

FORM
2A

Rev
04/01

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

400239237

Date Received:

01/11/2012

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:

428203

Expiration Date:

03/17/2015

☒ 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: 10338

Name: CARRIZO OIL & GAS INC

Address: 500 DALLAS STREET #2300

City: HOUSTON State: TX Zip: 77002

3. Contact Information

Name: Tina Taylor

Phone: (713) 328-1000

Fax: (713) 358-6440

email: tina.taylor@crzo.net

4. Location Identification:

Name: Nelson Ranches Number: 27-11-10-59

County: WELD

QuarterQuarter: NWNW Section: 27 Township: 10N Range: 59W Meridian: 6 Ground Elevation: 5104

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: 3 feet FNL, from North or South section line, and 1317 feet FWL, from East or West section line.

Latitude: 40.816160 Longitude: -103.970240 PDOP Reading: 1.9 Date of Measurement: 09/08/2011

Instrument Operator's Name: Marc Woodard

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" value="1"/>	Wells: <input type="text" value="3"/>	Production Pits: <input type="text"/>	Dehydrator Units: <input type="text"/>
Condensate Tanks: <input type="text"/>	Water Tanks: <input type="text" value="1"/>	Separators: <input type="text" value="1"/>	Electric Motors: <input type="text" value="1"/>	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" value="1"/>	Oil Pipeline: <input type="text"/>	Water Pipeline: <input type="text"/>	Flare: <input type="text" value="1"/>
Gas Compressors: <input type="text"/>	VOC Combustor: <input type="text"/>	Oil Tanks: <input type="text" value="8"/>	Fuel Tanks: <input type="text"/>	

Other: Freshwater Storage pit, Heater Treater, Separators-one high pressure, one low pressure, Jet pump, Flare until pipeline connection ready.

6. Construction:

Date planned to commence construction: 05/01/2012 Size of disturbed area during construction in acres: 6.60
Estimated date that interim reclamation will begin: 11/01/2012 Size of location after interim reclamation in acres: 2.00
Estimated post-construction ground elevation: 5102 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: Landfarm
Burial/Evaporation

7. Surface Owner:

Name: _____ Phone: _____
Address: _____ Fax: _____
Address: _____ Email: _____
City: _____ State: _____ Zip: _____ Date of Rule 306 surface owner consultation: _____
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: 20100108 ☐ Gas Facility Surety ID: _____ ☐ Waste Mgnt. Surety ID: _____

9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes ☐ No ☒
Distance, in feet, to nearest building: 5280, public road: 5280, above ground utilit: 5280
, railroad: 5280, property line: 3

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 be 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: 20 Cascajo gravelly sandy loam, 5 to 20 percent slopes

NRCS Map Unit Name: 31 Kim-Mitchell complex, 0 to 6 percent slopes

NRCS Map Unit Name: 32 Kim-Mitchell complex, 6 to 9 percent slopes

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: 1000, water well: 6150, depth to ground water: 150

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:

Nearest water well is 6150 ft SW permit # 37114 Static Water level 150'. SUA attached to the form 2's

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

Signed: _____ Date: 01/11/2012 Email: tina.taylor@crzo.net

Print Name: Tina Taylor Title: Regulatory Compliance

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:  Director of COGCC Date: 3/18/2012

**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.

Attachment Check List

Att Doc Num	Name
400239237	FORM 2A SUBMITTED
400239274	CONST. LAYOUT DRAWINGS
400239276	LOCATION DRAWING
400239277	LOCATION PICTURES
400239281	REFERENCE AREA MAP
400239283	REFERENCE AREA PICTURES
400239285	MULTI-WELL PLAN
400239286	DEVIATED DRILLING PLAN
400239287	ACCESS ROAD MAP
400239288	HYDROLOGY MAP
400239290	OIL & GAS LEASE
400239291	NRCS MAP UNIT DESC
400239292	NRCS MAP UNIT DESC
400239293	NRCS MAP UNIT DESC
400239506	WELL LOCATION PLAT

Total Attach: 15 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	No LGD or public comment received; final review completed.	3/16/2012 8:42:41 AM
OGLA	Revised the facilities list for a multi-well pad; added operator BMPs for aesthetic mitigation	3/15/2012 12:56:19 PM
OGLA	Requested an update from the operator on response to proposed BMPs	3/13/2012 7:41:17 AM
Permit	Well permit needs a property line waiver.	1/12/2012 6:18:57 AM
Permit	Operator corrected lat long and attached an updated plat. This form has passed completeness.	1/11/2012 10:15:54 AM
Permit	Returned to draft. Well location plat has the same lat longs for the surface and landing point which are roughly 900' apart.	1/11/2012 8:07:08 AM

Total: 6 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Material Handling and Spill Prevention	Operator will ensure 110 percent secondary containment for any volume of fluids contained at the well site during drilling and completion. Operator will implement best management practices to contain any unintentional release of fluids.
Storm Water/Erosion Control	Operator has designed the well pad with insloping and a storm water control ditch to prevent storm water run-on/runoff and the release of fluids from the location. See attached Construction Layout Drawing.
Site Specific	Fresh water for the Fresh Water Storage Pit comes from water provider; water sources permitted for consumable industrial use.
Material Handling and Spill Prevention	Operator shall not allow any fluids to flow back to the Fresh Water Storage Pit/Pond.
Site Specific	Fresh Water Storage Pit shall contain fresh water only and signage prohibiting the use of the pit for any fluid that does not come from municipal, irrigation or surface water source.
Construction	The location will be fenced and the fenced area will include the Fresh Water Storage Pit.
Pre-Construction	The COGCC to be notified 48 hours prior to construction of the Fresh Water Storage Pit.
Planning	A Form 15 Pit Report will be submitted within 30 days of construction of the fresh water storage pit.
Site Specific	Production equipment will be painted with consideration to environmental colors to reduce visual contrast with the surrounding environment.
Site Specific	Gas engines will be equipped with mufflers to reduce noise.
Site Specific	Portions of the access road will cross highly erodible soil. The road will be built to the minimal width required and ditch vegetation will be established to prevent erosion.
Site Specific	The fresh water storage pit spoils will be placed to screen the visibility of the pit from the north and the west.

Total: 12 comment(s)