



# Texas Brine Company, LLC

1301 Highway 70  
Belle Rose, LA 70341  
Phone: 985-369-6657  
Fax: 985-369-7873



January 13, 2014

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 (TPC) 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](mailto: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	No Sage personnel onsite, Roxana Dubose (CodeRed) - 07:00 - 17:00; No Sage personnel onsite, Roxana Dubose (CodeRed) - 07:00 - 11:30; 18:20 - 19:50; No Sage personnel onsite, Roxana Dubose (CodeRed) - 07:00 - 12:30	1/10 - 1/12/2014	NA	NA	NA	NA	1/11- 1/13/2014	
	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	1/10 - 1/12/2014	NA	NA	NA	NA	NA	
	Well Gas Sampling	No work performed	1/10 - 1/12/2014	NA	NA	NA	NA	NA	
	Under Slab Gas Sampling	No work performed	1/10 - 1/12/2014	NA	NA	NA	NA	NA	
Respec	Inclinometers/Tilt Meters/Transducers	1/10 - 1/12/2014 General site maintenance and read water levels. / General site maintenance; install survey reflectors; dismantle and recon for moving sites 89 and 33.	Eric Krantz	NA	NA	NA	NA	NA	
	INSAR Reflector Installations	1/10 - 1/12/2014 Clear growth around Ars.	Eric Krantz	NA	NA	NA	NA	NA	
	Subsidence Survey-Fenstermaker	1/10 - 1/12/2014 No work Conducted	NA	NA	NA	NA	NA	NA	
	Shallow Geophone Installation	1/10 - 1/12/2014 No work Conducted	NA	NA	NA	NA	NA	NA	
	Deep Geophone Installation	1/10 - 1/12/2014 No work Conducted	NA	NA	NA	NA	NA	NA	
	Amendment #3, Directive #2	1/10 - 1/12/2014 No work Conducted	NA	NA	NA	NA	NA	NA	
	Expansion of geoprobe gas sampling locations	1/10 - 1/12/2014 No work Conducted	NA	NA	NA	NA	NA	NA	
	DPVE	1/10 - 1/12/2014 No work Conducted	NA	NA	NA	NA	NA	NA	
	Abandon Casing Survey	1/10 - 1/12/2014 No work Conducted	NA	NA	NA	NA	NA	NA	
	Passive Vent Wells	1/10 - 1/12/2014 No work Conducted	NA	NA	NA	NA	NA	NA	
	MIHPT	1/10 - 1/12/2014 No work Conducted	NA	NA	NA	NA	NA	NA	
	Other	1/10 - 1/12/2014 Mapping old berms.	NA	NA	NA	NA	NA	NA	
	Miller	Weekly Stability Survey	NA	1/10-1/12/2014	NA	NA	NA	NA	NA
		Misc. Survey Work	NA	1/10-1/12/2014	NA	NA	NA	NA	NA
Sinkhole Hydro/Perimeter Survey		NA	1/10-1/12/2014	NA	NA	NA	NA	NA	
Pisani	Surface Water	NA	1/6 - 1/10/2014	NA	NA	NA	NA	NA	
	Sinkhole	PMR/ENK	1/6 - 1/10/2014	NA	NA	GCAL	Chloride, Bromide and Sulfate (Inorganic Anions) – SW-846 9056A, Conductivity – SM 2510B, TDS – SM 2540C, Cations/metals – SW-846 6010B, Carbonate & Bicarbonate Alkalinity – SM 2320B, BTEX – SW-846 8260B, TPH Fractions – TX 1006/LA 1006, and Dissolved Gases - RSK-175, Stable isotope analysis	NA	
	Industrial Well Water	PMR	1/6 - 1/10/2014	NA	NA	GCAL	Chloride, Bromide and Sulfate (Inorganic Anions) – SW-846 9056A, Conductivity – SM 2510B, TDS – SM 2540C, Cations/metals – SW-846 6010B, Carbonate & Bicarbonate Alkalinity – SM 2320B, BTEX – SW-846 8260B, TPH Fractions – TX 1006/LA 1006, and Dissolved Gases - RSK-175	NA	
	MRIJA Well Water	NA	1/6 - 1/10/2014	NA	NA	NA	NA	NA	
	GP/ORW Water	NA	1/6 - 1/10/2014	NA	NA	NA	NA	NA	
	Cavern Water	NA	1/6 - 1/10/2014	NA	NA	NA	NA	NA	
	Discharge/Outfall Water	PMR	1/6 - 1/10/2014	NA	NA	GCAL	Oil and Grease, Total BTEX, Toluene, Benzene, Sulfates, 1-3 Dichloropropene	NA	
	Geoprobe Wells	NA	1/6 - 1/10/2014	NA	NA	NA	NA	NA	
Grand Bayou Well 3A									
Daily Operations at 3A									
Summary of Today's events									
Oxy 3A									
1/11 - 1/13/2014	7am	1081.64	1/11/2014						
	7am	1096.64	1/12/2014						
	7am	1104.61	1/13/2014						
Relief Well #1									
See ORW-01 Flare Spreadsheet									

