



# Assumption Parish Operational Situation Summary

- Emergency Management:
  - Parish Emergency Declared – 19 June 2012
    - Extended 30 days on 20 December 2013
    - Extended 30 days on 17 January 2014
    - Extended 30 days on 14 February 2014
    - Extended 30 days on 14 March 2014
  - State Emergency Declared – 3 August 2012
  - LA Hwy 70 Open for traffic
  - Mandatory Evacuation still in effect
  - Security plans in place to secure sinkhole area
  - Parish continues blog to inform residents
  - Texas Brine issuing financial assistance for residents
  - Bayou Corne Incident Command Center - HOTLINE 1-877-281-7311
  - Facilitating the [askGOHSEP@la.gov](mailto:askGOHSEP@la.gov) for questions



# Assumption Parish Operational Situation Summary

- **Public Safety:**

- LSP providing air craft support
- LSP providing HAZMAT support to parish as needed
- LDWF providing air boat support to parish as needed
- No market or recreational hunting or fishing in restricted area
- LSA Command Post on site
- An office trailer has replaced the GOHSEP vehicle and will serve as a consolidated command post for the Assumption Unified Command
- All state agencies currently involved with the event will continue to be in attendance.
- GOHSEP has added a notification widget to their website indicating the current alert level for OG-1 and Hwy 70



# Assumption Parish Operational Situation Summary

## Gas Volumes as of 25 March

Vent Well Flare Data (Previous calendar day)

Well	Reading Date	Reading Time	Shut-in / flowing	Flow Total End Date	Start Time	End Time	Time/Hours	Choke Size (1/64")	Dishcharge Orifice (Inch)	Static (PSIG)	Diff. (PSIG)	Diff. (Inch)	Gas Rate (MCF/H)	Gas Rate (MCF/D)	Cumulative Gas Flared (MCF)	Previous Flared (MCF Total)	SIWHP (PSI)	FWHP (PSI)	Comments
ORW-01	3/22/2014	11:51	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.063	0.00	0.00	NA	0.00	0.00	1,099	1,099	2	0.0	
ORW-02	3/22/2014	11:53	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.250	0.00	0.00	NA	0.00	0.00	1,682	1,682	0.0	0.0	
ORW-03	3/22/2014	11:34	shut in	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2		
ORW-04	3/22/2014	16:20	flowing	3/23/2014	4:00pm	3:00Pm	24	5.75	0.125	0.10	0.00	7.88	0.046	1.10	1,038	1,037		3.0	continuous pumping
ORW-05	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,026	NA		NA	Plugged 1-28-2014
ORW-06	3/22/2014	10:48	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.063	0.00	0.00	0.00	0.000	0.00	1,097	1,097	14.0	0.0	
ORW-07	NA	NA	NA	NA	NA	NA	v	NA	NA	NA	NA	NA	NA	NA	58	NA		0.0	Plugged 2-7-2014
ORW-8	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	151	NA		NA	Plugged 2-5-2014
ORW-09	3/22/2014	10:38	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.063	0.00	0.00	0.00	0.00	0.00	1,036	1,036	2	0.0	
ORW-10	3/22/2014	10:56	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.063	0.00	0.00	0.00	0.00	0.00	568	568	23	0.0	
ORW-11	3/22/2014	10:20	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.250	0.00	0.00	0.00	0.00	0.00	112	112		0.0	
ORW-12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	78	NA		NA	Plugged 7-15-2013
ORW-13	3/22/2014	10:02	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.063	0.00	0.00	0.00	0.00	0.0	2.8	3	3	0.0	
ORW-14	3/22/2014	16:38	flowing	3/23/2014	4:00pm	3:00Pm	24	5.5	0.125	0.10	0.00	1.56	0.02	0.48	1,557	1,557		2.5	undergoing feasibility pumping test
ORW-15	3/22/2014	11:56	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.250	0.00	0.00	0.00	0.00	0.00	1,527	1,527	25	0.00	Pump Test 3/18PM
ORW-16	3/22/2014	10:42	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.125	0.00	0.00	0.00	0.000	0.0	199	199		0.0	
ORW-17	3/22/2014	10:48	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.063	0.00	0.00	0.00	0.00	0.00	62	62		0.0	
ORW-18	3/22/2014	16:26	flowing	3/23/2014	4:00pm	3:00Pm	24	1	0.063	0.10	0.00	1.44	0.005	0.12	58.89	58.77		14.0	
ORW-19	3/22/2014	10:53	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.125	0.00	0.00	0.00	0.000	0.00	199	199	10	0.0	shut-in/no flow 3-17PM
ORW-21	3/22/2014		shut in	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			data from pump test will be added

As of Tuesday, March 25, 2014



# Assumption Parish Operational Situation Summary

## Gas Volumes as of 25 March

ORW-22	3/22/2014	11:21	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.063	0.00	0.00	0.00	0.000	0.00	1,061	1,061	51	0.0	
ORW-23	3/22/2014	11:18	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.063	0.00	0.00	0.00	0.00	0.00	110	110		0.0	
ORW-24	3/22/2014	16:06	shut in	3/23/2014	4:00pm	3:00Pm	24	1	0.063	0.00	0.00	0.00	0.00	0.00	297	297		4.0	open to flare/no flow
ORW-27	3/22/2014	9:30	shut in	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0		
ORW-26	3/22/2014	10:30	shut in	3/23/2014	4:00pm	3:00Pm	24	1	0.063	0.00	0.00	0.00	0.000	0.00	173	173		3.0	started flaring for 5day pump test / no flow yet
ORW-28	3/22/2014	11:11	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.063	0.00	0.00	0.00	0.00	0.00	28	28	30	0.0	
ORW-29	3/22/2014	11:08	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.063	0.00	0.00	0.00	0.00	0.00	59	59	10	0.0	
ORW-30	3/22/2014	10:27	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.625	0.00	0.00	0.00	0.00	0.00	41.7	42	2	0.0	
ORW-31	3/22/2014	10:24	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.063	0.00	0.00	0.00	0.00	0.00	13	13	31	0.0	
ORW-32	3/22/2014	15:53	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.063	0.00	0.00	0.00	0.00	0.00	90	90		0.0	begin 5-day feasibility test
ORW-33	3/22/2014	9:33	shut in	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0		
ORW-36	3/22/2014	15:30	flowing	3/23/2014	4:00pm	3:00Pm	24	7	0.250	0.10	0.00	52.13	0.46	11.1	2,541	2,530		46.0	
ORW-37	3/22/2014	11:38	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.063	0.00	0.00	0.00	0.00	0.00	248.94	249	24	0.0	
ORW-38	3/22/2014	11:45	shut in	3/23/2014	4:00pm	3:00Pm	24	0.0	0.063	0.00	0.00	0.00	0.00	0.00	1.24	1.24		0.00	
ORW-39	3/22/2014	10:14	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.125	0.00	0.00	0.00	0.00	0.00	102.6	102.62	10.00	0.0	
ORW-40	3/22/2014	10:17	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.125	0.00	0.00	0.00	0.00	0.00	49.60	49.60	6.00	0.00	
ORW-41	3/22/2014	10:13	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.063	0.00	0.00	0.00	0.00	0.00	0.16	0.16	0.00	0.00	
ORW-42	3/22/2014	NA	shut in	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	229.70	NA		0.00	
ORW-43	3/22/2014	9:51	shut in	3/23/2014	4:00pm	3:00Pm	24	0	0.063	0.00	0.00	0.00	0.0	0.00	12.69	12.69		0.00	
ORW-46	3/22/2014	15:09	flowing	3/23/2014	4:00pm	3:00Pm	24	3	0.125	0.10	0.00	23.22	0.08	1.84	561.51	559.67		35.00	

