# Petroglyph Operating Company, Inc. Monthly Report – October 2008

Petroglyph Operating Company, Inc. (Petroglyph) is submitting this monthly report for the activities that have occurred at their Little Creek Field in the Raton Basin from the last date of data collection for the September Monthly Report (September 30, 2008) through November 3, 2008. Along with this monthly report, Petroglyph is submitting an electronic copy of all data including Microsoft Excel spreadsheets from which the attached summaries and graphs were created.

# 1.0 Investigation

<u>Aquifer Characterization</u>: The Methane Mitigation Well Aquifer Testing Report was submitted to the COGCC and EPA for review on September 25, 2008. The report submittal was followed by a meeting on September 29<sup>th</sup> to summarize the report and report findings and discuss the next steps. COGCC consultant, Whetstone Associates provided comments on the report which were transmitted to Petroglyph on November 4<sup>th</sup>. A response to the comments will be developed and submitted during the next reporting period. Overall, Whetstone felt that the report contained sufficient data to allow the Phase 1 system to move forward.

Petroglyph continues to monitor gas production from the recovery wells. Recovery 1 Kittleson has shown continued gas production which is slowly decreasing. The latest reading available for this report, taken on October 30<sup>th</sup>, showed 12.59 mcf/day being produced at the well. The October 30<sup>th</sup> reading represents a large drop from the last previous reading of 20.23 mcf/day on October 29<sup>th</sup>. In reviewing the data, the well shows a large drop about once each week for the last several weeks and then subsequent readings return to higher levels. The cause of this is not understood.

Both Recovery 4 Barrett and Recovery 3 PEI showed a decrease in gas production to zero and then began producing gas again in late September. Gas production in Recovery 3 PEI dropped to zero around August 12 when Petroglyph attempted to clear the well of murky water by adding Walsenburg city water. The latest reading available for Recovery 3 PEI was 0.3322 mcf/day, taken on October 30<sup>th</sup>. Gas production in Recovery 4 Barrett dropped to zero around September 9 but began producing gas again in late September. The latest reading available for Recovery 4 Barrett dropped to zero around September 9 but began producing gas again in late September. The latest reading available for Recovery 4 Barrett was 0.2565 mcf/day on October 30<sup>th</sup>. POCI 55 is no longer producing gas at the surface. Attachment 1 shows the changes in gas production at POCI 55 and each of the recovery wells. Actual measurements for each well are included in the data disk.

Recovery and injection well pipelines and surface equipment for the remediation system are complete. As of October 31<sup>st</sup> the injection is ready to operate and awaiting final regulatory approval from EPA. The flare is operational for methane from the off gassing from the wells.

The initial data collection from operation of the system will allow for review of the simulation model being developed and refinement to match field conditions. This data and model simulation will be used for the Phase 2 injection system operation.

<u>Dissolved Methane Sampling</u>: Petroglyph's consultant, Norwest Applied Hydrology, has completed initial sampling for dissolved methane in water wells within a one mile radius of the remediation system. Sampling results were included in the April monthly report with additional results during the August monthly report. Dissolved methane will be resampled after the remediation system has been in operation for approximately one month.

# Methane Source Investigation

In an ongoing effort to understand the source of the methane which has migrated from the Vermejo Formation and the zones in which migration is occurring (as well as the potential role of dikes in the methane movement), Petroglyph has applied to the Bureau of Land Management (BLM) for permission to drill an exploratory hole on BLM land in the vicinity of the Bounds property. This hole will be located to determine if gas is present, at what level the gas occurs and whether or not additional venting or treatment is needed at that location. The hole should provide additional information on gas that may be contributing to the Bounds well. The current date for a BLM decision on the well is not known.

# 2.0 Monitoring

# Down-hole Pressure and Fluid Level Monitoring

Barrett, Bergman, Coleman, and Meyer have continuous pressure monitoring for fluid levels that have been installed by Petroglyph. Information from these wells is downloaded monthly by Petroglyph and included in electronic format with this monthly report. The POCI 55 Monitoring Well also has a pressure gage. In addition, pressure transducers were also installed in the Evendon and Garza-Vela wells during the reporting period and information from those wells has been included in this reporting period. Attachment 2 shows graphically the changes in pressure for each of these wells. As can be seen on the graphs, some wells have pressure and associated water levels trending downward (Barrett, Bergman, Coleman, and Meyer), while other wells have pressure and associated water levels trending upward (POCI 55, Bruington) or remaining relatively steady (Evendon and Graza-Vela). There are no significant changes from previous monthly reports.

# Gas Flow Monitoring

Gas flow monitors have been installed by Petroglyph at the Angely, Bruington, Coleman, and Smith wells. Continuous gas flow monitoring occurs at Coleman and Smith, while gas flow is spot monitored with a gage and orifice tester at Angely and Bruington. Gas pressure at Bounds and Angely wells is currently monitored by COGCC or their consultant, however the data is presented in this report. The data from this monitoring is provided in Attachment 3. While gas flow can be variable, in general gas flow has shown an overall decrease in all wells. Gas flows from the Smith and Angely wells have been at

zero for a sustained period of time; in the case of Smith since April 21, 2008 and for Angely since February 6, 2008. The Bruington well had decreased from approximately 35 mcf/day in January to 0.747 mcf/day in September with one 0 reading in mid-September. In October this well dropped to 0 on October 16<sup>th</sup> and has had two subsequent readings showing it staying at 0 gas flow. In late May the Bounds well showed a decrease from approximately 2.37 mcf/day to less than 1 mcf/day (0.747 mcf/day). The well remained at 0.747 mcf/day until this reporting period. The October 15<sup>th</sup> reading was 0.528 mcf/day and the last reading in October, on October 29<sup>th</sup>, was 0. It is not known if the 0 reading will continue in subsequent measurements.

The Coleman well only shows gas flows when the well is pumped. The gas flows stop after some period of well pumping. Since July these gas flows have varied between 57 and 31 mcf/day for a duration of between as low as 5 minutes and as high as 45 minutes.

Figure 1 shows the monitored gas flows in each well and the timing for drilling and testing of Petroglyph remediation system wells. As shown on this figure, the drop in gas flow in the domestic wells appears to have occurred in correlation with the drilling of remediation system wells and venting of gas through these wells. This would indicate that the remediation system has been correctly located to remediate the area of largest gas concentration in the domestic wells.

# Fluid Levels in Petroglyph Production Wells

Eleven Petroglyph production wells are monitored for fluid level and casing pressure. An additional four Petroglyph production wells are continuously monitored for fluid level pressures. Three monitoring wells are also monitored for water levels. The monitoring occurs in the formation into which the wells are completed, the Vermejo Formation Changes in fluid levels in Petroglyph's production wells are shown graphically in Attachment 4. As shown in the attachment and as would be expected since Petroglyph is no longer pumping these wells to draw down water levels, pressure is equalizing within the Vermejo coals and consequently water levels are rising in all wells although the rate of rise is slowing. There are no significant changes in the data from previous monthly reports. There is no data provided for the Rohr 09-05 well because the power in the well is off and waiting some repair work. The pressure data for Lively 03-03 is missing because the down hole gage failed and will need to be replaced.

