

**APPLICATION FOR PERMIT TO:**

**Drill**
     
  Deepen
     
  Re-enter
     
  Recomplete and Operate

Date Received:  
02/05/2015

TYPE OF WELL    OIL <input type="checkbox"/> GAS <input checked="" type="checkbox"/> COALBED <input type="checkbox"/> OTHER _____	Refilling <input type="checkbox"/>
ZONE TYPE    SINGLE ZONE <input checked="" type="checkbox"/> MULTIPLE ZONES <input type="checkbox"/> COMMINGLE ZONES <input type="checkbox"/>	Sidetrack <input type="checkbox"/>

Well Name: <u>RESOLUTION</u>	Well Number: <u>12-63-21-28-3NH</u>
Name of Operator: <u>ANADARKO E&amp;P ONSHORE LLC</u>	COGCC Operator Number: <u>2800</u>
Address: <u>PO BOX 173779</u>	
City: <u>DENVER</u>	State: <u>CO</u>
	Zip: <u>80217-3779</u>
Contact Name: <u>CINDY HUR VUE</u>	Phone: <u>(720)929-6832</u>
	Fax: <u>(720)929-7832</u>
Email: <u>CINDY.HURVUE@ANADARKO.COM</u>	

**RECLAMATION FINANCIAL ASSURANCE**

Plugging and Abandonment Bond Surety ID: 20030041

**WELL LOCATION INFORMATION**

QtrQtr: NENW    Sec: 21    Twp: 12N    Rng: 63W    Meridian: 6

Latitude: 41.001012    Longitude: -104.440539

Footage at Surface:    239 feet    <sup>FNL/FSL</sup> 2055 feet    <sup>FEL/FWL</sup>         

Field Name: WILDCAT    Field Number: 99999

Ground Elevation: 5503    County: WELD

GPS Data:

Date of Measurement: 12/24/2014    PDOP Reading: 1.4    Instrument Operator's Name: ROB WILSON

If well is     Directional     Horizontal (highly deviated)    **submit deviated drilling plan.**

Footage at Top of Prod Zone:	<sup>FNL/FSL</sup> <u>603</u>	<sup>FEL/FWL</sup> <u>        </u>	Bottom Hole:	<sup>FNL/FSL</sup> <u>600</u>	<sup>FEL/FWL</sup> <u>1940</u>
	<sup>FNL</sup> <u>2052</u>	<sup>FWL</sup> <u>        </u>		<sup>FSL</sup> <u>        </u>	<sup>FWL</sup> <u>        </u>
	Sec: <u>21</u>	Twp: <u>12N</u>	Rng: <u>63W</u>	Sec: <u>28</u>	Twp: <u>12N</u>
				Rng: <u>63W</u>	

**LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT**

Surface Ownership:     Fee     State     Federal     Indian

The Surface Owner is:     is the mineral owner beneath the location.  
 (check all that apply)     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 by this Well:    Yes

The right to construct the Oil and Gas Location is granted by:    Bond

Surface damage assurance if no agreement is in place:    Blanket    Surface Surety ID: 20030042

**LEASE INFORMATION**

Using standard QtrQtr, Sec, Twp, Rng format, describe one entire mineral lease that will be produced by this well (Describe lease beneath surface location if produced. Attach separate description page or map if necessary.)

Township 12 North, Range 63 West, 6th P.M.  
Section 21: LOTS 1, 2, 3, 4, S2N2  
Weld County, Colorado

Total Acres in Described Lease: 311 Described Mineral Lease is:  Fee  State  Federal  Indian

Federal or State Lease # \_\_\_\_\_

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 0 Feet

**CULTURAL DISTANCE INFORMATION**

Distance to nearest:

Building: 5280 Feet  
Building Unit: 5280 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 4689 Feet  
Above Ground Utility: 1941 Feet  
Railroad: 5280 Feet  
Property Line: 300 Feet

**INSTRUCTIONS:**

- All measurements shall be provided from center of the Proposed Well to nearest of each cultural feature as described in Rule 303.a.(5).  
- 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: \_\_\_\_\_

**SPACING and UNIT INFORMATION**

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 642 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 600 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): \_\_\_\_\_ Unit Number: \_\_\_\_\_

**SPACING & FORMATIONS COMMENTS**

Unit Description: T12N-R63W section 21: Lots 1-4, S2N2, S2 [all], section 28: all

**OBJECTIVE FORMATIONS**

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
NIOBRARA	NBRR	421-18	1262	SEE ABOVE

**DRILLING PROGRAM**

Proposed Total Measured Depth: 16828 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 355 Feet (Including plugged wells)

Will a closed-loop drilling system be used? Yes

Is H<sub>2</sub>S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H<sub>2</sub>S Drilling Operations Plan)

Will salt sections be encountered during drilling?     No    

Will salt based (>15,000 ppm Cl) drilling fluids be used?     No    

Will oil based drilling fluids be used?     Yes    

BOP Equipment Type:  Annular Preventor    Double Ram    Rotating Head    None

### GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule     609    

### DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal:     OFFSITE          Drilling Fluids Disposal Methods:     Commercial Disposal    

Cuttings Disposal:     OFFSITE          Cuttings Disposal Method:     Commercial Disposal    

