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Estate of Michael Dolan 4:51 pm, Jan 27, 2009

Ms. Noreen Fitzpatrick, Trustee 3215 Deer Park Dr. Walnut Creek, CA 94598 Alameda County Environmental Health

1-23-,2009

Mr. Paresh Khatri Alameda County Department of Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502-6577

Re: Perjury Statement

Dolan Property, 6393 Scarlett Court, Dublin, California; RO-210

Dear Mr Khatri,

"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."

Noreen Fitzpatrick, Trustee

c. Peter MacDonald, Esquire Wanden Treanor, Esquire

Case Closure Summary Report

Dolan Trust Property
6393 Scarlett Court
Dublin, California
ACEH Fuel Leak Case No. RO0000210

January 21, 2009 BEI Job No. 202016

Prepared for:

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

Prepared by:

Blymyer Engineers, Inc. 1829 Clement Avenue Alameda, CA 94501-1395 (510) 521-3773

Limitations

Services performed by Blymyer Engineers, Inc. have been provided in accordance with generally accepted professional practices for the nature and conditions of similar 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, The Estate of Michael Dolan.

Blymyer Engineers, Inc.

Mark E. Detterman, CEG

Senior Geologist

Michael S. Lewis, REA

And:

Vice President, Technical Services

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1.0 Initiation of Corrective Action

1.1 Background – Tank Removal Activities

A 600-gallon underground storage tank (UST) was removed at the former Dolan Trust Property in Dublin, California in February 1990 (Figures 1 and 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* was present documenting the disposal of a 600-gallon UST. This has suggested that contaminated soil may not have been removed from the site at the time of tank removal. One soil sample was apparently collected beneath the tank at the time of removal, and one was collected from the soil stockpile (Table I). Both contained concentrations of Total Petroleum Hydrocarbons (TPH) as gasoline; TPH as diesel, and benzene, toluene, ethylbenzene, and total xylenes (BTEX).

There are no known details on the tank system such as the location of the dispenser, the location of the product or vent lines, if the tank system was a pressure or suction system, or the exact source of the release. An existing letter report (October 17, 1990; Laboratory Results From Water Samples Taken From Five Borings to Water Around Old Gas Tank Site on 10/3/90; Kenneth R. Henneman, Water Resources Consultant), and work plan (August 26, 1991; Initial Plan for Cleaning up Groundwater Pollution Under the Old Gas Tank Site; Kenneth R. Henneman, Water Resources Consultant) indicate that the tank did not contain holes upon removal, and most likely the tank was covered only with gravel. Mr. Henneman indicates that he was not present during the removal of the UST in the work plan and acknowledges this to be the most likely site layout. A hand sketch of the site lay-out in these references indicates the former tank location was tightly constrained (surrounded on three sides) by a concrete batch plant. Immediately northeast of the former tank location was a 6by-8 foot shed and 10.5 feet to the southwest was an office. Due to the small scale of the facility, and the tight dimensions, it is surmised that the dispenser, including product and vent lines, was either directly over the UST, or was associated with the shed to the northeast. Although unknown, the system is suspected to most likely have been a suction system. A copy of the hand sketch of the site from the October 17, 1990 document is enclosed as Appendix A.

1.2 Background – Site Characterization Activities

In October 1990, five soil bores were installed at the site, and soil and grab groundwater samples were collected. The resulting letter report (October 1990) documents discolored soil and sheen, and contained laboratory results with elevated concentrations of TPH as gasoline and BTEX in groundwater, and TPH as gasoline in the single soil sample collected from the five soil bores (bore logs were not generated). BTEX was not present in the soil sample, collected at a depth of 11 feet below grade surface (bgs), with good limits of detection. Additional delineation work was conducted in November 1991 (Soil and Groundwater Investigation, January 31, 1992, PES Environmental, Inc), 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 (Phase II Soil and Groundwater Investigation, August 1993, PES Environmental). 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 reports indicate that 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, PES Environmental installed wells MW-5 and MW-6 in March 1995 to a depth of 10 feet bgs (draft copy; Quarterly Groundwater Monitoring Report, January to March 1995; PES Environmental, Inc. May 10, 1995). No soil samples appear to have been collected from these two wells.

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. All previously available groundwater well monitoring and sampling data from the site has been tabulated on Tables II through VII.

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 as the Estate became 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.

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 Geoprobe⁷ 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* Subsurface Investigation, dated

October 10, 2003). All previously available soil and grab groundwater sample data generated during investigations at the site are tabulated on Tables I, VIII, and IX.

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, consistent with dynamic investigation procedures, and
- A 72-hour written advanced notification of field work 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 of the work, 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 a deeper 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. A summary of all groundwater well construction details is attached as Table X.

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 (NA), dualphase extraction, and source soil excavation and dewatering. It was found that, under monitored NA, 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.

1.3 Background - Remedial Actions

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. Two backfill wells (MW-8 and MW-9) were constructed during backfill operations at the request of the ACDEH to post-remedial monitor tank basin concentrations. 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 (Report on Source Soil Excavation and Dewatering, April 20, 2006, Blymyer Engineers). 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. All analytical data generated during the remedial activities at the site has been tabulated on Tables XI through XIV.

1.4 Background – Post Remediation Activities

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 are reported in the *Report on Source Soil Excavation and Dewatering*. 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, while the *Third Quarter 2006 Groundwater Monitoring Event* dated December 1, 2006, was issued on December 4, 2006. During the Fourth Quarter 2006 groundwater monitoring event, site redevelopment activities including paving and infrastructure installation for the car dealership precluded access to the groundwater monitoring wells. Groundwater monitoring required access to and reconstruction of, the groundwater monitoring wells, temporarily paved over during site redevelopment.

On January 2, 2007, the ACDEH issued a letter commenting on the *Third Quarter 2006 Groundwater Monitoring Event* report. The letter contained four technical comments that received a response in a February 16, 2007 letter from Blymyer Engineers, on behalf of the Dolan Estate (*Workplan for Additional Remediation Efforts* and *Response to January 2, 2007 Letter*). The comments and responses included:

- ACDEH concurrence with the recommendation for temporary cessation of NA parameters.
- The ACDEH recommended that microbial assays be conducted in order to determine if an appropriate microbial population is present in subsurface groundwater to allow the natural degradation of petroleum hydrocarbons in the subsurface in the presence of increased oxygen. Blymyer Engineers noted that microbial assays would help determine if augmentation of the current microbial population might allow faster degradation. Blymyer Engineers proposed to collect groundwater at three wells (upgradient, excavation, and downgradient) to determine trends across the site as recommended by the analytical laboratory, CytoCulture Environmental Biotechnology (CytoCulture) in Point Richmond, CA. Collection of the samples was proposed to be coordinated with a groundwater monitoring event, and the results would be reported within a quarterly groundwater monitoring report. The samples were to be analyzed for total microbial

population, and the hydrocarbon-degrading population within the total population at the three wells, as also recommended by CytoCulture.

- The ACDEH recommended the installation of ORC socks in well MW-4 in lieu of additional subsurface Geoprobe exploration proposed by Blymyer Engineers in the *Third Quarter 2006 Groundwater Monitoring Event* report. The Geoprobe bores were intended to determine the location of the presumed near-surface source of hydrocarbons of apparently recent origin (see referenced report) that is apparently impacting groundwater in the vicinity of well MW-4. Blymyer Engineers noted general agreement with the recommendation; however, additionally consulted Regenesis, Inc. (Regenesis), provider of ORC products. Regenesis additionally recommended the addition of RegenOx to well MW-4 prior to the installation of the ORC socks in the well as an appropriate method to provide a more rapid decrease in fuel hydrocarbon concentrations, and to extend the life of the ORC socks. Regenesis noted that because RegenOx is essentially a liquid, it will be removed and distributed by natural process in the vicinity of the well, will not solidify in the well, and will not make the well unavailable for future monitoring and sampling. Conversely, because it will not be injected into the subsurface soils and will be distributed by natural groundwater movements, the radius of influence will be more localized, which is presumed beneficial if the source is localized to well MW-4, as suspected.
- The ACDEH also requested continued analysis of groundwater from well MW-5 for fuel oxygenates based on previous groundwater analytical results. Blymyer Engineers noted that sampling of well MW-4 for fuel oxygenates was appropriate in support of determining the source of the hydrocarbons impacting groundwater in the vicinity of well MW-4, and recommended that a minimum of one groundwater sampling event at well MW-4 be conducted.

Due to site reconstruction and the resulting grade changes the remaining wells at the site were raised or lowered, and new well boxes were installed, to conform to the new grade at the site between February 20 and March 9, 2007. On March 19, 2007, the wells were resurveyed by CSS Environmental to GeoTracker standards.

The First Quarter 2007 Groundwater Monitoring Event and the Second Quarter 2007 Groundwater Monitoring Event were issued on April 23, and July 11, 2007, respectively. Since the June 2007 groundwater monitoring event (Second Quarter 2007), the site has completed redevelopment as the

new Ken Harvey Honda facility. The facility opened in early September 2007. As part of final site redevelopment, two wells, MW-6 and MW-9, were paved over again. On August 22, 2007, the access boxes for the wells were replaced and set flush with the new grade surface. The well casing elevations remained unchanged.

Due to the extended lack of response by the ACDEH to the February 16, 2007 workplan, The Estate elected to observe the 60-day response window allowed for regulatory comment and proceeded with work considered appropriate to further the site toward case closure. On September 5, 2007, after groundwater monitoring and sampling for the third quarter 2007 groundwater monitoring event, fifteen 1.75-inch diameter ORC Advanced socks were installed in 2-inch diameter well MW-4, and fifteen 3-inch diameter ORC Advanced socks were installed in each of the 4-inch diameter wells, MW-8 and MW-9. The socks were installed to help stimulate bacterial activity in the vicinity of the wells. The socks were installed according to the manufacturer's specifications, and typically provide between 6 and 12 months of increased oxygen concentrations in groundwater. It was recommended that these concentrations be monitored during quarterly groundwater monitoring events. Additionally it was recognized that the installation of the ORC socks would require use of micropurging techniques in the future in order to minimize the removal of DO in from these three wells.

In accordance with an analysis of past concentration trends in all wells at the site, Blymyer Engineers recommended a reduction in the number of wells to be sampled (*Third Quarter 2007 Groundwater Monitoring Report*, October 12, 2007). The recommendation reduced the number of sampled wells to three wells (MW-4, MW-8, and MW-9). It was reasoned that additional data from wells MW-1, MW-3, MW-6, and MW-7 was not warranted on an on-going basis. Only groundwater from wells MW-1 and MW-6 had yielded trace concentrations shortly after the remedial excavation. With those exceptions, those four wells have been non-detectable since installed (2.5 years for MW-7, and over ten years for the other listed wells). Blymyer Engineers recommended a reduction to an annual sampling interval for these wells. It was noted that well MW-5 has contained only MTBE since December 2004. Blymyer Engineers recommended that further analysis for TPH as diesel should be eliminated in this well, and that analysis for TPH as gasoline, BTEX, and MTBE could be reduced to a semi-annual interval to monitor concentration trends. Additionally it was

recommended that future analysis for TPH as diesel should employ the use of the silica gel cleanup technique.

On January 4, 2008, the *Fourth Quarter 2007 Groundwater Monitoring Report* was issued, and on March 21, 2008 the *First Quarter 2008 Groundwater Monitoring Report* was issued. In late March 2008, Blymyer Engineers was notified by email that the new case manager for the ACDEH was Mr. Paresh Khatri.

On May 1, 2008, the ACDEH issued a letter documenting receipt of the February 16, 2007 workplan proposing bio-monitoring and installation of ORC socks into well MW-4 at the site, but did not comment on the workplan, judged that the site was ready for case closure, and requested a case closure summary. However, the work proposed in the workplan had previously been implemented in September 2007 due to the expiration of the 60-day agency comment rule on April 16, 2007 and the initial agency suggestion of ORC sock installation. The May 1, 2008 letter also requested submittal of a previously referenced preferential pathway evaluation. The preferential pathway evaluation had been previously submitted in the *Report on Source Soil Excavation and Dewatering*, dated April 26, 2006, but had been overlooked. This was clarified and the most recent copy of the case closure summary requirements was requested of ACDEH. The requirements were subsequently forwarded on June 27, 2008 shortly before the suggested June 30, 2008 deadline for submittal of the document to ACDEH.

Because the bio-monitoring had been conducted and the ORC socks had been previously installed, ACDEH, Blymyer Engineers, and The Estate concurred that the ORC socks should be removed and one quarter of time should elapse in order to evaluate the potential rebound of contaminants due to the decrease in available dissolved oxygen. As a consequence, and with agency concurrence, the Second Quarter 2008 groundwater monitoring and sampling event consisted only of the removal of the ORC socks.

The first sampling of groundwater after removal of the ORC socks occurred on September 2, 2008. In general groundwater concentrations in perimeter wells MW-1, MW-3, MW-5, MW-6, and deep well MW-7 were non-detectable; however, MTBE was detected and increased marginally in well MW-5, rising above the ESL. Concentrations in former tank basin wells MW-8 and MW-9 essentially stabilized, with slight increases or decreases, all below their respective drinking water

ESLs. The concentration of TPH as gasoline in downgradient well MW-4 increased markedly rising from 180 to 810 Fg/L. The concentration of benzene and toluene also increased in well MW-4 over previous data; in the case of benzene returning marginally above the drinking water ESL of 1.0 Fg/L (to 2.1 Fg/L). As a result an additional round of groundwater monitoring was recommended. It was concluded that if concentrations essentially stabilized, case closure would be appropriate.

The final groundwater monitoring event occurred December 8, 2008. Only plume core wells MW-4, MW-8, and MW-9 were analyzed for hydrocarbons during the event. Concentrations in each well essentially stabilized; however, concentrations generally rose slightly in most instances. All wells returned non-detectable concentrations of TPH as diesel with silica gel cleanup. In all wells benzene concentrations increased; in wells MW-8 and MW-9 it rose to slightly over the drinking water ESL of 1.0 Fg/L for benzene, while in well MW-4 it remained slightly over the ESL. In well MW-8 TPH as gasoline remained below the drinking water ESL of 100 Fg/L and also decreased, while in well MW-9 it rose slightly above the ESL. In well MW-4 TPH as gasoline was essentially stable, but did rise from 810 to 860 Fg/L.

1.5 Validity of Data

No known concerns relative to analytical sample hold times were encountered during the data review for this Case Closure Summary Report. Blymyer Engineers standard operating procedure for compromised media samples is to flag the data in a footnote on the data tables. If used, the data would thus be qualified, and would generally be used only as a trend indicator. No notes were discovered in the data review process for this Case Closure Summary Report.

No known concerns relative to the well screening levels are known. First encountered water in wells MW-1 through MW-4 is reported at 12 feet bgs, with isolated or perched water reported as shallow as 1 foot bgs. When present, shallow water, a combination of cultural water due to concrete batch plant wash water infiltration and seasonal infiltration of rainwater, appears to be interconnected beneath the site, through the tank basin at a minimum. The screen interval for wells MW-1 through MW-4 was selected to monitor the first encountered groundwater at a depth of 12 feet bgs. Wells MW-5 and MW-6 were installed later to isolate and investigate a portion of the shallow perched water-bearing zone.

1.6 Methods of Investigation

A minimum of three consultants has been used to investigate the hydrocarbon release at the subject site. In general, investigation methods employed by the consultants at the site appear to generally conform to industry standards. Specifically, and unless previously forwarded, Blymyer Engineers' Standard Protocols are enclosed with all proposed work (i.e. Workplans) in order that the protocols can be reviewed for appropriateness and general conformance to regulatory requirements or needs. Standard Protocols for subcontractors (Blaine Tech Services, Inc.) are also enclosed with each quarterly groundwater monitoring report. Blymyer Engineers' Standard Protocols include soil sampling methodology; grab groundwater collection; groundwater monitoring well design, installation, and development; and groundwater monitoring and well sampling. Blaine Tech Services standard protocols include well development; water level, separate phase, and total well depth measurement; well purging; and sample collection. Each protocol has been forwarded at appropriate junctures, and methodology appears to have been in conformance with the protocols. Appropriate chain-of-custody procedures and sample preservation appear to have been employed.

Groundwater monitoring wells installed by the previous consultants appear to have been designed and installed appropriately.

All laboratories used for analytical testing are required to maintain certification with the State of California. There are no known problems with the state certifications to our knowledge. Additionally, the laboratories appear to have generally conformed to standard industry methodology, including sample preservation, hold times, sample preparation methods, and detection limits, unless otherwise noted on individual laboratory reports, and as required by state certification. Blymyer Engineers is not responsible for unknown deviations from standard industry methodologies that affect state laboratory certification.

2.0 Extent of Soil and Groundwater Contamination

2.1 Soil

The vertical and horizontal extent of soil contamination was depicted in a series of figures contained in the *Remedial Investigation / Feasibility Study Report* (RI/FS; Blymyer Engineers, October 7, 2005). The lateral extent of contamination at various depth intervals for Total TPH (TPH as gasoline and TPH as diesel) was depicted in Figure 6 (3.5 to 11 feet bgs), Figure 7 (11.5 to 19.5 feet bgs), Figure 8 (combined 3.5 to 19.5 feet bgs), and Figure 9 (20 to 43 feet bgs). These figures are reproduced in Appendix B. The depth intervals were chosen based on site hydrology. The lateral extent of contamination at various depth intervals for benzene, as a conservative proxy for BTEX, was depicted in Figures 10 to 13 (Appendix B), for the same depth intervals noted above. At the time of generation all of the maps represented a combination of historic and (then) current concentrations.

Because the excavation was shored, sidewall samples were not collected, and documented post-remedial concentrations are represented by four soil samples collected at the vertical base of the excavation. The four samples were placed authoritively at locations documented to contain elevated pre-remedial contamination. Each of the four samples returned nondetectable concentrations of TPH as gasoline, TPH as diesel; BTEX; all fuel oxygenates; and total lead (see attached Tables XI and XII).

Remaining soil contamination may possibly be present in the vicinity of well MW-4 (Figure 3). Impacted soil, potentially residual and potentially introduced by cars parked at the subject site as overflow parking for the automotive shop (formerly) across Scarlett Court during the time of remedial excavation, may be a contributory source of post-remedial groundwater contamination in well MW-4. In either case, the lateral extent of impacted soil, if present, is expected to be limited, but is uncertain. A discussion of the six lines of reasoning that suggest a source other than a UST release have been in all quarterly groundwater monitoring reports since the *First Quarter 2007 Groundwater Monitoring Event* (April 23, 2007).

2.2 Groundwater

The vertical and horizontal extent of groundwater contamination was depicted in a series of figures contained in the RI/FS report and included in Appendix B of this case closure summary. The historic lateral extent of Total TPH and benzene contamination for the October 1990 to December 1992 period were depicted on Figures 14 and 17. To document the decrease in contaminant concentrations prior to remediation, a series of figures was generated to depict the decrease in lateral extent of groundwater contamination at several depths. The figures depicted data from the period of 2004 to 2005. Total TPH data was depicted in Figures 15 (4 to 20 feet bgs) and 16 (> 20 feet bgs). Benzene, used as a conservative proxy for BTEX, was depicted in Figures 18 (4 to 20 feet bgs) and 19 (>20 feet bgs). These depth intervals were chosen based on the predominance of groundwater contaminant concentrations as encountered at the site. The most recent full-site groundwater TPH as gasoline and benzene concentrations (September 2008) are depicted in Figures 4 and 5, respectively.

2.3 Soil Vapor

Soil vapor concentrations were not determined during this investigation. The small (8 by 10 foot) former office and attached supply room (6 by 8 foot) for the concrete batch plant operations at the subject site were fully ventilated. The office had two sets of windows and a door, and these were typically open during the hours of business. The supply room was three sided, with a large door forming the fourth side. This was always open during business hours.

In the new configuration of the parcel, the closest point of the nearest building to the former area of impact is at a distance of approximately 100 feet, and is depicted on Figure 2 generated by the geotechnical engineer for site redevelopment (Kleinfelder, Site Plan, Figure 2; reproduced as Appendix C). The locations of existing wells have also been hand sketched on Figure 2 in Appendix C. The intervening ground surface is largely paved, but does contain a landscaping break in the pavement. Depending on location, the grade surface has been raised approximately by 0.5 to 2.0 feet.

The lack of volatile compounds (i.e. BTEX) in groundwater collected from most wells would imply trace soil vapor concentrations. The presence of landscape breaks in the surface at the site between

the new building and the former location of the tank excavation and residual soil vapors argues for a release point, or preferential pathway to the surface, for any residual vapors beneath the site.

2.4 Groundwater Occurrence

The site is situated over a former freshwater grasslands marsh in proximity to an ephemeral creek (currently channelized; towards the east). Groundwater beneath the site generally appears to be confined, with perched groundwater zones. Groundwater was present in multiple thick (2 to 4 feet) granular layers (silt and fine sands) separated by thick (2 to 3 feet) silty clays. Regionally the layers may be interconnected based on similar stabilized groundwater elevations in wells (i.e. deep well MW-7 in comparison to most other wells) and the lateral and vertical extent of contamination documented by subsurface investigations. During the RI/FS Investigation depth to first encountered water was between 8 and 16 feet bgs, and was dependant on the soil type encountered (thicker clay sections depressed the depth of first water), and the depth to stabilized groundwater in wells ranged between 1.5 to 4 feet bgs. Perching of infiltrating rainwater and cultural concrete batch plant wash water appear to have been present seasonally based on the presence of groundwater in granular surface fill materials (in pockets and layers generally up to 4 feet bgs). Surface discharge for several days after a rain event was reported in some areas of the site by former site personnel and suggests a temporary discharge of infiltrated rainwater at a low point in the site surface. Increasing Photoionization Detector (PID) readings with depth in soil bores as deep as 20 feet bgs, indicate the extent of seasonal or drought induced groundwater fluctuations beneath the site.

2.5 Hydraulic Gradient

Figures 6 and 7 present rose diagrams of groundwater flow vectors at the site that were generated prior to, and after, remedial actions at the site, respectively. The diagrams document groundwater flow has generally been to the south-southwest, with rare flows to the southwest and to the southeast. Based on subsurface investigations, a southerly flow direction is also documented for deeper water-bearing zones at the adjacent Busick Gearing site (Appendix D). Appendix D contains relevant contaminant plume maps from a 2004 overview summary of the adjacent Busick Gearing site conducted on behalf of The Estate for a Comfort Letter request of the SF RWQCB, subsequently issued.