# Bi-Weekly and Monthly Water Well Monitoring

Petroglyph currently monitors approximately 78 wells in the vicinity of the site, including one new wells added during this reporting period. Note that six wells were dropped from the reporting list since they were no longer being sampled as discussed in the last monthly report. Table 1 shows all of the wells that have ever been sampled, the sampling start date, the date of the last sample, the number of samples since the last reporting period and a description of the sampling results and any changes from the previous reporting period. Of the 78 wells, 6 were not sampled during this reporting period due to a lack of access. These wells will continue to be sampled when access is available. Sampling may vary during any one reporting period due to a variety of reasons. During this reporting period 18 wells were sampled once, 33 wells were sampled twice, 20 wells were sampled three times and 1 well had five sampling events.

As shown on Table 1, the monitoring results for the 71 wells sampled with comparable results from the last reporting period (excluding the one new sample points) showed that 49 wells had no or minimal change from the previous monitoring period measurements. Changes in % LEL, % by volume CH4, and % volume O2 were evaluated to determine if the wells where showing an indication of increasing or decreasing methane gas content. Of the remaining 22 wells, 12 showed increases in methane, with 4 of those only slight increases and 10 showed decreases with 6 of those well showing slight decrease.

Table 2 shows the current monitoring schedule including which wells are monitored biweekly and which wells are monitored monthly or at a different frequency. The schedule also includes those wells which will be monitored semi-weekly or weekly at the start up of the injection system for any changes as a result of system start up.

### Hand Held Measurements

Petroglyph conducts periodic ground surveys using a hand held methane detector at locations where gas has previously been detected, at locations where a property owner requests such a survey or at locations where previous surveys such as the helicopter survey have detected gas seepage. These surveys are conducted based on need or urgency so can range from several times a week to a one time survey based on concerns from a property owner. During this reporting period hand held measurements occurred at sixteen properties where surveys had previously been conducted and seven new properties. Results for this most recent sampling and for past hand held measurements are included in the electronic database with the recent measurements during this reporting period summarized in Tables 3A and 3B. Table 3A shows properties which have had hand held surveys and Table 3B shows seeps which were monitored with the hand held monitor during the reporting period. Properties which have not had hand held methane surveys in the past are highlighted in yellow.

# Helicopter Survey

Petroglyph completed a helicopter survey for methane seepage (May 16, 17, and 18) and provided that data to the COGCC under separate cover. Hand held methane detector ground surveys have been conducted for areas where the helicopter survey indicated a potential new presence of methane or to confirm other helicopter readings. These hand held surveys have been completed for the May helicopter survey.

# 3.0 Mitigation

### Methane Alarms

There are currently a total of 14 homes with alarm systems provided by Petroglyph and that number has not changed from previous reports. Petroglyph's contractor has

completed the updating of alarm systems for 9 homeowners who requested the updated system with both visual and audible alarms. No alarms have ever been triggered by the presence of methane. One homeowner had his monitor recalibrated during this reporting period (Derowitsch).

# Water Supply

Petroglyph is currently providing water to 15 homes. No new names were added to the list during this reporting period. Table 4 provides a list of the homes currently receiving water. Water is delivered as needed and can vary from month to month due to residential water use and whether or not the homes are occupied.

### Other

In addition to providing water several homeowners approached Petroglyph with other requests. These are detailed in the electronic data base under the Word file titled Water Well Activities. For this reporting period other activities included recalibration of one in home gas monitor as discussed above; collection of additional water quality samples as requested from home owners; installed several pressure transducers; and investigated several instances of gas bubbles in water coming into homes.

### Public Outreach

There was no public outreach during this reporting period. A detailed public outreach will occur just prior to the start up of the injection system. This public outreach will include the following elements:

- Public Notice would be provided in 4 ways:
  - Half or full page ad in the La Veta paper, and at least one of the Walsenburg papers
  - Legal notice of record in the papers, as well
  - Letters sent to well owners in the RRR project area
  - Flyers hand-delivered to those homeowners with wells in the RRR project area

Both the letter and flyer would include a proviso to contact PEI and/or the COGCC should the well owner observe changes in their well (gas discharge, water production change, etc.) after the startup of Phase One. The newspaper notice also would include contact information for Petroglyph.

### Health and Safety/Emergency Planning

No changes to Petroglyph's health, safety and emergency planning occurred during the reporting period.

# 4.0 Schedule

The following is the currently anticipated schedule for the implementation of Phase One, pumping of water from the Poison Canyon Formation to begin methane removal and then

injection of the pumped water back into the Poison Canyon in approximately the same locations, as well as initiation of Phase Two.

- Commencement of injection of the Poison Canyon water is currently anticipated to begin in mid to late November or once all needed regulatory approvals have been obtained.
- An application for injection under Phase Two is currently anticipated to be submitted to the EPA for review in Late November or early December.
- At the same time application will be made through the Colorado Division of Water Resources for a change in the permitted pumping and injection wells to allow for the injection of Vermejo Formation water under Phase Two.
- Routine bi-weekly and monthly sampling will continue with new sampling sites added as needed. Sampling will be adjusted based on the monitoring results in accordance with the Petroglyph Monitoring and Response Plan submitted to the COGCC on April 7, 2008 and commitments made to COGCC and EPA for monitoring during injection start up.
- Hand held seep monitoring will continue as needed.

The currently anticipated schedule is outlined in table form below. The schedule in contingent on a number of factors including weather conditions and equipment problems.

Key Activities	Estimated Completion Date
1. Start of Phase One injection activities	Mid to late November (pending a
	decision from the EPA)
2. Submittal of Phase Two UIC and Division of	Late November to Early December
Water Resources permit applications	



Figure 1

MCFD (Bruington, Smith, Coleman)

	Table 1           Water Well Measurements for the Period of September 30 to November 3. 2008										
Permit Number	Name	Sampling Start Date	Last Sample	Samples Since Last Monthly Report	If sampled, comparison of results from this period to last period						
20783	Goemmer Cattle	9/24/07	10/20/08	10/20/08	No change from previous measurements with no detectable methane and O2% volume at 20.9						
230572	Willis	7/11/07	10/21/08	10/8/08 and 10/21/08	No change from previous measurements with no detectable methane and O2% volume at 20.9						
84106	Rohr	7/06/07	10/27/08	10/20/08 and 10/27/08	No change from previous measurements with no detectable methane and O2% volume at 20.9. This well will be sampled quarterly from this point forward.						
93386	Lowry	7/12/07	10/20/08	10/20/08	No change from previous measurements with no detectable methane and O2% volume at 20.9						
203536	Hurley	8/2/07	10/21/08	10/7/08 and 10/21/08	At the well head: • No change in LEL at >100 • CH4 % volume decreased from 31 to 17 • H2S decreased from 3 ppm to 0 and back to 3 ppm • O2 % volume increased from 13.5 to 17.4 • CO remained at 0 No change at the cistern with no detectable methane and O2% volume at 20.9						
121013	Schafer	8/15/07	10/20/08	10/20/08	No change from previous measurements with no detectable methane and O2% volume at 20.9						
123144	Searle	7/11/07	10/6/08	10/6/08	No change from previous measurements with no detectable methane and O2% volume at 20.9						
145915	Carsella	7/11/07	9/23/08	Not sampled during the reporting period	Same well as Andreatta so this entry will be deleted and information moved to Andreatta						
169043	Burge	7/11/07	10/20/08	10/21/08 and 10/27/08	No change from previous measurements with no detectable methane and O2% volume at 20.9. H2S was 0.5 ppm and O2% volume was 17.3 in 10/21 reading. Reading was also attempted on 10/8, but the gate was locked and the pass code not working.						
181278	Bounds	7/12/07	10/29/08	10/1/08, 10/15/08 and 10/29/08	No change from previous measurement with %LEL at 100; CH4% at 100, and O2%, CO and H2S at 0, except H2S was 0.5 in 10/1/ reading and 02% was 0.3 in 10/29 reading.						

