November 10, 2008

Aminifilibadi Masood & Amini Sharbano
909 Blue Bell Drive
Livermore, CA 94551

Re: Transmittal Letter
Site Location: Springtown Gas
909 Blue Bell Drive, Livermore, CA 94551

Dear Mr. Wickham:

On behalf of Aminifilibadi Masood & Amini Sharbano, Geological Technics Inc. (GTI) prepared the 3rd Quarter Groundwater Monitoring Report, dated November 10, 2008 that was sent to your office via electronic delivery per Alameda County's guidelines on November 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,

Aminifilibadi Masood/Amini Sharbano
Property Owner
909 Blue Bell Drive
Livermore, CA 94551

Geological Technics Inc.

REPORT

Groundwater Monitoring
3rd Quarter 2008

Springtown Gas
909 Bluebell Drive
Livermore, California

Project No. 1409.2
November 10, 2008

Prepared for:
Masood Filibadi and Sharbano Amini
909 Bluebell Drive
Livermore, California 95353

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

November 10, 2008

Project No.: 1409.2
Project Name: Springtown Gas (Bluebell)

Massod Filibadi and Sharbano Amini
Springtown Gas
909 Bluebell Drive
Livermore, California 94551

RE: Report – 3rd Quarter 2008 Groundwater Monitoring
Springtown Gas, 909 Bluebell Drive, Livermore, California

Dear Massod Filibadi and Sharbano Amini:

Geological Technics Inc. (GTI) has prepared the following Report for the 3rd Quarter 2008 groundwater monitoring event performed on September 25, 2008, at Springtown Gas, 909 Bluebell Drive, Livermore, California. The groundwater data for the event are consistent with historical trends.

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

Respectfully submitted,

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

cc: Jerry Wickham – ACEHS
USTCFP

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FIGURES

APPENDICES

Geological Technics Inc.

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

REPORT

Groundwater Monitoring
3rd Quarter 2008

Springtown Gas
909 Bluebell Drive
Livermore, California

Project No. 1409.2
November 10, 2008

1.0 EXECUTIVE SUMMARY

This report summarizes the results of the 3rd Quarter 2008 groundwater monitoring and sampling event that took place on September 25, 2008 at Springtown Gas, 909 Bluebell Drive, Livermore, Alameda County, California (Site).

The average groundwater elevation at the site was 510.75 feet above mean sea level (amsl) and the groundwater flow was N54°W at 0.003 ft/ft for this event.

The results of analyses conducted on groundwater samples collected from the three monitoring wells on the site (STMW-1, STMW-2 and STMW-3) detected total petroleum hydrocarbons as gasoline (TPH-G) in groundwater samples collected from monitoring well STMW-1, but not in groundwater samples collected from monitoring wells STMW-2 or STMW-3. Concentrations of methyl tertiary butyl ether (MtBE) were detected in groundwater samples collected from monitoring wells STMW-1 and STMW-3, but not in groundwater samples collected from STMW-2. Concentrations of tert-butyl alcohol (TBA) were detected in groundwater samples collected from all three monitoring wells. The concentrations detected are consistent with historical site data. Concentrations of di-isopropyl alcohol (DIPE), ethyl-tertiary butyl ether (EtBE), tert-amyl-methyl ether (TAME), 1,2-dichloroethane (1,2-DCA), 1,2-dibromoethane (EDB), methanol ethanol, or benzene, toluene, ethylbenzene and total xylenes (BTEX) were not detected in groundwater samples collected from the three monitoring wells.

Geological Technics Inc. (GTI) submitted a work plan to the Alameda County Environmental Health Services (ACEHS) on July 30, 2008 to prepare a Site Conceptual Model for the Site, and conduct hydrogen peroxide injection and groundwater monitoring/sampling/analyses (*Work Plan, Site Conceptual Model, Hydrogen Peroxide Injection, Groundwater Monitoring/Sampling/Analyses, Springtown Gas, 909 Bluebell Drive, Livermore, California*). The work plan was approved by the ACEHS in correspondence dated August 8, 2008. GTI commenced the field work on September 19, 2008 with the installation of hydrogen injection pilot test well P1. The 3rd Quarter 2008 monitoring/sampling/analyses event was conducted at the Site on September 25, 2008. Hydrogen peroxide injections began on October 2, 2008 using well P1, and existing groundwater monitoring wells STMW-1 and STMW-3, and will continue until November 6, 2008. The results of the hydrogen peroxide injection pilot test and the Site Conceptual Model will be submitted to the ACEHS on December 8, 2008.

2.0 PHYSICAL SETTING

The Site is situated in a mixed commercial-residential land-use area of Livermore, California, and is located at the southeast corner of the intersection of Springtown Boulevard and Blue Bell Drive, approximately 300 feet north of westbound Interstate 580 (Figure 1). The Site occupies approximately 0.74 acres, and is currently an operating service station with mini-mart retailing Chevron-branded gasoline and diesel fuel products. The site contains one UST cluster in the east portion of the Site consisting of one 12,000 gallon capacity unleaded gasoline UST, and a 12,000 gallon capacity segmented UST storing 6,000 gallons of diesel and 6,000 gallons of premium unleaded. A single story mini-mart in the south portion of the Site, and six canopied fuel dispensers in the north portion of the site. No automotive repair facilities exist on the Site. The site is adjoined by Springtown Boulevard on the west, motel properties on the south and east, and Bluebell Drive on the north. Retail land-use is located on the north side of Bluebell Drive, with residential land-use beyond to the north and northeast.

The Site is located at an elevation of approximately 520 feet above mean sea level in the northeast portion of the Livermore Valley (USGS 1981). The Livermore Valley is a structural basin bounded by faults on the east and west that create the Altamont Hills uplift on the east and the Pleasanton Ridge uplift on the west (CDM&G, 1991). The shallow Pleistocene to Recent sediment underlying the basin consists of alluvial deposits that have been informally divided into upper and lower units. The sediment, ranging from coarse-grained gravel to fine-grained mud, was transported northward from the Northern Diablo Range on the southern margin of the basin and deposited in alluvial fan, braided stream, and lacustrine environments. Because the sediment prograded northward, the coarse-grained sediment makes up nearly 80% of the sediment in the southern part of the basin, but northward and westward interfingers with clay deposits that may be as much as 30 feet thick (DWR, 2004)

Drainages from the south, north, and east converge in the western part of the basin and flow out of the basin toward the Sunol Valley and Alameda Creek west of Pleasanton Ridge. The nearest surface drainages are Las Positas Creek located approximately 1 mile west of the Site, and Cavetano Creek 2 miles west of the Site (USGS 1981).

The alluvial fan, braided stream and lacustrine deposits are the principal aquifers for most domestic and irrigation purposes in the Livermore valley, although the underlying Livermore Formation, which may be as much as 4,000 feet thick, yields significant quantities of groundwater on the eastern side of the basin (DWR 2004).

3.0 GROUNDWATER MONITORING

3.1 Groundwater Elevation and Flow Direction

The average groundwater elevation for the 3rd Quarter 2008 monitoring event was 510.75 feet amsl on September 25, 2008, which corresponds to approximately 8.5 feet below ground surface (bgs). This elevation represents a decrease of 0.63 feet since the 4th Quarter 2007 event (December 10, 2007). The groundwater gradient for the 3rd Quarter 2008 monitoring event was 0.003 ft/ft flowing N54°W, which is consistent with historical trends.

The gradient direction for the 3rd Quarter 2008 monitoring event is shown on Figure 2 (Groundwater Gradient). The calculated groundwater gradient and flow direction is shown on Figure 3 (Groundwater Gradient Rose Diagram). The groundwater elevation data are summarized in Table 1 included in Appendix A. Table 4 provides a summary of monitoring well completion data.

3.2 Groundwater Sampling Procedure

The 3rd Quarter 2008 monitoring event was conducted on September 25, 2008. GTI monitored groundwater elevations and collected groundwater samples for analyses from the three groundwater monitoring wells on the Site. Depth to water in each monitoring well was measured and recorded before groundwater samples were collected from the wells. The wells were purged of at least three well volumes of stagnant water using dedicated Waterra® foot valves and tubing. 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. These water quality parameters were measured at intervals of each well volume purged. All purge water was placed in a 55-gallon DOT drums and secured on-site. The purge water was removed from the drums by vacuum truck and transported offsite for recycling by American Valley on October 3, 2008.

Before a sample was collected from each well, the water level was allowed to recharge to at least 80% of its initial level. Dedicated tubing attached to Waterra® foot valves were used to collect groundwater samples from the monitoring wells. The samples were placed into 40-ml VOA vials preserved with hydrochloric acid. Care was taken to minimize sample aeration during sample collection and avoid generating headspace. All samples were checked for the presence of headspace, labeled, recorded on a chain-of-custody, and placed in an ice chest cooled to 4^{o}C for transport to the analytical laboratory. All non-disposable sampling equipment was decontaminated in an Alconox solution and double-rinsed with de-ionized water before initial use and between uses at each monitoring well.

Groundwater monitoring field logs are included in Appendix C.

3.3 Laboratory Analyses

The collected groundwater samples were transported via courier to Excelchem Environmental Labs of Roseville, California (Certification No. 2119) for analyses.

The laboratory utilized USEPA Method 8260B to analyze the groundwater samples for the following constituents:

- Total petroleum hydrocarbons as gasoline (TPH-G)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX)
- Methyl tertiary butyl ether (MtBE)
- Di-isopropyl alcohol (DIPE), ethyl-tertiary butyl ether (EtBE), tert-amyl-methyl ether (TAME), 1,2-dichloroethane (1,2-DCA), 1,2-dibromoethane (EDB), tert butyl alcohol (TBA), methanol and ethanol

The results and detection limits for the above analyses are listed in Table 2 included in Appendix A. Certified analytical reports are included in Appendix B.

As required under AB2886, the groundwater elevation and laboratory analytical data were submitted electronically to GeoTracker on November 7, 2008 for the groundwater elevation data, (confirmation number 1275277256), and November 7, 2008 for the laboratory analytical data (confirmation number 3337130486).

