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Estate of Michael Dolan
Mr. Michael Fitzpatrick, Trustee
3215 Deer Park Dr.
Walnut Creek, CA 94598

Dec. 4, 2006

Mr. Barney Chan
Alameda County Health Care Services Agency
Environmental Protection Division
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

Re: Perjury Statement
Dolan Property, 6393 Scarlett Court, Dublin, California; RO-210

Dear Mr Chan,

"I declare under penalty of perjury, that the information and / or recommendations contained in the attached proposal or report is true and correct to the best of my knowledge."

Michael Fitzpatrick, Trustee

c. Peter MacDonald, Esquire
Wanden Treanor, Esquire

December 1, 2006
BEI Job No. 202016

Mr. Michael Fitzpatrick, Trustee
Estate of Michael Dolan
P.O. Box 31654
Walnut Creek, CA 94598

**Subject: Third Quarter 2006 Groundwater Monitoring Event**
**Former Dolan Trust Property**
**6393 Scarlett Court**
**Dublin, California**
**ACHCSA Fuel Leak Case No. RO0000210**

Dear Mr. Fitzpatrick:

This letter documents the Third Quarter 2006 groundwater monitoring event at the subject site (Figure 1). This is the tenth groundwater monitoring event conducted by Blymyer Engineers, Inc. and the third post-remediation groundwater monitoring event at the former Dolan Trust Property in Dublin, California.

## 1.0 Background

A 600-gallon underground storage tank (UST) was removed in February 1990 from the subject site (Figure 2). Although the UST had reportedly stored diesel more recently, soil and groundwater samples collected for laboratory analysis indicated that the contaminant of concern at the site was gasoline. Files maintained by the Alameda County Department of Environmental (ACDEH) do not contain waste manifests for the disposal of soil, although a *Uniform Hazardous Waste Manifest* is present documenting the disposal of a 600-gallon UST. This suggests that contaminated soil may not have been removed from the site. In October 1990, five soil bores were installed at the site, and soil and grab groundwater samples were collected. Additional delineation work was conducted in November 1991, when groundwater monitoring wells MW-1 through MW-4 were installed to a depth of 20 feet below grade surface (bgs). Soil and groundwater samples were collected. In November 1992, 14 additional soil bores were installed, and soil and grab groundwater samples were collected from selected bore locations. Although there were several data gaps in the perimeter zone of soil and groundwater delineation, the soil and groundwater plumes were largely defined as a result of this investigation. The groundwater plume did not appear to extend offsite; however, a thin free-phase layer was present immediately adjacent to the former UST basin, and at a location approximately 40 feet to the east. Additional wells were proposed to fill the existing data gaps and to monitor the lateral extent of impacted groundwater and free-phase. As a consequence, in March 1995, wells MW-5 and MW-6 were installed to a depth of 10 feet bgs. Intermittent groundwater sample collection or groundwater monitoring has occurred at the facility since 1991. In an August 1998 letter, the

ACDEH suggested that a health risk analysis or the installation of an oxygen releasing compound (ORC) might be appropriate for the site. Also in the August 1998 letter, the ACDEH stated that groundwater sampling of wells MW-1, MW-3, MW-5, and MW-6 could be discontinued, stated that the sampling interval could be decreased to a semiannual basis, and requested resumption of groundwater monitoring.

In May 2002, Blymyer Engineers was retained by Mr. Michael Fitzpatrick, on behalf of Mr. Michael Dolan, to conduct semiannual groundwater sampling of wells MW-2 and MW-4, and to conduct a file review to help determine the next appropriate step at the site.

In May 2002, Blymyer Engineers located and rehabilitated the wells at the site. Well MW-5 required the most extensive rehabilitation work, and required resurveying due to a change in well casing elevation. In June 2002, wells MW-2 and MW-4 were sampled, while depth to groundwater was measured all of the wells. Except for a slight increase in benzene in groundwater from well MW-4, the concentration of all analytes in the two wells decreased from the August 1997 sampling event. Based upon a review of the results, the ACDEH recommended that well MW-5 be incorporated into the sampling program and that quarterly groundwater monitoring resume in order that contaminant concentrations and contaminant trends could be quickly generated for the recommended health risk assessment.

Two additional quarters were completed prior to the death of Mr. Dolan. Groundwater monitoring was on hold after January 2003 due to the Estate becoming established. During the groundwater monitoring event in December 2002, analysis for the fuel oxygenates was conducted by EPA Method 8260B. All fuel oxygenates were found to be non-detectable at good limits of detection. Consequently, all sporadic occurrences of methyl tert-butyl ether (MTBE) previously detected at the site have been attributed to 3-methyl-pentane, another gasoline related compound. This suggests that the release predates the use of MTBE and other fuel oxygenates as gasoline additives. All previously available data from the site has been tabulated on Tables I through III.

On June 13, 2003, a workplan was submitted to the ACDEH in order to allow further subsurface delineation of impacted soil at the site. In a telephone conversation on June 16, 2003, Mr. Scott Seery mentioned that it was unlikely that he would be able to respond in a timely manner due to the work load at the ACDEH, and noted that if a response was not issued 60 days after receipt, regulations stated that the workplan should be considered approved. Consequently, field work commenced on September 13, 2003. Nine Geoprobe[7] soil bores were installed at the site to augment existing soil data. The data indicated that the lateral and vertical extent of impacted soil at the site had been adequately delineated to relatively low concentrations, and the limits further refined for the purposes of determining appropriate remedial actions (*Geoprobe*[7] *Subsurface Investigation*, dated October 10, 2003).

Based on these data and a lack of further comments by the ACDEH, a *Remedial Action Plan* (RAP), dated April 6, 2004, was issued. The plan detailed overexcavation and construction dewatering, as the principal method of remedial action. Introduction of ORC into the resulting excavation as an additional measure of insurance, should residual contamination be intentionally or unintentionally left in place, was also proposed. Use of ORC was proposed based on general knowledge that biodegradation of petroleum hydrocarbons is generally an oxygen limited process. A Request for Proposal (RFP) was generated in early May 2004 for contractor bidding purposes; however, it was not released due to a change in the timeline for sale closure. On September 2, 2004, Blymyer Engineers contacted Mr. Seery in order to determine the status of the RAP review. At that time, Mr. Seery notified Blymyer Engineers that Mr. Robert Schultz was the new case manager for the site. Mr. Schultz required time to review and become familiar with the file. On November 15, 2004, the ACDEH issued a 5-page response letter (*Fuel Leak Case No. RO0000210*) requesting extensive further work and containing several deadlines. A December 31, 2004 deadline was established for a workplan for additional site characterization. The *Workplan for Additional Investigation and Letter Report*, dated December 23, 2004, was submitted to the ACDEH on January 3, 2005.

In a letter dated January 24, 2005, the ACDEH approved the workplan provided four conditions were met:

- A pilot hole was to be used to identify lithology prior to collection of a groundwater sample from a deeper water-bearing zone,
- Should additional groundwater wells be required, the ACDEH would be consulted regarding well construction details,
- Should additional soil or groundwater samples be required, the ACDEH would be kept informed of planned changes and consistent dynamic investigation procedures, and
- A 72-hour written advanced warning would be provided.

On February 18, 2005, Blymyer Engineers mobilized to the site to install two to three dual-tube direct-push soil bores in an attempt to collect the approved soil and groundwater samples. As a precursor to the mobilization, a conduit survey was conducted. However, due to poor soil recovery an additional mobilization to the site was required. After notifying, and obtaining approval from, the ACDEH 72 hours in advance, a Cone Penetrometer Test (CPT) direct-push rig was mobilized to the site on March 28, 2005. Prior to the March 28, 2005 mobilization, the ACDEH approved a reduction in the quarterly analytical program, based on historical analytical trends. Specifically, hydrocarbon analysis of groundwater samples from wells MW-1, MW-3, and MW-6 was eliminated.

On April 13, 2005, CCS Environmental resurveyed all wells at the site. As of April 30, 2005, all tenant operations at the site ceased. This included the batch plant used by Dublin Concrete.

On May 10, 2005, Blymyer Engineers submitted the *Additional Site Investigation Data Transmittal* to the ACDEH providing a brief summary of the results of the CPT bore installations. Based on the detection of hydrocarbon compounds in groundwater between 30 and 40 feet bgs, the letter proposed the installation of groundwater well MW-7 across a deeper water-bearing zone in a downgradient position. Shortly thereafter, the ACDEH reported that Mr. Schultz had left the employ of the agency and that the case had not been assigned to a new case worker yet. The ACDEH was apprised that due to the sale of the parcel, work would proceed, pending agency review.

As a part of another related project, Blymyer Engineers oversaw the permitted destruction of two old water production wells between May 16 and May 24, 2005. According to Zone 7, both wells appear to have dated from the 1940s or 1950s. Well "3S/1E 6F 1", located on the subject parcel was constructed of 8-inch-diameter steel casing and was 95 feet in total depth. Well "3S/1E 6F 2" was located on the adjacent parcel, also owned by Dolan Properties, and was constructed of 13-inch-diameter riveted steel casing and was 38 feet in total depth. All Zone 7 permit conditions were observed; however, the upper 6 to 7.5 feet of each well casing was removed by excavation seven days after it had been filled to the surface with cement grout. An approximately 6- to 12-inch-thick concrete mushroom cap was placed over and around the remaining casing at depths of 6 and 7.5 feet bgs, respectively (where the casing broke during removal). The excavation was backfilled with native soil, and track rolled.

On July 5 and July 8, 2005, Blymyer Engineers oversaw the installation of downgradient groundwater monitoring well MW-7 (Figure 2). The well was installed into the second water-bearing zone beneath the site due to the detection of hydrocarbon contamination in groundwater in both CPT bores at depths of approximately 30 to 40 feet bgs. A conductor casing was installed to a depth of 30 feet in order to exclude upper water-bearing zones, and to prevent cross-contamination of deeper water-bearing zones. A 2-inch-diameter PVC casing was installed through the conductor casing and the well was screened between 30 and 40 feet bgs.

On October 7, 2005, Blymyer Engineers issued the *Remedial Investigation / Feasibility Study* report documenting all field work conducted since January 2005, and the results of a feasibility study. The report evaluated three remedial alternatives, including monitored natural attenuation, dual-phase extraction, and source soil excavation and dewatering. It was found that, under monitored natural attenuation, benzene would require approximately 33 years to reach the Maximum Contaminant Level (MCL) and that the remedial cost was the highest of the three options. Remedial costs were the second highest under the dual-phase extraction scenario, and would be more intrusive with respect to the future owner's land use. Remedial costs were lowest, and the site presence was least intrusive in the longer term under the remedial overexcavation and dewatering scenario. This scenario additionally proposed to introduce oxygen releasing compound (ORC) into the remedial excavation to stimulate biodegradation of the residual hydrocarbon contamination by indigenous microbes; previously shown to be oxygen-limited at the site. This scenario additionally proposed to treat soil and groundwater outside the plume core with ORC injected through Geoprobe bores on an approximately 10-foot spacing interval. Principally because remedial costs were lowest, remedial excavation was selected as the most appropriate remedial technology for the site. On October 26, 2005, Blymyer Engineers issued the *Corrective Action Plan For Source Soil Excavation and Dewatering*. On November 2, 2005, the ACDEH issued the letter *Fuel Leak Case No.*

*RO0000210*, which concurred with the recommended remedial plan, but contained six technical comments for clarification. On November 9, 2005, Blymyer Engineers issued the *Response to November 2, 2005 Letter*, that addressed the technical comments contained in the ACDEH letter. The letter indicated that soil reuse was not planned due to high perched groundwater as shallow as 3 feet bgs, provided documentation (Figure 2 of that letter) of the approximate planned bottom sample soil collection locations based on the iso-concentration figures, stated that ORC would be applied throughout the excavation as requested, attached NPK bio-nutrient calculations for the site, stated that a second excavation backfill well would be installed as requested, and stated that a post-remediation quarterly groundwater sampling program was planned for a minimum period of one year.

Remedial excavation began on November 29, 2005, with the initial installation of a slide-rail shoring system in the area for excavation. Between December 1, and December 8, 2005, Marcor Remediation, Inc. (Marcor) excavated and stockpiled 2,370 cubic yards (3,054.65 tons) of impacted soil from an area approximately 50 by 50 feet, by 20 to 21 feet in depth. Concurrent excavation dewatering was attempted, but due to the load of suspended fine particles, could not keep up with groundwater infiltration. Extracted groundwater was plumbed through a bag filter to remove the sediment load, and then through two 2,000-pound granular activated carbon (GAC) vessels into a 20,000-gallon temporary aboveground storage tank. Prior to discharge to the sanitary sewer a groundwater sample was collected under observation of the Dublin-San Ramon Services District personnel. Four authoritative excavation bottom soil samples were collected from locations in close proximity to previously documented worst-case soil concentrations and each returned non-detectable concentrations for all analytes. The excavation was backfilled with imported crushed rock and locally derived recycled asphaltic baserock. ORC was applied in slurry form to the crushed rock as it was placed into the excavation. On December 21 and 22, 2005, twenty-six ORC injection bores were pushed to approximately 21 feet bgs, and an ORC slurry was injected into the bores in areas surrounding the backfilled excavation in order to address residual contamination outside the area of excavation. The soil stockpiles were sampled concurrently with remedial excavation, and the soil was loaded, transported, and disposed at Keller Canyon Landfill in Pittsburg, California, between December 29, 2005, and January 4, 2006. On January 11, 2006, the property was sold by the Dolan Trust to Ken Harvey Honda, and site redevelopment planning was initiated for a car dealership.

On February 27, 2006, Blaine Tech Services, Inc. (Blaine) mobilized to the site to develop the two new wells (MW-8 and MW-9) located within the remedial excavation. Development details have been reported under separate cover in the report entitled *Report on Source Soil Excavation and Dewatering*, dated April 20, 2006. The first post-remediation groundwater monitoring event occurred on March 2, 2006, and was reported in the report entitled *First Quarter 2006 Groundwater Monitoring Event*, dated April 4, 2006. The *Second Quarter 2006 Groundwater Monitoring Event* dated June 22, 2006, was issued on June 28, 2006.

Current site redevelopment activities include paving and infrastructure installation for the car dealership.

## 2.0 Groundwater Sample Collection and Analytical Methods

Groundwater samples were collected from all monitoring wells on September 27 and 28, 2006. The groundwater samples were collected by Blaine in accordance with Blaine *Standard Operating Procedures* for groundwater gauging, purging, and sampling. A copy is included as Appendix A. In accordance with the recommendation contained in the previous quarterly report, Remediation by Natural Attenuation (RNA) parameters were collected this quarter. Purging for the RNA parameters used micropurge techniques. Depth to groundwater was measured in all wells at the site. Temperature, pH, conductivity, and turbidity were measured initially, and then after removal of each purge volume. Depth to groundwater was measured in all wells at the site on September 28, 2006. Temperature, pH, conductivity, and turbidity were measured initially, and then after removal of each purge volume. The groundwater depth measurements and details of the monitoring well purging and sampling are presented on the *Well Gauging Data* sheet and *Well Monitoring Data Sheets* generated by Blaine and included as Appendix B. Additional field forms included in Appendix B include the *Purge Drum Inventory Log*, and the *Wellhead Inspection Checklist*. Depth-to-groundwater measurements are presented in Table I. All purge and decontamination water was temporarily stored in Department of Transportation-approved 55-gallon drums for future disposal by the owner.

The groundwater samples were analyzed by McCampbell Analytical, Inc., a California-certified laboratory, on a 5-day turnaround time. Groundwater samples from all wells were analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline and as diesel by Modified EPA Method 8015C; benzene, toluene, ethylbenzene, and total xylenes (BTEX) and MTBE by EPA Method 8021B; Carbon Dioxide by Standard Method 5310B; Sulfate by Standard Method E300.1; Nitrate (as N) by E300.1; Phosphorous by E365.1; Manganese and Potassium by E200.8; Methane by Method RSK 174; Biochemical Oxygen Demand (BOD) by SM 5210B; and Chemical Oxygen Demand (COD) by SM 5220D. The sample with the highest detected concentration of MTBE by EPA Method 8021B was selected for reanalysis by EPA Method 8260B for all fuel oxygenates. This analytical method includes the fuel oxygenates *tert*-Butyl Alcohol [TBA], Di-isopropyl Ether [DIPE], Ethyl *tert*-Butyl Ether [ETBE], and Methyl *tert*-Amyl Ether [TAME], the lead scavengers 1,2-Dibromoethane (EDB) and 1,2-Dichloroethane (1,2-DCA), as well as ethanol and methanol. Tables II to V summarize current and previous analytical results for groundwater samples. The laboratory analytical report for the current sampling event is included as Appendix C.

## 3.0 Petroleum Hydrocarbon Groundwater Sample Analytical Results

Hydrocarbon analysis of groundwater samples from all wells was conducted during the current sampling event. Well MW-2 was destroyed during the remedial excavation in November 2005. Only perimeter well

MW-3 and deep well MW-7 yielded non-detectable analyte concentrations; however, perimeter wells MW-1 and MW-6 yielded petroleum hydrocarbons below the RWQCB ESL goals (78 Fg/L TPH as gasoline and 61 Fg/L TPH as diesel, respectively). Similar analyte concentrations have been present previously in each of these wells; however, in well MW-6 the hydrocarbon was previously very low levels of TPH as gasoline with benzene. Benzene was not detected in the well during the current event. Well MW-5 contained 48 Fg/L MTBE during this monitoring event. MTBE continues to trend slightly higher with each quarterly sampling event in this well. No other fuel oxygenates, lead scavengers, or ethanol or methanol were detected via analysis by EPA Method 8260B this quarter. Well MW-4 contained both lower and higher analyte concentrations than the previous quarter and TPH remains at elevated concentrations. Decreases were observed in TPH as diesel, benzene, ethylbenzene, and total xylenes, while an increase was observed in the concentration of TPH as gasoline and toluene. TPH as gasoline, TPH as diesel, and BTEX were again present in excavation wells MW-8 and MW-9 this quarter. Concentrations increased for each compound in well MW-8, and TPH as gasoline, TPH as diesel, and benzene were over the respective RWQCB ESLs. Analyte concentrations increased and decreased in well MW-9; however, the volatile fraction (BTEX, MTBE) were, in general, relatively unchanged on the whole. The total TPH concentration, although slightly lower, was roughly similar to the previous quarter. Only the TPH fractions were above the RWQCB ESLs in well MW-9. Figure 3 documents the former rough correlation between a rise of groundwater and a rise in contaminant concentrations. This cycle appears to have been broken after the remedial actions.

Well MW-2 yielded a detectable concentration of 1, 2-DCA (5.4 Fg/L) during the first quarterly groundwater monitoring event of 2005. All other oxygenates and lead scavengers were not detected, sometimes at elevated limits of detection due to the dilutions required because of the elevated hydrocarbon compound concentrations in the sample. However, the lack of MTBE in groundwater collected from well MW-2 at that time, at good limits of detection, is consistent with previous analysis for fuel oxygenates conducted in December 2002. These results suggest that there may have been potentially two separate releases at the site, a non-MTBE-bearing release (from prior to use of MTBE as a fuel additive) as detected in well MW-2 (screened between 5 and 20 feet bgs) and an MTBE-bearing release detected in well MW-5 (screened between 3 and 10 feet bgs). Consistent with this interpretation is the lack of EDB, 1, 2-DCA, ethanol, and methanol in well MW-5, at good limits of detection. This suggests that portions of the release predate the use of fuel oxygenates as gasoline fuel additives.

The laboratory has previously included a note that the hydrocarbon quantified as TPH as diesel in wells MW-2 and MW-5 was present in the requested quantitation range (diesel), but that it did not resemble the fuel pattern requested. A review of the chromatograms from wells during the September 2002 quarterly event and the current event indicate that the hydrocarbon detected in the diesel range in groundwater from well MW-2 is associated with the heavy end of gasoline (carbon range C4 to C12) which overlaps into the typical carbon range occupied by diesel (carbon range C10 to C22). However, the compound previously detected in well MW-5 suggests that it may be an aged diesel product as the smooth curve lay between carbon ranges C10 to C22. During the current and previous quarter, the laboratory included a note that oil range hydrocarbons were detected in the groundwater samples obtained from wells MW-8 and MW-9. McCampbell Analytical stated (personal communication, October 20, 2006) that the chromatograms indicate that this could be either oil or asphalt related compounds. Copies of the chromatograms for the current event are attached at the end of Appendix C.

Prior to the remedial excavation, only wells MW-2 and MW-4 consistently yielded concentrations of petroleum hydrocarbons. Groundwater from well MW-2 consistently contained the highest concentrations at the site, followed by well MW-4. Well MW-2 was destroyed under permit during the remedial excavation. During the current monitoring event the predominant location of contaminants was in the vicinity of wells MW-4, MW-8, and MW-9; the latter two are tank basin wells. The concentrations of each analyte at these wells was significantly less than previously detected in destroyed well MW-2; however, they remain elevated in well MW-4. Over the two previous quarterly events in 2006, hydrocarbon concentrations in groundwater in well MW-4 have been assumed to be a by-product of remedial excavation, wherein contaminants formerly sequestered in soil were mixed and released into groundwater in a one-time process. However, a closer review of the analytical data from groundwater collected in well MW-4 suggests that this assumption may be incorrect. There are multiple lines of evidence that suggest that a different source of gasoline hydrocarbons is reflected in groundwater collected from well MW-4, or that a fresh spill of gasoline may have occurred near well MW-4. These lines of evidence are as follows:

- There was a large increase in gasoline and volatile (BTEX) hydrocarbon concentrations in groundwater collected from well MW-4 between September 2005 and March 2006. The relative stability of those concentrations over three quarters appears to suggest a remaining source as opposed to a transient spike in contaminant concentrations to be expected from a one-time event.

- The analytical laboratory began to flag the gasoline hydrocarbon in groundwater collected from well MW-4 as “unmodified or weakly modified gasoline” (i.e. fresh) in the March 2006 groundwater monitoring event.

- There appears to be no MTBE associated with this hydrocarbon, as would be anticipated with recent release of gasoline due to the required removal of this chemical from reformulated gasoline by December 31, 2003.

- The apparent rapid decrease in the concentration of benzene in comparison to toluene and ethylbenzene would be typical of the chemical behavior (solubility) of these volatile compounds in groundwater.

- The concentration of TPH as diesel in wells MW-4, MW-8, and MW-9 are very similar, while the concentration of TPH as gasoline in well MW-4 is significantly higher than in the other two wells. This may suggest the source of the TPH as diesel is the same, but that the source of TPH as gasoline is different between the wells.

- The ratio of TPH as gasoline to TPH as diesel in groundwater collected from well MW-4 does not match the ratio seen previously in well MW-2, or currently in wells MW-8 or MW-9. Additionally the ratios of the various volatile organic compounds (BTEX) to TPH as gasoline or to TPH as diesel do not match between wells MW-4 and MW-8 or MW-9. Finally the ratios between the various volatile organic compounds, within a well, are generally not the same (see for example the ratio of total xylenes to benzene in each of the wells).

Each of these lines of evidence is suggestive of a separate source for the hydrocarbons in groundwater samples collected from well MW-4. This evidence appears to indicate an undiscovered residual pocket of contamination outside the area of excavation, or more likely, the introduction of fresh gasoline hydrocarbons in the vicinity of the well. One potential source may be surface spillage from vehicles parked in the vicinity of well MW-4 waiting for repair at the auto shop across Scarlett Court from the site. During site visits leading up to the remedial excavation, between 6 to 10 cars were parked adjacent to the fence in the vicinity of well MW-4 on a daily basis. Blymyer Engineers requested a review of chromatograms by McCampbell Analytical in the outside chance of determining if other fuel oxygenates used in more recently reformulated gasoline might be present in groundwater from the well. This requires analysis by EPA Method 8260, not requested as planned during the current quarterly event. As anticipated the available analysis (EPA Method 8015) was insufficient to resolve this during the current quarterly event.

A copy of the groundwater petroleum hydrocarbon analytical results can be found in Appendix C, and the results are summarized in Table II and Table III.

## 4.0 Intrinsic Bioremediation Groundwater Sample Analytical Results

Intrinsic bioremediation or RNA laboratory analytical parameters were collected during the current quarter. Field and analytical results for the current and for previous groundwater monitoring events are presented on Tables IV and V. Microbial use of petroleum hydrocarbons as a food source is affected by the concentration of a number of chemical compounds dissolved in groundwater at a site. RNA monitoring parameters were established by research conducted by the Air Force Center for Environmental Excellence. The research results were used to develop a technical protocol for documenting RNA in groundwater at petroleum hydrocarbon release sites (Wiedemeier, Wilson, Kampbell, Miller and Hansen, 1995, *Technical Protocol for Implementing the Intrinsic Remediation with Long Term Monitoring for Natural Attenuation of Fuel Contamination Dissolved in Groundwater, Volumes I and II*, U.S. Air Force Center for Environmental Excellence, Brooks Air Force Base, Texas). The protocol focuses on documenting both aerobic and anaerobic degradation processes whereby indigenous subsurface bacteria use various dissolved electron acceptors to degrade dissolved petroleum hydrocarbons.

In the order of preference, the following electron acceptors and metabolic by-products are used and generated, respectively, by the subsurface microbes (aerobes, Mn – Fe reducers, and methanogens) to degrade petroleum hydrocarbons: oxygen to carbon dioxide, nitrate to nitrogen, insoluble manganese ($Mn^{4+}$) to soluble manganese ($Mn^{2+}$), insoluble ferric iron ($Fe^{3+}$) to soluble ferrous iron ($Fe^{2+}$), sulfate to hydrogen sulfide, and carbon dioxide to methane. With the exception of oxygen, the use of all other electron acceptor pathways by microbes indicates increasingly anaerobic degradation. Aerobic degradation takes place first, and oxygen inhibits anaerobic degradation. As oxygen is consumed and an anoxic zone develops, the Mn – Fe reducers and methanogens begin to grow and release dissolved Mn, dissolved Fe, and methane (Commission on Geosciences, Environment and Resources, *Natural Attenuation for Groundwater Remediation*, 2000). Investigation of each of these electron acceptor pathways was conducted in all wells at the site as part of the evaluation of RNA chemical parameters. Analytical results collected prior to remedial excavation generally documented oxygen and nutrient (nitrate) limited RNA at the site.