		Water Well	Measuremer	September 30 to November 3, 2008	
Permit Number	Name	Sampling Start Date	Last Sample	Samples Since Last Monthly Report	If sampled, comparison of results from this period to last period
191079	Brian Dale (?)	8/15/07	10/20/08	10/20/08	At well #1: • %LEL increased from 0 to 32 • CH4 % volume increased from 0 to 2 • O2 % volume decreased from 20.9 to 17 • CO and H2S remained at 0 At Well #2: • %LEL decreased from 43 to 0 • CH4 % volume decreased from 2 to 0 • O2 % volume increased from 11.4 to 20.9 • CO and H2S remained at 0
192144	Snow	8/2/07	10/22/08	10/22/08	<ul> <li>%LEL decreased from &gt;100 to 0</li> <li>CH4 % vol decreased from 5 to 0</li> <li>O2 % vol increased from 4.2 to 20.9</li> <li>CO remained at 0</li> <li>H2S decreased from 3 ppm to 0</li> </ul>
192203	Rankins	7/12/07	10/20/08	10/20/08	No change from previous measurements with no detectable methane and O2% volume at 20.9
193520X	McEntee	8/2/07	10/20/08	10/6/08 and 10/20/08	At wellhead no change in most recent measurements from previous measurements with no detectable methane and O2% volume at 20.9. In 10/6 reading O2% was 19.6 and CO was 8 ppm. At east wellhead: • %LEL decreased from >100 to 0 • CH4 % decreased from 27 to 0 • O2 % increased from 16.2 to 20.9 • CO and H2S remain at 0
196371	Lyon	8/15/07	10/22/08	10/22/08	<ul> <li>%LEL increased from 0 to 23</li> <li>CH4 % increased from 0 to 1.15</li> <li>O2 % decreased from 20.9 to 6.7</li> <li>No change to CO and H2S at 0 ppm</li> </ul>
197472	Williams/Bartlett	8/15/07	9/22/08	Not sampled during this reporting period	Sampling attempted 10/7/08 and 10/21/08 but gate was locked preventing access

	Table 1           Water Well Measurements for the Period of September 30 to November 3. 2008									
Permit Number	Name	Sampling Start Date	Last Sample	Samples Since Last Monthly Report	If sampled, comparison of results from this period to last period					
205195	Johnson	8/15/07	10/28/08	10/6/08, 10/20/08 and 10/28/08	<ul> <li>%LEL decreased from 10 to 0</li> <li>CH4 % decreased from 0.50 to 0</li> <li>O2 % increased from 20.3 to 20.9</li> <li>No change to CO at 0 ppm</li> <li>H2S decreased from 3 to 0.5 ppm</li> <li>Values at the cistern and 2nd wellhead have remained unchanged with no detectable methane and O2% volume at 20.9.</li> </ul>					
210526	Bruington	8/7/07	10/29/08	10/2/08, 10/8/08, 10/16/08,10/23/08, 10/29/08	<ul> <li>%LEL has not changed at &gt;100</li> <li>CH4% has decreased from 100 to 80</li> <li>O2 % has increased from 0.4 to 9.8</li> <li>CO has decreased from 18 to 6 ppm</li> <li>H2S has decreased from 6.5 to 5.5 ppm</li> <li>Values at the cistern were unchanged at 0 for all except O2 which was 20.9.</li> </ul>					
215706	Brice	7/12/07	10/6/08	10/6/08	No change from previous measurements with no detectable methane and O2% volume at 20.9					
219376	White	8/2/07	10/29/08	10/21/08 and 10/29/08	<ul> <li>%LEL remains at &gt;100</li> <li>CH4 % increased from 5.00 to 10 and then back to 5.00</li> <li>O2 % increased from 3.2 to 8.1</li> <li>CO increased from 0 to 2</li> <li>H2S increased from 3 to 3.5 ppm</li> </ul>					
221465	Evenden	8/2/07	10/29/08	10/7/08, 10/20/08 and 10/29/08	No change from previous measurements with no detectable methane and O2% volume at 20.9 at end of month. 10/7 reading showed %LEL at 6 and CH4% at 0.3 with O2% at 14.5. H2S in 10/29 reading was 1.5					
222294	Cramer	8/3/07	10/22/08	10/22/08	<ul> <li>%LEL decreased from 11 to 0</li> <li>CH4 % decreased from 0.55 to 0</li> <li>O2 % increased from 11.9 to 20.9</li> <li>CO and H2S remained at 0</li> </ul>					
222539	Lively	7/6/07	10/21/08	10/6/08 and 10/21/08	No change from previous measurements with no detectable methane and O2% volume at 20.9					

	Table 1 Water Well Measurements for the Period of September 30 to November 3, 2008									
Permit Number	Name	Sampling Start Date	Last Sample	Samples Since Last Monthly Report	If sampled, comparison of results from this period to last period					
235292	Kerman/Hanson	7/6/07	10/27/08	10/6/08, 10/21/08 and 10/27/08	<ul> <li>%LEL decreased from 5 to 0</li> <li>CH4 % decreased from 0.25 to 0</li> <li>O2% stayed the same at 20.9</li> <li>CO and H2S remain at 0</li> <li>No change at the cistern with all values at 0 except O2% which is 20.9.</li> </ul>					
235516	Colorado Switzer	7/12/07	10/20/08	10/6/08 and 10/20/08	No change from previous measurements with no detectable methane and O2% volume at 20.9					
236272	Houghtling	7/6/07	10/28/08	10/6/08, 10/20/08 and 10/28/08	<ul> <li>% LEL remains unchanged at &gt;100</li> <li>CH4 % volume has decreased from 70 to 13</li> <li>O2% volume increased from 7.2 to 18.3</li> <li>H2S and CO remain unchanged at 0 ppm Not sampled at cistern</li> </ul>					
238689	Angely	7/5/07	10/29/08	10/1/08, 10/15/08 and 10/29/08	%LEL increased from 0 to 5 with all other values remaining at 0 and %O2 volume remaining at 20.9					
239657	Smith	7/5/07	10/27/08	10/6/08, 10/21/08 and 10/27/08	At Wellhead: All values at 0 except O2% which is at 20.9 except for last reading. In last reading %LEL at >100, CH4% at 11 and O2% at 18.7. See note below on well vent At Well Vent: • % LEL no change from >100 • CH4 % decreased from 46 to 27 • O2% volume increased from 10.5 to 16.5 • H2S and CO remain at 0 ppm The well vent was not sampled 10/27 as vent had become disconnected from well (potentially explaining higher wellhead readings on that date). Petroglyph glued the vent back in place. The cistern showed unchanged values with no detectable methane and O2% at 20.9.					
240947	Wolahan	7/12/07	10/20/08	10/6/08 and 10/20/08	No change from previous measurements with no detectable methane. O2% ended the period at 20.9 after starting at 17.3. No change at the cistern with no detectable methane and O2% at 20.9.					

