

FORM
2A

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:

400400234

Date Received:

05/09/2014

Oil and Gas Location Assessment

☐ New Location ☐ Refile ☒ Amend Existing Location Location#: 311597

Submit signed original form. This Oil and Gas Location Assessment is to be submitted to the COGCC for approval prior to any ground disturbance activity associated with oil and gas operations. Approval of this Oil and Gas Location Assessment will allow for the construction of the below specified Location; however, it does not supersede any land use rules applied by the local land use authority. Please see the COGCC website at <http://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

311597

Expiration Date:

07/28/2017

☒ This location assessment is included as part of a permit application.

CONSULTATION

- ☐ This location is included in a Comprehensive Drilling Plan. CDP # _____
- ☒ This location is in a sensitive wildlife habitat area.
- ☐ This location is in a wildlife restricted surface occupancy area.
- ☐ This location includes a Rule 306.d.(1)A.ii. variance request.

Operator

Operator Number: 96850
Name: WPX ENERGY ROCKY MOUNTAIN LLC
Address: 1001 17TH STREET - SUITE #1200
City: DENVER State: CO Zip: 80202

Contact Information

Name: Reed Haddock
Phone: (303) 606-4086
Fax: (303) 629-8268
email: reed.haddock@wpxenergy.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20030107 ☐ Gas Facility Surety ID: _____
☐ Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: GM Number: 21-12
County: GARFIELD
QuarterQuarter: NENW Section: 12 Township: 7S Range: 96W Meridian: 6 Ground Elevation: 5126
Define a single point as a location reference for the facility location. When the location is to be used as a well site then the point shall be a well location.
Footage at surface: 1173 feet FNL from North or South section line
1900 feet FWL from East or West section line
Latitude: 39.456459 Longitude: -108.061507
PDOP Reading: 1.3 Date of Measurement: 01/30/2013
Instrument Operator's Name: Robert Kay

RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

This proposed Oil and Gas Location is:

LOCATION ID # FORM 2A DOC #

FACILITIES

Indicate the number of each type of oil and gas facility planned on location

Wells	<u>11</u>	Oil Tanks	<u> </u>	Condensate Tanks	<u>3</u>	Water Tanks	<u>3</u>	Buried Produced Water Vaults	<u> </u>
Drilling Pits	<u> </u>	Production Pits	<u> </u>	Special Purpose Pits	<u> </u>	Multi-Well Pits	<u> </u>	Temporary Large Volume Above Ground Tanks	<u> </u>
Pump Jacks	<u> </u>	Separators	<u>11</u>	Injection Pumps	<u> </u>	Cavity Pumps	<u> </u>		
Gas or Diesel Motors	<u> </u>	Electric Motors	<u> </u>	Electric Generators	<u> </u>	Fuel Tanks	<u> </u>	Gas Compressors	<u> </u>
Dehydrator Units	<u> </u>	Vapor Recovery Unit	<u> </u>	VOC Combustor	<u>1</u>	Flare	<u> </u>	LACT Unit	<u> </u>
								Pigging Station	<u> </u>

OTHER FACILITIES

Other Facility Type

Number

<div></div>	<div></div>
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Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

1-8" buried steel gas to tie into 16" gas line running by pad.
1-10" buried flex steel frac water supply line from GV Mesa southwest to the pad.

CONSTRUCTION

Date planned to commence construction: 08/01/2014 Size of disturbed area during construction in acres: 4.20
Estimated date that interim reclamation will begin: 02/01/2016 Size of location after interim reclamation in acres: 1.30
Estimated post-construction ground elevation: 5126

DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes

Is H₂S anticipated? No

Will salt sections be encountered during drilling: No

Will salt based mud (>15,000 ppm Cl) be used? No

Will oil based drilling fluids be used? No

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE

Drilling Fluids Disposal Method: Recycle/reuse

Cutting Disposal: ONSITE

Cuttings Disposal Method: Cuttings trench

Other Disposal Description:

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: _____ or Document Number: _____

Centralized E&P Waste Management Facility ID, if applicable: _____

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: ExxonMobil Production Co.