As of Tuesday, March 25, 2014



# Assumption Parish Operational Situation Summary

## Gas Volumes as of 25 March

ORW-48	3/22/20 14	16:11	flowing	3/23/2014	4:00p m	3:00Pm	24	3	0.250	0.10	0.00	3.38	0.12	2.95	763.16	760.20		41.00	start depressurize well
ORW-49	3/22/20 14	15:36	flowing	3/23/2014	4:00p m	3:00Pm	24	5.5	0.125	0.10	0.00	27.90	0.1	2.05	446.31	444.26		42.00	
ORW-50	3/22/20 14	15:42	flowing	3/23/2014	4:00p m	3:00Pm	24	6.5	0.250	0.10	0.00	23.50	0.3	7.46	1052.88	1045.42		44.00	
ORW-52	3/22/20 14	15:13	flowing	3/23/2014	4:00p m	3:00Pm	24	5.5	0.125	0.10	0.00	4.50	0.03	0.81	223.49	222.67		46.00	
ORW-53	3/22/20 14	15:16	flowing	3/23/2014	4:00p m	3:00Pm	24	0.75	0.063	0.10	0.00	3.19	0.01	0.16	81.77	81.61		44.00	
ORW-54	3/22/20 14	16:00	flowing	3/23/2014	4:00p m	3:00Pm	24	3	0.125	0.00	0.00	20.97	0.1	1.78	987.45	985.67		43.00	
ORW-55	3/22/20 14	15:24	flowing	3/23/2014	4:00p m	3:00Pm	24	8.75	0.250	0.10	0.00	79.91	0.6	13.74	336.11	322.36		47.50	Bump up choke
ORW-56	3/22/20 14	15:20	flowing	3/23/2014	4:00p m	3:00Pm	24	1	0.063	0.10	0.00	43.84	0.03	0.66	34.75	34.09		40.00	
ORW-57	3/22/20 14	16:34	flowing	3/23/2014	4:00p m	3:00Pm	24	5.75	0.250	0.10	0.00	17.88	0.27	6.54	198.08	191.55		36.00	choke back
ORW-58	3/22/20 14	15:48	flowing	3/23/2014	4:00p m	3:00Pm	24	1	0.063	0.10	0.00	3.75	0.01	0.18	8.76	8.58		17.00	
TBC-RW-1/OGRW-1 *	3/22/20 14	9:48	shut in	3/23/2014	4:00p m	3:00Pm	24	0	0.063	0.10	0.00	0.00	0.000	0.00	5,245	5,245	4	0.0	shut-in no flow/pressure



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## Gas Volumes as of 25 March

Well	Time Data Collected	Tbg Pressure (psig)	Csg Pressure (psig)
BC 2	11:44	0	4
OG 3A	9:58	678	1180
OG 1	10:07	256	259
OG 2	9:45	499	572
TBC 3	10:08	0 *open to atmos	0
PMW 008s	10:40	NM	0
PMW 008m	10:40	open to atmos	0
PMW 19s	11:03	43	49
PMW 18s	11:30	NM	47.5
PMW 18m	11:30	NM	0
PMW 12m	11:02	open to atmos	0
PMW 16s	9:55	NM	55
PMW 16m	9:55	NM	0
PVW 1		NA	
PVW 2		NA	
PVW 3		NA	
PVW 4		NA	
PVW 5		NA	

\*Cumulative gas flared for OGRW-1 represents combined gas flow from ORW-12 and TBC-RW-1 for all dates preceding March 4, 2013. Cumulative gas flared after March 4, 2013 represents only OGRW-1 (formerly TBC-RW-1).

\*Note: Total daily gas flared and cumulative gas flared is based on data through 3pm of previous day

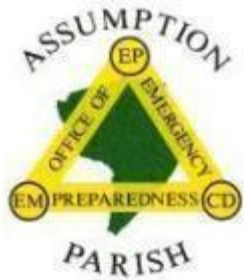
\*Note: ORW-42 became a PMW on 10/2/13 ORW-42 is now PMW-19S

\*Note: PMW-12S became a ORW on 9/6/13 PMW-12S is now ORW-54

\*Note: PMW-18 Flared for 50 MCF on 11-22-13 through flare 6 during the emergency response to mitigate gas kicks developed during well construction

\*Note: PMW-18 Flared for 1.53 MCF on 12-3-13 and 12-5-13 for 2.96 MCF for depressurization

\*All well pressures are read daily including weekends and holidays with data submitted to conservationorder <conservationorder@LA.GOV> daily.



# Assumption Parish Operational Situation Summary

- *The State Agency is responsible for oversight of the following activities. Texas Brine and its contractors are performing operational response activities.*

## DEPT OF NATURAL RESOURCES

- Conduct ventilation system inspections
- Daily berm inspections
- Survey rods on South berm (12/23/13)
- Survey settlement plates around containment berm (12/23/13)
- Water Level Survey (12/23/13)
- Survey around TBC tanks (12/23/13)
- Conduct daily well readings and flare maintenance
- Continue to depressurize ORW – 54
- Monitor bubble site 56
- Logged and hard tagged at 4076 ft
- CB&I sampling
- Performed daily visual inspections of under slab vent systems and dewatered as necessary.
- Monitored cracks in south berm daily during berm inspections
- Began repairing and building up lowest area of south berm between R11 and R14 on Wednesday (1/1/14)
- Depressurize ORW – 54 through separator so that wellhead can be replaced
- Downloaded transducer and track-it data from Saturday to Tuesday 12/28/14 to 1/1/14
- Real-time air monitoring and alarm system for the ORWs and PMWs were operational as of Monday (12/30/13)
- Collected samples from outfall#2 on Monday (12/30/13)
- Performed daily visual inspections of Under Slab Vent Systems and dewatered as necessary.
- Conducted daily berm inspections.
- Site Code Status moved down to Code 2 on Saturday (01/04)
- Site Code Status moved down to Code 1 on Sunday (01/05)
- Performed general maintenance on Maurice Road: Pulled in side sloughing and graded road on Monday (01/06)
- Reinstalled survey rods in south berm that were lost during repairs on Monday (01/06). Rods will be surveyed twice per week on Mondays and Thursdays
- Installed new survey rods in north berm for surveying/monitoring on Monday (01/06). Rods will be surveyed once per week on Mondays.
- Continued to vent and flare ORW-54 through the gas/water separator with open choke Friday – Monday (01/03 – 01/06) in an effort to reduce pressure low enough to change wellhead. Average well pressure: 10 – 12 psi.
- Performed daily routine flare maintenance
- Logged and tagged OG3A @3790' (1/3)

**As of Tuesday, March 25, 2014**



# Assumption Parish Operational Situation Summary

*The State Agency is responsible for oversight of the following activities. Texas Brine and its contractors are performing operational response activities.*

- Performed daily visual inspections of Under Slab Vent Systems and dewatered as necessary.
- Temporarily turned off unit at 1465 Sauce Piquante on Thursday (01/09) due to water flooding the blower intake unit from a broken water pipe on the house during the freezing weather. Unit will be turned back on when the water subsides.
- Conducted daily berm inspections.
- Began placing sand at the southwest corner of Pad 10 for construction of the new south berm on Wednesday (01/08), and will continue daily as weather permits.
- Collected weekly outfall samples on Tuesday (01/07)
- Measured water levels in MRAA wells on Tuesday (01/07)
- Conducted monthly sinkhole profile sampling on Wednesday (01/08)
- Conducted monthly bubble site monitoring on Wednesday (01/08)
- Conducted gas pressure monitoring of GP wells on Thursday (01/09)
- Collected water samples from OGRW-1 and ORW-54 on Thursday (01/09)
- Collected surface water sample from sinkhole (split with LDEQ) on Thursday (01/09)
- Performed geophone well maintenance on LA 10, 17, 19, and Geophone 1 on Thursday (01/09)
- Continued to vent and flare ORW-54 through the gas/water separator with open choke Tuesday – Thursday (01/07 – 01/09) in an effort to reduce pressure low enough to change wellhead. Average well pressure: 11 – 12 psi.
- Dewatered ORWs 18 & 22 on Tuesday (01/07)
- Dewatered ORW 22 on Wednesday (01/08)
- Dewatered ORW 26 on Thursday (01/09)
- Performed daily routine flare maintenance
- Performed sinkhole profile sampling (1/8/14)
- Performed daily visual inspections of Under Slab Vent Systems and dewatered as necessary.
- Restarted vent system at 1465 Sauce Piquante on Friday (01/10)
- Removed air monitoring detectors from 170 Crawfish Stew on Monday (01/13)
- Conducted daily berm inspections.
- Continued placing sand for construction of the new south berm daily (except Monday due to weather), and will continue daily as weather permits. Current progress of the berm is from the southwest corner of Pad 10 to approximately 50' east of the Florida Gas pipeline (pending approval to cross pipeline)
- Conducted SWPPP inspection on Saturday (01/11)
- Collected monthly samples from industrial water wells on Friday (01/10)
- Instrumentation site general maintenance (battery checks, adjustments, etc) performed on Saturday and Sunday (01/11 – 01/12)





