

APPLICATION FOR PERMIT TO:

Drill

 Deepen

 Re-enter

 Recomplete and Operate

Date Received:

TYPE OF WELL OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> COALBED <input type="checkbox"/> OTHER _____	Refiling <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>WOOTTEN</u>	Well Number: <u>2-21-2246</u>
Name of Operator: <u>DISCOVERY NATURAL RESOURCES LLC</u>	COGCC Operator Number: <u>10475</u>
Address: <u>410 17TH STREET #900</u>	
City: <u>DENVER</u>	State: <u>CO</u> Zip: <u>80202</u>
Contact Name: <u>Paul Gottlob</u>	Phone: <u>(720)420-5747</u> Fax: <u>()</u>
Email: <u>paul.gottlob@iptenergyservices.com</u>	

RECLAMATION FINANCIAL ASSURANCE	
Plugging and Abandonment Bond Surety ID: <u>82327007</u>	

WELL LOCATION INFORMATION				
QtrQtr: <u>NWNE</u>	Sec: <u>21</u>	Twp: <u>22S</u>	Rng: <u>46W</u>	Meridian: <u>6</u>
Latitude: <u>38.127140</u>		Longitude: <u>-102.583640</u>		
Footage at Surface: <u>660</u> feet	FNL/FSL <u>FNL</u> <u>1980</u> feet	FEL/FWL <u>FEL</u>		
Field Name: <u>WILDCAT</u>	Field Number: <u>99999</u>			
Ground Elevation: <u>3682</u>	County: <u>PROWERS</u>			
GPS Data:				
Date of Measurement: <u>08/27/2014</u>	PDOP Reading: <u>1.3</u>	Instrument Operator's Name: <u>Thomas Carlson</u>		
If well is <input type="checkbox"/> Directional <input type="checkbox"/> Horizontal (highly deviated) submit deviated drilling plan.				
Footage at Top of Prod Zone: _____	FNL/FSL	FEL/FWL	Bottom Hole: _____	FNL/FSL FEL/FWL
Sec: _____	Twp: _____	Rng: _____	Sec: _____	Twp: _____ Rng: _____

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT	
Surface Ownership: <input checked="" type="checkbox"/> Fee <input type="checkbox"/> State <input type="checkbox"/> Federal <input type="checkbox"/> Indian	
The Surface Owner is: <input checked="" type="checkbox"/> is the mineral owner beneath the location.	
(check all that apply) <input type="checkbox"/> is committed to an Oil and Gas Lease.	
<input checked="" type="checkbox"/> has signed the Oil and Gas Lease.	
<input type="checkbox"/> is the applicant.	
The Mineral Owner beneath this Oil and Gas Location is: <input checked="" type="checkbox"/> Fee <input type="checkbox"/> State <input type="checkbox"/> Federal <input type="checkbox"/> Indian	
The Minerals beneath this Oil and Gas Location will be developed by this Well: <u>Yes</u>	
The right to construct the Oil and Gas Location is granted by: <u>Surface Use Agreement</u>	
Surface damage assurance if no agreement is in place: _____	Surface Surety ID: _____

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.)

See attached diagram.

Total Acres in Described Lease: 189 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: 660 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 2115 Feet

Building Unit: 2165 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 658 Feet

Above Ground Utility: 2000 Feet

Railroad: 5280 Feet

Property Line: 780 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: 2493 Feet

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

Federal or State Unit Name (if appl): _____ Unit Number: _____

SPACING & FORMATIONS COMMENTS

Nearest Wellbore Permitted or Completed in the same formation is API#05-099-06089.

OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
ARBUCKLE	ABCK			
LANSING	LNSNG			
MARMATON	MRTN			
MISSISSIPPIAN-OSAGE-WARSAW	M-O-W			
MISSISSIPPIAN-OSAGE	MS-OS			
MISSISSIPPIAN-SPERGEN	MS-SP			
MISSISSIPPIAN-ST LOUIS	MS-SL			
MORROW	MRRW			
TOPEKA	TOPK			

DRILLING PROGRAM

Proposed Total Measured Depth: 5200 Feet
 Distance to nearest permitted or existing wellbore penetrating objective formation: 2493 Feet (Including plugged wells)
 Will a closed-loop drilling system be used? No
 Is H₂S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H₂S 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? No
 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: ONSITE Drilling Fluids Disposal Methods: Evaporation
 Cuttings Disposal: ONSITE Cuttings Disposal Method: Other
 Other Disposal Description:

 Beneficial reuse or land application plan submitted? No
 Reuse Facility ID: _____ or Document Number: _____

CASING PROGRAM

Casing Type	Size of Hole	Size of Casing	Wt/Ft	Csg/Liner Top	Setting Depth	Sacks Cmt	Cmt Btm	Cmt Top
SURF	12+1/4	8+5/8	24	0	500	305	500	0
1ST	7+7/8	5+1/2	15.5	0	5200	330	5200	3000
			Stage Tool	0	3000	530	3000	0

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

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: Paul Gottlob

Title: Regulatory & Engin. Tech. Date: _____ Email: paul.gottlob@iptenergyservices

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: _____

Expiration Date: _____

API NUMBER
05

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.

Best Management Practices

No	BMP/COA Type	Description
1	Planning	Single well pad - Logging Open hole resistivity log with gamma ray will be run on this well to describe the stratigraphy of the wellbore and to adequately verify the setting depth of the surface casing and aquifer coverage. A CBL will be run on all production casing or, in the case of a production liner, the intermediate casing, when these casing strings are run.
2	Planning	Braden-head Monitoring: Operator acknowledges and will comply with COGCC Policy for Braden-head Monitoring during Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated May 29, 2012.
3	Planning	Anti-Collision: Prior to drilling operations, Operator will perform an anti-collision scan of existing offset wells that have the potential of being within close proximity of the proposed wells. The anti-collision scan may include definitive MWD or gyro surveys of the offset wells with included error of uncertainty per survey instrument, and compared against the proposed well-path with its respective error of uncertainty. If current surveys do not exist for the offset wells, operators may have gyro surveys conducted to verify bottom-hole location. The proposed well may only be drilled if the anti-collision review results indicate that the risk of collision is sufficiently low as defined by the anti-collision plan, with separation factors greater than 1.5, or if the risk of collision has been mitigated through other means including shutting in wells, plugging wells, increased drilling fluid in the event of lost returns or as is appropriate for the specific situation. In the event of an increased risk of collision, that risk will be mitigated to prevent harm to people, the environment or property. For the proposed well, upon conclusion of drilling operations, an as-constructed directional survey will be submitted to the COGCC with the Form 5.
4	Material Handling and Spill Prevention	Load-lines. All load-lines shall be bull-plugged or capped.
5	Drilling/Completion Operations	Green Completions – Emission Control Systems. Test separators and associated flow lines and sand traps shall be installed on-site to accommodate Green completions techniques pursuant to COGCC Rules. In the anticipated absence of a viable gas sales line, the flow-back gas shall be thermally oxidized in an emissions control device (ECD), which will be installed and kept in operable condition for least the first 90-days of production pursuant to CDPHE rules. This ECD shall have an adequate capacity for 1.5 times the largest flow-back within a 10 mile radius, will be flanged to route gas to other or permanent oxidizing equipment and shall be provided with the equipment needed to maintain combustion where non-combustible gases are present.
6	Drilling/Completion Operations	Blowout preventer equipment (“BOPE”). A double ram and annular preventer will be used during drilling. At least the drilling company shall have a valid well blowout prevention certifications.
7	Drilling/Completion Operations	BOPE for well servicing operations. Adequate BOP equipment shall be used. Stabbing valves shall be installed in the event of reverse circulation and shall be prior tested with low and high pressure fluid.
8	Drilling/Completion Operations	Drill stem tests. Not applicable; no Drill Stem tests are planned.
9	Drilling/Completion Operations	Control of fire hazards. All materials which are considered fire hazards shall be a minimum of 25’ from the wellhead tanks or separators. Electrical equipment shall comply with API RP 500 and will comply with the current national electrical code. An emergency response plan has been generated for this site.
10	Drilling/Completion Operations	Guy line anchors. All guy line anchors shall be brightly marked pursuant to Rule 604.c (2)Q.
11	Final Reclamation	Well site cleared. Within 90-day subsequent to the time of plugging and abandonment of the entire site, superfluous debris and equipment shall be removed from the site.
12	Final Reclamation	Identification of plugged and abandoned wells. P&A’d wells shall be identified pursuant to 319.a.(5).

Total: 12 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400683994	SURFACE AGRMT/SURETY
400684403	PLAT
400684696	MINERAL LEASE MAP
400694423	30 DAY NOTICE LETTER

Total Attach: 4 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>

Total: 0 comment(s)