

FORM  
2A

Rev  
08/13

State of Colorado  
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203  
Phone: (303) 894-2100 Fax: (303) 894-2109



Document Number:

400560955

Date Received:

02/24/2014

Oil and Gas Location Assessment

☐ New Location ☒ Refile ☐ Amend Existing Location Location#: 335968

Submit signed original form. This Oil and Gas Location Assessment is to be submitted to the COGCC for approval prior to any ground disturbance activity associated with oil and gas operations. Approval of this Oil and Gas Location 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. Please see the COGCC website at <http://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

**335968**

Expiration Date:

**01/14/2018**

☐ This location assessment is included as part of a permit application.

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.

Operator

Operator Number: 10091  
Name: BERRY PETROLEUM COMPANY LLC  
Address: 1999 BROADWAY STE 3700  
City: DENVER State: CO Zip: 80202

Contact Information

Name: HEIDI BANG  
Phone: (303) 999-4262  
Fax: (303) 999-4362  
email: HBANG@LINNENERGY.COM

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20040105 ☐ Gas Facility Surety ID: \_\_\_\_\_  
☐ Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: CHEVRON Number: J29 596  
County: GARFIELD  
QuarterQuarter: NWSE Section: 29 Township: 5S Range: 96W Meridian: 6 Ground Elevation: 7962  
Define a single point as a location reference for the facility location. When the location is to be used as a well site then the point shall be a well location.  
Footage at surface: 2344 feet FSL from North or South section line  
1310 feet FEL from East or West section line  
Latitude: 39.585298 Longitude: -108.188090  
PDOP Reading: 2.2 Date of Measurement: 03/28/2008  
Instrument Operator's Name: ROBERT WOOD

## RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

This proposed Oil and Gas Location is:

LOCATION ID # FORM 2A DOC #

## FACILITIES

Indicate the number of each type of oil and gas facility planned on location

Wells	11	Oil Tanks		Condensate Tanks	6	Water Tanks	1	Buried Produced Water Vaults	
Drilling Pits		Production Pits		Special Purpose Pits		Multi-Well Pits		Temporary Large Volume Above Ground Tanks	
Pump Jacks		Separators	4	Injection Pumps		Cavity Pumps			
Gas or Diesel Motors		Electric Motors		Electric Generators		Fuel Tanks		Gas Compressors	
Dehydrator Units		Vapor Recovery Unit		VOC Combustor		Flare		LACT Unit	
								Pigging Station	

## OTHER FACILITIES

### Other Facility Type

### Number

WATER PIPELINE	1
GAS PIPELINE	1

Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

Separators used 2 quads, 1 single, 1 dual. Drilling rig, temporary office and temporary housing on location for approximately 10 days per well.

## CONSTRUCTION

Date planned to commence construction: 07/01/2015 Size of disturbed area during construction in acres: 5.21  
Estimated date that interim reclamation will begin: 07/01/2016 Size of location after interim reclamation in acres: 1.00  
Estimated post-construction ground elevation: 7958

## DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes

Is H<sub>2</sub>S anticipated? No

Will salt sections be encountered during drilling: No

Will salt based mud (>15,000 ppm Cl) be used? No

Will oil based drilling fluids be used? No

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Method: Recycle/reuse

Cutting Disposal: ONSITE Cuttings Disposal Method: Cuttings trench

Other Disposal Description:

Beneficial reuse or land application plan submitted?

Reuse Facility ID: or Document Number:

Centralized E&P Waste Management Facility ID, if applicable:

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: CHEVRON

Phone: \_\_\_\_\_

Address: 1111 SOUTH WILCREST

Fax: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

City: HOUSTON State: TX Zip: 77099

Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian

Check all that apply. The Surface Owner: ☒ is the mineral owner

☒ is committed to an oil and Gas Lease

☒ has signed the Oil and Gas Lease

☐ is the applicant

The Mineral Owner beneath this Oil and Gas Location is: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Minerals beneath this Oil and Gas Location will be developed from or produced to this Oil and Gas Location: Yes

The right to construct this Oil and Gas Location is granted by: oil and gas lease

Surface damage assurance if no agreement is in place: \_\_\_\_\_ Surface Surety ID: \_\_\_\_\_

Date of Rule 306 surface owner consultation 11/15/2010

## CURRENT AND FUTURE LAND USE

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

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

## CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 5280 Feet  
Building Unit: 5280 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 5280 Feet  
Above Ground Utility: 5280 Feet  
Railroad: 5280 Feet  
Property Line: 1020 Feet

### INSTRUCTIONS:

- All measurements shall be provided from center of nearest Well or edge of nearest Production Facility to nearest of each cultural feature as described in Rule 303.b.(3)A.  
- Enter 5280 for distance greater than 1 mile.  
- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.  
- Building Unit, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in 100-Series Rules.

## DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a: ☐ Buffer Zone  
☐ Exception Zone  
☐ Urban Mitigation Area

- Buffer Zone - as described in Rule 604.a.(2), within 1,000' of a Building Unit.  
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.  
- Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: \_\_\_\_\_

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: \_\_\_\_\_

## SOIL

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.org/> 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: 56. PARACHUTE-IRIGUL-RHONE ASSOCIATION. 25 TO 50 PERCENT SLOPES.

NRCS Map Unit Name: \_\_\_\_\_

NRCS Map Unit Name: \_\_\_\_\_

## 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: 03/28/2008

List individual species: SEE NRCS ATTACHED TO PREVIOUS DOC #400108226

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): \_\_\_\_\_

## WATER RESOURCES

Is this a sensitive area: ☐ No ☒ Yes

Distance to nearest

downgradient surface water feature: 479 Feet

water well: 431 Feet

Estimated depth to ground water at Oil and Gas Location 469 Feet

Basis for depth to groundwater and sensitive area determination:

The closest water well is an Unnamed, Exxon Oil Co. well (Permit # 121352 / Receipt # 0215078I)

Is the location in a riparian area: ☒ No ☐ Yes

Was an Army Corps of Engineers Section 404 permit filed ☒ No ☐ Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer No 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: \_\_\_\_\_

## GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

## DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- ☐ Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- ☐ Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- ☐ Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- ☐ Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

## RULE 502.b VARIANCE REQUEST

- ☐ Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number \_\_\_\_\_

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

## OPERATOR COMMENTS AND SUBMITTAL

Comments NO CHANGES HAVE BEEN MADE SINCE PREVIOUS 2A WAS SUBMITTED (DOC #400108226)  
I certify that there have been no changes on land use, lease description. Pad has not been built. Wells have not been drilled. Conductors have not been set. No rig on site.  
Reference well used for footages is the Chevron 29-23D.  
The APD will NOT require expansion / additional surface disturbance of pad.  
The location does not require a variance from any of the rules listed in Rule 306.d.(1). (A). (ii).  
The location is in a restricted surface occupancy area for Greater Sage Brush production.  
The location is in a sensitive wildlife habitat area for Greater Sage Brush production and Elk production.

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

Signed: \_\_\_\_\_ Date: 02/24/2014 Email: HBANG@LINNENERGY.COM

Print Name: HEIDI BANG Title: FIELD ADMIN 2

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: 1/15/2015

### **Conditions Of Approval**

**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.**

#### **COA Type**

#### **Description**

	The moisture content of drill cuttings managed onsite shall be kept as low as practicable to prevent accumulation of liquids greater than de minimis amounts. After drilling and completion operations have been completed, the drill cuttings that will remain on the well pad location (cuttings management area, the cut portion of the pad, cuttings trench, dry cuttings drilling pit), must meet the applicable standards of Table 910-1. Land-farming of E&P waste is prohibited on the location; however, this shall not preclude onsite disposal of E&P waste in accordance with COGCC Rules and permit conditions. After the drill cuttings have been amended (if necessary) and placed on the well pad, sampling frequency of the drill cuttings (to be determined by the operator) shall be representative of the material left on location. No offsite disposal of cuttings to another oil and gas location shall occur without prior approval of a an amended Waste Management Plan (submitted via a Form 4 Sundry Notice) specifying disposal location and waste characterization method. Commercial disposal of drill cuttings will only require notification to COGCC via a Form 4 Sundry Notice.
	Notify the COGCC 48 hours prior to start of pad 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).

