RECEIVED

2:52 pm, Dec 17, 2008

Alameda County Environmental Health

December 9, 2008

Rita and Tony Sullins Don Sul Inc. 187 North L Street Livermore, CA 94550

Re:

Transmittal Letter

Site Location:

Arrow Rentals

167 North L Street, Livermore, CA 94550

Dear Mr. Wickham:

On behalf of Rita and Tony Sullins, Don Sul Inc., Geological Technics Inc. (GTI) prepared the Semiannual Groundwater Monitoring, October of 2008, dated December 9, 2008 that was sent to your office via electronic delivery per Alameda County's guidelines on December 12, 2008.

I declare under penalty of law that the information and/or recommendations contained in the above referenced document or report is true and correct to the best of my knowledge.

Respectfully submitted,

Rita / Tony Sullins Property Owner

Don Sul Inc.

187 North L Street

Livermore, CA 94550

Geological Technics Inc.

REPORT

Semiannual Groundwater Monitoring October 2008

> Arrow Rentals Service 187 North L St. Livermore, CA 94550

> > Project No. 1262.2 December 9, 2008

Prepared for:
Tony & Rita Sullins
Arrow Rentals Service
187 North L St.
Livermore, CA 94550

Prepared by: Geological Technics Inc. 1101 7th Street Modesto, California 95354 (209) 522-4119

Geological Technics Inc.

1101 7th Street Modesto, California 95354 (209) 522-4119/Fax (209) 522-4227

December 9, 2008

Project No.:

1262.2

Project Name:

Sullins (L St.)

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

RE:

Report:

Semiannual Groundwater Monitoring, October 2008

Location: 187 North L Street, Livermore, CA 94550.

(ACEH Fuel Leak Case No. RO0000394)

Dear Mr. & Ms. Sullins:

Geological Technics Inc. has prepared the following Report for the 2nd Semi-annual 2008 groundwater monitoring event performed on October 8th and 9th, 2008, at the 187 North L Street property in Livermore. The groundwater data for the event indicate that the plume continues to display a trend of declining concentrations. However, an elevated core of gasoline contamination persists in the location of the former USTs/piping.

GTI is currently implementing the Corrective Action Plan (CAP) that includes provisions for performing dual phase extraction to treat the residual contamination at the site, which has received approval from ACEH and cost pre-approval from the UST Cleanup Fund.

If you have any questions, please do not hesitate to call me at (209) 522-4119.

Respectfully submitted,

Tamorah Bryant, P.E.

cc:

Jerry Wickham - ACEH

USTCUF

Chris Davidson - City of Livermore

Jennifer Sedlechek - Exxon Mobile Corp.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

1.0	GRO	UNDWATER MONITORING
	1.1	Hydrology of Site
	1.2	Groundwater Sampling Procedure
	1.3	Laboratory Analyses
2.0	FINE	DINGS AND DISCUSSION
3.0	CON	CLUSIONS & RECOMMENDATIONS
4.0	LIMI	TATIONS
5.0	SIGN	NATURES & CERTIFICATION

FIGURES

VICINITY MAP	1
SITE MAP	2
SITE DETAIL MAP	3
WELL SCREENED INTERVAL DIAGRAM	4
GROUNDWATER GRADIENT MAP SHALLOW WELLS	5A
GROUNDWATER GRADIENT MAP INTERMEDIATE WELLS	5B
GROUNDWATER GRADIENT MAP DEEP WELLS	5C
SHALLOW WELL APRIL 2008 TPH-G CONCENTRATIONS	6
INTERMEDIATE WELL APRIL 2008 TPH-G CONCENTRATIONS	7
DEEP WELL APRIL 2008 TPH-G CONCENTRATIONS	8
CROSS SECTION A-A'	9
GRAPH OF TPH-G CONCENTRATION VS. TIME W-1s	10
GRAPH OF TPH-G CONCENTRATION VS. TIME W-3s	11
GRAPH OF TPH-G CONCENTRATION VS. TIME W-Bs	12

APPENDICES

SUMMARY TABLES	A
Table 1A: Summary of Groundwater Elevation and Gradient – Water Table Wordship Table 1B: Summary of Groundwater Elevation and Gradient – Intermediate Wordship Table 1C: Summary of Groundwater Elevation and Gradient – Deep Wells Table 2: Summary of Vertical Gradients Table 3: Summary of Well Construction	
Table 4: Summary of Groundwater Analytical Data	ra <u>eto</u> es
LABORATORY ANALYTICAL DATA SHEETS	В
GROUNDWATER MONITORING FIELD LOGS	C

Geological Technics Inc._

1101 7th Street Modesto, California 95354 (209) 522-4119/Fax (209) 522-4227

REPORT

Semiannual Groundwater Monitoring October 2008

Arrow Rentals Services 187 North L St. Livermore, CA

> Project No. 1262.2 December 9, 2008

EXECUTIVE SUMMARY

This report summarizes the results of the 2nd Semi-annual 2008 groundwater monitoring and sampling event that took place on October 8th and 9th, of 2008.

The average shallow groundwater elevation at the site was 432 feet above mean sea level (msl) and the groundwater flow was Northwest in a variable direction for this event. This represents a decrease of 15.24 feet since the April 2008 monitoring event.

The analytical results of groundwater samples show that detectable concentrations of gasoline range petroleum hydrocarbons were present in five of the site's six groundwater monitoring wells sampled for this event (down gradient well W-Es was non-detect). A persistent core remains in the vicinity of well W-1 (140,000 μ g/l TPH-g, sampled 12/20/2007) that is located adjacent to former USTs/piping trenches and is down gradient of the former UST system from which the Pitcock release originated.

GTI is currently implementing the Corrective Action Plan (CAP) that includes provisions for performing dual phase extraction to treat the residual contamination at the site, which has received approval from ACEH and cost pre-approval from the UST Cleanup Fund.

1.0 GROUNDWATER MONITORING

1.1 Hydrogeology of Site

The average groundwater elevation in the site's shallow wells was 432 feet above mean sea level (msl) on October 8th and 9th, 2008. This corresponds to approximately 47 feet below grade surface (bgs) and represents an increase of 14.04 feet since the April 2008 monitoring event. The depth to groundwater observed in the site's wells has ranged from approximately 20 - 49 feet below grade surface from 1989 to 2008. Refer to Figures 1 through 3 for site details, well and borehole locations.

GTI grouped the five new CMTTM well sets installed in October 2006 and existing wells according to the aquifer interval that the screened section intercepted (see Table 3 in Appendix A for well construction details, and Figure 4 for well screen intervals):

Shallow Wells (screened 20 – 45 feet bgs):

W-1s, W-Bs, W-3s, W-Es, and either {MW-4, MW-5, MW-6, MW-7, MW-8} or {MW-105, MW-106, MW-107, MW-108} depending on groundwater elevation

Intermediate Wells (screened 40 – 60 feet bgs):

W-A, W-B, W-C, W-D, W-E, MW-104, MW-205, MW-206, MW-207, MW-208

Note: Wells W-B, -C, -D, and -E were abandoned on April 14, 2008.

Deep Wells (screened ~ 65 feet bgs):

MW-204, MW-305, MW-306, MW-307, MW-308

Deepest Wells (screened > 70 feet bgs):

MW-304, MW-404

The groundwater elevation data are summarized in Tables 1A, 1B and 1C of Appendix A, for the shallow, intermediate and deep aquifer levels, respectively.

Horizontal Groundwater Gradients:

The calculated gradients for the October 8th and 9th, 2008 monitoring event are as follows:

Aquifer Zone:	Gradient:	Bearing:
Water table	0.010	N57°W
Intermediate	0.12	N20°W
Deep	variable	

Figures 5A through 5C illustrate the three aquifer groundwater gradient maps for the October 8th and 9th, 2008 monitoring event.

Vertical Groundwater Gradients:

GTI calculated vertical gradients for well pairs MW-205/305, and MW-206/306 well pairs for the October 8th and 9th, 2008 monitoring event.

The following procedure is used to calculate vertical groundwater gradients in wells with submerged screens:

- O Determine the vertical distance between the two measuring devices (wells) by calculating the distance between the mid-point between the screen top and bottom in the deep well (MW-305) and the mid-point between the screen top and bottom in the shallower well (MW-205).
- Measure the head in both wells used in the calculations.
- o If the lateral distance between the well pair is greater than a few feet, then calculations must be made to correct the down-gradient piezometric head to account for the sloping water table between the wells. This is not necessary in this case because the wells are adjacent to each other in the CMTTM well sets.
- O Divide the difference in head by the difference in vertical distance in the measuring devices to obtain the vertical gradient.

Figure 3 shows the location of the well pairs used for calculating vertical groundwater gradient in this report: MW-204/304, MW-205/305 MW-206/306, and MW-207/307. Table 2 in Appendix A shows the calculated vertical gradients.

For the October 8th and 9th, 2008 event:

- o The vertical gradient for the MW-205/305 pair was positive (or upward) at 0.56 ft/ft.
- o The vertical gradient for the MW-206/306 pair was positive (or upward) at 0.06 ft/ft

In their January 16, 2007 letter correspondence Alameda County Environmental Health (ACEH) staff directed that groundwater elevation data for deep wells MW-304 & MW-404 be included in future reports. This data has been added in two columns on the far right of Table 1C, Appendix A.

1.2 Groundwater Sampling Procedure

On October 8th and 9th, 2008 Geological Technics Inc. (GTI) staff mobilized to the site to conduct sounding and sampling of the site's monitoring wells. Before sampling was attempted, the wells were sounded for depth to water and groundwater levels recorded with exceptions as noted. The non-CMTTM wells were purged of at least three well volumes of stagnant water using a dedicated Waterra check-ball. Purging continued until the temperature, conductivity, and pH of the groundwater stabilized (<10% variation in three consecutive readings), indicating that formation water representative of aquifer conditions was entering the wells.

Once purging was complete, water samples were collected from the Waterra tube. Care was taken to minimize sample agitation. Once a sample container was filled and capped, the bottle was inverted, tapped and checked for headspace bubbles. The sample container was identified and labeled with a unique designation, inserted into a foam holder and placed into an ice chest cooled to 4°C for transport to the laboratory. Disposable gloves were used by the technician to collect all samples and were changed with each sample collection.

The following deviations from the sampling protocol are noted:

- Several CMT[™] wells did not contain enough water to purge and collect samples. Samples were not collected from the following wells: MW-205, MW-208, MW-306, and MW-404.
- Wells W-3s, W-Bs, MW-107, MW-207, MW-304, MW-305, MW-307, and MW-308 were not sampled due to a lack of water/recharge for both days.
- Wells W-1s, and W-Es contained enough water to collect partial samples.
- Samples were not collected from well MW-104 due to issues with the Waterra tubing. The tubing and check valve will be replaced prior to the next monitoring event.

A chain of custody document, listing all samples collected, accompanied the samples from field to laboratory, thereby providing a means to track the movement of and insure the integrity of the samples.

All well purge water was placed in a 55 gallon DOT approved container. These drums were properly labeled and will be stored on site until their proper disposition can be arranged.

Groundwater monitoring field logs are included in Appendix C.

1.3 Laboratory Analyses

The groundwater samples collected on October 8th and 9th, 2008, were delivered to Argon Laboratories in Ceres, California (Certification Number 2359) for analysis.

The groundwater samples were analyzed for:

- Ethyl Benzene and Xylene (BTEX) by EPA method 8021B
- Total Petroleum Hydrocarbons as Gasoline (TPH-G) by EPA method 8015M
- Oxygenated Fuel Compound MtBE by EPA method 8021B

The results and detection limits for the above analyses are listed in Table 4 of Appendix A while the lab analytical results are presented in Appendix B.

As required under AB2886, the depth to groundwater data for the 2nd Semiannual 2008 was submitted to GeoTracker on December 9, 2008 – confirmation number 5039214193. Laboratory data was submitted to GeoTracker on December 12, 2008 – confirmation number 1919234335.

2.0 FINDINGS AND DISCUSSION

The results of the groundwater monitoring and sample analyses indicate the following:

October 8th and 9th, 2008-

• Shallow aquifer:

- O Well W-1s contained: 39,000 μg/l TPH-g, 3,900 μg/l benzene, 340 μg/l toluene, 1,400 μg/l ethyl benzene, and 2,000 μg/l xylene.
- Wells W-3s, W-Bs and MW-105 were not sampled during this event due to the well being dry.
- Well W-Es did not contain BTEX, TPH-g and MtBE contamination above the laboratory reporting limits.
- O MW-105 contained 11,000 μg/l TPH-g, 3,800 μg/l benzene, 70 μg/l toluene, 40 μg/l ethylbenzene, and 110 μg/l xylene.
- O MW-106 contained 90 μg/l TPH-g and 0.6 μg/l benzene.
- O Well MW-108 contained 2,100 μg/l TPH-g, 490 μg/l benzene, 8.4 μg/l toluene, 35 μg/l ethylbenzene and 40 μg/l xylene.
- Figure 6 contains a contour map indicating GTI's interpretation of the shallow TPH-g plume in October 2008. The groundwater plume is localized in the vicinity of the former USTs/piping trenches.
- Intermediate aquifer:
 - o MW-104 was not sampled during this event.
 - Well MW-205, 207, and 208 were not sampled during this event due to poor water production. Figure 5B contains GTI's interpretation of the intermediate ground water gradient.
 - Due to a lack of sample points, GTI was not able to generate a TPH-g plume for the intermediate wells. Figure 7 contains a contour map of the intermediate aquifer TPH-g plume from the April 2008 monitoring event.
- Deep aquifer:
 - ο Well MW-204 contained 18,000 μ g/l TPH-g, 9,200 μ g/l benzene, 360 μ g/l toluene, 130 μ g/l ethyl benzene, and 370 μ g/l xylene.
 - Well MW-305, 307, and 308 were not sampled during this event due to poor water production.
 - Due to a lack of sample points, GTI was not able to generate a TPH-g plume for the intermediate wells. Figure 8 contains a contour map of the deep aquifer TPH-g plume from the April 2008 monitoring event.

Deepest aquifer wells:

 Well MW-304, and -404 were not sampled during this event due to poor water production.

The vertical extent of the groundwater plume in the two deepest CMTTM wells is

illustrated in Figure 9, Cross Section A-A'.

- Figure 10 illustrates TPH-g concentration versus time in well W-1s (located in the vicinity of the core of the contaminant plume). With the exception of events in 1997 and 2001 the contaminant concentrations display a declining trend. The two peaks evident in Figure 10 suggest that significant contaminant mass is present although decades have past since the original USTs were removed. TPH-g concentrations in the well have remained somewhat stable for the last four monitoring events.
- Figure 11 illustrates TPH-g concentration versus time in well W-3s (located down/cross gradient of the core of the plume). The contaminant concentrations show a declining trend. W-3s was not sampled during this monitoring event.
- Figure 12 illustrates TPH-g concentration versus time in well W-Bs (located down gradient of the core of the plume). The contaminant concentrations showed a declining trend from 1995 2003 but appear to have stabilized. W-Bs was not sampled during this monitoring event.
- Obtaining valid water level measurements from the CMTTM wells remains problematic
 due to the clayey soils at the site. The clays clog the Waterra tubing and smear on the
 inside of the individual chambers. Some well elevations appear to be anomalous when
 utilizing computer-generated contours. Those points were removed in an attempt to
 accurately depict true groundwater gradient and direction.
- Groundwater gradient and direction were variable in the deep wells during the October 2008 monitoring event. Wells MW-305, MW-306, and MW-308 were used to determine groundwater gradient and direction for this monitoring event.
- Groundwater gradient and direction were variable in the deep level aquifer, and was determined using wells MW-305, MW-306, and MW-308. Figure 5C is a gradient map showing GTI's interpretation of groundwater movement and gradient.
- Due to a lack of data points, a TPH-g plume was not prepared for the intermediate and deep wells. Figures 7 and 8 contain GTI's interpretation from the April 2008 monitoring event.

3.0 CONCLUSIONS & RECOMMENDATIONS

Conclusions

- 1. Elevated concentrations of BTEX and TPH-g are present in a laterally limited (probably less than 300 foot radius) groundwater plume that is centered in the vicinity of wells W-1 & W-1s.
- The highest level of TPH-g detected, 39,000 μg/l, was present in shallow depth well W-1s. This well is located just down gradient of the former UST system from which the Pitcock release originated.
- 3. The lateral extent of the TPH-g plume is defined to the west by well W-Es.
- 4. The center of the plume has not migrated beyond the source area providing evidence that the plume is degrading as it migrates laterally by advective flow.
- 5. The data shows that the core of the plume is fairly stable, with concentrations decreasing very slowly by either natural biodegradation causes or by dilution effects.