	Table 1 Water Well Measurements for the Period of September 30 to November 3, 2008								
Permit Number	Name	Sampling Start Date	Last Sample	Samples Since Last Monthly Report	If sampled, comparison of results from this period to last period				
244403	Bergman	7/6/07	10/21/08	10/6/08 and 10/21/08	<ul> <li>% LEL remains unchanged at &gt;100</li> <li>CH4 % volume has increased from 23 to 81</li> <li>O2% volume has decreased from 14.9 to 6.9</li> <li>H2S and CO remain unchanged at 0 ppm</li> </ul>				
246775	Sharp	9/9/07	10/21//08	10/7/08 and 10/21/08	No change from previous measurements with no detectable methane and O2% volume at 20.9				
248680	Campbell	8/14/07	10/27/08	10/8/08 and 10/27/08	No change from previous measurements with no detectable methane and O2% volume at 20.9				
248862	Meyer	8/14/07	10/21/08	10/8/08 and 10/21/08	<ul> <li>% LEL no change &gt;100</li> <li>CH4 % volume has decreased slightly from 83 to 78</li> <li>O2% volume has increased from 2.4 to 9</li> <li>CO remains at 0</li> <li>H2S has increased from 0 to 1.5</li> </ul>				
248983	Tobyas	8/3/07	10/21/08	10/7/08 and 10/21/08	<ul> <li>% LEL decreased from &gt;100 to 51</li> <li>CH4 % volume has decreased from 5 to 2.55</li> <li>O2 has increased from 19.6 to 20.9</li> <li>No change for CO and H2S at 0</li> </ul>				
249181	Hentschel	9/9/07	10/21/08	10/7/08 and 10/21/08	No change from previous measurements with no detectable methane and O2% volume at 20.9				
250369	Martin	7/12/07	10/6/08	10/6/08	No change from previous measurements with no detectable methane and O2% volume at 20.9				
252931	Derowitsch	7/6/07	10/27/08	10/6/08, 10/20/08 and 10/27/08	<ul> <li>No change from previous measurements at wellhead with no detectable methane and O2% at 20.9.</li> <li>At well vent: <ul> <li>%LEL decreased from 11 to 0</li> <li>CH4 % remained at 0 with a 0.75 reading on 10/20</li> <li>O2 % remained at 20.9</li> <li>CO and H2S remained at 0</li> <li>At the cistern: <ul> <li>%LEL remained at 0 with a 15 reading on 10/20</li> <li>CH4 % remained at 0 with a 0.75 reading on 10/20</li> <li>Q2 % remained at 0 with a 15 reading on 10/20</li> <li>CH4 % remained at 0 with a 15 reading on 10/20</li> <li>CH4 % remained at 0 with a 15 reading on 10/20</li> <li>CH4 % remained at 0 with a 15 reading on 10/20</li> <li>CH4 % remained at 0 with a 15 reading on 10/20</li> </ul> </li> </ul></li></ul>				

	Table 1 Water Well Measurements for the Period of September 30 to November 3. 2008										
Permit         Name         Sampling         Last         Samples Since         If sampled, complementation           Number         Start Date         Sample         Last Monthly         period		If sampled, comparison of results from this period to last period									
					readings on 10/6 and 10/20						
253317	Gonzalez	7/12/07	10/20/08	10/6/08 and 10/20/08	No change from previous measurements with no detectable methane and O2% volume at 20.9						
254577	Ryerson	9/9/07	10/21/08	10/7/08 and 10/21/08	No change from previous measurements with no detectable methane and O2% volume at 20.9						
255929	Conley	7/11/07	9/22/08	Not sampled during this reporting period	Sample collection attempted but gate was locked so no access.						
256504	Hopke	7/5/07	10/27/08	10/6/08, 10/20/08 and 10/27/08	<ul> <li>At wellhead:</li> <li>No change in % LEL at &gt;100</li> <li>CH4 % volume has decreased from 33 to 22 with a high reading of 43</li> <li>O2% volume has increased from 15.5 to 17.8 with a low reading of 10.8</li> <li>CO remains at 0</li> <li>H2S increased to 2</li> <li>No change at cistern with no detectable methane and O2% volume at 20.9</li> </ul>						
257113	Masters #2	7/6/07	10/20/08	10/6/08 and 10/20/08	No change from previous measurements with no detectable methane and O2% volume at 20.9						
257994	Barrett	7/12/07	10/20/08	10/6/08 and 10/20/08	<ul> <li>% LEL remains at &gt;100</li> <li>CH4 % volume increased from 15 to 21</li> <li>O2% volume decreased slightly from 17.4 to 17</li> <li>CO and H2S remain at 0</li> </ul>						
259122	Higgins	9/26/07	10/21/08	10/8/08 and 10/21/08	No change from previous measurements with no detectable methane and O2% volume at 20.9						
260097	Dee	7/5/07	10/6/08	10/6/08	No change from previous measurements with no detectable methane and O2% volume at 20.9.						
264581	Ireland	7/12/07	10/27/08	10/6/08, 10/21/08 and 10/27/08	No change from previous measurements with no detectable methane and O2% volume at 20.9						

Table 1         Water Well Measurements for the Period of September 30 to November 3, 2008									
Permit Number	Name	Sampling Start Date	Last Sample	Samples Since Last Monthly Report	If sampled, comparison of results from this period to last period				
267694	Coleman	7/5/07	10/27/08	10/6/08, 10/20/08 and 10/27/08	<ul> <li>No changes from previous measurements for wellhead with no detectable methane and O2% volume at 20.9.</li> <li>At well vent:</li> <li>%LEL decreased from &gt;100 to 26</li> <li>CH4 % decreased from 5.00 to 1.30</li> <li>O2 % increased from 19.5 to 20.6</li> <li>CO and H2S remained at 0 with H2S reading of 4 ppm on 10/6</li> </ul>				
267695	Speh	9/4/07	10/21/08	10/6/08 and 10/21/08	No change from previous measurements with no detectable methane and O2% volume at 20.9				
269435	Goacher	7/11/07	10/21/08	10/6/08 and 10/21/08	No change from previous measurements with no detectable methane and O2% volume at 20.9				
270552	Chaves	9/9/07	10/21/08	10/8/08 and 10/21/08	No change from previous measurements with no detectable methane and O2% at 20.9.				
271136	Мау	7/12/07	10/6/08	10/6/08	No change from previous measurements with no detectable methane and O2% volume at 20.9				
274468	Roloff	9/9/07	9/9/08	Not sampled during this reporting period	Readings attempted 10/6 and 10/21 but gate was locked so no access				
235515	English	8/16/07	9/9/08	Not sampled during this reporting period	Reading attempted 10/6/08 but locked gate prevented access.				
258815	Goodwin	7/12/07	10/28/08	10/6/08, 10/21/08 and 10/28/08	No change at wellhead with no detectable methane and O2% at 20.9. H2S was 1.5 ppm in 10/28 reading. No change at cistern from previous measurements with no detectable methane and O2% volume at 20.9				
16861-F	Golden Cycle Land	7/12/07	10/20/08	10/6/08 and 10/20/08	In last reading at wellhead: • %LEL increased from 0 to >100 • %CH4 increased from 0 to 6 • O2% decreased from 20.9 to 20.7 • CO increased from 0 to 3 • H2S remained at 0				
84108-A	McPherson	7/6/07	10/20/08	10/6/08 and 10/20/08	No change from previous measurements with no detectable methane and O2% volume at 20.9.				
16861-F	Masters #1	8/13/07	10/20/08	10/6/08 and	No change from previous measurements with no detectable				

