CA

Sample ID	Date	TPH-g (mg/kg)	TPH-d (mg/kg)	TPH-mo (mg/kg)	MTBE (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl benzene (mg/kg)	Xylenes (mg/kg)
SWS (8')	03/20/00	290	---	---	ND<0.5	0.84	2	6.3	1.3
SWN (8')	03/20/00	1.8	---	---	ND<0.05	ND<0.005	ND<0.005	0.007	0.008
SWE (8')	03/20/00	1800	---	---	ND<5.0	12	65	32	160
EB (7')	03/20/00	560	220	100	ND<1.0	0.59	4.9	7.3	40
EBW (11.5')	03/20/00	280	---	---	ND<0.21	2.7	6.6	5.2	23
MW-1 10'	06/25/99	<1.0	---	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-1 15'	06/25/99	3.4	---	---	ND<0.05	0.092	0.022	0.054	0.14
MW-2 10'	06/25/99	420	---	---	<2	ND<0.1	2.7	4.8	8.2
MW-2 15'	06/25/99	<1.0	---	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-3 10'	06/25/99	14	---	---	ND<0.05	0.3	0.091	0.29	0.28
MW-3 15'	06/25/99	<1.0	---	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
MW-4 10'	06/25/99	3.6	---	---	ND<0.05	0.71	ND<0.005	0.19	ND<0.005
MW-4 15'	06/25/99	<1.0	---	---	ND<0.05	ND<0.005	ND<0.005	ND<0.005	ND<0.005
BH-1 10'	01/31/97	4.1	---	---	ND<5.0	0.078	0.009	0.11	0.17
BH-2 10'	01/31/97	23	---	---	0.13	0.46	0.05	0.089	0.061
BH-3 10'	01/31/97	280	---	---	1.8	3.2	3	3.8	12
BH-4 10'	01/31/97	4.6	---	---	ND<5.0	0.03	0.025	0.36	0.46
BH-5 10'	01/31/97	800	---	---	5	4.3	23	15	65
BH-6 10'	01/31/97	110	---	---	0.53	3	0.25	0.95	0.53
8KEW (10')	09/15/96	64	---	---	0.16	1.8	1.2	1.4	2.9
8KWW (10')	09/15/96	2600	---	---	25	2.8	15	37	120
8KNWW (10')	09/15/96	360	---	---	2.5	2.5	0.83	8.5	2.4
1KE (9')	09/15/96	41	---	---	ND<0.1	0.077	0.99	0.86	4.7
K (9')	09/15/96	4300	---	---	ND<10	13	83	71	310

NOTES:

TPH-g = Total Petroleum Hydrocarbons as gasoline

TPH-d = Total Petroleum Hydrocarbons as diesel

TPH-mo = Total Petroleum Hydrocarbons as motor oil

MTBE = methyl tert-butyl ether

--- sample not analyzed by this method

TABLE 6: MONITORING WELL CONSTRUCTION DETAILS
Omega Termite, 807 75th Ave., Oakland, California

Well ID	Date Installed	Well Box Elevation (ft msl)	Top of Casing (ft)	Depth to Water (1/2/07)	Casing Material	Total Depth (ft bgs)	Well Depth (ft bgs)	Borehole Diameter (inches)	Casing Diameter (inches)	Screened Interval (feet)	Slot Size (inches)	Filter Pack Interval (ft bgs)	Filter Pack Material	Bentonite Seal (ft bgs)	Grout Seal (feet)
MW-1	06/25/99	11.28	10.68	4.64	PVC	20	20	8 1/4	2	20.0-5.0	0.020	20.0-3.5	#3 sand	3.5-2.5	2.5-0.5
MW-2	06/25/99	12.55	12.15	6.09	PVC	20	20	8 1/4	2	20.0-5.0	0.020	20.0-3.5	#3 sand	3.5-2.5	2.5-0.5
MW-3	06/25/99	10.67	10.40	4.73	PVC	20	20	8 1/4	2	20.0-5.0	0.020	20.0-3.5	#3 sand	3.5-2.5	2.5-0.5
MW-4	06/25/99	10.56	10.31	4.17	PVC	20	20	8 1/4	2	20.0-5.0	0.020	20.0-3.5	#3 sand	3.5-2.5	2.5-0.5
TW-5	March 2000	11.69	11.58	Destroyed 12/20/06		10	10	NA	4	10.0-5.0	1/4" drilled	NA	NA	NA	2.0-0.5
MW-6	02/15/06	12.74	12.35	6.44	PVC	14	14	8 1/4	2	14.0-5.0	0.010	14.0-4.5	# 2/12	4.5-3.5	3.5-0.5
MW-7	02/16/06	11.64	11.16	4.17	PVC	33	33	8 1/4	2	33.0-26.0	0.010	33.0-25.0	# 2/12	25.0-23.0	23.0-0.5
MW-8	02/15/06	12.57	12.42	58.97	PVC	31	31	8 1/4	2	31.0-26.0	0.010	31.0-25.0	# 2/12	25.0-23.0	23.0-0.5
MW-9	02/16/06	11.41	11.22	5.19	PVC	30	30	8 1/4	2	30.0-25.0	0.010	30.0-24.0	# 2/12	24.0-22.0	22.0-0.5
MW-10	02/15/06	10.60	10.31	4.26	PVC	30	30	8 1/4	2	30.0-25.0	0.010	30.0-24.0	# 2/12	24.0-22.0	22.0-0.5
MW-11	12/18/06	11.14	10.96	3.94	PVC	35	35	8 1/4	2	35.0-25.0	0.010	35.0-23.0	# 2/12	23.0-21.0	21.0-0.5
MW-12	12/18/06	11.19	10.46	3.43	PVC	35	35	8 1/4	2	35.0-25.0	0.010	35.0-23.0	# 2/12	23.0-21.0	21.0-0.5

TABLE 7: OZONE WELL CONSTRUCTION DETAILS
Omega Termite, 807 75th Ave., Oakland, California

Well ID	Date Installed	Injection Point	Casing Material	Total Depth (ft bgs)	Well Depth (ft bgs)	Borehole Diameter (inches)	Casing Diameter (inches)	Screened Interval (feet)	Slot Size (inches)	Filter Pack Interval (ft bgs)	Filter Pack Material	Bentonite Seal (ft bgs)	Grout Seal (ft bgs)
OZ-1	12/21/06	Single Shallow Point	PVC	19.5	19.5	8 1/4	1	19.5-18.0	micropore	19.5-9.0	#2/16	16.0-2.0	2.0-1.0
OZ-2	12/19/06	Shallow Point	PVC	35	19.5	10 1/2	1	19.5-18.0	micropore	19.5-16.0	#2/16	16.0-2.0	2.0-1.0
		Deep Point			34		1	34.0-32.5	micropore	35.0-30.0	#2/16	30.0-19.5	
OZ-3	12/19/06	Shallow Point	PVC	35	15	10 1/2	1	15.0-13.5	micropore	16.0-12.0	#2/16	12.0-2.0	3.0-1.0
		Deep Point			34		1	34.0-32.5	micropore	35.0-30.0	#2/16	30.0-16.0	
OZ-4	12/19/06	Shallow Point	PVC	35	15	10 1/2	1	15.0-13.5	micropore	16.0-12.0	#2/16	12.0-2.0	2.0-1.0
		Deep Point			34		1	34.0-32.5	micropore	35.0-30.0	#2/16	30.0-16.0	
OZ-5	12/21/06	Shallow Point	PVC	35	15	10 1/2	1	15.0-13.5	micropore	16.0-12.0	#2/16	12.0-2.0	2.0-1.0
		Deep Point			34		1	34.0-32.5	micropore	35.0-30.0	#2/16	30.0-16.0	
OZ-6	12/21/06	Shallow Point	PVC	35	15	10 1/2	1	15.0-13.5	micropore	16.0-12.0	#2/16	12.0-2.0	2.0-1.0
		Deep Point			34		1	34.0-32.5	micropore	35.0-30.0	#2/16	30.0-16.0	
OZ-7	12/20/06	Shallow Point	PVC	35	15	10 1/2	1	15.0-13.5	micropore	16.0-12.0	#2/16	12.0-2.0	2.0-1.0
		Deep Point			34		1	34.0-32.5	micropore	35.0-30.0	#2/16	30.0-16.0	
OZ-8	12/20/06	Shallow Point	PVC	35	15	10 1/2	1	15.0-13.5	micropore	16.0-12.0	#2/16	12.0-2.0	2.0-1.0
		Deep Point			34		1	34.0-32.5	micropore	35.0-30.0	#2/16	30.0-16.0	
OZ-9	01/19/07	Shallow Point	PVC	35	20	8 1/4	1	21.0-19.5	micropore	22.0-18.0	#2/16	18.0-2.0	2.0-1.0
		Deep Point			34		1	34.0-32.5	micropore	35.0-30.0	#2/16	30.0-22.0	

TABLE 8: OZONE SYSTEM O&M DATA SUMMARY

Omega Termite, 807 75th Avenue, Oakland, California

Well ID	Notes	Date	Dwell Time (min)	Total Runtime (hr:min)	Sparge Point Status	Ozone or Oxygen?	O3 Delivery Pressure (psig)	O3 Flow Rate (acfm)	O2 Flow Rate (acfh)	O3 Reactor Pressure (psig)
OZ-1S	1	05/09/07	4	11:00	ENABLED	OZONE	20.0	1.3	-	-
(Valve 1)	2	06/07/07	4	23:23	ENABLED	OZONE	19.5	1.3	12.5	11.5
		07/10/07	4	25:46	ENABLED	OZONE	20.0	1.3	12.0	11.0
		07/16/07	8	32:18	ENABLED	OZONE	20.0	1.5	13.0	10.0
		08/02/07	8	51:14	ENABLED	OZONE	19.5	1.3	12.5	11.5
		08/22/07	5	73:33	ENABLED	OZONE	18.0	1.3	12.5	11.0
		09/13/07	4	99:38	ENABLED	OZONE	19.5	1.3	11.5	12.0
		09/26/07	8	115:09	ENABLED	OZONE	19.5	1.2	11.5	11.0
		10/23/07	8	121:17	ENABLED	OZONE	21.0	1.2	13.0	11.0
		11/13/07	8	136:13	ENABLED	OZONE	22.0	1.1	13.0	10.5
	3	12/26/07	8	-	-	-	22.0	-	-	-
		01/17/08	**8**	**151:44**	**ENABLED**	**OZONE**	**22.0**	**1.4**	**12.5**	**10.5**
OZ-2S	1	05/09/07	4	11:00	ENABLED	OZONE	12.0	1.3	-	-
(Valve 2)	2	06/07/07	4	23:18	ENABLED	OZONE	12.0	1.5	13.0	9.5
		07/10/07	4	25:40	ENABLED	OZONE	10.5	1.8	12.5	10.0
		07/16/07	8	32:10	ENABLED	OZONE	11.0	1.8	14.0	9.0
		08/02/07	8	51:08	ENABLED	OZONE	11.0	1.6	12.5	10.0
		08/22/07	5	73:24	ENABLED	OZONE	10.5	1.5	12.5	10.5
		09/13/07	4	99:32	ENABLED	OZONE	11.0	1.5	12.0	11.0
		09/26/07	8	115:03	ENABLED	OZONE	11.5	1.5	11.5	10.5
		10/23/07	8	121:14	ENABLED	OZONE	12.0	1.6	13.0	10.0
		11/13/07	8	136:10	ENABLED	OZONE	12.0	1.5	13.0	9.0
	3	12/26/07	8	-	-	-	12.0	-	-	-
		01/17/08	**8**	**151:30**	**ENABLED**	**OZONE**	**12.0**	**1.8**	**12.5**	**9.5**
OZ-3S	1	05/09/07	4	11:00	ENABLED	OZONE	23.0	1.0	-	-
(Valve 3)	2	06/07/07	4	23:18	ENABLED	OZONE	26.0	1.0	11.0	12.0
		07/10/07	4	25:40	ENABLED	OZONE	33.5	1.1	11.0	11.5
		07/16/07	4	32:04	ENABLED	OZONE	32.0	1.2	12.0	11.5
		08/02/07	8	51:08	ENABLED	OZONE	34.0	1.1	12.0	12.0
		08/22/07	5	73:24	ENABLED	OZONE	30.5	1.1	11.5	12.0
		09/13/07	4	99:32	ENABLED	OZONE	30.0	1.1	11.0	13.0
		09/26/07	8	115:03	ENABLED	OZONE	31.5	1.0	11.5	12.0
		10/23/07	8	121:14	ENABLED	OZONE	32.0	1.1	11.0	11.5
		11/13/07	8	136:10	ENABLED	OZONE	42.0	0.8	12.0	12.0
	3	12/26/07	8	-	-	-	40.0	-	-	-
		01/17/08	**8**	**181:08**	**ENABLED**	**OZONE**	**37.5**	**1.2**	**11.5**	**11.0**
OZ-4S	1	05/09/07	4	11:00	ENABLED	OZONE	16.0	1.1	-	-
(Valve 4)	2	06/07/07	4	23:18	ENABLED	OZONE	18.0	1.5	12.0	10.5
		07/10/07	4	25:40	ENABLED	OZONE	18.0	1.5	12.0	10.5
		07/16/07	4	32:04	ENABLED	OZONE	20.0	1.4	12.0	10.5
		08/02/07	8	51:08	ENABLED	OZONE	19.0	1.4	11.5	10.5
		08/22/07	5	73:24	ENABLED	OZONE	18.5	1.4	11.5	11.0
		09/13/07	4	99:32	ENABLED	OZONE	30.0	1.1	11.5	12.5
		09/26/07	8	99:32	DISABLED	OZONE	30.0	1.1	11.5	12.5
		10/23/07	8	99:32	ENABLED	OZONE	26.0	1.3	12.0	11.5
		11/13/07	8	113:28	ENABLED	OZONE	25.0	1.1	12.5	10.5
	3	12/26/07	8	-	-	-	26.0	-	-	-
		01/17/08	**8**	**158:23**	**ENABLED**	**OZONE**	**27.0**	**1.4**	**12.0**	**11.0**

TABLE 8: OZONE SYSTEM O&M DATA SUMMARY

Omega Termite, 807 75th Avenue, Oakland, California

Well ID	Notes	Date	Dwell Time (min)	Total Runtime (hr:min)	Sparge Point Status	Ozone or Oxygen?	O3 Delivery Pressure (psig)	O3 Flow Rate (acfm)	O2 Flow Rate (acfh)	O3 Reactor Pressure (psig)
OZ-5S	1	05/09/07	4	11:00	ENABLED	OZONE	21.0	1.0	-	-
(Valve 5)	2	06/07/07	4	23:14	ENABLED	OZONE	22.0	1.2	12.0	11.0
		07/10/07	4	25:39	ENABLED	OZONE	23.0	1.4	12.0	10.5
		07/16/07	4	32:04	ENABLED	OZONE	23.0	1.4	12.0	11.0
		08/02/07	8	51:08	ENABLED	OZONE	22.0	1.3	12.0	11.0
		08/22/07	5	73:24	ENABLED	OZONE	22.0	1.3	11.5	11.0
		09/13/07	4	83:11	ENABLED	OZONE	22.0	1.3	11.5	12.0
		09/26/07	8	98:42	ENABLED	OZONE	22.0	1.4	11.5	11.0
		10/23/07	8	104:53	DISABLED	OZONE	22.0	1.3	11.5	11.0
		11/13/07	8	119:19	ENABLED	OZONE	24.0	1.2	112.5	10.0
	3	12/26/07	8	-	-	-	24.5	-	-	-
		01/17/08	**8**	**135:05**	**ENABLED**	**OZONE**	**25.0**	**1.4**	**12.0**	**10.5**
OZ-6S	1	05/09/07	4	11:00	ENABLED	OZONE	21.0	1.0	-	-
(Valve 6)	2	06/07/07	4	23:12	ENABLED	OZONE	22.0	1.3	12.0	11.0
		07/10/07	4	25:36	ENABLED	OZONE	24.0	1.4	12.0	11.0
		07/16/07	4	32:00	ENABLED	OZONE	24.0	1.4	12.0	11.0
		08/02/07	8	51:08	ENABLED	OZONE	22.5	1.3	12.0	11.0
		08/22/07	5	73:24	ENABLED	OZONE	22.0	1.3	11.5	11.0
		09/13/07	4	99:32	ENABLED	OZONE	21.0	1.3	11.5	12.0
		09/26/07	8	115:03	ENABLED	OZONE	22.0	1.3	11.5	11.5
		10/23/07	8	121:14	ENABLED	OZONE	28.5	1.2	11.0	12.0
		11/13/07	8	136:09	ENABLED	OZONE	24.5	1.1	13.0	10.5
	3	12/26/07	8	-	-	-	25.0	-	-	-
		01/17/08	**8**	**181:04**	**ENABLED**	**OZONE**	**26.0**	**1.4**	**12.0**	**11.0**
OZ-7S	1	05/09/07	4	11:00	ENABLED	OZONE	16.0	1.2	-	-
(Valve 7)	2	06/07/07	4	23:06	ENABLED	OZONE	20.0	1.4	12.0	11.0
		07/10/07	4	25:36	ENABLED	OZONE	23.0	1.4	12.0	11.0
		07/16/07	4	32:04	ENABLED	OZONE	22.0	1.4	12.0	11.0
		08/02/07	8	51:08	ENABLED	OZONE	21.5	1.4	12.0	11.0
		08/22/07	5	73:24	ENABLED	OZONE	22.0	1.2	11.5	11.0
		09/13/07	4	99:32	ENABLED	OZONE	21.0	1.3	11.5	12.0
		09/26/07	8	115:03	ENABLED	OZONE	22.0	1.2	11.5	11.0
		10/23/07	8	121:14	ENABLED	OZONE	22.0	1.3	12.0	11.0
		11/13/07	8	136:10	ENABLED	OZONE	23.5	1.2	12.0	10.0
	3	12/26/07	8	-	-	-	24.0	-	-	-
		01/17/08	**8**	**151:32**	**ENABLED**	**OZONE**	**24.0**	**1.4**	**12.0**	**10.5**
OZ-8S	1	05/09/07	4	11:00	ENABLED	OZONE	16.0	1.2	-	-
(Valve 8)	2	06/07/07	4	23:05	ENABLED	OZONE	18.0	1.3	12.0	11.0
		07/10/07	4	25:36	ENABLED	OZONE	19.0	1.4	12.0	10.5
		07/16/07	4	32:04	ENABLED	OZONE	19.0	1.4	12.0	11.0
		08/02/07	8	51:08	ENABLED	OZONE	18.5	1.4	12.0	11.0
		08/22/07	5	73:24	ENABLED	OZONE	15.0	1.4	12.0	11.0
		09/13/07	4	99:32	ENABLED	OZONE	15.0	1.4	12.0	11.5
		09/26/07	8	115:03	ENABLED	OZONE	15.0	1.4	11.0	8.5
		10/23/07	8	121:14	ENABLED	OZONE	21.0	1.3	12.0	11.0
		11/13/07	8	136:10	ENABLED	OZONE	19.0	1.3	12.5	10.0
	3	12/26/07	8	-	-	-	20.0	-	-	-
		01/17/08	**8**	**151:59**	**ENABLED**	**OZONE**	**21.0**	**1.2**	**12.0**	**11.3**

TABLE 8: OZONE SYSTEM O&M DATA SUMMARY

Omega Termite, 807 75th Avenue, Oakland, California

Well ID	Notes	Date	Dwell Time (min)	Total Runtime (hr:min)	Sparge Point Status	Ozone or Oxygen?	O3 Delivery Pressure (psig)	O3 Flow Rate (acfm)	O2 Flow Rate (acfh)	O3 Reactor Pressure (psig)
OZ-2D	1	05/09/07	4	11:00	ENABLED	OZONE	28.0	0.8	-	-
(Valve 12)	2	06/07/07	4	23:05	ENABLED	OZONE	28.0	1.1	11.0	11.0
		07/10/07	4	25:36	ENABLED	OZONE	28.0	1.2	11.0	11.0
		07/16/07	4	32:04	ENABLED	OZONE	27.5	1.3	11.5	11.0
		08/02/07	8	51:08	ENABLED	OZONE	27.0	1.3	12.0	11.5
		08/22/07	5	73:24	ENABLED	OZONE	22.0	1.2	11.5	11.0
		09/13/07	4	99:32	ENABLED	OZONE	25.0	1.3	11.5	12.0
		09/26/07	8	115:03	ENABLED	OZONE	22.0	1.1	11.0	12.0
		10/23/07	8	121:14	ENABLED	OZONE	31.5	1.2	11.5	12.0
		11/13/07	8	136:10	ENABLED	OZONE	30.0	1.0	12.0	11.0
	3	12/26/07	8	-	-	-	32.0	-	-	-
		01/17/08	**8**	**180:59**	**ENABLED**	**OZONE**	**33.0**	**1.2**	**12.0**	**11.0**
OZ-3D	1	05/09/07	4	11:00	ENABLED	OZONE	26.0	0.9	-	-
(Valve 13)	2	06/07/07	4	23:04	ENABLED	OZONE	25.0	1.2	11.0	11.0
		07/10/07	4	25:36	ENABLED	OZONE	25.5	1.3	11.0	11.0
		07/16/07	4	32:04	ENABLED	OZONE	27.0	1.2	12.0	11.0
		08/02/07	8	51:08	ENABLED	OZONE	26.0	1.2	12.0	11.5
		08/22/07	5	73:24	ENABLED	OZONE	25.0	1.1	11.5	11.5
		09/13/07	4	99:26	ENABLED	OZONE	26.5	1.2	11.5	12.0
		09/26/07	8	115:01	ENABLED	OZONE	29.0	1.1	11.5	12.0
		10/23/07	8	121:12	ENABLED	OZONE	30.0	1.1	11.0	12.0
		11/13/07	8	136:07	ENABLED	OZONE	28.5	1.1	12.0	11.0
	3	12/26/07	8	-	-	-	28.0	-	-	-
		01/17/08	**8**	**151:21**	**ENABLED**	**OZONE**	**28.0**	**1.4**	**12.0**	**11.0**
OZ-4D	1	05/09/07	4	11:00	ENABLED	OZONE	19.0	1.0	-	-
(Valve 14)	2	06/07/07	4	22:59	ENABLED	OZONE	20.0	1.5	12.0	10.5
		07/10/07	4	25:36	ENABLED	OZONE	21.0	1.4	12.0	10.5
		07/16/07	4	32:04	ENABLED	OZONE	21.0	1.4	12.0	10.5
		08/02/07	8	51:08	ENABLED	OZONE	20.0	1.4	12.0	11.0
		08/22/07	5	73:24	ENABLED	OZONE	20.0	1.4	12.0	11.0
		09/13/07	4	99:22	ENABLED	OZONE	19.0	1.4	11.5	12.0
		09/26/07	8	115:01	ENABLED	OZONE	21.0	1.3	11.5	11.0
		10/23/07	8	121:12	ENABLED	OZONE	22.0	1.3	12.0	11.0
		11/13/07	8	136:08	ENABLED	OZONE	21.5	1.3	12.0	10.0
	3	12/26/07	8	-	-	-	22.0	-	-	-
		01/17/08	**8**	**147:01**	**ENABLED**	**OZONE**	**22.0**	**1.5**	**12.0**	**10.0**
OZ-5D	1	05/09/07	4	11:00	ENABLED	OZONE	25.0	0.9	-	-
(Valve 15)	2	06/07/07	4	22:59	ENABLED	OZONE	25.0	1.0	11.0	11.0
		07/10/07	4	25:36	ENABLED	OZONE	26.5	1.2	11.0	11.0
		07/16/07	4	32:04	ENABLED	OZONE	27.5	1.3	12.0	11.0
		08/02/07	8	51:08	ENABLED	OZONE	31.0	1.2	12.0	12.0
		08/22/07	5	73:24	ENABLED	OZONE	38.0	1.0	11.0	12.5
		09/13/07	4	91:20	ENABLED	OZONE	53.0	0.10	11.0	14.0
		09/26/07	8	91:25	DISABLED	OXYGEN	53.0	-	-	-
		10/23/07	8	91:25	DISABLED	OXYGEN	53.0	-	-	-
		11/13/07	8	91:29	ENABLED	OZONE	55.0	0.1	11.0	15.0
	3	12/26/07	8	-	-	-	55.0	-	-	-
		01/17/08	**8**	**91:29**	**ENABLED**	**OZONE**	**55.0**	**0.1**	**11.0**	**15.0**

TABLE 8: OZONE SYSTEM O&M DATA SUMMARY

Omega Termite, 807 75th Avenue, Oakland, California

Well ID	Notes	Date	Dwell Time (min)	Total Runtime (hr:min)	Sparge Point Status	Ozone or Oxygen?	O3 Delivery Pressure (psig)	O3 Flow Rate (acfm)	O2 Flow Rate (acfh)	O3 Reactor Pressure (psig)
OZ-6D	1	05/09/07	4	11:00	ENABLED	OZONE	31.0	0.8	-	-
(Valve 16)	2	06/07/07	4	23:00	ENABLED	OZONE	30.5	1.2	11.0	11.5
		07/10/07	4	17:47	ENABLED	OZONE	30.5	1.2	11.0	11.5
		07/16/07	4	24:15	ENABLED	OZONE	30.0	1.3	11.0	11.0
		08/02/07	8	43:15	ENABLED	OZONE	30.0	1.2	11.5	12.0
		08/22/07	5	65:35	ENABLED	OZONE	29.5	1.1	11.5	12.0
		09/13/07	4	91:33	ENABLED	OZONE	30.0	1.1	11.0	13.0
		09/26/07	8	107:14	ENABLED	OZONE	32.0	1.0	11.0	11.0
		10/23/07	8	113:25	ENABLED	OZONE	31.0	1.1	9.0	12.0
		11/13/07	8	128:20	ENABLED	OZONE	36.5	1.0	12.0	11.0
	3	12/26/07	8	-	-	-	38.0	-	-	-
		01/17/08	**8**	**173:07**	**ENABLED**	**OZONE**	**40.0**	**1.1**	**12.0**	**12.0**
OZ-7D	1	05/09/07	4	11:00	ENABLED	OZONE	22.0	0.9	-	-
(Valve 17)	2	06/07/07	4	23:00	ENABLED	OZONE	23.0	1.0	11.0	10.5
		07/10/07	4	25:36	ENABLED	OZONE	19.0	1.5	12.0	10.5
		07/16/07	4	32:04	ENABLED	OZONE	20.0	1.5	13.0	10.0
		08/02/07	8	51:00	ENABLED	OZONE	19.0	1.4	12.0	11.0
		08/22/07	5	73:24	ENABLED	OZONE	19.0	1.3	12.0	11.0
		09/13/07	4	99:22	ENABLED	OZONE	19.5	1.3	11.5	12.0
		09/26/07	8	115:02	ENABLED	OZONE	20.5	1.2	11.5	11.0
		10/23/07	8	121:13	ENABLED	OZONE	20.0	1.3	12.0	11.5
		11/13/07	8	136:09	ENABLED	OZONE	21.0	1.3	12.0	10.0
	3	12/26/07	8	-	-	-	22.5	-	-	-
		01/17/08	**8**	**180:56**	**ENABLED**	**OZONE**	**24.0**	**1.4**	**12.0**	**11.0**
OZ-8D	1	05/09/07	4	11:00	ENABLED	OZONE	23.0	0.9	-	-
(Valve 18)	2	06/07/07	4	23:00	ENABLED	OZONE	24.0	1.0	12.0	11.5
		07/10/07	4	25:36	ENABLED	OZONE	21.0	1.4	12.0	10.5
		07/16/07	4	32:04	ENABLED	OZONE	23.0	1.4	12.5	10.5
		08/02/07	8	51:00	ENABLED	OZONE	20.0	1.3	12.0	11.0
		08/22/07	5	73:22	ENABLED	OZONE	23.0	1.4	12.0	11.5
		09/13/07	4	99:24	ENABLED	OZONE	21.0	1.3	11.5	12.0
		09/26/07	8	115:08	ENABLED	OZONE	22.5	1.3	11.5	11.0
		10/23/07	8	121:14	ENABLED	OZONE	22.0	1.3	11.0	12.0
		11/13/07	8	136:10	ENABLED	OZONE	24.0	1.2	12.0	10.5
	3	12/26/07	8	-	-	-	26.0	-	-	-
		01/17/08	**8**	**180:57**	**ENABLED**	**OZONE**	**27.5**	**1.4**	**11.5**	**11.0**
OZ-9S	1	05/09/07	4	-	DISABLED	OZONE	-	-	-	-
(Valve 19)	2	06/07/07	4	-	DISABLED	OZONE	-	-	-	-
		07/10/07	4	-	DISABLED	OZONE	-	-	-	-
		07/16/07	4	-	DISABLED	OZONE	-	-	-	-
		08/02/07	4	-	DISABLED	OZONE	-	-	-	-
		08/22/07	4	-	DISABLED	OZONE	-	-	-	-
		09/13/07	4	-	DISABLED	OZONE	-	-	-	-
		09/26/07	8	-	DISABLED	OZONE	-	-	-	-
		10/23/07	8	0:57	DISABLED	OZONE	-	-	-	-
		11/13/07	8	14:53	ENABLED	OZONE	23.0	1.3	12.5	10.0
	3	12/26/07	8	-	-	-	24.0	-	-	-
		01/17/08	**8**	**59:40**	**ENABLED**	**OZONE**	**25.0**	**1.4**	**12.0**	**11.0**