Recommendations

- Maintain the current semi-annual monitoring schedule.
- Continue the process of developing and purging the CMTTM well chambers to clear them
 of clay residue/smear that precludes recharge and water level monitoring.
- Continue implementation of the Corrective Action Plan (CAP) that includes provisions
 for performing dual phase extraction to treat the residual contamination at the site, which
 has received approval from ACEH and cost pre-approval from the UST Cleanup Fund.

4.0 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.

5.0 SIGNATURES & CERTIFICATION

This report was prepared under the direction of:

Tamorah Bryant, P.E.

No. 67205

Exp. 9/30/10

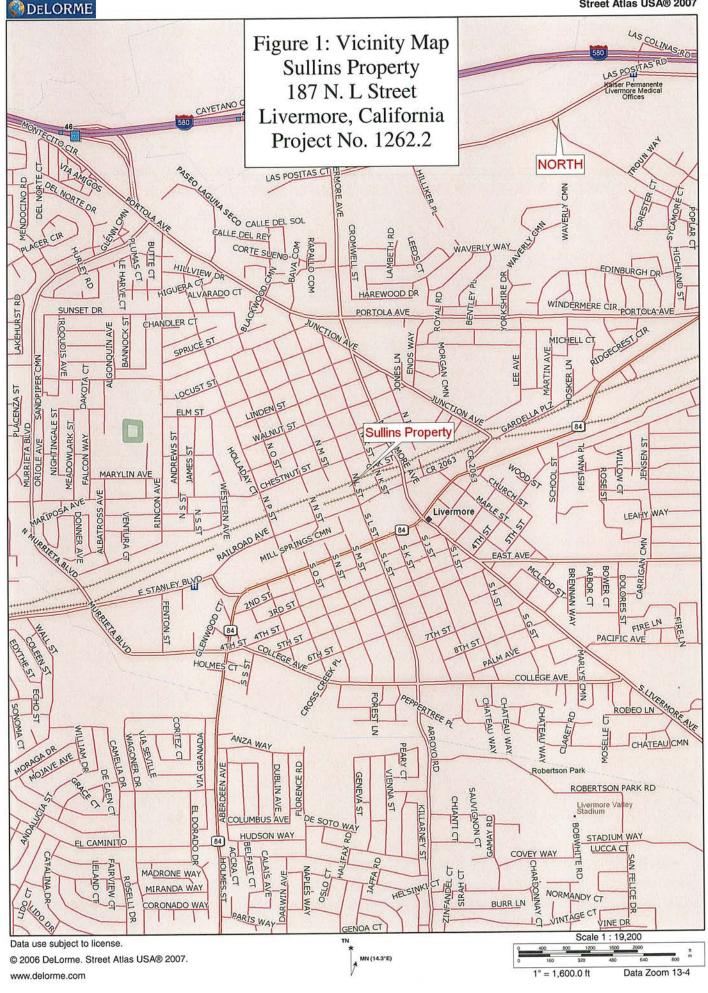
CIVIL

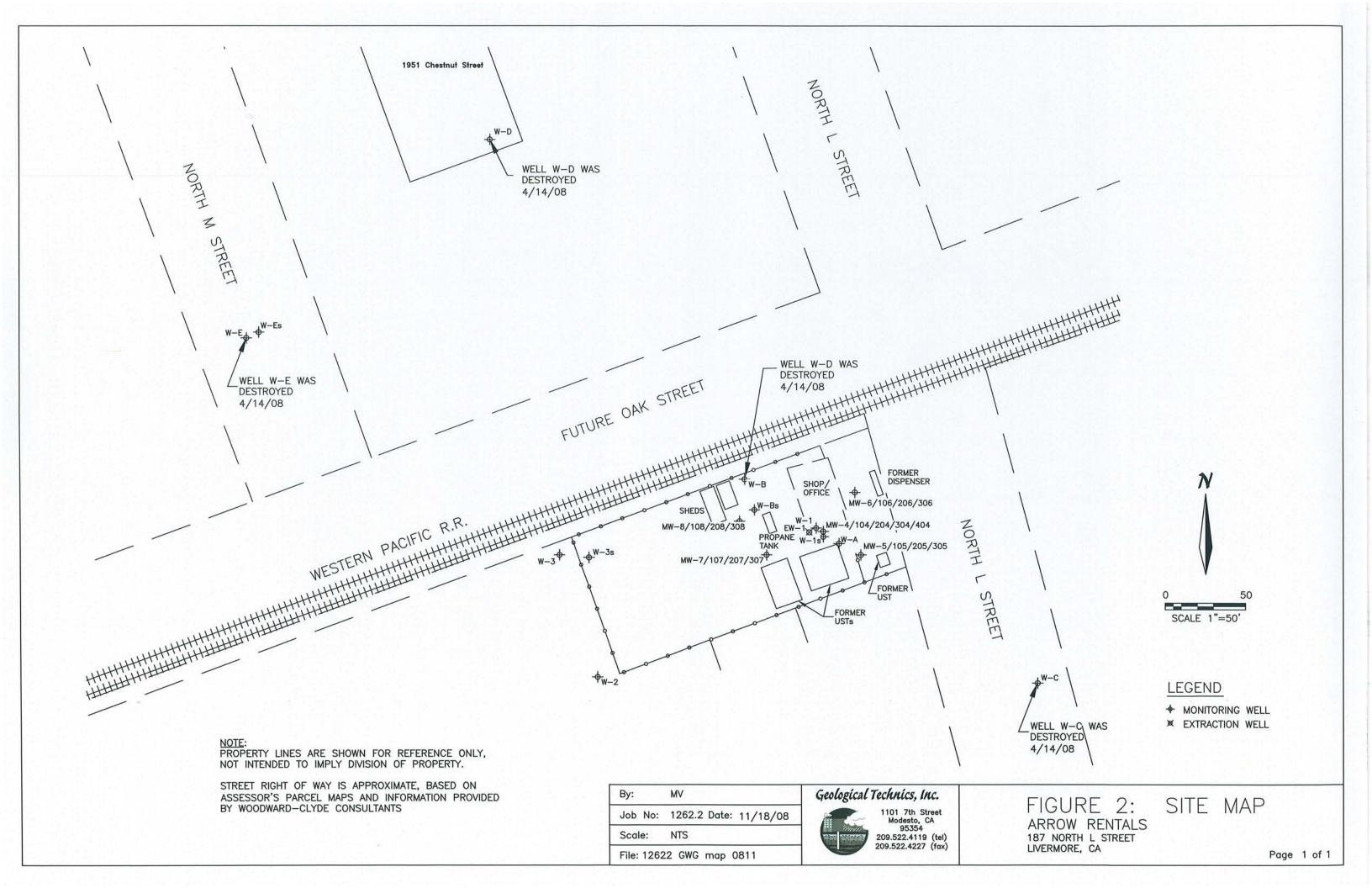
OF CALIFORNIA

PROFESSIONAL

CALIFORNIA

PROFESSIONAL





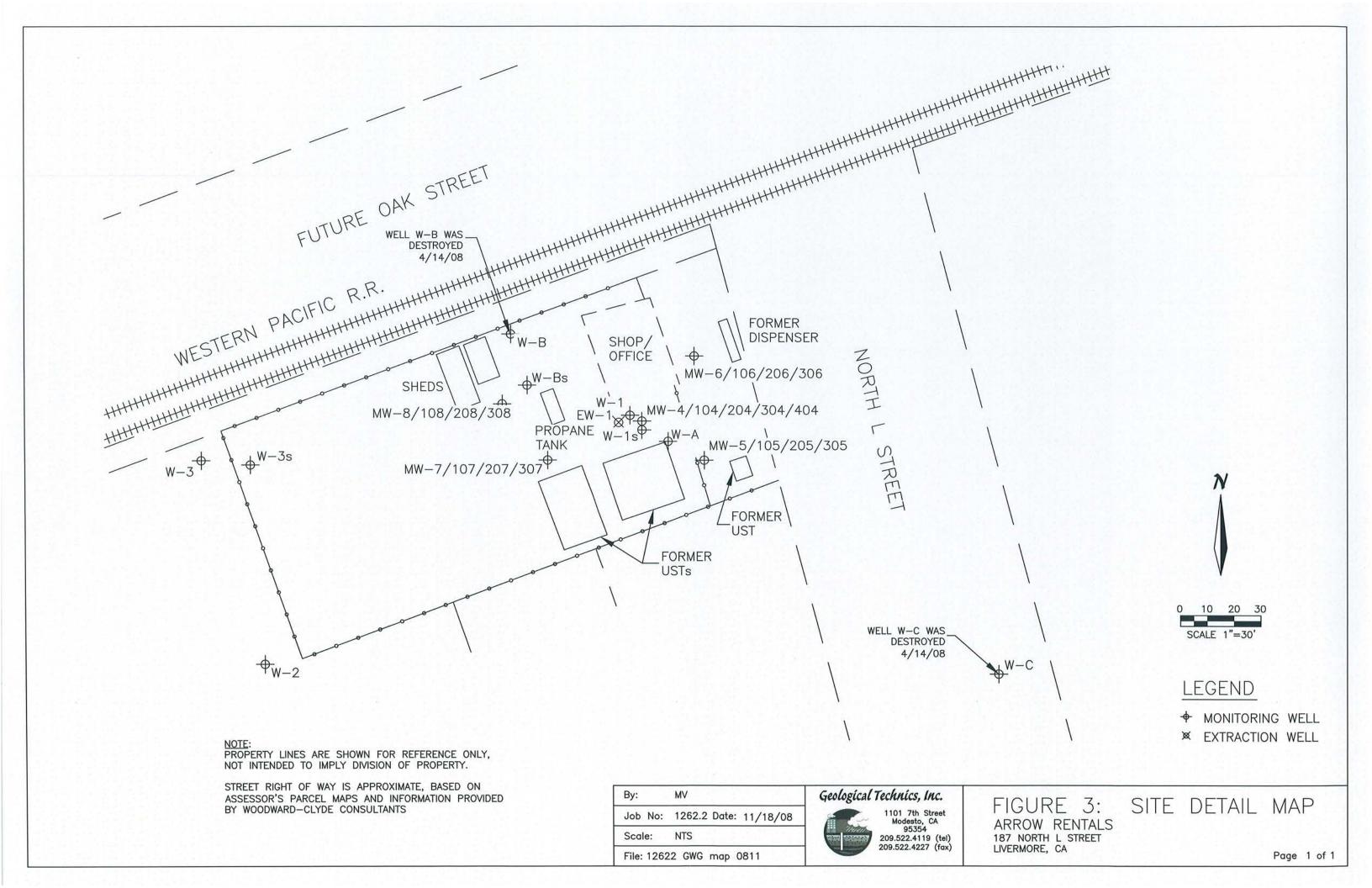
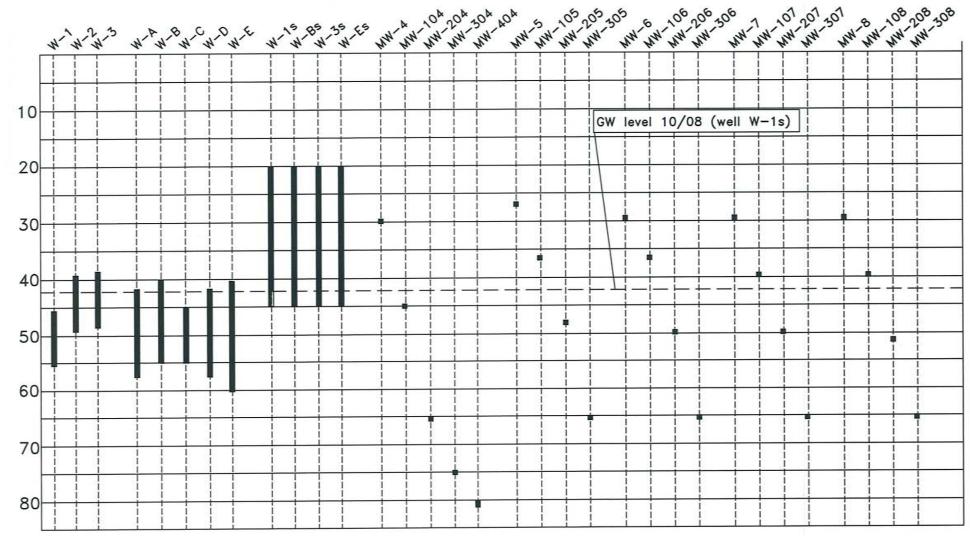
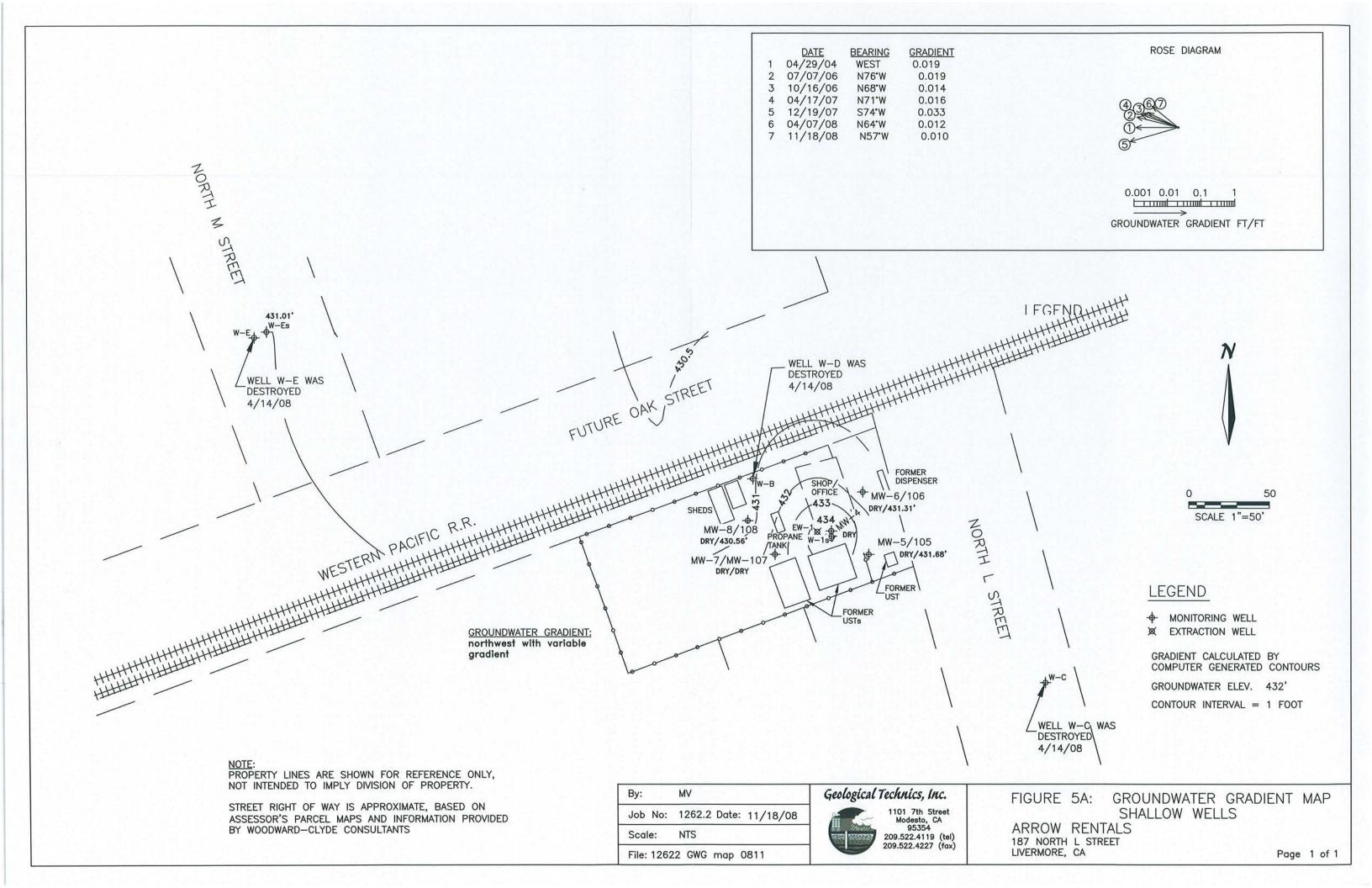


