

1155 120 20.3

11/11/95

95 JAN 17 10 17 56



January 17, 1995

**Chevron U.S.A. Products Company**  
6001 Bollinger Canyon Rd., Bldg. L  
P.O. Box 5004  
San Ramon, CA 94583-0804

**Site Assessment & Remediation Group**  
Phone (510) 842-9500

Ms. Eva Chu  
Alameda County Environmental Health  
80 Swan Way, Room 200  
Oakland, CA 94621

*Add'l up + down + down grad  
mws needed, possibly 3.*

Re: Former Chevron Service Station No. 9-7127  
Highway I-580 and Grantline Rd., Tracy, California

*Continue w/ passive planning of Pt  
in MW-1, if not already implemented.*

Dear Ms. Chu :

Enclosed is the latest monitoring and sampling report from Sierra Environmental Services dated January 5, 1995. Please refer to the enclosed report for the latest groundwater information.

At this time, Chevron has postpone the installation of one additional well. Chevron will not proceed until we have discussed this site in our up-coming meeting tentatively scheduled for January 26.

If you have any questions or comments, please feel free to call me at (510) 842-8752.

Sincerely,

Chevron U.S.A. Products Co.

Kenneth Kan  
Engineer

LKAN/MacFile 9-7127R11

Enclosure

cc: Person in Charge of Tracy (Alameda County), RWQCB-Central Valley Region  
3443 Routier Rd., Sacramento, CA 95827-3098

William S. Carnazzo M.D., Carnazzo Land Company, Inc.  
P.O. Box 6031, Atascadero, CA 93423

Mr. & Mrs. Joe Jess, Jess Ranch  
Route 5, Box 704-A, Tracy, CA 95376

Ms. Bette Owen, Chevron U.S.A. Products Co.

January 5, 1995

Kenneth Kan  
Chevron USA Products Company  
P.O. Box 5004  
San Ramon, CA 94583

Re: Former Chevron Service Station #9-7127  
Interstate 580 at Grant Line Road  
Altamont Pass, California  
SES Project #1-369-04

Dear Mr. Kan:

This report presents the results of the monthly water level measurements and the quarterly ground water sampling at former Chevron Service Station #9-7127, located at the intersection of Interstate 580 and Grant Line Road in the Altamont Pass Area of California. Four wells, MW-2 through MW-5, were sampled (Figure 1).

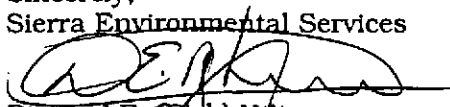
On September 12, October 12 and November 30, 1994, SES personnel visited the site. Water level measurements were collected in all site wells and all wells were checked for the presence of free-phase hydrocarbons. Free-phase hydrocarbons were present in one of the site wells, MW-1. Water level data are shown in Table 1 and ground water elevation contours are included on Figures 1, 2, and 3.

The ground water samples were collected on November 30, 1994 in accordance with SES Standard Operating Procedure - Ground Water Sampling (attached). The field water sampling forms for this event are included. All analyses were performed by GTEL of Concord, California. Analytic results for ground water are presented in Table 1. The chain of custody document and laboratory analytic reports are attached. SES is not responsible for laboratory omissions or errors.

Thank you for allowing us to provide services to Chevron. Please call if you have any questions.



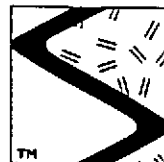
Sincerely,  
Sierra Environmental Services