3.0 Beneficial Uses

3.1 Existing Uses

In the San Francisco Bay Basin (Region 2) Water Quality Control Plan (Basin Plan) issued by the San Francisco Bay Regional Water Quality Control Board (SF RWQCB) on January 18, 2007, the Livermore Valley (or Livermore – Amador) Groundwater Basin is classified to have existing beneficial uses that include municipal, industrial, and agricultural supply. Zone 7 Water Agency (Zone 7) is managing the basin to supply these diverse interests.

The subject site is located within the physical boundary of the groundwater supply basin, but is at a distance of approximately 6,600 feet (1.25 miles) from the "Main Basin", as defined by Zone 7 (email communication, September 18, 2008). Thus the subject site overlies a marginal portion of the basin. Within this portion of the basin, groundwater is believed to migrate horizontally through shallow aquifers to the Main Basin, where groundwater migrates vertically to the deeper supply aquifers tapped by municipal supply wells managed by Zone 7. Both areas of the basin are defined by lithology; the marginal area being generally defined by finer grained deposits (silts and clays) than the "Main Basin". The closest supply well to the site is at a distance of approximately 9,000 feet (1.70 miles) and is within the "Main Basin". Zone 7 provided two maps, (regional and local vicinity; see Appendix E) that illustrate these features. On both maps the solid light blue triangles are existing supply wells, open light blue triangles are destroyed supply wells, solid red diamonds are existing monitoring wells, open red diamonds are destroyed monitoring wells, yellow crosses are abandoned (inactive but not destroyed) supply wells, and blue dots are unknown or cathodic protection wells per Zone 7. According to Zone 7, all existing supply wells north of the Main Basin are not municipal supply wells, and some may be small domestic or irrigation supply wells. As can be noted on the local vicinity map supplied by Zone 7 there are no existing (solid blue) or abandoned (yellow cross) within ¹/₄-mile downgradient of the release.

3.2 Factors Affecting Long-term Fate of Contaminants

The principal factor likely determining the long-term fate of the contaminants is anticipated to be the presence or absence of dissolved oxygen (DO) in groundwater in the vicinity of the site. Using a NA approach remaining concentrations will continue to decrease over time. The length of time is

likely to be determined by the concentration of DO in groundwater. Microbial use of petroleum hydrocarbons as a food source is principally affected by the concentration of DO in the groundwater present at a site; it is the preferred electron acceptor for the biodegradation of hydrocarbons. The presence of ferrous iron in a well (such as the return to well MW-4 during Third Quarter 2007) indicates that Mn – Fe degrading microbial colonies near these wells are degrading residual contaminants at a slower rate than use of DO allows. Recent quarterly data indicates that DO is decreasing in site wells after removal of the ORC socks in June 2008 to evaluate contaminant rebound. The following quarter (Third Quarter 2008) is also the quarter hydrocarbon concentrations rose in well MW-4. An additional quarter of monitoring was recommended in order to evaluate the potential rebound of concentrations in well MW-4 groundwater. In the Fourth Quarter 2008 only plume core wells MW-8, MW-9, and MW-4 were analyzed. With one exception concentrations in general rose modestly about the ESL (generally slightly above or below the appropriate ESLs). The exception was the concentration of TPH as gasoline in well MW-4 which rose from 810 to 860 Fg/L, and was considered roughly stable.

Prior to remedial excavation, using site-specific contaminant concentrations and groundwater that had not been augmented with DO, a decay constant of 0.0006 micrograms per liter per day (ug/L/day) for the degradation of benzene through NA processes was calculated during the evaluation of remedial alternatives (*Remedial Investigation / Feasibility Study Report*; Blymyer Engineers; October 7, 2005). Benzene was selected for this analysis as it was the major risk driver at the site due to a low Maximum Contaminant Level (MCL) in drinking water. Using pre-remedial benzene concentrations from well MW-2 it was found that benzene would require approximately 33 years to reach the MCL for benzene.

Assuming DO will return to pre-remedial concentrations, use of the same first-order rate equation, $C_{(t)} = C_0 x e^{-kt}$, the previously calculated decay constant for benzene (0.0006 ug/L/day), and current worst-case benzene concentrations, a conservative time to achieve regulatory compliance can again be estimated. In the equation $C_{(t)}$ is the concentration of contaminant after time t, and C_0 represents the initial contaminant concentration, and k represents the NA decay constant. Using the highest benzene concentration recorded during the Third Quarter 2008 groundwater monitoring event (2.1 ug/L), the equation indicates that in approximately 3.5 to 4 years benzene will reach the 1.0 ug/L

MCL / ESL goal in groundwater in the vicinity of well MW-4 (with a benzene concentration between 0.98 or 0.87 ug/L, respectively).

3.3 Effectiveness of Remediation

Based on this review no significant residual impact to the beneficial use of groundwater is anticipated, thus the final remedial goals are consistent with the non-degradation of state waters as stated in SWRCB Resolution 68-16 Statement of Policy with Respect to Maintaining High Quality of Waters in California.

The site is also considered to fit the low risk groundwater classification as described in the RWQCB Supplemental Instructions to State Water Board December 18, 1995 Interim Guidance on Required Cleanup at Low-Risk Fuel Sites. Six specific objectives were established to determine if a site fits into this category. Specifically, these are:

- A determination that the leak has been stopped and ongoing sources have been removed and remediated. These steps have occurred.
- A determination that the site is adequately characterized. A perimeter limit to soil and groundwater impact was established prior to remedial actions; however, a full perimeter limit for the groundwater plume was subsequently temporarily lost after remedial actions. That perimeter limit is currently undergoing reestablishment as the plume concentrations decrease and onsite the perimeter generally tightens. An interval of offsite migration will have occurred after the remedial excavation; however, the volume will be limited. Potential downgradient delineation would be very problematic due to the current construction of an expanded off-ramp immediate across Scarlett Court from the site, and a freeway interchange which occupies the following interval.
- A determination that the residual dissolved hydrocarbon plume has ceased migrating. The dissolved plume had stabilized to the site prior to remedial excavation. After remedial excavation a concentration spike was observed, but over recent monitoring events the residual plume has been stabilizing, and concentrations will, in general, continue to decrease. Residual contamination will not affect water supply wells mapped by Zone 7. The closest supply well is at a distance of approximately 1.70 miles from the site. There are also no sensitive receptors in

the vicinity or in the downgradient direction. The local vicinity and the larger downgradient vicinity across the freeway interchange is commercial. The closest residential units in the downgradient direction are at a distance of approximately 0.93 miles (south of Stonebridge Drive). Deeper grooundwater beneath the site is also not impacted as documented by groundwater monitoring.

- A determination that there is not a significant risk to human health. A site specific human health-risk assessment has not been conducted at the site; however, conservative RWQCB ESL goals have been used as remedial goals. Recent quarterly groundwater data indicates all hydrocarbons are fluctuating about the generic ESL goals, and are expected to continue to slowly decline through the process of NA.
- A determination that there are no significant risks to the environment. The closest surface body of water to the site is a portion of the Alamo Canal at a distance of approximately 175 feet to the southwest of the site. The Canal receives surface water runoff from vicinity streets, and thus is likely impacted by existing human activities. Residual groundwater contamination from the site at this distance is not anticipated to represent a significant risk to this surface body of water, and thus the environment.

4.0 Conclusions and Recommendations

The site is considered to fit the low risk groundwater classification as described in the RWQCB Supplemental Instructions to State Water Board December 18, 1995 Interim Guidance on Required Cleanup at Low-Risk Fuel Sites. Case closure is appropriate after agency concurrence and groundwater monitoring well destruction.

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

				002	C 20011000 C	ourt, Dubini,								
Sample ID	Depth (ft)	Date	Soil Type (USCS)	Metho			Method 8015		Method 8015					
				TPH as Gas	TPH as Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE				
East of 600 gal tank	7	2/5/90	N/A	740	1,100 ^a	14	35	23	110	NA				
Dirt pile (composite)		2/6/90	N/A	1,700	2,000 a, b	15	78	37	210	NA				
D1-10*	11.0	10/3/90	N/A	0.60	NA	< 0.005	< 0.005	<0.005	< 0.005	NA				
MW1-4A	11.0	11/22/91	CL/CH	<1	NA	< 0.003	< 0.003	< 0.003	< 0.003	NA				
MW2-4A	11.0	11/22/91	CH (w/Sa)	140	NA	1.7	3.6	2.6	14	NA				
MW3-4A	15.0	11/22/91	CL/CH (w/Sa)	<1	NA	<0.003	0.005	<0.003	<0.003	NA				
MW4-2A	11.0	11/22/91	CL/CH	<1	NA	< 0.003	0.006	0.005	< 0.003	NA				
B-1	5.0	11/3/92	CL	23	NA	0.13	0.033	1.4	0.038	NA				
B-1	10.0	11/3/92	CL	36	NA	0.095	0.030	0.69	1.7	NA				
B-2	5.0	11/3/92	CL	34	NA	0.28	1.4	0.63	4.1	NA				
B-2	10.0	11/3/92	CL	40	NA	1.3	0.63	0.98	4.8	NA				

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

Sample ID	Depth (ft)	Date	Soil Type	Metho	Modified EPA Method 8015 (mg/Kg)		EPA Method 8020 or 8021B			
			(USCS)	TPH as Gas	TPH as Diesel	Benzene	Toluene	(mg/Kg) Ethylbenzene	Total Xylenes	MTBE
B-3	5.0	11/3/92	SP	<1	NA	<0.003	0.004	<0.003	0.008	NA
B-3	10.0	11/3/92	CL	42	NA	1.1	0.13	0.86	4.7	NA
B-4	5.0	11/3/92	CL/CH	470	NA	2.3	8.6	6.6	38	NA
B-4	10.0	11/3/92	CL	23	NA	0.89	0.22	0.47	2.3	NA
SB-A-3.5	3.5	9/16/03	SC	<1.0	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05
SB-B-7.5	7.5	9/16/03	CL	5.9 a	1.4 ^b	0.024	0.17	0.098	0.019	< 0.05
SB-B-17	17	9/16/03	SM	49 ^a	10 ^b	0.022	0.17	0.30	0.67	< 0.05
SB-C-8.5	8.5	9/16/03	SM	150 a	32 b c d	3.1	1.2	2.4	11	< 0.50
SB-C-18	18	9/16/03	SM	640 ^a	180 b c d	9.9	7.1	11	42	<2.5
SB-D-10	10	9/16/03	CL	<1.0	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05
SB-D-13	13	9/16/03	SM	5.2 a	2.9 b d	0.014	0.040	0.088	0.046	< 0.05
SB-E-13.5	13.5	9/16/03	SM	1.7 ^a	2.6 ^{c d}	< 0.005	0.036	< 0.005	< 0.005	< 0.05
SB-F-17.75	17.75	9/16/03	CL/SM	210 ^a	62 ^{b c}	0.27	0.56	2.1	1.0	<5.0

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

Sample ID	Depth (ft)	Date	Soil Type (USCS)	Metho	ied EPA od 8015 g/Kg)	EPA Method 8020 or 8021B (mg/Kg)				
				TPH as Gas	TPH as Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
SB-G-8	8	9/16/03	CL	<1.0	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05
SB-H-12	12	9/16/03	CL	65 ^a	12 b c d	< 0.025	0.64	0.37	0.11	<0.25
SB-I-3.5	3.5	9/16/03	SP	2,600 a	1,500 ^{b c}	3.1	3.4	51	20	<10
SB-I-8.25	8.25	9/16/03	CL/SM	1,600 a	260 b c	19	45	33	110	<10
SB-I-13.5	13.5	9/16/03	SM	430 a	110 b c d	11	14	8.7	35	<10
SB-J-7.5	7.5	2/18/05	CL	550 a	33 b c	2.8	0.83	8.5	13	NA
SB-K-9	9.0	2/18/05	CL	130 a	8.8 b c	4.8	1.7	2.3	8.6	NA
SB-K-19.5	19.5	2/18/05	CL/SM	130 a	4.4 b c	0.48	1.2	1.6	6.2	NA
CPT1-23.5	23.5	3/28/05	ML	<1.0	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	NA
CPT1-29.5	29.5	3/28/05	ML	<1.0	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	NA
CPT1-41.5	41.5	3/28/05	ML	<1.0	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	NA
CPT2-8.0	8.0	3/28/05	CL	<1.0	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	NA
CPT2-28	28	3/28/05	CL	<1.0	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	NA

Table I, Summary of Soil Sample Hydrocarbon Analytical Results BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California											
Sample ID Depth (ft) Date Soil Modified EPA Type Method 8015 (USCS) (mg/Kg)								EPA Method 8020 or 8021B (mg/Kg)			
				TPH as Gas	TPH as Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	
CPT2-43	43	3/28/05	SM	<1.0	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	NA	
MW7-16	16	7/5/05	CL	38 ^f	4.2 c, e	< 0.050	0.62	0.078	0.056	< 0.50	
MW7-21	21	7/5/05	CL	<1.0	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05	
So Table	oundwater IS ource of Drin e A Shallow	al / Industrial last Current or Policing Water; Soils (<3m) of Soils (>3m)	otential	100	100	0.044	2.9	3.3	2.3	0.023	

Notes:	ft	= feet	mg/Kg	=	Milligrams per kilogram
TPH	=	Total Petroleum Hydrocarbons	MTBE	=	Methyl tert-butyl ether
NA	=	Not analyzed	N/A	=	Not available
<x< td=""><td>=</td><td>Less than the analytical detection limit (x)</td><td>*</td><td>=</td><td>Depth mismarked in field.</td></x<>	=	Less than the analytical detection limit (x)	*	=	Depth mismarked in field.
EPA	=	Environmental Protection Agency			
a	=	Laboratory note indicates an unmodified or wea	kly mod	lified gas	soline pattern.
b	=	Laboratory note indicates gasoline range compo	unds are	signific	ant.
c	_	I aboratory note indicates diesal range compoun	de ara ci	ianifican	t with no recognizable patter

Laboratory note indicates diesel range compounds are significant, with no recognizable pattern.

Laboratory note indicates oil range compounds are significant.

d = Laboratory note indicates oil range compounds are significant.

Laboratory note indicates a stoddard solvent/mineral spirit pattern.

Laboratory note indicates that there is no recognizable pattern.

Bold results indicate detectable analyte concentrations.

Shaded results indicate analyte concentrations above the appropriate RWQCB ESL value.

Table II, Summary of Groundwater Elevation Measurements BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California **TOC** Elevation Depth to Water Water Surface Elevation Well ID Date (feet) (feet) (feet) MW-1 326.61 4.82 321.79 11/27/1991 5.34 9/30/1992 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 1.95 324.66 2/12/1996 2/5/1997 Data Missing 8/6/1997 3.60 323.01 323.72 6/6/02* 2.89 323.13 3.48 9/23/2002 12/13/2002 3.18 323.43 12/14/2004 2.76 323.85 3/23/2005 1.14 325.47 329.41 6/22/2005 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 3.34^{-1} 9/28/2006 326.07 331.23 3 4.60 3/20/2007 326.63 NS 6/15/2007 NS 9/27/2007 5.14 326.09 12/18/2007 4.55 326.68 3/4/2008 3.96 327.27 4.83 9/2/2008 326.40 12/8/2008 NS NS

Table II, Summary of Groundwater Elevation Measurements BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California **TOC** Elevation Depth to Water Water Surface Elevation Well ID Date (feet) (feet) (feet) MW-2 326.67 4.92 321.75 11/27/1991 5.42 321.25 9/30/1992 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 2.60 324.07 2/12/1996 2/5/1997 1.72 324.95 8/6/1997 3.72 322.95 6/6/02* 3.46 323.21 322.53 9/23/2002 4.14 12/13/2002 3.45 323.22 2.96 12/14/2004 323.71 3/23/2005 1.83 324.84 329.46 6/22/2005 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 3/20/2007 Destroyed Destroyed 6/15/2007 Destroyed Destroyed 9/27/2007 Destroyed Destroyed 12/18/2007 Destroyed Destroyed 3/4/2008 Destroyed Destroyed 9/2/2008 Destroyed Destroyed 12/8/2008 Destroyed Destroyed

Table II, Summary of Groundwater Elevation Measurements BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California **TOC** Elevation Depth to Water Water Surface Elevation Well ID Date (feet) (feet) (feet) MW-3 326.58 4.96 321.62 11/27/1991 321.12 9/30/1992 5.46 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 2.45 2/12/1996 324.13 2/5/1997 1.99 324.59 8/6/1997 3.83 322.75 6/6/02* 3.66 322.92 4.66 9/23/2002 321.92 12/13/2002 3.66 322.92 12/14/2004 3.52 323.06 3/23/2005 1.83 324.75 329.37 6/22/2005 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 3.88 325.49 9/28/2006 330.69 ³ 4.40 3/20/2007 326.29 6/15/2007 4.88 325.81 9/27/2007 4.93 325.76 12/18/2007 4.57 326.12 3/4/2008 3.95 326.74 4.94 325.75 9/2/2008 12/8/2008 5.13 325.56

Table II, Summary of Groundwater Elevation Measurements BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California **TOC** Elevation Depth to Water Water Surface Elevation Well ID Date (feet) (feet) (feet) MW-4 326.92 5.26 11/27/1991 321.66 5.78 321.14 9/30/1992 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 2.32 324.60 322.78 8/6/1997 4.14 3.76 6/6/02* 323.16 322.78 9/23/2002 4.14 12/13/2002 3.90 323.02 12/14/2004 3.68 323.24 3/23/2005 1.93 324.99 329.70 6/22/2005 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 4.23 325.47 9/28/2006 330.10^{3} 3.91 3/20/2007 326.19 6/15/2007 4.35 325.75 9/27/2007 4.39 325.71 12/18/2007 3.55 326.55 3/4/2008 3.33 326.77 4.38 325.72 9/2/2008 12/8/2008 4.50 325.60

Table II, Summary of Groundwater Elevation Measurements BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California **TOC** Elevation Depth to Water Water Surface Elevation Well ID Date (feet) (feet) (feet) MW-5 326.50 3/21/1995 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 ** 2.79 6/6/02* 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 329.16 6/22/2005 2.99 326.17 3.39 325.77 7/18/2005 9/6/2005 3.07 326.09 3/2/2006 2.74 326.42 6/12/2006 3.36 325.80 325.83 9/28/2006 3.33 $331.26^{\frac{3}{3}}$ 3/20/2007 4.80 326.46 6/15/2007 5.31 325.95 9/27/2007 5.33 325.93 12/18/2007 5.30 325.96 3/4/2008 4.68 326.58 326.12 9/2/2008 5.14 5.47 325.79 12/8/2008

Table II, Summary of Groundwater Elevation Measurements BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California **TOC** Elevation Depth to Water Water Surface Elevation Well ID Date (feet) (feet) (feet) MW-6 327.23 3/21/1995 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* 4.81 322.42 327.23 9/23/2002 5.10 322.13 12/13/2002 4.88 322.35 12/14/2004 4.61 322.62 3/23/2005 3.40 323.83 330.02 4.72 6/22/2005 325.30 2.65 327.37 7/18/2005 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 $329.55^{\overline{3}}$ 3/20/2007 3.94 325.61 6/15/2007 4.16 325.39 9/27/2007 3.92 325.63 12/18/2007 3.81 325.74 3/4/2008 3.65 325.90 4.02 325.53 9/2/2008 4.26 325.29 12/8/2008

Table II, Summary of Groundwater Elevation Measurements BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California **TOC** Elevation Depth to Water Water Surface Elevation Well ID Date (feet) (feet) (feet) MW-7 6.38 7/18/2005 9/6/2005 6.78 330.25 3/2/2006 3.33 326.92 6/12/2006 4.18 326.07 9/28/2006 4.52 325.73 330.17^{3} 3/20/2007 3.74 326.43 6/15/2007 4.24 325.93 9/27/2007 4.33 325.84 12/18/2007 3.70 326.47 3/4/2008 3.15 327.02 4.06 9/2/2008 326.11 325.76 4.41 12/8/2008 MW-8 328.93 1.54 327.39 3/2/2006 6/12/2006 3.69 325.24 9/28/2006 3.10 325.83 $330.51^{\frac{3}{3}}$ 3/20/2007 4.16 326.35 325.89 6/15/2007 4.62 9/27/2007 4.51 326.00 12/18/2007 3.55 326.96 3/4/2008 3.69 326.82 9/2/2008 4.41 326.10

4.61

325.90

12/8/2008

	Table II, 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-9	3/2/2006	328.67	1.54	327.13								
	6/12/2006		3.68	324.99								
	9/28/2006		3.08	325.59								
	3/20/2007	330.74 ³	4.37	326.37								
	6/15/2007		4.83	325.91								
	9/27/2007		4.71	326.03								
	12/18/2007		3.84	326.90								
	3/4/2008		3.95	326.79								
	9/2/2008		4.65	326.09								
	12/8/2008		4.91	325.83								

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 NS = Not sampled

= Resurveyed on April 13, 2005 by CSS Environmental Services, Inc.

² = Surveyed on February 7, 2006 by CSS Environmental Services, Inc.

Surveyed on March 19, 2007 by CSS Environmental Services, Inc.