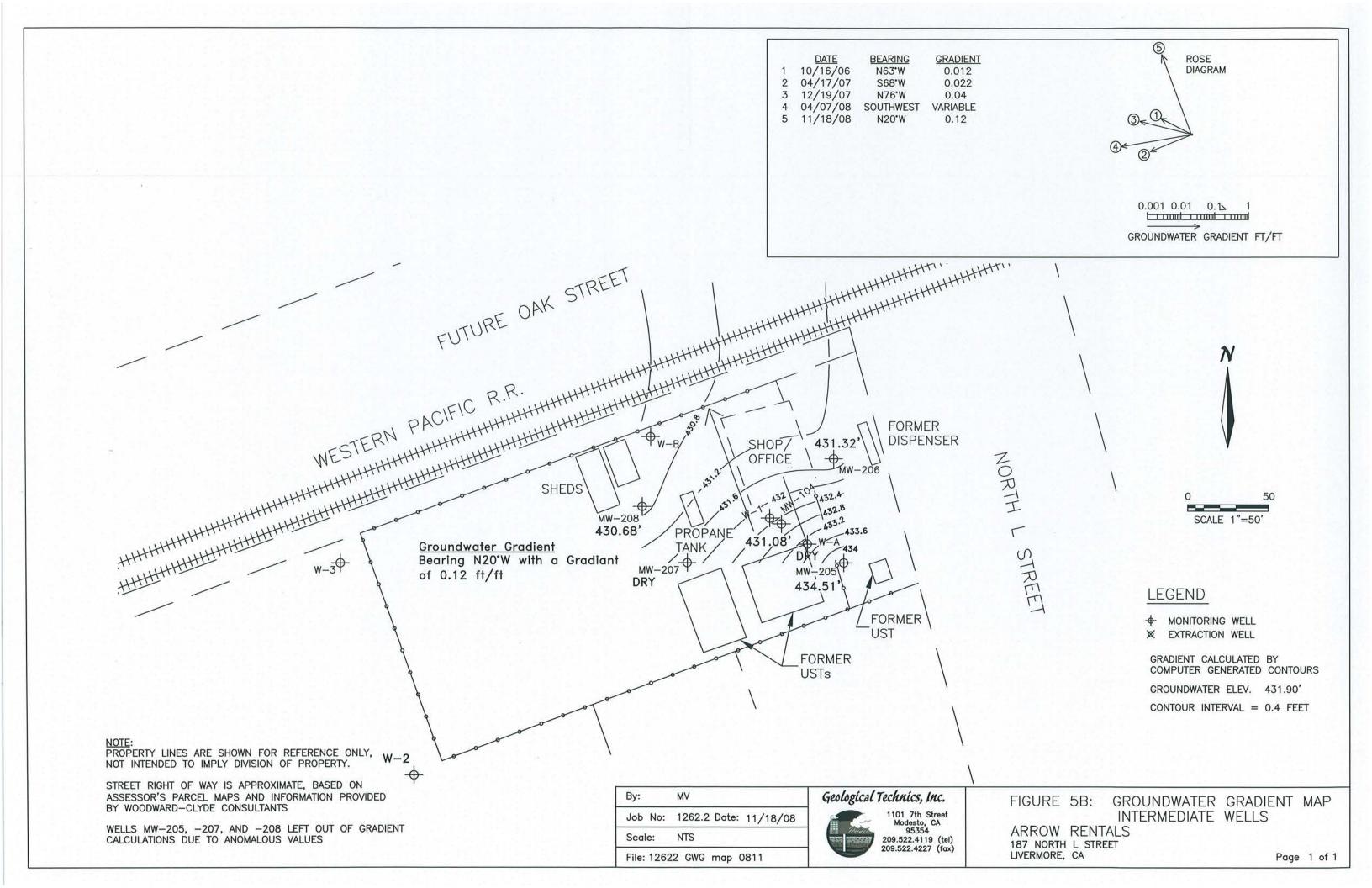
Fig 4: Well Screened Interval Diagram

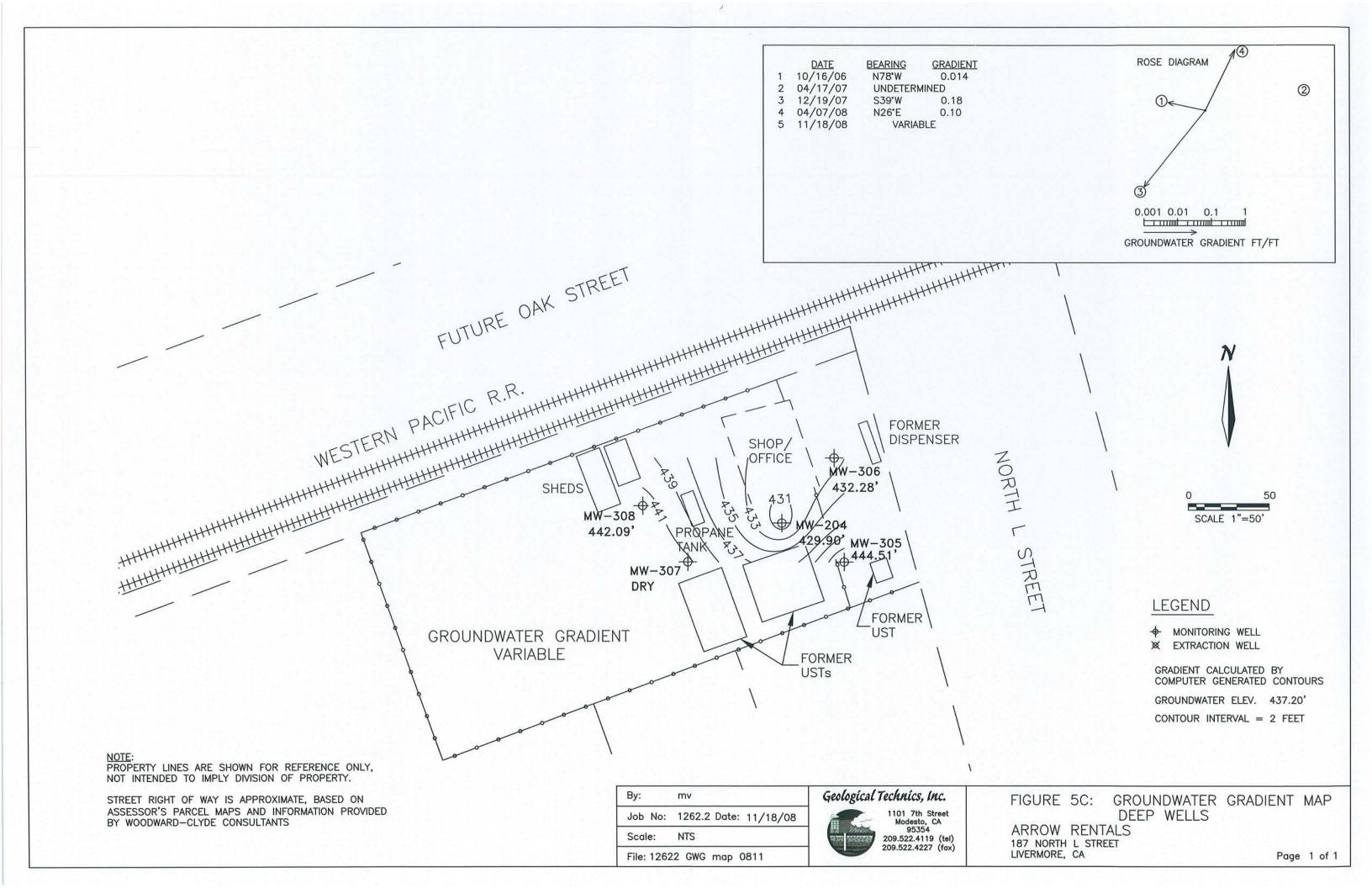


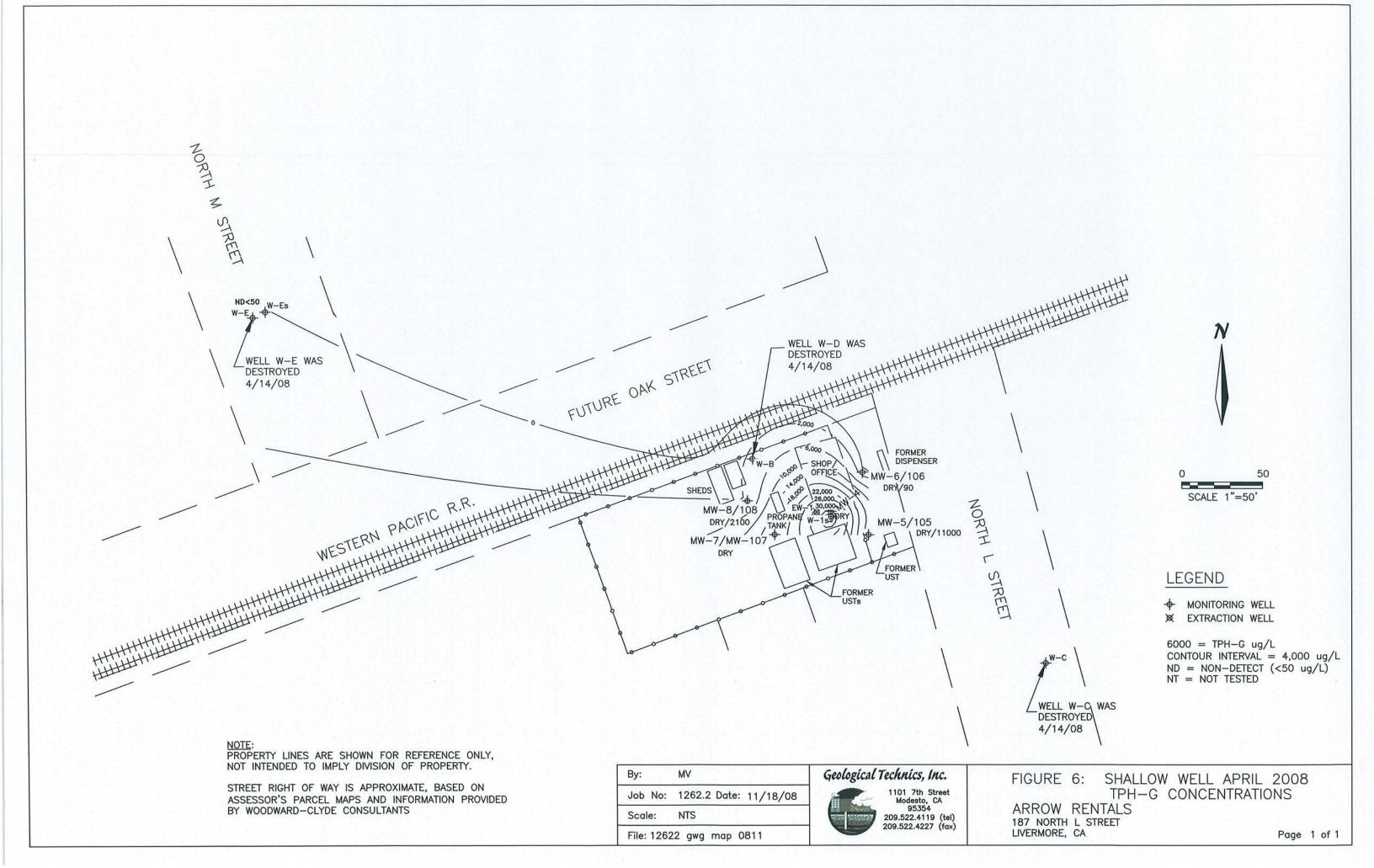
Sullins 187 North L Street Livermore, CA

Geological Technics Inc.

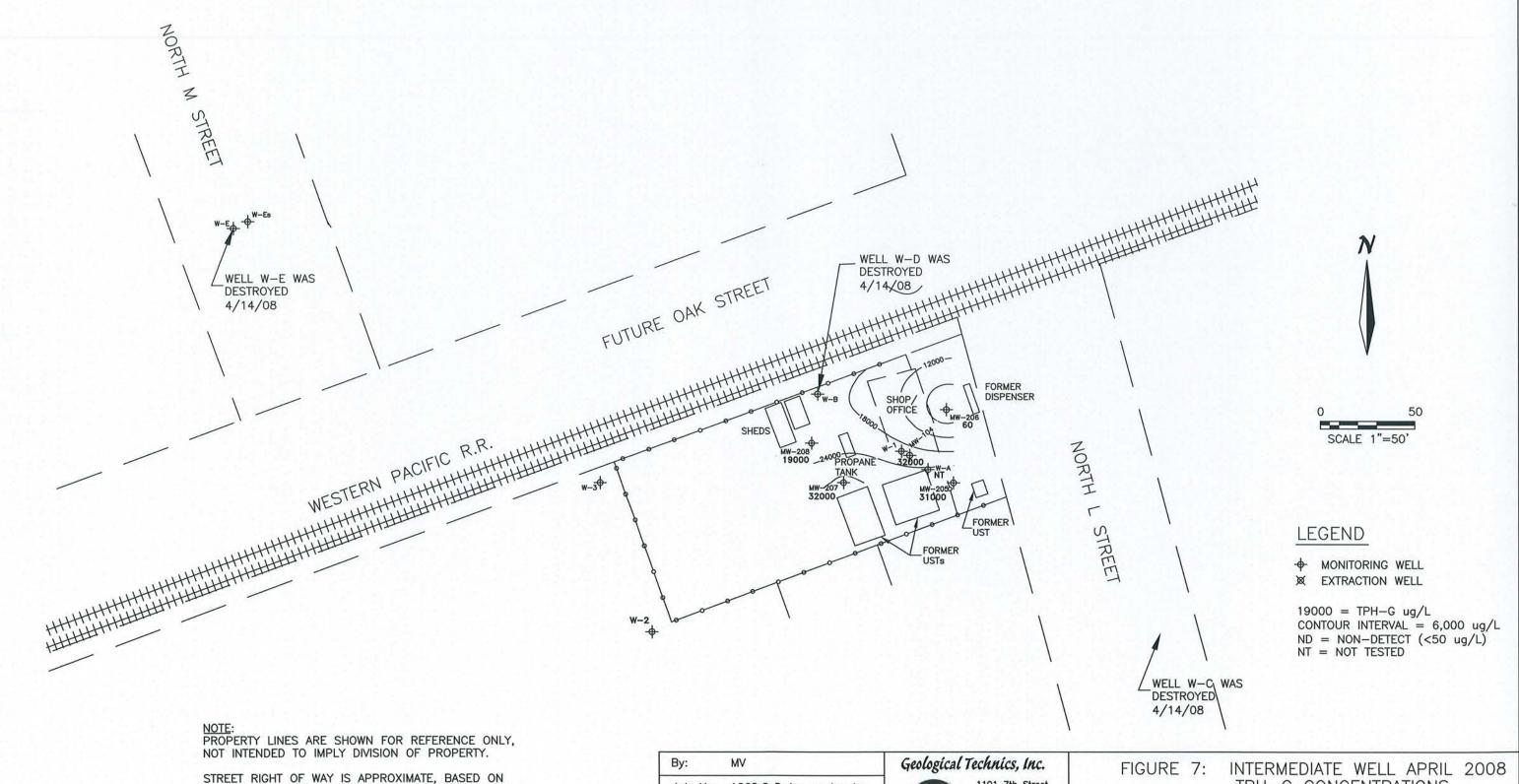








DURING OCOTBER 8TH AND 9TH MONITORING EVENT NOT ENOUGH DATA WAS COLLECTED TO CALCULATE THE TPH—G CONCENTRATIONS FOR THE INTERMEDIATE LEVELS. THE DATA SEEN ON THIS TABLE WAS GENERATED DURING THE APRIL 2008 MONITORING EVENT.