	Table 1           Water Well Measurements for the Period of September 30 to November 3, 2008									
Permit Number	Permit Number         Name         Sampling Start Date         Last         Samples Sin Last Monthly		Samples Since Last Monthly Report	If sampled, comparison of results from this period to last period						
				10/20/08	methane and O2% volume at 20.9					
	Andreatta	8/14/07	10/8/08	10/8/08	No change from previous measurements with no detectable methane and O2% volume at 20.9					
	Dernell	8/15/07	10/20/08	10/20/08	No change from previous measurements with no detectable methane and O2% volume at 20.9					
	Lang	10/29/07	7/28/08	Not sampled during this reporting period	Sampling attempted 10/6/08, but gate was locked preventing access.					
220100	Cordova	10/30/07	10/28/08	10/8/08, 10/20/08 and 10/28/08	<ul> <li>%LEL increased from 5 to 14 and then back to 10</li> <li>CH4% increased from 0.25 to 0.7 and then back to 0.5</li> <li>All other values remained unchanged</li> </ul>					
234836	White, Jim	1/4/08	10/28/08	10/7/08, 10/22/08 and 10/28/08	<ul> <li>At wellhead</li> <li>% LEL increased from 35 to &gt;100 with a 0 reading during the period</li> <li>CH4 % volume increased from 2 to 5 with a 0 reading during the period</li> <li>O2% volume decreased from 11.2 to 6.3 with a 20.9 reading during the period</li> <li>CO remains at 0</li> <li>H2S increased from 2 to 4.5 with a 0 reading during the period</li> <li>No change at cistern with no detectable methane and O2% at 20.9.</li> </ul>					
192509	Eddleman, Paul	1/17/08	10/28/08	10/7/08, 10/22/08 and 10/28/08	At the wellhead: • % LEL increased from 0 to 71 • CH4 % volume increased from 0 to 3.6 • O2% volume decreased from 20.9 to 9.1 • H2S increased from 0 to 3.5 ppm • CO increased from 0 to 9 ppm.					

	Table 1           Water Well Measurements for the Period of September 30 to November 3, 2008									
Permit Number	Name	Sampling Start Date	Last Sample	Samples Since Last Monthly Report	If sampled, comparison of results from this period to last period					
226536	Eddleman, Todd	1/17/08	10/28/08	10/7/08, 10/21/08 and 10/28/08	<ul> <li>%LEL increased from 0 to a high of &gt;100 and then back to 7</li> <li>CH4 %increased from 0 to a high of 5 and then back to 0.35</li> <li>O2 % decreased from 20.9 to a low of 9.4 and then back to 14.4</li> <li>CO increased from 0 to 9</li> <li>H2S increased from 0 to 3 and then back to 1.5.</li> </ul>					
31935	Garza-Vela	1/30/08	10/28/08	10/7/08, 10/20/08 and 10/28/08	<ul> <li>%LEL increased from 0 to 5</li> <li>CH4 % increased from 0 to 0.25</li> <li>O2 % decreased from 20.9 to 14.5</li> <li>CO increased from 0 to 4</li> <li>H2S increased from 0 to 0.5</li> </ul>					
271524-A	Modlish	1/30/08	10/21/08	10/7/08 and 10/21/08	<ul> <li>%LEL increased from 0 to &gt;100</li> <li>CH4 % increased from 0 to 5.0</li> <li>O2 % decreased from 20.9 to 6.1</li> <li>CO remains at 0</li> <li>H2S increased from 0 to 0.5 ppm</li> </ul>					
271748	Sample	3/10/08	10/29/08	10/7/08, 10/21/08 and 10/29/08	<ul> <li>%LEL remained at 5 at the end of the period with a decrease to 0 and increase to 11 in the period</li> <li>CH4 % remained at 0.25 with a decrease to 0 and increase to 0.55 during the period</li> <li>CO remains at 0</li> <li>H2S increased from 0 to 1.5</li> <li>O2 % volume increased from 15.9 to 18.5 with an increase to 20.9 and decrease to 10.9 during the period</li> <li>No change at the cistern with all values at 0 except for O2% at 20.9.</li> </ul>					
197128	Roberts	4/08/08	10/28/08	10/7/08, 10/22/08 and 10/28/08	No changes in values with no detectable methane and all values at 0 except O2% at 20.9.					
258651	Gonzalez	5/22/08	10/21/08	10/7/08 and 10/21/08	At wellhead: • %LEL did not change at >100 • CH4 % volume increased from 39 to 46 • O2 % increased from 12.4 to 15.5 • CO and H2S remain at 0					

	Table 1           Water Well Measurements for the Period of September 30 to November 3, 2008										
Permit Number	Name	Sampling Last Start Date Sample		Samples Since Last Monthly Report	If sampled, comparison of results from this period to last period						
					No measurement at well vent and cistern showed no change with all values at 0 except for O2% which is 20.9.						
246350	Gumpert	7/29/08	10/22/08	10/7/08 and 10/22/08	No change from previous measurements with no detectable methane and all value at 0 except for O2% at 20.9.						
268180	Billstrand	8/12/08	10/29/08	10/7/08, 10/21/08 and 10/29/08	At wellhead no detectable methane with %LEL and %CH4. O2% decreased from 20.9 to 17.5.H2S increased from 2 to 2.5 ppm.						
213070	Stephens	8/12/08	10/21/08	10/7/08 and 10/21/08	No change from previous measurements with no detectable methane with all values at 0 except O2% at 6.8 and H2S at 1.5 ppm.						
190327	Palmer	8/12/08	10/22/08	10/7/08 and 10/22/08	No change from previous measurements with no detectable methane and all values at 0 except O2% at 20.9. H2S increased from 0 to 1 ppm.						
196372	Geiselbrecht	8/12/08	10/22/08	10/7/08 and 10/22/08	No detectable methane with all values at 0 except O2% at 20.9. Also H2S increased from 0 to 1.5 ppm.						
234839	Waltz	8/12/08	10/7/08	10/7/08	No change from previous measurements with no detectable methane and all values at 0 except O2% at 20.9 and H2S decreasing from 1.5 to 0 ppm.						
193092	Degan	8/25/08	10/20/08	10/6/08 and 10/20/08	No change from previous measurements with no detectable methane and all values at 0 except O2% at 20.9.						
28093MH	Morine	9/10/08	10/7/08	10/7/08	No change from previous measurements with no detectable methane and all measurements at 0 except for %O2 which was 20.9.						
	Garbs	9/10/08	9/23/08	Not sampled during this reporting period.							
35227MH	Morris	10/8/08	10/8/08	10/8/08	New sampling site. All values were 0 except for O2% at 20.5 and a light H2S odor. Sampling also attempted 10/21 but property locked up for the winter. Will start sampling again in spring.						