## **Attachments**

## **Daily Action Summary**

**January 10, 2014**

### **Sinkhole Perimeter Air Monitoring and Neighborhood Air Monitoring**

- The following locations are equipped with solar-powered weather boxes: Pad #9, TR-1a, ORW-11a, ORW-9a, ORW-5, and PVW-BS-56a. And, the following locations are equipped with electrical power: ORW-49-WH and ORW-50-WH. Thus, daily monitor change-out is no longer necessary. All monitors will continue to be calibrated and serviced as necessary.
- No Sage personnel onsite.
- Roxana Dubose of Code Red (monitor sub-contractor) onsite from 07:00 to 17:00. Assisted in maintenance of the monitoring equipment 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-56a		
	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)
01/10/2014 01:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 02:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 03:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 04:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 05:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 06:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 07:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 08:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 09:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 10:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 11:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 12:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 01:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 02:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 03:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 04:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 05:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.0
01/10/2014 06:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 07:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 08:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 09:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 10:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 11:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 12:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9

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 (%)
01/10/2014 01:00:00 AM	0.0	<1.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.5	<1.0	0.0	0.0	0.0	20.5	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 02:00:00 AM	0.0	<1.0	0.0	0.0	20.8	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.5	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 03:00:00 AM	0.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 04:00:00 AM	0.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.5	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 05:00:00 AM	0.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.7	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 06:00:00 AM	0.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.7	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 07:00:00 AM	0.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.7	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 08:00:00 AM	0.0	0.0	0.0	0.0	20.7	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.5	<1.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/10/2014 09:00:00 AM	0.0	0.0	0.0	0.0	20.7	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.6	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 10:00:00 AM	0.0	0.0	0.0	0.0	20.8	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 11:00:00 AM	0.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 12:00:00 PM	0.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.5	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 01:00:00 PM	0.0	0.0	0.0	0.0	20.8	0.0	0.0	0.0	0.0	20.7	<1.0	0.0	0.0	0.0	20.4	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 02:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	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	<1.0	0.0	0.0	0.0	20.9
01/10/2014 03:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.6	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 04:00:00 PM	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	20.6	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 05:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.6	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 06:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.6	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 07:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 08:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.5	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 09:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.6	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 10:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.8	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 11:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 12:00:00 AM	0.0	0.0	0.0	0.0	20.7	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	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-56a		
	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)
01/10/2014 05:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 06:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 07:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 08:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 09:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 10:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 11:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 12:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 01:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 02:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 03:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 04:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 05:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.0
01/10/2014 06:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 07:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 08:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 09:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 10:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/10/2014 11:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 12:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 01:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 02:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 03:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 04:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 05:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9

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 (%)
01/10/2014 05:00:00 AM	0.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.7	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 06:00:00 AM	0.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.7	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 07:00:00 AM	0.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.7	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 08:00:00 AM	0.0	0.0	0.0	0.0	20.7	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.5	<1.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/10/2014 09:00:00 AM	0.0	0.0	0.0	0.0	20.7	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.6	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 10:00:00 AM	0.0	0.0	0.0	0.0	20.8	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 11:00:00 AM	0.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 12:00:00 PM	0.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.5	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 01:00:00 PM	0.0	0.0	0.0	0.0	20.8	0.0	0.0	0.0	0.0	20.7	<1.0	0.0	0.0	0.0	20.4	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 02:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	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	<1.0	0.0	0.0	0.0	20.9
01/10/2014 03:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.6	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 04:00:00 PM	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	20.6	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 05:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.6	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 06:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.6	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 07:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 08:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.5	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 09:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.6	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 10:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.8	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/10/2014 11:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 12:00:00 AM	0.0	0.0	0.0	0.0	20.7	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 01:00:00 AM	0.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 02:00:00 AM	0.0	0.0	0.0	0.0	20.8	0.0	0.0	0.0	0.0	20.7	<1.0	0.0	0.0	0.0	20.5	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 03:00:00 AM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.7	<1.0	0.0	0.0	0.0	20.5	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 04:00:00 AM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.7	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 05:00:00 AM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9

Notes:

## Daily Action Summary

January 11, 2014

### Sinkhole Perimeter Air Monitoring and Neighborhood Air Monitoring

- The following locations are equipped with solar-powered weather boxes: Pad #9, TR-1a, ORW-11a, ORW-9a, ORW-5, and PVW-BS-56a. And, the following locations are equipped with electrical power: ORW-49-WH and ORW-50-WH. Thus, daily monitor change-out is no longer necessary. All monitors will continue to be calibrated and serviced as necessary.
- No Sage personnel onsite.
- Roxana Dubose of Code Red (monitor sub-contractor) onsite from 07:00 to 11:30 and 18:20 to 19:50. Assisted in maintenance of the monitoring equipment as necessary.