Elevations in feet above mean sea level

Table III, Summary of Groundwater Sample Hydrocarbon Analytical Results BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California Modified EPA Method 8015 EPA Method 8020 or 8021B $(\mu g/L)$ $(\mu g/L)$ TPH as Well ID Sample Date Diesel TPH TPH Total with Benzene Toluene Ethylbenzene **MTBE** as Gasoline as Diesel Silica **Xylenes** Gel Cleanup RWQCB ESLs; Table F-1a: **Groundwater Screening** Levels (groundwater IS a 100 100 100 1 40 30 20 5 current or potential drinking water resource) MW-1 11/27/1991 < 50 NA NA < 0.3 < 0.3 < 0.3 < 0.3 NA 9/30/1992 < 50 NA NA < 0.3 < 0.3 < 0.3 < 0.3 NA 4/7/1994 < 50 NA NA < 0.5 < 0.5 < 0.5 NA < 0.5 < 50 NA 1 < 0.3 8/12/1994 NA 1 <2 NA 11/29/1994 < 50 NA NA < 0.5 < 0.5 < 0.5 NA <2 3/21/1995 < 50 NA NA < 0.5 < 0.5 < 0.5 <2 NA < 0.5 5/22/1995 NA < 50 NA < 0.5 < 0.5 <2 NA NA 8/24/1995 NA < 50 < 0.5 < 0.5 < 0.5 <2 NA 2/12/1996 NA < 50 NA < 0.5 < 0.5 < 0.5 <2 NA 6/6/02* NA NA NA NA NA NA NA NA 9/23/2002 NA NA NA NA NA NA NA NA 12/13/2002 NA NA NA NA NA NA NA NA 12/14/2004 < 50 < 50 NA < 0.5 < 0.5 < 0.5 < 5.0 < 0.5 3/23/2005 NA NA NA NA NA NA NA NA 6/22/2005 NA NA NA NA NA NA NA NA 9/6/2005 NA NA NA NA NA NA NA NA 62 k 3/2/2006 < 50 NA < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 NA NA NA 6/1/2006 NA NA NA NA NA 78 k 9/28/2006 < 50 NA < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 NA < 0.5 3/20/2007 < 50 < 50 < 0.5 < 0.5 < 0.5 < 5.0 NS NS NS NS NS NS 6/15/2007 NS NS 9/27/2007 < 50 NA < 50 < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 12/18/2007 NS NS NS NS NS NS NS NS 3/4/2008 NS NS NS NS NS NS NS NS NA 9/2/2008 < 50 < 50 < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 NS NS NS NS NS NS NS 12/8/2008 NS

Table III, Summary of Groundwater Sample Hydrocarbon Analytical Results BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California Modified EPA Method 8015 EPA Method 8020 or 8021B $(\mu g/L)$ $(\mu g/L)$ TPH as Well ID Sample Date Diesel TPH TPH Total with Benzene Toluene Ethylbenzene **MTBE** as Gasoline as Diesel Silica **Xylenes** Gel Cleanup RWQCB ESLs; Table F-1a: **Groundwater Screening** Levels (groundwater IS a 100 100 100 1 20 5 40 30 current or potential drinking water resource) MW-2 11/27/1991 NA 170,000 NA 24,000 13,000 3,500 16,000 NA 24,000 3,800 9/30/1992 NA 120,000 NA 15,000 17,000 NA 4/7/1994 NA 120,000 NA 21,000 14.000 4.300 21,000 NA 140,000 17,000 10,000 4,300 8/12/1994 NA NA 18,000 NA 11/29/1994 NA NA 17,000 NA 90,000 7,500 3,400 15,000 3/21/1995 NA 83,000 NA 17,000 NA 8.000 3.800 17,000 14,000 5/22/1995 NA 82,000 NA 6,000 4,000 16,000 NA 8/24/1995 NA 86,000 NA 13,000 8,100 3,700 16,000 NA 2/12/1996 NA 78,000 NA 15,000 8,100 4,200 18,000 NA NA 11,000 6,900 3,500 15,000 480 2/5/1997 58,000 NA 8/6/1997 NA 66,000 7,000 9,200 3,500 NA 16,000 < 500 25,000 a 2,900 2,700 6/6/02* NA NA **50** 2,200 < 250 14,000 b NA <250 9/23/2002 4.300° 2,700 81 2,100 1,800 4,000 ° 12/13/2002 26,900 NA 1,120 91 1,480 2,370 197 d

NA

NA

NA

NA

NS

NS

NS

21.000 e

27,000 ^{e i}

5,800 e

14,000 e

NS

NS

NS

1,700

1,400

53

1,000

NS

NS

NS

120

170

46

40

NS

NS

NS

1,600

1,700

570

1,500

NS

NS

NS

<60

<170

< 50

<100

NS

NS

NS

2,400

2,500

58

680

NS

NS

NS

12/14/2004

3/23/2005

6/22/2005

9/6/2005

3/2/2006

6/1/2006

9/28/2006

3/20/2007

6/15/2007

9/27/2007

12/18/2007

3/4/2008 9/2/2008

12/8/2008

7,600 f, g

15,000 f, g, i

1,200^g

4,900 f, g, j

NS

Table III, Summary of Groundwater Sample Hydrocarbon Analytical Results BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California Modified EPA Method 8015 EPA Method 8020 or 8021B $(\mu g/L)$ $(\mu g/L)$ TPH as Well ID Sample Date Diesel TPH TPH Total with Benzene Toluene Ethylbenzene **MTBE** as Gasoline as Diesel Silica **Xylenes** Gel Cleanup RWQCB ESLs; Table F-1a: **Groundwater Screening** Levels (groundwater IS a 100 100 100 1 30 20 5 40 current or potential drinking water resource) MW-3 11/27/1991 NA < 50 NA < 0.3 < 0.3 < 0.3 < 0.3 NA 9/30/1992 NA < 50 NA < 0.3 < 0.3 < 0.3 < 0.3 NA 4/7/1994 NA < 50 NA 2.5 5.5 0.9 5.1 NA < 50 < 0.5 8/12/1994 NA NA < 0.5 < 0.3 <2 NA 11/29/1994 NA < 50 NA < 0.5 < 0.5 < 0.5 <2 NA 3/21/1995 NA < 50 NA < 0.5 < 0.5 < 0.5 <2 NA 5/22/1995 NA < 50 NA < 0.5 < 0.5 < 0.5 <2 NA NA 8/24/1995 NA < 50 < 0.5 < 0.5 < 0.5 <2 NA 2/12/1996 NA < 50 NA < 0.5 < 0.5 < 0.5 <2 NA NA < 50 NA < 0.5 2/5/1997 < 0.5 < 0.5 < 0.5 < 5.0 6/6/02* NA NA NA NA NA NA NA NA 9/23/2002 NA 12/13/2002 < 0.5 12/14/2004 < 50 < 50 NA < 0.5 < 0.5 < 0.5 < 5.0 3/23/2005 NA NA NA NA NA NA NA NA 6/22/2005 NA NA NA NA NA NA NA NA 9/6/2005 NA NA NA NA NA NA NA NA < 0.5 < 50 < 50 NA < 0.5 < 0.5 < 5.0 3/2/2006 < 0.5 NA NA NA NA NA NA NA 6/1/2006 NA 9/27/2006 < 50 NA < 50 < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 3/20/2007 < 50 NA < 50 < 0.5< 0.5 < 0.5 < 0.5 < 5.0 6/15/2007 < 50 NA < 50 < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 9/27/2007 < 50 NA < 50 < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 12/18/2007 NS 3/4/2008 NS NS < 50 NA < 0.5 < 0.5 < 0.5 < 5.0 9/2/2008 < 50 < 0.5 12/8/2008 NS NS NS NS NS NS NS NS

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

	6393 Scarlett Court, Dublin, California											
		Modified E	EPA Metho (µg/L)	od 8015	EPA Method 8020 or 8021B (μg/L)							
Well ID	Sample Date	TPH as Gasoline	TPH as Diesel	TPH as Diesel with Silica Gel Cleanup	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE			
Ground Levels (current or wat	ESLs; Table F-1a: water Screening groundwater IS a potential drinking ter resource)	100	100	100	1	40	30	20	5			
MW-4	11/27/1991	NA	11,000	NA	100	0.7	250	330	NA			
	9/30/1992	NA	380	NA	3.5	2.4	8.9	3.4	NA			
	4/7/1994	NA	1,100	NA	61	5.5	17	12	NA			
	8/12/1994	NA	1,000	NA	3	1	8	4	NA			
	11/29/1994	NA	1,100	NA	2	< 0.5	10	6	NA			
	3/21/1995	NA	1,400	NA	200	5	66	18	NA			
	5/22/1995	NA	1,200	NA	60	1	12	8	NA			
	8/24/1995	NA	400	NA	1	< 0.5	1	<2	NA			
	2/12/1996	NA	1,500	NA	130	< 0.5	120	51	NA			
	2/5/1997	NA	1,200	NA	250	4.9	94	12	16			
	8/6/1997	NA	330	NA	1.5	< 0.5	< 0.5	< 0.5	< 5.0			
	6/6/02*	NA	< 50	NA	1.7	< 0.5	< 0.5	< 0.5	<2.5			
	9/23/2002	<48	< 50	NA	< 0.5	1.3	< 0.5	< 0.5	<2.5			
	12/13/2002	86°	< 50	NA	< 0.5	< 0.5	< 0.5	<1.5	< 0.5			
	12/14/2004	<50	95 h	NA	2.6	< 0.5	< 0.5	< 0.5	< 5.0			
	3/23/2005	<50	120 h	NA	< 0.5	5	<0.5	< 0.5	< 5.0			
	6/22/2005	<50	180 ^e	NA	1.7	7.5	< 0.5	< 0.5	< 5.0			
	9/6/2005	<50	< 50	NA	< 0.5	< 0.5	<0.5	< 0.5	< 5.0			
	3/2/2006	1,600 e	220 ^g	NA	47	4.1	1.6	19	<20			
	6/1/2006	1,000 e	250 f, g	NA	22	2.8	3.9	0.59	< 5.0			
	9/27/2006	1,400 e	220 f, g	NA	8.5	7.3	2.4	< 0.5	<15			
	3/20/2007	630 e, h	130 f, g	77 ^g	4.8	12	<0.5	< 0.5	< 5.0			
	6/15/2007	440 e, h	NA	<50	2.1	7.8	<0.5	< 0.5	<5.0			
	9/27/2007	450 e, h	NA	84 ^g	2.4	6.2	<0.5	<0.5	<5.0			
	12/18/2007	330 ^e	NA	<50	1.4	7.1	<0.5	<0.5	<35			
	3/4/2008	180 e	NA	<50	0.60	3.7	<0.5	<0.5	<5.0			
	9/2/2008	810 e	NA	<50	2.1	13	<0.5	<0.5	<5.0			
	12/8/2008	860 ^e	NA	< 50	2.2	16	< 0.5	0.83	< 5.0			

Table III, Summary of Groundwater Sample Hydrocarbon Analytical Results BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California Modified EPA Method 8015 EPA Method 8020 or 8021B $(\mu g/L)$ $(\mu g/L)$ TPH as Well ID Sample Date Diesel TPH TPH with Total Benzene Toluene Ethylbenzene **MTBE** Silica as Gasoline as Diesel **Xylenes** Gel Cleanup RWQCB ESLs; Table F-1a: **Groundwater Screening** 5 Levels (groundwater IS a 100 100 100 1 40 30 20 current or potential drinking water resource) MW-5 3/21/1995 NA < 50 NA < 0.5 < 0.5 < 0.5 <2 NA 5/22/1995 NA < 50 NA < 0.5 < 0.5 < 0.5 <2 NA 8/24/1995 NA < 50 NA < 0.5 < 0.5 < 0.5 <2 NA NA < 50 NA < 0.5 < 0.5 <2 NA 2/12/1996 < 0.5 2/5/1997 NA < 50 NA < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 6/6/02* NA NA NA NA NA NA NA NA 9/23/2002 < 0.5 310° < 50 NA < 0.5 < 0.5 < 0.5 < 2.5 0.720 ^d NA < 0.5 12/13/2002 97 ^c < 50 < 0.5 < 0.5 <1.5 12/14/2004 < 50 < 50 NA < 0.5 < 0.5 < 0.5 < 0.5 12 < 50 < 50 NA < 0.5 < 0.5 23 3/23/2005 < 0.5 < 0.5 6/22/2005 < 50 < 50 NA < 0.5 < 0.5 < 0.5 < 0.5 31 32 9/6/2005 < 50 < 50 NA < 0.5 < 0.5 < 0.5 < 0.5 3/2/2006 < 50 < 50 NA < 0.5 < 0.5 < 0.5 < 0.5 **30** < 50 < 50 < 0.5 < 0.5 6/1/2006 NA < 0.5 < 0.5 44 9/28/2006 < 50 < 50 NA < 0.5 < 0.5 < 0.5 48 < 0.5 < 0.5 3/20/2007 < 50 NA < 50 < 0.5 < 0.5 < 0.5 54 6/15/2007 < 50 NA < 50 < 0.5 < 0.5 < 0.5 < 0.5 38 < 0.5 36 9/27/2007 < 50 NA < 50 < 0.5 < 0.5 < 0.5 12/18/2007 NS NS NS NS NS NS NS NS < 50 NA 3/4/2008 < 50 < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 < 50 NA < 50 < 0.5 < 0.5 < 0.5 < 0.5 23 9/2/2008 NS 12/8/2008 NS NS NS NS NS NS NS

Table III, Summary of Groundwater Sample Hydrocarbon Analytical Results BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California Modified EPA Method 8015 EPA Method 8020 or 8021B $(\mu g/L)$ $(\mu g/L)$ TPH as Well ID Sample Date Diesel TPH TPH with Total Benzene Toluene Ethylbenzene **MTBE** Silica as Gasoline as Diesel **Xylenes** Gel Cleanup RWQCB ESLs; Table F-1a: **Groundwater Screening** 5 Levels (groundwater IS a 100 100 100 1 40 30 20 current or potential drinking water resource) MW-6 3/21/1995 NA < 50 NA < 0.5 < 0.5 < 0.5 <2 NA 5/22/1995 NA < 50 NA < 0.5 < 0.5 < 0.5 <2 NA 8/24/1995 NA < 50 NA < 0.5 < 0.5 < 0.5 <2 NA <0.5 NA <50 NA < 0.5 <0.5 <2 NA 2/12/1996 2/5/1997 NA < 50 NA < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 6/6/02* NA NA NA NA NA NA NA NA 9/23/2002 NA 12/13/2002 NA NA 12/14/2004 < 50 < 50 NA < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 NA NA NA NA NA NA 3/23/2005 NA NA 6/22/2005 NA NA NA NA NA NA NA NA 9/6/2005 NA NA NA NA NA NA NA NA 3/2/2006 < 50 < 50 NA < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 < 0.5 < 5.0 6/1/2006 50 e < 50 NA 0.84 < 0.5 < 0.5 9/27/2006 < 50 61^f NA < 0.5 < 0.5 < 0.5 < 5.0 < 0.5 < 0.5 < 5.0 3/20/2007 < 50 NA < 50 < 0.5 < 0.5 < 0.5 6/15/2007 < 50 NA < 50 < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 9/27/2007 < 50 NA < 50 < 0.5 < 0.5 < 0.5 < 5.0 < 0.5 12/18/2007 NS 3/4/2008 NS NS < 50 NA < 50 < 0.5 < 0.5 < 5.0 9/2/2008 < 0.5 < 0.5 NS NS NS 12/8/2008 NS NS NS NS NS

Table III, Summary of Groundwater Sample Hydrocarbon Analytical Results BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California Modified EPA Method 8015 EPA Method 8020 or 8021B $(\mu g/L)$ $(\mu g/L)$ TPH as Well ID Sample Date Diesel TPH TPH with Total Benzene Toluene Ethylbenzene **MTBE** Silica as Gasoline as Diesel **Xylenes** Gel Cleanup RWQCB ESLs; Table F-1a: **Groundwater Screening** 5 Levels (groundwater IS a 100 100 100 1 40 30 20 current or potential drinking water resource) MW-7 7/18/2005 < 50 < 50 NA < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 9/6/2005 0.7 1.2 < 5.0 < 50 < 50 NA < 0.5 < 0.5 3/2/2006 < 50 < 50 NA < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 < 50 < 50 NA < 0.5 < 0.5 < 0.5 < 5.0 6/1/2006 < 0.5 9/27/2006 < 50 < 50 NA < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 < 0.5 3/20/2007 < 50 NA < 50 < 0.5 < 0.5 < 0.5 < 5.0 6/15/2007 < 50 NA < 0.5 < 0.5 < 5.0 < 50 < 0.5 < 0.5 NA < 0.5 < 5.0 9/27/2007 < 50 < 50 < 0.5 < 0.5 < 0.5 12/18/2007 NS 3/4/2008 NS NS 9/2/2008 < 50 NA < 50 < 0.5 < 0.5 < 0.5 < 0.5 < 5.0 NS NS NS NS NS 12/8/2008 NS NS NS **MW-8** 3/2/2006 590 e 550 f g NA 6.2 2.7 0.67 21 < 5.0 97 ^k 250^{f, j} NA < 0.5 < 5.0 6/1/2006 < 0.5 < 0.5 1.1 9/28/2006 300 f, g, j NA 3 1.2 1.1 7.2 < 5.0 150 e 440 f, g < 5.0 3/20/2007 140 e 61 ^g 1.2 0.55 2.5 0.68 98 ^g 6/15/2007 NA 1.6 0.81 0.76 2.8 < 5.0 140 e < 0.5 < 5.0 9/27/2007 NA 0.66 0.55 2.3 140 e 53 ^g 94 f, g 12/18/2007 NA 1.1 < 0.5 0.77 2.1 < 5.0 96 e 95 e NA 1.1 1.3 < 5.0 3/4/2008 < 50 < 0.5 0.61 0.68 9/2/2008 86 e NA < 0.5 < 0.5 1.3 < 5.0 < 50 76 ^e 2 12/8/2008 NA < 50 1.1 < 0.5 2.2 < 5.0

Table III, Summary of Groundwater Sample Hydrocarbon Analytical Results BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California Modified EPA Method 8015 EPA Method 8020 or 8021B $(\mu g/L)$ $(\mu g/L)$ TPH as Well ID Sample Date Diesel TPH TPH with Total Benzene Toluene Ethylbenzene **MTBE** as Gasoline as Diesel Silica Xylenes Gel Cleanup RWQCB ESLs; Table F-1a: Groundwater Screening Levels (groundwater IS a 100 100 100 20 5 1 40 30 current or potential drinking water resource) MW-9 430 f g 3/2/2006 280 e NA 2.6 0.96 1 10 < 5.0 $180^{\ f,\,j}$ 680 k 6/1/2006 NA 0.85 < 0.5 1.9 3.9 < 5.0 530 f, g, j 0.95 9/28/2006 150 e NA 0.69 0.87 **6.7** < 5.0 3/20/2007 120 e < 50 0.88 0.70 < 0.5 1.8 < 5.0 NA 6/15/2007 NA 62 ^g < 5.0 120 e 1.3 0.84 1.1 3 92 ^g 9/27/2007 < 5.0 180 e NA 1.2 0.61 1.7 2.1 12/18/2007 130 e NA 97 f, g 1.5 < 5.0 0.58 1.1 1.9 3/4/2008 91 e NA < 0.5 < 5.0 < 50 2.0 1.1 1.9 9/2/2008 93 ^e NA < 50 0.68 < 0.5 1.2 3.0 < 5.0 12/8/2008 NA < 50 1.4 < 0.5 2.0 2.2 < 5.0 110 e

	Table III, Summary of Groundwater Sample Hydrocarbon Analytical Results BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California										
		Modified E	od 8015	EPA Method 8020 or 8021B (μg/L)							
Well ID	Sample Date	TPH as Gasoline	TPH as Diesel	TPH as Diesel with Silica Gel Cleanup		Toluene	Ethylbenzene	Total Xylenes	MTBE		
RWQCB ESLs; Table F-1a: Groundwater Screening Levels (groundwater IS a current or potential drinking water resource)		100	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

 $\langle x \rangle$ = 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 IV, Summary of Groundwater Sample Fuel Additive Analytical Results BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California

Wall ID	Comple Date				EPA Met	hod 8260B	(ug/L)			
Well ID	Sample Date	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
IVI VV - Z	3/23/2005	< 5.0	< 50	< 5.0	5.4	< 5.0	< 500	< 5.0	<5,000	< 5.0
MW-4	3/20/2007	< 0.5	< 5.0	NA	NA	< 0.5	NA	< 0.5	NA	< 0.5
	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*
MW-5	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
	3/20/2007	<1.0	<10	NA	NA	<1.0	NA	<1.0	NA	57*

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

 $MTBE \ = \ Methly \ tert\text{-butyl} \ ether$

 $(\mu g/L) = Micrograms per liter$

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

		0575 Scaricti	Court, Dubini,	Camoima		
Well ID	Sample Date	Field Meter Dissoved Oxygen	Field Meter Oxidation Reduction	Field Test Kit Ferrous Iron	Field Meter Field Temperature	Field Meter Field pH
		211,8111	Potential		F	
		(mg/L)	(mV)	(Fe 2+)	(°C or °F)	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
	3/20/2007	0.2	88	0	65.9	7.0
	6/15/2007	NS	NS	NS	NS	NS
	9/27/2007	1.6	245.0	0.81	23.1	7.24
	12/18/2007	NS	NS	NS	NS	NS
	3/4/2008	NS	NS	NS	NS	NS
	9/2/2008	0.15	78	0.0	19.7	7.0
	12/8/2008	NS	NS	NS	NS	NS
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
	3/20/2007	NS	NS	NS	NS	NS
	6/15/2007	NS	NS	NS	NS	NS
	9/27/2007	NS	NS	NS	NS	NS
	12/18/2007	NS	NS	NS	NS	NS
	3/4/2008	NS	NS	NS	NS	NS
	9/2/2008	NS	NS	NS	NS	NS
	12/8/2008	NS	NS	NS	NS	NS

		0575 Scaricti	Court, Dubini,	Camorma		
Well ID	Sample Date	Field Meter Dissoved Oxygen	Field Meter Oxidation Reduction	Field Test Kit Ferrous Iron	Field Meter Field Temperature	Field Meter Field pH
		Oxygen	Potential		remperature	
		(mg/L)	(mV)	(Fe 2+)	(°C or °F)	pH units
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
	3/20/2007	0.1	92	0	64.3	7.2
	6/15/2007	0.22	82	0	20.0	7.3
	9/27/2007	0.40	216	0.6	21.3	7.2
	12/18/2007	NS	NS	NS	NS	NS
	3/4/2008	NS	NS	NS	NS	NS
	9/2/2008	0.15	22	0.0	20.0	7.2
	12/8/2008	NS	NS	NS	NS	NS
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
	3/20/2007	0.1	6.2	1.5	36.4	7.1
	6/15/2007	0.18	-30	1.0	20.3	7.4
	9/27/2007	0.20	30	0.95	18.7	7.1
	12/18/2007	15.89	10.8	0.0	17.5	8.7
	3/4/2008	4.73 / 2.93	217.5 / 159.9	0.0	16.5	7.4
	9/2/2008	0.11	-24	0.6	20.3	7.4
	12/8/2008	1.28	88	0.0	64.3	7.3