  
Richard E. (Rick) Hilton  
Staff Environmental Scientist

  
Chris J. Bramer  
Professional Engineer #C48846

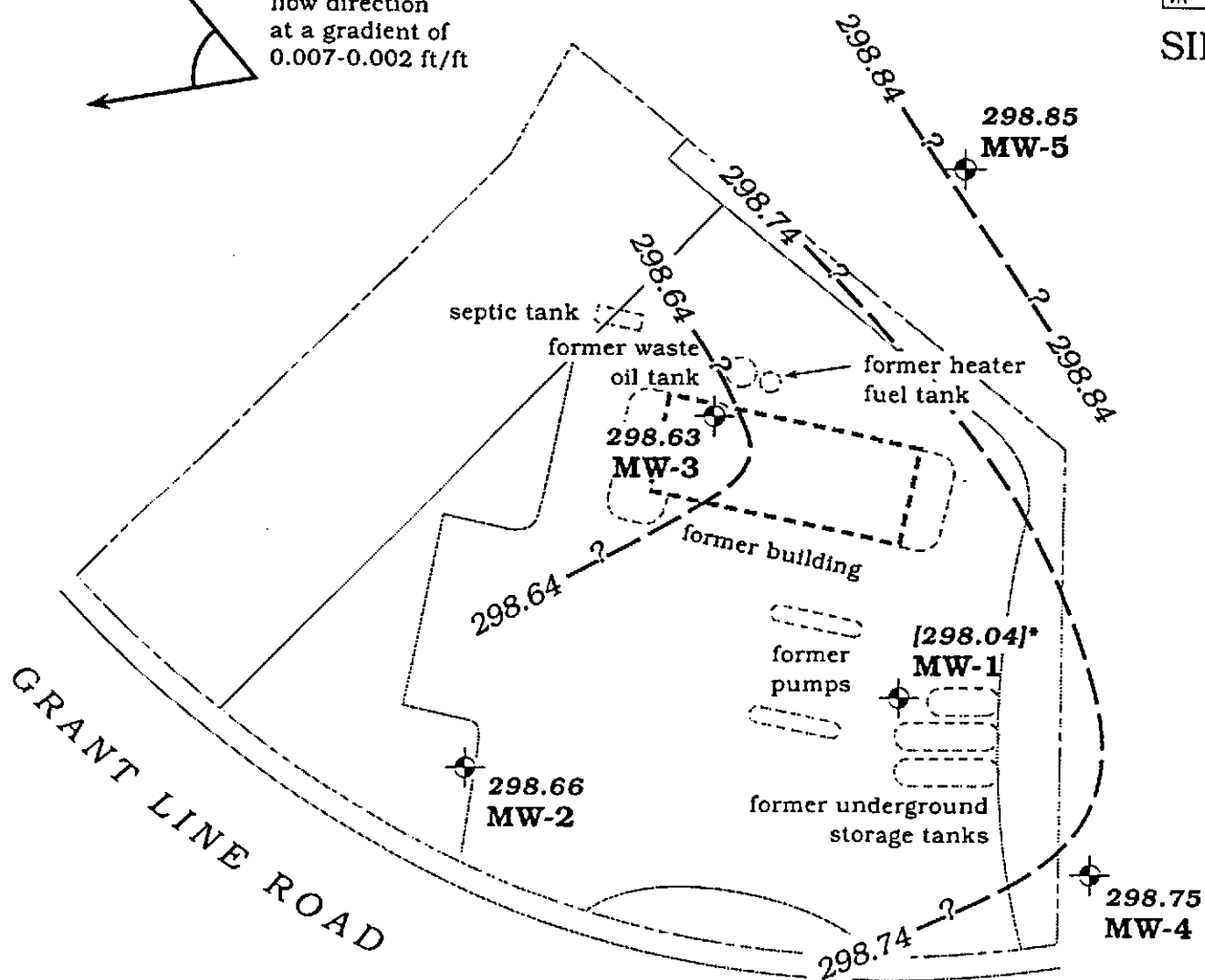
REH/CJB/lmo  
36904QM.JA5

Attachments      Figures  
                          Table  
                          SES Standard Operating Procedure  
                          Field Water Sampling Forms  
                          Chain of Custody Document and Laboratory Analytic Reports



SIERRA

Approximate ground water flow direction at a gradient of 0.007-0.002 ft/ft



**EXPLANATION**

- MW-5** Monitoring well
- 298.82** Ground water elevation, in feet
- [298.96]** Ground water elevation not used in contouring
- .** Ground water elevation corrected for presence of free phase hydrocarbons using the formula shown in Table 1
- 298.74** Ground water elevation contour, dashed where inferred, queried where uncertain

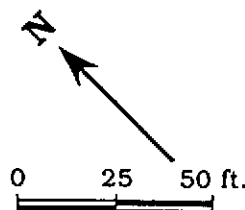
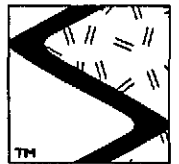


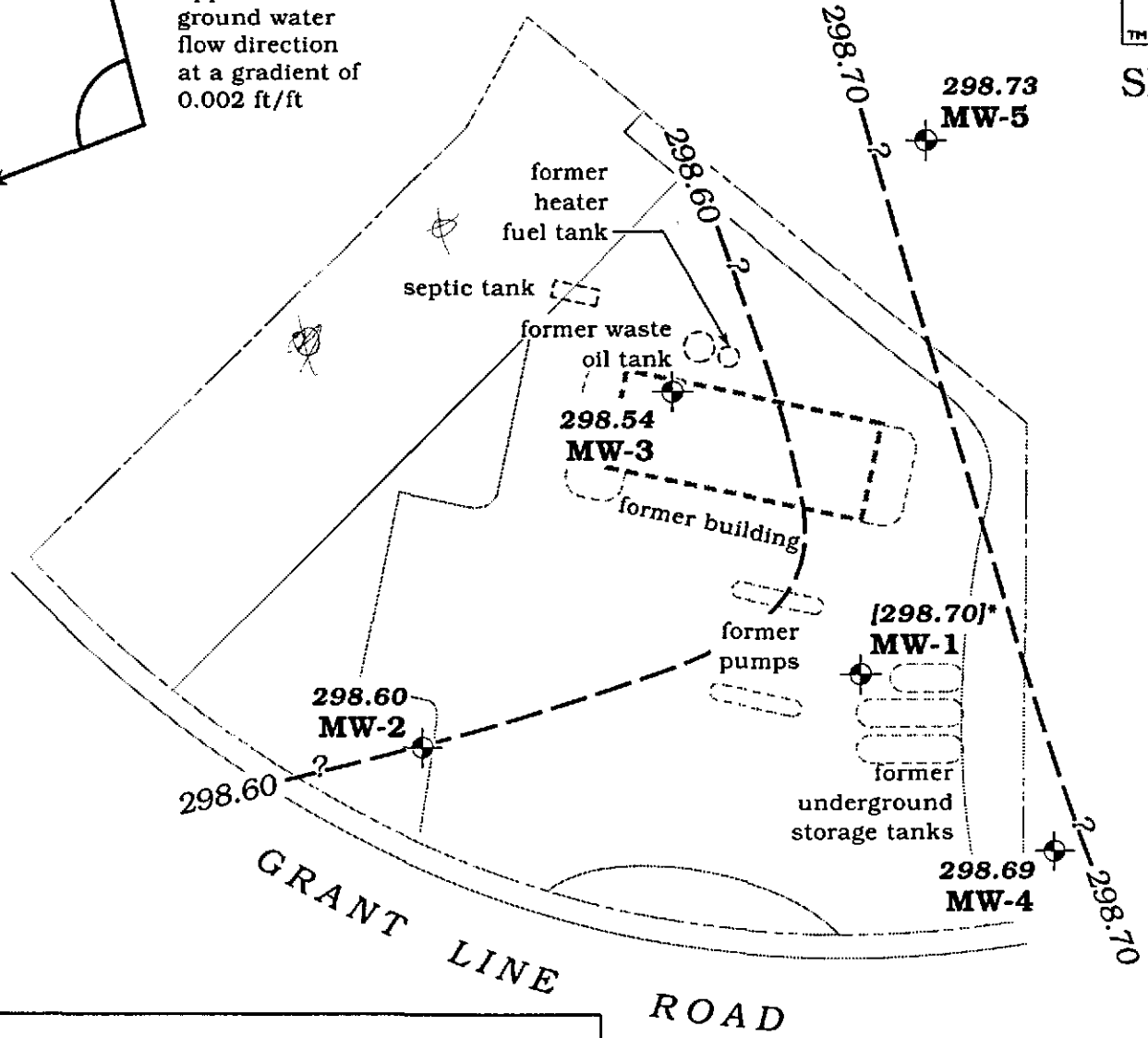
Figure 1. Monitoring Well Locations and Ground Water Elevation Contour Map - September 12, 1994 - Former Chevron Service Station #9-7127, Interstate 580 and Grant Line Road, Altamont Pass, California