Microbial use of petroleum hydrocarbons as a food source is principally affected by the concentration of dissolved oxygen (DO) in the groundwater present at a site; it is the preferred electron acceptor for the biodegradation of hydrocarbons. Pre-purge DO field readings documented two distinct regions. Plume core wells MW-4, MW-8, and MW-9 contained distinctly higher concentrations (0.97 to 1.88 milligrams per liter [mg/L]) of DO than the remaining wells (MW-1, MW-3, MW-5, MW-6, and MW-7; generally 0.64 to 0.75 mg/L). This suggests that the ORC product continues to provide additional oxygen to the excavation vicinity. Post-purge DO was present in groundwater in concentrations ranging from 0.23 mg/L to 0.78 mg/L. Post-purge DO is generally accepted to document the concentration of DO in the area surrounding each well and is generally considered more representative of a water-bearing zone. The concentration of post-purge DO in most wells shows a decreasing trend over the three post-remediation monitoring events. In comparison to the period prior to remediation, the concentration of post-purge DO remains at a slightly higher concentration in wells MW-1, MW-4, MW-5, and arguably in well MW-3. This is likely due to two causes; a natural increase in DO carried by rain water (see MW-1 or MW-3), and an increase produced by ORC (see MW-4). Because the two likely causes cannot be conclusively distinguished as previously observed, this may suggest that DO has been largely used in the vicinity of the excavation. This is not unexpected as ORC is noted to generate oxygen between 6 and 12 months. Excavation wells MW-8 and MW-9 both continue to contain slightly higher concentrations of post-purge DO than observed in well MW-2 prior to its destruction by excavation. In general, although there have been decreases in the concentration of DO in groundwater in some of the wells since the first quarterly event after remedial exaction, the concentration of DO generally remains higher than the concentration of DO prior to remedial action. Previously, lack of DO appeared to be one of the RNA-limiting factors in the remedial area and it may be transitioning back to a limiting factor due to the increased lack of clarity in the source of DO (rain water infiltration or ORC).

ORP is another measure of the supply and use of oxygen at a site. The higher the reading in millivolts (mV), the more oxygenated the subsurface environment is, and the lower the readings, the more anaerobic or reducing the subsurface environment is. Like DO, ORP values appear to represent a complex subsurface environment during the present monitoring event. The decrease in ORP value in wells MW-1 and MW-3 suggests that the decrease may partly be a seasonal change due to lower DO values as the wells are located away from the plume core, and generally have not contained detectable concentrations of contaminants. However, most other wells in the vicinity of the excavation contain slightly higher ORP readings than prior to and immediately after the remedial excavation. This appears to indicate continued oxygenation of the excavation vicinity and likely also reflects a generalized recovery in groundwater quality adjacent to the excavation area after the remedial excavation (In comparison to pre-remedial values; see for instance wells MW-4, MW-5, MW-6, and MW-7). Within the remedial excavation, ORP in wells MW-8 and MW-9 have marginally increased from the previous quarterly values, remain higher than ORP values in well MW-2 prior to the remedial excavation, but are lower than the first post-remedial monitoring event.

One of the by-products of microbial hydrocarbon degradation is the conversion of oxygen to carbon dioxide. In all wells carbon dioxide concentrations decreased in comparison to the March 2006 monitoring event. There appear to be at least two potential causes. This includes a natural seasonal decrease as most clearly seen in wells MW-1 and MW-3, and potentially, a general decrease in aerobic microbial activity as suggested by decreases in other wells (MW-4 and MW-6). Reviewing the data generated from upgradient well MW-1 and lateral to downgradient well MW-3, the data contained relatively similar and modest concentrations of carbon dioxide. These are presumed to be representative of background carbon dioxide concentrations. Groundwater from well MW-4 contained a lower concentration of carbon dioxide, presumed representative of some limited microbial activity; however, wells MW-6 and MW-7, had similar concentrations, but no or trace detectable concentrations of contaminants. Well MW-5 continues to contain the highest concentration of carbon dioxide for an undetermined reason. Excavation wells MW-8 and MW-9 contained only trace concentrations of carbon dioxide which suggests minimal microbial activity at these wells. This may be the result of removal of the majority of existing microbial colonies in the former plume core, and the inability in re-establishing colonies at that location due to higher, but still moderated, oxygen concentrations.

Should oxygen be in insufficient supply in groundwater, the next preferred electron acceptor is nitrate, which creates denitrifying conditions. In denitrifying conditions, nitrate concentrations decrease in the contaminant plume over background nitrate concentrations. During the present quarter, nitrate was nondetectable in all wells, except MW-3 and MW-8. Historically the site has yielded low nitrate concentrations; however, plume core wells (MW-4, MW-6, MW-8, and MW-9) yielded higher nitrate concentrations after the remedial excavation likely due to nutrient augmentation at that time. Nitrate in well MW-3 remains roughly within the range of nitrate concentrations prior to remedial excavation and is presumed to approximate natural concentrations in the well vicinity. Nitrate concentrations in well MW-8 (and MW-9) have decreased significantly. The low and nondetectable nitrate concentration in these latter wells during the current event appears to indicate that the nitrate has been essentially fully utilized and generally will not be available for further microbial degradation of hydrocarbons in the vicinity.

As dissolved oxygen concentrations continue to decrease, insoluble manganese ($Mn^{4+}$) is converted to soluble manganese ($Mn^{2+}$). At the subject site, total manganese in groundwater was analyzed by the analytical laboratory as a proxy for soluble manganese. Groundwater from wells MW-8 and MW-9 did not contain detectable concentrations of total manganese. Groundwater from all remaining wells except well MW-1 yielded lower concentrations of soluble manganese during the present monitoring event. Again this is likely due to two different processes. In wells MW-8 and MW-9 this suggests essentially no usage of this degradation pathway. In other wells this may be a natural reduction. This may also be a component of the elevated COD in wells MW-8 and MW-9, as discussed below.

Following the continuing trend of electron acceptors at the site, ferrous iron concentrations were evaluated at the site. The reduction of iron is inhibited by solid-phase manganese; however, as soluble manganese concentrations increase, soluble ferrous iron concentrations are expected to rise as subsurface Mn – Fe reducing microbes convert solid-phase ferric iron to soluble ferrous iron. Soluble manganese did not increase this quarter, and ferrous iron concentrations were non-detectable in all wells during the current monitoring event. Until this monitoring event, well MW-4 has contained higher levels of ferrous iron. This has previously suggested that microbial activity near this well was continuing to utilize iron to degrade contaminants in this area of the site. However, the lack of ferrous iron in all wells, the non-detectable manganese in wells MW-8 and MW-9, and the reduced concentration of DO sitewide suggest that Mn – Fe microbial colonies have not been re-established at the site or within the plume core.

Continuing the trend of electron acceptors at the site, sulfate concentrations were also evaluated as part of the evaluation of RNA chemical parameters. If utilized by the microbes, sulfate concentrations, like nitrate concentrations, decrease in the contaminant plume over background sulfate concentrations and a commensurate decrease in pH is observed as the resulting hydrogen sulfide is converted to a dilute sulfuric acid. This trend has previously been seen at the site; however, only groundwater samples from excavation wells MW-8 and MW-9 yielded markedly lower sulfate concentrations during the present monitoring event. All other wells yielded sulfate concentrations that were essentially unchanged, but that both increased and decreased in comparison to the previous quarterly data. This suggests that sulfate is not currently used at the site, except perhaps in the excavation, to degrade hydrocarbon contaminants at the site. Judged more likely is that the higher COD in these two wells may have produced this sulfate reduction in the two wells. Associated trends in pH values also do not suggest use of this pathway.

As oxygen becomes less prevalent and other pathways are increasingly utilized, the degradation process becomes increasingly anaerobic and methanogenic microbes become more prevalent. To this end, the conversion of carbon dioxide to methane was investigated at the site. The presence of methane in groundwater can be attributed to fermentation of natural organic matter as well as petroleum hydrocarbons. However, if utilized by the microbes, methane would increase relative to carbon dioxide. Background methane concentrations in groundwater found in wells MW-1, MW-3, and MW-7 is low to very low and is presumed to represent the degradation of natural organic matter. Methane concentrations in groundwater from excavation proximal wells MW-4 and MW-6 are slightly elevated in comparison to excavation wells MW-8 and MW-9. It should be noted that the conversion of carbon dioxide to methane is the least preferred pathway for microbial degradation of hydrocarbons principally because the conversion is the most anaerobic. Well MW-5 is slightly anomalous and has not been considered in this analysis. It appears probable that conversion of carbon dioxide to methane is not a significant process of hydrocarbon degradation except perhaps in the area immediately adjacent to the excavated plume core at this site. It can also be noted that there has been a reduction in methane generation over time at the site since the first methane sampling event in December 2004.

BOD and COD were again included in the analytical suite for the second time this quarter as suggested by REGENESIS to help evaluate the success of the ORC applications. All wells returned BOD values below the limits of detection; from upgradient, to excavation proximal, to down gradient wells. This appears to suggest limited biological degradation at the site. COD values were lowest in the upgradient and downgradient wells (MW-1 and MW-3, respectively) and the deeper well (MW-7). COD was slightly more elevated in excavation wells MW-8 and MW-9, in comparison to other excavation proximal wells. This suggests the chemical demand again remains a stronger factor on the use of oxygen than biological demand. This is also suggested by the RNA parameters reviewed above.

In summary, while the supply of DO in groundwater in the plume core appears to be higher than background and pre-remediation concentrations, the concentrations do not appear to be sufficient to allow the re-establishment of aerobic microbes. Within the RNA process, aerobic microbial degradation provides the quickest method to degrade hydrocarbons at a site. Microbial degradation of the groundwater hydrocarbon plume beneath the site appears to be becoming once again oxygen and nitrate limited. Indigenous aerobic microbes do not appear to have reestablished significant densities, yet oxygen appears to be in sufficient concentrations to limit reestablishment of Mn- Fe reducing microbes. Methanogenic microbes (Methanogens) also do not appear to be present at significant densities, except perhaps in the area immediately adjacent to the excavation (MW-5 and MW-6). While the reduction of DO was expected, the re-establishment of the microbes in the plume core was anticipated to be quicker, and was expected to assist in achieving the remedial goal. Each of these indicators suggests that the microbial process has temporarily reached an end point at the site, the remaining ORC has limited capacity to continue to provide DO to aerobic microbes beneath the site, and that additional efforts may be required.

## 5.0 Groundwater Flow Data

Surveyed top-of-casing (TOC) elevations were used to construct a groundwater gradient map (Figure 2). Well MW-1 was not used due to a bent casing noted by field personnel and caused by recent construction activities on the site. While not typically used, wells MW-5 and MW-6 were used to help construct the figure for this monitoring event. Although wells MW-5 and MW-6 are screened at shallower levels, the groundwater levels were not significantly different for these wells for this period. Based on a review of the case file at the ACDEH, groundwater elevations in wells MW-5 and MW-6 historically appear to have been consistently somewhat different than wells MW-1 through MW-4 at the site. However by appearances there is no significant flow direction changes created by excluding these two wells during the current quarter. The water level in well MW-7, presumed to be set in a deeper water-bearing zone (30 to 40 feet bgs), is and has previously been, very similar to the water level in wells set in the middle water-bearing zone (10 to 20 feet bgs; MW-1, MW-3, and MW-4). The similarity of this water level may indicate the well is set in a deeper portion of the same water-bearing zone at the site. It was used again to help generate the gradient and flow direction depicted Figure 2.

Groundwater depths on September 28, 2006, ranged between 3.08 to 4.85 feet below the top of the casings. On average, depth to groundwater remained unchanged (an average <0.001 foot increase) across the site since the June 2006 monitoring and sampling event; however, in four wells an increase in the depth to water was observed, while a decrease was observed in four wells (excluding well MW-1 due to the reported bent casing). Based on these data, the direction of groundwater flow appears to be generally towards the west and south from a ridge high that extends from well MW-5 to MW-7. Historically, groundwater has generally flowed to the south to southwest at the site (see for example the Rose Diagram of historic groundwater flow directions included in the *Additional Site Investigation Data Transmittal*); however, in June 2005 and November 1993, groundwater was documented to have flowed to the east. The average groundwater gradient was calculated to be at approximately 0.012 feet/foot for this monitoring event.

## 6.0 Conclusions and Recommendations

The following conclusions were generated from the available data discussed above:

- Groundwater was collected from all wells during the present monitoring event, and RNA parameters were re-analyzed as planned for the second time since the remedial excavation.

- Groundwater obtained from wells MW-3 and MW-7 yielded nondetectable concentrations of the analytes. Groundwater obtained from wells MW-1 and MW-6 yielded trace concentrations of TPH. This is the second time groundwater from each well has yielded trace concentrations of petroleum hydrocarbons.

- Except for the detection of MTBE at a concentration of 48 Fg/L in well MW-5, this well again yielded nondetectable concentrations of petroleum hydrocarbons, consistent with the majority of historic groundwater analytical results from this perimeter well. The concentration of MTBE is consistent with previously detected concentrations at this location, and continues an increasing concentration trend of this contaminant in groundwater from this well.

- Excavation wells MW-8 and MW-9, in the general location of destroyed plume core well MW-2, yielded concentrations of all analytes at significantly lower concentrations in comparison to concentrations previous detected in groundwater at well MW-2. Individually concentrations of TPH as gasoline and TPH as diesel in these two wells both increased and decreased. In well MW-9, the total TPH trend remained downward. Concentrations in the volatile components of gasoline (BTEX) generally marginally increased, although some compounds underwent modest reductions.

- Groundwater obtained from well MW-4 continued to contain elevated concentrations of all hydrocarbon compounds. This has previously been assumed to have been as a result of the remedial excavation process; however, a close inspection of the specific analytes appears to suggest an undetected residual source outside the area of excavation, or more likely, a fresh release of gasoline hydrocarbons. There are multiple lines of evidence to support these observations, and include the size of the increase; laboratory notes of fresh unweathered hydrocarbons; the lack of MTBE; the rapid decrease of benzene; similar concentrations of TPH as diesel but not of TPH as gasoline between wells MW-4, MW-8, and MW-9; multiple contaminant ratios; and observations of parked cars awaiting repair at the auto shop across the street.

- Microbial use of petroleum hydrocarbons as a food source has historically been principally limited by the concentration of DO in the groundwater; it is the preferred electron acceptor for the biodegradation of hydrocarbons. Nitrate concentrations in groundwater have also historically been a limiting factor at the site.

- During the current monitoring event, RNA chemical parameters appear to indicate a two-fold process at the site; a natural change in selected parameters as seen most clearly in perimeter wells, and a concurrent reduction in RNA chemical parameters within the plume core related to decreasing DO concentrations from ORC, and nitrate concentrations from the introduction of bionutrients. While DO concentrations in the plume remain above pre-remedial concentrations, post-purge DO concentrations in most wells shows a decreasing trend over the three post-remediation monitoring events.

- While the supply of DO in groundwater in the plume core appears to be higher than background and pre-remediation concentrations, the concentrations do not appear to be sufficient to allow the re-establishment of aerobic microbes. Within the RNA process, aerobic microbial degradation provides the quickest method to degrade hydrocarbons at a site. Microbial degradation of the groundwater hydrocarbon plume beneath the site appears to be becoming once again oxygen and nitrate limited. Indigenous aerobic microbes do not appear to have reestablished significant densities, and oxygen appears to be in sufficient concentrations as to limit reestablishment of Mn-Fe reducing microbes. Methanogenic microbes (Methanogens) also do not appear to be present at significant densities, except perhaps in the area immediately adjacent to the excavation (MW-5 and MW-6). While the reduction of DO was expected, the re-establishment of the microbes in the plume core was anticipated to be quicker, and was expected to assist in achieving the remedial goal. The RNA parameters predominately suggest that the microbial process has temporarily reached an end point at the site, the remaining ORC has limited capacity to continue to provide DO to aerobic microbes beneath the site, and that additional augmentation may be required.

- All wells returned BOD values below the limits of detection, apparently indicating limited biological demand while elevated COD values indicate the chemical demand for oxygen remains a stronger factor than biological demand.

- During the current quarter, groundwater flow appears to be towards the west to south from a ridge high extending from well MW-5 to MW-7. The average groundwater gradient was calculated at 0.012 feet/foot.

The following recommendations were generated from the available data discussed above:

- As a cost savings measure, analysis for RNA parameters (carbon dioxide, nitrate, sulfate, methane, manganese, potassium, total phosphorous, BOD, and COD) can again be temporarily stopped. Field measurements including DO, ORP, and ferrous iron can be used as proxies for the extent of biological or chemical degradation in groundwater beneath the subject site. Analytical testing for RNA parameters can be resumed in the future as it is warranted.

$ The next quarterly groundwater sampling event is scheduled to occur in December 2006. Analysis of groundwater collected from well MW-4 for fuel oxygenates by EPA Method 8260 should be included in the analytical program.

$ A subsurface investigation should be performed in an attempt to determine the source of the hydrocarbons in well MW-4. This would consist of the installation of a minimum of two to three Geoprobe bores around the well, or slightly upgradient towards the location of the excavation.

$ A copy of this letter report should be forwarded to:

Mr. Barney Chan
Alameda County Health Care Services Agency
Environmental Protection Division

1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

## 7.0 Limitations

Services performed by Blymyer Engineers have been provided in accordance with generally accepted professional practices for the nature and conditions of the work completed in the same or similar localities, at the time the work was performed. The scope of work for the project was conducted within the limitations prescribed by the client. This report is not meant to represent a legal opinion. No other warranty, expressed or implied, is made. This report was prepared for the sole use of the client.
Please call Mark Detterman at (510) 521-3773 with any questions or comments.

Sincerely,

Blymyer Engineers, Inc.

By:________________________________
Mark Detterman, C.E.G. 1788
Senior Geologist

And:________________________________
Michael S. Lewis
Vice President, Technical Services

Enclosures:

| | |
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| Table I: | Summary of Groundwater Elevation Measurements |
| Table II: | Summary of Groundwater Sample Hydrocarbon Analytical Results |
| Table III: | Summary of Groundwater Sample Fuel Additive Analytical Results |
| Table IV: | Summary of Groundwater Intrinsic Bioremediation Field Results |
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| Figure 1: | Site Location Map |
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| Figure 3: | TPH Concentration and Groundwater Elevation vs. Time in Wells MW-2 / MW-9 |

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| Appendix A: | *Standard Operating Procedures*, Blaine Tech Services, Inc. |
| Appendix B: | *Purge Drum Inventory Log, Test Equipment Calibration Log, Wellhead Inspection Checklist, Well Gauging Data*, and *Repair Data Sheet*, Dated September 27 and 28, 2006 |
| Appendix C: | Analytical Laboratory Report, McCampbell Analytical, Inc., Dated October 4, and 11, 2006 |

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Please call Mark Detterman at (510) 521-3773 with any questions or comments.

Sincerely,

Blymyer Engineers, Inc.

By: Mark E.
Mark Detterman, C.E.G. 1788
Senior Geologist

MARK E. DETTERMAN
No. 1788

And:
Michael S. Lewis
Vice President, Technical Services

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# *Tables*

## Table I, Summary of Groundwater Elevation Measurements
## BEI Job No. 202016, Dolan Rentals
## 6393 Scarlett Court, Dublin, California

| Well ID | Date | TOC Elevation (feet) | Depth to Water (feet) | Water Surface Elevation (feet) |
|---|---|---|---|---|
| MW-1 | 11/27/1991 | 326.61 | 4.82 | 321.79 |
| | 9/30/1992 | | 5.34 | 321.27 |
| | 4/7/1994 | | 3.38 | 323.23 |
| | 8/12/1994 | | 4.23 | 322.38 |
| | 11/29/1994 | | 3.44 | 323.17 |
| | 3/21/1995 | | 1.00 | 325.61 |
| | 5/22/1995 | | 2.20 | 324.41 |
| | 8/24/1995 | | 3.45 | 323.16 |
| | 2/12/1996 | | 1.95 | 324.66 |
| | 2/5/1997 | | Data | Missing |
| | 8/6/1997 | | 3.60 | 323.01 |
| | 6/6/02* | | 2.89 | 323.72 |
| | 9/23/2002 | | 3.48 | 323.13 |
| | 12/13/2002 | | 3.18 | 323.43 |
| | 12/14/2004 | | 2.76 | 323.85 |
| | 3/23/2005 | | 1.14 | 325.47 |
| | 6/22/2005 | 329.41 | 2.58 | 326.83 |
| | 7/18/2005 | | 2.21 | 327.20 |
| | 9/6/2005 | | 3.30 | 326.11 |
| | 3/2/2006 | | 2.32 | 327.09 |
| | 6/12/2006 | | 3.61 | 325.80 |
| | 9/28/2006 | | 3.34 [1] | 326.07 |

| **Table I, Summary of Groundwater Elevation Measurements<br>BEI Job No. 202016, Dolan Rentals<br>6393 Scarlett Court, Dublin, California** | | | | |
|---|---|---|---|---|
| Well ID | Date | TOC Elevation (feet) | Depth to Water (feet) | Water Surface Elevation (feet) |
| MW-2 | 11/27/1991 | 326.67 | 4.92 | 321.75 |
| | 9/30/1992 | | 5.42 | 321.25 |
| | 4/7/1994 | | 3.48 | 323.19 |
| | 8/12/1994 | | 4.18 | 322.49 |
| | 11/29/1994 | | 3.76 | 322.91 |
| | 3/21/1995 | | 1.25 | 325.42 |
| | 5/22/1995 | | 2.20 | 324.47 |
| | 8/24/1995 | | 3.57 | 323.10 |
| | 2/12/1996 | | 2.60 | 324.07 |
| | 2/5/1997 | | 1.72 | 324.95 |
| | 8/6/1997 | | 3.72 | 322.95 |
| | 6/6/02* | | 3.46 | 323.21 |
| | 9/23/2002 | | 4.14 | 322.53 |
| | 12/13/2002 | | 3.45 | 323.22 |
| | 12/14/2004 | | 2.96 | 323.71 |
| | 3/23/2005 | | 1.83 | 324.84 |
| | 6/22/2005 | 329.46 | 3.82 | 325.64 |
| | 7/18/2005 | | 3.55 | 325.91 |
| | 9/6/2005 | | 3.70 | 325.76 |
| | 3/2/2006 | | Destroyed | Destroyed |
| | 6/12/2006 | | Destroyed | Destroyed |
| | 9/28/2006 | | Destroyed | Destroyed |

## Table I, Summary of Groundwater Elevation Measurements
## BEI Job No. 202016, Dolan Rentals
## 6393 Scarlett Court, Dublin, California

| Well ID | Date | TOC Elevation (feet) | Depth to Water (feet) | Water Surface Elevation (feet) |
|---|---|---|---|---|
| MW-3 | 11/27/1991 | 326.58 | 4.96 | 321.62 |
| | 9/30/1992 | | 5.46 | 321.12 |
| | 4/7/1994 | | 3.66 | 322.92 |
| | 8/12/1994 | | 4.37 | 322.21 |
| | 11/29/1994 | | 3.60 | 322.98 |
| | 3/21/1995 | | 1.62 | 324.96 |
| | 5/22/1995 | | 2.73 | 323.85 |
| | 8/24/1995 | | 3.76 | 322.82 |
| | 2/12/1996 | | 2.45 | 324.13 |
| | 2/5/1997 | | 1.99 | 324.59 |
| | 8/6/1997 | | 3.83 | 322.75 |
| | 6/6/02* | | 3.66 | 322.92 |
| | 9/23/2002 | | 4.66 | 321.92 |
| | 12/13/2002 | | 3.66 | 322.92 |
| | 12/14/2004 | | 3.52 | 323.06 |
| | 3/23/2005 | | 1.83 | 324.75 |
| | 6/22/2005 | 329.37 | 3.99 | 325.38 |
| | 7/18/2005 | | 3.60 | 322.98 |
| | 9/6/2005 | | 4.42 | 324.95 |
| | 3/2/2006 | | 2.50 | 326.87 |
| | 6/12/2006 | | 3.52 | 325.85 |
| | 9/28/2006 | | 3.88 | 325.49 |

## Table I, Summary of Groundwater Elevation Measurements
## BEI Job No. 202016, Dolan Rentals
## 6393 Scarlett Court, Dublin, California

| Well ID | Date | TOC Elevation (feet) | Depth to Water (feet) | Water Surface Elevation (feet) |
|---|---|---|---|---|
| MW-4 | 11/27/1991 | 326.92 | 5.26 | 321.66 |
| | 9/30/1992 | | 5.78 | 321.14 |
| | 4/7/1994 | | 4.02 | 322.90 |
| | 8/12/1994 | | 4.81 | 322.11 |
| | 11/29/1994 | | 4.39 | 322.53 |
| | 3/21/1995 | | 1.80 | 325.12 |
| | 5/22/1995 | | 3.07 | 323.85 |
| | 8/24/1995 | | 4.09 | 322.83 |
| | 2/12/1996 | | 2.80 | 324.12 |
| | 2/5/1997 | | 2.32 | 324.60 |
| | 8/6/1997 | | 4.14 | 322.78 |
| | 6/6/02* | | 3.76 | 323.16 |
| | 9/23/2002 | | 4.14 | 322.78 |
| | 12/13/2002 | | 3.90 | 323.02 |
| | 12/14/2004 | | 3.68 | 323.24 |
| | 3/23/2005 | | 1.93 | 324.99 |
| | 6/22/2005 | 329.70 | 3.65 | 326.05 |
| | 7/18/2005 | | 3.69 | 323.23 |
| | 9/6/2005 | | 3.97 | 325.73 |
| | 3/2/2006 | | 2.90 | 326.80 |
| | 6/12/2006 | | 3.88 | 325.82 |
| | 9/28/2006 | | 4.23 | 325.47 |

