Geological Technics Inc.

Site Characterization Report

Soil and Groundwater Investigation

Arrow Rentals Service
187 North L Street
Livermore, CA

Project No. 1262.2
October 26, 2006

Prepared for:
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October 26, 2006

Project No.: 1262.2
Project Name: Sullins

Tony & Rita Sullins
Arrow Rentals Service
187 North L Street
Livermore, CA 94550

RE: Report –Site Characterization, Soil and Groundwater Investigation
Location- Arrow Rentals Service, 187 North L St., Livermore, CA

Dear Mr. & Ms. Sullins:

Geological Technics Inc. is pleased to present the attached Report of Site Characterization summarizing the fieldwork completed on October 2 - 10, 2006. This work included:

- Installation of five soil borings to depth ranging 66 - 82 feet below grade.
- Installation of five multi-chambered monitoring wells.
- Installation of one soil vapor extraction well.
- Collection of 28 discreet soil samples for laboratory analysis.

If you have any questions please do not hesitate to call.

Respectfully Submitted,

Raynold I. Kablanow II, Ph.D.
Vice President

cc: Jerry Wickham - ACEH
USTCUF
Chris Davidson, City of Livermore
Matt Katen, Zone #7 Water Agency
Heidi Timken – Timken Johnson Hwang
Jennifer Sedlechek – Exxon Mobile Corp.

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Geological Technics Inc.

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EXECUTIVE SUMMARY

Geological Technics Inc. has prepared this report summarizing the fieldwork completed on October 2 - 6, 2006. The scope of work included the installation of five new multi-chambered monitoring wells to further define the vertical and lateral extent of the soil and groundwater plumes.

Soil samples obtained from the new borings indicate that elevated levels of soil contamination are limited to the area of the former UST piping trenches. Soil contamination is evident laterally away from this location but it appears to be the result of groundwater transport. The extent of the groundwater contamination will be determined when the new multi-chambered monitoring wells are sampled. This work was completed on October 5 – 17, 2006 and the laboratory results are pending.

The results of this field investigation effort and a dual phase extraction pilot test completed on October 16 – 20, 2006 will be used to complete a Site Conceptual Model for the site. The Site Conceptual Model will contain recommendations for further site investigation (if necessary) and cleanup alternatives.

1.0 SITE HISTORY

Gasoline range petroleum hydrocarbons associated with underground storage tank (UST) systems have been documented in soil and groundwater at the subject site (see Figures 1 and 2 for vicinity and site maps). The site also experienced an environmental impact when a

gasoline delivery was introduced into a subsurface vapor/monitoring well rather than the UST fill pipe ("Petcock Release").

The work performed to date is summarized below*:

- 1972 – Three 1,500 gallon gasoline USTs removed.
- 1984 – Two gasoline USTs removed (4,000 & 6,000 gallon); a single 1,000 gallon gasoline UST installed.
- June 1985 – Petcock Petroleum dispenses ~600 gallons into a vapor monitoring well adjacent to the 1,000 gasoline UST (Petcock Release).
- September 1988 – Three monitoring wells installed (W-1, W-2 and W-3).
- March 1989 – Five soil borings advanced (B-1 through B-5).
- July 1990 – Five monitoring wells installed (W-A through W-E), three soil borings advanced (B-7, B-8 and B-1A), and a soil gas survey was completed.
- March 1991 – A single soil boring advanced (B-F).
- January 1992 - UST pipeline soil excavation and sampling, two soil borings advanced (B-G and B-H).
- March 1994 – Dual Phase Extraction pilot test performed.
- March 1996- Four monitoring wells installed (W-1s, W-Bs, W-3s and W-Es).
- 1988 to present – intermittent monitoring/sampling of select wells.

* Data from Woodward Clyde Consultants and ACEH documentation.

The data compiled during the course of this investigation indicate that the soil and groundwater were impacted with petroleum hydrocarbons from at least two separate sources.

In their letter correspondence's August 16 and December 27, 2005, the Alameda County Environmental Health (ACEH) directed that a work plan for additional site characterization be submitted for approval. Geological Technics Inc. (GTI) prepared our May 26, 2006 "Additional Site Characterization – Addendum" work plan addendum to supplement the Aquifer Sciences, Inc. (ASI) December 8, 2005 "Work Plan for Additional Soil and Investigation and Other Items". GTI's work plan addendum was intended to address ACEH staff concerns that were not covered in the original ASI work plan. The ACEH approved GTI's work plan in their June 9, 2006 letter.

The following sections summarize the field activities that were completed according to the GTI's May 26, 2006 work plan.

2.0 SOIL & GROUNDWATER INVESTIGATION

To further investigate the extent of soil and groundwater impacted with petroleum hydrocarbons, GTI supervised the installation of five continuous multi-chambered tubing (CMT™) wells on October 2 - 10, 2006 (MW-4 through MW-8, see Figure 3 for borehole

locations). One CMT™ well was constructed with five discretely screened intervals (MW-4) with the remaining wells completed with four screened intervals. The MW-4 CMT™ well borehole was installed in the vicinity of the highest documented contamination in soil and groundwater near existing wells W-1 and W-1s. The MW-5 CMT™ well borehole was placed approximately 5 feet down gradient (northwest) of the former 1000 gallon UST and Petcock gasoline release. The MW-6 CMT™ well borehole was placed approximately 5 feet west of the former dispenser island at the front of the parcel. The MW-7 CMT™ well borehole was placed approximately 5 feet west of the former UST excavation in the south-central portion of the site. The MW-8 CMT™ well borehole was placed approximately 55 feet down gradient (northwest) of borehole MW-4 in the vicinity of well W-B and W-Bs. (The propane tank and storage shed precluded placing boring MW-8 closer to W-B.)

2.1 Soil Borings

Prior to commencing work, a soil boring/monitoring well permit was secured from the Zone #7 Water Agency and the ACEH was notified at least 48 hours in advance. The subsurface was cleared of underground utilities by notifying Underground Service Alert.

Borings MW-4 through MW-8 were drilled using an 8.00-inch outside diameter continuous flight hollow stem auger owned and operated by Cascade Drilling Inc. of Sacramento, CA (C57# 142682). The first boring was advanced to approximately 82 feet below grade surface (bgs) while subsequent boreholes were terminated at 66.5 – 68 feet bgs. Static depth to groundwater was approximately 34 feet bgs as measured in existing well W-1s during the drilling period.

In preparation for a proposed pilot test a 25 foot extraction well, EW-1, was also installed on October 3, 2006. This well was free drilled with no soil sampling. The details of this well will be included in a forthcoming pilot test report.

2.2 Soil Sampling Procedure

In accordance with GTI's work plan and ACEH directives, the first borehole (MW-4) was intended to be continuously cored for geological evaluation from the depth of first water (34 ft) to total depth. Due to a communication error in the field with the driller the hole was sampled at 5 foot intervals to 50 feet bgs, but thereafter continuously to final depth. In each of the remaining boreholes MW-5 through MW-8 the soils were sampled continuously from 35 feet to total depth.

Field observations were made (including, but not inclusive of or limited to) sediment type, grain size and clay content; moisture content; obvious odor; visible evidence of contamination, i.e., color change due to reduction of iron or discoloration from hydrocarbons and other pollutants, and any readings above background levels on an organic vapor meter (OVM). The OVM is a field portable photo ionization detector that uses a 10.0 eV lamp to detect compounds with ionization potential below 10.0 eV (hydrocarbon range). Boring logs

providing sediment description using the USCS and field observations were maintained by GTI staff geologists, working under the supervision of Mr. Ray Kablanow, a California Professional Geologist and Certified Hydrogeologist. The boring logs are attached in Appendix C.

Soil samples were collected in 6.0-inch brass liners using a 2.0-inch modified California split spoon sampler. Select soil samples were sealed with Teflon sheets, capped, labeled and placed in a cooler at 4° Celsius for transport to the laboratory following Chain of Custody protocol.

2.3 Continuous Multi-chambered Tubing (CMT™) Well Installation

The objective of installing CMT™ wells was to monitor multiple lithologic units to define the lateral & vertical extent of the groundwater plume.

All five multi-chambered wells were constructed with manufacturer (Solinst Canada) supplied materials. The exception to this was that the bottom of the tubing was sealed by forcing hydrated bentonite into each chamber, and then installing a PVC cap with a pin through the cap and tubing to hold in place. The shallow screened interval of each CMT™ well was designated by the borehole name (i.e.- MW-4, MW-5, etc.) The deeper screened intervals of the wells are designated with 100, 200, 300, etc. series labels to differentiate the depth intervals monitored. The table below illustrates the new CMT™ well construction details and Figure 5 shows the screened intervals of all the site's wells (see boring logs in Appendix C for complete construction details):

Well No.	**TD** (ft)	**Screen Interval** (ft)	**Sand Pack** (ft)
MW-4	81.5	30	20 - 30
MW-104		50	48 - 52
MW-204		66	64 - 68
MW-304		75	73 - 76
MW-404		81.5	79.5 – 81.5
MW-5	68	27	24 - 29
MW-105		37	34 - 39
MW-205		48	45 - 50
MW-305		66	63 - 68
MW-6	68	30	27 - 31
MW-106		37	35 - 39
MW-206		50	47 - 52
MW-306		66	63 - 68

Well No.	**TD** (ft)	**Screen Interval** (ft)	**Sand Pack** (ft)
MW-7	69.5	30	20 - 30
MW-107		40	37 - 42
MW-207		50	47 - 52
MW-307		66	63 - 68
MW-8	66.5	30	20 - 30
MW-108		40	37 - 42
MW-208		52	49 - 54
MW-308		66	63 - 68

The screened intervals were chosen based on the lithology encountered in the initial boring MW-4 and then each subsequent borehole. The CMT™ tubing was laid out on the ground and the screened intervals constructed using hand tools. The actual perforations in the wall of the CMT™ tube chambers are three (3) 5/16 inch diameter holes drilled approximately two inches apart into the wall and covered by stainless steel mesh. Two sets of drilled holes/mesh placed adjacent to one another therefore comprise a one-foot interval of well screen.

Once the CMT™ tubing for the wells MW-4 through MW-8 had been installed, alternating sections of #2/12 Monterey washed sand and weighted bentonite pellets were used to fill the annulus of the borehole. The auger flights were removed one by one during the process to ensure correct annulus material placement and to keep the tubing centered in the borehole.

A granular bentonite transition seal was installed above the top sand filter pack and hydrated with clean water prior to installing the surface seal in each borehole. A surface seal was installed by pumping a neat cement grout (augmented with < 4% bentonite) into the borehole through the augers. The wells were encased in flush mounted traffic rated well boxes.

The new and existing site wells were sampled in accordance with GeoTracker requirements by Keir & Wright Civil Engineers of Livermore, California on October 16, 2006.

Note: Off-site groundwater monitoring wells W-2 & W-3 were not included in the survey. On October 3, 2006, GTI staff contacted Mr. Bob Habit of Signature Properties for permission to access these two wells located on the adjacent developed parcel to the west of the Arrow Rentals site. Signature Properties did not grant permission to access the wells citing liability issues with employees performing the proposed work and their concern that the ownership of the wells was in question. Signature Properties has not granted access permission to date. GTI has procured traffic boxes from Cascade Drilling to install over the wells but this work has also been set aside. At this time the wells are not secured and are vulnerable to vandalism.

3.0 SOIL SAMPLE ANALYSES

Five to six soil samples obtained from each boring were submitted to California Laboratory Services in Rancho Cordova, California (Department of Health Services Certification # 1233) for the following analyses:

- Benzene, toluene, ethylbenzene and xylene (BTEX) by EPA method 8260B or 8021
- Gasoline range petroleum hydrocarbons (TPH-G) by EPA method 5030/8015(m)
- TPH-DIESEL (8015M)
- 5 Oxygenates: MTBE, DIPE, TAME, ETBE, TBA (8260B)

A summary of the soil laboratory data is attached in Table 1, Appendix A, and the lab data reports are attached in Appendix B.

Soil samples were also obtained from soil cuttings (in drums) for disposal characterization. These lab data reports are also attached in Appendix B.

The laboratory data was submitted electronically to GeoTracker as required under AB2886 on October 25, 2006 (confirmation #'s: 4983137786, 2573171913 and 9309863328).

4.0 DISCUSSION

The following data were gleaned during the installation of the five CMT™ wells.

4.1 Geology and Hydrogeology of the Site

Depth to groundwater was determined to be approximately 34 feet bgs in well W-1s on Monday, October 2, 2006 prior to drilling. The driller tied a piece of cotton cord around the top of each auger flight to prevent clay/silt and groundwater intrusion into the augers. It was not possible to detect exactly when groundwater was encountered in the boreholes for this reason and due to the slow recharge nature of the clayey soils at the site.

Note: These boreholes were logged by different field geologists.

In the location of borehole MW-4 the subsurface was characterized as follows:

- The subsurface contained predominantly clayey/sandy gravels and clays. Gravel containing units are found extending from the surface to 40 feet, 50 – 51.5 feet and 61 – 78 feet bgs. Clay units are present at 40 – 41.5 feet, 52 – 61 feet and 78 – 81.5 feet bgs. The proportion of gravel to clay varied considerably in the borehole with some 6 inch sampling tubes comprised of approximately 80% or more ¼ - ½ inch diameter

pebbles. An opposite extreme was a solid tube of clay with one 2 inch diameter pebble in the middle.

- Silt and sand units are infrequent, with a silt unit noted at 45 feet bgs, and a thin (6 inch) sand at 66.5 feet bgs.
- The gravels range from brown or grey to a grey–green in color. Colors other than these included: orange iron-oxide stained sediments at 25, 35, 70 and 80 feet bgs.
- The clays range from uniform brown or grey to a mottled grey–brown color. Colors other than these included a dark brown "chocolate" clay at 78 feet bgs. Some brown clays contained grey nodules with a distinct hydrocarbon odor.
- The clayey silt unit at 45 feet was uniform brown, moist and contained some 5 mm pebbles.
- The sand unit at 66.5 feet was grey in color (salt and pepper), wet and fine to coarse grained.
- Field evidence of contamination (odor, staining or OVM readings) was noted in this boring. Petroleum hydrocarbon odor was noticeable at depths from 15 – 78 feet bgs. From 15 – 40 feet the odor was distinctly gasoline while a weathered petroleum odor was noted below 40 feet. The OVM readings ranged from 0 to 469 PPM (parts per million) with the highest readings (>450 PPM) at 20, 45, 52-54 and 61 feet bgs.

In the location of borehole MW-5 the subsurface was characterized as follows:

- The subsurface contained predominantly clayey/sandy gravels and clays. Gravel units are found extending from the surface to 37 feet, 62.5 - 65 and 66 – 68 feet bgs. Clay units are present at 37 – 61 feet.
- Silt and sand units are infrequent, with silt units noted at 51.5, 55.5 and 62 feet bgs, and with sand units at 65 – 66 feet bgs, a thin (3 inch) sand at 66.5 feet bgs.
- The gravels range from brown to grey in color.
- The clays range from brown or grey to reddish brown. Colors other than these included orange iron-oxide stained sediments at 15, 25 and 36 feet bgs.
- The silt units at 51.5 and 55.5 feet are grey & moist while the silt at 62 feet is brown.
- The sand units at 66 & 66.5 feet are grey in color (salt and pepper), wet and medium to coarse grained.
- Field evidence of contamination (odor, staining or OVM readings) was noted in this boring. Petroleum hydrocarbon odor was noticeable at depths from 30 – 56 feet bgs. The OVM readings ranged from 0 to 489 PPM (parts per million) with the highest readings (>450 PPM) at 40 - 44 feet bgs.

In the location of borehole MW-6 the subsurface was characterized as follows:

- The subsurface contained predominantly clayey/sandy gravels and clays. Gravel units are found extending from the surface to 37 feet, and 61 – 65 feet bgs. Clay units are present at 37 – 42.5, 45.5 – 53 and 54.5 – 61 feet bgs.
- Silt and sand units are infrequent, with silt units noted at 53 –54.5 feet bgs, and with sand units at 42.5 – 45.5 feet, and 67 feet bgs.
- The gravels range from brown to grey in color.

- The clays range from brown or grey, mottled grey-brown or reddish-brown. Colors other than these included orange iron-oxide stained sediments at 20, 36 and 41 feet bgs.
- The silt unit at 53 –54.5 feet bgs is mottled grey-brown and moist.
- The sand unit at 42.5 – 45.5 feet is fine grained with some pebbles, grey in color and wet. The sand unit at 67 feet is coarse to very coarse grained with some pebbles, brown in color and wet.
- Field evidence of contamination (odor, staining or OVM readings) was noted in this boring. Petroleum hydrocarbon odor was noticeable at depths from 45.5 – 51 feet bgs. The OVM readings ranged from 0 to 177 PPM (parts per million) with the highest reading at 45 feet bgs.

In the location of borehole MW-7 the subsurface was characterized as follows:

- The subsurface contained predominantly clayey/sandy gravels and clays. Gravel units are found extending from the surface to 36.5 feet, 53 – 56.5, 57.5 - 62 feet and 62 – 70 feet bgs. Clay units are present at 36.5 – 39.5 feet, 42.5 – 48.5 and 57 feet bgs.
- Silt and sand units are infrequent, with a silt unit noted at 39.5 – 42.5 feet bgs, and sands at 48.5 – 50 feet, 56.5, 62 feet and a thin (4 inch) sand at 64 feet bgs.
- The gravels range from brown to grey in color. Colors other than these included orange iron-oxide stained sediments at 35 and 55 feet bgs.
- The clays range from uniform brown or grey to a mottled grey–brown color
- The silt unit at 39.5 – 42.5 feet bgs was uniform brown and wet.
- The sand unit at 48.5 – 50 feet was mottled grey-brown in color, wet and very fine to fine grained. The sand unit at 56.5 feet is very fine grained, mottled grey-brown in color and wet. The sand unit at 62 feet is very coarse grained, grey and wet. The thin 4" sand layer at 64 feet is also very coarse grained, grey and wet.
- Field evidence of contamination (odor, staining or OVM readings) was noted in this boring. Petroleum hydrocarbon odor was noticeable at depths from 30 – 57 feet bgs. At 37 – 42 feet the odor was distinctly gasoline while a weathered petroleum odor was noted at other depths. The OVM readings ranged from 0 to 521 PPM (parts per million) with the highest readings (<450 PPM) at 38 and 44 - 47 feet bgs.

In the location of borehole MW-8 the subsurface was characterized as follows:

- The subsurface contained predominantly clayey/sandy gravels and clays. Gravel units are found extending from the surface to 25 feet, 30, 35, 55 – 57.5 and 65 – 66.5 feet bgs. Clay units are present at 25 feet, 36.5 – 51.5 and 58.5 - 65 feet bgs.
- Silt and sand units are infrequent, with a silt unit noted at 58 feet, and sands at 26 feet, and 51.5 – 54.5 feet bgs.
- The gravels range from brown to grey in color. Colors other than these included orange iron-oxide stained sediments at 20, a dark green gravel at ~55 feet bgs, and a gravel with "chocolate" dark brown clay nodules at 65 feet bgs.
- The clays range from uniform brown or grey to a mottled grey–brown color.
- The silt unit at 58 feet bgs is a mottled grey–brown color.

- The sand unit at 26 feet is approximately 4" thin, moist and grey. The sand unit at 51.5 – 54.5 feet bgs ranges from very fine to very coarse grained, grey to grey-green in color and wet.
- Field evidence of contamination (odor, staining or OVM readings) was noted in this boring. Petroleum hydrocarbon odor was noticeable at depths from 35 – 58 feet bgs. The OVM readings ranged from 0 to 446 PPM (parts per million) with the highest reading at 43 feet bgs.

Figure 4 indicates the locations of geological cross sections presented in Figures 6A and 7A. The continuous sampling of the boreholes revealed that the subsurface lithology falls into two predominant categories- gravelly soils and clayey soils. The site exhibits little correlation between boreholes and this situation is exacerbated by the fact that different geologists logged the boreholes and a five foot sampling interval was utilized in the past. For this reason the cross sections have gravelly units combined (sandy gravels, clayey gravels, silty gravels) and clay/silt units combined (clays, silts, gravelly clays). Sands units are portrayed as encountered. This grouping serves to identify potential preferential pathways for contaminant migration through units of greater hydraulic conductivity.

Figure 6A illustrates the geology trending from northwest to southeast side of the site. The diagram indicates that gravelly units are present to a depth of 35 – 40 feet. These are underlain by twenty feet of clayey units with some gravel interbedding. GTI's interpretation of the geology does not identify any sands units as laterally continuous. The gravelly units above 40 feet do appear to be laterally continuous, however the amount of sand, silt and clay within the gravels varies considerably both vertically and horizontally.

Figure 7A illustrates the geology trending from west-central portion to the northeast of the site. The lithology is very similar to Figure 6A with slightly more sandy units present in the soil profile in MW-7 borehole.

4.2 Chemical Distribution

The results of the soil sample analytical data are included in Table 1, Appendix A. The laboratory data sheets are included in Appendix B.

Chemical Distribution in the Soil

- Soil samples were obtained from boring MW-4 at 15, 30, 45, 60.5, 73 and 80 feet bgs.
  - The 15 ft sample contained: 64 mg/kg TPH-G, 84 mg/kg TPH-D and 0.65 mg/kg ethylbenzene.
  - The 30 ft sample contained: 18 mg/kg TPH-G, 3.2 mg/kg TPH-D, 0.15 mg/kg benzene, 0.19 mg/kg toluene, 0.11 mg/kg ethylbenzene and 1.1 mg/kg xylenes.
  - The 45 ft sample contained: 820 mg/kg TPH-G, 360 mg/kg TPH-D, 4.2 mg/kg ethylbenzene and 7.7 mg/kg xylenes.

- The 60.5 ft sample contained: 1100 mg/kg TPH-G, 680 mg/kg TPH-D, 8.7 mg/kg benzene, 1.1 mg/kg toluene, 18 mg/kg ethylbenzene and 62 mg/kg xylenes.
- The 73 ft sample contained: 5.4 mg/kg TPH-G, 0.027 mg/kg benzene, 0.065 mg/kg toluene, 0.043 mg/kg ethylbenzene and 0.19 mg/kg xylenes.
- The 80 ft sample contained: 12 mg/kg TPH-G, 0.013 mg/kg benzene, 0.036 mg/kg toluene, 0.016 mg/kg ethylbenzene and 0.084 mg/kg xylenes.

- Soil samples were obtained from boring MW-5 at 26, 36, 40.5, 48, 55.5 and 66.5 feet bgs.
  - The 26 ft sample did not contain contaminant concentrations above the laboratory limits.
  - The 36 ft sample contained: 11 mg/kg TPH-G, 1.1 mg/kg TPH-D, 0.021 mg/kg toluene, 0.031 mg/kg ethylbenzene and 0.035 mg/kg xylenes.
  - The 40.5 ft sample contained: 110 mg/kg TPH-G, 360 mg/kg TPH-D, 1.1 mg/kg benzene, 1.4 mg/kg toluene, 1.2 mg/kg ethylbenzene and 5.7 mg/kg xylenes.
  - The 48 ft sample contained: 7.6 mg/kg TPH-G, 0.19 mg/kg benzene, 0.025 mg/kg toluene, 0.067 mg/kg ethylbenzene and 0.16 mg/kg xylenes.
  - The 55.5 ft sample contained: 75 mg/kg TPH-G, 0.18 mg/kg benzene, 0.13 mg/kg toluene, 0.67 mg/kg ethylbenzene and 0.53 mg/kg xylenes.
  - The 66.5 ft sample did not contain contaminant concentrations above the laboratory limits.
- Soil samples were obtained from boring MW-6 at 16, 26, 40.5, 45, 49.5 and 67.5 feet bgs.
  - The 16 ft sample did not contain contaminant concentrations above the laboratory limits.
  - The 26 ft sample did not contain contaminant concentrations above the laboratory limits.
  - The 40.5 ft sample did not contain contaminant concentrations above the laboratory limits.
  - The 45.5 ft sample contained: 7.2 mg/kg TPH-G, 1.1 mg/kg TPH-D, 0.022 mg/kg toluene and 0.014 mg/kg ethylbenzene.
  - The 49.5 ft sample contained: 1.2 mg/kg TPH-G, 0.0091 mg/kg toluene and 0.0052 mg/kg ethylbenzene.
  - The 67.5 ft sample did not contain contaminant concentrations above the laboratory limits.
- Soil samples were obtained from boring MW-7 at 15, 40, 45.5, 49 and 68 feet bgs.
  - The 15 ft sample did not contain contaminant concentrations above the laboratory limits.
  - The 40 ft sample contained: 220 mg/kg TPH-G, 23 mg/kg TPH-D, 3.9 mg/kg benzene, 19 mg/kg toluene, 8.8 mg/kg ethylbenzene and 43 mg/kg xylenes.
  - The 45.5 ft sample contained: 1200 mg/kg TPH-G, 66 mg/kg TPH-D, 10 mg/kg benzene, 56 mg/kg toluene, 32 mg/kg ethylbenzene and 160 mg/kg xylenes.