Phone: _____

Address: 396 West Greens Rd

Fax: _____

Address: _____

Email: _____

City: Houston State: TX Zip: 77067

Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian

Check all that apply. The Surface Owner: ☒ is the mineral owner

☒ 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 from or produced to this Oil and Gas Location: Yes

The right to construct this Oil and Gas Location is granted by: oil and gas lease

Surface damage assurance if no agreement is in place: _____ Surface Surety ID: _____

Date of Rule 306 surface owner consultation _____

CURRENT AND FUTURE LAND USE

Current Land Use (Check all that apply):

Crop Land: ☐ Irrigated ☐ Dry land ☐ Improved Pasture ☐ Hay Meadow ☐ CRP

Non-Crop Land: ☒ Rangeland ☐ Timber ☐ Recreational ☐ Other (describe): _____

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

Future Land Use (Check all that apply):

Crop Land: ☐ Irrigated ☐ Dry land ☐ Improved Pasture ☐ Hay Meadow ☐ CRP

Non-Crop Land: ☒ Rangeland ☐ Timber ☐ Recreational ☐ Other (describe): _____

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 601 Feet
Building Unit: 1003 Feet
High Occupancy Building Unit: 2056 Feet
Designated Outside Activity Area: 2131 Feet
Public Road: 128 Feet
Above Ground Utility: 219 Feet
Railroad: 757 Feet
Property Line: 241 Feet

INSTRUCTIONS:

- All measurements shall be provided from center of nearest Well or edge of nearest Production Facility to nearest of each cultural feature as described in Rule 303.b.(3)A.
- 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: _____

SOIL

List all soil map units that occur within the proposed location. attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" report listing the soil typical vertical profile. This data is to be used when segregating topsoil.

The required information can be obtained from the NRCS web site at <http://soildatamart.nrcs.usda.org/> or from the COGCC web site GIS Online map page found at <http://colorado.gov/cogcc>. Instructions are provided within the COGCC web site help section.

NRCS Map Unit Name: 3. Arvada Loam, 1 to 6% slopes.

NRCS Map Unit Name: _____

NRCS Map Unit Name: _____

PLANT COMMUNITY:

Complete this section only if any portion of the disturbed area of the location's current land use is on non-crop land.

Are noxious weeds present: Yes ☒ No ☐

Plant species from: ☐ NRCS or, ☒ field observation Date of observation: 02/27/2013

List individual species: Cheatgrass, knapweed.

Check all plant communities that exist in the disturbed area.

- ☒ Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)
☒ Native Grassland (Bluestem, Grama, Wheatgrass, Buffalograss, Fescue, Oatgrass, Brome)
☐ Shrub Land (Mahogany, Oak, Sage, Serviceberry, Chokecherry)
☒ Plains Riparian (Cottonwood, Willow, Aspen, Maple, Poplar, Russian Olive, Tamarisk)
☐ Mountain Riparian (Cottonwood, Willow, Blue Spruce)
☐ Forest Land (Spruce, Fir, Ponderosa Pine, Lodgepole Pine, Juniper, Pinyon, Aspen)
☐ Wetlands Aquatic (Bullrush, Sedge, Cattail, Arrowhead)
☐ Alpine (above timberline)
☐ Other (describe): _____

WATER RESOURCES

Is this a sensitive area: ☒ No ☐ Yes

Distance to nearest

downgradient surface water feature: 818 Feet

water well: 1247 Feet

Estimated depth to ground water at Oil and Gas Location 20 Feet

Basis for depth to groundwater and sensitive area determination:

Sensitive Area Determination is attached.

Is the location in a riparian area: ☒ No ☐ Yes

Was an Army Corps of Engineers Section 404 permit filed ☒ No ☐ Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer No zone:

If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified: _____

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

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)

RULE 502.b VARIANCE REQUEST

- ☐ Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number _____

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 pad is built. Additional dirt work is needed.

Distance to nearest public road is from separators, not wellheads, so safety setbacks have been met.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: _____ Date: 05/09/2014 Email: reed.haddock@wpenergy.com

Print Name: Reed Haddock Title: Regulatory Specialist Sta

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: 7/29/2014

Conditions Of Approval

All representations, stipulations and conditions of approval stated in this Form 2A for this location shall constitute representations, stipulations and conditions of approval for any and all subsequent operations on the location unless this Form 2A is modified by Sundry Notice, Form 4 or an Amended Form 2A.