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- Continued to vent and flare ORW-54 through the gas/water separator with open choke Friday – Tuesday (01/10 – 01/13) in an effort to reduce pressure low enough to change wellhead. Average well pressure: 10 – 11 psi. A total of 3,872 gallons of water have been recovered from the separator.
- Shut in ORW-26 due to low pressure on Friday (01/10)
- Dewatered ORWs 19, 22, & 24 on Friday and Saturday (01/10 – 01/11)
- Shut in ORW-22 due to no pressure/gas flow on Sunday (01/12)
- Opened ORW-19 to flare on Sunday (01/12)
- Dewatered ORWs 6, 10, & 39 on Sunday (01/12)
- Dewatered ORWs 10, 19, 22, & 39 on Monday (01/13)
- Performed daily routine flare maintenance
- Collected gas samples from pmw 16s, 18s, and OGRW-1
- Logged OG-3A on Thursday (01/16). PRAL: 3,640'. TD @ 3,646'.
- Performed daily visual inspections of Under Slab Vent Systems and dewatered as necessary.
- Conducted daily berm inspections.
- Continued placing sand for construction of the new south berm daily, and will continue daily as weather permits. Current progress of placing the sand base for the berm is from the southwest corner of Pad 10 to approximately 135' west of the Florida Gas pipeline.
- Cleared and chipped trees on the Triche property for access road to ORWs 55 & 56 on Tuesday and Wednesday (01/14 – 01/15).
- Placed sand for access road on Triche property on Wednesday and Thursday (01/15 – 01/16).
- Collected monthly samples from MRAA wells Tuesday - Thursday (01/14 – 01/16)
- Surveyed rods in south and north berm and conducted weekly settlement plate survey on Tuesday (01/14)
- Collected weekly outfall samples on Tuesday (01/14)
- Completed sinkhole depth survey (fathometer) on Thursday (01/16). Depth: 185' – 190'.
- Collected samples from OGRW-1, ORWs 6, 19, 21, 22, & 54, and DPVE wells 22 & 37 for outfall discharge parameters on Thursday (01/16)
- Relocated instrumentation site 33 away from the edge of the sinkhole on Thursday (01/16)
- Continued to vent and flare ORW-54 through the gas/water separator with open choke Tuesday – Thursday (01/14 – 01/16) in an effort to reduce pressure low enough to change wellhead. Average well pressure: 10 – 11 psi. A total of 4,227 gallons of water have been recovered from the separator.
- Dewatered ORWs 6, 10, 19, 22, & 39 on Tuesday (01/14)
- Dewatered ORWs 10, 22, 32, & 39 on Wednesday (01/15)
- Dewatered ORWs 10, 19, 22, & 32 on Thursday (01/16)
- Drilled passive vent well PVW-03 to approximately 30' and set well (15' screen) on Thursday (01/16). Well will be grouted and completed today (01/17)
- Performed daily routine flare maintenance

**As of Tuesday, March 25, 2014**



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- Sampled bubble site 23 and GPBS-23 (1/14/14)
- Conducted daily berm inspections.
- Continued placing sand for construction of the new south berm daily, and will continue daily as weather permits. Approximately 1,691 linear feet of the sand base for the berm has been completed.
- Cleared, chipped trees, and placed sand on the Triche property for access road to ORWs 55 & 56 Friday – Monday (01/17 – 01/20).
- Cleared trees and placed sand for access road to ORW-57 Friday – Monday (01/17 – 01/20). Approximately 317' of road completed.
- Completed monthly sampling event on MRAA wells Friday (01/17)
- Surveyed rods in south berm on Friday (01/17)
- Installed and surveyed settlement rods around ORW-38 on Friday and Monday (01/17 & 01/20)
- Completed sinkhole wagon wheel survey on Friday (01/17)
- Surveyed south berm, north berm, and settlement plates on Monday (01/20)
- Continued to vent and flare ORW-54 through the gas/water separator with open choke Friday – Monday (01/17 – 01/20) in an effort to reduce pressure low enough to change wellhead. Average well pressure: 10 – 11 psi. A total of 4,717 gallons of water have been recovered from the separator.
- Dewatered ORWs 22 & 32 on Friday (01/17)
- Dewatered ORWs 22, 24, 6, & 18 on Saturday (01/18)
- Dewatered ORW 18 on Sunday and Monday (01/19 – 01/20)
- Grouted passive vent well PVW-03 on Friday (01/17)
- Drilled passive vent well PVW-01 Saturday and Sunday (01/18 – 01/19) TD @ 40'
- Grouted PVW-01 on Monday (01/20)
- Developed PVW-03 on Monday (01/20)
- Performed daily routine flare maintenance
- Performed daily visual inspections of Under Slab Vent Systems and dewatered as necessary.
- Conducted daily berm inspections.
- Continued placing sand for construction of the new south berm daily, and will continue daily as weather permits. Approximately 2,334 linear feet of the sand base for the berm has been completed.
- Placed sand for access road to ORW-57 Tuesday – Thursday (01/21 – 01/23). 834 feet of road completed. Length of road is now complete, however, will need to be built up for vehicular access.



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- Collected weekly outfall samples on Tuesday (01/21)
- Measured water levels on MRAA wells on Tuesday (01/21)
- Surveyed settlement rods around ORW-38 on Wednesday (01/22)
- Collected samples for outfall discharge parameters from ORWs 21, 19, 6, 22, 54, DPVE 22 & 37, and OGRW-1
- Conducted pressure monitoring for GP wells on Thursday (01/23)
- Continued to vent and flare ORW-54 through the gas/water separator with open choke Tuesday – Thursday (01/21 – 01/23). On Thursday afternoon, the wellhead was changed out to become a permanent ORW. The separator will be removed and the well will continue to flare. A total of 4,937 gallons of water were recovered from the separator.
- Developed PVW-03 and PVW-04 on Tuesday (01/21)
- Installed Track-It on PVW-03 on Wednesday (01/22)
- Developed PVW-05 on Thursday (01/23)
- Drilled ORW-56, set well and bentonite seal on Tuesday (01/21). TD @ 140'
- Completed grouting ORW-56 on Wednesday (01/22)
- Drilled ORW-55 on Wednesday and Thursday, set well and bentonite seal. TD @ 135.5'.
- Performed daily routine flare maintenance
- Performed logging of Oxy 1
- Performed daily visual inspections of Under Slab Vent Systems and dewatered as necessary.
- Conducted daily berm inspections.
- Continued placing sand for construction of the new south berm daily, and will continue daily as weather permits. Approximately 2,354 linear feet of the sand base for the berm has been completed from the east side (Pad 10), and 70' from the west side (near LA-18).
- Placed sand to build up low areas on access road to ORW-57 on Friday (01/24)
- Surveyed the south berm and settlement rods around ORW-38 on Friday and Monday (01/24 & 01/27)
- Collected weekly outfall sample on Monday (01/27)
- Placed microbial bugs in MRAA wells on Monday (01/27)
- ORWs 18 & 56 were brought online to flare Friday (01/24)
- Grouted ORW-55 to the surface on Friday (01/24)
- Advanced and completed CPT-125 to 124.58' on Friday (01/24)
- Grouted inclinometer IPI-STR02 to the surface on Friday (01/24)
- Completed Geoprobe borehole for passive vent well PVW-02 on Friday (01/24)



# Assumption Parish Operational Situation Summary

• *The State Agency is responsible for oversight of the following activities. Texas Brine and its contractors are performing operational response activities.*