		0575 Scarica	Court, Dubini,	Camorma		
Well ID	Sample Date	Field Meter Dissoved Oxygen	Field Meter Oxidation Reduction	Field Test Kit Ferrous Iron	Field Meter Field Temperature	Field Meter Field pH
		213/8111	Potential		F	
		(mg/L)	(mV)	(Fe 2+)	(°C or °F)	pH units
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	7.2
	9/28/2006	0.75 / 0.78	153.1 / 94.1	< 0.2	20.5	6.7
	3/20/2007	1.4	108	0	61.6	7.3
	6/15/2007	2.21	5.5	0	18.3	7.8
	9/27/2007	0.90	27	0.08	20.6	7.3
	12/18/2007	NS	NS	NS	NS	NS
	3/4/2008	2.76 / 0.81	89.2 / 0.9	0.0	17.9	7.5
	9/2/2008	1.98	41	0.0	22.9	7.3
	12/8/2008	NS	NS	NS	NS	NS
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
	3/20/2007	1.5	74	0	60.2	7.5
	6/15/2007	1.30	-51	0	20.5	7.7
	9/27/2007	1.2	-83	2.4	21.0	7.0
	12/18/2007	NS	NS	NS	NS	NS
	9/2/2008	NS	NS	NS	NS	NS
	9/2/2008	0.49	-77	0.0	23.0	7.6
	12/8/2008	NS	NS	NS	NS	NS

		Field Meter	Field Meter	Field Test Kit	Field Meter	Field Meter
Well ID	Sample Date	Dissoved	Oxidation Reduction	Ferrous Iron	Field	Field pH
		Oxygen	Potential		Temperature	
		(mg/L)	(mV)	(Fe 2+)	(°C or °F)	pH units
MW-7	7/18/2005	NS	NS	NS	68.7 / 69.4	7.5
	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
	3/20/2007	0.1	92	0	63.9	7.4
	6/15/2007	0.25	56	0	20.1	7.4
	9/27/2007	0.90	125	0.85	18.4	7.1
	12/18/2007	NS	NS	NS	NS	NS
	3/4/2008	NS	NS	NS	NS	NS
	9/2/2008	0.15	20	0.0	20.3	7.3
	12/8/2008	NS	NS	NS	NS	NS
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
	3/20/2007	0.1	101	0	62.3	9.9
	6/15/2007	0.3	4	0	19.0	9.1
	9/27/2007	0.4	1.53	0.2	21.3	9.2
	12/18/2007	5.6	-20.4	0.0	17.7	10.7
	3/4/2008	5.03 / 3.50	90.8 / 49.1	0.0	17.3	10.6
	9/2/2008	1.21	-2	0.0	20.7	8.8
	12/8/2008	0.12	33	0.0	67.7	9.1

Table V, Summary of Groundwater Intrinsic Bioremediation Field Results BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California Field Meter Field Meter Field Test Kit Field Meter Field Meter Dissoved Oxidation Ferrous Iron Field Field pH Well ID Sample Date Oxygen Reduction Temperature Potential (mg/L)(mV) (Fe 2+)pH units (°C or °F) MW-9 3/2/2006 0.52 / 0.20118.0 / 112.6 0.0 15.2 9.4 6/1/2006* 0.42 -30 0.0 20.5 10.5 9/28/2006 1.15 / 0.23 78.5 / -6.1 < 0.2 21.1 10.8 3/20/2007 0.2 0 62.8 8.9 136 0 46 19.0 6/15/2007 0.21 6.9 9/27/2007 0.4 -96 0.6 21.8 8.4 12/18/2007 11.7 20 0.0 19.0 10.5 3/4/2008 4.61 / 3.1292.3 / 8.7 0.0 18.9 10.9 9/2/2008 0.62 -51 0.0 21.8 10.1

42

0.0

67.6

10.1

Notes: mV = Millivolts

mg/L = Milligrams per liter oC = Degrees Centigrade

2.6 / 2.2 = Initial reading (pre-purge) / Final reading (post-purge)

0.06

NS = Not sampled * = Post purge value

12/8/2008

		Method SM 5310B	Method I	E300.1	Method RSK 174	Method E200.7		Method E365.1	Method SM 5210B	Method SM 5220D
Well ID	Sample Date	CO2	Nitrate (as N)	Sulfate	Methane	Manganese	Potassium	Total Phosphorous (as P)	BOD	COD
		mg/L				$\mu g/L$			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	<0.71	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

		Method SM 5310B	Method I	E300.1	Method RSK 174	Method	E200.7	Method E365.1	Method SM 5210B	Method SM 5220D
Well ID	Sample Date	CO2	Nitrate (as N)	Sulfate	Methane	Manganese	Potassium	Total Phosphorous (as P)	BOD	COD
		mg/L				$\mu g/L$			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

		Method SM 5310B	Method I	E300.1	Method RSK 174	Method E200.7		Method E365.1	Method SM 5210B	Method SM 5220D
Well ID	Sample Date	CO2	Nitrate (as N)	Sulfate	Methane	Manganese	Potassium	Total Phosphorous (as P)	BOD	COD
		mg/L				$\mu g/L$			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

		Method SM 5310B	Method F	E300.1	Method RSK 174	Method	E200.7	Method E365.1	Method SM 5210B	Method SM 5220D
Well ID	Sample Date	CO2	Nitrate (as N)	Sulfate	Methane	Manganese	Potassium	Total Phosphorous (as P)	BOD	COD
			mg/L			μg/L			mg/L	
MW-7	7/18/2005	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/2/2006	450	<0.71	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
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

 $\mu g/L = Micrograms per liter$

 CO_2 = Carbon Dioxide

NS = Not sampled

BOD = Biological Oxygen Demand

COS = Chemical Oxygen Demand

¹ = Total Nitrogen (Nitrate, Nitrite, & Ammonia)

Table V	Table VII, Summary of Groundwater Bacteria Enumeration Analytical Results BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California												
Aerobic Bacteria													
Method 9215A (HPC) / SM 9215 B Modified													
Well ID	Well ID Sample Date Hydrocarbon Degraders Total Heterotrophs Hydrocarbon Total Heterotrophs T												
			cfu/ml										
MW-1	3/20/2007	80	400	Gasoline/Diesel									
MW-3	4/9/2007	700	300	Gasoline/Diesel									
MW-4	MW-4 3/20/2007 5,000 10,000 Gasoline/Diesel												
MW-5	3/20/2007	400	1,000	AW 5									

Notes: SM = Standard Method

cfu/ml = Colony forming units per milliliter

Table VIII, Summary of Lead and Fuel Oxygenate Soil Sample Analytical Results BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California

Sample ID	Date	Method SW 7010 (mg/Kg)		EPA Method 8260B (Mg/Kg)								
		Total Lead	TAME	TBA	EDB	1,2-DCA	DIPE	ЕТВЕ	MTBE			
SB-B-7.5	9/16/03	<3.0	NA	NA	NA	NA	NA	NA	NA			
SB-B-17	9/16/03	<3.0	NA	NA	NA	NA	NA	NA	NA			
SB-C-18	9/16/03	<3.0	NA	NA	NA	NA	NA	NA	NA			
SB-F-17.75	9/16/03	<3.0	NA	NA	NA	NA	NA	NA	NA			
SB-I-3.5	9/16/03	<3.0	NA	NA	NA	NA	NA	NA	NA			
SB-I-8.25	9/16/03	7.6	NA	NA	NA	NA	NA	NA	NA			
SB-I-13.5	9/16/03	<3.0	NA	NA	NA	NA	NA	NA	NA			
SB-J-7.5	2/18/05	NA	< 0.005	< 0.025	< 0.005	< 0.005	< 0.005	<0.005	< 0.005			
RWQCB ESL Commercial / Industrial Land Use; ; Groundwater IS Current or Potential Source of Drinking Water; Table A Shallow Soils (<3m) or Table C Deep Soils (>3m)		750	NV	0.073	0.00033	0.0045	NV	NV	0.023			

Table VIII, Summary of Lead and Fuel Oxygenate Soil Sample Analytical Results, continued

Notes:	mg/Kg = <x 1,2-dca<="" =="" edb="" tame="" tba="" th=""><th>_</th><th>rams per kilogram nan the analytical detection limit (x) Methyl tert-Amyl Ether tert-Butyl Alcohol 1,2-Dibromoethane 1,2-Dichloroethane</th></x>	_	rams per kilogram nan the analytical detection limit (x) Methyl tert-Amyl Ether tert-Butyl Alcohol 1,2-Dibromoethane 1,2-Dichloroethane
	DIPE	=	Di-isopropyl Ether
	ETBE	=	Ethyl <i>tert</i> -Butyl Ether
	MTBE	=	Methyl <i>tert</i> -butyl Ether
	NA	=	Not analyzed

Bold results indicate detectable analyte concentrations.
Shaded results indicate analyte concentrations above the RWQCB ESL values.

Table IX, Summary of Grab or Depth-Discrete Groundwater Sample Hydrocarbon Analytical Results BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California

	6393 Scarlett Court, Dublin, California												
Sample ID	Date		A Method 8015 Fg/L)			EPA Method 8020							
		(1	g(L)			(Fg/L)							
		TPH as Gasoline	TPH as Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE					
D1	10/3/90	22,000	NA	250	<30	750	880	NA					
D3	10/3/90	110,000	NA	600	200	800	1,000	NA					
D4	10/3/90	15,000	NA	1,300	<30	700	1,000	NA					
D5	10/3/90	420	NA	2.4	<0.3	14	4.2	NA					
D6	10/3/90	320,000	NA	4,000	4,400	3,700	10,000	NA					
B-1	11/4/92		Free Product										
B-2	11/4/92				Free Produ	uct							
B-3	11/4/92	NA	NA	NA	NA	NA	NA	NA					
B-4	11/4/92				Free Produ	uct							
B-5	11/4/92	<50	NA	< 0.3	<0.3	<0.3	<0.3	NA					
B-6	11/4/92	<50	NA	<0.3	<0.3	<0.3	<0.3	NA					
B-7	11/4/92	<50	NA	<0.3	<0.3	<0.3	<0.3	NA					
B-8	11/4/92				Free Produ	uct							
B-9	11/4/92	170	NA	1.7	<0.3	2.4	1.4	NA					

Table IX, Summary of Grab or Depth-Discrete Groundwater Sample Hydrocarbon Analytical Results BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California

Sample ID	Date		A Method 8015 g/L)	EPA Method 8020 (Fg/L)							
		TPH as Gasoline	TPH as Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	МТВЕ			
B-10	11/4/92	7,800	NA	48	19	190	150	NA			
B-11	11/14/92	<50	NA	< 0.3	<0.3	<0.3	<0.3	NA			
B-12	11/14/92	<50	NA	<0.3	<0.3	<0.3	<0.3	NA			
B-13	12/10/92	<50	NA	<0.3	<0.3	<0.3	<0.3	NA			
SB-K-4W	2/18/05	74,000 ^{a b}	47,000 b c d	9,100	840	4,200	11,000	NA			
SB-K-19.5W	2/18/05	5,600 a b	2,400 cde	210	140	160	550	NA			
CPT1-34W	3/28/05	150 a	<50	11	6.5	5.3	17	NA			
CPT1-40W	3/28/05	320 a	61 ^d	33	23	15	46	NA			
CPT2-23W	3/28/05	<50	<50	<0.5	<0.5	<0.5	<0.5	NA			
CPT2-35W	3/28/05	<50	60 ^d	<0.5	<0.5	<0.5	<0.5	NA			
RWQCB Groundwater ESL: Groundwater IS a Current or Potential Source of Drinking Water; Commercial / Industrial Land Use (Table A or C)		100	100	1.0	40	30	20	5.0			

Table IX, Summary of Grab or Depth-Discrete Groundwater Sample Hydrocarbon Analytical Results

Notes: Fg/L = Micrograms per liter

TPH = Total Petroleum Hydrocarbons

MTBE = Methyl *tert*-butyl ether

NA = Not analyzed

< x = Less than the analytical detection limit (x)

EPA = Environmental Protection Agency

N/A = Not applicable

^a = Laboratory note indicates an unmodified or weakly modified gasoline pattern.

Laboratory note indicates a lighter than water immiscible sheen / product is present.

^c = Laboratory note indicates diesel range compounds are significant; no recognizable pattern.

d = Laboratory note indicates gasoline range compounds are significant.

^e = Laboratory note indicates oil range compounds are significant.

Bold results indicate detectable analyte concentrations.

Shaded results indicate analyte concentrations above the respective RWQCB ESL value (Groundwater IS Current or Potential Source of Drinking Water).

Table X, Summary of Groundwater Well Construction Details BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California

Well Number	Installation Date	Bore Depth	Well Completion Depth	Screen Interval	Casing Diameter /	Measured Depth ²	DTW ²	Consultant
		(feet, bgs)	(feet, bgs)	(feet, bgs)	Slot Size (inches)	(feet, bgs)	(feet, bgs)	
MW-1	11/22/91	20	20	5 - 20	2 / 0.020	19.34	1.14	PES
MW-2	11/21/91	20	20	5 - 20	2 / 0.020	19.76	1.83	PES
MW-3	11/21/91	20	20	5 - 20	2 / 0.020	18.41	1.83	PES
MW-4	11/21/91	20	20	5 - 20	2 / 0.020	18.64	1.93	PES
MW-5	2/23/95	10	10	3 - 10	2 / 0.020	9.83	2.39	PES
MW-6	3/14/95	10	10	5 - 10	2 / 0.020	9.90	3.40	PES
MW-7	7/8/05	40	40	30 - 40	2 / 0.010	42.60 ¹	6.35 ¹	BEI
MW-8	12/12/05	20	20	5 - 20	4 / 0.020	20.02	1.54	BEI
MW-9	12/12/05	20	20	5 - 20	4 / 0.020	19.84	1.44	BEI

Notes: bgs = Below grade surface

DTW = Depth to water

PES = PES Environmental, Inc. BEI = Blymyer Engineers, Inc.

Above grade completion (approximately 2.6 feet)

Wells MW-1 through MW-7 measured March 23, 2005; wells MW-7 and MW-8 measured March 2, 2006

Table XI, Summary of Excavation Bottom Soil Sample Hydrocarbon Analytical Results BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California

Sample ID	Date	Modified EPA Method 8015		EPA Method 8021B							
		(m	g/Kg)		(mg/Kg)						
		TPH as Gas	TPH as Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE			
NWB-20.5	12/2/05	<1.0	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05			
SEB-20	12/8/05	<1.0	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05			
SWB-20	SWB-20 12/8/05		<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05			
NEB-20	12/8/05	<1.0	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.05			
RWQCB ESL Commercial / Industrial Land Use;; Groundwater IS Current or Potential Source of Drinking Water; Table A Shallow Soils (<3m) or Table C Deep Soils (>3m)		100	100	0.044	2.9	3.3	1.5	0.023			

Notes: ft	=	feet	mg/Kg =	Milligrams per kilogram
TPH	=	Total Petroleum Hydrocarbons	MTBE =	Methyl tert-butyl ether
NA	_	Not analyzed	N/A -	Not available

<x = Less than the analytical detection limit (x) * = Depth mismarked in field.

EPA = Environmental Protection Agency

^a = Laboratory note indicates heavier gasoline range compounds are significant (aged gasoline?)

Laboratory note indicates that there is no recognizable pattern.

Laboratory note indicates gasoline range compounds are significant.

d = Laboratory note indicates oil range compounds are significant.

^e = Laboratory note indicates diesel range compounds are significant, with no recognizable pattern.

Laboratory note indicates unmodified or weakly modified gasoline is significant

Bold results indicate detectable analyte concentrations.

Shaded results indicate analyte concentrations above the respective *commercial* RWQCB ESL value, (Groundwater IS Current or Potential Source of Drinking Water).

Table XII, Summary of Excavation Bottom Lead and Fuel Additive Soil Sample Analytical Results BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California

Sample ID	Date	Method SW 6010 (mg/Kg)		EPA Method 8260B (mg/Kg)							
-		Total Lead	TAME	TBA	EDB	1,2-DCA	DIPE	Ethanol	ETBE	Methanol	MTBE
NWB-20.5	12/2/05	8.2	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	< 0.25	< 0.005	<2.5	< 0.005
SEB-20	12/8/05	7.6	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	<0.25	< 0.005	<2.5	< 0.005
SWB-20	12/8/05	8.9	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	<0.25	< 0.005	<2.5	< 0.005
NEB-20	12/8/05	7.5	< 0.005	< 0.05	< 0.005	< 0.005	< 0.005	<0.25	< 0.005	<2.5	< 0.005
Commercial Land Use; Grand Use; Grand Use; Grand Oscillation Source of I Water; Table Soils (<3m)	RWQCB ESL Commercial / Industrial Land Use; Groundwater IS Current or Potential Source of Drinking Water; Table A Shallow Soils (<3m) or Table C Deep Soils (>3m)		NV	0.073	0.00033	0.0045	NV	45	NV	NV	0.023

Notes: mg/Kg = Milligrams per kilogram

< x = Less than the analytical detection limit (x)

TAME Methyl tert-Amyl Ether TBA tert-Butyl Alcohol 1,2-Dibromoethane 1,2-DCA 1,2-Dichloroethane **EDB** = = DIPE Di-isopropyl Ether **ETBE** Ethyl tert-Butyl Ether = MTBE Methyl tert-butyl Ether NV No value established

Bold results indicate detectable analyte concentrations.

Table XIII, Summary of Stockpile Soil Sample Hydrocarbon and Lead Analytical Results BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California

Sample ID	Date	Method SW 6010	Modified EP	PA Method 8015	EPA Method 8021B					
		(mg/Kg)	(mg/Kg)		(mg/Kg)					
		Total Lead	TPH as Gas	TPH as Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE	
SP1, 1-4	11/29/05	14	25 ^{a b}	26 ^{c d e}	< 0.017	0.021	0.097	0.44	< 0.17	
SP2, 1-4	11/29/05	10	35 ^{a b}	42 ^{c d e}	< 0.017	0.023	0.16	0.64	< 0.17	
SP3, 1-4	12/2/05	7.9	28 ^f	3.7 °	0.026	0.13	0.3	0.56	< 0.20	
SP4, 1-4	12/2/05	7.3	82 ^f	13 °	0.074	0.21	1.1	3.3	< 0.50	
SP5, 1-4	12/6/05	7.1	140 ^{a b}	20 ° e	0.15	0.35	1.6	5.9	<0.50	
SP6, 1-4	12/6/05	14	140 ^{a b}	28 ^{c e}	0.18	0.65	1.6	2.7	<0.50	
SP7, 1-4	12/7/05	8.0	30 ^f	10 ^{c d e}	0.035	0.062	0.36	0.53	< 0.05	
SP8, 1-4	12/7/05	9.0	55 ^{a b}	33 ^{c d}	<0.050	0.077	0.83	2.7	<0.50	
SP9, 1-4	12/8/05	9.0	25 ^f	8.0 ^{c d e}	0.031	0.078	0.20	0.52	<0.05	
SP10, 1-4	12/8/05	9.3	45 b	11 ^{c d e}	0.034	0.49	0.26	0.72	<0.25	

Notes: ft	:	=	feet	mg/Kg	=	Milligrams per kilogram
T	PΗ	=	Total Petroleum Hydrocarbons	MTBE	=	Methyl tert-butyl ether
N	ΙA	=	Not analyzed	N/A	=	Not available
<	X	=	Less than the analytical detection limit (x)	*	=	Depth mismarked in field.
E	PA	=	Environmental Protection Agency			

Laboratory note indicates heavier gasoline range compounds are significant (aged gasoline?)

Bold results indicate detectable analyte concentrations.

Laboratory note indicates that there is no recognizable pattern.

c = Laboratory note indicates gasoline range compounds are significant.

d = Laboratory note indicates oil range compounds are significant.

Laboratory note indicates diesel range compounds are significant, with no recognizable pattern.

