Texas Brine Company, LLC
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May 30, 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 (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, 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 | Eric Rucinski - 07:55 - 09:05<br>Pete Hyatt IV (Code Red) - 07:00 - 17:00 | 5/29/2013 | NA | NA | NA | AreaRAE Monitors | 5/30/2013 | |
| | 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 | Steve Shaughnessy<br>NSDBS-49: 11:27 | 5/22/2013 | Yes (via Accutest courier | Yes | SPL | Sulfur | 5/30/2013 | |
| | Well Gas Sampling | Steve Shaughnessy<br>GPBS-15: 12:41 (5/21)<br>GPBS-20: 13:32 (5/22)<br>GPBS-26: 10:05 (5/22)<br>NSDMW015: 14:15 (5/22) | 5/21/2013<br>5/22/2013 | Yes (via Accutest courier service) | Yes | SPL | Sulfur | 5/30/2013 | |
| | Under Slab Gas Sampling | No work performed | 5/29/2013 | NA | NA | NA | NA | NA | |
| | Indoor Air Monitoring | No work performed | 5/29/2013 | NA | NA | NA | NA | NA | |
| Respec | Inclinometers/Tilt Meters | 5/29/2013 No Samples Collected | NA NA | NA | NA | NA | NA | NA | |
| | InSAR Reflector Installations | 5/29/2013 No Samples Collected | NA NA | NA | NA | NA | NA | NA | |
| | Subsidence Survey-Fenstermaker | 5/29/2013 No Samples Collected | NA NA | NA | NA | NA | NA | NA | |
| | Shallow Geophone Installation | 5/29/2013 No Samples Collected | NA NA | NA | NA | NA | NA | NA | |
| | Deep Geophone Installation | 5/29/2013 No Samples Collected | NA NA | NA | NA | NA | NA | NA | |
| | Amendment #3, Directive #2 | 5/29/2013 No Samples Collected | NA NA | NA | NA | NA | NA | NA | |
| | Expansion of geoprobe gas sampling locations | 5/29/2013 No Samples Collected | NA NA | NA | NA | NA | NA | NA | |
| Miller | Weekly Stability Survey | Herschel Sauce | May 29, 2013 | NA | NA | NA | NA | NA | |
| | Misc. Survey Work | Herschel Sauce | May 29, 2013 | NA | NA | NA | NA | NA | |
| | Sinkhole Hydro/Perimeter Survey | No Work Performed | May 29, 2013 | NA | NA | NA | NA | NA | |
| Pisani | Surface Water | NA | NA | NA | NA | NA | NA | NA | |
| | Industrial Well Water | NA | NA | NA | NA | NA | NA | NA | |
| | MRAAWell Water | 5/29/2013 GP-ORW-17, GP-BS-20, GP-BS-35 | PR PR | 5/29/2013 | | | | Isotech | DGW |
| | Geoprobe Wells | NA | NA | NA | NA | NA | NA | NA | |

| Grand Bayou Well 3A | | |
|---|---|---|
| Daily Operations at 3A | Summary of Today's events | |
| | Oxy 3A | |
| 5/30/2013 | 7am<br>540.94 | 5/30/2013 |
| | Relief Well #1 | |
| 5/30/2013 | See ORW-01 Flare Spreadsheet | |

# Attachments

**Daily Action Summary**

**May 29, 2013**

## Stationary Air Monitoring

- Eric Rucinski onsite from 07:55 – 09:05. Changed out the monitors between 08:17 and 08:44. Collected data from the monitoring database and forwarded to Jill Martin in the Baton Rouge office for processing.

- Pete Hyatt IV of Code Red (monitor sub-contractor) onsite from 07:00 to 17:00. Assisted in battery change outs and maintenance of the monitoring equipment.

## 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

- SPL provided the sulfur analytical results of the following gas seep sample collected on May 22, 2013 as part of the MRAA Sampling Program:

    - NSDBS-49

  SPL additionally conducted LHG analysis on the gas seep sample and provided those results. Isotopic analytical results are not yet available.

## Well Gas Sampling

- SPL provided the sulfur analytical results of the following well gas samples collected on May 21 - May 22, 2013 as part of the MRAA Sampling Program:

    - GPBS-15
    - GPBS-20
    - GPBS-26
    - NSDMW015

  SPL additionally conducted LHG analysis on the well gas samples and provided those results. Isotopic analytical results are not yet available.