## Table I, Summary of Groundwater Elevation Measurements
## BEI Job No. 202016, Dolan Rentals
## 6393 Scarlett Court, Dublin, California

| Well ID | Date | TOC Elevation (feet) | Depth to Water (feet) | Water Surface Elevation (feet) |
|---|---|---|---|---|
| MW-5 | 3/21/1995 | 326.50 | 2.10 | 324.40 |
| | 5/22/1995 | | 2.93 | 323.57 |
| | 8/24/1995 | | 1.57 | 324.93 |
| | 2/12/1996 | | 2.78 | 323.72 |
| | 2/5/1997 | | 2.24 | 324.26 |
| | 8/6/1997 | | 3.02 | 323.48 |
| | 6/6/02* | ** | 2.79 | NM |
| | 9/23/2002 | | 3.07 | NM |
| | 12/13/2002 | | 3.14 | NM |
| | 12/14/2004 | | 2.92 | NM |
| | 3/23/2005 | | 2.39 | NM |
| | 6/22/2005 | 329.16 | 2.99 | 326.17 |
| | 7/18/2005 | | 3.39 | 325.77 |
| | 9/6/2005 | | 3.07 | 326.09 |
| | 3/2/2006 | | 2.74 | 326.42 |
| | 6/12/2006 | | 3.36 | 325.80 |
| | 9/28/2006 | | 3.33 | 325.83 |
| MW-6 | 3/21/1995 | 327.23 | 3.24 | 323.99 |
| | 5/22/1995 | | 4.70 | 322.53 |
| | 8/24/1995 | | 4.95 | 322.28 |
| | 2/12/1996 | | 4.50 | 322.73 |
| | 2/5/1997 | | 3.68 | 323.55 |
| | 8/6/1997 | | 4.79 | 322.44 |
| | 6/6/02* | | 4.81 | 322.42 |

## Table I, Summary of Groundwater Elevation Measurements
## BEI Job No. 202016, Dolan Rentals
## 6393 Scarlett Court, Dublin, California

| Well ID | Date | TOC Elevation (feet) | Depth to Water (feet) | Water Surface Elevation (feet) |
|---|---|---|---|---|
| MW-6 | 9/23/2002 | 327.23 | 5.10 | 322.13 |
| | 12/13/2002 | | 4.88 | 322.35 |
| | 12/14/2004 | | 4.61 | 322.62 |
| | 3/23/2005 | | 3.40 | 323.83 |
| | 6/22/2005 | 330.02 | 4.72 | 325.30 |
| | 7/18/2005 | | 2.65 | 327.37 |
| | 9/6/2005 | | 4.98 | 325.04 |
| | 3/2/2006 | | 3.89 | 326.13 |
| | 6/12/2006 | | 4.73 | 325.29 |
| | 9/28/2006 | | 4.85 | 325.17 |
| MW-7 | 7/18/2005 | ** | 6.38 | --- |
| | 9/6/2005 | | 6.78 | --- |
| | 3/2/2006 | 330.25 | 3.33 | 326.92 |
| | 6/12/2006 | | 4.18 | 326.07 |
| | 9/28/2006 | | 4.52 | 325.73 |
| MW-8 | 3/2/2006 | 328.93 | 1.54 | 327.39 |
| | 6/12/2006 | | 3.69 | 325.24 |
| | 9/28/2006 | | 3.10 | 325.83 |
| MW-9 | 3/2/2006 | 328.67 | 1.54 | 327.13 |
| | 6/12/2006 | | 3.68 | 324.99 |
| | 9/28/2006 | | 3.08 | 325.59 |

| **Table I, Summary of Groundwater Elevation Measurements<br>BEI Job No. 202016, Dolan Rentals<br>6393 Scarlett Court, Dublin, California** | | | | |
|---|---|---|---|---|
| Well ID | Date | TOC Elevation (feet) | Depth to Water (feet) | Water Surface Elevation (feet) |

Notes:

TOC = Top of Casing
* = Initial data set collected under direction of Blymyer Engineers, Inc.
** = Surveyed elevation not available
[1] = Sampling form indicates casing is bent.
NM = Not measured
[1] = Resurveyed on April 13, 2005 by CSS Environmental Services, Inc.
[2] = Surveyed on February 7, 2006 by CSS Environmental Services, Inc.

Elevations in feet above mean sea level

## Table II, Summary of Groundwater Sample Hydrocarbon Analytical Results
## BEI Job No. 202016, Dolan Rentals
## 6393 Scarlett Court, Dublin, California

| Well ID | Sample Date | Modified EPA Method 8015 (µg/L) | | EPA Method 8020 or 8021B (µg/L) | | | | |
|---|---|---|---|---|---|---|---|---|
| | | TPH as Gasoline | TPH as Diesel | Benzene | Toluene | Ethylbenzene | Total Xylenes | MTBE |
| RWQCB ESLs; Table F-1a: Groundwater Screening Levels (groundwater IS a current or potential drinking water resource) | | 100 | 100 | 1 | 40 | 30 | 20 | 5 |
| MW-1 | 11/27/1991 | <50 | NA | <0.3 | <0.3 | <0.3 | <0.3 | NA |
| | 9/30/1992 | <50 | NA | <0.3 | <0.3 | <0.3 | <0.3 | NA |
| | 4/7/1994 | <50 | NA | <0.5 | <0.5 | <0.5 | <0.5 | NA |
| | 8/12/1994 | <50 | NA | **1** | **1** | <0.3 | <2 | NA |
| | 11/29/1994 | <50 | NA | <0.5 | <0.5 | <0.5 | <2 | NA |
| | 3/21/1995 | <50 | NA | <0.5 | <0.5 | <0.5 | <2 | NA |
| | 5/22/1995 | NA | <50 | <0.5 | <0.5 | <0.5 | <2 | NA |
| | 8/24/1995 | NA | <50 | <0.5 | <0.5 | <0.5 | <2 | NA |
| | 2/12/1996 | NA | <50 | <0.5 | <0.5 | <0.5 | <2 | NA |
| | 6/6/02* | NA | NA | NA | NA | NA | NA | NA |
| | 9/23/2002 | NA | NA | NA | NA | NA | NA | NA |
| | 12/13/2002 | NA | NA | NA | NA | NA | NA | NA |
| | 12/14/2004 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 |
| | 3/23/2005 | NA | NA | NA | NA | NA | NA | NA |
| | 6/22/2005 | NA | NA | NA | NA | NA | NA | NA |
| | 9/6/2005 | NA | NA | NA | NA | NA | NA | NA |
| | 3/2/2006 | **62** $^{k}$ | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 |
| | 6/1/2006 | NA | NA | NA | NA | NA | NA | NA |
| | 9/28/2006 | **78** $^{k}$ | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 |

## Table II, Summary of Groundwater Sample Hydrocarbon Analytical Results
## BEI Job No. 202016, Dolan Rentals
## 6393 Scarlett Court, Dublin, California

| Well ID | Sample Date | Modified EPA Method 8015 (µg/L) | | EPA Method 8020 or 8021B (µg/L) | | | | |
|---|---|---|---|---|---|---|---|---|
| | | TPH as Gasoline | TPH as Diesel | Benzene | Toluene | Ethylbenzene | Total Xylenes | MTBE |
| RWQCB ESLs; Table F-1a: Groundwater Screening Levels (groundwater IS a current or potential drinking water resource) | | 100 | 100 | 1 | 40 | 30 | 20 | 5 |
| MW-2 | 11/27/1991 | NA | **170,000** | **24,000** | **13,000** | **3,500** | **16,000** | NA |
| | 9/30/1992 | NA | **120,000** | **24,000** | **15,000** | **3,800** | **17,000** | NA |
| | 4/7/1994 | NA | **120,000** | **21,000** | **14,000** | **4,300** | **21,000** | NA |
| | 8/12/1994 | NA | **140,000** | **17,000** | **10,000** | **4,300** | **18,000** | NA |
| | 11/29/1994 | NA | **90,000** | **17,000** | **7,500** | **3,400** | **15,000** | NA |
| | 3/21/1995 | NA | **83,000** | **17,000** | **8,000** | **3,800** | **17,000** | NA |
| | 5/22/1995 | NA | **82,000** | **14,000** | **6,000** | **4,000** | **16,000** | NA |
| | 8/24/1995 | NA | **86,000** | **13,000** | **8,100** | **3,700** | **16,000** | NA |
| | 2/12/1996 | NA | **78,000** | **15,000** | **8,100** | **4,200** | **18,000** | NA |
| | 2/5/1997 | NA | **58,000** | **11,000** | **6,900** | **3,500** | **15,000** | **480** |
| | 8/6/1997 | NA | **66,000** | **7,000** | **9,200** | **3,500** | **16,000** | <500 |
| | 6/6/02* | NA | **25,000** [a] | **2,900** | 50 | **2,700** | **2,200** | <250 |
| | 9/23/2002 | **4,300** [c] | **14,000** [b] | **2,700** | 81 | **2,100** | **1,800** | <250 |
| | 12/13/2002 | **4,000** [c] | **26,900** | **1,120** | 91 | **1,480** | **2,370** | **197 d** |
| | 12/14/2004 | **7,600** [f, g] | **21,000** [e] | **1,700** | 120 | **1,600** | **2,400** | <60 |
| | 3/23/2005 | **15,000** [f, g, i] | **27,000** [e i] | **1,400** | **170** | **1,700** | **2,500** | <170 |
| | 6/22/2005 | **1,200** [g] | **5,800** [e] | **53** | **46** | **570** | **58** | <50 |
| | 9/6/2005 | **4,900** [f, g, j] | **14,000** [e] | **1,000** | **40** | **1,500** | **680** | <100 |
| | 3/2/2006 | NS | NS | NS | NS | NS | NS | NS |
| | 6/1/2006 | NS | NS | NS | NS | NS | NS | NS |
| | 9/28/2006 | NS | NS | NS | NS | NS | NS | NS |

## Table II, Summary of Groundwater Sample Hydrocarbon Analytical Results
## BEI Job No. 202016, Dolan Rentals
## 6393 Scarlett Court, Dublin, California

| Well ID | Sample Date | Modified EPA Method 8015 (µg/L) | | EPA Method 8020 or 8021B (µg/L) | | | | |
|---|---|---|---|---|---|---|---|---|
| | | TPH as Gasoline | TPH as Diesel | Benzene | Toluene | Ethylbenzene | Total Xylenes | MTBE |
| RWQCB ESLs; Table F-1a: Groundwater Screening Levels (groundwater IS a current or potential drinking water resource) | | 100 | 100 | 1 | 40 | 30 | 20 | 5 |
| MW-3 | 11/27/1991 | NA | <50 | <0.3 | <0.3 | <0.3 | <0.3 | NA |
| | 9/30/1992 | NA | <50 | <0.3 | <0.3 | <0.3 | <0.3 | NA |
| | 4/7/1994 | NA | <50 | **2.5** | **5.5** | **0.9** | **5.1** | NA |
| | 8/12/1994 | NA | <50 | <0.5 | <0.5 | <0.3 | <2 | NA |
| | 11/29/1994 | NA | <50 | <0.5 | <0.5 | <0.5 | <2 | NA |
| | 3/21/1995 | NA | <50 | <0.5 | <0.5 | <0.5 | <2 | NA |
| | 5/22/1995 | NA | <50 | <0.5 | <0.5 | <0.5 | <2 | NA |
| | 8/24/1995 | NA | <50 | <0.5 | <0.5 | <0.5 | <2 | NA |
| | 2/12/1996 | NA | <50 | <0.5 | <0.5 | <0.5 | <2 | NA |
| | 2/5/1997 | NA | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5 |
| | 6/6/02* | NA | NA | NA | NA | NA | NA | NA |
| | 9/23/2002 | NA | NA | NA | NA | NA | NA | NA |
| | 12/13/2002 | NA | NA | NA | NA | NA | NA | NA |
| | 12/14/2004 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 |
| | 3/23/2005 | NA | NA | NA | NA | NA | NA | NA |
| | 6/22/2005 | NA | NA | NA | NA | NA | NA | NA |
| | 9/6/2005 | NA | NA | NA | NA | NA | NA | NA |
| | 3/2/2006 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 |
| | 6/1/2006 | NA | NA | NA | NA | NA | NA | NA |
| | 9/27/2006 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 |

**Table II, Summary of Groundwater Sample Hydrocarbon Analytical Results**
**BEI Job No. 202016, Dolan Rentals**
**6393 Scarlett Court, Dublin, California**

| Well ID | Sample Date | Modified EPA Method 8015 (µg/L) | | EPA Method 8020 or 8021B (µg/L) | | | | |
|---|---|---|---|---|---|---|---|---|
| | | TPH as Gasoline | TPH as Diesel | Benzene | Toluene | Ethylbenzene | Total Xylenes | MTBE |
| RWQCB ESLs; Table F-1a: Groundwater Screening Levels (groundwater IS a current or potential drinking water resource) | | 100 | 100 | 1 | 40 | 30 | 20 | 5 |
| MW-4 | 11/27/1991 | NA | **11,000** | **100** | **0.7** | **250** | **330** | NA |
| | 9/30/1992 | NA | **380** | **3.5** | **2.4** | **8.9** | **3.4** | NA |
| | 4/7/1994 | NA | **1,100** | **61** | **5.5** | **17** | **12** | NA |
| | 8/12/1994 | NA | **1,000** | **3** | **1** | **8** | **4** | NA |
| | 11/29/1994 | NA | **1,100** | **2** | <0.5 | **10** | **6** | NA |
| | 3/21/1995 | NA | **1,400** | **200** | **5** | **66** | **18** | NA |
| | 5/22/1995 | NA | **1,200** | **60** | **1** | **12** | **8** | NA |
| | 8/24/1995 | NA | **400** | **1** | <0.5 | **1** | <2 | NA |
| | 2/12/1996 | NA | **1,500** | **130** | <0.5 | **120** | **51** | NA |
| | 2/5/1997 | NA | **1,200** | **250** | **4.9** | **94** | **12** | **16** |
| | 8/6/1997 | NA | **330** | **1.5** | <0.5 | <0.5 | <0.5 | <5 |
| | 6/6/02* | NA | <50 | **1.7** | <0.5 | <0.5 | <0.5 | <2.5 |
| | 9/23/2002 | <48 | <50 | <0.5 | **1.3** | <0.5 | <0.5 | <2.5 |
| | 12/13/2002 | **86**[c] | <50 | <0.5 | <0.5 | <0.5 | <1.5 | <0.5 |
| | 12/14/2004 | <50 | **95**[h] | **2.6** | <0.5 | <0.5 | <0.5 | <5.0 |
| | 3/23/2005 | <50 | **120**[h] | <0.5 | **5** | <0.5 | <0.5 | <5.0 |
| | 6/22/2005 | <50 | **180**[e] | **1.7** | **7.5** | <0.5 | <0.5 | <5.0 |
| | 9/6/2005 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 |
| | 3/2/2006 | **1,600**[e] | **220**[g] | **47** | **4.1** | **1.6** | **19** | <20 |
| | 6/1/2006 | **1,000**[e] | **250**[f, g] | **22** | **2.8** | **3.9** | **0.59** | <5.0 |
| | 9/27/2006 | **1,400**[e] | **220**[f, g] | **8.5** | **7.3** | **2.4** | <0.5 | <15 |

**Table II, Summary of Groundwater Sample Hydrocarbon Analytical Results**
**BEI Job No. 202016, Dolan Rentals**
**6393 Scarlett Court, Dublin, California**

| Well ID | Sample Date | Modified EPA Method 8015 (µg/L) | | EPA Method 8020 or 8021B (µg/L) | | | | |
|---|---|---|---|---|---|---|---|---|
| | | TPH as Gasoline | TPH as Diesel | Benzene | Toluene | Ethylbenzene | Total Xylenes | MTBE |
| RWQCB ESLs; Table F-1a: Groundwater Screening Levels (groundwater IS a current or potential drinking water resource) | | 100 | 100 | 1 | 40 | 30 | 20 | 5 |
| MW-5 | 3/21/1995 | NA | <50 | <0.5 | <0.5 | <0.5 | <2 | NA |
| | 5/22/1995 | NA | <50 | <0.5 | <0.5 | <0.5 | <2 | NA |
| | 8/24/1995 | NA | <50 | <0.5 | <0.5 | <0.5 | <2 | NA |
| | 2/12/1996 | NA | <50 | <0.5 | <0.5 | <0.5 | <2 | NA |
| | 2/5/1997 | NA | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5 |
| | 6/6/02* | NA | NA | NA | NA | NA | NA | NA |
| | 9/23/2002 | **310**[c] | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <2.5 |
| | 12/13/2002 | **97**[c] | <50 | <0.5 | <0.5 | <0.5 | <1.5 | **0.720 d** |
| | 12/14/2004 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | **12** |
| | 3/23/2005 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | **23** |
| | 6/22/2005 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | **31** |
| | 9/6/2005 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | **32** |
| | 3/2/2006 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | **30** |
| | 6/1/2006 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | **44** |
| | 9/28/2006 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | **48** |

## Table II, Summary of Groundwater Sample Hydrocarbon Analytical Results
## BEI Job No. 202016, Dolan Rentals
## 6393 Scarlett Court, Dublin, California

| Well ID | Sample Date | Modified EPA Method 8015 (µg/L) | | EPA Method 8020 or 8021B (µg/L) | | | | |
|---|---|---|---|---|---|---|---|---|
| | | TPH as Gasoline | TPH as Diesel | Benzene | Toluene | Ethylbenzene | Total Xylenes | MTBE |
| RWQCB ESLs; Table F-1a: Groundwater Screening Levels (groundwater IS a current or potential drinking water resource) | | 100 | 100 | 1 | 40 | 30 | 20 | 5 |
| MW-6 | 3/21/1995 | NA | <50 | <0.5 | <0.5 | <0.5 | <2 | NA |
| | 5/22/1995 | NA | <50 | <0.5 | <0.5 | <0.5 | <2 | NA |
| | 8/24/1995 | NA | <50 | <0.5 | <0.5 | <0.5 | <2 | NA |
| | 2/12/1996 | NA | <50 | <0.5 | <0.5 | <0.5 | <2 | NA |
| | 2/5/1997 | NA | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5 |
| | 6/6/02* | NA | NA | NA | NA | NA | NA | NA |
| | 9/23/2002 | NA | NA | NA | NA | NA | NA | NA |
| | 12/13/2002 | NA | NA | NA | NA | NA | NA | NA |
| | 12/14/2004 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 |
| | 3/23/2005 | NA | NA | NA | NA | NA | NA | NA |
| | 6/22/2005 | NA | NA | NA | NA | NA | NA | NA |
| | 9/6/2005 | NA | NA | NA | NA | NA | NA | NA |
| | 3/2/2006 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 |
| | 6/1/2006 | **50** [e] | <50 | **0.84** | <0.5 | <0.5 | <0.5 | <5.0 |
| | 9/27/2006 | <50 | **61** [f] | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 |

# Table II, Summary of Groundwater Sample Hydrocarbon Analytical Results
## BEI Job No. 202016, Dolan Rentals
## 6393 Scarlett Court, Dublin, California

| Well ID | Sample Date | Modified EPA Method 8015 (µg/L) | | EPA Method 8020 or 8021B (µg/L) | | | | |
|---|---|---|---|---|---|---|---|---|
| | | TPH as Gasoline | TPH as Diesel | Benzene | Toluene | Ethylbenzene | Total Xylenes | MTBE |
| RWQCB ESLs; Table F-1a: Groundwater Screening Levels (groundwater IS a current or potential drinking water resource) | | 100 | 100 | 1 | 40 | 30 | 20 | 5 |
| MW-7 | 7/18/2005 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 |
| | 9/6/2005 | <50 | <50 | **0.7** | <0.5 | **1.2** | <0.5 | <5.0 |
| | 3/2/2006 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 |
| | 6/1/2006 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 |
| | 9/27/2006 | <50 | <50 | <0.5 | <0.5 | <0.5 | <0.5 | <5.0 |
| MW-8 | 3/2/2006 | **590** [e] | **550** [f g] | **6.2** | **2.7** | **0.67** | **21** | <5.0 |
| | 6/1/2006 | **97** [k] | **250** [f, j] | <0.5 | <0.5 | <0.5 | **1.1** | <5.0 |
| | 9/28/2006 | **150** [e] | **300** [f, g, j] | **3** | **1.2** | **1.1** | **7.2** | <5.0 |
| MW-9 | 3/2/2006 | **280** [e] | **430** [f g] | **2.6** | **0.96** | **1** | **10** | <5.0 |
| | 6/1/2006 | **680** [k] | **180** [f, j] | **0.85** | <0.5 | **1.9** | **3.9** | <5.0 |
| | 9/28/2006 | **150** [e] | **530** [f, g, j] | **0.95** | **0.69** | **0.87** | **6.7** | <5.0 |

## Table II, Summary of Groundwater Sample Hydrocarbon Analytical Results
## BEI Job No. 202016, Dolan Rentals
## 6393 Scarlett Court, Dublin, California

| Well ID | Sample Date | Modified EPA Method 8015 (µg/L) | | EPA Method 8020 or 8021B (µg/L) | | | | |
|---|---|---|---|---|---|---|---|---|
| | | TPH as Gasoline | TPH as Diesel | Benzene | Toluene | Ethylbenzene | Total Xylenes | MTBE |
| RWQCB ESLs; Table F-1a: Groundwater Screening Levels (groundwater IS a current or potential drinking water resource) | | 100 | 100 | 1 | 40 | 30 | 20 | 5 |

Notes:
ug/L = micrograms per liter
TPH = Total Petroleum Hydrocarbons
MTBE = Methyl *tert* -Butyl Ether
RWQCB = California Regional Water Quality Control Board, San Francisco Bay Region
ESL = Environmental Screening Level
ND = Not Detected (method reporting limit not known)
NA = Not Analyzed
NS = Not Sampled
<*x* = Analyte not detected at reporting limit *x*
* = Initial data set collected under direction of Blymyer Engineers, Inc.
a = Laboratory note indicates the result is an unidentified hydrocarbon within the C6 to C10 range.
b = Laboratory note indicates the result is gasoline within the C6 to C10 range.
c = Laboratory note indicates the result is a hydrocarbon within the diesel range but that it does not represent the pattern of the requested fuel.
d = MTBE analysis by EPA Method 8260B yielded a non-detectable concentration at a detection
e = Laboratory note indicates that unmodified or weakly modified gasoline is significant.
f = Laboratory note indicates that diesel range compounds are significant, with no recognizable pattern.
g = Laboratory note indicates that gasoline range compounds are significant.
h = Laboratory note indicates that no recognizable pattern is present.
i = Laboratory note indicates that a lighter than water immiscible sheen / product is present.
j = Laboratory note indicates that oil range compounds are significant.
k = Laboratory note indicates one to a few isolated non-target peaks are present.