TABLE 8: OZONE SYSTEM O&M DATA SUMMARY

Omega Termite, 807 75th Avenue, Oakland, California

Well ID	Notes	Date	Dwell Time (min)	Total Runtime (hr:min)	Sparge Point Status	Ozone or Oxygen?	O3 Delivery Pressure (psig)	O3 Flow Rate (acfm)	O2 Flow Rate (acfh)	O3 Reactor Pressure (psig)
OZ-9D	1	05/09/07	4	-	DISABLED	OZONE	-	-	-	-
(Valve 20)	2	06/07/07	4	-	DISABLED	OZONE	-	-	-	-
		07/10/07	4	-	DISABLED	OZONE	-	-	-	-
		07/16/07	4	-	DISABLED	OZONE	-	-	-	-
		08/02/07	4	-	DISABLED	OZONE	-	-	-	-
		08/22/07	4	-	DISABLED	OXYGEN	-	-	-	-
		09/13/07	4	-	DISABLED	OXYGEN	-	-	-	-
		09/26/07	4	-	DISABLED	OXYGEN	-	-	-	-
		10/23/07	4	-	DISABLED	OXYGEN	-	-	-	-
		11/13/07	4	-	DISABLED	OXYGEN	-	-	-	-
	3	12/26/07	4	-	DISABLED	OXYGEN	-	-	-	-
		01/17/08	**4**	**-**	**DISABLED**	**OXYGEN**	**-**	**-**	**-**	**-**

NOTES:

psig = pounds per square inch - gauge

acfm = actual cubic feet per minute

acfh = actual cubic feet per hour

min = minutes

hr:min = hours, minutes

Dwell time = sparge point runtime

Ozone sparge unit valves 1 to 8 used for ozone sparge wells OZ-1S to OZ-8S

Ozone sparge unit valves 9, 10, and 11 not used, but available for system expansion

Ozone sparge unit valves 12 to 18 used for ozone sparge wells OZ-2D to OZ-8D

Ozone sparge unit valves 19 and 20 used for OZ-9S and OZ-9D

1) System was restrated on May 7, 2007

2) First monthly O&M visit

3) System was shut down by an internal ozone alarm; no data was collected

4)

5)

TABLE 9: OZONE MASS INJECTION ESTIMATES

Omega Termite, 807 75th Avenue, Oakland, California

Well ID	Date	Dwell Time (min)	Total Runtime (hours)	Sparge Point Status	Ozone or Oxygen?	O3 Delivery Pressure (psig)	O3 Outlet Temp (°F)	O3 Flow Rate (acfm)	O3 Flow Rate (scfm)	*Ozone Conc (ppmv)	Ozone Injection Rate (lbs/day)	Total Ozone Injected (lbs)
OZ-1S	05/09/07	4	0	ENABLED	OZONE	20.0	85	1.3	2.0	4,260	1.5	0.0
(Valve 1)	06/07/07	4	24	ENABLED	OZONE	19.5	85	1.3	2.0	4,260	1.5	1.5
	07/10/07	4	26	ENABLED	OZONE	20.0	85	1.3	2.0	4,260	1.5	1.6
	07/16/07	8	32	ENABLED	OZONE	20.0	85	1.5	2.3	4,260	1.7	2.0
	08/02/07	8	51	ENABLED	OZONE	19.5	85	1.3	2.0	4,260	1.5	3.2
	08/22/07	5	74	ENABLED	OZONE	18.0	85	1.3	1.9	4,260	1.5	4.6
	09/13/07	4	100	ENABLED	OZONE	19.5	85	1.3	2.0	4,260	1.5	6.2
	09/26/07	8	115	ENABLED	OZONE	19.5	85	1.2	1.8	4,260	1.4	7.1
	10/23/07	8	121	ENABLED	OZONE	21.0	85	1.2	1.8	4,260	1.4	7.4
	11/13/07	8	136	ENABLED	OZONE	22.0	85	1.1	1.7	4,260	1.3	8.2
	12/26/07	8	0	ENABLED	OZONE	22.0	-	-	0.0	0	0.0	8.2
	01/17/08	**8**	**152**	**ENABLED**	**OZONE**	**22.0**	**85**	1.4	**2.2**	**4,260**	**1.7**	**9.4**
OZ-2S	05/09/07	4	0	ENABLED	OZONE	12.0	85	1.3	1.7	4,150	1.3	0.0
(Valve 2)	06/07/07	4	23	ENABLED	OZONE	12.0	85	1.5	2.0	4,150	1.5	1.0
	07/10/07	4	26	ENABLED	OZONE	10.5	85	1.8	2.3	4,150	1.7	1.1
	07/16/07	8	32	ENABLED	OZONE	11.0	85	1.8	2.3	4,150	1.7	1.3
	08/02/07	8	52	ENABLED	OZONE	11.0	85	1.6	2.1	4,150	1.5	2.2
	08/22/07	5	73	ENABLED	OZONE	10.5	85	1.5	1.9	4,150	1.4	3.0
	09/13/07	4	100	ENABLED	OZONE	11.0	85	1.5	2.0	4,150	1.4	4.2
	09/26/07	8	115	ENABLED	OZONE	11.5	85	1.5	2.0	4,150	1.5	4.8
	10/23/07	8	121	ENABLED	OZONE	12.0	85	1.6	2.1	4,260	1.6	5.0
	11/13/07	8	136	ENABLED	OZONE	12.0	85	1.5	2.0	4,150	1.5	5.7
	12/26/07	8	0	-	-	12.0	-	-	0.0	0	0.0	5.7
	01/17/08	**8**	**152**	**ENABLED**	**OZONE**	**12.0**	**85**	**1.8**	**2.4**	**4,150**	**1.8**	**6.8**
OZ-3S	05/09/07	4	0	ENABLED	OZONE	23.0	85	1.0	1.6	4,260	1.2	0.0
(Valve 3)	06/07/07	4	23	ENABLED	OZONE	26.0	85	1.0	1.6	4,260	1.2	1.2
	07/10/07	4	26	ENABLED	OZONE	33.5	85	1.1	2.0	4,540	1.6	1.4
	07/16/07	4	32	ENABLED	OZONE	32.0	85	1.2	2.1	4,540	1.7	1.8
	08/02/07	8	51	ENABLED	OZONE	34.0	85	1.1	2.0	4,540	1.6	3.1
	08/22/07	5	73	ENABLED	OZONE	30.5	85	1.1	1.9	4,540	1.5	4.5
	09/13/07	4	100	ENABLED	OZONE	30.0	85	1.1	1.9	4,540	1.5	6.2
	09/26/07	8	115	ENABLED	OZONE	31.5	85	1.0	1.7	4,540	1.4	7.1
	10/23/07	8	121	ENABLED	OZONE	32.0	85	1.1	1.9	4,540	1.6	7.5
	11/13/07	8	136	ENABLED	OZONE	42.0	85	0.8	1.5	4,540	1.3	8.3
	12/26/07	8	0	-	-	40.0	-	-	0.0	0	0.0	8.3
	01/17/08	**8**	**181**	**ENABLED**	**OZONE**	**37.5**	**85**	**1.2**	**2.2**	**4,540**	**1.8**	**11.7**
								0.0				
OZ-4S	05/09/07	4	0	ENABLED	OZONE	16.0	85	1.1	1.6	4,260	1.2	0.0
(Valve 4)	06/07/07	4	23	ENABLED	OZONE	18.0	85	1.5	2.2	4,260	1.7	1.6
	07/10/07	4	26	ENABLED	OZONE	18.0	85	1.5	2.2	4,260	1.7	1.8
	07/16/07	4	32	ENABLED	OZONE	20.0	85	1.4	2.1	4,260	1.6	2.2
	08/02/07	8	51	ENABLED	OZONE	19.0	85	1.4	2.1	4,260	1.6	3.5
	08/22/07	5	73	ENABLED	OZONE	18.5	85	1.4	2.1	4,260	1.6	4.9
	09/13/07	4	100	ENABLED	OZONE	30.0	85	1.1	1.9	4,540	1.5	6.7
	09/26/07	8	100	DISABLED	OZONE	30.0	85	1.1	1.9	4,540	1.5	6.7
	10/23/07	8	100	ENABLED	OZONE	26.0	85	1.3	2.1	4,540	1.7	6.7
	11/13/07	8	114	ENABLED	OZONE	25.0	85	1.1	1.8	4,540	1.4	7.5
	12/26/07	8	0	-	-	26.0	-	-	0.0	0	0.0	7.5
	01/17/08	**8**	**158**	**ENABLED**	**OZONE**	**27.0**	**85**	**1.4**	**2.3**	**4,540**	**1.9**	**10.9**

TABLE 9: OZONE MASS INJECTION ESTIMATES

Omega Termite, 807 75th Avenue, Oakland, California

Well ID	Date	Dwell Time (min)	Total Runtime (hours)	Sparge Point Status	Ozone or Oxygen?	O3 Delivery Pressure (psig)	O3 Outlet Temp (°F)	O3 Flow Rate (acfm)	O3 Flow Rate (scfm)	*Ozone Conc (ppmv)	Ozone Injection Rate (lbs/day)	Total Ozone Injected (lbs)
OZ-5S	05/09/07	4	0	ENABLED	OZONE	21.0	85	1.0	1.5	4,260	1.2	0.0
(Valve 5)	06/07/07	4	23	ENABLED	OZONE	22.0	85	1.2	1.9	4,260	1.4	1.4
	07/10/07	4	26	ENABLED	OZONE	23.0	85	1.4	2.2	4,260	1.7	1.6
	07/16/07	4	32	ENABLED	OZONE	23.0	85	1.4	2.2	4,260	1.7	2.0
	08/02/07	8	52	ENABLED	OZONE	22.0	85	1.3	2.0	4,260	1.5	3.3
	08/22/07	5	73	ENABLED	OZONE	22.0	85	1.3	2.0	4,260	1.5	4.6
	09/13/07	4	83	ENABLED	OZONE	22.0	85	1.3	2.0	4,260	1.5	5.3
	09/26/07	8	99	ENABLED	OZONE	22.0	85	1.4	2.2	4,150	1.6	6.3
	10/23/07	8	105	DISABLED	OZONE	22.0	85	1.3	2.0	4,260	1.5	6.7
	11/13/07	8	119	ENABLED	OZONE	24.0	85	1.2	1.9	4,260	1.5	7.6
	12/26/07	8	0	-	-	24.5	-	-	0.0	0	0.0	7.6
	01/17/08	**8**	**135**	**ENABLED**	**OZONE**	**25.0**	**85**	**1.4**	**2.3**	**4,260**	**1.7**	**8.7**
OZ-6S	05/09/07	4	0	ENABLED	OZONE	21.0	85	1.0	1.5	4,260	1.2	0.0
(Valve 6)	06/07/07	4	23	ENABLED	OZONE	22.0	85	1.3	2.0	4,260	1.5	1.5
	07/10/07	4	26	ENABLED	OZONE	24.0	85	1.4	2.2	4,260	1.7	1.7
	07/16/07	4	32	ENABLED	OZONE	24.0	85	1.4	2.2	4,260	1.7	2.1
	08/02/07	8	51	ENABLED	OZONE	22.5	85	1.3	2.0	4,260	1.6	3.3
	08/22/07	5	74	ENABLED	OZONE	22.0	85	1.3	2.0	4,260	1.5	4.8
	09/13/07	4	100	ENABLED	OZONE	21.0	85	1.3	2.0	4,260	1.5	6.5
	09/26/07	8	115	ENABLED	OZONE	22.0	85	1.3	2.0	4,150	1.5	7.4
	10/23/07	8	121	ENABLED	OZONE	28.5	85	1.2	2.0	4,540	1.6	7.8
	11/13/07	8	137	ENABLED	OZONE	24.5	85	1.1	1.8	4,540	1.4	8.8
	12/26/07	8	0	-	-	25.0	-	-	0.0	0	0.0	8.8
	01/17/08	**8**	**181**	**ENABLED**	**OZONE**	**26.0**	**85**	**1.4**	**2.3**	**4,540**	**1.9**	**12.2**
OZ-7S	05/09/07	4	0	ENABLED	OZONE	16.0	85	1.2	1.7	4,260	1.3	0.0
(Valve 7)	06/07/07	4	23	ENABLED	OZONE	20.0	85	1.4	2.1	4,260	1.6	1.5
	07/10/07	4	26	ENABLED	OZONE	23.0	85	1.4	2.2	4,260	1.7	1.8
	07/16/07	4	32	ENABLED	OZONE	22.0	85	1.4	2.2	4,260	1.7	2.2
	08/02/07	8	51	ENABLED	OZONE	21.5	85	1.4	2.2	4,260	1.6	3.5
	08/22/07	5	73	ENABLED	OZONE	22.0	85	1.2	1.9	4,260	1.4	4.8
	09/13/07	4	100	ENABLED	OZONE	21.0	85	1.3	2.0	4,260	1.5	6.5
	09/26/07	8	115	ENABLED	OZONE	22.0	85	1.2	1.9	4,150	1.4	7.4
	10/23/07	8	121	ENABLED	OZONE	22.0	85	1.3	2.0	4,260	1.5	7.7
	11/13/07	8	136	ENABLED	OZONE	23.5	85	1.2	1.9	4,260	1.5	8.6
	12/26/07	8	0	-	-	24.0	-	-	0.0	0	0.0	8.6
	01/17/08	**8**	**152**	**ENABLED**	**OZONE**	**24.0**	**85**	**1.4**	**2.2**	**4,260**	**1.7**	**9.8**
OZ-8S	05/09/07	4	23	ENABLED	OZONE	16.0	85	1.2	1.7	4,260	1.3	0.0
(Valve 8)	06/07/07	4	26	ENABLED	OZONE	18.0	85	1.3	1.9	4,260	1.5	0.2
	07/10/07	4	32	ENABLED	OZONE	19.0	85	1.4	2.1	4,260	1.6	0.6
	07/16/07	4	51	ENABLED	OZONE	19.0	85	1.4	2.1	4,260	1.6	1.8
	08/02/07	8	73	ENABLED	OZONE	18.5	85	1.4	2.1	4,260	1.6	3.3
	08/22/07	5	100	ENABLED	OZONE	15.0	85	1.4	2.0	4,260	1.5	5.0
	09/13/07	4	100	ENABLED	OZONE	15.0	85	1.4	2.0	4,260	1.5	5.0
	09/26/07	8	115	ENABLED	OZONE	15.0	85	1.4	2.0	4,150	1.5	5.9
	10/23/07	8	121	ENABLED	OZONE	21.0	85	1.3	2.0	4,260	1.5	6.3
	11/13/07	8	136	ENABLED	OZONE	19.0	85	1.3	1.9	4,260	1.5	7.2
	12/26/07	8	0	-	-	20.0	-	-	0.0	0	0.0	7.2
	01/17/08	**8**	**152**	**ENABLED**	**OZONE**	**21.0**	**85**	**1.2**	**1.8**	**4,260**	**1.4**	**8.1**

TABLE 9: OZONE MASS INJECTION ESTIMATES

Omega Termite, 807 75th Avenue, Oakland, California

Well ID	Date	Dwell Time (min)	Total Runtime (hours)	Sparge Point Status	Ozone or Oxygen?	O3 Delivery Pressure (psig)	O3 Outlet Temp (°F)	O3 Flow Rate (acfm)	O3 Flow Rate (scfm)	*Ozone Conc (ppmv)	Ozone Injection Rate (lbs/day)	Total Ozone Injected (lbs)
OZ-2D	05/09/07	4	0	ENABLED	OZONE	28.0	85	0.8	1.3	4,540	1.1	0.0
(Valve 12)	06/07/07	4	23	ENABLED	OZONE	28.0	85	1.1	1.8	4,540	1.5	1.4
	07/10/07	4	26	ENABLED	OZONE	28.0	85	1.2	2.0	4,540	1.6	1.6
	07/16/07	4	32	ENABLED	OZONE	27.5	85	1.3	2.2	4,540	1.8	2.1
	08/02/07	8	51	ENABLED	OZONE	27.0	85	1.3	2.2	4,540	1.7	3.5
	08/22/07	5	73	ENABLED	OZONE	22.0	85	1.2	1.9	4,260	1.4	4.8
	09/13/07	4	100	ENABLED	OZONE	25.0	85	1.3	2.1	4,260	1.6	6.6
	09/26/07	8	115	ENABLED	OZONE	22.0	85	1.1	1.7	4,260	1.3	7.4
	10/23/07	8	121	ENABLED	OZONE	31.5	85	1.2	2.1	4,540	1.7	7.8
	11/13/07	8	136	ENABLED	OZONE	30.0	85	1.0	1.7	4,540	1.4	8.7
	12/26/07	8	0	-	-	32.0	-	-	0.0	0	0.0	8.7
	01/17/08	**8**	**181**	**ENABLED**	**OZONE**	**33.0**	**85**	**1.2**	**2.1**	**4,540**	**1.7**	**11.9**
OZ-3D	05/09/07	4	0	ENABLED	OZONE	26.0	85	0.9	1.5	4,540	1.2	0.0
(Valve 13)	06/07/07	4	23	ENABLED	OZONE	25.0	85	1.2	1.9	4,540	1.6	1.5
	07/10/07	4	26	ENABLED	OZONE	25.5	85	1.3	2.1	4,540	1.7	1.7
	07/16/07	4	32	ENABLED	OZONE	27.0	85	1.2	2.0	4,540	1.6	2.1
	08/02/07	8	51	ENABLED	OZONE	26.0	85	1.2	2.0	4,540	1.6	3.4
	08/22/07	5	73	ENABLED	OZONE	25.0	85	1.1	1.8	4,540	1.4	4.7
	09/13/07	4	99	ENABLED	OZONE	26.5	85	1.2	2.0	4,540	1.6	6.5
	09/26/07	8	115	ENABLED	OZONE	29.0	85	1.1	1.9	4,540	1.5	7.5
	10/23/07	8	121	ENABLED	OZONE	30.0	85	1.1	1.9	4,540	1.5	7.8
	11/13/07	8	136	ENABLED	OZONE	28.5	85	1.1	1.9	4,540	1.5	8.8
	12/26/07	8	0	-	-	28.0	-	-	0.0	0	0.0	8.8
	01/17/08	**8**	**151**	**ENABLED**	**OZONE**	**28.0**	**85**	**1.4**	**2.4**	**4,540**	**1.9**	**10.0**
OZ-4D	05/09/07	4	0	ENABLED	OZONE	19.0	85	1.0	1.5	4,260	1.1	0.0
(Valve 14)	06/07/07	4	23	ENABLED	OZONE	20.0	85	1.5	2.3	4,260	1.7	1.7
	07/10/07	4	26	ENABLED	OZONE	21.0	85	1.4	2.2	4,260	1.6	1.9
	07/16/07	4	32	ENABLED	OZONE	21.0	85	1.4	2.2	4,260	1.6	2.3
	08/02/07	8	51	ENABLED	OZONE	20.0	85	1.4	2.1	4,260	1.6	3.5
	08/22/07	5	73	ENABLED	OZONE	20.0	85	1.4	2.1	4,260	1.6	5.0
	09/13/07	4	99	ENABLED	OZONE	19.0	85	1.4	2.1	4,260	1.6	6.7
	09/26/07	8	115	ENABLED	OZONE	21.0	85	1.3	2.0	4,260	1.5	7.8
	10/23/07	8	121	ENABLED	OZONE	22.0	85	1.3	2.0	4,260	1.5	8.1
	11/13/07	8	136	ENABLED	OZONE	21.5	85	1.3	2.0	4,260	1.5	9.1
	12/26/07	8	0	-	-	22.0	-	-	0.0	0	0.0	9.1
	01/17/08	**8**	**147**	**ENABLED**	**OZONE**	**22.0**	**85**	**1.5**	**2.3**	**4,260**	**1.8**	**9.9**
OZ-5D	05/09/07	4	0	ENABLED	OZONE	25.0	85	0.9	1.5	4,540	1.2	0.0
(Valve 15)	06/07/07	4	23	ENABLED	OZONE	25.0	85	1.0	1.6	4,540	1.3	1.3
	07/10/07	4	26	ENABLED	OZONE	26.5	85	1.2	2.0	4,540	1.6	1.5
	07/16/07	4	32	ENABLED	OZONE	27.5	85	1.3	2.2	4,540	1.8	1.9
	08/02/07	8	51	ENABLED	OZONE	31.0	85	1.2	2.1	4,540	1.7	3.2
	08/22/07	5	73	ENABLED	OZONE	38.0	85	1.0	1.9	4,540	1.5	4.6
	09/13/07	4	91	ENABLED	OZONE	53.0	85	0.1	0.2	4,540	0.2	4.8
	09/26/07	8	91	DISABLED	OXYGEN	-	-	-	0.0	0	0.0	4.8
	10/23/07	8	91	DISABLED	OXYGEN	53.0	-	-	0.0	0	0.0	4.8
	11/13/07	8	91	ENABLED	OZONE	50.0	85	0.1	0.2	4,540	0.2	4.8
	12/26/07	8	0	-	-	55.0	-	-	0.0	0	0.0	4.8
	01/17/08	**8**	**91**	**ENABLED**	**OZONE**	**50.0**	**85**	**0.1**	0.2	**4,540**	**0.2**	**4.8**

TABLE 9: OZONE MASS INJECTION ESTIMATES

Omega Termite, 807 75th Avenue, Oakland, California

Well ID	Date	Dwell Time (min)	Total Runtime (hours)	Sparge Point Status	Ozone or Oxygen?	O3 Delivery Pressure (psig)	O3 Outlet Temp (°F)	O3 Flow Rate (acfm)	O3 Flow Rate (scfm)	*Ozone Conc (ppmv)	Ozone Injection Rate (lbs/day)	Total Ozone Injected (lbs)
OZ-6D	05/09/07	4	0	ENABLED	OZONE	31.0	85	0.8	1.4	4,540	1.1	0.0
(Valve 16)	06/07/07	4	23	ENABLED	OZONE	30.5	85	1.2	2.1	4,540	1.7	1.6
	07/10/07	4	18	ENABLED	OZONE	30.5	85	1.2	2.1	4,540	1.7	1.3
	07/16/07	4	24	ENABLED	OZONE	30.0	85	1.3	2.2	4,540	1.8	1.7
	08/02/07	8	43	ENABLED	OZONE	30.0	85	1.2	2.1	4,540	1.7	3.0
	08/22/07	5	66	ENABLED	OZONE	29.5	85	1.1	1.9	4,540	1.5	4.5
	09/13/07	4	92	ENABLED	OZONE	30.0	85	1.1	1.9	4,540	1.5	6.2
	09/26/07	8	107	ENABLED	OZONE	32.0	85	1.0	1.8	4,540	1.4	7.1
	10/23/07	8	113	ENABLED	OZONE	31.0	85	1.1	1.9	4,540	1.6	7.4
	11/13/07	8	128	ENABLED	OZONE	36.5	85	1.0	1.8	4,540	1.5	8.4
	12/26/07	8	0	-	-	38.0	-	-	0.0	0	0.0	8.4
	01/17/08	**8**	**173**	**ENABLED**	**OZONE**	**40.0**	**85**	**1.1**	**2.1**	**4,540**	**1.7**	**11.5**
OZ-7D	05/09/07	4	0	ENABLED	OZONE	22.0	85	0.9	1.4	4,260	1.1	0.0
(Valve 17)	06/07/07	4	23	ENABLED	OZONE	23.0	85	1.0	1.6	4,260	1.2	1.2
	07/10/07	4	26	ENABLED	OZONE	19.0	85	1.5	2.2	4,260	1.7	1.4
	07/16/07	4	32	ENABLED	OZONE	20.0	85	1.5	2.3	4,260	1.7	1.8
	08/02/07	8	51	ENABLED	OZONE	19.0	85	1.4	2.1	4,260	1.6	3.1
	08/22/07	5	73	ENABLED	OZONE	19.0	85	1.3	1.9	4,260	1.5	4.4
	09/13/07	4	99	ENABLED	OZONE	19.5	85	1.3	2.0	4,260	1.5	6.0
	09/26/07	8	115	ENABLED	OZONE	20.5	85	1.2	1.8	4,260	1.4	6.9
	10/23/07	8	121	ENABLED	OZONE	20.0	85	1.3	2.0	4,260	1.5	7.3
	11/13/07	8	136	ENABLED	OZONE	21.0	85	1.3	2.0	4,260	1.5	8.3
	12/26/07	8	0	-	-	22.5	-	-	0.0	0	0.0	8.3
	01/17/08	**8**	**181**	**ENABLED**	**OZONE**	**24.0**	**85**	**1.4**	**2.2**	**4,260**	**1.7**	**11.5**
OZ-8D	05/09/07	4	0	ENABLED	OZONE	23.0	85	0.9	1.4	4,260	1.1	0.0
(Valve 18)	06/07/07	4	23	ENABLED	OZONE	24.0	85	1.0	1.6	4,260	1.2	1.2
	07/10/07	4	26	ENABLED	OZONE	21.0	85	1.4	2.2	4,260	1.6	1.4
	07/16/07	4	32	ENABLED	OZONE	23.0	85	1.4	2.2	4,260	1.7	1.8
	08/02/07	8	51	ENABLED	OZONE	20.0	85	1.3	2.0	4,260	1.5	3.0
	08/22/07	5	73	ENABLED	OZONE	23.0	85	1.4	2.2	4,260	1.7	4.5
	09/13/07	4	99	ENABLED	OZONE	21.0	85	1.3	2.0	4,260	1.5	6.2
	09/26/07	8	115	ENABLED	OZONE	22.5	85	1.3	2.0	4,260	1.6	7.2
	10/23/07	8	121	ENABLED	OZONE	22.0	85	1.3	2.0	4,260	1.5	7.6
	11/13/07	8	136	ENABLED	OZONE	24.0	85	1.2	1.9	4,260	1.5	8.5
	12/26/07	8	0	-	-	26.0	-	-	0.0	0	0.0	8.5
	01/17/08	**8**	**181**	**ENABLED**	**OZONE**	**27.5**	**85**	**1.4**	**2.3**	**4,540**	**1.9**	**12.0**
OZ-9S	05/09/07	4	0	DISABLED	OZONE	-	-	-	-	-	-	-
(Valve 19)	06/07/07	4	0	DISABLED	OZONE	-	-	-	-	-	-	-
	07/10/07	4	0	DISABLED	OZONE	-	-	-	-	-	-	-
	07/16/07	4	0	DISABLED	OZONE	-	-	-	-	-	-	-
	08/02/07	4	0	DISABLED	OZONE	-	-	-	-	-	-	-
	08/22/07	4	0	DISABLED	OZONE	-	-	-	-	-	-	-
	09/13/07	4	0	DISABLED	OZONE	-	-	-	-	-	-	-
	09/26/07	8	0	DISABLED	OZONE	-	-	-	-	-	-	-
	10/23/07	8	1	DISABLED	OZONE	-	-	-	-	-	-	-
	11/13/07	8	15	ENABLED	OZONE	23.0	85.0	1.3	2.1	4,260	1.6	1.0
	12/26/07	8	0	-	-	24.0	-	-	0.0	0.0	0.0	1.0
	01/17/08	**8**	**60**	**ENABLED**	**OZONE**	**25.0**	**85.0**	**1.4**	**2.3**	**4,260**	**1.7**	**4.2**

TABLE 9: OZONE MASS INJECTION ESTIMATES

Omega Termite, 807 75th Avenue, Oakland, California

Well ID	Date	Dwell Time (min)	Total Runtime (hours)	Sparge Point Status	Ozone or Oxygen?	O3 Delivery Pressure (psig)	O3 Outlet Temp (°F)	O3 Flow Rate (acfm)	O3 Flow Rate (scfm)	*Ozone Conc (ppmv)	Ozone Injection Rate (lbs/day)	Total Ozone Injected (lbs)
OZ-9D	05/09/07	4	-	DISABLED	OZONE	-	-	-	-	-	-	-
(Valve 20)	06/07/07	4	-	DISABLED	OZONE	-	-	-	-	-	-	-
	07/10/07	4	-	DISABLED	OZONE	-	-	-	-	-	-	-
	07/16/07	4	-	DISABLED	OZONE	-	-	-	-	-	-	-
	08/02/07	4	-	DISABLED	OZONE	-	-	-	-	-	-	-
	08/22/07	4	-	DISABLED	OXYGEN	-	-	-	-	-	-	-
	09/13/07	4	-	DISABLED	OXYGEN	-	-	-	-	-	-	-
	09/26/07	4	-	DISABLED	OXYGEN	-	-	-	-	-	-	-
	10/23/07	4	-	DISABLED	OXYGEN	-	-	-	-	-	-	-
	11/13/07	4	-	DISABLED	OXYGEN	-	-	-	-	-	-	-
	12/26/07	4	-	DISABLED	OXYGEN	-	-	-	-	-	-	-
	01/17/08	**4**	-	**DISABLED**	**OXYGEN**	-	-	-	-	-	-	-

NOTES:

min = minutes
psig = pounds per square inch - gauge
acfm = actual cubic feet per minute
scfm = standard cubic feet per minute
ppmv = parts per million by volume
lbs/day = pounds per day

ACFM TO SCFM CONVERSION

Qs=Qa*√(Pa*Ts)/(Ps*Ta) Qs = SCFM Qa = ACFM

SCFM = ACFM*√((14.7+O3 Delivery Press)*530)/(14.7*545))

Pa = 14.7+O3 Delivery Pressure Ts = 460+Standard Temp = 460+70 = 530 R

Ps = 14.7 Ta = 460+O3 Outlet Temp = 460+85 = 545 R

Source: Dwyer Instruments, Inc. Bulletin F-43

OZONE INJECTION RATE ESTIMATE ASSUMPTIONS

Ozone Injection Rate Estimate = (60,000ppmv*10^-6)*(1scfm)*(1440min/day)*(28.32L/ft^3)*(1mol/22.4L)*(47.9982g/mol)*(1lb/454g)

