

From: Koepsell, Arthur
To: ["kim@banko1.com"](mailto:kim@banko1.com)
Subject: B&B Farms 1-19H Form 2A Document # 400306655, Kirkpatrick Oil Company
Date: Thursday, July 26, 2012 9:06:00 AM

Kimberly,

The COGCC is reviewing the Form 2A (#400302775) for Kirkpatrick Oil Company B&B Farms 1-19H location, located in the NENE Sec 19 T11S R44W Kit Carson County, Colorado. The COGCC requests the following changes regarding the data submitted on or attached to the Form 2A prior to passing the Oil and Gas Location Assessment (OGLA).

Proposed Freshwater Pit

A fresh water pit is considered a special purpose pit by the COGCC and will require a form 15. The form 15 can be submitted through Eforms. Preferably the Form 15 will be submitted along with the 2A. Please complete a Form 15 as soon as reasonably possible. The 2A should have the special purpose pit tab marked with a 1.

Plant Community

The plant community information should be removed since the location will be constructed on agricultural land.

Conditions of Approval

- Flowback and stimulation fluids must be sent to tanks. The flowback and stimulation fluid tanks must be placed on the well pad in an area with additional down gradient perimeter berming sufficiently impervious to contain any spilled or released material (per Rule 604.a.(4)). Tanks used for flowback must be equipped with emission reducing devices during flowback.
- Prior to initiating construction of the fresh water pit the operator is required to submit a Form 15 Pit Permit. The fresh water storage pit shall be lined in accordance with Rule 904.b. and 904.c. The fresh water storage pit shall include signage that: identifies the pit use as a freshwater-only pit, prohibits placing E&P Waste in the pit. The pit is required to be closed with a form 27.
- Provide notice to COGCC 48-hours prior to commencement of Hydraulic Fracturing activities via form 42.
- Provide notice to COGCC 48-hours prior to commencement of construction activities via form 42.
- Prior to drilling, operator shall sample two wells, springs, or surface water features within a one (1) mile radius of the proposed oil and gas location. Testing preference shall be given to water wells and springs over surface water. The sample location shall be surveyed in

accordance with Rule 215.

Initial baseline testing shall include laboratory analysis of pH, total dissolved solids (TDS), specific conductivity (SC), sodium adsorption ratio (SAR) calculation, calcium (Ca), potassium (K), magnesium (Mg), sodium (Na), arsenic (As), boron (B), barium (Ba), cadmium (Cd), chromium (Cr), copper (Cu), iron (Fe), manganese (Mn), lead (Pb), selenium (Se). All metals analyzed for total recoverable; bromide (Br), chloride (Cl), fluoride (F), sulfate (SO₄), alkalinity (total, HCO₃, and CO₃ – all expressed as CaCO₃), benzene, toluene, ethyl benzene, o-xylene, m- + p-xylene (BTEX), dissolved methane, diesel range organics (DRO), gasoline range organics (GRO). Sampling shall be performed by qualified individuals using methods consistent with commonly accepted environmental sampling procedures. Field observations such as pH, temperature, specific conductance, odor, water color, sediment, bubbles, and effervescence shall also be included.

After 90 days, but less than 180 days of completion of the first proposed well a “post-completion” test shall be performed for the same analytical parameters listed above and repeated one (1), three (3) and six (6) years thereafter.

If free gas or a dissolved methane concentration level greater than one (1) milligrams per liter (mg/l) is detected in a water well, gas compositional analysis and stable isotope analysis of the methane (carbon and deuterium) shall be performed to determine gas type (biogenic or thermogenic). If the methane concentration increases by more than five (5) mg/l between sampling periods, or increases to more than ten (10) mg/l, the operator shall notify the Director and the owner of the water well immediately. If thermogenic methane concentrations increase between sampling periods, the operator shall submit to the Director an action plan to determine the source of the increase.

Copies of all test results described above shall be provided to the Director and the landowner where the water quality testing well is located within three (3) months of collecting the samples used for the test. The analytical data and surveyed sample locations shall also be submitted to the Director in an electronic data deliverable format approved by Director.

If you have any questions or concerns feel free to contact me.

Thanks,

Arthur

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