

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:

400466051

Date Received:

10/21/2013

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:

435722

Expiration Date:

01/02/2017

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: Caboose Number: 1548-21-44

County: CHEYENNE

Quarter: SESE Section: 21 Township: 15S Range: 48W Meridian: 6 Ground Elevation: 4254

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: 675 feet FSL from North or South section line

1100 feet FEL from East or West section line

Latitude: 38.722635 Longitude: -102.779769

PDOP Reading: 1.3 Date of Measurement: 06/20/2013

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> </u>	Condensate Tanks	<u> </u>	Water Tanks	<u> 15 </u>	Buried Produced Water Vaults	<u> </u>
Drilling Pits	<u> </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> </u>	Separators	<u> </u>	Injection Pumps	<u> 3 </u>	Cavity Pumps	<u> </u>		
Gas or Diesel Motors	<u> </u>	Electric Motors	<u> 3 </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> </u>	LACT Unit	<u> </u>
								Pigging Station	<u> </u>

OTHER FACILITIES

Other Facility Type	Number
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Water Treatment Building (TBD)	1
Filter skid	1

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

WATER LINES: Multiple water lines will run from untreated SWD water storage tanks to pump skid and water treatment building (if needed), treated water tanks to filter pump building then to the injection pump skid. One water line may be installed from Caboose 1548-21-41H well pad to the east (±50 between pads).

ELECTRICAL LINES: Power drop or buried line in to transformer and buried lines to electrical panels, communications tower, pump skids, water treatment building, tanks, ECD (VOC combustor), and various facility lights TBD.

GAS LINES: One gas line will be run from the heater treater to the ECD.

CONSTRUCTION

Date planned to commence construction: 01/06/2014 Size of disturbed area during construction in acres: 11.00

Estimated date that interim reclamation will begin: 06/28/2014 Size of location after interim reclamation in acres: 7.00

Estimated post-construction ground elevation: 4254

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? No

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Method: Commercial Disposal
Cutting Disposal: ONSITE Cuttings Disposal Method: Other

Other Disposal Description:

Cuttings will be tested and spread (with written consent of landowner) on pad surface or otherwise remediated and disposed of in compliance with rule 910. Please see Waste Management Plan attached for compliance and best management practices.

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: _____ or Document Number: _____

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

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Gayla Sue Connelley

Phone: 719-962-3303

Address: P.O. Box 116

Fax: _____

Address: _____

Email: _____

City: Kit Carson 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: No

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: 2350 Feet
Building Unit: 2350 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 671 Feet
Above Ground Utility: 702 Feet
Railroad: 5280 Feet
Property Line: 650 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: 51 Viona loamy sand, 3 to 6 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: 07/11/2013

List individual species: Russian thistle - Salsola australis blue grama - Bouteloua gracilis slimflower scurfpea - Psoralidium tenuiflorum Texas croton-Croton texensis Fendler hiddenflower- Cryptantha fendleri copper mallow- Sphaeralcea coccinealittle hogweed - Portul

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): Russian thistle Mixed Grass/Mixed Forb Rangeland

WATER RESOURCES

Is this a sensitive area: No Yes

Distance to nearest

downgradient surface water feature: 335 Feet

water well: 3300 Feet

Estimated depth to ground water at Oil and Gas Location 24 Feet

Basis for depth to groundwater and sensitive area determination:

Data source: Colorado Department of Water Resources records; nearest water well permit number 19354; well depth 44', static water depth 24', elevation 4238'
Location is considered sensitive area due to surface water feature within 1000' buffer

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: No

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 Included in the attachments is a Memorandum of Surface Use Agreement and Memorandum of Water Disposal Well Agreement both signed by the surface owner and dated Nov. 13, 2013. Injection Application Forms 26, 31 and 33 will be submitted to the UIC department at COGCC under separate cover.

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

Signed: _____ Date: 10/21/2013 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: Matthew Lee Director of COGCC Date: 1/3/2014

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>

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	The proposed SWD injection pad is located in a rural rangeland area. The closest occupied building is 2,435 feet to the NE separated by Highway 287.
2	Wildlife	Suitable burrowing owl habitat (prairie dog colony) within 150 feet of the proposed well pad. 3/3 consecutive negative surveys 7 days apart. 8/21/2013; No burrowing owls observed 8/28/2013; No burrowing owls observed 9/5/2013; No burrowing owls observed

Total: 2 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1668030	CORRESPONDENCE
400466051	FORM 2A SUBMITTED
400498729	NRCS MAP UNIT DESC
400498730	30 DAY NOTICE LETTER
400498731	LOCATION DRAWING
400498732	ACCESS ROAD MAP
400498733	LOCATION PICTURES
400498745	REFERENCE AREA PICTURES
400498764	WASTE MANAGEMENT PLAN
400499623	WELL LOCATION PLAT
400514599	SURFACE AGRMT/SURETY
400514602	SURFACE OWNER CONSENT
400516125	HYDROLOGY MAP

Total Attach: 13 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed; no LGD or public comment received.	12/31/2013 6:22:41 AM
OGLA	IN PROCESS - Operator provided additional info indicating there will be no related remote locations that will produce to this location and that there will be no drilling pits ob this location. OGLA review complete and task passed.	12/27/2013 2:11:36 PM
OGLA	ON HOLD - Requested clarification on the related remote locations and why two drilling pits for a single well pad that will be drilled via closed loop. Due by 1/26/14.	12/26/2013 10:11:43 AM
Permit	Revised distance to public road(20'). Road was primitive. Distance to public road is 671 feet.	12/4/2013 4:59:09 AM
Permit	Passed completion.	11/21/2013 10:09:45 AM
Permit	Returned to draft: 1) Hydrology map doesn't match this location.	11/19/2013 10:45:56 AM
Permit	Returned to draft: Signed SUA must be attached to this permit.	10/22/2013 6:14:59 AM

Total: 7 comment(s)