Negligible change in air density, constant concentration and average molecular weight

1 mole occupies 22.4 Liters at STP
STP is 21°C (70°F) and 1 atm
MWozone = 47.9982 grams/mole
Mwoxygen = 31.9988 grams/mole

1 day = 1440 minutes
1 ft3 = 28.317 Liters
1 lb = 454 grams

*Ozone concentration based on testing and data provided by H2O Engineering, Inc.

for 10 psi = 4,150 ppmv for 20 psi = 4,260 ppmv for 30 psi = 4,540 ppmv

TABLE 10A: INDOOR & CRAWL SPACE AIR SAMPLE ANALYTICAL DATA (µg/m^3)
Omega Termite, 807 75th Avenue, Oakland, California

Sample ID	Date	TPH-g (µg/m^3)	Benzene (µg/m^3)	Toluene (µg/m^3)	Ethyl-benzene (µg/m^3)	Xylenes (µg/m^3)	MTBE (µg/m^3)
CS-1	04/10/07	-	0.80	2.7	0.66	3.1	ND<0.09
	05/14/07	**-**	**11.0**	**7.7**	**1.7**	**5.8**	**ND<0.36**
BA-1	04/10/07	-	1.2	5.4	3.0	14	ND<0.09
	05/14/07	**-**	**2.1**	**3.0**	**4.8**	**22**	**ND<0.36**
***AQMD #1018**	11/09/01	-	4.5	-	-	-	-
	10/04/01	-	0.96	-	-	-	-
	01/08/02	-	4.15	-	-	-	-
	06/13/02	-	0.3	-	-	-	-
	03/04/03	-	2.56	-	-	-	-
	03/28/03	-	0.6	-	-	-	-
***AQMD #1024**	11/09/01	-	7.0	-	-	-	-
	10/04/01	-	0.96	-	-	-	-
	01/08/02	-	4.2	-	-	-	-
	06/13/02	-	0.3	-	-	-	-
	02/08/03	-	5.7	-	-	-	-
	06/08/03	-	0.6	-	-	-	-
Residential ESLs		26	0.085	63	420	150	9.4
Residential CHHSLs		-	0.084	313	pp	730	9.35
Commercial ESLs		36	0.140	88	580	200	16
Commercial CHHSLs		-	0.141	438	pp	1020	15.7

TABLE 10B: INDOOR & CRAWL SPACE AIR SAMPLE ANALYTICAL DATA (ppbv)
Omega Termite, 807 75th Avenue, Oakland, California

Sample ID	Date	TPH-g (ppbv)	Benzene (ppbv)	Toluene (ppbv)	Ethyl-benzene (ppbv)	Xylenes (ppbv)	MTBE (ppbv)
CS-1	04/10/07	-	0.25	0.72	0.16	0.72	ND<0.025
	05/14/07	**-**	**3.6**	**2.0**	**0.40**	**1.4**	**ND<0.1**
BA-1	04/10/07	-	0.37	1.4	0.69	3.3	ND<0.025
	05/14/07	**-**	**0.65**	**0.8**	**1.1**	**4.9**	**ND<0.1**
***AQMD #1018**	11/09/01	-	1.4	-	-	-	-
	10/04/01	-	0.3	-	-	-	-
	01/08/02	-	1.30	-	-	-	-
	06/13/02	-	0.10	-	-	-	-
	03/04/03	-	0.80	-	-	-	-
	03/28/03	-	0.20	-	-	-	-
***AQMD #1024**	11/09/01	-	2.2	-	-	-	-
	10/04/01	-	0.3	-	-	-	-
	01/08/02	-	1.30	-	-	-	-
	06/13/02	-	0.10	-	-	-	-
	02/08/03	-	1.80	-	-	-	-
	06/08/03	-	0.20	-	-	-	-
Residential ESLs		7.4	0.027	17	96.7	34.5	2.6
Residential CHHSLs		-	0.026	83	pp	168	2.6
Commercial ESLs		10	0.044	23	134	46.1	4.4
Commercial CHHSLs		-	0.044	116	pp	235	4.4

NOTES:
*2004, 2005, 2006 data not published (www.baaqmd.gov/pmt/air_toxics/annual_reports/index.htm)
AQMD = Bay Area Air Quality Management District Monitoring Station
#1018 - Davie Tennis Stadium, 198 Oak Road, Piedmont, CA
#1024 - 2419 Filbert Street, Oakland, CA

RED = max concentration detected that year
BLUE = low concentration detected that year

ESL = Environmental Screening Level (February 2005)
CHHSL = California Human Health Screening Level
pp = CHHSL postponed

At standard temperature (25°C) and pressure (1 atm)
ppbv = µg/m^3 * (24.45/MW)
µg/m^3 = ppbv * (MW/24.45)

Molecular Weights (MWs): Benzene = 78.1, Toluene = 92.13, MTBE = 88.15, Ethlybenzene = 106.16, Xylene = 106.16

TABLE 11: PASSIVE SMD SYSTEM SCREENING DATA
Omega Termite, 807 75th Avenue, Oakland, California

Sample ID	Date	HC Reading (ppmv)
SMD-1	05/07/07	30
	05/08/07	21
	05/09/07	76
	05/10/07	64
	05/11/07	42
	05/14/07	26
	06/07/07	0
	07/10/07	0
	07/16/07	0
	08/02/07	0
	08/22/07	0
	09/13/07	0
	09/26/07	0
	10/25/07	0
	11/13/07	0
	12/26/07	**0**
SMD-2	05/07/07	0
	05/08/07	0
	05/09/07	2.5
	05/10/07	4.5
	05/11/07	1.0
	05/14/07	0
	06/07/07	0
	07/10/07	0
	07/16/07	0
	08/02/07	0
	08/22/07	0
	09/13/07	0
	09/26/07	0
	10/25/07	0
	11/13/07	0
	12/26/07	**0**

NOTES:
HC = total volatile hydrocarbons
ppmv = parts per million by volume
SMD = submembrane depressurization

APPENDIX A

OZONE SPARGE WELL INSTALLATION PERMITS

Alameda County Public Works Agency - Water Resources Well Permit

399 Elmhurst Street
Hayward, CA 94544-1395
Telephone: (510)670-6633 Fax:(510)782-1939

Application Approved on: 12/05/2006 By jamesy

Permit Numbers: W2006-1016 to W2006-1018
Permits Valid from 12/18/2006 to 12/21/2006

Application Id: 1165258224938
City of Project Site: Oakland
Site Location: 807 75th Ave.
Oakland, CA
Project Start Date: 12/18/2006
Completion Date: 12/21/2006

Applicant: AEI Consultants - Robert Flory
2500 Camino Diablo, Walnut Creek, CA 94597
Phone: 925-944-2899

Property Owner: Allen Kanaday
807 75th Ave., Oakland, CA 95621
Phone: 510-562-1333

Client: ** same as Property Owner **

Total Due: $800.00
Receipt Number: WR2006-0536 **Total Amount Paid:** $800.00
Payer Name : Robert F. Flory Paid By: VISA **PAID IN FULL**

Works Requesting Permits:

Remedian Well Construction-Injection - 9 Wells
Driller: HEW Drilling - Lic #: 384167 - Method: hstem **Work Total: $200.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2006-1016	12/05/2006	03/18/2007	OZ-1	10.50 in.	1.00 in.	10.00 ft	35.00 ft
W2006-1016	12/05/2006	03/18/2007	OZ-2	10.50 in.	1.00 in.	10.00 ft	35.00 ft
W2006-1016	12/05/2006	03/18/2007	OZ-3	10.50 in.	1.00 in.	10.00 ft	35.00 ft
W2006-1016	12/05/2006	03/18/2007	OZ-4	10.50 in.	1.00 in.	10.00 ft	35.00 ft
W2006-1016	12/05/2006	03/18/2007	OZ-5	10.50 in.	1.00 in.	10.00 ft	35.00 ft
W2006-1016	12/05/2006	03/18/2007	OZ-6	10.50 in.	1.00 in.	10.00 ft	35.00 ft
W2006-1016	12/05/2006	03/18/2007	OZ-7	10.50 in.	1.00 in.	10.00 ft	35.00 ft
W2006-1016	12/05/2006	03/18/2007	OZ-8	10.50 in.	1.00 in.	10.00 ft	35.00 ft
W2006-1016	12/05/2006	03/18/2007	OZ-9	8.25 in.	1.00 in.	10.00 ft	16.00 ft

Specific Work Permit Conditions

1. Permittee shall assume entire responsibility for all activities and uses under this permit and shall indemnify, defend and save the Alameda County Public Works Agency, its officers, agents, and employees free and harmless from any and all expense, cost, liability in connection with or resulting from the exercise of this Permit including, but not limited to, properly damage, personal injury and wrongful death.

2. Permitte, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no

case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.

4. Applicant shall contact James Yoo for an inspection time at 510-670-6633 at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

5. Minimum seal depth (Neat Cement Seal) is 2 feet below ground surface (BGS).

6. Minimum surface seal thickness is two inches of cement grout placed by tremie

7. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

Well Construction-Monitoring-Monitoring - 2 Wells
Driller: HEW Drilling - Lic #: 384167 - Method: hstem **Work Total: $600.00**

Specifications

Permit #	Issued Date	Expire Date	Owner Well Id	Hole Diam.	Casing Diam.	Seal Depth	Max. Depth
W2006-1017	12/05/2006	03/18/2007	MW-11	8.50 in.	2.00 in.	15.00 ft	35.00 ft
W2006-1018	12/05/2006	03/18/2007	MW-12	8.50 in.	2.00 in.	15.00 ft	35.00 ft

Specific Work Permit Conditions

1. Permitte, permittee's contractors, consultants or agents shall be responsible to assure that all material or waters generated during drilling, boring destruction, and/or other activities associated with this Permit will be safely handled, properly managed, and disposed of according to all applicable federal, state, and local statutes regulating such. In no case shall these materials and/or waters be allowed to enter, or potentially enter, on or off-site storm sewers, dry wells, or waterways or be allowed to move off the property where work is being completed.

2. Prior to any drilling activities, it shall be the applicant's responsibility to contact and coordinate an Underground Service Alert (USA), obtain encroachment permit(s), excavation permit(s) or any other permits or agreements required for that Federal, State, County or City, and follow all City or County Ordinances. No work shall begin until all the permits and requirements have been approved or obtained. It shall also be the applicants responsibilities to provide to the Cities or to Alameda County an Traffic Safety Plan for any lane closures or detours planned. No work shall begin until all the permits and requirements have been approved or obtained.

3. Compliance with the well-sealing specifications shall not exempt the well-sealing contractor from complying with appropriate State reporting-requirements related to well destruction (Sections 13750 through 13755 (Division 7, Chapter 10, Article 3) of the California Water Code). Contractor must complete State DWR Form 188 and mail original to the Alameda County Public Works Agency, Water Resources Section, within 60 days. Including permit number and site map.

4. Applicant shall contact James Yoo for an inspection time at 510-670-6633 at least five (5) working days prior to starting, once the permit has been approved. Confirm the scheduled date(s) at least 24 hours prior to drilling.

5. Wells shall have a Christy box or similar structure with a locking cap or cover. Well(s) shall be kept locked at all times. Well(s) that become damaged by traffic or construction shall be repaired in a timely manner or destroyed immediately (through permit process). No well(s) shall be left in a manner to act as a conduit at any time.

6. Minimum surface seal thickness is two inches of cement grout placed by tremie

7. Minimum seal (Neat Cement seal) depth for monitoring wells is 5 feet below ground surface(BGS) or the maximum depth practicable or 20 feet.

8. Copy of approved drilling permit must be on site at all times. Failure to present or show proof of the approved permit application on site shall result in a fine of $500.00.

PROGRAMS AND SERVICES

Well Standards Program

The Alameda County Public Works Agency, Water Resources is located at:
399 Elmhurst Street
Hayward, CA 94544
For Driving Directions or General Info, Please Contact 510-670-5480 or wells@acpwa.org
For Drilling Permit information and process contact James Yoo at
Phone: 510-670-6633
FAX: 510-782-1939
Email: Jamesy@acpwa.org

Alameda County Public Works is the administering agency of General Ordinance Code, Chapter 6.88 . The purpose of this chapter is to provide for the regulation of groundwater wells and exploratory holes as required by California Water Code. The provisions of these laws are administered and enforced by Alameda County Public Works Agency through its Well Standards Program.

Drilling Permit Jurisdictions in Alameda County: There are four jurisdictions in Alameda County.

Location: Agency with Jurisdiction Contact Number

Berkeley City of Berkeley Ph: 510-981-7460
Fax: 510-540-5672

Fremont, Newark, Union City Alameda County Water District Ph: 510-668-4460
Fax: 510-651-1760

Pleasanton, Dublin, Livermore, Sunol Zone 7 Water Agency Ph: 925-454-5000
Fax: 510-454-5728

The Alameda County Public Works Agency, Water Resources has the responsibility and authority to issue drilling permits and to enforce the County Water Well Ordinance 73-68. This jurisdiction covers the western Alameda County area of **Oakland**, **Alameda**,**Piedmont**, **Emeryville**, **Albany**, **San Leandro**, **San Lorenzo**, **Castro Valley**, and **Hayward** . The purpose of the drilling permits are to ensure that any new well or the destruction of wells, including geotechnical investigations and environmental sampling within the above jurisdiction and within Alameda County will not cause pollution or contamination of ground water or otherwise jeopardize the health, safety or welfare of the people of Alameda County.

Permits are required for all work pertaining to wells and exploratory holes at any depth within the jurisdiction of the Well Standards Program. A completed permit application *(30 Kb)** , along with a site map, should be submitted at least **ten (10) working days prior to the planned start of work**. Submittals should be sent to the address or fax number provided on the application form. When submitting an application via fax, please use a high resolution scan to retain legibility.

Fees
Beginning April 11, 2005 , the following fees shall apply:

A permit to construct, rehabilitate, or destroy wells, including cathodic protection wells, but excluding dewatering wells (*Horizontal hillside dewatering and dewatering for construction period only), shall cost $300.00 per well.

A permit to bore exploratory holes, including temporary test wells, shall cost $200 per site. A site includes the project parcel as well as any adjoining parcels.

Please make checks payable to: **Treasurer, County of Alameda**

Permit Fees are exempt to State & Federal Projects
Applicants shall submit a letter from the agency requesting the fee exemption.

Scheduling Work/Inspections:
Alameda County Public Works Agency (ACPWA), Water Resources Section requires scheduling and inspection of permitted work. All drilling activities must be scheduled in advance. Availability of inspections will vary from week to week and will come on a first come, first served bases. To ensure inspection availability on your desired or driller scheduled date, the following procedures are required:

Please contact **James Yoo at 510-670-6633** to schedule the inspection date and time (You must have drilling permit approved prior to scheduling).

Schedule the work as far in advance as possible (at least 5 days in advance); and confirm the scheduled drilling date(s) at least 24 hours prior to drilling.

Once the work has been scheduled, an ACPWA Inspector will coordinate the inspection requirements as well as how the Inspector can be reached if they are not at the site when Inspection is required. Expect for special circumstances given, all work will require the inspection to be conducted during the working hours of 8:30am to 2:30pm., Monday to Friday, excluding holidays.

Request for Permit Extension:
Permits are only valid from the start date to the completion date as stated on the drilling permit application and Conditions of Approval. To request an extension of a drilling permit application, applicants must request in writing prior to the completion date as set forth in the Conditions of Approval of the drilling permit application. Please send fax or email to Water Resources Section, Fax 510-782-1939 or email at wells@acpwa.org. There are no additional fees for permit extensions or for re-scheduling inspection dates. You may not extend your drilling permit dates beyond 90 days from the approval date of the permit application. **NO refunds** shall be given back after 90 days and the permit shall be deemed voided.

Cancel a Drilling Permit:
Applicants may cancel a drilling permit only in writing by mail, fax or email to Water Resources Section, Fax 510-782-1939 or email at wells@acpwa.org. If you do not cancel your drilling permit application before the drilling completion date or notify in writing within 90 days, Alameda County Public Works Agency, Water Resources Section may void the permit and No refunds may be given back.

Refunds/Service Charge:
A service charge of $25.00 dollars for the first check returned and $35.00 dollars for each subsequent check returned.

Applicants who cancel a drilling permit application **before** we issue the approved permit(s), will receive a **FULL** refund (at any amount) and will be mailed back within two weeks.

Applicants who cancel a drilling permit application **after** a permit has been issued will then be charged a service fee of $50.00 (fifty Dollars).

To collect the remaining funds will be determined by the amount of the refund to be refunded (see process below).

Board of Supervisors Minute Order, File No. 9763, dated January 9, 1996, gives blanket authority to the Auditor-Controller to process claims, from all County departments for the refund of fees which do not exceed $500 (Five Hundred Dollars)(with the exception of the County Clerk whose limit is $1,500).

Refunds over the amounts must be authorized by the Board of Supervisors Minute Order, File No. 9763 require specific approval by the Board of Supervisors. The forms to request for refunds under $500.00 (Five Hundred Dollars) are available at this office or any County Offices. If the amount is exceeded, a Board letter and Minute Order must accompany the claim. Applicant shall fill out the request form and the County Fiscal department will process the request.

Enforcement
Penalty. Any person who does any work for which a permit is required by this chapter and who fails to obtain a permit shall be guilty of a misdemeanor punishable by fine not exceeding Five Hundred Dollars ($500.00) or by imprisonment not exceeding six months, or by both such fine and imprisonment, and such person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any such

violation is committed, continued, or permitted, and shall be subject to the same punishment as for the original offense. (Prior gen. code §3-160.6)

Enforcement actions will be determined by this office on a case-by-case basis
Drilling without a permit shall be the cost of the permit(s) and a fine of $500.00 (Five Hundred Dollars).

Well Completion Reports (State DWR-188 forms) must be filed with the Well Standards Program within 60 days of completing work. Staff will review the report, assign a state well number, and then forward it to the California Department of Water Resources (DWR). Drillers should not send completed reports to DWR directly. Failure to file a Well Completion Report or deliberate falsification of the information is a misdemeanor; it is also grounds for disciplinary action by the Contractors' State License Board. Also note that filed Well Completion Reports are considered private record protected by state law and can only be released to the well owner or those specifically authorized by government agencies.

See our website (www.acgov.org/pwa/wells/index.shtml) for links to additional forms.

APPENDIX B

BORING LOGS

Project: Omega Termite **Project Location: 807 75th Avenue, Oakland, Ca** **Project Number: 115483**	**Log of Boring OZ-1** Sheet 1 of 1

Date(s) Drilled **February 15, 2006**	Logged By **Robert F. Flory**	Checked By
Drilling Method **Hollow Stem Auger**	Drill Bit Size/Type **8 1/4 inch**	Total Depth of Borehole **20 feet bgs**
Drill Rig Type **CME 75**	Drilling Contractor **Gregg Drilling**	Surface Elevation
Groundwater Level and Date Measured	Sampling Method(s) **ModCal**	
Borehole Backfill **Well Completion**	Location	

Depth, feet	Sample Type	Sample Number	Sampling Resistance, blows/foot	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	PID Reading, ppm	Well Log	REMARKS AND OTHER TESTS
0				GC/GM		Crushed Gravel clay mix, gray - dark gray 2.5Y 5/1 - 4/1, firm dry, FILL			
				CL		Silty Clay, dark gray - grayish brown 2.5Y 4/1 - 5/2, stiff, slightly moist			
5		OZ-1-5	8/9/15	CL		becoming very dark gray - dark grayish brown	0.3		1" blank riser Bentonite chip
				SC/SM		Silty Sandy Gravel, dark gray - greenish gray N 2.5/ - 10Y 4/1 , firm, wet, moist, strong hydrocarbon odor			
10		OZ-1-10	6/5/16			a/a becoming moist	450 9.1		
				ML		Clayey Silt, olive brown 2.5Y 4/4, stiff, moist			#2/16 Monterey sand
15		OZ-1-15	6/7/9	CL		Silty Clay, light olive brown 2.5Y 5/4, stiff, slightly moist			
		OZ-1-18	6/6/10	CL		Silty Clay, light olive brown 2.5Y 5/4, stiff, slightly moist	4.5		1" x 18" microporous diffuser
20						Bottom of Boring at 20 feet bgs			
25									
30									
35									

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Project: Omega Termite
Project Location: 807 75th Ave. Oakland, CA
Project Number: 262157

Log of Boring OZ-2

Sheet 1 of 1

Date(s) Drilled **December 18, 2006**	Logged By **Robert F. Flory**	Checked By **Adrian Angel**
Drilling Method **Hollow Stem Auger**	Drill Bit Size/Type **10 1/2 inch**	Total Depth of Borehole **35 feet bgs**
Drill Rig Type **CME 75**	Drilling Contractor **HEW Drilling**	Surface Elevation
Groundwater Level and Date Measured	Sampling Method(s) **ModCal, Grab**	
Borehole Backfill **Well Completion**	Location	

Depth, feet	Sample Type	Sample Number	Sampling Resistance, blows/foot	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	PID Reading, ppm	Well Log	REMARKS AND OTHER TESTS
0				CL-ML		Silty sandy Clay, brown 10YR 4/4. locally gravelly, soft - moderately stiff, slightly moist. Auger return sample			
				GC		Clayey Gravel, very dark brown - dark gray 10YR 3/2 - 4/1, (FILL) Auger sample	0.1		1" riser
5							0.2		I" blank riser 1" riser 3/8" bentonite chip
10				GP		Gravel, dark gray 10YR, pea gravel (FILL) Auger sample	0.1		
		OZ-2-13	9/10/7	CL		Silty Clay, olive brown 2.5Y 4/4, soft wet muck	0.6		
				CL		Sandy Silty Clay, olive brown 2.5Y 4/4, soft, moist			
15				ML		Silty Clay, brownish yellow 10YR 6/6 - light yellowish brown 10YR 6/4 with some dark green gray 5GY 4/1streaksmoderately stiff, moist.			# 2/12 "Monterey Sand"
		OZ-2-17.5	5/5/11	CL		Silty Clay, 2.5Y 5/6 with spotty yellowish brown 10YR 6/4, firm, moist	66		1" microporous diffuser
				CL		Silty Clay, olive 5Y 4/4 with 5GY 4/1 mottling, moderately stiff, moist.			
20									3/8" bentonite chip
				CL		Sandy Clay, brownish yellow 10YR 6/8 - olive 5Y 4/4 with 5GY 4/1 mottling, stiff, moist			
		OZ-2-23	6/9/4	GC		Sandy Gravel, olive brown 5Y 4/4, hard, moist	0.7		
25				CL-ML		Silty Clay - Clayey Silt, brownish yellow 10YR 6/8 - light yellowish brown 2.5Y 6/4 with some greenish gray 10GY 6/1 mottling, moderately soft, slightly plastic, moist			
		OZ-2-27	3/5/8				0.1		
				SM		Silty Sand, 10YR 4/4, silty, moderately soft - soft, wet, no hydrocarbon odor.			
30		OZ-2-30	5/7/11	ML		Gravelly Silt, yellowish brown 10YR 5/4, moderately firm, wet.	0.2		# 2/12 "Monterey Sand"
				ML		Clayey Silt, brown - yellowish brown 10YR 5/3 - 5/4, moderately firm, wet			
				ML		Gravelly Silt, light olive brown 2.5Y 5/3, firm, wet, no hydrocarbon odor			1" microporous diffuser
		OZ-2-34	8/12/23	SM		Silty Sand, light olive brown 2.5Y 5/3 - 5/6 - olive brown 2.5Y 4/4, firm, wet	0.1		
35						Bottom of Boring at 35 feet bgs			

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Project: Omega Termite
Project Location: 807 75th Ave. Oakland, CA
Project Number: 262157

Log of Boring OZ-3

Sheet 1 of 1

Date(s) Drilled **December 18, 2006**	Logged By **Robert F. Flory**	Checked By **Adrian Angel**
Drilling Method **Hollow Stem Auger**	Drill Bit Size/Type **10 1/2 inch**	Total Depth of Borehole **35 feet bgs**
Drill Rig Type **CME 75**	Drilling Contractor **HEW Drilling**	Surface Elevation
Groundwater Level and Date Measured	Sampling Method(s) **ModCal, Grab**	
Borehole Backfill **Well Completion**	Location **Twin to boring SB-13**	

Depth, feet	Sample Type	Sample Number	Sampling Resistance, blows/foot	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	PID Reading, ppm	Well Log	REMARKS AND OTHER TESTS
0				CL-ML		Silty sandy Clay, brown 10YR 4/4. locally gravelly, soft - moderately stiff, slightly moist. Auger return sample	0		
				CL		Silty Clay, dark gray, hard, slightly moist. Auger return sample			1" riser
5				CL		Silty Clay, black N 2.5/, hard, slightly moist. Auger return sample	0		I" blank riser 1" riser
				CL		Silty Clay, dark yellowish brown 10YR 4/4, stiff, moist Auger return sample	0		3/8" bentonite chip
10		OZ-3-10	7/9/12	CL		Silty Clay, olive 5Y 4/4 - brown 2.5Y 5/2 - dark yellowish brown 10YR 4/4, stiff, moist.	3.4		
							18.0		# 2/12 "Monterey Sand"
				CL		Silty Clay, yellowish brown - brownish yellow 10YR 5/6-6/8 with grayish green 10GY 5/1 mottling silty, very stiff, moist			1" microporous diffuser
15		OZ-3-16	5/5/11				3.5		
				ML		Clayey Silt, yellowish brown 10YR 5/4-5/6, moderately stiff, moist.	17.5		
							0.9		3/8" bentonite chip
				ML		Clayey Silt, yellowish brown 10YR 5/6, moderately stiff, moist.	0.7		
				SW-SC		Sand - Clayey Sand, brown - yellowish brown 10YR 5/3-5/6, firm, wet			
20		OZ-3-21	4/6/13	CL		Sandy Clay, yellowish brown 10YR 5/6, stiff, moist.	70.2		
				CL		Silty Clay, yellowish brown 10YR 5/6, stiff moist			
				CL		Sandy Silty Clay, yellowish brown 10YR 5/6 - with 5Y 6/3pale olive vertical channels, moderately soft, slightly plastic, moist			
25		OZ-3-26	3/5/8				0.1		
				SM		Silty Sand, 10YR 4/4, very fine grained, clayey, moderately soft - soft, wet, no hydrocarbon odor.			
		OZ-3-28	3/4/11				0.1		
				SC		Clayey Sand, olive yellow 2.5Y 6/6 with some 5Y 6/3 - 6/2 mottling, moderately firm, wet.			
30		OZ-3-31	8/11/14				5.0		# 2/12 "Monterey Sand"
				SC		Clayey Sand, light olive 2.5Y 5/4 - yellowish brown 10YR 5/6, moderately soft - soft, wet, no hydrocarbon odor			1" microporous diffuser
		OZ-3-33	7/7/10				0.2		
35						Bottom of Boring at 35 feet bgs			

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Project: Omega Termite
Project Location: 807 75th Ave. Oakland, CA
Project Number: 262157

Log of Boring OZ-4

Sheet 1 of 1

Date(s) Drilled **December 18, 2006**	Logged By **Robert F. Flory**	Checked By **Adrian Angel**
Drilling Method **Hollow Stem Auger**	Drill Bit Size/Type	Total Depth of Borehole **35 feet bgs**
Drill Rig Type **CME 75**	Drilling Contractor **HEW Drilling**	Surface Elevation
Groundwater Level and Date Measured	Sampling Method(s) **ModCal, Grab**	
Borehole Backfill **Well Completion**	Location **Twin to boring SB-8**	

Depth, feet	Sample Type	Sample Number	Sampling Resistance, blows/foot	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	PID Reading, ppm	Well Log	REMARKS AND OTHER TESTS
0				CL-ML		Silty Clay - Clayey Silt, yellow brown 10YR 6/6 gravelly, stiff - firm, slightly moist, Auger return sample	0		
				CL		Silty Clay, light olive brown 2.5Y 5/4, stiff, moist Auger return sample	0		1" riser
5									I" blank riser
				CL		Silty Clay, light olive brown - olive brown, 2.5Y 5/4 -4/4 to yellowish brown 10YR 5/8 mottling, stiff, moist Auger return sample	0		1" riser
									3/8" bentonite chip
10				CL-ML		Silty Clay - Clayey Silt, light yellowish brown 2.5Y 6/4 - 10YR 6/4 with some olive - pale olive 5Y 6/4-4/4 motting, stiff - firm, moist Auger return sample	0		
							0		# 2/12 "Monterey Sand"
				CL		Sandy Clay, 10YR 5/4-6/6, silty, very stiff, moist			1" microporous diffuser
15		OZ-4-16	5/5/11				0.1		
				SC-CL		Clayey Silty Sand, with some becoming Sandy Silty Clay, 2.5Y 6/6 to 10YR 6/6 with some greenish gray 5GY 6/1 streaks and mottling, moderately firm, moist - wet			3/8" bentonite chip
20		OZ-4-20	4/6/13				0		
				SM		Silty Sand, dark yellow brown 10YR 3/4, very fine grained, with some clay, moderately soft, wet			
25		OZ-4-25	5/7/15	CL		Sandy Clay, 10YR 5/6, stiff, moist	0.3		
				SM		Silty Sand, 10YR 4/4, very fine grained, clayey, moderately soft - soft, wet, no hydrocarbon odor.			
		OZ-4-28	2/3/10						
30		OZ-4-31	8/11/14	SM		Silty Sand, 10YR 4/4, very fine grained, clayey, moderately soft - soft, wet, no hydrocarbon odor with some streaks very Sandy Silty Clay, moderately firm	0		# 2/12 "Monterey Sand"
				SP		Sand, light olive gray 5Y 6/2 with some yellowish red 5YR 4/6 mottling, moderately friable - friable, wet, no hydrocarbon odor			1" microporous diffuser
		OZ-4-33	10/28/33				0		
35				GW		Sandy Gravel, light brownish gray - grayish brown 10YR 5/2 - 6/2, firm, wet			
						Bottom of Boring at 35 feet bgs			

