

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:

400635298

Date Received:

09/05/2014

APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☐ GAS ☒ COALBED ☐ OTHER _____

Refilling ☒

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: LATHAM Well Number: 2-8D

Name of Operator: LINN OPERATING INC COGCC Operator Number: 10516

Address: 1999 BROADWAY SUITE 3700

City: DENVER State: CO Zip: 80202

Contact Name: HEIDI BANG Phone: (303)999-4262 Fax: (303)999-4362

Email: HBANG@LINNENERGY.COM

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20140058

WELL LOCATION INFORMATION

QtrQtr: NESE Sec: 2 Twp: 6S Rng: 97W Meridian: 6

Latitude: 39.550096 Longitude: -108.182490

Footage at Surface: 1981 feet FNL/FSL FSL 1257 feet FEL/FWL FEL

Field Name: GRAND VALLEY Field Number: 31290

Ground Elevation: 8360 County: GARFIELD

GPS Data:

Date of Measurement: 10/13/2009 PDOP Reading: 3.2 Instrument Operator's Name: ROBERT WOOD

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

Footage at Top of Prod Zone: FNL/FSL FSL 2403 FEL 646 FEL 2403 FSL 646 FEL
Sec: 2 Twp: 6S Rng: 97W Sec: 2 Twp: 6S Rng: 97W

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: 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.)

PLEASE SEE MINERAL LEASE MAP ATTACHED TO ORIGINAL APD. LATHAM OWNS SURFACE. CHEVRON OWNS MINERALS.

Total Acres in Described Lease: 5165 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: 2520 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: 614 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: 340 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 238 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.)
WILLIAMS FORK	WMFK	510-18	320	S/2

DRILLING PROGRAM

Proposed Total Measured Depth: 9940 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 340 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? 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: Recycle/reuse

Cuttings Disposal: ONSITE Cuttings Disposal Method: Other

Other Disposal Description:

Cuttings will be managed onsite. Concentrations shall not exceed the levels in Table 910-1 standards.

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	30	20	55	0	90	100	90	0
SURF	16	9+5/8	36	0	2000	1000	2000	0
1ST	8+3/4	4+1/2	11.6	0	9940	600	9940	

☐ 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 I CERTIFY THAT THERE HAS BEEN NO CHANGES ON LAND USE, LEASE DESCRIPTION. THE PAD HAS BEEN BUILT. THE PIT HAS BEEN CONSTRUCTED. WELLS HAVE BEEN DRILLED. NO RIG ON SITE. THE REFILE WILL NOT REQUIRE ANY EXPANSION/ADDITIONAL SURFACE DISTURBANCE OF THE PAD.
The location does not require a variance from any of the rules listed in Rule 306.d.(1).(A).(ii).
The location is not in a wildlife restricted surface occupancy area.
THE PRODUCTION CASING TOP OF CEMENT WILL BE 200' ABOVE TOP OF GAS.

This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: 415531

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: HEIDI BANG

Title: FIELD ADMIN 2 Date: 9/5/2014 Email: HBANG@LINNENERGY.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: 11/16/2014

Expiration Date: 11/15/2016

API NUMBER

05 045 19073 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)Within 7 days of receipt of this approved form, Operator shall contact COGCC Reclamation Supervisor for site reclamation status verification.
	1)Operator shall comply with the most current revision of the Northwest Colorado Notification Policy. See attached notice. 2)Operator shall comply with the most current revision of the Garfield County Rulison Field Notice to Operators, with the following exception: all field notice requirements specified in this notice to operators are superseded by the requirements of the most current revision of the Northwest Colorado Notification Policy (see condition of approval #1). See attached notice. 3)Operator shall provide cement coverage from the production casing shoe (4+1/2" FIRST STRING) to a minimum of 200' above all Mesa Verde Group (and Ohio Creek Formation, if present) oil, gas, and water-bearing sandstone and coalbed formations. Verify production casing cement coverage with a cement bond log.

Best Management Practices

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

Applicable Policies and Notices to Operators

Piceance Rulison Field - Notice to Operators.

NW Colorado Notification Policy.

Notice Concerning Operating Requirements for Wildlife Protection.

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400635298	FORM 2 SUBMITTED

Total Attach: 1 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Corrected waste and cuttings disposal methods as per opr. Final review complete.	11/14/2014 2:12:03 PM
Permit	Checking with opr regarding onsite disposal methods. Corrected distance to nearest unit boundary as per opr.	11/12/2014 2:21:39 PM
Final Review	Changed permitting task back to active for correction of dist. to unit.	10/19/2014 11:36:50 AM
Permit	Corrected statements to refile as per opr. Final review complete.	10/17/2014 1:36:51 PM
Engineer	Evaluated existing offset wells within 1,500 feet of this wellbore. Offset wells target the MVRD formation. No mitigation required. 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. There are no dedicated domestic water wells within a 1-mile radius of the surface location. Removed 1st string cement top of 200'. See COA#3. First APD for this well (doc# 400012167) issued 2/3/2010. Two producing wells on pad.	9/12/2014 8:25:14 AM
LGD	Pass-GDB	9/11/2014 2:21:06 PM
Permit	Passed Completeness	9/8/2014 3:26:03 PM

Total: 7 comment(s)