NOTE: RTU-13, located at ORW-49-WH, went offline from approximately 13:18 to 15:08. Data from this time period was retrieved from the unit's internal data logger. RTU-14, located at ORW-50-WH, went offline from approximately 13:18 PM to 15:12. Data from this time period was retrieved from the unit's internal data logger. RTU-15, located at PVW-BS-56a, went offline from approximately 13:26 to 14:36. The onsite technician is working to retrieve the data from this time period from the unit's internal data logger. A revised report reflecting any change to the hourly averages will be submitted 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-56a		
	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)
01/11/2014 01:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 02:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 03:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 04:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 05:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 06:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 07:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 08:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 09:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 10:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 11:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 12:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.2
01/11/2014 01:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.3
01/11/2014 02:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.3
01/11/2014 03:00:00 PM	<1.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.3
01/11/2014 04:00:00 PM	<1.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.3
01/11/2014 05:00:00 PM	<1.0	0.0	21.2	0.0	0.0	20.9	0.0	0.0	21.3
01/11/2014 06:00:00 PM	0.0	0.0	21.2	0.0	0.0	20.9	0.0	0.0	21.2
01/11/2014 07:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.2
01/11/2014 08:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.2
01/11/2014 09:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.1
01/11/2014 10:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.0
01/11/2014 11:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/12/2014 12:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.0

Notes:  
RTU-13, located at ORW-49-WH, went offline from approximately 01:18 PM to 03:08 PM. Data from this time period was retrieved from the unit's internal data logger.  
RTU-14, located at ORW-50-WH, went offline from approximately 01:18 PM to 03:12 PM. Data from this time period was retrieved from the unit's internal data logger.  
RTU-15, located at PVW-BS-56a, went offline from approximately 01:26 PM to 02:36 PM. The onsite technician is working to retrieve the data from this time period from the unit's internal data logger. A revised report reflecting any change to the hourly averages will be submitted as necessary.

**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 (%)
01/11/2014 01:00:00 AM	0.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 02:00:00 AM	0.0	0.0	0.0	0.0	20.8	0.0	0.0	0.0	0.0	20.7	<1.0	0.0	0.0	0.0	20.5	<1.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 03:00:00 AM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.7	<1.0	0.0	0.0	0.0	20.5	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 04:00:00 AM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.7	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 05:00:00 AM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 06:00:00 AM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.7	0.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 07:00:00 AM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.8	<1.0	0.0	0.0	0.0	20.6	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 08:00:00 AM	0.0	0.0	0.0	0.0	20.8	0.0	0.0	0.0	0.0	20.8	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 09:00:00 AM	0.0	0.0	0.0	0.0	20.8	0.0	0.0	0.0	0.0	20.8	<1.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 10:00:00 AM	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	0.0	0.0	0.0	0.0	20.8	<1.0	0.0	0.0	0.0	20.9
01/11/2014 11:00:00 AM	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	0.0	0.0	0.0	0.0	20.7	<1.0	0.0	0.0	0.0	20.9
01/11/2014 12:00:00 PM	0.0	0.0	0.0	0.0	21.0	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	<1.0	0.0	20.8	<1.0	0.0	0.0	0.0	20.9
01/11/2014 01:00:00 PM	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	<1.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 02:00:00 PM	0.0	0.0	0.0	0.0	21.3	0.0	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	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 03:00:00 PM	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	21.1	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 04:00:00 PM	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	21.2	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 05:00:00 PM	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	21.0	0.0	0.0	0.0	0.0	21.2	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/11/2014 06:00:00 PM	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	21.2	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/11/2014 07:00:00 PM	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	<1.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/11/2014 08:00:00 PM	<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	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/11/2014 09:00:00 PM	<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	21.0	<1.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/11/2014 10:00:00 PM	<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	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/11/2014 11:00:00 PM	<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	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/12/2014 12:00:00 AM	<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	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	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-56a		
	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)
01/11/2014 05:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 06:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 07:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 08:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 09:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 10:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 11:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/11/2014 12:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.2
01/11/2014 01:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.3
01/11/2014 02:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.3
01/11/2014 03:00:00 PM	<1.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.3
01/11/2014 04:00:00 PM	<1.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.3
01/11/2014 05:00:00 PM	<1.0	0.0	21.2	0.0	0.0	20.9	0.0	0.0	21.3
01/11/2014 06:00:00 PM	0.0	0.0	21.2	0.0	0.0	20.9	0.0	0.0	21.2
01/11/2014 07:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.2
01/11/2014 08:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.2
01/11/2014 09:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.1
01/11/2014 10:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.0
01/11/2014 11:00:00 PM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/12/2014 12:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.0
01/12/2014 01:00:00 AM	<1.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.0
01/12/2014 02:00:00 AM	<1.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/12/2014 03:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/12/2014 04:00:00 AM	<1.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/12/2014 05:00:00 AM	<1.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9

Notes:  
RTU-13, located at ORW-49-WH, went offline from approximately 01:18 PM to 03:08 PM. Data from this time period was retrieved from the unit's internal data logger.  
RTU-14, located at ORW-50-WH, went offline from approximately 01:18 PM to 03:12 PM. Data from this time period was retrieved from the unit's internal data logger.  
RTU-15, located at PVW-BS-56a, went offline from approximately 01:26 PM to 02:36 PM. The onsite technician is working to retrieve the data from this time period from the unit's internal data logger. A revised report reflecting any change to the hourly averages will be submitted as necessary.

