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:

400770585

(SUBMITTED)

Date Received:

| Oil and | Gas | Location | <b>Assessment</b> |
|---------|-----|----------|-------------------|
|---------|-----|----------|-------------------|

| New Location Refile Amend Existing Location Loca  | ation#:   |
|---|---|
| Submit signed original form. This Oil and Gas Location Assessment is to be submitted to prior to any ground disturbance activity associated with oil and gas operations. Approval Assessment will allow for the construction of the below specified Location; however, it do use rules applied by the local land use authority. Please see the COGCC website at http accompanying information pertinent this Oil and Gas Location Assessment. | of this Oil and Gas Location es not supersede any land      |
|   |   |
| 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  | Contact Information   |
| Operator Number: 2800   | Name: CINDY HUR VUE   |
| Name: ANADARKO E&P ONSHORE LLC  | Phone: (720) 929-6832                                       |
| Address: PO BOX 173779  | Fax: (720) 929-7832   |
| City: DENVER State: CO Zip: 80217-3779  | email: CINDY.HURVUE@ANADARKO.C<br>OM                        |
| RECLAMATION FINANCIAL ASSURANCE   | 7.00  |
| ▼ Plugging and Abandonment Bond Surety ID: 20030041     □ Gas   | s Facility Surety ID:                                       |
| Waste Management Surety ID:   |   |
| LOCATION IDENTIFICATION   |   |
| Name: RESOLUTION FED Numb   | er: 12-65-24-25-5CH   |
| County: WELD  |   |
| QuarterQuarter: NWNE Section: 24 Township: 12N Range:   | 65W Meridian: 6 Ground Elevation: 5857                      |
| Define a single point as a location reference for the facility location. When the location a well location.   | cation is to be used as a well site then the point shall be |
| Footage at surface: 276 feet FNL from North or South section line   |   |
| 2025 feet FEL from East or West section line  |   |
| Latitude: 40.999313 Longitude: -104.607305  |   |
| PDOP Reading:1.5 Date of Measurement:12/16/2014   |   |
| Instrument Operator's Name: NICK ROADIFER   |   |