- Completed installation of meter run and connected ORW-56 to flare on Saturday (01/25)
- Advanced and completed CPT-126 to 136.98' on Saturday (01/25)
- Performed P&A activities on ORWs on Rig Road Saturday – Monday (01/25 – 01/27)
- Installed transducers on ORWs 54 & 56 on Sunday (01/26)
- Constructed fences around PVWs on Sunday (01/26) and Monday (01/27)
- Rigged up and began drilling on ORW-57 on Monday (01/27)
- Performed daily routine flare maintenance
- Connected meter run and began flowing ORW 55 on Monday (1/27); starting pressure 47.5 psi; Choke set at 1; 1/8" orifice plate
- Performed daily visual inspections of Under Slab Vent Systems and dewatered as necessary.
- Conducted daily berm inspections.
- Earthwork was temporarily put on hold due to freezing weather conditions Tuesday and Wednesday (01/28 & 01/29). Continued placing sand for construction of the new south berm on Thursday (01/30), and will continue daily as weather permits. Approximately 2,354 linear feet of the sand base for the berm has been completed from the east side (Pad 10), and 70' from the west side (near LA-18).
- Collected samples for outfall discharge parameters from ORWs 21, 19, 6, 22, 54, DPVE 22 & 37, and OGRW-1
- Conducted daily monitoring of passive vent wells
- Installed transducer in ORW-46 on Tuesday (01/28)
- In advance of the winter weather storm, the following ORWs and associated flares were shut in as a safety precaution on Tuesday (01/28): ORWs 52, 53, 55, 56, 48, 18, 4, 14, & OGRW-1
- On Wednesday (01/29), the ORWs that were shut in due to the winter weather were brought back online.
- Performed daily visual inspections of Under Slab Vent Systems and dewatered as necessary.
- Conducted daily berm inspections.
- Continued placing sand for construction of the new south berm as weather permitted. A total of 3,011 linear feet of the sand base for the berm has been completed.
- Graded the north berm and main TBC access road on Monday (02/03)
- Surveyed the south berm, north berm, and settlement rods around ORW-38 on Friday and Monday (01/31 & 02/03)
- Conducted daily monitoring of passive vent wells
- Conducted daily well readings and flare maintenance
- Opened ORWs 19 & 26 to flare on Friday (01/31)



# Assumption Parish Operational Situation Summary

*The State Agency is responsible for oversight of the following activities. Texas Brine and its contractors are performing operational response activities.*

- Shut in ORW 26 on Monday (02/03) due to no flow
- Reinstalled transducer in ORW-41 on Monday (02/03)
- Flushed the screen in ORW-6, reinstalled the transducer, and restored the well to service on Monday (02/03)
- Prepared pumping equipment for ORW-38 pump test by testing connections, pumping capabilities, etc. and moved frac tank to location on Monday (02/03)
- Collected samples from ORW 55/56 (1/31/14)
- Performed daily visual inspections of Under Slab Vent Systems and dewatered as necessary.
- Conducted daily berm inspections.
- Continued placing sand for construction of the new south berm as weather permitted. 3,122 linear feet of the sand base for the berm has been completed.
- Conducted SWPPP inspection on Tuesday (02/04)
- Placed sand on low areas on access road to ORW-57 on Thursday (02/06)
- Cleared path from Pad 9 to Pad 10 with marsh excavator in preparation of building containment berm on Thursday (02/06).
- Collected weekly outfall samples on Tuesday (02/04)
- Performed in-situ monitoring of industrial water wells and measured water levels on Tuesday (02/04)
- Performed monthly bubble site monitoring Tuesday and Wednesday (02/04 – 02/05)
- Surveyed the settlement rods around ORW-38 on Wednesday (02/05)
- Monitored gas pressures in GP wells on Thursday (02/06)
- Conducted daily monitoring of passive vent wells
- Conducted daily well readings and flare maintenance
- ORW-8 plugged: removed transducer, tubing, & flushed sand out on Tuesday (02/04) and completed grouting to the surface on Wednesday (02/05)
- ORW-38 pump test: Conducted pump and piping installations, connections and pump testing on Tues/Wed (02/04 – 02/05) and started pump test on Thurs (02/06).
- Completed gas collection piping connections at ORW-58 prior to drilling on Wednesday (02/05)
- Began drilling ORW-58 on Wednesday (02/05) and set well and seal on Thursday (02/06). TD @ 149'. Screened 120' – 124'.
- Began plugging activities at ORW-7 on Thursday (02/06). Removed tubing and flushed out sand.
- Completed building platform for water containment drum at bubble site 56 in order to remove temporary barge.
- Completed gas collection piping connections at ORW-57 on Thursday (02/06)
- Performed daily visual inspections of Under Slab Vent Systems and dewatered as necessary.
- Conducted daily berm inspections.
- Continued placing sand for construction of new south berm as weather permitted. A total of 3,356 linear feet of the sand base for the berm has been completed.
- Placed limestone on Triche property access road on Saturday (2/8)
- Conducted SWPPP inspection on Monday (02/10)

**As of Tuesday, March 25, 2014**



# Assumption Parish Operational Situation Summary

• *The State Agency is responsible for oversight of the following activities. Texas Brine and its contractors are performing operational response activities.*

- Surveyed the south berm, north berm, and settlement rods around ORW-38 on Friday and Monday (02/07 and 02/10)
- Installed the casing for inclinometer IPI-STR01 to 85' on Saturday (02/08) and installed the inclinometer on Sunday (02/09)
- Conducted daily monitoring of passive vent wells
- Conducted daily well readings and flare maintenance
- ORW-7 and GP-ORW-8 was plugged and grouted to the surface on Friday (02/07)
- GP-ORW-5 was plugged and grouted to the surface on Sunday (02/09)
- ORW-38 pump test: Continued pump test Friday through Monday (02/07 – 02/10). The pump test was stopped on Monday (02/10) due to lack of gas production.
- Completed the installation of ORW-58 on Friday (02/07) by grouting the well annulus to the surface.
- ORW-57: drilled to 155.5' on Saturday (02/08), set well and seal on Sunday (02/09), and completed grouting to surface on Monday (02/10)
- ORW-58: installed meter run and Barton meter and began to flare on Saturday (02/08). Well development began on Monday (02/10).
- Installed survey rods around ORW-21 in preparation for dewatering test
- Performed daily visual inspections of Under Slab Vent Systems and dewatered as necessary.
- Conducted daily berm inspections.
- Continued placing sand for construction of the new south berm as weather permitted. A total of 3,526 linear feet of the sand base for the berm has been completed.
- Placed silt fence along access road on Triche property and access to ORW-57 on Wednesday and Thursday (02/12 – 02/13)
- Collected weekly outfall samples on Tuesday (02/11)
- Collected monthly samples from industrial water wells on Tuesday (02/11)
- Conducted in-situ monitoring of industrial water wells and measured water levels on Tuesday (02/11)
- Completed connections on inclinometer IPI-STR01 on Tuesday (02/11). Both IPI-STR01 & 02 are now online and recording.
- Surveyed the south berm and settlement rods around ORW-38 on Wednesday (02/12)
- Conducted sinkhole depth survey (fathometer: 210') on Wednesday and Thursday (02/12 – 02/13)
- Conducted daily monitoring of passive vent wells
- Conducted daily well readings and flare maintenance
- Completed developing ORW-58 on Tuesday (02/11)
- A pressurized leak test was performed on the BC-2 wellhead assembly on Tuesday (02/11). No leaks were noted and the test pressure remained constant. Following the test, the Nitrogen gas that was used for the test was bled off and the well was placed back into monitoring status. Gas pressure on BC-2 has been 2-3 psi for the last two days. An additional soap and water bubble leak test was performed on Thursday. No leaks were found.



# Assumption Parish Operational Situation Summary

*The State Agency is responsible for oversight of the following activities. Texas Brine and its contractors are performing operational response activities.*

- Re-deployed AreaRaes for continuous air monitoring at PVWs 04 & 05 on Wednesday (02/12)
- Opened ORWs 57 & 58 to flare on Wednesday (02/12)
- Began forming surface completions at ORWs 55, 56, 57, & 58 on Wednesday (02/12) and completed pouring concrete pads on Thursday (02/13)
- Demobilized the barge and tank at bubble site 56 and replaced with a water collection drum placed on a wooden platform at the location on Thursday (02/13)
- Extended the risers on monitor wells for PVWs 01, 04, & 05 above accumulated water around the wells on Thursday (02/13)
- Laid out dewatering piping from ORW-14 to OGRW-1 for future dewatering activities on Thursday (02/13)
- Respec and CB&I split samples at PVW-03
- CB&I collected gas samples from 57 and 58
- Performed daily visual inspections of Under Slab Vent Systems and dewatered as necessary.
- Conducted daily berm inspections.
- Continued placing sand for construction of the new south berm as weather permitted. A total of 3,958 linear feet of the sand base for the berm has been completed.
- Placed silt fence along the access road to ORW-57 on Friday (02/14)
- Surveyed the old south berm, north berm, and settlement rods around ORWs 38 & 21 on Friday and Monday (02/14 & 02/17)
- Collected monthly surface water samples on Friday (02/14)
- Conducted daily monitoring of passive vent wells
- Conducted daily well readings and flare maintenance
- Laid out dewatering piping along ORWs on the south side of the highway for future ORW dewatering activities on Friday and Monday (02/14 & 02/17)
- Completed the fence enclosure around ORW-58 on Friday (02/14)
- Rechecked BC-2 wellhead assembly for leaks on Friday (02/14). No leaks were found.
- Tested equipment at ORW-21 in advance of the official startup of the upcoming ORW-21 pump test to verify pumping rates, connectivity to the MRAA, piping connections, etc. Friday – Monday (02/14 – 02/17). Water level prior to pumping on Saturday was 5.77' below the top of the master valve measuring point, and achieved a drawdown of 46' at 1.1 gpm (pumped 280 gallons). Monday testing achieved a pumping rate of 2.0 gpm. Well pressure began with 7.0 psi and ended with 8.0 psi.
- CB&I collected a sample from PVW-03 for DEQ testing
- Performed daily visual inspections of Under Slab Vent Systems and dewatered as necessary.
- Conducted daily berm inspections.
- Continued placing sand for construction of the new south berm as weather permitted. The sand base layer of the berm has now been completely connected (4,363').



