

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:

400474125

Date Received:

09/04/2013

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:

434890

Expiration Date:

10/30/2016

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: Switchman Number: 1647-17-11-H

County: CHEYENNE

Quarter: SWSW Section: 17 Township: 16S Range: 47W Meridian: 6 Ground Elevation: 4186

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: 350 feet FSL from North or South section line

600 feet FWL from East or West section line

Latitude: 38.658071 Longitude: -102.711518

PDOP Reading: 1.7 Date of Measurement: 07/01/2013

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>1</u>	Production Pits	<u> </u>	Special Purpose Pits	<u>1</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>1</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

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

Water and oil lines: one oil/water line from wellhead to separator; one water line and one oil line each are planned to go from the separator to the tank battery. Gas lines: one gas line will be run from the tanks to the ECD, and if needed one gas gathering line from separator to tie in to the midstream pipeline.

CONSTRUCTION

Date planned to commence construction: 03/24/2014 Size of disturbed area during construction in acres: 12.34

Estimated date that interim reclamation will begin: 07/29/2014 Size of location after interim reclamation in acres: 10.11

Estimated post-construction ground elevation: 4185

DRILLING PROGRAM

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

Is H₂S 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?

DRILLING WASTE MANAGEMENT PROGRAM

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

Cutting Disposal: Cuttings Disposal Method:

Other Disposal Description:

Cuttings will be spread on pad surface or disposed of per rules 907 to 910. Drilling mud will be reused or sent to commercial disposal and adhere to rules 907 to 910. Please see the Waste Management Plan with 02A.

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: _____

Phone: _____

Address: _____

Fax: _____

Address: _____

Email: _____

City: _____ State: _____ Zip: _____

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: _____

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 _____

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: 4832 Feet
 Building Unit: 4832 Feet
 High Occupancy Building Unit: 5280 Feet
 Designated Outside Activity Area: 5280 Feet
 Public Road: 600 Feet
 Above Ground Utility: 5280 Feet
 Railroad: 5280 Feet
 Property Line: 350 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 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: 52 Vona-Olney complex, 3 to 12 percent slopes
 NRCS Map Unit Name: 14 Fort Collins-Vona complex, 0 to 3 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: 08/14/2013

List individual species: Sand sagebrush- Oligosporus filifolius, Russian thistle - Salsola australis, Texas croton-Croton texensis, blue grama - Bouteloua gracilis, little hogweed - Portulaca oleracea

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): Sand Sagebrush Mixed Grass/Mixed Forb Rangeland

WATER RESOURCES

Is this a sensitive area: No Yes

Distance to nearest

downgradient surface water feature: 6210 Feet

water well: 3056 Feet

Estimated depth to ground water at Oil and Gas Location 21 Feet

Basis for depth to groundwater and sensitive area determination:

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 _____

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

Rangeland reference photo was taken from the disturbance area boundary facing NORTH away from the pad

Distance to nearest water well: 3,056' NE
Water well permit #: 12-WCB
Depth: -

Distance to nearest water well with depth: 4,975' NE
Water well permit #: 5012-F
Depth: 21

*Water well data from CDWR records

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

Signed: _____ Date: 09/04/2013 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: 10/31/2013

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.

<u>COA Type</u>	<u>Description</u>
	No E&P Waste permitted to be stored in Temporary Large Volument Above Ground Tank.
	Temporary Large Volume Above Ground Tank design shall be certified by a Professional Engineer, and the installation shall be in accordance with certified design.

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	The pad location is in a rural rangeland area. The closest occupied building is 4832' to the North and East.

Total: 1 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1667848	NOTICE OF SURFACE USE AGREEMENT
2086391	CORRESPONDENCE
20286371	WASTE MANAGEMENT PLAN
400474125	FORM 2A SUBMITTED
400474699	30 DAY NOTICE LETTER
400474700	HYDROLOGY MAP
400474704	NRCS MAP UNIT DESC
400474711	WELL LOCATION PLAT
400474712	LOCATION DRAWING
400474713	ACCESS ROAD MAP
400474719	REFERENCE AREA PICTURES
400474730	LEGAL/LEASE DESCRIPTION
400475443	LOCATION PICTURES

Total Attach: 13 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Final Review	Requested and received operator concurrence on COAs for tank.	10/31/2013 11:31:23 AM
Permit	Final review completed; no LGD or public comment received.	10/25/2013 1:56:41 PM
OGLA	noxious weed presence changed to "yes" due to presence of Russian Thistle, updated waste management plan provided by operator attached, correspondence that explains size of location is attached, operator provided evidence of SUA - attached, right to construct changed from "bond" to "SUA"	10/21/2013 8:03:10 AM
Permit	Returned to draft. Incorrect plugging bond number. Missing facility ID or document number for beneficial reuse or land application plan.	9/5/2013 10:37:17 AM

Total: 4 comment(s)