Bold results indicate detectable analyte concentrations.
Note: Shaded cell indicates that detected concentration exceeds ESL

| **Table III, Summary of Groundwater Sample Fuel Additive Analytical Results<br>BEI Job No. 202016, Dolan Rentals<br>6393 Scarlett Court, Dublin, California** | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Well ID | Sample Date | EPA Method 8260B (ug/L) | | | | | | | | |
| | | TAME | TBA | EDB | 1,2-DCA | DIPE | Ethanol | ETBE | Methanol | MTBE |
| RWQCB Groundwater ESLs Table F-1a: Groundwater Screening Levels (groundwater IS a current or potential drinking water source) | | NV | 12 | 0.05 | 0.5 | NV | 50,000 | NV | NV | 5.0 |
| MW-2 | 12/13/2002 | <0.50 | <2,000 | NA | NA | <0.50 | NA | <0.50 | NA | <0.50 |
| | 3/23/2005 | <5.0 | <50 | <5.0 | **5.4** | <5.0 | <500 | <5.0 | <5,000 | <5.0 |
| MW-5 | 12/14/2004 | <0.5 | <5.0 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | <500 | **12** |
| | 3/2/2006 | <0.5 | <5.0 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | <500 | **28*** |
| | 6/1/2006 | <0.5 | <5.0 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | <500 | **40*** |
| | 9/28/2006 | <0.5 | <5.0 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | <500 | **48** |

Notes:
TAME = Methyl tert-Amyl Ether
TBA = tert-Butyl Alcohol
EDB = 1,2-Dibromoethane
1,2-DCA = 1,2-Dichloroethane
DIPE = Di-isopropyl ether
ETBE = Ethyl tert-butyl ether
MTBE = Methly tert-butyl ether
(µg/L) = Micrograms per liter
NA = Not analyzed
NV = No value
* = Differs from result yielded by EPA 8021B

Bold results indicate detectable analyte concentrations.
Note: Shaded cell indicates that detected concentration exceeds ESL

## Table IV, Summary of Groundwater Intrinsic Bioremediation Field Results
## BEI Job No. 202016, Dolan Rentals
## 6393 Scarlett Court, Dublin, California

| Well ID | Sample Date | Field Meter | Field Meter | Field Test Kit | Field Meter | Field Meter |
|---|---|---|---|---|---|---|
| | | Dissoved Oxygen (mg/L) | Oxidation Reduction Potential (mV) | Ferrous Iron (Fe 2+) | Field Temperature (oC) | Field pH pH units |
| MW-1 | 12/14/2004 | 0.2 / 2.0 | 224 / 160 | 0.1 | 18.8 | 6.9 |
| | 3/23/2005 | 5.1 / 0.2 | 105 / 102 | 0.0 | 17.3 | 6.9 |
| | 6/22/2005 | 0.51 / 0.28 | -208.2 / -137.4 | 0.3 | 19.6 | 6.7 |
| | 3/2/2006 | 0.53 / 0.38 | 441.3 / 448.7 | 0.0 | 17.4 | 6.8 |
| | 6/1/2006 | NS | NS | NS | NS | NS |
| | 9/28/2006 | 0.74 / 0.45 | -11.9 / -129.5 | >0.2 | 22.6 | 6.8 |
| MW-2 | 12/14/2004 | 0.3 / 2.0 | -160 / -148 | 1.4 | 18.4 | 6.9 |
| | 3/23/2005 | 0.1 / 0.1 | -133 / -145 | 2.0 | 16.6 | 7.0 |
| | 6/22/2005 | 0.55 / 0.11 | -208.5 / -229.6 | 1.0 | 22.6 | 7.0 |
| | 3/2/2006 | NS | NS | NS | NS | NS |
| | 6/1/2006 | NS | NS | NS | NS | NS |
| | 9/28/2006 | NS | NS | NS | NS | NS |
| MW-3 | 12/14/2004 | 0.3 / 0.6 | 171 / 165 | 0.1 | 19.4 | 7.2 |
| | 3/23/2005 | 0.1 / 0.1 | 81 / 79 | 0.0 | 17.7 | 7.2 |
| | 6/22/2005 | 1.49/1.39 | 100.7 / 30.3 | 0.1 | 20.8 | 7.1 |
| | 3/2/2006 | 0.49 / 0.17 | 414.9 / 419.7 | 0.0 | 18.7 | 6.1 |
| | 6/1/2006 | NS | NS | NS | NS | NS |
| | 9/27/2006 | 0.64 / 0.39 | -49.0 / -103.2 | >0.2 | 22.1 | 7.0 |

## Table IV, Summary of Groundwater Intrinsic Bioremediation Field Results
## BEI Job No. 202016, Dolan Rentals
## 6393 Scarlett Court, Dublin, California

| Well ID | Sample Date | Field Meter | Field Meter | Field Test Kit | Field Meter | Field Meter |
|---|---|---|---|---|---|---|
| | | Dissoved Oxygen (mg/L) | Oxidation Reduction Potential (mV) | Ferrous Iron (Fe 2+) | Field Temperature (oC) | Field pH pH units |
| MW-4 | 12/14/2004 | 0.7 / 0.1 | -7 / -41 | 0.8 | 18.0 | 6.8 |
| | 3/23/2005 | 0.1 / 0.4 | -17 / -19 | 1.2 | 15.9 | 6.9 |
| | 6/22/2005 | 0.23 / 0.12 | -28.6 / -30.9 | 1.2 | 20.1 | 6.7 |
| | 3/2/2006 | 0.58 / 0.56 | -169.5 / -205.6 | 1.2 | 16.2 | 7.5 |
| | 6/1/2006* | 0.31 | -78 | 1.0 | 18.5 | 7.0 |
| | 9/27/2006 | 1.88 / 0.51 | 109 / -1.9 | <0.2 | 19.4 | 6.7 |
| MW-5 | 12/14/2004 | 0.5 / 2.0 | 5 / 532 | 0.1 | 17.9 | 7.1 |
| | 3/23/2005 | 0.1 / 0.9 | -17 / 0 | 0.0 | 15.1 | 7.2 |
| | 6/22/2005 | 0.52 / 0.27 | 14.4 / -35.3 | 0.1 | 23.8 | 7.0 |
| | 3/2/2006 | 0.84 / 0.59 | 436.8 / 449.2 | 0.0 | 14.6 | 6.2 |
| | 6/1/2006* | 0.49 | -34 | 0.0 | 19.4 | 7.16 |
| | 9/28/2006 | 0.75 / 0.78 | 153.1 / 94.1 | >0.2 | 20.5 | 6.70 |
| MW-6 | 12/14/2004 | 0.3 / 1.2 | 125 / -25 | 0.0 | 15.5 | 7.2 |
| | 3/23/2005 | 0.1 / 0.8 | 52 / -4 | 0.0 | 13.9 | 7.2 |
| | 6/22/2005 | 0.53 / 0.49 | -22.3 / -18 | 0.1 | 22.7 | 7.0 |
| | 3/2/2006 | 1.53 / 0.51 | -116.5 / -189.9 | 0.2 | 13.5 | 8.2 |
| | 6/1/2006* | 0.50 | 16 | 0.0 | 20.1 | 8.0 |
| | 9/27/2006 | 0.69 / 0.35 | -50.2 / -72.9 | >0.2 | 22.9 | 7.5 |

## Table IV, Summary of Groundwater Intrinsic Bioremediation Field Results
## BEI Job No. 202016, Dolan Rentals
## 6393 Scarlett Court, Dublin, California

| Well ID | Sample Date | Field Meter | Field Meter | Field Test Kit | Field Meter | Field Meter |
|---|---|---|---|---|---|---|
| | | Dissoved Oxygen (mg/L) | Oxidation Reduction Potential (mV) | Ferrous Iron (Fe 2+) | Field Temperature (oC) | Field pH pH units |
| MW-7 | 7/18/2005 | NS | NS | NS | 68.7 / 69.4 | 7.0 / 7.0 |
| | 3/2/2006 | 2.71 / 1.08 | 214.3 / -176.9 | 0.4 | 14.0 | 8.0 |
| | 6/1/2006* | 0.45 | 62 | 0.4 | 20.2 | 7.15 |
| | 9/27/2006 | 0.67 / 0.26 | 70.0 / 62.0 | >0.2 | 19.8 | 7.0 |
| MW-8 | 3/2/2006 | 1.20 / 0.85 | 423.8 / 456.9 | 0.0 | 14.1 | 8.4 |
| | 6/1/2006* | 0.60 | -50 | 0.0 | 19.9 | 10.3 |
| | 9/28/2006 | 0.97 / 0.40 | 51.9 / 63.9 | >0.2 | 20.2 | 10.3 |
| MW-9 | 3/2/2006 | 0.52 / 0.20 | 118.0 / 112.6 | 0.0 | 15.2 | 9.4 |
| | 6/1/2006* | 0.42 | -30 | 0.0 | 20.5 | 10.45 |
| | 9/28/2006 | 1.15 / 0.23 | 78.5 / -6.1 | >0.2 | 21.1 | 10.80 |

Notes:
mV = Millivolts
mg/L = Milligrams per liter
oC = Degrees Centigrade
2.6 / 2.2 = Initial reading (pre-purge) / Final reading (post-purge)
NS = Not sampled
* = Post purge value

## Table V, Summary of Groundwater Intrinsic Bioremediation Analytical Results
## BEI Job No. 202016, Dolan Rentals
## 6393 Scarlett Court, Dublin, California

| Well ID | Sample Date | Method SM 5310B | Method E300.1 | | Method RSK 174 | Method E200.7 | | Method E365.1 | Method SM 5210B | Method SM 5220D |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CO2 | Nitrate (as N) | Sulfate | Methane | Manganese | Potassium | Total Phosphorous (as P) | BOD | COD |
| | | mg/L | | | µg/L | | | mg/L | | |
| MW-1 | 12/14/2004 | 580 | <20 | 1,100 | 2.2 | NA | NS | NS | NS | NS |
| | 3/23/2005 | 660 | 0.41 | 620 | <0.5 | NS | NS | NS | NS | NS |
| | 6/22/2005 | 660 | <0.1 | 580 | 0.91 | NS | NS | NS | NS | NS |
| | 3/2/2006 | 850 | <0.7[1] | 610 | 0.65 | 1,700 | 5,100 | 0.19 | <3.0 | 43 |
| | 6/1/2006 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 9/28/2006 | 660 | <0.1 | 980 | 0.86 | 1,900 | 1,200 | 0.18 | <4.0 | 15 |
| MW-2 | 12/14/2004 | 940 | <5.0 | 220 | 4,700 | NS | NS | NS | NS | NS |
| | 3/23/2005 | 1,100 | 0.34 | 180 | 3,700 | NS | NS | NS | NS | NS |
| | 6/22/2005 | 990 | <0.1 | 290 | 1,800 | NS | NS | NS | NS | NS |
| | 3/2/2006 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 6/1/2006 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 9/28/2006 | NS | NS | NS | NS | NS | NS | NS | NS | NS |

# Table V, Summary of Groundwater Intrinsic Bioremediation Analytical Results
## BEI Job No. 202016, Dolan Rentals
## 6393 Scarlett Court, Dublin, California

| Well ID | Sample Date | Method SM 5310B | Method E300.1 | | Method RSK 174 | Method E200.7 | | Method E365.1 | Method SM 5210B | Method SM 5220D |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CO2 | Nitrate (as N) | Sulfate | Methane | Manganese | Potassium | Total Phosphorous (as P) | BOD | COD |
| | | mg/L | | | µg/L | | | mg/L | | |
| MW-3 | 12/14/2004 | 610 | <20 | 780 | <0.5 | NS | NS | NS | NS | NS |
| | 3/23/2005 | 590 | 0.2 | 560 | <0.5 | NS | NS | NS | NS | NS |
| | 6/22/2005 | 320 | 1.3 | 540 | <0.5 | NS | NS | NS | NS | NS |
| | 3/2/2006 | 730 | 2.0[1] | 630 | <0.5 | 1,800 | 4,400 | 0.18 | <3.0 | <10 |
| | 6/1/2006 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 9/27/2006 | 650 | 1.5 | 580 | <0.5 | 1,500 | 900 | 0.16 | <4.0 | <10 |
| MW-4 | 12/14/2004 | 680 | <10 | 760 | 170 | NS | NS | NS | NS | NS |
| | 3/23/2005 | 700 | 0.3 | 430 | 24 | NS | NS | NS | NS | NS |
| | 6/22/2005 | 700 | <0.1 | 480 | 71 | NS | NS | NS | NS | NS |
| | 3/2/2006 | 370 | 0.88[1] | 490 | 90 | 5,300 | 3,900 | 0.17 | <3.0 | 33 |
| | 6/1/2006 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 9/27/2006 | 290 | <0.1 | 480 | 51 | 4,100 | 670 | 0.13 | <4.0 | 22 |

## Table V, Summary of Groundwater Intrinsic Bioremediation Analytical Results
## BEI Job No. 202016, Dolan Rentals
## 6393 Scarlett Court, Dublin, California

| Well ID | Sample Date | Method SM 5310B | Method E300.1 | | Method RSK 174 | Method E200.7 | | Method E365.1 | Method SM 5210B | Method SM 5220D |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CO2 | Nitrate (as N) | Sulfate | Methane | Manganese | Potassium | Total Phosphorous (as P) | BOD | COD |
| | | mg/L | | | µg/L | | | mg/L | | |
| MW-5 | 12/14/2004 | 1,400 | <20 | 1,200 | 120 | NS | NS | NS | NS | NS |
| | 3/23/2005 | 1,400 | 1 | 640 | 57 | NS | NS | NS | NS | NS |
| | 6/22/2005 | 1,500 | <0.1 | 590 | 1.5 | NS | NS | NS | NS | NS |
| | 3/2/2006 | 1,600 | <0.7 [1] | 450 | 490 | 960 | 4,000 | 0.14 | <3.0 | 31 |
| | 6/1/2006 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 9/28/2006 | 1,400 | <0.1 | 410 | 24 | 630 | 920 | 0.13 | <4.0 | 15 |
| MW-6 | 12/14/2004 | 790 | <10 | 460 | 180 | NS | NS | NS | NS | NS |
| | 3/23/2005 | 770 | 0.12 | 380 | 60 | NS | NS | NS | NS | NS |
| | 6/22/2005 | 770 | <0.1 | 400 | 36 | NS | NS | NS | NS | NS |
| | 3/2/2006 | 470 | 5.2 [1] | 540 | 12 | 480 | 1,600 | 0.099 | <3.0 | 21 |
| | 6/1/2006 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 9/27/2006 | 400 | <0.1 | 530 | 55 | 410 | 320 | 0.079 | <4.0 | 25 |
| MW-7 | 7/18/2005 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 3/2/2006 | 450 | <0.7 [1] | 260 | 1.7 | 5,500 | 7,300 | 0.16 | <3.0 | 26 |
| | 6/1/2006 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 9/27/2006 | 350 | <0.1 | 270 | 1.1 | 4,600 | 1,700 | 0.13 | <4.0 | <10 |

## Table V, Summary of Groundwater Intrinsic Bioremediation Analytical Results
## BEI Job No. 202016, Dolan Rentals
## 6393 Scarlett Court, Dublin, California

| Well ID | Sample Date | Method SM 5310B | Method E300.1 | | Method RSK 174 | Method E200.7 | | Method E365.1 | Method SM 5210B | Method SM 5220D |
|---|---|---|---|---|---|---|---|---|---|---|
| | | CO2 | Nitrate (as N) | Sulfate | Methane | Manganese | Potassium | Total Phosphorous (as P) | BOD | COD |
| | | mg/L | | | µg/L | | | mg/L | | |
| MW-8 | 3/2/2006 | 9 | 13 [1] | 570 | 17 | <20 | 19,000 | 0.21 | <3.0 | 71 |
| | 6/1/2006 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 9/28/2006 | 5 | 0.29 | 290 | 18 | <20 | 6,000 | <0.04 | <4.0 | 34 |
| MW-9 | 3/2/2006 | 8 | 11 [1] | 890 | 19 | <20 | 20,000 | <0.04 | <3.0 | 61 |
| | 6/1/2006 | NS | NS | NS | NS | NS | NS | NS | NS | NS |
| | 9/28/2006 | 6.3 | <0.1 | 120 | 28 | <20 | 5,300 | <0.04 | <4.0 | 42 |

Notes:
SM = Standard Method
mg/L = Milligrams per liter
µg/L = Micrograms per liter
$CO_2$ = Carbon Dioxide
NS = Not sampled
BOD = Biological Oxygen Demand
COS = Chemical Oxygen Demand
[1] = Total Nitrogen (Nitrate, Nitrite, & Ammonia)

# *Figures*

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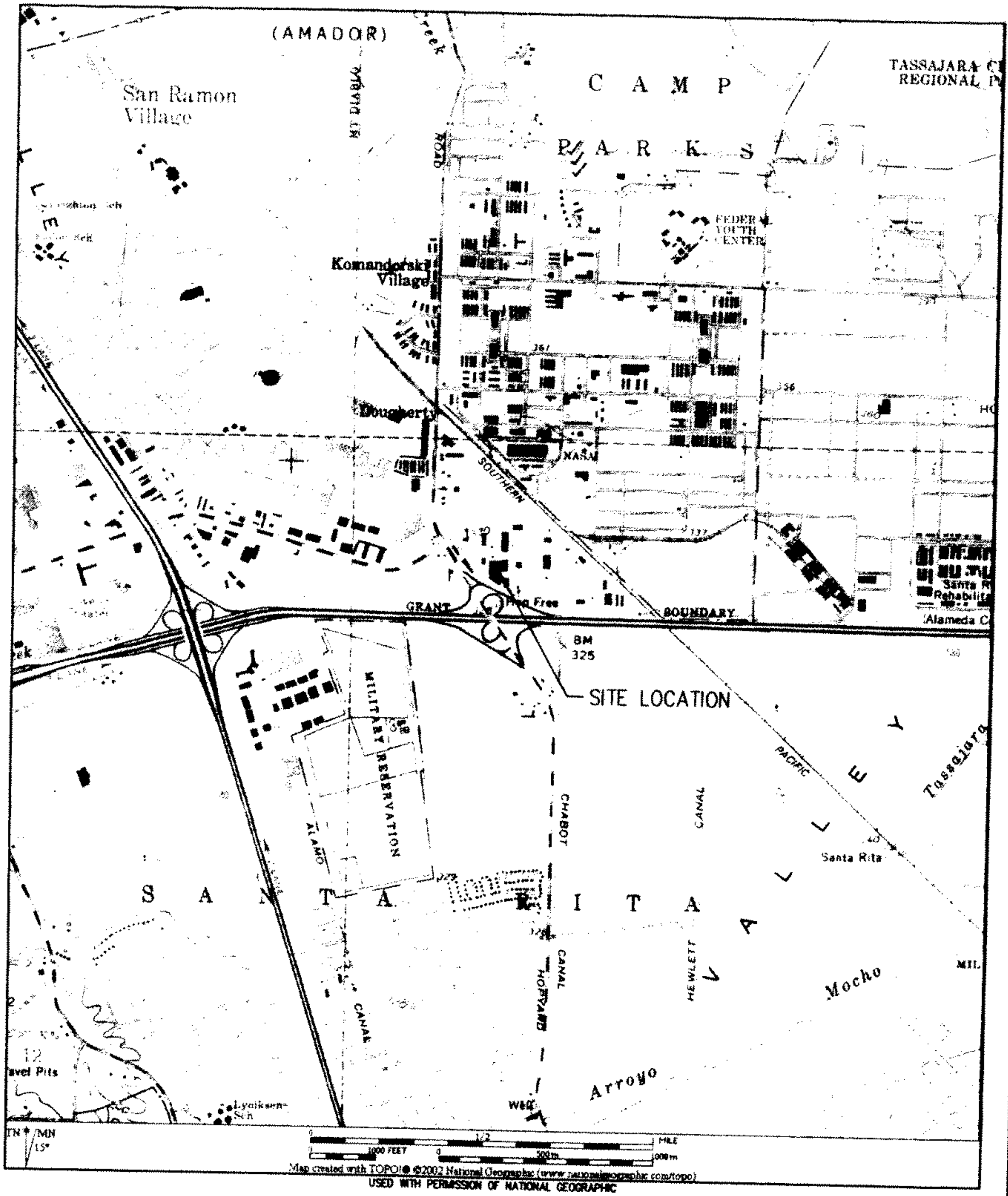

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BLYMYER
ENGINEERS, INC.

BEI JOB NO.
202016

DATE
6-27-02

LEGEND

## SITE LOCATION MAP

FORMER DOLAN RENTAL
PROPERTY
6393 SCARLETT COURT
DUBLIN, CA

FIGURE
1

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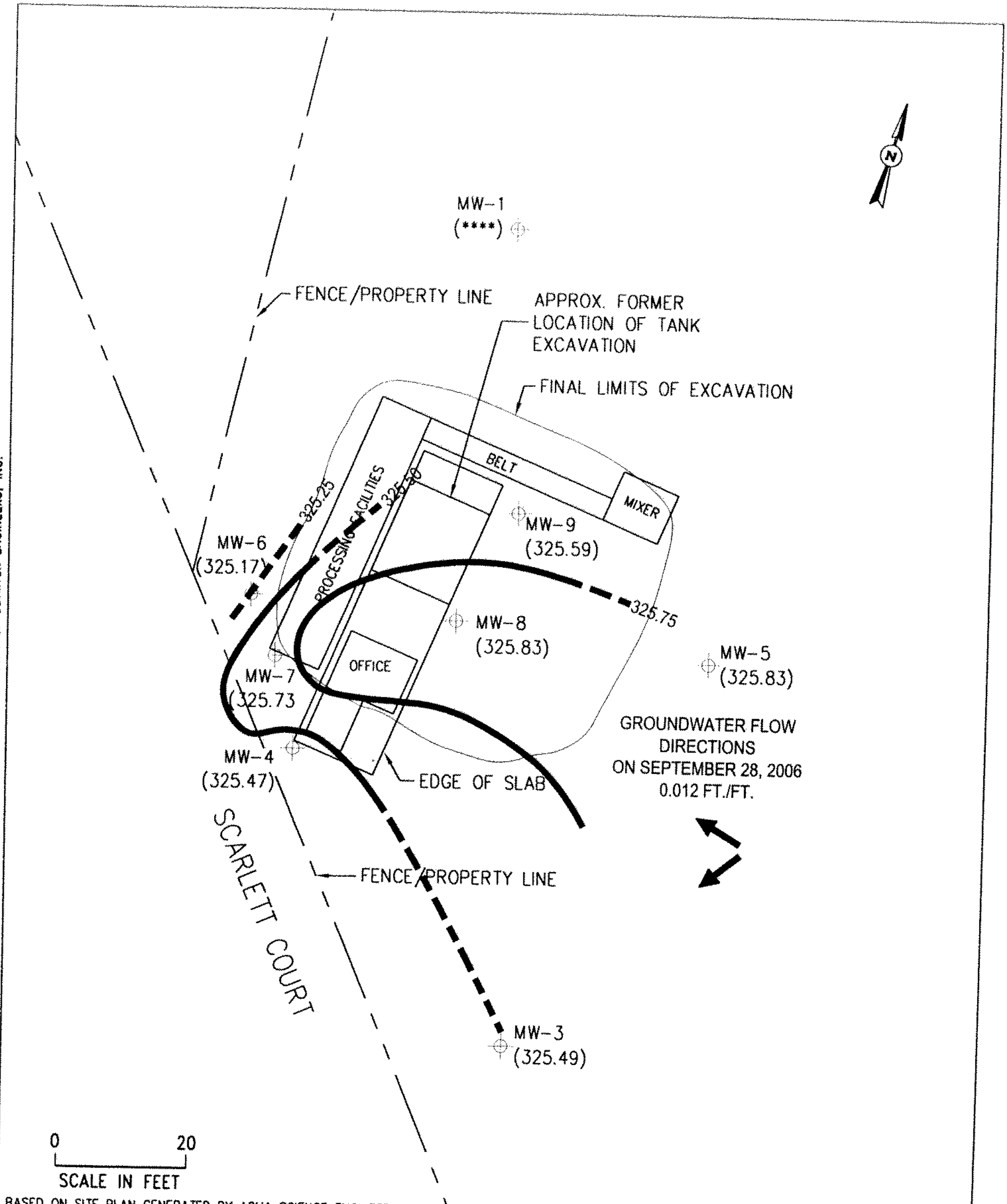


BASED ON SITE PLAN GENERATED BY AQUA SCIENCE ENGINEERS, INC.

**BLYMYER ENGINEERS, INC.**

BEI JOB NO. 202016

DATE 11-16-06

**LEGEND**

| | |
|---|---|
| ⌖ | GROUNDWATER MONITORING WELL |
| (323.72) | GROUND WATER ELEV. |
| (****) | CASING BENT DURING CONSTRUCTION, NOT USED IN GRADIENT CALCULATION |
| — — | GROUNDWATER ELEV. CONTOUR |
| ➞ | GROUNDWATER FLOW DIRECTION |

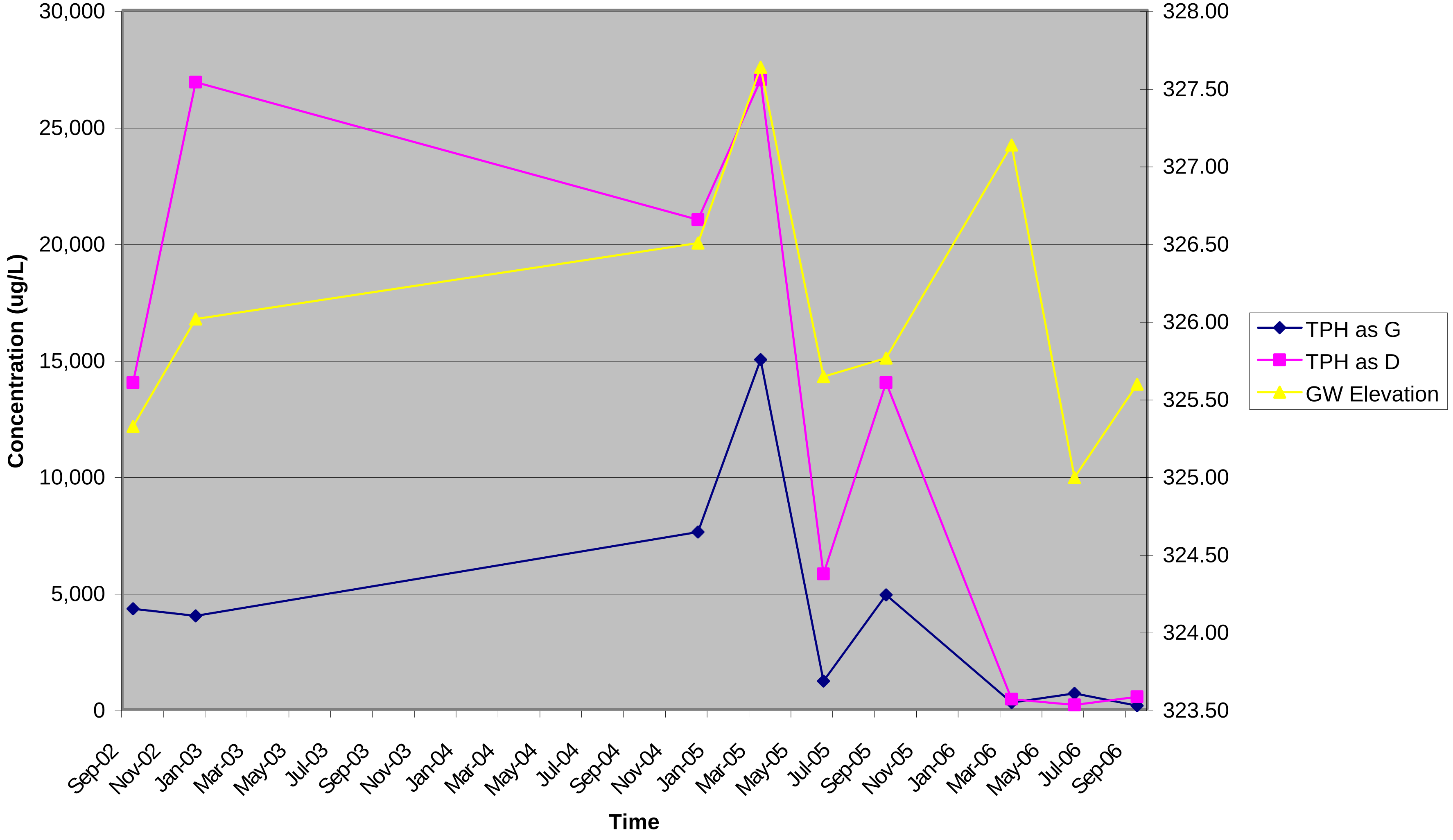
## SITE PLAN AND GROUNDWATER GRADIENT ON SEPTEMBER 28, 2006

FORMER DOLAN RENTAL PROPERTY
6393 SCARLETT COURT
DUBLIN, CA

FIGURE 2

L:\Acod\2002dwg\202016\8.5 x 11\202016fig 2b.dwg November 16, 2006 - 2:40PM LWITTSTOCK

# Figure 3: TPH Concentration and Groundwater Elevation vs. TIme in Wells MW-2 / MW-9



# *Appendix A*

## *Standard Operating Procedures*

**Blaine Tech Services, Inc.**

Blaine Tech Services, Inc.
Standard Operating Procedure

# FLOW CELL PURGING AND SAMPLING

Flow Cell purging provides the user with a constant stream of real time, highly accurate water quality information during the purge process. Typically, this equipment is utilized as part of the Low-Flow sampling process, where parameter stabilization is the most important prerequisite prior to sample collection and/or when very accurate Dissolved Oxygen measurements are required.