## Under Slab Gas Sampling

- Not Scheduled

**Air Indoor Monitoring**

- Not Scheduled

**Texas Brine - Belle Rose, Louisiana**
**Gas Seep Sampling Results - MRAA Sampling Events**

| | **NSDBS-49** |
|---|---|
| | **Sample Date: May 22, 2013** |
| **LHG Constituents** | |
| **SPL Sample ID** | **BS-49B** |
| **Pollutant** | **Mol %** |
| Nitrogen | 9.865 |
| Carbon Dioxide | 1.928 |
| Methane | 85.225 |
| Ethane | 2.229 |
| Propane | 0.433 |
| Iso-butane | 0.100 |
| n-Butane | 0.091 |
| Iso-pentane | 0.046 |
| n-Pentane | 0.025 |
| Hexanes | 0.026 |
| Heptanes+ | 0.032 |
| **Sulfides** | |
| **SPL Sample ID** | **BS-49B** |
| **Pollutant** | **$ppm_w$** |
| Hydrogen Sulfide | <1.0 |
| Carbonyl Sulfide | <1.0 |
| Dimethyl Sulfide | ND |
| Methyl Ethyl Sulfide | ND |
| Diethyl Sulfide | ND |
| Di-iso-propyl Sulfide | ND |
| Di-n-propyl Sulfide | ND |
| Di-iso-butyl Sulfide | ND |
| Di-sec-butyl Sulfide | ND |
| Di-tert-butyl Sulfide | ND |
| Di-n-butyl Sulfide | ND |
| Unknown Sulfides | ND |
| Methyl Mercaptan | ND |
| Ethyl Mercaptan | ND |
| Isopropyl Mercaptan | ND |
| n-Propyl Mercaptan | ND |
| Isobutyl Mercaptan | ND |
| sec-Butyl Mercaptan | ND |
| tert-Butyl Mercaptan | ND |
| n-Butyl Mercaptan | ND |
| Isoamyl Mercaptan | ND |
| pri-Amyl Mercaptan | ND |
| n-Amyl Mercaptan | ND |
| Carbon Disulfide | ND |
| Dimethyl Disulfide | ND |
| Methyl Ethyl Disulfide | ND |
| Diethyl Disulfide | ND |
| Di-iso-propyl Disulfide | ND |
| Di-n-propyl Disulfide | ND |
| Di-iso-butyl Disulfide | ND |
| Di-sec-butyl Disulfide | ND |
| Di-tert-butyl Disulfide | ND |
| Di-n-butyl Disulfide | ND |
| Unknown Disulfides | ND |
| Thiophene | ND |
| Thiophane | ND |

