

State of Colorado Oil and Gas Conservation Commission

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Document Number:

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Date Received:

07/09/2013

Oil and Gas Location Assessment

☒ New Location ☐ Amend Existing Location Location#: _____

Submit original plus one copy. This form is to be submitted to the COGCC prior to any ground disturbance activity associated with oil and gas development operations. This Assessment may be approved as a standalone application or submitted as an informational report accompanying an Application for Permit-To-Drill, Form 2. Approval of this Assessment will allow for the construction of the below specified location; however, it does not supersede any land use rules applied by the local land use authority. This form may serve as notice to land owners and other interested parties, please see the COGCC web site at <http://colorado.gov/cogcc/> for all accompanying information pertinent to this Oil and Gas Location Assessment.

Location ID:

436485

Expiration Date:

03/19/2017
☒ This location assessment is included as part of a permit application.

1. CONSULTATION

- ☐ This location is included in a Comprehensive Drilling Plan. CDP # _____
- ☐ This location is in a sensitive wildlife habitat area.
- ☐ This location is in a wildlife restricted surface occupancy area.
- ☐ This location includes a Rule 306.d.(1)A.ii. variance request.

2. Operator

Operator Number: 10421

Name: PETROLEUM RESOURCE MANAGEMENT CORP.

Address: 1580 LINCOLN ST., STE 635

City: DENVER State: CO Zip: 80203

3. Contact Information

Name: Duncan Shepherd

Phone: (303) 861-9480

Fax: (303) 861-7362

email: petromgt@comcast.net

4. Location Identification:

Name: Duncan Ranch Number: 11-89-36 #3-4

County: MOFFAT

QuarterQuarter: LOT 19 Section: 36 Township: 11N Range: 89W Meridian: 6 Ground Elevation: 7977

Define a single point as a location reference for the facility location. This point should be used as the point of measurement in the drawings to be submitted with this application. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 728 feet FSL, from North or South section line, and 2409 feet FEL, from East or West section line.

Latitude: 40.860331 Longitude: -107.325012 PDOP Reading: 3.0 Date of Measurement: 05/25/2013

Instrument Operator's Name: Kyle Tesky

5. Facilities (Indicate the number of each type of oil and gas facility planned on location):

Special Purpose Pits: <input type="text"/>	Drilling Pits: <input type="text"/>	Wells: <input type="text" value="1"/>	Production Pits: <input type="text"/>	Dehydrator Units: <input type="text" value="1"/>
Condensate Tanks: <input type="text" value="1"/>	Water Tanks: <input type="text" value="1"/>	Separators: <input type="text" value="1"/>	Electric Motors: <input type="text"/>	Multi-Well Pits: <input type="text"/>
Gas or Diesel Motors: <input type="text"/>	Cavity Pumps: <input type="text"/>	LACT Unit: <input type="text"/>	Pump Jacks: <input type="text"/>	Pigging Station: <input type="text"/>
Electric Generators: <input type="text"/>	Gas Pipeline: <input type="text"/>	Oil Pipeline: <input type="text"/>	Water Pipeline: <input type="text"/>	Flare: <input type="text"/>
Gas Compressors: <input type="text"/>	VOC Combustor: <input type="text" value="1"/>	Oil Tanks: <input type="text"/>	Fuel Tanks: <input type="text"/>	

Other: Cuttings Trench; Exploratory well, no decision yet on facilities (estimates only) depending on well success.

6. Construction:

Date planned to commence construction: 06/01/2014 Size of disturbed area during construction in acres: 3.00
Estimated date that interim reclamation will begin: 10/31/2014 Size of location after interim reclamation in acres: 3.00
Estimated post-construction ground elevation: 7973 Will a closed loop system be used for drilling fluids: Yes ☒
Will salt sections be encountered during drilling: Yes ☐ No ☒ Is H2S anticipated? Yes ☐ No ☒
Will salt (>15,000 ppm TDS Cl) or oil based muds be used: Yes ☐ No ☒
Mud disposal: Offsite ☒ Onsite ☐ Method: Land Farming ☐ Land Spreading ☐ Disposal Facility ☒
Other: _____

7. Surface Owner:

Name: Mr. Duane Duncan, Vice Pr Phone: 307-380-6444
Address: Duncan Livestock Company Fax: None
Address: P.O. Box 62 Email: None
City: Dixon State: WY Zip: 82323 Date of Rule 306 surface owner consultation: 01/01/2013
Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian
Mineral Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian
The surface owner is: ☒ the mineral owner ☒ committed to an oil and gas lease
☒ is the executer of the oil and gas lease ☐ the applicant
The right to construct the location is granted by: ☒ oil and gas lease ☐ Surface Use Agreement ☐ Right of Way
☐ applicant is owner
Surface damage assurance if no agreement is in place: ☐ \$2000 ☐ \$5000 ☐ Blanket Surety ID _____

8. Reclamation Financial Assurance:

☒ Well Surety ID: 20120059 ☐ Gas Facility Surety ID: _____ ☐ Waste Mgmt. Surety ID: _____

