

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:

2588917

## 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:

**426029**

Expiration Date:

**10/16/2014**

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: 10234  
 Name: BAYHORSE PETROLEUM LLC  
 Address: 2558 E PORTSMOUTH AVE  
 City: SALT LAKE CITY State: UT Zip: 84121

### 3. Contact Information

Name: ROD VAUGHN  
 Phone: (435) 752-2021  
 Fax: (435) 752-2021  
 email: RLVAUGHN47@Q.COM

### 4. Location Identification:

Name: TRADE WINDS Number: 2-21  
 County: KIOWA  
 Quarter: SWSE Section: 21 Township: 18S Range: 47W Meridian: 6 Ground Elevation: 4145

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: 620 feet FSL, from North or South section line, and 2020 feet FEL, from East or West section line.  
 Latitude: 38.471110 Longitude: -102.682400 PDOP Reading: 3.1 Date of Measurement: 09/26/2011  
 Instrument Operator's Name: KEITH WESTFALL

### 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"/> <b>3</b> | Wells: <input type="checkbox"/> <b>1</b>      | Production Pits: <input type="checkbox"/>     | Dehydrator Units: <input type="checkbox"/> |
| Condensate Tanks: <input type="checkbox"/>              | Water Tanks: <input type="checkbox"/> <b>1</b>   | Separators: <input type="checkbox"/> <b>1</b> | Electric Motors: <input type="checkbox"/>     | Multi-Well Pits: <input type="checkbox"/>  |
| Gas or Diesel Motors: <input type="checkbox"/> <b>1</b> | Cavity Pumps: <input type="checkbox"/>           | LACT Unit: <input type="checkbox"/>           | Pump Jacks: <input type="checkbox"/> <b>1</b> | Pigging Station: <input type="checkbox"/>  |
| Electric Generators: <input type="checkbox"/>           | Gas Pipeline: <input type="checkbox"/>           | Oil Pipeline: <input type="checkbox"/>        | Water Pipeline: <input type="checkbox"/>      | Flare: <input type="checkbox"/>            |
| Gas Compressors: <input type="checkbox"/>               | VOC Combustor: <input type="checkbox"/>          | Oil Tanks: <input type="checkbox"/> <b>2</b>  | Fuel Tanks: <input type="checkbox"/>          |  |

Other: PITS=WATER, MUD, RESERVE

### 6. Construction:

Date planned to commence construction: 10/01/2011 Size of disturbed area during construction in acres: 3.60  
Estimated date that interim reclamation will begin: 04/01/2012 Size of location after interim reclamation in acres: 0.90  
Estimated post-construction ground elevation: 4145 Will a closed loop system be used for drilling fluids: Yes  No   
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: DRY & BACKFILL

### 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: 20090091  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: 8580, public road: 1100, above ground utilit: 990  
, railroad: 1000, property line: 620

### 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: OLNEY LOAMY SAND

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: SAND DROPSEED, NEEDLEGRASS, PRAIRIE SANDREED, SIDEOATS GRAMMA, LITTLE BLUESTEM,

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: 230, water well: 2819, depth to ground water: 41

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:**

THERE ARE NO VISIBLE IMPROVEMENTS WITHIN 400' OF THE STAKED LOCATION. NEAREST WATER WELL: PERMIT #88619, DEPTH 120', STATIC 41'.

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

Signed: \_\_\_\_\_ Date: 09/21/2011 Email: RLVAUGHN47@Q.COM

Print Name: RODNEY L. VAUGHN Title: PRESIDENT

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. Nashin Director of COGCC Date: 10/17/2011

**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.**

In accordance with Rule 607.c., operator shall provide notice of any gas analysis indicating the presence of hydrogen sulfide on the proposed location including pipelines, production equipment and tanks. Submit notices to COGCC's area engineer, Dirk Sutphin, at [dirk.sutphin@state.co.us](mailto:dirk.sutphin@state.co.us) and local government designee, Debra Lening at [kiowaclerk@hotmail.com](mailto:kiowaclerk@hotmail.com) as follows:

1) Reporting of the presence of H<sub>2</sub>S in concentrations less than 10 parts per million (PPM) shall be done via verbal and email notices. Verbal notice with a follow up email shall be provided as soon as practicable upon detection of H<sub>2</sub>S to COGCC's area engineer and the local government designee.

