

APPLICATION FOR PERMIT TO:

Drill Deepen Re-enter Recomplete and Operate

Date Received:
01/28/2014

TYPE OF WELL OIL GAS COALBED OTHER _____

ZONE TYPE SINGLE ZONE MULTIPLE ZONES COMMINGLE ZONES

Refiling
Sidetrack

Well Name: IGW Well Number: 122

Name of Operator: ELM RIDGE EXPLORATION CO LLC COGCC Operator Number: 26625

Address: 12225 GREENVILLE AVE STE 950

City: DALLAS State: TX Zip: 75243-9362

Contact Name: Terry Lindeman Phone: (505)632-3476 Fax: (505)632-8151

Email: tlindeman@elmridge.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20100130

WELL LOCATION INFORMATION

QtrQtr: NESE Sec: 7 Twp: 33N Rng: 8W Meridian: N

Latitude: 37.115080 Longitude: -107.753940

Footage at Surface: 1145 feet FNL/FSL FSL 1163 feet FEL/FWL FEL

Field Name: IGNACIO BLANCO Field Number: 38300

Ground Elevation: 6649 County: LA PLATA

GPS Data:
Date of Measurement: 05/07/2007 PDOP Reading: 3.0 Instrument Operator's Name: Nelson Ross

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>1999</u>	FSL	<u>1649</u>	FEL	<u>2002</u>	FSL	<u>1827</u>	FEL
Sec: <u>7</u>	Twp: <u>33N</u>	Rng: <u>8W</u>	Sec: <u>7</u>	Twp: <u>33N</u>	Rng: <u>8W</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: 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.)

E/2 SEC. 7, T33N, R8W, NMPM

Total Acres in Described Lease: 320 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: 1179 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 461 Feet

Building Unit: 473 Feet

High Occupancy Building Unit: 5280 Feet

Designated Outside Activity Area: 5280 Feet

Public Road: 1650 Feet

Above Ground Utility: 334 Feet

Railroad: 5280 Feet

Property Line: 201 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: 12/27/2013

SPACING and UNIT INFORMATION

Distance from Completed Portion of Wellbore to Nearest Wellbore Permitted or Completed in the same formation: 931 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 1179 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.)
FRUITLAND COAL	FRLDC	112-195	320	E/2

DRILLING PROGRAM

Proposed Total Measured Depth: 3384 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 755 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 608

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
SURF	12+1/4	8+5/8	24	0	500	400	500	0
1ST	7+7/8	5+1/2	17	500	3384	458	3384	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

The only change to the permit is the bottom hole location due to revised geologic interpretation.

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

Location ID: 311887

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: Robert Joyce

Title: Agent Date: 1/28/2014 Email: jlr@animas.net

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: 3/26/2014

Expiration Date: 03/25/2016

API NUMBER

05 067 09559 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.

<u>COA Type</u>	<u>Description</u>
	<p>1) Provide 48 hour notice via form 42</p> <p>2) Provide cement coverage of production casing from TD to surface. Verify cement coverage with Cement Bond Log.</p> <p>3) Run and submit Directional Survey for primary well bore and for each lateral section</p> <p>4) The operator shall comply with Rule 321, and it shall be the operator's responsibility to ensure that the well bore complies with setback requirements in Commission orders and/or rules prior to producing the well.</p> <p>5) Sample and test two closest water wells within 1/2 mile swath of lateral wellbore Fruitland Coal (horizontal dimension – top to bottom of pay).</p> <p>6) Operators are required to obtain a bottom hole pressure utilizing a bottom hole gauge after a minimum 48 hour shut-in period following completion and prior to sales</p> <p>7) Comply with all applicable provisions of Order 112-195</p> <p>8) Borehole problems encountered while drilling that require an unplanned sidetrack: Contact, discuss & receive prior approval from COGCC Regional Engineer – Mark Weems</p> <p>970-259-4587 off 970-749-0624 cell mark.weems@state.co.us</p>
	<p>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.</p>

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Community Outreach and Notification	Rule 604.a (2)-Notices sent 12-27-13-Certified Mail/Return Receipt Requested. All notices)were delivered and return receipts were signed by addressee and returned. Return Receipts are scanned and uploaded as attachments.
2	Pre-Construction	Rule 604.c.(2)W-Pre-construction consultation occurred at the time the Surface Damage Agreement was negotiated. In subsequent conversations with the surface owner, Rodney Gantt, no changes were requested and none are anticipated
3	Traffic control	Rule 604.c.(2)D- Access is off County Road 309A, approximately 1.2 miles North of its intersection with County Road 318. Access gate is on the wEST side of the County Road. Access is granted by existing Surface Damage Agreement (attached). Elm Ridge agrees to comply with any La Plata County traffic control measures required for this well.
4	General Housekeeping	Rule 604.c.(2)P- Trash containers will be maintained on site. Trash will be hauled to and disposed at a commercial landfill.