# Assumption Parish Operational Situation Summary

• *The State Agency is responsible for oversight of the following activities. Texas Brine and its contractors are performing operational response activities.*

- Surveyed and set grade stakes on the new south berm for sand base elevation on Tuesday (02/18)
- Collected weekly outfall samples on Tuesday (02/18)
- Conducted in-situ monitoring of the industrial water wells on Tuesday (02/18)
- Surveyed the old south berm, settlement rods around ORWs 38 & 21, and site settlement plate survey on Wednesday (02/19)
- Collected sinkhole profile samples on Wednesday (02/19)
- Conducted gas pressure monitoring at GP wells on Thursday (02/20)
- Conducted daily monitoring of passive vent wells
- Conducted daily well readings and flare maintenance
- Collected gas sample with CB&I from PVW-03 on Tuesday (02/18)
- Conducted preliminary work at ORW-21 and ORW-39 for upcoming pump test Tuesday – Thursday (02/18 – 02/20). Replaced old pump with new electric pump, piping connections, etc.
- Continued laying out 2" HDPE dewatering piping along ORWs on the south side of the highway for future dewatering activities Tuesday – Thursday (02/18 – 02/20). The majority of the piping has been laid out. Work continues on piping connections.
- Performed daily visual inspections of Under Slab Vent Systems and dewatered as necessary.
- Conducted daily berm inspections.
- Performed SWPPP inspection on Friday (02/21)
- Repaired washout areas resulting from rain events over the weekend on the new south berm on Monday (02/24)
- Surveyed the old south berm, north berm, and settlement rods around ORWs 38 & 21 on Friday and Monday (02/21 & 02/24)
- Conducted daily monitoring of passive vent wells
- Conducted daily well readings and flare maintenance
- Tested new pump at ORW-39 to assess well conditions on Friday and Saturday (02/21 – 02/22)
- Continued laying out 2" HDPE dewatering piping along ORWs on the south side of the highway for future dewatering activities Friday – Monday (02/21 – 02/24). The piping leading to Outfall 001 (north berm) was completed on Monday.
- Conducted preliminary pump testing at ORW-30 to assess well condition on Saturday (02/22)
- Began pump test at ORW-21 on Monday (02/24). Initial pump rate of 1.0 gpm and 10 psi reduction in pressure transducer. Pumped 300 gallons.
- Began geotechnical borings on the new south berm on Monday (02/24). Completed two borings (20 & 21).
- CB&I collected a sample from Bubble Site #101





# Assumption Parish Operational Situation Summary

*The State Agency is responsible for oversight of the following activities. Texas Brine and its contractors are performing operational response activities.*

- Performed daily visual inspections of Under Slab Vent Systems and dewatered as necessary.
- Conducted daily berm inspections.
- Continued geotechnical borings Tuesday and Wednesday (02/25 – 02/26). Completed B22, B23, & B24. All geotechnical borings on the new berm are now complete.
- Installed turbidity curtain along portions of the new south berm near Bayou Corne, near CPT-102, on Tuesday (02/25) and near CPT-103 on Thursday (02/27)
- Installed settlement plates along the new south berm on Thursday (02/27)
- Collected weekly outfall sample on Tuesday (02/25)
- Conducted in-situ monitoring of industrial water wells on Tuesday (02/25)
- Conducted the monthly MRAA sampling event Tuesday – Thursday (02/25 – 02/27)
- Surveyed the old south berm, settlement rods around ORWs 38 & 21, and weekly site settlement plate survey on Wednesday (02/26)
- Conducted daily well readings and flare maintenance
- Completed dewatering piping connections from ORWs 19, 18, 6, & 16 going to Outfall 003 (near ORW-9 west berm) on Tuesday (02/25) and placed a new 1,500-gallon tank at Outfall 003 location on Wednesday (02/26).
- Conducted preliminary pump testing at ORWs 16, 19, & 18 to assess well conditions Tuesday - Thursday (02/25 – 02/27)
- Continued pump test at ORW-21 Tuesday - Thursday (02/25 – 02/27). Through day 4 of 30 planned days. Cumulative water pumped approximately 4,400 gallons.
- New flow meters were installed on Thursday (02/27).
- Performed well work over on ORW-4 Tuesday – Thursday (02/25 – 02/27) to replace the well head and remove sand and silt in the well.
- Began work over on ORW-14 on Thursday (02/27). Flushed seal out. Work continuing today.
- Performed daily visual inspections of Under Slab Vent Systems and dewatered as necessary.
- Conducted daily berm inspections.
- Placed sand on low areas of the new south berm on Monday (03/03)
- Surveyed the old south berm and settlement rods around ORW-21 on Friday, Monday, and Wednesday (02/28, 03/03, and 03/05)
- Completed the monthly MRAA sampling event on Friday (02/28)
- Collected weekly outfall sample on Wednesday (03/05)
- Conducted in-situ monitoring of industrial water wells on Wednesday (03/05)
- Collected monthly samples from industrial water wells on Wednesday (03/05)
- Conducted monthly bubble site monitoring on Wednesday and Thursday (03/05 – 03/06)
- Conducted gas pressure monitoring at GP wells on Thursday (03/06)
- Conducted daily well readings and flare maintenance
- Conducted preliminary pump testing at ORWs 4, 6, 26, & 48 to assess well conditions over the last week (02/28 – 03/06)



# Assumption Parish Operational Situation Summary

• *The State Agency is responsible for oversight of the following activities. Texas Brine and its contractors are performing operational response activities.*

- Continued pump test at ORW-21 daily. Completed 11 of 30 planned days. Cumulative water pumped approximately 19,400 gallons. Increased the pump rate to achieve 20 psi reduction in down-hole pressure on Monday (03/03) and 30 psi reduction on Wednesday (03/05).
- Performed well work over / redevelopment on ORWs 4, 10, 14, 16, and 37 over the last week (02/28 – 03/06).
- Shut in all PVW wells (1 – 5) on Friday (02/28)
- Reinstalled transducer in ORW-39 on Monday (03/03)
- Downloaded monthly transducer data from ORWs Monday – Thursday (03/03 – 03/07)
- Set up equipment and prepared for dewatering test on ORW-14 Thursday (03/06)
- Performed daily visual inspections of Under Slab Vent Systems and dewatered as necessary.
- Conducted daily berm inspections.
- Stockpiled clay on Monday (03/10)
- Surveyed the old south berm and settlement rods around ORW-21 on Friday, (03/7)
- Began the monthly MRAA sampling on Friday (03/7)
- Conducted shut in test at NSDBS-056 on Friday (3/7)
- Collected Track-It data on monitoring wells on Friday (3/7)
- Replaced antenna at site 33 and repair communication issue on Friday (3/7)
- Conducted flyover for aerial photography of sinkhole on Monday (3/10)
- Conducted daily well readings and flare maintenance
- Began the 5-day feasibility pump test at ORW 14 on Friday (3/7) and at ORWs 4 and 30 on Saturday (3/11)
- Continued pump test at ORW-21 daily. Completed 15 of 30 planned days. Cumulative water pumped approximately 31,900 gallons. Increased the pump rate to achieve 40 psi reduction in down-hole pressure on Friday (3/7); producing a small amount of gas which later dissipated overnight; Pump rate was increased to 50 psi reduction during the day on Saturday (3/8) and decreased back to 40 psi that evening.
- Replaced filter pack in ORW 16 from 6/14 grade to a smaller grain size 16/30 filter pack.
- Completed download of monthly transducer data from ORWs on Friday (3/7)
- Began equipment set up and preparation for dewatering test at ORW-26 on Monday (3/7)
- Performed daily visual inspections of Under Slab Vent Systems and dewatered as necessary.
- Conducted daily berm inspections.
- Stockpiled clay on pad 10
- Installed overflow structure on new south berm Thursday (03/13)
- Began excavation of anchor trenches along the base of slopes of new berm on Thursday (3/13), in preparation for geotextile and GCL placement