- The 49 ft sample contained: 0.31 mg/kg benzene, 0.051 mg/kg toluene, 0.034 mg/kg ethylbenzene and 0.1 mg/kg xylenes.
- The 68 ft sample did not contain contaminant concentrations above the laboratory limits.

- Soil samples were obtained from boring MW-8 at 25, 35, 45, 55 and 65 feet bgs.
  - The 25 ft sample did not contain contaminant concentrations above the laboratory limits.
  - The 35 ft sample contained: 2200 mg/kg TPH-G, 800 mg/kg TPH-D, 3.8 mg/kg benzene, 2.2 mg/kg toluene, 29 mg/kg ethylbenzene and 130 mg/kg xylenes.
  - The 45 ft sample contained: 1.7 mg/kg TPH-G, 0.058 mg/kg benzene and 0.011 mg/kg ethylbenzene.
  - The 55 ft sample contained: 1.8 mg/kg TPH-G and 0.022 mg/kg benzene.
  - The 65 ft sample contained: 0.041 mg/kg benzene and 0.03 mg/kg ethylbenzene.
- Note: the laboratory qualified all detections of diesel as falling within the diesel petroleum hydrocarbon range but as not matching the diesel chromatogram "fingerprint". This suggests these detections are weathered gasoline.
- Figure 6B & 7B illustrate the above cross sections with the historical distribution of gasoline concentrations (TPH-G) in soil included.

Chemical Distribution in the Ground Water

The new wells were developed by GTI staff during the period October 5 – 17, 2006. The wells were sampled as part of the 2nd 2006 semi-annual groundwater sampling event and in accordance with ACEH directives. The ACEH directed that water samples be obtained prior to conducting a dual-phase extraction pilot test on October 16 – 20, 2006.

The distribution of contamination in groundwater will be presented in a forthcoming Site Conceptual Model (SCM) under development.

4.3 Contaminant Mass Estimate Calculations

Contaminant mass balance calculations will be presented in the SCM referenced above.

5.0 CONCLUSIONS & RECOMMENDATIONS

Based on our interpretation of the data collected over the course of this subsurface investigation, GTI have reached several conclusions. These conclusions are based on the premise that the data we considered, although incomplete, are representative of actual site conditions. We acknowledge that there may be undiscovered conditions, which would upon their consideration, change our interpretation and thus our conclusions.

Conclusions

- The depth to groundwater was approximately 27 feet bgs in July and 34 feet bgs in October 2006. This fact affirms previous data that shows groundwater elevation has ranged 20 – 40 feet bgs during the site investigation and wide fluctuations are possible in a three month timeframe. This has caused a large smear zone of impacted soils in the subsurface.
- There was limited evidence of contamination in the vadose zone with the exception of borehole MW-4 that had gasoline odors and 64 mg/kg TPH-G in the 15' bgs sample. This is an area adjacent to former UST piping trenches and other boreholes in this location have also contained shallow soil contamination.
- Boring MW-4 was advanced to a depth of 81.5 feet bgs. The soils below 70 feet showed declining gas odors/OVM readings and it appeared that the bottom of the contamination plume was attenuating at this level. The boring was advanced into clayey soils at 78 – 81.5 ft and terminated in accordance with GTI work plan if deep clays were encountered. The laboratory data for the 73 and 80 foot samples contained 5.4 and 12 mg/kg TPH-G, respectively. GTI believes that these soil samples define the bottom of the contaminant plume and may in fact be a drilling artifact. A semi-viscous clayey slurry was forming in the augers as the sampling device was repeatedly inserted and removed at depths below the water table and this may have affected the sample tubes. Future sampling of the wells screened at this interval will demonstrate if the TPH-G at this depth is the bottom of the impacted soils or a drilling artifact.
- The basal soil samples from the other four borings at depths of 65 – 68 ft did not contain TPH-G above the laboratory reporting limits suggesting that clayey soils at 40 – 60 ft bgs act to retard the vertical migration of contaminants.
- The highest levels of soil contamination remain in the area of boreholes W-1 and B-G. But the 15 ft sample from MW-4 shows attenuation over time as it contained only 64 mg/kg TPH-G. The 15 ft sample from boring W-1 contained 1,200 mg/kg TPH-G and the 15 ft sample from B-G contained 1,800 mg/kg. These two locations are only a few feet from MW-4 and were installed in 1988 and 1992, respectively.
- The residual soil TPH-G contamination in the vadose zone and sorbed hydrocarbons below the water table continues to provide a source for dissolved hydrocarbon groundwater plume. The presence of 220 – 2,200 mg/kg TPH-G in down gradient boring MW-8 with clean soils above and below the depths of 40 - 45 ft suggests that groundwater transport was responsible for the contamination in this location. The clean soils at 50 and 68 ft in this boring affirm that the clays below 40 ft serve to inhibit the spread of the gasoline.

Recommendations

Our recommendations are based on our knowledge of site conditions, and on the state and limitations of subsurface investigative technology. GTI makes the following recommendations:

1. Incorporate the new MCT wells in the semi-annual monitoring schedule. The new wells were sampled during the week of October 16 – 20, 2006 and this data will be used to complete a SCM and the 2nd 2006 Semi-Annual Groundwater Monitoring Report.
2. Perform contaminant mass estimate calculations for soil and include in the forthcoming SCM.
3. Perform contaminant mass estimate calculations for groundwater after the data is received and include in the forthcoming SCM.
4. Perform a dual phase extraction test to evaluate the feasibility of utilizing both soil vapor and groundwater extraction technologies to treat the gasoline plume at the site. This work was proposed, approved and completed during the week of October 16 – 20, 2006. A report on this work is forthcoming.
5. If further site investigation is necessary, utilize a conductor casing during drilling to prevent the introduction of contamination to the deeper aquifer. As stated above, the clays at 40 – 60 ft below grade appear to prevent the vertical migration of the gasoline. Drilling through these intervals could cause shallow contaminated water to spread below the clays.

6.0 LIMITATIONS

This report was prepared in accordance with the generally accepted standard of care and practice in effect at the time Services were rendered. It should be recognized that definition and evaluation of environmental conditions is an inexact science and that the state or practice of environmental geology/hydrology is changing and evolving and that standards existing at the present time may change as knowledge increases and the state of the practice continues to improve. Further, that differing subsurface soil characteristics can be experienced within a small distance and therefore cannot be known in an absolute sense. All conclusions and recommendations are based on the available data and information.

The tasks proposed and completed during this project were reviewed and approved by the local regulatory agency for compliance with the law. No warranty, expressed or implied, is made.

7.0 SIGNATURES AND CERTIFICATION

If you have any questions or if we can be of further assistance, please do not hesitate to contact our office at 209-522-4119.

This report was prepared by:

Joseph D. Angulo
Geologist

Raynold Kablanow II, Ph.D.
California Professional Geologist #5234
Certified Hydrogeologist #442

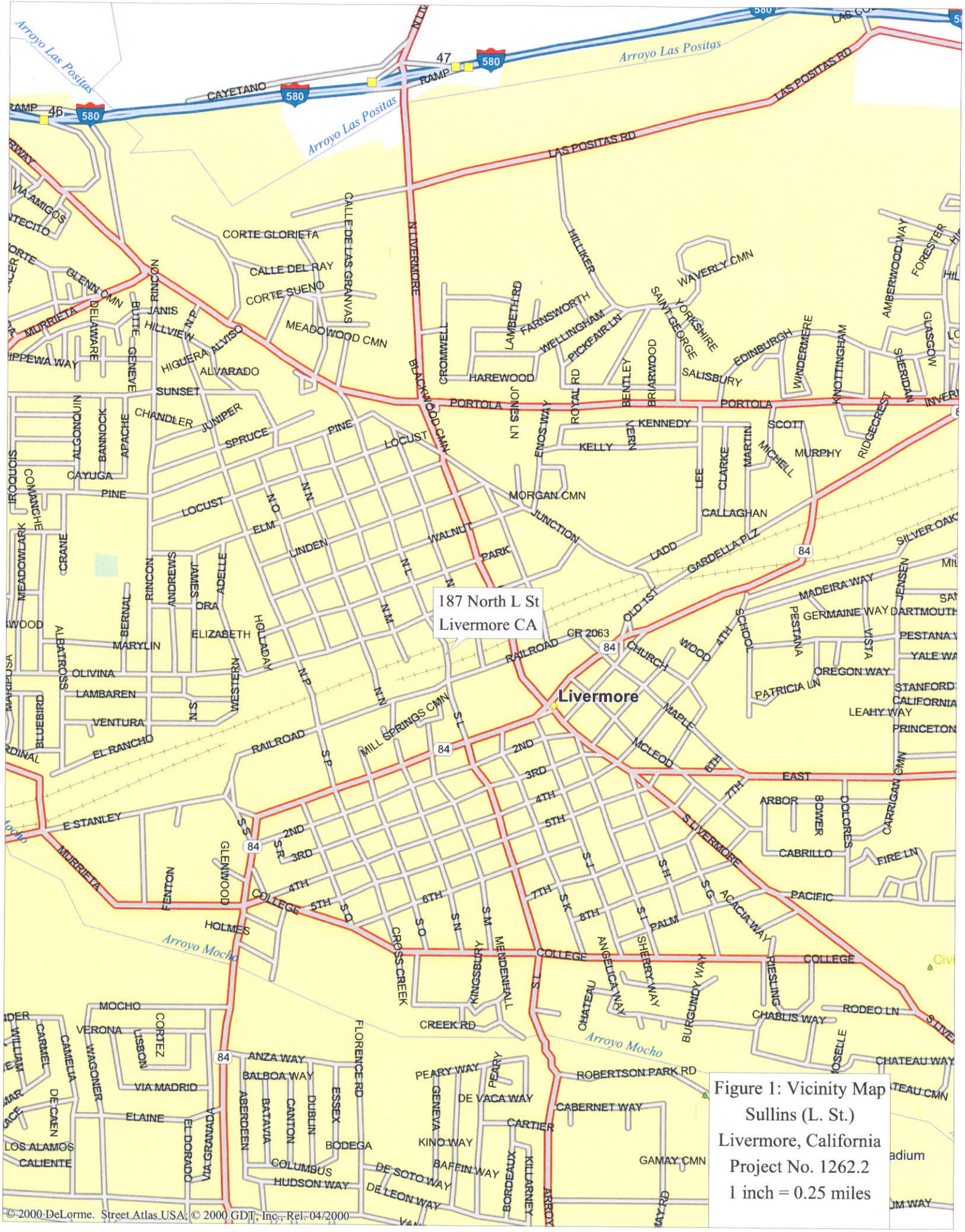


Figure 1: Vicinity Map
Sullins (L. St.)
Livermore, California
Project No. 1262.2
1 inch = 0.25 miles

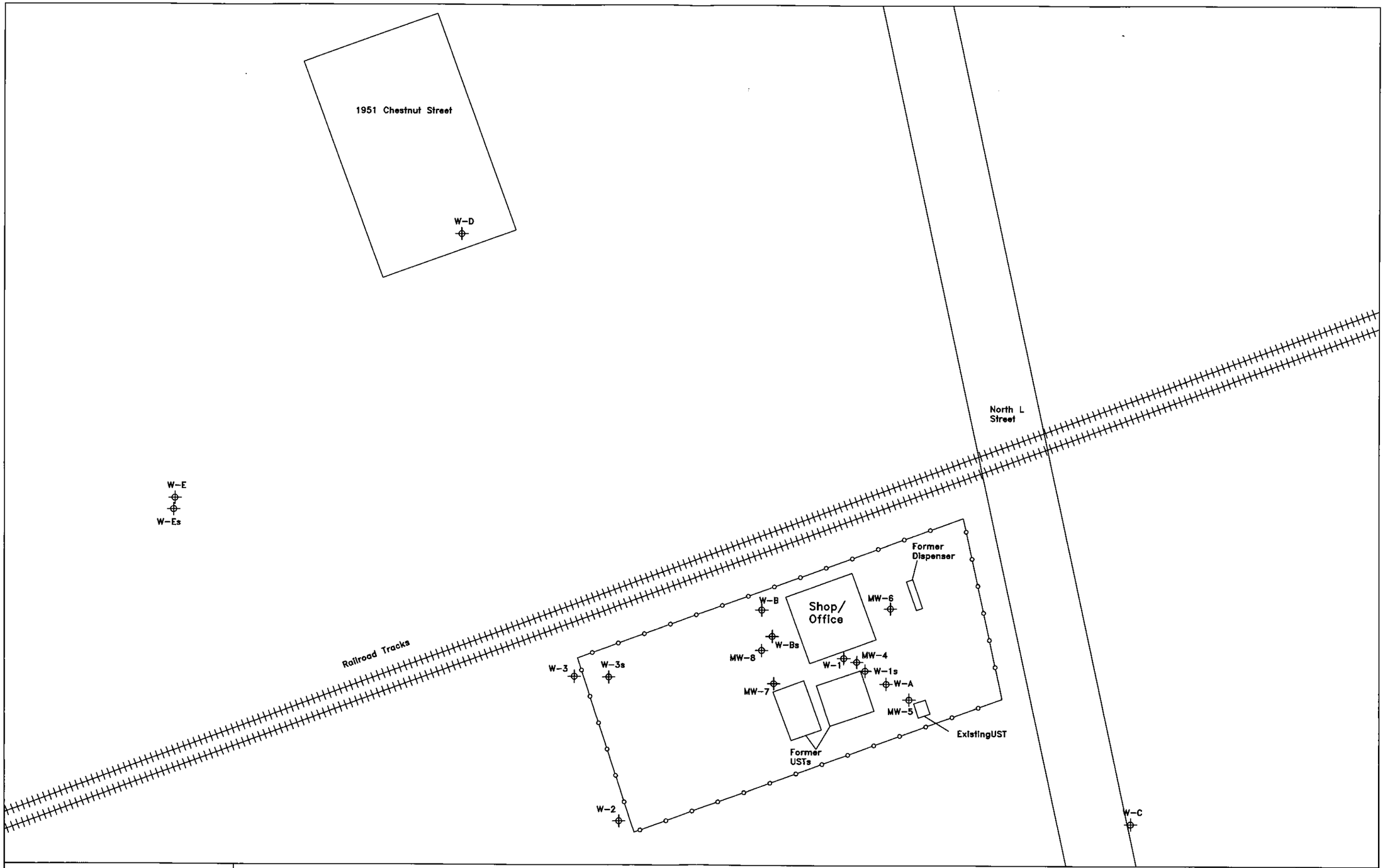


Fig 2: Site Map

Arrow Rentals
187 North L Street
Livermore, CA

Geological Technics Inc. 10/25/06

Legend

Monitoring Well

Soil Boring

N

0 50'

Scale

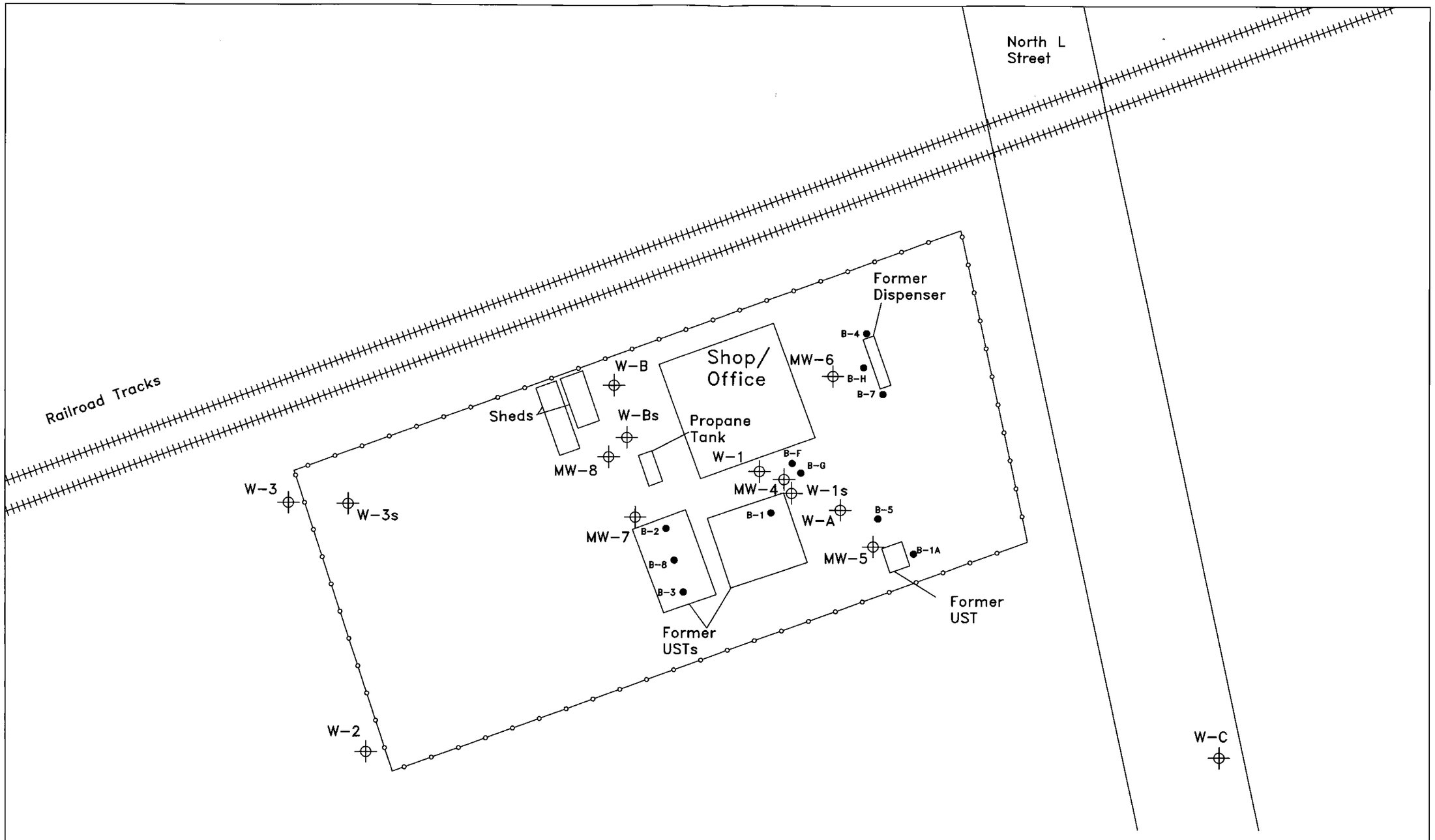


Fig 3: Site Detail Map

Arrow Rentals
187 North L Street
Livermore, CA

Geological Technics Inc. 5/18/06

Legend

- Monitoring Well
- Soil Boring
- Proposed Monitoring Well

N

0 30'

Scale

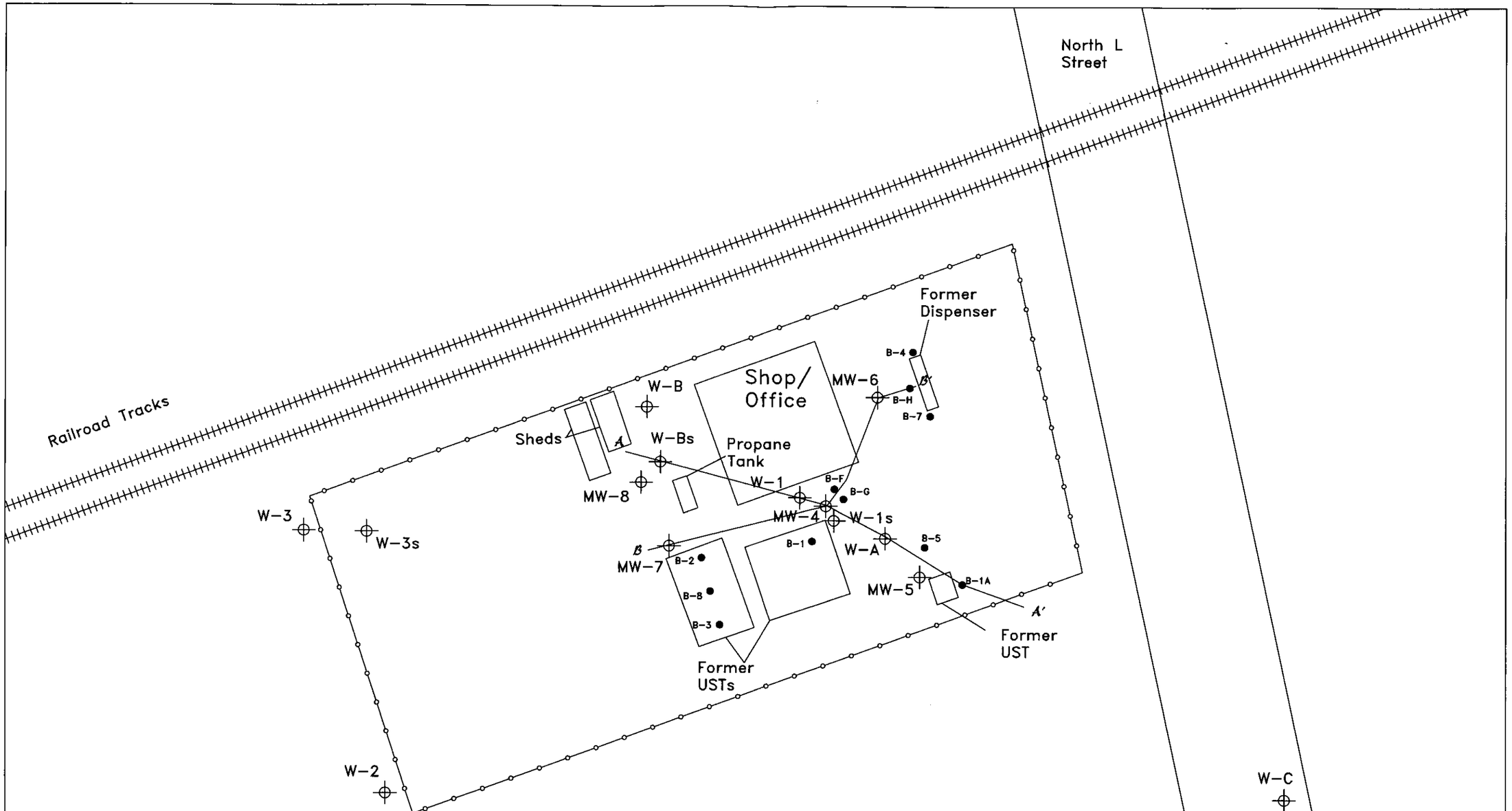


Fig 4: Site Detail Map
w/ cross sections

Arrow Rentals
187 North L Street
Livermore, CA

Geological Technics Inc. 5/18/06

Legend

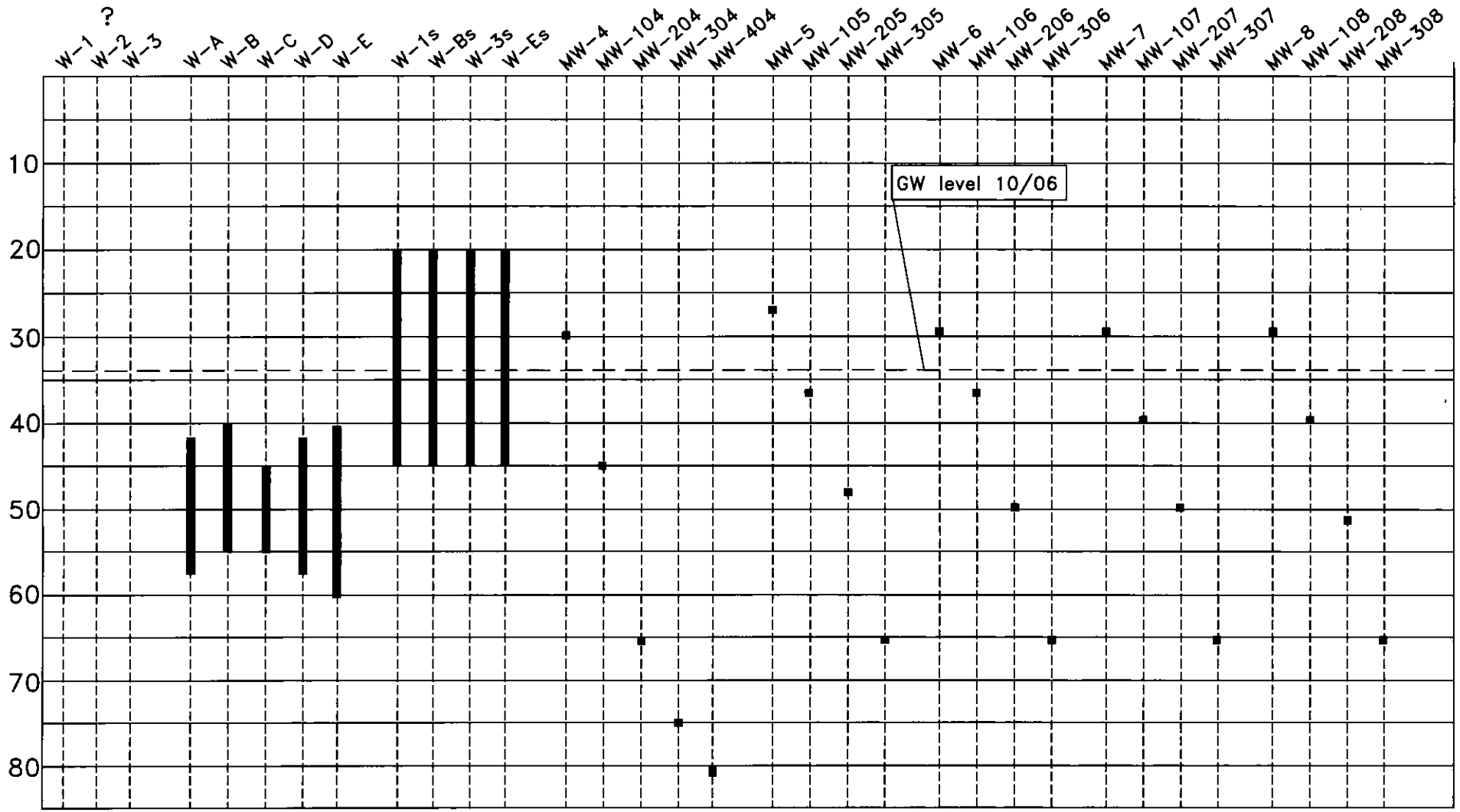
- Monitoring Well
- Soil Boring
- Proposed Monitoring Well

N

0 30'

Scale

Fig 5: Well Screened Interval Diagram



Sullins
187 North L Street
Livermore, CA

Geological Technics Inc.