SIERRA



Approximate  
ground water  
flow direction  
at a gradient of  
0.002 ft/ft



**EXPLANATION**

- MW-5** Monitoring well
- 298.73** Ground water elevation, in feet
- [298.70]** Ground water elevation not used in contouring
- \*** Ground water elevation corrected for presence of free-phase hydrocarbons using the formula shown in Table 1
- 298.70** Ground water elevation contour, dashed where inferred, queried where uncertain

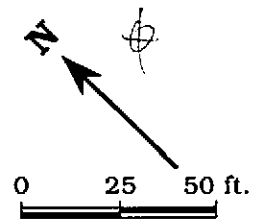
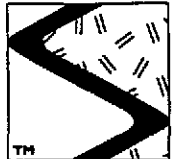
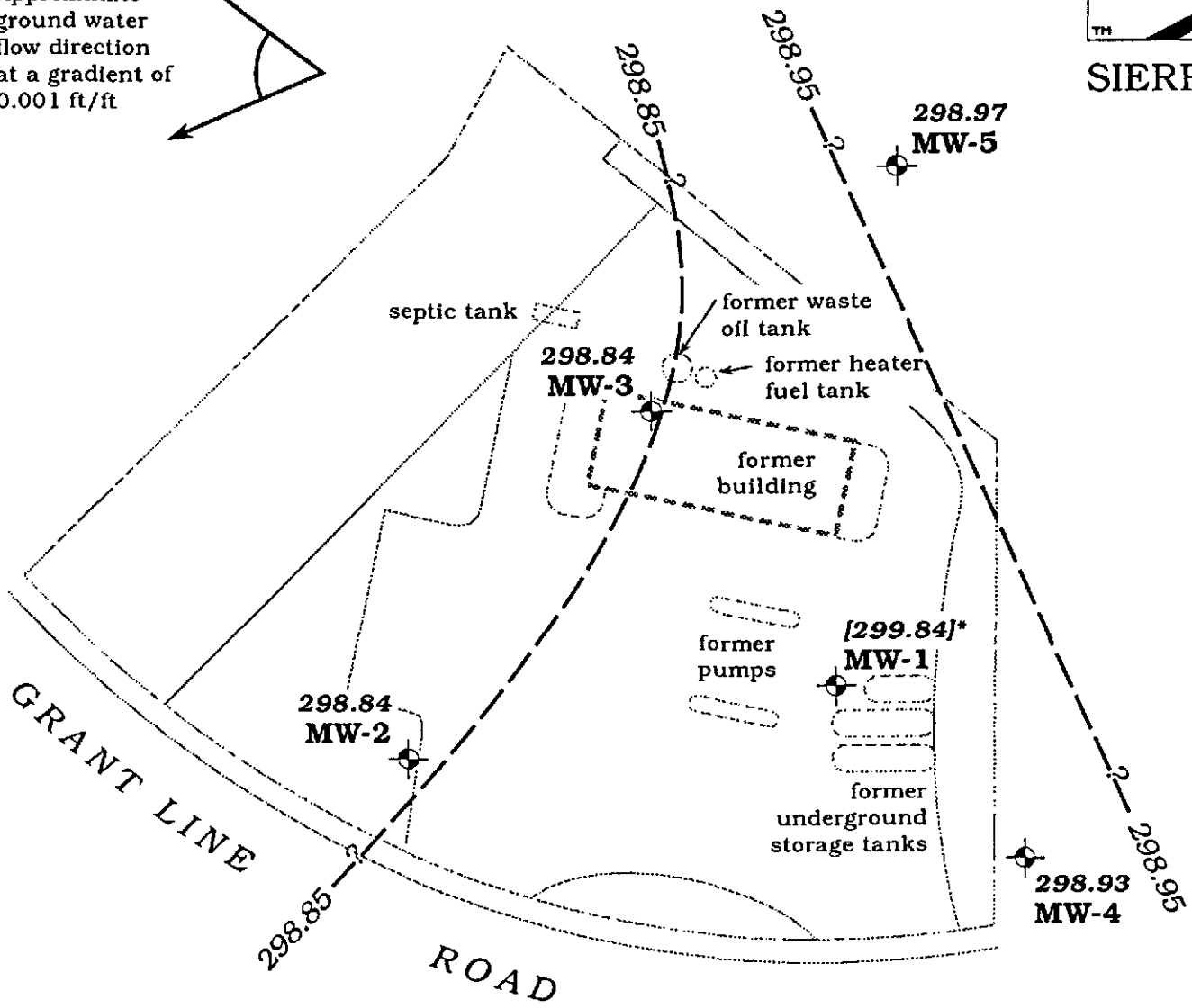
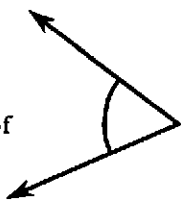