5	Storm Water/Erosion Control	The location will be trenched on the cut side and bermed on the fill side. Ditches and catchment ponds will be constructed where necessary to prevent silt runoff. ditches and catchments will be riprapped and wattles will be placed, where necessary, prior to the beginning of construction. The size and quantity of the wattles used will vary according to the location to insure adequate protection of drainage areas.
6	Material Handling and Spill Prevention	Rule 604.c.(2)F- Wells are monitored daily by the pumpers. Pressure monitoring is not necessary. Maximum reservoir pressure is approximately 1200 psig. These are low pressure gathering lines. All gathering lines are checked yearly for leaks. Per Rule 604.c.(2)G.- Berms will be constructed with corrugated metal sides and will be sufficient in height and area to contain 150% of the volume of the largest single tank. Synthetic liners are being and will be used under tanks on location. Rule 604.c.(2)N-Any materials not in use that might constitute a fire hazard will be removed a minimum distance of twenty five feet from the wellhead, tanks and separator. No electrical equipment installations are planned inside the bermed area.
7	Construction	Rule 604.c.(2)V.- the IGE 122 well will be located in the immediate vicinity of and partially within the footprint of the existing F. W. Terrell Gas Unit #2 well pad. Rule 604.c.(2)B.- no fresh water pits are planned. Rule 604.c.(2)E- The existing well access road will be used. No new disturbance is anticipated. Standard specifications for this access road include a driving surface constructed with with 6 inches of 3" minus gravel over a driving surface approximately 12 feet in width, crowned, with ditches and culverts where necessary for drainage. Rule 604.c.(2)M.- The tract of land where the well pad is located is perimeter fenced with a cattle guard at entrance to well access on CR 309A. Rule 604.c.(2)V-The existing well pad for the F. W. Terrell Gas Unit #2 well is being used for this location.
8	Noise mitigation	(Rule 604.c.(2)ADrilling and Completion: Noise levels will be monitored by operator and if exceeds acceptable levels operator agrees to install sound walls or, if necessary, provide reasonable motel accommodations for the affected party. Post-production: If engines or motorized equipment becomes necessary, Elm Ridge will first try to electrify the location if it is practical and feasible. If not, they will orient exhaust away from the affected party and will use hospital grade mufflers, buried, in series. Elm Ridge will install sound walls if necessary.
9	Drilling/Completion Operations	Rule 604.c.(2)B.- A closed loop system will be used. No fresh water pits are planned. Fresh water will be stored in above ground tanks Per Rule 604.c.(2)C.)-i.- There are producing wells within one mile of the location of the proposed IGW 122 well. It is anticipated that this will be a producing well and, if so, Elm Ridge will comply with applicable requirements under Rule 805. ii- No uncontrolled venting is anticipated (based on 500 mcf) iii-aa., bb. cc.- Elm Ridge will use a system capable of handling 1.5 Mmcf. Anticipated flowback is 0.5 Mmcf or less. No necessity for flaring is anticipated. Rule 604.c.(2)H.- Elm Ridge will be using a 3M system per BLM specifications. Rule 604.c.(2)I.- BOPE pressure testing will be performed weekly. 604.c.(2)K.- Pit level indicators will be used. 604.c.(2)L- Drill stem tests are not typically done and none are anticipated. Rule 604.c.(2)O- Load lines will be bullplugged Rule 604.c.(2)Q- Guy line anchors will be identified per COGCC rules and are tested before each use. Rule 604.c.(2)S. – Existing well access road will be used and maintained for all weather use and will meet any safety requirements.

Total: 9 comment(s)

Attachment Check List

Att Doc Num	Name
1857412	SELECTED ITEMS REPORT
400474910	FORM 2 SUBMITTED
400543906	DEVIATED DRILLING PLAN
400543908	SURFACE AGRMT/SURETY
400543916	DRILLING PLAN
400543924	TOPO MAP
400544198	LOCATION DRAWING
400546136	EXCEPTION LOC REQUEST
400546138	LOCATION DRAWING
400546139	CONST. LAYOUT DRAWINGS
400546140	WELL LOCATION PLAT
400546356	DIRECTIONAL DATA
400546441	DIRECTIONAL DATA

Total Attach: 13 Files

General Comments

User Group	Comment	Comment Date
Permit	Final review completed; no LGD or public comment received.	3/24/2014 5:38:35 PM
Permit	The power line that is 334' from the well would be a utility drop to the two houses out there. per operator. Distance to power line revised to 334'	2/4/2014 11:49:53 AM
Permit	Changed distance to another well penetrating the objective to reflect distance from objective zone and not surface location.	2/4/2014 7:35:19 AM
Permit	Distance to power line may be wrong.	2/4/2014 7:21:24 AM
Permit	Operator needs to list and changes to this refile in comparison to the previous filing. If no changes than it should be stated on the permit. It appears that the bottom hole location has changed.	2/4/2014 6:58:21 AM
Permit	Passed completeness.	1/28/2014 1:10:56 PM
Permit	Returned to draft: BHL in Well Location tab does not match attached Well Location Plat. Directional data not uploaded in Attachment tab.	1/28/2014 10:27:21 AM
Permit	Returned to draft: P&A Bond ID is incorrect in Well Name & Contact Info tab (should be 20100130). Please correct. Either the Type of Well in the well information tab should be changed to Coal Bed or the Water Sampling Rule should be changed to 609, whichever is correct. Well location data in Well Location tab does not match attached Well Location Plat. Directional data not uploaded in Attachment tab. Please check spreadsheet formats and remove any extra rows or columns from the spreadsheet.	1/28/2014 9:18:43 AM

Total: 8 comment(s)