

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:

400955443

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Date Received:

01/29/2016

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:

**445493**

Expiration Date:

**04/16/2019**

☒ 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: P O BOX 173779  
City: DENVER State: CO Zip: 80217-3779

Contact Information

Name: Shayelyn Marshall  
Phone: (720) 929-6907  
Fax: (720) 929-7907  
email: Shayelyn.marshall@anadarko.com

RECLAMATION FINANCIAL ASSURANCE

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

LOCATION IDENTIFICATION

Name: RESOLUTION Number: 12-65-25-25-4NH  
County: WELD  
QuarterQuarter: SESW Section: 25 Township: 12N Range: 65W Meridian: 6 Ground Elevation: 5917  
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: 425 feet FSL from North or South section line  
2044 feet FWL from East or West section line  
Latitude: 40.972341 Longitude: -104.611885  
PDOP Reading: 1.3 Date of Measurement: 11/23/2015  
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	4	Oil Tanks*	16	Condensate Tanks*		Water Tanks*	8	Buried Produced Water Vaults*	
Drilling Pits		Production Pits*		Special Purpose Pits		Multi-Well Pits*		Modular Large Volume Tanks	
Pump Jacks	4	Separators*	4	Injection Pumps*		Cavity Pumps*		Gas Compressors*	
Gas or Diesel Motors*	4	Electric Motors		Electric Generators*	4	Fuel Tanks*		LACT Unit*	
Dehydrator Units*		Vapor Recovery Unit*		VOC Combustor*	2	Flare*	2	Pigging Station*	

## OTHER FACILITIES\*

Other Facility Type

Number

HEATER TREATER	4
FLOW LINES	4

\*Those facilities indicated by an asterisk (\*) shall be used to determine the distance from the Production Facility to the nearest cultural feature on the Cultural Setbacks Tab.

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

Please see Comments section for pipelines and flow lines description.

## CONSTRUCTION

Date planned to commence construction: 08/01/2016 Size of disturbed area during construction in acres: 9.00  
Estimated date that interim reclamation will begin: 11/01/2016 Size of location after interim reclamation in acres: 3.00  
Estimated post-construction ground elevation: 5914

## 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? Yes

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Method: Commercial Disposal

Cutting Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Please see Comments section for disposal facility 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: TRUE RANCHES LLC	Phone: _____
Address: PO DRAWER 2360	Fax: _____
Address: _____	Email: _____
City: CASPER	State: WY Zip: 82601

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 11/23/2015

## CURRENT AND FUTURE LAND USE

### Current Land Use (Check all that apply):

Crop Land:	<input type="checkbox"/> Irrigated	<input type="checkbox"/> Dry land	<input type="checkbox"/> Improved Pasture	<input type="checkbox"/> Hay Meadow	<input type="checkbox"/> CRP
Non-Crop Land:	<input checked="" type="checkbox"/> Rangeland	<input type="checkbox"/> Timber	<input type="checkbox"/> Recreational	<input type="checkbox"/> Other (describe): _____	
Subdivided:	<input type="checkbox"/> Industrial	<input type="checkbox"/> Commercial	<input type="checkbox"/> Residential		

### Future Land Use (Check all that apply):

Crop Land:	<input type="checkbox"/> Irrigated	<input type="checkbox"/> Dry land	<input type="checkbox"/> Improved Pasture	<input type="checkbox"/> Hay Meadow	<input type="checkbox"/> CRP
Non-Crop Land:	<input checked="" type="checkbox"/> Rangeland	<input type="checkbox"/> Timber	<input type="checkbox"/> Recreational	<input type="checkbox"/> Other (describe): _____	
Subdivided:	<input type="checkbox"/> Industrial	<input type="checkbox"/> Commercial	<input type="checkbox"/> Residential		

## CULTURAL DISTANCE INFORMATION

Provide the distance to the nearest cultural feature as measured from Wells or Production Facilities onsite.

	From WELL	From PRODUCTION FACILITY
Building:	5280 Feet	5280 Feet
Building Unit:	5280 Feet	5280 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	5280 Feet	5280 Feet
Above Ground Utility:	5280 Feet	5280 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	425 Feet	155 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.
- For measurement purposes only, Production Facilities should only include those items with an asterisk(\*) on the Facilities Tab.

## 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: \_\_\_\_\_

## FOR MULTI-WELL PADS AND PRODUCTION FACILITIES WITHIN DESIGNATED SETBACK LOCATIONS ONLY:

- ☐ Check this box if this Oil and Gas Location has or will have Production Facilities that serve multiple wells (onll or offsite) and the Production Facilities are proposed to be located less than 1,000 feet from a Building Unit. *(Pursuant to Rule 604.c.(2)E.i., the operator must evaluate alternative locations for the Production Facilities that are farther from the Building Unit, and determine whether those alternative locations were technically feasible and economically practicable for the same proposed development.)*
- ☐ By checking this box, I certify that no alternative placements for the Production Facilities, farther from the nearest Building Unit, were available based on the analysis conducted pursuant to Rule 604.c.(2)E.i.

In the space below, explain rationale for siting the multi-well Production Facility(ies) that supports your Rule 604.c.(2)E.i determination. Attach documentation that supports your determination to this Form 2A.

## 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: 52—Peetz-Altvan complex, 0 to 20 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: 01/20/2016

List individual species: big bluestem, sand bluestem, sideoats grama, blue grama, prairie sandreed, Canada wildrye, thickspike wheatgrass, needle and thread, prairie Junegrass, western wheatgrass

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: 650 Feet

water well: 2596 Feet

Estimated depth to ground water at Oil and Gas Location 231 Feet

Basis for depth to groundwater and sensitive area determination:

Intermittent Stream: 650' SE Elev: 5850' Sensitive Area: Downgradient surface water feature within 1000'. Not in the floodplain.

