

From: Koepsell, Arthur
To: ["SENICHOLS@RAMSEYLIC.COM"](mailto:SENICHOLS@RAMSEYLIC.COM)
Subject: State of Colorado 2-36 Form 2A Document # 2237332, Ramsey Property Management
Date: Thursday, July 26, 2012 8:45:00 AM

Stephen,

The COGCC is reviewing the Form 2A (#2237332) for the Ramsey Property Management State of Colorado 2-36, located in the NESE Sec 36 T34S R43W Baca County, Colorado. The COGCC requests the following changes to the information provided and acknowledgement of conditions of approval prior to passing the Oil and Gas Location Assessment (OGLA).

Location drawing

The location drawing misrepresents County road 48.00, located approximately 300 feet east of the location, as a private drive. Please have your surveyors correct the location drawing and forward it via email.

Condition of Approval

- 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.

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 please feel free to contact me.

Thanks,

Arthur

Arthur W. Koepsell, P.G.
Oil & Gas Location Assessment Specialist
Southern Area

Oil and Gas Location Assessment
Colorado Oil and Gas Conservation Commission
1120 Lincoln St. Suite 801
Denver Colorado 80203
Phone (303) 894-2100 ext. 5148