ASSESSOR'S PARCEL MAPS AND INFORMATION PROVIDED BY WOODWARD-CLYDE CONSULTANTS

1262.2 Date: 11/18/08 Job No:

Scale: NTS

File: 12622 gwg map 0811

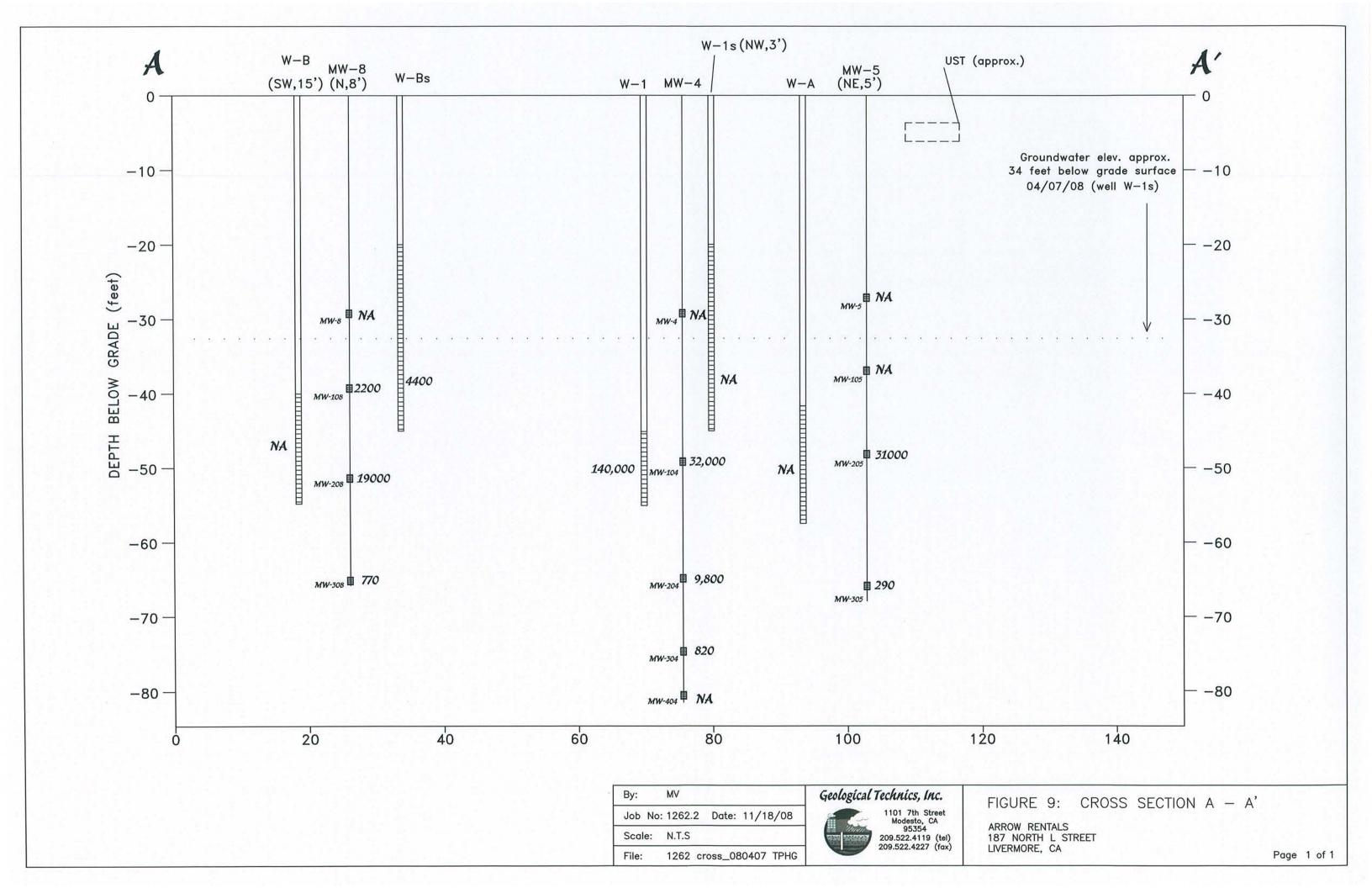


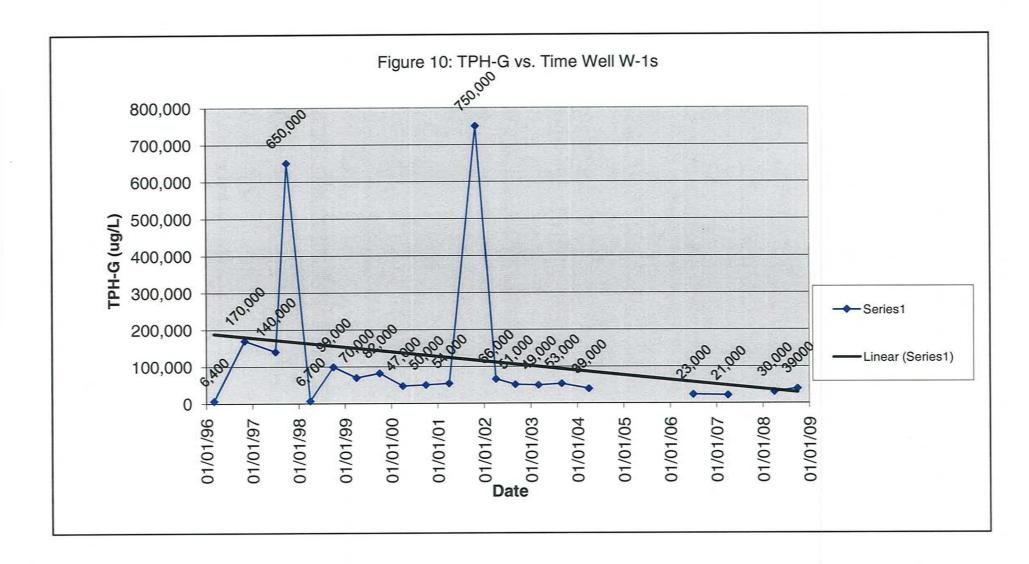
TPH-G CONCENTRATIONS

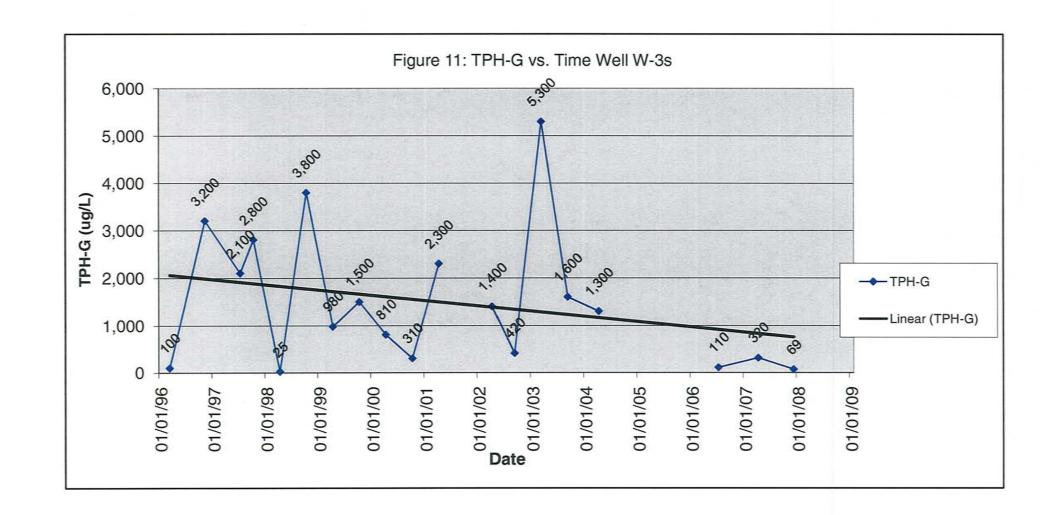
ARROW RENTALS 187 NORTH L STREET LIVERMORE, CA

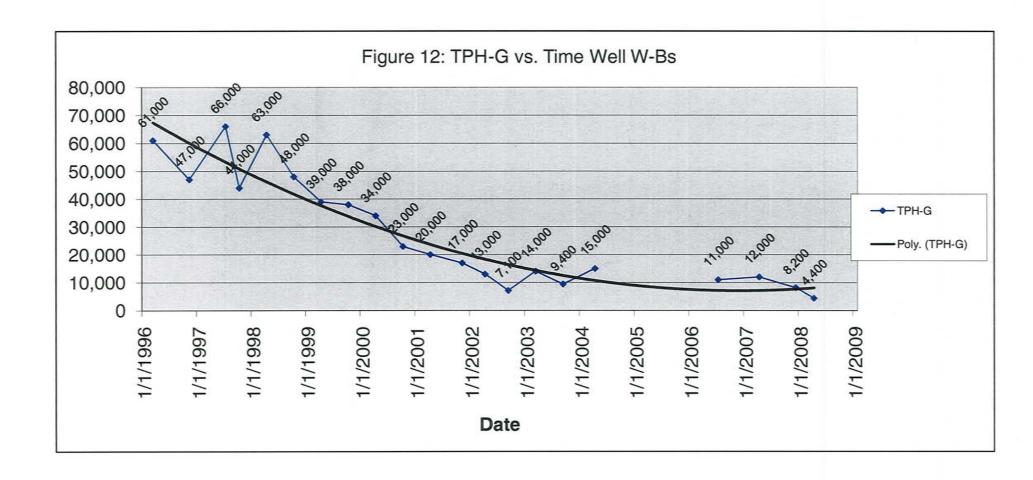
Page 1 of 1

NOTE: DURING OCOTBER 8TH AND 9TH MONITORING EVENT NOT ENOUGH DATA WAS COLLECTED TO CALCULATE THE TPH-G CONCENTRATIONS FOR THE DEEP LEVELS. THE DATA SEEN ON THIS TABLE WAS GENERATED DURING THE APRIL 2008 MONITORING EVENT. NORTH 3 WESTERN PACIFIC R.R. 50 SCALE 1"=50' LEGEND MONITORING WELL X EXTRACTION WELL 2500 = TPH-G ug/LCONTOUR INTERVAL = 1,000 ug/L ND = NON-DETECT (<50 ug/L)NT = NOT TESTED WELL W-C1 WAS DESTROYED 4/14/08 PROPERTY LINES ARE SHOWN FOR REFERENCE ONLY, NOT INTENDED TO IMPLY DIVISION OF PROPERTY. By: Geological Technics, Inc. FIGURE 8: DEEP WELL APRIL 2008 STREET RIGHT OF WAY IS APPROXIMATE, BASED ON 1101 7th Street TPH-G CONCENTRATIONS 1262.2 Date: 11/18/08 Job No: ASSESSOR'S PARCEL MAPS AND INFORMATION PROVIDED Modesto, CA 95354 ARROW RENTALS BY WOODWARD-CLYDE CONSULTANTS NTS 209.522.4119 (tel) 209.522.4227 (fax) Scale: 187 NORTH L STREET LIVERMORE, CA File: 12622 GWG map 0811 Page 1 of 1









Appendix A

Summary Tables

Table 1A: Summary of Groundwater Elevation and Gradient - Water Table Wells

Date							Eleva	ition of Grou	ndwater*				Avg	. Elv.	Avg. DTW	Gradient	Bearing
		W-1s	W-3s	W-Bs	W-Es								(f	eet)	(feet)	(ft/ft)	
	top of casing	479.09	476.98	478.82	474.66												
	top of screen	459.09	456.98	458.82	454.66												
	bottom of screen	434.09	431.98	433.82	429.66												
7/15/1997		448.68	447.81	449.20	443.20												
10/29/1997		442.64	441.53	442.19	437.98					es - Mary - marter (a.V.)				////			
4/27/1998		460.48	457.25	459.96	455.39	7/20/21 23 - 17.23											
10/23/1998		445.11	444.01	445.60	440.16												
4/9/1999		453.14	451.02	452.78	447.25												
10/5/1999		446.66	445.20	446.72	441.47												
4/5/2000		453.12	451.96	453.77	448.04												
10/26/2000		447.91	446.50	448.14	442.43												
4/18/2001		447.80	446.51	446.89	442.63												
11/13/2001		435.69	433.32	443.59	431.05												
4/30/2002		441.80	439.19	441.50	437.09												
9/30/2002		439.17	437.01	439.39	434.50						17						
3/19/2003		446.83	445.03	446.74	441.80												
9/16/2003		440.88	438.50	441.40	436.14												
4/29/2004		448.99	447.39	448.83	443.43									7.16	30.23	0.019	West
7/7/2006		450.40	448.61	450.25	444.21								44	8.37	29.02	0.019	N76°W

7/7/2006 | 450.40 | 448.61 | 450.25 | 444.21 | *Data prior to July 7, 2006 from *Environmental Sampling Services* 5/27/04 Groundwater Monitoring Report

Date					Elevati	on of Ground	water - Wells	Surveyed Oct	ober 16, 2006	in accordance	e with SWRCE	3 Geotracker 1	Requirements					
		W-1s	W-3s	W-Bs	W-Es	MW-4	MW-5	MW-6	MW-7	MW-8	MW-105	MW-106	MW-107	MW-108	Avg. Elv.	Avg. DTW	Gradient	Bearing
	top of casing	481.19	479.12	480.92	476.78	480.84	481.12	480.79	480.91	480.64	481.12	480.79	480.91	480.64	(feet)	(feet)	(ft/ft)	
	top of screen	461.19	459.12	460.92	456.78	451.84	455.12	451.79	451.91	451.64	445.12	444.79	441.91	441.64				
	bottom of screen	436.19	434.12	435.92	431.78	450.84	454.12	450.79	450.91	450.64	444.12	443.79	440.91	440.64				
10/16/2006		447.81	446.17	447.93	442.75	<u> </u>		12	-		447.97	447.11	446.77	446.34	446.61	33.58	0.014	N68°W
4/17/2007		449.64	448.35	449.51	444.58	454.09	-	= =	(4)	741	(4)	140	448.92	4	448.20	31.58	0.016	N71°W
12/19/2007		438.88	437.46	444.51	433.10	= =			34			443.07	442.26	442.60	440.27	39.78	0.033	S74°W
4/7/2008		446.97	-	446.76	442.34	453.30	-	445.99		452.15	447.38	445.18	445.86	446.36	447.23	33.23	0.012	N64°W
10/8-9/2008		435.40		-	431.01		-	1-	3. 4 5	-	431.68	431.31	-:	430.56	431.99	47.27	0.01	N57°W

"-" = well dry or depth to water measurement could not be obtained

Table 1B: Summary of Groundwater Elevation and Gradient - Intermediate Wells

Date				Elevation of (Groundwater -	Wells Surve	yed Octpber 10	6, 2006 in acco	ordance with S	WRCB Geotr	acker Require	ements			
		W-A	W-B	W-C	W-D	W-E	MW-104	MW-205	MW-206	MW-207	MW-208	Avg. Elv.	Avg. DTW	Gradient	Bearing
	top of casing	481.04	480.74	481.61	477.03	476.56	480.84	481.12	480.79	480.91	480.64	(feet)	(feet)	(ft/ft)	
	top of screen	439.04	440.74	436.61	435.03	436.06	431.34	434.12	431.79	431.91	429.64				
	bottom of screen	423.54	425.74	426.61	419.53	416.26	430.34	433.12	430.79	430.91	428.64				
10/16/2006			₩5	(m)	-	442.63	444.85	446.75	447.03	446.27	445.12	445.44	34.70	0.012	N63°W
4/17/2007		-		-	12	12	-	2	448.57	447.13	447.05	447.58	33.20	0.022	S68°W
12/19/2007		438.36	H.1		95	18	435.98		436.10	434.33	433.92	435.74	45.11	0.04	N76°W
4/7/2008		446.72	2 20	(<u>=</u>)	9 <u>4</u>	(2	443.10	444.84	446.38	444.84	443.66	444.92	35.97	northwest	variable
10/8-9/2008		-	-	(8)	4 =	Æ	431.08	434.51	431.32	(#)	430.68	431.90	48.95	0.12	N20°W

[&]quot;-" = well dry or depth to water measurement could not be obtained

Table 1C: Summary of Groundwater Elevation and Gradient - Deep Wells

Date		Elevat	ion of Ground	water - Wells	Surveyed Oct	ober 16, 2006	in accordance	e with SWRCE	Geotracker l	Requirements		
		MW-204	MW-305	MW-306	MW-307	MW-308	Avg. Elv.	Avg. DTW	Gradient	Bearing	MW-304	MW-404
	top of casing	480.84	481.12	480.79	480.91	480.64	(feet)	(feet)	(ft/ft)		480.84	480.84
	top of screen	415.34	416.12	415.79	415.91	415.64					406.34	400.84
	bottom of screen	414.34	415.12	414.79	414.91	414.64					405.34	399.34
10/16/2006		447.09	447.44	447.29	446.63	446.37	446.96	33.90	0.014	N78°W	442.76	444.37
4/17/2007		-	448.49	449.08	12	-	448.79	32.17	4:	-	-	448.82
12/19/2007		435.73	-	443.19	435.20	434.93	437.26	43.53	0.18	S39°W	435.45	435.51
4/7/2008		446.42	446.56	442.68	446.86	445.59	445.62	35.24	0.1	N26°E	441.42	446.18
10/8-9/2008		429.90	444.51	432.28	.=	442.09	437.20	43.65	#	3	=	432.20

