



Texas Brine Company, LLC

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December 9, 2013

Commissioner James H. Welsh
P.O. Box 94275
Baton Rouge, LA 70804

RE: In response to State of Louisiana Department of Natural Resources Office of Conservation's Second Amendment to Declaration of Emergency and Directive

Commissioner Welsh,

In response to the Second Amendment and Declaration of Emergency and Directive order issued by the Louisiana Department of Natural Resources (LDNR), Office of Conservation on September 25, 2012, Texas Brine Company, LLC (TBC) understands the seven items listed in the document.

In the above mentioned, TBC was specifically directed and ordered to perform certain tasks outlined in the above mentioned document. Below are the required responses, as directed.

1. TBC's counsel provided LDNR legal counsel with a response to Directives 1-3 on September 28, 2012.
2. TBC understands Directive 4, which is to provide all daily logs and field notes from all contractors conducting investigation into subsidence and natural gas bubbling. The Daily Action Summary and results for current information can be found in the Attachment section of this report.
3. TBC understands Directive 5, which directs TBC to immediately allow for split or share any sample taken on site related to Well 3A (Serial Number 974265), the cavern, other wells facilities or other site locations. The Daily Action Summary of today's collection can be found in Attachment section of this report.
4. TBC understands Directive 6, which directs TBC to immediately report the results (final and preliminary) of any tests, logs samples or data collection performed on Well 3A, the cavern, other wells, facilities or site locations that indicate a change in any previously known conditions related to the investigation of the subsidence or natural gas bubbling

events, and continue to report any such results. The Daily Action Summary and the Results related to this Directive can be found in Attachment section of this report.

5. TBC understands the Directive 7, which states that TBC will provide a daily summary of all tests, or logs performed or samples taken from Well 3A and the cavern as well as any results of those tests or logs, including preliminary as of September 25, 2012 and going forward. The Daily Summary and Results related to this Directive can be found in Attachment section of this report.

Please note that the drilling rig used for the Observation Well 3A has been removed and the site is being rigged down and returned to pre-drilling condition. As such, daily drilling reports for this well have ceased. Plans are being made for longer term potential gas venting/flaring requirements and possible hydrocarbon material recover from Well 3A.

In addition, previous daily summary reports issued to LDNR have included significant duplicate information as there is a fair amount of overlap in the information requested in each of the Directives included in the September 25, 2012 order. All requested information associated with the Directives issued in the September 25, 2012 order are included in the Attachment section of this report.

TBC believes that the submittal of this report satisfies the requirements of the Declaration of Emergency and Directive issued on September 25, 2012. As directed this report is submitted by email to conservationorder@la.gov, ref. "Emergency Declaration-Texas Brine Company LLC-9/25/2012.