4.0 CONCLUSIONS

The results of the 3rd Quarter 2008 monitoring event indicate the following:

- The average groundwater elevation at the site was 510.75 feet above mean sea level (amsl) and the groundwater flow was N54°W at 0.003 ft/ft for this event.

- The groundwater gradient and the direction of groundwater flow for the 3rd Quarter 2008 event is consistent with the gradients and groundwater flow directions for the two preceding quarterly monitoring events (3rd and 4th Quarters 2007).
- Oxidation-Reduction Potential (ORP) and Dissolved Oxygen (DO) data for this quarter (Table 3) indicate ORP and DO values are lower in the down gradient monitoring well (STMW-1) relative to the up gradient monitoring well (STMW-2) suggesting aerobic biodegradation may be active between the up gradient and down gradient monitoring wells.
- The results of analyses conducted on groundwater samples collected from the three monitoring wells on the site (STMW-1, STMW-2 and STMW-3) detected total petroleum hydrocarbons as gasoline (TPH-G) in groundwater samples collected from monitoring well STMW-1 at 230 µg/l, but not in groundwater samples collected from monitoring wells STMW-2 or STMW-3.
- Concentrations of methyl tertiary butyl ether (MtBE) were detected in groundwater samples collected from monitoring wells STMW-1 (204 µg/l) and STMW-3 (67 µg/l), but not in groundwater samples collected from STMW-2. Figure 4 is a contour map showing the distribution of MtBE concentrations for the 3rd Quarter 2008 monitoring event. The contours suggest the MtBE groundwater plume is localized in the vicinity of the existing USTs and monitoring well STMW-1.
- Concentrations of tert-butyl alcohol (TBA) were detected in groundwater samples collected from all three monitoring wells at 704 µg/l in STMW-1, 71 µg/l in STMW-2, and 31.7 µg/l in STMW-3. Figure 5 is a contour map showing the distribution of TBA concentrations for the 3rd Quarter 2008 monitoring event. The contours mirror the same conclusion as for the MtBE groundwater plume, the TBA groundwater plume is localized in the vicinity of the existing USTs and monitoring well STMW-1.
- Concentrations of di-isopropyl alcohol (DIPE), ethyl-tertiary butyl ether (EtBE), tert-amyl-methyl ether (TAME), 1,2-dichloroethane (1,2-DCA), 1,2-dibromoethane (EDB), methanol ethanol, or benzene, toluene, ethylbenzene and total xylenes (BTEX) were not detected in groundwater samples collected from the three monitoring wells.
- The concentrations of MtBE and TBA detected in the groundwater samples collected from monitoring well STMW-1 are much lower than those MtBE and TBA concentrations detected during the preceding two quarterly monitoring events conducted at the Site (3rd and 4th quarters 2007). In the remaining monitoring wells (STMW-2 and STMW-3), the concentrations of TBA and MtBE detected are consistent with those MtBE and TBA concentrations detected during the 3rd and 4th Quarter 2007 events.

5.0 RECOMMENDATIONS

- Maintain the quarterly monitoring schedule.
- Conduct the 4th Quarter 2008 monitoring event in December 2008, and report the results on February 16, 2009 in accordance with ACEHS directive (August 8, 2008 correspondence)
- Based on the information presented in the Site Conceptual Model to be submitted to the ACEHS on December 8, 2008, it is likely additional monitoring wells will need to be installed during the First and Second Quarters 2009. These additional monitoring wells will be incorporated into the existing monitoring well network and the quarterly monitoring/sampling/analyses program for the Site.

6.0 LIMITATIONS

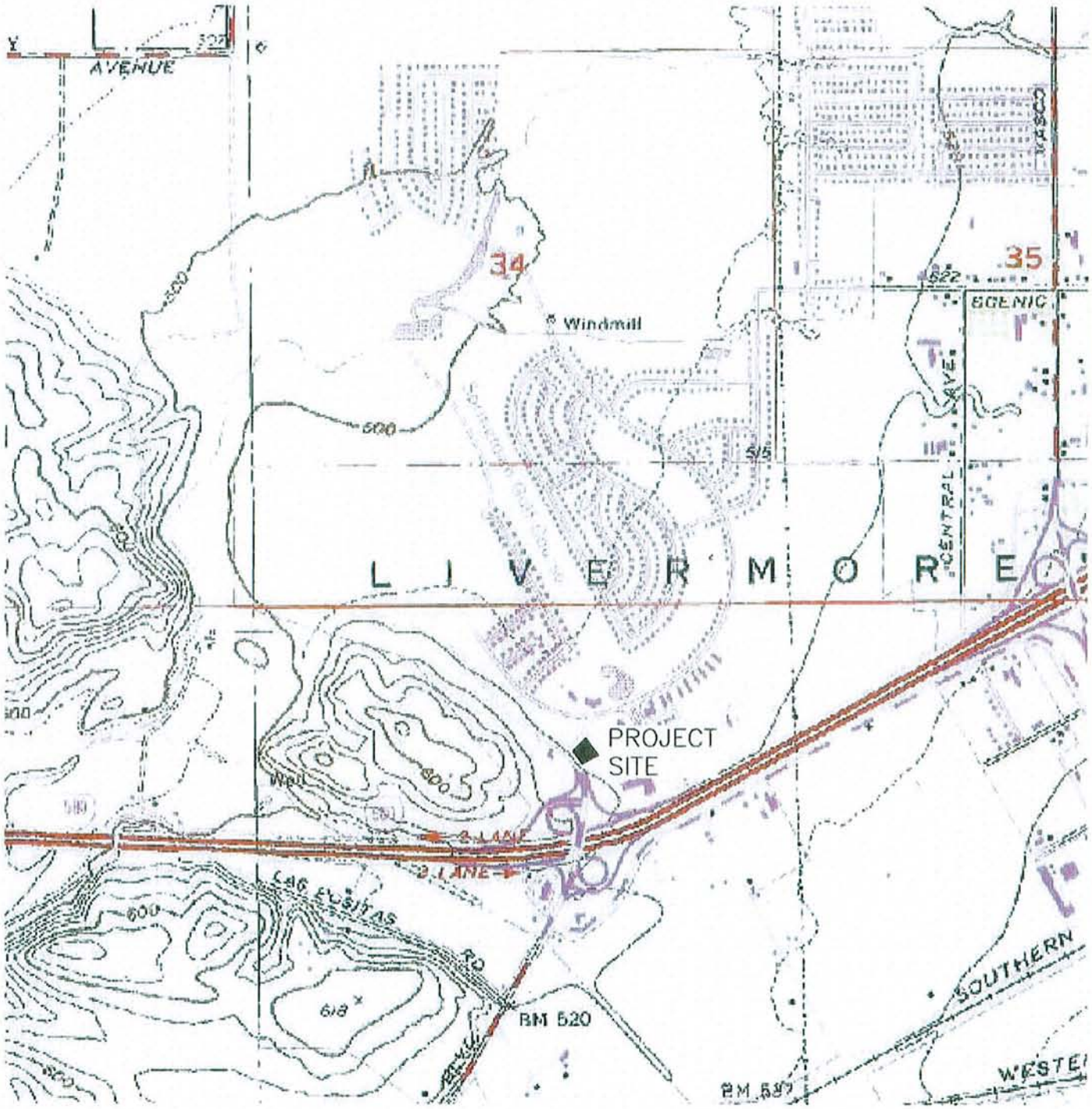
This report was prepared in accordance with the generally accepted standard of care and practice in effect at the time Services were rendered. It should be recognized that definition and evaluation of environmental conditions is an inexact science and that the state or practice of environmental geology/hydrology 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 CERTIFICATION

This report was prepared under the direction of:

