

**From:** [brianjhedberg@gmail.com](mailto:brianjhedberg@gmail.com) on behalf of [Brian Hedberg](#)  
**To:** [Koepsell, Arthur](#)  
**Subject:** Re: Assistance with Huerfano Permit  
**Date:** Friday, September 07, 2012 9:44:44 AM

---

Arthur,

Our COO Duane Bacon has reviewed the stipulations below. It will not be a problem for us to comply. Thanks,

Brian

On Tue, Sep 4, 2012 at 9:13 AM, Koepsell, Arthur <[Arthur.Koepsell@state.co.us](mailto:Arthur.Koepsell@state.co.us)> wrote:

Brian,

That was what was necessary. I also wanted to make sure that you have seen the complete list of conditions of approval that are attached to this permit. Please reply to this email to let me know that you have reviewed the COAs.

1. Only enclosed flares shall be utilized at the location. A Form 4 Sundry Notice is required to be filed with the COGCC stating that flaring will be taking place on the location. The Sundry is required to be submitted and approved prior to initiating flaring. The Sundry shall also include a line drawing of the flare.
2. Provide notice to COGCC 48-hours prior to commencement of construction activities via form 42.
3. Provide notice to COGCC 48-hours prior to commencement of hydraulic fracturing activities via form 42.
4. THE MOISTURE CONTENT OF ANY DRILL CUTTINGS IN A CUTTINGS PIT, TRENCH, OR PILE SHALL BE AS LOW AS PRACTICABLE TO PREVENT ACCUMULATION OF LIQUIDS GREATER THAN DE MINIMIS AMOUNTS. AT THE TIME OF CLOSURE, THE DRILL CUTTINGS MUST ALSO MEET THE APPLICABLE STANDARDS OF TABLE 910-1.
5. Results of the pit closure sampling shall be supplied to Peter Gintautas at [Peter.Gintautas@state.co.us](mailto:Peter.Gintautas@state.co.us) via form 4 prior to closing the pit.

6. 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.

7. Emissions from condensate, crude oil, and produced water tanks and from glycol dehydrators shall be controlled by a device capable of 95% control efficiency of VOC. The device(s) shall be maintained to allow maximum efficiency during operations. If necessary, a permit from the Colorado Department of Public Health and Environment, Air Pollution Control Division, for the tank(s), Dehydrator(s) and control device(s) shall be obtained.

8. Only enclosed flares shall be utilized at the location. A Form 4 Sundry Notice is required to be filed with the COGCC stating that flaring will be taking place on the location. The Sundry is required to be submitted and approved prior to initiating flaring. The Sundry shall also include a line drawing of the flare.

9. Venting of gas is prohibited on the location.

10. The operator will conduct baseline sampling of (at a minimum) the two (2) closest water wells prior to spudding the well. At least one of the sampled wells shall be between the operators proposed location and the Huerfano River. The operator may conduct additional groundwater monitoring at their own discretion. 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 (SO<sub>4</sub>), alkalinity (total, HCO<sub>3</sub>, and CO<sub>3</sub> – all expressed as CaCO<sub>3</sub>), 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.

The selected sampling locations will be sampled again 1 year, 3 years and 6 years after completion. Post completion sampling of water wells will consist of the same analyte list as the pre-drilling program. Copies of all test results, field parameters and field observations described above shall be provided to the Director and the water well owner within three (3) months of collecting the samples. The analytical data and surveyed sample locations shall also be submitted to the Director in an electronic data deliverable format approved by Director.

Please feel free to contact me if you have any questions regarding the COAs.

Thanks,

Arthur

Arthur W. Koepsell, P.G.

Environmental Data Analyst

Colorado Oil and Gas Conservation Commission

1120 Lincoln St. Suite 801

Denver Colorado 80203

Phone  [\(303\) 894-2100](tel:(303)894-2100)  ext. 5148



---

**From:** [brianjhedberg@gmail.com](mailto:brianjhedberg@gmail.com) [mailto:[brianjhedberg@gmail.com](mailto:brianjhedberg@gmail.com)] **On Behalf Of** Brian Hedberg  
**Sent:** Friday, August 31, 2012 10:23 AM  
**To:** Koepsell, Arthur  
**Subject:** Fwd: Assistance with Huerfano Permit

Arthur,

Please let us know if this is acceptable. Thanks,

Brian

----- Forwarded message -----  
From: <[terrysurveying@comcast.net](mailto:terrysurveying@comcast.net)>  
Date: Fri, Aug 31, 2012 at 8:14 AM  
Subject: Re: Assistance with Huerfano Permit  
To: Brian Hedberg <[bhedberg@nrgcolo.com](mailto:bhedberg@nrgcolo.com)>

Brian,

Attached is a drawing showing the improvements within 400' of the well pad. I've also included a distance to the water well, which lies north of the county road, and to the house site.

Let us know if this work.

Gary Terry  
Terry Surveying

1424 Santa Fe Trail  
PO Box 851  
Trinidad, CO 81082  
[\(719\)846-6921](tel:(719)846-6921)  
[\(719\)846-6066](tel:(719)846-6066) fax  
website: [terrysurveying.com](http://terrysurveying.com)  
[terrysurveying@comcast.net](mailto:terrysurveying@comcast.net)

**From:** [Brian Hedberg](#)

**Sent:** Friday, August 17, 2012 11:45 AM

**To:** [terrysurveying@comcast.net](mailto:terrysurveying@comcast.net)

**Subject:** Assistance with Huerfano Permit

Gary,

We're still having trouble getting the permit for the Jenny C. The last piece is our location drawing. Please see the State's comments below. Is this something you all are able to do? I also attached the Location Drawing we previously filed that was rejected. Please let me know,

Thanks,

Brian

[Brian,](#)

Location drawings need to have the proposed disturbed area clearly shown on the drawing, a line on the drawing clearly showing the 400 ft radius from the edge of the disturbed area, all existing improvements within 400 feet and the distance to those improvements. The drawing you provided does not have distances to the existing field

road or to the canal located to the south west of the location. The drawing also needs to have the 400 foot improvement radius included on the drawing. If you have any further questions regarding the requirement for the location drawing please see Rule 303.d.(3).C. 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](tel:(303)894-2100)  ext. 5148