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Project: Omega Termite
Project Location: 807 75th Avenue, Oakland, Ca
Project Number: 115483

Log of Boring OZ-5

Sheet 1 of 1

Date(s) Drilled **December 20, 2006**	Logged By **Robert F. Flory**	Checked By **Adrian Angel**
Drilling Method **Hollow Stem Auger**	Drill Bit Size/Type **10 1/2 inch**	Total Depth of Borehole **35 feet bgs**
Drill Rig Type **CME 75**	Drilling Contractor **HEW Drilling**	Surface Elevation
Groundwater Level and Date Measured	Sampling Method(s) **ModCal, Grab**	
Borehole Backfill **Well Completion**	Location	

Depth, feet	Sample Type	Sample Number	Sampling Resistance, blows/foot	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	PID Reading, ppm	Well Log	REMARKS AND OTHER TESTS
0				CL		Silty Clay, very dark grayish brown 120YR 3/2, soft, wet becoming black downward			
				CL		Silty Clay, black N 2.5/, very stiff, moist			1" blank riser
5							9.0		1" blank riser
									3/8" bentonite chips
				SC		Clayey Sand, yellowish brown 10YR 5/8, coarse grained, firm, wet			
10		OZ-5-11	5/8/11	SC		Clayey Sand, light olive brown 2.5Y 5/4, firm, wet	67		
				CL		Silty Clay, olive brown - olive yellow 5Y 5/4 - 6/8 olive 5Y 4/3, with some greenish gray 5GY 5/1 horiz. streaks and vert. channels, firm, wet			# 2/16 Monterey Sand
				CL		Silty Clay, dark olive - olive 5Y 3/2 - 5/4 with some yellowish brown 10YR 5/8, firm, moist			1" x 18" microporous diffuser
15		OZ-5-16	5/8/11				25		
							10		3/8" bentonite chips
				SC		Clayey Sand, olive brown 2.5Y 4/4, firm, wet			
20		OZ-5-21.0	5/12/12				4.4		
				SW		Clayey Gravelly Sand, dark yellowish brown 10YR 4/4, hard, wet			
25		OZ-5-26	6/7/12	ML		Clayey Silt, yellowish brown 10YR 5/4 with some light olive brown 2.5Y 5/4-5/6 with greenish gray 10Y 6/1 mottling and streaks, moderately firm, moist	0.4		
				SM		Silty Sand, light yellowish brown 10YR 6/4 - light olive brown 2.5Y 5/4, mottled, moderately firm, wet			
30		OZ-5-31	7/11/15	SC		Clayey Sand, yellowish brown - strong brown 10YR 5/8 - 7.5YR 5/8 with abundant greenish gray 5G 5/1 streaks & mottling, firm, wet	44.0		# 2/16 Monterey Sand
		OZ-5-34	7/13/14	CL		Silty Clay, dark yellowish brown 10YR 4/6 - 3/6, stiff - slightly plastic, moist	0		1" x 18" microporous diffuser
35						Bottom of Boring at 35 feet bgs			

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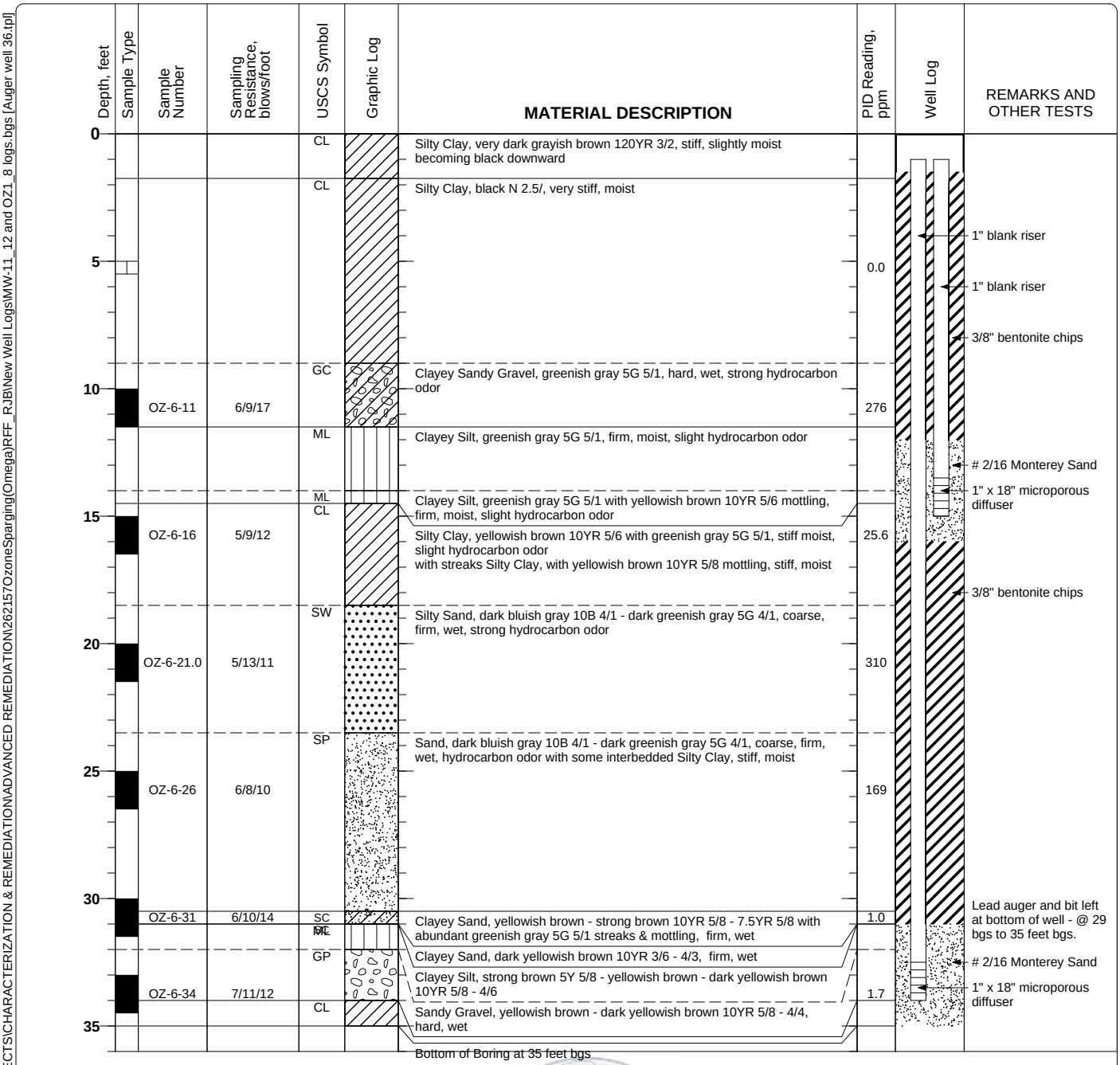
Project: Omega Termite Project Location: 807 75th Avenue, Oakland, Ca Project Number: 115483	**Log of Boring OZ-6** Sheet 1 of 1

Date(s) Drilled **December 20, 2006**	Logged By **Robert F. Flory**	Checked By **Adrian Angel**
Drilling Method **Hollow Stem Auger**	Drill Bit Size/Type **10 1/2 inch**	Total Depth of Borehole **35 feet bgs**
Drill Rig Type **CME 75**	Drilling Contractor **HEW Drilling**	Surface Elevation
Groundwater Level and Date Measured	Sampling Method(s) **ModCal, Grab**	
Borehole Backfill **Well Completion**	Location	



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Project: Omega Termite
Project Location: 807 75th Avenue, Oakland, Ca
Project Number: 115483

Log of Boring OZ-7

Sheet 1 of 1

Date(s) Drilled **December 20, 2006**	Logged By **Robert F. Flory**	Checked By **Adrian Angel**
Drilling Method **Hollow Stem Auger**	Drill Bit Size/Type **10 1/2 inch**	Total Depth of Borehole **35 feet bgs**
Drill Rig Type **CME 75**	Drilling Contractor **HEW Drilling**	Surface Elevation
Groundwater Level and Date Measured	Sampling Method(s) **ModCal, Grab**	
Borehole Backfill **Well Completion**	Location **Twin to wells MW-3 and MW-10**	

Depth, feet	Sample Type	Sample Number	Sampling Resistance, blows/foot	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	PID Reading, ppm	Well Log	REMARKS AND OTHER TESTS
0				GW		Concrete			
				CL		Crushed Gravel clay mix, gray - dark gray 2.5Y 5/1 - 4/1, firm dry, FILL			
				CL		Silty Clay, very dark grayish brown 120YR 3/2, stiff, slightly moist becoming black downward			
						Silty Clay, black N 2.4/, very stiff, slightly moist			1" blank riser
5							0.1		
							13.0		1" blank riser
				CL		Silty Clay, dark gray - dark olive gray 5Y 3/1- 5Y 3/2, stiff, moist			3/8" Bentonite chips
				CL-ML		Silty Clay - Clayey Silt, olive brown - dark grayishbrown 2.5Y 4/3 - 4/2, incleasing clay downward, foderately firm - stiff, moist, very slight hydrocarbon odor	0.1		
10							6.9		
				CL		Silty Clay, olive brown 5Y 4/4, firm, moist - very moist, very slight hydrocarbon odor	8.1		# 2/12 Monterey sand
									1" X 18" microporous diffuser
15				CL		Silty Clay, light olive brown 2.5Y 5/4, stiff, moist			
				SC-CL		Sandy Clay - Clayey Sand, dark greenish gray 10G 4/4, firm - moderately firm, moist - wet, very slight hydrocarbon odor			3/8" Bentonite chips
20		OZ-7-20	5/6/9				5.0		
25		OZ-7-25	5/8/8	SP		Clayey Sand - Sandy Clay, dark greenish gray 10G 4/4 - dark olive gray 5Y 3/2, fine grained, firm, poorly graded, wet, no odor	26.5		
				CL		Silty Clay, dark olive gray 5Y 5/2, stiff with streaks Clayey Sand, coarse, firm, slightly moist, slight hydrocarbon odor			1" blank riser
		OZ-7-29	6/9/13				0.3		
30				ML		Clayey Silt, light olive brown 2.5Y 5/6 with grayish brown 2,5Y 5/2 mottling, firm, moist			
		OZ-7-30	10/13/20	SC		Clayey Sand, strong brown 10YR 5/8, gravelly, firm - hard, wet	0.1		# 2/12 Monterey Sand
				ML		Clayey Silt, strong brown 5Y 5/8 -yellowish brown - dark yellowish brown 10YR 5/8 - 4/6, firm, wet			
				GP		Sandy Gravel, yellowish brown - dark yellowish brown 10YR 5/8 - 4/4, hard, wet			1" X 18" microporous diffuser
		OZ-7-34	9/10/132				0.1		
35				CL		Sandy Clay, yellowish brown, stiff, moist			
						Bottom of Boring at 35 feet bgs			

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Project: Omega Termite
Project Location: 807 75th Avenue, Oakland, Ca
Project Number: 115483

Log of Boring OZ-8

Sheet 1 of 1

Date(s) Drilled **December 20, 2006**	Logged By **Robert F. Flory**	Checked By **Adrian Angel**
Drilling Method **Hollow Stem Auger**	Drill Bit Size/Type **10 1/2 inch**	Total Depth of Borehole **35 feet bgs**
Drill Rig Type **CME 75**	Drilling Contractor **HEW Drilling**	Surface Elevation
Groundwater Level and Date Measured	Sampling Method(s) **ModCal, Grab**	
Borehole Backfill **Well Completion**	Location **Twin to wells MW-2 and MW-8**	

Depth, feet	Sample Type	Sample Number	Sampling Resistance, blows/foot	USCS Symbol	Graphic Log	MATERIAL DESCRIPTION	PID Reading, ppm	Well Log	REMARKS AND OTHER TESTS
0				GW-GC		Sandy Clayey Gravel (crushed) gray N 5/ - brown 10YR 4/4, loose - hard, dry			
				CL		Silty Clay, very dark grayish brown 10YR 3/2, stiff, slightly moist becoming black downward			
						Silty Clay, black N 2.5/, very stiff, moist			'I blank riser
5							0.2		'I blank riser
				CL		Sandy Clay, very dark gray - dark olive gray 5Y 3/1 - 3/2, firm, moist			3/8" bentonite chip
10		OZ-8-11	6/9/17	SC-CL		Clayey Sand - Sandy Gravelly Clay, gray 10Y 5/1 - greenish gray 5GY 5/1, firm - stiff, wet - moist, slight hydrocarbon odor	16.2		# 2/12 Monterey Sand
				SC		Clayey Sand, greenish gray - grayish green 5G 5/1 - 5/2, moderately firm, moist - wet, hydrocarbon odor			1" x 18" microporous diffuser
15		OZ-8-16	5/9/12				172		
				CL		Silty Clay, greenish gray - grayish green 5G 5/1 - 5/2 with streaks and mottling yellowish brown 10YR 5/8, stiff, moist, hydrocarbon odor with streaks Silty Clay, with yellowish brown 10YR 5/8 mottling, stiff, moist	10		3/8" bentonite chip
		OZ-3_18		SW		Sand, dark olive gray 5Y 3/2 - very dark greenish gray 5G 3/1, coarse, locally clayey, gravelly, firm - hard, wet			
20		OZ-8-21.0	5/13/11				4.4		
				SP		Clayey Sand, brown 5YR 4/2 - 4/4 occasionally olive yellow 2.5Y 6/8 mottling, firm, moist - wet			
25		OZ-8-26	6/8/10				9.0 0.4 0.1		
				CL		Silty Clay, brownish yellow - yellowish brown 10YR 6/8 - 5/8, stiff, moist			
				CL		Sandy Clay, brownish yellow - yellowish brown 10YR 6/8 - 5/8, stiff, moist			
30		OZ-8-31	6/10/14	SC		Clayey Sand, dark yellowish brown - brownish yellow 10YR 3/6 - 4/3, firm, wet	44.0		
				SP SC		Sand, dark olive brown 2.5Y 3/3, firm, wet			# 2/12 Monterey Sand
				SC		Clayey Sand, dark yellowish brown 10YR 3/6 - 4/6, firm, wet			1" x 18" microporous diffuser
		OZ-8-34	7/13/142			Silty Clay, brown - dark yellowish brown 10YR 4/3 - 3/6, stiff - slightly plastic, moist	0.2		
35						Bottom of Boring at 35 feet bgs			

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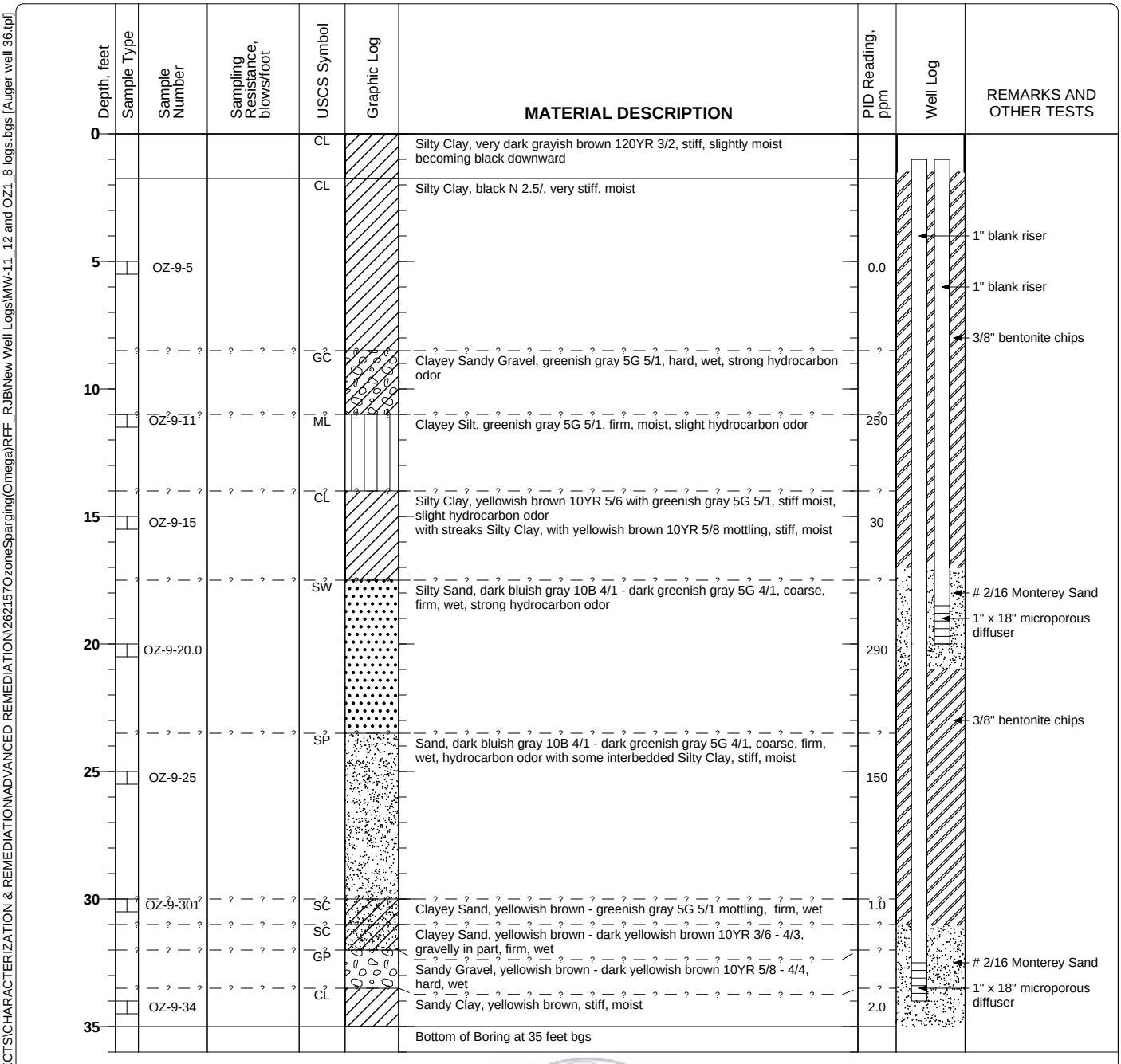
Project: Omega Termite
Project Location: 807 75th Avenue, Oakland, Ca
Project Number: 115483

Log of Boring OZ-9

Sheet 1 of 1

Date(s) Drilled **December 20, 2006**	Logged By **Robert F. Flory**	Checked By **Adrian Angel**
Drilling Method **Hollow Stem Auger**	Drill Bit Size/Type **8 1/4 inch Hollowstem**	Total Depth of Borehole **35 feet bgs**
Drill Rig Type **CME 75**	Drilling Contractor **HEW Drilling**	Surface Elevation
Groundwater Level and Date Measured	Sampling Method(s) **Grab**	
Borehole Backfill **Well Completion**	Location **6 feet from OZ-6**	



X:\PROJECTS\CHARACTERIZATION & REMEDIATION\ADVANCED REMEDIATION\262157OzoneSparging(Omega)RFF_RJB\New Well Logs\MW-11_12 and OZ1_8 logs.bgs [Auger well 36.tpl]

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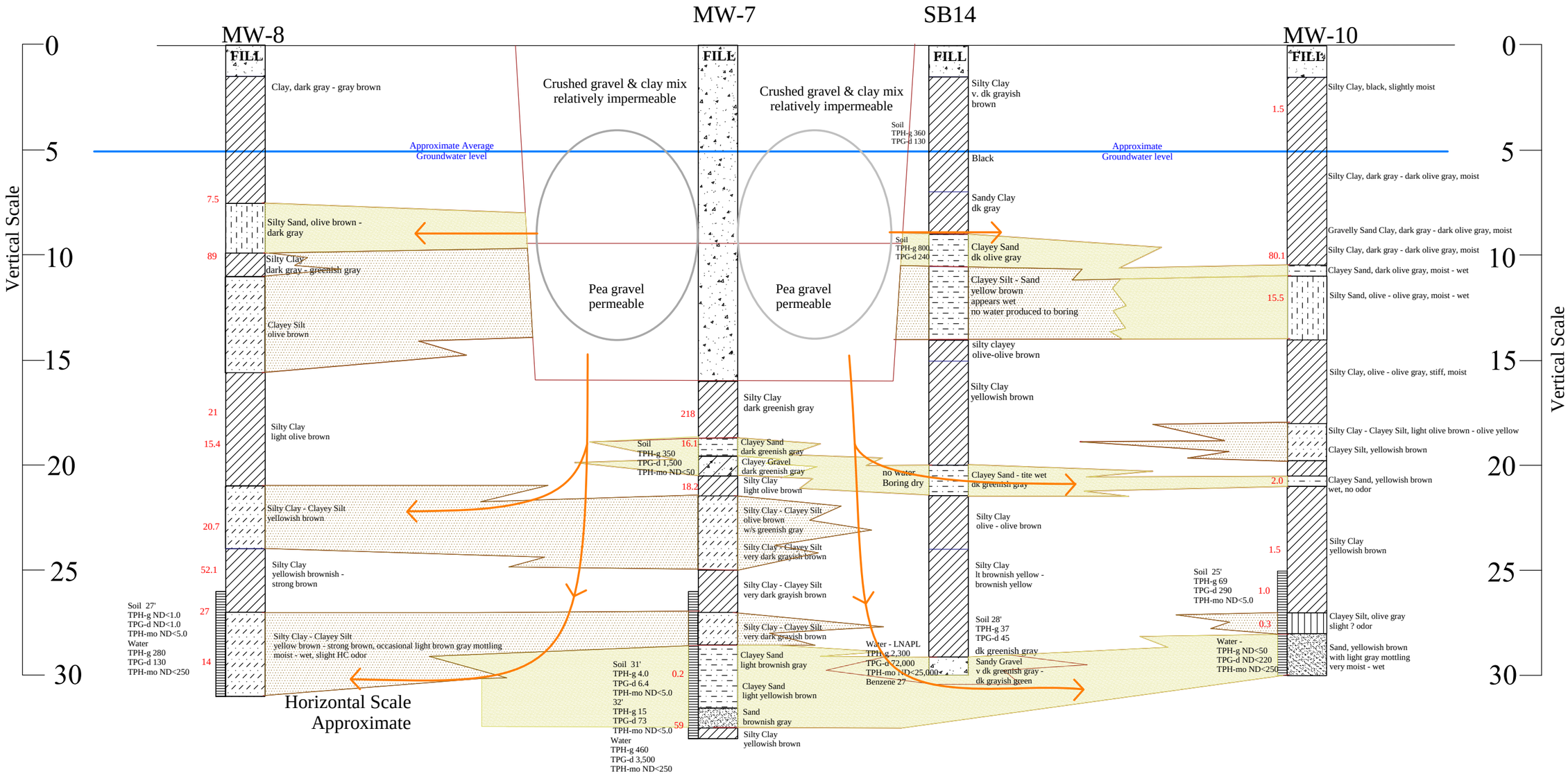
ENVIRONMENTAL & CIVIL ENGINEERING

APPENDIX D

LABORATORY ANALYTICAL REPORTS

SITE CONCEPTUAL MODEL



LEGEND

- Clay - Silty Clay
- Clayey Silt
- Silty Sand
- Sand
- Permeable Sand and Silt
- Silt
- Clayey Sand
- Gravel
- Impermeable Silt and Clay
- Screened Interval

Contaminant Concentrations
Soil - mg/kg
Water - ug/L

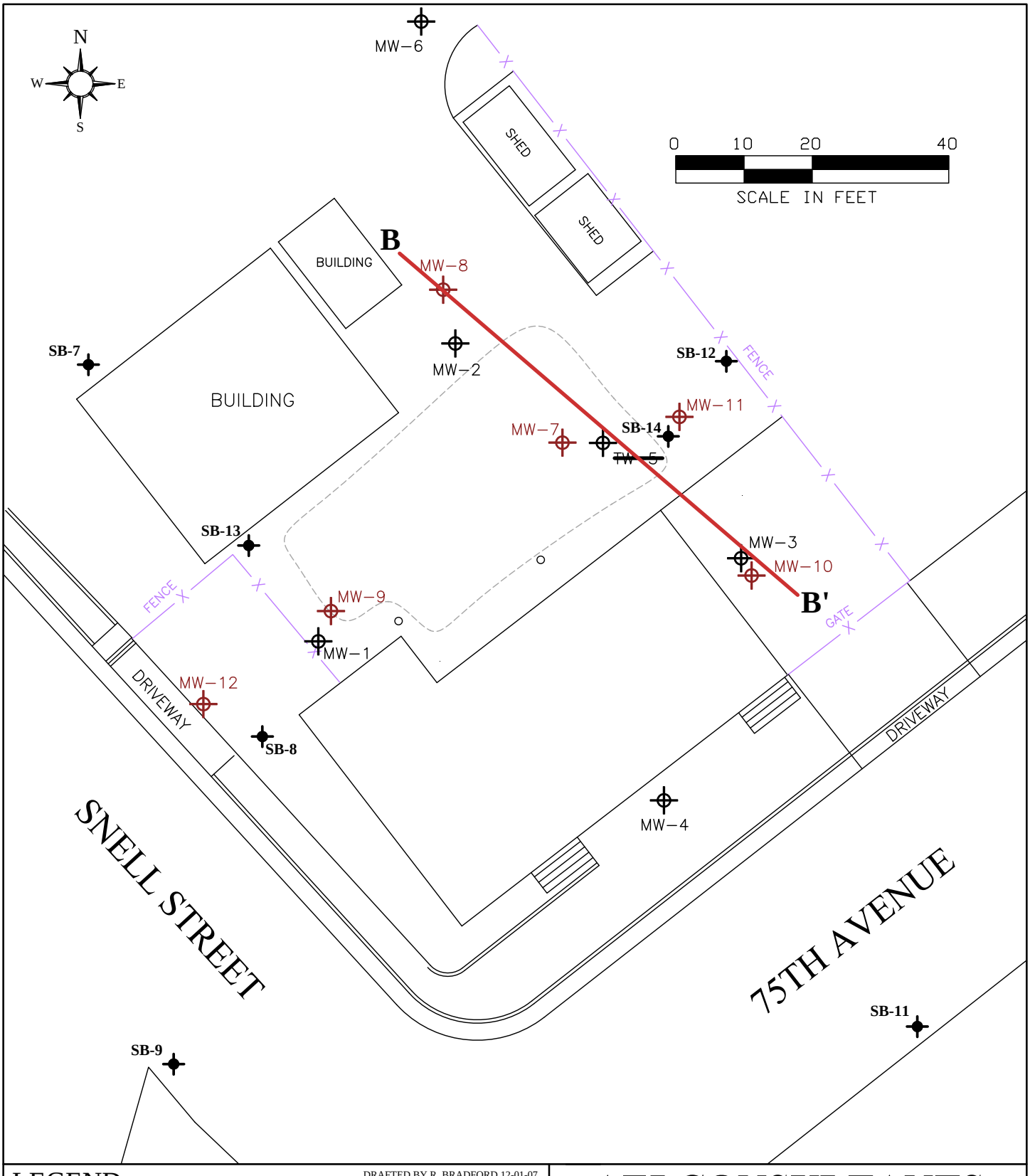
Drafted 5/4/06 by RFF

AEI CONSULTANTS
2500 CAMINO DIABLO, SUITE 200 WALNUT CREEK, CA

SITE CONCEPTUAL MODEL

807 75th Avenue
Oakland, California

FIGURE X
PROJECT NO. 262157



LEGEND

- MONITORING WELL (SHALLOW) — SHALLOW WELLS SCREEDED FROM ~5 TO 20 FT BGS
- MONITORING WELL (DEEP) — DEEP WELLS SCREENED FROM ~25 TO 30 FT BGS
- SOIL BORING
- OZONE SPARGE POINT(S)

DRAFTED BY R. BRADFORD 12-01-07
REVISED BY R. BRADFORD 12-18-07

AEI CONSULTANTS

2500 CAMINO DIABLO, SUITE 200, WALNUT CREEK

CROSS SECTION CUT

807 75th AVENUE
OAKLAND, CALIFORNIA

FIGURE Y

PROJECT NO. 262157

APPENDIX C

SITE CONCEPTUAL MODEL

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #262157; Omega Termite	Date Sampled: 12/18/06
		Date Received: 12/20/06
	Client Contact: Robert Flory	Date Reported: 12/28/06
	Client P.O.:	Date Completed: 12/28/06

WorkOrder: 0612442

December 28, 2006

Dear Robert:

Enclosed are:

1). the results of **8** analyzed samples from your **#262157; Omega Termite project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0612442 **ClientID: AEL**

☑ EDF ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty

Report to:
Robert Flory
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
Email: rflory@aeiconsultants.com
TEL: (925) 283-600 FAX: (925) 283-612
ProjectNo: #262157; Omega Termite
PO:

Bill to
Denise Mockel
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 5 days