**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 (%)
01/11/2014 05:00:00 AM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.6	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 06:00:00 AM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.7	0.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 07:00:00 AM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.8	<1.0	0.0	0.0	0.0	20.6	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 08:00:00 AM	0.0	0.0	0.0	0.0	20.8	0.0	0.0	0.0	0.0	20.8	<1.0	0.0	0.0	0.0	20.5	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 09:00:00 AM	0.0	0.0	0.0	0.0	20.8	0.0	0.0	0.0	0.0	20.8	<1.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 10:00:00 AM	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	0.0	0.0	0.0	0.0	20.8	<1.0	0.0	0.0	0.0	20.9
01/11/2014 11:00:00 AM	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	0.0	0.0	0.0	0.0	20.7	<1.0	0.0	0.0	0.0	20.9
01/11/2014 12:00:00 PM	0.0	0.0	0.0	0.0	21.0	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	0.0	0.0	<1.0	0.0	20.8	<1.0	0.0	0.0	0.0	20.9
01/11/2014 01:00:00 PM	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	<1.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 02:00:00 PM	0.0	0.0	0.0	0.0	21.3	0.0	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	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 03:00:00 PM	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	21.1	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 04:00:00 PM	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	21.2	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/11/2014 05:00:00 PM	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	21.0	0.0	0.0	0.0	0.0	21.2	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/11/2014 06:00:00 PM	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	21.2	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/11/2014 07:00:00 PM	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	<1.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/11/2014 08:00:00 PM	<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	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/11/2014 09:00:00 PM	<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	21.0	<1.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/11/2014 10:00:00 PM	<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	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/11/2014 11:00:00 PM	<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	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/12/2014 12:00:00 AM	<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	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/12/2014 01:00:00 AM	<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	<1.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/12/2014 02:00:00 AM	<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	<1.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/12/2014 03:00:00 AM	<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	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/12/2014 04:00:00 AM	<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	<1.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/12/2014 05:00:00 AM	<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	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9

Notes:

## **Daily Action Summary**

**January 12, 2014**

### **Sinkhole Perimeter Air Monitoring and Neighborhood Air Monitoring**

- The following locations are equipped with solar-powered weather boxes: Pad #9, TR-1a, ORW-11a, ORW-9a, ORW-5, and PVW-BS-56a. And, the following locations are equipped with electrical power: ORW-49-WH and ORW-50-WH. Thus, daily monitor change-out is no longer necessary. All monitors will continue to be calibrated and serviced as necessary.
- No Sage personnel onsite.
- Roxana Dubose of Code Red (monitor sub-contractor) onsite from 07:00 to 12:30. Assisted in maintenance of the monitoring equipment 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-56a		
	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)
01/12/2014 01:00:00 AM	<1.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	21.0
01/12/2014 02:00:00 AM	<1.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/12/2014 03:00:00 AM	0.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/12/2014 04:00:00 AM	<1.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/12/2014 05:00:00 AM	<1.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/12/2014 06:00:00 AM	<1.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/12/2014 07:00:00 AM	<1.0	0.0	20.7	0.0	0.0	20.9	0.0	0.0	20.9
01/12/2014 08:00:00 AM	<1.0	0.0	20.6	0.0	0.0	20.8	0.0	0.0	20.9
01/12/2014 09:00:00 AM	<1.0	0.0	20.9	<1.0	0.0	20.8	0.0	0.0	20.9
01/12/2014 10:00:00 AM	0.0	0.0	20.9	<1.0	0.0	20.9	0.0	0.0	20.9
01/12/2014 11:00:00 AM	0.0	0.0	21.2	<1.0	0.0	20.9	0.0	0.0	20.9
01/12/2014 12:00:00 PM	0.0	0.0	21.2	<1.0	0.0	20.9	0.0	0.0	20.9
01/12/2014 01:00:00 PM	0.0	0.0	21.2	<1.0	0.0	21.2	0.0	0.0	20.9
01/12/2014 02:00:00 PM	<1.0	0.0	21.0	0.0	0.0	21.2	0.0	0.0	20.9
01/12/2014 03:00:00 PM	<1.0	0.0	21.4	<1.0	0.0	21.2	0.0	0.0	20.9
01/12/2014 04:00:00 PM	<1.0	0.0	21.4	0.0	0.0	21.2	0.0	0.0	20.9
01/12/2014 05:00:00 PM	0.0	0.0	21.5	<1.0	0.0	21.2	0.0	0.0	20.9
01/12/2014 06:00:00 PM	0.0	0.0	21.5	<1.0	0.0	21.2	0.0	0.0	20.9
01/12/2014 07:00:00 PM	0.0	0.0	21.3	<1.0	0.0	21.2	0.0	0.0	20.9
01/12/2014 08:00:00 PM	0.0	0.0	21.2	<1.0	0.0	21.2	0.0	0.0	20.9
01/12/2014 09:00:00 PM	0.0	0.0	21.2	<1.0	0.0	21.1	0.0	0.0	20.9
01/12/2014 10:00:00 PM	0.0	0.0	21.1	<1.0	0.0	21.0	0.0	0.0	20.9
01/12/2014 11:00:00 PM	0.0	0.0	21.0	<1.0	0.0	20.9	0.0	0.0	20.9
01/13/2014 12:00:00 AM	0.0	0.0	20.9	<1.0	0.0	20.9	0.0	0.0	20.9