The Flow Cell system consists a flow cell, a sonde, a display unit and various hose lines. Flow cell system brands commonly used by BLAINE include YSI, HORIBA and QED. A separate pump must be used to supply the flow of water to the Flow Cell. The pump must be capable of purging water at rates that are variable and low. The most common purge pump used is the Grunfos Redi-Flo II variable speed electric submersible pump. Both peristaltic and pneumatic bladder pumps are common alternatives.

As the Low-Flow methodology stipulates sampling through the purge tube (as opposed to a bailer) to minimize disturbance to the water column, dedicated, small-diameter tubing is typically used.

**Flow cell purging and sampling using dedicated, in-place, pump**

1. Plug the display unit into the sonde.
2. Calibrate the sonde for all parameters using the supplied calibration fluids, following the manufacturer's instruction manual.
3. Connect the flow cell to the sonde.
4. Without disturbing the water column in the well, connect the water line from the in-place pump to the lower end of the flow cell.
5. Connect a water discharge line to the upper end of the flow cell.
6. Without disturbing the water column, connect the power source (electricity, compressed air, etc.) to the in-place pump.
7. Lower an electronic water level indicator (sounder) slowly into the well until it hits the water surface.
8. While monitoring the sounder, commence pumping at a rate that does not induce draw-down in the well.
9. Collect parameter measurements from the display unit as per job specifications (ie. every 1 minute, every 3 minutes, etc.).
10. Monitor flow cell to make sure it remains free of air bubbles.
11. Once parameters have stabilized, adjust the pump rate to the lowest technically feasible setting.
12. Disconnect the water line from the lower end of the flow cell.
13. Fill the appropriate sample containers.
14. Remove power supply and sounder from well.

# *Appendix B*

## *Purge Drum Inventory Log, Wellhead Inspection Checklist, Well Gauging Data, and Repair Data Sheet*

**Blaine Tech Services, Inc.**

**Dated September 27 and 28, 2006**

BLAINE
TECH SERVICES INC.

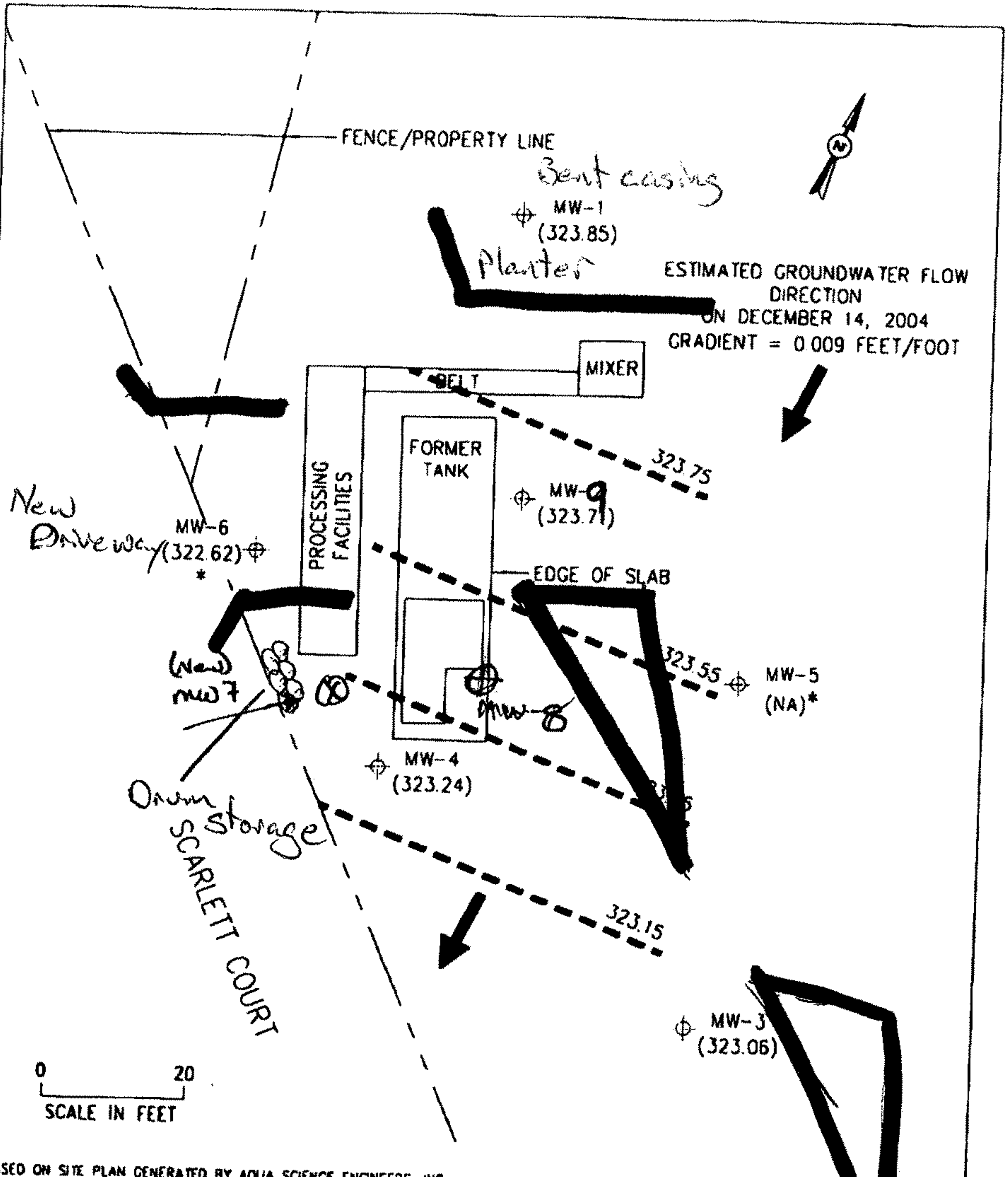
INDEPENDENT THIRD PARTY SAMPLING AND DOCUMENTATION

# PURGE DRUM INVENTORY LOG

CLIENT Blymyer

SITE ADDRESS 6393 Scarlett Ct., Dublin

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **STATUS OF DRUM(S) UPON ARRIVAL** | | | | | | | |
| Number of drum(s) **empty**: | | 1 | 0 | | 0 | | |
| Number of drum(s) **1/4 full**: | | 2 | 0 | | 0 | | |
| Number of drum(s) **1/2 full**: | | 2 | 0 | | 0 | | |
| Number of drum(s) **3/4 full**: | 1 | 1 | 0 | 1 | 1 | | |
| Number of drum(s) **full**: | 14 | 18 | 0 | 3 | 3 | 6 | |
| **Total** drum(s) on site: | 15 | 24 | 0 | 4 | 4 | 6 | |
| **STATUS OF DRUM(S) AT DEPARTURE** | | | | | | | |
| Number of drum(s) **empty**: | | 1 | 0 | | | 0 | |
| Number of drum(s) **1/4 full**: | | 2 | 0 | | | | |
| Number of drum(s) **1/2 full**: | | 1 | 0 | | | 1 | |
| Number of drum(s) **3/4 full**: | | 1 | 1 | | 1 | | |
| Number of drum(s) **full**: | 15 | 19 | 3 | 4 | 5 | 6 | |
| **Total** drum(s) on site: | 15 | 24 | 4 | 4 | 6 | 7 | |
| **LOCATION OF DRUM(S)** | | | | | | | |
| Is/Are drum(s) at wellhead(s)? | Yes | yes | | yes | Y | Y | |
| Describe location if drum(s) is/are located elsewhere: | ~~Next to MW-7 & MW-2~~<br>Next to MW-7 on Scarlett Ct. side | | | | | | |
| Label drum(s) properly: | Yes | yes | Yes | yes | Y | Y | |
| **FINAL STATUS** | | | | | | | |
| Number of **new** BTS drum(s) left on site this event: | 0 | ~~0~~ | 4 | 9 | 2 | 1 | |
| Date of inspection: | 7/18/05 | 9-6-05 | 02/27/06 | 3-2-06 | 6/1/06 | 9/28/06 | |
| Logged by BTS Field Technician: | MT | DV | JJ | DW | DA | WE | |
| Office Review by: | | | 2/28 | 3/3 | ✓ | | |



BASED ON SITE PLAN GENERATED BY AQUA SCIENCE ENGINEERS, INC.

BLYMYER
ENGINEERS, INC.

BEI JOB NO. 202016

DATE 1-28-04

**LEGEND**

| | |
|---|---|
| ⊕ | GROUNDWATER MONITORING WELL |
| (323.72) | GROUND WATER ELEV. |
| (NA) | GROUNDWATER ELEV. (NOT AVAILABLE) |
| * | GROUNDWATER ELEV. (NOT USED) |
| — — | GROUNDWATER ELEV. CONTOUR |
| → | GROUNDWATER FLOW DIRECTION |

SITE PLAN AND
GROUNDWATER GRADIENT
DECEMBER 12, 2004
FORMER DOLAN RENTAL PROPERTY
6393 SCARLETT COURT
DUBLIN, CA

FIGURE
2

L:\Acad\2002dwg\202016\202016fig2a.dwg 10/28/02 1:32 pm

# TEST EQUIPMENT CALIBRATION LOG

**PROJECT NAME** Blymyer @ Dolan Lumber

**PROJECT NUMBER** C60927-wc-1

| EQUIPMENT NAME | EQUIPMENT NUMBER | DATE/TIME OF TEST | STANDARDS USED | EQUIPMENT READING | CALIBRATED TO: OR WITHIN 10%: | TEMP. | INITIALS |
|---|---|---|---|---|---|---|---|
| YSI 556 flow Cell | 05C1520 AK | 9/27/06 @0920 | 4.0, 7.0, 10.0 pH | 4.11, 7.17, 9.94 pH | 4.0, 7.0, 10.0 pH | 23.1°C | wc |
| ↓ | ↓ | ↓ | 3900 µS | 3895 µS | 3900 µS | ↓ | wc |
| | | | 233.0 mV | 236.3 mV | 233.0 mV | | wc |
| | | | 100% DO | 106.4% | 100% | | wc |
| Hach 2100P Turbidimeter | 0211000 28998 | 9/27/06 @0930 | 5.0/60.0/470 NTU | 5.1/59.3/473 NTU | ok ✓ | 23.1°C | wc |
| YSI 556 flow Cell | 05C1520 AK | 9/27/06 @ 0615 | 4.0, 7.0, 10.0 pH | 4.03, 6.99, 10.04 pH | 4.0, 7.0, 10.0 pH | 22.0°C | wc |
| ↓ | ↓ | ↓ | 3900 µS | 3905 µS | 3900 µS | ↓ | wc |
| | | | 233.0 mV | 235.1 mV | 233.0 mV | | wc |
| | | | 100% DO | 101.2% | 100% | | wc |
| Hach 2100P Turbidimeter | 0211000 28998 | 9/27/06 @0615 | 5.0, 60.0, 470 NTU | 5.1, 59.5, 473 NTU | ok ✓ | | wc |
| | | | | | | | |

# WELLHEAD INSPECTION CHECKLIST

Page 1 of 1

Date 9/27/06 Client Blymyer @ Dolan Rentals

Site Address 6393 Scarlett Ct, Dublin

Job Number 060927-WC-1 Technician Will

| Well ID | Well Inspected - No Corrective Action Required | Water Bailed From Wellbox | Wellbox Components Cleaned | Cap Replaced | Debris Removed From Wellbox | Lock Replaced | Other Action Taken (explain below) | Well Not Inspected (explain below) |
|---|---|---|---|---|---|---|---|---|
| mw-1 | — See below — | | | ⊗ | | ⊗ | X | |
| mw-3 | christy box | | | | | | X | |
| mw-4 | christy box | | | | | | | |
| mw-5 | 1 of 2 tabs stripped | | | | | | X | |
| mw-6 | X → casing cut @ angle | | | | | | | |
| mw-7 | X → no lock | | | | | | | |
| mw-8 | 1 of 4 bolts broken | | | | | | X | |
| mw-9 | X | | | | | | X | |

NOTES: mw-(1,5,3,8,9) Buried upon arrival

mw-1 box broken and filled in w/ dirt. Rim completely severed from box. Casing severly bent from nearby construction activities. Cap & lock replaced

9/28/06

MW-1

- Buried under 2.5 feet of dirt
- Well box cemented full by solidified grey dirt
- Cap & lock had to be chisled free and pryed loose
- Replaced cap & lock
- Casing is severely bent.

all other buried wells mw(3, 5, 8, 9, ~~2~~) (.5–1.5)' deep.

total 5 buried mw-(1, 3, 5, 8, 9)

# WELL GAUGING DATA

Project # 060927-wc-1 Date 9/28/06 Client Blymyer

Site Dublin Concrete/Dolan Rentals 6393 Scarlett Ct, Dublin

| Well ID | Time | Well Size (in.) | Sheen / Odor | Depth to Immiscible Liquid (ft.) | Thickness of Immiscible Liquid (ft.) | Volume of Immiscibles Removed (ml) | Depth to water (ft.) | Depth to well bottom (ft.) | Survey Point: TOB or TOC | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| mw-1 | 1124 ~~0804~~ | 2 | | | | | 3.34 | 19.21 | | |
| mw-3 | 0738 | 2 | | | | | 3.88 | 18.35 | | |
| mw-4 | 0718 | 2 | | | | | 4.23 | 18.63 | | |
| mw-5 | 0754 | 2 | | | | | 3.33 | 9.74 | | |
| mw-6 | 0732 | 2 | | | | | 4.85 | 9.81 | | |
| mw-7 | 0726 | 2 | | | | | 4.52 | 39.91 | | |
| mw-8 | 0743 | 4 | | | | | 3.10 | 20.00 | | |
| mw-9 | 0748 | 4 | | | | | 3.08 | 19.83 | ✓ | |

✱ mw-1 gauged after 3 wells had been micropurged due to accessibility.

# WELL GAUGING DATA

Project # 060927-ae-1 Date 9/27/06 Client Blymyer

Site Dublin Concrete (Dolan Rentals)

| Well ID | Time | Well Size (in.) | Sheen / Odor | Depth to Immiscible Liquid (ft.) | Thickness of Immiscible Liquid (ft.) | Volume of Immiscibles Removed (ml) | Depth to water (ft.) | Depth to well bottom (ft.) | Survey Point: TOB or [✓ TOC] | Notes |
|---|---|---|---|---|---|---|---|---|---|---|
| mw-1 | | | | | | | | | | |
| mw-3 | 1313 | 2 | | | | | 3.87 | 18.35 | | |
| mw-4 | 0854 | 2 | | | | | 4.20 | 18.63 | | |
| mw-5 | | | | | | | | | | |
| mw-6 | 0906 | 2 | | | | | 4.85 | 9.81 | | |
| mw-7 | 0900 | 2 | | | | | 4.50 | 39.91 | | |
| mw-8 | | | | | | | | | | |
| mw-9 | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
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| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

9/27/06 → gauge & go until all wells are accessible. full round of gauging done 9/28/06.

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 060927-we-1 | Client: Blymyer @ Dolan Rentals |
| Sampler: we | Start Date: 9/28/06 |
| Well I.D.: MW-1 | Well Diameter: [✓ 2] 3 4 6 8 ____ |
| Total Well Depth: 19.21 | Depth to Water Pre: 3.34 Post: 3.60 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: [✓ PVC] Grade | Flow Cell Type: YSI 556 |

Purge Method: 2" Grundfos Pump [✓ Peristaltic Pump] Bladder Pump

Sampling Method: Dedicated Tubing [✓ New Tubing] Other ________

Flow Rate: 200 ml/min

Pump Depth: ~14'

| Time | Temp. ([✓ °C] or °F) | pH | Cond. (mS or [✓ µS]) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or [✓ mLs]) | Observations | DTW= |
|---|---|---|---|---|---|---|---|---|---|
| 1128 | 22.24 | 7.26 | 4490 | 63 | 0.74 | -11.9 | 0 | clear | 3.34 |
| 1131 | 22.40 | 7.02 | 4462 | 72 | 0.54 | -73.9 | 600 | | 3.52 |
| 1134 | 22.47 | 6.89 | 4453 | 73 | 0.46 | -102.7 | 1,200 | | 3.54 |
| 1137 | 22.58 | 6.83 | 4434 | 65 | 0.47 | -119.6 | 1,800 | | 3.56 |
| 1140 | 22.51 | 6.82 | 4419 | 52 | 0.52 | -130.3 | 2,400 | | 3.58 |
| 1143 | 22.45 | 6.81 | 4424 | 53 | 0.46 | -127.4 | 3,000 | | 3.59 |
| 1146 | 22.56 | 6.80 | 4420 | 49 | 0.45 | -129.5 | 3,600 | | 3.60 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | $fe^{2+}$ | ~~X~~ < 0.2 | | mg/L | | |

MW 10/25/06

| | |
|---|---|
| Did well dewater? Yes [✓ No] | Amount actually evacuated: 3.6 L |
| Sampling Time: 1152 | Sampling Date: 9/28/06 |
| Sample I.D.: MW-1 | Laboratory: McCampbell |
| Analyzed for: TPH-G BTEX MTBE TPH-D | Other: see COC |
| Equipment Blank I.D.: @ Time | Duplicate I.D.: |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 060927-WC-1 | Client: Blymyer @ Dolan Rentals |
| Sampler: WC | Start Date: 9/27/06 |
| Well I.D.: MW-3 | Well Diameter: [✓ 2] 3 4 6 8 ___ |
| Total Well Depth: 18.35 | Depth to Water Pre: 3.87 Post: 4.31 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: [✓ PVC] Grade | Flow Cell Type: YSI 556 |

Purge Method: 2" Grundfos Pump [✓ Peristaltic Pump] Bladder Pump

Sampling Method: Dedicated Tubing [✓ New Tubing] Other ___

Flow Rate: ~200 ml/min Pump Depth: ~13'

| Time | Temp. ([✓ °C] or °F) | pH | Cond. (mS or [✓ µS]) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or [✓ mL]) | Observations/DTW |
|---|---|---|---|---|---|---|---|---|
| 1312 | 21.85 | 7.31 | 3661 | 38 | 0.64 | -49.0 | 0 | clear / 3.87 |
| 1315 | 21.76 | 7.09 | 3619 | 29 | 0.40 | -86.5 | 600 | ↓ / 4.14 |
| 1318 | 21.78 | 7.07 | 3613 | 21 | 0.34 | -96.0 | 1,200 | / 4.16 |
| 1321 | 21.79 | 7.03 | 3606 | 19 | 0.31 | -95.6 | 1,800 | / 4.19 |
| 1324 | 21.72 | 7.03 | 3611 | 17 | 0.40 | -102.0 | 2,400 | / 4.23 |
| 1327 | 21.96 | 7.04 | 3597 | 16 | 0.41 | -103.6 | 3,000 | / 4.28 |
| 1330 | 22.11 | 7.02 | 3593 | 16 | 0.39 | -103.2 | 3,600 | / 4.31 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

$Fe^{2+}$ < 0.2 mg/L

MAN [illegible]/25/06

| | |
|---|---|
| Did well dewater? Yes [✓ No] | Amount actually evacuated: 3.6 L |
| Sampling Time: 1337 | Sampling Date: 9/27/06 |
| Sample I.D.: MW-3 | Laboratory: McCampbell |
| Analyzed for: TPH-G BTEX MTBE TPH-D | Other: See COC |
| Equipment Blank I.D.: @ Time | Duplicate I.D.: |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 060927-WC-1 | Client: Blymyer @ Dolan Rentals |
| Sampler: WC | Start Date: 9/27/06 |
| Well I.D.: MW-4 | Well Diameter: [✓ 2] 3 4 6 8 ___ |
| Total Well Depth: 18.63 | Depth to Water Pre: 4.20 Post: 4.44 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: [✓ PVC] Grade | Flow Cell Type: YSI 556 |

Purge Method: 2" Grundfos Pump [✓ Peristaltic Pump] Bladder Pump

Sampling Method: Dedicated Tubing [✓ New Tubing] Other____

Flow Rate: ~ 200 ml/min

Pump Depth: ~13.5'

| Time | Temp. ([✓ °C] or °F) | pH | Cond. (mS or [✓ µS]) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or [✓ mL]) | Observations | DTW |
|---|---|---|---|---|---|---|---|---|---|
| 0940 | 19.64 | 6.84 | 3201 | 116 | 1.08 | 109.0 | 0 | cloudy | 4.37 |
| 0943 | 19.45 | 6.71 | 3327 | 76 | 0.44 | 22.6 | 600 | clear | 4.39 |
| 0946 | 19.38 | 6.67 | 3365 | 45 | 0.37 | 10.8 | 1,200 | ↓ | 4.41 |
| 0949 | 19.40 | 6.66 | 3367 | 35 | 0.37 | 5.9 | 1,800 | | 4.42 |
| 0952 | 19.43 | 6.67 | 3361 | 25 | 0.42 | 2.0 | 2,400 | | 4.43 |
| 0955 | 19.37 | 6.67 | 3366 | 21 | 0.48 | -1.2 | 3,000 | | 4.42 |
| 0958 | 19.38 | 6.68 | 3367 | 19 | 0.51 | -1.9 | 3,600 | | 4.44 |
| | | | | | | | | | |
| | | Post Purge $Fe^{2+} < 0.2$ mg/L | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

| | |
|---|---|
| Did well dewater? Yes [✓ No] | Amount actually evacuated: 3.6L |
| Sampling Time: 1005 | Sampling Date: 9/27/06 |
| Sample I.D.: MW-4 | Laboratory: McCampbell |
| Analyzed for: TPH-G BTEX MTBE TPH-D | Other: see COC |
| Equipment Blank I.D.: @ Time | Duplicate I.D.: |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 060927-WC-1 | Client: Blymyer @ Doolan Rentals |
| Sampler: WC | Start Date: 9/28/06 |
| Well I.D.: MW-5 | Well Diameter: [✓ 2] 3 ~~4~~ 6 8 ___ |
| Total Well Depth: 9.74 | Depth to Water Pre: 3.33 Post: 3.88 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: [✓ PVC] Grade | Flow Cell Type: |

Purge Method: 2" Grundfos Pump [✓ Peristaltic Pump] Bladder Pump

Sampling Method: Dedicated Tubing [✓ New Tubing] Other ___

Flow Rate: 100 ml/min

Pump Depth: ~7.5'

| Time | Temp. ([✓ °C] or °F) | pH | Cond. (mS or [✓ µS]) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or [✓ mL]) | Observations | DTW = |
|---|---|---|---|---|---|---|---|---|---|
| 0944 | 19.86 | 6.14 | 4282 | 25 | 0.75 | 153.1 | 0 | clear | 3.33 |
| 0947 | 19.95 | 6.46 | 4281 | 15 | 0.85 | 120.0 | 300 | ↓ | 3.61 |
| 0950 | 20.01 | 6.59 | 4283 | 14 | 0.88 | 106.3 | ~~400~~600 | | 3.76 |
| 0953 | 20.15 | 6.66 | 4277 | 13 | 0.90 | ~~97.~~ 109.8 | ~~1,200~~900 | | 3.79 |
| 0956 | 20.32 | 6.65 | 4267 | 9 | 0.90 | 97.2 | ~~1,500~~ 1,200 | | 3.82 |
| 0959 | 20.40 | 6.64 | 4263 | 8 | 0.83 | 97.6 | ~~1,800~~ 1,500 | | 3.85 |
| 1002 | 20.47 | 6.66 | 4257 | 8 | 0.78 | 94.1 | 1,800 | ↓ | 3.88 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | $Fe^{2+}$ | ~~X~~ < 0.2<br>MON 10/25/06 | | mg/L | | |

| | |
|---|---|
| Did well dewater? Yes [✓ No] | Amount actually evacuated: 1.8L |
| Sampling Time: 1006 | Sampling Date: 9/28/06 |
| Sample I.D.: MW-5 | Laboratory: McCampbell |
| Analyzed for: TPH-G BTEX MTBE TPH-D | Other: see COC |
| Equipment Blank I.D.: @ Time | Duplicate I.D.: |

## WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 060927-WC-1 | Client: Blymyer @ Dolan Rentals |
| Sampler: WC | Start Date: 9/27/06 |
| Well I.D.: MW-6 | Well Diameter: 2 3 4 6 8 ____ |
| Total Well Depth: 9.81 | Depth to Water Pre: 4.85 Post: 5.68 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: [✓ PVC] Grade | Flow Cell Type: |

