

PROGRESS REPORT

July 2009

INTERIM GROUNDWATER/AQUIFER POLLUTION PREVENTION, MITIGATION AND MONITORING PLAN

PINEDALE ANTICLINE OIL AND GAS EXPLORATION AND DEVELOPMENT PROJECT
SUBLETTE COUNTY, WYOMING

PROGRESS MADE SINCE LAST REPORTING PERIOD

Planning Documents, Budgeting, Meetings and Management

- Worked with JFC Surveying to import PDOP data from the April 2009 survey; continued database with conversion process.
- Attended the PAWG meeting held on July 23 at BLM's Pinedale F.O.
- Supported efforts of DEQ and USQ regarding DEQ's draft "comfort letter" which addresses several of USQ concerns associated with installing study wells: sampling parameters; long-term fate of the study wells; and, responsibility for investigating any contamination discovered.
- Addressed USQ comments and prepared another draft version of a statement of understanding/right of access agreement/surface use agreement to cover study well/piezometer installation on private property.
- Met with SCCD representatives on July 22 to discuss their continuing support of the groundwater characterization study, including assistance with private landowner meetings.
- Met with Ultra on July 22 to discuss the status of accounts receivable.
- Provided project status updates, budget summary and maintained project communication with representatives of SCCD, USQ, DEQ and BLM.

Initial Vulnerability Assessment

- No activity.

Credible/Suitable Well Determination

- Provided support to BLM and DEQ regarding our credible well determination and the associated suitable well determination. Issued a spreadsheet summary of the 65 credible wells and identified each well's suitability for a specific project data need.

Monitoring Program Augmentation

- No activity.

Hydrogeologic Data Gaps Study

- Continued preparation of BLM Right-of-Way permit applications for seven study wells and two piezometers to be installed at seven sites.
- Continued preparation of WOGCC Sundry Notices for 13 study wells and one piezometer on operating pads.
- Initiated preparation of SEO well permit applications for the approximately 11 wells that will be completed with casing greater than 4-inches in diameter.

- Installed water level recorders (pressure transducers) and a barometric pressure recorder at New Fork River stations NF-50 (mouth of the East Fork River) and downstream at NF-19. Measuring point elevations at each transducer location were established from benchmarks set during the April 2009 well survey. Data are being recorded every two hours and will be used to evaluate river stage relative to groundwater elevations. Work was completed on July 22nd.
- Completed reconnaissance of Antelope Springs and Mesa Springs on July 21 and 22. Work included describing the physiographic setting at each spring, obtaining GPS coordinates, measuring flow, and collecting samples for laboratory analyses.

Low Level Petroleum Hydrocarbon Source Evaluation

- Continued work on the sampling and analysis plan.

HEALTH AND SAFETY

- Field work was conducted by Steve Wright and K. Bill Clark on July 21 and 22. Kathy Raper of the SCCD was present on July 22nd. No field incidents were recorded at the springs or surface water stations.

ISSUES AND PROPOSED RESOLUTIONS

- **Database** – A portion of the PDOP data from JFC Surveying was received. Geomatrix is still working to obtain the balance of PDOP data. Once added to the database, an internal QA/QC review will be completed before issuing the geodatabase to BLM.
- **DEQ Comfort Letter vs. Memorandum of Understanding** – Geomatrix understands that based on an opinion from the Wyoming Attorney General, a MOU between DEQ and USQ is not preferred for this project. Alternatively, DEQ offered to issue a letter to USQ to address certain concerns (see above). Initiating work to prepare for field studies is predicated on USQ acceptance of the letter. Geomatrix will continue to encourage DEQ and USQ regarding the letter. Geomatrix is also poised to issue applications to BLM, WOGCC and SEO for the necessary permissions to install wells.
- **WOGCC** – Although not involved in meetings or discussions with the WOGCC, Geomatrix understands that the agency may not allow study wells to be installed within 350 feet of gas wells or associated equipment unless wells are constructed to gas well standards. Geomatrix also understands that BLM has requested a temporary suspension of WOGCC's rules to allow for the groundwater characterization study.
- **Right of Access Agreement/Statement of Understanding** – Geomatrix issued a revision to the Right of Access agreement for private property owners to USQ in early August. Geomatrix will continue to work with USQ to finalize the agreement. We have the support of the SCCD to assist us in contact private property owners and are poised to begin.
- **Yates** – Due to delays in the project, Geomatrix has not contacted Yates recently regarding their concurrence with a Sundry Notice for study wells on their Highway #7 pad. Once USQ accepts DEQ's letter (see above), Geomatrix will contact Yates.
- **Geomatrix as Agent** – Agency permit applications for the study wells require the applicant(s) signature(s). For efficiency, Geomatrix will request Ultra, Shell and Questar

designate Geomatrix as their representative for the purposes of the ROW applications, Sundry Notices and SEO well applications.

- **Schedule** – The project schedule continues to slip. Geomatrix has been in communication with BLM and USQ regarding the schedule and has requested expedited BLM review of the ROW permit applications. To preserve as much of the the 2009 field season as possible, Geomatrix will attempt to have more than one drill rig operating. The schedule will be adjusted once the drilling program is scheduled.

ANTICIPATED ACTIVITIES FOR NEXT REPORTING PERIOD (August 2009)

- Complete the database conversion, perform internal QC/QA review, and transmit the project geodatabase to BLM for review.
- Issue ROW permit applications, Sundry Notices and SEO well applications.
- Initiate contact with private landowners assuming we receive approval from USQ.
- Continue preparation of the Sampling and Analysis Plan for the LLPHE.

SCHEDULE STATUS

- See discussion above.

DELIVERABLE STATUS

- July 9 – Project status report for June.
- July 31 – Spreadsheet summary of credible and suitable wells.

STAFFING CHANGES OR CONCERNS

- None.