Laboratory note indicates unmodified or weakly modified gasoline is significant

Table IXV, Summary of Treated Effluent Groundwater Sample Hydrocarbon Analytical Results BEI Job No. 202016, Dolan Rentals 6393 Scarlett Court, Dublin, California Sample ID Date Modified EPA Method 8015 EPA Method 8020

Sample ID	Date		A Method 8015 g/L)	EPA Method 8020									
		(.	8,2)		(Fg/L)								
		TPH as Gasoline	TPH as Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE					
Eff-1	12/2/05	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0					

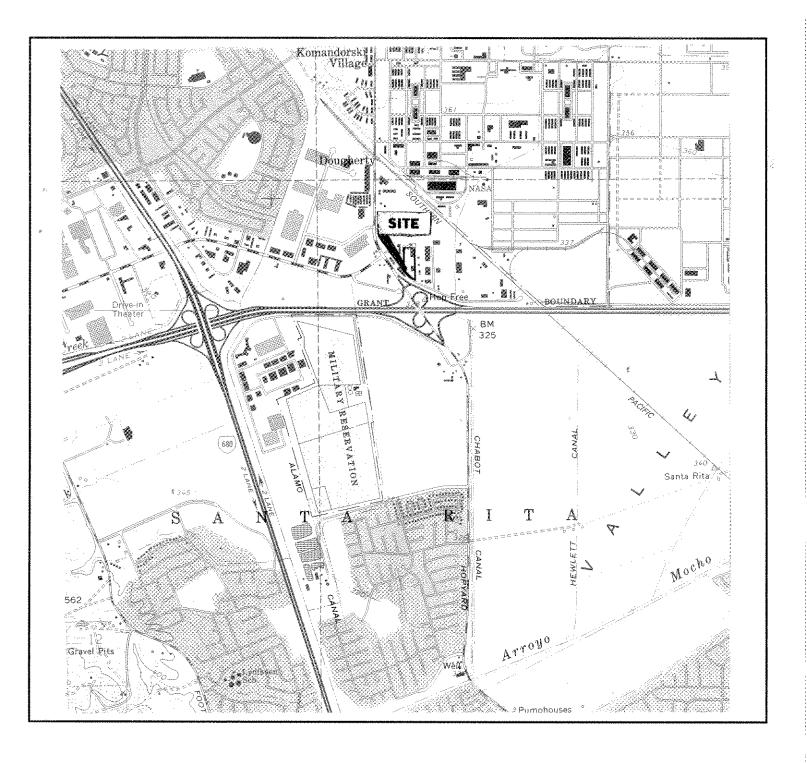
Notes: Fg/L = Micrograms per liter

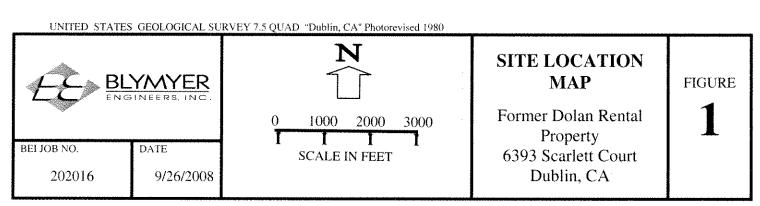
TPH = Total Petroleum Hydrocarbons

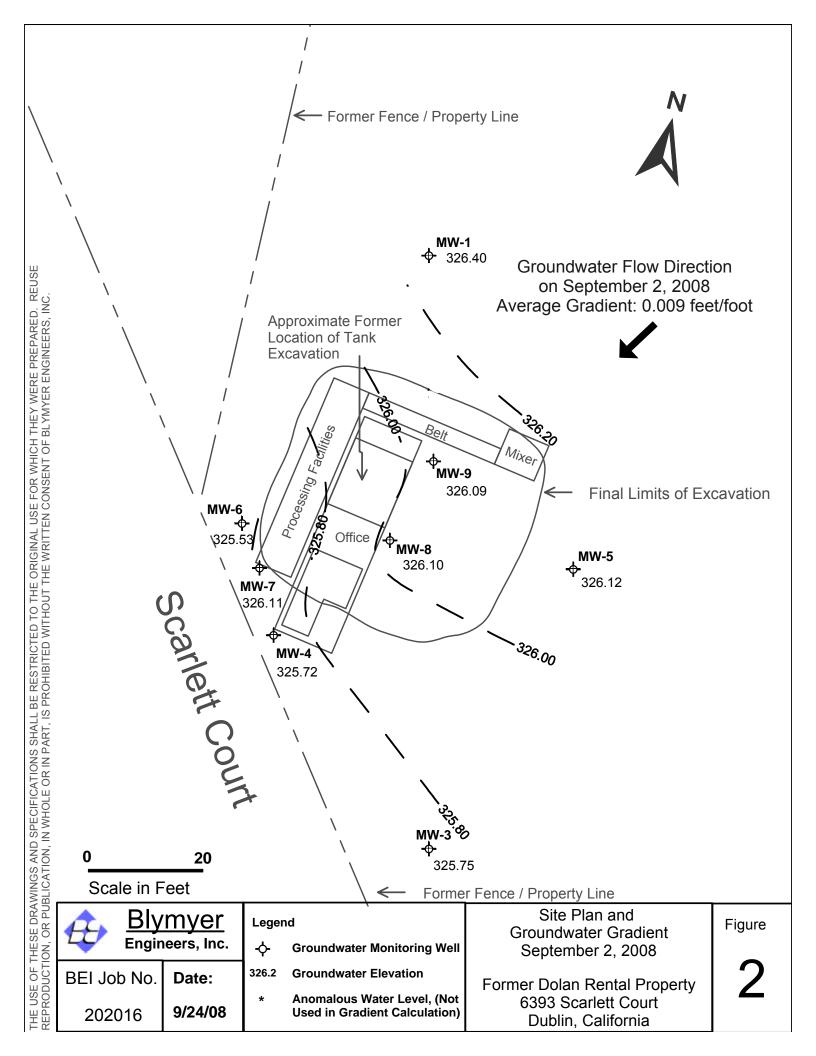
MTBE = Methyl *tert*-butyl ether

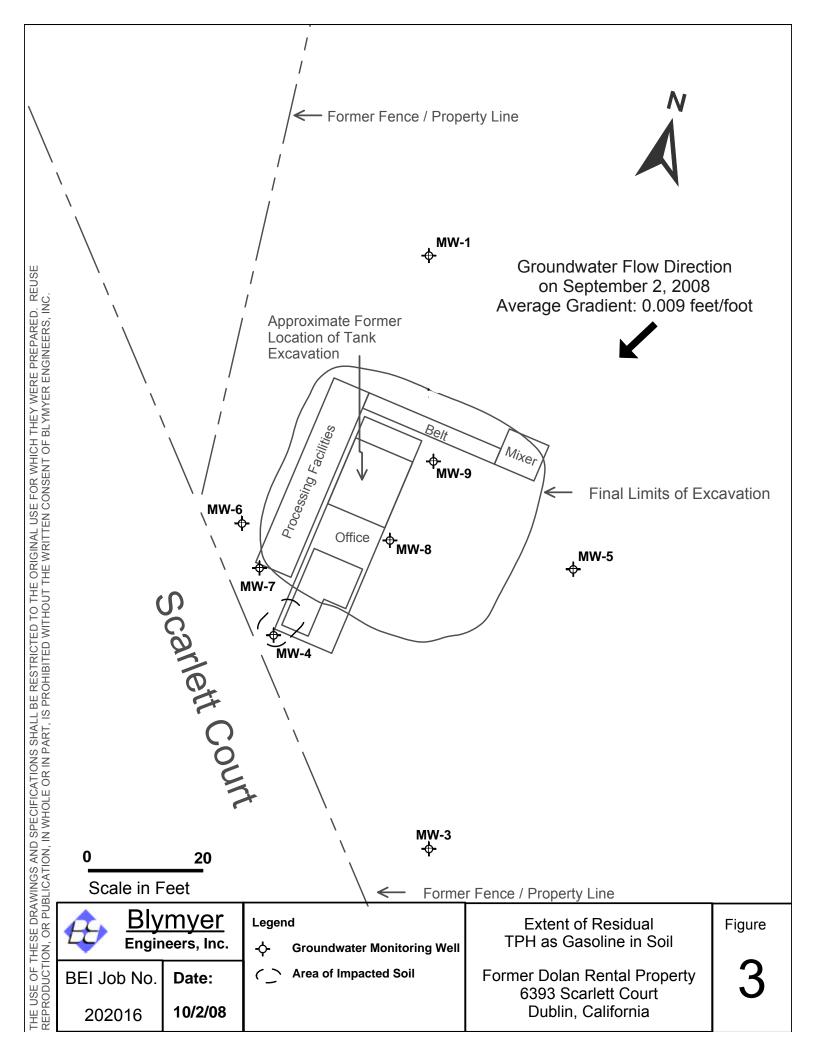
< x = Less than the analytical detection limit (x)

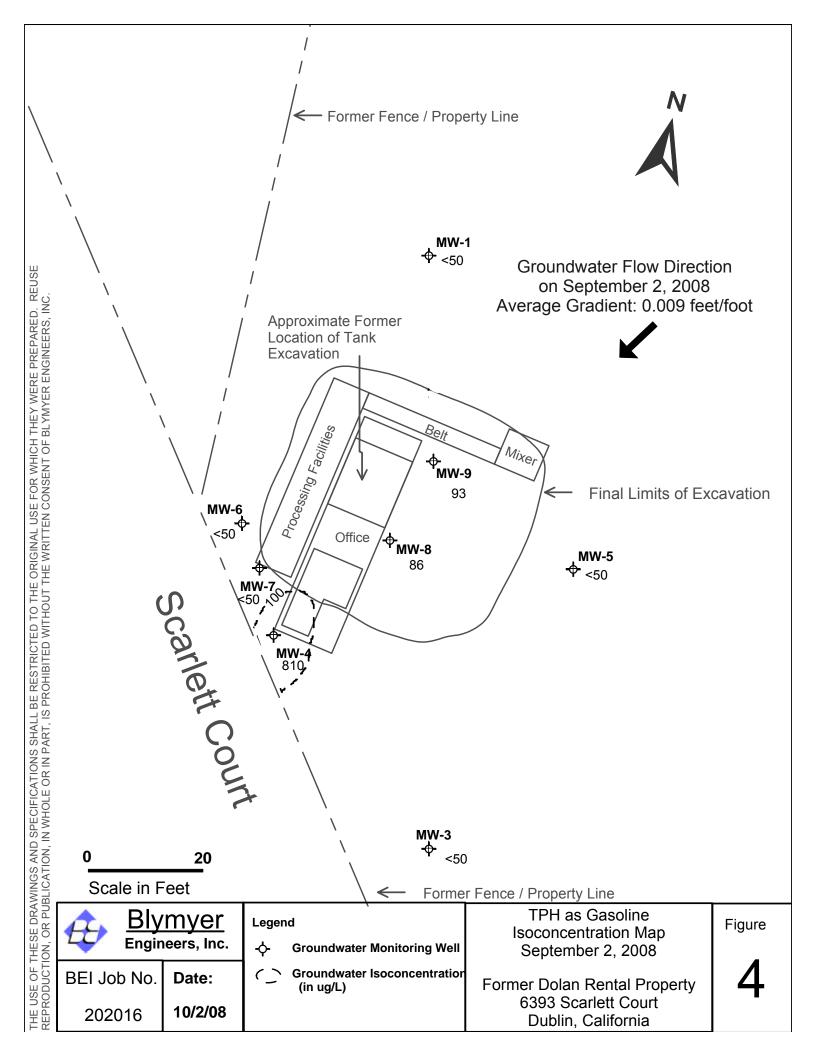
EPA = Environmental Protection Agency

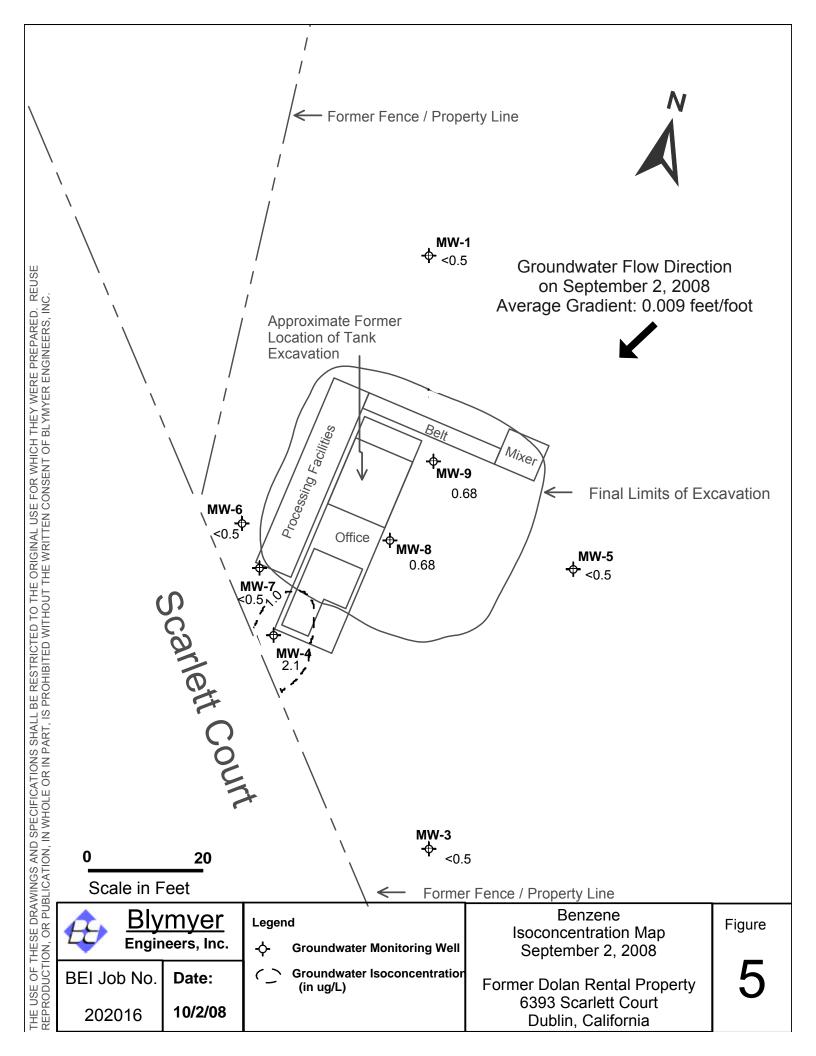


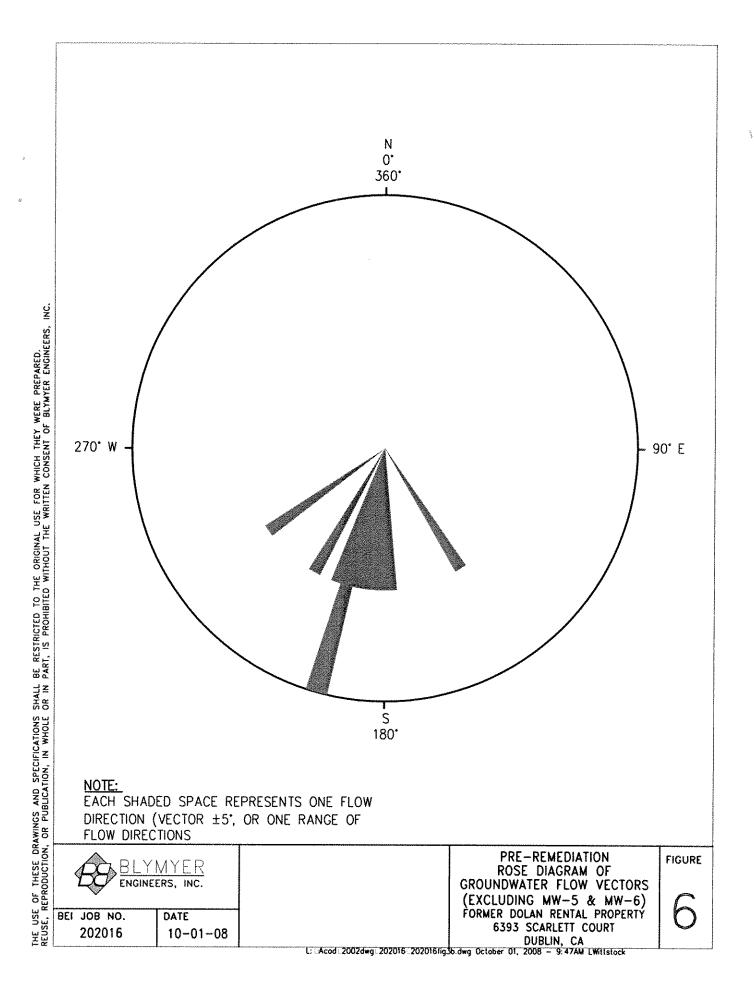


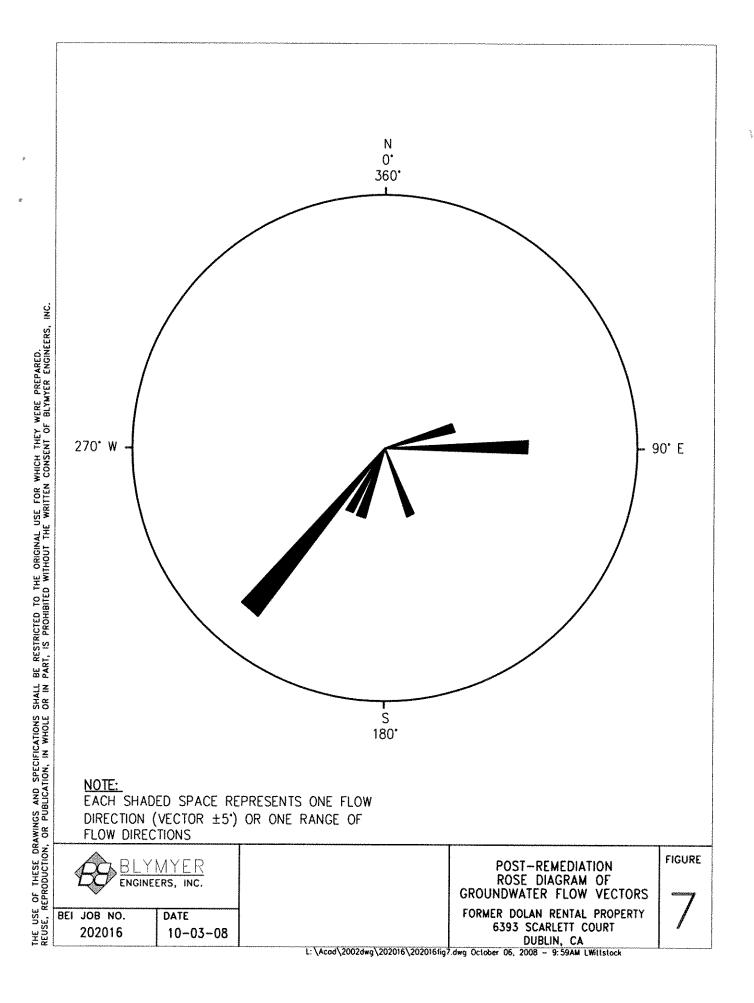












Appendix A

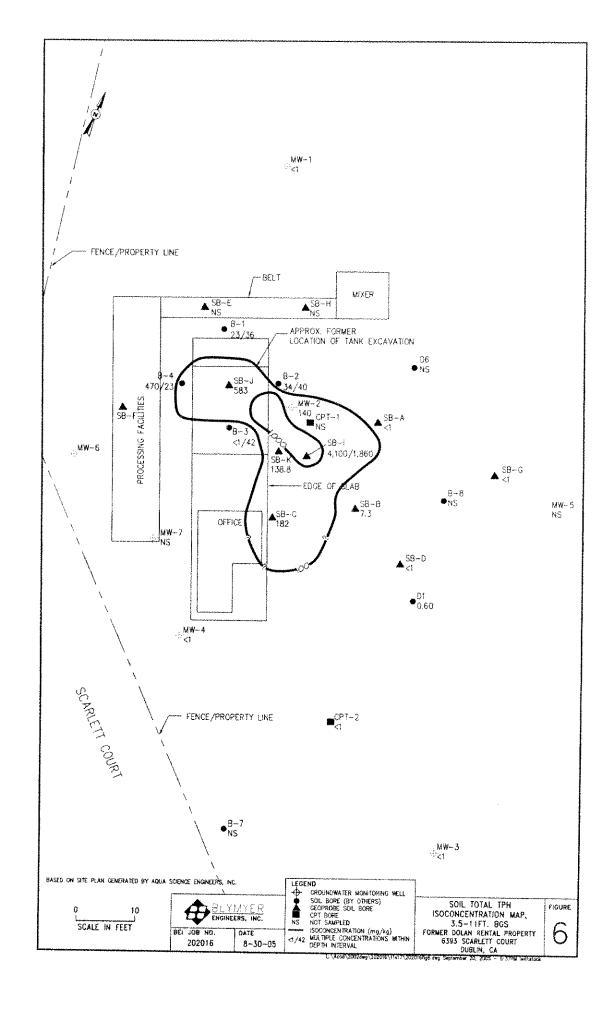
Hand Sketch of Site:

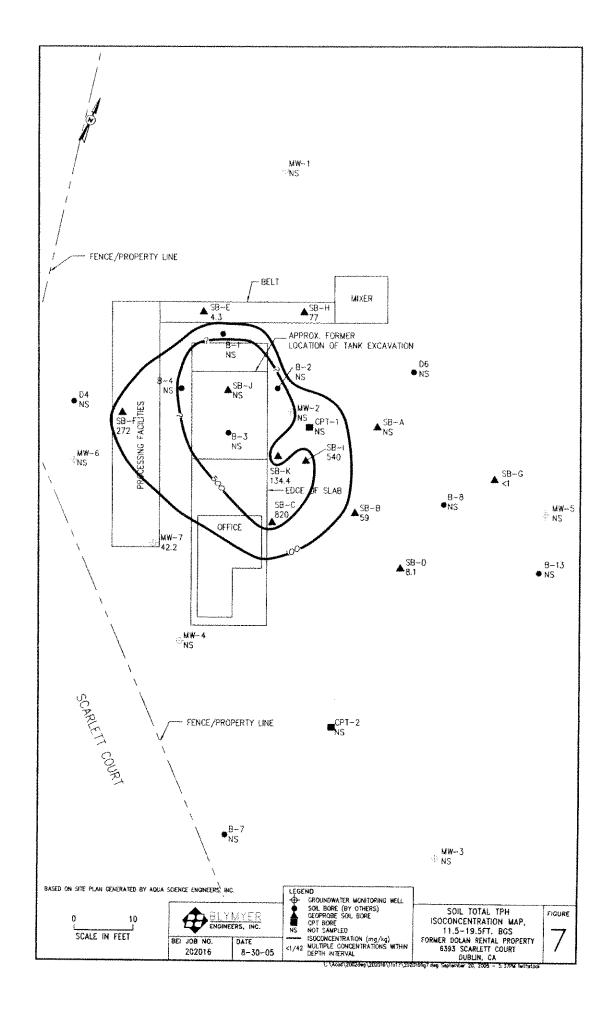
Kenneth R. Henneman, Water Resources Consultant; Laboratory results form water samples taken from five borings to water around old gas tank site on 10/3/90

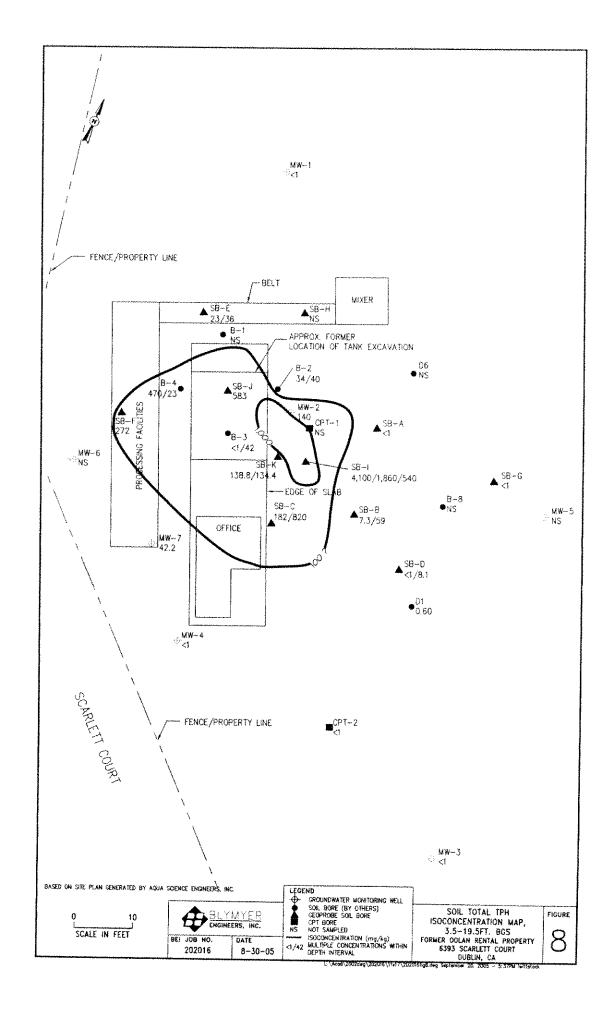
MATERIAL STORAGE BINS APPORT ATTACHMENT 1 10/17/90 Bettencourt Letter LOCATION OF BORINGS TO WATER, DRILLED 10/3/90 医过程 11) CONCRETE SURTACE DRIVERSAY RUAD When drilled 0 10/3/90 KRK 10/17/90 DUBLIN ROCK & READY MIX :6393 Scarlett Ct., Dublin CA 94568 1) Approximate locations of proposed borings to shallow water Map provided by DRORM KRH 9-26-90 Locations selected 9/20/20 with PA. Ma. Co.