| This proposed Oil and Gas Location is:   | Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#) |  |                      |                                   |
|--|--|--|----------------------|-----------------------------------|
| Ins proposed on and das Location is.   | LOCATION ID #  | FORM   | 2A DOC #             |                                   |
| FACILITIES   |  |  |                      |                                   |
| Indicate the number of each type of oil and gas faci   | ility planned on location  |  |                      |                                   |
| Wells 4 Oil Tanks*   | 16 Condensate Tanks*   | 8  | Water Tanks*         | Buried Produced Water Vaults*     |
| Drilling Pits Production Pits*   | Special Purpose Pits   | N  | lulti-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  |  | 1  | <u>Number</u>        |                                   |
| Flow Lines   |  | - 10   | 4                    |                                   |
| Heater Treater   |  |  | 4                    |                                   |
| *Those facilities indicated by an asterisk (*) shall be cultural feature on the Cultural Setbacks Tab.   | e used to determine the  | distance   | from the Producti    | on Facility to the nearest        |
| Per Rule 303.b.(3)C, description of all oil, gas, and  | or water pipelines:  | -  |                      |                                   |
| Description: Please see Comments section. De-  | scription of pipelines and   | d flow lin   | es does not fit in s | space provided.                   |
| CONSTRUCTION   | _ / •  |  |                      |                                   |
| Date planned to commence construction: 11/   | /01/2015 Size  | of diet  | urbod aroa durir     | ng construction in acres: 9.00    |
| ·  |  | 1  |                      |                                   |
|  |  | Estimated date that interim reclamation will begin: 06/01/2016 Size of location after interim reclamation in acres: 3.50 |                      |                                   |
| Estimated post-construction ground elevation: 5847   |  |  |                      |                                   |
| •  | 0047   |  | ¥//                  |                                   |
| DRILLING PROGRAM   |  |  | 4                    |                                   |
| DRILLING PROGRAM  Will a closed loop system be used for drilling f   |  |  | V                    |                                   |
| DRILLING PROGRAM  Will a closed loop system be used for drilling f  Is H <sub>2</sub> S anticipated?No   | luids: Yes   |  |                      |                                   |
| DRILLING PROGRAM  Will a closed loop system be used for drilling f Is H <sub>2</sub> S anticipated?No_  Will salt sections be encountered during drilling  | luids: <u>Yes</u><br>g: No   |  |                      |                                   |
| DRILLING PROGRAM  Will a closed loop system be used for drilling f Is H <sub>2</sub> S anticipated?No_  Will salt sections be encountered during drilling  | luids: <u>Yes</u><br>g: No   |  |                      |                                   |
| DRILLING PROGRAM  Will a closed loop system be used for drilling f Is H <sub>2</sub> S anticipated? No  Will salt sections be encountered during drillin  Will salt based mud (>15,000 ppm CI) be used   | luids: <u>Yes</u><br>g: No   |  |                      |                                   |
| DRILLING PROGRAM  Will a closed loop system be used for drilling f Is H <sub>2</sub> S anticipated?No_  Will salt sections be encountered during drillin  Will salt based mud (>15,000 ppm Cl) be used  Will oil based drilling fluids be used?Yes   | luids: <u>Yes</u> g: No d? No  |  |                      |                                   |
| DRILLING PROGRAM  Will a closed loop system be used for drilling f Is H <sub>2</sub> S anticipated? No  Will salt sections be encountered during drillin  Will salt based mud (>15,000 ppm CI) be used   | luids: Yes g: No d? No ROGRAM  | Disposa  | al Method: Com       | mercial Disposal                  |
| DRILLING PROGRAM  Will a closed loop system be used for drilling f Is H <sub>2</sub> S anticipated?No_  Will salt sections be encountered during drillin  Will salt based mud (>15,000 ppm Cl) be used  Will oil based drilling fluids be used?Yes  DRILLING WASTE MANAGEMENT P  | luids: Yes g: No d? No  ROGRAM  Drilling Fluids  |  |                      | mercial Disposal mercial Disposal |
| DRILLING PROGRAM  Will a closed loop system be used for drilling f Is H2S anticipated?No  Will salt sections be encountered during drillin  Will salt based mud (>15,000 ppm Cl) be used  Will oil based drilling fluids be used?Yes  DRILLING WASTE MANAGEMENT P  Drilling Fluids Disposal:OFFSITE  | luids: Yes g: No d? No  ROGRAM  Drilling Fluids  |  |                      | <u> </u>                          |
| DRILLING PROGRAM  Will a closed loop system be used for drilling f Is H2S anticipated?No  Will salt sections be encountered during drillin  Will salt based mud (>15,000 ppm Cl) be used  Will oil based drilling fluids be used?Yes  DRILLING WASTE MANAGEMENT P  Drilling Fluids Disposal:OFFSITE  Cutting Disposal:OFFSITE  | luids: Yes g: No d? No  ROGRAM  Drilling Fluids  |  |                      | <u> </u>                          |
| DRILLING PROGRAM  Will a closed loop system be used for drilling f Is H <sub>2</sub> S anticipated?No  Will salt sections be encountered during drillin  Will salt based mud (>15,000 ppm Cl) be used  Will oil based drilling fluids be used?Yes  DRILLING WASTE MANAGEMENT P  Drilling Fluids Disposal:OFFSITE  Cutting Disposal:OFFSITE   | g: <u>No</u> d? <u>No</u> ROGRAM  Drilling Fluids  Cuttings  |  |                      | <u> </u>                          |
| DRILLING PROGRAM  Will a closed loop system be used for drilling for list H2S anticipated?No  Will salt sections be encountered during drilling will salt based mud (>15,000 ppm CI) be used will oil based drilling fluids be used?Yes  DRILLING WASTE MANAGEMENT P  Drilling Fluids Disposal:OFFSITE Cutting Disposal:OFFSITE Cutting Disposal:OFFSITE  Other Disposal Description:  Beneficial reuse or land application plan submarks. | g: <u>No</u> d? <u>No</u> ROGRAM  Drilling Fluids  Cuttings  |  |                      | <u> </u>                          |