# Assumption Parish Operational Situation Summary

*The State Agency is responsible for oversight of the following activities. Texas Brine and its contractors are performing operational response activities.*

- Surveyed the old south berm and settlement rods around ORW-21 on Wednesday (03/12)
- Completed the monthly MRAA sampling on Wednesday (03/12)
- Completed wagon wheel portion of Sinkhole Depth Survey Wednesday (3/12)
- Surveyed areas of existing and proposed water overflow structures on Thursday (3/13)
- Conducted daily well readings and flare maintenance
- Completed the 5-day feasibility pump test and transitioned into continuous pumping at ORW 14 on Wednesday (3/12) and ORW 4 on Thursday (3/13).
- Continued pump test at ORW-21. Completed 18 of 30 planned days. Cumulative water pumped approximately 44,00 gallons; An 8-hour test was conducted on Thursday (3/13) at maximum bottom hole pressure reduction for this test configuration; DNR/CBI were on site to monitor test. Depth of pump and pump rate were approximately 148.21 feet and 2.9 gpm, respectively.
- Redeveloped ORW 26 on Tuesday (3/11) and conducted 6-hour preliminary pump test on Wednesday (3/12).
- Began equipment set up and preparation for dewatering test at ORW 15 on Wednesday (3/12)
- Observation and analyze of BS #104 (outside of evacuation zone) (3/14/14)
- Performed daily visual inspections of Under Slab Vent Systems and dewatered as necessary.
- Conducted daily berm inspections.
- Total of 1,675' of geotextile/GCL deployed and covered with first lift of clay
- Completed Sinkhole Depth Survey on Friday (3/14); Deepest areas identified by fathometer was 230' and by wireline was 248'.
- Completed routine survey of berms and ORW 21 settlement rods on Friday and Monday (3/14 and 3/17)
- Conducted daily well readings and flare maintenance
- Completed redevelopment of ORW 15 on Monday (3/17)
- Completed installation of water line ORW 57 to Outfall 2 frac tank on Friday (3/14)
- Restarted 5-day pump test at ORW 30 on Friday (3/14)
- Began 5-day dewatering test at ORW 26 on Sunday (3/16)
- OGRW 1 was shut-in on Friday (3/14) due to no pressure. Upon investigation, the pump was removed and well was tagged at 182' bgs on Monday (3/17). An electric pump will be reinstalled to decrease down hole pressure and increase pump rate.
- Continued pump test at ORW-21. Completed 22 of 30 planned days. Cumulative water pumped approximately 60,538 gallons; Average pump rate is 2.75 gpm
- Plugged and abandoned PVW-4 on Monday (3/17); small amount of gas encountered during retrieval of the auger; All appropriate safety protocols were followed; No issues.



# Assumption Parish Operational Situation Summary

*The State Agency is responsible for oversight of the following activities. Texas Brine and its contractors are performing operational response activities.*

- Conducted daily berm inspections.
- Total of 2,950 ft of geotextile/GCL deployed and 2650 ft covered with first lift of clay
- Disked and dried clay placed along new south berm connector on Wednesday (3/19)
- Graded and compacted clay on the berm connector on Thursday (3/20)
- Completed survey of old south berm and ORW 21 settlement rods on Wednesday (3/19)
- Conducted daily well readings and flare maintenance
- Completed redevelopment of ORW 24 on Tuesday (3/18); Installed pump on Wednesday (3/19); Performed 6-hour aquifer step test on Thursday (3/20)
- Began work over of ORW 23 on Tuesday (3/18) and completed redevelopment of Wednesday (3/19)
- Completed 5-day feasibility pump test at ORW 30 on Wednesday (3/18) and installed permanent well head
- Continued monitoring of continuous dewatering of ORWs 4 and 14
- Began work over at ORW 32 on Wednesday (3/18) and completed redevelopment on Thursday (3/20)
- Depressurized ORW-48 on Wednesday and Thursday (3/19-20) and installed pump and transducer on Thursday (3/20)
- Conducted 6-hour pre-test at ORW 15 on Wednesday (3/19); Redeveloped well and installed pump and transducer on Thursday (3/20)
- Plugged and abandoned PVWs 5, 1, and 2 on Tuesday (3/18), Wednesday (3/19), and Thursday (3/20), respectively. Monitored wells following P&A. No gas detected
- Began installation of electrical panel and connections associated with ORWs 57 and 48 on Thursday (3/20) in preparation for proposed continuous pumping.
- Pulled pump in OGRW 1 on Wednesday (3/19) and reinstalled in an effort increase pump rate.
- Continued pump test at ORW-21. Completed 24 of 30 planned days. Cumulative water pumped approximately 72,668 gallons; Pump rate is 2.84 gpm; Total gas vented 901scf; Continue 40 psi BHP reduction
- Removed Track-It data loggers from GP-37-1, GP-37-2, NSDMW017, GP-22-1, and GP-22-3 on Tuesday (3/18)
- Downloaded data and removed Track-It data logger from NSDMW006 on Wednesday (3/19)
- CB&I sampled Bubble Site 56
- *Conducted daily berm inspections.*
- *Total of 3,500' of geotextile/GCL deployed and covered with first lift of clay*
- *Disked and compacted clay placed along new south berm on Friday (3/21)*
- *Graded and compacted clay on the berm connector on Thursday (3/20)*
- *Completed survey of old south berm, north berm, and ORW 21 settlement rods*
- *Performed weekly TBC subsidence survey*
- *Reseal antenna at Site IPI-02 on Friday (3/21)*
- *Performed Sinkhole Profile Sampling (3/21)*



# Assumption Parish Operational Situation Summary

• *The State Agency is responsible for oversight of the following activities. Texas Brine and its contractors are performing operational response activities.*

- Conducted daily well readings and flare maintenance
- Bled down and sampled TBC-3 on Friday (3/21) and installed PVC riser on well on Saturday (3/22)
- Installed privacy fence at ORW 48; installed pump; completed connections to the water discharge line to the frac tank on the north berm; and completed the service connections for power to ORW-48 on Friday (3/21)
- Performed a work over at ORW-1: flushed silt from the well and injected BMR on Friday (3/21)
- Developed ORW-1 and removed 1500 gal of water (3/24)
- Completed 5-day feasibility pump test at ORW 26 on Saturday (3/22)
- Began work over 5-day feasibility pump test at ORW 24 on Friday (3/21)
- Installed pump and transducer in ORW-32 and completed connections to the water discharge line to the tank at ORW-15 on Friday (3/21); and installed Barton meter on Saturday (3/21)
- Performed 6-hour step test at ORW 32 on Saturday (3/22) and began 5-day feasibility test on Sunday (3/23)
- Began continuous pumping of ORW 48 on Saturday (3/22)
- Plugged and abandoned PVW 3 on Friday (3/21). Monitored PVWs 3 and 2 following P&A.
- Downloaded data and removed Track-It data logger from GP-5 and restored original valve Configuration on Friday (3/21)
- Continued pump test at ORW-21. Completed 28 of 30 planned days. Cumulative water pumped approximately 90,047 gallons; Pump rate is 2.96 gpm; Total gas vented 902scf; Continue 40 psi BHP reduction
- Continued monitoring of continuous dewatering of ORWs 4, 14, and 48



# Assumption Parish Operational Situation Summary

- DHH / Office of Public Health
  - Section for Environmental Epidemiology and Toxicology
    - Air Monitoring Sample Data
      - SEET has received and is analyzing community ambient air sampled 1/2/14, 1/7/14, 1/9-10/14, 1/14/14, 1/16-17/14, 1/21/14, 1/23/14, 1/31/14, 2/4/13, 2/7/14, 2/11/14, 2/13/14, 2/14/14, 2/18/14, 2/20-21/14, 2/25/14, 2/27-28/14, 3/6/14, 3/7/14, 3/11/14, 3/13-14/14, **3/18/14, and 3/20-21/14** (MultiRAE) and 2/13-18/14(MAML). SEET will issue a letter to the parish in reference to these findings once the review of the data has been completed.
      - SEET has received and is analyzing sample results for air at bubble sites collected 1/2/14, 1/9/14, 1/16/14, 1/23/14, 2/6/14, 2/13/14, 2/20/14, 2/27/14, 3/6/14, 3/13/14 **and 3/20/14** (MultiRAE). SEET will issue a letter to the parish in reference to these findings once the review of the data has been completed.