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

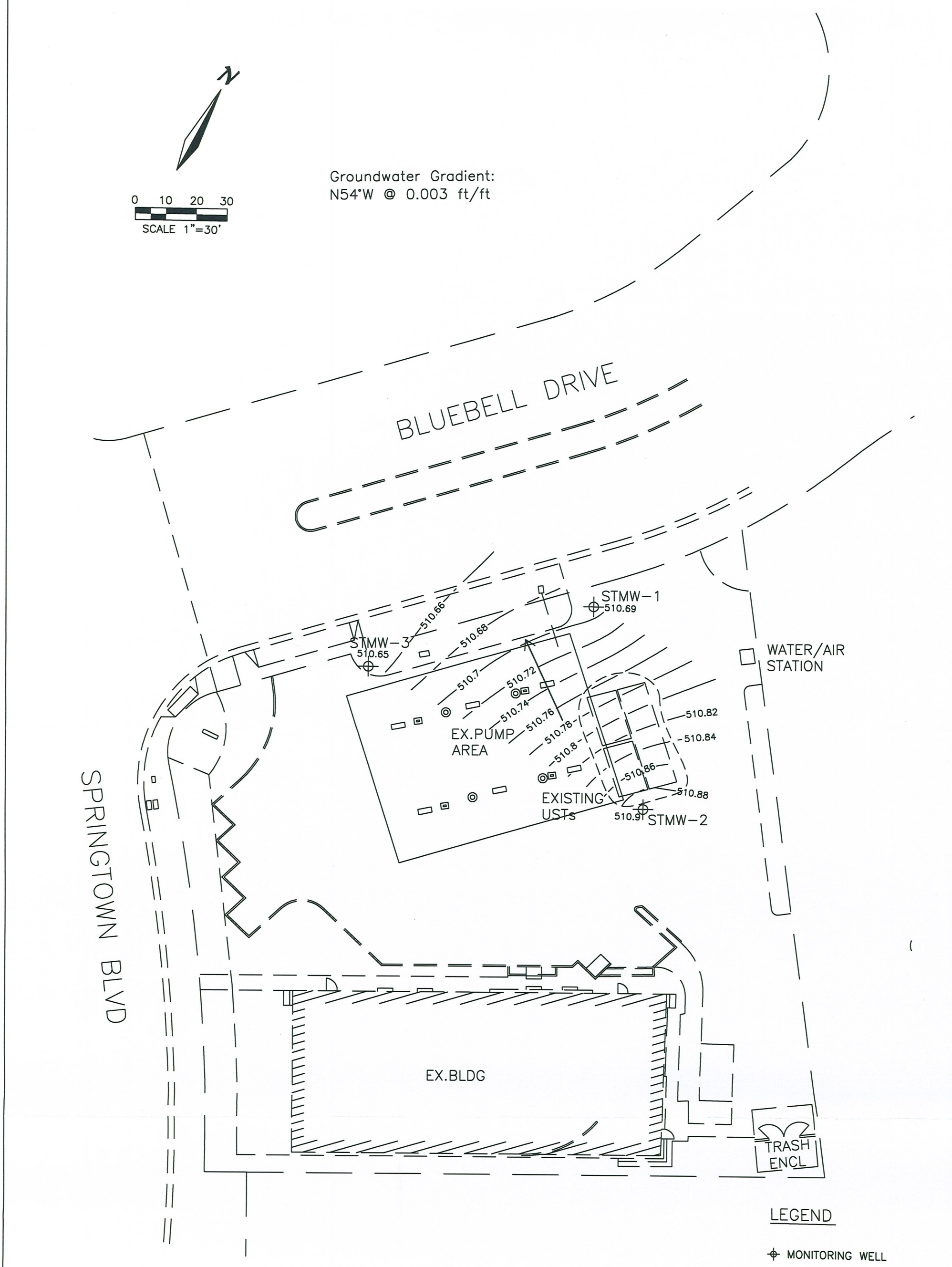


By:	TB
Job No:	1409.2 Date: 07/25/08
Scale:	N.T.S.
File:	14092 site plan

Geological Technics, Inc.
1101 7th Street
Modesto, CA
95354
209.522.4119 (tel)
209.522.4227 (fax)

FIGURE 1: VICINITY MAP

SPRINGTOWN GAS (BLUEBELL)
909 BLUEBELL DRIVE
LIVERMORE, CA



By:	MV
Job No:	1409.2 Date: 10/14/08
Scale:	1"=30'
File:	3Q08 Springtown GWG

Geological Technics, Inc.
1101 7th Street
Modesto, CA
95354
209.522.4119 (tel)
209.522.4227 (fax)

Figure 2 Groundwater Gradient Map
SEPTEMBER 25, 2008
SPRINGTOWN GAS (BLUEBELL)
909 BLUEBELL DRIVE
LIVERMORE, CA

	Date	Slope	Bearing
1.	9/04/07	0.006 ft/ft	NW
2.	12/10/07	0.004 ft/ft	NW
3.	9/25/08	0.003 ft/ft	N54°W

N

0 10 20 30

SCALE 1"=30'

BLUEBELL DRIVE

SPRINGTOWN BLVD

STMW-1
510.69

STMW-2
510.91

STMW-3
510.65

510.66

510.68

510.7

510.72

510.74

510.76

510.78

510.8

510.82

510.84

510.86

510.88

① ② ③

EX.PUMP AREA

EXISTING USTs

WATER/AIR STATION

EX.BLDG

TRASH ENCL

LEGEND

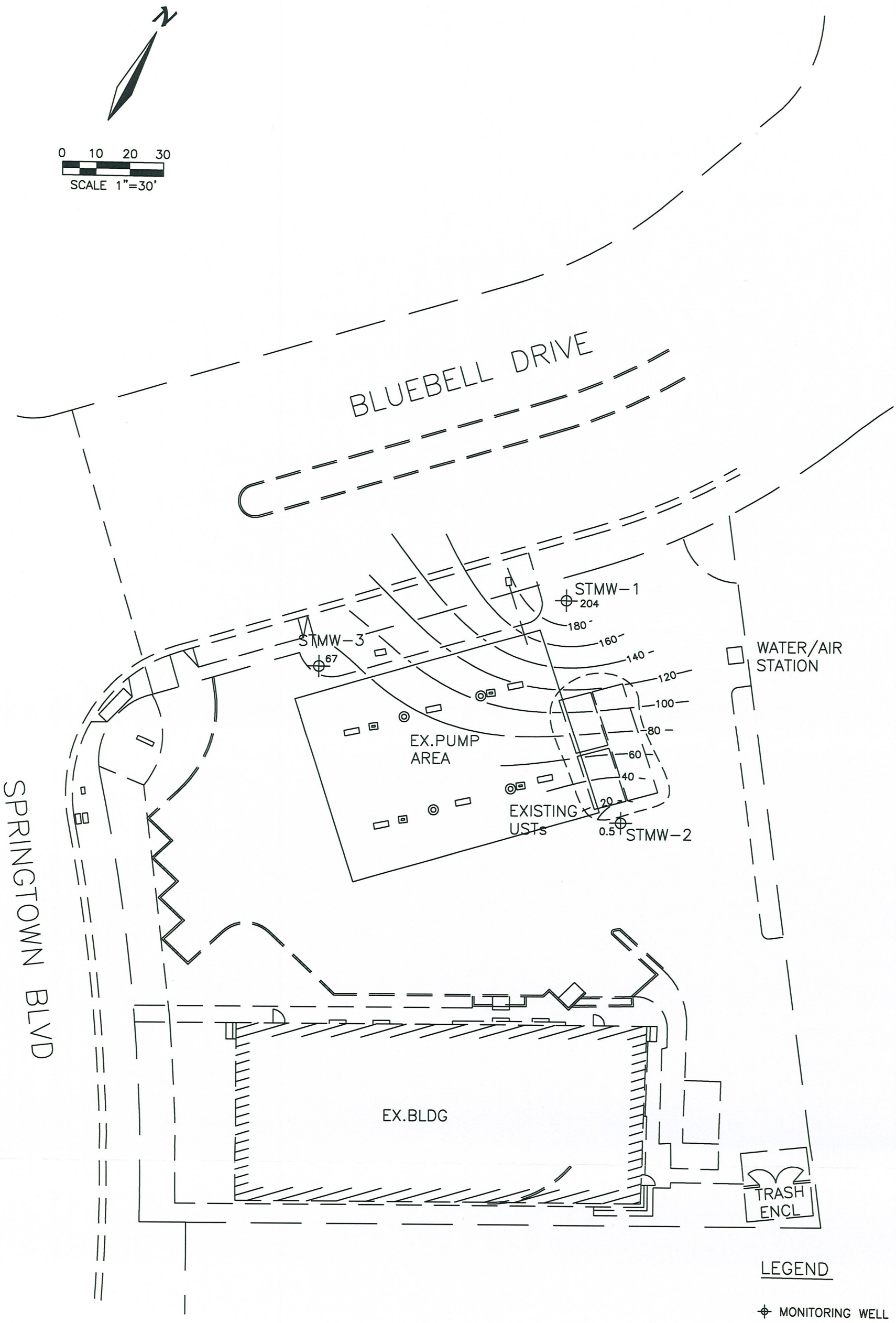
⊕ MONITORING WELL

By:	MV
Job No:	1409.2 Date: 10/14/08
Scale:	1"=30'
File:	3Q08 Rose Springtown

Geological Technics, Inc.

1101 7th Street
Modesto, CA
95354
209.522.4119 (tel)
209.522.4227 (fax)

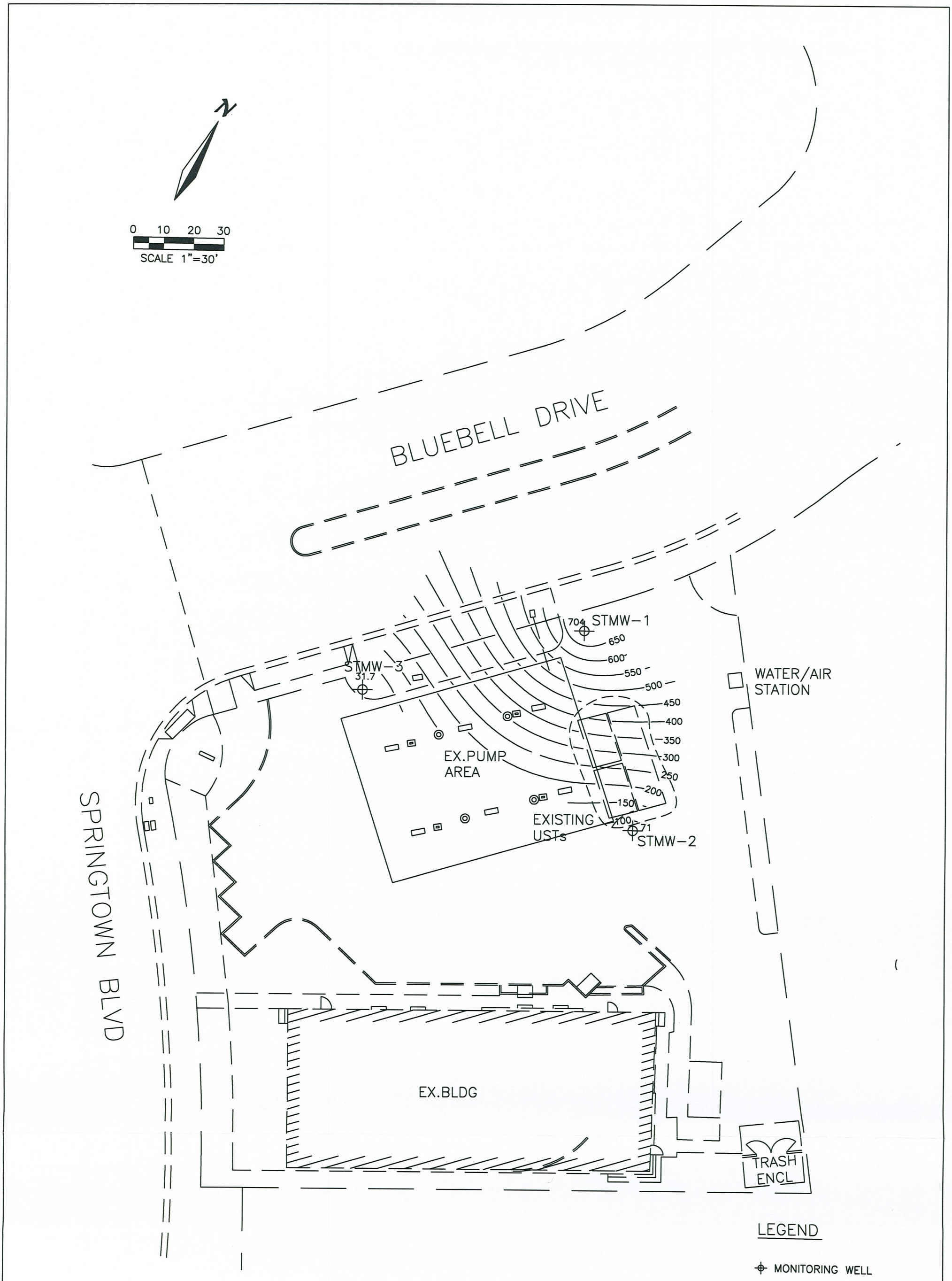
Figure 3 Groundwater Gradient Rose Diagram
SEPTEMBER 25, 2008
SPRINGTOWN GAS (BLUEBELL)
909 BLUEBELL DRIVE
LIVERMORE, CA



