Trihydro CORPORATION

SOIL GAS PROBE MEASUREMENTS

Well ID UW-139 (5) ☐ Sub-slab Probe ☑ Soil gas Probe

Date:	7-1-09	PID Model Number:	Mini Rae 2000
Project Name:	Initial Sample Event	Landtech GEM 2000 Landfill Gas Meter Serial Number:	GEM2000
Project Number:	500-017-012	Helium Detector (model/serial number)	MGD2002
Site Location:	Chevron Cincy	Weather:	Overcast 70°
Field Personnel:	J Hall	Air Temperature (°C/°F):	70°
Recorded by:	J Hall	Atmospheric Pressure (in. Hg):	29.13

Surface Type: ☐ Concrete ☐ Asphalt ☑ Grass ☐ Other

Surface Thickness (inches): ☑ Unknown

Initial Pressure / Vacuum: 0.01 Time: 1010 Field Tubing blank reading (ppm): 0.0 Time: 10:10

Shut-in Testing		Start of Pneumatic Testing: 1011		
Prior to Pneumatic	OK ☑ @ 1011	Elapsed Time (min)	Pump Flow Rate (LPM)	Well Head Vacuum (in. Hg)
Prior to Purge	OK ☑ @ 1015	1	.1	-0.03
Prior to Sample Collection	OK ☑ @ 1041	2	.2	-0.09
		3	.5	-0.24

2009 Date	Start Time	End Time	Elapsed Time (min)	Bag Volume (L)	Purge Rate (LPM)	Cumulative Volume (L)	CH4 (%)	CO2 (%)	O2 (%)	Tracer Gas (%) Shroud Min	Tracer Gas (%) Shroud Max	VOCs by PID (ppmv)	He
7/1	Pneumatic		—	—	—	—	0.1 ~~0.01~~	6.3 ~~0.63~~	16.1	NA		15.9	NA
7/1	1025	1030 ~~1028~~	5	1.0	.2	1.0	0.1	7.1	15.5	14	20	6.9	Ø
7/1	1030	1035	5	1.0	.2	2.0	0.1	6.5	15.9	9	16	3.7	Ø
7/1	1035	1040	5	1.0	.2	3.0	0.1	7.1	15.5	18	23.4	2.7	Ø

Date	Time	Sample ID	Canister ID	Flow Controller #	Vacuum Gauge #	Initial Vacuum	Final Vacuum	Tracer Gas (%) Shroud Min	Tracer Gas (%) Shroud Max
7-1-09	1042	UW-139(5)020109	~~[illegible]~~	6741	1029358	28.56	4.71	19.2	21.7
			36397						

Comments: OA-1 Started @ 0952 Upwind from UW-139 Light wind

SOIL GAS PROBE MEASUREMENTS

Trihydro CORPORATION

Well ID UW-139 (10) ☐ Sub-slab Probe ☑ Soil gas Probe

Date:	7-1-09	PID Model Number:	Mini Rae 2000
Project Name:	Initial Sample Event	Landtech GEM 2000 Landfill Gas Meter Serial Number:	GEM 2000
Project Number:	500-017-012	Helium Detector (model/serial number)	MGD 2002
Site Location:	Chevron Cincy	Weather:	Overcast
Field Personnel:	J. Hill	Air Temperature (°C/°F):	70°
Recorded by:	J. Hill	Atmospheric Pressure (in. Hg):	29.13

Surface Type: ☐ Concrete ☐ Asphalt ☑ Grass ☐ Other

Surface Thickness (inches): ☑ Unknown

Initial Pressure / Vacuum: 0.01 Time: 1058 Field Tubing blank reading (ppm): 0.0 Time: 1058

Shut-in Testing			Start of Pneumatic Testing: 1058		
Prior to Pneumatic	OK ☑ @	1058	Elapsed Time (min)	Pump Flow Rate (LPM)	Well Head Vacuum (in. Hg)
Prior to Purge	OK ☑ @	1101	1	.1	-0.06
Prior to Sample Collection	OK ☑ @	1121	2	.2	-0.13
			3	.5	-0.41