10/25/06

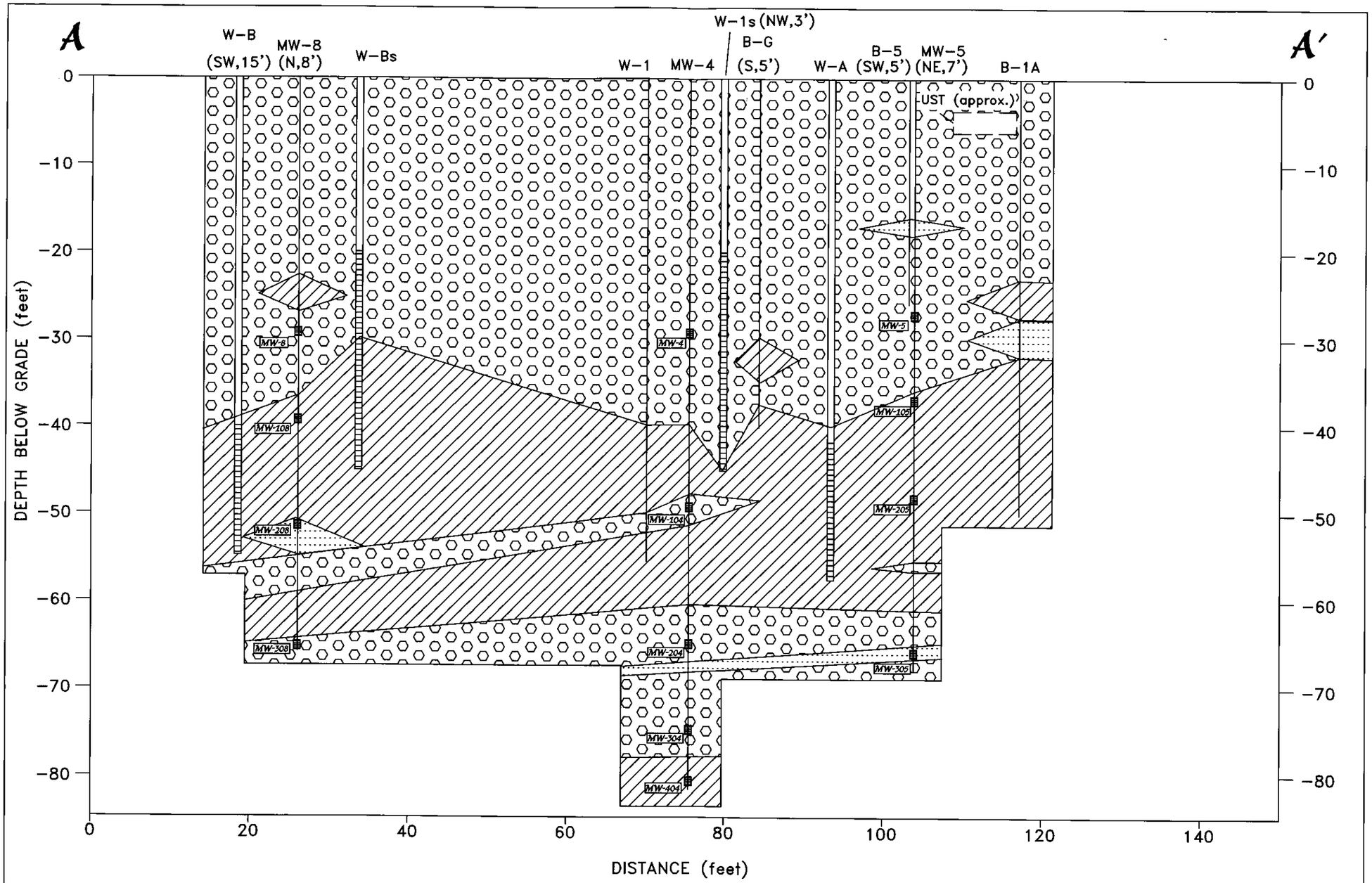


Figure 6A
Geologic Cross Section A – A'

Arrow Rentals
187 N L Street
Livermore, CA
Project No.: 1262.2

Geological Technics Inc. *10/24/06*

LEGEND

Scale as Indicated.

GRAVELLY UNITS UNITS (Includes sandy gravels,silty gravels, clayey gravels)

FINE GRAINED UNITS (Includes silts and clays, gravelly clays)

SAND UNITS

MW-108 = CMT well screen section

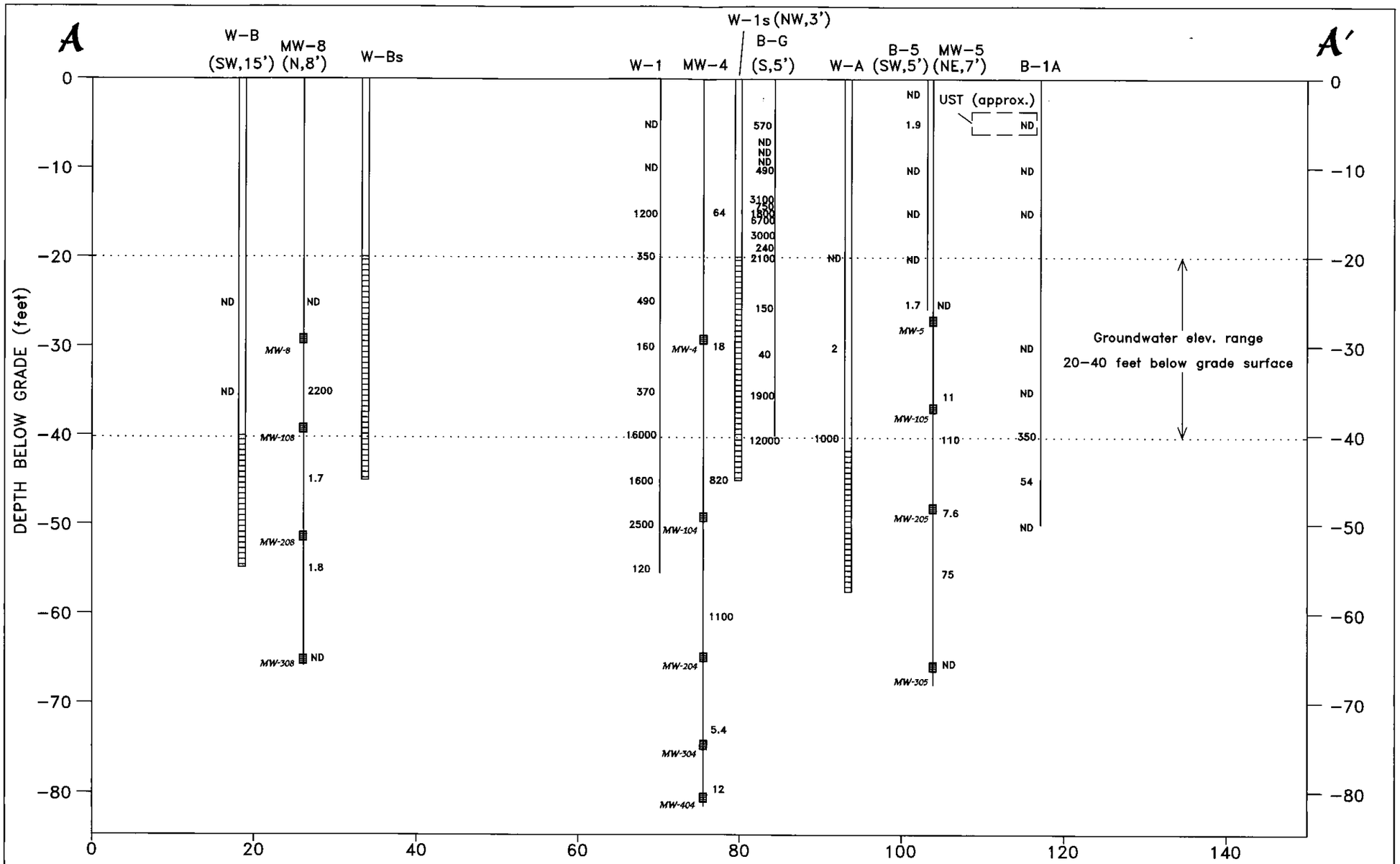


Figure 6B
Cross Section A – A'
With Soil TPH-Gasoline

Arrow Rentals
187 N L Street
Livermore, CA

Project No.: 1262.2

Geological Technics Inc. *10/24/06*

LEGEND

2300 = Soil TPH-G Concentration (mg/kg)
ND = Soil TPH-G non-detect

Scale as Indicated.

(N,5') = Boring projection onto section (direction, distance)

MW-108 = CMT well screen section

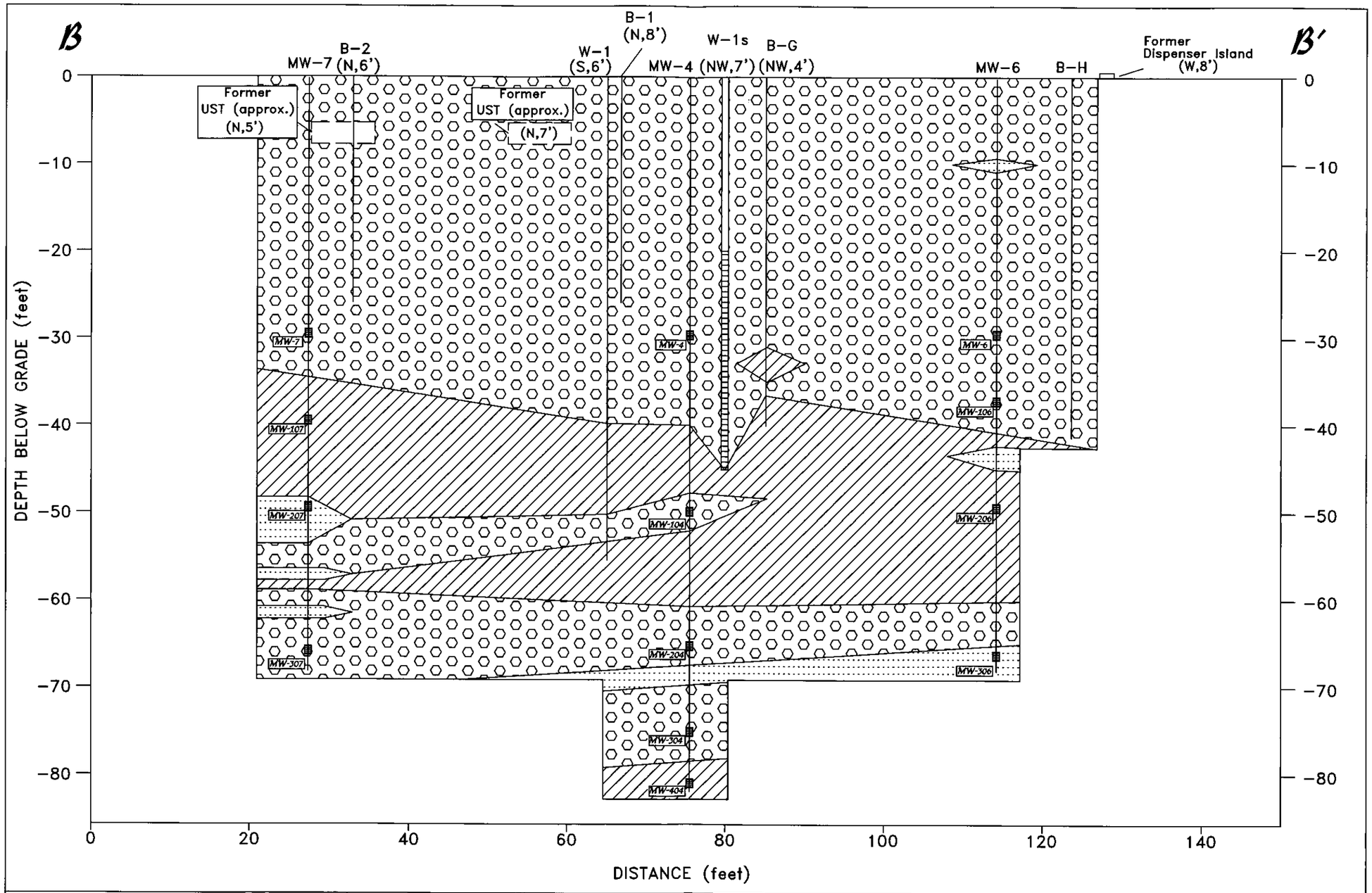


Figure 7A
Geologic Cross Section B – B'

Arrow Rentals
187 N L Street
Livermore, CA
Project No.: 1262.2

Geological Technics Inc. *10/24/06*

LEGEND

Scale as Indicated.

GRAVELLY UNITS UNITS (includes sandy gravels,silty gravels, clayey gravels)

FINE GRAINED UNITS (includes silts and clays, gravelly clays)

SAND UNITS

MW-108 = CMT well screen section

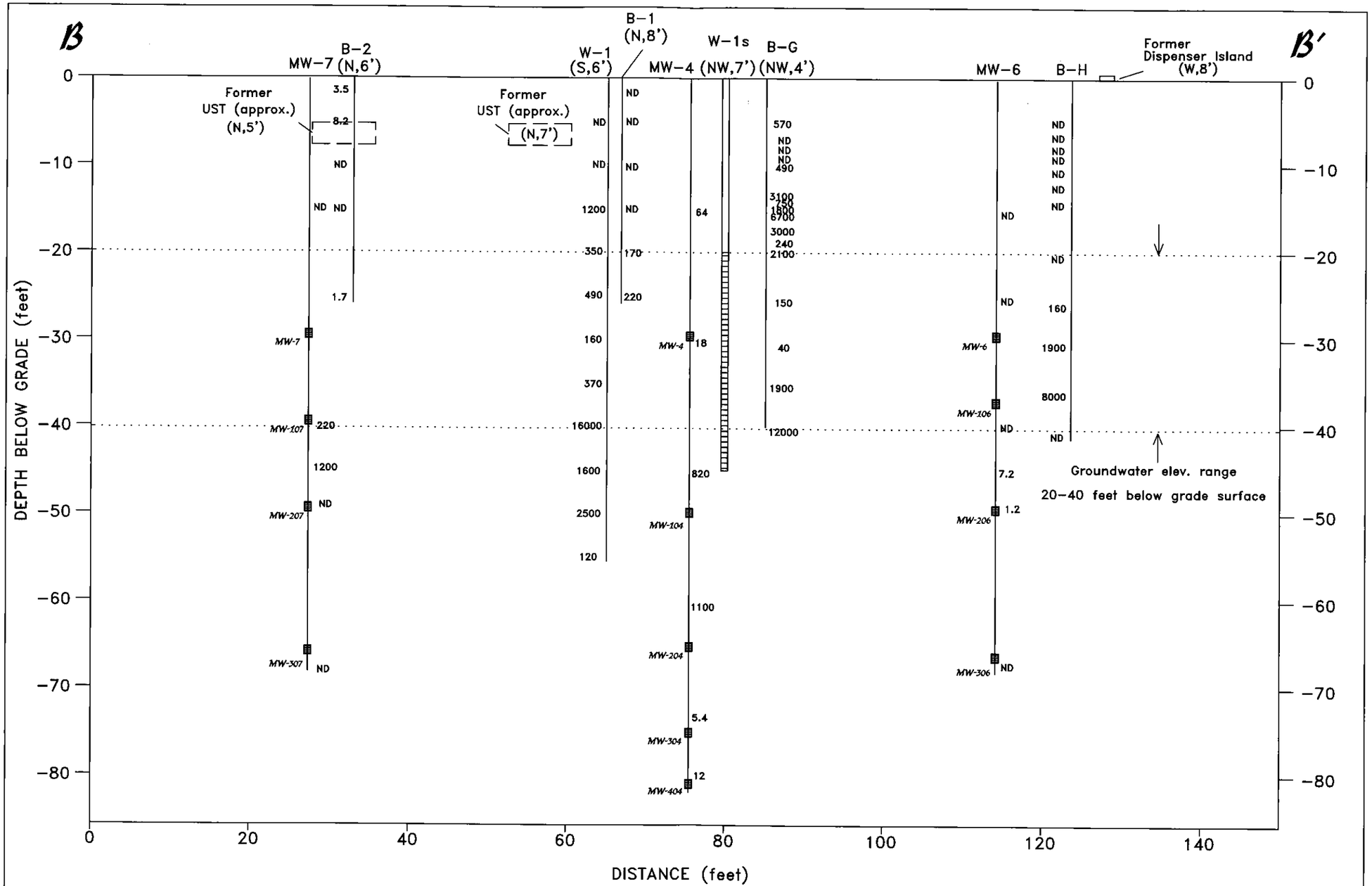


Figure 7B
Cross Section B – B'
With Soil TPH-gasoline
Arrow Rentals
187 N L Street
Livermore, CA
Project No.: 1262.2

Geological Technics Inc. *10/24/06*

LEGEND

Scale as Indicated.

2300 = Soil TPH-G Concentration (mg/kg)
ND = Soil TPH-G non-detect

(N,5') = Boring projection onto section (direction, distance)

MW-108 = CMT well screen section

Appendix A

Summary Data Tables

Table 1. Summary of Analytical Data - Soil Borings

Sullins
187 North L Street
Livermore, California
Project No. 1262.2

Summary of Soil Analytical Data

Date Sampled	Borehole	Sample Depth (Ft)	TPH-Gasoline	TEPH-Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	DIPE	ETBE	MTBE	TAME	TBA
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
10/2/2006	MW-4	15	**64****	**84***	ND<0.25	ND<0.25	**0.65**	ND<0.5	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<2.5
10/2/2006	MW-4	30	**18**	**3.2***	**0.15**	**0.19**	**0.11**	**1.1**	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.2
10/2/2006	MW-4	45	**820****	**360***	ND<0.25	ND<0.25	**4.2**	**7.7**	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<2.5
10/2/2006	MW-4	60.5	**1100**	**680***	**8.7**	**1.1**	**18**	**62**	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<2.5
10/2/2006	MW-4	73	**5.4**	ND<1	**0.027**	**0.065**	**0.043**	**0.19**	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.1
10/2/2006	MW-4	80	**12**	ND<1	**0.013**	**0.036**	**0.016**	**0.084**	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
10/9/2006	MW-5	26	ND<1	ND<1	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
10/9/2006	MW-5	36	**11****	**1.1***	ND<0.005	**0.021**	**0.031**	**0.035**	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
10/9/2006	MW-5	40.5	**110**	**360***	**1.1**	**1.4**	**1.2**	**5.7**	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<2.5
10/9/2006	MW-5	48	**7.6**	ND<1	**0.19**	**0.025**	**0.067**	**0.16**	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
10/9/2006	MW-5	55.5	**75**	ND<1	**0.18**	**0.13**	**0.67**	**0.53**	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
10/9/2006	MW-5	66.5	ND<1	ND<1	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
10/10/2006	MW-6	16	ND<1	ND<1	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
10/10/2006	MW-6	26	ND<1	ND<1	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
10/10/2006	MW-6	40.5	ND<1	ND<1	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
10/10/2006	MW-6	45	**7.2****	**1.1***	ND<0.005	**0.022**	**0.014**	ND<0.01	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
10/10/2006	MW-6	49.5	**1.2****	ND<1	ND<0.005	**0.0091**	**0.0052**	ND<0.01	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
10/10/2006	MW-6	67.5	ND<1	ND<1	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
10/4/2006	MW-7	15	ND<1	ND<1	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
10/4/2006	MW-7	40	**220**	**23***	**3.9**	**19**	**8.8**	**43**	ND<0.025	ND<0.025	ND<0.025	ND<0.025	ND<0.25
10/4/2006	MW-7	45.5	**1200**	**66***	**10**	**56**	**32**	**160**	ND<0.25	ND<0.25	ND<0.25	ND<0.25	ND<2.5
10/4/2006	MW-7	49	ND<1	ND<1	**0.31**	**0.051**	**0.034**	**0.1**	ND<0.01	ND<0.01	ND<0.01	ND<0.01	ND<0.1
10/4/2006	MW-7	68	ND<1	ND<1	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
10/5/2006	MW-8	25	ND<1	ND<1	ND<0.005	ND<0.005	ND<0.005	ND<0.01	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
10/5/2006	MW-8	35	**2200**	**800***	**3.8**	**2.2**	**29**	**130**	ND<0.025	ND<0.025	ND<0.025	ND<0.025	ND<0.25
10/5/2006	MW-8	45	**1.7**	ND<1	**0.058**	ND<0.005	**0.011**	ND<0.01	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
10/5/2006	MW-8	55	**1.8**	ND<1	**0.022**	ND<0.005	ND<0.005	ND<0.01	ND<0.005	ND<0.005	ND<0.005	ND<0.005	ND<0.05
10/5/2006	MW-8	65	ND<1	ND<1	**0.041**	ND<0.02	**0.03**	ND<0.04	ND<0.02	ND<0.02	ND<0.02	ND<0.02	ND<0.2

*= laboratory reported as within diesel range but does not match diesel chromatogram "fingerprint"
**= laboratory reported as within gasoline range but does not match gasolinel chromatogram "fingerprint"

Appendix B

Laboratory Reports

CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

October 13, 2006

CLS Work Order #: CPJ0163
COC #:

Joe Angulo
GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project Name: Sullins

Enclosed are the results of analyses for samples received by the laboratory on 10/04/06 18:15. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

James Liang, Ph.D.
Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

CALIFORNIA LABORATORY SERVICES

10/13/06 16:08

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0163
COC #:

Geological Technics Inc.
1101 7th Street
Modesto, CA
(209) 522-4119 Fax 522-4227
E-mail: gti@geologicaltechnics.com

CPJ0163 Page 1 of 1

Chain of Custody

Project #: [redacted] Client Project Name: [redacted]
Site Address: [redacted]
Global ID No: [redacted]
Sampled By: (print and sign name) [redacted]

Analysis Requested

Laboratory Name and Address: [redacted]
Purchase Order #: [redacted]
EDF Report ☐ Yes ☐ No
Turnaround Time: S - Standard
1 day, 2 day, 5 day

Date	Time	Field I.D.	Sample I.D.	No. of Containers	Matrix (Soil, Water, Gas, Other)	Turnaround Time			Remarks
[redacted]				1	S	S	X	X	
				1	S	S	X	X	
				1	S	S	X	X	
				1	S	S	X	X	
				1	S	S	X	X	
				1	S	S	X	X	

Relinquished by: (signature)	Date:	Time:	Received by: (signature)	Date:	Time:
[redacted]	10/4/06	1455	[redacted]	10/4/06	1457
[redacted]	10/4/06	18:57	[redacted]	10/4/06	18:15
[redacted]			[redacted]		

Please return cooler/ice chest to Geological Technics Inc.