Bruce E. Martin

Vice President, Operations

Texas Brine Company, LLC

Summary Table for Daily Events

TBC Oxy Grand Bayou Data Management-Environmental									
Contractor	Responsibilities	Collected By	Date Collected	Delivered to Lab	Results from Lab	Laboratory	Method	Date to Agencies	
Sage	Stationary Air Monitoring	Bijet Mukherjee - 07:45 - 08:40, Britt Barnett (Code Red) - 00:00 - 06:00; 18:00 - 24:00, Chad Deshotel (Code Red) - 06:00 - 18:00; Eric Rucinski - 07:50 - 11:45, Britt Barnett (Code Red) - 00:00 - 06:00; 18:00 - 24:00, Chad Deshotel (Code Red) - 06:00 - 18:00; Steven Shaughnessy - 08:05 - 09:20; Britt Barnett (Code Red) - 00:00 - 06:00; 18:00 - 24:00, Chad Deshotel (Code Red) - 06:00 - 18:00	12/6 - 12/9/2013	NA	NA	NA	AreaRAE Monitors	12/7- 12/9/2013	
	Residential Air Monitoring	Sage has been requested to suspend bimonthly residential air monitoring. Therefore, Sage will discontinue these activities.	NA	NA	NA	NA	NA	NA	
	Gas Seep Sampling	No work performed	12/6 - 12/8/2013	NA	NA	NA	NA	NA	
	Well Gas Sampling	Steven Shaughnessy ORW-6 at 13:42 and 13:55	11/14/2013	NA	Yes	Isotech	Isotopic	12/8/2013	
	Under Slab Gas Sampling	No work performed	12/6 - 12/9/2013	NA	NA	NA	NA	NA	
	Indoor Air Monitoring	No work performed	12/6 - 12/9/2013	NA	NA	NA	NA	NA	
Respec	Inclinometers/Tilt Meters/Transducers	Set WL offset, azimuth, & trimmed trees site #41. installed stiff gage, set WL offset & installed Yagi antenna site #30. Dug post hole & finished post installation AR 23. Dug post holes AR 38. / System O&M / Completed O&M at artificial reflector locations 28 & 23. Was stuck in mud at AR-38 location for a good period of time.	12/6 - 12/8/2213	N. Marnach	NA	NA	NA	NA	NA
	INSAR Reflector Installations	No work Conducted	12/6 - 12/8/2213	NA	NA	NA	NA	NA	NA
	Subsidence Survey-Fenstermaker	No work Conducted	12/6 - 12/8/2213	NA	NA	NA	NA	NA	NA
	Shallow Geophone Installation	No work Conducted	12/6 - 12/8/2213	NA	NA	NA	NA	NA	NA
	Deep Geophone Installation	No work Conducted	12/6 - 12/8/2213	NA	NA	NA	NA	NA	NA
	Amendment #3, Directive #2	No work Conducted	12/6 - 12/8/2213	NA	NA	NA	NA	NA	NA
	Expansion of geoprobe gas sampling locations	No work Conducted	12/6 - 12/8/2213	NA	NA	NA	NA	NA	NA
	DPVE	No work Conducted	12/6 - 12/8/2213	NA	NA	NA	NA	NA	NA
	Abandon Casing Survey	No work Conducted	12/6 - 12/8/2213	NA	NA	NA	NA	NA	NA
	Passive Vent Well at NSDB556	Perform Volumetric flow test at GP-56 / Reported findings from initial volumetric flow measurement attempt. / Collected gas sample and estimate of volumetric flow at GP 56.	12/6 - 12/8/2213	N. Marnach	NA	NA	NA	NA	NA
	MIHPT	No work Conducted	12/6 - 12/8/2213	NA	NA	NA	NA	NA	NA
	Miller	Weekly Stability Survey	No work performed	12/7 - 12/9/2013	NA	NA	NA	NA	NA
		Misc. Survey Work	M. Fore	12/7 - 12/9/2013	NA	NA	NA	NA	NA
Pisani	Sinkhole Hydro/Perimeter Survey	No work performed	12/7 - 12/9/2013	NA	NA	NA	NA	NA	
	Surface Water	NA	12/6 - 12/8/2013	NA	NA	NA	NA	NA	
	Sinkhole	NA	12/6 - 12/8/2013	NA	NA	NA	NA	NA	
	Industrial Well Water	NA	12/6 - 12/8/2013	NA	NA	NA	NA	NA	
	MRAA Well Water	NA	12/6 - 12/8/2013	NA	NA	NA	NA	NA	
	GP/ORW Water	NA	12/6 - 12/8/2013	NA	NA	NA	NA	NA	
	Cover Water	NA	12/6 - 12/8/2013	NA	NA	NA	NA	NA	
	Discharge/Outfall Water	NA	12/6 - 12/8/2013	NA	NA	NA	NA	NA	
	Geoprobe Wells	NA	12/6 - 12/8/2013	NA	NA	NA	NA	NA	
Grand Bayou Well 3A									
Daily Operations at 3A		Summary of Today's events							
12/7 - 12/9/2013		Dex 3A							
	7am	909.98	12/7/2013						
	7am	908.2	12/8/2013						
	7am	914.3	12/9/2013						
12/7 - 12/9/2013		Relief Well #1							
		See ORW-01 Flare Spreadsheet							

Attachments



MRAA Sampling Event

November 14, 2013



Daily Action Summary

December 6, 2013

Sinkhole Perimeter Air Monitoring and Neighborhood ORWs Air Monitoring

- Bijet Mukherjee onsite from 07:45 – 08:40. Changed out the monitors between 08:04 and 08:27. Collected data from the monitoring database and forwarded to Steven Shaughnessy in the Baton Rouge office for processing.
- Code Red (monitor sub-contractor) onsite for continuous 24/7 monitoring:
 - Britt Barnett onsite from 0:00 to 06:00; 18:00 to 24:00
 - Chad Deshotel onsite from 06:00 to 18:00

Technicians also assisted in battery change outs and maintenance of the monitoring equipment as necessary.

