

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:

401002680

#### APPLICATION FOR PERMIT TO:

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

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER and Deepen

Refilling ☐

ZONE TYPE SINGLE ZONE ☐ MULTIPLE ZONES ☒ COMMINGLE ZONES ☒

Sidetrack ☐

Date Received:

03/09/2016

Well Name: Schulte

Well Number: 1-13R

Name of Operator: GRYNBERG\* JACK DBA GRYNBERG PETROLEUM CO

COGCC Operator Number: 36200

Address: 3600 S. YOSEMITE ST - STE 900

City: DENVER

State: CO

Zip: 80237-1830

Contact Name: Heather Bader

Phone: (303)850-7490

Fax: ( )

Email: h.bader@grynberg.com

#### RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20100037

#### WELL LOCATION INFORMATION

QtrQtr: SWSW Sec: 3 Twp: 6S Rng: 52W Meridian: 6

Latitude: 39.550400

Longitude: -103.207800

Footage at Surface: 312 feet FNL/FSL FSL 1046 feet FEL/FWL FWL

Field Name: WILDCAT

Field Number: 99999

Ground Elevation: 4945

County: LINCOLN

GPS Data:

Date of Measurement: 03/03/2016 PDOP Reading: 3.5 Instrument Operator's Name: Craig Burke

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                     

Sec:            Twp:            Rng:            Sec:            Twp:            Rng:           

#### 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: Bond

Surface damage assurance if no agreement is in place: \$2,000

Surface Surety ID: 20160083

## 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.)

T6S-R52W  
Sec3 S/2 of SW/4  
Sec10 N/2 of NW/4  
Refer to attached pooling agreement.

Total Acres in Described Lease: 160 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: 1046 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: 1032 Feet  
Above Ground Utility: 4315 Feet  
Railroad: 5280 Feet  
Property Line: 311 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

## OBJECTIVE FORMATIONS

Objective Formation(s)	Formation Code	Spacing Order Number(s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
ARBUCKLE	ABCK			
ATOKA	ATOK			
CHEROKEE	CHRK			
J SAND	JSND			
KANSAS CITY	KSSC			
LANSING	LNSNG			
MARMATON	MRTN			
MORROW	MRRW			
REAGAN	REGN			
SPERGEN	SPGN			
WOLFCAMP GRANITE WASH	WFCGW			

## DRILLING PROGRAM

Proposed Total Measured Depth: 8700 Feet

Distance from proposed wellbore to nearest existing or permitted wellbore belonging to another operator:

4900 Feet (Including plugged wells)

Will a closed-loop drilling system be used? No

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? 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: Evaporation

Cuttings Disposal: ONSITE Cuttings Disposal Method: Drilling pit

Other Disposal Description:

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
SURF	12+1/4	8+5/8	24	0	238	200	238	0
1ST	7+7/8	5+1/2	17	0	8700	928	8700	1500

☒ 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

Water well sampling per Rule 609: No water wells within a one-half mile radius of the proposed well.

During the meeting on May 18, 2016 we discussed that prior to deepening the Davis Oil, JF Ellison #1, API 05-073-05055 that was drilled and abandoned in September 1958 the COGCC will require Grynberg to:

Run a CBL on the 230' of 8 5/8" 24# surface casing.  
 Run a casing inspection log on the surface casing that will show casing thickness. Logging tool spec sheet attached..  
 Pull test 30, 000 pounds up on the surface casing.  
 Pressure test the surface casing to 1000 PSI for 15 minutes.

Notify the COGCC inspectors 24 hours in advance to witness all of the above operations.

Meeting attendees; COGCC Stuart Ellsworth, Diana Burns, Dirk Sutphin and Richard Miller with Grynberg Petroleum.

This application is in a Comprehensive Drilling Plan No CDP #: \_\_\_\_\_

Location ID: 386901

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: Heather Bader

Title: Regulatory Consultant Date: 3/9/2016 Email: h.bader@grynberg.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: 8/5/2016