	Date	Start Time	End Time	Elapsed Time (min)	Bag Volume (L)	Purge Rate (LPM)	Cumulative Volume (L)	CH4 (%)	CO2 (%)	O2 (%)	Tracer Gas (%) Shroud Min	Tracer Gas (%) Shroud Max	VOCs by PID (ppmv)	He
1	7-1	Pneumatic						0.1	4.4	17.8	NA		4.0	Ø
2	7-1	11:05	11:10	5	1.0	.2	1.0	0.0	4.7	17.3	7	14	2.5	Ø
1	7-1	11:10	11:15	5	1.0	.2	2.0	0.0	4.4	16.9	8	10	1.8	Ø
2	7-1	11:15	11:20	5	1.0	.2	3.0	0.0	4.5	16.7	11	13	1.6	Ø

Date	Time	Sample ID	Canister ID	Flow Controller #	Vacuum Gauge #	Initial Vacuum	Final Vacuum	Tracer Gas (%) Shroud Min	Tracer Gas (%) Shroud Max
7-1	11:22	UW-139(10)070109	12034	FC00540	1029358	28.73	1.9	8.0	15

Comments:

SOIL GAS PROBE MEASUREMENTS

Trihydro CORPORATION

Well ID VW-139 (15) ☐ Sub-slab Probe ☑ Soil gas Probe

Date:	7-1-09	PID Model Number:	Mini Rae 2000
Project Name:	Initial Sampling	Landtech GEM 2000 Landfill Gas Meter Serial Number:	GEM 2000
Project Number:	500-017-012	Helium Detector (model/serial number)	MGD2002
Site Location:	Chevron Cinco SUQ	Weather:	overcast
Field Personnel:	J. Hall	Air Temperature (°C/°F):	70
Recorded by:	J. Hall	Atmospheric Pressure (in. Hg):	29.12

Surface Type: ☐ Concrete ☐ Asphalt ☑ Grass ☐ Other

Surface Thickness (inches): ☑ Unknown

Initial Pressure / Vacuum: 0.02 Time: 1136 Field Tubing blank reading (ppm): 0.0 Time: 1136

Shut-in Testing			Start of Pneumatic Testing: 1136		
Prior to Pneumatic	OK ☑ @	1135	Elapsed Time (min)	Pump Flow Rate (LPM)	Well Head Vacuum (in. Hg)
Prior to Purge	OK ☑ @	1139	1	.1	-0.04
Prior to Sample Collection	OK ☑ @	1156	2	.2	-0.11
			3	.5	-0.35

	2009 Date	Start Time	End Time	Elapsed Time (min)	Bag Volume (L)	Purge Rate (LPM)	Cumulative Volume (L)	CH4 (%)	CO2 (%)	O2 (%)	Tracer Gas (%) Shroud Min	Tracer Gas (%) Shroud Max	VOCs by PID (ppmv)	He
1	7-1			Pneumatic				0.0	4.7	12.7	None		3.7	Ø
2	7-1	1140	1145	5	1.0	.2	1.0	0.0	4.7	12.6	15	17	2.0	Ø
1	7-1	1145	1150	5	1.0	.2	2.0	0.0	4.9	11.9	13.2	15.8	1.9	Ø
2	7-1	1150	1155	5	1.0	.2	3.0	0.0	4.8	12.3	15.8	17.7	1.4	Ø

2009 Date	Time	Sample ID	Canister ID	Flow Controller #	Vacuum Gauge #	Initial Vacuum	Final Vacuum	Tracer Gas (%) Shroud Min	Tracer Gas (%) Shroud Max
7-1	1157	VW-139 (15) 070109	35603	FC 00114	1029358	28.64	3.08	15	18

Comments:

SOIL GAS PROBE MEASUREMENTS

Trihydro CORPORATION

Well ID UW-139 (20) ☐ Sub-slab Probe ☑ Soil gas Probe

Date:	7-1-09	PID Model Number:	MiniRae 2000
Project Name:	Initial Sampling SVQ	Landtech GEM 2000 Landfill Gas Meter Serial Number:	GEM2000
Project Number:	500-017-012	Helium Detector (model/serial number)	MGD2002
Site Location:	Chevron Cracy SVQ	Weather:	Cloudy
Field Personnel:	S. Hill	Air Temperature (°C/°F):	70
Recorded by:	S. Hill	Atmospheric Pressure (in. Hg):	29.15