Date Received: **12/20/2006**
Date Printed: **12/20/2006**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0612442-001	OZ-4-16	Soil	12/18/06 9:15:00	☑	A		A									
0612442-002	OZ-4-26	Soil	12/18/06 9:35:00	☑	A		A									
0612442-003	OZ-4-31	Soil	12/18/06 9:40:00	☐	A	A	A									
0612442-004	OZ-4-33	Soil	12/18/06 9:55:00	☑	A		A									
0612442-005	MW-12-7.5	Soil	12/18/06 11:00:00	☑	A		A									
0612442-006	MW-12-14	Soil	12/18/06 11:10:00	☐	A		A									
0612442-007	MW-12-19	Soil	12/18/06 11:20:00	☑	A		A									
0612442-008	MW-12-24	Soil	12/18/06 11:30:00	☐	A		A									
0612442-009	MW-12-29	Soil	12/18/06 11:40:00	☑	A		A									
0612442-010	MW-11-21	Soil	12/18/06 2:15:00	☑	A		A									
0612442-011	MW-11-26	Soil	12/18/06 2:25:00	☐	A		A									
0612442-012	MW-11-29	Soil	12/18/06 2:35:00	☑	A		A									
0612442-013	MW-11-31	Soil	12/18/06 2:45:00	☐	A		A									
0612442-014	OZ-3-16	Soil	12/19/06 8:40:00	☑	A		A									
0612442-015	OZ-3-21	Soil	12/19/06 8:50:00	☐	A		A									

Test Legend:

1	G-MBTEX_S	2	PREDF REPORT	3	TPH(D)_S	4		5	
6		7		8		9		10	
11		12							

Prepared by: Elisa Venegas

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0612442 **ClientID: AEL**

☑ EDF ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty

Report to:
Robert Flory
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
Email: rflory@aeiconsultants.com
TEL: (925) 283-600 FAX: (925) 283-612
ProjectNo: #262157; Omega Termite
PO:

Bill to
Denise Mockel
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: 5 days

Date Received: **12/20/2006**
Date Printed: **12/20/2006**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0612442-016	OZ-3-26	Soil	12/19/06 9:05:00	☑	A		A									
0612442-017	OZ-3-31	Soil	12/19/06 9:31:00	☐	A		A									
0612442-018	OZ-2-17.5	Soil	12/19/06 3:45:00	☐	A		A									
0612442-019	OZ-2-24.5	Soil	12/19/06 4:00:00	☑	A		A									
0612442-020	OZ-2-34	Soil	12/19/06 4:40:00	☐	A		A									

Test Legend:

1	G-MBTEX_S	2	PREDF REPORT	3	TPH(D)_S	4		5	
6		7		8		9		10	
11		12							

Prepared by: Elisa Venegas

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

McCampbell Analytical, Inc.
"When Quality Counts"

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Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants	Client Project ID: #262157; Omega Termite	Date Sampled: 12/18/06-12/19/06
2500 Camino Diablo, Ste. #200		Date Received: 12/20/06
Walnut Creek, CA 94597	Client Contact: Robert Flory	Date Extracted: 12/20/06
	Client P.O.:	Date Analyzed 12/22/06

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method SW5030B Analytical methods SW8021B/8015Cm Work Order: 0612442

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
003A	OZ-4-31	S	ND	ND	0.015	ND	ND	ND	1	94
006A	MW-12-14	S	ND	ND	ND	ND	ND	ND	1	95
008A	MW-12-24	S	ND	ND	0.094	ND	ND	ND	1	95
011A	MW-11-26	S	29,g,m	ND	ND	ND	ND	ND	1	82
013A	MW-11-31	S	ND	ND	ND	ND	ND	ND	1	83
015A	OZ-3-21	S	ND	ND	ND	ND	ND	ND	1	82
018A	OZ-2-17.5	S	6.3,a	ND	0.19	ND	0.046	0.011	1	85
020A	OZ-2-34	S	ND	ND	ND	ND	ND	ND	1	87

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	NA	NA	NA	NA	1	ug/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	1	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) value derived using a client specified carbon range; o) results are reported on a dry weight basis; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #262157; Omega Termite	Date Sampled: 12/18/06-12/19/06
		Date Received: 12/20/06
	Client Contact: Robert Flory	Date Extracted: 12/20/06
	Client P.O.:	Date Analyzed 12/21/06-12/23/06

Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel*

Extraction method SW3550C Analytical methods SW8015C Work Order: 0612442

Lab ID	Client ID	Matrix	TPH(d)	DF	% SS
0612442-003A	OZ-4-31	S	ND	1	101
0612442-006A	MW-12-14	S	ND	1	103
0612442-008A	MW-12-24	S	ND	1	102
0612442-011A	MW-11-26	S	61,k	1	103
0612442-013A	MW-11-31	S	ND	1	99
0612442-015A	OZ-3-21	S	3.4,a	1	102
0612442-018A	OZ-2-17.5	S	1.9,d	1	103
0612442-020A	OZ-2-34	S	ND	1	100

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA
	S	1.0	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel is significant; d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit; o) results are reported on a dry weight basis.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder 0612442

EPA Method SW8021B/8015Cm Extraction SW5030B BatchID: 25328 Spiked Sample ID: 0612438-033A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)£	ND	0.60	104	111	6.51	109	108	1.21	70 - 130	30	70 - 130	30
MTBE	ND	0.10	82.1	89.6	8.70	86.6	85.1	1.65	70 - 130	30	70 - 130	30
Benzene	ND	0.10	99.2	98.4	0.785	97.8	92.3	5.80	70 - 130	30	70 - 130	30
Toluene	ND	0.10	83	82.5	0.681	83.2	78.5	5.81	70 - 130	30	70 - 130	30
Ethylbenzene	ND	0.10	102	101	0.829	102	96.5	5.43	70 - 130	30	70 - 130	30
Xylenes	ND	0.30	94.7	94.7	0	95.7	90	6.10	70 - 130	30	70 - 130	30
%SS:	108	0.10	106	100	5.58	102	99.1	2.94	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 25328 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0612442-003	12/18/06 9:40 AM	12/20/06	12/22/06 2:42 AM	0612442-006	12/18/06 11:10 AM	12/20/06	12/22/06 3:12 AM
0612442-008	12/18/06 11:30 AM	12/20/06	12/22/06 3:41 AM	0612442-011	12/18/06 2:25 PM	12/20/06	12/22/06 6:21 AM
0612442-013	12/18/06 2:45 PM	12/20/06	12/22/06 5:49 AM	0612442-015	12/19/06 8:50 AM	12/20/06	12/22/06 4:43 AM
0612442-018	12/19/06 3:45 PM	12/20/06	12/22/06 5:16 AM	0612442-020	12/19/06 4:40 PM	12/20/06	12/22/06 6:54 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder 0612442

EPA Method SW8015C	Extraction SW3550C	BatchID: 25327	Spiked Sample ID: 0612438-033A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	ND	20	94	94.4	0.406	99.8	99.8	0	70 - 130	30	70 - 130	30
%SS:	100	50	99	98	0.659	103	102	0.615	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 25327 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0612442-003	12/18/06 9:40 AM	12/20/06	12/22/06 8:56 AM	0612442-006	12/18/06 11:10 AM	12/20/06	12/21/06 5:21 PM
0612442-008	12/18/06 11:30 AM	12/20/06	12/22/06 7:59 PM	0612442-011	12/18/06 2:25 PM	12/20/06	12/23/06 12:33 AM
0612442-013	12/18/06 2:45 PM	12/20/06	12/23/06 12:33 AM	0612442-015	12/19/06 8:50 AM	12/20/06	12/22/06 9:08 PM
0612442-018	12/19/06 3:45 PM	12/20/06	12/22/06 10:17 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder 0612442

EPA Method SW8015C **Extraction SW3550C** **BatchID: 25330** **Spiked Sample ID: 0612443-002a**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	3.5	20	86.7	87.5	0.741	99.4	104	4.70	70 - 130	30	70 - 130	30
%SS:	106	50	98	98	0	95	97	1.31	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 25330 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0612442-020	12/19/06 4:40 PM	12/20/06	2/22/06 10:59 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #262157; Omega Termite	Date Sampled: 12/20/06
		Date Received: 12/22/06
	Client Contact: Robert Flory	Date Reported: 01/02/07
	Client P.O.:	Date Completed: 01/02/07

WorkOrder: 0612543

January 02, 2007

Dear Robert:

Enclosed are:

1). the results of **9** analyzed samples from your **#262157; Omega Termite project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

ARV 0612543

McCAMPBELL ANALYTICAL, INC.

1538 Willow Pass Road
Bay Point., CA 94565

Telephone: (925) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

GeoTracker EDF ☒ PDF ☒ Excel ☐ Write On (DW) ☐

Report To: Robert Flory	Bill To: Same
Company: AEI Consultants	
2500 Camino Diablo, Suite 200	
Walnut Creek, CA 94597	E-Mail: rflory@aeiconsultants.com
Tel: (925) 944-2899 Ext 122	Fax: (925) 944-2895
Project #: 262157	Project Name: Omega Termite
Project Location: 807 75th Avenue, Oakland, CA	
Sampler Signature:	

SAMPLE ID	LOCATION (Field Point Name)	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED Ice	METHOD PRESERVED HCl	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	MBTEX (SW8021B) & TPH as Gas (SW8015Cm)	TPH as Diesel (SW8015Cm)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	HVOCs EPA 8260 (8010 list)	BTEX ONLY (EPA 602 / 8020)	Pesticides EPA 608 / 8080	PCBs EPA 608 / 8080	VOCs EPA 624 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	Halogenated VOCs (8260B – 8010 Target List)	Comments
OZ-7-29	OZ-7	12/20/06	1055	1	2x6		X								X	X															
OZ-7-34	OZ-7	"	1120	1	"		"								Hold																
OZ-8-11	OZ-8	"	1405	1	"		"								X	X															
OZ-8-20	"	"	1435	1	"		"								X	X	Add'l														labelled 5/21
OZ-8-26	"	"	1445	1	"		"								Hold																
OZ-8-31	"	"	1500	1	"		"								X	X															
OZ-6-11	OZ-6	12/21/06	0835	1	"		"								X	X															
OZ-6-16	"	"	0850	1	"		"								Hold																
OZ-6-21	"	"	0905	1	"		"								X	X															
OZ-6-26	"	"	0920	1	"		"								X	X															
OZ-5-16	OZ-5	"	1300	1	"		"								X	X															
OZ-5-21	"	"	1325	1	"		"								Hold																labelled 5/26
OZ-5-31	"	"	1330	1	"		"								X	X															

Relinquished By:	Date:	Time:	Received By:
	12/22/06	1235	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° 8.6°c ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT
DECHLORINATED IN LAB PERSERVED IN LAB

PRESERVATION	VOAS	O&G	METALS	OTHER
APPROPRIATE CONTAINERS ✓				

2/2

McCAMPBELL ANALYTICAL, INC.

1538 Willow Pass Road
Bay Point., CA 94565

Telephone: (925) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

GeoTracker EDF ☒ PDF ☒ Excel ☐ Write On (DW) ☐

Report To: Robert Flory Bill To: Same

Company: AEI Consultants

2500 Camino Diablo, Suite 200

Walnut Creek, CA 94597 E-Mail: rflory@aeiconsultants.com

Tel: (925) 944-2899 Ext 122 Fax: (925) 944-2895

Project #: 262157 Project Name: Omega Termite

Project Location: 807 75th Avenue, Oakland, CA

Sampler Signature:

SAMPLE ID	LOCATION (Field Point Name)	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED Ice	METHOD PRESERVED HCl	METHOD PRESERVED HNO_3	METHOD PRESERVED Other
OZ-1-12	OZ-1	12/2/16	1605	1	3/6		X				X			
OZ-1-17	↓	↓	1615	1			X				X			
OZ-1-7	↓	↓	1550	1			X				X			

Analysis Request	Other	Comments
MBTEX (SW8021B) & TPH as Gas (SW8015Cm)		
TPH as Diesel (SW8015Cm)		
Total Petroleum Oil & Grease (5520 E&F/B&F)		
Total Petroleum Hydrocarbons (418.1)		
HVOCs EPA 8260 (8010 list)		
BTEX ONLY (EPA 602 / 8020)		
Pesticides EPA 608 / 8080		
PCBs EPA 608 / 8080		
VOCs EPA 624 / 8260		
EPA 625 / 8270		
PAH's / PNA's by EPA 625 / 8270 / 8310		
CAM-17 Metals		
LUFT 5 Metals		
Lead (7240/7421/239.2/6010)		
RCI		
	Halogenated VOCs (8260B – 8010 Target List)	

Relinquished By:	Date:	Time:	Received By:
	12/2/16	1735	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

	VOAS	O&G	METALS	OTHER
ICE/t°				
GOOD CONDITION				
HEAD SPACE ABSENT				
DECHLORINATED IN LAB				
PRESERVATION APPROPRIATE				
CONTAINERS				
PERSERVED IN LAB				

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0612543 **ClientID: AEL**

☐EDF ☐Fax ☐Email ☐HardCopy ☐ThirdParty

Report to:
Robert Flory
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
Email: rflory@aeiconsultants.com
TEL: (925) 283-6000 FAX: (925) 283-6121
ProjectNo: #262157; Omega Termite
PO:

Bill to:
Denise Mockel
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Requested TAT: **5 days**
Date Received: **12/22/2006**
Date Printed: **12/27/2006**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0612543-001	OZ-7-29	Soil	12/20/06 10:55:00	☐	A	A										
0612543-003	OZ-8-11	Soil	12/20/06 2:05:00	☐	A	A										
0612543-006	OZ-8-31	Soil	12/20/06 3:00:00	☐	A	A										
0612543-007	OZ-6-11	Soil	12/21/06 8:35:00	☐	A	A										
0612543-009	OZ-6-21	Soil	12/21/06 9:05:00	☐	A	A										
0612543-010	OZ-6-26	Soil	12/21/06 9:20:00	☐	A	A										
0612543-011	OZ-5-16	Soil	12/21/06 1:00:00	☐	A	A										
0612543-013	OZ-5-31	Soil	12/21/06 1:30:00	☐	A	A										
0612543-014	OZ-1-12	Soil	12/21/06 4:05:00	☐	A	A										

Test Legend:

1	G-MBTEX_S	2	TPH(D)_S	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Melissa Valles

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants	Client Project ID: #262157; Omega Termite	Date Sampled: 12/20/06-12/21/06
2500 Camino Diablo, Ste. #200		Date Received: 12/22/06
Walnut Creek, CA 94597	Client Contact: Robert Flory	Date Extracted: 12/22/06
	Client P.O.:	Date Analyzed 12/23/06-12/28/06

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method SW5030B Analytical methods SW8021B/8015Cm Work Order: 0612543

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	OZ-7-29	S	12,g,m	ND	ND	ND	ND	ND	1	71
003A	OZ-8-11	S	9.4,a,m	ND	0.012	0.047	0.040	0.026	1	117
006A	OZ-8-31	S	28,a,m	ND<0.10	0.061	0.15	0.32	0.17	2	70
007A	OZ-6-11	S	31,a	ND<0.25	0.18	0.14	ND<0.025	0.064	5	107
009A	OZ-6-21	S	17,g,m	ND	0.10	ND	ND	0.034	1	73
010A	OZ-6-26	S	200,g,m	ND<0.50	ND<0.050	ND<0.050	0.067	0.17	10	113
011A	OZ-5-16	S	34,a	ND<0.50	0.63	0.13	0.42	1.4	10	97
013A	OZ-5-31	S	1.3,a	ND	0.047	ND	0.011	0.041	1	90
014A	OZ-1-12	S	ND	ND	ND	ND	ND	ND	1	89

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	NA	NA	NA	NA	1	ug/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	1	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) value derived using a client specified carbon range; o) results are reported on a dry weight basis; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

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Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants	Client Project ID: #262157; Omega Termite	Date Sampled: 12/20/06-12/21/06
2500 Camino Diablo, Ste. #200		Date Received: 12/22/06
Walnut Creek, CA 94597	Client Contact: Robert Flory	Date Extracted: 12/22/06
	Client P.O.:	Date Analyzed 12/24/06-12/29/06

Diesel Range (C10-C23) Extractable Hydrocarbons as Diesel*

Extraction method SW3550C Analytical methods SW8015C Work Order: 0612543

Lab ID	Client ID	Matrix	TPH(d)	DF	% SS
0612543-001A	OZ-7-29	S	5.9,k	1	100
0612543-003A	OZ-8-11	S	2.0,k	1	100
0612543-006A	OZ-8-31	S	19,g,d,b	1	108
0612543-007A	OZ-6-11	S	22,k	1	113
0612543-009A	OZ-6-21	S	22,k	1	110
0612543-010A	OZ-6-26	S	240,k	1	112
0612543-011A	OZ-5-16	S	22,a,d	1	110
0612543-013A	OZ-5-31	S	4.0,a	1	110
0612543-014A	OZ-1-12	S	ND	1	111

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA
	S	1.0	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel is significant; d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit; o) results are reported on a dry weight basis.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

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QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder 0612543

EPA Method SW8021B/8015Cm Extraction SW5030B BatchID: 25394 Spiked Sample ID: 0612537-003A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)£	ND	0.60	114	113	1.20	112	110	1.60	70 - 130	30	70 - 130	30
MTBE	ND	0.10	96.9	93.8	3.18	87.3	98.7	12.2	70 - 130	30	70 - 130	30
Benzene	ND	0.10	91.7	96.4	4.98	97.7	103	4.84	70 - 130	30	70 - 130	30
Toluene	ND	0.10	82.8	87.2	5.20	87	92.9	6.53	70 - 130	30	70 - 130	30
Ethylbenzene	ND	0.10	91.3	95.9	4.91	96.3	99.3	3.06	70 - 130	30	70 - 130	30
Xylenes	ND	0.30	91	95	4.30	95	95.7	0.699	70 - 130	30	70 - 130	30
%SS:	86	0.10	76	81	6.37	89	85	4.60	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 25394 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0612543-001	12/20/06 10:55 AM	12/22/06	12/27/06 4:24 PM	0612543-003	12/20/06 2:05 PM	12/22/06	12/27/06 5:30 PM
0612543-006	12/20/06 3:00 PM	12/22/06	12/27/06 8:15 PM	0612543-007	12/21/06 8:35 AM	12/22/06	12/28/06 10:08 PM
0612543-009	12/21/06 9:05 AM	12/22/06	12/27/06 6:03 PM	0612543-010	12/21/06 9:20 AM	12/22/06	12/23/06 11:46 AM
0612543-011	12/21/06 1:00 PM	12/22/06	12/23/06 12:18 PM	0612543-013	12/21/06 1:30 PM	12/22/06	12/28/06 12:34 AM
0612543-014	12/21/06 4:05 PM	12/22/06	12/27/06 10:25 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

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QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder: 0612543

EPA Method: SW8015C	Extraction: SW3550C	BatchID: 25395	Spiked Sample ID: 0612537-003A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	ND	20	96.7	97.5	0.818	109	111	2.51	70 - 130	30	70 - 130	30
%SS:	101	50	100	101	1.40	112	110	1.45	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 25395 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0612543-001A	12/20/06 10:55 AM	12/22/06	12/24/06 10:19 AM	0612543-003A	12/20/06 2:05 PM	12/22/06	12/24/06 11:27 AM
0612543-006A	12/20/06 3:00 PM	12/22/06	12/29/06 4:34 AM	0612543-007A	12/21/06 8:35 AM	12/22/06	12/24/06 4:37 AM
0612543-009A	12/21/06 9:05 AM	12/22/06	12/24/06 5:46 AM	0612543-010A	12/21/06 9:20 AM	12/22/06	12/24/06 6:54 AM
0612543-011A	12/21/06 1:00 PM	12/22/06	12/24/06 8:02 AM	0612543-013A	12/21/06 1:30 PM	12/22/06	12/24/06 9:11 AM
0612543-014A	12/21/06 4:05 PM	12/22/06	12/24/06 10:19 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

ARV 0704293

McCAMPBELL ANALYTICAL, INC.

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Website: www.mccampbell.com Email: main@mccampbell.com
Telephone: (877) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

GeoTracker EDF ☒ **PDF** ☒ **Excel** ☐ **Write On (DW)** ☐

☐ Check if sample is effluent and "J" flag is required

Report To: Ricky Bradford	**Bill To:** same
Company: AEI Consultants	
2500 Camino Diablo, #200	
Walnut Creek, CA 94597	**E-Mail:** rbradford@aeiconsultants.com
Tele: (925) 283-6000	**Fax:** (925) 944-2895
Project #: 262.157	**Project Name:** Omega
Project Location: 807 75th Avenue	
Sampler Signature:	

SAMPLE ID	LOCATION/ Field Point Name	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED ICE	METHOD PRESERVED HCL	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	Analysis Request: BTEX & TPH as Gas (602 / 8021 + 8015) MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (1664 / 5520 E/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 502.2 / 601 / 8010 / 8021 (HVOCs)	MTBE / BTEX ONLY (EPA 602 / 8021)	EPA 505/ 608 / 8081 (Cl Pesticides)	EPA 608 / 8082 PCB's ONLY; Aroclors / Congeners	EPA 507 / 8141 (NP Pesticides)	EPA 515 / 8151 (Acidic Cl Herbicides)	EPA 524.2 / 624 / 8260 (VOCs)	EPA 525.2 / 625 / 8270 (SVOCs)	EPA 8270 SIM / 8310 (PAHs / PNAs)	CAM 17 Metals (200.7 / 200.8 / 6010 / 6020)	LUFT 5 Metals (200.7 / 200.8 / 6010 / 6020)	Lead (200.7 / 200.8 / 6010 / 6020)	Other: BTEX + MTBE ONLY TO-15	Other: TPH-G by TO-3	Comments: Ending Vacuum (in. Hg)
CS-1	"	4/10/07	7:15am	1	6L Summa			X							Canister # 2733																X	X	4.0
BA-1	"	4/10/07	8:07am	1	"			X							Canister # 2734																X	X	3.0

Relinquished By:	Date:	Time:	Received By:
	4/10/07	1550	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° 4/C
GOOD CONDITION ✓
HEAD SPACE ABSENT ____
DECHLORINATED IN LAB ____
APPROPRIATE CONTAINERS ✓
PRESERVED IN LAB ____

COMMENTS:

	VOAS	O&G	METALS	OTHER
PRESERVATION			pH<2	

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553-5560
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http://www.mccampbell.com E-mail: main@mccampbell.com

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA. 94597	Client Project ID: #262.157; Omega	Date Sampled: 04/10/2007
		Date Received: 04/13/2007
	Client Contact: Ricky Bradford	Date Extracted: 05/01/2007
	Client P.O:	Date Analyzed: 05/01/2007

MBTEX By GC/MS*

EPA method TO15

Lab ID	0704293-001A	0704293-002A			RL
Client ID	CS-1	BA-1			
Matrix	Air	Air			
Initial Pressure (psia)	12.24	12.82			
Final Pressure (psia)	12.24	12.82			Air
Compound	Concentration*				nl/L
Benzene	0.25	0.37			0.025
Ethylbenzene	0.16	0.69			0.025
Methyl-tert Butyl Ether (MTBE)	ND<0.025	ND<0.025			0.025
Toluene	0.72	1.4			0.025
Xylenes, total	0.72	3.3			0.075
Surrogate Recoveries (%)					
Bromofluorobenzene	N/A	N/A			
Comments:					

* air samples are reported in nl/L = ppbv.

ND means not detected above the reporting limit; N/A means surrogate not applicable to this analysis

(j) estimated value due to low QC recovery

DHS Certification No. 1644

___EH___ Edward Hamilton,
Lab Director

McCampbell Analytical, Inc.
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AEI Consultants	Client Project ID: #262.157; Omega	Date Sampled: 04/10/07
2500 Camino Diablo, Ste. #200		Date Received: 04/13/07
Walnut Creek, CA 94597	Client Contact: Ricky Bradford	Date Extracted: 05/01/07
	Client P.O.:	Date Analyzed: 05/01/07

MBTEX by TO-15*

Extraction Method: TO-15 Analytical Method: TO-15 Work Order: 0704293

					Reporting Limit for DF =1	
Lab ID	0704293-001A	0704293-002A				
Client ID	CS-1	BA-1				
Matrix	A	A				
DF	1	1			S	A
Compound	**Concentration**				ug/kg	µg/m³
Benzene	0.80	1.2			NA	0.08
Ethylbenzene	0.66	3.0			NA	0.11
Methyl-t-butyl ether (MTBE)	ND	ND			NA	0.09
Toluene	2.7	5.4			NA	0.094
Xylenes	3.1	14			NA	0.32
Surrogate Recoveries (%)						
%SS2:	N/A	N/A				
Comments						

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative; q) reported in ppm

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QC SUMMARY REPORT FOR TO-15

W.O. Sample Matrix: Air QC Matrix: Air WorkOrder: 0704293

EPA Method: TO-15	Extraction: SW5030B	BatchID: 27976	Spiked Sample ID: N/A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Benzene	N/A	2.5	N/A	N/A	N/A	96.8	99.6	2.85	N/A	N/A	70 - 130	20
Ethylbenzene	N/A	2.5	N/A	N/A	N/A	89.2	92.4	3.52	N/A	N/A	70 - 130	20
Methyl-t-butyl ether (MTBE)	N/A	2.5	N/A	N/A	N/A	88	91.2	3.57	N/A	N/A	70 - 130	20
Toluene	N/A	2.5	N/A	N/A	N/A	95.6	99.2	3.70	N/A	N/A	70 - 130	20
Xylenes	N/A	7.5	N/A	N/A	N/A	91.2	92.5	1.45	N/A	N/A	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 27976 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0704293-001A	04/10/07 7:50 AM	05/01/07	05/01/07	0704293-002A	04/10/07 8:07 AM	05/01/07	05/01/07

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #262157; Omega	Date Sampled: 05/14/07
		Date Received: 05/15/07
	Client Contact: Ricky Bradford	Date Reported: 05/22/07
	Client P.O.:	Date Completed: 05/22/07

WorkOrder: 0705398

May 22, 2007

Dear Ricky:

Enclosed are:

1). the results of **2** analyzed samples from your **#262157; Omega project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

0705398 AEI

McCAMPBELL ANALYTICAL INC.