Expiration Date: 08/04/2018

**API NUMBER**

05 073 05055 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**

	Bradenhead tests shall be performed and reported according to the following schedule and Form 17 submitted within 10 days of each test.: 1) Within 60 days of rig release, prior to stimulation. 2) 6-7 months after rig release, prior to stimulation. 3) Within 30 days of first production, as reported on Form 5A.
	Prior to drilling out surface casing shoe plug perform the following tests and logs to evaluate the surface casing integrity for well control and aquifer protection: Run a CBL on the surface casing. Run a casing inspection log on the surface casing to evaluate casing thickness. Pressure test the surface casing to 1000 PSI for 15 minutes. If any of these evaluation tools indicate a potential lack of integrity operator shall install intermediate casing to at least 5% of proposed TVD (8700'x5%=435').
	1) Provide 48 hour notice prior to spud via electronic Form 42. 2) If production casing is set provide cement coverage to at least 200' above the shallowest completed and across Cheyenne/Dakota interval (4800'-3900'). Run and submit CBL to verify cemented intervals. 3) If well is a dry hole set plugs at the following depths: 40 sks cement at 7350' (shale at top of Morrow), 40 sks cement at 5450' (shale at bottom of Stone Corral), 40 sks cement across any DST w/ show, 40 sks cement at 4800', 40 sks cement at 3900', 50 sks cement 290'-190' (50' below to 50' above surface casing shoe), 15 sks cement in top of surface casing, cut 4 ft below GL, weld on plate, 5 sks cement each in rat hole and mouse hole.

## Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	General Housekeeping	<ul style="list-style-type: none"> <li>• Materials and fluids will be stored in a neat and orderly fashion.</li> <li>• Waste will be collected regularly and disposed of at an offsite facility.</li> <li>• Drip pans will be used during fueling and maintenance to contain spills or leaks.</li> <li>• Cleanup of trash and discarded material will be done at the end of the work day.</li> <li>• Cleanup will consist of monitoring the road, location and any other work areas.</li> <li>• Material to be cleaned up includes trash, scrap, and contaminated soil.</li> </ul>
2	Storm Water/Erosion Control	Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with oil and gas development throughout the State of Colorado. BMPs will be constructed as necessary to prevent stormwater from leaving the construction site. BMPs used will vary according to the location, and will remain until the pad is reclaimed.
3	Material Handling and Spill Prevention	<ul style="list-style-type: none"> <li>• Materials and fluids will be stored in a neat and orderly fashion.</li> <li>• Waste will be collected regularly and disposed of at an offsite facility.</li> <li>• Prompt cleanup is required of spills to minimize waste materials entering the stormwater runoff.</li> </ul>
4	Drilling/Completion Operations	Open Hole Resistivity/GR log will be run from base of surface casing to TD. A cement bond log shall be run on all production casing.
5	Drilling/Completion Operations	<p>Drilling cuttings will be discharged into the reserve pit, removed and dried on location then buried in the reserve pit once dried out.</p> <p>Drilling fluids will be discharged into the reserve pit and evaporated.</p> <p>Production pit will be 125' x 125' x 8, unlined.</p>

Total: 5 comment(s)

## Applicable Policies and Notices to Operators

Policy
<p>Notice Concerning Operating Requirements for Wildlife Protection.</p> <p><a href="http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf">http://cogcc.state.co.us/documents/reg/Policies/Wildlife_Notice.pdf</a></p>

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401002680	FORM 2 SUBMITTED
401026996	WELL LOCATION PLAT
401066421	WELLBORE DIAGRAM
401067217	MINERAL LEASE MAP
401067218	DRILLING PLAN

Total Attach: 5 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	3/5/2016 1:12:40 PM
Permit	Per operator request, revised distance to nearest public road and distance to nearest property line to reflect related Form 2A.	8/5/2016 11:54:26 AM
Permit	Cultural distances on this Form 2 do not match related Form 2A.	3/1/2016 4:25:01 PM
LGD	County Permit #1602	7/12/2016 8:31:21 AM
Permit	Passed completeness but req'd operation clarify lease description under surface location and distance to lease line.	6/27/2016 12:07:25 PM
Permit	Returned to draft: --Add 2A doc # to Related Forms Tab --All attachments except Well Location Plat should be deleted and submitted on Related Form 2A --Attach Pooling Agreement to this form, not 2A --Attachment labeled "Drilling Plan" should be labeled WBD --Attach procedure to this form --Exception Request Letter attachment is meaningless--delete --Lease description should be for lease under this location only--Comments can refer to Pooling Agreement which should be attached. Do not refer to "Grynberg Unit" since no unit has been formed, only a voluntarily pooled area. --Distance to lease should be to boundary of lease under location --Add "Open hole" resistivity log with GR to open hole logging BMP.	6/22/2016 6:47:40 AM
Permit	Returned to draft: --Need re-entry for this existing well named Ellison, not a potential re-drill. --Numerous data field issues including lease description, distance to lease, right to construct (SUA required if specified as right to construct), delete surface bond, distance to property line does not agree with attachment labeled PLAT. --requires procedure as an attachment --requires amended 2A for new disturbance--many of the attachments belong on that 2A	6/20/2016 7:27:56 AM
Permit	Returned to draft: --WBD and procedure are required attachments --address distance to lease line--revise or submit exception location request with waiver --additional objective formations? list separately --open hole logging BMP --facility ID# or doc # for beneficial reuse --related 2A	3/10/2016 8:14:05 AM

Total: 8 comment(s)