

**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:

400473864

Date Received:

09/23/2013

**Oil and Gas Location Assessment**☐ New Location ☐ Refile ☒ Amend Existing Location Location#: 335244

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:

**335244**

Expiration Date:

**10/17/2016**☒ 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: Greg Davis

Phone: (303) 606-4071

Fax: (303) 629-8268

email: greg.j.davis@wpxenergy.com

**RECLAMATION FINANCIAL ASSURANCE**

☒ Plugging and Abandonment Bond Surety ID: 20030107 ☐ Gas Facility Surety ID: \_\_\_\_\_

☐ Waste Management Surety ID: \_\_\_\_\_

**LOCATION IDENTIFICATION**

Name: Clough Number: 2A Injection

County: GARFIELD

QuarterQuarter: SESW Section: 21 Township: 6S Range: 94W Meridian: 6 Ground Elevation: 5277

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: 784 feet FSL from North or South section line

1412 feet FWL from East or West section line

Latitude: 39.505642 Longitude: -107.897759

PDOP Reading: 1.3 Date of Measurement: 01/15/2013

Instrument Operator's Name: J. Kirkpatrick

## 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>5</u>	Oil Tanks	<u>2</u>	Condensate Tanks	<u>      </u>	Water Tanks	<u>2</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>4</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>      </u>	Flare	<u>      </u>	LACT Unit	<u>      </u>
								Pigging Station	<u>      </u>

## OTHER FACILITIES

Other Facility Type

Number

<input type="text"/>	<input type="text"/>
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Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

# Lines	Diameter	Contents	Material	New/Existing	Tie In Point
2	10"	Frac Water	Poly	Temporary Surface	Water line tying into existing water infrastructure.

\*See attached POD Map for details

Wellhead will be covered during winter months.

## CONSTRUCTION

Date planned to commence construction: 10/15/2013 Size of disturbed area during construction in acres: 3.92  
Estimated date that interim reclamation will begin: 04/01/2014 Size of location after interim reclamation in acres: 1.00  
Estimated post-construction ground elevation: 5277

## DRILLING PROGRAM

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

Is H<sub>2</sub>S 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?       

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Method: Centralized E&P WMF

Cutting Disposal:        Cuttings Disposal Method:       

Other Disposal Description:

Cuttings will be managed on pad surface with a small cement trench on the end.

Beneficial reuse or land application plan submitted?       

Reuse Facility ID:        or Document Number:       

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

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: W F Clough

Phone: \_\_\_\_\_

Address: P.O. Box 686

Fax: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

City: Rifle State: CO Zip: 81650

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: \_\_\_\_\_

The right to construct this Oil and Gas Location is granted by: Surface Use Agreement

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: 1257 Feet  
Building Unit: 4668 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 339 Feet  
Above Ground Utility: 201 Feet  
Railroad: 1828 Feet  
Property Line: 231 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: 47 Nihill Channery Loam 6 to 25% 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: 01/15/2013

List individual species: Cheatgrass, Wheatgrass, Sage

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: 1112 Feet

water well: 3519 Feet

Estimated depth to ground water at Oil and Gas Location 87 Feet

Basis for depth to groundwater and sensitive area determination:

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 \_\_\_\_\_

## 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

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

Signed: \_\_\_\_\_ Date: 09/23/2013 Email: greg.j.davis@wpenergy.com

Print Name: Greg Davis

Title: Supervisor Permits

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: 10/18/2013

### **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>Notify the COGCC 48 hours prior to start of pad construction, rig mobilization, spud, and start of hydraulic stimulation operations using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).</p> <p>As required for Groundwater Baseline Sampling; Operator shall comply with Rule 609. STATEWIDE GROUNDWATER BASELINE SAMPLING AND MONITORING.</p>
	<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. At the time of closure, if the drill cuttings are to be left onsite, they must also meet the applicable standards of table 910-1.</p> <p>Operator must submit an as-built drawing (plan view and cross-sections) of the injection well pad and associated equipment within 30 calendar days of construction.</p> <p>Operator must implement best management practices to contain any unintentional release of fluids, including any fluids conveyed via temporary surface or buried pipelines.</p> <p>Operator must implement best management practices to contain any unintentional release of fluids, including</p> <p>If the well is to be hydraulically stimulated, flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline, storage vessel, or lined pit (only if an amended Form 2A has been submitted/approved) located 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 with additional downgradient perimeter berming. The area where flowback fluids will be stored/reused must be constructed to be sufficiently impervious to contain any spilled or released material.</p> <p>Operator will use qualified containment devices for all appropriate chemicals/hazardous materials used onsite during the operation of the injection well.</p> <p>All tanks and aboveground vessels containing fluids must have secondary containment structures. All secondary containment structures/areas must be lined. Operator must ensure a minimum of 110 percent secondary containment for the largest structure containing fluids within each bermed area the facility during operations. The construction and lining of the secondary containment structures/areas shall be supervised by a professional engineer or their agent.</p> <p>Operator shall equip and maintain on all tanks an electronic level monitoring device.</p> <p>Operator shall install a steel containment ring around tank batteries to provide secondary containment and install a synthetic liner that underlies the entire battery and</p>