By:	MV
Job No:	1409.2 Date: 10/14/08
Scale:	1"=30'
File:	3Q08 MTBE Springtown

Geological Technics, Inc.
1101 7th Street
Modesto, CA
95354
209.522.4119 (tel)
209.522.4227 (fax)

Figure 4 MTBE CONTOUR MAP
SEPTEMBER 25, 2008
SPRINGTOWN GAS (BLUEBELL)
909 BLUEBELL DRIVE
LIVERMORE, CA



By:	MV
Job No:	1409.2 Date: 10/14/08
Scale:	1"=30'
File:	3Q08 TBA Springtown

Geological Technics, Inc.
1101 7th Street
Modesto, CA
95354
209.522.4119 (tel)
209.522.4227 (fax)

Figure 5 TBA CONTOUR MAP
SEPTEMBER 25, 2008
SPRINGTOWN GAS (BLUEBELL)
909 BLUEBELL DRIVE
LIVERMORE, CA

Appendix A

Summary Tables

Table 1
Summary of Groundwater Elevation

Springtown Gas
909 Bluebell Drive
Livermore, California

Date		STMW-1	STMW1	STMW-2	STMW2	STMW-3	STMW3	Avg GW	GW Gradient	
		GW Elev	DTW	GW Elev	DTW	GW Elev	DTW	Elev	Slope	Direction
	*top of casing**	517.55		519.59		520.37			ft/ft	
9/4/2007		510.97	6.58	511.59	8.00	510.85	9.52	511.14	0.006	NW
12/10/07		511.29	6.26	511.59	8.00	511.25	9.12	511.38	0.004	NW
09/25/08		510.69	6.86	510.9	8.69	510.65	9.72	510.75	0.003	N54°W

*TOC elevations surveyed in on 9/06/07 by Muir Consutling Inc. NAD 83 and NGVD 29
**Gradient and slope determined from computer generated contours

Table 2
Summary of Groundwater Analytical Data

Springtown Gas
909 Bluebell Drive
Livermore, California

DATE	MONITORING WELL	TPHg	B	T	E	X	MtBE	TBA	DIPE	EtBE	TAME	1,2-DCA	EDB	Methanol	Ethanol
		ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
9/4/2007	STMW-1	220	<10	<10	<10	<10	850	6,500	-	-	-	-	-	-	-
	STMW-2	<50	<0.5	<0.5	<0.5	<0.5	<1	42	-	-	-	-	-	-	-
	STMW-3	59	<1	<1	<1	<1	160	120	-	-	-	-	-	-	-
12/10/2007	STMW-1	210	<5	<5	<5	<5	540	4,200	-	-	-	-	-	-	-
	STMW-2	<50	<0.5	<0.5	<0.5	<0.5	<1	83	-	-	-	-	-	-	-
	STMW-3	<50	<0.5	<0.5	<0.5	<0.5	17	86	-	-	-	-	-	-	-
9/25/2008	STMW-1	230	<0.5	<0.5	<0.5	<1.0	204	704	<0.5	<0.5	0.6	<0.5	<0.5	<5	<20
	STMW-2	<50	<0.5	<0.5	<0.5	<1	<0.5	71	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<20
	STMW-3	<50	<0.5	<0.5	<0.5	<0.5	67	31.7	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<20

notes:

TPHg	Total petroleum hydrocarbons as gasoline
TPHd	Total petroleum hydrocarbons as diesel
B	Benzene
T	Toluene
E	Ethylbenzene
X	Total xylenes
MtBE	Methyl tertiary butyl ether
TBA	Tert-butyl alcohol
DIPE	Di-isopropyl ether
EtBE	Ethyl-tertiary butyl ether
TAME	Tert-amyl-methyl ether
1,2-DCA	1,2-Dichloroethane
EDB	1,2-Dibromoethane
bgs	below ground surface
ug/l	micrograms per liter
-	Not analyzed or not reported

Table 3
Summary of Water Quality Parameter Data

Springtown Gas
909 Bluebell Drive
Livermore, California

Monitoring Well	STMW-1						STMW-2						STMW-3					
Date	pH	E.C.	°C	°F	ORP	DO	pH	E.C.	°C	°F	ORP	DO	pH	E.C.	°C	°F	ORP	DO
9/4/2007	6.37	1462	21.4	43.9	NM	NM	6.43	1405	21.1	43.7	NM	NM	6.14	2115	20	43.1	NM	NM
12/10/2007	6.92	1090	18.5	42.3	NM	NM	7.02	1074	19.8	43.0	NM	NM	6.77	1267	6.77	35.8	NM	NM
9/25/2008	7.22	1706	21.63	44.0	48.3	0.38	7.15	1652	21.26	43.8	34	0.7	6.84	1838	20.32	43.3	60.2	0.84

notes:

E.C.	Electricval conductivity
°C	Degrees centigrade
°F	Degrees fahrenheit
ORP	Oxygen reduction potential
DO	Dissolved oxygen
NM	Not measured

Table 4
Summary of Monitoring Well Completion Data

Springtown Gas
909 Bluebell Drive
Livermore, California

Well 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		Annular Seal		Grout Seal	
									From	To	From	To	From	To	From	To
STMW-1	Active	8/23/2007	20.00	10	2	PVC	20	#2/12	10	20	20	8	8	7	7	0
STMW-2	Active	7/5/1995*	38.50	10	2	PVC	20	#2/12	10	20	20	8	8	7	7	0
STMW-3	Active	7/5/1995*	33.90	10	2	PVC	20	#2/12	10	20	20	8	8	7	7	0

Appendix B

Laboratory Analytical Data Sheets

EXCELCHEM
Environmental Labs

1135 W Sunset Boulevard
Suite A
Rocklin, CA 95765
Phone# 916-543-4445
Fax# 916-543-4449

ELAP Certificate No. : 2119

10 October 2008

Geological Technics

Geological Technics

1101 7th Street

Modesto, CA 95354

RE: Springtown Gas

Workorder number:0809198

Enclosed are the results of analyses for samples received by the laboratory on 09/26/08 13:20. All Quality Control results are within acceptable limits except where noted as a case narrative. If you have any questions concerning this report, please feel free to contact the laboratory.

Sincerely,

_____

John Somers, Lab Director

Excelchem Environmental Labs

Geological Technics	Project:	Springtown Gas	
1101 7th Street	Project Number:	1409.2	Date Reported:
Modesto, CA 95354	Project Manager:	Geological Technics	10/10/08 16:45

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
STMW-3	0809198-01	Water	09/25/08 09:10	09/26/08 13:20
STMW-2	0809198-02	Water	09/25/08 09:50	09/26/08 13:20
VE-2	0809198-03	Water	09/25/08 10:20	09/26/08 13:20
STMW-1	0809198-04	Water	09/25/08 11:00	09/26/08 13:20
P-1	0809198-05	Water	09/25/08 11:50	09/26/08 13:20
VE-1	0809198-06	Water	09/25/08 12:15	09/26/08 13:20

Excelchem Environmental Lab.

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Laboratory Representative

Excelchem Environmental Labs

Geological Technics	Project:	Springtown Gas	
1101 7th Street	Project Number:	1409.2	Date Reported:
Modesto, CA 95354	Project Manager:	Geological Technics	10/10/08 16:45

STMW-3
0809198-01 (Water)

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERIES								
Antimony	ND	10.0	ug/l	ARJ0067	10/02/08	10/08/08	EPA 6010B	
Arsenic	**20.4**	10.0	"	"	"	"	"	
Barium	**789**	20.0	"	"	"	"	"	
Beryllium	ND	5.0	"	"	"	"	"	
Cadmium	**24.7**	10.0	"	"	"	"	"	
Chromium	**390**	10.0	"	"	"	"	"	
Cobalt	**101**	50.0	"	"	"	"	"	
Copper	**187**	20.0	"	"	"	"	"	
Lead	**48.9**	10.0	"	"	"	"	"	
Molybdenum	ND	10.0	"	"	"	"	"	
Nickel	**440**	10.0	"	"	"	"	"	
Selenium	ND	20.0	"	"	"	"	"	
Silver	ND	10.0	"	"	"	"	"	
Thallium	ND	20.0	"	"	"	"	"	
Vanadium	**335**	20.0	"	"	"	"	"	
Zinc	**425**	20.0	"	"	"	"	"	
Mercury	**2.70**	0.250	"	ARJ0026	10/02/08	10/03/08	EPA 7470A	
Volatile Organic Compounds by GC/MS								
Gasoline Range Hydrocarbons	ND	50.0	ug/l	ARJ0022	10/02/08	10/02/08	EPA 8260B	
Ethanol	ND	20.0	"	"	"	"	"	
TBA	**31.7**	5.0	"	"	"	"	"	
Methyl tert-Butyl Ether	**67.0**	0.5	"	"	"	"	"	
Di-isopropyl ether	ND	0.5	"	"	"	"	"	
Ethyl tert-Butyl Ether	ND	0.5	"	"	"	"	"	
Tert-Amyl Methyl Ether	ND	0.5	"	"	"	"	"	
1,2-Dichloroethane	ND	0.5	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.5	"	"	"	"	"	
Benzene	ND	0.5	"	"	"	"	"	
Toluene	ND	0.5	"	"	"	"	"	
Ethylbenzene	ND	0.5	"	"	"	"	"	
m,p-Xylene	ND	0.5	"	"	"	"	"	
o-Xylene	ND	0.5	"	"	"	"	"	
Xylenes, total	ND	1.0	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*94.0 %*	% Recovery Limits		*70-130*		"	
Surrogate: Toluene-d8		*102 %*	% Recovery Limits		*70-130*		"	
Surrogate: 4-Bromofluorobenzene		*102 %*	% Recovery Limits		*70-130*		"	