Purge Method: 2" Grundfos Pump [✓ Peristaltic Pump] Bladder Pump

Sampling Method: Dedicated Tubing [✓ New Tubing] Other ____

Flow Rate: ~200ml/min ⊛ 400ml/min

Pump Depth: ~7.5'

| Time | Temp. ([✓ °C] or °F) | pH | Cond. (mS or [✓ µS]) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or [✓ mL]) | Observations | DTW. |
|---|---|---|---|---|---|---|---|---|---|
| 1137 | 21.64 | 7.48 | 4012 | 10 | 0.69 | -50.2 | 0 | clear | 4.85 |
| 1140 | 21.92 | 7.50 | 4009 | 9 | 0.43 | -74.9 | 600 | ↓ | 5.06 |
| 1143 | 22.00 | 7.50 | 4009 | 7 | 0.39 | -77.6 | 1,200 | | 5.35 |
| ⊛1146 | 22.71 | 7.52 | 3994 | 7 | 0.41 | -69.8 | 1,800 | | 5.61 |
| 1149 | 22.77 | 7.52 | 3994 | 7 | 0.37 | -71.2 | ~~2,400~~ 2,100 | | 5.63 |
| 1152 | 22.86 | 7.52 | 3993 | 8 | 0.36 | -70.7 | ~~3,000~~ 2,400 | | 5.65 |
| 1155 | 22.91 | 7.52 | 3993 | 7 | 0.35 | -72.9 | ~~3,600~~ 2,700 | | 5.68 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

⊛ reduced flow to ~100ml/min

Fe2+ < 0.2 mg/L

| | |
|---|---|
| Did well dewater? Yes [✓ No] | Amount actually evacuated: ~~3.6L~~ 2.7L mgw 10/25/06 |
| Sampling Time: 1200 | Sampling Date: 9/27/06 |
| Sample I.D.: MW-6 | Laboratory: McCampbell |
| Analyzed for: TPH-G BTEX MTBE TPH-D | Other: see COC |
| Equipment Blank I.D.: @ Time | Duplicate I.D.: |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 060927-WC-1 | Client: Blymyer @ Dolan Rentals |
| Sampler: WC | Start Date: 9/27/06 |
| Well I.D.: MW-7 | Well Diameter: [✓ 2] 3 4 6 8 ____ |
| Total Well Depth: 89.91 | Depth to Water Pre: 4.50 Post: 4.68 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: [✓ PVC] Grade | Flow Cell Type: YSI 556 |

Purge Method: 2" Grundfos Pump [✓ Peristaltic Pump] Bladder Pump

Sampling Method: Dedicated Tubing [✓ New Tubing] Other ____

Flow Rate: ~200 ml/min

Pump Depth: ~35'

| Time | Temp. ([✓ °C] or °F) | pH | Cond. (mS or [✓ µS]) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or [✓ mL]) | Observations / DTW |
|---|---|---|---|---|---|---|---|---|
| 1035 | 19.64 | 6.90 | 3591 | 18 | 0.67 | 70.0 | 0 | clear / 4.50 |
| 1038 | 19.68 | 6.92 | 3587 | 9 | 0.31 | 68.5 | 600 | / 4.64 |
| 1041 | 19.76 | 6.93 | 3592 | 8 | 0.26 | 68.8 | 1,200 | / 4.66 |
| 1044 | 19.71 | 6.94 | 3593 | 9 | 0.23 | 67.3 | 1,800 | / 4.66 |
| 1047 | 19.69 | 6.94 | 3595 | 10 | 0.25 | 67.3 | 2,400 | / 4.67 |
| 1050 | 19.76 | 6.95 | 3601 | 9 | 0.26 | 66.7 | 3,000 | / 4.67 |
| 1053 | 19.79 | 6.96 | 3613 | 9 | 0.26 | 62.0 | 3,600 | / 4.68 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

$Fe^{2+}$ < 0.2 mg/L

10/25/06

| | |
|---|---|
| Did well dewater? Yes [✓ No] | Amount actually evacuated: 3.6 L |
| Sampling Time: 1100 | Sampling Date: 9/27/06 |
| Sample I.D.: MW-7 | Laboratory: McCampbell |
| Analyzed for: TPH-G BTEX MTBE TPH-D | Other: see COC |
| Equipment Blank I.D.: @ Time | Duplicate I.D.: |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 060927-WC-1 | Client: Blymyer @ Dolan Rentals |
| Sampler: WC | Start Date: 9/28/06 |
| Well I.D.: MW-8 | Well Diameter: 2 3 [✓ 4] 6 8 |
| Total Well Depth: 20.00 | Depth to Water Pre: 3.10 Post: 3.11 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: [✓ PVC] Grade | Flow Cell Type: ysi 556 |

Purge Method: 2" Grundfos Pump [✓ Peristaltic Pump] Bladder Pump

Sampling Method: Dedicated Tubing [✓ New Tubing] Other

Flow Rate: ~200 ml/min

Pump Depth: ~15'

| Time | Temp. ([✓ °C] or °F) | pH | Cond. (mS or [✓ µS]) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or [✓ mL]) | Observations | DTW= |
|---|---|---|---|---|---|---|---|---|---|
| 0806 | 19.69 | 9.42 | 2458 | 20 | 0.97 | 51.9 | 0 | clear | 3.10 |
| 0809 | 19.89 | 10.20 | 2250 | 18 | 0.58 | 6.6 | 600 | ↓ | 3.12 |
| 0812 | 20.05 | 10.31 | 2190 | 15 | 0.55 | 6.9 | 1,200 | | 3.12 |
| 0815 | 20.17 | 10.35 | 2136 | 13 | 0.54 | 19.7 | 1,800 | | 3.12 |
| 0818 | 20.22 | 10.34 | 2128 | 11 | 0.51 | 33.9 | 2400 | | 3.11 |
| 0821 | 20.23 | 10.29 | 2137 | 10 | 0.39 | 61.8 | 3,000 | | 3.11 |
| 0824 | 20.25 | 10.27 | 2139 | 10 | 0.40 | 63.9 | 3,600 | | 3.11 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

fe2+ ~~X~~ < 0.2 mg/L MD 10/25/06

| | |
|---|---|
| Did well dewater? Yes [✓ No] | Amount actually evacuated: 3.6 L |
| Sampling Time: 0830 | Sampling Date: 9/28/06 |
| Sample I.D.: MW-8 | Laboratory: McCampbell |
| Analyzed for: TPH-G BTEX MTBE TPH-D | Other: see COC |
| Equipment Blank I.D.: @ Time | Duplicate I.D.: |

# WELL MONITORING DATA SHEET

| | |
|---|---|
| Project #: 060927-WC-1 | Client: Blymyer @ Dolan Rentals |
| Sampler: WC | Start Date: 9/28/06 |
| Well I.D.: MW-9 | Well Diameter: 2 3 [✓ 4] 6 8 ___ |
| Total Well Depth: 19.83 | Depth to Water Pre: 3.08 Post: 3.23 |
| Depth to Free Product: | Thickness of Free Product (feet): |
| Referenced to: [✓ PVC] Grade | Flow Cell Type: YSI 556 |

Purge Method: 2" Grundfos Pump [✓ Peristaltic Pump] Bladder Pump
Sampling Method: Dedicated Tubing [✓ New Tubing] Other___
Flow Rate: ~200 ml/min
Pump Depth: ~14'

| Time | Temp. ([✓ °C] or °F) | pH | Cond. (mS or [✓ µS]) | Turbidity (NTUs) | D.O. (mg/L) | ORP (mV) | Water Removed (gals. or mL) | Observations | DTW |
|---|---|---|---|---|---|---|---|---|---|
| 0845 | 21.09 | 9.82 | 1048 | 12 | 1.15 | 78.5 | 0 | clear | 3.08 |
| 0848 | 21.22 | 10.05 | 1071 | 7 | 1.44 | 66.6 | 600 | | 3.15 |
| 0851 | 21.43 | 10.31 | 1146 | 8 | 0.70 | 57.1 | 1,200 | | 3.18 |
| 0854 | 21.41 | 10.56 | 1266 | 7 | 0.36 | 34.0 | 1,800 | | 3.20 |
| 0857 | 21.13 | 10.73 | 1384 | 7 | 0.44 | 3.3 | 2,400 | | 3.22 |
| 0900 | 21.16 | 10.77 | 1406 | 6 | 0.27 | -3.8 | 3,000 | | 3.23 |
| 0903 | 21.13 | 10.80 | 1426 | 6 | 0.23 | -6.1 | 3,600 | ↓ | 3.23 |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | Fe2+ | ~~X~~ < 0.2 | | mg/L | | |

mod 10/25/06

| | |
|---|---|
| Did well dewater? Yes [✓ No] | Amount actually evacuated: 3.6 L |
| Sampling Time: 0910 | Sampling Date: 9/28/06 |
| Sample I.D.: MW-9 | Laboratory: McCampbell |
| Analyzed for: TPH-G BTEX MTBE TPH-D | Other: see COC |
| Equipment Blank I.D.: @ Time | Duplicate I.D.: |

# *Appendix C*

## Analytical Laboratory Report
## McCampbell Analytical, Inc.
## Dated October 4 and 11, 2006

**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

| | | | |
|---|---|---|---|
| Blymyer Engineers, Inc.<br>1829 Clement Avenue<br>Alameda, CA 94501-1395 | Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: | 09/27/06 |
| | | Date Received: | 09/27/06 |
| | Client Contact: Mark Detterman | Date Reported: | 10/04/06 |
| | Client P.O.: | Date Completed: | 10/04/06 |

**WorkOrder: 0609558**

October 04, 2006

Dear Mark:

Enclosed are:

1). the results of **4** analyzed samples from your **Dublin Concrete/Dolan Rentals 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.**
"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

| | | |
|---|---|---|
| Blymyer Engineers, Inc.<br>1829 Clement Avenue<br>Alameda, CA 94501-1395 | Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: 09/27/06<br>Date Received: 09/27/06 |
| | Client Contact: Mark Detterman | Date Extracted 09/29/06-09/30/06 |
| | Client P.O.: | Date Analyzed: 09/29/06-09/30/06 |

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0609558

| Lab ID | Client ID | Matrix | TPH(g) | MTBE | Benzene | Toluene | Ethylbenzene | Xylenes | DF | % SS |
|---|---|---|---|---|---|---|---|---|---|---|
| 001A | MW-3 | W | ND | ND | ND | ND | ND | ND | 1 | 101 |
| 002A | MW-4 | W | 1400,a | ND<15 | 8.5 | 7.3 | 2.4 | ND | 1 | 95 |
| 003A | MW-6 | W | ND | ND | ND | ND | ND | ND | 1 | 109 |
| 004A | MW-7 | W | ND | ND | ND | ND | ND | ND | 1 | 111 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Reporting Limit for DF =1;<br>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

| | | |
|---|---|---|
| Blymyer Engineers, Inc.<br>1829 Clement Avenue<br>Alameda, CA 94501-1395 | Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: 09/27/06<br>Date Received: 09/27/06 |
| | Client Contact: Mark Detterman | Date Extracted 09/27/06 |
| | Client P.O.: | Date Analyzed 09/28/06-09/30/06 |

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

Extraction method: SW3510C Analytical methods: SW8015C Work Order: 0609558

| Lab ID | Client ID | Matrix | TPH(d) | DF | % SS |
|---|---|---|---|---|---|
| 0609558-001B | MW-3 | W | ND | 1 | 105 |
| 0609558-002B | MW-4 | W | 220,d,b | 1 | 106 |
| 0609558-003B | MW-6 | W | 61,b | 1 | 113 |
| 0609558-004B | MW-7 | W | ND | 1 | 106 |

| | | | |
|---|---|---|---|
| Reporting Limit for DF =1;<br>ND means not detected at or<br>above the reporting limit | W | 50 | μg/L |
| | S | NA | NA |

* 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/jet fuel range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

| | | |
|---|---|---|
| Blymyer Engineers, Inc.<br>1829 Clement Avenue<br>Alameda, CA 94501-1395 | Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: 09/27/06<br>Date Received: 09/27/06 |
| | Client Contact: Mark Detterman | Date Extracted 09/28/06 |
| | Client P.O.: | Date Analyzed 09/28/06 |

## Methane*

Extraction method: RSK 174
Analytical methods: RSK174
Work Order: 0609558

| Lab ID | Client ID | Matrix | Methane | DF | % SS |
|---|---|---|---|---|---|
| 0609558-001D | MW-3 | W | ND | 1 | N/A |
| 0609558-002D | MW-4 | W | 51 | 40 | N/A |
| 0609558-003D | MW-6 | W | 55 | 40 | N/A |
| 0609558-004D | MW-7 | W | 1.1 | 1 | N/A |

| | | | |
|---|---|---|---|
| Reporting Limit for DF =1;<br>ND means not detected at or above the reporting limit | W | 0.5 | µg/L |
| | S | NA | NA |

* water samples are reported in µg/L.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

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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

| | | |
|---|---|---|
| Blymyer Engineers, Inc.<br>1829 Clement Avenue<br>Alameda, CA 94501-1395 | Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: 09/27/06<br>Date Received 09/27/06 |
| | Client Contact: Mark Detterman | Date Extracted 09/27/06 |
| | Client P.O.: | Date Analyzed 09/28/06-09/29/06 |

## Inorganic Anions by IC*

Extraction method: E300.1
Analytical methods: E300.1
Work Order: 0609558

| Lab ID | Client ID | Matrix | Nitrate as N | DF | Nitrate as NO3⁻ | DF | Sulfate | DF | % SS |
|---|---|---|---|---|---|---|---|---|---|
| 001G | MW-3 | W | 1.5 | 1 | 6.8 | 1 | 580 | 100 | 104 |
| 002G | MW-4 | W | ND | 1 | ND | 1 | 480 | 50 | 104 |
| 003G | MW-6 | W | ND | 1 | ND | 1 | 530 | 100 | 102 |
| 004G | MW-7 | W | ND | 1 | ND | 1 | 270 | 50 | 105 |

| | | | | | |
|---|---|---|---|---|---|
| Reporting Limit for DF =1;<br>ND means not detected at or above the reporting limit | W | 0.1 | 0.45 | 0.1 | mg/L |
| | S | NA | NA | NA | mg/Kg |

* water samples are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in mg/wipe, product/oil/non-aqueous liquid samples in mg/L.

* [Nitrate as NO3⁻] = 4.4286 x [Nitrate as N]

\# surrogate diluted out of range or surrogate coelutes with another peak; N/A means surrogate not applicable to this analysis.

h) a lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted/reporting limit raised due to high inorganic content/matrix interference; k) sample arrived with head space.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

| | | |
|---|---|---|
| Blymyer Engineers, Inc.<br>1829 Clement Avenue<br>Alameda, CA 94501-1395 | Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: 09/27/06 |
| | | Date Received: 09/27/06 |
| | Client Contact: Mark Detterman | Date Extracted 09/27/06-10/02/06 |
| | Client P.O.: | Date Analyzed: 10/02/06 |

## Biochemical Oxygen Demand (BOD)*

Analytical Method: SM5210B

Work Order: 0609558

| Lab ID | Client ID | Matrix | BOD | DF |
|---|---|---|---|---|
| 0609558-001E | MW-3 | W | ND | 1 |
| 0609558-002E | MW-4 | W | ND | 1 |
| 0609558-003E | MW-6 | W | ND | 1 |
| 0609558-004E | MW-7 | W | ND | 1 |

| | | |
|---|---|---|
| Reporting Limit for DF = 1; ND means not detected at or above the reporting limit | W | 4.0 mg/L |
| | S | NA |

* water samples are reported in mg/L.

i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to insufficient sample amount; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

| | | |
|---|---|---|
| Blymyer Engineers, Inc.<br>1829 Clement Avenue<br>Alameda, CA 94501-1395 | Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: 09/27/06<br>Date Received: 09/27/06 |
| | Client Contact: Mark Detterman | Date Extracted 09/28/06 |
| | Client P.O.: | Date Analyzed: 09/28/06 |

## Chemical Oxygen Demand (COD)*

Analytical Method: SM5220D

Work Order: 0609558

| Lab ID | Client ID | Matrix | COD | DF |
|---|---|---|---|---|
| 0609558-001F | MW-3 | W | ND | 1 |
| 0609558-002F | MW-4 | W | 22 | 1 |
| 0609558-003F | MW-6 | W | 25 | 1 |
| 0609558-004F | MW-7 | W | ND | 1 |

| | | |
|---|---|---|
| Reporting Limit for DF = 1; ND means not detected at or above the reporting limit | W | 10 mg/L |
| | S | NA |

*water/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.

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

| | | |
|---|---|---|
| Blymyer Engineers, Inc.<br>1829 Clement Avenue<br>Alameda, CA 94501-1395 | Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: 09/27/06 |
| | | Date Received: 09/27/06 |
| | Client Contact: Mark Detterman | Date Extracted 09/27/06 |
| | Client P.O.: | Date Analyzed: 10/02/06 |

## Inorganic Carbon as Carbon Dioxide*

Analytical Method: SM5310 B

Work Order: 0609558

| Lab ID | Client ID | Matrix | IC as CO2 | DF |
|---|---|---|---|---|
| 0609558-001C | MW-3 | W | 650 | 5 |
| 0609558-002C | MW-4 | W | 290 | 5 |
| 0609558-003C | MW-6 | W | 400 | 5 |
| 0609558-004C | MW-7 | W | 350 | 5 |

| | | |
|---|---|---|
| Reporting Limit for DF = 1; ND means not detected at or above the reporting limit | W | 2.6 mg/L |
| | S | NA |

* water samples are reported in mg/L, soil/sludge/solid samples in mg/kg.

* Non-Purgeable Organic Carbon=NPOC; TOC=Total Organic Carbon; DOC=Dissolved Organic Carbon; POC=Purgeable Organic Cabon; IC=Inorganic Carbon.

i) liquid sample contains greater than ~1 vol. % sediment.

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

| | | |
|---|---|---|
| Blymyer Engineers, Inc.<br>1829 Clement Avenue<br>Alameda, CA 94501-1395 | Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: 09/27/06 |
| | | Date Received: 09/27/06 |
| | Client Contact: Mark Detterman | Date Extracted 10/03/06 |
| | Client P.O.: | Date Analyzed: 10/03/06 |

## Total Phosphorous as P*

Analytical Method: E365.1

Work Order: 0609558

| Lab ID | Client ID | Matrix | Total Phosphorous as P | DF |
|---|---|---|---|---|
| 0609558-001F | MW-3 | W | 0.16 | 1 |
| 0609558-002F | MW-4 | W | 0.13 | 1 |
| 0609558-003F | MW-6 | W | 0.079 | 1 |
| 0609558-004F | MW-7 | W | 0.13 | 1 |

| | | |
|---|---|---|
| Reporting Limit for DF = 1; ND means not detected at or above the reporting limit | W | 0.04 mg/L |
| | S | NA |

*water/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.

i) liquid sample contains greater than ~1 vol. % sediment; J) analyte detected below quantitation limits.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

| | | |
|---|---|---|
| Blymyer Engineers, Inc.<br>1829 Clement Avenue<br>Alameda, CA 94501-1395 | Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: 09/27/06 |
| | | Date Received: 09/27/06 |
| | Client Contact: Mark Detterman | Date Extracted 09/27/06 |
| | Client P.O.: | Date Analyzed: 09/29/06 |

## Metals*

Extraction method: E200.8 Analytical methods: E200.8 Work Order: 0609558

| Lab ID | Client ID | Matrix | Extraction | Manganese | Potassium | DF | % SS |
|---|---|---|---|---|---|---|---|
| 001H | MW-3 | W | TTLC | 1500 | 900 | 1 | 106 |
| 002H | MW-4 | W | TTLC | 4100 | 670 | 1 | 113 |
| 003H | MW-6 | W | TTLC | 410 | 320 | 1 | 112 |
| 004H | MW-7 | W | TTLC | 4600 | 1700 | 1 | 110 |

| | | | | | |
|---|---|---|---|---|---|
| Reporting Limit for DF =1;<br>ND means not detected at or above the reporting limit | W | TTLC | 20 | 20 | μg/L |
| | S | TTLC | NA | NA | NA |

*water samples are reported in ug/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; J) analyte detected below quantitation limits; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrrogate recovery; n) results are reported on a dry weight basis; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

# QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0609558

**EPA Method: SW8021B/8015Cm** **Extraction: SW5030B** **BatchID: 23977** **Spiked Sample ID: 0609553-001A**

| 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 | 103 | 106 | 2.98 | 101 | 103 | 2.21 | 70 - 130 | 30 | 70 - 130 | 30 |
| MTBE | ND | 10 | 80.2 | 77.8 | 2.99 | 82.8 | 85.7 | 3.42 | 70 - 130 | 30 | 70 - 130 | 30 |
| Benzene | ND | 10 | 110 | 109 | 0.946 | 108 | 115 | 6.22 | 70 - 130 | 30 | 70 - 130 | 30 |
| Toluene | ND | 10 | 109 | 106 | 2.83 | 107 | 113 | 5.37 | 70 - 130 | 30 | 70 - 130 | 30 |
| Ethylbenzene | ND | 10 | 112 | 112 | 0 | 111 | 118 | 5.96 | 70 - 130 | 30 | 70 - 130 | 30 |
| Xylenes | ND | 30 | 123 | 123 | 0 | 123 | 130 | 5.26 | 70 - 130 | 30 | 70 - 130 | 30 |
| %SS: | 106 | 10 | 106 | 104 | 2.62 | 104 | 111 | 6.39 | 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 23977 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0609558-001A | 9/27/06 1:37 PM | 9/30/06 | 9/30/06 12:40 PM | 0609558-002A | 9/27/06 10:05 AM | 9/29/06 | 9/29/06 9:52 PM |
| 0609558-003A | 9/27/06 12:00 PM | 9/29/06 | 9/29/06 10:22 PM | 0609558-004A | 9/27/06 11:00 AM | 9/29/06 | 9/29/06 10:51 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.

QA/QC Officer

# QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0609558

**EPA Method: SW8015C** **Extraction: SW3510C** **BatchID: 23982** **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 | 97.5 | 95.2 | 2.37 | N/A | N/A | 70 - 130 | 30 |
| %SS: | N/A | 2500 | N/A | N/A | N/A | 104 | 101 | 3.08 | 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 23982 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0609558-001B | 9/27/06 1:37 PM | 9/27/06 | 9/28/06 6:38 PM | 0609558-002B | 9/27/06 10:05 AM | 9/27/06 | 9/28/06 7:46 PM |
| 0609558-003B | 9/27/06 12:00 PM | 9/27/06 | 9/30/06 8:35 AM | 0609558-004B | 9/27/06 11:00 AM | 9/27/06 | 9/28/06 10:03 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

# QC SUMMARY REPORT FOR RSK174

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0609558

**EPA Method: RSK174** **Extraction: RSK 174** **BatchID: 23984** **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 |
| Methane | N/A | 1.76 | N/A | N/A | N/A | 102 | 104 | 1.58 | N/A | N/A | 80 - 120 | 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 23984 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0609558-001D | 9/27/06 1:37 PM | 9/28/06 | 9/28/06 3:51 PM | 0609558-002D | 9/27/06 10:05 AM | 9/28/06 | 9/28/06 6:07 PM |
| 0609558-003D | 9/27/06 12:00 PM | 9/28/06 | 9/28/06 6:25 PM | 0609558-004D | 9/27/06 11:00 AM | 9/28/06 | 9/28/06 5:35 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

# QC SUMMARY REPORT FOR E300.1

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0609558

**EPA Method: E300.1** **Extraction: E300.1** **BatchID: 23951** **Spiked Sample ID: N/A**

| Analyte | Sample | Spiked | MS | MSD | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance Criteria (%) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mg/L | mg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD |
| Nitrate as N | N/A | 1 | N/A | N/A | N/A | 95.9 | 96.4 | 0.568 | N/A | N/A | 85 - 115 | 15 |
| Nitrate as $NO3^-$ | N/A | 4.4 | N/A | N/A | N/A | 95.9 | 96.4 | 0.568 | N/A | N/A | 85 - 115 | 15 |
| Sulfate | N/A | 1 | N/A | N/A | N/A | 101 | 97.5 | 3.22 | N/A | N/A | 85 - 115 | 15 |
| %SS: | N/A | 0.10 | N/A | N/A | N/A | 96 | 95 | 0.946 | N/A | N/A | 90 - 115 | 10 |

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

NONE

## BATCH 23951 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0609558-001G | 9/27/06 1:37 PM | 9/27/06 | 9/28/06 7:57 PM | 0609558-001G | 9/27/06 1:37 PM | 9/27/06 | 9/29/06 10:36 PM |
| 0609558-002G | 9/27/06 10:05 AM | 9/27/06 | 9/28/06 8:28 PM | 0609558-002G | 9/27/06 10:05 AM | 9/27/06 | 9/28/06 10:35 PM |
| 0609558-003G | 9/27/06 12:00 PM | 9/27/06 | 9/28/06 9:00 PM | 0609558-003G | 9/27/06 12:00 PM | 9/27/06 | 9/29/06 11:08 PM |
| 0609558-004G | 9/27/06 11:00 AM | 9/27/06 | 9/28/06 9:32 PM | 0609558-004G | 9/27/06 11:00 AM | 9/27/06 | 9/28/06 11:39 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 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 content.

DHS ELAP Certification N° 1644

QA/QC Officer

# QC SUMMARY REPORT FOR SM5210B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0609558

**EPA Method: SM5210B** **Extraction: SM5210B** **BatchID: 23944** **Spiked Sample ID: N/A**

| Analyte | Sample | Spiked | MS | MSD | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance Criteria (%) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mg/L | mg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD |
| BOD | N/A | 198 | N/A | N/A | N/A | 102 | 105 | 2.68 | N/A | N/A | 80 - 120 | 16 |

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

## BATCH 23944 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0609558-001E | 9/27/06 1:37 PM | 9/27/06 | 10/02/06 2:08 PM | 0609558-002E | 9/27/06 10:05 AM | 9/27/06 | 10/02/06 2:26 PM |
| 0609558-003E | 9/27/06 12:00 PM | 9/27/06 | 10/02/06 2:44 PM | 0609558-004E | 9/27/06 11:00 AM | 9/27/06 | 10/02/06 3:02 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.