[&]quot;-" = well dry or depth to water measurement could not be obtained

Table 2

Date	Well Pair	Mid Points (TS-BS & TS-BS)	gwl/ts	bs/bs	GW Elev. (Head)	Vert Head diff.	Vert Dist diff.	Vertical Gradien
16-Oct-06	MW-104	430.84	431.34	430.34	444.85	2.240	16.00	0.14
10-001-00	MW-204	414.84	415.34	414.34	447.09	2.240	10.00	0.1.4
	WW-204	414.04	413.34	414.54	447.02			
16-Oct-06	MW-205	433.62	434.12	433.12	446.75	0.690	18.00	0.04
	MW-305	415.62	416.12	415.12	447.44			
19-Apr-07	MW-107	441.41	441.91	440.91	448.92	-1.790	10.00	-0.18
	MW-207	431.41	431.91	430.91	447.13			
19-Apr-07	MW-206	431.29	431.79	430.79	446.75	0.510	16.00	0.03
19-Api-07	MW-306	415.29	415.79	414.79	447.44	0.510	10.00	0.05
1012000000			Trees.		125.52	0.200	0.00	0.02
19-Dec-07	MW-204	414.84	415.34	414.34	435.73	-0.280	9.00	-0.03
	MW-304	405.84	406.34	405.34	435.45			
19-Dec-07	MW-304	405.84	406.34	405.34	435.45	0.060	5.75	0.01
	MW-404	400.09	400.84	399.34	435.51	***************************************		1
10 5 07	MW 207	421-41	421.01	430.91	434.33	0.870	16.00	0.05
19-Dec-07	MW-207 MW-307	431.41 415.41	431.91 415.91	414.91	434.33	0.670	10.00	0.03
	WW-507	415.41	413.91	414.91	433.20			
7-Apr-08	MW-204	414.84	415.34	414.34	446.42	-5.000	9.00	-0.56
V 200 - 644 6 € 2 70 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	MW-304	405.84	406.34	405.34	441.42	STATUTE OF THE STATE OF THE STA		
7-Apr-08	MW-205	433.62	434.12	433.12	446.75	1.720	18.00	0.10
, 11p. 00	MW-305	415.62	416.12	415.12	447.44	001000	LESCALFORN	80,000
7 4 09	MW-206	431.29	431.79	430.79	446.75	-3.700	16.00	-0.23
7-Apr-08	MW-306	415.29	415.79	414.79	447.44	-3.700	10.00	0.25
7-Apr-08	MW-207	431.41	431.91	430.91	444.84	2.020	16.00	0.13
	MW-307	415.41	415.91	414.91	446.86			L
8-Oct-08	MW-204	414.84	415.34	414.34	429.90		9.00	
	MW-304	405.84	406.34	405.34	B			
9 Oat 09	MW 205	433.62	434.12	433.12	434.51	10.000	18.00	0.56
8-Oct-08	MW-205 MW-305	415.62	416.12	415.12	444.51	10.000	10.00	0.50
	IVI VV - 3U.3	413.02	410.12	713.12	777.01			
8-Oct-08	MW-206	431.29	431.79	430.79	431.32	0.960	16.00	0.06
	MW-306	415.29	415.79	414.79	432.28			
8-Oct-08	MW-207	431.41	431.91	430.91	-		16.00	
5 50.00	MW-307	415.41	415.91	414.91				

Table 3: Summary of Well Construction

Well/Boring Type	Well/Boring Number	Status	Date Drilled	Total Depth (ft)	Boring Diameter (in)	Well Casing Diameter (in)	Casing Type	Slot Size (in)	Sand Type	Well	Screen	Filter	Pack	Annul	ar Seal	Grou	it Seal
					8					From	То	From	То	From	То	From	То
Monitoring	W-1	Active	5/25/1989	56.5	8	2	PVC	0.010	#2/12	55.5	45.5	55.5	41.5	41.5	39	39	S
Monitoring.	W-2	Active	5/26/1989	51.5	8	2	PVC	0.010	#2/12	49	39	49	36	36	22.5	22.5	S
Monitoring	W-3	Active	5/26/1989	51.5	8	2	PVC	0.010	#2/12	48	38	48	34.5	34.5	32.5	32.5	S
Monitoring	W-A	Active	7/12/1990	63	12	4	PVC	0.010	#2/12	57.5	42	63	40	40	36.5	36.5	S
Monitoring	W-B	Active	7/13/1990	55	12	4	PVC	0.010	#2/12	55	40	55	32	32	30	30	S
Monitoring	W-C	Active	7/11/1990	55	8	2	PVC	0.010	#2	55	45	55	37.5	37.5	35	35	S
Monitoring	W-D	Active	7/12/1990	57.5	12	4	PVC	0.010	#2/12	57.5	42	57.5	39.5	34	32	32	S
Monitoring	W-E	Active	7/10/1990	61	8	2	PVC	0.010	#2/12	60.3	40.5	61	37	30	29	29	S
Monitoring	MW-1s	Active	3/11/1996	45	?	6	PVC	0.010	#2/12	45	20	45	17	17	15	15	S
Monitoring	MW-Bs	Active	3/12/1996	45	?	6	PVC	0.010	#2/12	45	20	45	18	18	16	16	S
Monitoring	MW-3s	Active	3/12/1996	45	?	4	PVC	0.010	#2/12	45	20	45	18	18	16	16	S
Monitoring	MW-Es	Active	3/13/1996	45	?	2	PVC	0.010	#2/12	45	20	45	18	18	16	16	S
Monitoring	MW-4	Active	10/04/06	82	8	155	MCT	1.00	#2/12	30	29	30	20	16	14	14	S
Monitoring	MW-104	Active	-	_ ~	#2) in	MCT	10.00	#2/12	50.5	49.5	52	48			- 02	
Monitoring	MW-204	Active			=<	्र	MCT	::*::::	#2/12	66.5	65.5	68	64		-	-	-
Monitoring	MW-304	Active	-			18	MCT		#2/12	75.5	74.5	76	73	-		. 80	-
Monitoring	MW-404	Active	=	, ×1	**	. :-	MCT	0+0	#2/12	81.5	80	81.5	79.5	-			
Monitoring	MW-5	Active	10/09/06	68	8	[34	MCT	5.953	#2/12	27	26	29	24	24	21.5	21.5	S
Monitoring	MW-105	Active	-		-		MCT		#2/12	37	36	39	34	-		- 8:	-
Monitoring	MW-205	Active	-	-	*		MCT		#2/12	48	47	50	45	1.21		45	
Monitoring	MW-305	Active	-	-			MCT	1.41	#2/12	66	65	68	63	-	(4)		-
Monitoring	MW-6	Active	10/10/06	68	8	1.4	MCT	1940	#2/12	30	29	31	27	27	24	24	S
Monitoring	MW-106	Active	~	-		102	MCT	243	#2/12	37	36	39	35	-	- 1	-	-
Monitoring	MW-206	Active	-	52	-	134	MCT	948	#2/12	50	49	52	47	-	+		
Monitoring	MW-306	Active		2		-	MCT		#2/12	66	65	68	63	-		-	-
Monitoring	MW-7	Active	10/05/06	69.5	8	[:a _	MCT	5.0	#2/12	30	29	30	20	-		6	S
Monitoring	MW-107	Active		(₽)	-		MCT	i i e	#2/12	40	39	42	37	-	1 20	-	
Monitoring	MW-207	Active	2	·		104	MCT		#2/12	50	49	52	47	-	-	- 25	
Monitoring	MW-307	Active	-	2	~	1-	MCT	1742	#2/12	66	65	68	63	-	4	- 21	
Monitoring	MW-8	Active	10/06/06	66.5	8	-	MCT		#2/12	30	29	30	30	20	18	18	S
Monitoring	MW-108	Active	-	1 2	9	7 - 2-	MCT	161	#2/12	40	39	42	37	-	9	2:	-
Monitoring	MW-208	Active	-		. 3	720	MCT	122	#2/12	52	51	54	49	-			1
Monitoring	MW-308	Active	131	- 5	-	-	MCT	-	#2/12	66	65	66	63	-	-		
Vapor Extraction	EW-1	Active	10/3/2006	25	10	4	PVC	0.010	#2/12	25	10	25	9.5	9.5	7.5	7.5	1 :

Wells	Date	TPH	ТРН	Benzene	Toluene	Project No Ethyl	Total	MTBE	ETBE	DIPE	TAME	ТВА	1,2 DCA	EDB
		Gasoline ug/L	Diesel ug/L	ug/L	ug/L	Benzene ug/L	Xylenes ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
W-1	11/1988 (?) 9/13/1995	210,000 666,000	300,000	29,000 65,000	30,000 78,000	5,400 6,400	24,000 36,000	- <12500	-	-	-		-	-
	10/19/2006 10/20/2006 12/20/2007	77,000 110,000 140,000	- :	9,700 4,600 20,000	11,000 7,200 17,000	2,000 3,900 3,000	10,000 11,000 16,000	- - <2000	-	-	-	-	-	-
W-2	11/1988 (?)	360	<50	6.7	2.1	0.5	1.3	-	-	-	-	-	-	-
W-3	9/13/1995	90	2,200	<0.5 290	<0.5 120	<0.5	<0.5 140	<5 -	-	-	-	-		-
W-3	9/13/1995	27,000	-	5,600	290	460	280	<2500	-	-		-		-
W-A (dup)	1990 1990	10,000	2,400	6,800 6,900	5,500 5,600	620 620	3,400 6,800	-	-	-	-	-	-	-
	10/20/2006 10/29/2007	450 40,000	-	4,000	19 330	21 1,600	3,000	<100	-	-	-	-	-	-
W-B (dup)	1990 1990	13,000 21,000	1,700 1,600	22,000 21,000	7,900 7,300	2,000 1,800	4,000 3,700	-	-	-	-	-	-	-
W-C	1990	<10	<100	<1	<1	<1	<1	-	-	-	-	-	-	-
W-D	1990	100	<100	1	2	2	1	-	-	-	-	-	-	-
W-E	1990 9/13/1995	<10 95	<100	<1 4	<1 <0.5	<1 <0.5	<1 <0.5	- 18	-	-	-	-	-	-
W-1s	3/22/1996 11/22/1996	6,400 170,000		580 13,000	470 18,000	85 3,500	1,100 18,000	<500 <10000	-	-	-	-	-	-
	7/15/1997 10/29/1997	140,000 650,000	38,000 180,000	12,000 14,000	12,000 19,000	2,600 7,800	16,000 35,000	<800 <3000	-	-	-			-
	4/27/1998 10/23/1998 4/9/1999	6,700 99,000 70,000	2,200 18,000 24,000	9,800 6,500	9,400 7,000	77 1,800 1,800	870 11,000 8,900	<30 <600 360	-	-	-	-		-
	10/5/1999 4/5/2000	82,000 47,000	60,000 15,000	5,500 4,300	4,500 2,300	2,500 1,500	14,000 6,100	<300 170		-			-	-
	10/26/2000 4/18/2001	50,000 54,000	1,200 6,800	3,800 5,200	1,800	1,700 1,500	7,600 7,000	<50 <330	-	-	-	-	-	-
	11/13/2001 4/30/2002 9/30/2002	750,000 66,000 51,000	8,200 1,200	9,500 6,000 5,600	7,800 2,700 1,500	7,200 2,300 2,000	33,000 11,000 9,400	<2000 <1200 <1000	-	-	-	-	-	-
	3/19/2003 9/16/2003	49,000 53,000	9,800 24,000	3,400 4,100	880 1,200	1,300 1,400	7,300 6,600	<500 <1000	-	-	-	-		
	4/29/2004 7/7/2006 10/17/2006	39,000 23,000 35,000	5,900 <500 <470	3,700 4,000 5,000	1,200 710 1,300	810 1,200 1,500	4,700 2,900 3,500	<2500 <100	- <500	- <500	- <500	<1000	- <50	- <50
	10/19/2006 10/20/2006	40,000 32,000		6,000 2,100	3,800 2,700	1,300 1,200	4,400 3,600	-	-	-	-	-	-	-
	4/19/2007 10/29/2007	21,000 68,000	-	2,200 19,000	460 830	1,200 2,700	1,800 4,000	<200 <400	-	-	-	-		-
	4/8/2008 10/9/2008	30,000 39,000	-	2,600 3,900	340 340	1,800 1,400	1,700 2,000	<120 <250	-	-	-	-	-	-
W-3s	3/22/1996 11/22/1996	100 3,200	-	13 270	6.9 29	5.3 63	14 100	<5 <100	-	-	-		-	-
-	7/15/1997 10/29/1997 4/27/1998	2,100 2,800 <50	340 750 <50	230 630 <0.5	7 31 <0.5	33 71 <0.5	51 69 <0.5	<20 <30 <3	-	-	-			-
	10/23/1998 4/9/1999	3,800 980	1,000	500 240	28	90	37	35	-	-	-	-	-	-
	10/5/1999 4/5/2000	1,500 810	1,000 320	290 150	9.5	53 9	9.8 5.7	<6 <5	-	-		-	-	-
	10/26/2000 4/18/2001 11/13/2001	2,300	120 1,600	83 320	3.5 8	6.4 16	7	<5 <20	-	-	-	-	-	-
	4/30/2002 9/30/2002	1,400 420	490 390	320 68	5.5 1.4	24 3.1	5 1.1	<25 <5	-	-	-	-	-	-
	3/19/2003 9/16/2003 4/29/2004	5,300 1,600 1,300	1,500 1,400 400	920 270 210	24 1.7 5.1	140 5.2 23	<0.5 4.5	<25 <5 <25	-	-	-	-	-	-
	7/7/2006 10/17/2006	110 1,300	<500 <50	44 95	0.77 <2	<0.5 2	<0.5 <2	<1	<5 -	- <5 -	<5 -	<10	<0.5	<0.5
	4/19/2007 12/19/2007	320 69	-	1.3	<2.5 <0.5	<2.5 <0.5	<2.5 <1	<5 <2	-	-	-	-		-
W-Bs	3/22/1996 11/22/1996	61,000 47,000	-	9,800 5,100	8,000 3,100	2,200 1,400	11,000 7,800	<5000 <2500	-	-	-	-	-	-
	7/15/1997 10/29/1997	66,000 44,000	17,000 27,000	7,800 6,000	4,900 500	1,900 1,500	10,000 6,400	<600 380	-	-	-	-	-	-
	4/27/1998 10/23/1998 4/9/1999	63,000 48,000 39,000	17,000 9,600 12,000	6,100 6,700 4,100	5,400 1,200 1,900	1,900 1,500 1,400	9,100 6,200 5,600	<600 <300 <300	-	-	-	-		-
	10/5/1999 4/5/2000	38,000 34,000	7,300 9,600	3,800 3,500	390 1,200	1,600 1,400	5,900 4,700	<60 <150	-	-		-	-	-
	10/26/2000 4/18/2001 11/13/2001	23,000 20,000 17,000	650 2,500 3,600	2,500 2,400 2,000	210 180 130	1,100 880 1,100	2,600 1,800 1,700	150 <20 <150	-	-	-	-	-	-
	4/30/2002 9/30/2002	13,000 7,100	2,300 1,500	1,000	38 28	660 260	360 93	<170 <250	-	-				-
	3/19/2003 9/16/2003	14,000 9,400	3,900 1,900	1,200	77 36	820 580	900 160	<120 <150	-	-	-	-	-	-
	4/29/2004 7/7/2006 10/17/2006	15,000 11,000 6,500	3,300 <50 <47	2,400 1,900 1,000	170 160 37	1,300 820 410	950 440 83	<200 <40 -	<200	- <200 -	<200	- <400 -	- <20 -	<20
	10/20/2006 4/19/2007	630 12,000	<47 -	39 1,500	8.5 100	1.7 900	20 620	- <100	-	-	-	-	-	-
	12/19/2007 4/8/2008	8,200 4,400	-	360 410	<50 15	380 460	<100 71	<200 <50	-	-	-	-	-	-
W-Es	3/22/1996 11/22/1996	<50 280	-	<0.5 24	<0.5 0.6	<0.5 1.8	<0.5 2.2	<5 <5	-	-	-	-	-	-
	7/15/1997 10/29/1997 4/27/1998	-	-	-	-	-	-	-	-	-	-	-	-	-
	10/23/1998 4/9/1999	82 -	69	<0.5	0.8	<0.5 -	0.8	4	-	-	-	-	-	-
	10/5/1999 4/5/2000	- 110		<0.5	<0.5	<0.5	<1.0	- -	-		-	-	-	-
	10/26/2000 4/18/2001 11/13/2001	110 - -	<50 - -	0.7	<0.5 -	<0.5 -	<1.0 -	<5 -	-	-	-	-	-	-
	4/30/2002 9/30/2002	-	-		-	•	-	-	-	-	-		-	-
	3/19/2003 9/16/2003 4/29/2004	86 - 55	61 - 87	<0.5 - 0.62	<0.5 - <0.5	<0.5 - <0.5	<0.5 - <0.5	<5 - <5	-	-	-	-	-	-
	7/7/2006 10/17/2006	<25 <50	<50 <50	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	2.4	<5 -	<5 -	<5 -	<10	<0.5	<0.5
	4/17/2007 12/19/2007	<50 <50	-	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<0.5 <1	<1 <2	-	-	-	-		-
	4/7/2008 10/8/2008	<50 <50	-	<0.5 <0.5	<0.5 <0.5	<0.5 <0.5	<1 <1	<5 <5	-	-	-	-	-	-
MW-4	10/16/2006 4/17/2007							DRY DRY						
	10/29/2007 12/19/2007	460,000	-	24,000	21,000	3,800	19,000	<500 DRY	-	-	-	-	-	-
MW-5	10/16/2006 4/17/2007			1				DRY DRY						
April 2	12/19/2007							DRY						
MW-6	10/16/2006 4/17/2007 12/19/2007							DRY DRY DRY						
	10/16/2006							DRY						
MW-7								DRY						A 72.7
MW-7	4/17/2007 12/19/2007							DRY						
MW-7	4/17/2007							DRY DRY DRY						