1534 Willow Pass Road
Pittsburg, CA 94565-1701
www.main@mccampbell.com
Telephone: (925) 252-9262 Fax: (925) 252-9269

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

EDF Required? YES! / ~~Coelt~~ (Normal) No Write On (DW) No

Report To: Ricky Bradford	**Bill To:** AEI Consultants
Company: AEI Consultants	
2500 Camino Diablo, #200	
Walnut Creek, CA 94597	**E-Mail:** rbradford@aeiconsultants.com
Tele: (925) 283-6000 ext. 148	**Fax:** (925) 944-2895
Project #: 262157	**Project Name:** Omega
Project Location: 807 75th Avenue, Oakland, CA	
Sampler Signature:	

Lab Use Only

Pressurized By	Date	Pressurization Gas	
		N2	He

Notes:

Field Sample ID (Location)	Collection Date	Collection Time	Canister SN#	Sampler Kit SN#	Analysis Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
BA-1	5/14/07	7:35 am	3652	3620	BTEX+MTBE ONLY TO-15	29.0	4.5		
CS-1	5/14/07	7:49 am	3650	4736	BTEX + MTBE ONLY TO-15	29.0	6.5		

Relinquished By:	Date:	Time:	Received By:
	5/15/07	10:00	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

Temp (°C): N/A Work Order #: 0705398

Condition: good

Custody Seals Intact?: Yes ____ No ____ None ✓

Shipped Via: Client drop-off

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0705398 **ClientID: AEL**

☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty

Report to:
Ricky Bradford
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Email: rbradford@aeiconsultants.com
TEL: (925) 283-600 FAX: (925) 944-289
ProjectNo: #262157; Omega
PO:

Bill t
Denise Mockel
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
dmockel@aeiconsultants.com

Requested TAT: 5 days

Date Received **05/15/2007**
Date Printed: **05/15/2007**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0705398-001	BA-1	Air	5/14/07 7:25:00	☐	A	A										
0705398-002	CS-1	Air	5/14/07 7:40:00	☐		A										

Test Legend:

1	PREDF REPORT	2	TO15(MBTEX+NAPH)_AIR	3		4		5	
6		7		8		9		10	
11		12							

Prepared by: Melissa Valles

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

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Sample Receipt Checklist

Client Name: **AEI Consultants**

Date and Time Received: **5/15/07 8:04:25 PM**

Project Name: **#262157; Omega**

Checklist completed and reviewed by: Melissa Valles

WorkOrder N°: **0705398** Matrix Air

Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp:		NA ☑
Water - VOA vials have zero headspace / no bubbles?	Yes ☐	No ☐	No VOA vials submitted ☑
Sample labels checked for correct preservation?	Yes ☑	No ☐	
TTLC Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑

Client contacted: Date contacted: Contacted by:

Comments:

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AEI Consultants	Client Project ID: #262157; Omega	Date Sampled: 05/14/07
2500 Camino Diablo, Ste. #200		Date Received: 05/15/07
Walnut Creek, CA 94597	Client Contact: Ricky Bradford	Date Extracted: 05/15/07
	Client P.O.:	Date Analyzed: 05/22/07

Volatile Organics by P&T and GC/MS*

Extraction Method: TO-15 Analytical Method: TO-15 Work Order: 0705398

Lab ID	0705398-001A	0705398-002A			Reporting Limit for DF =1	
Client ID	BA-1	CS-1				
Matrix	A	A				
DF	1	1			S	A
Compound	**Concentration**				ug/kg	nL/L
Benzene	0.65	3.6			NA	0.1
Ethylbenzene	1.1	0.40			NA	0.1
Methyl-t-butyl ether (MTBE)	ND	ND			NA	0.1
Toluene	0.80	2.0			NA	0.1
Xylenes	4.9	1.4			NA	0.1
Surrogate Recoveries (%)						
%SS1:	N/A	N/A				
Comments						

*vapor samples are reported in nL/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative; q) reported in ppm

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AEI Consultants	Client Project ID: #262157; Omega	Date Sampled: 05/14/07
2500 Camino Diablo, Ste. #200		Date Received: 05/15/07
Walnut Creek, CA 94597	Client Contact: Ricky Bradford	Date Extracted: 05/15/07
	Client P.O.:	Date Analyzed: 05/22/07

MBTEX by TO-15*

Extraction Method: TO-15 Analytical Method: TO-15 Work Order: 0705398

Lab ID	0705398-001A	0705398-002A			Reporting Limit for DF =1	
Client ID	BA-1	CS-1				
Matrix	A	A				
DF	1	1			S	A
Compound	**Concentration**				ug/kg	µg/m³
Benzene	2.1	11			NA	0.32
Ethylbenzene	4.8	1.7			NA	0.43
Methyl-t-butyl ether (MTBE)	ND	ND			NA	0.36
Toluene	3.0	7.7			NA	0.38
Xylenes	22	5.8			NA	1.3
Surrogate Recoveries (%)						
%SS1:	N/A	N/A				
Comments						

*vapor samples are reported in µg/m³.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; k) reporting limit near, but not identical to our standard reporting limit due to variable Encore sample weight; m) reporting limit raised due to insufficient sample amount; n) results are reported on a dry weight basis; p) see attached narrative; q) reported in ppm

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QC SUMMARY REPORT FOR TO-15

W.O. Sample Matrix: Air QC Matrix: Air WorkOrder: 0705398

EPA Method TO-15	Extraction TO-15				BatchID: 28110				Spiked Sample ID: N/A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	nL/L	nL/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Benzene	N/A	2.5	N/A	N/A	N/A	87.6	87.7	0.132	N/A	N/A	70 - 130	20
Ethylbenzene	N/A	2.5	N/A	N/A	N/A	91.2	91.8	0.634	N/A	N/A	70 - 130	20
Methyl-t-butyl ether (MTBE)	N/A	2.5	N/A	N/A	N/A	92.5	92.2	0.355	N/A	N/A	70 - 130	20
Toluene	N/A	2.5	N/A	N/A	N/A	89.9	89.5	0.433	N/A	N/A	70 - 130	20
Xylenes	N/A	7.5	N/A	N/A	N/A	90.7	92	1.46	N/A	N/A	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 28110 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0705398-001A	05/14/07 7:25 AM	05/15/07	05/22/07 2:27 AM	0705398-002A	05/14/07 7:40 AM	05/15/07	05/22/07 3:23 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #115483; Omega termite	Date Sampled: 10/04/07
		Date Received: 10/04/07
	Client Contact: Robert Flory	Date Reported: 10/12/07
	Client P.O.:	Date Completed: 10/12/07

WorkOrder: 0710203

October 12, 2007

Dear Robert:

Enclosed are:

1). the results of **11** analyzed samples from your **#115483; Omega termite project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

0710203

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ■ 5 DAY

GeoTracker EDF ☒ PDF ☒ Excel ☐ Write On (DW) ☐

Report To: Robert Flory	Bill To: Same
Company: AEI Consultants	
2500 Camino Diablo, Suite 200	
Walnut Creek, CA 94597	E-Mail: rflory@aeiconsultants.com
Tel: (925) 944-2899, extension 122	Fax: (925) 944-2895
Project #: 115483	Project Name: Omega termite
Project Location: 807 75th, Oakland, CA	
Sampler Signature:	

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED Ice	METHOD PRESERVED HCl	METHOD PRESERVED HNO_3	METHOD PRESERVED Other	BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH (8015) diesel / motor oil	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	HVOCs EPA 8260 (8010 list)	BTEX ONLY (EPA 602 / 8020)	Pesticides EPA 608 / 8080	PCBs EPA 608 / 8080	Fuel Aditives by 8260 incl DCA & EDB	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	Halogenated VOCs (8260B – 8010 Target List)	Other	Other	Other	Comments
MW-1		10/4/07	1:25	4	VL	X					X	X			X	X									X								
MW-2			1:30	4		X					X	X			X	X									X								
MW-3			11:46	4		X					X	X			X	X									X								
MW-4			12:39	4		X					X	X			X	X									X								
MW-6			9:58	4		X					X	X			X	X									X								
MW-7			9:40	4		X					X	X			X	X									X								
MW-8			9:55	4		X					X	X			X	X									X								
MW-9			1:40	4		X					X	X			X	X									X								
MW-10			12:30	4		X					X	X			X	X									X								
MW-11			11:12	4		X					X	X			X	X									X								
MW-12			12:21	4		X					X	X			X	X									X								

Relinquished By:	Date:	Time:	Received By:
	10/4/07	6:30	Envirotech T.L.
Enviro-Tech SR.	10/4/07	1820	
	10/4/07	1936	

ICE/t° 10.2
GOOD CONDITION
HEAD SPACE ABSENT
DECHLORINATED IN LAB

PRESERVATION APPROPRIATE CONTAINERS	VOAS	O&G	METALS	OTHER
PERSERVED IN LAB				

Filter Samples for Metals Analysis: Yes / No

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0710203 **ClientID: AEL**

☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty

Report to:
Robert Flory
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
Email: rflory@aeiconsultants.com
TEL: (925) 944-289 FAX: (925) 283-612
ProjectNo: #115483; Omega termite
PO:

Bill t
Denise Mockel
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
dmockel@aeiconsultants.com

Requested TAT: 5 days

Date Received **10/04/2007**
Date Printed: **10/04/2007**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0710203-001	MW-1	Water	10/4/2007 1:24:00	☐	C	A	A	B								
0710203-002	MW-2	Water	10/4/2007 1:30:00	☐	C	A		B								
0710203-003	MW-3	Water	10/4/2007	☐	C	A		B								
0710203-004	MW-4	Water	10/4/2007	☐	C	A		B								
0710203-005	MW-6	Water	10/4/2007 9:48:00	☐	C	A		B								
0710203-006	MW-7	Water	10/4/2007 9:40:00	☐	C	A		B								
0710203-007	MW-8	Water	10/4/2007 9:55:00	☐	C	A		B								
0710203-008	MW-9	Water	10/4/2007 1:40:00	☐	C	A		B								
0710203-009	MW-10	Water	10/4/2007	☐	C	A		B								
0710203-010	MW-11	Water	10/4/2007	☐	C	A		B								
0710203-011	MW-12	Water	10/4/2007	☐	C	A		B								

Test Legend:

1	8270D-PNA_W	2	G-MBTEX_W	3	PREDF REPORT	4	TPH(DMO)_W	5	
6		7		8		9		10	
11		12							

Prepared by: Ana Venegas

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

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Telephone: 877-252-9262 Fax: 925-252-9269

Sample Receipt Checklist

Client Name: **AEI Consultants**

Date and Time Received: **10/4/2007 8:33:28 PM**

Project Name: **#115483; Omega termite**

Checklist completed and reviewed by: Ana Venegas

WorkOrder N°: **0710203** Matrix Water

Carrier: Michael Hernandez (MAI Courier)

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 10.2°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
TTLC Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑

Client contacted: Date contacted: Contacted by:

Comments:

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Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants	Client Project ID: #115483; Omega termite	Date Sampled: 10/04/07
2500 Camino Diablo, Ste. #200		Date Received: 10/04/07
Walnut Creek, CA 94597	Client Contact: Robert Flory	Date Extracted: 10/04/07
	Client P.O.:	Date Analyzed: 10/11/07

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Extraction Method: SW3510C Analytical Method: SW8270C Work Order: 0710203

Lab ID	0710203-001C	0710203-002C	0710203-003C	0710203-004C	Reporting Limit for DF =1	
Client ID	MW-1	MW-2	MW-3	MW-4		
Matrix	W	W	W	W		
DF	1	1	1	1	S	W
Compound	**Concentration**				ug/kg	µg/L
Acenaphthene	ND	ND	ND	ND	NA	0.5
Acenaphthylene	ND	ND	ND	ND	NA	0.5
Anthracene	ND	ND	ND	ND	NA	0.5
Benzo(a)anthracene	ND	ND	ND	ND	NA	0.5
Benzo(a)pyrene	ND	ND	ND	ND	NA	0.5
Benzo(b)fluoranthene	ND	ND	ND	ND	NA	0.5
Benzo(k)fluoranthene	ND	ND	ND	ND	NA	0.5
Benzo(g,h,i)perylene	ND	ND	ND	ND	NA	0.5
Chrysene	ND	ND	ND	ND	NA	0.5
Dibenzo(a,h)anthracene	ND	ND	ND	ND	NA	0.5
Fluoranthene	ND	ND	ND	ND	NA	0.5
Fluorene	0.72	ND	ND	ND	NA	0.5
Indeno (1,2,3-cd) pyrene	ND	ND	ND	ND	NA	0.5
1-Methylnaphthalene	ND	17	3.2	ND	NA	0.5
2-Methylnaphthalene	ND	17	1.5	ND	NA	0.5
Naphthalene	ND	26	8.9	ND	NA	0.5
Phenanthrene	ND	ND	ND	ND	NA	0.5
Pyrene	ND	ND	ND	ND	NA	0.5
Surrogate Recoveries (%)						
%SS1	80	82	81	79		
%SS2	82	83	83	81		
Comments						

* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

#) surrogate diluted out of range; &) low or no surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; J) analyte detected below quantitation limits.

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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants	Client Project ID: #115483; Omega termite	Date Sampled: 10/04/07
2500 Camino Diablo, Ste. #200		Date Received: 10/04/07
Walnut Creek, CA 94597	Client Contact: Robert Flory	Date Extracted: 10/04/07
	Client P.O.:	Date Analyzed: 10/11/07

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Extraction Method: SW3510C Analytical Method: SW8270C Work Order: 0710203

Lab ID	0710203-005C	0710203-006C	0710203-007C	0710203-008C	Reporting Limit for DF =1	
Client ID	MW-6	MW-7	MW-8	MW-9		
Matrix	W	W	W	W		
DF	1	1	1	1	S	W
Compound	**Concentration**				ug/kg	µg/L
Acenaphthene	ND	ND	ND	ND	NA	0.5
Acenaphthylene	ND	ND	ND	ND	NA	0.5
Anthracene	ND	ND	ND	ND	NA	0.5
Benzo(a)anthracene	ND	ND	ND	ND	NA	0.5
Benzo(a)pyrene	ND	ND	ND	ND	NA	0.5
Benzo(b)fluoranthene	ND	ND	ND	ND	NA	0.5
Benzo(k)fluoranthene	ND	ND	ND	ND	NA	0.5
Benzo(g,h,i)perylene	ND	ND	ND	ND	NA	0.5
Chrysene	ND	ND	ND	ND	NA	0.5
Dibenzo(a,h)anthracene	ND	ND	ND	ND	NA	0.5
Fluoranthene	ND	ND	ND	ND	NA	0.5
Fluorene	ND	ND	ND	ND	NA	0.5
Indeno (1,2,3-cd) pyrene	ND	ND	ND	ND	NA	0.5
1-Methylnaphthalene	ND	ND	ND	ND	NA	0.5
2-Methylnaphthalene	ND	ND	ND	ND	NA	0.5
Naphthalene	ND	ND	ND	ND	NA	0.5
Phenanthrene	ND	ND	ND	ND	NA	0.5
Pyrene	ND	ND	ND	ND	NA	0.5
Surrogate Recoveries (%)						
%SS1	79	80	79	78		
%SS2	81	82	82	79		
Comments						

* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

#) surrogate diluted out of range; &) low or no surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; J) analyte detected below quantitation limits.

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AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #115483; Omega termite	Date Sampled: 10/04/07
		Date Received: 10/04/07
	Client Contact: Robert Flory	Date Extracted: 10/04/07
	Client P.O.:	Date Analyzed: 10/11/07

Polynuclear Aromatic Hydrocarbons (PAHs / PNAs) using SIM Mode by GC/MS

Extraction Method: SW3510C Analytical Method: SW8270C Work Order: 0710203

Lab ID	0710203-009C	0710203-010C	0710203-011C		Reporting Limit for DF =1	
Client ID	MW-10	MW-11	MW-12			
Matrix	W	W	W			
DF	1	1	1		S	W
Compound	**Concentration**				ug/kg	µg/L
Acenaphthene	ND	ND	ND		NA	0.5
Acenaphthylene	ND	ND	ND		NA	0.5
Anthracene	ND	ND	ND		NA	0.5
Benzo(a)anthracene	ND	ND	ND		NA	0.5
Benzo(a)pyrene	ND	ND	ND		NA	0.5
Benzo(b)fluoranthene	ND	ND	ND		NA	0.5
Benzo(k)fluoranthene	ND	ND	ND		NA	0.5
Benzo(g,h,i)perylene	ND	ND	ND		NA	0.5
Chrysene	ND	ND	ND		NA	0.5
Dibenzo(a,h)anthracene	ND	ND	ND		NA	0.5
Fluoranthene	ND	ND	ND		NA	0.5
Fluorene	ND	ND	ND		NA	0.5
Indeno (1,2,3-cd) pyrene	ND	ND	ND		NA	0.5
1-Methylnaphthalene	ND	ND	ND		NA	0.5
2-Methylnaphthalene	ND	ND	ND		NA	0.5
Naphthalene	ND	ND	ND		NA	0.5
Phenanthrene	ND	ND	ND		NA	0.5
Pyrene	ND	ND	ND		NA	0.5
Surrogate Recoveries (%)						
%SS1	78	78	78			
%SS2	80	79	81			
Comments						

* water samples in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L.

ND means not detected above the reporting limit; N/A means analyte not applicable to this analysis.

#) surrogate diluted out of range; &) low or no surrogate due to matrix interference.

h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted due to high organic content/matrix interference; J) analyte detected below quantitation limits.

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AEI Consultants	Client Project ID: #115483; Omega termite	Date Sampled: 10/04/07
2500 Camino Diablo, Ste. #200		Date Received: 10/04/07
Walnut Creek, CA 94597	Client Contact: Robert Flory	Date Extracted: 10/07/07-10/12/07
	Client P.O.:	Date Analyzed 10/07/07-10/12/07

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method SW5030B Analytical methods SW8021B/8015Cm Work Order: 0710203

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	W	500,a	ND	140	ND	1.8	8.2	1	97
002A	MW-2	W	660,b,m	ND	1.8	0.83	40	45	1	98
003A	MW-3	W	320,a	ND	28	ND	29	17	1	91
004A	MW-4	W	180,a	ND<10	44	ND	12	2.2	1	100
005A	MW-6	W	ND	ND	ND	ND	ND	ND	1	97
006A	MW-7	W	ND	ND	ND	ND	ND	ND	1	95
007A	MW-8	W	ND	ND	ND	ND	ND	ND	1	94
008A	MW-9	W	ND	ND	4.2	ND	ND	ND	1	102
009A	MW-10	W	ND	ND	ND	ND	ND	ND	1	92
010A	MW-11	W	ND	ND	ND	ND	ND	ND	1	120
011A	MW-12	W	ND	ND	ND	ND	ND	ND	1	128

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	1	µg/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

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AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #115483; Omega termite	Date Sampled: 10/04/07
		Date Received: 10/04/07
	Client Contact: Robert Flory	Date Extracted: 10/04/07
	Client P.O.:	Date Analyzed: 10/08/07-10/10/07

Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil*

Extraction method: SW3510C Analytical methods: SW8015C Work Order: 0710203

Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	DF	% SS
0710203-001B	MW-1	W	440,a	260	1	95
0710203-002B	MW-2	W	1300,d,b	ND	1	97
0710203-003B	MW-3	W	230,d	ND	1	99
0710203-004B	MW-4	W	ND	ND	1	87
0710203-005B	MW-6	W	100,b	ND	1	88
0710203-006B	MW-7	W	ND	ND	1	102
0710203-007B	MW-8	W	ND	ND	1	103
0710203-008B	MW-9	W	140,a	ND	1	106
0710203-009B	MW-10	W	120,b	ND	1	105
0710203-010B	MW-11	W	ND	ND	1	95
0710203-011B	MW-12	W	ND	ND	1	100

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	250	µg/L
	S	NA	NA	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant (cooking oil?); h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil range (?); no recognizable pattern; m) fuel oil; n) stoddard solvent/mineral spirits; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

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QC SUMMARY REPORT FOR SW8270C

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0710203

EPA Method SW8270C	Extraction SW3510C				BatchID: 31136			Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Benzo(a)pyrene	N/A	10	N/A	N/A	N/A	81.4	81.3	0.187	N/A	N/A	30 - 130	30
Chrysene	N/A	10	N/A	N/A	N/A	84.4	82	2.90	N/A	N/A	30 - 130	30
1-Methylnaphthalene	N/A	10	N/A	N/A	N/A	88.9	89	0.125	N/A	N/A	30 - 130	30
2-Methylnaphthalene	N/A	10	N/A	N/A	N/A	86.4	85.2	1.46	N/A	N/A	30 - 130	30
Phenanthrene	N/A	10	N/A	N/A	N/A	79.6	79.1	0.561	N/A	N/A	30 - 130	30
Pyrene	N/A	10	N/A	N/A	N/A	80.6	80	0.728	N/A	N/A	30 - 130	30
%SS1:	N/A	5	N/A	N/A	N/A	85	85	0	N/A	N/A	30 - 130	30
%SS2:	N/A	5	N/A	N/A	N/A	91	92	0.281	N/A	N/A	30 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 31136 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0710203-001C	10/04/07 1:24 PM	10/04/07	10/11/07 1:59 AM	0710203-002C	10/04/07 1:30 PM	10/04/07	10/11/07 3:17 AM
0710203-003C	10/04/07 12:48 PM	10/04/07	10/11/07 4:35 AM	0710203-004C	10/04/07 12:39 PM	10/04/07	10/11/07 5:53 AM
0710203-005C	10/04/07 9:48 AM	10/04/07	10/11/07 7:11 AM	0710203-006C	10/04/07 9:40 AM	10/04/07	10/11/07 8:29 AM
0710203-007C	10/04/07 9:55 AM	10/04/07	10/11/07 9:47 AM	0710203-008C	10/04/07 1:40 PM	10/04/07	10/11/07 11:06 AM
0710203-009C	10/04/07 12:30 PM	10/04/07	10/11/07 12:25 PM	0710203-010C	10/04/07 11:12 AM	10/04/07	10/11/07 1:45 PM
0710203-011C	10/04/07 12:21 PM	10/04/07	10/11/07 3:05 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

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QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0710203

EPA Method SW8021B/8015Cm **Extraction SW5030B** **BatchID: 31088** **Spiked Sample ID: 0710163-005A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)£	ND	60	74.9	76.6	2.23	82.1	88.9	7.91	70 - 130	30	70 - 130	30
MTBE	ND	10	113	107	5.51	112	115	2.50	70 - 130	30	70 - 130	30
Benzene	ND	10	107	103	3.62	98	104	5.73	70 - 130	30	70 - 130	30
Toluene	ND	10	119	114	4.27	108	117	8.17	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	114	112	2.39	105	107	2.35	70 - 130	30	70 - 130	30
Xylenes	ND	30	120	120	0	110	113	2.99	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 31088 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0710203-001A	10/04/07 1:24 PM	10/11/07	10/11/07 9:47 AM	0710203-002A	10/04/07 1:30 PM	10/12/07	10/12/07 12:22 AM
0710203-003A	10/04/07 12:48 PM	10/11/07	10/11/07 11:49 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

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QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0710203

EPA Method SW8021B/8015Cm	Extraction SW5030B				BatchID: 31107			Spiked Sample ID: 0710173-001A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)£	ND	60	71.8	76.6	6.51	77.3	75.8	1.99	70 - 130	30	70 - 130	30
MTBE	ND	10	109	105	4.34	108	112	3.59	70 - 130	30	70 - 130	30
Benzene	ND	10	103	97.8	5.57	97.8	97.9	0.148	70 - 130	30	70 - 130	30
Toluene	ND	10	114	108	5.22	109	108	0.984	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	111	105	5.09	106	105	1.77	70 - 130	30	70 - 130	30
Xylenes	ND	30	113	110	2.99	113	110	2.99	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 31107 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0710203-004A	10/04/07 12:39 PM	10/07/07	10/07/07 5:03 AM	0710203-005A	10/04/07 9:48 AM	10/07/07	10/07/07 5:36 AM
0710203-006A	10/04/07 9:40 AM	10/07/07	10/07/07 6:08 AM	0710203-007A	10/04/07 9:55 AM	10/07/07	10/07/07 6:41 AM
0710203-008A	10/04/07 1:40 PM	10/07/07	10/07/07 7:14 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

DHS ELAP Certification N° 1644

QA/QC Officer

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QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0710203

EPA Method SW8021B/8015Cm	Extraction SW5030B				BatchID: 31135			Spiked Sample ID: 0710203-011A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)£	ND	60	81.4	90.5	10.6	106	102	4.21	70 - 130	30	70 - 130	30
MTBE	ND	10	96.3	104	7.90	111	117	4.52	70 - 130	30	70 - 130	30
Benzene	ND	10	85.6	98.2	13.7	105	105	0	70 - 130	30	70 - 130	30
Toluene	ND	10	78.5	88.7	12.1	103	98	4.90	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	86.5	95.3	9.76	103	103	0	70 - 130	30	70 - 130	30
Xylenes	ND	30	81.7	92.3	12.3	96.7	96.7	0	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 31135 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0710203-009A	10/04/07 12:30 PM	10/07/07	10/07/07 2:19 PM	0710203-010A	10/04/07 11:12 AM	10/07/07	10/07/07 6:45 PM
0710203-011A	10/04/07 12:21 PM	10/07/07	10/07/07 7:15 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

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QA/QC Officer

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QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0710203

EPA Method SW8015C	Extraction SW3510C				BatchID: 31123			Spiked Sample ID: N/A				
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	N/A	1000	N/A	N/A	N/A	104	105	1.50	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	90	89	0.519	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 31123 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0710203-001B	10/04/07 1:24 PM	10/04/07	10/08/07 1:42 PM	0710203-002B	10/04/07 1:30 PM	10/04/07	10/08/07 2:51 PM
0710203-003B	10/04/07 12:48 PM	10/04/07	10/08/07 3:59 PM	0710203-004B	10/04/07 12:39 PM	10/04/07	10/10/07 7:26 PM
0710203-005B	10/04/07 9:48 AM	10/04/07	10/10/07 8:36 PM	0710203-006B	10/04/07 9:40 AM	10/04/07	10/08/07 1:42 PM
0710203-007B	10/04/07 9:55 AM	10/04/07	10/08/07 2:51 PM	0710203-008B	10/04/07 1:40 PM	10/04/07	10/08/07 3:59 PM
0710203-009B	10/04/07 12:30 PM	10/04/07	10/08/07 5:08 PM	0710203-010B	10/04/07 11:12 AM	10/04/07	10/09/07 5:40 AM
0710203-011B	10/04/07 12:21 PM	10/04/07	10/09/07 6:48 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #115483; Omega termite	Date Sampled: 07/11/07
		Date Received: 07/11/07
	Client Contact: Robert Flory	Date Reported: 07/18/07
	Client P.O.:	Date Completed: 07/18/07

WorkOrder: 0707210

July 18, 2007

Dear Robert:

Enclosed are:

1). the results of **4** analyzed samples from your **#115483; Omega termite project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

AEL 070721D

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

GeoTracker EDF ☒ PDF ☒ Excel ☐ Write On (DW) ☐

Report To: Robert Flory	Bill To: Same
Company: AEI Consultants	
2500 Camino Diablo, Suite 200	
Walnut Creek, CA 94597	E-Mail: rflory@aeiconsultants.com
Tel: (925) 944-2899, extension 122	Fax: (925) 944-2895
Project #: 115483	Project Name: Omega termite
Project Location: 807 75th, Oakland, CA	
Sampler Signature:	

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	MATRIX Soil	MATRIX Air	MATRIX Sludge	MATRIX Other	METHOD PRESERVED Ice	METHOD PRESERVED HCl	METHOD PRESERVED HNO_3	METHOD PRESERVED Other
MW-1		7/11/07	1:40p	4	VIL	X				X	X			
MW-2		"	1:36p	"	"	X				X	X			
MW-7		"	1:44p	"	"	X				X	X			
MW-11		"	1:53p	"	"	X				X	X			

BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH (8015) diesel / motor oil	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	HVOCs EPA 8260 (8010 list)	BTEX ONLY (EPA 602 / 8020)	Pesticides EPA 608 / 8080	PCBs EPA 608 / 8080	Fuel Aditives by 8260 incl DCA & EDB	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	Halogenated VOCs (8260B – 8010 Target List)	Other	Other	Other	Comments
X	X																		Filter Samples for Metals Analysis: Yes / No
X	X																		
X	X																		
X	X																		

Relinquished By:	Date:	Time:	Received By:
	7/11/07	4:45p	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° 19.2
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
DECHLORINATED IN LAB _____ PERSERVED IN LAB _____

	VOAS	O&G	METALS	OTHER
PRESERVATION	✓			
APPROPRIATE CONTAINERS	✓			

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0707210 **ClientID: AEL**

☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty

Report to:
Robert Flory
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
Email: rflory@aeiconsultants.com
TEL: (925) 283-600 FAX: (925) 944-289
ProjectNo: #115483;Omega termite
PO:

Bill t
Denise Mockel
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
dmockel@aeiconsultants.com

Requested TAT: 5 days

Date Received **07/11/2007**
Date Printed: **07/11/2007**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0707210-001	MW-1	Water	7/11/07 1:40:00	☐	A	A	B									
0707210-002	MW-2	Water	7/11/07 1:36:00	☐	A		B									
0707210-003	MW-7	Water	7/11/07 1:44:00	☐	A		B									
0707210-004	MW-11	Water	7/11/07 1:53:00	☐	A		B									

Test Legend:

1	G-MBTEX_W	2	PREDF REPORT	3	TPH(DMO)_W	4		5	
6		7		8		9		10	
11		12							

Prepared by: Kimberly Burks

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

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Telephone: 877-252-9262 Fax: 925-252-9269

Sample Receipt Checklist

Client Name: **AEI Consultants**

Date and Time Received: **7/11/2007 4:29:22 PM**

Project Name: **#115483;Omega termite**

Checklist completed and reviewed by: Kimberly Burks

WorkOrder N°: **0707210** Matrix Water

Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 19.2°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
TTLC Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑

Client contacted: Date contacted: Contacted by:

Comments:

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AEI Consultants	Client Project ID: #115483; Omega termite	Date Sampled: 07/11/07
2500 Camino Diablo, Ste. #200		Date Received: 07/11/07
Walnut Creek, CA 94597	Client Contact: Robert Flory	Date Extracted: 07/12/07
	Client P.O.:	Date Analyzed: 07/12/07

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0707210

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	W	2000,a	ND<10	620	1.5	5.9	31	1	115
002A	MW-2	W	5300,a,h	ND<17	10	7.5	47	72	3.3	118
003A	MW-7	W	67,a	ND	17	ND	ND	ND	1	104
004A	MW-11	W	ND	ND	ND	ND	ND	ND	1	107

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	1	µg/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #115483; Omega termite	Date Sampled: 07/11/07
		Date Received: 07/11/07
	Client Contact: Robert Flory	Date Extracted: 07/11/07
	Client P.O.:	Date Analyzed: 07/13/07-07/18/07

Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil*

Extraction method: SW3510C Analytical methods: SW8015C Work Order: 0707210

Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	DF	% SS
0707210-001B	MW-1	W	450,a,d	ND	1	97
0707210-002B	MW-2	W	2900,d,b,h	480	1	91
0707210-003B	MW-7	W	150,a,f	ND	1	102
0707210-004B	MW-11	W	460,g,b	980	1	88

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	250	µg/L
	S	NA	NA	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil range (?); no recognizable pattern; m) fuel oil; n) stoddard solvent/mineral spirits; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

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QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0707210

EPA Method SW8021B/8015Cm	Extraction SW5030B				BatchID: 29222			Spiked Sample ID: 0707210-004A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)£	ND	60	102	105	2.24	103	96.8	6.62	70 - 130	30	70 - 130	30
MTBE	ND	10	88.4	76.3	14.6	108	99.1	8.96	70 - 130	30	70 - 130	30
Benzene	ND	10	96.8	92.2	4.83	102	96.4	6.09	70 - 130	30	70 - 130	30
Toluene	ND	10	97.7	92.9	5.02	93.6	88.1	6.08	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	104	96.4	7.27	105	96.9	7.81	70 - 130	30	70 - 130	30
Xylenes	ND	30	113	110	2.99	100	93	7.25	70 - 130	30	70 - 130	30
%SS:	107	10	93	92	1.18	107	101	6.29	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 29222 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0707210-001A	07/11/07 1:40 AM	07/12/07	07/12/07 12:40 AM	0707210-001A	07/11/07 1:40 AM	07/12/07	07/12/07 8:32 PM
0707210-002A	07/11/07 1:36 AM	07/12/07	07/12/07 8:01 PM	0707210-003A	07/11/07 1:44 AM	07/12/07	07/12/07 1:45 AM
0707210-004A	07/11/07 1:53 AM	07/12/07	07/12/07 2:18 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