NOTE: The sinkhole monitors are now housed in solar-powered weather boxes; thus, daily monitor change-out not necessary for Pad 9, TR-1a, ORW-11a, ORW-9a, and ORW-5. Monitors will continue to be calibrated and serviced as necessary.

Residential Air Monitoring

- Sage has been requested to suspend bimonthly residential air monitoring. Therefore, Sage will discontinue these activities. The last event was conducted on March 26, 2013.

Gas Seep Sampling

- Not Scheduled

Well Gas Sampling

- Not Scheduled

Under Slab Gas Sampling

- Not Scheduled

Air Indoor Monitoring

- Not Scheduled

Texas Brine - Belle Rose, Louisiana
Hourly Air Monitoring Data
Neighborhood Monitoring

*Time indicates start of time period (ex. 12:00:00 AM gives the time period 12:00:00 AM to 12:59:59 AM)

Date-Time *	Observation Relief Well -49 at the Well Head			Observation Relief Well - 50 at the Well Head			Passive Vent Well -56		
	ORW-49-WH			ORW-50-WH			PVW-BS-56		
	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)
12/06/2013 01:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 02:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 03:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 04:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 05:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 06:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 07:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 08:00:00 AM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	21.0
12/06/2013 09:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 10:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 11:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 12:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.2	0.0	0.0	21.0
12/06/2013 01:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.2	0.0	0.0	21.0
12/06/2013 02:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.3	0.0	0.0	21.0
12/06/2013 03:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.2	0.0	0.0	21.0
12/06/2013 04:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	21.0
12/06/2013 05:00:00 PM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 06:00:00 PM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 07:00:00 PM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 08:00:00 PM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 09:00:00 PM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 10:00:00 PM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 11:00:00 PM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 12:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0

Notes:

Texas Brine - Belle Rose, Louisiana
Hourly Air Monitoring Data
Sinkhole Perimeter Monitoring

*Time indicates start of time period (ex. 12:00:00 AM gives the time period 12:00:00 AM to 12:59:59 AM)

Date-Time *	Observation Relief Well -5					Observation Relief Well - 9					Observation Relief Well -11					South of OG3A-1					Onsite Trailers				
	ORW-5					ORW-9a					ORW-11a					Pad #9					TR-1a				
	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	SO2 (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)
12/06/2013 01:00:00 AM	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 02:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 03:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 04:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 05:00:00 AM	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 06:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 07:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 08:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 09:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 10:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 11:00:00 AM	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 12:00:00 PM	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	21.1	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	21.1	0.0	0.0	0.0	0.0	20.9
12/06/2013 01:00:00 PM	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	21.1	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	21.0	0.0	0.0	0.0	0.0	20.9
12/06/2013 02:00:00 PM	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	21.1
12/06/2013 03:00:00 PM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	21.2
12/06/2013 04:00:00 PM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	21.2	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	21.1
12/06/2013 05:00:00 PM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	21.0	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	20.9
12/06/2013 06:00:00 PM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 07:00:00 PM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 08:00:00 PM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 09:00:00 PM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 10:00:00 PM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 11:00:00 PM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 12:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.7	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9

Notes:

Texas Brine - Belle Rose, Louisiana
Hourly Air Monitoring Data
Neighborhood Monitoring

*Time indicates start of time period (ex. 12:00:00 AM gives the time period 12:00:00 AM to 12:59:59 AM)

Date-Time *	Observation Relief Well -49 at the Well Head			Observation Relief Well - 50 at the Well Head			Passive Vent Well -56		
	ORW-49-WH			ORW-50-WH			PVW-BS-56		
	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)
12/06/2013 05:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 06:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 07:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 08:00:00 AM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	21.0
12/06/2013 09:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 10:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 11:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 12:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.2	0.0	0.0	21.0
12/06/2013 01:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.2	0.0	0.0	21.0
12/06/2013 02:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.3	0.0	0.0	21.0
12/06/2013 03:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.2	0.0	0.0	21.0
12/06/2013 04:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	21.0
12/06/2013 05:00:00 PM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 06:00:00 PM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 07:00:00 PM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 08:00:00 PM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 09:00:00 PM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 10:00:00 PM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/06/2013 11:00:00 PM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 12:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 01:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 02:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 03:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 04:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 05:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0