QA/QC Officer

# QC SUMMARY REPORT FOR SM5220D

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0609558

**EPA Method: SM5220D** **Extraction: SM5220D** **BatchID: 23985** **Spiked Sample ID: 0609558-001F**

| Analyte | Sample | Spiked | MS | MSD | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance Criteria (%) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mg/L | mg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD |
| COD | ND | 400 | 101 | 103 | 1.20 | 98.9 | 100 | 1.23 | 80 - 120 | 20 | 90 - 110 | 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 23985 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0609558-001F | 9/27/06 1:37 PM | 9/28/06 | 9/28/06 1:37 PM | 0609558-002F | 9/27/06 10:05 AM | 9/28/06 | 9/28/06 1:43 PM |
| 0609558-003F | 9/27/06 12:00 PM | 9/28/06 | 9/28/06 1:49 PM | 0609558-004F | 9/27/06 11:00 AM | 9/28/06 | 9/28/06 1:55 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

# QC SUMMARY REPORT FOR SM5310B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0609558

**EPA Method: SM5310 B** **Extraction: SM5310 B** **BatchID: 23983** **Spiked Sample ID: 0609558-004C**

| Analyte | Sample | Spiked | MS | MSD | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance Criteria (%) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mg/L | mg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD |
| IC as CO2 | 350 | 36.7 | 118 | 116 | 0.232 | 103 | 102 | 0.585 | 70 - 130 | 20 | 80 - 120 | 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 23983 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0609558-001C | 9/27/06 1:37 PM | 9/27/06 | 10/02/06 7:58 PM | 0609558-002C | 9/27/06 10:05 AM | 9/27/06 | 10/02/06 8:04 PM |
| 0609558-003C | 9/27/06 12:00 PM | 9/27/06 | 10/02/06 8:11 PM | 0609558-004C | 9/27/06 11:00 AM | 9/27/06 | 10/02/06 8:19 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 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 content.

# QC SUMMARY REPORT FOR E365.1

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0609558

**EPA Method: E365.1** **Extraction: E365.1** **BatchID: 23986** **Spiked Sample ID: 0609558-001F**

| Analyte | Sample | Spiked | MS | MSD | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance Criteria (%) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mg/L | mg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD |
| Total Phosphorous as P | 0.16 | 0.80 | 86.2 | 88 | 1.66 | 93.1 | 92.7 | 0.363 | 80 - 120 | 20 | 90 - 110 | 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 23986 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0609558-001F | 9/27/06 1:37 PM | 10/03/06 | 10/03/06 1:21 PM | 0609558-002F | 9/27/06 10:05 AM | 10/03/06 | 10/03/06 1:22 PM |
| 0609558-003F | 9/27/06 12:00 PM | 10/03/06 | 10/03/06 1:23 PM | 0609558-004F | 9/27/06 11:00 AM | 10/03/06 | 10/03/06 1:24 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

# QC SUMMARY REPORT FOR E200.8

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0609558

**EPA Method: E200.8** **Extraction: E200.8** **BatchID: 23976** **Spiked Sample ID: 0609542-001A**

| 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 |
| Manganese | 98 | 100 | 89.1 | 91.1 | 1.06 | 100 | 102 | 2.08 | 75 - 125 | 20 | 85 - 115 | 20 |
| Potassium | 14,000 | 100 | 90 | 100 | 0.0722 | 88.5 | 93.6 | 5.53 | 75 - 125 | 20 | 85 - 115 | 20 |
| %SS: | 111 | 750 | 109 | 111 | 1.37 | 102 | 105 | 2.48 | 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 23976 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0609558-001H | 9/27/06 1:37 PM | 9/27/06 | 9/29/06 2:28 AM | 0609558-002H | 9/27/06 10:05 AM | 9/27/06 | 9/29/06 2:34 AM |
| 0609558-003H | 9/27/06 12:00 PM | 9/27/06 | 9/29/06 2:39 AM | 0609558-004H | 9/27/06 11:00 AM | 9/27/06 | 9/29/06 2:45 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 content.

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Pittsburg, CA 94565-1701
(925) 252-9262

# CHAIN-OF-CUSTODY RECORD

Page 1 of 1

**WorkOrder: 0609558** **ClientID: BEIA** **EDF: NO**

**Report to:**

Mark Detterman
Blymyer Engineers, Inc.
1829 Clement Avenue
Alameda, CA 94501-1395

Email:
TEL: (510) 521-3773 FAX: (510) 865-2594
ProjectNo: Dublin Concrete/Dolan Rentals
PO:

**Bill to:**

Accounts Payable
Blymyer Engineers, Inc.
1829 Clement Avenue
Alameda, CA 94501-1395

Requested TAT: 5 days

*Date Received:* 09/27/2006
*Date Printed:* 09/27/2006

| | | | | | Requested Tests (See legend below) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sample ID** | **ClientSampID** | **Matrix** | **Collection Date** | **Hold** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 0609558-001 | MW-3 | Water | 9/27/06 1:37:00 PM | ☐ | G | E | F | A | C | H | D | F | B | | | |
| 0609558-002 | MW-4 | Water | 9/27/06 10:05:00 | ☐ | G | E | F | A | C | H | D | F | B | | | |
| 0609558-003 | MW-6 | Water | 9/27/06 12:00:00 | ☐ | G | E | F | A | C | H | D | F | B | | | |
| 0609558-004 | MW-7 | Water | 9/27/06 11:00:00 | ☐ | G | E | F | A | C | H | D | F | B | | | |

Test Legend:

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 300_1_W | 2 | BOD_W | 3 | COD_W | 4 | G-MBTEX_W | 5 | IC(CO2)_W |
| 6 | METALSMS_W | 7 | RSK174_W | 8 | TotalP_W | 9 | TPH(D)_W | 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.

Beia 0609558

**BLAINE**
TECH SERVICES, INC.

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
FAX (408) 573-7771
PHONE (408) 573-0555

CHAIN OF CUSTODY

BTS # 060927-WC-1

CLIENT: Blymyer Engineers, Inc.

SITE: Dublin Concrete/ Dolan Rentals
6393 Scarlett Ct
Dublin, CA

LAB: McCampbell | DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND

☐ EPA
☐ LIA
☐ OTHER
☐ RWQCB REGION

SPECIAL INSTRUCTIONS

Invoice and Report to : Blymyer Engineers, Inc.

Attn: Mark Detterman

EDF Format Required

**Rerun highest MTBE detection by 8021 for (5) oxygenates, 1,2-DCA, EDB, Methanol and Ethanol all by EPA 8260.

CONDUCT ANALYSIS TO DETECT

| SAMPLE I.D. | DATE | TIME | MATRIX S= SOIL W=$H_2O$ | CONTAINERS TOTAL | CONTAINERS | C = COMPOSITE ALL CONTAINERS | TPH-G (8015M) | BTEX/MtBE (8021B)** | TPH-D (8015M) | Carbon Dioxide, Methane | BOD **(48 hr hold)** | COD, Total Phosphorous | Sulfate, Nitrate **(48 hr Hold)** | Manganese, Potassium | ADD'L INFORMATION | STATUS | CONDITION | LAB SAMPLE # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-3 | 9/27/06 | 1337 | W | 12 | mix | | X | X | X | X | X | X | X | X | | | | |
| MW-4 | ↓ | 1005 | ↓ | ↓ | ↓ | | X | X | X | X | X | X | X | X | | | | |
| MW-6 | ↓ | 1200 | ↓ | ↓ | ↓ | | X | X | X | X | X | X | X | X | | | | |
| MW-7 | ↓ | 1100 | ↓ | ↓ | ↓ | | X | X | X | X | X | X | X | X | | | | |

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

| | | | | |
|---|---|---|---|---|
| SAMPLING COMPLETED | DATE 9/27/06 | TIME 1337 | SAMPLING PERFORMED BY Will Gow | RESULTS NEEDED NO LATER THAN As contracted |

| | | | | | |
|---|---|---|---|---|---|
| RELEASED BY | DATE 9/27/06 | TIME 4:25p | RECEIVED BY | DATE 9/27/06 | TIME 4:25p |
| RELEASED BY | DATE | TIME | RECEIVED BY | DATE 9/27/06 | TIME 6:45pm |
| RELEASED BY | DATE | TIME | RECEIVED BY | DATE | TIME |
| SHIPPED VIA | DATE SENT | TIME SENT | COOLER # | | |

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

| | | |
|---|---|---|
| Blymyer Engineers, Inc.<br>1829 Clement Avenue<br>Alameda, CA 94501-1395 | Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: 09/28/06<br>Date Received: 09/28/06 |
| | Client Contact: Mark Detterman | Date Reported: 10/04/06 |
| | Client P.O.: | Date Completed: 10/11/06 |

**WorkOrder: 0609597**

October 11, 2006

Dear Mark:

Enclosed are:

1). the results of 4 analyzed samples from your **Dublin Concrete/Dolan Rentals 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

| | | |
|---|---|---|
| Blymyer Engineers, Inc.<br>1829 Clement Avenue<br>Alameda, CA 94501-1395 | Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: 09/28/06<br>Date Received: 09/28/06 |
| | Client Contact: Mark Detterman | Date Extracted 10/02/06 |
| | Client P.O.: | Date Analyzed: 10/02/06 |

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

Extraction method: SW5030B Analytical methods: SW8021B/8015Cm Work Order: 0609597

| Lab ID | Client ID | Matrix | TPH(g) | MTBE | Benzene | Toluene | Ethylbenzene | Xylenes | DF | % SS |
|---|---|---|---|---|---|---|---|---|---|---|
| 001A | MW-1 | W | 78,f | ND | ND | ND | ND | ND | 1 | 119 |
| 002A | MW-5 | W | ND | 48 | ND | ND | ND | ND | 1 | 97 |
| 003A | MW-8 | W | 150,a | ND | 3.0 | 1.2 | 1.1 | 7.2 | 1 | ---# |
| 004A | MW-9 | W | 150,a | ND | 0.95 | 0.69 | 0.87 | 6.7 | 1 | 113 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 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

| | | |
|---|---|---|
| Blymyer Engineers, Inc.<br>1829 Clement Avenue<br>Alameda, CA 94501-1395 | Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: 09/28/06 |
| | | Date Received: 09/28/06 |
| | Client Contact: Mark Detterman | Date Extracted 09/28/06 |
| | Client P.O.: | Date Analyzed 10/02/06-10/03/06 |

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

Extraction method: SW3510C    Analytical methods: SW8015C    Work Order: 0609597

| Lab ID | Client ID | Matrix | TPH(d) | DF | % SS |
|---|---|---|---|---|---|
| 0609597-001B | MW-1 | W | ND | 1 | 103 |
| 0609597-002B | MW-5 | W | ND | 1 | 106 |
| 0609597-003B | MW-8 | W | 300,d,g,b | 1 | 105 |
| 0609597-004B | MW-9 | W | 530,b,d,g | 1 | 106 |

| | | | |
|---|---|---|---|
| Reporting Limit for DF =1;<br>ND means not detected at or above the reporting limit | W | 50 | μg/L |
| | S | NA | NA |

* 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/jet fuel range; l) bunker oil; m) fuel oil; n) stoddard solvent/mineral spirit.

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Angela Rydelius, Lab Manager

| | | |
|---|---|---|
| Blymyer Engineers, Inc.<br>1829 Clement Avenue<br>Alameda, CA 94501-1395 | Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: 09/28/06<br>Date Received: 09/28/06 |
| | Client Contact: Mark Detterman | Date Extracted 10/11/06 |
| | Client P.O.: | Date Analyzed: 10/11/06 |

## Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS*

Extraction Method: SW5030B Analytical Method: SW8260B Work Order: 0609597

| | | | | | | |
|---|---|---|---|---|---|---|
| Lab ID | 0609597-002I | | | | Reporting Limit for DF =1 | |
| Client ID | MW-5 | | | | | |
| Matrix | W | | | | | |
| DF | 2 | | | | S | W |
| **Compound** | **Concentration** | | | | ug/kg | µg/L |
| tert-Amyl methyl ether (TAME) | ND<1.0 | | | | NA | 0.5 |
| t-Butyl alcohol (TBA) | ND<10 | | | | NA | 5.0 |
| 1,2-Dibromoethane (EDB) | ND<1.0 | | | | NA | 0.5 |
| 1,2-Dichloroethane (1,2-DCA) | ND<1.0 | | | | NA | 0.5 |
| Diisopropyl ether (DIPE) | ND<1.0 | | | | NA | 0.5 |
| Ethanol | ND<100 | | | | NA | 50 |
| Ethyl tert-butyl ether (ETBE) | ND<1.0 | | | | NA | 0.5 |
| Methanol | ND<1000 | | | | NA | 500 |
| Methyl-t-butyl ether (MTBE) | 48 | | | | NA | 0.5 |
| **Surrogate Recoveries (%)** | | | | | | |
| %SS1: | 114 | | | | | |
| **Comments** | | | | | | |

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

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.

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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

| | | |
|---|---|---|
| Blymyer Engineers, Inc.<br>1829 Clement Avenue<br>Alameda, CA 94501-1395 | Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: 09/28/06<br>Date Received: 09/28/06 |
| | Client Contact: Mark Detterman | Date Extracted 10/02/06 |
| | Client P.O.: | Date Analyzed 10/02/06 |

## Methane*

Extraction method: RSK 174 Analytical methods: RSK174 Work Order: 0609597

| Lab ID | Client ID | Matrix | Methane | DF | % SS |
|---|---|---|---|---|---|
| 0609597-001H | MW-1 | W | 0.86 | 1 | N/A |
| 0609597-002H | MW-5 | W | 24 | 20 | N/A |
| 0609597-003H | MW-8 | W | 18 | 20 | N/A |
| 0609597-004H | MW-9 | W | 28 | 20 | N/A |

| | | | |
|---|---|---|---|
| Reporting Limit for DF =1;<br>ND means not detected at or above the reporting limit | W | 0.5 | µg/L |
| | S | NA | NA |

* water samples are reported in µg/L.

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Angela Rydelius, Lab Manager

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

| | | |
|---|---|---|
| Blymyer Engineers, Inc.<br>1829 Clement Avenue<br>Alameda, CA 94501-1395 | Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: 09/28/06 |
| | | Date Received 09/28/06 |
| | Client Contact: Mark Detterman | Date Extracted 09/28/06 |
| | Client P.O.: | Date Analyzed 09/29/06-09/30/06 |

## Inorganic Anions by IC*

Extraction method: E300.1 Analytical methods: E300.1 Work Order: 0609597

| Lab ID | Client ID | Matrix | Nitrate as N | DF | Nitrate as NO3⁻ | DF | Sulfate | DF | % SS |
|---|---|---|---|---|---|---|---|---|---|
| 001F | MW-1 | W | ND | 1 | ND | 1 | 980 | 200 | 105 |
| 002F | MW-5 | W | ND | 1 | ND | 1 | 410 | 100 | 103 |
| 003F | MW-8 | W | 0.29 | 1 | 1.3 | 1 | 290 | 100 | 99 |
| 004F | MW-9 | W | ND | 1 | ND | 1 | 120 | 50 | 107 |

| | | | | | |
|---|---|---|---|---|---|
| Reporting Limit for DF =1;<br>ND means not detected at or above the reporting limit | W | 0.1 | 0.45 | 0.1 | mg/L |
| | S | NA | NA | NA | mg/Kg |

* water samples are reported in mg/L, soil/sludge/solid samples in mg/kg, wipe samples in mg/wipe, product/oil/non-aqueous liquid samples in mg/L.

* [Nitrate as NO3⁻] = 4.4286 x [Nitrate as N]

\# surrogate diluted out of range or surrogate coelutes with another peak; N/A means surrogate not applicable to this analysis.

h) a lighter than water immiscible sheen/product is present; i) liquid sample that contains greater than ~1 vol. % sediment; j) sample diluted/reporting limit raised due to high inorganic content/matrix interference; k) sample arrived with head space.

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Angela Rydelius, Lab Manager

| | | |
|---|---|---|
| Blymyer Engineers, Inc.<br>1829 Clement Avenue<br>Alameda, CA 94501-1395 | Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: 09/28/06<br>Date Received: 09/28/06 |
| | Client Contact: Mark Detterman | Date Extracted 09/28/06-10/03/06 |
| | Client P.O.: | Date Analyzed: 10/04/06 |

## Biochemical Oxygen Demand (BOD)*

Analytical Method: SM5210B

Work Order: 0609597

| Lab ID | Client ID | Matrix | BOD | DF |
|---|---|---|---|---|
| 0609597-001D | MW-1 | W | ND | 1 |
| 0609597-002D | MW-5 | W | ND | 1 |
| 0609597-003D | MW-8 | W | ND | 1 |
| 0609597-004D | MW-9 | W | ND | 1 |

| | | |
|---|---|---|
| Reporting Limit for DF = 1; ND means not detected at or above the reporting limit | W | 4.0 mg/L |
| | S | NA |

* water samples are reported in mg/L.

i) liquid sample that contains greater than ~1 vol. % sediment; j) reporting limit raised due to insufficient sample amount; p) see attached narrative.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

| | | |
|---|---|---|
| Blymyer Engineers, Inc.<br>1829 Clement Avenue<br>Alameda, CA 94501-1395 | Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: 09/28/06<br>Date Received: 09/28/06 |
| | Client Contact: Mark Detterman | Date Extracted 09/29/06 |
| | Client P.O.: | Date Analyzed: 09/29/06 |

## Chemical Oxygen Demand (COD)*

Analytical Method: SM5220D

Work Order: 0609597

| Lab ID | Client ID | Matrix | COD | DF |
|---|---|---|---|---|
| 0609597-001E | MW-1 | W | 15 | 1 |
| 0609597-002E | MW-5 | W | 15 | 1 |
| 0609597-003E | MW-8 | W | 34 | 1 |
| 0609597-004E | MW-9 | W | 42 | 1 |

| | | |
|---|---|---|
| Reporting Limit for DF = 1; ND means not detected at or above the reporting limit | W | 10 mg/L |
| | S | NA |

*water/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.

DHS ELAP Certification N° 1644

Angela Rydelius, Lab Manager

Blymyer Engineers, Inc.

1829 Clement Avenue

Alameda, CA 94501-1395

| | |
|---|---|
| Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: 09/28/06 |
| | Date Received: 09/28/06 |
| Client Contact: Mark Detterman | Date Extracted 09/28/06 |
| Client P.O.: | Date Analyzed: 10/02/06 |

## Inorganic Carbon as Carbon Dioxide*

Analytical Method: SM5310 B

Work Order: 0609597

| Lab ID | Client ID | Matrix | IC as CO2 | DF |
|---|---|---|---|---|
| 0609597-001C | MW-1 | W | 660 | 5 |
| 0609597-002C | MW-5 | W | 1400 | 5 |
| 0609597-003C | MW-8 | W | 5.0 | 1 |
| 0609597-004C | MW-9 | W | 6.3 | 1 |

| | | |
|---|---|---|
| Reporting Limit for DF = 1; ND means not detected at or above the reporting limit | W | 2.6 mg/L |
| | S | NA |

* water samples are reported in mg/L, soil/sludge/solid samples in mg/kg.

* Non-Purgeable Organic Carbon=NPOC; TOC=Total Organic Carbon; DOC=Dissolved Organic Carbon; POC=Purgeable Organic Cabon; IC=Inorganic Carbon.

i) liquid sample contains greater than ~1 vol. % sediment.

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Angela Rydelius, Lab Manager

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

| | | |
|---|---|---|
| Blymyer Engineers, Inc.<br>1829 Clement Avenue<br>Alameda, CA 94501-1395 | Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: 09/28/06 |
| | | Date Received: 09/28/06 |
| | Client Contact: Mark Detterman | Date Extracted 10/03/06 |
| | Client P.O.: | Date Analyzed: 10/03/06 |

## Total Phosphorous as P*

Analytical Method: E365.1

Work Order: 0609597

| Lab ID | Client ID | Matrix | Total Phosphorous as P | DF |
|---|---|---|---|---|
| 0609597-001E | MW-1 | W | 0.18 | 1 |
| 0609597-002E | MW-5 | W | 0.13 | 1 |
| 0609597-003E | MW-8 | W | ND | 1 |
| 0609597-004E | MW-9 | W | ND | 1 |

| | | |
|---|---|---|
| Reporting Limit for DF = 1; ND means not detected at or above the reporting limit | W | 0.04 mg/L |
| | S | NA |

*water/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.

i) liquid sample contains greater than ~1 vol. % sediment; J) analyte detected below quantitation limits.

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Angela Rydelius, Lab Manager

| | | |
|---|---|---|
| Blymyer Engineers, Inc.<br>1829 Clement Avenue<br>Alameda, CA 94501-1395 | Client Project ID: Dublin Concrete/Dolan Rentals | Date Sampled: 09/28/06 |
| | | Date Received: 09/28/06 |
| | Client Contact: Mark Detterman | Date Extracted 09/28/06 |
| | Client P.O.: | Date Analyzed: 09/30/06 |

## Metals*

Extraction method: E200.8 Analytical methods: E200.8 Work Order: 0609597

| Lab ID | Client ID | Matrix | Extraction | Manganese | Potassium | DF | % SS |
|---|---|---|---|---|---|---|---|
| 001G | MW-1 | W | TTLC | 1900 | 1200 | 1 | 109 |
| 002G | MW-5 | W | TTLC | 630 | 920 | 1 | 107 |
| 003G | MW-8 | W | TTLC | ND | 6000 | 1 | 104 |
| 004G | MW-9 | W | TTLC | ND | 5300 | 1 | 108 |

| | | | | | |
|---|---|---|---|---|---|
| Reporting Limit for DF =1; ND means not detected at or above the reporting limit | W | TTLC | 20 | 20 | µg/L |
| | S | TTLC | NA | NA | NA |

*water samples are reported in ug/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; J) analyte detected below quantitation limits; k) reporting limit raised due to matrix interference; m) estimated value due to low/high surrrogate recovery; n) results are reported on a dry weight basis; p) see attached narrative.

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Angela Rydelius, Lab Manager

# QC SUMMARY REPORT FOR SW8021B/8015Cm

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0609597

**EPA Method: SW8021B/8015Cm Extraction: SW5030B BatchID: 24013 Spiked Sample ID: 0609590-005A**

| 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 | 109 | 111 | 1.88 | 107 | 104 | 3.28 | 70 - 130 | 30 | 70 - 130 | 30 |
| MTBE | ND | 10 | 103 | 111 | 7.39 | 94.9 | 95.5 | 0.687 | 70 - 130 | 30 | 70 - 130 | 30 |
| Benzene | ND | 10 | 98.8 | 101 | 2.21 | 102 | 105 | 3.12 | 70 - 130 | 30 | 70 - 130 | 30 |
| Toluene | ND | 10 | 93.9 | 94.9 | 1.07 | 95.4 | 100 | 4.82 | 70 - 130 | 30 | 70 - 130 | 30 |
| Ethylbenzene | ND | 10 | 101 | 103 | 1.93 | 101 | 105 | 3.37 | 70 - 130 | 30 | 70 - 130 | 30 |
| Xylenes | ND | 30 | 95.3 | 95.3 | 0 | 95 | 95.7 | 0.699 | 70 - 130 | 30 | 70 - 130 | 30 |
| %SS: | 98 | 10 | 101 | 103 | 1.60 | 104 | 110 | 5.55 | 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 24013 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0609597-001A | 9/28/06 11:52 AM | 10/02/06 | 10/02/06 4:11 PM | 0609597-002A | 9/28/06 10:06 AM | 10/02/06 | 10/02/06 4:44 PM |
| 0609597-003A | 9/28/06 8:30 AM | 10/02/06 | 10/02/06 3:57 PM | 0609597-004A | 9/28/06 9:10 AM | 10/02/06 | 10/02/06 4:26 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.

# QC SUMMARY REPORT FOR SW8015C

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0609597

**EPA Method: SW8015C** **Extraction: SW3510C** **BatchID: 24016** **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 | 118 | 0.904 | N/A | N/A | 70 - 130 | 30 |
| %SS: | N/A | 2500 | N/A | N/A | N/A | 103 | 103 | 0 | 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 24016 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0609597-001B | 9/28/06 11:52 AM | 9/28/06 | 10/02/06 7:31 PM | 0609597-002B | 9/28/06 10:06 AM | 9/28/06 | 10/02/06 8:38 PM |
| 0609597-003B | 9/28/06 8:30 AM | 9/28/06 | 10/02/06 9:46 PM | 0609597-004B | 9/28/06 9:10 AM | 9/28/06 | 10/03/06 2:21 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.

QA/QC Officer

# QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0609597

**EPA Method: SW8260B** **Extraction: SW5030B** **BatchID: 24114** **Spiked Sample ID: 0610102-001C**

| 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 |
| tert-Amyl methyl ether (TAME) | ND | 10 | 94.2 | 91.3 | 3.04 | 79.9 | 86.2 | 7.51 | 70 - 130 | 30 | 70 - 130 | 30 |
| t-Butyl alcohol (TBA) | ND | 50 | 111 | 110 | 1.12 | 83.3 | 86 | 3.18 | 70 - 130 | 30 | 70 - 130 | 30 |
| 1,2-Dibromoethane (EDB) | ND | 10 | 119 | 113 | 5.23 | 85.5 | 90.2 | 5.28 | 70 - 130 | 30 | 70 - 130 | 30 |
| 1,2-Dichloroethane (1,2-DCA) | ND | 10 | 103 | 99.9 | 3.11 | 89.8 | 92.2 | 2.64 | 70 - 130 | 30 | 70 - 130 | 30 |
| Diisopropyl ether (DIPE) | ND | 10 | 106 | 102 | 3.29 | 93.3 | 99.1 | 5.99 | 70 - 130 | 30 | 70 - 130 | 30 |
| Ethanol | ND | 500 | 116 | 113 | 1.95 | 95.8 | 96.8 | 1.08 | 70 - 130 | 30 | 70 - 130 | 30 |
| Ethyl tert-butyl ether (ETBE) | ND | 10 | 98.8 | 94.6 | 4.32 | 84.9 | 91.6 | 7.54 | 70 - 130 | 30 | 70 - 130 | 30 |
| Methanol | ND | 2500 | 99.7 | 98.5 | 1.26 | 92.7 | 107 | 13.9 | 70 - 130 | 30 | 70 - 130 | 30 |
| Methyl-t-butyl ether (MTBE) | ND | 10 | 102 | 98.1 | 3.94 | 90.3 | 98.4 | 8.61 | 70 - 130 | 30 | 70 - 130 | 30 |
| %SS1: | 102 | 10 | 107 | 104 | 2.50 | 95 | 96 | 1.63 | 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 24114 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0609597-002I | 9/28/06 10:06 AM | 10/11/06 | 10/11/06 10:50 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.