Table 2         Methane Readings Schedule         (to be Implemented at start of injection as per Petroglyph commitment)         Schedule Good Through End of 2008												
Landowner	LandownerSubdivisionWater LevelSemi- CisternBi- WeeklyMonthlyQuarterly											
Kathy Dee	River Ridge						X	<u>quarterry</u>				
Wolahan	River Ridge		х		х	х						
R. Gonzalez	River Ridge					Х						
Martin	River Ridge						x					
McPherson	River Ridge				x	X						
Rohr	River Ridge							x				
Houghtling	River Ridge		X	X		X						
Kent Smith	River Ridge		X	Х		Х						
Bergman	River Ridge			x		x						
Lively	River Ridge					x						
Kerman	River Ridge		x		x	x						
Speh	River Ridge					x						
Lang	River Ridge		x				x					

Table 2												
Methane Readings Schedule												
	(to be Impler	nented at s	tart of injec	tion as per	Petroglyph	commitme	ent)					
		Water Semi- Bi-										
Landowner	<u>Subdivision</u>	Level	<u>Cistern</u>	Weekly	<u>Weekly</u>	Weekly	<u>Monthly</u>	<u>Quarterly</u>				
Conlov	Divor Didgo						v					
Conney	River Riuge						^					
Searle	River Ridge						Х					
Roloff	River Ridge	x				x						
Норре	0											
(Goacher)	River Ridge					Х						
				Ň		Ň						
Deroswitsch	River Ridge		X	X		X						
Switzer	River Ridge					х						
Bobby	¥											
English	River Ridge		Х				Х					
Мау	River Ridge						x					
Brice	River Ridge						x					
Richard												
Goodwin	River Ridge		X		Х	Х						
Ireland	River Ridge				Х	х						
Golden Cycle												
Land (Goemmer)	River Ridge			Х		x						
Burge	River Ridge				Х	Х						

Table 2											
	(to be Implemented at start of injection as per Petroglyph commitment)										
	<b>、</b>	Sch	edule Good T	hrough End o	f 2008		,	1			
<u>Landowner</u>	<u>Subdivision</u>	<u>Water</u> Level	<u>Cistern</u>	<u>Semi-</u> Weekly	<u>Weekly</u>	<u>Bi-</u> Weekly	<u>Monthly</u>	Quarterly			
Barrett	River Ridge			х		x					
Bruce Hopke	River Ridge		x	Х		x					
Masters # 1	River Ridge			Х		X					
Masters # 2	River Ridge	Х		Х		Х					
Coleman	River Ridge			Х		Х					
Sharp	River Ridge		X			Х					
Ryerson	River Ridge					Х					
Meyers	River Ridge					Х					
Chaves	River Ridge					Х					
Hentschel	River Ridge					x					
Rankins	River Ridge							x			
Lowry	River Ridge							x			
Goemmer Cattle	River Ridge							x			

Table 2												
	Methane Readings Schedule (to be Implemented at start of injection as per Petroglyph commitment)											
	Schedule Good Through End of 2008											
Landowner	Subdivision	<u>Water</u> Level	Cistern	<u>Semi-</u> Weekly	Weekly	<u>Bi-</u> Weekly	Monthly	Quarterly				
							<u>_</u>					
T. Gonzalez	Bear Creek		Х			X						
Michael Hurlev	Bear Creek	x	x			x						
Tobyas	Bear Creek					Х						
Higgins	Bear Creek	x				x						
Andreatta/	Boar brook											
Carsella	Bear Creek						Х					
Willie	Bear Creek					x						
Janet	Bear Oreek											
Campbell	River Ridge						Х					
Dale	City Ranch						x					
McEntee	City Ranch					x						
Johnson	City Ranch		x			x						
Cordova	City Ranch		x			x						
Dernell	City Ranch						x					
Schaefer	City Ranch							x				

Table 2												
Methane Keadings Schedule (to be Implemented at start of injection as per Petroglyph commitment)												
	Schedule Good Through End of 2008											
Landowner	Subdivision	<u>Water</u> Level	Cistern	<u>Semi-</u> Weekly	Weekly	<u>Bi-</u> Weekly	Monthly	Quarterly				
Bruington												
Bruington	VVEERLI											
Orlie White	Silver Spurs	X					х					
Evenden	Silver Spurs					x						
Roberts	Silver Spurs					x						
Snow	Silver Spurs	х					x					
Cramer	Silver Spurs	x	x				x					
Lyon	Silver Spurs						x					
Jim White	Silver Spurs		x			x						
Garza-Vela	Silver Spurs					X						
Modlish	Silver Spurs					X						
Todd Eddleman	Silver Spurs					x						
Paul Eddleman	Silver Spurs					X						
Mitch Sample	Silver Spurs		X			X						

Table 2											
Methane Readings Schedule											
(to be Implemented at start of injection as per Petroglyph commitment)											
	Schedule Good Through End of 2008										
Landowner	Subdivision	<u>Water</u> Level	Cistern	<u>Semi-</u> Weekly	Weekly	<u>Bi-</u> Weekly	Monthly	Quarterly			
				<u> </u>	<u> </u>	<u> </u>	<u>montiny</u>	Quarterry			
Gumpert	Silver Spurs					Х					
Scott											
Billstrand	Silver Spurs					X					
Lawrence							Ň				
Waltz	Silver Spurs						X				
Stephens	Silver Spurs					х					
-											
Palmer (G/S)	Silver Spurs					X					
Geiselbrecht	Silver Spurs					х					
Morine	Silver Spurs						х				
Morris <sup>1</sup>	Silver Spurs						x				
Bartlett	City Ranch							x			
Deagan	City Ranch					Х					