9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes ☐ No ☒
Distance, in feet, to nearest building: 1107, public road: 5500, above ground utility: 7500,
railroad: 132000, property line: 728

10. Current Land Use (Check all that apply):

Crop Land: ☐ Irrigated ☐ Dry land ☐ Improved Pasture ☐ Hay Meadow ☐ CRP
Non-Crop Land: ☒ Rangeland ☐ Timber ☐ Recreational ☐ Other (describe): _____
Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

11. Future Land Use (Check all that apply):

Crop Land: ☐ Irrigated ☐ Dry land ☐ Improved Pasture ☐ Hay Meadow ☐ CRP
Non-Crop Land: ☒ Rangeland ☐ Timber ☐ Recreational ☐ Other (describe): _____
Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

12. Soils:

List all soil map units that occur within the proposed location. Attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" report listing the soil typical vertical profile. This data is to used when segregating topsoil.

The required information can be obtained from the NRCS web site at <http://soildatamart.nrcs.usda.gov/> or from the COGCC web site GIS Online map page found at <http://colorado.gov/cogcc>. Instructions are provided within the COGCC web site help section.

NRCS Map Unit Name: 96. Heathcoat stony loam, 1 to 6 percent slopes, extremely stony.

NRCS Map Unit Name: 121. Leaps clay loam, 3 to 15 percent slopes, very stony.

NRCS Map Unit Name: _____

13. Plant Community:

Complete this section only if any portion of the disturbed area of the location's current land use is on non-crop land.

Are noxious weeds present: Yes ☐ No ☒

Plant species from: ☐ NRCS or, ☐ field observation Date of observation: _____

List individual species: _____

Check all plant communities that exist in the disturbed area.

☒ Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)

☒ Native Grassland (Bluestem, Grama, Wheatgrass, Buffalograss, Fescue, Oatgrass, Brome)

☒ Shrub Land (Mahogany, Oak, Sage, Serviceberry, Chokecherry)

☐ Plains Riparian (Cottonwood, Willow, Aspen, Maple, Poplar, Russian Olive, Tamarisk)

☐ Mountain Riparian (Cottonwood, Willow, Blue Spruce)

☐ Forest Land (Spruce, Fir, Ponderosa Pine, Lodgepole Pine, Juniper, Pinyon, Aspen)

☐ Wetlands Aquatic (Bullrush, Sedge, Cattail, Arrowhead)

☐ Alpine (above timberline)

☐ Other (describe): _____

14. Water Resources:

Rule 901.e. may require a sensitive area determination be performed. If this determination is performed the data is to be submitted with the Form 2A.

Is this a sensitive area: ☒ No ☐ Yes Was a Rule 901.e. Sensitive Areas Determination performed: ☐ No ☒ Yes

Distance (in feet) to nearest surface water: 612 , water well: 5000 , depth to ground water: 600

Is the location in a riparian area: ☒ No ☐ Yes Was an Army Corps of Engineers Section 404 permit filed ☒ No ☐ Yes

Is the location within a Rule 317B Surface Water Supply Area buffer zone:

☒ No ☐ 0-300 ft. zone ☐ 301-500 ft. zone ☐ 501-2640 ft. zone

If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified: ☒ No ☐ Yes

15. Comments:

There are no surface improvements within 500 feet of the proposed well. the nearest railroad is approximately 132,000 feet (25 miles) away.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: _____ Date: 07/09/2013 Email: rickobe1@aol.com

Print Name: Rick Obernolte Title: Environmental consultant

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: Matthew Lee Director of COGCC Date: 3/20/2014

**CONDITIONS OF
APPROVAL, IF ANY:**

All representations, stipulations and conditions of approval stated in this Form 2A for this location shall constitute representations, stipulations and conditions of approval for any and all subsequent operations on the location unless this Form 2A is modified by Sundry Notice, Form 4 or an Amended Form 2A.

Description

GENERAL SITE COAs:

Notify the COGCC 48 hours prior to start of pad/access road construction, rig mobilization, spud, and start of hydraulic stimulation operations using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).

Operator must ensure 110 percent secondary containment for any volume of fluids (excluding freshwater) contained at well site during drilling and completion operations; including, but not limited to, construction of a berm or diversion dike, diversion/collection trenches within and/or outside of berms/dikes, site grading, or other comparable measures (i.e., best management practices (BMPs) associated with stormwater management) sufficiently protective of nearby surface water. Any berm constructed at the well pad location will be stabilized, inspected at regular intervals (at least every 14 days), and maintained in good condition.

Operator must implement best management practices to contain any unintentional release of fluids, including any fluids conveyed via buried or temporary surface pipelines.

Operator shall design and construct the access road utilizing all available soils, geologic, landslide, and hydrogeologic information.

During all construction, drilling, and completion phases at this location, operator shall be monitoring the wildfire potentials daily and have the appropriate additional equipment and measures in place. This may include smoking bans and additional fire fighting equipment. Operator shall consult with the NFS as necessary.

