

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:

400466620

Date Received:

08/20/2013

Oil and Gas Location Assessment

☒ New Location ☐ Refile ☐ Amend Existing Location Location#: \_\_\_\_\_

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:

**434581**

Expiration Date:

**10/07/2016**

☒ 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: 2800  
Name: ANADARKO E&P ONSHORE LLC  
Address: PO BOX 173779  
City: DENVER State: CO Zip: 80217

Contact Information

Name: Kenny Trueax  
Phone: (720) 929-6383  
Fax: ( )  
email: kenny.trueax@anadarko.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20030041 ☐ Gas Facility Surety ID: \_\_\_\_\_  
☐ Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: LINCOLN Number: 1748-11-11-H  
County: KIOWA  
QuarterQuarter: SWSW Section: 11 Township: 17S Range: 48W Meridian: 6 Ground Elevation: 4233  
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: 600 feet FSL from North or South section line  
700 feet FWL from East or West section line  
Latitude: 38.586836 Longitude: -102.765358  
PDOP Reading: 2.0 Date of Measurement: 07/17/2013  
Instrument Operator's Name: Rob Wilson

## 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	<u>1</u>	Oil Tanks	<u>12</u>	Condensate Tanks	<u>      </u>	Water Tanks	<u>2</u>	Buried Produced Water Vaults	<u>      </u>
Drilling Pits	<u>2</u>	Production Pits	<u>      </u>	Special Purpose Pits	<u>      </u>	Multi-Well Pits	<u>      </u>	Temporary Large Volume Above Ground Tanks	<u>      </u>
Pump Jacks	<u>1</u>	Separators	<u>1</u>	Injection Pumps	<u>      </u>	Cavity Pumps	<u>      </u>		
Gas or Diesel Motors	<u>      </u>	Electric Motors	<u>      </u>	Electric Generators	<u>      </u>	Fuel Tanks	<u>      </u>	Gas Compressors	<u>      </u>
Dehydrator Units	<u>      </u>	Vapor Recovery Unit	<u>      </u>	VOC Combustor	<u>1</u>	Flare	<u>1</u>	LACT Unit	<u>      </u>
								Pigging Station	<u>      </u>

## OTHER FACILITIES

Other Facility Type

Number

<input type="text"/>	<input type="text"/>
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Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

Water and oil lines: One line from wellhead to separator; one water line and one oil line are planned to go to the tank battery.  
Gas lines: One gas line will be run to ECD and if needed one gas gathering line to tie in to the market line.

## CONSTRUCTION

Date planned to commence construction: 11/01/2013 Size of disturbed area during construction in acres: 12.38

Estimated date that interim reclamation will begin: 05/01/2014 Size of location after interim reclamation in acres: 10.06

Estimated post-construction ground elevation: 4233

## 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: Commercial Disposal

Cutting Disposal: ONSITE Cuttings Disposal Method: Beneficial reuse

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: Monte Richardson

Phone: 719-438-5660

Address: P.O. Box 488

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

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

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

City: Eads State: CO Zip: 80825

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: Surface Use Agreement

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

Date of Rule 306 surface owner consultation 07/03/2013

## 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: 576 Feet  
Above Ground Utility: 545 Feet  
Railroad: 5280 Feet  
Property Line: 600 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: 7 Bijou-Valent loamy sands, 1 to 8 percent slopes

NRCS Map Unit Name: 37 Valent loamy sand, 3 to 10 percent slopes

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: 08/21/2013

List individual species: Plant community: sand sagebrush Mixed Grass/Mixed Forb Rangelandsand sagebrush-Oligosporus filifoliusblue grama - Bouteloua gracilislittle hogweed - Portulaca oleraceaSand dropseed- Sporobolus cryptandrusFendler hiddenflower- Cryptantha fendle

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: 6130 Feet

water well: 3680 Feet

Estimated depth to ground water at Oil and Gas Location 48 Feet

Basis for depth to groundwater and sensitive area determination:

State Engineer's Office

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 N/A

## 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


Reference area picture taken directly north of the proposed pad disturbance.

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

Signed: \_\_\_\_\_ Date: 08/20/2013 Email: kenny.trueax@anadarko.com

Print Name: Kenneth Trueax Title: Sr. 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:  Director of COGCC Date: 10/8/2013

### **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.

<b><u>COA Type</u></b>	<b><u>Description</u></b>
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### **Best Management Practices**

<b><u>No</u></b>	<b><u>BMP/COA Type</u></b>	<b><u>Description</u></b>
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1	Planning	The location is in a rural area with no occupied buildings within a mile of the well pad. The closest occupied dwelling is 1.3 miles away in the NWSW of Sec. 10 17S-48W to the West.
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Total: 1 comment(s)

### **Attachment Check List**

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
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2086370	LOCATION DRAWING
2086372	CORRESPONDENCE
2086374	CORRESPONDENCE
2086375	WELL LOCATION PLAT
2518567	REFERENCE AREA PHOTO
2518627	SURFACE AGRMT/SURETY
20286371	WASTE MANAGEMENT PLAN
400466620	FORM 2A APPROVED
400466777	HYDROLOGY MAP
400466778	30 DAY NOTICE LETTER
400466779	WELL LOCATION PLAT
400466781	ACCESS ROAD MAP
400469691	LOCATION PICTURES
400469696	NRCS MAP UNIT DESC
400491597	FORM 2A SUBMITTED

Total Attach: 15 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Requested signed SUA. Received and attached. Changed Right to Construct from Surface Bond to Surface Use Agreement.	10/7/2013 6:07:25 AM
Permit	Final review completed; no LGD or public comment received.	9/26/2013 8:42:54 AM
OGLA	operator explanation for large size of location after reclamation - from email:  The size of the Lincoln pad and the other four 02A forms submitted by Anadarko in this area (listed below) is based on the maximum amount of space needed for a multi-stage completion scenario. However, we have a few different completion models being evaluated for this area and actively working to shrink the pads wherever possible with a target size of approximately six acres. Being a new field for Anadarko we may not be able to determine the optimal stimulation design before the well is drilled. We will make sure the surface owner agrees to the maximum size before construction begins.  Correspondence attached. operator provided revised well plat drawing with note for 500 foot buffer -attached.	9/26/2013 7:41:46 AM
OGLA	operator provided new waste management plan (WMP) and location drawing with 500' improvement buffer. The WMP was modified to be site specific per COCGG request. Operator stated that a Surface Use Agreement has been signed. One temporary large volume storage tank has been added to facilities per operator request. correspondence attached. Construction date changed to November 1, 2013.	9/24/2013 10:35:31 AM
Agency	Location drawing has a 400' improvement buffer, request drawing with improvements within 500' identified.	9/12/2013 11:18:42 AM
Permit	Permit was resubmitted to notify the correct official after made change in county.	8/23/2013 12:28:39 PM
Permit	Changed by operator; surface use agreement is in process so bond is right to construct presently. Permit is in Kiowa Co. and not Cheyenne.	8/23/2013 11:40:23 AM
Permit	Requested clarification on beneficial reuse of cuttings.	8/23/2013 11:38:18 AM
Permit	Requested reference area picture and map.	8/23/2013 11:36:55 AM
Permit	Passes Completeness.	8/21/2013 12:18:25 PM

Total: 10 comment(s)