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 (%)
01/12/2014 01:00:00 AM	<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	<1.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/12/2014 02:00:00 AM	<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	<1.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/12/2014 03:00:00 AM	<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	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/12/2014 04:00:00 AM	<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	<1.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/12/2014 05:00:00 AM	<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	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/12/2014 06:00:00 AM	<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	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/12/2014 07:00:00 AM	<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	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.7
01/12/2014 08:00:00 AM	<1.0	0.0	0.0	0.0	20.8	0.0	0.0	<1.0	0.0	20.7	<1.0	0.0	0.0	0.0	20.6	0.0	<1.0	0.0	0.0	20.5	<1.0	0.0	0.0	0.0	20.6
01/12/2014 09:00:00 AM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	<1.0	0.0	20.9	0.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.5	<1.0	0.0	0.0	0.0	20.9
01/12/2014 10:00:00 AM	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	<1.0	0.0	20.9	<1.0	0.0	<1.0	0.0	20.9	0.0	<1.0	<1.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/12/2014 11:00:00 AM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	21.3	<1.0	0.0	<1.0	0.0	20.9	0.0	<1.0	<1.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/12/2014 12:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	21.3	<1.0	0.0	<1.0	0.0	20.9	<1.0	<1.0	<1.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/12/2014 01:00:00 PM	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	21.3	<1.0	0.0	<1.0	0.0	20.9	<1.0	<1.0	<1.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/12/2014 02:00:00 PM	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	21.0	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/12/2014 03:00:00 PM	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	21.2	0.0	<1.0	0.0	0.0	21.0	<1.0	0.0	0.0	0.0	20.9
01/12/2014 04:00:00 PM	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	21.2	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	21.1
01/12/2014 05:00:00 PM	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	21.1	0.0	0.0	0.0	0.0	21.1	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	21.2
01/12/2014 06:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	21.1
01/12/2014 07:00:00 PM	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	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/12/2014 08:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/12/2014 09:00:00 PM	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	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/12/2014 10:00:00 PM	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	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/12/2014 11:00:00 PM	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	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/13/2014 12:00:00 AM	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	0.0	<1.0	0.0	0.0	20.9	<1.0	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-56a		
	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)	H2S (ppm)	LEL (%)	O2 (%)
01/12/2014 05:00:00 AM	<1.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/12/2014 06:00:00 AM	<1.0	0.0	20.9	0.0	0.0	20.9	0.0	0.0	20.9
01/12/2014 07:00:00 AM	<1.0	0.0	20.7	0.0	0.0	20.9	0.0	0.0	20.9
01/12/2014 08:00:00 AM	<1.0	0.0	20.6	0.0	0.0	20.8	0.0	0.0	20.9
01/12/2014 09:00:00 AM	<1.0	0.0	20.9	<1.0	0.0	20.8	0.0	0.0	20.9
01/12/2014 10:00:00 AM	0.0	0.0	20.9	<1.0	0.0	20.9	0.0	0.0	20.9
01/12/2014 11:00:00 AM	0.0	0.0	21.2	<1.0	0.0	20.9	0.0	0.0	20.9
01/12/2014 12:00:00 PM	0.0	0.0	21.2	<1.0	0.0	20.9	0.0	0.0	20.9
01/12/2014 01:00:00 PM	0.0	0.0	21.2	<1.0	0.0	21.2	0.0	0.0	20.9
01/12/2014 02:00:00 PM	<1.0	0.0	21.0	0.0	0.0	21.2	0.0	0.0	20.9
01/12/2014 03:00:00 PM	<1.0	0.0	21.4	<1.0	0.0	21.2	0.0	0.0	20.9
01/12/2014 04:00:00 PM	<1.0	0.0	21.4	0.0	0.0	21.2	0.0	0.0	20.9
01/12/2014 05:00:00 PM	0.0	0.0	21.5	<1.0	0.0	21.2	0.0	0.0	20.9
01/12/2014 06:00:00 PM	0.0	0.0	21.5	<1.0	0.0	21.2	0.0	0.0	20.9
01/12/2014 07:00:00 PM	0.0	0.0	21.3	<1.0	0.0	21.2	0.0	0.0	20.9
01/12/2014 08:00:00 PM	0.0	0.0	21.2	<1.0	0.0	21.2	0.0	0.0	20.9
01/12/2014 09:00:00 PM	0.0	0.0	21.2	<1.0	0.0	21.1	0.0	0.0	20.9
01/12/2014 10:00:00 PM	0.0	0.0	21.1	<1.0	0.0	21.0	0.0	0.0	20.9
01/12/2014 11:00:00 PM	0.0	0.0	21.0	<1.0	0.0	20.9	0.0	0.0	20.9
01/13/2014 12:00:00 AM	0.0	0.0	20.9	<1.0	0.0	20.9	0.0	0.0	20.9
01/13/2014 01:00:00 AM	0.0	0.0	20.9	<1.0	0.0	20.9	0.0	0.0	20.9
01/13/2014 02:00:00 AM	0.0	0.0	20.9	<1.0	0.0	20.9	0.0	0.0	20.9
01/13/2014 03:00:00 AM	0.0	0.0	20.9	<1.0	0.0	20.9	0.0	0.0	20.9
01/13/2014 04:00:00 AM	0.0	0.0	20.9	<1.0	0.0	20.9	0.0	0.0	20.9
01/13/2014 05:00:00 AM	0.0	0.0	20.9	<1.0	0.0	20.9	0.0	0.0	20.9