DHS ELAP Certification N° 1644

QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0707210

EPA Method SW8015C	Extraction SW3510C	BatchID: 29220	Spiked Sample ID: N/A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	N/A	1000	N/A	N/A	N/A	109	110	0.980	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	87	89	2.03	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 29220 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0707210-001B	07/11/07 1:40 AM	07/11/07	07/18/07 11:56 AM	0707210-002B	07/11/07 1:36 AM	07/11/07	07/13/07 6:18 PM
0707210-003B	07/11/07 1:44 AM	07/11/07	07/18/07 5:22 PM	0707210-004B	07/11/07 1:53 AM	07/11/07	07/13/07 5:09 PM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #262157; Omega Termite	Date Sampled: 06/06/07
		Date Received: 06/06/07
	Client Contact: Robert Flory	Date Reported: 06/13/07
	Client P.O.:	Date Completed: 06/13/07

WorkOrder: 0706168

June 13, 2007

Dear Robert:

Enclosed are:

1). the results of **11** analyzed samples from your **#262157; Omega Termite project,**

2). a QC report for the above samples

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

aer 0706168

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☒ 5 DAY

GeoTracker EDF ☒ PDF ☒ Excel ☐ Write On (DW) ☐

Report To: Robert Flory	Bill To: Same
Company: AEI Consultants	
2500 Camino Diablo, Suite 200	
Walnut Creek, CA 94597	E-Mail: rflory@aeiconsultants.com
Tel: (925) 944-2899, extension 122	Fax: (925) 944-2895
Project #: 262157	Project Name: Omega Termite
Project Location: 807 75th, Oakland, CA	
Sampler Signature:	

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other	BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH (8015) diesel / motor oil	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	HVOCs EPA 8260 (8010 list)	BTEX ONLY (EPA 602 / 8020)	Pesticides EPA 608 / 8080	PCBs EPA 608 / 8080	Fuel Aditives by 8260 incl DCA & EDB	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI	Halogenated VOCs (8260B – 8010 Target List)	Other	Other	Other	Comments
MW-1		6/6/07	4:17	4	VOL	X					X	X			X	X																		Filter Samples for Metals Analysis: Yes / No
MW-2			4:22			X					X	X			X	X																		
MW-3			4:05			X					X	X			X	X																		
MW-4			3:54			X					X	X			X	X																		
MW-6			3:38			X					X	X			X	X																		
MW-7			3:18			X					X	X			X	X																		
MW-8			3:23			X					X	X			X	X																		
MW-9			4:10			X					X	X			X	X																		
MW-10			4:00			X					X	X			X	X																		
MW-11			3:30			X					X	X			X	X																		
MW-12			3:48			X					X	X			X	X																		
						1																												

Relinquished By:	Date:	Time:	Received By:
	6/6/07	6:15p	
Relinquished By:	Date:	Time:	Received By:
Relinquished By:	Date:	Time:	Received By:

ICE/t° 19.2° ✓
GOOD CONDITION ✓
HEAD SPACE ABSENT ✓
DECHLORINATED IN LAB _____ PERSERVED IN LAB _____

PRESERVATION	VOAS	O&G	METALS	OTHER
APPROPRIATE	✓			
CONTAINERS	✓			

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0706168 **ClientID: AEL**

☑ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty

Report to:
Robert Flory
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
Email: rflory@aeiconsultants.com
TEL: (925) 283-600 FAX: (925) 944-289
ProjectNo: #262157; Omega Termite
PO:

Bill t
Denise Mockel
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
dmockel@aeiconsultants.com

Requested TAT: 5 days

Date Received **06/06/2007**
Date Printed: **06/06/2007**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0706168-001	MW-1	Water	6/6/07 4:17:00 PM	☐	A	A	B									
0706168-002	MW-2	Water	6/6/07 4:22:00 PM	☐	A		B									
0706168-003	MW-3	Water	6/6/07 4:05:00 PM	☐	A		B									
0706168-004	MW-4	Water	6/6/07 3:54:00 PM	☐	A		B									
0706168-005	MW-6	Water	6/6/07 3:38:00 PM	☐	A		B									
0706168-006	MW-7	Water	6/6/07 3:28:00 PM	☐	A		B									
0706168-007	MW-8	Water	6/6/07 3:23:00 PM	☐	A		B									
0706168-008	MW-9	Water	6/6/07 4:10:00 PM	☐	A		B									
0706168-009	MW-10	Water	6/6/07 4:00:00 PM	☐	A		B									
0706168-010	MW-11	Water	6/6/07 3:30:00 PM	☐	A		B									
0706168-011	MW-12	Water	6/6/07 3:44:00 PM	☐	A		B									

Test Legend:

1	G-MBTEX_W	2	PREDF REPORT	3	TPH(DMO)_W	4		5	
6		7		8		9		10	
11		12							

Prepared by: Melissa Valles

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

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"When Quality Counts"

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Telephone: 877-252-9262 Fax: 925-252-9269

Sample Receipt Checklist

Client Name: **AEI Consultants**

Date and Time Received: **6/6/07 7:44:27 PM**

Project Name: **#262157; Omega Termite**

Checklist completed and reviewed by: Melissa Valles

WorkOrder N°: **0706168** Matrix Water

Carrier: Client Drop-In

Chain of Custody (COC) Information

Chain of custody present?	Yes ☑	No ☐
Chain of custody signed when relinquished and received?	Yes ☑	No ☐
Chain of custody agrees with sample labels?	Yes ☑	No ☐
Sample IDs noted by Client on COC?	Yes ☑	No ☐
Date and Time of collection noted by Client on COC?	Yes ☑	No ☐
Sampler's name noted on COC?	Yes ☑	No ☐

Sample Receipt Information

Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	NA ☑
Shipping container/cooler in good condition?	Yes ☑	No ☐	
Samples in proper containers/bottles?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	

Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature	Cooler Temp: 19.2°C		NA ☐
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	No ☐	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	No ☐	
TTLC Metal - pH acceptable upon receipt (pH<2)?	Yes ☐	No ☐	NA ☑

Client contacted: Date contacted: Contacted by:

Comments:

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Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants	Client Project ID: #262157; Omega Termite	Date Sampled: 06/06/07
2500 Camino Diablo, Ste. #200		Date Received: 06/06/07
Walnut Creek, CA 94597	Client Contact: Robert Flory	Date Extracted: 06/09/07
	Client P.O.:	Date Analyzed: 06/09/07

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0706168

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	MW-1	W	2500,a	ND<20	910	3.4	7.7	55	1	98
002A	MW-2	W	3800,a	ND<20	17	17	75	58	1	109
003A	MW-3	W	460,a	ND	40	1.9	39	22	1	102
004A	MW-4	W	190,a	ND	40	ND	14	3.6	1	98
005A	MW-6	W	ND	ND	ND	ND	ND	ND	1	94
006A	MW-7	W	ND	ND	ND	ND	ND	ND	1	97
007A	MW-8	W	ND	ND	ND	ND	ND	ND	1	92
008A	MW-9	W	64,a	ND	12	ND	ND	ND	1	98
009A	MW-10	W	ND	ND	ND	ND	ND	ND	1	90
010A	MW-11	W	ND	ND	ND	ND	ND	ND	1	113
011A	MW-12	W	ND	ND	ND	ND	ND	ND	1	118

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	1	µg/L
	S	NA	NA	NA	NA	NA	NA	1	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) range non-target isolated peaks subtracted out of the TPH(g) concentration at the client's request; p) see attached narrative.

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Angela Rydelius, Lab Manager

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Telephone: 877-252-9262 Fax: 925-252-9269

AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #262157; Omega Termite	Date Sampled: 06/06/07
		Date Received: 06/06/07
	Client Contact: Robert Flory	Date Extracted: 06/06/07
	Client P.O.:	Date Analyzed 06/08/07-06/12/07

Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil*

Extraction method: SW3510C Analytical methods: SW8015C Work Order: 0706168

Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	DF	% SS
0706168-001B	MW-1	W	540,b,d	300	1	87
0706168-002B	MW-2	W	1500,d	ND	1	86
0706168-003B	MW-3	W	230,d	ND	1	86
0706168-004B	MW-4	W	59,d,b	ND	1	80
0706168-005B	MW-6	W	76,b	ND	1	88
0706168-006B	MW-7	W	ND	ND	1	112
0706168-007B	MW-8	W	ND	ND	1	89
0706168-008B	MW-9	W	320,a	250	1	93
0706168-009B	MW-10	W	230,k	ND	1	81
0706168-010B	MW-11	W	ND	ND	1	114
0706168-011B	MW-12	W	ND	ND	1	108

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	250	µg/L
	S	NA	NA	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel; f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range; l) bunker oil range (?); no recognizable pattern; m) fuel oil; n) stoddard solvent/mineral spirits; p) see attached narrative.

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QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0706168

EPA Method SW8021B/8015Cm	Extraction SW5030B				BatchID: 28576				Spiked Sample ID: 0706172-003A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)£	ND	60	102	82.1	22.1	98.1	79.2	21.3	70 - 130	30	70 - 130	30
MTBE	ND	10	110	95.1	14.5	103	102	1.03	70 - 130	30	70 - 130	30
Benzene	ND	10	101	91.1	9.83	99	94.9	4.21	70 - 130	30	70 - 130	30
Toluene	ND	10	97.9	90.9	7.37	99.4	95.3	4.21	70 - 130	30	70 - 130	30
Ethylbenzene	ND	10	98.7	92	7.01	103	94.8	8.26	70 - 130	30	70 - 130	30
Xylenes	ND	30	91.3	85.3	6.79	117	100	15.4	70 - 130	30	70 - 130	30
%SS:	95	10	104	104	0	94	92	2.42	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 28576 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0706168-001A	06/06/07 4:17 PM	06/09/07	06/09/07 12:56 AM	0706168-001A	06/06/07 4:17 PM	06/09/07	06/09/07 5:18 PM
0706168-002A	06/06/07 4:22 PM	06/09/07	06/09/07 1:29 AM	0706168-003A	06/06/07 4:05 PM	06/09/07	06/09/07 2:02 AM
0706168-004A	06/06/07 3:54 PM	06/09/07	06/09/07 2:35 AM	0706168-005A	06/06/07 3:38 PM	06/09/07	06/09/07 4:47 AM
0706168-006A	06/06/07 3:28 PM	06/09/07	06/09/07 5:54 PM	0706168-007A	06/06/07 3:23 PM	06/09/07	06/09/07 6:29 PM
0706168-008A	06/06/07 4:10 PM	06/09/07	06/09/07 9:08 AM	0706168-009A	06/06/07 4:00 PM	06/09/07	06/09/07 9:21 PM
0706168-010A	06/06/07 3:30 PM	06/09/07	06/09/07 10:15 AM	0706168-011A	06/06/07 3:44 PM	06/09/07	06/09/07 11:23 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

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QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0706168

EPA Method SW8015C	Extraction SW3510C	BatchID: 28526	Spiked Sample ID: N/A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	N/A	1000	N/A	N/A	N/A	119	129	0.0157	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	116	119	0.198	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 28526 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0706168-001B	06/06/07 4:17 PM	06/06/07	06/08/07 5:50 PM	0706168-002B	06/06/07 4:22 PM	06/06/07	06/08/07 6:58 PM
0706168-003B	06/06/07 4:05 PM	06/06/07	06/08/07 8:06 PM	0706168-004B	06/06/07 3:54 PM	06/06/07	06/08/07 9:14 PM
0706168-004B	06/06/07 3:54 PM	06/06/07	06/12/07 3:08 AM	0706168-005B	06/06/07 3:38 PM	06/06/07	06/09/07 12:35 AM
0706168-006B	06/06/07 3:28 PM	06/06/07	06/12/07 7:08 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

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QA/QC Officer

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QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder 0706168

EPA Method SW8015C	Extraction SW3510C	BatchID: 28579	Spiked Sample ID: N/A

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	N/A	1000	N/A	N/A	N/A	109	107	2.29	N/A	N/A	70 - 130	30
%SS:	N/A	2500	N/A	N/A	N/A	119	116	2.26	N/A	N/A	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 28579 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0706168-007B	06/06/07 3:23 PM	06/06/07	06/09/07 2:49 AM	0706168-008B	06/06/07 4:10 PM	06/06/07	06/09/07 10:10 AM
0706168-009B	06/06/07 4:00 PM	06/06/07	06/09/07 11:18 AM	0706168-010B	06/06/07 3:30 PM	06/06/07	06/12/07 8:17 PM
0706168-011B	06/06/07 3:44 PM	06/06/07	06/12/07 9:25 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification N° 1644

QA/QC Officer

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AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #262484; Omega Termite	Date Sampled: 01/19/07
		Date Received: 01/24/07
	Client Contact: Ricky Bradford	Date Reported: 01/29/07
	Client P.O.:	Date Completed: 01/30/07

WorkOrder: 0701499

January 30, 2007

Dear Ricky:

Enclosed are:

1). the results of **1** analyzed sample from your **#262484; Omega Termite project,**

2). a QC report for the above sample

3). a copy of the chain of custody, and

4). a bill for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits. If you have any questions please contact me. McCampbell Analytical Laboratories strives for excellence in quality, service and cost. Thank you for your business and I look forward to working with you again.

Best regards,

Angela Rydelius, Lab Manager

AEL 0701499

McCAMPBELL ANALYTICAL INC.

110 2nd AVENUE SOUTH, #D7
PACHECO, CA 94553-5560
Telephone: (925) 798-1620 Fax: (925) 798-1622

CHAIN OF CUSTODY RECORD

TURN AROUND TIME ☐ RUSH ☐ 24 HR ☐ 48 HR ☐ 72 HR ☑ 5 DAY
EDF Required? Coelt (Normal) No Write On (DW) No

Report To: Ricky Bradford Bill To:
Company: AEI Consultants
2500 Camino Diablo, Suite 200
Walnut Creek, CA 94597 E-Mail: rbradford@aeiconsultants.com
Tele: (925) 283-6000 ext. 148 Fax: (925) 944-2895
Project #: 262 HB4 Project Name: Omega Termite
Project Location: Omega
Sampler Signature:

SAMPLE ID (Field Point Name)	LOCATION	SAMPLING Date	SAMPLING Time	# Containers	Type Containers	MATRIX Water	Soil	Air	Sludge	Other	METHOD PRESERVED Ice	HCl	HNO_3	Other
STKP-1W		1/19/07	1220	1	2L	X								
STKP-2M		"	1230	1	"	X								
STKP-3E		"	1243	1	"	X								

Analysis Request

BTEX & TPH as Gas (602/8020 + 8015)/MTBE	TPH as Diesel (8015)	Total Petroleum Oil & Grease (5520 E&F/B&F)	Total Petroleum Hydrocarbons (418.1)	EPA 601 / 8010	BTEX ONLY (EPA 602 / 8020)	EPA 608 / 8080	EPA 608 / 8080 PCB's ONLY	EPA 624 / 8240 / 8260	EPA 625 / 8270	PAH's / PNA's by EPA 625 / 8270 / 8310	CAM-17 Metals	LUFT 5 Metals	Lead (7240/7421/239.2/6010)	RCI
+	+												X	

Other: 3 point Composite

Comments:

Relinquished By:	Date:	Time:	Received By:
	1/24/07	1410	Adrian Nieto
Adrian Nieto	1-24-07	4:22	
Relinquished By:	Date:	Time:	Received By:

ICE/t° 19.2°
GOOD CONDITION
HEAD SPACE ABSENT
DECHLORINATED IN LAB

	VOAS	O&G	METALS	OTHER
PRESERVATION				
APPROPRIATE CONTAINERS				
PERSERVED IN LAB				

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

WorkOrder: 0701499 **ClientID: AEL**

☐ EDF ☐ Fax ☑ Email ☐ HardCop ☐ ThirdPart

Report to:
Ricky Bradford
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597

Email: rbradford@aeiconsultants.com
TEL: (925) 283-600 FAX: (925) 944-289
ProjectNo: #262484; Omega Termite
PO:

Bill t
Denise Mockel
AEI Consultants
2500 Camino Diablo, Ste. #200
Walnut Creek, CA 94597
dmockel@aeiconsultants.com

Requested TAT: 5 days

Date Received **01/24/2007**
Date Printed: **01/26/2007**

Sample ID	ClientSampID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
0701499-001	STKP 1W,2M,3E	Soil	01/19/07	☐	A	A	A									

Test Legend:

1	G-MBTEX_S	2	PB_S	3	TPH(DMO)_S	4		5	
6		7		8		9		10	
11		12							

Prepared by: Nickole White

Comments:

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.

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AEI Consultants	Client Project ID: #262484; Omega Termite	Date Sampled: 01/19/07
2500 Camino Diablo, Ste. #200		Date Received: 01/24/07
Walnut Creek, CA 94597	Client Contact: Ricky Bradford	Date Extracted: 01/24/07
	Client P.O.:	Date Analyzed 01/25/07

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method SW5030B Analytical methods SW8021B/8015Cm Work Order: 0701499

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS
001A	STKP 1W,2M,3E	S	11,m	ND	ND	0.071	ND	0.049	1	104

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	NA	NA	NA	NA	1	ug/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	1	mg/Kg

* water and vapor samples and all TCLP & SPLP extracts are reported in µg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples in mg/L.

cluttered chromatogram; sample peak coelutes with surrogate peak.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified gasoline is significant; b) heavier gasoline range compounds are significant(aged gasoline?); c) lighter gasoline range compounds (the most mobile fraction) are significant; d) gasoline range compounds having broad chromatographic peaks are significant; biologically altered gasoline?; e) TPH pattern that does not appear to be derived from gasoline (stoddard solvent / mineral spirit?); f) one to a few isolated non-target peaks present; g) strongly aged gasoline or diesel range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to high MTBE content; k) TPH pattern that does not appear to be derived from gasoline (aviation gas). m) no recognizable pattern; n) TPH(g) value derived using a client specified carbon range; o) results are reported on a dry weight basis; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

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AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #262484; Omega Termite	Date Sampled: 01/19/07
		Date Received: 01/24/07
	Client Contact: Ricky Bradford	Date Extracted: 01/24/07
	Client P.O.:	Date Analyzed 01/26/07

Lead by ICP*

Extraction method SW3050B Analytical methods 6010C Work Order: 0701499

Lab ID	Client ID	Matrix	Extraction	Lead	DF	% SS
0701499-001A	STKP 1W,2M,3E	S	TTLC	7.7	1	100

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	TTLC	NA	µg/L
	S	TTLC	5.0	mg/Kg

*water samples are reported in µg/L, product/oil/non-aqueous liquid samples and all TCLP / STLC / DISTLC / SPLP extracts are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, filter samples in µg/filter.

means surrogate diluted out of range; ND means not detected above the reporting limit; N/A means not applicable to this sample or instrument.

i) aqueous sample containing greater than ~1 vol. % sediment; for DISSOLVED metals, this sample has been preserved prior to filtration; for TTLC metals, a representative sediment-water mixture was digested; j) reporting limit raised due to insufficient sample amount; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrrogate recovery, caused by matrix interference; n) results are reported on a dry weight basis; p) see attached narrative.

DHS ELAP Certification N° 1644

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AEI Consultants 2500 Camino Diablo, Ste. #200 Walnut Creek, CA 94597	Client Project ID: #262484; Omega Termite	Date Sampled: 01/19/07
		Date Received: 01/24/07
	Client Contact: Ricky Bradford	Date Extracted: 01/24/07
	Client P.O.:	Date Analyzed 01/26/07

Diesel (C10-23) and Oil (C18+) Range Extractable Hydrocarbons as Diesel and Motor Oil*

Extraction method: SW3550C Analytical methods: SW8015C Work Order: 0701499

Lab ID	Client ID	Matrix	TPH(d)	TPH(mo)	DF	% SS
0701499-001A	STKP 1W,2M,3E	S	140,a	41	1	105

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	NA	NA	ug/L
	S	1.0	5.0	mg/Kg

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

+The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation: a) unmodified or weakly modified diesel is significant; b) diesel range compounds are significant; no recognizable pattern; c) aged diesel? is significant); d) gasoline range compounds are significant; e) unknown medium boiling point pattern that does not appear to be derived from diesel (asphalt?); f) one to a few isolated peaks present; g) oil range compounds are significant; h) lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; k) kerosene/kerosene range/jet fuel; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit; o) mineral oil; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

McCampbell Analytical, Inc.
"When Quality Counts"

1534 Willow Pass Road, Pittsburg, CA 94565-1701
Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder: 0701499

EPA Method SW8021B/8015Cm	Extraction SW5030B				BatchID: 25922				Spiked Sample ID: 0701514-001A			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(btex)£	ND	0.60	95.6	104	8.62	104	98.4	5.82	70 - 130	30	70 - 130	30
MTBE	ND	0.10	104	92.7	11.6	97.5	90.4	7.56	70 - 130	30	70 - 130	30
Benzene	ND	0.10	114	98.1	14.7	107	106	1.45	70 - 130	30	70 - 130	30
Toluene	ND	0.10	120	107	11.5	117	113	2.83	70 - 130	30	70 - 130	30
Ethylbenzene	ND	0.10	82.3	104	22.9	97.9	79.1	21.3	70 - 130	30	70 - 130	30
Xylenes	ND	0.30	110	113	2.99	123	120	2.74	70 - 130	30	70 - 130	30
%SS:	89	0.10	104	98	5.94	100	102	1.98	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 25922 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0701499-001	1/19/07	1/24/07	1/25/07 8:46 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

DHS ELAP Certification N° 1644


QA/QC Officer

McCampbell Analytical, Inc.
"When Quality Counts"

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Web: www.mccampbell.com E-mail: main@mccampbell.com
Telephone: 877-252-9262 Fax: 925-252-9269

QC SUMMARY REPORT FOR 6010C

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder 0701499

EPA Method 6010C **Extraction SW3050B** **BatchID: 25921** **Spiked Sample ID 0701494-001A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	Spiked	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	mg/Kg	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
Lead	6.3	50	96.9	91.9	4.72	10	104	100	4.02	75 - 125	20	80 - 120	20
%SS:	102	250	112	111	0.805	250	101	101	0	70 - 130	20	70 - 130	20

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 25921 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0701499-001A	1/19/07	1/24/07	1/26/07 11:56 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not applicable to this method.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte

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QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Soil QC Matrix: Soil WorkOrder 0701499

EPA Method SW8015C **Extraction SW3550C** **BatchID: 25898** **Spiked Sample ID: 0701470-002A**

Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)			
	mg/Kg	mg/Kg	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD
TPH(d)	ND	20	99.7	97.3	2.44	91	98	7.35	70 - 130	30	70 - 130	30
%SS:	115	50	94	101	7.11	104	98	6.23	70 - 130	30	70 - 130	30

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 25898 SUMMARY

Sample ID	Date Sampled	Date Extracted	Date Analyzed	Sample ID	Date Sampled	Date Extracted	Date Analyzed
0701499-001	1/19/07	1/24/07	1/26/07 9:37 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

APPENDIX E

REGULATORY CORRESPONDANCE

ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

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

August 11, 2006

Mr. Allen Kanady
Omega Termite
807 75th Avenue
Oakland, CA 94621

Subject: Fuel Leak Case No. RO0000508, Omega Termite, 807 75th Avenue, Oakland, CA – Work Plan Approval

Dear Mr. Kanady:

Alameda County Environmental Health (ACEH) staff has reviewed the fuel leak case file for the above-referenced site and the document entitled, "Well and Ozone Micro-Sparge System Installation Work Plan," dated July 31, 2006 and prepared on your behalf by AEI Consultants. The Work Plan proposes the installation of two additional deeper zone monitoring wells and an ozone sparging system. Two separate zones of soil and groundwater contamination have been identified at the site. Low flow ozone sparging is proposed at depths of approximately 17 feet bgs (shallow zone) and 35 feet bgs (deeper zone). We concur with the proposed scope of work.

We request that you address the following technical comments, perform the proposed work, and send us the reports described below.

TECHNICAL REPORT REQUEST

Please submit technical reports to Alameda County Environmental Health (Attention: Jerry Wickham), according to the following schedule:

- **November 15, 2006** - Quarterly Monitoring Report for the Third Quarter 2006
- **December 15, 2006** – Start-Up Report
- **February 15, 2007** - Quarterly Monitoring Report for the Fourth Quarter 2006

These reports are being requested pursuant to California Health and Safety Code Section 25296.10. 23 CCR Sections 2652 through 2654, and 2721 through 2728 outline the responsibilities of a responsible party in response to an unauthorized release from a petroleum UST system, and require your compliance with this request.

ELECTRONIC SUBMITTAL OF REPORTS

Effective **January 31, 2006**, the Alameda County Environmental Cleanup Oversight Programs (LOP and SLIC) require submission of all reports in electronic form to the county's ftp site. Paper copies of reports will no longer be accepted. The electronic copy replaces the paper copy and will be used for all public information requests, regulatory review, and compliance/enforcement

activities. Instructions for submission of electronic documents to the Alameda County Environmental Cleanup Oversight Program ftp site are provided on the attached "Electronic Report Upload (ftp) Instructions." Please do not submit reports as attachments to electronic mail.

Submission of reports to the Alameda County ftp site is an addition to existing requirements for electronic submittal of information to the State Water Resources Control Board (SWRCB) Geotracker website. Submission of reports to the Geotracker website does not fulfill the requirement to submit documents to the Alameda County ftp site. In September 2004, the SWRCB adopted regulations that require electronic submittal of information for groundwater cleanup programs. For several years, responsible parties for cleanup of leaks from underground storage tanks (USTs) have been required to submit groundwater analytical data, surveyed locations of monitor wells, and other data to the Geotracker database over the Internet. Beginning July 1, 2005, electronic submittal of a complete copy of all necessary reports was required in Geotracker (in PDF format). Please visit the SWRCB website for more information on these requirements (http://www.swrcb.ca.gov/ust/cleanup/electronic_reporting).

PERJURY STATEMENT

All work plans, technical reports, or technical documents submitted to ACEH must be accompanied by a cover letter from the responsible party that states, at a minimum, the following: "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge." This letter must be signed by an officer or legally authorized representative of your company. Please include a cover letter satisfying these requirements with all future reports and technical documents submitted for this fuel leak case.

PROFESSIONAL CERTIFICATION & CONCLUSIONS/RECOMMENDATIONS

The California Business and Professions Code (Sections 6735, 6835, and 7835.1) requires that work plans and technical or implementation reports containing geologic or engineering evaluations and/or judgments be performed under the direction of an appropriately registered or certified professional. For your submittal to be considered a valid technical report, you are to present site specific data, data interpretations, and recommendations prepared by an appropriately licensed professional and include the professional registration stamp, signature, and statement of professional certification. Please ensure all that all technical reports submitted for this fuel leak case meet this requirement.

UNDERGROUND STORAGE TANK CLEANUP FUND

Please note that delays in investigation, later reports, or enforcement actions may result in your becoming ineligible to receive grant money from the state's Underground Storage Tank Cleanup Fund (Senate Bill 2004) to reimburse you for the cost of cleanup.

AGENCY OVERSIGHT

If it appears as though significant delays are occurring or reports are not submitted as requested, we will consider referring your case to the Regional Board or other appropriate agency, including the County District Attorney, for possible enforcement actions. California Health and Safety Code, Section 25299.76 authorizes enforcement including administrative action or monetary penalties of up to $10,000 per day for each day of violation.

If you have any questions, please call me at (510) 567-6791.

Sincerely,

Jerry Wickham
Hazardous Materials Specialist

Enclosure: ACEH Electronic Report Upload (ftp) Instructions

cc: Robert Flory
AEI Consultants
2500 Camino Diablo Blvd., Suite 200
Walnut Creek, CA 94597

Donna Drogos, ACEH
Jerry Wickham, ACEH
File

APPENDIX F

SOIL DISPOSAL MANIFEST

Keller Canyon Sanitary Landfill
901 Bailey Road
Pittsburg, CA 94565
Phone (925) 458-9800
Fax (925) 458-9891

☐ **Ox Mountain Sanitary Landfill**
12310 San Mateo Road
Half Moon Bay, CA 94019
Phone (650) 726-1819
Fax (650) 726-9183

☐ **Newby Island Sanitary Landfill**
1601 Dixon Landing Road
Milpitas, CA 95035
Phone (408) 945-2800
Fax (408) 262-2871

☐ **Forward Landfill**
9999 S. Austin Road
Manteca, CA 95336
Phone (209) 982-4298
Fax (209) 982-1009

NON-HAZARDOUS WASTE MANIFEST

GENERATOR: Allen G. Kenady
MAILING ADDRESS: 607 75th Ave
CITY, STATE, ZIP: Oakland CA 94621
PHONE: 510-562-1333
CONTACT PERSON: Allen G. Kenady
SIGNATURE OF AUTHORIZED AGENT / TITLE: * [signature]
DATE: 3/1/07

GENERATOR'S CERTIFICATION: I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or title 22 of the California code of regulations, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations; **AND, if the waste is a treatment residue of a previously restricted hazardous waste** subject to the Land Disposal Restrictions, I certify and warrant that the waste has been treated in accordance with the requirements of 40 CFR Part 268 and is no longer a hazardous waste as defined by 40 CFR Part 261.