Rev. 9/2004

CALIFORNIA LABORATORY SERVICES

10/13/06 16:08

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0163
COC #:

Extractable Petroleum Hydrocarbons by EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 D15 (CPJ0163-01) Soil	**Sampled: 10/02/06 11:10**	**Received: 10/04/06 18:15**							
Diesel	**84**	1.0	mg/kg	1	CP07720	10/05/06	10/05/06	EPA 8015M	D-DSL
MW-4 D30 (CPJ0163-02) Soil	**Sampled: 10/02/06 11:35**	**Received: 10/04/06 18:15**							
Diesel	**3.2**	1.0	mg/kg	1	CP07720	10/05/06	10/05/06	EPA 8015M	D-DSL
MW-4 D45 (CPJ0163-03) Soil	**Sampled: 10/02/06 12:05**	**Received: 10/04/06 18:15**							
Diesel	**360**	5.0	mg/kg	5	CP07720	10/05/06	10/05/06	EPA 8015M	D-DSL
MW-4 D60.5 (CPJ0163-04) Soil	**Sampled: 10/02/06 14:12**	**Received: 10/04/06 18:15**							
Diesel	**680**	10	mg/kg	10	CP07720	10/05/06	10/05/06	EPA 8015M	D-DSL
MW-4 D73 (CPJ0163-05) Soil	**Sampled: 10/02/06 15:30**	**Received: 10/04/06 18:15**							
Diesel	ND	1.0	mg/kg	1	CP07720	10/05/06	10/05/06	EPA 8015M	
MW-4 D80 (CPJ0163-06) Soil	**Sampled: 10/02/06 16:18**	**Received: 10/04/06 18:15**							
Diesel	ND	1.0	mg/kg	1	CP07720	10/05/06	10/05/06	EPA 8015M	

CALIFORNIA LABORATORY SERVICES

10/13/06 16:08

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0163
COC #:

TPH-Gasoline by GC FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 D15 (CPJ0163-01) Soil Sampled: 10/02/06 11:10 Received: 10/04/06 18:15									
Gasoline	**64**	10	mg/kg	10	CP07789	10/09/06	10/09/06	EPA 8015M	GAS-1
Surrogate: o-Chlorotoluene (Gas)		*710 %*	*65-135*		"	"	"	"	*QS-4*
MW-4 D30 (CPJ0163-02) Soil Sampled: 10/02/06 11:35 Received: 10/04/06 18:15									
Gasoline	**18**	5.0	mg/kg	5	CP07789	10/09/06	10/09/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*176 %*	*65-135*		"	"	"	"	*QS-4*
MW-4 D45 (CPJ0163-03) Soil Sampled: 10/02/06 12:05 Received: 10/04/06 18:15									
Gasoline	**820**	200	mg/kg	200	CP07850	10/10/06	10/10/06	EPA 8015M	GAS-1
Surrogate: o-Chlorotoluene (Gas)		*295 %*	*65-135*		"	"	"	"	*QS-4*
MW-4 D60.5 (CPJ0163-04) Soil Sampled: 10/02/06 14:12 Received: 10/04/06 18:15									
Gasoline	**1100**	100	mg/kg	100	CP07789	10/09/06	10/09/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*281 %*	*65-135*		"	"	"	"	*QS-4*
MW-4 D73 (CPJ0163-05) Soil Sampled: 10/02/06 15:30 Received: 10/04/06 18:15									
Gasoline	**5.4**	1.0	mg/kg	1	CP07789	10/09/06	10/09/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*111 %*	*65-135*		"	"	"	"	
MW-4 D80 (CPJ0163-06) Soil Sampled: 10/02/06 16:18 Received: 10/04/06 18:15									
Gasoline	**12**	10	mg/kg	10	CP07789	10/09/06	10/09/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*126 %*	*65-135*		"	"	"	"	

10/13/06 16:08

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0163
COC #:

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 D15 (CPJ0163-01) Soil Sampled: 10/02/06 11:10 Received: 10/04/06 18:15									**QRL-5**
Di-isopropyl ether	ND	250	µg/kg	50	CP07751	10/05/06	10/06/06	EPA 8260B	
Ethyl tert-butyl ether	ND	250	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	250	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	250	"	"	"	"	"	"	
Tert-butyl alcohol	ND	2500	"	"	"	"	"	"	
Benzene	ND	250	"	"	"	"	"	"	
Ethylbenzene	**650**	250	"	"	"	"	"	"	
Toluene	ND	250	"	"	"	"	"	"	
Xylenes (total)	ND	500	"	"	"	"	"	"	
Surrogate: Toluene-d8		*95.2 %*	*60-140*		"	"	"	"	
MW-4 D30 (CPJ0163-02) Soil Sampled: 10/02/06 11:35 Received: 10/04/06 18:15									
Di-isopropyl ether	ND	20	µg/kg	4	CP07716	10/05/06	10/05/06	EPA 8260B	
Ethyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	200	"	"	"	"	"	"	
Benzene	**150**	20	"	"	"	"	"	"	
Ethylbenzene	**190**	20	"	"	"	"	"	"	
Toluene	**110**	20	"	"	"	"	"	"	
Xylenes (total)	**1100**	40	"	"	"	"	"	"	
Surrogate: Toluene-d8		*96.0 %*	*60-140*		"	"	"	"	
MW-4 D45 (CPJ0163-03) Soil Sampled: 10/02/06 12:05 Received: 10/04/06 18:15									
Di-isopropyl ether	ND	250	µg/kg	50	CP07751	10/05/06	10/06/06	EPA 8260B	
Ethyl tert-butyl ether	ND	250	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	250	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	250	"	"	"	"	"	"	
Tert-butyl alcohol	ND	2500	"	"	"	"	"	"	
Benzene	ND	250	"	"	"	"	"	"	
Ethylbenzene	**4200**	250	"	"	"	"	"	"	
Toluene	ND	250	"	"	"	"	"	"	
Xylenes (total)	**7700**	500	"	"	"	"	"	"	

CALIFORNIA LABORATORY SERVICES

10/13/06 16:08

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0163
COC #:

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 D45 (CPJ0163-03) Soil Sampled: 10/02/06 12:05 Received: 10/04/06 18:15									
Surrogate: Toluene-d8		*95.6 %*		*60-140*		*CP07751*	*10/05/06*	*10/06/06*	*EPA 8260B*
MW-4 D60.5 (CPJ0163-04) Soil Sampled: 10/02/06 14:12 Received: 10/04/06 18:15									
Di-isopropyl ether	ND	250	µg/kg	50	CP07716	10/05/06	10/05/06	EPA 8260B	
Ethyl tert-butyl ether	ND	250	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	250	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	250	"	"	"	"	"	"	
Tert-butyl alcohol	ND	2500	"	"	"	"	"	"	
Benzene	**8700**	1200	"	250	"	"	"	"	
Ethylbenzene	**18000**	1200	"	"	"	"	"	"	
Toluene	**1100**	250	"	50	"	"	"	"	
Xylenes (total)	**62000**	2500	"	250	"	"	"	"	
Surrogate: Toluene-d8		*97.6 %*		*60-140*	"	"	"	"	
MW-4 D73 (CPJ0163-05) Soil Sampled: 10/02/06 15:30 Received: 10/04/06 18:15									
Di-isopropyl ether	ND	10	µg/kg	2	CP07716	10/05/06	10/05/06	EPA 8260B	
Ethyl tert-butyl ether	ND	10	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	10	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	10	"	"	"	"	"	"	
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	
Benzene	**27**	10	"	"	"	"	"	"	
Ethylbenzene	**43**	10	"	"	"	"	"	"	
Toluene	**65**	10	"	"	"	"	"	"	
Xylenes (total)	**190**	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		*96.8 %*		*60-140*	"	"	"	"	

10/13/06 16:08

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0163
COC #:

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 D80 (CPJ0163-06) Soil	**Sampled: 10/02/06 16:18**	**Received: 10/04/06 18:15**							
Di-isopropyl ether	ND	5.0	µg/kg	1	CP07751	10/05/06	10/06/06	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Benzene	**13**	5.0	"	"	"	"	"	"	
Ethylbenzene	**16**	5.0	"	"	"	"	"	"	
Toluene	**36**	5.0	"	"	"	"	"	"	
Xylenes (total)	**84**	10	"	"	"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*60-140*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

10/13/06 16:08

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0163
COC #:

Extractable Petroleum Hydrocarbons by EPA Method 8015M - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP07720 - LUFT-DHS GCNV										
Blank (CP07720-BLK1)				Prepared & Analyzed: 10/05/06						
Diesel	ND	1.0	mg/kg							
Motor Oil	ND	1.0	"							
Kerosene	ND	1.0	"							
JP-5/JP-8	ND	1.0	"							
LCS (CP07720-BS1)				Prepared & Analyzed: 10/05/06						
Diesel	46.5	1.0	mg/kg	50.0		93.0	65-135		30	
LCS Dup (CP07720-BSD1)				Prepared & Analyzed: 10/05/06						
Diesel	49.0	1.0	mg/kg	50.0		98.0	65-135	5.24	30	
Matrix Spike (CP07720-MS1)	Source: CPJ0163-01			Prepared & Analyzed: 10/05/06						
Diesel	83.8	1.0	mg/kg	50.0	84	NR	59-138		37	QM-7
Matrix Spike Dup (CP07720-MSD1)	Source: CPJ0163-01			Prepared & Analyzed: 10/05/06						
Diesel	84.1	1.0	mg/kg	50.0	84	0.200	59-138	0.357	37	QM-7

10/13/06 16:08

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0163
COC #:

TPH-Gasoline by GC FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP07789 - EPA 5030 Soil GC										
Blank (CP07789-BLK1)				Prepared: 10/09/06 Analyzed: 10/11/06						
Gasoline	ND	1.0	mg/kg							
Surrogate: o-Chlorotoluene (Gas)	*0.0933*		"	*0.100*		*93.3*	*65-135*			
LCS (CP07789-BS1)				Prepared: 10/09/06 Analyzed: 10/11/06						
Gasoline	2.83	2.0	mg/kg	2.50		113	65-135		30	
Surrogate: o-Chlorotoluene (Gas)	*0.106*		"	*0.100*		*106*	*65-135*			
LCS Dup (CP07789-BSD1)				Prepared: 10/09/06 Analyzed: 10/11/06						
Gasoline	2.86	2.0	mg/kg	2.50		114	65-135	1.05	30	
Surrogate: o-Chlorotoluene (Gas)	*0.109*		"	*0.100*		*109*	*65-135*			
Matrix Spike (CP07789-MS1)	**Source: CPJ0163-02**			Prepared: 10/09/06 Analyzed: 10/11/06						
Gasoline	30.7	1.0	mg/kg	12.5	18	102	63-124		35	
Surrogate: o-Chlorotoluene (Gas)	*0.406*		"	*0.500*		*81.2*	*65-135*			
Matrix Spike Dup (CP07789-MSD1)	**Source: CPJ0163-02**			Prepared: 10/09/06 Analyzed: 10/11/06						
Gasoline	31.2	1.0	mg/kg	12.5	18	106	63-124	1.62	35	
Surrogate: o-Chlorotoluene (Gas)	*0.412*		"	*0.500*		*82.4*	*65-135*			
Batch CP07850 - EPA 5030 Soil GC										
Blank (CP07850-BLK1)				Prepared: 10/10/06 Analyzed: 10/11/06						
Gasoline	ND	1.0	mg/kg							
Surrogate: o-Chlorotoluene (Gas)	*0.100*		"	*0.100*		*100*	*65-135*			
LCS (CP07850-BS1)				Prepared: 10/10/06 Analyzed: 10/11/06						
Gasoline	1.73	1.0	mg/kg	2.50		69.2	65-135		30	
Surrogate: o-Chlorotoluene (Gas)	*0.107*		"	*0.100*		*107*	*65-135*			

CALIFORNIA LABORATORY SERVICES

10/13/06 16:08

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0163
COC #:

TPH-Gasoline by GC FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP07850 - EPA 5030 Soil GC										
LCS Dup (CP07850-BSD1)				Prepared: 10/10/06 Analyzed: 10/11/06						
Gasoline	1.73	1.0	mg/kg	2.50		69.2	65-135	0.00	30	
Surrogate: o-Chlorotoluene (Gas)	*0.110*		"	*0.100*		*110*	*65-135*			
Matrix Spike (CP07850-MS1)	**Source: CPJ0228-19**			Prepared: 10/10/06 Analyzed: 10/11/06						
Gasoline	1.69	1.0	mg/kg	2.50	ND	67.6	63-124		35	
Surrogate: o-Chlorotoluene (Gas)	*0.0920*		"	*0.100*		*92.0*	*65-135*			
Matrix Spike Dup (CP07850-MSD1)	**Source: CPJ0228-19**			Prepared: 10/10/06 Analyzed: 10/11/06						
Gasoline	1.69	1.0	mg/kg	2.50	ND	67.6	63-124	0.00	35	
Surrogate: o-Chlorotoluene (Gas)	*0.0911*		"	*0.100*		*91.1*	*65-135*			

10/13/06 16:08

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0163
COC #:

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP07716 - EPA 5030 Soil MS										
Blank (CP07716-BLK1)				Prepared & Analyzed: 10/05/06						
Di-isopropyl ether	ND	5.0	µg/kg							
Ethyl tert-butyl ether	ND	5.0	"							
Methyl tert-butyl ether	ND	5.0	"							
tert-Amyl methyl ether	ND	5.0	"							
Tert-butyl alcohol	ND	50	"							
Benzene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
Toluene	ND	5.0	"							
Xylenes (total)	ND	10	"							
Surrogate: Toluene-d8	*49.5*		"	*50.0*		*99.0*	*60-140*			
LCS (CP07716-BS1)				Prepared & Analyzed: 10/05/06						
Methyl tert-butyl ether	52.0	5.0	µg/kg	50.0		104	60-140		30	
Surrogate: Toluene-d8	*50.7*		"	*50.0*		*101*	*60-140*			
LCS Dup (CP07716-BSD1)				Prepared & Analyzed: 10/05/06						
Methyl tert-butyl ether	44.9	5.0	µg/kg	50.0		89.8	60-140	14.7	30	
Surrogate: Toluene-d8	*50.1*		"	*50.0*		*100*	*60-140*			
Batch CP07751 - EPA 5030 Soil MS										
Blank (CP07751-BLK1)				Prepared & Analyzed: 10/06/06						
Di-isopropyl ether	ND	5.0	µg/kg							
Ethyl tert-butyl ether	ND	5.0	"							
Methyl tert-butyl ether	ND	5.0	"							
tert-Amyl methyl ether	ND	5.0	"							
Tert-butyl alcohol	ND	50	"							
Benzene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
Toluene	ND	5.0	"							
Xylenes (total)	ND	10	"							
Surrogate: Toluene-d8	*48.7*		"	*50.0*		*97.4*	*60-140*			

10/13/06 16:08

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0163
COC #:

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP07751 - EPA 5030 Soil MS										
LCS (CP07751-BS1)				Prepared & Analyzed: 10/06/06						
Methyl tert-butyl ether	48.7	5.0	µg/kg	50.0		97.4	60-140		30	
Surrogate: Toluene-d8	*49.0*		"	*50.0*		*98.0*	*60-140*			
LCS Dup (CP07751-BSD1)				Prepared & Analyzed: 10/06/06						
Methyl tert-butyl ether	44.8	5.0	µg/kg	50.0		89.6	60-140	8.34	30	
Surrogate: Toluene-d8	*48.8*		"	*50.0*		*97.6*	*60-140*			
Matrix Spike (CP07751-MS1)	**Source: CPJ0228-07**			Prepared: 10/06/06 Analyzed: 10/07/06						
Methyl tert-butyl ether	37.6	5.0	µg/kg	50.0	ND	75.2	60-140		30	
Surrogate: Toluene-d8	*47.9*		"	*50.0*		*95.8*	*60-140*			
Matrix Spike Dup (CP07751-MSD1)	**Source: CPJ0228-07**			Prepared: 10/06/06 Analyzed: 10/07/06						
Methyl tert-butyl ether	39.9	5.0	µg/kg	50.0	ND	79.8	60-140	5.94	30	
Surrogate: Toluene-d8	*48.3*		"	*50.0*		*96.6*	*60-140*			

CALIFORNIA LABORATORY SERVICES

10/13/06 16:08

GEOLOGICAL TECHNICS INC. 1101 7th St. MODESTO, CA 95354	Project: Sullins Project Number: 1262.2 Project Manager: Joe Angulo	**CLS Work Order #: CPJ0163** COC #:

Notes and Definitions

QS-4	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QRL-5	The sample was diluted due to the presence of high levels of non-target analytes or matrix interference resulting in elevated reporting limits.
QM-7	The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
GAS-1	Although sample contains compounds in the retention time range associated with gasoline, the chromatogram was not consistent with the expected chromatographic pattern or "fingerprint". However, the reported concentration is based on gasoline.
D-DSL	Although sample contains compounds in the retention time range associated with diesel, the chromatogram was not consistent with the expected chromatographic pattern or "fingerprint". However, the reported concentration is based on diesel.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

October 16, 2006

CLS Work Order #: CPJ0296
COC #:

Joe Angulo
GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project Name: Sullins

Enclosed are the results of analyses for samples received by the laboratory on 10/06/06 17:50. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

James Liang, Ph.D.
Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

CALIFORNIA LABORATORY SERVICES

10/16/06 14:36

GEOLOGICAL TECHNICS INC. 1101 7th St. MODESTO, CA 95354	Project: Sullins Project Number: 1262.2 Project Manager: Joe Angulo	**CLS Work Order #: CPJ0296** COC #:

Geological Technics Inc.
1101 7th Street
Modesto, CA
(209) 522-4119 Fax 522-4237
E-mail: gti@geologicaltechnics.com

CPJ0296 Page 1 of 1

Chain of Custody

Project #: 1262.2 — Client/Project Name: Sullins

Site Address: 187 Main St, [illegible]

Global ID No.: T0600100116

Sampled By: (print and sign name) Joseph D. Angulo

Laboratory Name and Address: CLS

Purchase Order #: 1262 - [illegible]

EDF Report: ☑ Yes ☐ No

Turnaround Time: S = Standard, 1 day, 2 day, 5 day

Analysis Requested

Date	Time	Field I.D.	Sample I.D.	No. of Containers	Matrix (Soil, Water, Gas, Other)	Turnaround Time	BTEX / TPH-G (8260B, 8021)	TPH-D (8015M)
10/4/06	1412	MW-7	MW-7 D15	1	S	S	X	X
	1527		MW-7 D40					
	1534		MW-7 D45.5					
	1542		MW-7 D49					
	1726		MW-7 D65					
10/5/06	1325	MW-8	MW-8 D25					
	1356		MW-8 D35					
	1455		MW-8 D45					
	1533		MW-8 D55					
	1623		MW-8 D65					

Remarks:
* DIPE, TBA, TAME, ETBE, MTBE
Report limits:
TPH-G 1.0 mg/kg
BTEX 8260 0.005 mg/kg
TPH-D 1.0 mg/kg

Relinquished by: (signature)	Date	Time	Received by: (signature)	Date	Time
[signature]	10/6/06	1315	[signature]	10/6/06	1315
[signature]	10/6/06	1750	[signature]	10/6/06	1750

Please return cooler/ice chest to Geological Technics Inc.