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 (%)
01/12/2014 05:00:00 AM	<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	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/12/2014 06:00:00 AM	<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	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.9
01/12/2014 07:00:00 AM	<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	0.0	<1.0	0.0	0.0	20.9	<1.0	<1.0	0.0	0.0	20.7
01/12/2014 08:00:00 AM	<1.0	0.0	0.0	0.0	20.8	0.0	0.0	<1.0	0.0	20.7	<1.0	0.0	0.0	0.0	20.6	0.0	<1.0	0.0	0.0	20.5	<1.0	0.0	0.0	0.0	20.6
01/12/2014 09:00:00 AM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	<1.0	0.0	20.9	0.0	0.0	0.0	0.0	20.6	0.0	0.0	0.0	0.0	20.5	<1.0	0.0	0.0	0.0	20.9
01/12/2014 10:00:00 AM	<1.0	0.0	0.0	0.0	20.9	0.0	0.0	<1.0	0.0	20.9	<1.0	0.0	<1.0	0.0	20.9	0.0	<1.0	<1.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/12/2014 11:00:00 AM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	21.3	<1.0	0.0	<1.0	0.0	20.9	0.0	<1.0	<1.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/12/2014 12:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	21.3	<1.0	0.0	<1.0	0.0	20.9	<1.0	<1.0	<1.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/12/2014 01:00:00 PM	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	21.3	<1.0	0.0	<1.0	0.0	20.9	<1.0	<1.0	<1.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/12/2014 02:00:00 PM	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	21.0	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/12/2014 03:00:00 PM	0.0	0.0	0.0	0.0	21.3	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	21.2	0.0	<1.0	0.0	0.0	21.0	<1.0	0.0	0.0	0.0	20.9
01/12/2014 04:00:00 PM	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	21.2	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	21.1
01/12/2014 05:00:00 PM	0.0	0.0	0.0	0.0	21.2	0.0	0.0	0.0	0.0	21.1	0.0	0.0	0.0	0.0	21.1	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	21.2
01/12/2014 06:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	21.1
01/12/2014 07:00:00 PM	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	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/12/2014 08:00:00 PM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/12/2014 09:00:00 PM	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	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/12/2014 10:00:00 PM	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	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/12/2014 11:00:00 PM	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	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/13/2014 12:00:00 AM	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	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/13/2014 01:00:00 AM	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	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/13/2014 02:00:00 AM	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	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/13/2014 03:00:00 AM	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	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/13/2014 04:00:00 AM	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	0.0	<1.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9
01/13/2014 05:00:00 AM	0.0	0.0	0.0	0.0	20.9	0.0	0.0	0.0	0.0	20.9	<1.0	0.0	0.0	0.0	20.9	0.0	<1.0	0.0	0.0	20.9	<1.0	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: Crystal Hocking

Date: 1/10/2014

Company: RESPEC

Job #: 2241

<b>Personnel</b>	<b>Company</b>	<b>Job Title</b>
Eric Krantz	RESPEC	Staff Engineer

**Time Onsite:** Start Time: NA End Time: NA

**DAILY ACTIVITY:**

No Field Work Conducted.

**Instrumentation Program:**

Trip to Gonzales to purchase supplies.

**Other Programs:**

*Passive Vent-GP-56:* No work conducted by RESPEC.