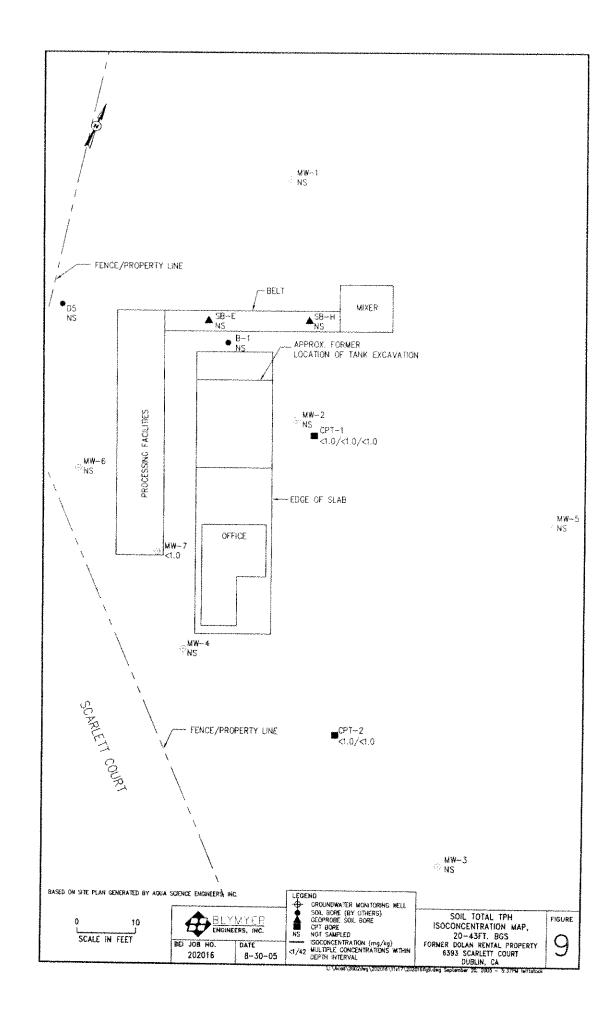
Appendix B

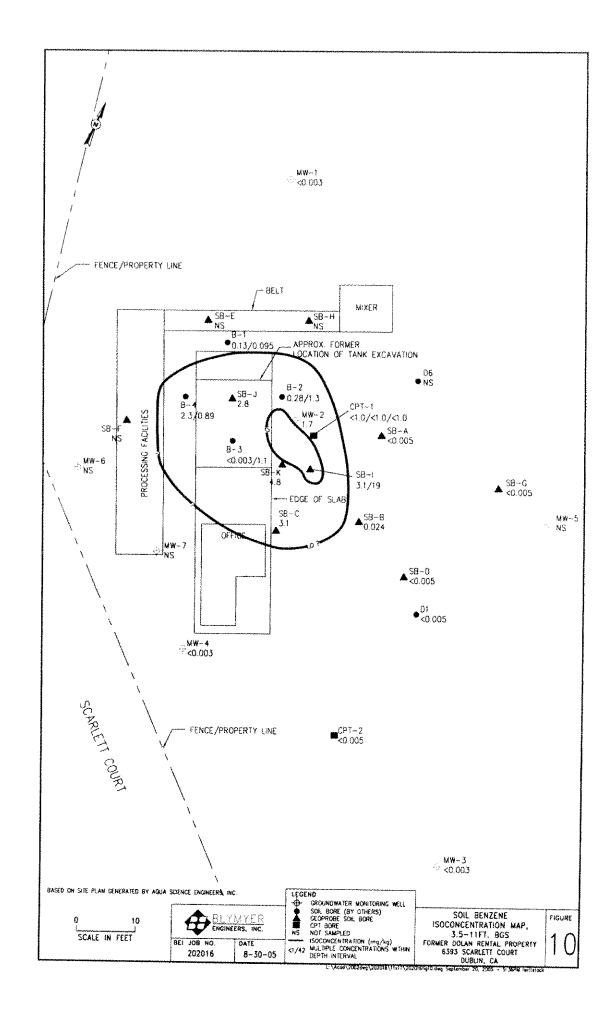
Figures from Blymyer Engineers Report,
Remedial Investigation / Feasibility Study
October 7, 2005

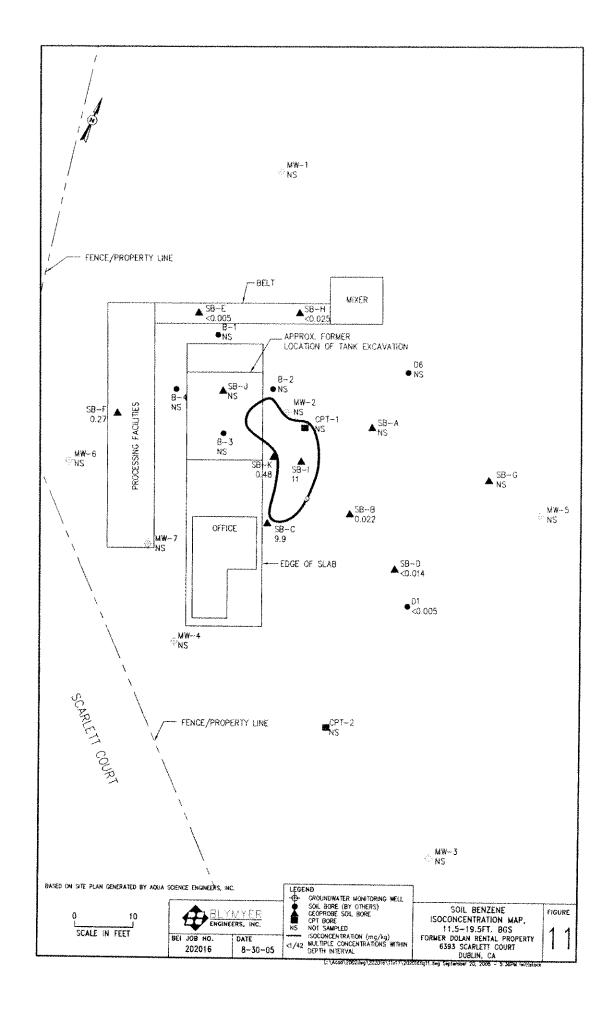


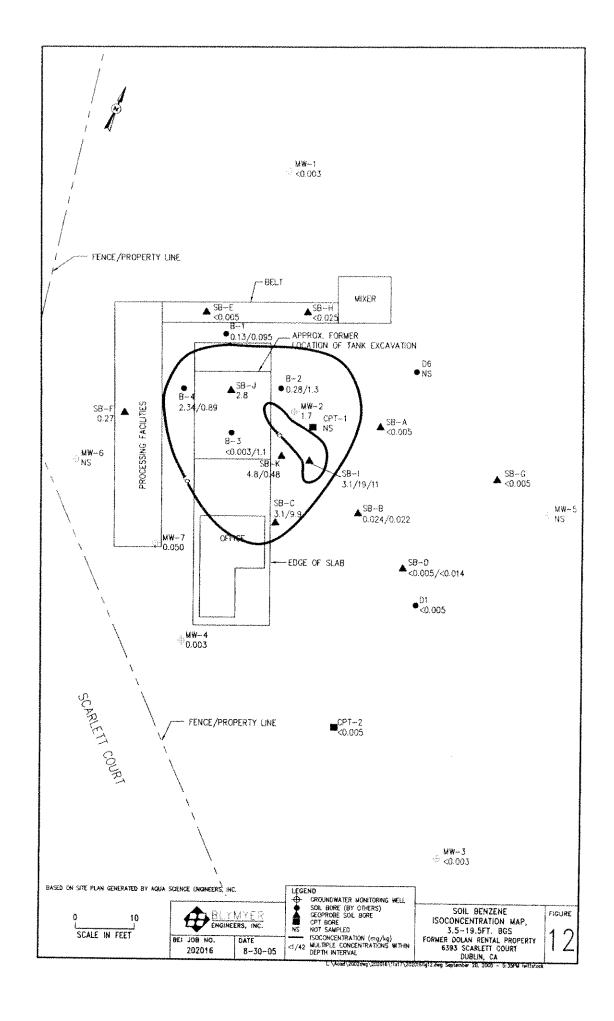


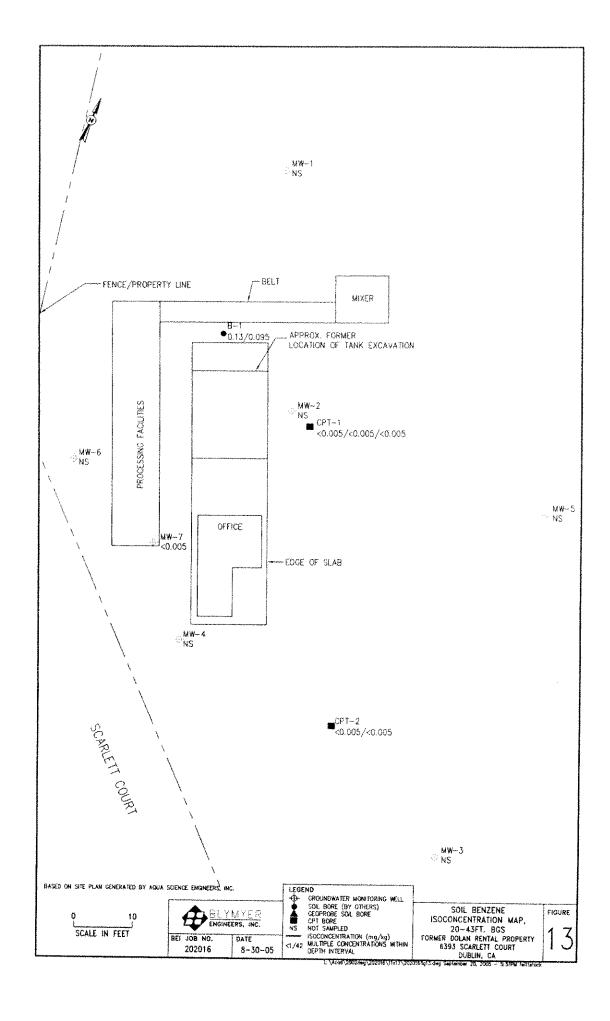


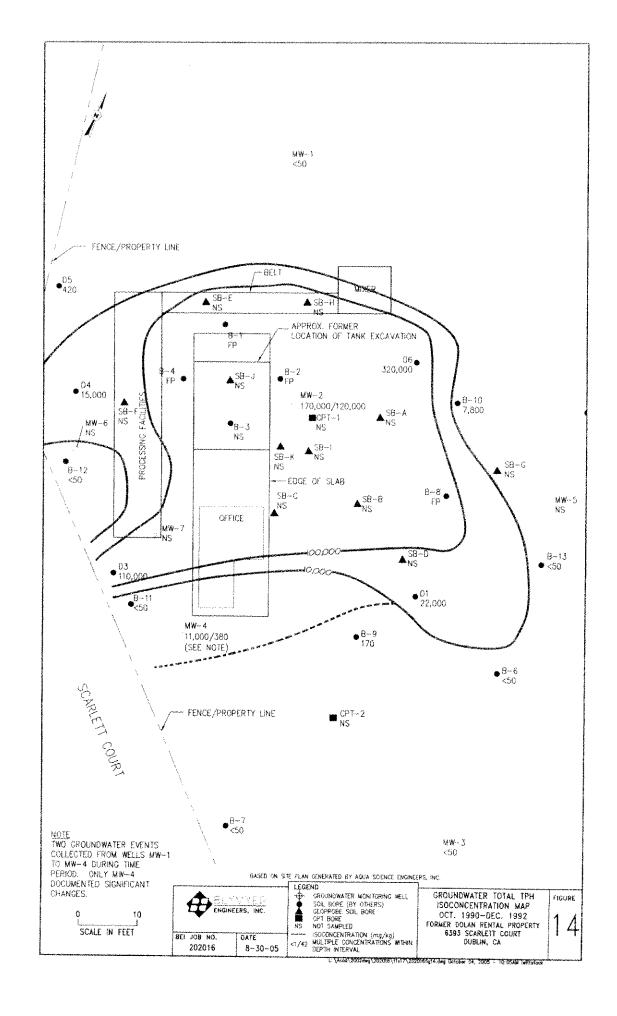


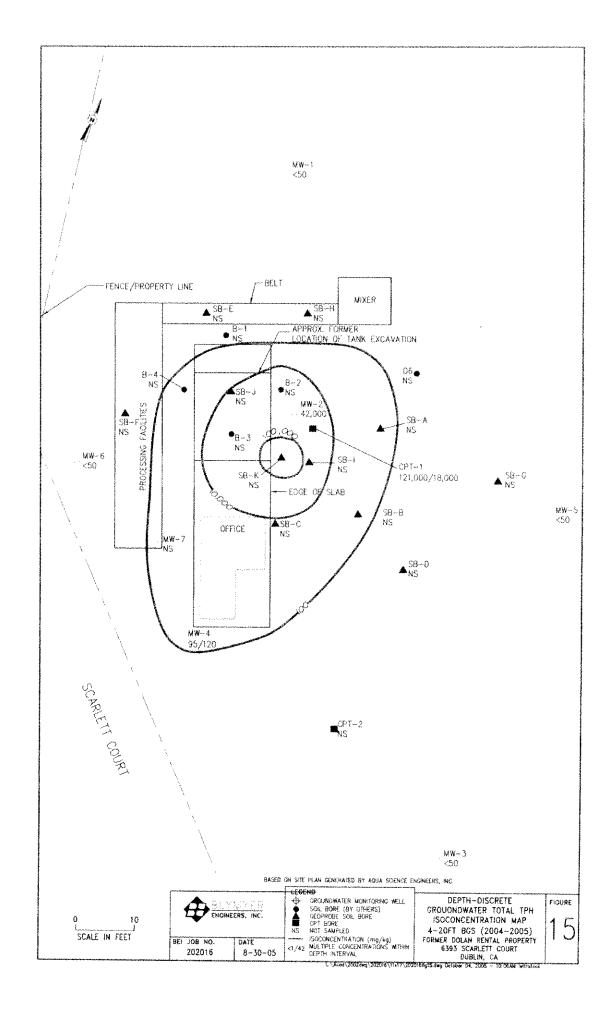


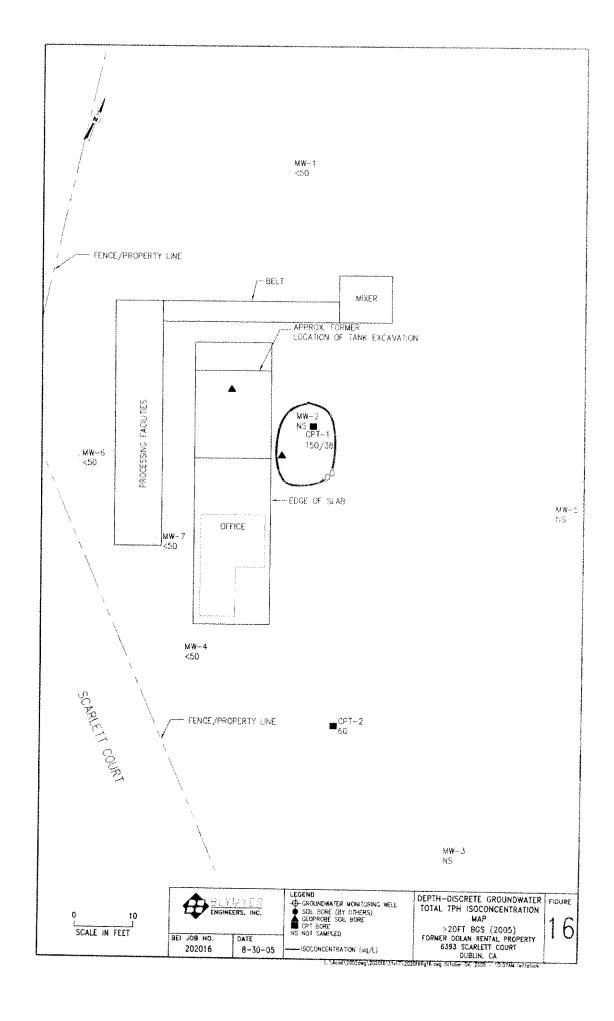


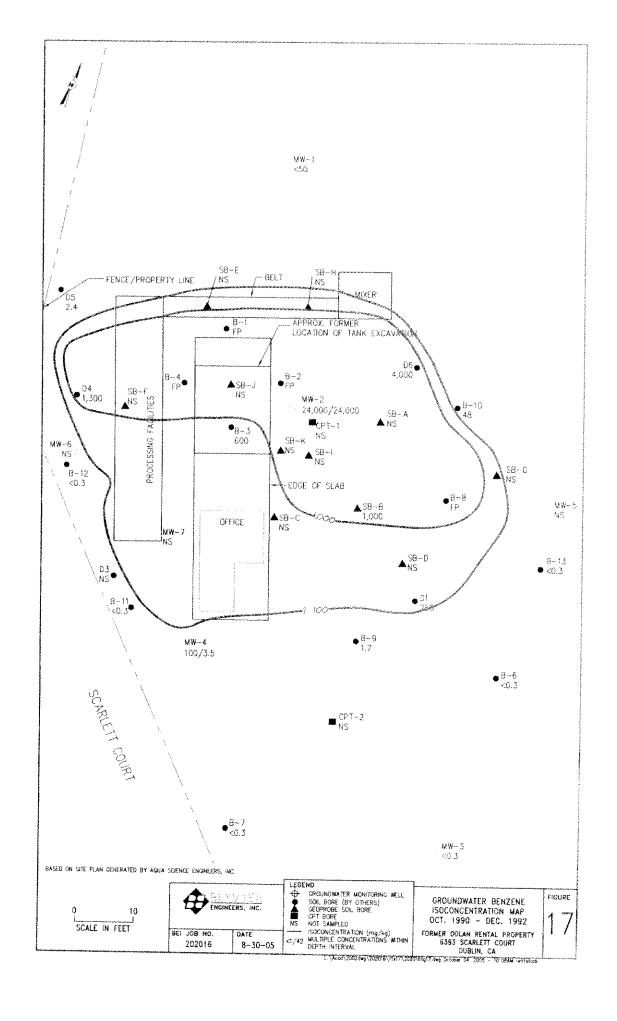


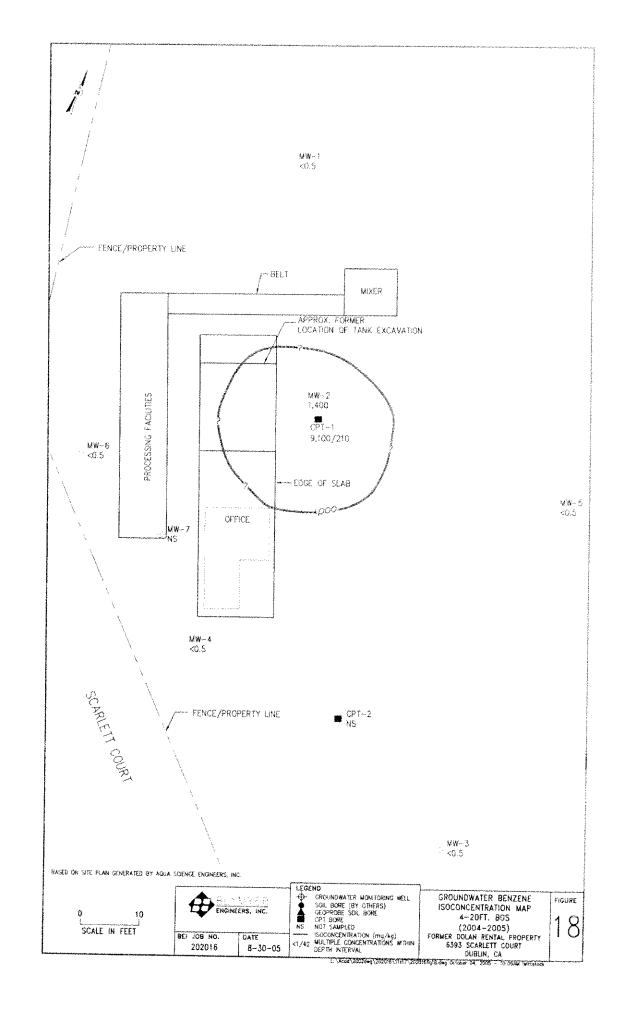


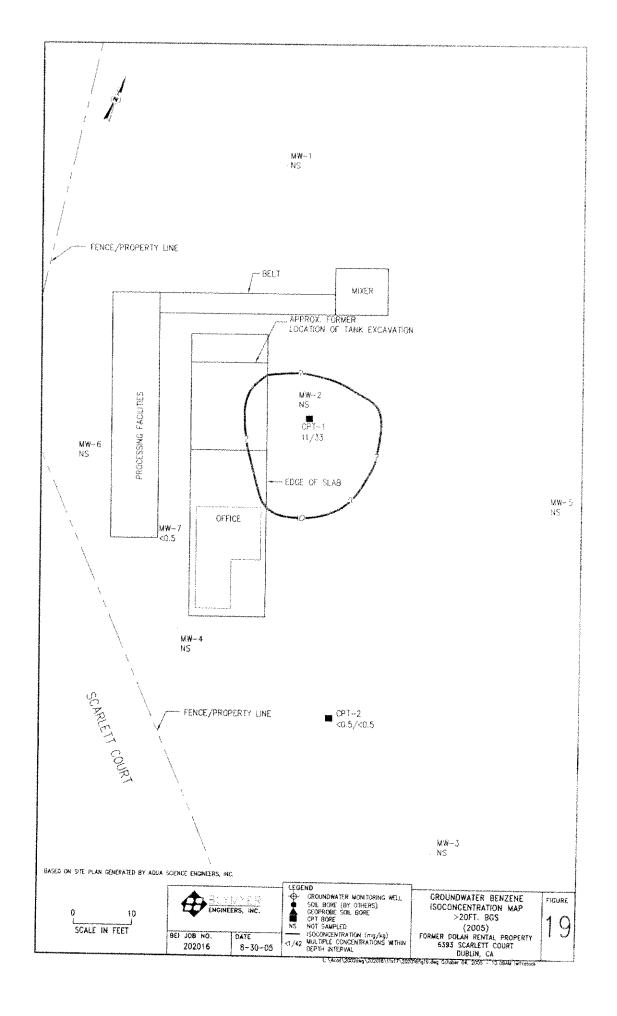












Appendix C
Figure 2; Site Plan
Kleinfelder, Inc. May 8, 2005



Appendix D
Busick Gearing Documentation





July 6, 2004 BEI Job No. 204005

Ms. Betty Graham San Francisco Bay Regional Water Quality Control Board 1515 Clay St., Suite 1400 Oakland, CA 94612

