

Daily Report 12/16/13

This report discusses activities completed 12/13/2013 through 12/15/2013.

Tetra Tech

Directive #1 - Indoor Air

- Draft Concept Plan for phased approach to indoor air monitoring plus installation of alarm systems and ventilation systems was submitted to DNR on 12/13/12 for comments; the detailed Work Plan was submitted to DNR on 1/14/13 for comments.
- Installed a total of 98 detectors at 45 locations. No positive alarms have occurred to date for either % LEL or H2S.
- A total of ten monitoring pairs and associated transmitters have been provided to Assumption Parish, at their request.
- Continued daily monitor calibration.
- Completed visual inspection and maintenance of the under slab ventilation systems. Liquids found in the systems were removed and transported to the TBC frac tank.

Plan for today:

- Continue monitor calibration.
- Continue indoor air monitoring.
- Continue ventilation system operation, maintenance, and monitoring.

Directive #2 - Additional Relief Wells and Directive #3 - Overall Plan as Corrected

- Met with DNR/Shaw on 1/24/13; reached agreement on well designs.
- Radius of Influence (ROI) wells are installed at well pads ORW-5 and ORW-9.
- The field portion of ROI testing was completed July 21st. Report is being finalized.
- Rock ft bgss Trucking used a motor grader to grade the TBC access roads.

Directive #4 - Operation of All Wells

- Flares #2, #3, #4, #5, and #6 are operating. One additional flare, and a trailer-mounted backup flare, are available as needed. TBC Flare #1 will require insulation repair prior to being put into service.
- Well work overs are ongoing for all low-producing and non-flowing wells.
- Barton meters have been installed on flowing wells; performed routine maintenance.
- Performed daily flare operation and maintenance.
- Performed daily relief well operation and maintenance.
- Increased the choke position and orifice plate size from 1/8-inch to ½-inch on ORW-49, 50, and 36.



- Re-oriented and zeroed choke indicators on ORW-31, 39 and 48, and PMW-19S.
- Continued depressurization of ORW-54. Removed 250 gallons of water from the separator over two days; well head pressure ranged between 13 and 15 psi.
- Dewatered ORW-6. Starting conditions: 27.5 psi well head, 11.75 ft bgs water level. Removed 110 gallons over 1 hour of pumping; ending conditions: 26 psi well head, 77.39 ft bgs water level.
- Removed the transducer from ORW-19. Installed an AP-2 pump along with the transducer. Dewatered the well; starting conditions: 4 psi well head, 9.84 ft bgs water level. Removed 240 gallons over 2 hours of pumping; well head pressure: 3 psi; water level 59.08 ft bgs.
- Dewatered ORW-18. Starting conditions: 19 psi well head, 8.75 ft bgs water level. Pumped 325 gallons over 2.5 hours; ending conditions: 30 psi well head, 28.67 ft bgs water level.
- Removed the electric pump and transducer from ORW-43. Reinstalled the transducer 12" lower than previous position due to removing the pump head assembly.
- Increased the choke position on ORW-49 and 36.
- Decreased the choke position at ORW-50 to stabilize the well head pressure.
- Shut in ORW-39: no pressure, no flow.
- Removed the high capacity QED pump and transducer from ORW-9; reinstalled the transducer. Installed the pump at ORW-16.
- Dewatered ORW-26. Starting conditions: 40 psi well head, 8.33 ft bgs water level; over 1.5 hours of pumping, remove 110 gallons; while pumping, the well was opened to flow to the flare with a 1/16" orifice plate; began operating at 40 psi; ending conditions: 27.5 psi well head, 96.73 ft bgs water level.
- ORW-16: install the high capacity AP-2; dewater the well; starting conditions: 0 psi well head, 9.87 ft bgs water level; over 2 hours of pumping, remove 300 gallons; ending conditions: 0 psi well head pressure; 48.88 ft bgs water level.
- Programed and installed track-it data loggers on ORW-49, 50, 52 and 53; placed labels on each well, as well as, PWM-18 and 16.

Plan for today:

- Complete daily flare, Barton meter, generator, and compressor operation and maintenance activities.
- Continue dewatering schedule.

<u>Directive #5 – Sinkhole Containment</u>

- Submitted Joint Application to OCM and COE, which included sinkhole containment design and additional ORW wells, on 2/14/13.
- Initial containment of the sinkhole area was completed.
- A pre-construction meeting was held on-site on March 27th for TBC and contractors.
- Construction of the containment system began April 1st.



• The current configuration of the sinkhole containment system is completed.

Plan for today:

• Inspect berm.