Surface Type: ☐ Concrete ☐ Asphalt ☑ Grass ☐ Other

Surface Thickness (inches): ☑ Unknown

Initial Pressure / Vacuum: 0.00	Time: 1210	Field Tubing blank reading (ppm): 0.0	Time: 1210

Shut-in Testing		
Prior to Pneumatic	OK ☑ @	1210
Prior to Purge	OK ☑ @	1213
Prior to Sample Collection	OK ☑ @	1230

Start of Pneumatic Testing: 1210

Elapsed Time (min)	Pump Flow Rate (LPM)	Well Head Vacuum (in. Hg)
1	.1	-0.07
2	.2	-0.14
3	.5	-0.42

	Date 2009	Start Time	End Time	Elapsed Time (min)	Bag Volume (L)	Purge Rate (LPM)	Cumulative Volume (L)	CH4 (%)	CO2 (%)	O2 (%)	Tracer Gas (%) Shroud Min	Tracer Gas (%) Shroud Max	VOCs by PID (ppmv)	He
1	7/1		Pneumatic					0.0	4.9	12.5	None		3.9	0
2	7/1	1214	1219	5	1.0	.2	1.0	0.0	5.1	12.1	7.4	11.3	1.8	0
1	7/1	1219	1224	5	1.0	.2	2.0	0.0	5.1	11.9	13.3	17.9	1.5	0
2	7/1	1224	1229	5	1.0	.2	3.0	0.0	5.1	11.9	13.7	15.3	1.2	0

Date	Time	Sample ID	Canister ID	Flow Controller #	Vacuum Gauge #	Initial Vacuum	Final Vacuum	Tracer Gas (%) Shroud Min	Tracer Gas (%) Shroud Max
7-1-09	1232	UW-139(20),0709	35669	FC00776	1029358	28.56	3.68	8.8	14.7

Comments:

SOIL GAS PROBE MEASUREMENTS

Trihydro CORPORATION

Well ID IW-139 (30) ☐ Sub-slab Probe ☐ Soil gas Probe

Date:	7-1-09	PID Model Number:	MiniRae 2000
Project Name:	Initial Sampling	Landtech GEM 2000 Landfill Gas Meter Serial Number:	GEM2000
Project Number:	500-017-012	Helium Detector (model/serial number)	MGD2002
Site Location:	Chevron Clay SVQ	Weather:	Cloudy
Field Personnel:	JHH	Air Temperature (°C/°F):	70
Recorded by:	JHH	Atmospheric Pressure (in. Hg):	29.15

Surface Type: ☐ Concrete ☐ Asphalt ☑ Grass ☐ Other

Surface Thickness (inches): ☑ Unknown

Initial Pressure / Vacuum: 0.01	Time: 1245	Field Tubing blank reading (ppm): 0.0	Time: 1245

Shut-in Testing		
Prior to Pneumatic	OK ☑ @	1245
Prior to Purge	OK ☑ @	1254
Prior to Sample Collection	OK ☑ @	1311

Start of Pneumatic Testing: 1245

Elapsed Time (min)	Pump Flow Rate (LPM)	Well Head Vacuum (in. Hg)
1	.1	-0.10
2	.2	-0.23
3	.3	-0.66

	Date 2009	Start Time	End Time	Elapsed Time (min)	Bag Volume (L)	Purge Rate (LPM)	Cumulative Volume (L)	CH4 (%)	CO2 (%)	O2 (%)	Tracer Gas (%) Shroud Min	Tracer Gas (%) Shroud Max	VOCs by PID (ppmv)	He
1	7-1		Pneumatic					0.0	5.6	11.1	None		4.3	Ø
2	7-1	1255	1300	5	1.0	.2	1.0	0.0	5.8	10.9	25	27	2.3	Ø
1	7-1	1300	1305	5	1.0	.2	2.0	0.0	5.8	10.6	19.2	20	1.7	Ø
2	7-1	1305	1310	5	1.0	.2	3.0	0.0	5.8	10.6	9.9	12.2	1.7	Ø