**PROPOSED SCHEDULE:**

**Instrumentation Program:**

Planned general site maintenance visits and battery checks/change. Replace the transducer at Rig Access Road water level site. Visit and adjust radio communication system at sites 30, 36, and 41. Continue mapping berms.

**Other Programs:**

*Passive Vent Wells:* RESPEC will work with WHE and TBC to begin demobilizing the barge from PVW-56 (located near the former location of NSDBS-056). **Tentative** PVW installation in Bayou Corne community may start Thursday 1/16/14.

Initials: CMH

**RESPEC Consulting & Services**

Texas Brine, L.L.C.

Assumption Parish, Louisiana

Daily Field Report

Report By: Crystal Hocking

Date: 1/11/2014

Company: RESPEC

Job #: 2241

<b>Personnel</b>	<b>Company</b>	<b>Job Title</b>
Eric Krantz	RESPEC	Staff Engineer

**Time Onsite:** Start Time: 9:30 End Time: 16:00

**DAILY ACTIVITY:**

**Instrumentation Program:**

Performed general site maintenance (battery checks, padlocks, replace desiccant, adjust antennas, adjust solar panels, trim trees). Read water levels at site 52, 22, 21, 55, 53, 40, 50, 48, 44, 11. Added battery capacity at site 21.

**Other Programs:**

Passive Vent-GP-56: No work conducted by RESPEC.

**PROPOSED SCHEDULE:**

**Instrumentation Program:**

Replace the transducer at Rig Access Road water level site. Continue mapping berms.

**Other Programs:**

Passive Vent Wells: RESPEC will work with WHE and TBC to begin demobilizing the barge from PVW-56 (located near the former location of NSDBS-056). **Tentative** PVW installation in Bayou Corne community may start Thursday 1/16/14.

Initials: CMH

**RESPEC Consulting & Services**

Texas Brine, L.L.C.

Assumption Parish, Louisiana

Daily Field Report

Report By: Crystal Hocking

Date: 1/12/2014

Company: RESPEC

Job #: 2241

<b>Personnel</b>	<b>Company</b>	<b>Job Title</b>
Eric Krantz	RESPEC	Staff Engineer

**Time Onsite:** Start Time: 8:30 End Time: 15:00

**DAILY ACTIVITY:**

**Instrumentation Program:**

Clear growth around ARs. Continue general site maintenance. Installed survey reflectors on all sites within the sinkhole berm and site 59. Dismantle site 89 in preparation to move site. Recon for moving sites 89 and 33.

**Other Programs:**

*Berm Mapping:* No work conducted.

*Passive Vent-GP-56:* No work conducted by RESPEC.

**PROPOSED SCHEDULE:**

**Instrumentation Program:**

Finish general site maintenance on sites south and west of the berm. Install structures and move equipment for sites 33 and 89. Test radio and modem for deep array IPIs.

**Other Programs:**

*Passive Vent Wells:* RESPEC will work with WHE and TBC to begin demobilizing the barge from PVW-56 (located near the former location of NSDBS-056). **Tentative** PVW installation in Bayou Corne community may start Thursday 1/16/14. **Tentative** installation of deep array inclinometers 1/22/14.

*Berm Mapping:* Finish mapping berms west of sinkhole.

Initials: CMH

**Michael Pisani & Associates**  
**Texas Brine, L.L.C.**  
**Assumption Parish, Louisiana**  
**Daily Field Report**

Report By: Patrick Ritchie  
 Company: MP&A

Date: 1/6/2014  
 Work Order # 80-05

Health and Safety Meeting  YES  NO

Weather: \_\_\_\_\_

Personnel	Company	Job Title

Site Activities: Start Time \_\_\_\_\_ End Time \_\_\_\_\_

**Equipment On-site:**

  
  

**Daily Activity:**  
 No Field Activities

  
  
  
  
  
  
  
  
  
  

**Estimated time of completion:**  
 On-going

**Proposed schedule:**  
 Measure pressure and water level at TBC Geoprobe locations (2x/month)  
 Collect laboratory samples from MRAA and industrial water wells (monthly)  
 Observe, video, measure bubble sites (monthly)  
 Collect laboratory samples from surface water (monthly)  
 Collect sinkhole profile and laboratory samples (monthly)  
 Conduct in-situ monitoring of industrial water wells  
 Measure water level for the industrial water wells and MRAA wells and download transducer data

**Estimated time of completion:**  
 On-going

Initials: PMR



**Michael Pisani & Associates**  
**Texas Brine, L.L.C.**  
**Assumption Parish, Louisiana**  
**Daily Field Report**

Report By: Patrick Ritchie  
 Company: MP&A

Date: 1/7/2014  
 Work Order # 80-05

Health and Safety Meeting  YES  NO

Weather: 27F Cold, mostly cloudy

Personnel	Company	Job Title
Patrick Ritchie	MPA	Environmental Scientist
John McGuire	MPA	Environmental Scientist