SURFACE & MINERALS & RIGHT TO CONSTRUCT

| Name: True Ranch, LLC Phone: 307-237-9301   |   |
|---|---|
| Address: PO DRAWER 2360 Fax:  |   |
| Address: Email:   |   |
| City: CASPER State: WY Zip: 82602   |   |
| Surface Owner:  |   |
| 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 Damage Surface Surety ID:                            |   |
| Date of Rule 306 surface owner consultation 02/02/2015  |   |
| Date of Rule 300 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   | — |
| Cubalvided. Industrial Commercial 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:                         | 3533 Feet | 3393 Feet                |
| Building Unit:                    | 3505 Feet | 3283 Feet                |
| High Occupancy Building Unit:     | 5280 Feet | 5280 Feet                |
| Designated Outside Activity Area: | 5280 Feet | 5280 Feet                |
| Public Road:                      | 1061 Feet | 884 Feet                 |
| Above Ground Utility:             | 3195 Feet | 3191 Feet                |
| Railroad:                         | 5280 Feet | 5280 Feet                |
| Property Line:                    | 266 Feet  | 424 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

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:

| - Buffer Zone | <ul> <li>as described in Rule 604.a.(2),</li> </ul> |
|---------------|---|
| 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.

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

| Check this box if this Oil and Gas Location has or will have Production Facilities that serve multiple wells (on 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 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: | 80—Manter sandy loam, 0 to 6 percent slopes               |
|---------------------|---|
| NRCS Map Unit Name: | 81—Treon-Aberone fine sandy loams, 6 to 30 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: 12/16/2014  | $\neg$ |
| List individual species: prairie sagewort, Aster, blue grama, smooth brome, Cirsium, needle and thread, pricklypear, Phacelia, Russian thistle  |        |
| 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: 1785 Feet   |        |
| water well: 2382 Feet   |        |
| Estimated depth to ground water at Oil and Gas Location75 Feet  |        |
| Basis for depth to groundwater and sensitive area determination:  |        |
| Nearest surface water features: Intermittent Stream: 1785' SE Elev: 5725' Loc Elev:5857' Nearest water wells: 2382' S, Permit 76647, depth 75', Static Water Level 45', Elev 5730' 5820' No Non-Fox Hills Wells within 1 miles Sensitive area determination: NO SENSITIVE AREA  |        |
| Is the location in a riparian area: 区 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 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.)  |        |

|                 | 04.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit ction after Location approval)  |
|-----------------|--|
| Rule 60         | 04.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)   |
|                 | 04.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific oment plan)  |
| <b>RULE 502</b> | .b VARIANCE REQUEST  |
| Rule 50         | 02.b. Variance Request from COGCC Rule or Spacing Order Number   |
|                 | ons and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. ifications, SUAs).  |
| OPERATO         | OR COMMENTS AND SUBMITTAL  |
| Comments        | There are no surface water features within 1000' of this proposed location, therefore no hydrology map is attached (per COGCC Guidance, October 2014).   |
|                 | Drilling fluids disposal: 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 disposal at a licensed, commercial disposal site.   |
|                 | 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.   |
|                 | Rangeland pictures will also be provided during growing season via sundry notice.  |
|                 | Reclamation will commence during the following growing season.   |
| I hereby co     | ertify that the statements made in this form are, to the best of my knowledge, true, correct and complete.  Date: Email: CINDY.HURVUE@ANADARKO.COM   |
| Print Name      | e: CINDY HUR VUE Title: REGULATORY ANALYST II  |
|                 | ne information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders by approved.  |
| COGCC Ap        |  |
|                 |  |

### **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.

# **Best Management Practices**

| No BMP/COA Type | <u>Description</u>   |
|-----------------|--|
| 1 Planning      | The nearest building unit is located 3283' away from this oil and gas location, therefore it is not within a Designated Setback Location and is exempt from 604.c. |

Total: 1 comment(s)

# **Attachment Check List**

| Att Doc Num | <u>Name</u>             |
|-------------|-------------------------|
| 400779414   | NRCS MAP UNIT DESC      |
| 400779417   | REFERENCE AREA PICTURES |
| 400779425   | REFERENCE AREA MAP      |
| 400779437   | ACCESS ROAD MAP         |
| 400779438   | CONST. LAYOUT DRAWINGS  |
| 400779440   | MULTI-WELL PLAN         |
| 400779441   | WELL LOCATION PLAT      |
| 400779442   | LOCATION DRAWING        |
| 400779443   | WASTE MANAGEMENT PLAN   |
| 400779445   | SURFACE AGRMT/SURETY    |

Total Attach: 10 Files

# **General Comments**

| User Group | Comment |  | Comment Date |
|------------|---------|--|--------------|
|            |         |  |              |

Total: 0 comment(s)

Date Run: 1/26/2015 Doc [#400770585]