Date	Time	Sample ID	Canister ID	Flow Controller #	Vacuum Gauge #	Initial Vacuum	Final Vacuum	Tracer Gas (%) Shroud Min	Tracer Gas (%) Shroud Max
7-1-09	1313	IW-139(30)070109	36442	FC00832	1029358	28.59	-3.23	9.3	18.5

Comments:

SOIL GAS PROBE MEASUREMENTS

Trihydro CORPORATION

Well ID UW-139(40) ☐ Sub-slab Probe ☑ Soil gas Probe

Date:	7-1-09	PID Model Number:	MiniRae 2000
Project Name:	Initial Sampling	Landtech GEM 2000 Landfill Gas Meter Serial Number:	GEM2000
Project Number:	500-017-012	Helium Detector (model/serial number)	MGD2062
Site Location:	Chevron Cincy SWQ	Weather:	Cloudy
Field Personnel:	S Hall	Air Temperature (°C/(F)):	70
Recorded by:	S Hall	Atmospheric Pressure (in. Hg):	29.16

Surface Type: ☐ Concrete ☐ Asphalt ☑ Grass ☐ Other

Surface Thickness (inches): ☑ Unknown

Initial Pressure / Vacuum: ~~0.02~~ 373	Time: 1327	Field Tubing blank reading (ppm): 0.0	Time: 1327

Shut-in Testing		Start of Pneumatic Testing: 1328		
Prior to Pneumatic	OK ☑ @ 1327	Elapsed Time (min)	Pump Flow Rate (LPM)	Well Head Vacuum (in. Hg)
Prior to Purge	OK ☐ @	1	.1	5.9
Prior to Sample Collection	OK ☐ @	2	.2	12.3
		3	.3	22.7

Date	Start Time	End Time	Elapsed Time (min)	Bag Volume (L)	Purge Rate (LPM)	Cumulative Volume (L)	CH4 (%)	CO2 (%)	O2 (%)	Tracer Gas (%) Shroud Min	Tracer Gas (%) Shroud Max	VOCs by PID (ppmv)

No Sample Collected

Date	Time	Sample ID	Canister ID	Flow Controller #	Vacuum Gauge #	Initial Vacuum	Final Vacuum	Tracer Gas (%) Shroud Min	Tracer Gas (%) Shroud Max

Comments: Flow Stopped, Could not Maintain .2 L/min.

Air Toxics LTD.

CHAIN-OF-CUSTODY RECORD

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180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630-4719
(916) 985-1000 FAX (916) 985-1020

Project Manager Douglas Paul Michalski
Collected by: (Print and Sign) John H. Hill
Company Chevron Email pmichalski@trcbyd.o
Address 5000 St. 128 City Chevrs State OH Zip 45002
Phone 513-353-1325 x23 Fax 513 352 4464

Project Info:
P.O. #
Project # 500-017-012
Project Name South West Quad

Turn Around Time:
☐ Normal
☐ Rush
specify

Lab Use Only
Pressurized by:
Date:
Pressurization Gas:
N_2 He

Lab I.D.	Field Sample I.D. (Location)	Can #	Date of Collection	Time of Collection	Analyses Requested	Canister Pressure/Vacuum Initial	Final	Receipt	Final (psi)
	UW-139(5), 070109	36397	7/1/09	1042	TO-15, ASTM1946 + He	28.56	4.71		
	UW-139(10), 070109	12034	7/1/09	1122	TO-15, ASTM 1946 + He	28.73	1.9		
	UW-139(15), 070109	35603	7/1/09	1157	TO-15, ASTM1946 + He	28.64	3.08		
	UW-139(20), 070109	35669	7/1/09	1232	TO-15, ASTM1946 + He	28.56	3.68		
	UW-139(20), 070109	36442	7/1/09	1313	TO-15, ASTM1946 + He	28.59	3.23		
	OA-1, 070109	5770	7/1/09	1342	TO-15LL	29.30	9.19		

Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
[signature]	7-2-09/1700		
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time
Relinquished by: (signature)	Date/Time	Received by: (signature)	Date/Time

Notes: Flow Controllers Returned:
FC00540 FC00445
F6674
FC00114
FC00776
FC00632

Lab Use Only

Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
				Yes No None	

Form 1293 rev.11