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Geological Technics	Project:	Springtown Gas	
1101 7th Street	Project Number:	1409.2	Date Reported:
Modesto, CA 95354	Project Manager:	Geological Technics	10/10/08 16:45

STMW-3
0809198-01 (Water)

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
Methanol								
Methanol	ND	5.0	mg/L	ARJ0061	10/08/08	10/08/08	8015M	

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Geological Technics	Project:	Springtown Gas	
1101 7th Street	Project Number:	1409.2	Date Reported:
Modesto, CA 95354	Project Manager:	Geological Technics	10/10/08 16:45

STMW-2
0809198-02 (Water)

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERIES								
Antimony	ND	10.0	ug/l	ARJ0067	10/02/08	10/08/08	EPA 6010B	
Arsenic	**27.2**	10.0	"	"	"	"	"	
Barium	**1860**	20.0	"	"	"	"	"	
Beryllium	**6.3**	5.0	"	"	"	"	"	
Cadmium	**32.0**	10.0	"	"	"	"	"	
Chromium	**561**	10.0	"	"	"	"	"	
Cobalt	**103**	50.0	"	"	"	"	"	
Copper	**257**	20.0	"	"	"	"	"	
Lead	**58.9**	10.0	"	"	"	"	"	
Molybdenum	ND	10.0	"	"	"	"	"	
Nickel	**533**	10.0	"	"	"	"	"	
Selenium	ND	20.0	"	"	"	"	"	
Silver	ND	10.0	"	"	"	"	"	
Thallium	ND	20.0	"	"	"	"	"	
Vanadium	**407**	20.0	"	"	"	"	"	
Zinc	**558**	20.0	"	"	"	"	"	
Mercury	**5.18**	0.250	"	ARJ0026	10/02/08	10/03/08	EPA 7470A	
Volatile Organic Compounds by GC/MS								
Gasoline Range Hydrocarbons	ND	50.0	ug/l	ARJ0022	10/02/08	10/02/08	EPA 8260B	
Ethanol	ND	20.0	"	"	"	"	"	
TBA	**71.0**	5.0	"	"	"	"	"	
Methyl tert-Butyl Ether	ND	0.5	"	"	"	"	"	
Di-isopropyl ether	ND	0.5	"	"	"	"	"	
Ethyl tert-Butyl Ether	ND	0.5	"	"	"	"	"	
Tert-Amyl Methyl Ether	ND	0.5	"	"	"	"	"	
1,2-Dichloroethane	ND	0.5	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.5	"	"	"	"	"	
Benzene	ND	0.5	"	"	"	"	"	
Toluene	ND	0.5	"	"	"	"	"	
Ethylbenzene	ND	0.5	"	"	"	"	"	
m,p-Xylene	ND	0.5	"	"	"	"	"	
o-Xylene	ND	0.5	"	"	"	"	"	
Xylenes, total	ND	1.0	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*95.6 %*	% Recovery Limits			*70-130*	"	
Surrogate: Toluene-d8		*99.6 %*	% Recovery Limits			*70-130*	"	
Surrogate: 4-Bromofluorobenzene		*102 %*	% Recovery Limits			*70-130*	"	

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Geological Technics	Project:	Springtown Gas	
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Modesto, CA 95354	Project Manager:	Geological Technics	10/10/08 16:45

STMW-2
0809198-02 (Water)

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
Methanol								
Methanol	ND	5.0	mg/L	ARJ0061	10/08/08	10/08/08	8015M	

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Modesto, CA 95354	Project Manager:	Geological Technics	10/10/08 16:45

VE-2

0809198-03 (Water)

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERIES								
Antimony	ND	10.0	ug/l	ARJ0067	10/02/08	10/08/08	EPA 6010B	
Arsenic	**12.2**	10.0	"	"	"	"	"	
Barium	**257**	20.0	"	"	"	"	"	
Beryllium	ND	5.0	"	"	"	"	"	
Cadmium	ND	10.0	"	"	"	"	"	
Chromium	**91.8**	10.0	"	"	"	"	"	
Cobalt	ND	50.0	"	"	"	"	"	
Copper	**42.8**	20.0	"	"	"	"	"	
Lead	**10.8**	10.0	"	"	"	"	"	
Molybdenum	**11.0**	10.0	"	"	"	"	"	
Nickel	**87.2**	10.0	"	"	"	"	"	
Selenium	ND	20.0	"	"	"	"	"	
Silver	ND	10.0	"	"	"	"	"	
Thallium	ND	20.0	"	"	"	"	"	
Vanadium	**88.7**	20.0	"	"	"	"	"	
Zinc	**107**	20.0	"	"	"	"	"	
Mercury	ND	0.250	"	ARJ0026	10/02/08	10/03/08	EPA 7470A	

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Geological Technics	Project:	Springtown Gas	
1101 7th Street	Project Number:	1409.2	Date Reported:
Modesto, CA 95354	Project Manager:	Geological Technics	10/10/08 16:45

STMW-1
0809198-04 (Water)

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERIES								
Antimony	ND	10.0	ug/l	ARJ0067	10/02/08	10/08/08	EPA 6010B	
Arsenic	**44.6**	10.0	"	"	"	"	"	
Barium	**1360**	20.0	"	"	"	"	"	
Beryllium	**7.0**	5.0	"	"	"	"	"	
Cadmium	**40.8**	10.0	"	"	"	"	"	
Chromium	**691**	10.0	"	"	"	"	"	
Cobalt	**116**	50.0	"	"	"	"	"	
Copper	**358**	20.0	"	"	"	"	"	
Lead	**61.9**	10.0	"	"	"	"	"	
Molybdenum	ND	10.0	"	"	"	"	"	
Nickel	**709**	10.0	"	"	"	"	"	
Selenium	ND	20.0	"	"	"	"	"	
Silver	ND	10.0	"	"	"	"	"	
Thallium	ND	20.0	"	"	"	"	"	
Vanadium	**535**	20.0	"	"	"	"	"	
Zinc	**726**	20.0	"	"	"	"	"	
Mercury	**18.9**	0.250	"	ARJ0026	10/02/08	10/03/08	EPA 7470A	
Volatile Organic Compounds by GC/MS								
Gasoline Range Hydrocarbons	**230**	50.0	ug/l	ARJ0022	10/02/08	10/02/08	EPA 8260B	
Ethanol	ND	20.0	"	"	"	"	"	
Di-isopropyl ether	ND	0.5	"	"	"	"	"	MTBE
Ethyl tert-Butyl Ether	ND	0.5	"	"	"	"	"	TBA
Tert-Amyl Methyl Ether	**0.6**	0.5	"	"	"	"	"	
1,2-Dichloroethane	ND	0.5	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.5	"	"	"	"	"	
Benzene	ND	0.5	"	"	"	"	"	
Toluene	ND	0.5	"	"	"	"	"	
Ethylbenzene	ND	0.5	"	"	"	"	"	
m,p-Xylene	ND	0.5	"	"	"	"	"	
o-Xylene	ND	0.5	"	"	"	"	"	
Xylenes, total	ND	1.0	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*105 %*	% Recovery Limits			*70-130*	"	
Surrogate: Toluene-d8		*100 %*	% Recovery Limits			*70-130*	"	
Surrogate: 4-Bromofluorobenzene		*105 %*	% Recovery Limits			*70-130*	"	
Methanol								

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Geological Technics	Project:	Springtown Gas	
1101 7th Street	Project Number:	1409.2	Date Reported:
Modesto, CA 95354	Project Manager:	Geological Technics	10/10/08 16:45

STMW-1
0809198-04 (Water)

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
Methanol								
Methanol	ND	5.0	mg/L	ARJ0061	10/08/08	10/08/08	8015M	

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Geological Technics	Project:	Springtown Gas	
1101 7th Street	Project Number:	1409.2	Date Reported:
Modesto, CA 95354	Project Manager:	Geological Technics	10/10/08 16:45

STMW-1
0809198-04RE1 (Water)

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
Volatile Organic Compounds by GC/MS								
TBA	**704**	50.0	ug/l	ARJ0022	10/02/08	10/03/08	EPA 8260B	
Methyl tert-Butyl Ether	**204**	5.0	"	"	"	"	"	
Surrogate: Dibromofluoromethane		*102 %*	% Recovery Limits		*70-130*		"	
Surrogate: Toluene-d8		*96.7 %*	% Recovery Limits		*70-130*		"	
Surrogate: 4-Bromofluorobenzene		*97.8 %*	% Recovery Limits		*70-130*		"	

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Geological Technics	Project:	Springtown Gas	
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Modesto, CA 95354	Project Manager:	Geological Technics	10/10/08 16:45

P-1

0809198-05 (Water)