Notes:

Texas Brine - Belle Rose, Louisiana
Hourly Air Monitoring Data
Sinkhole Perimeter Monitoring

*Time indicates start of time period (ex. 12:00:00 AM gives the time period 12:00:00 AM to 12:59:59 AM)

Date-Time *	Observation Relief Well -5					Observation Relief Well - 9					Observation Relief Well -11					South of OG3A-1					Onsite Trailers				
	ORW-5					ORW-9a					ORW-11a					Pad #9					TR-1a				
	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	SO2 (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)
12/06/2013 05:00:00 AM	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 06:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 07:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 08:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 09:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 10:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 11:00:00 AM	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 12:00:00 PM	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	21.1	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	21.1	0.0	0.0	0.0	0.0	20.9
12/06/2013 01:00:00 PM	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	21.1	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	21.0	0.0	0.0	0.0	0.0	20.9
12/06/2013 02:00:00 PM	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	21.1
12/06/2013 03:00:00 PM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	21.2
12/06/2013 04:00:00 PM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	21.2	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	21.1
12/06/2013 05:00:00 PM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	21.0	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	20.9
12/06/2013 06:00:00 PM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 07:00:00 PM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 08:00:00 PM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 09:00:00 PM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 10:00:00 PM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/06/2013 11:00:00 PM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 12:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.7	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 01:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.5	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 02:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 03:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 04:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 05:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.5	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9

Notes:

Daily Action Summary

December 7, 2013

Sinkhole Perimeter Air Monitoring and Neighborhood ORWs Air Monitoring

- Eric Rucinski onsite from 07:50 – 11:45. Changed out the monitors between 07:59 and 11:19. Collected data from the monitoring database and forwarded to Steven Shaughnessy in the Baton Rouge office for processing.
- Code Red (monitor sub-contractor) onsite for continuous 24/7 monitoring:
 - Britt Barnett onsite from 0:00 to 06:00; 18:00 to 24:00
 - Chad Deshotel onsite from 06:00 to 18:00

Technicians also assisted in battery change outs and maintenance of the monitoring equipment as necessary.

NOTE: The sinkhole monitors are now housed in solar-powered weather boxes; thus, daily monitor change-out not necessary for Pad 9, TR-1a, ORW-11a, ORW-9a, and ORW-5. Monitors will continue to be calibrated and serviced as necessary.

Residential Air Monitoring

- Sage has been requested to suspend bimonthly residential air monitoring. Therefore, Sage will discontinue these activities. The last event was conducted on March 26, 2013.

Gas Seep Sampling

- Not Scheduled

Well Gas Sampling

- Isotopic analytical results from the November 14, 2013 MRAA sampling event were received and are attached.

Under Slab Gas Sampling

- Not Scheduled

Air Indoor Monitoring

- Not Scheduled

Texas Brine - Belle Rose, Louisiana
Hourly Air Monitoring Data
Neighborhood Monitoring

*Time indicates start of time period (ex. 12:00:00 AM gives the time period 12:00:00 AM to 12:59:59 AM)

Date-Time *	Observation Relief Well -49 at the Well Head			Observation Relief Well - 50 at the Well Head			Passive Vent Well -56		
	ORW-49-WH			ORW-50-WH			PVW-BS-56		
	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)
12/07/2013 01:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 02:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 03:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 04:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 05:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 06:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 07:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 08:00:00 AM	<1.0	0.0	21.0	0.0	0.0	21.1	<1.0	0.0	21.0
12/07/2013 09:00:00 AM	<1.0	0.0	21.0	0.0	0.0	20.9	<1.0	0.0	21.0
12/07/2013 10:00:00 AM	<1.0	0.0	21.0	0.0	0.0	20.9	<1.0	0.0	21.0
12/07/2013 11:00:00 AM	<1.0	0.0	21.0	0.0	0.0	20.9	<1.0	0.0	21.0
12/07/2013 12:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 01:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 02:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 03:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 04:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 05:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 06:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 07:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 08:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 09:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 10:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 11:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/08/2013 12:00:00 AM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0