Subject: Summary Background and Overview for Comfort Letter

Dolan Trust Properties

Parcel No. 941-0550-014-02; 6363 & 6365 Scarlett Court (Eastern) Parcel No. 941-0550-013-04; 6367 to 6393 Scarlett Court (Western)

Dublin, California

Dear Ms. Graham:

On behalf of Michael Fitzpatrick, Executor of The Estate of Michael Dolan (The Estate), Blymyer Engineers, Inc. (Blymyer) is pleased to submit the enclosed documents and brief summary background for your review. As we discussed by telephone on May 6, 2004, two parcels of land (Figures 1 and 2) owned by Mr. Dolan were placed on the market for sale, and a sales contract is pending. With the discovery of a large volatile organic compound (VOC) plume on the immediately adjacent property to the east, at the Busick Gearing / Dublin Multilayer / Precision Metal Fabricators (BG/DM/PMF) property, and the recent additional discovery by the Zone 7 Water Agency (Zone 7) of similar contaminants, in roughly similar compound ratios and contaminant trends, to those attributed to the BG/DM/PMF properties, in the two water supply wells on the two Dolan parcels, The Estate has expressed an interest in seeking a Comfort Letter. It is the intent of The Estate that the letter will provide comfort for The Estate as well as a future purchaser from unnecessary additional financial involvement in the problems at the adjacent site to the east. It is understood from the beginning that should a Comfort Letter ultimately be issued by the San Francisco Bay Regional Water Quality Control Board (RWQCB), that periodic access to the Dolan parcels will be required by the Responsible Party (RP) at such time that further subsurface investigations and remedial actions shall occur. It is further understood that without this access an innocent property owner could also be designated as an RP.

During our conversation you requested copies of environmental reports and data generated for the two Dolan Estate parcels. Consequently, I have included the following documents:

* Fourth Quarter 2002 Groundwater Monitoring Event (Blymyer Engineers, Inc.; January 17, 2003): This is the most recent quarterly groundwater monitoring report available for the underground storage tank (UST) release, located in the southwest corner of the western parcel. There was an approximate 5-year gap in groundwater monitoring at the site prior to the second quarter 2002 monitoring event. While petroleum hydrocarbon contaminant concentrations decreased significantly during that interval, the residual groundwater concentrations remain elevated.



- * Geoprobe* Subsurface Investigation (Blymyer Engineers, Inc.; October 23, 2003): This is the most recent investigation of the former UST. Blymyer Engineers was retained to help refine the lateral extent of petroleum-impacted soil around the former location of the UST. The specific purpose of the investigation was to fill gaps in the distribution of contaminant data and to update the contaminant concentrations in the vicinity of the UST, in order to provide a better estimate of costs through completion of remediation, of the UST release.
- Compilation of existing older UST investigation bores by various consultants.
- * Phase I Environmental Site Assessment (Phase One, Inc.; July 2003): Phase One was retained by The Estate to conduct this investigation as the first step in marketing the two Dolan Estate parcels at the time they were placed on the market. The intent was to independently identify existing or potential environmental concerns at the site at that time. This report contains copies of a number of the older UST-related investigation reports.
- * Progress Report: Additional Geoprobe® Investigation of Phase One ESA Areas of Concern Blymyer Engineers, Inc.; March 3, 2004): This investigation was conducted as the second step in marketing the two Dolan parcels by The Estate. The intent was to investigate the environmental concerns or conditions identified by Phase One and to either eliminate them as an environmental issue, or to place a cost through remediation, in order to discount the sale price of the property. Included in this report (Appendix D) is the majority portion of the last report generated for the adjacent BG/DM/PMF facility.
- Remedial Action Plan (Blymyer Engineers, Inc.; April 6, 2004): This report was generated to identify the appropriate remedial action and to identify the appropriate plan of action for the UST-related contaminant issues. It was submitted on the referenced date to the Alameda County Health Care Services Agency (ACHCSA) for review and comment per the requirements of the UST Cleanup Fund.
- Zone 7 Water Agency data: Aerial photograph with well location and groundwater analytical data from the Dolan water supply wells (blue triangles). Please also note other vicinity wells represented as filled red diamonds (functioning contaminant investigation wells) and open red diamonds (destroyed contaminant investigation wells). You will observe filled diamonds are located in the Dolan UST investigation area and in the BG/DM/PMF area.

Most of these reports contain good summaries of the work conducted on the two Dolan parcels. Consequently, I have not summarized these data here.

To date, subsurface explorations on the two Dolan parcels have been confined to the upper 20 feet below grade surface (bgs). Within that depth, in the area of the former UST, the upper soil stratigraphy at the site was variable. In general, the paved surface was found to be underlain by a silty clay to an approximate depth of 3 to 4 feet bgs; however, multiple soil bores revealed either a



salty fine grained sand, or a medium to course grained well-graded sand directly under the pavement section. In the bores that contained the upper clay, a relatively poorly graded sand (fine to medium or medium to course grained) was encountered beneath the clay. This sand unit ranged between 0.5 and 3.5 feet in thickness, and its thickness varied on the thickness of the overlaying clay. Regardless of the composition of the upper 4 to 5 feet bgs, a generally silty clay was present in the majority of soil bores beneath that depth. The silty clay, in general, extended to a depth of approximately 8 to 9 feet bgs, but in several soil bores the clay extended to depths between 12 and 16 feet bgs. In general, beneath the silty clay, a series of 1- to 3-foot-thick units of silty to clayey sands were interbedded with 1- to 3-foot-thick silty clay units to the total depth explored (20 feet bgs).

Busick Gearing / Dublin Multilayer / Precision Metal Fabricators: Brief Background

Based on the review of adjacent sites listed in the *Environmental Records Search* conducted by BBL Environmental Information for the Phase I report, Blymyer Engineers determined that BG/DM/PMF properties, located at 6335 to 6355 Scarlett Court, warranted further investigation to determine the status of the release, and to determine if the release might affect the Dolan Estate parcels. The ESA reported the site had an active toxic release from a sump, but that containment of the plume had not been started.

On March 1, 2004, Blymyer Engineers visited the RWQCB after determining that the release investigation was being managed by the RWQCB. As you are aware, there is a moderately extensive file for the release, with investigations dating back to 1990. The most recent document contained in the file was dated May 7, 1999. The 6341 Scarlett Court property is located in Building 2 of a three-building complex, immediately to the east of the Dolan parcels (Figure 2). Historic operations included metal fabrication, electronic manufacturing, and electronic assembly. A wet floor and a sump were located in the southeast corner of Building 2 from 1971 to 1990. Soil samples collected during removal of the sump documented elevated levels of VOCs, including Trichloroethene (TCE), 1,2-Dichloroethene (1,2-DCE), and Tetrachloroethene (PCE). Subsequent assessment at the site indicated that groundwater beneath the site was impacted by TCE, 1,2-DCE, 1,2-Dichloroethane (1,2-DCA), and PCE. Nine groundwater monitoring wells, and up to 27 Cone Penetrometer and Hydropunch soil bores were installed as of the most recent report (Montgomery Watson, *Results of Additional Groundwater Sampling*, May 7, 1999).

These investigations documented that a buried alluvial stream channel trends south-southwest across the adjacent site. The investigations documented that four water-bearing zones beneath that site have been impacted (5- to 15-foot, 40-foot, 50-foot, and 60-foot water-bearing zones), and that the groundwater plume extends over 1,300 feet in the downgradient direction (as of the work date of March 1999, to the south side of the intersection of the I-580 east off-ramp and Hopyard Road). The data indicate that the concentrations of the VOC contaminants decrease by one to two orders of magnitude in each of the next deepest water-bearing zones. Concentrations up to 15,000 micrograms/liter (µg/L) TCE were detected in the 40-foot zone. 380 µg/L TCE were detected in the 50-foot zone, and 40 µg/L TCE were detected in the 60-foot zone. The May 1999 document reported on work conducted to better define the lateral and vertical extent of impacted groundwater



at the downgradient edge of the groundwater plume. As noted in the report, further evaluation of the extent of the groundwater plume, and selection of a remedial design was pending.

Figures 2 and 3 of the May 1999 report depict the known extent of TCE within the 40-foot and 50-foot water-bearing zones (285 foot Mean Sea Level [MSL] Zone and the 275 MSL Zone, respectively). The concentration contours contained on these figures suggest minimal incursion onto the eastern parcel owned by The Estate had occurred; however, no borings had been installed on this parcel to verify this conclusion (as of the March 1999 work date). The May 1999 report also stated that impacted soil and the impacted portion of the shallowest water-bearing zone (5 to 15 feet bgs) is generally limited to the BG/DM/PMF site.

As we discussed on March 2, 2004, (voice mail, personal communication), the BG/DM/PMF site has been inactive since about the summer of 1999 due to a recalcitrant RP. Undoubtedly, changes to the plume configuration (principally the length) and concentration contours have likely occurred in that interval.

Busick Gearing / Dublin Multilayer / Precision Metal Fabricators: Overview

As you will recall, as part of the well / boring permit process for contaminant investigations a complete final report is required by Zone 7. Upon review of the March 3, 2004 report (*Progress Report: Additional Geoprobe[®] Investigation of Phase One ESA Areas of Concern*), Zone 7 requested access to sample the two water supply wells on the Dolan parcels, prior to their intended future destruction. Although contamination was judged unlikely based on the strong southwesterly concentration gradient documented by available data, access was provided and on April 13, 2004, Zone 7 contract samplers collected groundwater samples from the Dolan wells. Copies of the results are provided with this communication.

It should be noted that neither The Estate nor Zone 7 are aware of the details of construction associated with both of the Dolan wells. Well 3S/1E 6F 2 has an approximately 12-inch diameter steel casing at the surface, and has been measured at a total depth of approximately 35 feet bgs. Well 3S/1E 6F 1 has an approximately 8-inch diameter steel casing at the surface and has been measured at a total depth of approximately 95 feet bgs. The screening interval of both wells is unknown; however, based on both the depth of each well and the decrease in contaminant concentrations detected in the groundwater samples, it has been reasoned to be generally consistent with general well depth.

One of the lines of evidence that suggest that the detected contaminants are likely associated with the adjacent site is the notable similarity of contaminants (TCE, cis-1.2-DCE, and PCE), as well as the general ratio between these contaminants. Referencing the April 3, 1996, Site Characterization Studies report by Harza Engineering, the predominant contaminant is TCE, with decreasing concentrations of cis-1.2-DCE and PCE (report fragment attached, please reference Figure 10 in particular). This same ratio was present in a soil sample collected directly beneath the referenced sump after a fire on January 15, 1990, and after removal of a portion of the sanitary sewer (page 14 and 15 of the Harza report; it appears there had been no control of pH in the waste discharge).



It should also be noted that a slightly different ratio of similar VOC contaminants was present in groundwater collected from well MW-3 (Figure 10, Harza report), which is located approximately 190 feet upgradient of the sump, presumed to have been the source of the contaminants at the BG/DM/PMF site. In order of abundance, 1,1-DCE, TCE, and 1,1-DCA were detected. Detection of contaminants at this well location can either provide documentation of upgradient dispersal of the contamination, or can indicate a second source at the adjacent property, such as is suggested by documented chemical usage at 6355 Scarlett Court (Building #3) provided in some detail on page 13 and 14 of the Harza report (three solvent tanks for an engine and machine shop, Safety-Kleen solvent tanks at Phantom Manufacturing, and the presence of an etching machine and plating tank at Dublin Circuits, a printed circuit board manufacturing shop).

There is also substantial likelihood of near surface releases as indicated by a discussion of three known outdoor chemical spills at Building #2 (page 11 and 12, Harza report), outdoor drum storage at Building #2 (page 12, Harza report), reference to a potential septic system and a leach field for Building #1 (page 24, Harza report), and an outdoor drum storage area at Building #1 (page 24, Harza report). Also documented was an 8.000-gallon sewerage holding tank (also documented on Figure 2 of the Harza report), used at Building #3 until a sewer connection could be completed, from approximately October 1972 to sometime in 1975. Although the Montgomery Watson report states that impact to the first groundwater bearing zone (at approximately 5 to 15 feet bgs) is limited to the BG/DM/PMF site, there is significant indication that poor housekeeping in "earlier years" may have impacted near surface soil and groundwater at multiple locations at the adjacent property.

Of additional importance is the recent verbal report by Mr. Fitzpatrick, Estate Executor, of the knowledge of a water supply well at the Busick Gearing property. Mr. Fitzpatrick stated (personal communication, April 28, 2004) that at one time it was common knowledge that the three adjacent parcels (two Dolan properties, and Busick Gearing) each had a water supply well. Each of the three wells were located in approximately the same location on the three parcels and tapped "the same water vein". From memory, Mr. Fitzpatrick noted that Mr. Dolan purchased the lumberyard property in about 1970 (December 1969 per title report) and that the well on that property was used for "about a month" before it failed. Per Mr. Fitzpatrick, it was not repaired, but the Busick well was consequently used for about one month for water supply for the tenant (Culligan Water) in the small building in the southeast corner of the lumberyard site. The current condition of the Busick well is unknown by Mr. Fitzpatrick. Well details, including casing diameter, depth, and screening interval(s), pumping rate, or volume of groundwater use are also unknown. Zone 7 reports that they have records for three wells with unknown locations in the vicinity. Two of these have been reasoned by Zone 7 to be the two Dolan water supply wells. The third may be the Busick well. In each case, Zone 7 reports that the well construction details are essentially the same - a hand written sheet with approximate depths only, each dating from 1959, long after the wells were installed.



Blymyer has reviewed building construction dates on the BG/DM/PMF site and the date of reported usage of the Dolan wells. According to the Harza report, Building #1 was constructed in approximately 1965 (page 24), Building #2 in 1971 (page 11), and Building #3 in 1972. The last recalled usage of well 3S/1E 6F 2 (lumberyard well) was 1970 to 1971. According to the title report, Mr. Dolan did not purchase the western parcel until September 1976, thus it is possible the well may have been active more recently. It has been surmised that the operation of one or more wells may have drawn a plume from the adjacent properties in both a lateral as well as an upgradient direction. The pumping rate and volume of groundwater use from both wells are unknown.

Future Actions

As we discussed in our conversation there has not been analytical testing to date on the Dolan parcels for VOCs as there was not an apparent history of significant usage at the site. The Estate has expressed a willingness to conduct a limited investigation into the nature and occurrence of VOC contamination on the two Dolan parcels in an attempt to determine the source of the VOC contamination, and in support of a presumed Comfort Letter effort by the RWQCB. Should you find the presently available data to be insufficient to issue a Comfort Letter, The Estate prefers that the identification of the scope of work for the additional investigation be an expeditious and collaborative effort between all parties.

Should you need additional information, or have additional questions, please contact Mark Detterman at (510) 521-3773.

Sincerely,

Blymyer Engineers, Inc.

Mark E. Detterman, C.E.C

Senior Geologist

Michael S. Lewis

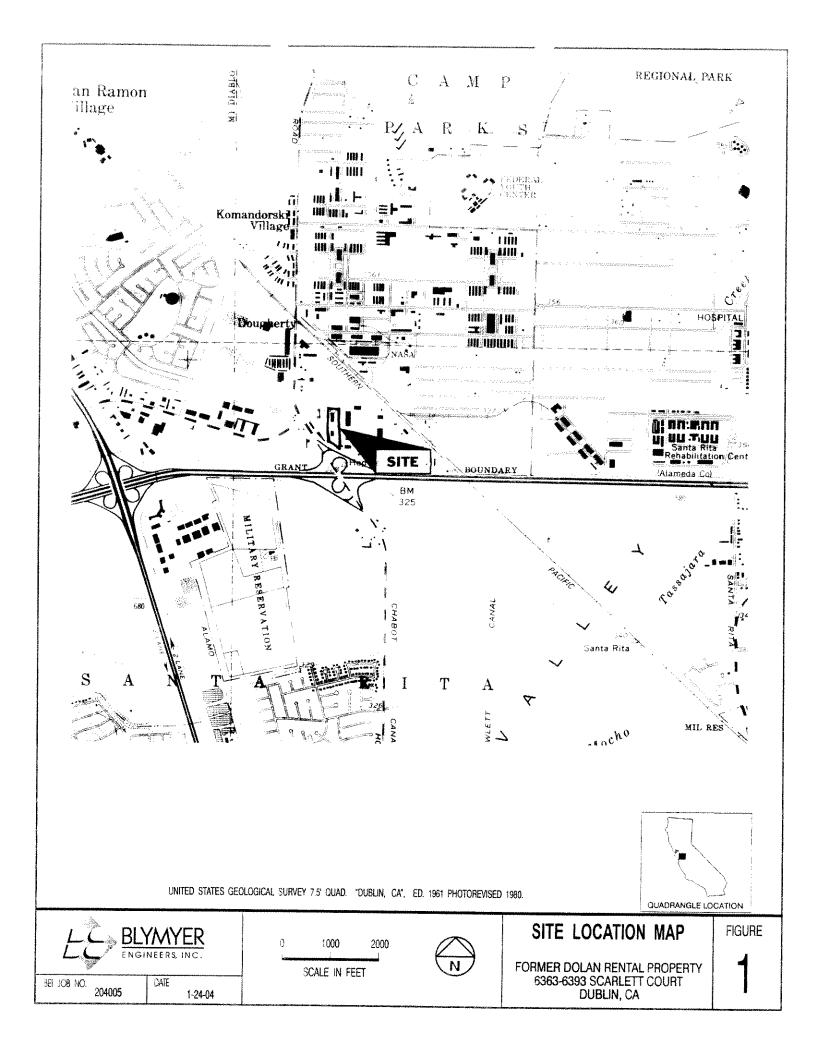
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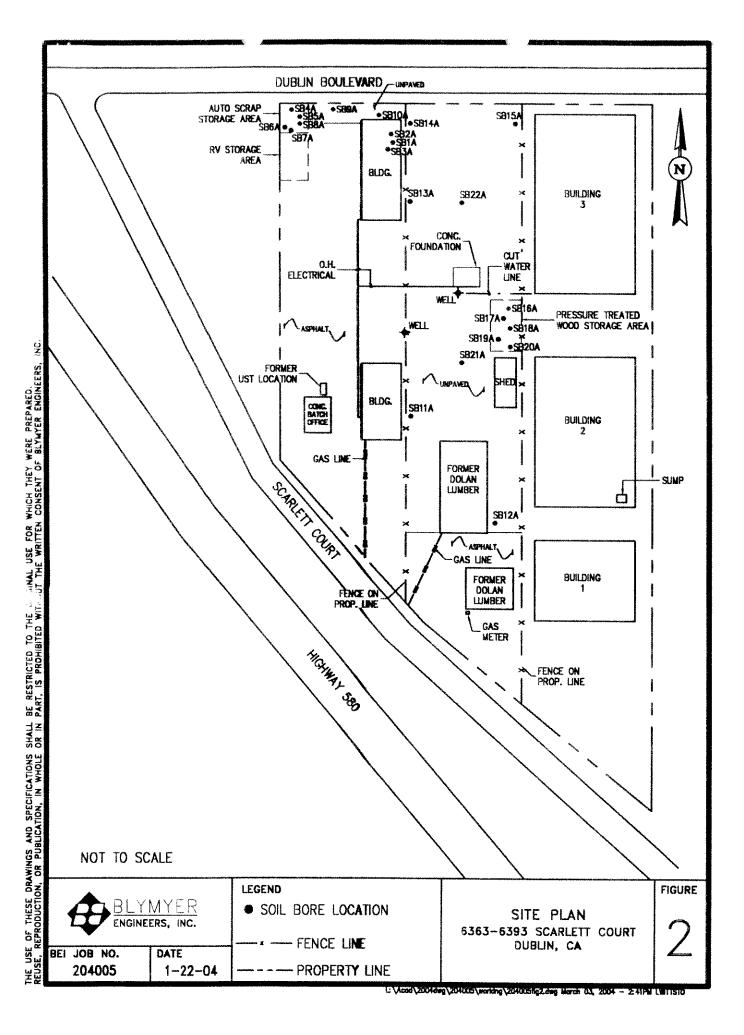
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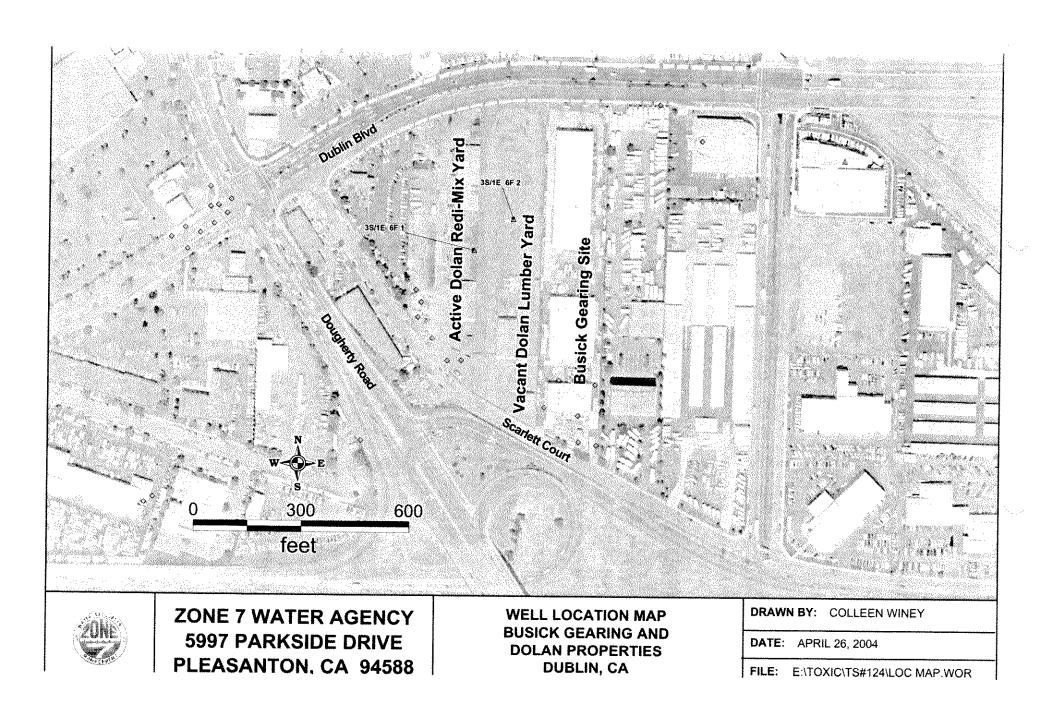
c. Mr. Michael Fitzpatrick, Executor, Estate of Michael Dolan Peter MacDonald, Esq.

