

FORM

2

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:

400388548

APPLICATION FOR PERMIT TO:

☒ Drill
 ☐ Deepen
 ☐ Re-enter
 ☐ Recomplete and Operate

Date Received:

11/21/2013

TYPE OF WELL OIL ☐ GAS ☒ COALBED ☐ OTHER HorizontalRefilling ☐ZONE TYPE SINGLE ZONE ☐ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☒Well Name: BulldogWell Number: 17-31H-891Name of Operator: AXIA ENERGY LLCCOGCC Operator Number: 10335Address: 1430 LARIMER STREET #400City: DENVER State: CO Zip: 80202Contact Name: Lisa SmithPhone: (303)857-9999Fax: (303)450-9200Email: Lisa@permitco-usa.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20100083

WELL LOCATION INFORMATION

QtrQtr: NW NE Sec: 17 Twp: 8N Rng: 91W Meridian: 6Latitude: 40.658638Longitude: -107.627338
 Footage at Surface: 90 feet FNL 2128 feet FEL
Field Name: WildcatField Number: 99999Ground Elevation: 6975County: MOFFAT

GPS Data:

Date of Measurement: 01/11/2013 PDOP Reading: 1.1 Instrument Operator's Name: Glen McElroyIf 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
1137 FNL 1968 FEL 628 FSL 1977 FEL
 Sec: 17 Twp: 8N Rng: 91W Sec: 20 Twp: 8N Rng: 91W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ IndianThe 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 ☐ IndianThe Minerals beneath this Oil and Gas Location will be developed by this Well: YesThe right to construct the Oil and Gas Location is granted by: Surface Use AgreementSurface damage assurance if no agreement is in place: _____ Surface Surety ID: 20100083

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.)

Partial Lease Description: T8N-R91W Sec. 17: E/2NW, NWNW, NE, E/2, SE. Lease contains 8802.79 acres total. Distance to mineral lease line is 0' because lateral crosses multiple lease lines. Spacing Unit contains 2605 acres.

Total Acres in Described Lease: 8803 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: 1481 Feet
Building Unit: 1553 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 836 Feet
Above Ground Utility: 966 Feet
Railroad: 5280 Feet
Property Line: 2128 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: 1325 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 628 Feet (Enter 5280 for distance greater than 1 mile.)

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

SPACING & FORMATIONS COMMENTS

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	TBD	2605	Sec. 17-20 All

DRILLING PROGRAM

Proposed Total Measured Depth: 21405 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 1325 Feet (Including plugged wells)

Will a closed-loop drilling system be used? Yes

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? 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 N/A

DRILLING WASTE MANAGEMENT PROGRAM

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

Cuttings Disposal: Cuttings Disposal Method: Other

Other Disposal Description:

Water based cuttings to be tested to Table 910 standards, mixed/treated as necessary, and buried or spread at location. Oil based cuttings will be hauled to commercial disposal facility.

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
CONDUCTOR	20	16	55#	0	60	60	60	0
SURF	13+1/2	10+3/4	40.5#	0	1500	545	1500	0
1ST	9+7/8	7+5/8	26.4#	0	11700	823	11700	
2ND	6+3/4	5+1/2	20#	0	11650	100	11650	9650
TAPER	6+3/4	4+1/2	13.5#	11650	21404	865	21404	11650

☐ 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 Production casing is tapered 5-1/2" to 4-1/2".

This application is in a Comprehensive Drilling Plan No 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: 11/21/2013 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:  Director of COGCC Date: 3/8/2014

Expiration Date: 03/07/2016

API NUMBER

05 081 07797 01

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

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

Best Management Practices

No	BMP/COA Type	Description

Applicable Policies and Notices to Operators

NW Colorado Notification Policy.

Notice Concerning Operating Requirements for Wildlife Protection.

Attachment Check List

Att Doc Num	Name
400388548	FORM 2 SUBMITTED
400513837	DEVIATED DRILLING PLAN
400513838	PLAT
400513839	OIL & GAS LEASE
400513840	MINERAL LEASE MAP
400513841	UNIT CONFIGURATION MAP
400513842	DIRECTIONAL DATA
400517011	SURFACE AGRMT/SURETY
400517012	WAIVERS
400517013	WAIVERS

Total Attach: 10 Files

General Comments

User Group	Comment	Comment Date
Permit	Final review completed. No LGD comments.	3/4/2014 8:37:52 AM
Permit	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.	3/4/2014 8:37:28 AM
Permit	Operator requested change of distance to nearest Above Ground Utility.	3/4/2014 8:36:13 AM
Permit	The distance to the nearest Above Ground Utility is 899 in the horizontal and 966 in the pilot, requested review and clarification.	2/27/2014 9:43:03 AM
Permit	The distance to the nearest building is incorrect on the previously approved form 2A, it says 5280' but as submitted for the form 2's is it 1481' which has been verified to be correct.	2/25/2014 11:06:38 AM
Engineer	PROPOSED SURFACE CASING OF 1,500 FEET MAY NOT PROVIDE FULL COVERAGE OF WASATCH FORMATION, BASED ON FORT UNION REPORTED LOG TOPS IN OFFSET WELLS.	12/10/2013 2:29:44 PM
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 000 FEET DEEP (NO PERMITTED WATER WELLS WITHIN ONE MILE).	12/10/2013 2:29:31 PM
Engineer	Changed 5-1/2" Casing Type from "1st Liner" to "Second String." Changed 4-1/2" Casing Type from "2nd Liner" to "Taper."	12/10/2013 2:28:17 PM
Permit	Passed completeness.	11/22/2013 12:29:39 PM

Total: 9 comment(s)