Notes:

Texas Brine - Belle Rose, Louisiana
Hourly Air Monitoring Data
Sinkhole Perimeter Monitoring

*Time indicates start of time period (ex. 12:00:00 AM gives the time period 12:00:00 AM to 12:59:59 AM)

Date-Time *	Observation Relief Well -5					Observation Relief Well - 9					Observation Relief Well -11					South of OG3A-1					Onsite Trailers				
	ORW-5					ORW-9a					ORW-11a					Pad #9					TR-1a				
	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	SO2 (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)
12/07/2013 01:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.5	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 02:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 03:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 04:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 05:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.5	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 06:00:00 AM	<1.0	0.0	0.0	0.0	21.0	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 07:00:00 AM	<1.0	0.0	0.0	0.0	21.0	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 08:00:00 AM	<1.0	0.0	0.0	0.0	21.0	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 09:00:00 AM	<1.0	0.0	0.0	0.0	20.8	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 10:00:00 AM	<1.0	0.0	0.0	0.0	21.0	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 11:00:00 AM	0.0	0.0	0.0	0.0	21.2	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 12:00:00 PM	0.0	0.0	0.0	0.0	21.2	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 01:00:00 PM	0.0	0.0	0.0	0.0	21.2	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 02:00:00 PM	0.0	0.0	0.0	0.0	21.2	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 03:00:00 PM	0.0	0.0	0.0	0.0	21.2	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 04:00:00 PM	0.0	0.0	0.0	0.0	21.1	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 05:00:00 PM	0.0	0.0	0.0	0.0	21.1	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 06:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 07:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 08:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 09:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 10:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 11:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 12:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9

Notes:

Texas Brine - Belle Rose, Louisiana
MRAA Sampling Events
Isotopic Analytical Results

Lab # 394707

Sample Name: ORW-6

Date Sampled: 11/14/2013

Component	mol %	¹³ C ‰	D ‰	¹⁵ N ‰
Carbon Monoxide	nd			
Helium	nd			
Hydrogen	nd			
Argon	0.0305			
Oxygen	0.069			
Nitrogen	1.88			
Carbon Dioxide	1.39			
Methane	93.26	-42.81	-154.5	
Ethane	2.42	-26.94		
Ethylene	nd			
Propane	0.662	-23.15		
Propylene	nd			
Iso-butane	0.166	-23.66		
N-butane	0.0884	-20.51		
Iso-pentane	0.0215			
N-pentane	0.0048			
Hexanes +	0.0030			
BTU/cf ¹	1015			
Specific gravity	0.598			

Texas Brine - Belle Rose, Louisiana
Hourly Air Monitoring Data
Neighborhood Monitoring

*Time indicates start of time period (ex. 12:00:00 AM gives the time period 12:00:00 AM to 12:59:59 AM)

Date-Time *	Observation Relief Well -49 at the Well Head			Observation Relief Well - 50 at the Well Head			Passive Vent Well -56		
	ORW-49-WH			ORW-50-WH			PVW-BS-56		
	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)
12/07/2013 05:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 06:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 07:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 08:00:00 AM	<1.0	0.0	21.0	0.0	0.0	21.1	<1.0	0.0	21.0
12/07/2013 09:00:00 AM	<1.0	0.0	21.0	0.0	0.0	20.9	<1.0	0.0	21.0
12/07/2013 10:00:00 AM	<1.0	0.0	21.0	0.0	0.0	20.9	<1.0	0.0	21.0
12/07/2013 11:00:00 AM	<1.0	0.0	21.0	0.0	0.0	20.9	<1.0	0.0	21.0
12/07/2013 12:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 01:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 02:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 03:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 04:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 05:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 06:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 07:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 08:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 09:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 10:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/07/2013 11:00:00 PM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/08/2013 12:00:00 AM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/08/2013 01:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/08/2013 02:00:00 AM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/08/2013 03:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/08/2013 04:00:00 AM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/08/2013 05:00:00 AM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0

Notes:

Texas Brine - Belle Rose, Louisiana
Hourly Air Monitoring Data
Sinkhole Perimeter Monitoring