# Assumption Parish Operational Situation Summary

- **DHH / Office of Public Health**
  - Section for Environmental Epidemiology and Toxicology
    - Industrial Water Well Sampling Data
      - No new water well data received during this operational period.



# Assumption Parish Operational Situation Summary

- **DHH / Office of Public Health**
  - Section for Environmental Epidemiology and Toxicology
    - Slurry Water Sampling Data
      - No new slurry data received during this operational period.





# Assumption Parish Operational Situation Summary

- **DHH / Office of Public Health**
  - Section for Environmental Epidemiology and Toxicology
    - Surface Water at Bubble Sites
      - No new surface water data received during this operational period.



# Assumption Parish Operational Situation Summary

## Department of Environmental Quality

- Air monitoring for VOC's continues with no dangerous levels detected off site (1000' away).
- On going Water sampling/water quality monitoring in Bayou Corne and Grand Bayou indicates no water pollution associated with the incident to date.
- To date outdoor air monitoring has been conducted in response to the receipt of 97 rights of passage.
- 57 indoor air monitoring inspections have been conducted in response to citizen requests.
- Private residence air monitoring is available for scheduling upon citizen completion of the Right of passage form. Please call (225) 219-3015 to notify DEQ if you desire monitoring..
- LDEQ Command Post on site. Mobile Air Monitoring Lab (MAML) scheduled to be on site on a recurring basis collecting continuous data on methane/non-methane VOCs and H2S.
- DEQ is conducting community air monitoring
- DEQ has submitted comments on Texas Brine's proposed water control structure to DNR
- Approved emergency water discharge permit allowing discharge of water back into the sinkhole (9/6)
- Has begun water sampling weekly in the Bayou near sinkhole water discharge
- Collected Hydrocarbon samples within sinkhole
- Mobile Air Monitoring Lab (MAML) departed the site on 3/18/14
- Bubbling at Bubble Site 101 has ceased, but DEQ will continue to monitor site for one more week

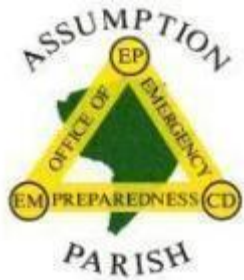


# Assumption Parish Operational Situation Summary

## Department of Transportation and Development

- Regular monitoring of roadways and bridges in the area for ground movement
- Developed a traffic contingency plan if needed
- As of **25 March** 2014 DOTD monitoring equipment has not detected any permanent bridge or highway movements nor any noteworthy trends.
- Performed survey for CORS-5 location
- No significant changes in the surface of Hwy 70 profiler runs
- In an abundance of caution DOTD crews are working to establish a fifth CORS site, which is currently planned to be established in the Bayou Corne community. This fifth CORS device was part of the original package, and is not the result of any new developments





# Assumption Parish Operational Situation Summary

- Department of Transportation and Development (con'td)**

ACTIVITY	STATUS/REMARKS
CORS 1	Installed on Monday, April 1, 2013. No significant movements off of baseline noted
CORS 2	Installed on Tuesday, July 17, 2013. No significant movements off of baseline noted
CORS 3	Installed on Monday, April 8, 2013. No significant movements off of baseline noted
CORS 4	Installed on Tuesday, April 9, 2013. No significant movements off of baseline noted
ACTIVITY	Reports from the active CORS sites are published daily and provided online at the following FTP site: <a href="ftp://mimir.lsu.edu/anonymous:user@mimir.lsu.edu:2123">ftp://mimir.lsu.edu/anonymous:user@mimir.lsu.edu:2123</a> Web interface account has been created. Credentials for accessing CORS911 sites via web site was distributed on April 29, 2013.

SAA 1	Installed April 23, 2013. No significant movements off of baseline noted.
SAA 2	Installed April 25, 2013. No significant movements off of baseline noted
SAA 3	Installed July 2, 2013. No significant movements off of baseline noted.
SAA 4	Installed April 30, 2013. No significant movements off of baseline noted.
SAA 5	Installed April 24, 2013. No significant movements off of baseline noted.
SAA GENERAL	Data from each station is being downloaded to DOTD hourly with manual analysis performed periodically. Options to provide reliable cellular communications to each site are being investigated. Automated alerts are being sent to B. Fernandez and J. Rauser for situational awareness and action as needed.

SENSR 1	
SENSR 2	
SENSR 3	
SENSR GENERAL	Installed all equipment in April 2013. Training is completed. No significant movements off of baseline noted

HWY 70 REALIGNMENT	SAP Contract No. 4400001862, State Project No. H.010571.1, LA 70 Bypass, Stage 0 Feasibility Study in separate document. Stage 0 meeting was held for possible bypass road on 27 MAR. A stakeholder meeting regarding the potential Hwy 70 bypass road was held on April 11, 2013.
HWY 70 CONTINGENCY PLAN	Developed August 11, 2012 by District 61 .
EMERGENCY COMMUNICATION PLAN	Draft plan developed March 18, 2013; alert roster developed April 10, 2013.



# Assumption Parish Scientific Situation Summary

## University of Memphis:

- There were 112+ MEQs yesterday and 72 MEQs detected since midnight that meet the selection criteria. There were 4 VLP events detected yesterday and 2 VLPs detected since midnight. (12/26)
- There were 232 MEQs yesterday and 32+ MEQs detected since midnight that meet the selection criteria. There were 6 VLP events detected yesterday and no VLPs detected since midnight. (1/2/14)
- There were 2 MEQs yesterday and no MEQs detected since midnight that meet the selection criteria. There were no VLP events detected yesterday and no VLPs detected since midnight. (1/7/14)
- There was 1 MEQ yesterday and 4 MEQs detected since midnight that meet the selection criteria. There were no VLP events detected yesterday and 1 VLP detected since midnight. (1/10/14)
- There were 2 MEQs yesterday and 2 MEQs detected since midnight that meet the selection criteria. There were no VLP events detected yesterday and no VLPs detected since midnight. (1/14/14)
- There were 3 MEQs yesterday and 3 MEQs detected since midnight that meet the selection criteria. There were no VLP events detected yesterday and no VLPs detected since midnight. (1/17/14)
- There were 2 MEQs yesterday and 2 MEQs detected since midnight that meet the selection criteria. There were no VLPs event detected yesterday and no VLPs detected since midnight. (1/21/14)
- There were no MEQs yesterday and 4 MEQs detected since midnight that meet the selection criteria. There were no VLPs event detected yesterday and no VLPs detected since midnight. (1/24/14)
- There were 6 MEQs yesterday and 4 MEQs detected since midnight that meet the selection criteria. There were no VLPs event detected yesterday and no VLPs detected since midnight. (1/28/14)
- There were 3 MEQs yesterday and 1 MEQ detected since midnight that meet the selection criteria. There were no VLPs event detected yesterday and no VLPs detected since midnight. (1/31/14)
- There were 2 MEQs yesterday and 1 MEQ detected since midnight that meet the selection criteria. There were no VLPs event detected yesterday and no VLPs detected since midnight. (2/4/14)
- There were no MEQs yesterday and 1 MEQ detected since midnight that meet the selection criteria. There were no VLPs event detected yesterday and no VLPs detected since midnight. (2/7/14)
- There was 1 MEQ yesterday and no MEQs detected since midnight that meet the selection criteria. There were no VLPs event detected yesterday and no VLPs detected since midnight (2/11/14)
- There were 3 MEQs yesterday and 3 MEQs detected since midnight that meet the selection criteria. There was 1 VLP event detected yesterday and no VLPs detected since midnight. (2/14/14)
- There were 3 MEQs yesterday and no MEQs detected since midnight that meet the selection criteria. There were no VLP events detected yesterday and no VLPs detected since midnight. The rate of MEQs is consistent with code 1, green. (2/18/14)