Ms. Colleen Winey, Zone 7 Water Agency

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May 7, 1999

Ms. Doreen Green Busick-Gearing Properties 7440 Amarillo Road Dublin CA 94568

Mr. John Chan Dublin Multilayer, Inc. 680 South Road Belmont CA 94022 Mr. Fred Miller Precision Metal Fabricators, Inc. 4095 Del Mar Avenue, Suite 6 Rocklin CA 95677

RE: Results of Additional Groundwater Sampling 6341 Scarlett Court, Dublin, Alameda County

Dear Ms. Green, Mr. Chan, and Mr. Miller;

Montgomery Watson has prepared this report, summarizing additional subsurface investigation activities that were performed by IT Corporation downgradient of the property located at 6341 Scarlett Court in Dublin, California (Figure 1). The work was performed to better define the lateral and vertical extent of groundwater impact at the site so that an evaluation of remedial alternatives could be performed. This most recent investigation was performed as described in the *Modification to the Work Plan for Additional Groundwater Characterization*, dated October 30, 1998, prepared by Fluor Daniel GTI and further as recommended in the January 29, 1999 *Additional Groundwater Characterization Report*, prepared by IT Corporation. This investigation work was based on previous investigation activities performed at the site in December 1998 and earlier. The most recent subsurface investigation activities were conducted at the site on March 26, 1999. The results of the March 26, 1999 groundwater sampling event provide data that generally characterize the extent of impact in the primary impacted water-bearing zones. This report provides the following:

- A description of the investigation approach including a description of methods used during the investigation;
- A summary of the results of the subsurface investigation;
- Site plans showing the locations of sampling and the results of investigation;
- CPT lithologic logs (Appendix A);
- Certified laboratory reports and chain-of-custody records for groundwater samples collected during the investigation (Appendix B).

BACKGROUND

The 6341 Scarlett Court property is located at Building 2 within a three building complex (see Figure 1). The property is zoned light industrial and historical operations include metal fabrication, electronic manufacturing and electronic assembly. A wet floor and a sump were located in Building 2 from 1971 to 1990. Soil samples collected during removal of the sump documented elevated levels of volatile organic compounds (VOCs) including TCE, 1,2 DCE and PCE. Subsequent assessment activities indicated that the groundwater beneath the site was primarily impacted with TCE and 1,2 DCE, with lesser concentrations of 1,2 DCA and PCE.

Investigations performed in 1997 indicate that groundwater impact in the shallow-most groundwater (defined by existing groundwater monitoring wells between 5 to 15 feet below ground surface) is generally limited to onsite areas. With regard to vertical extent of impact, the data collected from these investigations show that the subsurface stratigraphy in the upper aquiclude beneath the site consists primarily of low permeability material with zones of higher permeability material located at various depths. In particular, one of these more permeable zones was noted to exist at a depth of approximately 40 feet (corresponding to an elevation of approximately 285 feet above mean sea level [MSL]) in the site vicinity. Hydropunch groundwater samples collected from this zone immediately downgradient of the site exhibited elevated levels of TCE and PCE.

Subsequent investigation during 1998 showed this zone (herein referred to as the 285' MSL Zone, based on recent survey information as discussed below) to be a channel deposit, trending generally southwesterly beneath the investigation area. Furthermore, it is apparent from the 1998 investigations that VOCs have migrated offsite within this zone. The cross-channel width of the deposits from which groundwater samples exhibit elevated concentrations of VOCs have been defined along Scarlett Court at the southern extent of the site to be approximately 200-250 feet. Concentrations up to 15,000 ug/L TCE (CPT-1F) have been detected along Scarlett Court in the 285'MSL Zone.

Samples collected from deeper water-bearing zones have shown significant attenuation of VOC concentrations, indicating that the 285' MSL Zone is the primary pathway for contaminant migration offsite. Specifically, a permeable zone, approximately 10 feet below the 285' MSL Zone, referred to as the 275' MSL Zone has been consistently investigated during recent investigations, and has shown vertical attenuation of VOC concentrations of approximately two orders of magnitude. The highest concentration detected in the 275' MSL Zone was 380 ug/L TCE at CPT-10. The next deepest water-bearing zone investigated (approximately 265' MSL) exhibits further vertical attenuation, with a maximum detected TCE concentration of 40 ug/L at CPT-1F.

INVESTIGATION APPROACH

The most recent investigation conducted in March 1999 was designed to define the lateral and vertical extent of VOCs in groundwater downgradient of the site. Although sampling conducted in December 1998 and earlier had generally defined the width of the plume in the water-bearing zones investigated, it was evident that the plume had migrated further offsite than previously anticipated.

Based on a review of the existing data for the site, it was proposed that additional sampling be conducted using the Hydropunch method of groundwater sampling southwest of the observed area of impact. Similar to the investigation conducted in December 1998, the most recent investigation required an encroachment permit from Caltrans, because the sample locations were adjacent to the Interstate 580 freeway and the Hopyard/Dougherty exit and entrance ramps.

Geologic evaluation of soil types was performed using a cone penetrometer test (CPT) rig in 4 selected locations, CPT-1Q, CPT-1R, CPT-1S and CPT-1T (see Figure 1). It was proposed that groundwater samples be collected from within the channel deposit encountered near the site at approximately 40 foot depths and also at approximately 50 feet in depth, depending on the lithologies encountered to determine the extent of impacts to the next deeper water-bearing zone. Because of variability in ground surface elevations, a professional surveyor was contracted to determine ground surface elevations at each sampling location. These elevations were compared with ground surface elevations at previous sample locations to ensure that the same stratigraphic horizons were investigated. These survey data are the basis for the definition of the 285'-, 275'- and 265' MSL Zones discussed above.

Prior to conducting any subsurface activities, boring permits were obtained from the Alameda County Flood Control and Water Conservation District for the four CPT's, Underground Service Alert was notified and a private underground utility locator was contracted to ensure clearance of any existing subsurface utilities.

Cone Penetrometer Tests and Hydropunch Groundwater Sampling

CPT involves hydraulically pushing a penetrometer into the subsurface while continuously recording the soil responses in relation to friction sleeve resistance, pore pressures and electrical resistivity. The recording of these parameters enables field personnel to determine the changes in lithology and unit thicknesses. The operation does not generate any soil cuttings. After the CPT rods are pushed to a designated depth, they are removed from the ground and the resulting hole is simultaneously sealed with bentonite grout.

After completion of the CPTs at the designated locations, groundwater samples are collected using Hydropunch, which allows for groundwater sample collection without installation of monitoring wells. Sampling rods are lowered to a desired depth and an inlet screen is exposed. Groundwater fills the sampling rods under *in situ* hydrostatic head with no aeration. The groundwater is then transferred to a sample container. The process is then repeated at another designated sampling depth.

On March 26, 1999, 4 CPT borings were advanced to total depths of between 60 to 85 feet below ground surface (bgs). All four borings were located south of I-580 and positioned southwest of the observed area of impacted groundwater along Scarlett Court and north of I-580. CPT-1Q and CPT-1R were located near the Hopyard/Dougherty offramp from eastbound I-580. CPT-1S and CPT-1T were located near the onramp to eastbound I-580 from Hopyard Road. These locations were selected based on the data from the samples previously collected along Scarlett Court and north of I-580 to provide definition of the channel deposits and the boundaries of the plume in the 285'- and 275' MSL Zones.

Based on the results of the December 1998 CPT borings, the channel deposits at both the 285' and 275' MSL horizons were observed to pinch out to the west in the vicinity of CPT-1M, and were generally thickest at CPT-1O and CPT-1P. The eastern limit of the channel was not located in the December investigation event based on time constraints, however; previous data (CPT-1J, CPT-1K and CPT-1L) define the eastern boundaries of the channels along Scarlett Court.

The CPT borings conducted in March 1999 were instrumental in further defining the 285'- and 275' MSL Zone channel deposits. Specifically, the channels were noted to be not present in the east at CPT-1T, supporting previous data in defining the eastern boundaries of these deposits. Furthermore, the channels were observed to be thickest at locations CPT-1Q and CPT-1R, consistent with the interpretation of a southwesterly orientation. Logs of the CPT borings are presented in Appendix A.

Groundwater samples were collected from depths of 44- 46 feet (286-284 feet MSL) and 55- 57 feet (275-273 feet MSL) at CPT-1Q; 60-64 feet (278-274 feet MSL) at CPT-1R; and 47- 50 feet (284-281 feet MSL) at CPT-1S. Although an attempt was made, no samples were collected at location CPT-1T based on the lack of permeable deposits in the depth intervals of interest. Similarly, the 275 MSL zone was noted to be very thin at location CPT-1S and a water sample could not be recovered. Although, a 5-foot thickness of apparently permeable material was observed between 284-279 feet MSL at location CPT-1R, a water sample could not be recovered. A review of the CPT log for CPT-1R indicates the presence of sandy silt at that depth interval.

All Hydropunch groundwater samples collected during the investigation were labeled and placed in an ice-chilled, insulated cooler for transport under chain-of-custody protocol to a California-certified laboratory and analyzed for VOCs using EPA Method 8260. The laboratory analytical reports are presented in Appendix B.

All subsurface exploration equipment was steam cleaned after each location and sampling equipment was either steam cleaned or cleaned in a solution of Alconox and rinsed prior to use at each sampling location.

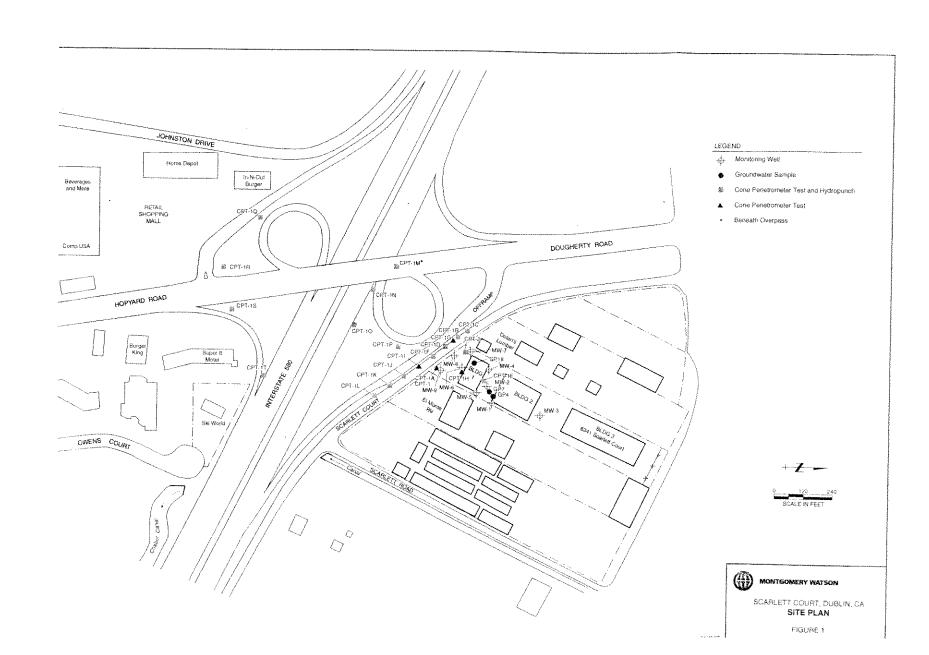
The four groundwater samples collected on March 26,1999 were analyzed for VOCs. The only detected VOC was TCE at relatively low concentrations indicative of plume periphery locations. In the 285'MSL Zone, samples were collected at locations CPT-1Q and CPT-1S. TCE was detected at CPT-1Q at 9.47 ug/L and not detected (<0.5 ug/L) at CPT-1S. In the 275' MSL Zone, samples were collected at locations CPT-1Q and CPT-1R. TCE was detected in at CPT-1Q at 1.4 ug/L and CPT-1R at 3.44 ug/L. Table 1 summarizes these results.

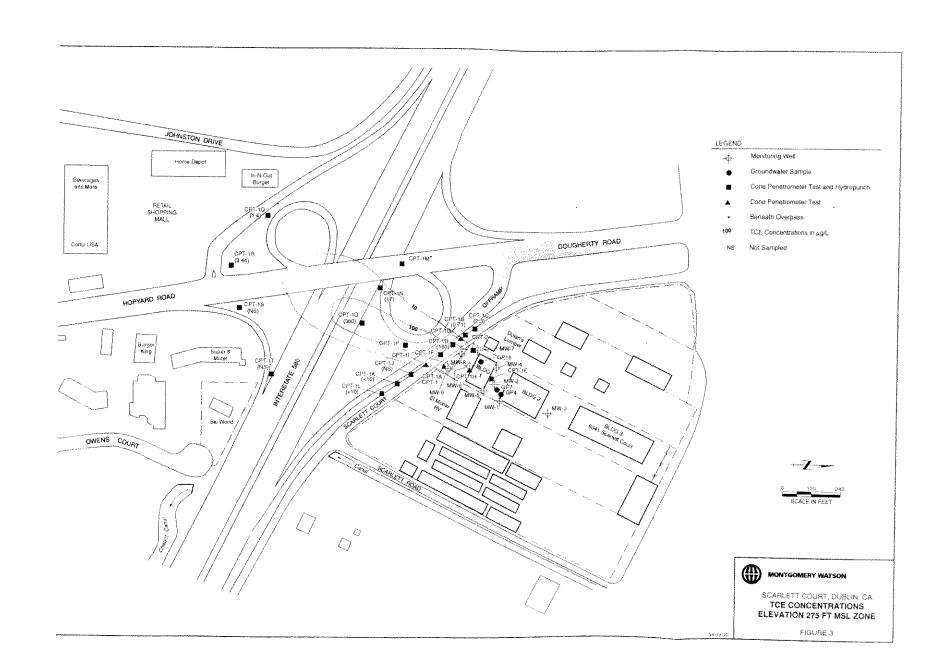
Locations CPT-1Q and CPT-1R appear to be centrally located within the channel deposits where the primary migration of VOCs is apparent. Based on the low concentrations of TCE detected, these locations appear to be situated just within the leading edge of the plume in the 285'MSL Zone. Concentrations detected in the 275' MSL Zone are below the State of California Maximum Contaminant Level (MCL) for drinking water. Figures 2 and 3 illustrate the concentrations of TCE in groundwater samples collected from the 285' and 275' MSL Zones, respectively.

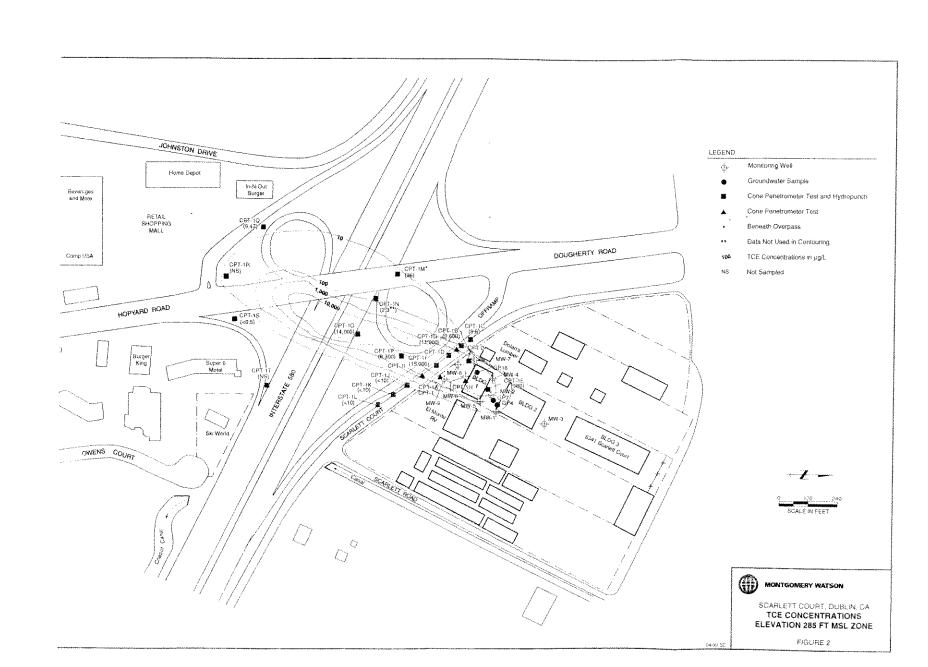
DISCUSSION OF RESULTS

The results of recent investigation indicate that the lateral extent of groundwater impact in the primary zone of migration (285'MSL Zone) has been largely defined. The vertical extent of impact is defined by documented significant attenuation of VOCs in the 275' MSL Zone. Laterally, this deeper zone is defined by downgradient samples exhibiting results below the applicable MCL.

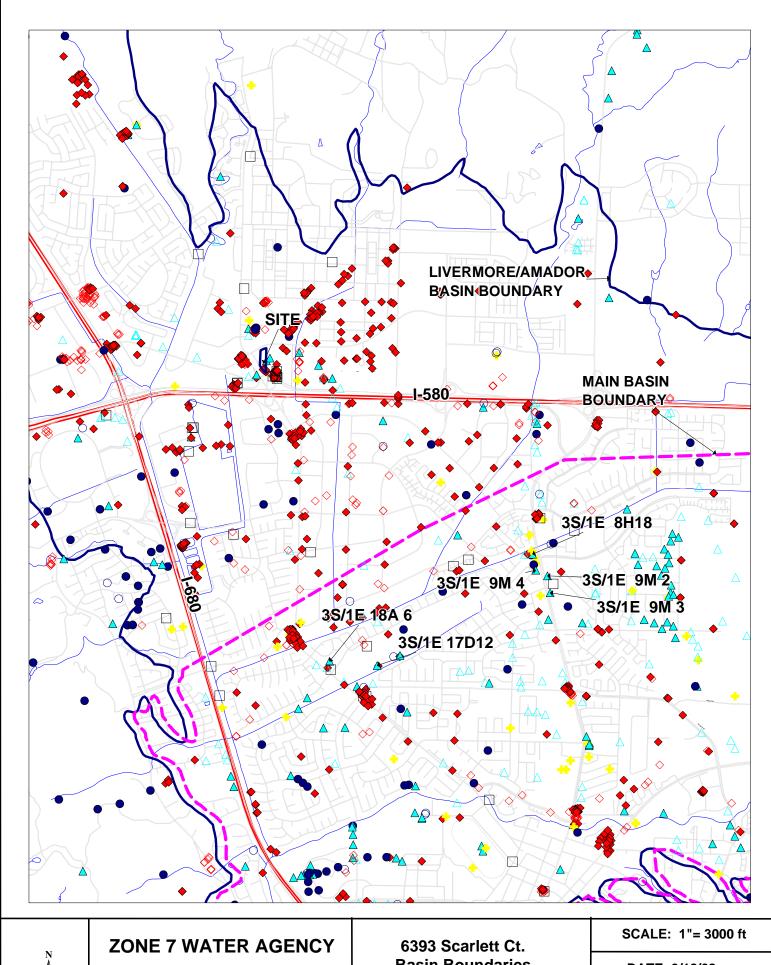
At your request, we are preparing a plan evaluating appropriate future actions based on the data collected to date. This plan will be available by June 7, 1999.







Appendix E Zone 7 Maps



 $W \xrightarrow{N \atop S} E$

ZONE 7 WATER AGENCY 100 N. CANYONS PARKWAY LIVERMORE, CA 94551 6393 Scarlett Ct.
Basin Boundaries
Hopyard & Mocho Wells

DATE: 9/18/08

FILE NO.:



ZONE 7 WATER AGENCY 100 NORTH CANYONS PARKWAY LIVERMORE, CA 94551

WELL LOCATION MAP

SCALE: 1"= 500 ft

DATE: 5/30/08

6393 Scarlett Court