### **Best Management Practices**

#### **No BMP/COA Type**

#### **Description**

1 Wildlife	<p>Berry Petroleum Company; Proposed Chevron J-29-596 Well Pad Wildlife Mitigation Measures</p> <p>Berry would like to propose the implementation of the following BMPs/mitigation measures to reduce impacts to sage grouse associated with the proposed Chevron J-29-596 well pad. These measures will require surface owner consent/agreement with respect to consistency with our Surface Use Agreement and associated Sage Grouse Mitigation Plan.</p> <ul style="list-style-type: none"><li>o Ground disturbing activities at the J-29 location, including pad construction, drilling, and completions would occur outside of the period from March 1 to June 30. Berry will make a good faith effort to complete all activity on the J-29 location during a single, uninterrupted time period.</li><li>o Well site visitations to the J-29 pad would be restricted to the period of 9:00 AM to 4:00 PM during the lekking season (March 1 to May 15).</li><li>o Company guidelines would be established to minimize wildlife mortality from vehicle collisions (posted speed limits, plus notification of all employees and contractors to drive cautiously and within those speed limits).</li><li>o Since well pad density has/will exceed one pad per square mile/section, Berry will initiate and complete a Wildlife Mitigation Plan in close coordination with the CDOW (subject to surface owner approval).</li><li>o Activities at the other two Berry well pads located within the Section 29 RSO area would be completed and thorough interim reclamation carried out (all site regrading</li></ul>
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and appropriate seeding) prior to initiation of activity at the J-29 location. Remaining activities and interim reclamation at the other two Berry locations within the RSO would be carried out between July 1 and February 28.

- o Berry is researching and will make a good faith effort to design tanks, fences, and other facilities to prevent raptor/raven/crow perching and nesting, where feasible.
- o Design wastewater pits to minimize retention of stagnant water. Immediately after drilling and completions are finished, the pit will be emptied and reclaimed.
- o While the pit is in use (it contains water) and the potential exists for mosquito breeding, the pit will be treated with Bti to prevent the potential spread of West Nile Virus.
- o Berry will use early and effective reclamation techniques, including an aggressive interim reclamation program, to return habitat to use by sage grouse as quickly as possible.
- o Berry will reclaim/restore sage grouse habitat with native grasses, forbs, and shrubs, conducive to optimal sage grouse habitat.
- o Berry will use a high diversity reclamation seed mix/approved CP-4D seed mix, approved by the CDOW and the surface owner.
- o Avoid aggressive non-native grasses in sage grouse habitat reclamation.
- ? Restore disturbed sagebrush using locally collected seed, where possible.
- ? Berry is also willing to agree to participate in the CDOW off-site mitigation program. Berry will coordinate with the CDOW regarding how the off-site mitigation program works and what costs are involved. If the program is similar to wetlands mitigation banking, and the costs are reasonable, Berry will participate in this program to offset project impacts.
- ? Additional relevant BMPs that would be implemented, as described in Section II B, "Infrastructure Layout Wildlife Protection Measures", of the CDOW "Actions to Minimize Adverse Impacts to Wildlife Resources" document include:
  - o Combining utility infrastructure (gas and water pipelines) alongside the access road to avoid the use of a separate utility corridor.
  - o Implement fugitive dust control measures (watering).
  - o To reduce vehicle-animal collisions, Berry will either house the drilling crew on the location to minimize commuting, or strongly recommend car pooling to the pad site to reduce traffic.
  - o Access by unauthorized parties will be restricted at the guard station on the Garden Gulch Road.
  - o Vehicle parking will be restricted to disturbed areas.
  - o Man camps are being considered for this site to reduce vehicle traffic.
  - o The pipeline corridor within the vicinity of the RSO area has been consolidated and is shared by Berry and Marathon/Enterprise.
- o Additional BMPs that would be implemented, as described in Section II D, "Drilling and Production Operations Wildlife Protection Measures" include:
  - o Water will be transported to the J-29 pad by pipeline, as opposed to trucking.
  - o Berry is presently evaluating using closed loop drilling and completions techniques. It is unclear at this time if we can commit to that, however.
  - o If closed loop drilling and completion techniques cannot be implemented, proper fencing and netting of the reserve pit will be carried out as discussed in our recent meeting with the CDOW to exclude wildlife, including grouse.
  - o Exclusionary devices will be installed to prevent entry by birds and wildlife into stacks, vents, and openings.
  - o During pipeline installations, trench plugs or escape ramps will be installed to prevent the entrapment of wildlife, or restriction of wildlife movement.
  - o Additional BMPs described in Section II G, "Restoration, Reclamation, and Abandonment" will be followed, provided Berry receives surface-owner approval.
  - o Berry will establish policies to protect wildlife in general at the J-29 well pad, including prohibitions on possession of firearms, exclusion of dogs, and prohibition of wildlife feeding. Bear-proof dumpsters will be used and site sweeps to verify all food-related trash is properly disposed of will also be carried out.