The access road will be constructed as to not allow any sediment to migrate from the access road to nearby surface water or any drainages leading to surface water.

Strategically apply fugitive dust control measures, including enforcing established speed limits on private roads, to reduce fugitive dust and coating of vegetation and deposition in water sources.

The moisture content of any freshwater generated drill cuttings in a cuttings trench, area, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. At the time of closure, if the freshwater generated drill cuttings are to be onsite, they must also meet the applicable standards of table 910-1.

Flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline, storage vessel, or lined pit (only if an amended Form 2A has been submitted/approved and a Form 15 Earthen Pit Permitted has been submitted/approved) located on the well pad; or into tanker trucks for offsite disposal. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment must be placed on the well pad in an area with additional downgradient perimeter berming. The area where flowback fluids will be stored/reused must be constructed to be sufficiently impervious to contain any spilled or released material.

Berms or other containment devices shall be constructed to be sufficiently impervious (preferably corrugated steel with poly liner) to contain any spilled or released material around crude oil, condensate, and produced water storage tanks.

GROUNDWATER MONITORING COA:

Operator shall comply with Rule 609. STATEWIDE GROUNDWATER BASELINE SAMPLING AND MONITORING.

PIPELINE COAs:

Operator shall pressure test pipelines in accordance with Rule 1101.e.(1) prior to putting into initial service any temporary surface or permanent buried pipelines and following any reconfiguration of the pipeline network. Operator shall notify the COGCC Oil and Gas Location Assessment (OGLA) Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us) and the COGCC Field Inspection Supervisor for Northwest Colorado (Shaun Kellerby; email shaun.kellerby@state.co.us) 48 hours prior to testing surface poly or buried steel pipelines.

Operator must implement best management practices to contain any unintentional release of fluids along all portions of the surface pipeline route where temporary pumps and other necessary equipment are located.

Operator must routinely inspect the entire length of the surface pipeline to ensure integrity. Operator shall conduct daily inspections of surface poly pipeline routes for leaks during active transfer of fluids. Inspections shall be conducted by viewing the length of the pipeline; operator will endeavor to minimize surface disturbance during pipeline monitoring. The operator shall maintain records of inspections, findings and repairs, if necessary, for the life of the pipelines.

Operator must ensure 110 percent secondary containment for any potential volume of fluids that may be released from the surface pipeline at all sensitive area crossings, including, but not limited to stream, intermittent stream, ditch, and drainage crossings.

Operator will utilize, to the extent practical, all existing access and other public roads, and/or existing pipeline right-of-ways, when placing/routing the surface pipelines. This will reduce surface disturbance and fragmentation of wildlife habitat in the area.

Attachment Check List

Att Doc Num	Name
2106715	REFERENCE AREA PICTURES
2106717	CORRESPONDENCE
2106719	NRCS MAP UNIT DESC
400443835	FORM 2A SUBMITTED
400444708	WELL LOCATION PLAT
400444709	LOCATION DRAWING
400444710	CONST. LAYOUT DRAWINGS
400444711	CONST. LAYOUT DRAWINGS
400444712	CONST. LAYOUT DRAWINGS
400444713	CONST. LAYOUT DRAWINGS
400444714	PROPOSED BMPs
400444715	PROPOSED BMPs
400444716	CONST. LAYOUT DRAWINGS
400444717	TOPO MAP
400444718	HYDROLOGY MAP
400444719	REFERENCE AREA PICTURES
400444720	LOCATION PICTURES
400444721	ACCESS ROAD MAP
400444722	SURFACE AGRMT/SURETY
400444754	REFERENCE AREA MAP

Total Attach: 20 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Off Hold--operator submitted exception location request and offset mineral owner waiver. Oper. revised date of construction and date of interim rec. No LGD or public comments. Final Review--passed.	3/19/2014 12:07:00 PM
Permit	Put on hold pending receipt of exception loc. req. ltr. & waiver.	8/20/2013 3:45:41 PM
OGLA	Initiated/Completed OGLA Form 2A review on 08-19-13 by Dave Kubeczko; placed notification, fluid containment, spill/release BMPs, cuttings moisture content, access road sediment control, baseline GW sampling, tank berming, flowback to tanks, dust control, and pipeline COAs on Form 2A; sent email requesting any concerns/issues to operator on 08-19-13; onsite conducted by COGCC on 05-06-13; no CPW; passed OGLA Form 2A review on 07-03-13 by Dave Kubeczko; notification, fluid containment, spill/release BMPs, cuttings moisture content, access road sediment control, baseline GW sampling, tank berming, flowback to tanks, dust control, and pipeline COAs.	8/19/2013 1:13:15 PM
Permit	Corrected qtr/qtr.; added related APD. Checked min. owner signed lease. Right to construct is oil & gas lease. APD requires exc. loc. req. ltr.	8/6/2013 11:36:06 AM
Permit	Pass Completeness. Added NRCS Map Description.	7/9/2013 2:54:25 PM

Total: 5 comment(s)

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>