	<p>is keyed into the top of the containment ring.</p> <p>Approval of this Form 2A does not authorize operator the right to inject. Authorization to inject into the selected Formation(s) requires approval of both the Form 31 and the Form 33.</p> <p>Before hydraulic stimulation of the each well, operator shall collect a groundwater sample from the Iles Formation and analyze for total dissolved solids (TDS); submit laboratory analytical results to denise.onyskiw@state.co.us and arthur.koelspell@state.co.us.</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. Operator shall notify the COGCC Oil and Gas Location Assessment (OGLA) Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us) and the COGCC Field Inspection Supervisor for Northwest Colorado (Shaun Kellerby; email shaun.kellerby@state.co.us) 48 hours prior to testing surface poly/steel or buried poly/steel pipelines.</p> <p>Operator must implement best management practices to contain any unintentional release of fluids along all portions of the surface pipeline route where temporary pumps and other necessary equipment are located.</p> <p>Operator must routinely inspect the entire length of the surface pipeline to ensure integrity. Operator shall conduct daily inspections of surface poly pipeline routes for leaks during active transfer of fluids. Inspections shall be conducted by viewing the length of the pipeline; operator will endeavor to minimize surface disturbance during pipeline monitoring. The operator shall maintain records of inspections, findings and repairs, if necessary, for the life of the pipelines.</p> <p>Operator must ensure appropriate secondary containment for volume of fluids that may be released before pump shut down from the surface pipeline at all stream, intermittent stream, ditch, and drainage crossings. Catchment basins, if needed, should be sized to contain the volume between pump stations or between the nearest pump station and the injection well pad being used for this well pad location. Pump stations along the surface poly or steel pipeline route will be continuously monitored when operating in order to swiftly respond to such a failure.</p> <p>Operator will utilize, to the extent practical, all existing access and other public roads, and/or existing pipeline right-of-ways, when placing/routing the surface pipelines. This will reduce surface disturbance and fragmentation of wildlife habitat in the area.</p>
	<p>Operator must implement best management practices to contain any unintentional release of fluids, including any fluids conveyed via temporary surface pipelines or buried permanent pipelines.</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 (i.e., best management practices (BMPs) associated with stormwater management) 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>The access road will be maintained as to not allow any sediment to migrate from the access road to nearby surface water or any drainages leading to surface water.</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 (preferably corrugated steel with poly liner) to contain any spilled or released material around crude oil, condensate, and produced water storage tanks.</p>

## **Best Management Practices**

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
1	Planning	PLANNING BMP's * Use existing roads where possible * Maximize use of remote telemetry for well monitoring to minimize traffic
2	Interim Reclamation	PRODUCTION/RECLAMATION BMP's * Remove well pad and road surface materials that are incompatible with post-production land use and re-vegetation requirements * Use only certified weed-free native seed in seed mixes, except for non-native plants that benefit wildlife * WPX Energy will use certified, weed free grass hay, straw, hay or other mulch materials used for the reseeding and reclamation of disturbed areas. * Install exclusionary devices to prevent bird and other wildlife access to equipment stacks, vents and openings. * Reduce visits to well-sites through remote monitoring (i.e. SCADA) and the use of multi-function contractors.

Total: 2 comment(s)

## **Attachment Check List**

<b>Att Doc Num</b>	<b>Name</b>
2106782	CORRESPONDENCE
400473864	FORM 2A SUBMITTED
400476470	LOCATION PICTURES
400476472	MULTI-WELL PLAN
400476475	LOCATION DRAWING
400476476	REFERENCE AREA MAP
400476478	HYDROLOGY MAP
400476482	ACCESS ROAD MAP
400476483	CONST. LAYOUT DRAWINGS
400476484	NRCS MAP UNIT DESC
400476485	SENSITIVE AREA DATA
400482874	SURFACE AGRMT/SURETY
400482881	OTHER

Total Attach: 13 Files



## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review completed. No LGD or public comments.	10/18/2013 5:55:52 AM
LGD	pass, gdb	10/7/2013 3:42:09 PM
OGLA	Initiated/Completed OGLA Form 2A review on 09-23-13 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, tank berming, flowback to tanks, cuttings low moisture content, secondary containment, tank level monitoring, and injection formation TDS sampling COAs on Form 2A on 09-23-13; received acknowledgement of COAs from operator on 09-23-13; passed by CPW on 02-22-13 with operator submitted BMPs acceptable; passed OGLA Form 2A review on 10-15-13 by Dave Kubeczko; fluid containment, spill/release BMPs, tank berming, flowback to tanks, cuttings low moisture content, secondary containment, tank level monitoring, and injection formation TDS sampling COAs.	9/23/2013 8:59:05 PM
DOW	The BMPs identified in the Form 2A application and surface use agreement adequately address wildlife concerns.  Approved: Jim Komatinsky 9-23-2013	9/23/2013 3:04:17 PM
Permit	Passes Completeness.	9/23/2013 2:07:43 PM

Total: 5 comment(s)