Colorado Oil And Gas Conservation Commission Conditions Of Approval April 3, 2007

Lexam Explorations (U.S.A) Inc.:

Baca No. 5 Well NE¼ SW¼, Section 28, Township 43 North, Range 11 East,

N.M.P.M.

Baca No. 6 Well SE¼ NE ¼, Section 33, Township 43 North, Range 11 East,

N.M.P.M.

- 1. Notify David Shelton COGCC Engineering Supervisor (303-894-2100 x 108) or David Dillon COGCC Engineering Manager (303-894-2100 x 104) 48 hours prior to moving onto the location with drilling equipment. Advise Mr. Shelton or Mr. Dillon at least 24 hours prior to running any casing string to provide COGCC Field Inspectors sufficient notification time to witness cementing operations and pressure testing of blowout preventers. If the well is a dry hole, notify Mr. Shelton or Mr. Dillon 24 hours prior to plugging and abandoning this well.
- 2. Any changes to the approved drilling plan and procedures must be approved in writing by the COGCC.
- 3. Immediately notify the COGCC of any major problems encountered during the drilling, cementing, or completion process.
- 4. Conductor casing and surface casing will be cemented to surface.
- 5. Surface casing depth will be set at a depth of 3000 feet. This depth was determined by COGCC staff based upon review of available relevant data, including data from the deep water well located approximately one mile from the drill sites, and after consultation with the Division of Water Resources staff.
- 6. Prior to commencing operations, an inventory of all chemicals and products that will be used or stored on site must be provided to the COGCC, the surface owner, and local emergency response personnel prior to bringing those substances on to the Baca National Wildlife Refuge. If additional chemicals or products are required, then information about these substances must be provided to the COGCC, the surface owner, and the local emergency response personnel prior to bringing them on to the Baca National Wildlife Refuge.
- 7. Prior to commencing operations, a meeting with the local emergency response personnel will be held to establish an adequate safety and response plan for drilling, completion, and production activities.

- 8. A closed loop mud and cutting system will be used and cuttings will be placed in an above ground and lined enclosure, unless landowner approval to use an alternative mud and cutting system is obtained in writing.
- The drill cuttings will not be left at or buried on the drill site or elsewhere on the Baca National Wildlife Refuge, unless landowner approval is obtained in writing. Cuttings will be disposed in accordance with COGCC Rule 907.
- 10. Formation temperatures will be recorded and the data provided to the COGCC and the surface owner.
- 11. If pumping tests are conducted on discrete zones below deepest neighboring water well (2,180 feet below surface), then water samples will be collected for basic water quality tests, including TDS, dissolved metals, common anions, pH and alkalinity. The analytical results will be provided to the COGCC and the surface owner.
- 12. If production casing is run, then all hydrocarbon and water bearing formations must be covered with cement and a cement bond log must be run to verify coverage. Cementing requirements will be determined by COGCC staff from open-hole logs and other well information obtained during the drilling of the well.
- 13. If the well is plugged as a dry hole, then the COGCC must be contacted for plugging instructions, which will be based on log and geologic data, and the actual wellbore configuration. Cement plugs will be set to confine all fluids to the reservoirs in which they originally occurred. The plugging procedure will assure that all aquifers are properly isolated and protected.
- 14. A guard, provided by Lexam, shall be stationed at the property gate on County Road T during all drilling and completion activities. The guard will limit access to the property to Lexam employees, Lexam contractors, and other authorized personnel.
- 15. Baseline water quality data will be acquired from both near surface (unconfined aquifer) and deeper aquifers in proximity to proposed wells prior to the spud of the wells and again within six months after the wells are completed and/or plugged. Sampling and analysis procedures must be approved by the COGCC staff prior to conducting this work. Data will be provided to the COGCC and the surface owner. Data will used to assess any possible long-term affects on ground water quality.

- 16. A minimum of one up-gradient and two down-gradient monitoring wells will be installed around each drill pad. The wells will be completed in the shallow unconfined aquifer. The locations and elevations of the wells will be surveyed and depth to water will be measured. Water samples will be collected for chemical analysis before the wells are spud and at predetermined intervals thereafter, which will agreed to by the United States Fish and Wildlife Service (USFWS) and Lexam. If spills or releases of drilling related chemicals at sites occur, then the sampling frequency may be increased to a frequency agreed to by the USFWS, Baca Grande Water and Sanitation District, and Lexam.
- 17. Equipment and vehicles brought onto the Baca National Wildlife Refuge from outside the San Luis Valley must be cleaned and decontaminated to minimize introduction of non-native species and noxious weeds.
- 18. Lexam will insure that all drilling and completion operations will be supervised by a WellCAP IADC certified supervisor. All blow prevention equipment shall be rated for 5000 psi and will be installed and tested in accordance with U.S. Bureau of Land Management Onshore Order #1.