Total: 1 comment(s)

## Attachment Check List

**Att Doc Num**

**Name**

400560955

FORM 2A SUBMITTED

Total Attach: 1 Files

### General Comments

**User Group**

**Comment**

**Comment Date**

#Error	Form put back in process and sent to final approval.	1/15/2015 7:05:25 AM
#Error	<p>PREVIOUS FORM 2A#400108226 COAs:</p> <p>Notice to Operators (NTO) Drilling Wells on the Roan Plateau in Garfield County: Again, although this well pad location does not fall within the current Roan Rim NTO boundaries, those boundaries are currently being revised; therefore the operator must comply with all provisions of the June 12, 2008 Notice to Operators (NTO) Drilling Wells Within ¾ Mile of the Rim of the Roan Plateau in Garfield County – Pit Design, Construction, and Monitoring Requirements. At a minimum, the following condition of approval (COA) will apply: COA 6 - All pits must be lined.</p> <p>No portion of any pit that will be used to hold liquids shall be constructed on fill material, unless the pit and fill slope are designed and certified by a professional engineer, subject to review and approval by the director prior to construction of the pit. The construction and lining of the pit shall be supervised by a professional engineer or their agent. The entire base of the pit must be in cut.</p> <p>The moisture content of any drill cuttings in a cuttings pit, trench, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. At the time of closure, the drill cuttings must also meet the applicable standards of table 910-1.</p> <p>Berms or other containment devices shall be constructed in compliance with Rule 603.e.(12) around crude oil, condensate, and produced water storage tanks.</p> <p>Flowback and stimulation fluids must be sent to tanks to allow the sand to settle out before the fluids can be placed into any pipeline or pit located on the well pad. The flowback and stimulation fluid tanks 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 (per Rule 604.a.(4)). Under unforeseen upset conditions during flowback operations, operator may discharge flowback fluids directly into the pit, as needed (notice of intent to directly discharge into the pit must be sent to Dave Kubeczko; email dave.kubeczko@state.co.us).</p> <p>Operator must ensure 110 percent secondary containment for any volume of fluids 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</p>	8/12/2014 8:55:05 AM



	<p>(at least every 14 days), and maintained in good condition.</p> <p>The nearby hillside must be monitored for any day-lighting of drilling fluids throughout the drilling of the surface casing interval.</p> <p>Since the operator will be running up to 10 percent (by volume) diesel oil in the water based drilling mud as a shale stabilization and friction reduction additive while drilling the production hole interval, any pit constructed to hold fluids must be permitted, and approved, prior to construction and use (a Form 15 [Earthen Pit Report/Permit] will need to be submitted). Additional COAs may be attached to the Form 15.</p> <p>Any pit constructed to hold fluids (reserve pit, production pit, frac pit; except for flare pit, if built) must be lined. Operator must implement best management practices to contain any unintentional release of fluids, including any fluids conveyed via temporary surface pipelines.</p> <p>Notify COGCC Oil and Gas Location Assessment (OGLA) Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us) 48 hours prior to start of construction.</p>		
#Error	<p>Refile 2A. No LGD or public comments. Final Review--passed.</p>	8/7/2014 12:54:10 PM	
#Error	<p>pass, gdb</p>	3/14/2014 10:31:51 AM	
#Error	<p>Initiated/Completed OGLA Form 2A review on 03-06-14 by Dave Kubeczko; previously submitted Form 2A#400108226 (approved on 12-29-10); Facility ID#335968; same COAs apply: fluid containment, spill/release BMPs, lined pits/closed loop, tank containment, flowback to tanks only, no pit in fill, monitoring of hillside, and cuttings low moisture content; passed by CPW on 02-25-14 with operator submitted BMPs acceptable; passed OGLA Form 2A review on 03-24-14 by Dave Kubeczko; notification, fluid containment, spill/release BMPs, lined pits/closed loop, tank containment, flowback to tanks only, no pit in fill, monitoring of hillside, and cuttings low moisture content COAs.</p>	3/6/2014 11:41:06 AM	
#Error	<p>The BMPs previously approved for this location under Document# 400108226 adequately address wildlife concerns and should continue to apply to this location.</p> <p>Approved:Jim Komatinsky 2-25-2014</p>	2/25/2014 11:39:26 AM	
#Error	<p>Passed completeness.</p>	2/24/2014 3:53:51 PM	

Total: 7 comment(s)