Site Activities: Start Time 8:30 End Time 15:25

**Equipment On-site:** Airboat

**Daily Activity:**  
 Collect laboratory samples from outfall location  
 Conduct in-situ monitoring of industrial water wells  
 Measure water level for the industrial water wells and MRAA wells and download transducer data  
 Observe, video, measure bubble sites

**Estimated time of completion:**  
 On-going

**Proposed schedule:**  
 Measure pressure and water level at TBC Geoprobe locations (2x/month)  
 Collect laboratory samples from MRAA and industrial water wells (monthly)  
 Observe, video, measure bubble sites (monthly)  
 Collect laboratory samples from surface water (monthly)  
 Collect sinkhole profile and laboratory samples (monthly)  
 Conduct in-situ monitoring of industrial water wells  
 Measure water level for the industrial water wells and MRAA wells and download transducer data

**Estimated time of completion:**  
 On-going

Initials: PMR

**Michael Pisani & Associates**  
**Texas Brine, L.L.C.**  
**Assumption Parish, Louisiana**  
**Daily Field Report**

Report By: Patrick Ritchie  
 Company: MP&A

Date: 1/8/2014  
 Work Order # 80-05

Health and Safety Meeting  YES  NO

Weather: 26F Cold, clear, sunny

Personnel	Company	Job Title
Patrick Ritchie	MPA	Environmental Scientist
John McGuire	MPA	Environmental Scientist
Eric Kochen	MPA	Environmental Scientist
Tobyn Celler	MPA	Environmental Scientist

Site Activities: Start Time 7:00 End Time 15:30

**Equipment On-site:** Airboats

**Daily Activity:**  
 Collect sinkhole profile and laboratory samples  
 Observe, video, measure bubble sites

**Estimated time of completion:**  
 On-going

**Proposed schedule:**  
 Measure pressure and water level at TBC Geoprobe locations (2x/month)  
 Collect laboratory samples from MRAA and industrial water wells (monthly)  
 Observe, video, measure bubble sites (monthly)  
 Collect laboratory samples from surface water (monthly)  
 Collect sinkhole profile and laboratory samples (monthly)  
 Conduct in-situ monitoring of industrial water wells  
 Measure water level for the industrial water wells and MRAA wells and download transducer data

**Estimated time of completion:**  
 On-going

Initials: PMR

**Michael Pisani & Associates**  
**Texas Brine, L.L.C.**  
**Assumption Parish, Louisiana**  
**Daily Field Report**

Report By: Patrick Ritchie  
 Company: MP&A

Date: 1/9/2014  
 Work Order # 80-05

Health and Safety Meeting  YES  NO

Weather: 46F Cold, mostly cloudy

Personnel	Company	Job Title
Patrick Ritchie	MPA	Environmental Scientist

Site Activities: Start Time 9:00 End Time 15:30

**Equipment On-site:**

**Daily Activity:**  
 Measure pressure and water level at TBC Geoprobe locations  
 Measure pressure and water level at CBI Geoprobe locations

**Estimated time of completion:**  
 On-going

**Proposed schedule:**  
 Measure pressure and water level at TBC Geoprobe locations (2x/month)  
 Collect laboratory samples from MRAA and industrial water wells (monthly)  
 Observe, video, measure bubble sites (monthly)  
 Collect laboratory samples from surface water (monthly)  
 Collect sinkhole profile and laboratory samples (monthly)  
 Conduct in-situ monitoring of industrial water wells  
 Measure water level for the industrial water wells and MRAA wells and download transducer data

**Estimated time of completion:**  
 On-going

Initials: PMR

**Michael Pisani & Associates**  
**Texas Brine, L.L.C.**  
**Assumption Parish, Louisiana**  
**Daily Field Report**

Report By: Patrick Ritchie  
 Company: MP&A

Date: 1/10/2014  
 Work Order # 80-05

Health and Safety Meeting  YES  NO

Weather: 65F Humid, mostly cloudy

Personnel	Company	Job Title
Patrick Ritchie	MPA	Environmental Scientist

Site Activities: Start Time 12:15 End Time 14:30

**Equipment On-site:**

**Daily Activity:**  
 Collect laboratory samples from industrial water wells  
 Measure water level for the industrial water wells  
 Conduct in-situ monitoring of industrial water wells

**Estimated time of completion:**  
 On-going

**Proposed schedule:**  
 Measure pressure and water level at TBC Geoprobe locations (2x/month)  
 Collect laboratory samples from MRAA and industrial water wells (monthly)  
 Observe, video, measure bubble sites (monthly)  
 Collect laboratory samples from surface water (monthly)  
 Collect sinkhole profile and laboratory samples (monthly)  
 Conduct in-situ monitoring of industrial water wells  
 Measure water level for the industrial water wells and MRAA wells and download transducer data

**Estimated time of completion:**  
 On-going

Initials: PMR