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERIES								
Antimony	ND	10.0	ug/l	ARJ0067	10/02/08	10/08/08	EPA 6010B	
Arsenic	ND	10.0	"	"	"	"	"	
Barium	**206**	20.0	"	"	"	"	"	
Beryllium	ND	5.0	"	"	"	"	"	
Cadmium	ND	10.0	"	"	"	"	"	
Chromium	**75.4**	10.0	"	"	"	"	"	
Cobalt	ND	50.0	"	"	"	"	"	
Copper	**30.2**	20.0	"	"	"	"	"	
Lead	ND	10.0	"	"	"	"	"	
Molybdenum	ND	10.0	"	"	"	"	"	
Nickel	**76.7**	10.0	"	"	"	"	"	
Selenium	ND	20.0	"	"	"	"	"	
Silver	ND	10.0	"	"	"	"	"	
Thallium	ND	20.0	"	"	"	"	"	
Vanadium	**62.5**	20.0	"	"	"	"	"	
Zinc	**68.5**	20.0	"	"	"	"	"	
Mercury	ND	0.250	"	ARJ0026	10/02/08	10/03/08	EPA 7470A	

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Geological Technics	Project:	Springtown Gas	
1101 7th Street	Project Number:	1409.2	Date Reported:
Modesto, CA 95354	Project Manager:	Geological Technics	10/10/08 16:45

VE-1

0809198-06 (Water)

Analyte	Result	Reporting Limit	Units	Batch	Date Prepared	Date Analyzed	Method	Notes
METALS BY 6000/7000 SERIES								
Antimony	ND	10.0	ug/l	ARJ0067	10/02/08	10/08/08	EPA 6010B	
Arsenic	**274**	10.0	"	"	"	"	"	
Barium	**16400**	20.0	"	"	"	"	"	
Beryllium	**53.1**	5.0	"	"	"	"	"	
Cadmium	**323**	10.0	"	"	"	"	"	
Chromium	**4330**	10.0	"	"	"	"	"	
Cobalt	**857**	50.0	"	"	"	"	"	
Copper	**2750**	20.0	"	"	"	"	"	
Lead	**458**	10.0	"	"	"	"	"	
Molybdenum	ND	10.0	"	"	"	"	"	
Nickel	**3450**	10.0	"	"	"	"	"	
Selenium	ND	20.0	"	"	"	"	"	
Silver	ND	10.0	"	"	"	"	"	
Thallium	ND	20.0	"	"	"	"	"	
Vanadium	**3790**	20.0	"	"	"	"	"	
Zinc	**4970**	20.0	"	"	"	"	"	
Mercury	ND	0.250	"	ARJ0026	10/02/08	10/03/08	EPA 7470A	

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Geological Technics	Project:	Springtown Gas	
1101 7th Street	Project Number:	1409.2	Date Reported:
Modesto, CA 95354	Project Manager:	Geological Technics	10/10/08 16:45

METALS BY 6000/7000 SERIES - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ARJ0026 - EPA 7470A										
Blank (ARJ0026-BLK1)				Prepared & Analyzed: 10/02/08						
Mercury	ND	0.250	ug/l							
LCS (ARJ0026-BS1)				Prepared & Analyzed: 10/02/08						
Mercury	6.97	0.250	ug/l	6.67		105	75-125			
LCS Dup (ARJ0026-BSD1)				Prepared & Analyzed: 10/02/08						
Mercury	6.56	0.250	ug/l	6.67		98.3	75-125	6.17	20	
Matrix Spike (ARJ0026-MS1)		**Source: 0809215-01**		Prepared & Analyzed: 10/02/08						
Mercury	7.74	0.250	ug/l	6.67	0.332	111	75-125			
Matrix Spike Dup (ARJ0026-MSD1)		**Source: 0809215-01**		Prepared & Analyzed: 10/02/08						
Mercury	7.67	0.250	ug/l	6.67	0.332	110	75-125	0.882	20	
Batch ARJ0067 - EPA 6010B										
Blank (ARJ0067-BLK1)				Prepared: 10/02/08 Analyzed: 10/08/08						
Antimony	ND	10.0	ug/l							
Arsenic	ND	10.0	"							
Barium	ND	20.0	"							
Beryllium	ND	5.0	"							
Cadmium	ND	10.0	"							
Chromium	ND	10.0	"							
Cobalt	ND	50.0	"							
Copper	ND	20.0	"							
Lead	ND	10.0	"							
Molybdenum	ND	10.0	"							
Nickel	ND	10.0	"							
Selenium	ND	20.0	"							
Silver	ND	10.0	"							
Thallium	ND	20.0	"							
Vanadium	ND	20.0	"							
Zinc	ND	20.0	"							

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Geological Technics	Project:	Springtown Gas	
1101 7th Street	Project Number:	1409.2	Date Reported:
Modesto, CA 95354	Project Manager:	Geological Technics	10/10/08 16:45

METALS BY 6000/7000 SERIES - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ARJ0067 - EPA 6010B										
LCS (ARJ0067-BS1)				Prepared: 10/02/08 Analyzed: 10/08/08						
Antimony	942	10.0	ug/l	1000		94.2	80-120			
Arsenic	951	10.0	"	1000		95.1	80-120			
Barium	981	20.0	"	1000		98.1	80-120			
Beryllium	934	5.0	"	1000		93.4	80-120			
Cadmium	943	10.0	"	1000		94.3	80-120			
Chromium	958	10.0	"	1000		95.8	80-120			
Cobalt	966	50.0	"	1000		96.6	80-120			
Copper	979	20.0	"	1000		97.9	80-120			
Lead	932	10.0	"	1000		93.2	80-120			
Molybdenum	974	10.0	"	1000		97.4	80-120			
Nickel	972	10.0	"	1000		97.2	80-120			
Selenium	934	20.0	"	1000		93.4	80-120			
Silver	932	10.0	"	1000		93.2	80-120			
Thallium	951	20.0	"	1000		95.1	80-120			
Vanadium	950	20.0	"	1000		95.0	80-120			
Zinc	965	20.0	"	1000		96.5	80-120			
LCS Dup (ARJ0067-BSD1)				Prepared: 10/02/08 Analyzed: 10/08/08						
Antimony	1020	10.0	ug/l	1000		102	80-120	7.48	25	
Arsenic	1010	10.0	"	1000		101	80-120	5.78	25	
Barium	1050	20.0	"	1000		105	80-120	6.81	25	
Beryllium	1010	5.0	"	1000		101	80-120	8.05	25	
Cadmium	1000	10.0	"	1000		100	80-120	6.06	25	
Chromium	1030	10.0	"	1000		103	80-120	7.65	25	
Cobalt	1040	50.0	"	1000		104	80-120	7.06	25	
Copper	1040	20.0	"	1000		104	80-120	6.14	25	
Lead	999	10.0	"	1000		99.9	80-120	6.94	25	
Molybdenum	1030	10.0	"	1000		103	80-120	5.59	25	
Nickel	1030	10.0	"	1000		103	80-120	5.65	25	
Selenium	994	20.0	"	1000		99.4	80-120	6.24	25	
Silver	996	10.0	"	1000		99.6	80-120	6.62	25	
Thallium	1010	20.0	"	1000		101	80-120	6.12	25	
Vanadium	1010	20.0	"	1000		101	80-120	5.88	25	
Zinc	1040	20.0	"	1000		104	80-120	7.06	25	

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Geological Technics	Project:	Springtown Gas	
1101 7th Street	Project Number:	1409.2	Date Reported:
Modesto, CA 95354	Project Manager:	Geological Technics	10/10/08 16:45

METALS BY 6000/7000 SERIES - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ARJ0067 - EPA 6010B										
Matrix Spike (ARJ0067-MS1)	**Source: 0809198-01**			Prepared: 10/02/08 Analyzed: 10/08/08						
Antimony	555	10.0	ug/l	1000	ND	55.5	75-125			QL-01
Arsenic	951	10.0	"	1000	20.4	93.1	75-125			
Barium	1680	20.0	"	1000	789	89.0	75-125			
Beryllium	925	5.0	"	1000	4.34	92.1	75-125			
Cadmium	923	10.0	"	1000	24.7	89.9	75-125			
Chromium	1290	10.0	"	1000	390	90.4	75-125			
Cobalt	1000	50.0	"	1000	101	90.1	75-125			
Copper	1210	20.0	"	1000	187	102	75-125			
Lead	931	10.0	"	1000	48.9	88.3	75-125			
Molybdenum	885	10.0	"	1000	ND	88.5	75-125			
Nickel	1300	10.0	"	1000	440	86.1	75-125			
Selenium	901	20.0	"	1000	ND	90.1	75-125			
Silver	962	10.0	"	1000	ND	96.2	75-125			
Thallium	880	20.0	"	1000	8.11	87.2	75-125			
Vanadium	1250	20.0	"	1000	335	91.8	75-125			
Zinc	1340	20.0	"	1000	425	91.4	75-125			
Matrix Spike Dup (ARJ0067-MSD1)	**Source: 0809198-01**			Prepared: 10/02/08 Analyzed: 10/08/08						
Antimony	550	10.0	ug/l	1000	ND	55.0	75-125	1.08	25	QL-01
Arsenic	959	10.0	"	1000	20.4	93.9	75-125	0.875	25	
Barium	1680	20.0	"	1000	789	89.3	75-125	0.181	25	
Beryllium	926	5.0	"	1000	4.34	92.2	75-125	0.0923	25	
Cadmium	903	10.0	"	1000	24.7	87.9	75-125	2.18	25	
Chromium	1280	10.0	"	1000	390	88.9	75-125	1.13	25	
Cobalt	1010	50.0	"	1000	101	90.6	75-125	0.508	25	
Copper	1220	20.0	"	1000	187	103	75-125	0.583	25	
Lead	937	10.0	"	1000	48.9	88.8	75-125	0.624	25	
Molybdenum	878	10.0	"	1000	ND	87.8	75-125	0.832	25	
Nickel	1300	10.0	"	1000	440	86.0	75-125	0.0860	25	
Selenium	899	20.0	"	1000	ND	89.9	75-125	0.163	25	
Silver	957	10.0	"	1000	ND	95.7	75-125	0.432	25	
Thallium	883	20.0	"	1000	8.11	87.5	75-125	0.343	25	
Vanadium	1240	20.0	"	1000	335	90.2	75-125	1.33	25	
Zinc	1340	20.0	"	1000	425	91.1	75-125	0.211	25	