*Time indicates start of time period (ex. 12:00:00 AM gives the time period 12:00:00 AM to 12:59:59 AM)

Date-Time *	Observation Relief Well -5					Observation Relief Well - 9					Observation Relief Well -11					South of OG3A-1					Onsite Trailers				
	ORW-5					ORW-9a					ORW-11a					Pad #9					TR-1a				
	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	SO2 (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)
12/07/2013 05:00:00 AM	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.5	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 06:00:00 AM	<1.0	0.0	0.0	0.0	21.0	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 07:00:00 AM	<1.0	0.0	0.0	0.0	21.0	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 08:00:00 AM	<1.0	0.0	0.0	0.0	21.0	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 09:00:00 AM	<1.0	0.0	0.0	0.0	20.8	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 10:00:00 AM	<1.0	0.0	0.0	0.0	21.0	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 11:00:00 AM	0.0	0.0	0.0	0.0	21.2	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 12:00:00 PM	0.0	0.0	0.0	0.0	21.2	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 01:00:00 PM	0.0	0.0	0.0	0.0	21.2	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 02:00:00 PM	0.0	0.0	0.0	0.0	21.2	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 03:00:00 PM	0.0	0.0	0.0	0.0	21.2	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 04:00:00 PM	0.0	0.0	0.0	0.0	21.1	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 05:00:00 PM	0.0	0.0	0.0	0.0	21.1	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 06:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 07:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 08:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 09:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 10:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/07/2013 11:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 12:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 01:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 02:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 03:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 04:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 05:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9

Notes:

Daily Action Summary

December 8, 2013

Sinkhole Perimeter Air Monitoring and Neighborhood ORWs Air Monitoring

- Steven Shaughnessy onsite from 08:05 – 09:20. Changed out the monitors between 08:17 and 08:53. Collected data from the monitoring database and forwarded to Eric Rucinski in the Baton Rouge office for processing.
- Code Red (monitor sub-contractor) onsite for continuous 24/7 monitoring:
 - Britt Barnett onsite from 0:00 to 06:00; 18:00 to 24:00
 - Chad Deshotel onsite from 06:00 to 18:00

Technicians also assisted in battery change outs and maintenance of the monitoring equipment as necessary.

NOTE: The sinkhole monitors are now housed in solar-powered weather boxes; thus, daily monitor change-out not necessary for Pad 9, TR-1a, ORW-11a, ORW-9a, and ORW-5. Monitors will continue to be calibrated and serviced as necessary.

Residential Air Monitoring

- Sage has been requested to suspend bimonthly residential air monitoring. Therefore, Sage will discontinue these activities. The last event was conducted on March 26, 2013.

Gas Seep Sampling

- Not Scheduled

Well Gas Sampling

- Not Scheduled

Under Slab Gas Sampling

- Not Scheduled

Air Indoor Monitoring

- Not Scheduled

Texas Brine - Belle Rose, Louisiana
Hourly Air Monitoring Data
Neighborhood Monitoring

*Time indicates start of time period (ex. 12:00:00 AM gives the time period 12:00:00 AM to 12:59:59 AM)

Date-Time *	Observation Relief Well -49 at the Well Head			Observation Relief Well - 50 at the Well Head			Passive Vent Well -56		
	ORW-49-WH			ORW-50-WH			PVW-BS-56		
	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)
12/08/2013 01:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/08/2013 02:00:00 AM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/08/2013 03:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/08/2013 04:00:00 AM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/08/2013 05:00:00 AM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/08/2013 06:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/08/2013 07:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/08/2013 08:00:00 AM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	21.0
12/08/2013 09:00:00 AM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.9
12/08/2013 10:00:00 AM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.5
12/08/2013 11:00:00 AM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/08/2013 12:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/08/2013 01:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/08/2013 02:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/08/2013 03:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/08/2013 04:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/08/2013 05:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/08/2013 06:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/08/2013 07:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/08/2013 08:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/08/2013 09:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.5
12/08/2013 10:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.5
12/08/2013 11:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/09/2013 12:00:00 AM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4

Notes:

Texas Brine - Belle Rose, Louisiana
Hourly Air Monitoring Data
Sinkhole Perimeter Monitoring