Water Wells:

149108: Dist: 2596' Static: 40 Elev: 5725' NE SWL Calc(5916-5725) + 40= 231

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: \_\_\_\_\_

Is the Location within a Floodplain? ☒ No ☐ Yes Floodplain Data Sources Reviewed (check all that apply)

☒ Federal (FEMA)

☐ State

☒ County

☐ Local

☐ Other \_\_\_\_\_

## 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

Reference area photos will be taken during growing season and therefore, submitted via Form 4 within 12 months of Form 2A.

The nearest building unit is located 5280' away from this oil and gas location, therefore it is not within a Designated Setback Location and is exempt from 604.c.

APC will reuse water-based drilling fluids to the maximum extent possible, at which point they will either be land applied or taken to a licensed, commercial disposal site; the decision will be based upon laboratory analysis of fluids. APC will reuse oil-based drilling fluids to the maximum extent possible, at which point they will be returned to the fluids manufacturer for reconditioning or disposed of at the licensed, commercial disposal sites listed below:

**Liquids**

- Waste Management's CSI facility in Bennett, CO
- Republic Services' Tower Road landfill in Denver, CO

**Solids**

- Waste Management's Buffalo Ridge facility in Keenesburg, CO
- Waste Management's North Weld facility in Ault, CO
- Waste Connection's North Regional Landfill in Erie, CO

The proposed location is an Exploratory well pad and a determination of need in regards to area trunklines will be determined at a later date. If required in the future, buried pipelines will be utilized to gather the gas and oil product from the location (3 gas pipelines, 1 oil pipeline per well). 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 3" to 20"; oil pipelines from 3" to 12". Capacity of pipelines will vary based on diameter. This site will utilize on-site tank battery. Temporary above ground polyethylene water pipelines (diameter 10"-12" with a 60 BPM capacity) will deliver water to location operations from on-site production facility.

Flow Lines: 1 per well will flow to the on-site production facility. During production, flow direction in the flow lines is from the well head to the production facility. The size of flow lines is typically 3". Flow lines will be constructed from steel pipe, buried and will be contained within the identified disturbance area.

There will be 1 fuel gas supply line installed from each well head to the on-site 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 will be constructed from poly or steel pipe, buried, and will be contained within the identified disturbance area.

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 will be constructed from steel pipe, buried, and will be completely contained within the identified disturbance area if required.

Reclamation will commence during the following growing season.

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

Signed: \_\_\_\_\_ Date: 01/29/2016 Email: Shayelyn.marshall@anadarko.com

Print Name: Shayelyn Marshall Title: Regulatory Analyst I

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: 4/17/2016

### **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**

	Reference Area Pictures will be taken during growing season and submitted via Form 4 Sundry within 12 months of COGCC approval of the Form 2A.
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## **Best Management Practices**

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	Planning	The nearest building unit is located 5280' away from this oil and gas location, therefore it is not within a Designated Setback Location and is exempt from 604.c.
2	Storm Water/Erosion Control	In our experience, soil blankets do not work for locations that are in construction. The constant maintenance of this BMP will not be in our best interests to prevent erosion of the referenced slopes. However, by using the soil binder in addition to the diversion ditch and berm with a sediment trap, the sediment will not be allowed to discharge from our area of disturbance. During the construction phase of this project, we will conduct 14 day stormwater inspections, and the soil binder will be maintained or reapplied to the design criteria as defined on the BMP fact sheet as needed. If the soil binder needs to be maintained, then the stormwater inspector will issue a corrective action for our contractor to reapply the BMP to prevent erosion from occurring. Once our construction operations are concluded, the location will be reduced in size, brought back as close as possible to original grade, and planted with a native seed mixture and crimped with a certified weed free straw to create temporary stabilization until vegetation can stabilize the location.

Total: 2 comment(s)

## **Attachment Check List**

<b>Att Doc Num</b>	<b>Name</b>
2477858	CORRESPONDENCE
400955443	FORM 2A SUBMITTED
400970931	ACCESS ROAD MAP
400970933	HYDROLOGY MAP
400972749	LOCATION DRAWING
400972750	WELL LOCATION PLAT
400972752	CONST. LAYOUT DRAWINGS
400972756	LOCATION PICTURES
400972757	MULTI-WELL PLAN
400972758	NRCS MAP UNIT DESC
400972760	WASTE MANAGEMENT PLAN
400977107	REFERENCE AREA MAP
400981017	SURFACE AGRMT/SURETY

Total Attach: 13 Files



### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Complete.	4/11/2016 1:41:46 PM
OGLA	IN PROCESS - Operator has revised the distance to the nearest water well and the estimated depth to groundwater. OGLA task passed.	3/31/2016 11:56:26 AM
OGLA	ON HOLD - Operator to revise the distance to the nearest water well. Due by 3/22/16.	2/22/2016 1:34:04 PM
LGD	As of today's date February 19, 2016, the Weld County Oil and Gas Liaison/LGD has not been contacted by any nearby resident(s) regarding this proposed location. Oil and Gas Exploration and Production activities are currently considered a Use by Right in the Agricultural Zoned District and no land use permitting is required by the County. A building permit is required for the production facilities (tank battery, separators, and pump jacks) from the Department of Planning Services. A new or expanded access from a county road or the use of a right-of-way requires a permit from the Department of Public Works. Troy Swain, Weld Oil and Gas Liaison and LGD (970) 353-6100, ext. 3579.	2/19/2016 12:36:38 PM
Permit	Passed completeness.	2/1/2016 9:24:39 AM
Permit	Returned to draft per operator.	1/29/2016 3:04:36 PM

Total: 6 comment(s)