Figure 2. Monitoring Well Locations and Ground Water Elevation Contour Map - October 12, 1994 - Former Chevron Service Station #9-7127, Interstate 580 and Grant Line Road, Altamont Pass, California



SIERRA

Approximate ground water flow direction at a gradient of 0.001 ft/ft



<b>EXPLANATION</b>	
	<b>MW-5</b> Monitoring well
298.97	Ground water elevation, in feet
[299.84]	Ground water elevation not used in contouring
*	Ground water elevation corrected for presence of free-phase hydrocarbons using the formula shown in Table 1
- 298.85	Ground water elevation contour, dashed where inferred, queried where uncertain

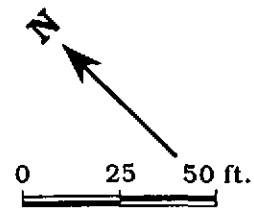


Figure 3. Monitoring Well Locations and Ground Water Elevation Contour Map - November 30, 1994 - Former Chevron Service Station #9-7127, Interstate 580 and Grant Line Road, Altamont Pass, California



Table 1. Water Level Data and Ground Water Analytic Results - Former Chevron Service Station #9-7127, Interstate 580 at Grant Line Road, Altamont Pass Area, California

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G)	B	T	E	X
MW-1/ 329.17	2/15/94	29.77	299.40	0	8015/8020	99,000	20,000	24,000	2,000	9,800
	4/21/94	29.85	299.32	0	---	---	---	---	---	---
	6/1/94	29.92	299.25	0	8015/8020	56,000	12,000	15,000	1,100	5,800
	6/28/94	30.15	299.02	0	---	---	---	---	---	---
	7/19/94	20.30	308.87	0	---	---	---	---	---	---
	9/2/94	30.61	298.96 <sup>1</sup>	0.5	---	---	---	---	---	---
	9/12/94	31.66	298.04 <sup>1</sup>	0.66	---	---	---	---	---	---
	10/12/94	31.70	298.70 <sup>1</sup>	1.54	---	---	---	---	---	---
	11/30/94	29.95	299.84 <sup>1</sup>	0.77	---	---	---	---	---	---
MW-2/ 327.22	2/15/94	27.09	300.13	0	8015/8020	83	21	6	1	3
	4/21/94	27.81	299.41	0	---	---	---	---	---	---
	6/1/94	27.98	299.24	0	8015/8020	<50	1.3	0.5	<0.5	<0.5
	6/28/94	28.17	299.05	0	---	---	---	---	---	---
	7/19/94	28.35	298.87	0	---	---	---	---	---	---
	9/2/94	28.52	298.70	0	8015/8020	82	13	16	3.6	14
	9/12/94	28.56	298.66	0	---	---	---	---	---	---
	10/12/94	28.62	298.60	0	---	---	---	---	---	---
	11/30/94	28.38	298.84	0	8015/8020	<50	3.6	4.5	1.0	4.5
MW-3/ 329.28	2/15/94	29.87	299.41	0	8015/8020	23,000	11,000	1,700	540	1,000
	4/21/94	29.96	299.32	0	---	---	---	---	---	---
	6/1/94	30.11	299.17	0	8015/8020	27,000	12,000	2,600	600	2,200
	6/28/94	30.31	298.97	0	---	---	---	---	---	---
	7/19/94	30.50	298.78	0	---	---	---	---	---	---
	9/2/94	30.61	298.67	0	8015/8020	34,000	16,000	4,100	770	3,000
	9/12/94	30.65	298.63	0	---	---	---	---	---	---
	10/12/94	30.74	298.54	0	---	---	---	---	---	---
	11/30/94	30.44	298.84	0	8015/8020	33,000	16,000	3,000	740	2,400
MW-4/ 329.44	5/21/93	---	---	---	8015/8020	<50	12	2	<0.5	1
	11/5/93	---	---	---	8015/8020	300	56	10	0.8	3
	2/15/94	29.90	299.54	0	8015/8020	260	47	12	2	4
	4/21/94	29.99	299.45	0	---	---	---	---	---	---



SIERRA

Table 1. Water Level Data and Ground Water Analytic Results - Former Chevron Service Station #9-7127, Interstate 580 at Grant Line Road, Altamont Pass Area, California (continued)

