

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:

400497498

APPLICATION FOR PERMIT TO:

☒ Drill
 ☐ Deepen
 ☐ Re-enter
 ☐ Recomplete and Operate
TYPE OF WELL OIL ☐ GAS ☒ COALBED ☐ OTHER Planned LateralRefiling ☐

Date Received:

10/22/2013

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐Sidetrack ☒Well Name: ShellWell Number: 797-09-HN1Name of Operator: OXY USA WTP LPCOGCC Operator Number: 66571Address: 760 HORIZON DR #101City: GRAND JUNCTION State: CO Zip: 81506Contact Name: Joan ProulxPhone: (970)263-3641Fax: (970)263-3694Email: joan_proulx@oxy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20060137

WELL LOCATION INFORMATION

QtrQtr: Tct 94 Sec: 9 Twp: 7S Rng: 97W Meridian: 6Latitude: 39.466560Longitude: -108.225770
 Footage at Surface: 345 feet FNL/FSL FNL 2344 feet FEL/FWL FWL
Field Name: GRAND VALLEYField Number: 31290Ground Elevation: 5918County: GARFIELD

GPS Data:

Date of Measurement: 07/16/2007 PDOP Reading: 2.7 Instrument Operator's Name: B JohnsonIf well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**
 Footage at Top of Prod Zone: FNL/FSL 240 FNL 2350 FWL 986 FNL 2541 FWL
 Sec: 9 Twp: 7S Rng: 97W Sec: 16 Twp: 7S Rng: 97W

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: NoThe 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.)

See attached BLM Lease Map

Total Acres in Described Lease: 1250 Described Mineral Lease is: ☐ Fee ☐ State ☒ Federal ☐ Indian

Federal or State Lease # COC 67549

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 986 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 5023 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: 336 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: 5280 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 986 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.)
MANCOS	MNCS			

DRILLING PROGRAM

Proposed Total Measured Depth: 15346 Feet

Distance to nearest permitted or existing wellbore penetrating objective formation: 17793 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: OFFSITE Drilling Fluids Disposal Methods: Recycle/reuse

Cuttings Disposal: ONSITE Cuttings Disposal Method: Cuttings trench

Other Disposal Description:

Liquid hydrocarbons produced may either be trucked to the LT Off-Loading Facility for injection into the LT 28-10 SWD, or sent to the Central Water Handling Facility for re-use.

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+0/0	16+0/0	65	0	90		90	0
SURF	14+3/4	10+3/4	45.5	0	3100	1320	3100	0
1ST	9+7/8	7+5/8	29.7	0	8600	1380	8600	0
2ND	6+3/4	5+1/2	20	0	8400	880	8400	7500
TAPER	6+3/4	4+1/2	13.5	8400	15346	880	15346	8400

☐ 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 Form 2 is for the sidetrack portion of the well (see doc #400493506 for pilot hole Form 2). The proposed Shell 797-09-HN1 well will be drilled from the existing Shell 797-09A pad which is located on private lands owned by Shell. There are two producing wells on this pad (Shell 797-09-12, 05-045-13794, and Shell 797-09-37A, 05-045-14926). The 797-09-HN1 well is a horizontal well which will be drilled in two stages. A vertical pilot hole will reach approximately 11,500' and be entirely in fee minerals. The pilot hole will then be plugged back and a horizontal sidetrack will be drilled into Federal minerals (Lease COC 67549). Access to the location is on existing roads across private land. Per GarCo Vacation Ordinance dated 10-5-1987, CR 213 is now OXY's private property north of Sec 8, 7S, 97W, 6 PM. Oxy will provide appropriate housing for essential personnel in order to conduct safe, efficient drilling operations at this well site.

Please note the following: The North arrow marker on the plat pages is pointed South. The two location stakes in the plat photos are for the two wells permitted in 2010 that were never drilled.

The production casing will be a tapered casing. The top portion of the casing will be 5 1/2" from surface to 8,400', and the sidetrack portion of the casing will be 4 1/2" from 8,400' to 15,346'.

The sidetrack will have two plugs:
Plug #1 10,600' to 10,100' with 124 sxs
Plug #2 9,300' to 8,500' with 231 sxs

The spacing order for the Mancos applies to Rule 318.a.

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

Location ID: 335018

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: Joan Proulx

Title: Regulatory Date: 10/22/2013 Email: joan_proulx@oxy.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: 12/31/2013

Expiration Date: 12/30/2015

API NUMBER

05 045 22291 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. (2) COMPLIANCE WITH THE MOST CURRENT REVISION OF THE GARFIELD COUNTY RULISON-FIELD NOTICE TO OPERATORS IS REQUIRED. (3) CEMENT ON PRODUCTION CASING MUST BE A MINIMUM OF 200' ABOVE THE TOP OF THE MESA-VERDE FORMATION (OR 200' ABOVE THE OHIO CREEK FORMATION IF PRESENT). CEMENT TOP VERIFICATION BY CBL IS REQUIRED.
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Best Management Practices

No BMP/COA Type

Description

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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

Att Doc Num

Name

400497498	FORM 2 SUBMITTED
400497550	TOPO MAP
400497553	DEVIATED DRILLING PLAN
400497556	DIRECTIONAL DATA
400499929	FED. DRILLING PERMIT
400499934	WELL LOCATION PLAT
400499939	MINERAL LEASE MAP

Total Attach: 7 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed. No LGD comments.	12/16/2013 10:22:41 AM
LGD	pass, gdb	11/18/2013 9:55:50 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 00 FEET DEEP. SEE DOC #400493506 FOR VERTICAL 'PILOT' HOLE, FROM WHICH THIS HORIZONTAL LATERAL WILL BE DRILLED.	11/13/2013 1:15:37 PM
Permit	Corrections made. Form passes completeness.	10/31/2013 12:07:07 PM
Permit	Returned to draft. Well type is Planned Lateral.	10/31/2013 9:07:36 AM
Permit	Returned to DRAFT. Requested review of the Well Name & Contact Info tab, it says Multiple zone types but the Spacing & Formations tab has only the Mancos identified. The Surface & Minerals tab does not show that the surface owner is the mineral owner beneath the location but is committed to a Oil & Gas lease, also shows that the minerals beneath the location will be developed, but our map layers show the BHL in Section 16 is Federal minerals (even given as COC 067549). Spacing order 510-55 is incorrect as it covers only section 32 W2E2 7S 96W. The proposed depth says 15333' but the casing depth 15346' those should come closer to matching.	10/23/2013 11:32:04 AM

Total: 6 comment(s)