2) All verbal and email notices shall include all of the following information:

a) Well or Facility name,

b) API Number or COGCC Facility Number,

c) H<sub>2</sub>S concentration in PPM,

d) Date sample or measurement was collected,

e) Type of measurement or analysis (e.g., gas analysis, meter measurement, or colorimetric tube), and

f) Description of sample point.

3) Sundry Notices are required for H<sub>2</sub>S concentrations equal to or exceeding 10 PPM. Only one H<sub>2</sub>S Sundry Notice Form 4 is required per well or location following the initial H<sub>2</sub>S detection, which exceeds 10 parts per million (PPM). Subsequent H<sub>2</sub>S reporting shall be done on an annual basis and be submitted not later than January 31 for all measurements or sampling events during the prior calendar year.

4) Subsequent annual reports shall be provided in a spreadsheet and submitted to the COGCC's area engineer and/or COGCC's engineering supervisor via email.

5) Sundry Notices and annual report spreadsheets shall provide all of the following information:

a) Well or Facility name

b) API Number or COGCC Facility Number

c) H<sub>2</sub>S concentration in PPM

d) Date sample or measurement was collected

e) Type of measurement or analysis (e.g., gas analysis, meter measurement, or colorimetric tube)

f) Description of sample point

g) Absolute Open Flow Potential in cubic feet per day (CFPD) at the H<sub>2</sub>S source(s).

h) If flow is not open to the atmosphere, then state that the source is not flowing and include a description of the potential for atmospheric release and duration in which the container or pipeline would likely be opened for servicing operations.

i) Distance to the nearest occupied residence, school, church, park, school bus stop, place of business, or other areas where the public could reasonably be expected to frequent.

j) Distance to the nearest Federal, State, County, or municipal road or highway owned and principally maintained for public use.

If the operator can reasonably expect hydrogen sulfide at or above 100 parts per million (ppm) to be present on the

location the operator shall follow all reporting requirements above and file a hydrogen sulfide drilling operations plan (United States Department of the Interior, Bureau of Land Management, Onshore Order No. 6, November 23, 1990) with the COGCC prior to spudding the well as described in COGCC rule 607.a.

**Attachment Check List**

| Att Doc Num | Name                    |
|-------------|-------------------------|
| 1792326     | CORRESPONDENCE          |
| 1792328     | WAIVERS                 |
| 1792332     | CORRESPONDENCE          |
| 2588917     | FORM 2A                 |
| 2588918     | LOCATION PICTURES       |
| 2588919     | LOCATION DRAWING        |
| 2588920     | HYDROLOGY MAP           |
| 2588921     | ACCESS ROAD MAP         |
| 2588922     | REFERENCE AREA MAP      |
| 2588923     | REFERENCE AREA PICTURES |
| 2588924     | NRCS MAP UNIT DESC      |

Total Attach: 11 Files

**General Comments**

| <b><u>User Group</u></b> | <b><u>Comment</u></b>   | <b><u>Comment Date</u></b> |
|--------------------------|---|----------------------------|
| Permit                   | Final review completed, under limited comment period. BY  | 10/13/2011<br>7:25:03 AM   |
| Permit                   | LGD Waiver attached, surface owners waivers attached. BY  | 10/12/2011<br>8:42:09 AM   |
| OGLA                     | Passed early due to exigent circumstances. The comment period was open for 7 days prior to receiving the request for exigent circumstances.   | 10/12/2011<br>8:05:50 AM   |
| OGLA                     | Ready to pass 10/26/2011.   | 10/5/2011<br>3:53:44 PM    |
| Permit                   | Closed loop System? No<br><br>On or offsite mud disposal? Onsite<br><br>Committed to an Oil and Gas lease? They are committed to an O&G<br><br>Distance to above ground utility? 990 (abandoned telephone line per operator)<br><br>Corrected above answers via verbal with operator. | 10/5/2011<br>12:07:50 PM   |

Total: 5 comment(s)

**BMP**

| <b><u>Type</u></b> | <b><u>Comment</u></b> |
|--------------------|-----------------------|
|                    |                       |

Total: 0 comment(s)