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Laboratory Representative

Excelchem Environmental Labs

Geological Technics	Project:	Springtown Gas	
1101 7th Street	Project Number:	1409.2	Date Reported:
Modesto, CA 95354	Project Manager:	Geological Technics	10/10/08 16:45

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ARJ0022 - EPA 8260B										
Blank (ARJ0022-BLK1)				Prepared & Analyzed: 10/02/08						
Surrogate: Dibromofluoromethane	*12.2*		*ug/l*	*12.5*		*97.8*	*70-130*			
Surrogate: Toluene-d8	*12.7*		"	*12.5*		*102*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*13.6*		"	*12.5*		*109*	*70-130*			
Gasoline Range Hydrocarbons	ND	50.0	"							
TBA	ND	5.0	"							
Methyl tert-Butyl Ether	ND	0.5	"							
Di-isopropyl ether	ND	0.5	"							
Ethyl tert-Butyl Ether	ND	0.5	"							
Tert-Amyl Methyl Ether	ND	0.5	"							
1,2-Dichloroethane	ND	0.5	"							
Benzene	ND	0.5	"							
Toluene	ND	0.5	"							
Ethylbenzene	ND	0.5	"							
m,p-Xylene	ND	0.5	"							
o-Xylene	ND	0.5	"							
Xylenes, total	ND	1.0	"							
LCS (ARJ0022-BS1)				Prepared & Analyzed: 10/02/08						
Surrogate: Dibromofluoromethane	*12.3*		*ug/l*	*12.5*		*98.6*	*70-130*			
Surrogate: Toluene-d8	*12.6*		"	*12.5*		*101*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*13.4*		"	*12.5*		*107*	*70-130*			
Benzene	18.0	0.5	"	21.0		85.6	80-120			
Toluene	18.1	0.5	"	21.0		86.3	80-120			
1,1-Dichloroethene	19.2	0.5	"	21.0		91.5	80-120			
Trichloroethene	18.2	0.5	"	21.0		86.5	80-120			
Chlorobenzene	18.4	0.5	"	21.0		87.4	80-120			
LCS Dup (ARJ0022-BSD1)				Prepared & Analyzed: 10/02/08						
Surrogate: Dibromofluoromethane	*12.7*		*ug/l*	*12.5*		*102*	*70-130*			
Surrogate: Toluene-d8	*12.5*		"	*12.5*		*99.8*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*13.4*		"	*12.5*		*107*	*70-130*			
Benzene	20.0	0.5	"	21.0		95.2	80-120	10.7	15	
Toluene	20.1	0.5	"	21.0		95.9	80-120	10.5	15	
1,1-Dichloroethene	21.4	0.5	"	21.0		102	80-120	10.6	15	
Trichloroethene	20.0	0.5	"	21.0		95.1	80-120	9.44	15	
Chlorobenzene	20.6	0.5	"	21.0		98.0	80-120	11.5	15	

Excelchem Environmental Lab.

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Laboratory Representative

Excelchem Environmental Labs

Geological Technics	Project:	Springtown Gas	
1101 7th Street	Project Number:	1409.2	Date Reported:
Modesto, CA 95354	Project Manager:	Geological Technics	10/10/08 16:45

Methanol - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch ARJ0061 - 8015M										
Blank (ARJ0061-BLK1)				Prepared & Analyzed: 10/08/08						
Methanol	ND	5.0	mg/L							
LCS (ARJ0061-BS1)				Prepared & Analyzed: 10/08/08						
Methanol	500	5.0	mg/L	500		99.9	70-130			
LCS Dup (ARJ0061-BSD1)				Prepared & Analyzed: 10/08/08						
Methanol	499	5.0	mg/L	500		99.8	70-130	0.195	20	
Matrix Spike (ARJ0061-MS1)	**Source: 0809198-01**			Prepared & Analyzed: 10/08/08						
Methanol	512	5.0	mg/L	500	2.6	102	70-130			
Matrix Spike Dup (ARJ0061-MSD1)	**Source: 0809198-01**			Prepared & Analyzed: 10/08/08						
Methanol	515	5.0	mg/L	500	2.6	102	70-130	0.569	20	

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Laboratory Representative

Excelchem Environmental Labs

Geological Technics	Project:	Springtown Gas	
1101 7th Street	Project Number:	1409.2	Date Reported:
Modesto, CA 95354	Project Manager:	Geological Technics	10/10/08 16:45

Notes and Definitions

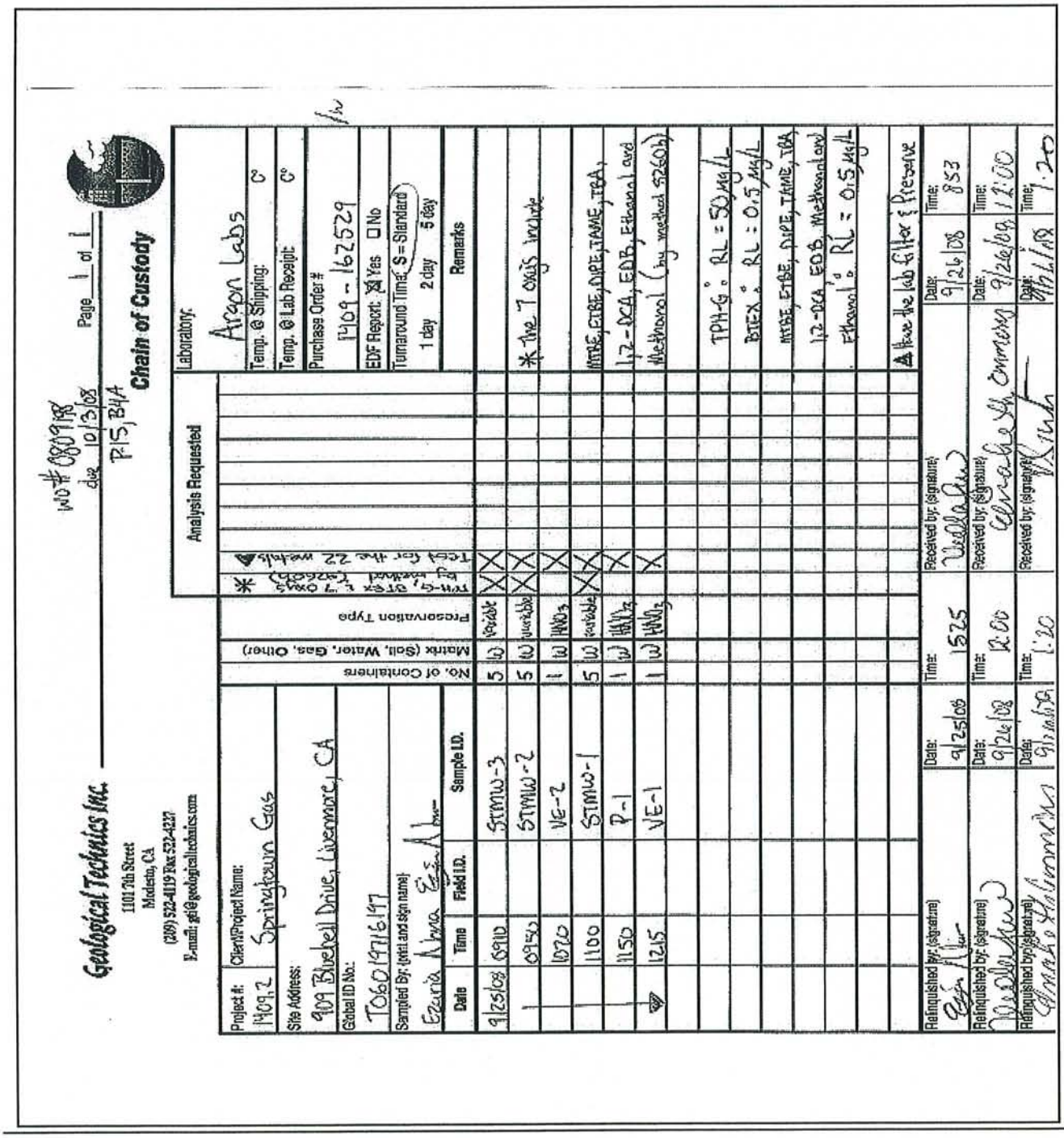
QL-01 Sample results for the QC batch were accepted based on LCS/LCSD percent recoveries and RPD values.

ND - Analyte not detected at reporting limit.

NR - Not reported

Excelchem Environmental Labs

Geological Technics	Project:	Springtown Gas	
1101 7th Street	Project Number:	1409.2	Date Reported:
Modesto, CA 95354	Project Manager:	Geological Technics	10/10/08 16:45



Excelchem Environmental Lab.

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Laboratory Representative

Excelchem Environmental Labs

Geological Technics	Project:	Springtown Gas	
1101 7th Street	Project Number:	1409.2	Date Reported:
Modesto, CA 95354	Project Manager:	Geological Technics	10/10/08 16:45

Appendix C

Groundwater Monitoring Field Notes

Geological Technics, Inc.