							Hand	Table 3A Held Gas Meter Results At Home Sites
Name	Date	Time	Weather Conditions		RMLD R	eadings		Notes
				N	E	w	S	
Kent Smith	10/27/08	11:55	Clear, wind 10-15 mph	19 - 30		26 - 37		Background 25 - 40, W (trees) 31 - 68, W pasture 48 - 60, Well 80 - 107, 0 vent 26 - 30, Driveway circle 30 - 36, Cooler 40's, & Center of Driveway 19
Mitch Sample	10/29/08	16:40	Clear, wind 10-15 mph	26 - 32	26 - 34	28 - 36	26 - 34	Background 28 - 42, E Pasture 54 - 106: Inside E Kitchen 30 - 166, E Pea Reading Mike Barrett & Brion Stephen.
Terri Kerman	10/27/08	11:17	Clear & Calm	20 - 42	20 - 36	18 - 36	26 - 36	Background 18 - 31, W (trees) 18 - 31, Well 60 - 88, Cistern 50 - 84; Insid 37. Reading Mike Barrett & Brion Stephen.
Bruington	10/29/08	14:15	Clear, wind 10-15 mph	20 - 28	24 - 44	120 - 228	22 - 32	Background 25 - 40, S Draw 30 - 120, Driveway 40 - 54, Propane tank 25 Reading Mike Barrett & Brion Stephen.
Jim White	10/28/08	15:35	Clear & Calm	52 - 88	22 - 28	26 - 32	28 - 37	Background 26 - 35, Well 970 - 1260, S Corner home 30 - 48, Septic 50 - Stephen.
Donald Derowitsch	10/27/08	9:52	Clear & Windy	17 - 60	19 - 40	22 - 44	17 - 30	Background 20 - 50, Propane tank 57 - 60, Cistern 27 - 58, Hot tub 26 - 42 Driveway 50 - 62, & N pasture 60 - 80. Reading Mike Barrett & Brion Step
Jack Houghtling	10/27/08	8:43	Wind 10-15 mph	22 - 37	36 - 40	28 - 42	30 - 42	Background 25 - 35, Crawl space vent 30 - 34, Cistern 22 - 28, N Pasture Reading Mike Barrett & Brion Stephen.
Vince Coleman	10/27/08	9:26	Clear, wind 10-15 mph	15 - 31	15 - 38	28 - 46	22 - 35	Background 15 - 30, vent 28 - 33, crawl space vent 38 - 46, 42 - 43, 36 - 4 Reading Mike Barrett & Brion Stephen.
John Ireland/ Kevin Murphy	10/27/08	10:43	Clear & Calm	48 - 60 17 - 28	22 - 25	76 - 108	26 - 46	Background 18 - 31, NW home 20 - 30, Well 33 - 40, Propane Tank 29 - 3 Barrett & Brion Stephen.
Janet Campbell	10/27/08	14:30	Clear, wind 10-15	18 - 72	22 - 38	21 - 40	40 - 72	Background 28 - 40, Horse stall 35 - 56, Well 52 - 72, Pen 23 - 50, Well 54 Septic 35 - 78, 10' away septic 115 - 140, Transformer 20 - 48, Propane 4 26, NE 19 - 26, SE 20 - 33, S 20 - 25, N 15 - 20, Faucet 22 - 38, 23 - 30, 2 Stephen.
Petroglyph aka Calvin Haupt	10/27/08	14:00	Calm					Background 25 - 35, N side of property 44 - 60, NW 62 - 78, SW 56 - 70 8 - 56, top of dike 20 - 56, old fence 40 - 52, E near road 63 - 66, wash out I Higher reading found on disturbed road & east guide wire. Reading Mike
Richard Goodwin	10/28/08	10:17	Calm	50 - 55	28 - 42	28 - 40	46 - 57	Background 30 - 42, S Pasture 40 - 85, Driveway 28 - 42, E Pasture 40 - 4 Septic 37 - 40, W Arroyo 60 - 76, Cistern 42 - 54, & Well 58 - 100. Readir
Bruce Hopke	10/27/08	9:12	Clear, wind 10-15 mph	22 - 42	14 - 42	17 - 33	50 - 70	Background 15 - 30, Cistern 15 - 42, Crawl space vent 28 - 30, 27 - 31, 28 Reading Mike Barrett & Brion Stephen.
Bill Cordova	10/28/08	16:45	Clear & Calm	24 - 29	24 - 35	28 - 42	20 - 38	Background 24 - 40, S Deck 20 - 36, Cistern 40 - 55, E crawl space 26 - 4 38: E kitchen sink 25 - 44, 58 - 60; Well 70 - 85. Reading Mike Barrett & B
Todd Eddleman	10/28/08	14:50	Clear & Calm	23 - 25	16 - 29	20 - 40	22 - 33	Background 25 - 36, Well 38 - 60, Crawl space vent 24 - 28, N crawl vent Barrett & Brion Stephen.
Roberts	10/28/08	15:53	Clear & Calm	22 - 36	40 - 42	21 - 35	28 - 36	Background 32 - 42, Well 22 - 36, Cistern 20 - 30, E Flowers 23 - 26, E Ve 38 - 42. Reading Mike Barrett & Brion Stephen.
Paul Eddleman	10/28/08	15:10	Clear & Calm	38 - 44	26 - 34	19 - 30	20 - 30	Background 35 - 40; Well N 60 - 133, Well S 560 - 1190, Well E 100 - 380 54, & Center Driveway 61. Reading Mike Barrett & Brion Stephen.
Burge	10/27/08	15:30	Clear & Calm	38 - 83	34 - 46	38 - 56	28 - 50	Background 38 - 52, Well 21 - 51, SE 28 - 48, NE 23 - 30; Camper 30 - 66 76 - 90, W pasture 65 - 91, N pasture 70 - 80, & NW pasture 78 - 104. Re
E. Johnson	10/28/08	11:15	Clear & Calm	27 - 56	24 - 33 30 - 44	20 - 42	43 - 66	Background 28 - 42, Propane Tank 23 - 48, Cistern 24 - 36, Well # 1 20 - 61, & E of well #2 46 - 80. Reading Mike Barrett & Brion Stephen.
Garza	10/28/08	14:15	Clear & Calm	19 - 33	26 - 51	24 - 44	30 - 46	Background 28 - 38, E Pasture 50 - 70, Driveway 19 - 50, Well 100 - 120,

Cistern 15 - 28, Fence 28 - 34, Deck 28 - 42, Crawl space 5 - 25. Reading Mike Barrett & Brion Stephen.

ak 31 - 36, & Basement W 30 - 50, N 35 - 42, E 28 - 30.

le home W 23 - 24, E 17 - 21, S 22 - 24, & Water faucet 19 -

- 64, N Draw 22 - 42, Well 30 - 837, & Cistern 30 - 600.

88, & W Deck 28 - 36. Reading Mike Barrett & Brion

2, Cooler covered, Septic 78 - 60, Field leech 50 - 56, phen.

arroyo 50 - 73, NW Pasture 20 - 40, & Well vent 500 - 1000.

42; W pasture 27 - 62, Septic 48 - 56, & W vent 25 - 35.

30, Driveway 18 - 60, & SE home 18 - 50. Reading Mike

ank 52 - 72, W bank 27 - 78, SW home 22 - 34, Dog pen 44, 40 - 58, Vent 30 - 40, NE bank 28 - 60; Inside home NW 19 -23 - 24, Above sink 20 -25, Reading Mike Barrett & Brion

& 35 - 40, NE 63 - 50,W (dead bare tree) 70 - 78, guidewire 36 E of guideline 78 - 115 & 100 - 105, & roadway 102 - 112. Barrett & Brion Stephen.

48, W Pasture 33 - 36, S Pasture 50 - 55, W Deck 28 - 46, ng Mike Barrett & Brion Stephen.

8 - 30, 17 - 28; Propane tank 22 - 30, & well 170 - 380.

40, N Pasture 48 - 72, Inside S living rm 22 - 26, N hall 17 - Brion Stephen.

28 - 36, S bank 50 - 69, & Driveway 30 - 36. Reading Mike

ent 21 - 32, W Vent 22 - 35, E Pasture 48 - 50, & W Pasture

); Crawl space vent 20 - 24, Lawn 28 - 32, W Driveway 40 -

6, 55 - 76, SW Camper 15 - 25, Well house 60 - 66, NE house eading Mike Barrett & Brion Stephen.

60, Well # 2 28 - 57, N of Well #2 28 - 52, W of well #2 24 -

& S of well 75 - 85. Reading Mike Barrett & Brion Stephen.

						Table 3A Held Gas Meter Results At Home Sites			
Name	Date	Time	Wea Condi	ther itions		RMLD Readings			Notes
					N	E	W	S	
Evendon	10/29/08	15:30	Clear 15 mph	10-	33 - 46	30 - 45	30 - 54 28 - 40	30 - 40	Background 38 - 40, S old well 30 - 166, E old well 30 - 1200, N old well 24 Septic 35 - 62, & Well 60 - 100. Reading Mike Barrett & Brion Stephen.
Scott Billstrand	10/29/08	16:25	Clear mph	10-15	22 - 31	22 - 31	24 - 34	22 - 31	Background 20 - 34 & E Driveway 44 - 60. Reading Mike Barrett & Brion S
Orlie White	10/29/08	15:08	Clear mph	10-15	23 - 25	20 - 30	24 - 35	36 - 38	Background 30 - 50, N well 36 - 56, E Well 45 - 50, W Well 32 - 50, S Well 20, E Kitchen 22 - 29; & Driveway 35 - 64. Reading Mike Barrett & Brion \$

Home owners new to the list are highlighted in yellow.

40 - 260 & 30 - 330, W old well 40 - 268, E vent 34 - 44,

# Stephen.

l 55 - 60, E crawl 30 - 32; Inside N 18 - 24, W 20 - 36, S 17 -Stephen.