Well ID/ TOC (ft)	Date	DTW (ft)	GWE (msl)	Product Thickness* (ft)	Analytic Method	TPPH(G) B T E X				
						-----ppb----->				
MW-4	6/1/94	30.14	299.30	0	8015/8020	860	200	23	2.8	9.6
(cont)	6/28/94	30.32	299.12	0	---	---	---	---	---	---
	7/19/94	30.50	298.94	0	---	---	---	---	---	---
	9/2/94	30.62	298.82	0	8015/8020	1,700	250	27	6.4	15
	<b>9/12/94</b>	<b>30.69</b>	<b>298.75</b>	<b>0</b>	---	---	---	---	---	---
	<b>10/12/94</b>	<b>30.75</b>	<b>298.69</b>	<b>0</b>	---	---	---	---	---	---
	<b>11/30/94</b>	<b>30.51</b>	<b>298.93</b>	<b>0</b>	<b>8015/8020</b>	<b>830</b>	<b>350</b>	<b>29</b>	<b>8.1</b>	<b>22</b>
MW-5	5/25/93	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	0.9
	11/5/93	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
312.88	2/15/94	25.10	287.78	0	8015/8020	<50	<0.5	1	<0.5	1
	4/21/94	13.21	299.67	0	---	---	---	---	---	---
	6/1/94	13.39	299.49	0	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/28/94	13.73	299.15	0	---	---	---	---	---	---
	7/19/94	13.80	299.08	0	---	---	---	---	---	---
	9/2/94	14.02	298.86	0	8015/8020	<50	3.2	1.8	<0.5	2.1
	<b>9/12/94</b>	<b>14.03</b>	<b>298.85</b>	<b>0</b>	---	---	---	---	---	---
	<b>10/12/94</b>	<b>14.15</b>	<b>298.73</b>	<b>0</b>	---	---	---	---	---	---
	<b>11/30/94</b>	<b>13.91</b>	<b>298.97</b>	<b>0</b>	<b>8015/8020</b>	<b>&lt;50<sup>2</sup></b>	<b>&lt;0.5<sup>2</sup></b>	<b>&lt;0.5<sup>2</sup></b>	<b>&lt;0.5<sup>2</sup></b>	<b>&lt;0.5<sup>2</sup></b>
Trip Blank										
TB-LB	2/15/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	6/1/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	9/2/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5
	<b>11/30/94</b>	---	---	---	<b>8015/8020</b>	<b>&lt;50</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>	<b>&lt;0.5</b>
Bailer Blank										
BB	2/15/94	---	---	---	8015/8020	<50	<0.5	<0.5	<0.5	<0.5



Table 1. Water Level Data and Ground Water Analytic Results - Former Chevron Service Station #9-7127, Interstate 580 at Grant Line Road, Altamont Pass Area, California

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EXPLANATION:

DTW = Depth to water  
TOC = Top of casing elevation  
GWE = Ground water elevation  
msl = Measurements referenced relative to mean sea level  
TPPH(G) = Total Purgeable Petroleum Hydrocarbons as Gasoline  
B = Benzene  
T = Toluene  
E = Ethylbenzene  
X = Xylenes  
ppb = Parts per billion  
--- = Not analyzed/Not applicable

ANALYTIC METHODS:

8015 = EPA Method 8015/5030 for TPH(G)  
8020 = EPA Method 8020 for BTEX

NOTES:

All top of casing elevations were surveyed by Tronoff Land Surveying, Davis, California on November 2, 1993.

\* Product thickness was measured on and after February 15, 1994 with an MMC flexi-dip interface probe. Analytic data prior to February 15, 1994 compiled from the Well Installation Report prepared for Chevron by Pacific Environmental Group, Inc., December 3, 1993.

1 GWE corrected for the presence of free-phase hydrocarbons using:  $GWE = [(TOC - DTW) + (0.8)(Product\ Thickness)]$ . 0.8 is the assumed specific gravity of free-phase hydrocarbons.

2 Estimated concentration. TFT surrogate recovery demonstrated sample specific matrix effect. Benzene and Toluene are estimated values due to low recovery of (TFT) surrogate. The (BFB) surrogate had acceptable recovery. Low surrogate recovery can be attributed to sample effervescence (GTEL).





## SES STANDARD OPERATING PROCEDURE GROUND WATER SAMPLING

The following describes sampling procedures used by SES field personnel to collect and handle ground water samples. Before samples are collected, careful consideration is given to the type of analysis to be performed so that precautions are taken to prevent loss of volatile components or contamination of the sample, and to preserve the sample for subsequent analysis. Wells will be sampled no less than 24 hours after well development. Collection methods specific to ground water sampling are presented below.

Prior to sampling, each well is checked for the presence of free-phase hydrocarbons using an MMC flexi-dip interface probe. Product thickness (measured to the nearest 0.01 foot) is noted on the sampling form. Water level measurements are also made using either a water level meter or the interface probe. The water level measurements are also noted on the sampling form.

Prior to sampling, each well is purged of a minimum of three well casing volumes of water using a steam-cleaned PVC bailer, or a pre-cleaned pump. Temperature, pH and electrical conductivity are measured at least three times during purging. Purging is continued until these parameters have stabilized (i.e., changes in temperature, pH or conductivity do not exceed  $\pm 0.5^{\circ}\text{F}$ , 0.1 or 5%, respectively).

The purge water is taken to Chevron's Richmond Refinery for disposal.

Ground water samples are collected from the wells with Chevron designated disposable bailers. The water samples are decanted into the appropriate container for the analysis to be performed. Pre-preserved sample containers may be used or the analytic laboratory may add preservative to the sample upon arrival. Duplicate samples are collected from each well as a back-up sample and/or to provide quality control. The samples are labeled to include the project number, sample ID, date, preservative, and the field person's initials. The samples are placed in polyethylene bags and in an ice chest (maintained at  $4^{\circ}\text{C}$ ) for transport under chain of custody to the laboratory.

The chain of custody form includes the project number, analysis requested, sample ID, date analysis and the SES field person's name. The form is signed and dated (with the transfer time) by each person who yields or receives the samples beginning with the field personnel and ending with the laboratory personnel.

A trip blank accompanies each sampling set, or 5% trip blanks are included for sets of greater than 20 samples. The trip blank is analyzed for some or all of the same compounds as the ground water samples.