Rev. 4/2004

CALIFORNIA LABORATORY SERVICES

10/16/06 14:36

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0296
COC #:

Extractable Petroleum Hydrocarbons by EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 D15 (CPJ0296-01) Soil	**Sampled: 10/04/06 14:12**	**Received: 10/06/06 17:50**							
Diesel	ND	1.0	mg/kg	1	CP07763	10/09/06	10/09/06	EPA 8015M	
MW-7 D40 (CPJ0296-02) Soil	**Sampled: 10/04/06 15:07**	**Received: 10/06/06 17:50**							
Diesel	**23**	1.0	mg/kg	1	CP07763	10/09/06	10/09/06	EPA 8015M	D-DSL
MW-7 D45.5 (CPJ0296-03) Soil	**Sampled: 10/04/06 15:34**	**Received: 10/06/06 17:50**							
Diesel	**66**	1.0	mg/kg	1	CP07763	10/09/06	10/09/06	EPA 8015M	D-DSL
MW-7 D49 (CPJ0296-04) Soil	**Sampled: 10/04/06 15:42**	**Received: 10/06/06 17:50**							
Diesel	ND	1.0	mg/kg	1	CP07763	10/09/06	10/09/06	EPA 8015M	
MW-7 D68 (CPJ0296-05) Soil	**Sampled: 10/04/06 17:20**	**Received: 10/06/06 17:50**							
Diesel	ND	1.0	mg/kg	1	CP07763	10/09/06	10/09/06	EPA 8015M	
MW-8 D25 (CPJ0296-06) Soil	**Sampled: 10/05/06 13:25**	**Received: 10/06/06 17:50**							
Diesel	ND	1.0	mg/kg	1	CP07763	10/09/06	10/09/06	EPA 8015M	
MW-8 D35 (CPJ0296-07) Soil	**Sampled: 10/05/06 13:56**	**Received: 10/06/06 17:50**							
Diesel	**800**	20	mg/kg	20	CP07763	10/09/06	10/09/06	EPA 8015M	D-DSL
MW-8 D45 (CPJ0296-08) Soil	**Sampled: 10/05/06 14:55**	**Received: 10/06/06 17:50**							
Diesel	ND	1.0	mg/kg	1	CP07763	10/09/06	10/09/06	EPA 8015M	
MW-8 D55 (CPJ0296-09) Soil	**Sampled: 10/05/06 15:33**	**Received: 10/06/06 17:50**							
Diesel	ND	1.0	mg/kg	1	CP07763	10/09/06	10/09/06	EPA 8015M	D-DSL

CALIFORNIA LABORATORY SERVICES

10/16/06 14:36

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0296
COC #:

Extractable Petroleum Hydrocarbons by EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-8 D65 (CPJ0296-10) Soil Sampled: 10/05/06 16:23 Received: 10/06/06 17:50									
Diesel	ND	1.0	mg/kg	1	CP07763	10/09/06	10/09/06	EPA 8015M	

CALIFORNIA LABORATORY SERVICES

10/16/06 14:36

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0296
COC #:

TPH-Gasoline by GC FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 D15 (CPJ0296-01) Soil Sampled: 10/04/06 14:12 Received: 10/06/06 17:50									
Gasoline	ND	1.0	mg/kg	1	CP07850	10/10/06	10/10/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*83.5 %*	*65-135*		"	"	"	"	
MW-7 D40 (CPJ0296-02) Soil Sampled: 10/04/06 15:07 Received: 10/06/06 17:50									
Gasoline	**220**	20	mg/kg	20	CP07850	10/10/06	10/10/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*257 %*	*65-135*		"	"	"	"	*QS-4*
MW-7 D45.5 (CPJ0296-03) Soil Sampled: 10/04/06 15:34 Received: 10/06/06 17:50									
Gasoline	**1200**	500	mg/kg	500	CP07870	10/11/06	10/11/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*118 %*	*65-135*		"	"	"	"	
MW-7 D49 (CPJ0296-04) Soil Sampled: 10/04/06 15:42 Received: 10/06/06 17:50									
Gasoline	ND	1.0	mg/kg	1	CP07850	10/10/06	10/10/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*84.3 %*	*65-135*		"	"	"	"	
MW-7 D68 (CPJ0296-05) Soil Sampled: 10/04/06 17:20 Received: 10/06/06 17:50									
Gasoline	ND	1.0	mg/kg	1	CP07850	10/10/06	10/10/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*91.0 %*	*65-135*		"	"	"	"	
MW-8 D25 (CPJ0296-06) Soil Sampled: 10/05/06 13:25 Received: 10/06/06 17:50									
Gasoline	ND	1.0	mg/kg	1	CP07850	10/10/06	10/10/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*97.1 %*	*65-135*		"	"	"	"	
MW-8 D35 (CPJ0296-07) Soil Sampled: 10/05/06 13:56 Received: 10/06/06 17:50									
Gasoline	**2200**	500	mg/kg	500	CP07956	10/12/06	10/13/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*92.1 %*	*65-135*		"	"	"	"	

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GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0296
COC #:

TPH-Gasoline by GC FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-8 D45 (CPJ0296-08) Soil Sampled: 10/05/06 14:55 Received: 10/06/06 17:50									
Gasoline	**1.7**	1.0	mg/kg	1	CP07850	10/10/06	10/10/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*112 %*	*65-135*		"	"	"	"	
MW-8 D55 (CPJ0296-09) Soil Sampled: 10/05/06 15:33 Received: 10/06/06 17:50									
Gasoline	**1.8**	1.0	mg/kg	1	CP07850	10/10/06	10/10/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*117 %*	*65-135*		"	"	"	"	
MW-8 D65 (CPJ0296-10) Soil Sampled: 10/05/06 16:23 Received: 10/06/06 17:50									
Gasoline	ND	1.0	mg/kg	1	CP07870	10/11/06	10/11/06	EPA 8015M	
Surrogate: o-Chlorotoluene (Gas)		*107 %*	*65-135*		"	"	"	"	

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Project Manager: Joe Angulo

CLS Work Order #: CPJ0296
COC #:

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 D15 (CPJ0296-01) Soil Sampled: 10/04/06 14:12 Received: 10/06/06 17:50									
Di-isopropyl ether	ND	5.0	µg/kg	1	CP07952	10/11/06	10/13/06	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: Toluene-d8		*100 %*	*60-140*		"	"	"	"	
MW-7 D40 (CPJ0296-02) Soil Sampled: 10/04/06 15:07 Received: 10/06/06 17:50									
Di-isopropyl ether	ND	25	µg/kg	5	CP07871	10/09/06	10/11/06	EPA 8260B	
Ethyl tert-butyl ether	ND	25	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	25	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	25	"	"	"	"	"	"	
Tert-butyl alcohol	ND	250	"	"	"	"	"	"	
Benzene	**3900**	500	"	100	"	"	10/13/06	"	
Ethylbenzene	**8800**	500	"	"	"	"	"	"	
Toluene	**19000**	500	"	"	"	"	"	"	
Xylenes (total)	**43000**	1000	"	"	"	"	"	"	
Surrogate: Toluene-d8		*99.6 %*	*60-140*		"	"	"	"	
MW-7 D45.5 (CPJ0296-03) Soil Sampled: 10/04/06 15:34 Received: 10/06/06 17:50									
Di-isopropyl ether	ND	250	µg/kg	50	CP07871	10/09/06	10/11/06	EPA 8260B	
Ethyl tert-butyl ether	ND	250	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	250	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	250	"	"	"	"	"	"	
Tert-butyl alcohol	ND	2500	"	"	"	"	"	"	
Benzene	**10000**	250	"	"	"	"	"	"	
Ethylbenzene	**32000**	2500	"	500	"	"	10/13/06	"	
Toluene	**56000**	2500	"	"	"	"	"	"	
Xylenes (total)	**160000**	5000	"	"	"	"	"	"	

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GEOLOGICAL TECHNICS INC.
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Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0296
COC #:

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 D45.5 (CPJ0296-03) Soil	**Sampled: 10/04/06 15:34**	**Received: 10/06/06 17:50**							
Surrogate: Toluene-d8		*98.6 %*	*60-140*		*CP07871*	*10/09/06*	*10/11/06*	*EPA 8260B*	
MW-7 D49 (CPJ0296-04) Soil	**Sampled: 10/04/06 15:42**	**Received: 10/06/06 17:50**							
Di-isopropyl ether	ND	10	µg/kg	2	CP07952	10/11/06	10/13/06	EPA 8260B	
Ethyl tert-butyl ether	ND	10	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	10	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	10	"	"	"	"	"	"	
Tert-butyl alcohol	ND	100	"	"	"	"	"	"	
Benzene	**310**	10	"	"	"	"	"	"	
Ethylbenzene	**34**	10	"	"	"	"	"	"	
Toluene	**51**	10	"	"	"	"	"	"	
Xylenes (total)	**100**	20	"	"	"	"	"	"	
Surrogate: Toluene-d8		*100 %*	*60-140*		"	"	"	"	
MW-7 D68 (CPJ0296-05) Soil	**Sampled: 10/04/06 17:20**	**Received: 10/06/06 17:50**							
Di-isopropyl ether	ND	5.0	µg/kg	1	CP07952	10/11/06	10/13/06	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: Toluene-d8		*103 %*	*60-140*		"	"	"	"	

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Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-8 D25 (CPJ0296-06) Soil Sampled: 10/05/06 13:25 Received: 10/06/06 17:50									
Di-isopropyl ether	ND	5.0	µg/kg	1	CP07952	10/11/06	10/13/06	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Benzene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*60-140*		"	"	"	"	
MW-8 D35 (CPJ0296-07) Soil Sampled: 10/05/06 13:56 Received: 10/06/06 17:50									
Di-isopropyl ether	ND	25	µg/kg	5	CP07871	10/09/06	10/11/06	EPA 8260B	
Ethyl tert-butyl ether	ND	25	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	25	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	25	"	"	"	"	"	"	
Tert-butyl alcohol	ND	250	"	"	"	"	"	"	
Benzene	**3800**	1200	"	250	"	"	10/11/06	"	
Ethylbenzene	**29000**	1200	"	"	"	"	"	"	
Toluene	**2200**	1200	"	"	"	"	"	"	
Xylenes (total)	**130000**	2500	"	"	"	"	"	"	
Surrogate: Toluene-d8		*96.2 %*	*60-140*		"	"	"	"	
MW-8 D45 (CPJ0296-08) Soil Sampled: 10/05/06 14:55 Received: 10/06/06 17:50									
Di-isopropyl ether	ND	5.0	µg/kg	1	CP07952	10/11/06	10/13/06	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Benzene	**58**	5.0	"	"	"	"	"	"	
Ethylbenzene	**11**	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	

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Project: Sullins
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Project Manager: Joe Angulo

CLS Work Order #: CPJ0296
COC #:

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-8 D45 (CPJ0296-08) Soil	**Sampled: 10/05/06 14:55**	**Received: 10/06/06 17:50**							
Surrogate: Toluene-d8		*104 %*	*60-140*		*CP07952*	*10/11/06*	*10/13/06*	*EPA 8260B*	
MW-8 D55 (CPJ0296-09) Soil	**Sampled: 10/05/06 15:33**	**Received: 10/06/06 17:50**							
Di-isopropyl ether	ND	5.0	µg/kg	1	CP07952	10/11/06	10/13/06	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Benzene	**22**	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: Toluene-d8		*99.6 %*	*60-140*		"	"	"	"	
MW-8 D65 (CPJ0296-10) Soil	**Sampled: 10/05/06 16:23**	**Received: 10/06/06 17:50**							
Di-isopropyl ether	ND	20	µg/kg	4	CP07822	10/10/06	10/10/06	EPA 8260B	
Ethyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	20	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	20	"	"	"	"	"	"	
Tert-butyl alcohol	ND	200	"	"	"	"	"	"	
Benzene	**41**	20	"	"	"	"	"	"	
Ethylbenzene	**30**	20	"	"	"	"	"	"	
Toluene	ND	20	"	"	"	"	"	"	
Xylenes (total)	ND	40	"	"	"	"	"	"	
Surrogate: Toluene-d8		*108 %*	*60-140*		"	"	"	"	

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Project Manager: Joe Angulo

CLS Work Order #: CPJ0296
COC #:

Extractable Petroleum Hydrocarbons by EPA Method 8015M - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP07763 - LUFT-DHS GCNV										
Blank (CP07763-BLK1)				Prepared & Analyzed: 10/09/06						
Diesel	ND	1.0	mg/kg							
LCS (CP07763-BS1)				Prepared & Analyzed: 10/09/06						
Diesel	53.2	1.0	mg/kg	50.0		106	65-135		30	
LCS Dup (CP07763-BSD1)				Prepared & Analyzed: 10/09/06						
Diesel	54.0	1.0	mg/kg	50.0		108	65-135	1.49	30	
Matrix Spike (CP07763-MS1)		Source: CPJ0295-01		Prepared & Analyzed: 10/09/06						
Diesel	118	1.0	mg/kg	50.0	66	104	59-138		37	
Matrix Spike Dup (CP07763-MSD1)		Source: CPJ0295-01		Prepared & Analyzed: 10/09/06						
Diesel	113	1.0	mg/kg	50.0	66	94.0	59-138	4.33	37	

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Project Manager: Joe Angulo

CLS Work Order #: CPJ0296
COC #:

TPH-Gasoline by GC FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP07850 - EPA 5030 Soil GC										
Blank (CP07850-BLK1)				Prepared: 10/10/06 Analyzed: 10/11/06						
Gasoline	ND	1.0	mg/kg							
Surrogate: o-Chlorotoluene (Gas)	*0.100*		"	*0.100*		*100*	*65-135*			
LCS (CP07850-BS1)				Prepared: 10/10/06 Analyzed: 10/11/06						
Gasoline	1.73	1.0	mg/kg	2.50		69.2	65-135		30	
Surrogate: o-Chlorotoluene (Gas)	*0.107*		"	*0.100*		*107*	*65-135*			
LCS Dup (CP07850-BSD1)				Prepared: 10/10/06 Analyzed: 10/11/06						
Gasoline	1.73	1.0	mg/kg	2.50		69.2	65-135	0.00	30	
Surrogate: o-Chlorotoluene (Gas)	*0.110*		"	*0.100*		*110*	*65-135*			
Matrix Spike (CP07850-MS1)		**Source: CPJ0228-19**		Prepared: 10/10/06 Analyzed: 10/11/06						
Gasoline	1.69	1.0	mg/kg	2.50	ND	67.6	63-124		35	
Surrogate: o-Chlorotoluene (Gas)	*0.0920*		"	*0.100*		*92.0*	*65-135*			
Matrix Spike Dup (CP07850-MSD1)		**Source: CPJ0228-19**		Prepared: 10/10/06 Analyzed: 10/11/06						
Gasoline	1.69	1.0	mg/kg	2.50	ND	67.6	63-124	0.00	35	
Surrogate: o-Chlorotoluene (Gas)	*0.0911*		"	*0.100*		*91.1*	*65-135*			
Batch CP07870 - EPA 5030 Soil GC										
Blank (CP07870-BLK1)				Prepared & Analyzed: 10/11/06						
Gasoline	ND	1.0	mg/kg							
Surrogate: o-Chlorotoluene (Gas)	*0.0856*		"	*0.100*		*85.6*	*65-135*			
LCS (CP07870-BS1)				Prepared & Analyzed: 10/11/06						
Gasoline	2.78	2.0	mg/kg	2.50		111	65-135		30	
Surrogate: o-Chlorotoluene (Gas)	*0.115*		"	*0.100*		*115*	*65-135*			

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COC #:

TPH-Gasoline by GC FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP07870 - EPA 5030 Soil GC										
LCS Dup (CP07870-BSD1)				Prepared & Analyzed: 10/11/06						
Gasoline	2.91	2.0	mg/kg	2.50		116	65-135	4.57	30	
Surrogate: o-Chlorotoluene (Gas)	*0.113*		"	*0.100*		*113*	*65-135*			
Matrix Spike (CP07870-MS1)	**Source: CPJ0228-23**			Prepared & Analyzed: 10/11/06						
Gasoline	1.99	1.0	mg/kg	2.50	ND	79.6	63-124		35	
Surrogate: o-Chlorotoluene (Gas)	*0.109*		"	*0.100*		*109*	*65-135*			
Matrix Spike Dup (CP07870-MSD1)	**Source: CPJ0228-23**			Prepared & Analyzed: 10/11/06						
Gasoline	2.40	1.0	mg/kg	2.50	ND	96.0	63-124	18.7	35	
Surrogate: o-Chlorotoluene (Gas)	*0.104*		"	*0.100*		*104*	*65-135*			
Batch CP07956 - EPA 5030 Soil GC										
Blank (CP07956-BLK1)				Prepared: 10/12/06 Analyzed: 10/13/06						
Gasoline	ND	1.0	mg/kg							
Surrogate: o-Chlorotoluene (Gas)	*0.0903*		"	*0.100*		*90.3*	*65-135*			
LCS (CP07956-BS1)				Prepared: 10/12/06 Analyzed: 10/13/06						
Gasoline	2.13	1.0	mg/kg	2.50		85.2	65-135		30	
Surrogate: o-Chlorotoluene (Gas)	*0.113*		"	*0.100*		*113*	*65-135*			
LCS Dup (CP07956-BSD1)				Prepared: 10/12/06 Analyzed: 10/13/06						
Gasoline	2.19	1.0	mg/kg	2.50		87.6	65-135	2.78	30	
Surrogate: o-Chlorotoluene (Gas)	*0.118*		"	*0.100*		*118*	*65-135*			

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Project Manager: Joe Angulo

CLS Work Order #: CPJ0296
COC #:

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP07822 - EPA 5030 Soil MS										
Blank (CP07822-BLK1)				Prepared & Analyzed: 10/10/06						
Di-isopropyl ether	ND	5.0	µg/kg							
Ethyl tert-butyl ether	ND	5.0	"							
Methyl tert-butyl ether	ND	5.0	"							
tert-Amyl methyl ether	ND	5.0	"							
Tert-butyl alcohol	ND	50	"							
Surrogate: Toluene-d8	*50.3*		"	*50.0*		*101*	*60-140*			
LCS (CP07822-BS1)				Prepared & Analyzed: 10/10/06						
Methyl tert-butyl ether	52.4	5.0	µg/kg	50.0		105	60-140		30	
Surrogate: Toluene-d8	*50.8*		"	*50.0*		*102*	*60-140*			
LCS Dup (CP07822-BSD1)				Prepared & Analyzed: 10/10/06						
Methyl tert-butyl ether	51.7	5.0	µg/kg	50.0		103	60-140	1.34	30	
Surrogate: Toluene-d8	*50.2*		"	*50.0*		*100*	*60-140*			
Matrix Spike (CP07822-MS1)	**Source: CPJ0228-23**			Prepared: 10/10/06 Analyzed: 10/11/06						
Methyl tert-butyl ether	37.1	5.0	µg/kg	50.0	ND	74.2	60-140		30	
Surrogate: Toluene-d8	*49.4*		"	*50.0*		*98.8*	*60-140*			
Matrix Spike Dup (CP07822-MSD1)	**Source: CPJ0228-23**			Prepared: 10/10/06 Analyzed: 10/11/06						
Methyl tert-butyl ether	37.8	5.0	µg/kg	50.0	ND	75.6	60-140	1.87	30	
Surrogate: Toluene-d8	*50.3*		"	*50.0*		*101*	*60-140*			
Batch CP07871 - EPA 5030 Soil MS										
Blank (CP07871-BLK1)				Prepared & Analyzed: 10/11/06						
Di-isopropyl ether	ND	5.0	µg/kg							
Ethyl tert-butyl ether	ND	5.0	"							
Methyl tert-butyl ether	ND	5.0	"							
tert-Amyl methyl ether	ND	5.0	"							
Tert-butyl alcohol	ND	50	"							
Surrogate: Toluene-d8	*49.9*		"	*50.0*		*99.8*	*60-140*			

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Project: Sullins
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Project Manager: Joe Angulo

CLS Work Order #: CPJ0296
COC #:

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP07871 - EPA 5030 Soil MS										
LCS (CP07871-BS1)				Prepared & Analyzed: 10/11/06						
Methyl tert-butyl ether	53.4	5.0	µg/kg	50.0		107	60-140		30	
Surrogate: Toluene-d8	*51.5*		"	*50.0*		*103*	*60-140*			
LCS Dup (CP07871-BSD1)				Prepared & Analyzed: 10/11/06						
Methyl tert-butyl ether	51.6	5.0	µg/kg	50.0		103	60-140	3.43	30	
Surrogate: Toluene-d8	*50.0*		"	*50.0*		*100*	*60-140*			
Matrix Spike (CP07871-MS1)		**Source: CPJ0228-18**		Prepared: 10/11/06 Analyzed: 10/12/06						
Methyl tert-butyl ether	37.5	5.0	µg/kg	50.0	ND	75.0	60-140		30	
Surrogate: Toluene-d8	*47.8*		"	*50.0*		*95.6*	*60-140*			
Matrix Spike Dup (CP07871-MSD1)		**Source: CPJ0228-18**		Prepared: 10/11/06 Analyzed: 10/12/06						
Methyl tert-butyl ether	30.2	5.0	µg/kg	50.0	ND	60.4	60-140	21.6	30	
Surrogate: Toluene-d8	*47.9*		"	*50.0*		*95.8*	*60-140*			
Batch CP07952 - EPA 5030 Soil MS										
Blank (CP07952-BLK1)				Prepared & Analyzed: 10/13/06						
Di-isopropyl ether	ND	5.0	µg/kg							
Ethyl tert-butyl ether	ND	5.0	"							
Methyl tert-butyl ether	ND	5.0	"							
tert-Amyl methyl ether	ND	5.0	"							
Tert-butyl alcohol	ND	50	"							
Benzene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
Toluene	ND	5.0	"							
Xylenes (total)	ND	10	"							
Surrogate: Toluene-d8	*50.0*		"	*50.0*		*100*	*60-140*			

CALIFORNIA LABORATORY SERVICES

10/16/06 14:36

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0296
COC #:

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP07952 - EPA 5030 Soil MS										
LCS (CP07952-BS1)				Prepared & Analyzed: 10/13/06						
Methyl tert-butyl ether	48.7	5.0	µg/kg	50.0		97.4	60-140		30	
Surrogate: Toluene-d8	*49.7*		"	*50.0*		*99.4*	*60-140*			
LCS Dup (CP07952-BSD1)				Prepared & Analyzed: 10/13/06						
Methyl tert-butyl ether	51.8	5.0	µg/kg	50.0		104	60-140	6.17	30	
Surrogate: Toluene-d8	*49.6*		"	*50.0*		*99.2*	*60-140*			
Matrix Spike (CP07952-MS1)	**Source: CPJ0296-01**			Prepared & Analyzed: 10/13/06						
Methyl tert-butyl ether	45.2	5.0	µg/kg	50.0	ND	90.4	60-140		30	
Surrogate: Toluene-d8	*49.0*		"	*50.0*		*98.0*	*60-140*			
Matrix Spike Dup (CP07952-MSD1)	**Source: CPJ0296-01**			Prepared & Analyzed: 10/13/06						
Methyl tert-butyl ether	49.6	5.0	µg/kg	50.0	ND	99.2	60-140	9.28	30	
Surrogate: Toluene-d8	*50.5*		"	*50.0*		*101*	*60-140*			

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10/16/06 14:36

GEOLOGICAL TECHNICS INC. 1101 7th St. MODESTO, CA 95354	Project: Sullins Project Number: 1262.2 Project Manager: Joe Angulo	**CLS Work Order #: CPJ0296** COC #:

Notes and Definitions

QS-4	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
D-DSL	Although sample contains compounds in the retention time range associated with diesel, the chromatogram was not consistent with the expected chromatographic pattern or "fingerprint". However, the reported concentration is based on diesel.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

COPY

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3249 Fitzgerald Road Rancho Cordova, CA 95742

October 18, 2006

CLS Work Order #: CPJ0452
COC #:

Joe Angulo
GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project Name: Sullins

Enclosed are the results of analyses for samples received by the laboratory on 10/11/06 17:00. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

James Liang, Ph.D.
Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

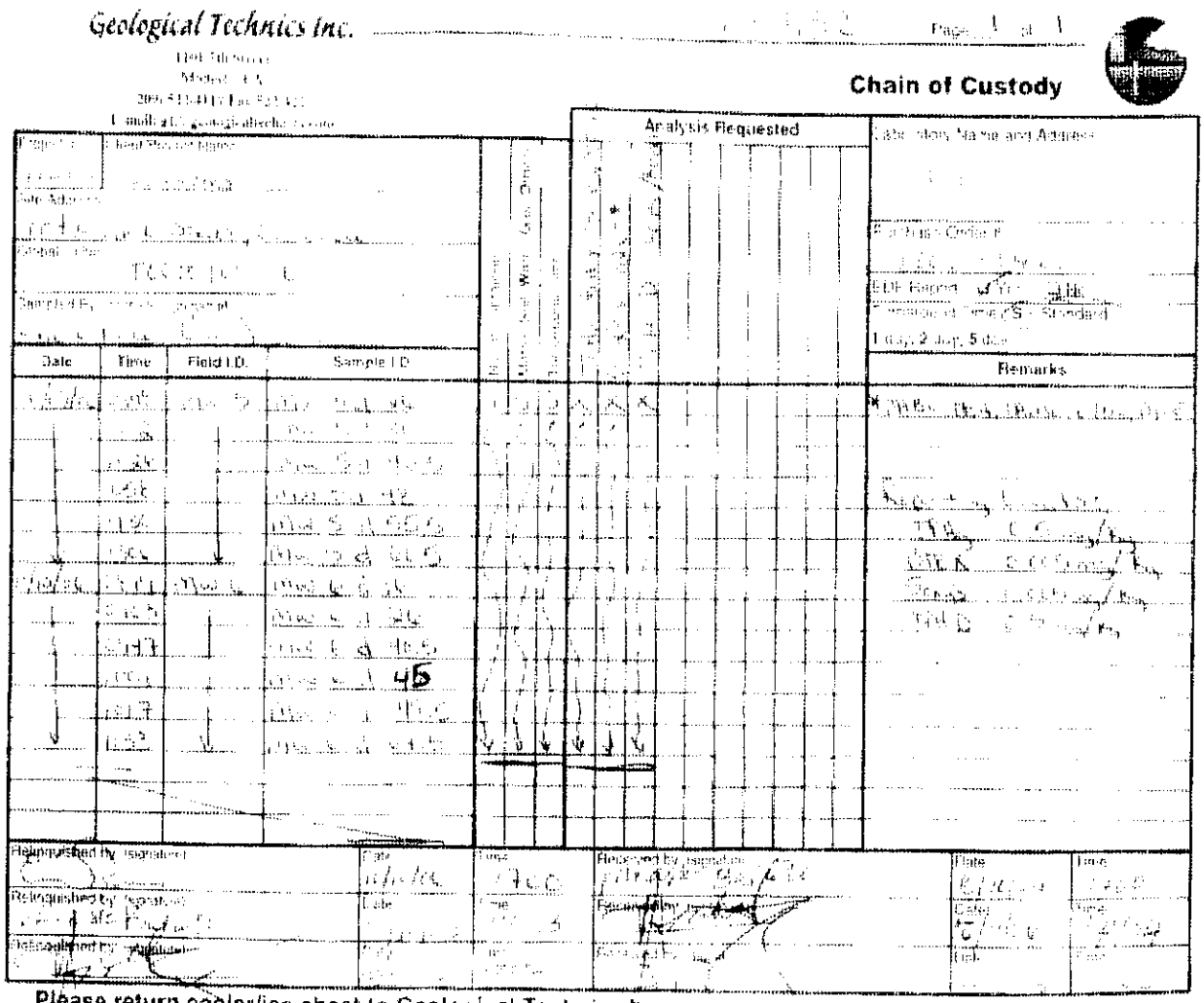
CALIFORNIA LABORATORY SERVICES

10/18/06 15:26

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0452
COC #:



CALIFORNIA LABORATORY SERVICES

10/18/06 15:26

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0452
COC #:

Extractable Petroleum Hydrocarbons by EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5D 26 (CPJ0452-01) Soil Sampled: 10/09/06 09:48 Received: 10/11/06 17:00									
Diesel	ND	1.0	mg/kg	1	CP07957	10/13/06	10/13/06	EPA 8015M	
MW-5D 36 (CPJ0452-02) Soil Sampled: 10/09/06 10:12 Received: 10/11/06 17:00									
Diesel	**1.1**	1.0	mg/kg	1	CP07957	10/13/06	10/13/06	EPA 8015M	D-DSL
MW-5D 40.5 (CPJ0452-03) Soil Sampled: 10/09/06 10:26 Received: 10/11/06 17:00									
Diesel	**360**	5.0	mg/kg	5	CP07957	10/13/06	10/13/06	EPA 8015M	D-DSL
MW-5D 48 (CPJ0452-04) Soil Sampled: 10/09/06 10:58 Received: 10/11/06 17:00									
Diesel	ND	1.0	mg/kg	1	CP07957	10/13/06	10/13/06	EPA 8015M	
MW-5D 55.5 (CPJ0452-05) Soil Sampled: 10/09/06 11:30 Received: 10/11/06 17:00									
Diesel	ND	1.0	mg/kg	1	CP07957	10/13/06	10/13/06	EPA 8015M	
MW-5D 66.5 (CPJ0452-06) Soil Sampled: 10/09/06 13:06 Received: 10/11/06 17:00									
Diesel	ND	1.0	mg/kg	1	CP07957	10/13/06	10/13/06	EPA 8015M	
MW-6D 16 (CPJ0452-07) Soil Sampled: 10/10/06 08:19 Received: 10/11/06 17:00									
Diesel	ND	1.0	mg/kg	1	CP07957	10/13/06	10/13/06	EPA 8015M	
MW-6D 66 (CPJ0452-08) Soil Sampled: 10/10/06 09:03 Received: 10/11/06 17:00									
Diesel	ND	1.0	mg/kg	1	CP07957	10/13/06	10/13/06	EPA 8015M	
MW-6D 40.5 (CPJ0452-09) Soil Sampled: 10/10/06 09:47 Received: 10/11/06 17:00									
Diesel	ND	1.0	mg/kg	1	CP07957	10/13/06	10/13/06	EPA 8015M	

CALIFORNIA LABORATORY SERVICES

10/18/06 15:26

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0452
COC #:

Extractable Petroleum Hydrocarbons by EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6D 45 (CPJ0452-10) Soil Sampled: 10/10/06 10:01 Received: 10/11/06 17:00									
Diesel	1.1	1.0	mg/kg	1	CP07957	10/13/06	10/13/06	EPA 8015M	D-DSL
MW-6D 49.5 (CPJ0452-11) Soil Sampled: 10/10/06 10:17 Received: 10/11/06 17:00									
Diesel	ND	1.0	mg/kg	1	CP07957	10/13/06	10/13/06	EPA 8015M	
MW-6D 67.5 (CPJ0452-12) Soil Sampled: 10/10/06 11:33 Received: 10/11/06 17:00									
Diesel	ND	1.0	mg/kg	1	CP07957	10/13/06	10/13/06	EPA 8015M	

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10/18/06 15:26

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0452
COC #:

Gas/BTEX by GC PID/FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5D 26 (CPJ0452-01) Soil Sampled: 10/09/06 09:48 Received: 10/11/06 17:00									
Gasoline	ND	1000	µg/kg	1	CP07987	10/16/06	10/16/06	8015M/8021B	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*120 %*	*65-135*		"	"	"	"	
MW-5D 36 (CPJ0452-02) Soil Sampled: 10/09/06 10:12 Received: 10/11/06 17:00									
Gasoline	**11000**	1000	µg/kg	1	CP07987	10/16/06	10/16/06	8015M/8021B	GAS-1
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	**21**	5.0	"	"	"	"	"	"	
Ethylbenzene	**31**	5.0	"	"	"	"	"	"	
Xylenes (total)	**35**	10	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*406 %*	*65-135*		"	"	"	"	*QS-4*
MW-5D 40.5 (CPJ0452-03) Soil Sampled: 10/09/06 10:26 Received: 10/11/06 17:00									
Gasoline	**110000**	20000	µg/kg	20	CP08025	10/18/06	10/18/06	8015M/8021B	
Benzene	**1100**	100	"	"	"	"	"	"	
Toluene	**1400**	100	"	"	"	"	"	"	
Ethylbenzene	**1200**	100	"	"	"	"	"	"	
Xylenes (total)	**5700**	200	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*77.0 %*	*65-135*		"	"	"	"	
MW-5D 48 (CPJ0452-04) Soil Sampled: 10/09/06 10:58 Received: 10/11/06 17:00									
Gasoline	**7600**	1000	µg/kg	1	CP07987	10/16/06	10/16/06	8015M/8021B	
Benzene	**190**	5.0	"	"	"	"	"	"	
Toluene	**25**	5.0	"	"	"	"	"	"	
Ethylbenzene	**67**	5.0	"	"	"	"	"	"	
Xylenes (total)	**160**	10	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*82.7 %*	*65-135*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

10/18/06 15:26

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0452
COC #:

Gas/BTEX by GC PID/FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5D 55.5 (CPJ0452-05) Soil Sampled: 10/09/06 11:30 Received: 10/11/06 17:00									
Gasoline	**75000**	20000	µg/kg	20	CP08025	10/18/06	10/18/06	8015M/8021B	
Benzene	**180**	100	"	"	"	"	"	"	
Toluene	**130**	100	"	"	"	"	"	"	
Ethylbenzene	**670**	100	"	"	"	"	"	"	
Xylenes (total)	**530**	200	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*138 %*	*65-135*		"	"	"	"	*QS-4*
MW-5D 66.5 (CPJ0452-06) Soil Sampled: 10/09/06 13:06 Received: 10/11/06 17:00									
Gasoline	ND	1000	µg/kg	1	CP07987	10/16/06	10/16/06	8015M/8021B	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*99.4 %*	*65-135*		"	"	"	"	
MW-6D 16 (CPJ0452-07) Soil Sampled: 10/10/06 08:19 Received: 10/11/06 17:00									
Gasoline	ND	1000	µg/kg	1	CP07987	10/16/06	10/16/06	8015M/8021B	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*125 %*	*65-135*		"	"	"	"	
MW-6D 66 (CPJ0452-08) Soil Sampled: 10/10/06 09:03 Received: 10/11/06 17:00									
Gasoline	ND	1000	µg/kg	1	CP07987	10/16/06	10/16/06	8015M/8021B	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*128 %*	*65-135*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

10/18/06 15:26

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0452
COC #:

Gas/BTEX by GC PID/FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6D 40.5 (CPJ0452-09) Soil Sampled: 10/10/06 09:47 Received: 10/11/06 17:00									
Gasoline	ND	1000	µg/kg	1	CP07987	10/16/06	10/16/06	8015M/8021B	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*131 %*	*65-135*		"	"	"	"	
MW-6D 45 (CPJ0452-10) Soil Sampled: 10/10/06 10:01 Received: 10/11/06 17:00									
Gasoline	**7200**	1000	µg/kg	1	CP07987	10/16/06	10/16/06	8015M/8021B	GAS-1
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	**22**	5.0	"	"	"	"	"	"	
Ethylbenzene	**14**	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*112 %*	*65-135*		"	"	"	"	
MW-6D 49.5 (CPJ0452-11) Soil Sampled: 10/10/06 10:17 Received: 10/11/06 17:00									
Gasoline	**1200**	1000	µg/kg	1	CP07987	10/16/06	10/16/06	8015M/8021B	GAS-1
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	**9.1**	5.0	"	"	"	"	"	"	
Ethylbenzene	**5.2**	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*147 %*	*65-135*		"	"	"	"	*QS-4*
MW-6D 67.5 (CPJ0452-12) Soil Sampled: 10/10/06 11:33 Received: 10/11/06 17:00									
Gasoline	ND	1000	µg/kg	1	CP07987	10/16/06	10/16/06	8015M/8021B	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*129 %*	*65-135*		"	"	"	"	

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0452
COC #:

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5D 26 (CPJ0452-01) Soil Sampled: 10/09/06 09:48 Received: 10/11/06 17:00									
Di-isopropyl ether	ND	5.0	µg/kg	1	CP08052	10/17/06	10/18/06	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Surrogate: Toluene-d8		*95.0 %*	*60-140*		"	"	"	"	
MW-5D 36 (CPJ0452-02) Soil Sampled: 10/09/06 10:12 Received: 10/11/06 17:00									
Di-isopropyl ether	ND	5.0	µg/kg	1	CP08002	10/11/06	10/17/06	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Surrogate: Toluene-d8		*99.2 %*	*60-140*		"	"	"	"	
MW-5D 40.5 (CPJ0452-03) Soil Sampled: 10/09/06 10:26 Received: 10/11/06 17:00									**QRL-5**
Di-isopropyl ether	ND	250	µg/kg	50	CP08052	10/17/06	10/18/06	EPA 8260B	
Ethyl tert-butyl ether	ND	250	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	250	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	250	"	"	"	"	"	"	
Tert-butyl alcohol	ND	2500	"	"	"	"	"	"	
Surrogate: Toluene-d8		*96.2 %*	*60-140*		"	"	"	"	
MW-5D 48 (CPJ0452-04) Soil Sampled: 10/09/06 10:58 Received: 10/11/06 17:00									
Di-isopropyl ether	ND	5.0	µg/kg	1	CP08052	10/17/06	10/18/06	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*60-140*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

10/18/06 15:26

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0452
COC #:

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5D 55.5 (CPJ0452-05) Soil Sampled: 10/09/06 11:30 Received: 10/11/06 17:00									
Di-isopropyl ether	ND	5.0	µg/kg	1	CP08052	10/17/06	10/18/06	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Surrogate: Toluene-d8		*98.2 %*	*60-140*		"	"	"	"	
MW-5D 66.5 (CPJ0452-06) Soil Sampled: 10/09/06 13:06 Received: 10/11/06 17:00									
Di-isopropyl ether	ND	5.0	µg/kg	1	CP08052	10/17/06	10/18/06	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Surrogate: Toluene-d8		*95.8 %*	*60-140*		"	"	"	"	
MW-6D 16 (CPJ0452-07) Soil Sampled: 10/10/06 08:19 Received: 10/11/06 17:00									
Di-isopropyl ether	ND	5.0	µg/kg	1	CP08002	10/11/06	10/17/06	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Surrogate: Toluene-d8		*94.6 %*	*60-140*		"	"	"	"	
MW-6D 66 (CPJ0452-08) Soil Sampled: 10/10/06 09:03 Received: 10/11/06 17:00									
Di-isopropyl ether	ND	5.0	µg/kg	1	CP08052	10/17/06	10/18/06	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Surrogate: Toluene-d8		*95.0 %*	*60-140*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

10/18/06 15:26

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0452
COC #:

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6D 40.5 (CPJ0452-09) Soil Sampled: 10/10/06 09:47 Received: 10/11/06 17:00									
Di-isopropyl ether	ND	5.0	µg/kg	1	CP08052	10/17/06	10/18/06	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Surrogate: Toluene-d8		*96.0 %*	*60-140*		"	"	"	"	
MW-6D 45 (CPJ0452-10) Soil Sampled: 10/10/06 10:01 Received: 10/11/06 17:00									
Di-isopropyl ether	ND	5.0	µg/kg	1	CP08052	10/17/06	10/18/06	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Surrogate: Toluene-d8		*101 %*	*60-140*		"	"	"	"	
MW-6D 49.5 (CPJ0452-11) Soil Sampled: 10/10/06 10:17 Received: 10/11/06 17:00									
Di-isopropyl ether	ND	5.0	µg/kg	1	CP08052	10/17/06	10/18/06	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Surrogate: Toluene-d8		*95.4 %*	*60-140*		"	"	"	"	
MW-6D 67.5 (CPJ0452-12) Soil Sampled: 10/10/06 11:33 Received: 10/11/06 17:00									
Di-isopropyl ether	ND	5.0	µg/kg	1	CP08052	10/17/06	10/18/06	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Surrogate: Toluene-d8		*96.4 %*	*60-140*		"	"	"	"	

CALIFORNIA LABORATORY SERVICES

10/18/06 15:26

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0452
COC #:

Extractable Petroleum Hydrocarbons by EPA Method 8015M - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP07957 - LUFT-DHS GCNV										
Blank (CP07957-BLK1)				Prepared & Analyzed: 10/13/06						
Diesel	ND	1.0	mg/kg							
Motor Oil	ND	1.0	"							
Hydraulic Oil	ND	1.0	"							
Mineral Oil	ND	1.0	"							
Kerosene	ND	1.0	"							
LCS (CP07957-BS1)				Prepared & Analyzed: 10/13/06						
Diesel	43.9	1.0	mg/kg	50.0		87.8	65-135		30	
LCS Dup (CP07957-BSD1)				Prepared & Analyzed: 10/13/06						
Diesel	57.8	1.0	mg/kg	50.0		116	65-135	27.3	30	
Matrix Spike (CP07957-MS1)	**Source: CPJ0452-05**			Prepared & Analyzed: 10/13/06						
Diesel	46.6	1.0	mg/kg	50.0	0.18	92.8	59-138		37	
Matrix Spike Dup (CP07957-MSD1)	**Source: CPJ0452-05**			Prepared & Analyzed: 10/13/06						
Diesel	47.7	1.0	mg/kg	50.0	0.18	95.0	59-138	2.33	37	

GEOLOGICAL TECHNICS INC	Project: Sullins	
1101 7th St.	Project Number: 1262.2	**CLS Work Order #: CPJ0452**
MODESTO, CA 95354	Project Manager: Joe Angulo	COC #:

Gas/BTEX by GC PID/FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP07987 - EPA 5030 Soil GC										
Blank (CP07987-BLK1)				Prepared & Analyzed: 10/16/06						
Gasoline	ND	1000	µg/kg							
Benzene	ND	5.0	"							
Toluene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
Xylenes (total)	ND	10	"							
Surrogate: o-Chlorotoluene (BTEX)	*134*		"	*100*		*134*	*65-135*			
Surrogate: o-Chlorotoluene (Gas)	*124*		"	*100*		*124*	*65-135*			
LCS (CP07987-BS1)				Prepared & Analyzed: 10/16/06						
Gasoline	2360	1000	µg/kg	2500		94.4	65-135		30	
Surrogate: o-Chlorotoluene (Gas)	*128*		"	*100*		*128*	*65-135*			
LCS Dup (CP07987-BSD1)				Prepared & Analyzed: 10/16/06						
Gasoline	2500	1000	µg/kg	2500		100	65-135	5.76	30	
Surrogate: o-Chlorotoluene (Gas)	*123*		"	*100*		*123*	*65-135*			
Matrix Spike (CP07987-MS1)	**Source: CPJ0448-12**			Prepared & Analyzed: 10/16/06						
Gasoline	2300	1000	µg/kg	2500	ND	92.0	63-124		35	
Surrogate: o-Chlorotoluene (Gas)	*124*		"	*100*		*124*	*65-135*			
Matrix Spike Dup (CP07987-MSD1)	**Source: CPJ0448-12**			Prepared & Analyzed: 10/16/06						
Gasoline	2220	1000	µg/kg	2500	ND	88.8	63-124	3.54	35	
Surrogate: o-Chlorotoluene (Gas)	*122*		"	*100*		*122*	*65-135*			
Batch CP08025 - EPA 5030 Soil GC										
Blank (CP08025-BLK1)				Prepared & Analyzed: 10/18/06						
Gasoline	ND	1000	µg/kg							
Benzene	ND	5.0	"							
Toluene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
Xylenes (total)	ND	10	"							

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10/18/06 15:26

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0452
COC #:

Gas/BTEX by GC PID/FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP08025 - EPA 5030 Soil GC										
Blank (CP08025-BLK1)				Prepared & Analyzed: 10/18/06						
Surrogate: o-Chlorotoluene (BTEX)	*136*		*µg/kg*	*100*		*136*	*65-135*			*QS-HI*
Surrogate: o-Chlorotoluene (Gas)	*121*		"	*100*		*121*	*65-135*			
LCS (CP08025-BS1)				Prepared & Analyzed: 10/18/06						
Gasoline	2180	1000	µg/kg	2500		87.2	65-135		30	
Surrogate: o-Chlorotoluene (Gas)	*125*		"	*100*		*125*	*65-135*			
LCS Dup (CP08025-BSD1)				Prepared & Analyzed: 10/18/06						
Gasoline	2260	1000	µg/kg	2500		90.4	65-135	3.60	30	
Surrogate: o-Chlorotoluene (Gas)	*129*		"	*100*		*129*	*65-135*			
Matrix Spike (CP08025-MS1)	**Source: CPJ0531-08**			Prepared & Analyzed: 10/18/06						
Gasoline	2020	1000	µg/kg	2500	ND	80.8	63-124		35	
Surrogate: o-Chlorotoluene (Gas)	*131*		"	*100*		*131*	*65-135*			
Matrix Spike Dup (CP08025-MSD1)	**Source: CPJ0531-08**			Prepared & Analyzed: 10/18/06						
Gasoline	2030	1000	µg/kg	2500	ND	81.2	63-124	0.494	35	
Surrogate: o-Chlorotoluene (Gas)	*120*		"	*100*		*120*	*65-135*			

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GEOLOGICAL TECHNICS INC
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0452
COC #:

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP08002 - EPA 5030 Soil MS										
Blank (CP08002-BLK1)				Prepared: 10/16/06 Analyzed: 10/17/06						
Di-isopropyl ether	ND	5.0	µg/kg							
Ethyl tert-butyl ether	ND	5.0	"							
Methyl tert-butyl ether	ND	5.0	"							
tert-Amyl methyl ether	ND	5.0	"							
Tert-butyl alcohol	ND	50	"							
Surrogate: Toluene-d8	*48.4*		"	*50.0*		*96.8*	*60-140*			
LCS (CP08002-BS1)				Prepared: 10/16/06 Analyzed: 10/17/06						
Methyl tert-butyl ether	42.5	5.0	µg/kg	50.0		85.0	60-140		30	
Surrogate: Toluene-d8	*49.1*		"	*50.0*		*98.2*	*60-140*			
LCS Dup (CP08002-BSD1)				Prepared: 10/16/06 Analyzed: 10/17/06						
Methyl tert-butyl ether	44.6	5.0	µg/kg	50.0		89.2	60-140	4.82	30	
Surrogate: Toluene-d8	*47.5*		"	*50.0*		*95.0*	*60-140*			
Matrix Spike (CP08002-MS1)	**Source: CPJ0685-05**			Prepared: 10/16/06 Analyzed: 10/17/06						
Methyl tert-butyl ether	35.3	5.0	µg/kg	50.0	ND	70.6	60-140		30	
Surrogate: Toluene-d8	*46.5*		"	*50.0*		*93.0*	*60-140*			
Matrix Spike Dup (CP08002-MSD1)	**Source: CPJ0685-05**			Prepared: 10/16/06 Analyzed: 10/17/06						
Methyl tert-butyl ether	34.1	5.0	µg/kg	50.0	ND	68.2	60-140	3.46	30	
Surrogate: Toluene-d8	*45.0*		"	*50.0*		*90.0*	*60-140*			
Batch CP08052 - EPA 5030 Soil MS										
Blank (CP08052-BLK1)				Prepared: 10/17/06 Analyzed: 10/18/06						
Di-isopropyl ether	ND	5.0	µg/kg							
Ethyl tert-butyl ether	ND	5.0	"							
Methyl tert-butyl ether	ND	5.0	"							
tert-Amyl methyl ether	ND	5.0	"							
Tert-butyl alcohol	ND	50	"							
Surrogate: Toluene-d8	*48.0*		"	*50.0*		*96.0*	*60-140*			

CALIFORNIA LABORATORY SERVICES

10/18/06 15:26

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0452
COC #:

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP08052 - EPA 5030 Soil MS										
LCS (CP08052-BS1)				Prepared: 10/17/06 Analyzed: 10/18/06						
Methyl tert-butyl ether	20.3	5.0	µg/kg	18.0		113	60-140		30	
Surrogate: Toluene-d8	*49.9*		"	*50.0*		*99.8*	*60-140*			
LCS Dup (CP08052-BSD1)				Prepared: 10/17/06 Analyzed: 10/18/06						
Methyl tert-butyl ether	21.5	5.0	µg/kg	18.0		119	60-140	5.74	30	
Surrogate: Toluene-d8	*50.0*		"	*50.0*		*100*	*60-140*			
Matrix Spike (CP08052-MS1)		**Source: CPJ0452-09**		Prepared: 10/17/06 Analyzed: 10/18/06						
Methyl tert-butyl ether	45.9	5.0	µg/kg	50.0	ND	91.8	60-140		30	
Surrogate: Toluene-d8	*47.6*		"	*50.0*		*95.2*	*60-140*			
Matrix Spike Dup (CP08052-MSD1)		**Source: CPJ0452-09**		Prepared: 10/17/06 Analyzed: 10/18/06						
Methyl tert-butyl ether	46.7	5.0	µg/kg	50.0	ND	93.4	60-140	1.73	30	
Surrogate: Toluene-d8	*47.4*		"	*50.0*		*94.8*	*60-140*			

CALIFORNIA LABORATORY SERVICES

10/18/06 15:26

GEOLOGICAL TECHNICS INC.	Project: Sullins	
1101 7th St.	Project Number: 1262.2	**CLS Work Order #: CPJ0452**
MODESTO, CA 95354	Project Manager: Joe Angulo	COC #:

Notes and Definitions

QS-HI	Surrogate recovery was greater than the upper control limit. A reanalysis was not performed since the analytes associated with the surrogate were not detected.
QS-4	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QRL-5	The sample was diluted due to the presence of high levels of non-target analytes or matrix interference resulting in elevated reporting limits.
GAS-1	Although sample contains compounds in the retention time range associated with gasoline, the chromatogram was not consistent with the expected chromatographic pattern or "fingerprint". However, the reported concentration is based on gasoline.
D-DSL	Although sample contains compounds in the retention time range associated with diesel, the chromatogram was not consistent with the expected chromatographic pattern or "fingerprint". However, the reported concentration is based on diesel.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

COPY

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3249 Fitzgerald Road Rancho Cordova, CA 95742

October 18, 2006

CLS Work Order #: CPJ0448
COC #:

Joe Angulo
GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project Name: Sullins

Enclosed are the results of analyses for samples received by the laboratory on 10/11/06 17:00. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,

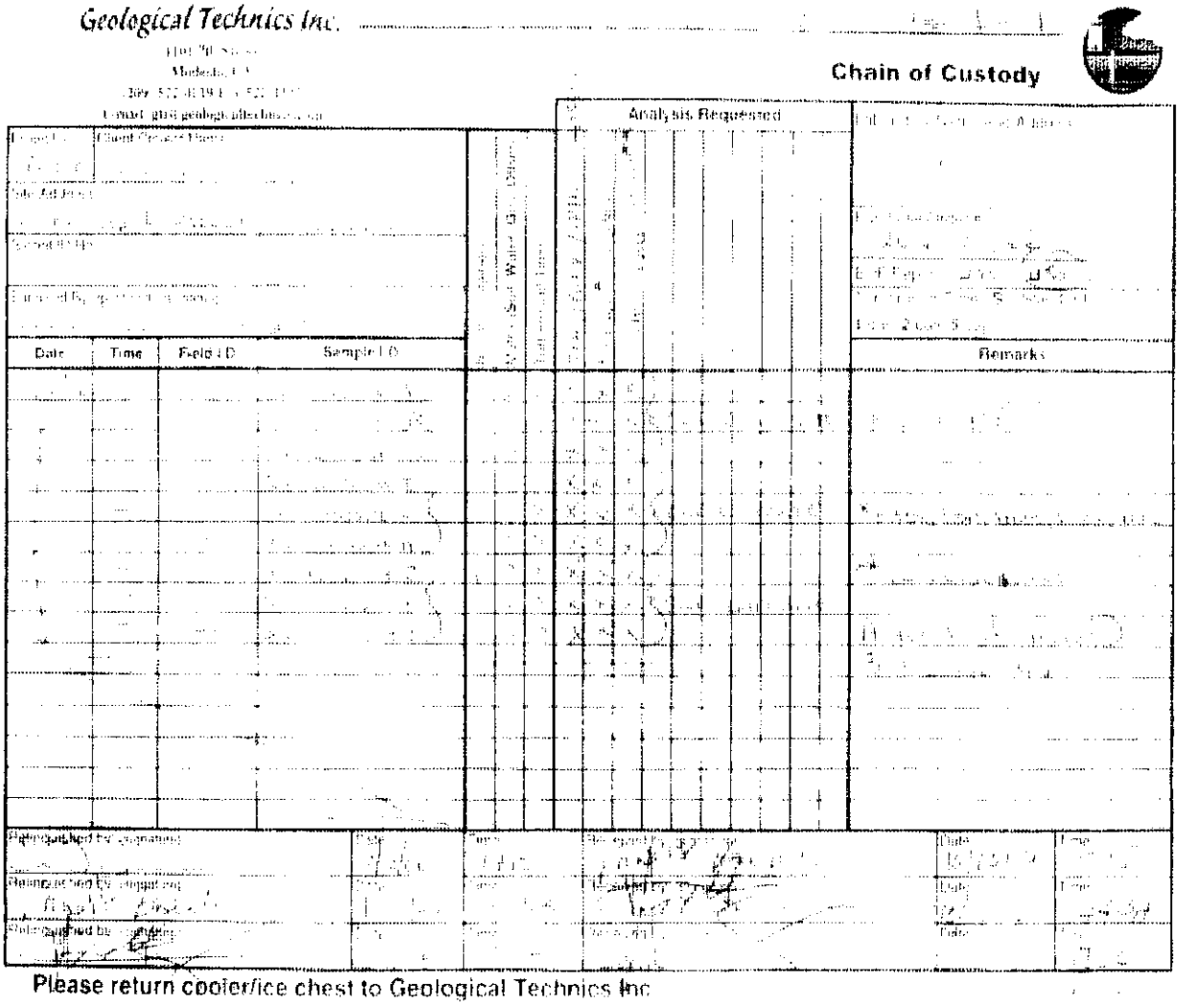
James Liang, Ph.D.
Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

CALIFORNIA LABORATORY SERVICES

10/18/06 15:59

GEOLOGICAL TECHNICS INC.	Project: Sullins	
1101 7th St.	Project Number: 1262.2	**CLS Work Order #: CPJ0448**
MODESTO, CA 95354	Project Manager: Joe Angulo	COC #:



Geological Technics Inc.