COA Type

Description

	<p>The moisture content of any cuttings in a cuttings pit, trench, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts.</p> <p>Flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline or storage vessel on the well pad; or into tanker trucks for offsite disposal. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment must be placed on the well pad in an area constructed to be sufficiently impervious to contain any spilled or released material.</p>
	<p>Notify the COGCC 48 hours prior to start of pad construction, rig mobilization, spud, pipeline testing, start of hydraulic stimulation operations, and start of flowback operations using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).</p>
	<p>Operator must ensure secondary containment for any volume of fluids contained at well site during drilling and completion operations; including, but not limited to, construction of a berm or diversion dike, diversion/collection trenches within and/or outside of berms/dikes, site grading, or other comparable measures sufficiently protective of nearby surface water. Any berm constructed at the well pad location will be stabilized, inspected at regular intervals (at least every 14 days), and maintained in good condition.</p> <p>Strategically apply fugitive dust control measures, including enforcing established speed limits on private roads, to reduce fugitive dust and coating of vegetation and deposition in water sources.</p> <p>Berms or other containment devices shall be constructed to be sufficiently impervious (corrugated steel with poly liner) to contain any spilled or released material around permanent crude oil, condensate, and produced water storage tanks.</p>
	<p>Operator shall pressure test pipelines in accordance with Rule 1101.e.(1) prior to putting into initial service any temporary surface or permanent buried pipelines and following any reconfiguration of the pipeline network.</p>

Best Management Practices

No	BMP/COA Type	Description
1	Planning	<p>Share/consolidate corridors for pipeline ROWs to the maximum extent possible. Maximize the utility of surface facilities by developing multiple wells from a single pad (directional drilling), and by co-locating multipurpose facilities (for example, well pads and compressors) to avoid unnecessary habitat fragmentation and disturbance of additional geographic areas.</p> <p>Minimize newly planned activities and operations within 300 feet of the ordinary high water mark of any reservoir, lake, wetland, or natural perennial or seasonally flowing stream or river.</p> <p>Locate roads outside of drainages where possible and outside of riparian habitat. Avoid new surface disturbance and placing new facilities in key wildlife habitats in consultation with CDOW.</p> <p>Minimize the number, length, and footprint of oil and gas development roads. Use existing roads where possible.</p> <p>Combine utility infrastructure (gas, electric, and water) planning with roadway planning to avoid separate utility corridors.</p> <p>Combine and share roads to minimize habitat fragmentation.</p> <p>Where possible, consolidate pipeline and existing roadways, or roadways that are planned for development.</p> <p>Place roads to avoid obstructions to migratory routes for wildlife, and to avoid displacement of wildlife from public to private lands.</p> <p>Design roads with visual and auditory buffers or screens (e.g., topographic barriers, vegetation, and distance).</p> <p>Maximize the use of directional drilling to minimize habitat loss/fragmentation.</p> <p>Maximize use of remote telemetry for well monitoring to minimize traffic.</p> <p>Phase and concentrate development activities, so that large areas of undisturbed habitat for wildlife remain.</p> <p>Maintain undeveloped areas within development boundaries sufficient to allow wildlife to persist within development boundaries during all phases of construction, drilling, and production.</p> <p>Minimize the duration of development and avoid repeated or chronic disturbance of developed areas. Complete all anticipated drilling within a phased, concentrated, development area during a single, uninterrupted time period.</p>
2	Traffic control	<p>A street sweeper will make routine passes to eliminate muddy roads.</p> <p>Most likely, CR 215 to the new Town of Parachute bypass road (to avoid going through town) will be used to get to the pad. The Town of Parachute has agreed to this route. Pilot cars will be used to get the larger rig traffic to location.</p>
3	Construction	<p>Close and reclaim roads not necessary for development, including removing all bridges and culverts and recontouring/reclaiming all stream crossings.</p> <p>Structures for perennial or intermittent stream channel crossings should be constructed using appropriately sized bridges or culverts.</p> <p>Design road crossings of streams to allow fish passage at all flows and to minimize the generation of sediment.</p> <p>Design road crossings of streams at right angles to all riparian corridors and streams to minimize the area of disturbance to the extent possible.</p>
4	Noise mitigation	<p>A sound wall will be constructed around the perimeter of the pad and the frac pad.</p>

