

**APPLICATION FOR PERMIT TO:**

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

TYPE OF WELL	OIL <input type="checkbox"/>	GAS <input checked="" type="checkbox"/>	COALBED <input type="checkbox"/>	OTHER <u>Pilot/Directional</u>	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"/>	Date Received: 01/28/2014

Well Name: Bulldog      Well Number: 24-11H-892

Name of Operator: AXIA ENERGY LLC      COGCC Operator Number: 10335

Address: 1430 LARIMER STREET #400

City: DENVER      State: CO      Zip: 80202

Contact Name: Lisa Smith      Phone: (303)857-9999      Fax: (303)450-9200

Email: lisa@permitco-usa.com

**RECLAMATION FINANCIAL ASSURANCE**  
Plugging and Abandonment Bond Surety ID: 20100083

**WELL LOCATION INFORMATION**

QtrQtr: NENE      Sec: 23      Twp: 8N      Rng: 92W      Meridian: 6

Latitude: 40.633956      Longitude: -107.678219

Footage at Surface: 1299 feet      FNL/FSL FNL 242 feet      FEL/FWL FEL

Field Name: Wildcat      Field Number: 99999

Ground Elevation: 6925      County: MOFFAT

GPS Data:  
Date of Measurement: 04/05/2013      PDOP Reading: 1.6      Instrument Operator's Name: Glen McElroy

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

Footage at Top of Prod Zone:	FNL/FSL	FEL/FWL	Bottom Hole:	FNL/FSL	FEL/FWL
<u>1979</u>	<u>FNL</u> <u>661</u>	<u>FWL</u>	<u>1979</u>	<u>FNL</u> <u>661</u>	<u>FWL</u>
Sec: <u>24</u>	Twp: <u>8N</u>	Rng: <u>92W</u>	Sec: <u>24</u>	Twp: <u>8N</u>	Rng: <u>92W</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: oil and gas lease

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.)

T8N -R92W

Sec. 3: Lots 17, 18, N/2S/2

Sec. 9: NE/4, SE NW, NE SW, N/2SE/4

Sec. 11: SW/4, S/2 NW/4

Sec. 14: W/2NW/4

Sec. 23: E/2 SE, NE/4, NW SE, SE NW, NE SW

Sec. 24: NW NW, SW NW, W/2SW

Sec. 25: W/2NW

Sec. 26: NE NE

See Mineral Lease Map in the attachments section

Total Acres in Described Lease: 1520 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: 5280 Feet

Building Unit: 5280 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 5280 Feet

Above Ground Utility: 5280 Feet

Railroad: 5280 Feet

Property Line: 1299 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: 1320 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

Distance from Completed Portion of Wellbore to Nearest Unit Boundary line has been identified as zero feet because this pilot hole will not be completed or produced and is for informational purposes only.  
See attached unit configuration map.

## 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	540-15	2463	S.23,24,25,26,36

## DRILLING PROGRAM

Proposed Total Measured Depth: 13646 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 1320 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: ONSITE Cuttings Disposal Method: Other

Other Disposal Description:

Cuttings to be collected in cuttings pit, tested, and if pass Table 910-1 standards, to be buried or spread on location. Oil based cuttings will be hauled to a commercial disposal facility.

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	20	16	55#	0	60	60	60	0
SURF	13+1/2	10+3/4	40.5#	0	1500	410	1500	0
1ST	9+7/8	7+5/8	26.4#	0	11500	800	11500	
OPEN HOLE	6+3/4			11500	13646			

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 pilot hole is being drilled for informational purposes only and will not be completed or produced.  
  
COGCC: Operator's details moved here from eForm Casing Tab - open hole will be plugged back from 13,646' MD to 11,000' MD with 375 sacks cement prior to drilling the lateral sidetrack.

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: Lisa Smith

Title: Agent for Axia Energy LLC Date: 1/28/2014 Email: lisa@permitco-usa.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: *Matthew Lee* Director of COGCC Date: 8/8/2014

Expiration Date: 08/07/2016

<b>API NUMBER</b>
05 081 07806 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.

### COA Type

### Description

	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.
	(1) COMPLIANCE WITH THE MOST CURRENT REVISION OF THE NORTHWEST COLORADO NOTIFICATION POLICY IS REQUIRED. SEE ATTACHED NOTICE.  (2) CEMENT ON INTERMEDIATE (7-5/8" FIRST STRING) CASING MUST EXTEND INTO THE SURFACE CASING (MINIMUM 200' LAP ABOVE SURFACE CASING SHOE) TO PROVIDE ISOLATION OF ALL CRETACEOUS (INCLUDING MESAVERDE GROUP, LEWIS, FOX HILLS, AND LANCE) AND TERTIARY (INCLUDING FORT UNION AND WASATCH, IF PRESENT) OIL, GAS, AND WATER-BEARING SANDSTONE AND COALBED FORMATIONS THAT ARE NOT OTHERWISE COVERED BY SURFACE CASING. VERIFY INTERMEDIATE (7-5/8" FIRST STRING) CASING CEMENT COVERAGE WITH A CBL.

## Best Management Practices

### No BMP/COA Type

### Description

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## Applicable Policies and Notices to Operators

NW Colorado Notification Policy.

Notice Concerning Operating Requirements for Wildlife Protection.

## Attachment Check List

### Att Doc Num

### Name

400450719	FORM 2 SUBMITTED
400470264	SURFACE AGRMT/SURETY
400470270	DIRECTIONAL DATA
400493471	30 DAY NOTICE LETTER
400493473	WAIVERS
400517641	UNIT CONFIGURATION MAP
400517642	MINERAL LEASE MAP
400517667	WELL LOCATION PLAT
400546783	DEVIATED DRILLING PLAN

Total Attach: 9 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed. No LGD comments.	5/28/2014 11:27:06 AM
Engineer	THE PROPOSED SURFACE CASING IS MORE THAN 50' BELOW THE DEPTH OF THE DEEPEST WATER WELL WITHIN 1-MILE OF THE SURFACE LOCATION WHEN CORRECTED FOR ELEVATION DIFFERENCES. THE DEEPEST WATER WELL WITHIN 1-MILE IS 280 FEET DEEP.	2/10/2014 5:01:09 PM
Engineer	PROPOSED SURFACE CASING OF 1,500 FEET MAY NOT PROVIDE FULL COVERAGE OF WASATCH FORMATION AND/OR FORT UNION FORMATION, BASED ON REPORTED LOG TOPS IN OFFSET WELLS.	2/10/2014 5:00:54 PM
Permit	Passed completeness.	1/29/2014 9:28:56 AM

Total: 4 comment(s)