*Time indicates start of time period (ex. 12:00:00 AM gives the time period 12:00:00 AM to 12:59:59 AM)

Date-Time *	Observation Relief Well -5					Observation Relief Well - 9					Observation Relief Well -11					South of OG3A-1					Onsite Trailers				
	ORW-5					ORW-9a					ORW-11a					Pad #9					TR-1a				
	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	SO2 (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)
12/08/2013 01:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 02:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 03:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 04:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 05:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 06:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 07:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 08:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 09:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 10:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 11:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 12:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 01:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 02:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 03:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 04:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 05:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 06:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 07:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 08:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 09:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 10:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 11:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/09/2013 12:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9

Notes:

Texas Brine - Belle Rose, Louisiana
Hourly Air Monitoring Data
Neighborhood Monitoring

*Time indicates start of time period (ex. 12:00:00 AM gives the time period 12:00:00 AM to 12:59:59 AM)

Date-Time *	Observation Relief Well -49 at the Well Head			Observation Relief Well - 50 at the Well Head			Passive Vent Well -56		
	ORW-49-WH			ORW-50-WH			PVW-BS-56		
	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)
12/08/2013 05:00:00 AM	<1.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/08/2013 06:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/08/2013 07:00:00 AM	0.0	0.0	21.0	0.0	0.0	20.9	0.0	0.0	21.0
12/08/2013 08:00:00 AM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	21.0
12/08/2013 09:00:00 AM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.9
12/08/2013 10:00:00 AM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.5
12/08/2013 11:00:00 AM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/08/2013 12:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/08/2013 01:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/08/2013 02:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/08/2013 03:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/08/2013 04:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/08/2013 05:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/08/2013 06:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/08/2013 07:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/08/2013 08:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/08/2013 09:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.5
12/08/2013 10:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.5
12/08/2013 11:00:00 PM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/09/2013 12:00:00 AM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/09/2013 01:00:00 AM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/09/2013 02:00:00 AM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/09/2013 03:00:00 AM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.4
12/09/2013 04:00:00 AM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.5
12/09/2013 05:00:00 AM	0.0	0.0	21.0	0.0	0.0	21.0	0.0	0.0	20.5

Notes:

Texas Brine - Belle Rose, Louisiana
Hourly Air Monitoring Data
Sinkhole Perimeter Monitoring

*Time indicates start of time period (ex. 12:00:00 AM gives the time period 12:00:00 AM to 12:59:59 AM)

Date-Time *	Observation Relief Well -5					Observation Relief Well - 9					Observation Relief Well -11					South of OG3A-1					Onsite Trailers				
	ORW-5					ORW-9a					ORW-11a					Pad #9					TR-1a				
	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	SO2 (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)	CO (ppm)	Non-Methane VOC (ppm)	H2S (ppm)	LEL (%)	O2 (%)
12/08/2013 05:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 06:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 07:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 08:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 09:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 10:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 11:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 12:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 01:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 02:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 03:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 04:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 05:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 06:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 07:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 08:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 09:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 10:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/08/2013 11:00:00 PM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/09/2013 12:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/09/2013 01:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/09/2013 02:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/09/2013 03:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/09/2013 04:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9
12/09/2013 05:00:00 AM	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9

Notes:

RESPEC Consulting & Services

Texas Brine, L.L.C.

Assumption Parish, Louisiana

Daily Field Report

Report By: David Gnage

Date: 12/06/13

Company: RESPEC

Job #: 02241

Personnel	Company	Job Title
Nick Marnach	RESPEC	Staff Engineer

Time Onsite: Start Time: 7:30 End Time: 17:30

DAILY ACTIVITY:

Attended Daily Contractor meeting.

Instrumentation Program:

Set WL offset, azimuth, & trimmed trees site #41. Installed staff gage, set WL offset & installed Yagi antenna site #30. Dug post hole & finished post installation AR 23. Dug post holes AR 38.

Other Programs:

Passive Vent Well Program

Performed volumetric flow test at well GP-56

PROPOSED SCHEDULE:

Instrumentation Program:

Clear trees and verify coordinates site 26. Install survey marking selected sites. Identify/Map berm. Desiccant replacement at all sites. Ensure all sites have identification and install as necessary. Remove NL200 from response trailer. Continue AR reinforcement of sites #23, #28, #38. Verify Lat/Long and clear trees AR sites 22, 26, 60. Install pressure transducer site 89

Other Programs:

No work currently planned.