Table 4: Summary of Groundwater Analytical Data

Wells	Date	TPH	TPH	Benzene	Toluene	Ethyl	Total	MTBE	ETBE	DIPE	TAME	TBA	1,2 DCA	EDB
		Gasoline	Diesel	ug/L	ug/L	Benzene	Xylenes	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
		ug/L	ug/L			ug/L	ug/L							
MW-104	10/19/2006	960	-	250	170	20	83	-	-	-	-	-	-	-
1011	4/19/2007			1 200				DRY						
	10/29/2007	1,300	-	210	82	110	380	<5	_	-	i -	I	-	-
	12/19/2007	1,000			- 02		1 000	DRY						
	4/8/2008	32,000	-	7,100	1,400	680	1,800	<250	-	-	-	-	-	-
	4/0/2000	02,000		7,100	1,400	- 555	1,000	1200						
MW-105	10/16/2006		-		-		-		-		-	-	-	-
10100-103	4/19/2007	13,000	-	4,300	980	490	1,500	<250		-	-	-	-	-
		13,000		4,300	300	430	1,300	DRY					_	
	12/19/2007							DRY						
	4/8/2008	44.000		1 0000	70	10	110							
	10/9/2008	11,000	-	3800	70	40	110	<50	-	-	-	-	•	-
MW-106	10/16/2006	56	-	2.2	<0.5	0.57	<0.5	<u> </u>	-	-	-	-	-	-
	4/19/2007	240	-	7.6	<0.5	<0.5	<0.5	<1	-	-	-	-	-	-
	10/29/2007	86	-	<0.5	<0.5	<0.5	<0.5	<1	-	-	-	-	-	-
	12/20/2007	54	-	1.0	<0.5	<0.5	<1	<2	-	-	-	-	-	-
	4/8/2008							DRY						
	10/8/2008	90	-	0.6	<0.5	<0.5	<1	<5	-	-	-	-	-	-
MW-107	10/19/2006	320	-	430	290	33	140	-		-	-	-	-	-
	4/19/2007	7,400	- I-	3,400	150	140	140	<200	-	-	-	-	-	-
	12/19/2007		•					DRY						
	4/8/2008	18,000		6,100	700	380	480	<50	-	-	-	-	-	-
		1,000		1 -,		1								
MW-108	10/16/2006	3,400	-	790	46	<20	65.	-			-	-	-	-
100	4/19/2007	<20,000	-	5,400	<200	400	220	<400	-	-	-	-	-	-
	10/29/2007	310	-	55	3.2	10	14	1.9	-	-	-	-	-	-
	12/19/2007	510		1 33	U.E	1 10		DRY						
	4/8/2008	2,200	-	1,100	24	26	140	<25			-	-	-	T -
	10/9/2008	2,200	-	490	8.4	35	40	<12	-		-		-	<u> </u>
	10/9/2006	2,100	-	490	0.4	35	40	<12						_
1011 004	10/10/0000	5.000		500	400	110	500							
MW-204	10/19/2006	5,800	-	560	420	110	580	-	-	-	•	-	-	-
	4/18/2007	<10,000		2,700	650	210	970	<200	-		-	-	-	-
	10/29/2007	710	-	18	9.9	11	34	<1	-	-	-	-	-	-
	12/20/2007	22,000	-	4,700	1,100	490	1,400	<800	-		-	-	-	-
	4/8/2008	9,800	-	1,800	340	520	560	<50	-	-	-	-	-	-
	10/8/2008	18,000		9,200	360	130	370	<100				1.00 - 200		
MW-205	10/16/2006	<2000	-	880	63	<20	54	-	-	-	-	-	-	-
	10/17/2006	5,100	1 1 - 1	2,000	190	52	220	-	-	-	-	-	-	-
	4/18/2007	<40,000	-	14,000	550	<400	<400	<800	The Property		120 10 100 10			F 1 200
	12/19/2007						er see Suit	DRY						Marie a
	4/8/2008	31,000	-	20,000	640	510	1,400	<250	-	-	-	-		-
									- 100000			Eliza Jepan		
MW-206	10/16/2006	<50	-	0.72	<0.5	<0.5	<0.5		-	200	-		-	-
	4/18/2007	<50	-	0.96	<0.5	<0.5	<0.5	<1	-		-	-	-	-
	12/19/2007	84		0.71	<0.5	<0.5	<1	<2	-	-	-			-
	4/8/2008	60		1.8	<0.5	<0.5	<1	<5	-	-	-	-		-
	4/0/2000	- 00		1.0	70.5	10.0	- ''	1 10						-
MW-207	10/19/2006	1,000	-	170	52	18	67	-	-			-		-
WW-207	4/18/2007	<25,000	-	9,700	480	<250	250	<500	-	-	-	-	-	-
	12/19/2007	\25,000	-	3,700	400	\250	230	DRY						
		22.000	-	12 000	250	580	790	<250		-	-		-	-
	4/7/2008	32,000	-	12,000	350	300	790	1250		-	-		<u> </u>	<u> </u>
BANAL OO	10/10/0000	2 200		1 200	240	FC	F20							-
MW-304	10/19/2006	3,300		290	240	56	530		-	-	-	-	-	-
	4/19/2007	<10,000	ST AVE	3,100	450	<100	420	<200	-	-	-	-		-
	12/20/2007	1,500	-	380	43	32	110	<40	-	-	-	-	-	-
	4/8/2008	820	-	100	36	36	98	<5	-0.00	-	-	-	-	-
MW-305	10/16/2006	<50	-	1.8	<0.5	<0.5	0.67	-	-	-	-	-	-	-
	4/19/2007	<20,000	-	3,600	<200	<200	<200	<400	•	-		• •	<u> </u>	-
	12/19/2007							DRY	THE STATE OF	20,870,5				
	4/8/2008	290	-	42	14	8.1	28	<5		1.50	- 15 m	- V	Property of the second	-
							72197							
MW-306	10/16/2006	<50	-	<0.5	<0.5	<0.5	<0.5	100	-	-		-	-	-
	4/18/2007	<50	-	3.1	<0.5	<0.5	<0.5	<1	-	-	-	-	-	-
	12/20/2007	<50		0.54	<0.5	<0.5	<1	<2	-	-		-	-	-
	4/7/2008	<50	-	<0.5	<0.5	<0.5	<1	<5		-			-	-
		1		1		1			7 1 1	No. of Asset		100		
MW-307	10/19/2006	<50	-	2.3	1.5	<0.5	4.7	-			-			-
007	4/18/2007	<4000	-	1,300	250	78	310	<80		-			-	<u> </u>
	12/19/2007	1,500	-	200	50	59	140	<40	-	-		-	-	-
				720	110	69	160	<25		-	-	-	-	-
	4/7/2008	2,500		120	110	09	100	<25		-	-	-	-	-
		-50		1.05	-0.5	1 .0 =	.0.5		potential and the second					
MM 000	10/10/0000	<50	-	<0.5	<0.5	<0.5	<0.5	- 000	-	-	•	-	-	-
MW-308	10/16/2006		-	1,600	<100	<100	<100	<200	2/10/-			-	-	-
MW-308	4/19/2007	<10,000			. 15	7.2	8.4	<4		-	-	-	-	-
MW-308	4/19/2007 12/19/2007	<10,000 190	•	25	1.5									
MW-308	4/19/2007	<10,000		25 150	10	48	45	<5	-	-	-			-
	4/19/2007 12/19/2007 4/7/2008	<10,000 190 770	-	150	10									
MW-308	4/19/2007 12/19/2007 4/7/2008 10/19/2006	<10,000 190 770 1,700	-	150	73	27	280		-	-	-	-	-	-
	4/19/2007 12/19/2007 4/7/2008	<10,000 190 770	-	150	10	27 130	280 550	- <200						
	4/19/2007 12/19/2007 4/7/2008 10/19/2006	<10,000 190 770 1,700	-	150	73	27	280		-	-	-	-	-	

pre- 2006 data adapted from *Environmental Sampling Services* 5/27/04 Groundwater Monitoring Report
- = not analyzed

Appendix B

Laboratory Analytical Data Sheets

argon laboratories

16 October 2008

Ray Kablanow Geological Technics, Inc. 1101 7th Street Modesto, CA 95354

RE: Sullins Project Data

Enclosed are the results for sample(s) received on 10/10/08 14:43 by Argon Laboratories. The sample(s) were analyzed according to instructions in accompanying chain-of-custody. Results are summarized on the following pages.

Please see quality control report for a summary of QC data pertaining to this project.

The sample(s) will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Sample(s) may be archived by prior arrangement.

Thank you for the opportunity to service the needs of your company.

Sincerely,

Lab Manager

CANI	Actical	Toche	ire Imc
dent	uzulai	, i ceru	ics Inc.

Page_

- 111	1
- (抽)	Train
1255	- Secretary
AL.	

1101 7th Street Modesto, CA (209) 522-4119 Fax 522-4227

Chain of Custody

(209) 522-4119 Fax 522-4227 E-mail: gti@geologicaltechnics.com								SUSM	*	Analysis Requested	, , , ,	aboratory:	1 Labs	
Site Address: 187 N Global ID No. TO 6 00 Sampled By: E20110	ite Address: 187 N. L. Strect, Livermire, CA slobal ID No.: TO 600100116 sampled By: (print and sign name) Ezarial Nona Date Time Field I.D. Sample I.D.			No. of Containers	Matrix (Soil, Water, Gas, Other)	Preservation Type	TPH-G By EPPA method (8	BTEX, MIBE BY (SUZI)			Femp. @ Si Femp. @ La Purchase O 1262 EDF Report	nipping: ab Receipt:	o dard	
		Field I.D.		his i'n'	Z	_		<u> </u>			+++	T.211-		200/1
10/8/08	1340		W-Es		1	W	variote	1	H	++++	+	7 IFH	G:RL-50	July L
10/9/08	1000		MW-W5	>	4	H	H21_	H	H		+	v ko-	a 11-2-	:0) = (-11
1019/08	0940		W-15		4	4	HCL	1	H	++++	+	オポらて	EX 4 M I BE	-RL=5ug/L
10/8/08	1430		MW-10	6	2	Н	HCL	H	HH	++++	+++			
10/3/08	1430		MW - 100	,	2	1	None	Ц	Ш	++++	+++		15 1 1 1 V	
	1455		MW-10	8	2	Ш	HCL	Ц	Ш		+		***	
10/8/05			MW-10!		2		None							e Perservation
10/8/19			MW-30	4	12		HCL					type	w/resul	ts
10/8/03	1515		MW-20		2	多	None	4	4			ال		
10/3/02														
		ļ			+	-	-	+	\vdash		+			
Relinquished by: (signature) Ezarla Nin a loga is 8 Relinquished by: (signature) Date: Date: D		Tin	450 ne: 116			Red	eived by: (signature) eived by: (signature)			Date: 10(9)08 Date:	Time:			
		iture)	27-104/	Date:	Tin	ne: /ଧ	1.42	ζ.	Rec	elived by: (signature)	X	201	Date:	Time 1.43

Argon Laboratories Sample Receipt Checklist

Client Name:	Geological Tec	hnics,	Inc.					Date	& Time R	eceived:	10	0/10/08		4:43
Project Name:	Sullins							Clie	nt Project I	Number:		12	62.2	
Received By:	C.R.			Matr	ix:	Water	V	Soil			Slud	ge		
Sample Carrier:	Client	Lab	oratory	1	Fed Ex		UPS		Other					
Argon Labs Project	Number:	1810	031											
Shipper Container in	good condition?					Sample	s received	in prop	oer containe	ers?	Yes	V	No	
	N/A	Yes		No		Sample	s received	d intact?	•		Yes	V	No	
Samples received und	der refrigeration?	Yes	V	No		Sufficie	nt sample	volume	e for reques	ted tests?	Yes	4	No	
Chain of custody pres	sent?	Yes	7	No		Sample	s receive	d within	holding tim	e?	Yes	V	No	
Chain of Custody sign	ned by all parties?	Yes	V	No		Do sam	ples cont	ain prop	er preserva N/A	itive?	Yes	V	No	
Chain of Custody ma	tches all sample la	abels?				Do VOA	vials conta	in zero l	neadspace?					
		Yes	V	No				(None	submitted	□)	Yes	V	No	
	ANY "I	No" RE	SPONSI	MUST	BE DETA	ILED IN	THE CO	MMENT	S SECTIOI	N BELOW	ı			
											-			
Date Client Contac	ted:			-	Pe	rson Co	ntacted:							
Contacted By:					Subject:									
Comments:														
a =														
		100					-							
Action Taken:				111/2										
				ADDITIO	NAL TES	T(S) RE	QUEST /	OTHER	1					
											T			77-0
Contacted By:						U	ate:				Him	e:		
Call Received By:					_									
Comments:														
					191									
								-						









argon laboratories 2905 Railroad Ave. Ceres, CA 95307 (209)581-9280 Fax (209)581-9282

Geological Technics, Inc.

1101 7th Street

Modesto, CA 95354

Project Number: 1262.2

Project Name: Sullins

Project Manager;Ray Kablanow

Work Order No.:

I810031

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
W-E s	I810031-01	Water	10/08/08 13:40	10/10/08 14:43
MW-105	I810031-02	Water	10/09/08 10:00	10/10/08 14:43
W-1 s	I810031-03	Water	10/09/08 09:40	10/10/08 14:43
MW-106 (HCl Pres.)	1810031-04	Water	10/08/08 14:30	10/10/08 14:43
MW-106 (Unpreserved)	1810031-05	Water	10/08/08 14:30	10/10/08 14:43
MW-108 (HCl Pres.)	1810031-06	Water	10/08/08 14:55	10/10/08 14:43
MW-108 (Unpreserved)	1810031-07	Water	10/08/08 14:55	10/10/08 14:43
MW-204 (HCl Pres.)	1810031-08	Water	10/08/08 15:15	10/10/08 14:43
MW-204 (Unpreserved)	1810031-09	Water	10/08/08 15:15	10/10/08 14:43

argon laboratories 2905 Railroad Ave. Ceres, CA 95307 (209)581-9280 Fax (209)581-9282

Geological Technics, Inc.

Project Number: 1262.2

1101 7th Street

Project Name: Sullins

Work Order No.:

Modesto, CA 95354

Project Manager; Ray Kablanow

1810031

TPH-gas/BTEX/MTBE EPA Method 8015M / 8021B

Analyte	Result	Reporting Limit	Units	Dilution	Analyzed	Method	Notes
W-E s (I810031-01) Water Sampled: 08-C	oct-08 13:40 Receiv	ed: 10-Oct-08	14:43				
Total Petroleum Hydrocarbons @	ND	50	ug/L	1	13-Oct-08	EPA 8015M/8021B	
Gasoline		-212				80131/0/8021B	
Benzene	ND	0.5	"				
Toluene	ND	0.5	"				
Xylenes (total)	ND	1.0	"	"			
Sthylbenzene	ND	0.5	"	"	2.37		
Methyl-t-butyl ether	ND	5.0		"	**	163	
Surr. Rec.:		97 %			И	"	
MW-105 (I810031-02) Water Sampled: 0	9-Oct-08 10:00 Rec	eived: 10-Oct	-08 14:43				
Total Petroleum Hydrocarbons @	11000	500	ug/L	10	13-Oct-08	EPA 8015M/8021B	
Gasoline	3800	5.0	.0		(w) :		
Benzene	70	5.0			.0		
Toluene	110	10					
Xylenes (total)	40	5.0		u.		**	
Ethylbenzene		50					
Methyl-t-butyl ether	ND				"	#	
Surr. Rec.:		101 %					
W-1 s (I810031-03) Water Sampled: 09-0	Oct-08 09:40 Receiv	ed: 10-Oct-08	14:43				
Total Petroleum Hydrocarbons @	39000	2500	ug/L	50	13-Oct-08	EPA 8015M/8021B	
Gasoline	3900	25	5.85	. 11		**	
Benzene	340	25			n	п	
Toluene	2000	50			.06		
	2000	50					
Xylenes (total)	1400	25	**				
Xylenes (total) Ethylbenzene Methyl-t-butyl ether	1400 ND	25 250					

Approved By

Surr. Rec.:

Argon Laboratories, Inc. California D.O.H.S. Cert. #2359

@FGOM laboratories 2905 Railroad Ave. Ceres, CA 95307 (209)581-9280 Fax (209)581-9282

Geological Technics, Inc.