QA/QC Officer

# QC SUMMARY REPORT FOR RSK174

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0609597

**EPA Method: RSK174** **Extraction: RSK 174** **BatchID: 23984** **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 |
| Methane | N/A | 1.76 | N/A | N/A | N/A | 102 | 104 | 1.58 | N/A | N/A | 80 - 120 | 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 23984 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0609597-001H | 9/28/06 11:52 AM | 10/02/06 | 10/02/06 2:34 PM | 0609597-002H | 9/28/06 10:06 AM | 10/02/06 | 10/02/06 7:26 PM |
| 0609597-003H | 9/28/06 8:30 AM | 10/02/06 | 10/02/06 7:57 PM | 0609597-004H | 9/28/06 9:10 AM | 10/02/06 | 10/02/06 8:16 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

# QC SUMMARY REPORT FOR E300.1

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0609597

**EPA Method: E300.1** **Extraction: E300.1** **BatchID: 23951** **Spiked Sample ID: N/A**

| Analyte | Sample | Spiked | MS | MSD | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance Criteria (%) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mg/L | mg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD |
| Nitrate as N | N/A | 1 | N/A | N/A | N/A | 95.9 | 96.4 | 0.568 | N/A | N/A | 85 - 115 | 15 |
| Nitrate as NO3⁻ | N/A | 4.4 | N/A | N/A | N/A | 95.9 | 96.4 | 0.568 | N/A | N/A | 85 - 115 | 15 |
| Sulfate | N/A | 1 | N/A | N/A | N/A | 101 | 97.5 | 3.22 | N/A | N/A | 85 - 115 | 15 |
| %SS: | N/A | 0.10 | N/A | N/A | N/A | 96 | 95 | 0.946 | N/A | N/A | 90 - 115 | 10 |

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

## BATCH 23951 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0609597-001F | 9/28/06 11:52 AM | 9/28/06 | 9/29/06 4:56 AM | 0609597-001F | 9/28/06 11:52 AM | 9/28/06 | 9/30/06 5:28 AM |
| 0609597-002F | 9/28/06 10:06 AM | 9/28/06 | 9/29/06 5:28 AM | 0609597-002F | 9/28/06 10:06 AM | 9/28/06 | 9/30/06 6:00 AM |
| 0609597-003F | 9/28/06 8:30 AM | 9/28/06 | 9/29/06 6:00 PM | 0609597-003F | 9/28/06 8:30 AM | 9/28/06 | 9/30/06 6:32 AM |
| 0609597-004F | 9/28/06 9:10 AM | 9/28/06 | 9/29/06 6:31 AM | 0609597-004F | 9/28/06 9:10 AM | 9/28/06 | 9/30/06 7:03 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 content.

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QA/QC Officer

# QC SUMMARY REPORT FOR SM5210B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0609597

**EPA Method: SM5210B** **Extraction: SM5210B** **BatchID: 23944** **Spiked Sample ID: N/A**

| Analyte | Sample | Spiked | MS | MSD | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance Criteria (%) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mg/L | mg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD |
| BOD | N/A | 198 | N/A | N/A | N/A | 102 | 105 | 2.68 | N/A | N/A | 80 - 120 | 16 |

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

BATCH 23944 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0609597-001D | 9/28/06 11:52 AM | 9/28/06 | 10/04/06 2:50 PM | 0609597-002D | 9/28/06 10:06 AM | 9/28/06 | 10/04/06 3:08 PM |
| 0609597-003D | 9/28/06 8:30 AM | 9/28/06 | 10/04/06 3:26 PM | 0609597-004D | 9/28/06 9:10 AM | 9/28/06 | 10/04/06 3:44 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

# QC SUMMARY REPORT FOR SM5220D

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0609597

**EPA Method: SM5220D** **Extraction: SM5220D** **BatchID: 23985** **Spiked Sample ID: N/A**

| Analyte | Sample | Spiked | MS | MSD | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance Criteria (%) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mg/L | mg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD |
| COD | N/A | 400 | N/A | N/A | N/A | 98.9 | 100 | 1.23 | N/A | N/A | 90 - 110 | 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 23985 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0609597-001E | 9/28/06 11:52 AM | 9/29/06 | 9/29/06 4:19 PM | 0609597-002E | 9/28/06 10:06 AM | 9/29/06 | 9/29/06 4:25 PM |
| 0609597-003E | 9/28/06 8:30 AM | 9/29/06 | 9/29/06 4:31 PM | 0609597-004E | 9/28/06 9:10 AM | 9/29/06 | 9/29/06 4:37 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.

# QC SUMMARY REPORT FOR SM5310B

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0609597

**EPA Method: SM5310 B** **Extraction: SM5310 B** **BatchID: 23983** **Spiked Sample ID: 0609558-004C**

| Analyte | Sample | Spiked | MS | MSD | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance Criteria (%) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mg/L | mg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD |
| IC as CO2 | 350 | 36.7 | 118 | 116 | 0.232 | 103 | 102 | 0.585 | 70 - 130 | 20 | 80 - 120 | 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 23983 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0609597-001C | 9/28/06 11:52 AM | 9/28/06 | 10/02/06 9:22 PM | 0609597-002C | 9/28/06 10:06 AM | 9/28/06 | 10/02/06 9:28 PM |
| 0609597-003C | 9/28/06 8:30 AM | 9/28/06 | 10/02/06 10:18 PM | 0609597-004C | 9/28/06 9:10 AM | 9/28/06 | 10/02/06 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.

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 content.

QA/QC Officer

# QC SUMMARY REPORT FOR E365.1

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0609597

**EPA Method: E365.1** **Extraction: E365.1** **BatchID: 23986** **Spiked Sample ID: 0609558-001F**

| Analyte | Sample | Spiked | MS | MSD | MS-MSD | LCS | LCSD | LCS-LCSD | Acceptance Criteria (%) | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | mg/L | mg/L | % Rec. | % Rec. | % RPD | % Rec. | % Rec. | % RPD | MS / MSD | RPD | LCS/LCSD | RPD |
| Total Phosphorous as P | 0.16 | 0.80 | 86.2 | 88 | 1.66 | 93.1 | 92.7 | 0.363 | 80 - 120 | 20 | 90 - 110 | 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 23986 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0609597-001E | 9/28/06 11:52 AM | 10/03/06 | 10/03/06 1:33 PM | 0609597-002E | 9/28/06 10:06 AM | 10/03/06 | 10/03/06 1:34 PM |
| 0609597-003E | 9/28/06 8:30 AM | 10/03/06 | 10/03/06 1:35 PM | 0609597-004E | 9/28/06 9:10 AM | 10/03/06 | 10/03/06 1:36 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

# QC SUMMARY REPORT FOR E200.8

W.O. Sample Matrix: Water QC Matrix: Water WorkOrder: 0609597

**EPA Method: E200.8** **Extraction: E200.8** **BatchID: 23976** **Spiked Sample ID: 0609542-001A**

| 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 |
| Manganese | 98 | 100 | 89.1 | 91.1 | 1.06 | 100 | 102 | 2.08 | 75 - 125 | 20 | 85 - 115 | 20 |
| Potassium | 14,000 | 100 | 90 | 100 | 0.0722 | 88.5 | 93.6 | 5.53 | 75 - 125 | 20 | 85 - 115 | 20 |
| %SS: | 111 | 750 | 109 | 111 | 1.37 | 102 | 105 | 2.48 | 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 23976 SUMMARY

| Sample ID | Date Sampled | Date Extracted | Date Analyzed | Sample ID | Date Sampled | Date Extracted | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 0609597-001G | 9/28/06 11:52 AM | 9/28/06 | 9/30/06 12:06 AM | 0609597-002G | 9/28/06 10:06 AM | 9/28/06 | 9/30/06 12:11 AM |
| 0609597-003G | 9/28/06 8:30 AM | 9/28/06 | 9/30/06 12:17 AM | 0609597-004G | 9/28/06 9:10 AM | 9/28/06 | 9/30/06 12:47 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 content.

DHS ELAP Certification N° 1644

QA/QC Officer

BC19 0609597

**BLAINE**
TECH SERVICES, INC.

1680 ROGERS AVENUE
SAN JOSE, CALIFORNIA 95112-1105
FAX (408) 573-7771
PHONE (408) 573-0555

CHAIN OF CUSTODY
BTS # 060927-WC-1

CLIENT Blymyer Engineers, Inc.

SITE Dublin Concrete/ Dolan Rentals
6393 Scarlett Ct
Dublin, CA

LAB McCampbell
DHS #

ALL ANALYSES MUST MEET SPECIFICATIONS AND DETECTION LIMITS SET BY CALIFORNIA DHS AND
☐ EPA
☐ LIA
☐ OTHER
☐ RWQCB REGION

SPECIAL INSTRUCTIONS

Invoice and Report to : Blymyer Engineers, Inc.
Attn: Mark Detterman
EDF Format Required
**Rerun highest MTBE detection by 8021 for (5) oxygenates, 1,2-DCA, EDB, Methanol and Ethanol all by EPA 8260.

CONDUCT ANALYSIS TO DETECT

| SAMPLE I.D. | DATE | TIME | MATRIX S= SOIL W=$H_2O$ | CONTAINERS TOTAL | CONTAINERS | C = COMPOSITE ALL CONTAINERS | TPH-G (8015M) | BTEX/MtBE (8021B)** | TPH-D (8015M) | Carbon Dioxide, Methane | BOD (48 hr hold) | COD, Total Phosphorous | Sulfate, Nitrate (48 hr Hold) | Manganese, Potassium | ADD'L INFORMATION | STATUS | CONDITION | LAB SAMPLE # |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MW-1 | 9/28/06 | 1152 | W | 12 | mix | | X | X | X | X | X | X | X | X | | | | |
| MW-5 | ↓ | 1006 | ↓ | ↓ | ↓ | | X | X | X | X | X | X | X | X | (X) 9-oxy add-on per note 10/4/06 | | | |
| MW-8 | ↓ | 0830 | ↓ | ↓ | ↓ | | X | X | X | X | X | X | X | X | | | | |
| MW-9 | ↓ | 0910 | ↓ | ↓ | ↓ | | X | X | X | X | X | X | X | X | | | | |

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

SAMPLING COMPLETED DATE 9/28/06 TIME 1200
SAMPLING PERFORMED BY Will Crow

RESULTS NEEDED NO LATER THAN As contracted

| | | | | | |
|---|---|---|---|---|---|
| RELEASED BY | DATE 9/28/06 | TIME 4:00p | RECEIVED BY | DATE 9/28/06 | TIME 4:00p |
| RELEASED BY | DATE | TIME | RECEIVED BY | DATE 9/28/06 | TIME 6:45pm |
| RELEASED BY | DATE | TIME | RECEIVED BY | DATE | TIME |

| | | | |
|---|---|---|---|
| SHIPPED VIA | DATE SENT | TIME SENT | COOLER # |

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

# CHAIN-OF-CUSTODY RECORD

Page 1 of 1

**WorkOrder: 0609597** **ClientID: BEIA**

☑ EDF ☐ Fax ☐ Email ☐ HardCopy ☐ ThirdParty

**Report to:**
Mark Detterman
Blymyer Engineers, Inc.
1829 Clement Avenue
Alameda, CA 94501-1395

Email: MDetterman@blymyer.com
TEL: (510) 521-3773 FAX: (510) 865-2594
ProjectNo: Dublin Concrete/Dolan Rentals
PO:

**Bill to:**
Accounts Payable
Blymyer Engineers, Inc.
1829 Clement Avenue
Alameda, CA 94501-1395

Requested TAT: 5 days

*Date Received:* 09/28/2006
*Date Printed:* 10/04/2006

| Sample ID | ClientSampID | Matrix | Collection Date | Hold | Requested Tests (See legend below) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0609597-001 | MW-1 | Water | 9/28/06 11:52:00 | ☐ | F |  | D | E | A | C | G | A | H | E | B |  |
| 0609597-002 | MW-5 | Water | 9/28/06 10:06:00 | ☐ | F | I | D | E | A | C | G |  | H | E | B |  |
| 0609597-003 | MW-8 | Water | 9/28/06 8:30:00 AM | ☐ | F |  | D | E | A | C | G |  | H | E | B |  |
| 0609597-004 | MW-9 | Water | 9/28/06 9:10:00 AM | ☐ | F |  | D | E | A | C | G |  | H | E | B |  |

Test Legend:

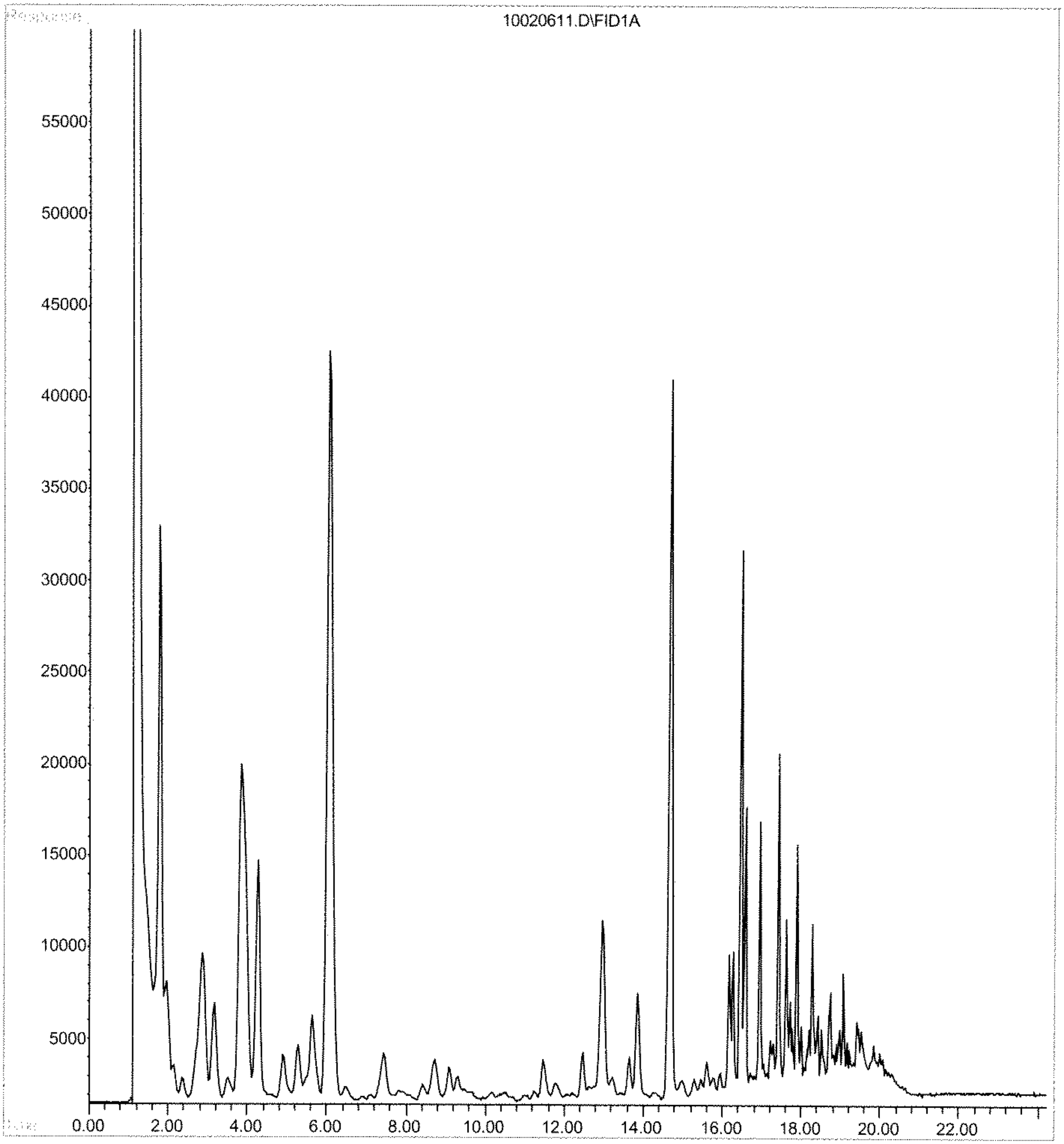
| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 300_1_W | 2 | 9-OXYS_W | 3 | BOD_W | 4 | COD_W | 5 | G-MBTEX_W |
| 6 | IC(CO2)_W | 7 | METALSMS_W | 8 | PREDF REPORT | 9 | RSK174_W | 10 | TotalP_W |
| 11 | TPH(D)_W | 12 |  |  |  |  |  |  |  |

**Prepared by: Melissa Valles**

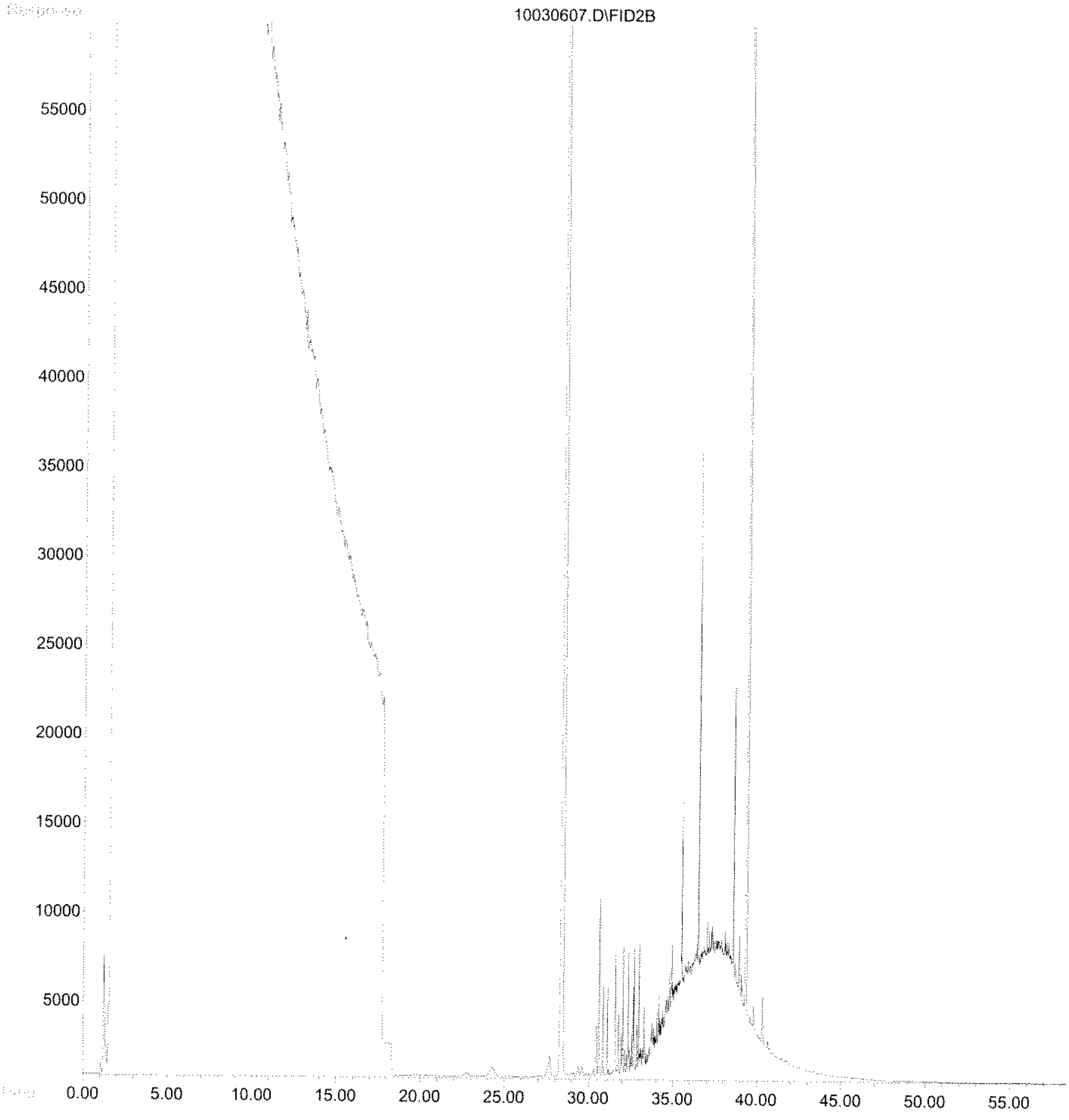
**Comments:** 9-Oxys added 10-4-06 per note on coc; 5 day

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.

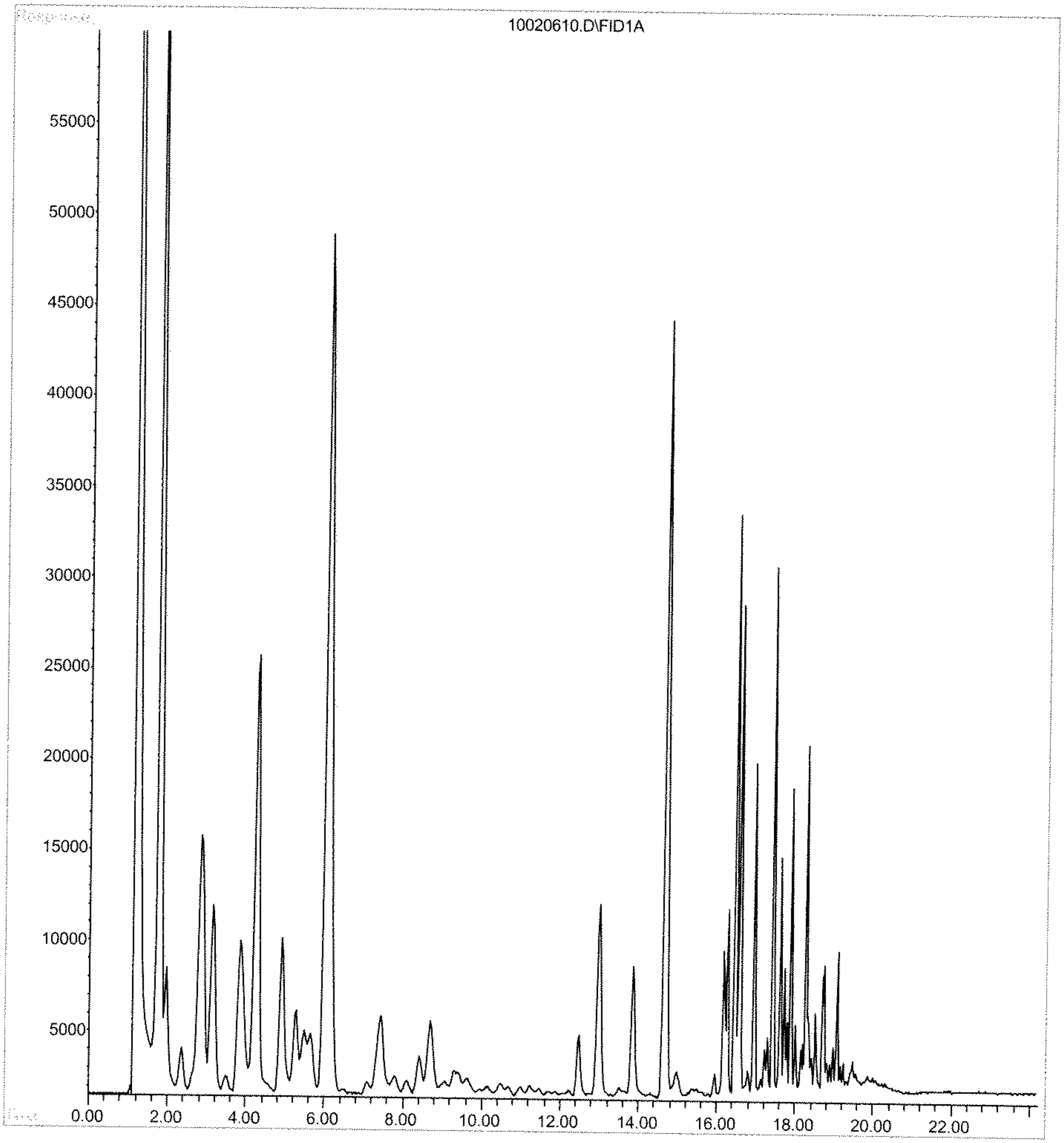
```
File        : D:\HPCHEM\GC19\DATA\10020611.D
Operator    :
Acquired    :  2 Oct 2006   4:26 pm using AcqMethod GC19J.M
Instrument :   GC-19
Sample Name: 0609597-004A W
Misc Info   : G-MBTEX_W
Vial Number: 11
```



```
File        : D:\HPCHEM\GC6\DATAB\10030607.D
Operator    :
Acquired    :  3 Oct 2006   2:21 pm using AcqMethod GC6ANEWN.M
Instrument  :   GC-6
Sample Name: 0609597-004B W
Misc Info   : TPH(D)_W
Vial Number: 54
```



```
File          : D:\HPCHEM\GC19\DATA\10020610.D
Operator      :
Acquired      :  2 Oct 2006   3:57 pm using AcqMethod GC19J.M
Instrument :    GC-19
Sample Name: 0609597-003A W
Misc Info   : G-MBTEX_W
Vial Number: 10
```



```
File        : D:\HPCHEM\GC6\DATAA\10020622.D
Operator    :
Acquired    :  2 Oct 2006   9:46 pm using AcqMethod GC6ANEWN.M
Instrument :   GC-6
Sample Name: 0609597-003B W
Misc Info   : TPH(D)_W
Vial Number: 11
```