Other Disposal Description:

Beneficial reuse or land application plan submitted?     Yes    

Reuse Facility ID:                           or Document Number:                     

### CASING PROGRAM

<u>Casing Type</u>	<u>Size of Hole</u>	<u>Size of Casing</u>	<u>Wt/Ft</u>	<u>Csg/Liner Top</u>	<u>Setting Depth</u>	<u>Sacks Cmt</u>	<u>Cmt Btm</u>	<u>Cmt Top</u>
CONDUCTOR	20	16	42	0	90	60	90	0
SURF	12+1/4	9+5/8	36	0	2000	530	2000	0
1ST	8+3/4	7	26	0	7875	900	7875	0
1ST LINER	6+1/8	4+1/2	11.6	6975	16828	830	16828	6975

Conductor Casing is NOT planned

### 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)

### GREATER WATTENBERG AREA LOCATION EXCEPTIONS

Check all that apply:

- Rule 318A.a. Exception Location (GWA Windows).
- Rule 318A.c. Exception Location (GWA Twinning).

### RULE 502.b VARIANCE REQUEST

Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number

## OTHER LOCATION EXCEPTIONS

Check all that apply:

- Rule 318.c. Exception Location from Rule or Spacing Order Number \_\_\_\_\_
- Rule 603.a.(2) Exception Location (Property Line Setback).

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 Right to construct and Surface Use Agreement currently under negotiation with surface owner. Currently have a staking waiver. Using blanket bond for right to construct at time of permit submission.

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.

This application is in a Comprehensive Drilling Plan \_\_\_\_\_ CDP #: \_\_\_\_\_

Location ID: \_\_\_\_\_

Is this application being submitted with an Oil and Gas Location Assessment application? \_\_\_\_\_ Yes

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

Signed: \_\_\_\_\_ Print Name: CINDY HUR VUE

Title: Regulatory Analyst II Date: 2/5/2015 Email: CINDY.HURVUE@ANADARK

Operator must have a valid water right or permit allowing for industrial use or purchased water from a seller that has a valid water right or permit allowing for industrial use, otherwise an application for a change in type of use is required under Colorado law. Operator must also use the water in the location set forth in the water right decree or well permit, otherwise an application for a change in place of use is required under Colorado law. Section 37-92-103(5), C.R.S. (2011).

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: 4/12/2015

Expiration Date: 04/11/2017

### API NUMBER

05 123 41397 00

## Conditions Of Approval

All representations, stipulations and conditions of approval stated in the Form 2A for this location shall constitute representations, stipulations and conditions of approval for this Form 2 Permit-to-Drill and are enforceable to the same extent as all other representations, stipulations and conditions of approval stated in this Permit-to-Drill.

<u>COA Type</u>	<u>Description</u>
	1) Submit Form 42 electronically to COGCC 48 hours prior to MIRU. 2) Comply with Rule 317.j and provide cement coverage from end of 7" casing to a minimum of 50' above the bottom of the surface casing. Verify coverage with cement bond log. 3) Comply with Rule 321. Run and submit Directional Survey from TD to base of surface casing. Ensure that the wellbore complies with setback requirements in commission orders or rules prior to producing the well.
	Operator acknowledges the proximity of the listed non producing well. Operator agrees to provide mitigation Option 3 (per the DJ Basin Horizontal Offset Policy, ensure all applicable documentation is submitted based on the selected mitigation option chosen, and submit a Form 42 "OFFSET MITIGATION COMPLETED" for the remediated well, referencing the API Number of the proposed horizontal well(s) stating what appropriate mitigation occurred and that it has been completed, prior to the hydraulic stimulation of the proposed wells.  UPRR-AVERS 1-21 API #123-10358)
	Open hole resistivity and gamma logs shall be run to describe the stratigraphy of the entire well bore and to adequately verify the setting depth of surface casing and aquifer coverage. On a multi-well pad, these open hole logs are only required on one of the first wells drilled on the pad and the Drilling Completion Report - Form 5 for every well on the pad shall identify which well was logged.

## Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
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.

Total: 1 comment(s)

## Applicable Policies and Notices to Operators

Notice Concerning Operating Requirements for Wildlife Protection.

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400779384	FORM 2 SUBMITTED
400783365	DIRECTIONAL DATA
400783367	DEVIATED DRILLING PLAN
400783369	WASTE MANAGEMENT PLAN
400783370	WELL LOCATION PLAT
400817736	OffsetWellEvaluations Data

Total Attach: 6 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	4/9/2015 9:32:15 AM
Engineer	Inserted HOP spreadsheet as provided in an Email from Cindy Hur Vue (Anadarko) dated March 25th 2015.  Updated "Operator's Wellbore Integrity Contact" with John.rager@anadarko.com on spreadsheets per email from Shayelyn Marshall (Anadarko) dated March 30th, 2015.	3/31/2015 8:26:57 AM
Permit	Operator provided Spacing Order number 421-18 and corrected unit acreage from 1271 acres to 1262 acres.	3/4/2015 12:49:00 PM
Permit	Spacing Order is blank. Contacted operator to correct.	2/24/2015 2:15:24 PM
Permit	Passed Completeness	2/6/2015 12:29:43 PM

Total: 5 comment(s)