**Texas Brine - Belle Rose, Louisiana**
**Well Gas Sampling Results - MRAA Sampling Events**

| | GPBS-15 | GPBS-26 | GPBS-20 | NSDMW015 |
|---|---|---|---|---|
| | Sample Date: May 21, 2013 | Sample Date: May 22, 2013 | Sample Date: May 22, 2013 | Sample Date: May 22, 2013 |
| **LHG Constituents** | | | | |
| **SPL Sample ID** | GPBS-15W | GPBS-26W | GPBS-20W | NSDMWO15W |
| **Pollutant** | Mol % | Mol % | Mol % | Mol % |
| Nitrogen | 3.469 | 3.048 | 3.769 | 3.404 |
| Carbon Dioxide | 2.601 | 5.728 | 2.560 | 3.658 |
| Methane | 90.813 | 88.812 | 90.318 | 89.784 |
| Ethane | 2.353 | 1.760 | 2.460 | 2.224 |
| Propane | 0.449 | 0.402 | 0.550 | 0.617 |
| Iso-butane | 0.101 | 0.106 | 0.133 | 0.166 |
| n-Butane | 0.092 | 0.070 | 0.109 | 0.106 |
| Iso-pentane | 0.045 | 0.034 | 0.050 | 0.032 |
| n-Pentane | 0.025 | 0.016 | 0.024 | 0.009 |
| Hexanes | 0.027 | 0.016 | 0.020 | ND |
| Heptanes+ | 0.025 | 0.008 | 0.007 | ND |
| **Sulfides** | | | | |
| **SPL Sample ID** | GPBS-15W | GPBS-15W | GPBS-20W | NSDMWO15W |
| **Pollutant** | $ppm_w$ | $ppm_w$ | $ppm_w$ | $ppm_w$ |
| Hydrogen Sulfide | <1.0 | 1.5 | <1.0 | <1.0 |
| Carbonyl Sulfide | <1.0 | <1.0 | ND | <1.0 |
| Dimethyl Sulfide | ND | ND | ND | ND |
| Methyl Ethyl Sulfide | ND | ND | ND | ND |
| Diethyl Sulfide | ND | ND | ND | ND |
| Di-iso-propyl Sulfide | ND | ND | ND | ND |
| Di-n-propyl Sulfide | ND | ND | ND | ND |
| Di-iso-butyl Sulfide | ND | ND | ND | ND |
| Di-sec-butyl Sulfide | ND | ND | ND | ND |
| Di-tert-butyl Sulfide | ND | ND | ND | ND |
| Di-n-butyl Sulfide | ND | ND | ND | ND |
| Unknown Sulfides | ND | ND | ND | ND |
| Methyl Mercaptan | ND | ND | ND | ND |
| Ethyl Mercaptan | ND | ND | ND | ND |
| Isopropyl Mercaptan | ND | ND | ND | ND |
| n-Propyl Mercaptan | ND | ND | ND | ND |
| Isobutyl Mercaptan | ND | ND | ND | ND |
| sec-Butyl Mercaptan | ND | ND | ND | ND |
| tert-Butyl Mercaptan | ND | ND | ND | ND |
| n-Butyl Mercaptan | ND | ND | ND | ND |
| Isoamyl Mercaptan | ND | ND | ND | ND |
| pri-Amyl Mercaptan | ND | ND | ND | ND |
| n-Amyl Mercaptan | ND | ND | ND | ND |
| Carbon Disulfide | ND | ND | ND | ND |
| Dimethyl Disulfide | ND | ND | ND | ND |
| Methyl Ethyl Disulfide | ND | ND | ND | ND |
| Diethyl Disulfide | ND | ND | ND | ND |
| Di-iso-propyl Disulfide | ND | ND | ND | ND |
| Di-n-propyl Disulfide | ND | ND | ND | ND |
| Di-iso-butyl Disulfide | ND | ND | ND | ND |
| Di-sec-butyl Disulfide | ND | ND | ND | ND |
| Di-tert-butyl Disulfide | ND | ND | ND | ND |
| Di-n-butyl Disulfide | ND | ND | ND | ND |
| Unknown Disulfides | ND | ND | ND | ND |
| Thiophene | ND | ND | ND | ND |
| Thiophane | ND | ND | ND | ND |

Texas Brine - Belle Rose, Louisiana
Hourly Air Monitoring Data

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

| | South-most Pipeline Site | | | | | Middle-most Pipeline Site | | | | | North-most Pipeline Site | | | | | On Drill Rig Boom | | | | | Onsite Trailers | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ST-3 | | | | | ST-2 | | | | | ST-1 | | | | | OG 3A-1 | | | | | TR-1 | | | | |
| Date-Time * | 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 (%) |
| 05/29/2013 01:00:00 AM | <1.0 | 0.0 | <1.0 | 0.0 | 21.3 | <1.0 | 0.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 02:00:00 AM | <1.0 | 0.0 | <1.0 | 0.0 | 21.2 | <1.0 | 0.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | <1.0 | <1.0 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 03:00:00 AM | 0.0 | 0.0 | <1.0 | 0.0 | 21.2 | <1.0 | 0.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | <1.0 | 5.8 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 04:00:00 AM | 0.0 | 0.0 | <1.0 | 0.0 | 21.2 | <1.0 | 0.0 | 0.0 | 0.0 | 20.9 | 0.0 | <1.0 | 0.0 | 0.0 | 20.9 | <1.0 | 4.9 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 05:00:00 AM | 0.0 | 0.0 | <1.0 | 0.0 | 21.2 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | <1.0 | 9.4 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 06:00:00 AM | 0.0 | 0.0 | <1.0 | 0.0 | 21.2 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | <1.0 | 17.1 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 07:00:00 AM | <1.0 | 0.0 | <1.0 | 0.0 | 21.2 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | <1.0 | 0.0 | 0.0 | 20.9 | <1.0 | 3.1 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 08:00:00 AM | <1.0 | <1.0 | <1.0 | 0.0 | 21.1 | <1.0 | <1.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | <1.0 | <1.0 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 09:00:00 AM | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 10:00:00 AM | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | <1.0 | <1.0 | 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 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 11:00:00 AM | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 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 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 12:00:00 PM | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | <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 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 01:00:00 PM | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 02:00:00 PM | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 03:00:00 PM | 0.0 | <1.0 | <1.0 | 0.0 | 20.9 | <1.0 | <1.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 04:00:00 PM | 0.0 | <1.0 | 0.0 | 0.0 | 20.9 | <1.0 | <1.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 05:00:00 PM | 0.0 | 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 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 06:00:00 PM | 0.0 | 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 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 07:00:00 PM | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | <1.0 | 0.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 08:00:00 PM | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | <1.0 | 0.0 | 0.0 | 0.0 | 20.9 | 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 | 20.9 |
| 05/29/2013 09:00:00 PM | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | <1.0 | 0.0 | 0.0 | 0.0 | 20.9 | 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 | 20.9 |
| 05/29/2013 10:00:00 PM | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | <1.0 | 0.0 | 0.0 | 0.0 | 20.9 | 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 | 20.9 |
| 05/29/2013 11:00:00 PM | 0.0 | <1.0 | 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 | <1.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/30/2013 12:00:00 AM | 0.0 | 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 | <1.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |

Notes:
RTU-8, located at OG3A-1, recorded elevated VOC readings from approximately 2:45 AM to 7:20 AM on 5/29/2013.

Texas Brine - Belle Rose, Louisiana
Hourly Air Monitoring Data

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

| | South-most Pipeline Site | | | | | Middle-most Pipeline Site | | | | | North-most Pipeline Site | | | | | On Drill Rig Boom | | | | | Onsite Trailers | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ST-3 | | | | | ST-2 | | | | | ST-1 | | | | | OG 3A-1 | | | | | TR-1 | | | | |
| Date-Time * | 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 (%) |
| 05/29/2013 05:00:00 AM | 0.0 | 0.0 | <1.0 | 0.0 | 21.2 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | <1.0 | 9.4 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 06:00:00 AM | 0.0 | 0.0 | <1.0 | 0.0 | 21.2 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | <1.0 | 17.1 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 07:00:00 AM | <1.0 | 0.0 | <1.0 | 0.0 | 21.2 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | <1.0 | 0.0 | 0.0 | 20.9 | <1.0 | 3.1 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 08:00:00 AM | <1.0 | <1.0 | <1.0 | 0.0 | 21.1 | <1.0 | <1.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | <1.0 | <1.0 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 09:00:00 AM | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 10:00:00 AM | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | <1.0 | <1.0 | 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 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 11:00:00 AM | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 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 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 12:00:00 PM | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | <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 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 01:00:00 PM | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 02:00:00 PM | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 03:00:00 PM | 0.0 | <1.0 | <1.0 | 0.0 | 20.9 | <1.0 | <1.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | <1.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 04:00:00 PM | 0.0 | <1.0 | 0.0 | 0.0 | 20.9 | <1.0 | <1.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 05:00:00 PM | 0.0 | 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 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 06:00:00 PM | 0.0 | 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 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 07:00:00 PM | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | <1.0 | 0.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/29/2013 08:00:00 PM | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | <1.0 | 0.0 | 0.0 | 0.0 | 20.9 | 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 | 20.9 |
| 05/29/2013 09:00:00 PM | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | <1.0 | 0.0 | 0.0 | 0.0 | 20.9 | 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 | 20.9 |
| 05/29/2013 10:00:00 PM | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | <1.0 | 0.0 | 0.0 | 0.0 | 20.9 | 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 | 20.9 |
| 05/29/2013 11:00:00 PM | 0.0 | <1.0 | 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 | <1.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/30/2013 12:00:00 AM | 0.0 | 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 | <1.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/30/2013 01:00:00 AM | 0.0 | 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 | <1.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/30/2013 02:00:00 AM | 0.0 | <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 | <1.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/30/2013 03:00:00 AM | 0.0 | <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 | <1.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/30/2013 04:00:00 AM | 0.0 | <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 | <1.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |
| 05/30/2013 05:00:00 AM | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | <1.0 | 0.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | 0.0 | 0.0 | 20.9 | 0.0 | <1.0 | 0.0 | 0.0 | 20.9 | 0.0 | 0.0 | <1.0 | 0.0 | 20.9 |

Notes:
RTU-8, located at OG3A-1, recorded elevated VOC readings from approximately 2:45 AM to 7:20 AM on 5/29/2013.

# RESPEC Consulting & Services

Texas Brine, L.L.C.

Assumption Parish, Louisiana

Daily Field Report

Report By: John Schneider  Date: 05/25/13

Company: RESPEC  Work Order #: ()

| Personnel | Company | Job Title |
|---|---|---|
| John Schneider | RESPEC | Staff Geophysicist |
| | | |
| | | |
| | | |

**Time Onsite:** Start Time: 0725 End Time: 1530

(Note: on-site time only reflects time on-site; it does not reflect time taken for off-site activities)

**Equipment Onsite**:

**Daily Activity:**

07:30 contractor meeting. Provided drilling oversight on G1. Loss of mud circulation prevented sampling analysis. (John Schneider).