Groundwater Monitoring Field Log

Project Name: Springtown Gas (Blue Bell)

Well I.D.: STMW-1

Project No.: 1409.2

Date: 9/25/2008

Project Location: 909 Bluebell Drive

Livermore, CA

Samples sent to: Argon

Time	Cumulative Volume Purged (gal)	Temp C°	EC (µS/cm)	pH	ORP (millivolts)	DO (mg/L)	Remarks
10:35	0.00	21.83	1685	7.64	24.1	6.04	Clear, mild odor, no sediments
10:39	2.25	21.45	1693	7.27	46.5	0.53	Brown, mild odor, a lot of sediments
10:44	4.50	21.56	1699	7.24	48.6	0.40	Brown, mild odor, a lot of sediments
10:48	6.75	21.63	1706	7.22	48.3	0.38	Brown, mild odor, a lot of sediments
11:00							Collected samples

Purge Method: ☒ Dedicated Waterra ☐ Centrifugal pump with dedicated tubing ☐ Other _____

Pumping Rate: 0.52 gal/min

Well Constructed TD (ft):	20.00
* Well TD (ft):	19.77
Silt Thickness (ft):	0.23
Initial DTW (ft):	6.86
Water column height (ft):	12.91
One casing volume (gal):	2.19
** Final DTW (ft):	-
Casing diameter (in):	2"

Sample Containers used:

4	# VOAs	X	preserved ____ non-preserved
____	# amber liters	____	preserved ____ non-preserved
1	# polys 250 ml	X	preserved ____ non-preserved
____	# polys ____	____	preserved ____ non-preserved

Notes: Used 22 ft of waterra tubing.

Sampled By: E. Nona

Sample Method: Waterra ☒ Bailer ☐ Other ☐

* = measured ** = @ sampling

Purged Water Drummed: ☐ Yes ☐ No

No. of Drums:

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

Geological Technics, Inc.

Groundwater Monitoring Field Log

Project Name: Springtown Gas (Blue Bell)
Well I.D.: STMW-2
Project No.: 1409.2
Date: 9/25/2008
Project Location: 909 Bluebell Drive
Livermore, CA
Samples sent to: Argon

Time	Cumulative Volume Purged (gal)	Temp C°	EC (µS/cm)	pH	ORP (millivolts)	DO (mg/L)	Remarks
9:27	0.0	21.86	1636	7.52	76.0	4.96	Brown, no odor, a lot of sediment
9:33	2.0	21.29	1639	7.25	58.1	0.87	Brown, no odor, a lot of sediment
9:38	4.0	21.31	1644	7.16	56.2	0.56	Brown, no odor, a lot of sediment
9:43	6.0	21.26	1652	7.15	55.8	0.63	Brown, no odor, a lot of sediment
9:50							Collected samples

Purge Method: ☒ Dedicated Waterra ☐ Centrifugal pump with dedicated tubing ☐ Other _____

Pumping Rate: 0.26 gal/min

Well Constructed TD (ft):	20.00
* Well TD (ft):	20.12
Silt Thickness (ft):	-0.12
Initial DTW (ft):	8.69
Water column height (ft):	11.43
One casing volume (gal):	1.94
** Final DTW (ft):	8.89
Casing diameter (in):	2"

Sample Containers used: 4 # VOAs __X__ preserved ____ non-preserved
_____ # amber liters _____ preserved ____ non-preserved
1 # polys 250 ml __X__ preserved ____ non-preserved
_____ # polys _____ _____ preserved ____ non-preserved

Notes: Used 21 ft of waterra tubing.

Sampled By: E. Nona

Sample Method: Waterra ☒ Bailer ☐ Other ☐

* = measured ** = @ sampling

Purged Water Drummed: ☐ Yes ☐ No
No. of Drums:

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

Geological Technics, Inc.

Groundwater Monitoring Field Log

Project Name: Springtown Gas (Blue Bell)

Well I.D.: STMW-3

Project No.: 1409.2

Date: 9/25/2008

Project Location: 909 Bluebell Drive

Livermore, CA

Samples sent to: Argon

Time	Cumulative Volume Purged (gal)	Temp C°	EC (µS/cm)	pH	ORP (millivolts)	DO (mg/L)	Remarks
8:45	0.00	20.51	1836	6.78	172.3	6.96	Brown, no odor, a lot of sediments
8:52	1.75	20.30	1808	6.75	65.6	1.47	Brown, no odor, a lot of sediments
8:56	3.50	20.36	1770	6.82	62.1	1.22	Brown, no odor, a lot of sediments
9:01	5.25	20.32	1838	6.84	60.2	0.84	Brown, no odor, a lot of sediments
9:10							Collected samples

Purge Method: ☒ Dedicated Waterra ☐ Centrifugal pump with dedicated tubing ☐ Other _____

Pumping Rate: 0.33 gal/min

Well Constructed TD (ft):	20.00
* Well TD (ft):	20.07
Silt Thickness (ft):	-0.07
Initial DTW (ft):	9.72
Water column height (ft):	10.35
One casing volume (gal):	1.76
** Final DTW (ft):	10.12
Casing diameter (in):	2"

Sample Containers used:

4	# VOAs	X preserved ____ non-preserved
____	# amber liters	____ preserved ____ non-preserved
1	# polys 250 ml	X preserved ____ non-preserved
____	# polys ____	____ preserved ____ non-preserved

Notes: Used 22 ft of waterra tubing.

Sampled By: E. Nona

Sample Method: Waterra ☒ Bailer ☐ Other ☐

* = measured ** = @ sampling

Purged Water Drummed: ☐ Yes ☐ No

No. of Drums:

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

Geological Technics, Inc.

Groundwater Monitoring Field Log

Project Name: Springtown Gas (Blue Bell)

Well I.D.: VE-1

Project No.: 1409.2

Date: 9/25/2008

Project Location: 909 Bluebell Drive

Livermore, CA

Samples sent to: Argon

Time	Cumulative Volume Purged (gal)	Temp C°	EC (µS/cm)	pH	ORP (millivolts)	DO (mg/L)	Remarks
12:00	0.00	23.22	2094	7.08	-50.4	4.61	Olive green, strong odor, a lot of sediments
12:05	0.75	22.80	2072	6.90	-44.9	3.07	Olive green, strong odor, a lot of sediments
12:15							Collected samples

Purge Method: ☒ Dedicated Waterra ☐ Centrifugal pump with dedicated tubing ☐ Other _____

Pumping Rate: 0.15 gal/min

Well Constructed TD (ft):	10.00
* Well TD (ft):	8.70
Silt Thickness (ft):	1.30
Initial DTW (ft):	7.63
Water column height (ft):	1.07
One casing volume (gal):	0.70
** Final DTW (ft):	7.64
Casing diameter (in):	4"

Sample Containers used:

_____	# VOAs	_____ preserved	____ non-preserved
_____	# amber liters	_____ preserved	____ non-preserved
1	# polys 250 ml	X preserved	____ non-preserved
_____	# polys _____	_____ preserved	____ non-preserved

Notes: Used 11 ft of waterra tubing. Well went dry at 1 gallon.

Sampled By: E. Nona

Sample Method: Waterra ☒ Bailer ☐ Other ☐

* = measured ** = @ sampling

Purged Water Drummed: ☐ Yes ☐ No

No. of Drums:

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

Geological Technics, Inc.

Groundwater Monitoring Field Log

Project Name: Springtown Gas (Blue Bell)

Well I.D.: VE-2

Project No.: 1409.2

Date: 9/25/2008

Project Location: 909 Bluebell Drive

Livermore, CA

Samples sent to: Argon

Time	Cumulative Volume Purged (gal)	Temp C°	EC (µS/cm)	pH	ORP (millivolts)	DO (mg/L)	Remarks
10:08	0.00	21.76	1969	7.33	-5.5	5.49	Brown, mild odor, a lot of sediments
10:13	0.75	21.67	1933	7.10	-13.6	6.48	Brown, mild odor, a lot of sediments
10:20							Collected samples

Purge Method: ☒ Dedicated Waterra ☐ Centrifugal pump with dedicated tubing ☐ Other

Pumping Rate: 0.15 gal/min

Well Constructed TD (ft):	10.00
* Well TD (ft):	8.50
Silt Thickness (ft):	1.50
Initial DTW (ft):	7.58
Water column height (ft):	0.92
One casing volume (gal):	0.60
** Final DTW (ft):	7.94
Casing diameter (in):	4"

Sample Containers used:

	# VOAs		preserved ____ non-preserved
	# amber liters		preserved ____ non-preserved
1	# polys 250 ml	X	preserved ____ non-preserved
	# polys		preserved ____ non-preserved

Notes: A lot of bubbles in the flow cell. Used 10 ft of waterra tubing. Well went dry at 1 gallon.

Sampled By: E. Nona

Sample Method: Waterra ☒ Bailer ☐ Other ☐

* = measured ** = @ sampling

Purged Water Drummed: ☐ Yes ☐ No

No. of Drums:

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

Geological Technics, Inc.

Groundwater Monitoring Field Log

Project Name: Springtown Gas (Blue Bell)

Well I.D.: P-1

Project No.: 1409.2

Date: 9/25/2008

Project Location: 909 Bluebell Drive

Livermore, CA

Samples sent to: Argon

Time	Cumulative Volume Purged (gal)	Temp C°	EC (µS/cm)	pH	ORP (millivolts)	DO (mg/L)	Remarks
11:05	0.0	21.07	1998	7.28	69.0	5.39	Brown, mild odor, few sediments
11:15	8.0	20.41	1955	7.16	48.4	0.47	Clear, mild odor, no sediments
11:28	16.0	20.55	1944	7.15	49.6	0.86	Clear, mild odor, no sediments
11:43	24.0	20.59	1941	7.16	50.3	1.19	Clear, mild odor, no sediments
11:50							Collected samples

Purge Method: ☒ Dedicated Waterra ☐ Centrifugal pump with dedicated tubing ☐ Other _____

Pumping Rate: 0.64 gal/min

Well Constructed TD (ft):	20.00
* Well TD (ft):	19.54
Silt Thickness (ft):	0.46
Initial DTW (ft):	7.68
Water column height (ft):	11.86
One casing volume (gal):	7.71
** Final DTW (ft):	8.05
Casing diameter (in):	4"

Sample Containers used:

_____	# VOAs	_____	preserved ____ non-preserved
_____	# amber liters	_____	preserved ____ non-preserved
1	# polys 250 ml	X	preserved ____ non-preserved
_____	# polys _____	_____	preserved ____ non-preserved

Notes: _____

Sampled By: E. Nona

Sample Method: Waterra ☒ Bailer ☐ Other ☐

* = measured ** = @ sampling

Purged Water Drummed: ☒ Yes ☐ No

No. of Drums: 2

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