

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



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Document Number:

400046344

Oil and Gas Location Assessment

☐ New Location ☒ Amend Existing Location Location#: 318564

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 stand alone 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:

318564

Expiration Date:

06/24/2013

☒ 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: 52250

Name: MACHII-ROSS PETROLEUM CO

Address: 2901 28TH ST STE 205

City: SANTA MONICA State: CA Zip: 90405

3. Contact Information

Name: ANDY PETERSON

Phone: (970) 669-7411

Fax: (970) 669-4077

email: andy.peterson@petersonenergy.com

4. Location Identification:

Name: HORST Number: 44-21 & 44-21J

County: WELD

Quarter: SESE Section: 21 Township: 2N Range: 67W Meridian: 6 Ground Elevation: 5030

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: 601 feet, from North or South section line: FSL and 780 feet, from East or West section line: FEL

Latitude: 40.118140 Longitude: -104.888990 PDOP Reading: 0.9 Date of Measurement: 09/29/2008

Instrument Operator's Name: DALLAS NIELSEN

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="2"/> | Wells: <input type="text" value="2"/> | Production Pits: <input type="text"/> | Dehydrator Units: <input type="text"/> |
| Condensate Tanks: <input type="text" value="0"/> | 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" value="1"/> | Pigging Station: <input type="text"/> |
| Electric Generators: <input type="text"/> | Gas Pipeline: <input type="text" value="0"/> | Oil Pipeline: <input type="text"/> | Water Pipeline: <input type="text"/> | Flare: <input type="text"/> |
| Gas Compressors: <input type="text"/> | VOC Combustor: <input type="text"/> | Oil Tanks: <input type="text" value="1"/> | Fuel Tanks: <input type="text"/> | |

Other: see comment section reagrding drilling pits and tank battery.

6. Construction:

Date planned to commence construction: 06/01/2010 Size of disturbed area during construction in acres: 1.00
Estimated date that interim reclamation will begin: 06/30/2010 Size of location after interim reclamation in acres: 0.50
Estimated post-construction ground elevation: 5030 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: _____ Phone: _____
Address: _____ Fax: _____
Address: _____ Email: _____
City: _____ State: _____ Zip: _____ Date of Rule 306 surface owner consultation: 12/17/2008
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 20090063

8. Reclamation Financial Assurance:

☐ Well Surety ID: 20090062 ☐ 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: 645, public road: 594, above ground utilit: 557
, railroad: 22000, property line: 536

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: Otero Sandy Loam, 1 to 3 percent slopes

NRCS Map Unit Name: _____

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 (Bluestern, 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: 396, water well: 113, depth to ground water: 265

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:

3-phase flowline to existing Horst 44-21 Battery located approximately 1,010' N of the Horst 44-21. 3-phase flowline to Horst 44-21J Battery located on-site approximately 75' NE of the Horst 44-21J. One drilling pit was closed ~ 30 years ago. Pump jack is on existing Horst 44-21 well. There are two wells at this site, both are vertical, thus no multiwell plan has been filed. There have been no changes to the surrounding land use. Nearest well classified as a water well is 113' from proposed Horst 44-21J well. This water well, Receipt 0040294, Permit #:40294-MH -, located at SE SE 21 2.0N 67.0W Sixth is classified as a monitoring well by CDWR. The closest Well classified for domestic use is Receipt: 0902787, Permit #: 33784- -, which is approximately 5300' from the proposed well. Static Water level determined from Commercial well Receipt: 0398696 Permit #46527-F -, located approximately 4,159' from the proposed well at SE NW 28 2.0N 67.0W Sixth 3000 S 1600 W.

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

Signed: _____ Date: 03/15/2010 Email: cdoke@petersonenergy.com

Print Name: CLAYTON DOKE Title: ENGINEER

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: _____

David S. Nash

Director of COGCC

Date: 6/25/2010

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.

There will be no human disturbance or construction activity within 0.5 mile of the active bald eagle nest from November 15 to July 31. The July 31 date may be advanced if monitoring shows the chicks have left the nest before this date.

There will be no open pits on the location after drilling and completion operations are completed. After this time, fluids will be transported by pipeline to the tank battery located north of CR 18, on the Horst location, approximately 75 feet northeast of the Horst 44-21J wellhead. If a closed loop system is not used, the reserve pit will be sucked dry of fluids immediately following drilling and completion activities, or pits with residual fluid will be netted or screened until reclamation is completed

Before drilling, prairie dog holes within 150 ft of the well site should be destroyed during the period August 1 through March 1 to prevent nesting by burrowing owls.

There will be no major planned work with workover rigs, such as refracs, recompletions, or reworks, between November 1 and July 31. Minor workover or swabbing to improve production that could be completed within a 2-day time frame would be allowed.

Attachment Check List

| Att Doc Num | Name | Doc Description |
|-------------|-----------------------|----------------------|
| 1784941 | CORRESPONDENCE | LF@2447703 1784941 |
| 1784942 | CORRESPONDENCE | LF@2448241 1784942 |
| 2613016 | OTHER | LF@2465172 2613016 |
| 2613017 | CORRESPONDENCE | LF@2465177 2613017 |
| 2613018 | CORRESPONDENCE | LF@2465178 2613018 |
| 2613043 | CORRESPONDENCE | LF@2478367 2613043 |
| 2613044 | CORRESPONDENCE | LF@2478371 2613044 |
| 2613045 | CORRESPONDENCE | LF@2478624 2613045 |
| 2613123 | SURFACE OWNER CONSENT | LF@2496693 2613123 |
| 400046372 | NRCS MAP UNIT DESC | LF@2439681 400046372 |
| 400046788 | LOCATION PICTURES | LF@2439682 400046788 |
| 400046822 | LOCATION DRAWING | LF@2439683 400046822 |
| 400046824 | ACCESS ROAD MAP | LF@2439684 400046824 |
| 400046845 | HYDROLOGY MAP | LF@2439685 400046845 |
| 400047769 | FORM 2A SUBMITTED | LF@2439686 400047769 |

Total Attach: 15 Files