WASTE TYPE:
- ☐ DISPOSAL
- ☐ CONSTRUCTION
- ☐ DEBRIS
- ☐ SPECIAL WASTE Soil Cl II
- ☐ SLUDGE
- ☐ WOOD
- ☐ OTHER

GENERATING FACILITY: 607 75th Ave Oakland

WASTE ACCEPTANCE NO.: SWIC - 212172510

REQUIRED PERSONAL PROTECTIVE EQUIPMENT
- ☒ GLOVES
- ☐ GOGGLES
- ☐ RESPIRATOR
- ☒ HARD HAT
- ☐ TY-VEK
- ☐ OTHER

SPECIAL HANDLING PROCEDURES:

RECEIVING FACILITY

TRANSPORTER: DeAngelo Trkg
ADDRESS: 510 DeAngelo Ct
CITY, STATE, ZIP: Watsonville CA 95492
PHONE: 707 335-1407
SIGNATURE OF AUTHORIZED AGENT OR DRIVER: * Joe Millan
DATE: 3/1/07

NOTES:

VEHICLE LICENSE NUMBER	TRUCK NUMBER
3P4671	13

END DUMP	BOTTOM DUMP	TRANSFER
☐	☐	☐

ROLL-OFF(S)	FLAT-BED	VAN	DRUMS
☒	☐	☐	☐

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is true and accurate.

REMARKS

FACILITY TICKET NUMBER

SIGNATURE OF AUTHORIZED AGENT: *
DATE: 3-7-07

CUBIC YARDS: 20

DISPOSAL METHOD: (TO BE COMPLETED BY LANDFILL)

	DISPOSE	OTHER
☐ SOIL		
☐ CONSTRUCTION DEBRIS		
☐ NON-FRIABLE ASBESTOS		
☐ WOOD		
☐ ASH		
☒ SPECIAL OTHER	20	

SCHEDULING MUST BE MADE PRIOR TO 3:00 P.M. THE DAY PRIOR TO EXPECTED ARRIVAL • ANY UNSCHEDULED LOADS ARE SUBJECT TO REFUSAL UPON ARRIVAL. ONGOING DAILY DELIVERIES MUST BE SCHEDULED WITH THE LANDFILL THE DAY BEFORE.

MANIFEST # 80784

BALER COPY

133604

KELLER CANYON LANDFILL
901 BAILEY ROAD
PITTSBURG, CA

000901
AEI CONSULTANTS
2500 CAMINO DIABLO
SUITE 200
WALNUT CREEK, CA 94597
Contract: #212Y72510

SITE	TICKET	GRID
01	375258	

WEIGHMASTER: FELIPE C

DATE IN	TIME IN
1 March 2007	1:42 pm

DATE OUT	TIME OUT
1 March 2007	1:42 pm

VEHICLE	ROLL OFF
DBT13	

REFERENCE	ORIGIN
80784	OAKLAND

Gross Weight 63,720.00 lb
Stored Tare Weight 39,160.00 lb
Net Weight 24,560.00 lb 12.28 TN

Inbound - SCALE TICKET

QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
12.28	TN	SW-CONT SOIL W/FUEL				
1.00	LD	ENVIRONMENTAL FEE				
1.00	LD	FUEL RECOVERY FEE				

NET AMOUNT

TENDERED

CHANGE

CHECK NO.

SIGNATURE

APPENDIX G

MSDS SHEETS FOR LIQUID NAILS & FLEXFIX DUCT TAPE

MSDS for: LN-903 Revised: 24-May-2005

SECTION 1:

PRODUCT IDENTIFIER:	LN-903 HEAVY DUTY CONSTRUCTION ADHESIVE
DATE OF PREPARATION:	JUNE 3, 2004
PRODUCT USE:	ADHESIVE

MANUFACTURED BY: MACCO ADHESIVES
15885 SPRAGUE RD.
STRONGSVILLE, OHIO 44136, U.S.A.

ICI PAINTS (CANADA)
8200 KEELE STREET
CONCORD, ONTARIO L4K 2A5, CANADA

EMERGENCY AND MSDS TELEPHONE NUMBER: 1-800-545-2643

MSDS PREPARED BY: PRODUCT SAFETY AND TOXICOLOGY DEPARTMENT
ICI PAINTS NORTH AMERICA

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT		**WT.%**
CHEMICAL NAME:	STYRENE BUTADIENE COPOLYMER	10-20
COMMON NAME:	STYRENE BUTADIENE COPOLYMER	
CAS NUMBER:	CONFIDENTIAL	
CHEMICAL NAME:	LIMESTONE	10-20
COMMON NAME:	LIMESTONE	
CAS NUMBER:	1317-65-3	
CHEMICAL NAME:	KAOLIN	20-30
COMMON NAME:	CLAY	
CAS NUMBER:	1332-58-7	
CHEMICAL NAME:	QUARTZ	0.1-1.0
COMMON NAME:	QUARTZ	
CAS NUMBER:	14808-60-7	
CHEMICAL NAME:	DISTILLATES, PETROLEUM, HYDROTREATED HEAVY NAPHTHENIC	1-5
COMMON NAME:	PETROLEUM HYDROCARBON	
CAS NUMBER:	64742-52-5	
CHEMICAL NAME:	DISTILLATES (PETROLEUM), STEAM-CRACKED, POLYMERS WITH LIGHT STEAM-CRACKED PETROLEUM NAPHTHA	5-10
COMMON NAME:	AROMATIC HYDROCARBON RESIN	
CAS NUMBER:	68410-16-2	
CHEMICAL NAME:	WATER	20-30
COMMON NAME:	WATER	
CAS NUMBER:	7732-18-5	

CHEMICAL NAME:	STODDARD SOLVENT	1-5
COMMON NAME:	MINERAL SPIRITS	
CAS NUMBER:	8052-41-3	
CHEMICAL NAME:	BENZENE,1,2,4-TRIMETHYL-	0.1-1.0
COMMON NAME:	PSEUDOCUMENE	
CAS NUMBER:	95-63-6	

SECTION 3: HAZARDS IDENTIFICATION

PRIMARY ROUTE(S) OF EXPOSURE: INHALATION, SKIN CONTACT, EYE CONTACT, INGESTION

EFFECTS OF OVEREXPOSURE

INHALATION: IRRITATION OF RESPIRATORY TRACT. PROLONGED INHALATION MAY LEAD TO DIZZINESS AND/OR LIGHTHEADEDNESS, HEADACHE, UNCOORDINATION, NAUSEA, VOMITING, SORE THROAT, CENTRAL NERVOUS SYSTEM DEPRESSION, DIFFICULTY OF BREATHING, LIVER DAMAGE, KIDNEY DAMAGE, PNEUMOCONIOSIS, LOSS OF CONSCIOUSNESS.

SKIN CONTACT: IRRITATION OF SKIN. PROLONGED OR REPEATED CONTACT CAN CAUSE DERMATITIS, DEFATTING.

EYE CONTACT: IRRITATION OF EYES. PROLONGED OR REPEATED CONTACT CAN CAUSE CONJUNCTIVITIS, TEARING OF EYES, REDNESS OF EYES.

INGESTION: INGESTION MAY CAUSE LUNG INFLAMMATION AND DAMAGE DUE TO ASPIRATION OF MATERIAL INTO LUNGS, MOUTH AND THROAT IRRITATION, HEADACHE, UNCOORDINATION, NAUSEA, VOMITING, DIARRHEA, GASTRO-INTESTINAL DISTURBANCES, ABDOMINAL PAIN, COUGHING, CENTRAL NERVOUS SYSTEM DEPRESSION, DIFFICULTY OF BREATHING, PULMONARY EDEMA, CONVULSIONS, LOSS OF CONSCIOUSNESS, CYANOSIS.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

EYE, SKIN, RESPIRATORY DISORDERS, LUNG DISORDERS, RESPIRATORY DISORDERS

SECTION 4: FIRST-AID MEASURES

INHALATION: REMOVE TO FRESH AIR. RESTORE AND SUPPORT CONTINUED BREATHING. GET EMERGENCY MEDICAL ATTENTION. HAVE TRAINED PERSON GIVE OXYGEN IF NECESSARY. GET MEDICAL HELP FOR ANY BREATHING DIFFICULTY.

SKIN CONTACT: WASH THOROUGHLY WITH SOAP AND WATER. IF ANY PRODUCT REMAINS, GENTLY RUB PETROLEUM JELLY, VEGETABLE OR MINERAL/BABY OIL ONTO SKIN. REPEATED APPLICATIONS MAY BE NEEDED. REMOVE CONTAMINATED CLOTHING. WASH CONTAMINATED CLOTHING BEFORE RE-USE.

EYE CONTACT: FLUSH IMMEDIATELY WITH LARGE AMOUNTS OF WATER, ESPECIALLY UNDER LIDS FOR AT LEAST 15 MINUTES. IF IRRITATION OR OTHER EFFECTS PERSIST, OBTAIN MEDICAL TREATMENT.

INGESTION: IF SWALLOWED, OBTAIN MEDICAL TREATMENT IMMEDIATELY.

SECTION 5: FIRE-FIGHTING MEASURES

FLASH POINT (SETA): ABOVE 200F/93C LOWER EXPLOSIVE LIMIT: NOT AVAILABLE
UPPER EXPLOSIVE LIMIT: 7.0 %

FIRE EXTINGUISHING MEDIA: DRY CHEMICAL OR FOAM. WATER FOG, CARBON DIOXIDE

UNUSUAL FIRE AND EXPLOSION HAZARDS

VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL LONG DISTANCES TO A SOURCE OF IGNITION AND FLASH BACK. VAPORS CAN FORM EXPLOSIVE MIXTURES IN AIR AT ELEVATED TEMPERATURES. CLOSED CONTAINERS MAY BURST IF EXPOSED TO EXTREME HEAT OR FIRE. MAY DECOMPOSE UNDER FIRE CONDITIONS EMITTING IRRITANT AND/OR TOXIC GASES.

FIRE FIGHTING PROCEDURES

WATER MAY BE USED TO COOL AND PROTECT EXPOSED CONTAINERS. FIREFIGHTERS SHOULD USE FULL PROTECTIVE CLOTHING, EYE PROTECTION, AND SELF-CONTAINED BREATHING APPARATUS.

HAZARDOUS DECOMPOSITION OR COMBUSTION PRODUCTS

CARBON MONOXIDE, CARBON DIOXIDE, OXIDES OF SULFUR, ALDEHYDES, STYRENE, OXIDES OF CALCIUM, SMOKE

SECTION 6: ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

COMPLY WITH ALL APPLICABLE HEALTH AND ENVIRONMENTAL REGULATIONS. ELIMINATE ALL SOURCES OF IGNITION. VENTILATE AREA. EVACUATE ALL UNNECESSARY PERSONNEL. PLACE COLLECTED MATERIAL IN PROPER CONTAINER. COMPLETE PERSONAL PROTECTIVE EQUIPMENT MUST BE USED DURING CLEANUP.

LARGE SPILLS: SHUT OFF LEAK IF SAFE TO DO SO. DIKE AND CONTAIN SPILL. PUMP TO STORAGE OR SALVAGE VESSELS. USE ABSORBENT TO PICK UP EXCESS RESIDUE. KEEP SALVAGEABLE MATERIAL AND RINSE WATER OUT OF SEWERS AND WATER COURSES.

SMALL SPILLS: USE ABSORBENT TO PICK UP RESIDUE AND DISPOSE OF PROPERLY.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE

STORE BELOW 80F. STORE BELOW 100F (38C). KEEP AWAY FROM HEAT, SPARKS AND OPEN FLAME. KEEP FROM FREEZING. STORE ABOVE 20F (-7C).

OTHER PRECAUTIONS

USE ONLY WITH ADEQUATE VENTILATION. DO NOT TAKE INTERNALLY. KEEP OUT OF REACH OF CHILDREN. AVOID CONTACT WITH SKIN AND EYES, AND BREATHING OF VAPORS. WASH HANDS THOROUGHLY AFTER HANDLING, ESPECIALLY BEFORE EATING OR SMOKING. KEEP CONTAINERS TIGHTLY CLOSED AND UPRIGHT WHEN NOT IN USE. GROUND EQUIPMENT WHEN TRANSFERRING TO PREVENT ACCUMULATION OF STATIC CHARGE.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

COMMON NAME:	LIMESTONE		
CAS NUMBER:	1317-65-3		
ACGIH(TWA):	10 MG/M3	OSHA(TWA):	5 MG/M3

COMMON NAME:	CLAY		
CAS NUMBER:	1332-58-7		
ACGIH(TWA):	2 MG/M3	OSHA(TWA):	5 MG/M3

COMMON NAME:	QUARTZ		
CAS NUMBER:	14808-60-7		
ACGIH(TWA):	0.05MG/M3	OSHA(TWA):	0.1 MG/M3

COMMON NAME:	PETROLEUM HYDROCARBON		
CAS NUMBER:	64742-52-5		
ACGIH(TWA):	5 MG/M3	OSHA(TWA):	5 MG/M3
ACGIH(STEL):	10 MG/M3		

COMMON NAME:	MINERAL SPIRITS		
CAS NUMBER:	8052-41-3		
ACGIH(TWA):	100 PPM	OSHA(TWA):	500 PPM

RESPIRATORY PROTECTION

CONTROL ENVIRONMENTAL CONCENTRATIONS BELOW APPLICABLE EXPOSURE STANDARDS WHEN USING THIS MATERIAL. WHEN RESPIRATORY PROTECTION IS DETERMINED TO BE NECESSARY, USE A NIOSH/MSHA (CANADIAN Z94.4) APPROVED ELASTOMERIC SEALING-SURFACE FACEPIECE RESPIRATOR OUTFITTED WITH ORGANIC VAPOR CARTRIDGES AND PAINT SPRAY (DUST/MIST) PREFILTERS. DETERMINE THE PROPER LEVEL OF PROTECTION BY CONDUCTING APPROPRIATE AIR MONITORING. CONSULT 29CFR1910.134 FOR SELECTION OF RESPIRATORS (CANADIAN Z94.4).

VENTILATION

PROVIDE DILUTION VENTILATION OR LOCAL EXHAUST TO PREVENT BUILD-UP OF VAPORS. USE EXPLOSION-PROOF EQUIPMENT.

PERSONAL PROTECTIVE EQUIPMENT

EYE WASH, SAFETY SHOWER, SAFETY GLASSES OR GOGGLES, IMPERVIOUS GLOVES, IMPERVIOUS CLOTHING, APRON, BOOTS

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE:	NOT AVAILABLE	SPECIFIC GRAVITY:	1.382
BOILING RANGE (F/C):	212-396/100-202	WEIGHT PER GALLON:	11.51/ 13.82 IMP
APPEARANCE:	TAN	%VOLATILE BY VOLUME:	39.21
PHYSICAL STATE:	PASTE	SOLUBLE IN WATER:	Y
PH:	8.00		

SECTION 10: STABILITY AND REACTIVITY

UNDER NORMAL CONDITIONS:	STABLE (SEE SECTION 5 FIRE FIGHTING MEASURES)
MATERIALS TO AVOID:	OXIDIZERS, ACIDS, BASES, PEROXIDES, METAL SALTS, METAL COMPOUNDS, STYRENE MONOMER
CONDITIONS TO AVOID:	ELEVATED TEMPERATURES, CONTACT WITH OXIDIZING AGENTS, FREEZING, SPARKS, OPEN FLAMES, IGNITION SOURCES
HAZARDOUS POLYMERIZATION:	WILL NOT OCCUR

SECTION 11: TOXICOLOGICAL INFORMATION

COMMON NAME: STYRENE BUTADIENE COPOLYMER
CAS NUMBER: CONFIDENTIAL
CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

COMMON NAME: LIMESTONE
CAS NUMBER: 1317-65-3
CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO
LD50: 6450.00 MG/KG ORL RAT

COMMON NAME: CLAY
CAS NUMBER: 1332-58-7
CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

COMMON NAME: QUARTZ
CAS NUMBER: 14808-60-7
CARCINOGENICITY LISTED BY: NTP YES IARC YES 1 OSHA NO ACGIH NO

COMMON NAME: PETROLEUM HYDROCARBON
CAS NUMBER: 64742-52-5
CARCINOGENICITY LISTED BY: NTP NO IARC YES 1 OSHA NO ACGIH NO
LD50: > 2000.00 MG/KG SKN RBT

COMMON NAME: AROMATIC HYDROCARBON RESIN
CAS NUMBER: 68410-16-2
CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO

COMMON NAME: MINERAL SPIRITS
CAS NUMBER: 8052-41-3
CARCINOGENICITY LISTED BY: NTP NO IARC NO OSHA NO ACGIH NO
LD50: > 3.00 GM/KG SKN RBT
LD50: > 5.00 GM/KG ORL RAT

SUPPLEMENTAL HEALTH INFORMATION

NOTICE - REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

CARCINOGENICITY:	CONTAINS CRYSTALLINE SILICA WHICH IS CONSIDERED A HAZARD BY INHALATION. IARC HAS CLASSIFIED CRYSTALLINE SILICA AS CARCINOGENIC TO HUMANS (GROUP 1). CRYSTALLINE SILICA IS ALSO A KNOWN CAUSE OF SILICOSIS, A NONCANCEROUS LUNG DISEASE. THE NATIONAL TOXICOLOGY PROGRAM (NTP) HAS CLASSIFIED CRYSTALLINE SILICA AS A KNOWN HUMAN CARCINOGEN.
REPRODUCTIVE EFFECTS:	NO REPRODUCTIVE EFFECTS ARE ANTICIPATED
MUTAGENICITY:	NO MUTAGENIC EFFECTS ARE ANTICIPATED
TERATOGENICITY:	NO TERATOGENIC EFFECTS ARE ANTICIPATED

SECTION 12: ECOLOGICAL INFORMATION

NO ECOLOGICAL TESTING HAS BEEN DONE BY ICI PAINTS ON THIS PRODUCT AS A WHOLE.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: DISPOSE IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. AVOID DISCHARGE TO NATURAL WATERS.

SECTION 14: TRANSPORT INFORMATION

DOT:	ADHESIVE
IMDG:	NOT AVAILABLE
IATA:	NOT AVAILABLE
TDG:	NOT AVAILABLE

SECTION 15: REGULATORY INFORMATION

SARA 302	SARA 313	CERCLA 302.4	HAZ AIR POLLUTANT	MARINE POLTNT

THIS PRODUCT CONTAINS NO SARA 302, CERCLA 302.4 OR HAZARDOUS AIR POLLUTANT CHEMICALS. IT ALSO CONTAINS NO CHEMICALS WHICH ARE SUBJECT TO THE REPORTING REQUIREMENTS UNDER SARA 313. AS OF THE DATE OF THIS MSDS, ALL OF THE COMPONENTS IN THIS PRODUCT ARE LISTED (OR ARE OTHERWISE EXEMPT FROM LISTING) ON THE TSCA INVENTORY. THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR (CONTROLLED PRODUCTS REGULATIONS) AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

SECTION 16: OTHER INFORMATION

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA AVAILABLE AT THE TIME OF PREPARATION OF THIS DATA SHEET AND WHICH ICI PAINTS BELIEVES TO BE RELIABLE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THIS DATA. ICI PAINTS SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS INFORMATION, OR OF ANY PRODUCT, METHOD OR APPARATUS MENTIONED AND YOU MUST MAKE YOUR OWN DETERMINATION OF ITS SUITABILITY AND COMPLETENESS FOR YOUR OWN USE, FOR THE PROTECTION OF THE ENVIRONMENT, AND THE HEALTH AND SAFETY OF YOUR EMPLOYEES AND USERS OF THIS MATERIAL. COMPLIES WITH OSHA HAZARD COMMUNICATION STANDARD 29CFR1910.1200.

MATERIAL SAFETY DATA SHEET
FlexFix

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	FlexFix
Use/Size	Pressure Sensitive Adhesive
Product Numbers	
Manufacturer/Supplier	Covalence Adhesives
Address	25 Forge Parkway Franklin, MA 02038
Phone Number	(800) 248-7659 (Monday – Friday 8:00 am to 5:00 pm)
Chemtrec Number	(800) 424-9300
Revision Date:	
MSDS Date:	July 11, 2007

This MSDS has been compiled in accordance with - EC Directive 91/155/EC - OSHA's Hazcom Standard (29 CFR 1910.1200)

2. COMPOSITION/INFORMATION ON THE COMPONENTS

Component Name	CAS#/Codes	Concentration	R Phrases	Classification
Polymers	N.A.	<55%	None	None
Hydrocarbon resin	N.A.	<5%	None	None

3. HAZARD IDENTIFICATION

EU Main Hazards
Not classified as hazardous.

Routes of Entry
Skin contact

Carcinogenic Status
Not considered carcinogenic by NTP, IARC, and OSHA.

Target Organs
- Skin

Health Effects - Eyes
Contact may cause irritation due to mechanical abrasion.

Health Effects - Skin
Prolonged, repeated contact with adhesive may cause skin irritation.

Health Effects - Ingestion
Not an expected route of entry during normal handling and use.

Health Effects - Inhalation
Prolonged, repeated inhalation of adhesive may irritation of the nose, throat and lungs.

4. FIRST AID MEASURES

Eyes
Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

Skin
Wash skin thoroughly with soap and water. Obtain medical attention if blistering occurs or redness persists.

Ingestion
Obtain medical attention immediately.

Inhalation
Remove person to fresh air. Seek medical attention if symptoms persist.

Advice to Physicians
Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing Media
Water spray, carbon dioxide and dry chemical.

Unusual Fire and Explosion Hazards
Can release hazardous vapors during a fire.

Protective Equipment for Fire-Fighting
Wear full protective clothing and self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

No specific measures necessary. Prevent the material from entering drains or watercourses.

7. HANDLING AND STORAGE

Keep away from heat and sources of ignition. Exposure to high heat or flame can release irritating and toxic fumes. Storage area should be: - cool - dry - well ventilated - away from incompatible materials

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Standards
Exposure limits are listed below, if they exist.
Polymers
None established
Hydrocarbon Resin
None established
Engineering Control Measures
No specific measures necessary. Good general room ventilation is expected to be adequate to control airborne levels.

Respiratory Protection
Respiratory protection not normally required.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Hand Protection
Not required under normal conditions of use. However, care should be taken to avoid contact with the adhesive.

Eye Protection
Safety glasses

Body Protection
Normal work wear.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Polymer backing with an acrylic based pressure sensitive adhesive
Color	Clear adhesive with black or aluminum color backing
Odor	Slight
pH	Not applicable
Specific Gravity	No data available
Boiling Range/Point (°C/F)	Not applicable
Melting Point (°C/F)	Not applicable
Flash Point (PMCC) (°C/F)	Not known
Explosion Limits (%)	No data available
Vapor Pressure	Not applicable
Density	No data.
Solubility in Water	Not known
Vapor Density (Air = 1)	Not applicable

10. STABILITY AND REACTIVITY

Stability
Stable under normal conditions.

Conditions to Avoid
- Heat - High temperatures

Materials to Avoid
None known

Hazardous Polymerization
Will not occur.

Hazardous Decomposition Products

– acrylic monomers

11. TOXICOLOGICAL INFORMATION

Acute Toxicity
Low order of acute toxicity.

Chronic Toxicity/Carcinogenicity
This product is not expected to cause long term adverse health effects.

11. TOXICOLOGICAL INFORMATION

Genotoxicity
This product is not expected to cause any mutagenic effects.
Reproductive/Developmental Toxicity
This product is not expected to cause adverse reproductive effects.

12. ECOLOGICAL INFORMATION

Mobility
No relevant studies identified.

Persistence/Degradability
No relevant studies identified.

Bio-accumulation
No relevant studies identified.

Ecotoxicity
The product may be harmful to aquatic organisms.

13. DISPOSAL

Dispose of in accordance with all applicable local and national regulations.

14. TRANSPORT INFORMATION

DOT CFR 172.101 Data	Not Regulated
UN Proper Shipping Name	Not Regulated
UN Class	None.
UN Number	None.
UN Packaging Group	None.
Classification for AIR Transportation (IATA)	Consult current IATA Regulations prior to shipping by air.

15. REGULATORY INFORMATION

EU Label Information
Classification and labelling have been performed according to EU directives 67/548/EEC and 99/45/EC including amendments.
EC Annex I Classification
According to EC Commission Directive 67/548/EEC this product is not classified.

R phrases
None.

S phrases
None.

US REGULATIONS (Federal, State) and INTERNATIONAL CHEMICAL REGISTRATION LAWS
TSCA Listing
This product contains ingredients that are listed on or exempt from listing on the EPA Toxic Substance Control Act Chemical Inventory.

15. REGULATORY INFORMATION

EINECS Listing
All ingredients in this product have been verified for inclusion on the European Inventory of Existing Commercial Chemical Substances (EINECS) or specifically exempted.

DSL (Canadian) Listing
All ingredients in this product have been verified for inclusion on the Domestic Substance List (DSL).

MA Right To Know Law
This product contains the following chemicals on the Massachusetts Right to Know Law: Aqua Ammonia (1336-21-6) <0.2%

PA Right To Know Law
This product contains the following chemicals on the Pennsylvania Hazardous Substance List: Aqua Ammonia (1336-21-6) <0.2%

NJ Right To Know Law
This product contains the following chemicals on the New Jersey Workplace Hazardous Substance List: Aqua Ammonia (1336-21-6) <0.2%

California Proposition 65
This product contains trace amounts of the following materials which the State of California has found to cause cancer, birth defects or other reproductive harm: Formaldehyde (50-00-0) – Dioxane(123-91-1) – Ethylene oxide (75-21-8) – Ethyl acrylate (140-88-5) – Acetaldehyde (75-07-0)

SARA Title III Sect. 302 (EHS)
This product does not contain any chemicals subject to SARA Title III Section 302.

SARA Title III Sect. 304
This product does not contain any chemicals subject to SARA Title III Section 304.

SARA Title III Sect. 311/312 Categorization
Immediate (acute)

SARA Title III Sect. 313
This product contains the following chemicals that are listed in Section 313 at or above de minimis concentrations. None

16. OTHER INFORMATION

NFPA Ratings
NFPA Code for Flammability - 0
NFPA Code for Health - 1
NFPA Code for Reactivity - 0
NFPA Code for Special Hazards – 0

HMIS Ratings
HMIS Code for Flammability - 0
HMIS Code for Health - 1
HMIS Code for Reactivity - 0
HMIS Code for Personal Protection - See Section 8

Abbreviations
N/A: Denotes no applicable information found or available
CAS#: Chemical Abstracts Service Number
ACGIH: American Conference of Governmental Industrial Hygienists
OSHA: Occupational Safety and Health Administration

16. OTHER INFORMATION

Abbreviations
TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit
NTP: National Toxicology Program
IARC: International Agency for Research on Cancer
R: Risk
S: Safety
LC50: Lethal Concentration 50%
LD50: Lethal Dose 50%
BOD: Biological Oxygen Demand
KoC: Soil Organic Carbon Partition Coefficient
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
N: Dangerous for the environment.

For further Information email: Technical.Adhesives@covcorp.com

Prepared By: EnviroNet LLC.

The information and recommendations presented in this MSDS are based on sources believed to be accurate. Covalence Adhesives assumes no liability for the accuracy or completeness of this information. It is the user's responsibility to determine the suitability of the **material** for their particular purposes. In particular, we make NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, with respect to such information, and we assume no liability resulting from its use. Users should ensure that any use **or disposal** of the material is in accordance with applicable Federal, State, and local laws and regulations.

APPENDIX H

IN-SITU OXIDATION POINT –CITRIC ACID CLEANING PROCEDURE

H2O Engineering, Inc.
265 Prado Road, Suite#1
San Luis Obispo, CA 93401
805-547-0303 Phone
805-547-0113 Fax
www.h2oengineering.com

In-Situ Oxidation Point – Citric Acid Cleaning Procedure

1. Refer to citric acid MSDS for all relevant safety concerns. Please read all directions below before proceeding.
2. H2O Engineering recommends the following PPE as a minimum for this procedure:
    a. Chemical resistant gloves
    b. Goggles
    c. Face Shield
    d. Long sleeve shirt and long pants
3. While the Ozone Sparge Unit is running, record all flow and pressure values before treating fouled in-situ oxidation points.
4. Stop the Ozone Sparge Unit. From the Main Menu Screen or from the Auto Mode Menu Screen press F2 (Stop) to stop the system (Refer to the Ozone Sparge Unit User Guide to Stop the Ozone Sparge Unit from the correct Panel View Screen).
5. Disable the valves associated with the in-situ oxidation points to be treated. In the Valve Configuration Menu, choose the appropriate subgroup of valves, either 1-10, 11-20, etc. From there, disable the valves associated with the in-situ oxidation points to be treated. **NOTE:** For nested well configurations, make sure to disable all valves associated with each nested in-situ oxidation point.
6. Turn off the Ozone Sparge Unit. Turn the main power switch on the door to the OFF position. **NOTE:** Always follow job site lock-out tag-out safety procedures.
7. At the well box, remove the upper portion of the wellhead connection fitting, set aside.
8. Using a funnel, pour approximately 1 gallon of liquid citric acid (50% minimum strength) into the well riser pipe.
9. Reconnect wellhead connection fitting.
10. Turn on the Ozone Sparge Unit. Power up Ozone Sparge Unit by turning the main power switch on the door to the ON position. **NOTE:** Always follow job site lock-out tag-out safety procedures.
11. Start the Ozone Sparge Unit. From the Main Menu Screen or from the Auto Mode Menu Screen press F1 (Start) to resume the sparge sequence (Refer to the Ozone Sparge Unit User Guide to Start the Ozone Sparge Unit from the correct Panel View Screen). **Note:** Do not re-enable valves associated with the treated in-situ oxidation points until the solution has had a minimum of 24 hours to soak.
12. After the 24 hour soak period, re-enable valves associated with the treated in-situ oxidation points.
13. Record all flow and pressure values to evaluate the effectiveness of the acid treatment. If desired results are not achieved, a second treatment may be necessary.

    If you have any questions or concerns, please do not hesitate to call H2O Engineering, Inc.