**Proposed Schedule:**

Log samples from G1 if circulation returns.

Initials: JMS

# RESPEC Consulting & Services

Texas Brine, L.L.C.

Assumption Parish, Louisiana

Daily Field Report

Report By: John Schneider

Date: 05/26/13

Company: RESPEC

Work Order #: ()

| Personnel | Company | Job Title |
|---|---|---|
| John Schneider | RESPEC | Staff Geophysicist |
| | | |
| | | |
| | | |

**Time Onsite:** Start Time: 0730 End Time: 1715

(Note: on-site time only reflects time on-site; it does not reflect time taken for off-site activities)

**Equipment Onsite**:

**Daily Activity:**

Provided drilling oversight on G1. Loss of mud circulation prevented sampling analysis. (John Schneider).

**Proposed Schedule:**

Provide drilling oversight for G1.

Initials: JMS

# RESPEC Consulting & Services

Texas Brine, L.L.C.

Assumption Parish, Louisiana

Daily Field Report

Report By: John Schneider  Date: 05/27/13

Company: RESPEC  Work Order #: ()

| Personnel | Company | Job Title |
|---|---|---|
| John Schneider | RESPEC | Staff Geophysicist |
| | | |
| | | |
| | | |

**Time Onsite:** Start Time: 0730 End Time: 1630

(Note: on-site time only reflects time on-site; it does not reflect time taken for off-site activities)

**Equipment Onsite**:

**Daily Activity:**

Provided drilling oversight on G1. (John Schneider).

**Proposed Schedule:**

Provide drilling oversight for G1.

Initials: JMS

**RESPEC Consulting & Services**

Texas Brine, L.L.C.

Assumption Parish, Louisiana

Daily Field Report

Report By: Pete Smith

Company: RESPEC

Date: 05/28/13

Job #: 02241

| Personnel | Company | Job Title |
|---|---|---|
| Peter Smith, CPG | RESPEC | Staff Geologist |
| Eric Krantz, PE | RESPEC | Staff Engineer |
| John Schneider | RESPEC | Staff Geophysicist |

**Time Onsite:** Start Time: 07:00 End Time: 18:00

**DAILY ACTIVITY:**

07:30 contractor meeting.

**Instrumentation program:**

Receive and inventory shipment of instrumentation equipment (Krantz). Assemble instrumentation units.

**G-1 drilling program:**

Drilling oversight (Smith).

**MRAA Sampling Event:**

Sampling meeting with Pisani and CBI (Smith). Coordinate water sampling.

**PROPOSED SCHEDULE:**

**Instrumentation program:**

Assemble instrumentation units.

**G-1 drilling program:**

Drilling oversight.

**MRAA Sampling Event:**

Water sampling at remaining wells.

Initials: PHS

**RESPEC Consulting & Services**

Texas Brine, L.L.C.

Assumption Parish, Louisiana

Daily Field Report

Report By: Pete Smith

Company: RESPEC

Date: 05/29/13

Job #: 02241

| Personnel | Company | Job Title |
|---|---|---|
| Peter Smith, CPG | RESPEC | Staff Geologist |
| Eric Krantz, PE | RESPEC | Staff Engineer |
| | | |

**Time Onsite:** Start Time: 07:00 End Time: 18:00

**DAILY ACTIVITY:**

07:30 contractor meeting.

**Instrumentation program:**

Assemble instrumentation units (Krantz).

**G-1 drilling program:**

Drilling oversight (Smith). Wait on cement.

**MRAA Sampling Event:**

Sampling meeting with Pisani and CBI (Smith). Coordinate final water sampling.

**PROPOSED SCHEDULE:**

**Instrumentation program:**

Assemble instrumentation units.

**G-1 drilling program:**

Drilling oversight. Wait on cement.

**MRAA Sampling Event:**

No sampling; program is complete.

Initials: PHS

# ME&A Daily Action Summary

May 29, 2013

**Subsidence Survey:**

- Arrived @ 8:30 am
- Ran conventional level loop starting at TBM 2 which is a nail set in a power pole adjacent to the main roadway and OxyGeismar #2 well pad. Ran level loop through brine wells (1,2 & 3), water wells (1,2 & 3), TBM's, and the two brine storage tanks.

**Sinkhole Perimeter/Hydrographic Survey:**

- No Work Done

**Support Sinkhole Cleanup**

- No Work Done

**Misc. Survey Work**

- Centerline survey of containment berms to check elevations and re-set water level gauges.
- Departed @ 4:30 pm