Chain of Custody

Analysis Requested

Date	Time	Field I.D	Sample I.D	Remarks

Please return cooler/ice chest to Geological Technics Inc

CALIFORNIA LABORATORY SERVICES

10/18/06 15:59

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0448
COC #:

Extractable Petroleum Hydrocarbons by EPA Method 8015M

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Composite Soil Composite A-D-G (CPJ0448-04) Soil	**Sampled: 10/10/06 00:00**		**Received: 10/11/06 17:00**						
Diesel	ND	1.0	mg/kg	1	CP07957	10/13/06	10/13/06	EPA 8015M	
Composite Soil Composite B-E-H (CPJ0448-08) Soil	**Sampled: 10/10/06 00:00**		**Received: 10/11/06 17:00**						
Diesel	**4.2**	1.0	mg/kg	1	CP07957	10/13/06	10/13/06	EPA 8015M	D-DSI
Composite Soil Composite C-F-I (CPJ0448-12) Soil	**Sampled: 10/10/06 00:00**		**Received: 10/11/06 17:00**						
Diesel	ND	1.0	mg/kg	1	CP07957	10/13/06	10/13/06	EPA 8015M	

CALIFORNIA LABORATORY SERVICES

10/18/06 15:59

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0448
COC #:

Gas/BTEX by GC PID/FID

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Composite Soil Composite A-D-G (CPJ0448-04) Soil	**Sampled: 10/10/06 00:00**		**Received: 10/11/06 17:00**						
Gasoline	**6200**	1000	µg/kg	1	CP07987	10/16/06	10/16/06	8015M/8021B	GAS-1
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	**13**	5.0	"	"	"	"	"	"	
Ethylbenzene	**15**	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*113 %*	*65-135*		"	"	"	"	
Composite Soil Composite B-E-H (CPJ0448-08) Soil	**Sampled: 10/10/06 00:00**		**Received: 10/11/06 17:00**						
Gasoline	**12000**	1000	µg/kg	1	CP07987	10/16/06	10/16/06	8015M/8021B	GAS-1
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	**22**	5.0	"	"	"	"	"	"	
Xylenes (total)	**69**	10	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*439 %*	*65-135*		"	"	"	"	*QS-4*
Composite Soil Composite C-F-I (CPJ0448-12) Soil	**Sampled: 10/10/06 00:00**		**Received: 10/11/06 17:00**						
Gasoline	ND	1000	µg/kg	1	CP07987	10/16/06	10/16/06	8015M/8021B	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	10	"	"	"	"	"	"	
Surrogate: o-Chlorotoluene (Gas)		*106 %*	*65-135*		"	"	"	"	

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10/18/06 15:59

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0448
COC #:

Metals by EPA 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Composite Soil Composite A-D-G (CPJ0448-04) Soil	**Sampled: 10/10/06 00:00**		**Received: 10/11/06 17:00**						
Lead	ND	2.5	mg/kg	1	CP07998	10/16/06	10/17/06	EPA 6010B	
Composite Soil Composite B-E-H (CPJ0448-08) Soil	**Sampled: 10/10/06 00:00**		**Received: 10/11/06 17:00**						
Lead	**6.9**	2.5	mg/kg	1	CP07998	10/16/06	10/17/06	EPA 6010B	
Composite Soil Composite C-F-I (CPJ0448-12) Soil	**Sampled: 10/10/06 00:00**		**Received: 10/11/06 17:00**						
Lead	ND	2.5	mg/kg	1	CP07998	10/16/06	10/17/06	EPA 6010B	

CALIFORNIA LABORATORY SERVICES

10/18/06 15:59

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0448
COC #:

Volatile Organic Compounds by EPA Method 8260B

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Composite Soil Composite A-D-G (CPJ0448-04) Soil	**Sampled: 10/10/06 00:00**		**Received: 10/11/06 17:00**						
Di-isopropyl ether	ND	5.0	µg/kg	1	CP08002	10/11/06	10/17/06	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Surrogate: Toluene-d8		*102 %*	*60-140*		"	"	"	"	
Composite Soil Composite B-E-H (CPJ0448-08) Soil	**Sampled: 10/10/06 00:00**		**Received: 10/11/06 17:00**						
Di-isopropyl ether	ND	5.0	µg/kg	1	CP08002	10/11/06	10/18/06	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Surrogate: Toluene-d8		*107 %*	*60-140*		"	"	"	"	
Composite Soil Composite C-F-I (CPJ0448-12) Soil	**Sampled: 10/10/06 00:00**		**Received: 10/11/06 17:00**						
Di-isopropyl ether	ND	5.0	µg/kg	1	CP08002	10/11/06	10/17/06	EPA 8260B	
Ethyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	5.0	"	"	"	"	"	"	
tert-Amyl methyl ether	ND	5.0	"	"	"	"	"	"	
Tert-butyl alcohol	ND	50	"	"	"	"	"	"	
Surrogate: Toluene-d8		*94.0 %*	*60-140*		"	"	"	"	

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10/18/06 15:59

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0448
COC #:

Extractable Petroleum Hydrocarbons by EPA Method 8015M - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP07957 - LUFT-DHS GCNV										
Blank (CP07957-BLK1)				Prepared & Analyzed: 10/13/06						
Diesel	ND	1.0	mg/kg							
Motor Oil	ND	1.0	"							
Hydraulic Oil	ND	1.0	"							
Mineral Oil	ND	1.0	"							
Kerosene	ND	1.0	"							
LCS (CP07957-BS1)				Prepared & Analyzed: 10/13/06						
Diesel	43.9	1.0	mg/kg	50.0		87.8	65-135		30	
LCS Dup (CP07957-BSD1)				Prepared & Analyzed: 10/13/06						
Diesel	57.8	1.0	mg/kg	50.0		116	65-135	27.3	30	
Matrix Spike (CP07957-MS1)		**Source: CPJ0452-05**		Prepared & Analyzed: 10/13/06						
Diesel	46.6	1.0	mg/kg	50.0	0.18	92.8	59-138		37	
Matrix Spike Dup (CP07957-MSD1)		**Source: CPJ0452-05**		Prepared & Analyzed: 10/13/06						
Diesel	47.7	1.0	mg/kg	50.0	0.18	95.0	59-138	2.33	37	

CALIFORNIA LABORATORY SERVICES

10/18/06 15:59

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0448
COC #:

Gas/BTEX by GC PID/FID - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP07987 - EPA 5030 Soil GC										
Blank (CP07987-BLK1)				Prepared & Analyzed: 10/16/06						
Gasoline	ND	1000	µg/kg							
Benzene	ND	5.0	"							
Toluene	ND	5.0	"							
Ethylbenzene	ND	5.0	"							
Xylenes (total)	ND	10	"							
Surrogate: o-Chlorotoluene (BTEX)	*134*		"	*100*		*134*	*65-135*			
Surrogate: o-Chlorotoluene (Gas)	*124*		"	*100*		*124*	*65-135*			
LCS (CP07987-BS1)				Prepared & Analyzed: 10/16/06						
Gasoline	2360	1000	µg/kg	2500		94.4	65-135		30	
Surrogate: o-Chlorotoluene (Gas)	*128*		"	*100*		*128*	*65-135*			
LCS Dup (CP07987-BSD1)				Prepared & Analyzed: 10/16/06						
Gasoline	2500	1000	µg/kg	2500		100	65-135	5.76	30	
Surrogate: o-Chlorotoluene (Gas)	*123*		"	*100*		*123*	*65-135*			
Matrix Spike (CP07987-MS1)	**Source: CPJ0448-12**			Prepared & Analyzed: 10/16/06						
Gasoline	2300	1000	µg/kg	2500	ND	92.0	63-124		35	
Surrogate: o-Chlorotoluene (Gas)	*124*		"	*100*		*124*	*65-135*			
Matrix Spike Dup (CP07987-MSD1)	**Source: CPJ0448-12**			Prepared & Analyzed: 10/16/06						
Gasoline	2220	1000	µg/kg	2500	ND	88.8	63-124	3.54	35	
Surrogate: o-Chlorotoluene (Gas)	*122*		"	*100*		*122*	*65-135*			

CALIFORNIA LABORATORY SERVICES

10/18/06 15:59

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0448
COC #:

Metals by EPA 6000/7000 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP07998 - EPA 3050B										
Blank (CP07998-BLK1)				Prepared: 10/16/06 Analyzed: 10/17/06						
Lead	ND	2.5	mg/kg							
LCS (CP07998-BS1)				Prepared: 10/16/06 Analyzed: 10/17/06						
Lead	23.2	2.5	mg/kg	25.0		92.8	75-125		25	
LCS Dup (CP07998-BSD1)				Prepared: 10/16/06 Analyzed: 10/17/06						
Lead	23.0	2.5	mg/kg	25.0		92.0	75-125	0.866	25	
Matrix Spike (CP07998-MS1)	**Source: CPJ0403-01**			Prepared: 10/16/06 Analyzed: 10/17/06						
Lead	65.6	2.5	mg/kg	25.0	15	202	75-125		30	QM-5
Matrix Spike Dup (CP07998-MSD1)	**Source: CPJ0403-01**			Prepared: 10/16/06 Analyzed: 10/17/06						
Lead	79.4	2.5	mg/kg	25.0	15	258	75-125	19.0	30	QM-5

CALIFORNIA LABORATORY SERVICES

10/18/06 15:59

GEOLOGICAL TECHNICS INC.
1101 7th St.
MODESTO, CA 95354

Project: Sullins
Project Number: 1262.2
Project Manager: Joe Angulo

CLS Work Order #: CPJ0448
COC #:

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch CP08002 - EPA 5030 Soil MS										
Blank (CP08002-BLK1)				Prepared: 10/16/06 Analyzed: 10/17/06						
Di-isopropyl ether	ND	5.0	µg/kg							
Ethyl tert-butyl ether	ND	5.0	"							
Methyl tert-butyl ether	ND	5.0	"							
tert-Amyl methyl ether	ND	5.0	"							
Tert-butyl alcohol	ND	50	"							
Surrogate: Toluene-d8	*48.4*		"	*50.0*		*96.8*	*60-140*			
LCS (CP08002-BS1)				Prepared: 10/16/06 Analyzed: 10/17/06						
Methyl tert-butyl ether	42.5	5.0	µg/kg	50.0		85.0	60-140		30	
Surrogate: Toluene-d8	*49.1*		"	*50.0*		*98.2*	*60-140*			
LCS Dup (CP08002-BSD1)				Prepared: 10/16/06 Analyzed: 10/17/06						
Methyl tert-butyl ether	44.6	5.0	µg/kg	50.0		89.2	60-140	4.82	30	
Surrogate: Toluene-d8	*47.5*		"	*50.0*		*95.0*	*60-140*			
Matrix Spike (CP08002-MS1)	**Source: CPJ0685-05**			Prepared: 10/16/06 Analyzed: 10/17/06						
Methyl tert-butyl ether	35.3	5.0	µg/kg	50.0	ND	70.6	60-140		30	
Surrogate: Toluene-d8	*46.5*		"	*50.0*		*93.0*	*60-140*			
Matrix Spike Dup (CP08002-MSD1)	**Source: CPJ0685-05**			Prepared: 10/16/06 Analyzed: 10/17/06						
Methyl tert-butyl ether	34.1	5.0	µg/kg	50.0	ND	68.2	60-140	3.46	30	
Surrogate: Toluene-d8	*45.0*		"	*50.0*		*90.0*	*60-140*			

CALIFORNIA LABORATORY SERVICES

10/18/06 15:59

GEOLOGICAL TECHNICS INC.	Project: Sullins	
1101 7th St.	Project Number: 1262.2	**CLS Work Order #: CPJ0448**
MODESTO, CA 95354	Project Manager: Joe Angulo	COC #:

Notes and Definitions

QS-4	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
QM-5	The spike recovery was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
GAS-1	Although sample contains compounds in the retention time range associated with gasoline, the chromatogram was not consistent with the expected chromatographic pattern or "fingerprint". However, the reported concentration is based on gasoline.
D-DSL	Although sample contains compounds in the retention time range associated with diesel, the chromatogram was not consistent with the expected chromatographic pattern or "fingerprint". However, the reported concentration is based on diesel.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Appendix C

Boring Logs

Geological Technics Inc.

1101 7th Street
Modesto, CA 95354
209.522.4119
209.522.4227 (fax)
gti@geologicaltechnics.com

UNIFIED SOIL CLASSIFICATION AND SYMBOL CHART

COARSE-GRAINED SOILS (more than 50% of material is larger than No. 200 sieve size.)			
GRAVELS More than 50% of coarse fraction larger than No. 4 sieve size	Clean Gravels (Less than 5% fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines
		GP	Poorly-graded gravels, gravel-sand mixtures, little or no fines
	Gravels with fines (More than 12% fines)	GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
SANDS 50% or more of coarse fraction smaller than No. 4 sieve size	Clean Sands (Less than 5% fines)	SW	Well-graded sands, gravelly sands, little or no fines
		SP	Poorly graded sands, gravelly sands, little or no fines
	Sands with fines (More than 12% fines)	SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures
FINE-GRAINED SOILS (50% or more of material is smaller than No. 200 sieve size.)			
SILTS AND CLAYS Liquid limit less than 50%		ML	Inorganic silts and very fine sands, rock flour, silty of clayey fine sands or clayey silts with slight plasticity
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
		OL	Organic silts and organic silty clays of low plasticity
SILTS AND CLAYS Liquid limit 50% or greater		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
		CH	Inorganic clays of high plasticity, fat clays
		OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS		PT	Peat and other highly organic soils

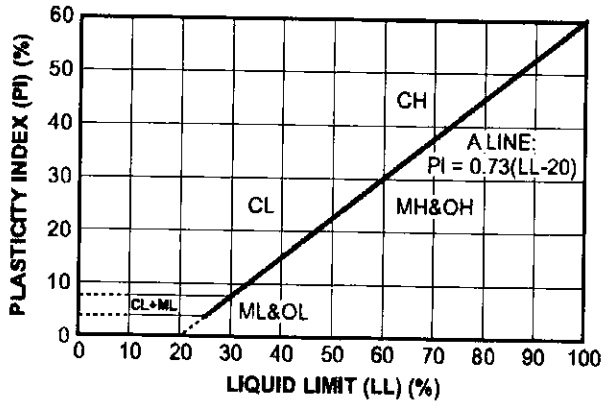
LABORATORY CLASSIFICATION CRITERIA

GW	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3	
GP	Not meeting all gradation requirements for GW	
GM	Atterberg limits below "A" line or P.I. less than 4	Above "A" line with P.I. between 4 and 7 are borderline cases requiring use of dual symbols
GC	Atterberg limits above "A" line with P.I. greater than 7	
SW	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{D_{30}}{D_{10} \times D_{60}}$ between 1 and 3	
SP	Not meeting all gradation requirements for GW	
SM	Atterberg limits below "A" line or P.I. less than 4	Limits plotting in shaded zone with P.I. between 4 and 7 are borderline cases requiring use of dual symbols.
SC	Atterberg limits above "A" line with P.I. greater than 7	

Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows:

Less than 5 percent ..... GW, GP, SW, SP
More than 12 percent ..... GM, GC, SM, SC
5 to 12 percent ..... Borderline cases requiring dual symbols

PLASTICITY CHART



Sullins
187 North L Street
Livermore, CA

Project No.: 1262.2

Geological Technics Inc.

LOG OF BORING MW-4

(Page 1 of 3)

Date	: 10/2/06
Drilling Method	: HSA
Driller	: Cascade
Logged By	: J. Angulo

Boring Dia.	: 8"
Tot. Depth	: 82'
Casing Depth	: 81.5'
Casing Dia.	: MCT
Screen Interval	: 30,50,65,75,80
Slot Size	: MCT
Filter Pack	: SEE LOG
Annular Seal	: SEE LOG
Grout	: 0-14'
Water Depth	: ~34'

Depth in Feet	Lab Sample	Time	Blow Count	DESCRIPTION	GRAPHIC	USCS	OVM (ppm)
0				3" Concrete			
				SANDY CLAYEY GRAVEL-pebbles to 2",dark brown to grey, moist 2-4', loose, no odor.		GP	
5		11:00	2 8 12	(as above- dry at 5', more clay than above)		GC	1
10		11:06	5 8 12	(as above but grey and wet)		GC	0
15	X	11:10	3 18 26	(as above but moist, lt.grey, with gasoline odor)		GC	415
20		11:17	7 7 12	(as above but w/more wet, plastic clay)		GC	454
				SANDY CLAYEY GRAVEL-uniform grey color,wet,pebbles <1/2",gas odor.		GP	
25		11:25	20 21 7	(as above with some orange Fe staining,wet)		GP	
30	X						

Well: MW-4
Elev.:

GROUT
SEAL
HEAVE/GRAVEL
SAND
SCREEN

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Sullins
187 North L Street
Livermore, CA

Project No.: 1262.2

Geological Technics Inc.

LOG OF BORING MW-4

(Page 2 of 3)

Date	: 10/2/06
Drilling Method	: HSA
Driller	: Cascade
Logged By	: J. Angulo

Boring Dia.	: 8"
Tot. Depth	: 82'
Casing Depth	: 81.5'
Casing Dia.	: MCT
Screen Interval	: 30,50,65,75,80
Slot Size	: MCT
Filter Pack	: SEE LOG
Annular Seal	: SEE LOG
Grout	: 0-14'
Water Depth	: ~34'

Well: MW-4
Elev.:

Depth in Feet	Lab Sample	Time	Blow Count	DESCRIPTION	GRAPHIC	USCS	OVM (ppm)
30	X	11:35	18 20 21			GP	445
35		11:45	13 21 28	(as above)		GP	251
40		11:55	3 4 8	SILTY CLAY- brown, moist, HC odor.		CL	237
				SANDY CLAY- very fine grained, wet, brown, HC odor.		CL	
45	X	12:05	20 13 7	SANDY CLAYEY SILT- brown, moist, firm, some 5mm pebbles, HC odor.		ML	459
50		12:15	3 9 26	CLAYEY SANDY GRAVEL-grey, wet, HC odor.		GC	273
		12:20	5 9 50	SILTY CLAY- brown, moist, HC odor.		CL	469
		13:30	7 7 7	SILTY SANDY CLAY- v fine to fine grained, wet, brown, HC odor.		CL	456
55		13:37	7 9 14	SILTY CLAY- brown with grey stained nodules, black 1/8" nodules, HC odor.		CL	75
		13:40	6 7 12	(as above but more mottled brown/grey color)		CL	79
		13:55	15 28 35	(as above)		CL	156
		14:02	7 13	GRAVELLY SANDY CLAY-mottled grey/brown, pebbles to 1", moist, HC odor.		CL	35
60							

SEAL
HEAVE/SAND
SCREEN
SEAL

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10-23-2006

Sullins
187 North L Street
Livermore, CA

Project No.: 1262.2

Geological Technics Inc.

LOG OF BORING MW-4

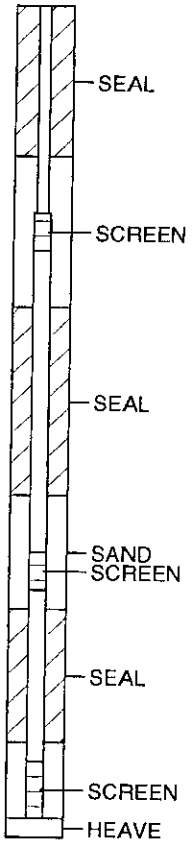
(Page 3 of 3)

Date : 10/2/06
Drilling Method : HSA
Driller : Cascade
Logged By : J. Angulo

Boring Dia. : 8"
Tot. Depth : 82'
Casing Depth : 81.5'
Casing Dia. : MCT
Screen Interval : 30,50,65,75,80
Slot Size : MCT
Filter Pack : SEE LOG
Annular Seal : SEE LOG
Grout : 0-14'
Water Depth : ~34'

Well: MW-4
Elev.:

Depth in Feet	Lab Sample	Time	Blow Count	DESCRIPTION	GRAPHIC	USCS	OVM (ppm)
60							
	X	14:02	16	(as above but more silty, gravels rare)		CL	35
			16			CL	
		14:12	24	(as above)		GC	466
			22				
		14:23	26	CLAYEY SANDY GRAVEL-grey-green, pebbles to 2",		GC	
			50-6"	wet, HC odor.			
			45				
		14:30	49	No recovery- 2" pebble stuck in front of sampler.		GC	260
65			50				
			25	(as above- less clay more coarse sand grains)			
		14:48	35			GC	
			50	(as above)			
			35			SP	
		14:55	50-6"	SAND- fine to coarse, wet, HC odor.		GC	41
			45	CLAYEY SANDY GRAVEL-grey-green, pebbles to 2",			
		15:05	50-6"	wet, HC odor.		GC	183
70			12	(as above)			
		15:16	35			GC	73
			42	(as above with 1" orange Fe stained v.coarse sand lens)			
			29				
		15:25	50-5"	(as above but more brown clay,less sand, pebbles to 1.5")		GC	
	X		9				
		15:30	19	CLAYEY SAND- v.coarse, uniform brown color, faint HC odor.		SC	8
			20				
75			7				
		15:42	7	CLAYEY SANDY GRAVEL-brown, wet, faint HC odor.		GC	8
			14				
			7				
		15:55	18	(as above but less clay, almost loose)		GC	5
			41				
			13				
		16:02	20	(as above)		GC	2
			41			CL	
			17	SANDY SILTY CLAY- uniform brown color, no odor.			
		16:11	28			CL	1
80	X		42	(as above- pebbles to 2")			
			28				
		16:18	50	(as above- some orange Fe staining).		CL	1
			50				
85							
90							



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10-23-2006

Sullins
187 North L Street
Livermore, CA

Project No.: 1262.2

Geological Technics Inc.

