

**APPLICATION FOR PERMIT TO:**

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

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

Date Received: 05/03/2018

Well Name: Jamaso 4-65      Well Number: 5-6-7 TMP

Name of Operator: AXIS EXPLORATION LLC      COGCC Operator Number: 10646

Address: 370 17TH ST SUITE 5300

City: DENVER      State: CO      Zip: 80202

Contact Name: Kelsi Welch      Phone: (720)354-4607      Fax: ( )

Email: kwelch@extractionog.com

**RECLAMATION FINANCIAL ASSURANCE**  
Plugging and Abandonment Bond Surety ID: 20160140

**WELL LOCATION INFORMATION**

QtrQtr: SWNW    Sec: 4    Twp: 4S    Rng: 65W    Meridian: 6

Latitude: 39.733350      Longitude: -104.676850

Footage at Surface: <u>2427</u> Feet	FNL/FSL	FEL/FWL
<u>FNL</u> <u>409</u> Feet	<u>FNL</u>	<u>FWL</u>

Field Name: WILDCAT      Field Number: 99999

Ground Elevation: 5585      County: ARAPAHOE

GPS Data:  
Date of Measurement: 01/18/2018    PDOP Reading: 1.3    Instrument Operator's Name: D. Wimmer

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

Footage at Top of Prod Zone: <u>2819</u> Feet	FNL/FSL	FEL/FWL	Bottom Hole: <u>2819</u> Feet	FNL/FSL	FEL/FWL
<u>FNL</u> <u>113</u> Feet	<u>FNL</u>	<u>FWL</u>	<u>FNL</u> <u>113</u> Feet	<u>FNL</u>	<u>FWL</u>

Sec: 4    Twp: 4S    Rng: 65W      Sec: 4    Twp: 4S    Rng: 65W

**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: No

The right to construct the Oil and Gas Location is granted by: Surface Use Agreement

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.)

This well will not produce. It is a pilot hole that will be used for testing and logging.

Total Acres in Described Lease: \_\_\_\_\_ 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: \_\_\_\_\_ Feet

**CULTURAL DISTANCE INFORMATION**

Distance to nearest:

Building: 1157 Feet  
 Building Unit: 1157 Feet  
 High Occupancy Building Unit: 5280 Feet  
 Designated Outside Activity Area: 4108 Feet  
 Public Road: 398 Feet  
 Above Ground Utility: 481 Feet  
 Railroad: 4299 Feet  
 Property Line: 339 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 proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 5280 Feet

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

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

**SPACING & FORMATIONS COMMENTS**

No portion of this well will produce minerals. This well will only be used for testing and logging.

**OBJECTIVE FORMATIONS**

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
CODELL	CODL			

## DRILLING PROGRAM

Proposed Total Measured Depth: 8920 Feet

Distance from the proposed wellbore to nearest existing or proposed wellbore belonging to another operator, including plugged wells:

Enter distance if less than or equal to 1,500 feet: \_\_\_\_\_ Feet  No well belonging to another operator within 1,500 feet

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? \_\_\_\_\_

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
CONDUCTOR	24	16	42	0	80	100	80	0
SURF	12+1/4	9+5/8	36	0	2500	670	2500	0
OPEN HOLE	8+1/2			2500	8920			

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 wellbore will be a pilot hole drilled solely for the purpose of collecting data by logging and coring. We will then plug back and drill drilling a horizontal with approved

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

Location ID: 454144

Is this application being submitted with an Oil and Gas Location Assessment application? No

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

Signed: \_\_\_\_\_ Print Name: Kelsi Welch

Title: Regulatory Analyst Date: 5/3/2018 Email: kwelch@extractionog.com

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:  Director of COGCC Date: 8/29/2018

Expiration Date: 08/28/2020

<b>API NUMBER</b>
05 005 07336 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.

<b>COA Type</b>	<b>Description</b>
	1) Note surface casing setting depth change from 1500' to 2500'. Increase cement coverage accordingly. 2) Submit Form 42 electronically to COGCC 48 hours prior to MIRU for the first well activity with a rig on the pad and provide 48 hour spud notice via Form 42 for all subsequent wells drilled on the pad.

## Best Management Practices

No	<u>BMP/COA Type</u>	<u>Description</u>
1	Drilling/Completion Operations	317.p - This directional pilot hole will be logged with open-hole Resistivity Log and Gamma Ray Log from TD into the surface casing. The Form 5, Completion Report, will list all logs run and have those logs attached.

Total: 1 comment(s)

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2519789	WELL LOCATION PLAT
401613898	FORM 2 SUBMITTED
401629297	WELL LOCATION PLAT
401629304	DEVIATED DRILLING PLAN
401629305	DIRECTIONAL DATA
401664939	SURFACE AGRMT/SURETY
401672330	OffsetWellEvaluations Data
401748937	OFFSET WELL EVALUATION

Total Attach: 8 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Removed spacing order, acres & configuration. Pushed to Final.	08/26/2018
Final Review	Final approval - asked about acreage being assigned to a strat test - returned Final Review to Active	08/08/2018
Permit	Corrected logging BMP. Attached new well location plat. Form IN PROCESS.	08/06/2018
Final Review	ON HOLD: Well location plat does not include the bottom hole location; logging BMP is not adequate for this deep pilot hole.	07/27/2018
Permit	Final review complete.	07/09/2018
Permit	Corrected distance to building. Added TPZ footages. Passed permitting.	07/09/2018
Permit	Passed Completeness.	06/20/2018
Permit	Returned to draft for: TMD's from Deviated Drilling Plan do not match form Drilling and Casing tabs. BHL does not match deviated drilling plan.	06/13/2018
Permit	Returned to draft for: Logging comment.	05/10/2018

Total: 9 comment(s)