### WATER SAMPLING DATA

Job Name ALTAMONT PASS Job Number 1-369-04  
 Well Number MW-TB-LB Date 11/30/94  
 Sampler RH/TZ  
 Well Diameter 2  
 Sample Point Location/Description \_\_\_\_\_  
 Well Depth (spec.) \_\_\_\_\_  
 Depth to Water (static) \_\_\_\_\_ Well Depth (sounded) \_\_\_\_\_  
 Initial height of water in casing \_\_\_\_\_ Volume \_\_\_\_\_ gallons  
 Volume to be purged \_\_\_\_\_ gallons  
 Purged With Sub Pump Sampled With DISP. BAIER  
 Pumped or Bailed Dry? Yes No Time \_\_\_\_\_ After \_\_\_\_\_ gallons  
 Water level at sampling \_\_\_\_\_ Percent Recovery \_\_\_\_\_

**Formulas/Conversions**  
 $r$  = well radius in ft  
 $h$  = ht of water col. in ft  
 $vol. in cyl. = \pi r^2 h$   
 $7.48 gal/ft^3$   
 $V_1^* casing = 0.163 gal/ft$   
 $V_2^* casing = 0.367 gal/ft$   
 $V_3^* casing = 0.653 gal/ft$   
 $V_{4.5}^* casing = 0.826 gal/ft$   
 $V_6^* casing = 1.47 gal/ft$   
 $V_7^* casing = 2.61 gal/ft$

### CHEMICAL DATA

TRIP BLANK

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
<u>←</u>							
<u>←</u>			<u>TB/LB</u>				
<u>←</u>							

SAMPLES COLLECTED Time \_\_\_\_\_ Total volume purged (gal.) \_\_\_\_\_  
 Water color \_\_\_\_\_ Odor \_\_\_\_\_  
 Description of sediments or material in sample: \_\_\_\_\_  
 Additional Comments: BLANK SUPPLIED BY Superior Precision Analytical

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
<u>TB-LB</u>	<u>2</u>	<u>1</u>	<u>-</u>	<u>HCl</u>	<u>YES</u>	<u>GTEL</u>	<u>G/BTEX</u>

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);  
 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);  
 5 = Other \_\_\_\_\_; 6 = Other \_\_\_\_\_



### WATER SAMPLING DATA

Job Name ALTAMONT PASS Job Number 1-369-04  
 Well Number MW-2 Date 11/30/94  
 Sample Point Location/Description SW well  
 Depth to Water (static) 28.38 Well Depth (sounded) \_\_\_\_\_  
 Initial height of water in casing 9.62 Volume 1.57 gallons  
 Volume to be purged \_\_\_\_\_ gallons  
 Purged With Sub Pump Sampled With DISP. BAILER  
 Pumped or Bailed Dry? Yes  No  Time \_\_\_\_\_ After \_\_\_\_\_ gallons  
 Water level at sampling \_\_\_\_\_ Percent Recovery \_\_\_\_\_

Sampler RH/TL  
 Well Diameter 2  
 Well Depth (spec.) 38

**Formulas/Conversions**

$r$  = well radius in ft  
 $h$  = ht of water col. in ft  
 vol. in cyl. =  $\pi r^2 h$   
 7.48 gal/ft<sup>3</sup>

$V_1$  casing = 0.163 gal/ft  
 $V_2$  casing = 0.367 gal/ft  
 $V_3$  casing = 0.653 gal/ft  
 $V_4$  casing = 0.826 gal/ft  
 $V_5$  casing = 1.47 gal/ft  
 $V_6$  casing = 2.61 gal/ft

### CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
1241	1243	2	2	9.42	77.0	1.04	X1,000
	1244	2	4	9.51	70.0	1.02	X1,000
	1245	1	5	9.52	69.9	1.01	X1,000

SAMPLES COLLECTED Time 1251 Total volume purged (gal.) 5  
 Water color Cloudy Odor None  
 Description of sediments or material in sample: LT Brown Sediment  
 Additional Comments: \_\_\_\_\_

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Init)	Analysis Requested
MW 2	2	1	-	HCl	YES	GTEL	G/BTEX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);  
 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);  
 5 = Other \_\_\_\_\_; 6 = Other \_\_\_\_\_



### WATER SAMPLING DATA

Job Name ALTAMONT PASS Job Number 1-369-04 Sampler RH  
 Well Number MW-3 Date 11/30/94 Well Diameter 2  
 Sample Point Location/Description NORTH-CENTRAL well Well Depth (spec.) 41  
 Depth to Water (static) 30.44 Well Depth (sounded) \_\_\_\_\_  
 Initial height of water in casing 10.56 Volume 1.72 gallons  
 Volume to be purged 5.1 gallons  
 Purged With Sub Pump Sampled With DISP. BAILER  
 Pumped or Bailed Dry? Yes  No  Time \_\_\_\_\_ After \_\_\_\_\_ gallons  
 Water level at sampling \_\_\_\_\_ Percent Recovery \_\_\_\_\_

**Formulas/Conversions**  
 $r$  = well radius in ft  
 $h$  = ht of water col. in ft  
 $vol. in cyl. = \pi r^2 h$   
 $7.48 gal/ft^3$   
 $V_1$  casing = 0.163 gal/ft  
 $V_2$  casing = 0.367 gal/ft  
 $V_3$  casing = 0.653 gal/ft  
 $V_4$  casing = 0.826 gal/ft  
 $V_5$  casing = 1.47 gal/ft  
 $V_6$  casing = 2.61 gal/ft

### CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°F)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
1331	1333	2	2	9.6	63.3	1160	
	1336	2	4	9.4	65.7	1140	
	1338	2	6	9.2	65.9	1140	

SAMPLES COLLECTED Time 1338 Total volume purged (gal.) 6  
 Water color clear Odor strong hydrogen sulfide  
 Description of sediments or material in sample: none  
 Additional Comments: \_\_\_\_\_

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (In/Out)	Analysis Requested
1171	2	1	-	HCl	YES	GTEL	G/BTEX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);  
 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);  
 5 = Other \_\_\_\_\_; G = Other \_\_\_\_\_