Initials: DJG

RESPEC Consulting & Services

Texas Brine, L.L.C.

Assumption Parish, Louisiana

Daily Field Report

Report By: David Gnage

Company: RESPEC

Date: 12/07/13

Job #: 02241

Personnel	Company	Job Title
Nick Marnach	RESPEC	Staff Engineer

Time Onsite: Start Time: 7:30 End Time: 17:30

DAILY ACTIVITY:

Attended Daily Contractor meeting.

Instrumentation Program:

Removed NL200, control box, antenna, and all cables from response trailer.

Site #25-Replaced desiccant and added site identification

Site #18-Added reflective survey tape, reinforced, installed stainless hardware, and added site identification

Site #26-Added reflective survey tape, cable ties, reinforced, cut trees, WL=3.84@1:46, coordinates 30°0'27"N, 91°8'44"W

Site #29-Added reflective survey tape, replaced desiccant, WL=3.605@2:22

Site #31-Added reflective survey tape, replaced desiccant, WL=3.64@2:40

Site #54-Replaced desiccant, WL=3.70@2:44

Site #32-Added reflective survey tape, replaced desiccant, WL=3.78@2:57

Site #34-Replaced desiccant, WL=3.30@3:02

Site #36-Added reflective survey tape, replaced desiccant, WL=3.64@3:12

Site#37-Replaced desiccant, WL=3.175@3:24

Mapped Berm

Cemented in posts AR38

Other Programs:

Passive Vent Well Program

Reported findings from initial volumetric flow measurement attempt.

PROPOSED SCHEDULE:

Instrumentation Program:

Visit sites 35 & 60. Reinforce AR sties 23,28, 38. Ensure all sites have identification and install as necessary.

Verify Lat/Long and clear trees AR sites 22, 60. Install pressure transducer site 89

Other Programs:

Visit GP-56 check if gas production has resumed.

Initials: DJG

RESPEC Consulting & Services

Texas Brine, L.L.C.

Assumption Parish, Louisiana

Daily Field Report

Report By: David Gnage

Date: 12/08/13

Company: RESPEC

Job #: 02241

Personnel	Company	Job Title
Nick Marnach	RESPEC	Staff Engineer

Time Onsite: Start Time: 7:30 End Time: 17:30

DAILY ACTIVITY:

Attended Daily Contractor meeting.

Instrumentation Program:

Completed O&M at artificial reflector locations 28 & 23. Was stuck in mud at AR-38 location for a good period of time. Traveled to Gonzales for supplies.

Other Programs:

Passive Vent Well Program

Collected gas sample and estimate of volumetric flow at GP-56.

PROPOSED SCHEDULE:

Instrumentation Program:

Complete O&M at AR38 location. Verify Lat/Long and clear trees AR sites 22, 60. Install pressure transducer site 89. Install survey markers. Demobilize evening of December 9th.

Other Programs:

No work planned.

Initials: DJG

ME&A Daily Action Summary

December 07, 2013

Subsidence Survey:

- No Work Done

Sinkhole Perimeter/Hydrographic Survey:

- No Work Done

Support Sinkhole Cleanup

- No Work Done

Misc. Survey Work

- Arrived @ 8:30 am
- Surveyed Containment Berm Settlement Plates
- Departed @ 10:30 am

ME&A Daily Action Summary

December 08, 2013

Subsidence Survey:

- No Work Done

Sinkhole Perimeter/Hydrographic Survey:

- No Work Done

Support Sinkhole Cleanup

- No Work Done

Misc. Survey Work

- Arrived @ 8:30 am
- Surveyed Containment Berm Settlement Plates
- Departed @ 10:30 am

ME&A Daily Action Summary

December 09, 2013

Subsidence Survey:

- No Work Done

Sinkhole Perimeter/Hydrographic Survey:

- No Work Done

Support Sinkhole Cleanup

- No Work Done

Misc. Survey Work

- Arrived @ 8:00 am
- Surveyed Containment Berm Settlement Plates
- Surveyed South Berm Settlement Rods
- Departed @ 11:30 am