LOG OF BORING MW-5

(Page 1 of 3)

Date : 10/9/06
Drilling Method : HSA
Driller : Cascade
Logged By : E. Price

Boring Dia. : 8"
Tot. Depth : 68'
Casing Depth : 66.5'
Casing Dia. : MCT
Screen Interval : 27,37,48,66
Slot Size : MCT
Filter Pack : SEE LOG
Annular Seal : SEE LOG
Grout : 0-21.5'
Water Depth : ~34'

Well: MW-5
Elev.:

Depth in Feet	Lab Sample	Time	Blow Count	DESCRIPTION	GRAPHIC	USCS	OVM (ppm)
0				3" Road base gravel			
				SANDY CLAYEY GRAVEL- dark brown, moist, no odor.		GC	
5		09:12	5 7 20				
10		09:18	7 9 18	CLAYEY SANDY GRAVEL- dark brown, moist, sands fine to coarse grained, no odor.		GC	0
				(as above - 1 - 3cm pebbles, some grey in clays)		GC	
15		09:26	20 20 20	SANDY CLAYEY GRAVEL- dark brown, some iron oxide stain, wet, 5 - 20 mm, no odor.		GC	0
				GRAVELLY SAND- lt brown, v. coarse, pebbles >4cm.		SW	
20		09:37	7 18 26	SILTY SANDY GRAVEL- dark brown, fine to v.coarse, wet, no odor.		GM	0
25	X	09:48	9 15 21	SANDY CLAYEY GRAVEL- grey, wet, pebbles avg. 1-2cm, staining and odor.		GC	4.7
				SILTY SANDY GRAVEL- lt brown, fine to v.coarse, dry, pebbles <1.5 cm, no odor.		GM	
30							

GROUT
SEAL
SCREEN
SEAL

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Sullins
187 North L Street
Livermore, CA

Project No.: 1262.2

Geological Technics Inc.

LOG OF BORING MW-5

(Page 2 of 3)

Date : 10/9/06
Drilling Method : HSA
Driller : Cascade
Logged By : E. Price

Boring Dia. : 8"
Tot. Depth : 68'
Casing Depth : 66.5'
Casing Dia. : MCT
Screen Interval : 27,37,48,66
Slot Size : MCT
Filter Pack : SEE LOG
Annular Seal : SEE LOG
Grout : 0-21.5'
Water Depth : ~34'

Well: MW-5
Elev.:

Depth in Feet	Lab Sample	Time	Blow Count	DESCRIPTION	GRAPHIC	USCS	OVM (ppm)
30		10:00	17 22 34	SANDY GRAVEL-grey,med to v coarse, moist,wet, slight odor.		GW	67
35	X	10:12	14 26 17	SANDY CLAYEY GRAVEL- grey, moist, odor.		GC	248
		10:15	4 6 8	CLAY- reddish brown, mod plasticity, uniform, strong odor.		CL	402
		10:18	7 7 7	(as above- some oxidation staining & fine grain sand)		CL	
40	X	10:26	7 9 10	CLAY- reddish brown, plasticity, grey mottling, strong odor.		CL	489
		10:29	7 7 14	SILTY CLAY- as above		CL	459
		10:48	4 4 4	GRAVELLY CLAY- brown, moist, odor.		CL	462
45		10:51	5 5 9	(as above- but grey)		CL	
	X	10:58	7 11 14	GRAVELLY CLAY- lt brown, organic material -black streaks, moist, odor.		CL	372
		11:07	5 8 15	SANDY CLAY-grey, wet, odor.		CL	326
50		11:14	10 14 16	SILT- grey w/oxidation, moist.		ML	308
		11:21	10 10 4	SILTY CLAY- brown w/oxidation, wet.		CL	386
		11:27	7 3 5	CLAYEY GRAVEL- lt brown, wet.		GC	327
55	X	11:30	9 9 3	SILT- mottled grey-brown, oxidized, moist.		ML CL	67
		11:38	3 7 2	GRAVELLY CLAY- lt brown, wet, no odor.		CL	72
		11:41	2 4 5	CLAY- lt brown w/ oxidation, wet.		CL	109
60		12:39	5	(as above - w/ some gravel)		CL	
				(as above - no gravel)			

SEAL
SCREEN
SAND
SEAL
SCREEN
SEAL

Sullins
187 North L Street
Livermore, CA

Project No.: 1262.2

Geological Technics Inc.

LOG OF BORING MW-5

(Page 3 of 3)

Date : 10/9/06
Drilling Method : HSA
Driller : Cascade
Logged By : E. Price

Boring Dia. : 8"
Tot. Depth : 68'
Casing Depth : 66.5'
Casing Dia. : MCT
Screen Interval : 27,37,48,66
Slot Size : MCT
Filter Pack : SEE LOG
Annular Seal : SEE LOG
Grout : 0-21.5'
Water Depth : ~34'

Well: MW-5
Elev.:

Depth in Feet	Lab Sample	Time	Blow Count	DESCRIPTION	GRAPHIC	USCS	OVM (ppm)
60		12:39	5 4	(as above - some gravels)		CL	
		12:46	5 7	GRAVELLY CLAY- brown,wet, no odor.		CL	144
			7 9	SILT- brown w/black streaks, no odor.		ML	
		12:51	12 12	SANDY CLAYEY GRAVEL- brown,wet,pebbles avg 1.5-3.5cm.		GC	
		12:58	20 36	(as above - with some pebbles >4cm)		GC	32
65			22 36				
		13:06	50-3"	SAND-multi-colored, med to coarse, wet.		SW	31
	X	13:12	50-6"	SANDY CLAYEY GRAVEL- brown, lg pebbles, 6" sand layer as above.		GC	31
70							
75							
80							
85							
90							

SEAL
SCREEN

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Sullins
187 North L Street
Livermore, CA

Project No.: 1262.2

Geological Technics Inc.

LOG OF BORING MW-6

(Page 1 of 3)

Date : 10/10/06
Drilling Method : HSA
Driller : Cascade
Logged By : E. Price

Boring Dia. : 8"
Tot. Depth : 68'
Casing Depth : 66.5'
Casing Dia. : MCT
Screen Interval : 30,37,50,66
Slot Size : MCT
Filter Pack : SEE LOG
Annular Seal : SEE LOG
Grout : 0-24'
Water Depth : ~34'

Well: MW-6
Elev.:

Depth in Feet	Lab Sample	Time	Blow Count	DESCRIPTION	GRAPHIC	USCS	OVM (ppm)
0				3" Concrete			
5		08:08	15 16 26	SILTY SANDY GRAVEL- lt brown, pebbles 0.5-1.5 cm.		GM	
10		08:15	15 30 12	SANDY CLAYEY GRAVEL- brown, no odor. SANDY GRAVEL- brown, v large pebbles, whitish appearance maybe calcite.		GC GW	0
15	X	08:19	7 17 21	GRAVELLY SILTY SAND- brown, few large pebbles, dry, no odor. SANDY CLAYEY GRAVEL-dark brown,pebbles 0.5 to 2 cm, oxidation, moist, no odor.		SW GC	0
20		08:26	9 18 22	(as above except with v large clasts as long as tube 6") CLAYEY SANDY GRAVEL- dark brown, smaller pebbles than above 0.2 - 1 cm w/more clay, moist, no odor.		GC GC	0.2
25	X	09:03	20 42 12	SANDY CLAYEY GRAVEL- as above with larger pebbles. (as above with pebbles avg >2 cm)		GC GC	0.1
30							

GROUT
SEAL
SCREEN

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Sullins
187 North L Street
Livermore, CA

Project No.: 1262.2

Geological Technics Inc.

LOG OF BORING MW-6

(Page 2 of 3)

Date : 10/10/06
Drilling Method : HSA
Driller : Cascade
Logged By : E. Price

Boring Dia. : 8"
Tot. Depth : 68'
Casing Depth : 66.5'
Casing Dia. : MCT
Screen Interval : 30,37,50,66
Slot Size : MCT
Filter Pack : SEE LOG
Annular Seal : SEE LOG
Grout : 0-24'
Water Depth : ~34'

Well: MW-6
Elev.:

Depth in Feet	Lab Sample	Time	Blow Count	DESCRIPTION	GRAPHIC	USCS	OVM (ppm)
30		09:14	12 26 18	SANDY CLAYEY GRAVEL- mottled brown-grey, some v large pebbles, moist, no odor.		GC GC	0.3
35		09:34	10 20 25	SANDY CLAYEY GRAVEL- grey w/oxidation, pebble size decreasing with depth, wet, no odor.		GC	34.4
		09:38	7 10				
		09:42	12 7 7	CLAY- reddish-brown,mod plastic, increasing silt with depth.		CL	11
40	X	09:47	9 7 8	(as above with some pebbles)		CL CL	11
		09:50	10 7 7	SANDY CLAY- v fine, low plasticity, brown, moist, no odor.		CL CL	
		10:01	9 6 6	GRAVELLY SANDY CLAY- brown w/oxidation, small pebbles, friable.		SW	17
45	X	10:07	7 9 9	CLAYEY GRAVELLY SAND- grey, wet, fine grain, no odor.		SC	177
		10:07	9 7 7	CLAYEY SAND - as above but no pebbles.		CL	
		10:13	9 14 28	CLAY- lt brown, wet, slight odor.		CL	14
			32 5	(as above but mottled grey-brown)		CL CL	
	X	10:17	10 15	(as above but increasing silt content)		CL	2
50		10:28	6 6	SILTY CLAY- mottled grey-borwn, moist, no odor.		CL	
		10:33	9 12 18	SANDY CLAY- mottled brown-grey, v fine grains.		CL	
			30 7	(as above with less sand) CLAY- lt brown, wet, 6" silty layer, no odor.		CL	2
		10:38	7 11	SILT- lt brown, minor grey mottling, moist, some organic material, no odor.		ML	0.8
55		10:50	10 25 50	GRAVELLY CLAY- lt brown, wet, no odor.		CL CL	
		10:56	3 3 4	CLAY- mottled brown-grey, no odor.		CL CL	
		11:02	9 8 20	GRAVELLY CLAY- few pebbles. (as above - grey, with pebbles 2 - 6mm)		CL	0.3
60		11:05	2 2	SILTY CLAY- brown, moist, no odor.		CL	0.3

SEAL
SCREEN
SAND
SEAL
SCREEN
SEAL

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Sullins
187 North L Street
Livermore, CA

Project No.: 1262.2

Geological Technics Inc.

LOG OF BORING MW-6

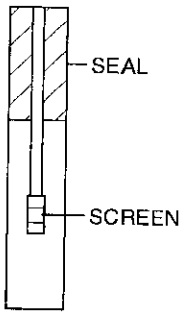
(Page 3 of 3)

Date	: 10/10/06
Drilling Method	: HSA
Driller	: Cascade
Logged By	: E. Price

Boring Dia.	: 8"
Tot. Depth	: 68'
Casing Depth	: 66.5'
Casing Dia.	: MCT
Screen Interval	: 30,37,50,66
Slot Size	: MCT
Filter Pack	: SEE LOG
Annular Seal	: SEE LOG
Grout	: 0-24'
Water Depth	: ~34'

Depth in Feet	Lab Sample	Time	Blow Count	DESCRIPTION	GRAPHIC	USCS	OVM (ppm)
60		11:05	6 13	(as above w/small pebbles)		CL	0.3
		11:13	14 26 26	CLAYEY SANDY GRAVEL- brown, pebbles>2 cm, wet, no odor.		GC	1
		11:19	40 50-4"	CLAYEY SANDY GRAVEL- lt brown, wet, no odor, med-v coarse grains, 0.2 to >5cm pebbles, bent tube & limited recovery.		GC	
		11:23	50-6"			GC	
65		11:33	27 50-5"	(as above with slighty greater clay content) no recovery.			
	X	11:41	38 45 50-5"	CLAYEY GRAVELLY SAND- brown, wet, coarse to v coarse grain, pebbles 0.2 - 0.8 cm, no odor.		SW	0.5
				(as above but larger pebbles)		SW	
70							
75							
80							
85							
90							

Well: MW-6
Elev.:



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Sullins
187 North L Street
Livermore, CA

Project No.: 1262.2

Geological Technics Inc.

LOG OF BORING MW-7

(Page 1 of 3)

Date : 10/4/06
Drilling Method : HSA
Driller : Cascade
Logged By : J. Angulo

Boring Dia. : 8"
Tot. Depth : 69.5'
Casing Depth : 66.5
Casing Dia. : MCT
Screen Interval : 30,40,50,66
Slot Size : MCT
Filter Pack : SEE LOG
Annular Seal : SEE LOG
Grout : 0-14'
Water Depth : ~34'

Well: MW-7
Elev.:

Depth in Feet	Lab Sample	Time	Blow Count	DESCRIPTION	GRAPHIC	USCS	OVM (ppm)
0				3" Concrete			
				SANDY CLAYEY GRAVEL- dark brown, moist, no odor.		GC	
5		14:00	7 7 11	(as above)		GC	0
10		14:05	10 18 12	SANDY CLAYEY GRAVEL- brown,more sand than above, sl moist,pebbles to 1.5 ", no odor.		GC	0
15	X	14:12	7 19 24	(as above- moist, 1/2" lt grey silt lens,no odor)		GC	0
20		14:17	12 18 19	(as above- 2" brown sandy silt lens, some wet clay grey-brown lenses)		GC	0
25		14:23	7 14 30	(as above- less dark in color, more uniform brown clays)		GC	0
30							

GROUT
SLOUGH
SAND/GRAVEL
SAND
SCREEN

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Sullins
187 North L Street
Livermore, CA

Project No.: 1262.2

Geological Technics Inc.

LOG OF BORING MW-7

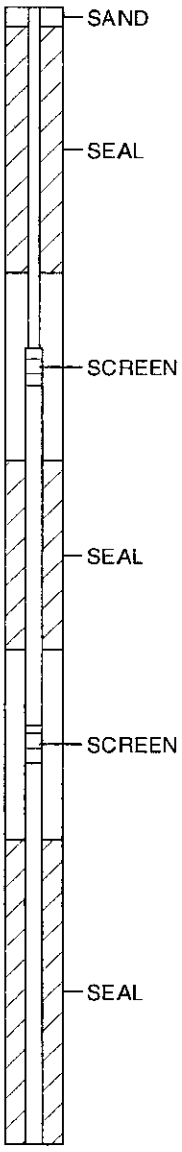
(Page 2 of 3)

Date : 10/4/06
Drilling Method : HSA
Driller : Cascade
Logged By : J. Angulo

Boring Dia. : 8"
Tot. Depth : 69.5'
Casing Depth : 66.5
Casing Dia. : MCT
Screen Interval : 30,40,50,66
Slot Size : MCT
Filter Pack : SEE LOG
Annular Seal : SEE LOG
Grout : 0-14'
Water Depth : ~34'

Depth in Feet	Lab Sample	Time	Blow Count	DESCRIPTION	GRAPHIC	USCS	OVM (ppm)
30		14:32	12 28 32			GC	15
35		14:50	12 12 18	GRAVELLY CLAY- as above but more clay than gravel, HC odor.		CL	115
		15:00	6 7 9	CLAY- brown, plastic, HC odor.		CL	49
		15:03	9 16 12	(as above- silt lenses, grey HC stained nodules, strong gasoline odor)		CL	521
40	X	15:07	7 9 12	SILT- brown, uniform, wet, HC odor.		ML	164
		15:10		CLAYEY SILT- brown, uniform, wet, gasoline odor.		ML	183
		15:25	9 12 15	SILTY CLAY- brown, gasoline odor.		CL	105
45	X	15:30	9 12 18	SANDY GRAVELLY CLAY- grey, strong HC odor,pebbles to 1".		CL	554
		15:34	2 7 12	(as above - brown to grey)		CL	418
		15:37	7 11 13	(as above - some grey silt lenses)		CL	109
	X	15:42	7 9 20	SAND- v.fine to fine, grey, wet, HC odor.		SP	72
50		15:45	12 17 20	No recovery.			
		16:00	10 17 14	CLAYEY SAND- v.fine, grey, wet, HC odor.		SC	40
		16:03	15 39 50-4"	CLAYEY SANDY GRAVEL-grey, wet, HC odor.		GC	12
55		16:11	9 26 39	(as above - some orange Fe staining)		GC	10
		16:19	7 18 26	(as above) SAND- v.fine, brown to grey, wet, faint HC odor.		GC SP CL	88
		16:30	7 19 20	SILTY CLAY- brown, faint HC odor.		GC	13
60				CLAYEY SANDY GRAVEL-brown, faint HC odor.		GC	

Well: MW-7
Elev.:



Sullins
187 North L Street
Livermore, CA

Project No.: 1262.2

Geological Technics Inc.

LOG OF BORING MW-7

(Page 3 of 3)

Date : 10/4/06
Drilling Method : HSA
Driller : Cascade
Logged By : J. Angulo

Boring Dia. : 8"
Tot. Depth : 69.5'
Casing Depth : 66.5
Casing Dia. : MCT
Screen Interval : 30,40,50,66
Slot Size : MCT
Filter Pack : SEE LOG
Annular Seal : SEE LOG
Grout : 0-14'
Water Depth : ~34'

Well: MW-7
Elev.:

Depth in Feet	Lab Sample	Time	Blow Count	DESCRIPTION	GRAPHIC	USCS	OVM (ppm)
60							
			9	(as above)		GC	
		16:36	13	(as above- less clay)		GC	6
			23				
			12	SAND-v.coarse, grey,wet, no odor.		SP	
		16:42	12			GC	40
			14	SANDY CLAYEY GRAVEL- brown, HC odor.			
		16:46	23			GC	5
65			35	(as above- v.coarse 4" sand layer, odor?)			
			44				
			7				
		16:55	14	(as above but grey, no odor)		GC	14
			38				
		17:10	35	(as above)		GC	4
	X		50-5'				
		17:20	34	(as above)		GC	3
			50-6"				
70							
75							
80							
85							
90							

SEAL
SAND
SCREEN
SEAL

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Sullins
187 North L Street
Livermore, CA

Project No.: 1262.2

Geological Technics Inc.

LOG OF BORING MW-8

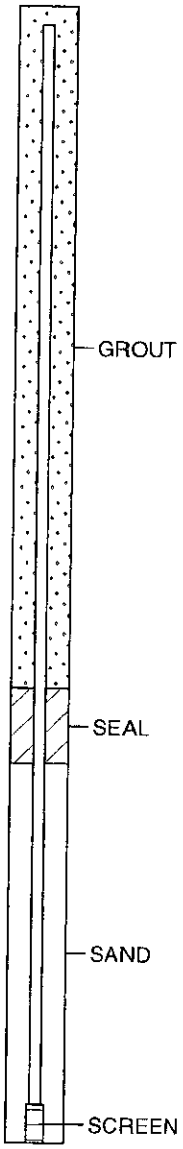
(Page 1 of 3)

Date	: 10/5/06
Drilling Method	: HSA
Driller	: Cascade
Logged By	: J. Angulo

Boring Dia.	: 8"
Tot. Depth	: 66.5'
Casing Depth	: 66.5'
Casing Dia.	: MCT
Screen Interval	: 30,40,52,66
Slot Size	: MCT
Filter Pack	: SEE LOG
Annular Seal	: SEE LOG
Grout	: 0-18'
Water Depth	: ~34'

Depth in Feet	Lab Sample	Time	Blow Count	DESCRIPTION	GRAPHIC	USCS	OVM (ppm)
0				2-3" Concrete over fill gravel			
5		12:50	9 20 25	CLAYEY SANDY GRAVEL- lt brown, dry, pebbles to 1", no odor.		GC	2
10		13:00	50-6"	(as above but grey with pebbles to 2")		GC	1
15		13:05	12 28 50-5"	(as above but sl moist, more clay)		GC	1
20		13:15	15 12 17	(as above much less sand-more clay, orange oxidation staining)		GC	1
25	X	13:25	11 19 24	SANDY GRAVELLY CLAY- grey, sl moist, 4" clayey sand layer @ 25', no odor.		CL	0
30							

Well: MW-8
Elev.:



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10-23-2006

Sullins
187 North L Street
Livermore, CA

Project No.: 1262.2

Geological Technics Inc.

LOG OF BORING MW-8

(Page 2 of 3)

Date : 10/5/06
Drilling Method : HSA
Driller : Cascade
Logged By : J. Angulo

Boring Dia. : 8"
Tot. Depth : 66.5'
Casing Depth : 66.5'
Casing Dia. : MCT
Screen Interval : 30,40,52,66
Slot Size : MCT
Filter Pack : SEE LOG
Annular Seal : SEE LOG
Grout : 0-18'
Water Depth : ~34'

Well: MW-8
Elev.:

Depth in Feet	Lab Sample	Time	Blow Count	DESCRIPTION	GRAPHIC	USCS	OVM (ppm)
30		13:40	19 26 40	CLAYEY SANDY GRAVEL- grey, moist, 1-2" pebbles, no odor.		GC	1
35	X	13:56	7 9 14	(as above - but grey, strong gas odor, 6" v fine sand layer)		GC	314
		14:00	6 6 12	SANDY CLAY- brown to grey, wet to moist, HC odor, v fine sand grains.		CL	8
		14:15	9 8 12	(as above)		CL	
40		14:20	5 5 12	(as above with v fine 1-2" sand lenses)		CL	17
		14:30	11 13 19	SILTY CLAY- brown to grey, moist, HC odor.		CL	2
		14:45	4 7 10	(as above)		CL	446
			4	GRAVELLY SANDY CLAY- brown to grey, HC odor.		CL	
45	X	14:55	4 4 9	SILTY CLAY- brown to grey, HC odor.		CL	19
		15:00	12 17 5	SANDY GRAVELLY CLAY- grey to brown, pebbles to 1/2", very hard 3" layer, HC odor.		CL	66
		15:03	5 9 7	SILTY CLAY- brown with some grey HC nodules, wet, HC odor.		CL	33
50		15:06	10 15 7	(as above)		CL	7
		15:10	10 10 12				63
		15:12	15 20	SAND- grey-green, v fine to fine, wet, strong HC odor.		SP	275
		15:20		Heave- no recovery but gravels?			
55	X	15:33	17 36 45	SAND- fine to v coarse, grey, wet, HC odor.		SW GC	3
		15:44	17 24 30	CLAYEY SANDY GRAVEL- grey to dark green, wet, pebbles to 1/2".		GC	18
		15:46	4 9 21	(as above with iron oxide stained nodules, pebbles to 2") (as above but more sand)		GC ML	11
		15:50	10 15 25	CLAYEY GRAVELLY SILT- mottled grey-brown, no odor.		CL	11
60		16:00	7	SANDY GRAVELLY CLAY- mottled grey-brown, pebbles to 1/2".		CL	4

SEAL
SCREEN
SEAL
SCREEN
SEAL

Sullins
187 North L Street
Livermore, CA

Project No.: 1262.2

Geological Technics Inc.

LOG OF BORING MW-8

(Page 3 of 3)

Date	: 10/5/06
Drilling Method	: HSA
Driller	: Cascade
Logged By	: J. Angulo

Boring Dia.	: 8"
Tot. Depth	: 66.5'
Casing Depth	: 66.5'
Casing Dia.	: MCT
Screen Interval	: 30,40,52,66
Slot Size	: MCT
Filter Pack	: SEE LOG
Annular Seal	: SEE LOG
Grout	: 0-18'
Water Depth	: ~34'

Well: MW-8
Elev.:

Depth in Feet	Lab Sample	Time	Blow Count	DESCRIPTION	GRAPHIC	USCS	OVM (ppm)
60		16:00	7 4 7	(as above but less clay, more sandy)		CL	4
		16:07	16 22			CL	
			3	(as above but more sand/silt)			
		16:10	6 10	SANDY CLAY- mottled grey-brown, no odor.		CL	7
			6				
		16:15	12 18	(as above but less sand)		CL	7
65	X		17				
		16:23	28 42	SANDY CLAYEY GRAVEL-mottled grey-brown, some chocolate brown clay nodules, no odor.		GC	4
70							
75							
80							
85							
90							

SEAL
SAND
SCREEN

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