	-	-	_	-	Table 3B Hand Held Gas Meter Results At Seeps
Name	Date	Time	Weather Conditions	RMLD Readings	Notes
Hwy 160 & RR Tracks	10/29/08	13:20	Clear 10- 15 Wind	Hwy 160 & RR Tracks	S old pit 50 - 60, W old pit 20 - 114, N 60 - 70, E 27 - 57, Roadway 10 - 114, N swamp 32 - 63, E s 40 - 87 & E pasture 54 - 76. Higher concentration over the swamp & sunken depression along roa on pasture. Reading Mike Barrett & Brion Stephen.
Dike near Derowitsch	10/27/08	10:10	SSW 10-15	Purple F2 Dike on hill behind 10-02.	Background 30 - 50, open pasture west of transformer near road 28 - 90, NW side of pasture 50 - 8 stake 19 - 30 & 28 - 38, & dead trees 27 - 59. GPS taken @ stake 37° 32.800N; 104° 52.29W, Ele GPS 37° 32.796N; 104° 52.331W; Elevation 6743'. RMLD readings higher here 52 - 90, 60 - 100 & road. Reading Mike Barrett & Brion Stephen.
Ideal Canyon Mine Vent	10/28/08	13:50	Calm	Mine venting along Ideal Canyon Road. Purple A-14.	Background 28 - 36, N of ck @ tree-line 26 - 50, W of ck along roadway 30 - 40, E along N bank d drainage 54 - 56, E on arroyo bank 30 - 80 & 100 - 118 closer to culvert, S of culvert 50 - 70, & SE higher readings have moved from N to S. Higher readings are near the arroyo & mine camp. Read
Pictou Site (COGCC soil survey area)	10/28/08	10:00	Calm	Old Pictou Camp site (COGCC soil survey area) NW of Walsenburg A - Z.	Background 28 - 30, S Pit #2 77 - 127 (GPS 37° 38.346N 104° 49.031W, 6254'), E Pit #1 50 - 77 ( & W pasture 50 - 77. Area reads between 50 - 80. High point N pasture W of left slag pile at 100 m
Rohr Water Well	10/27/08	12:17	Clear 10-15 mph	Rohr Water Well	NE 52 - 68, E 56 - 72, Pit 60 - 70, SW 42 - 63, NW 60 - 91, N 72 - 78, Pit NE 38 - 40, SE 42 - 60, F 40 - 113, & NE Pit 38 - 86. Higher readings near pit of well. Reading Mike Barrett & Brion Stephe
Old Mine Storage N of Hellifiknow Rd	10/27/08	13:30	Calm	Old mine storage North of Hellifiknow Road	Background 25 - 35, N wall of storage 28 - 31, NW wall 30 - 34, NE wall 35 - 50, NW 45 - 50, 50's 40 & 40 - 62, SE near power pole 56 - 74, Old pond 40 - 62, NNE pasture 80 - 86, & near dead tre
Seep by Bound's Home	10/27/08	16:03	Calm	H1-3 Yellow/Purple County Rd seep by Bounds.	Background 60's, high read continued on North side of county road, 300' read exceed 1000 from E between 100-300'. Readings higher near Bounds fence line. Reading Mike Barrett & Brion Stephe
Montoys Mine Camp	10/28/08	12:15	Calm	Montoya Mine Camp	Background 20 - 40, N 80 - 90, E 90 - 100, W 57 - 124, & S 82 - 91. Higher reading taken near sur old mine hole 150 - 256 (hole has been filled in). The higher readings overall are near the fence lin Reading Mike Barrett & Brion Stephen.

swamp 45 - 112, W tracks 28 - 61, N tracks 60 - 126, E tracks ad. One higher spike in east pasture could be caused by cattle

80, @ stake in pasture 40 - 50, E side of stake 38 - 42, W of evation 6750'. Facing Mt Greenhorn closer to electrical box & 50 - 110. Photos taken @ site. Higher readings close to

drainage 40 - 45, rock marker 40 - 50, S of ck near arroyo E draw facing old mine camp 30 - 104. since previous visit Iding Mike Barret & Brion Stephen.

(GPS 37° 38.347N 104° 49.018W 6248'). N pasture 80 - 100, nax. Reading Mike Barrett & Brion Stephen.

Row S 32 - 57, Row N 20 - 60, Berm 68 - 102, Well opening m.

near old drainage, W outside wall 45 - 54, SW pasture 26 ees 80 - 92. Reading Mike Barrett & Brion Stephen.

Bounds w/ a higher reading @ 2500 South side of road en.

nken depressions W of slag. W of small slag pile 100 - 140, ne & filled mine hole. Pictures were taken @ this site.

# Table 4Residences Receiving Water

Jerry Angely Kent Smith Alan Cramer Tom Gonzales Spencer/Carol Snow Bruington Todd Eddleman Paul Eddleman Jim White Edward Lyon Donald Sharp Edward Johnson Richard McEntee P.C. Roberts Ireland-Murphy Has received water provided by PEI New to list as of 3/12/08 New to list as of 3/12/08 New to list as of 6/6/08 New to list as of 7/08/08 New to list as of 8/8/08 New to list as of 8/18/08 Attachment 1 Gas Flow in Monitoring Well POCI 55, Recovery 1 Kittleson, Recovery 3 PEI and Recovery 4 Barrett

#### POCI 55 MW Gas Flow from 3/6/08 to 10/31/08



### Recovery 1 Kittleson Gas Flow from 3/25/08 to10/30/08



Recovery 3 PEI Gas Flow from 4/15/08 to 10/30/08



### Recovery 4 Barrett Gas Flow from 5/15/08 to 10/30/08



Attachment 2 Graphs of Pressure and Fluid Level Data From POCI 55, Barrett, Bergman, Coleman, Evendon, Garza-Vela and Meyer











### Bergman WW pressure data from 8/9/07 to 10/30/08 Permit # 24403, SW NW Sec 3 29S 67W Lot 48 RRR







Coleman WW (GL elev. 6848') Pressure Data from 10/24/08 to 10/26/08

Data Point Frequency is one/minute





# Evenden WW, from 10/3/08 to 10/29/08 Permit # 221465 Lot 117 Silver Spurs Ranch Elevation 6712'





# Meyer WW Water Level from 6/24/05 to 10/30/08 Permit # 248862 Lot 120 RRR SW, NE Sec 30 T28S R66W





Meyers WW 11/30/05 to 10/30/08 Permit # 248862

Hrs

Meyers WW BHP from 12/1/05 to 10/30/08



PSIG

Attachment 3 Gas Flow Measurements at Bruington, Coleman, Angely, Bounds, and Smith

### Bruington WW # 210526 Measured Gas Flow from 8/22/07 to 10/29/08



### Coleman WW #267294 Measured Gas Flow from 9/1/07 to 10/26/08



### Angely WW # 238689 Measured Gas Flow from 9/27/07 to 10/29/08



### Bounds WW #181278 Measured Gas Flow from 10/3/07 to 10/29/08



### Smith WW # 239657 Measured Gas Flow from 8/22/07 to 10/28/08



Attachment 4 Fluid Levels in Petroglyph Production Wells

### Monitor Well Fluid Levels PBU from 1/1/07 to 10/30/08



Lively 02-02



Lively 02-12



Lively 03-01



Lively 03-10



Lively 03-12







Rohr 04-10





Rohr 09-10

State 36-02



State 36-05



State 36-11



Rohr 04-14 PBU from 7/1/07 to 10/30/08



Rohr 08-01 PBU from 7/1/07 to 10/30/08



# Rohr 09-04 PBU data (psia) 7/1/07 to 10/30/08