### WATER SAMPLING DATA

Job Name ALTAMONT PASS Job Number 1-369.04  
 Well Number MW-4 Date 11/30/94  
 Sample Point Location/Description Shut in well  
 Depth to Water (static) 30.51 Well Depth (sounded)       
 Initial height of water in casing 9.49 Volume 1.55 gallons  
 Volume to be purged 5 gallons  
 Purged With Sub Pump Sampled With DISP. BAILER  
 Pumped or Bailed Dry? Yes  No Time      After      gallons  
 Water level at sampling      Percent Recovery     

Sampler RH/TZ  
 Well Diameter 2  
 Well Depth (spec.) 40

**Formulas/Conversions**

$r$  = well radius in ft  
 $h$  = ht of water col. in ft  
 vol. in cyl. =  $\pi r^2 h$   
 7.48 gal/ft<sup>3</sup>

$V_c$  casing = 0.163 gal/ft  
 $V_1$  casing = 0.367 gal/ft  
 $V_2$  casing = 0.653 gal/ft  
 $V_3$  casing = 0.826 gal/ft  
 $V_4$  casing = 1.47 gal/ft  
 $V_5$  casing = 2.61 gal/ft

### CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°C)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
1259	1300	2	2	8.9	63.4	1310	
	1302	2	4	9.0	63.6	1290	
	1303	1	5	9.1	63.5	1280	

SAMPLES COLLECTED Time 1315 Total volume purged (gal.) 5  
 Water color Cloudy Odor STRONG Hydroc. odor  
 Description of sediments or material in sample: LT grey-brown sediment  
 Additional Comments:     

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Inst)	Analysis Requested
MWJM	2	1	-	HCl	YES	GTEL	G/BTEX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);  
 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);  
 5 = Other     ; 6 = Other



### WATER SAMPLING DATA

Job Name ALTAMONT PASS Job Number 1-369-04 Sampler RH/TL  
 Well Number MW-5 Date 11/30/94 Well Diameter 2  
 Sample Point Location/Description bottom of hillside well Well Depth (spcc.) 28  
 Depth to Water (static) 13.91 Well Depth (sounded) \_\_\_\_\_  
 Initial height of water in casing 4.09 Volume 2.29 gallons  
 Volume to be purged 6.89 gallons  
 Purged With Sub Pump Hand Bail Sampled With DISP. BAITER  
 Pumped or Bailed Dry? Yes  No  Time \_\_\_\_\_ After \_\_\_\_\_ gallons  
 Water level at sampling \_\_\_\_\_ Percent Recovery \_\_\_\_\_

**Formulas/Conversions**  
 r = well radius in ft  
 h = ht of water col. in ft  
 vol. in cyl. =  $\pi r^2 h$   
 7.48 gal/ft<sup>3</sup>  
 $V_1^* \text{ casing} = 0.163 \text{ gal/ft}$   
 $V_2^* \text{ casing} = 0.367 \text{ gal/ft}$   
 $V_3^* \text{ casing} = 0.653 \text{ gal/ft}$   
 $V_4^* \text{ casing} = 0.826 \text{ gal/ft}$   
 $V_5^* \text{ casing} = 1.47 \text{ gal/ft}$   
 $V_6^* \text{ casing} = 2.61 \text{ gal/ft}$

### CHEMICAL DATA

Purge Time		Purge Volume (gal.)	Cumulative (gal.)	pH	Temp (°F)	Specific Conductance	
Start	Stop					Measurement	x umhos/cm
1225	235	3	3	9.9	61	1410	
	1245	.2	5	9.8	6	1420	
	1252	2	7	9.8	62	1410	

SAMPLES COLLECTED Time 300 Total volume purged (gal.) 6.89  
 Water color 0 Odor None  
 Description of sediments or material in sample: None  
 Additional Comments: 100% clear water

Sample ID	# of Cont.	Container Type	Filtered (size, u)	Preservative (type)	Refrig. (Y/N)	Lab (Inst)	Analysis Requested
MW-5	2	1	-	HCl - <u>None</u>	YES	GTEL	G/BTEX

Container Type Codes: 1 = 40 ml clear VOA/Teflon septa; 2 = Brown glass/teflon lined cap (specify size);  
 3 = Clear glass/teflon lined cap (specify size); 4 = Polyethylene/polyethylene cap (specify size);  
 5 = Other \_\_\_\_\_; 6 = Other \_\_\_\_\_





**Northwest Region**

4080-C Pike Lane  
Concord, CA 94520  
(510) 685-7852  
(800) 544-3422 from inside California  
(800) 423-7143 from outside California  
(510) 825-0720 (FAX)

January 3, 1995

Ed Morales  
Sierra Environmental Services  
P.O. Box 3954  
Santa Rosa, CA 94502

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RE: GTEL Client ID: SIE01CHV08  
Login Number: C4120027  
Project ID (number): 1-369-04  
Project ID (name): Chevron/#9-7127/I-580 at Grant Line, Tracy, CA

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Dear Ed Morales:

This report, previously dated 12/09/94, is a reissue.

Enclosed please find the analytical results for the samples received by GTEL Environmental Laboratories, Inc. on 12/01/94.

A formal Quality Assurance/Quality Control (QA/QC) program is maintained by GTEL, which is designed to meet or exceed the EPA requirements. Analytical work for this project met QA/QC criteria unless otherwise stated in the footnotes.

GTEL is certified by the Department of Health Service under Certification Number E1075.

If you have any questions regarding this analysis, or if we can be of further assistance, please call our Customer Service Representative.

Sincerely,  
GTEL Environmental Laboratories, Inc.