# Assumption Parish Scientific Situation Summary

## University of Memphis:

- There were 3 MEQs yesterday and 1 MEQ detected since midnight that meet the selection criteria. There were no VLP events detected yesterday and no VLPs detected since midnight. (2/21/14)
- There were 3 MEQs yesterday and 2 MEQs detected since midnight that meet the selection criteria. There were no VLP events detected yesterday and no VLPs detected since midnight. (2/28/14)
- There were 6 MEQs yesterday and 1 MEQ detected since midnight that meet the selection criteria. There were no VLP events detected yesterday and no VLP detected since midnight. (3/7/14)
- There were 2 MEQs yesterday and no MEQs detected since midnight that meet the selection criteria. There were no VLP events detected yesterday and no VLP detected since midnight. (3/11/14)
- There were 5 MEQs yesterday and no MEQs detected since midnight that meet the selection criteria. There was no VLP events detected yesterday and no VLP detected since midnight. (3/14/14)
- There was 1 MEQ yesterday and no MEQs detected since midnight that meet the selection criteria. There was no VLP events detected yesterday and no VLP detected since midnight. (3/18/14)
- There were 2 MEQs yesterday and 2 MEQs detected since midnight that meet the selection criteria. There were no VLP events detected yesterday and no VLPs detected since midnight. (3/21/14)
- There were 96 MEQs yesterday and 2 MEQs detected since midnight that meet the selection criteria. There were 6 VLP events detected yesterday and no VLPs detected since midnight. Yesterday the Oxy 3 cavern pressure was bled down in the morning. A couple of hours later an intense episode of MEQ activity combined with large VLP events occurred. The seismic activity has significantly decreased overnight with no VLP events. (3/25/14)



# Assumption Parish Scientific Situation Summary

- **Scientific Workgroup theories of cause:**
  - Salt Dome moving – natural migration of gas
  - Failed cement casing in OXY #3 well
  - Cavity Failure
  - Salt / Caprock falling from top of the cavern
    - Natural
    - Man-made (including penetration into sediments by cavern)
  - Gas storage cavern connections, communications by fractures
  - Low permeability seepage of gas into OXY #3 (source unknown)
  - Regional Tectonic activity (movement on growth faults)
  - A combination of above events
  - Held monthly meeting (conference call) on 2/19/14





# Next Operational Period (25-28 Mar 14) Incident Action Plan

- *The State Agency is responsible for oversight of the following activities. Texas Brine and its contractors are performing operational response activities.*

## DNR:

- Texas Brine conducting hydrocarbon removal operations
- Perform oversight of operations at investigatory well, observation/vent well and sink hole (day light hours)
- Staff providing assist Assumption Parish Incident Commander and DEQ with bubble site monitoring, community air monitoring, and in-home monitoring
- Reviewing analysis of water samples from water wells screened in Mississippi River Alluvial aquifer
- Continue source investigation and file reviews
- Coordinate and provide information to science team
- Dome operators proceeding to implement their Shallow Geology, Aquifer, and Caprock Characterization Plan
- CB&I to collect pressure readings from the shallow water Geoprobes
- CB&I continues to evaluate the production of formation gas from the vent wells
- November 12, 2012 emergency order from the Commissioner of Conservation:
  - Homes – Ventilation improvements in unventilated, unoccupied, enclosed spaces
    - Gas Monitors
  - Texas Brine’s contractor is Installing pressure monitoring wells with DNR oversight.
  - Develop plan for mitigation problem over area
  - Contain dissolved contamination from flowing into Bayou Corne



# Next Operational Period (25-28 Mar 14) Incident Action Plan

- *The State Agency is responsible for oversight of the following activities. Texas Brine and its contractors are performing operational response activities.*

## DNR (Cont'd)

- Texas Brine contractor to maintain antennas & repeaters for in-home monitoring
- Texas Brine contractor to maintain in-home monitors.
- BRC continues to evaluate data and provide recommended requirements
- Monitoring under slab venting installation
- Weekly surveys
- Continue engineering planning, placement of sand and clay, and geotextile material on South Berm re-route
- Surveying subsidence rods at ORW-21 as part of de-watering test
- Continue de-watering test at ORW-21
- Continuous ORW de-watering at ORW-14, 4, 48, and OGRW-1
- Continue 5-day de-watering test at ORW-24, 32
- Perform surface water sampling



# Next Operational Period (25-28 Mar 14) Incident Action Plan

- **DEQ:**

- Continue to conduct air and water quality monitoring in the community and in the area of the bubbling in Bayou Corne, Triche Canal, and Grand Bayou
- Continue to offer indoor air monitoring to residents who complete the Rite of Passage form from the Parish. Residents desiring indoor home monitoring may call DEQ @ (225) 219-3015
- Pursuant to the DNR press release dated 11/7/2012 regarding the pressure in some geoprobes, LDEQ will conduct indoor air monitoring as requested at residential homes in the Bayou Corne community.
- Conduct any test required by scientific group to aid in source/cause identification
- Provide oversight of Texas Brine's efforts to conduct hydrocarbon removal at the slurry site.
- Provide oversight and review of Texas Brine's air and water quality monitoring efforts.
- Continue to visually monitor conditions of the booms and general conditions of the slurry area from the well pad.
- Perform Bayou Corne water quality background sampling (non-bubbling)



# Next Operational Period (25-28 Mar 14) Incident Action Plan

- **DHH / Office of Public Health**

- DHH will continue to review and analyze environmental sample data as provided by the Louisiana Department of Environmental Quality (LDEQ), for any chemical findings that would indicate a potential public health risk.
- DHH Safe Drinking Water Program will continue to monitor the incident for any reports of the expansion of the slurry/hole to ensure that water distribution underground piping is not compromised.



# Next Operational Period (25-28 Mar 14) Incident Action Plan

- **DHH / Office of Public Health:**
  - DHH/OPH will continue to participate in meetings with GOHSEP and Assumption Parish to maintain visibility and operational readiness for any potential public health concerns.



# Next Operational Period (25-28 Mar 14) Incident Action Plan

## • DOTD:

- Continue daily observation of road and bridges
- Will continue observation and analysis of deformation spots along Hwy 70 in evacuation zone
- Continuous monitoring of Hwy 70 with instrumentation
- Continue observation and analysis of Hwy 69
- Continue establishing a fifth CORS site in the Bayou Corne area



# Next Operational Period (25-28 Mar 14) Incident Action Plan

- **Scientific Group:**

- Analyzing groundwater sample analyses
- Evaluate issues as they arise
- Continue to provide information to the UCG
- Anyone can submit information at any time for science team evaluation by sending an email to [askgohsep@la.gov](mailto:askgohsep@la.gov)
- Additional members added to the team as needed



# Assumption Parish Long Range Plan

- **DNR:**
  - Conducting testing of investigatory well to determine cavern condition and root cause
  - Scientific Group conference calls/meetings will be scheduled weekly to review new data and issues that arise
  - Continue source investigation and file review
  - Evaluate results of monitoring data and take necessary action
  - Monitor operations at investigatory, observation/vent well and sink hole (day light hours)
  - Staff on standby to assist incident commander
  - Ensure total remediation of the entire site
  - Continue to pursue landowner access agreements
  - Implement CB&I's Plan of Action
  - Conduct industrial well sampling bi-weekly and bubble sites as reported in general vicinity of operations.
  - Dome operators to identify presence of natural gas and vent as necessary
  - Ensure Texas Brine fully complies with the Commissioner of Conservation's Orders dated 11 Oct 12, Nov 2012, 7 Dec 2012, and 14 Jan 2013.
  - Blue Ribbon Commission will evaluate data collected in order to provide recommendations on risk levels to the Parish
- **DOTD:**
  - Investigating bypass alignment of LA 70 around the Salt Dome
  - Continuous automated monitoring of roadway-bridge movement and subsidence
  - Establish CORS site #5 on the North side of Hwy 70
- **DEQ:**
  - Continue to conduct sampling of air and water in area of operation
  - Continue oversight of ongoing remedial activities
  - Continue to conduct hazard assessment monitoring with APSO in resident homes and properties when requested.