

FORM  
2A  
Rev  
04/01



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Document Number:  
400036812

### 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 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:  
**416315**  
Expiration Date:  
**03/21/2013**

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: 10159  
Name: ROSETTA RESOURCES OPERATING LP  
Address: 717 TEXAS STE 2800  
City: HOUSTON State: TX Zip: 77002

#### 3. Contact Information

Name: SHAWN HILDRETH  
Phone: (713) 335-4104  
Fax: (281) 763-2320  
email: SHAWN.HILDRETH@ROSETTA RESOURCES.COM

#### 4. Location Identification:

Name: DETERDING Number: 31-02  
County: YUMA  
Quarter: NWNE Section: 31 Township: 1N Range: 44W Meridian: 6 Ground Elevation: 3851  
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: 799 feet, from North or South section line: FNL and 2278 feet, from East or West section line: FEL  
Latitude: 40.015660 Longitude: -102.330240 PDOP Reading: 1.8 Date of Measurement: 10/21/2009

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

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

Other: ACCESS ROAD CR 30; PROPOSED WATER TANK LOCATED APPROX. 55 FEET N OF CR 30 AND 168 FEET W OF A TRAIL.

6. Construction:

Date planned to commence construction: 03/01/2010 Size of disturbed area during construction in acres: 0.34
Estimated date that interim reclamation will begin: 06/01/2010 Size of location after interim reclamation in acres: 0.17
Estimated post-construction ground elevation: 3851 Will a closed loop system be used for drilling fluids: Yes
Will salt sections be encountered during drilling: Yes No X Is H2S anticipated? Yes No X
Will salt (>15,000 ppm TDS Cl) or oil based muds be used: Yes No X
Mud disposal: Offsite Onsite X Method: Land Farming X Land Spreading Disposal Facility
Other:

7. Surface Owner:

Name: LEROY & LOU ANN DETERDING Phone:
Address: P. O. BOX 37 Fax:
Address: Email:
City: VERNON State: CO Zip: 80755 Date of Rule 306 surface owner consultation: 10/07/2009
Surface Owner: X Fee State Federal Indian
Mineral Owner: X Fee State Federal Indian
The surface owner is: X the mineral owner X committed to an oil and gas lease
X is the executer of the oil and gas lease the applicant
The right to construct the location is granted by: X 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:

X Well Surety ID: 20060021 Gas Facility Surety ID: Waste Mgnt. Surety ID:

9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes No X
Distance, in feet, to nearest building: 4420 , public road: 4580 , above ground utilit: 4715
, railroad: 5280 , property line: 877

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

Crop Land: Irrigated Dry land Improved Pasture Hay Meadow CRP
Non-Crop Land: X 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: X 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: COLBY-TORRIORTHENTS COMPLEX, GULLIED, 15 TO 25 PERCENT SLOPES- OIL AND GAS LOCATION

NRCS Map Unit Name: KUMA-KEITH SILT LOAMS- WATER TANK

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: Little bluestem, sideoats gramma, western wheat grass

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: 27, water well: 4210, depth to ground water: 230

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 Suppl 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:

SECTION 6 - CULTURAL: DISTANCE TO NEAREST RAILROAD IS GREATER THAN 1 MILE. SOILS: INCLUDES OIL AND GAS LOCATION AND WATER TANK. Reference area is on undisturbed ground immediately adjacent to the south of the location as shown in the south location photographs. SECTION 8- WATER RESOURCES: SENSITIVE AREA DUE TO LOCATION IN NORTHERN HIGH PLAINS DESIGNATED GROUNDWATER BASIN. GIVEN THE OIL AND GAS LOCATION IS IN THE MIDDLE OF AN INTERMITTENT STREAM, ROSETTA'S BMP'S IS TO INSTALL DIVERSION BERMS ON THE SOUTH SIDE OF THE LOCATION. REGARDING THE ENTRANCE ROAD, INSTALL CULVERTS & BUILD UP THE ROAD WITH 8 TO 10 INCHES OF BASE WITH A CROWN FOLLOWING THE NATURAL FLOW OF THE LAND.

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

Signed: \_\_\_\_\_ Date: 02/09/2010 Email: SHAWN.HILDRETH@ROSETTARESOURCE S.COM

Print Name: SHAWN HILDRETH Title: REGULATORY ANALYST

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: 3/22/2010

**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.**

Location is in a sensitive area because of close proximity to surface water, therefore, operator must ensure 110 percent secondary containment for any volume of fluids contained at well site during drilling and completion operations.

**Attachment Check List**

| Att Doc Num | Name               | Doc Description      |
|-------------|--------------------|----------------------|
| 2085111     | CORRESPONDENCE     | LF@2426232 2085111   |
| 400036907   | LOCATION PICTURES  | LF@2422777 400036907 |
| 400036908   | LOCATION DRAWING   | LF@2422778 400036908 |
| 400036909   | HYDROLOGY MAP      | LF@2422779 400036909 |
| 400036910   | ACCESS ROAD MAP    | LF@2422780 400036910 |
| 400036911   | NRCS MAP UNIT DESC | LF@2422781 400036911 |
| 400036912   | NRCS MAP UNIT DESC | LF@2422782 400036912 |
| 400036913   | PROPOSED BMPs      | LF@2422783 400036913 |
| 400036914   | LOCATION DRAWING   | LF@2422784 400036914 |
| 400036915   | HYDROLOGY MAP      | LF@2422785 400036915 |
| 400039458   | FORM 2A SUBMITTED  | LF@2422786 400039458 |

Total Attach: 11 Files