5	Drilling/Completion Operations	<p>Use centralized hydraulic fracturing operations.</p> <p>Install and maintain adequate measures to exclude all types of wildlife (e.g., big game, birds, and small rodents) from all fluid pits (e.g., fencing, netting, and other appropriate exclusion measures).</p> <p>Conduct well completions with drilling operations to limit the number of rig moves and traffic.</p> <p>Flowlines are 2" 1502 steel lines. They are rated to 15,000psi and are pressure tested before each job to the maximum working pressure anticipated, approximately 7,500psi on this pad. The manifold is 3" line rated to 15,000psi which is also pressure tested to maximum working pressure. We will use a choke manifold in front of the primary 4 phase high stage separator. The 4 phase separator is rated for 4000psi and is capable of handling 90 MMcf/day and 13,956 bbls per day with a 1.25" discharge orifice. Gas from the 4 phase separator is sent to sales. Water from the 4 phase separator is sent to the bullet tank (Pneumatic Tank) to "flash" the water before being sent to sealed flowback water tanks and then moved to the frac tanks to be re-used for frac fluid. "Flashing" the water in the bullet tank allows for the pressure to be dropped to near atmospheric and releases any fugitive gas trapped in the water. Any fugitive gas from the bullet tank is sent to flare or the combustor to be burned off, and any fugitive gas that may remain in the sealed flowback tanks will be sent through carbon filters. A sand trap will be used for drillouts; its primary purpose is as a junk catcher to screen out plug parts. The sandtrap intake and outputs are limited by the 2" flowlines. Water from the sandtrap will be sent to the sealed flowback tank.</p> <p>The flare stack is rated for 98 MMcf/day, propane is used to fuel the pilot light which insures it is ignited at all times.</p> <p>The average Mesa Verde well is choked to flow at 1-1.2 MMcf/day. We normally complete 1 completion group (4 wells) at a time.</p> <p>Proven production can be demonstrated with the following pads; GM 44-1, GV 18-23, GV 8-14 and GM 313-12.</p>	
6	Interim Reclamation	<p>Utilize staked soil retention blankets for erosion control and reclamation of large surface areas with 1.5:1 or steeper slopes.</p> <p>Avoid use of plastic blanket materials.</p> <p>Restore both form and function of impacted wetlands and riparian areas and mitigate erosion.</p> <p>Remove well pad and road surface materials that are incompatible with post-production land use and re-vegetation requirements.</p> <p>Use only certified weed-free native seed in seed mixes, except for non-native plants that benefit wildlife.</p> <p>WPX Energy will use certified, weed free grass hay, straw, hay or other mulch materials used for the reseeding and reclamation of disturbed areas.</p> <p>Install exclusionary devices to prevent bird and other wildlife access to equipment stacks, vents and openings.</p> <p>Reduce visits to well-sites through remote monitoring (i.e. SCADA) and the use of multi-function contractors.</p> <p>Avoid dust suppression activities within 300 feet of the ordinary high water mark of any reservoir, lake, wetland, or natural perennial or seasonally flowing stream or river where possible.</p>	

Total: 6 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1345202	SURFACE AGRMT/SURETY
2107054	CORRESPONDENCE
400400234	FORM 2A SUBMITTED
400400268	NRCS MAP UNIT DESC
400400271	PROPOSED BMPs
400400277	SENSITIVE AREA DATA
400595763	30 DAY NOTICE LETTER
400598810	ACCESS ROAD MAP
400598813	HYDROLOGY MAP
400598814	LOCATION DRAWING
400598817	REFERENCE AREA MAP
400602373	LOCATION PICTURES
400602395	REFERENCE AREA PICTURES
400602398	CONST. LAYOUT DRAWINGS
400605621	MULTI-WELL PLAN
400605624	OTHER
400605626	FACILITY LAYOUT DRAWING
400605630	WASTE MANAGEMENT PLAN

Total Attach: 18 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Agency	Final review completed. No LGD comments.	7/29/2014 9:05:44 AM
Permit	Received redacted SUA.	7/29/2014 9:05:12 AM
Permit	SUA not signed by surface owner (Exxon). SUA is right to construct for all but one well on this location.	7/27/2014 12:41:51 PM
LGD	pass, gdb	5/30/2014 8:44:54 AM
OGLA	Initiated/Completed OGLA Form 2A review on 05-20-14 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, notification, flowback to tanks, and pipeline COAs from operator on 05-20-14; received acknowledgement of COAs from operator on 05-20-14; passed by CPW on 05-13-14 with operator submitted BMPs acceptable; passed OGLA Form 2A review on 07-23-14 by Dave Kubeczko; fluid containment, spill/release BMPs, construction/stormwater BMPs, sediment control pad and access road, notification, flowback to tanks, and pipeline COAs.	5/20/2014 11:49:50 AM
DOW	The BMPs submitted with the Form 2A application adequately address wildlife concerns. Approved:Jim Komatinsky 5-13-2014	5/13/2014 9:50:34 AM
Permit	Passed completeness	5/13/2014 8:57:22 AM

Total: 7 comment(s)