

**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:

400516269

Date Received:

12/05/2013

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:

436195

Expiration Date:

02/22/2017☐ 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.

OperatorOperator Number: 47120Name: KERR-MCGEE OIL & GAS ONSHORE LPAddress: P O BOX 173779City: DENVER State: CO Zip: 80217-3779**Contact Information**Name: Cheryl LightPhone: (720) 929-6461Fax: (720) 929-7461email: cheryl.light@anadarko.com**RECLAMATION FINANCIAL ASSURANCE**☒ Plugging and Abandonment Bond Surety ID: 20010124☐ Gas Facility Surety ID: _____☐ Waste Management Surety ID: _____**LOCATION IDENTIFICATION**Name: SPURLING TANK BATTERYNumber: 35N-34HZCounty: WELDQuarterQuarter: NENW Section: 34 Township: 2N Range: 67W Meridian: 6 Ground Elevation: 5020

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: 310 feet FNL from North or South section line2253 feet FWL from East or West section lineLatitude: 40.101185 Longitude: -104.878361PDOP Reading: 6.0 Date of Measurement: 04/30/2013Instrument Operator's Name: DAVID MACDONALD

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 #

Production Facilities Location serves Well(s)

400516264

318914

FACILITIES

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

Wells	Oil Tanks	31	Condensate Tanks	Water Tanks	7	Buried Produced Water Vaults		
Drilling Pits	Production Pits		Special Purpose Pits	Multi-Well Pits		Temporary Large Volume Above Ground Tanks		
Pump Jacks	Separators	7	Injection Pumps	Cavity Pumps				
Gas or Diesel Motors	Electric Motors		Electric Generators	Fuel Tanks		Gas Compressors		
Dehydrator Units	Vapor Recovery Unit	7	VOC Combustor	7	Flare	7	LACT Unit	2
							Pigging Station	

OTHER FACILITIES

Other Facility Type

Number

Gas pipeline	1
Flow lines	21
Oil pipeline	1

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

Pipelines: Buried pipelines will be utilized to gather the gas and oil product from the location (1 gas pipeline, 1 oil pipeline). Both gas and oil pipelines will be constructed from steel of suitable wall thickness and material grade to meet the respective gathering systems design pressure. Gas pipelines will range in diameter from 4" to 20"; oil pipelines from 4" to 12". Capacity of pipelines will vary based on diameter. Pipelines will begin at the location and terminate at larger trunk lines in the area. Temporary above ground polyethylene water pipelines (diameter 10" – 12" with a 60 BPM capacity) will deliver water to location operations from larger trunk lines.

Please see comments section for flow line description.

CONSTRUCTION

Date planned to commence construction: 04/08/2014 Size of disturbed area during construction in acres: 1.50

Estimated date that interim reclamation will begin: 07/08/2014 Size of location after interim reclamation in acres: 1.50

Estimated post-construction ground elevation: 5020

DRILLING PROGRAM

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

Is H₂S anticipated? _____

Will salt sections be encountered during drilling: _____

Will salt based mud (>15,000 ppm Cl) be used? _____

Will oil based drilling fluids be used? _____

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: _____

Drilling Fluids Disposal Method: _____

Cutting Disposal: _____

Cuttings Disposal Method: _____

Other Disposal Description:

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: _____ or Document Number: _____

Centralized E&P Waste Management Facility ID, if applicable: 149021

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Diana Lee Spurling

Phone: 303-841-3919

Address: PO Box 215

Fax: _____

Address: _____

Email: _____

City: Dacono State: CO Zip: 80514

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 04/11/2013

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: 818 Feet
Building Unit: 818 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 306 Feet
Above Ground Utility: 211 Feet
Railroad: 5280 Feet
Property Line: 277 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: 47 OLNEY FINE SANDY LOAM, 1 TO 3 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: 11/08/2013

List individual species: cheatgrass - Bromus tectorum, field bindweed- Convolvulus arvensis -(NOXIOUS WEED-C-List)

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): cheatgrass/Mixed Forb Rangeland

WATER RESOURCES

Is this a sensitive area: ☐ No ☒ Yes

Distance to nearest

downgradient surface water feature: 791 Feet

water well: 1644 Feet

Estimated depth to ground water at Oil and Gas Location 0 Feet

Basis for depth to groundwater and sensitive area determination:

Sensitive area determination: Surface water feature less than 1000' from edge of pad and depth to groundwater less than or equal to 20'.

Basis for depth to groundwater: Identified water well (Permit # 42862) located approximately 2994' west of the proposed oil and gas location. Depth to groundwater at water well is 20' and the water well is at an elevation of approximately 5045'.

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 318A

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 Flow Lines: Seven flow lines will flow to the production facility location. During production, flow direction in the flow lines is from the well head to the production facility. The size of flow lines is typically 2". Flow lines are constructed from steel pipe, are buried, and vary in length generally equaling the distance between the well heads and the tank battery (typically ranging from 75' to 3500" feet).
Seven fuel gas supply lines will also be installed from the well head to the production facility. During operation flow direction in the supply lines will be from the production facility to the well head. The size of the supply lines is typically 1". Supply lines are constructed from poly or steel pipe, buried, and vary in length generally equaling the distance between the well heads and the tank battery (typically ranging from 75' to 3500" feet).
Gas lift lines are also occasionally installed (one per well) from the well head to the production facility. During operation flow direction in the gas lift lines will be from the production facility to the well head. The size of the gas lift lines is typically 2". Gas lift lines are constructed from steel pipe, buried, and vary in length generally equaling the distance between the well heads and the tank battery (typically ranging from 75' to 3500" feet).

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

Signed: _____ Date: 12/05/2013 Email: DJRegulatory@anadarko.com

Print Name: Lauren Kucera Title: Regulatory Analyst II

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: 2/23/2014

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.

COA Type

Description

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Best Management Practices

No BMP/COA Type

Description

1	Planning	The nearest building unit is located 1,046' away from this oil and gas location, therefore it is not within a Designated Setback Location and is exempt from 604.c.
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Total: 1 comment(s)

Attachment Check List

Att Doc Num

Name

2086839	FACILITY LAYOUT DRAWING
400516269	FORM 2A SUBMITTED
400518168	REFERENCE AREA PICTURES
400518169	LOCATION PICTURES
400518171	ACCESS ROAD MAP
400518180	WASTE MANAGEMENT PLAN
400518519	HYDROLOGY MAP
400518520	NRCS MAP UNIT DESC
400520988	LOCATION DRAWING

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	2/18/2014 10:46:50 AM
OGLA	Uploaded Scaled Facility Layout drawing as provided by KM. Changed nearest building unit/building distance to 818 feet as provided by KM.	1/30/2014 10:34:49 AM
OGLA	Requesting distance to nearest building unit be established from the equipment nearest the building unit, not from an arbitrary reference point in the middle of the disturbance.	12/16/2013 11:09:13 AM
Permit	ok to pass.	12/12/2013 2:34:58 PM
Permit	Passed Completeness.	12/6/2013 8:56:48 AM

Total: 5 comment(s)