*Eder Peralta*  
*ES*

Rashmi Shah  
Laboratory Director



GTEL Client ID: SIE01CHV08 ANALYTICAL RESULTS  
 Login Number: C4120027  
 Project ID (number): 1-369-04  
 Project ID (name): Chevron/#9-7127/I-580 at Grant Line, Tracy, CA

Volatile Organics  
 Method: EPA 8020  
 Matrix: Aqueous

GTEL Sample Number	C4120027-01	C4120027-02	C4120027-03	C4120027-04
Client ID	TBLB	MW-5	MW-2	MW-4
Date Sampled	11/30/94	11/30/94	11/30/94	11/30/94
Date Analyzed	12/05/94	12/07/94	12/07/94	12/08/94
Dilution Factor	1.00	1.00	1.00	2.00

Analyte	Reporting		Concentration:			
	Limit	Units				
Benzene	0.5	ug/L	< 0.5	< 0.5	3.6	350
Toluene	0.5	ug/L	< 0.5	< 0.5	4.5	29.
Ethylbenzene	0.5	ug/L	< 0.5	< 0.5	1.0	8.1
Xylenes (total)	0.5	ug/L	< 0.5	< 0.5	4.5	22.
TPH as GAS	50.	ug/L	< 50.	< 50.	< 50.	830
BFB (Surrogate)	--	%	94.5	81.8	94.5	108.

**Notes:**

**Dilution Factor:**

Dilution factor indicates the adjustments made for sample dilution.

**EPA 8020:**

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update 1. Acceptability limits for recovery in the Bromofluorobenzene (BFB) surrogate is 62-129%. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual protocols, May 1988 revision.

**C4120027-02:**

Estimated concentration. TFT surrogate recovery demonstrated sample specific matrix effect. Benzene and Toluene are estimated values due to low recovery of (TFT) surrogate. The (BFB) surrogate had acceptable recovery. Low surrogate recovery can be attributed to sample effervescence.

GTEL Concord, CA  
 C4120027:1



GTEL Client ID: SIE01CHV08  
 Login Number: C4120027  
 Project ID (number): 1-369-04  
 Project ID (name): Chevron/#9-7127/I-580 at Grant Line, Tracy, CA

ANALYTICAL RESULTS

Volatile Organics  
 Method: EPA 8020  
 Matrix: Aqueous

GTEL Sample Number	C4120027-05	--	--	--
Client ID	MM-3	--	--	--
Date Sampled	11/30/94	--	--	--
Date Analyzed	12/07/94	--	--	--
Dilution Factor	100	--	--	--

Analyte	Reporting Limit	Units	Concentration:			
Benzene	0.5	ug/L	16000	--	--	--
Toluene	0.5	ug/L	3000	--	--	--
Ethylbenzene	0.5	ug/L	740	--	--	--
Xylenes (total)	0.5	ug/L	2400	--	--	--
TPH as GAS	50	ug/L	33000	--	--	--
BFB (Surrogate)	--	%	96.4	--	--	--

Notes:

Dilution Factor:

Dilution factor indicates the adjustments made for sample dilution.

EPA 8020:

"Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition including promulgated Update 1. Acceptability limits for recovery in the Bromofluorobenzene (BFB) surrogate is 62-129%. Modification for TPH as gasoline as per California State Water Resources Board LUFT Manual protocols, May 1988 revision.

GTEL Concord, CA  
 C4120027:2



GTEL Client ID: SIE01CHV08  
Login Number: C4120027  
Project ID (number): 1-369-04  
Project ID (name): Chevron/#9-7127/I-580 at Grant Line, Tracy, CA

QUALITY CONTROL RESULTS

Volatile Organics  
Method: EPA 8020  
Matrix: Aqueous

Method Blank Results

QC Batch No: Q120594-4  
Date Analyzed: 05-DEC-94

Analyte	Method: EPA 8020	Concentration: ug/L
Benzene	< 0.30	
Toluene	< 0.30	
Ethylbenzene	< 0.30	
Xylenes (Total)	< 0.50	
TPH as Gasoline	< 10.	

Notes:

GTEL Client ID: SIE01CHV08  
 Login Number: C4120027  
 Project ID (number): 1-369-04  
 Project ID (name): Chevron/#9-7127/I-580 at Grant Line, Tracy, CA

QUALITY CONTROL RESULTS

Volatile Organics  
 Method: EPA 8020  
 Matrix: Aqueous

Matrix Spike and Matrix Spike Duplicate Results

Analyte	Original Concentration	Spike Amount	Matrix Spike Concentration	Matrix Spike Recovery, %	Matrix Spike Duplicate Concentration	Matrix Spike Duplicate Recovery, %	Acceptability Limits		
							RPD, %	RPD, %	Recovery, %
EPA 8020	GTEL Sample ID: C4120033-02		Spike ID: G120894-4		Dup. ID: G120894-5		Client ID: Batch QC		
Units: ug/L	Analysis Date: 06-DEC-94		09-DEC-94		09-DEC-94				
Benzene	< 0.50	20.0	23.2	116	22.2	111	4.4	34	57.3-138%
Toluene	< 0.50 **	20.0	21.9	110	21.0	105	4.6	31	63-134%
Ethylbenzene	< 0.50 **	20.0	21.6	108	20.9	105	2.8	38	59.3-137%
Xylenes (Total)	< 0.50	60.0	58.5	97.5	55.2	92.0	5.8	31	59.3-144%

Notes:

\*\*; C4120033-02: Toluene: For data validation purposes an estimated concentration of 0.238, which is below the reporting limit, was used to calculate the spike recovery results.

C4120033-02: Ethylbenzene: For data validation purposes an estimated concentration of 0.252, which is below the reporting limit, was used to calculate the spike recovery results.