Project Number: 1262.2

1101 7th Street

Project Name: Sullins

Work Order No.:

Modesto, CA 95354

Project Manager: Ray Kablanow

I810031

TPH-gas/BTEX/MTBE EPA Method 8015M / 8021B

Analyte							
	Result	Limit	Units	Dilution	Analyzed	Method	Note
MW-106 (HCl Pres.) (I810031-04) Water	Sampled: 08-Oct-08 14:30	Recei	ved: 10-O	et-08 14:43			
Total Petroleum Hydrocarbons @	90	50	ug/L	1	13-Oct-08	EPA	
Gasoline						8015M/8021B	
Benzene	0.6	0.5	"		· u		
Toluene	ND	0.5			(,0)		
Xylenes (total)	ND	1.0					
Ethylbenzene	ND	0.5	**				
Methyl-t-butyl ether	ND	5.0				•	
Surr. Rec.:		88 %			W.	"	
MW-106 (Unpreserved) (I810031-05) Wa	ter Sampled: 08-Oct-08 14	:30 Re	eceived: 10	0-Oct-08 14:43			
Total Petroleum Hydrocarbons @	100	50	ug/L	1	13-Oct-08	EPA 8015M/8021B	
Gasoline	1.0	0.5		*	· ·	**	
Benzene	ND	0.5			·	16	
Toluene	ND	1.0		in .		n.	
Xylenes (total)	ND	0.5		700			
Ethylbenzene	ND ND	5.0			ii.		
Methyl-t-butyl ether		13.5 15.5 6			,,	,,	
Surr. Rec.:		87%					
MW-108 (HCl Pres.) (I810031-06) Water	Sampled: 08-Oct-08 14:55	Recei	ived: 10-0	Oct-08 14:43			
Total Petroleum Hydrocarbons @	2100	120	ug/L	2.5	13-Oct-08	EPA	
Gasoline					* a.	8015M/8021B	
Benzene	490	1.2	95	<u>#</u>			
Toluene	8.4	1.2			W.	"	
Xylenes (total)	40	2.5	"		"		
Ethylbenzene	35	1.2	**	NC.			
Methyl-t-butyl ether	ND	12	M:	"		*	
		01%			"	"	

Approved By

Argon Laboratories, Inc. California D.O.H.S. Cert. #2359

@FSON laboratories 2905 Railroad Ave. Ceres, CA 95307 (209)581-9280 Fax (209)581-9282

Geological Technics, Inc.

Project Number: 1262.2

1101 7th Street

Project Name: Sullins

Work Order No.: I810031

Modesto, CA 95354

Project Manager:Ray Kablanow

TPH-gas/BTEX/MTBE EPA Method 8015M / 8021B

		Reporting	500 10	5201 W		Method	Notes
Analyte	Result	Limit	Units	Dilution	Analyzed	Method	Notes
MW-108 (Unpreserved) (I810031-07) Water	Sampled: 08-Oc	t-08 14:55 R	eceived: 1	0-Oct-08 14:43			
Total Petroleum Hydrocarbons @ Gasoline	1300	120	ug/L	2.5	13-Oct-08	EPA 8015M/8021B	
Benzene	200	1.2		ii .	(0)	3.00%	
Toluene	5.8	1.2	76			3.00	
Xylenes (total)	33	2.5	30	n	, n		
Ethylbenzene	18	1.2	30	,11			
Methyl-t-butyl ether	ND	12		•			
Surr. Rec.:	7515 UK)	99 %			"	σ	
MW-204 (HCl Pres.) (I810031-08) Water S	ampled: 08-Oct-0	8 15:15 Rece	eived: 10-C	Oct-08 14:43			
Total Petroleum Hydrocarbons @	18000	1000	ug/L	20	13-Oct-08	EPA 8015M/8021B	
Gasoline	9200	10		*		1.00	
Benzene	360	10			(0)	1961	
Toluene	370	20	n I	30.3	: n	() (!);	
Xylenes (total)	130	10	n				
Ethylbenzene Methyl-t-butyl ether	ND	100	300				
New 227	ND	105 %			(0)	U	
Surr. Rec.:		0400.200					
MW-204 (Unpreserved) (I810031-09) Water	Sampled: 08-O	:t-08 15:15 F	Received:	0-Oct-08 14:43			
Total Petroleum Hydrocarbons @	8400	1000	ug/L	20	13-Oct-08	EPA 8015M/8021B	
Gasoline	2500	10			300	"	
Benzene	ATRES	10			790	0:	
Toluene	140			w	(11)		
Xylenes (total)	250	20			Till Till Till Till Till Till Till Till		
Ethylbenzene	20	10					
Methyl-t-butyl ether	ND	100	- 10			7:	

101%

Approved By

Surr. Rec.:

Argon Laboratories, Inc. California D.O.H.S. Cert. #2359

aboratories 2905 Railroad Ave. Ceres, CA 95307 (209)581-9280 Fax (209)581-9282

Geological Technics, Inc.

Project Number: 1262.2

1101 7th Street

Project Name: Sullins

Work Order No.:

Modesto, CA 95354

Project Manager: Ray Kablanow

I810031

TPH-gas/BTEX/MTBE EPA Method 8015M / 8021B - Quality Control

Argon Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch I802183 - EPA 5030B										
Blank (I802183-BLK1)				Prepared &	k Analyzed:	10/13/08				
Surrogate: a,a,a-Trifluorotoluene	42.5		ug/L	50		85	80-120			
Total Petroleum Hydrocarbons @ Gasoline	ND	50	ú							
Benzene	ND	0.5	¥							
Toluene	ND	0.5	30							
Xylenes (total)	ND	1.0								
Ethylbenzene	ND	0.5								
Methyl-t-butyl ether	ND	5.0	"							
LCS (I802183-BS1)				Prepared &	& Analyzed:	10/13/08				
Total Petroleum Hydrocarbons @ Gasoline	1055		ug/L	1000		106	80-120			
LCS Dup (I802183-BSD1)				Prepared &	& Analyzed:	10/13/08				
Total Petroleum Hydrocarbons @ Gasoline	934.0		ug/L	1000		93	80-120	12	20	
Matrix Spike (I802183-MS1)	Sou	rce: I810031-	01	Prepared &	& Analyzed:	: 10/13/08				
Benzene	21.90		ug/L	25	ND	88	70-130			
Matrix Spike Dup (I802183-MSD1)	Sou	Prepared &	& Analyzed:	: 10/13/08						
Benzene	21.80		ug/L	25	ND	87	70-130	0.5	20	

@FGOM laboratories 2905 Railroad Ave. Ceres, CA 95307 (209)581-9280 Fax (209)581-9282

Geological Technics, Inc.

1101 7th Street

Modesto, CA 95354

Project Number: 1262.2

Project Name: Sullins

Project Manager: Ray Kablanow

Work Order No.:

I810031

Notes and Definitions

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

	Project Name:	t Name: Sullins (L St)						Well I.D.: W-1s						
	Project No.:	1262.2							Date:	10/9/2008				
	Project Location:	187 N. L	Street	t										
		Livermore							Samples sent to:	Argon				
Time	Cumulative Volume Purged (gal)	Temp	C°	EC (μS/cm)	pН	ORP (millivolts)	DO	(mg/L)		Remarks				
9:40									Collected samples					
		-												
		-												
_		_			-									
		⊠ n		Mataria Don	strifugal aum	p with dedicated t	uhina	☐ Oth	or					
	Purge Method				ıtılluğal pulli	p with dedicated t	ubing	- Our						
	Pumping Rate			gavmin -										
Well	Constructed TD (ft)	45.0	0		Sample	Containers used:		4	_# VOAs	X preserved non-preserved				
	* Well TD (ft)	44.3	1						# amber liters	preserved non-preserved				
	Silt Thickness (ft)								# polys	preserved non-preserved				
	Initial DTW (ft)			-			Departs	20. 90	# polys					
	r column height (ft)			1		Notes:	Not en	ough wat	er in the well to collect para	meters.				
One	casing volume (gal)	-	_	1		Sampled By:	_ No	Ç.	- A \					
	** Final DTW (ft)			-		Sampled By:	E. NO	na (3	n/ on					
	asing diameter (in)	: 6"		1					1					
Sample M	ethod:	Waterra [⊒ Bai	iler ⊠ Other □		* = measured	"=@s	sampling		Purged Water Drummed: ⊠ Yes ☐ No				
Ga	allons per foot of casing	. 2" dia. = 0.1	7, 3°d	ia. = 0.38 4" dia. = 0.6	65, 5" dia. = 1.	02, 6° dia. = 1.48				No. of Drums: 1				

	Project Name:	Sullins (L	St)						Well I.D.:	W-3s
	Project No.:	1262.2							Date:	10/8/2008
	Project Location:		Street	•1						
		Livermore							Samples sent to:	Argon
			,							
Time	Cumulative Volume Purged (gal)	Temp	C°	EC (μS/cm)	рН	ORP (millivolts)	DO	(mg/L)		Remarks
		_								
	5 11 11 11	☑ Dedic	otod l	Materra DCon	rifugal num	p with dedicated t	uhina	☐ Oth	er	
	Purge Method: Pumping Rate:			gal/min	illugai pulli	p with dedicated t	ubing	- Our		
	Fullipling hate.			gazziiii						
Well	Constructed TD (ft):	45.0	0		Sample	Containers used:			_# VOAs	preserved non-preserved
	* Well TD (ft):								# amber liters	preserved non-preserved
	Silt Thickness (ft):								# polys	preserved non-preserved
,,,,,,	Initial DTW (ft):		-			Natasi	Daywa	n	# polys	preserved non-preserved
	r column height (ft): casing volume (gal):					Notes:	Dry we	11.		
Offe	** Final DTW (ft)	-				Sampled By:	F Nor	1a &	· / \	
0	asing diameter (in)					Campion by.		8		
				1					1	D., D.,
Sample M				ler Other		* = measured	" = @ s	ampling]	Purged Water Drummed: ☐ Yes ☐ No
Ga	llons per foot of casing.	2" dia. = 0.17	7, 3" di	ia. = 0.38 4" dia. = 0.6	5, 5" dia. = 1.	02, 6" dia. = 1.48				No. of Drums:

Project Name: S	ullins (L St)				Well I.D.: W-Bs						
Project No.: 12	262.2			_			Date: 10/8/2008				
Project Location: 18	87 N. L Street										
<u>Li</u>	ivermore, CA				Samples sent to: Argon						
Cumulative Volume Purged Time (gal) T	Гетр С°	EC (μS/cm)	рН	ORP (millivolts)	DO	(mg/L)	Remarks				
1											
•	☑ Dedicated \	Vaterra □Cent gal/min	rifugal pum	p with dedicated to	ubing	☐ Othe					
Well Constructed TD (ft):	45.00		Sample	Containers used:			# VOAs preserved non-preserved				
* Well TD (ft):	44.13						# amber liters preserved non-preserved				
Silt Thickness (ft):	0.87			,			# polys preserved non-preserved				
Initial DTW (ft):	*						# polys preserved non-preserved				
Water column height (ft):	-			Notes:	Dry well						
One casing volume (gal):	-					0.	-				
** Final DTW (ft):	411			Sampled By:	E. Non	a (2	Ben Du				
Casing diameter (in):	4"										
Sample Method: V Gallons per foot of casing. 2'		ler ☐ Other ☐ a. = 0.38 4" dia. = 0.68	5, 5" dia. = 1.0		** = @ sa	mpling	Purged Water Drummed: ☐ Yes ☐ No No. of Drums:				

	Project Name:	Sullins (L	St)						Well I.D.: W-Es
	Project No.:	1262.2							Date: 10/8/2008
	Project Location:	187 N. L	Street						
		Livermor	e, CA						Samples sent to: Argon
Time	Cumulative Volume Purged (gal)	Temp	C°	EC (μS/cm)	pН	ORP (millivolts)	DO	(mg/L)	Remarks
13:40									Collected samples
	Purge Method:	⊠ Ded	icated \	Vaterra □Cen	ntrifugal pum	p with dedicated t	ubina	☐ Oth	ner
	Pumping Rate:		icaica		umugu. pum		3		· ·
	r uniping riate.			1					
Well	Constructed TD (ft):				Sample	Containers used:	-	1	# VOAsX preserved non-preserved
	* Well TD (ft):								# amber liters preserved non-preserved
	Silt Thickness (ft):								# polys preserved non-preserved
\\\\ate	Initial DTW (ft):	-				Notes:	Not or	ough wat	ter in the well to collect parameters.
	r column height (ft): casing volume (gal):					ivotes.	NOI EI	ough wat	ion and mon to compart parameters.
Offe	** Final DTW (ft):	_				Sampled By:	E. No	na E	12 1 2
0	asing diameter (in):					,		C)
Sample M		Waterra	□ Bai	ler⊠ Other □ ia. = 0.38 4* dia. = 0.4		* = measured .02, 6* dia. = 1.48	** = @ :	sampling	Purged Water Drummed:

	Project Name:	Sullins (L St						Well I.D.: 1	MW-104	
	Project No.:	1262.2						Date:	10/8/2008	
	Project Location:	187 N. L Str	eet							
	,	Livermore, C						Samples sent to:	Argon	
Time	Cumulative Volume Purged (gal)	Temp C	e° EC (μS/cm)	pН	ORP (millivolts)	DO	(mg/L)		Remarks	
						1				
			1							
	Purge Method:		d Waterra 🔲 Cer	ntrifugal pum	p with dedicated to	ubing	☐ Oth	er		
	Pumping Rate:									
0.254.07.00			_							
Well	Constructed TD (ft):		-	Sample	Containers used:			# VOAs	preserved non-preserved	
	* Well TD (ft):		-					# amber liters # polys	preserved non-preserved preserved non-preserved	
	Silt Thickness (tt): Initial DTW (tt):		-			-		# polys	preservednon-preserved	
Wate	r column height (ft):		-		Notes:	Tubing	was too f	flexible to purge out any water		
	casing volume (gal):	-								
	** Final DTW (ft):				Sampled By:	E. Nor	na Ez	in A Du		
С	asing diameter (in):	CMT			-			,		
Sample Me			Bailer □ Other □ 3" dia. = 0.38 4" dia. = 0.		* = measured	** = @ s	ampling] [Purged Water Drummed: ☐ Yes ☐ No No. of Drums:	
Ga	mons per root or casing.	2 Uld. = U.17,	uia. = 0.00 4 uia. = 0.	00, 0 uia. = 1.	oc, o oia 1.40			,1		

	Project Name:	Sullins (L	St)						Well I.D.:	MW-105
	Project No.:	1262.2							Date:	10/9/2008
	Project Location:	187 N. L	Street							
		Livermore							Samples sent to:	Argon
		Livermon	0,01							
Time	Cumulative Volume Purged (gal)	Temp	C°	EC (μS/cm)	pН	ORP (millivolts)	DO	(mg/L)		Remarks
10:00									Collected samples	
10.00										
	Purge Method:	⊠ Dedi	cated \	Waterra □Cen	trifugal pun	np with dedicated t	ubing	☐ Oth		
	Pumping Rate:			gal/min						
Well	Constructed TD (ft):			1	Sample	Containers used:		4	# VOAs	X preserved non-preserved
· · · ·	* Well TD (ft):				Campic	, contamero acca.		-	# amber liters	preserved non-preserved
	Silt Thickness (ft):	-							# polys	preserved non-preserved
	Initial DTW (ft):		4						# polys	preserved non-preserved
Wate	r column height (ft):		15	1		Notes:				
One	casing volume (gal)	-]			_			
	** Final DTW (ft)	49.4	19]		Sampled By:	E. No	na 🕝	3 in Dom	
	asing diameter (in)	: CM	T							
Sample M	ethod: allions per foot of casing.			iler ⊠ Other □		* = measured	** = @ \$	sampling]	Purged Water Drummed:

	Project Name:	Sullins (L	St)						Well I.D.:	MW-106
	Project No.:	1262.2							Date:	10/8/2008
	Project Location:	187 N. L	Street							
		Livermore	e, CA						Samples sent to:	Argon
Time	Cumulative Volume Purged (gal)	Temp	C°	EC (μS/cm)	pН	ORP (millivolts)	DO	(mg/L)		Remarks
14:30									Collected samples	
			_		4.5					
	Purge Method: Pumping Rate:				trifugal pum	p with dedicated to	ubing	Oth		
Well	Constructed TD (ft):	,			Sample	Containers used:		2	_# VOAs	X preserved non-preserved
	* Well TD (ft):	66.6	5					2	# VOAs	preservedX_ non-preserved
	Silt Thickness (ft):		cas:						_# polys	preserved non-preserved
	Initial DTW (ft):					Neter			# polys	preserved non-preserved
Water column height (ft): 17.17 Notes: One casing volume (gal): -									4:	
** Final DTW (th): 49.50 Sampled By: E. Nona							na ج	()		
С	asing diameter (in):							3		
								sampling]	Purged Water Drummed: ☐ Yes ☐ No No. of Drums:

	Project Name:	Sullins (L	St)						Well I.D.:	MW-107
	Project No.:	1262.2							Date:	10/8/2008
	Project Location:	187 N. L S	Street							
		Livermore							Samples sent to:	Argon
		Livermore	, CA				6		Samples sent to.	Aigui
Time	Cumulative Volume Purged (gal)	Temp	C°	EC (µS/cm)	рН	ORP (millivolts)	DO	(mg/L)		Remarks
							Ü			
		_								
\vdash										
 										
			9 - 10041	-		76.00 F (1980)		Пои		
	Purge Method:				trifugal pum	p with dedicated to	ubing	☐ Oth	er	
	Pumping Rate:			gal/min						
Well	Constructed TD (ft):	3 -			Sample	Containers used:			# VOAs	preserved non-preserved
	* Well TD (ft):	30.1	5						# amber liters	preserved non-preserved
	Silt Thickness (ft):	<u> </u>							# polys	preserved non-preserved
	Initial DTW (ft):	£					_		# polys	preserved non-preserved
Wate	Water column height (ft):									
One	casing volume (gal):							0	1	
	** Final DTW (ft):					Sampled By:	E. Nor	na 🚑	gin / done	
	asing diameter (in):	: СМТ							_	
Sample M	ethod:	Waterra □	Bail	ler Other		* = measured	•• = @ s	ampling		Purged Water Drummed:
Ga	llons per foot of casing.	2" dia. = 0.17	, 3" di	a. = 0.38 4" dia. = 0.6	5, 5° dia. = 1.	02, 6" dia. = 1.48				No. of Drums:

	Project Name:	Sullins (L	St)						Well I.D.:	MW-108
	Project No.:	1262.2							Date:	10/8/2008
	Project Location:	187 N. L	Street							
	:04	Livermor	e, CA						Samples sent to:	Argon
Time	Cumulative Volume Purged (gal)	Temp	C°	EC (μS/cm)	рН	ORP (millivolts)	DO	(mg/L)		Remarks
14:55									Collected samples	
	Purge Method: Pumping Rate:				trifugal pum	np with dedicated t	ubing	☐ Oth		
Well	Constructed TD (ft):				Sample	Containers used:		2	_# VOAs	X preserved non-preserved
	* Well TD (ft):		28					2	_# VOAs	preservedX_ non-preserved
	Silt Thickness (ft):	-	en cuit						# polys	preserved non-preserved non-preserved
Wate	Initial DTW (ft):			1		Notes:			# polys	preservednon-preserved
Water column height (tt): 14.20 Notes: One casing volume (gal):										
** Final DTW (ft): - Sampled By: E. Nona & Sam								in A hom		
С	asing diameter (in)		Т]				-		
Sample M	ethod:			iler		* = measured .02, 6* dia. = 1.48	" = @ :	sampling]	Purged Water Drummed: Yes No No. of Drums:

	Project Name:	Sullins (L	St)						Well I.D.:	MW-204
	Project No.:	1262.2							Date:	10/8/2008
	Project Location:	187 N. L S	treet							
	G	Livermore	, CA						Samples sent to:	Argon
Time	Cumulative Volume Purged (gal)	Temp	C°	EC (µS/cm)	pН	ORP (millivolts)	DO	(mg/L)		Remarks
15:15									Collected samples	
			\dashv							
			-							
	Purge Method: Pumping Rate:				trifugal pum	p with dedicated t	ubing	Oth	er	
Well	Constructed TD (ft):				Sample	Containers used:		2	# VOAs	X preserved non-preserved
	* Well TD (ft):	-)					2	_# VOAs	preservedX_ non-preserved
	Silt Thickness (ft):								# polys	preserved non-preserved non-preserved
Water	Initial DTW (ft): r column height (ft):					Notes:	-		# polys	preserved non-preserved
1	casing volume (gal):	_	Ī			Notes.				
	** Final DTW (ft):					Sampled By:	E. No	na E	in A brown	
С	asing diameter (in):	-	i i					U		
Sample Me	ethod: illons per foot of casing.			iler		* = measured .02, 6* dia. = 1.48	"=@s	sampling]	Purged Water Drummed:

	Project Name:	Sullins (L	St)						Well I.D.: N	W-205	
	Project No.:	1262.2							Date: 1	0/8/2008	
	Project Location:	187 N. L	Street	t							
		Livermor	e, CA	1					Samples sent to: A	rgon	
Time	Cumulative Volume Purged (gal)	Temp	C°	EC (μS/cm)	pН	ORP (millivolts)	DO	(mg/L)		Remarks	
							_				
		-									
								Пон			
	Purge Method				itrifugai pun	np with dedicated t	lubing	Oth			
	Pumping Rate			gal/min							
Well	Constructed TD (ft)	i			Sample	Containers used:			# VOAs	preserved non-preserved	ed
	* Well TD (ft)	:47.8	34						# amber liters	preserved non-preserved	ed
	Silt Thickness (ft)								_ # polys	preserved non-preserv	ed
	Initial DTW (ft)	46.6	61						# polys	preserved non-preserv	ed
Wate	er column height (ft)	:1.2	3			Notes:	Remo	ved 5-10 r	ml before well went dry, could	not collect any samples.	
One	casing volume (gal)	:									
	** Final DTW (ft)	:				Sampled By	E. No	na ج	in Now		
	Casing diameter (in)	: CM	IT								
Sample M	ethod: allons per foot of casing			iler □ Other □ iia. = 0.38 4" dia. = 0.6	65, 5" dia. = 1	* = measured 1.02, 6* dia. = 1.48	** = @ \$	sampling		Purged Water Drummed: No. of Drums:	Yes 🔲 No

	Project Name:	Sullins (L	_St)						Well I.D.:	MW-207
	Project No.:	1262.2							Date:	10/8/2008
	Project Location:	187 N. L	Street							
		Livermor	re, CA						Samples sent to:	Argon
Time	Cumulative Volume Purged (gal)	Temp	С°	EC (μS/cm)	рН	ORP (millivolts)	DO	(mg/L)		Remarks
									1 =	
								- 1		
	Purge Method: Pumping Rate:			Waterra □Cen	trifugal pum	np with dedicated t	ubing	☐ Oth	er	
Well	Constructed TD (ft):				Sample	Containers used:			# VOAs	preserved non-preserved
	* Well TD (ft):	49.0	30						# amber liters	preserved non-preserved
	Silt Thickness (ft)		_						# polys	preserved non-preserved
14/-4-	Initial DTW (ft)					Notes	Dry we		# polys	preserved non-preserved
	r column height (ft) casing volume (gal)	_				Notes.	DIY WE			
One	** Final DTW (ft)					Sampled By:	E. No	na Ez	- A h-	
0	asing diameter (in)	: CN	IΤ						,	
Sample M	ethod: allons per foot of casing.			ler ☐ Other ☐ ia. = 0.38 4" dia. = 0.6	65, 5" dia. = 1	* = measured .02, 6* dia. = 1.48	** = @ s	ampling]	Purged Water Drummed: Yes No No. of Drums:

	Project Name:	Sullins (L	St)						Well I.D.: <u>N</u>	/IW-208
	Project No.:	1262.2							Date: 1	0/8/2008
	Project Location:	187 N. L	Street							
		Livermor	e, CA						Samples sent to: A	Argon
Time	Cumulative Volume Purged (gal)	Temp	C°	EC (μS/cm)	рН	ORP (millivolts)	DO	(mg/L)		Remarks
							Nã			
	Purge Method:	⊠ Dedi	cated \	Vaterra □Cen	trifugal pum	p with dedicated t	ubina	☐ Oth	er	
	Pumping Rate:			gal/min			3			
				. • · · · · · · · · · · · · · · · · · ·						
Well	Constructed TD (ft):				Sample	Containers used:			# VOAs	preserved non-preserved
	* Well TD (ft):	-							# amber liters	preserved non-preserved preserved non-preserved
	Silt Thickness (ft): Initial DTW (ft):								# polys	preserved non-preserved
Water column height (#): 0.87 Notes: Not enough water in the well to collect any samples.										
1	casing volume (gal):							3		•
2590.00	** Final DTW (ft):	-		1		Sampled By:	E. No	na E	in A Jam	
С	asing diameter (in):	CM	IT					2	, -0	
Sample M	ethod: Illons per foot of casing.			ler Other	5, 5* dia. = 1.	* = measured 02, 6* dia. = 1.48	"=@s	ampling] [Purged Water Drummed: ☐ Yes ☐ No No. of Drums:

	Project Name:	Sullins (L	St)						Well I.D.:	MW-304
	Project No.:	1262.2							Date:	10/8/2008
	Project Location:	187 N. L	Street							
		Livermore					o .		Samples sent to:	Argon
Time	Cumulative Volume Purged (gal)	Temp	С°	EC (μS/cm)	рН	ORP (millivolts)	DO	(mg/L)		Remarks
		_	\dashv							
			-							
					-11					
		_								
	Purge Method: Pumping Rate:			Vaterra □Cen	trifugal pum	p with dedicated to	ubing	☐ Oth	er	
Well	Constructed TD (ft):				Sample	Containers used:			# VOAs	preserved non-preserved
	* Well TD (ft):	-	0				-		# amber liters	preserved non-preserved
	Silt Thickness (ft): Initial DTW (ft):								# polys	preserved non-preserved preserved non-preserved
Wate	r column height (ft):					Notes:	Dry we		# poly3	preservednon-preserved
	casing volume (gal):									
	** Final DTW (ft):					Sampled By:	E. Nor	na E	Link In	
С	asing diameter (in):	CM	Г			3		١	,	
Sample M	ethod: Ilons per foot of casing.			ler Other a. = 0.38 4* dia. = 0.6	65, 5° dia. = 1.	* = measured .02, 6* dia. = 1.48	"= @ s	ampling]	Purged Water Drummed: Yes No No. of Drums:

	Project Name:	Sullins (L	St)				Well I.D.: N	IW-305		
	Project No.:	1262.2							Date: 1	0/8/2008
	Project Location:		Street							
									Samples sent to: A	rnon
	5	Livermor	e, CA						Gampies sent to. 71	
	Cumulative Volume Purged			50		ORP (millivolts)	DO	(mg/L)		Domestro
Time	(gal)	Temp	C°	EC (μS/cm)	pН	ONF (millivoits)	ВО	(IIIg/L)		Remarks
-										
	Purge Method	: ⊠ Dedi	cated	Waterra □Cen	trifugal pum	p with dedicated t	ubing	☐ Oth	er	
	Pumping Rate									
1000000	17,000			1					#.VO.4 =	preserved non-preserved
Well	Constructed TD (ft)			-	Sample	Containers used:				preserved non-preserved
	* Well TD (ft)	-	51	-			-			preserved non-preserved
	Silt Thickness (ft) Initial DTW (ft)			1					# polys	preserved non-preserved
Wate	r column height (ft)			1		Notes	Dry we		ii poijo	
1	casing volume (gal)			1		110100	, DI) III		20	
	** Final DTW (ft)			1		Sampled By	E. No	na E	A dem	
	asing diameter (in)	-		1				7	, , , ,	
Sample M		Waterra	□ Ba	iler	65, 5" dia. = 1	* = measured .02, 6* dia. = 1.48	** = @ \$	sampling] [Purged Water Drummed: ☐ Yes ☐ No No. of Drums:

Project Name: Sullins (L St)								Well I.D.: MW-306					
	Project No.:	1262.2					Date: 10/8/2008						
	Project Location:	187 N. L	Street										
		Livermor							Samples sent to: Arg	jon			
Time	Cumulative Volume Purged (gal)	Temp	C°	EC (μS/cm)	рН	ORP (millivolts)	DO	(mg/L)		Remarks			
		_										_	
		_											
												_	
					7		. In in a	☐ Oth					
	Purge Method:				trifugai pum	p with dedicated t	ubing	u Otn			9		
	Pumping Rate:			gal/min									
Well	Constructed TD (ft):				Sample	Containers used:			# VOAs	preserved	_ non-preserved		
	* Well TD (ft):	50.9	97							preserved			
	Silt Thickness (ft):								-	preserved			
	Initial DTW (ft):	48.5	51							preserved	_ non-preserved		
Wate	r column height (ft)	2.4	6			Notes:	Not en	ough wat	er in the well to collect any sam	ples.		_	
One	casing volume (gal)											_	
	** Final DTW (ft)					Sampled By:	E. No	na ڃ	S. Dun				
	asing diameter (in)	: CM	Т]									
Sample Method: Waterra 🗆 Bailer 🗀 Other 🗀 🔭 = measured ** = @ sampling Purged Water Drummed: 🗀 Yes 🗔 Gallons per foot of casing. 2* dia. = 0.17, 3* dia. = 0.38 4* dia. = 0.65, 5* dia. = 1.02, 6* dia. = 1.48										lo			

Project Name: Sullins (L St)								Well I.D.: MW-307					
	Project No.:	1262.2					Date: 10/8/2008						
	Project Location:	187 N. L	Street										
		Livermor							Samples sent to:	Argon			
	9	Liverillor	e, ca						oampies sent to.	Aigon			
Time	Cumulative Volume Purged (gal)	Temp	C°	EC (µS/cm)	рН	ORP (millivolts)	DO	(mg/L)		Remarks			
		-											
		-											
		-											
	Purge Method:	: 🗵 Dedi	cated \	Waterra ☐Cen	trifugal pum	p with dedicated t	ubing	☐ Oth					
	Pumping Rate	·		gal/min									
Well	Constructed TD (ft):				Sample	Containers used:			# VOAs	preserved non-preserved			
	* Well TD (ft):	39.4	9						# amber liters	preserved non-preserved			
	Silt Thickness (ft)	·							# polys	preserved non-preserved			
	Initial DTW (ft)								# polys	preserved non-preserved			
Wate	r column height (ft)	:				Notes:	Dry we	ell.					
One	casing volume (gal)	:							4				
	** Final DTW (ft)	: <u> </u>				Sampled By:	E. No	na Z	in / dur	F1			
0	asing diameter (in)	: CM	T										
Sample M	ethod: ullons per foot of casing.			ler Other	65, 5° dia. = 1	* = measured .02, 6* dia. = 1.48	" = @ s	sampling]	Purged Water Drummed:			

Project Name: Sullins (L St)								Well I.D.: MW-308						
Project No.: 1262.2									Date: 10/8/2008					
	Project Location:	187 N. L	Street	t										
	,	Livermor							Samples sent to:	Argon				
Time	Cumulative Volume Purged (gal)	Temp	C°	EC (μS/cm)	pН	ORP (millivolts)	DO	(mg/L)		Remarks				
<u> </u>														
		-					-							
								Пои						
	Purge Method				trifugal pum	p with dedicated t	ubing	☐ Oth	er					
	Pumping Rate			gal/min										
Well	Constructed TD (ft)	:			Sample	Containers used:			_# VOAs	preserved non-preserved				
	* Well TD (ft)	38.5	55						# amber liters	preserved non-preserved				
	Silt Thickness (ft)								# polys	preserved non-preserved				
	Initial DTW (ft)	:							# polys	preserved non-preserved				
Water column height (ft): - Notes: D							Dry we	ell.						
One	casing volume (gal)	:												
	** Final DTW (ft)	:				Sampled By:	E. No	na 🧲	ign / hu					
	asing diameter (in)	: CM	Т											
Sample M	ethod:	Waterra	⊒ Bai	iler Other		* = measured	** = @ s	ampling]	Purged Water Drummed: ☐ Yes ☐ No				
	illons per foot of casing	. 2" dia. = 0.1	7, 3*d	iia. = 0.38 4" dia. = 0.6	65, 5" dia. = 1	.02, 6" dia. = 1.48			- 5	No. of Drums:				

	Project Name:	Sullins (L	. St)				Well I.D.: MW-404							
	Project No.:	1262.2					Date: 10/8/2008							
	Project Location:	187 N. L	Street											
Livermore, CA									Samples sent to: Argon					
Time	Cumulative Volume Purged (gal)	Temp	C°	EC (μS/cm)	pН	ORP (millivolts)	DO	(mg/L)		Remarks				
	Purge Method:	⊠ Dedi	cated \	Waterra □Cen	trifugal pum	p with dedicated t	ubina	☐ Oth	er					
	Pumping Rate:					,								
]										
Well	Constructed TD (ft):				Sample	Containers used:				preserved non-preserved				
	* Well TD (ft):		14						# amber liters # polys	preserved non-preserved non-preserved				
	Silt Thickness (ft): Initial DTW (ft):	-								preserved non-preserved				
Water column height (th): 1.30						Notes:	Could	not nurae	out any water with hand pur					
	casing volume (gal):		<u> </u>			Troico.	Could	not purgo	out any mater man have per	ging mounds.				
	** Final DTW (ft):					Sampled By:	E. No	na E	in land					
С	asing diameter (in):	CM	Т					L) ,					
Sample Method: Waterra Bailer Other Purged Water Drummed: Yes No Sample Method: Value of Casing. 2* dia. = 0.17, 3* dia. = 0.38 4* dia. = 0.65, 5* dia. = 1.48														