

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:

400574545

Date Received:

06/26/2014

Oil and Gas Location Assessment

New Location     Refile     Amend Existing Location    Location#: 335318

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:

**335318**

Expiration Date:

**08/15/2017**

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: 323-28

County: GARFIELD

Quarter: NESW    Section: 28    Township: 6S    Range: 96W    Meridian: 6    Ground Elevation: 5457

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: 1555 feet FSL from North or South section line

2300 feet FWL from East or West section line

Latitude: 39.492206    Longitude: -108.114880

PDOP Reading: 3.8    Date of Measurement: 06/03/2014

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>15</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>17</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

<u>Other Facility Type</u>	<u>Number</u>

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

2-10" temporary surface poly water supply lines from GV waterline infrastructure.  
1-8" buried steel gas line to tie into existing line running from the GM 11-28 pad.  
1-4" buried produced waterline to be installed with gas line.

The 2", steel, flowlines from the upper pad Mesaverde wells will be routed out the west end of the cellar and then head south to tie in at the separators on the lower Niobrara pad. All disturbance will be within pad boundaries. The 4", steel, flowlines from the lower pad Niobrara wells will be routed across the Niobrara pad to the west to tie into the separators on that same pad. There will be two (2) - 2" steel surface flow lines (one water, one condensate) installed from the separators going north to the tanks. The disturbance for these flowlines will all be within pad boundaries. All flowlines will be buried 4' deep. The Revised Facility Layout Drawing shows the locations of the separators and tanks.

## CONSTRUCTION

Date planned to commence construction: 09/01/2014 Size of disturbed area during construction in acres: 11.70

Estimated date that interim reclamation will begin: 08/03/2015 Size of location after interim reclamation in acres: 2.00

Estimated post-construction ground elevation: 5455

## 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? 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?         

Reuse Facility ID:          or Document Number:         

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

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: WPX Energy

Phone:         

Address: 1001 17th Street, Suite 1200

Fax:         

Address:         

Email:         

City: Denver State: CO Zip: 80202

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: applicant is owner

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): Existing Drill Pad

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): Existing Drill Pad

Subdivided:  Industrial  Commercial  Residential

## CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 1903 Feet  
Building Unit: 2213 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 423 Feet  
Above Ground Utility: 205 Feet  
Railroad: 5280 Feet  
Property Line: 92 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 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 percent 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: 06/12/2014

List individual species: Kochia, Cheatgrass

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, Chokeycherry)  
 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: 877 Feet

water well: 1988 Feet

Estimated depth to ground water at Oil and Gas Location 40 Feet

Basis for depth to groundwater and sensitive area determination:

There is one permitted well just outside the quarter mile buffer (permit number 278414) upgradient of the facility which indicates that the depth to groundwater is approximately 25 feet. The well is approximately at the same elevation as the facility. Therefore it could be assumed that the depth to groundwater in the immediate vicinity of the facility may less than 40 feet.

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 The WPX GM 728-24-33-HN1 and the WPX GM 728-34-33-HN1 Form 2s will be submitted at a later date (mid-July).  
A Revised Facility Layout Drawing that shows the correct number of separators and tanks for the Mesa Verde wells (3 quad and 1 single separator for each Mesa Verde well) and the Niobrara wells (2 separators for each Niobrara well) has been provided. All existing and proposed tanks and separators will be located on the lower Niobrara pad.  
WPX designed this pad to be tiered to take advantage of better cuts and fills but to also help with the surface spacing between the Mesa Verde wells and Niobrara wells. The upper tier will have the Mesa Verde wells and the lower tier will have the Niobrara wells. Although the actual "pads" for each tier are shown to be separate on the plats, the disturbance area will all be as one with topsoil piles and storm water BMPs being continuous around the entire surface disturbance.  
WPX also shows separate cuttings areas. The upper, Mesa Verde tier, will have a cuttings trench that we will use to bury the cuttings from the Mesa Verde wells. Having this area in close proximity to the rig on location will help operationally. The cuttings area shown on the lower, Niobrara tier, will be used to manage the cuttings from the Niobrara wells. Again, helping operationally.

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

Signed: \_\_\_\_\_ Date: 06/26/2014 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: 8/16/2014

### 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>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>The location is in an area of moderate run-on/run-off potential; therefore standard stormwater BMPs must be implemented at this location to insure compliance with CDPHE and COGCC requirements and to prevent any stormwater run-on and /or stormwater run-off.</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 crude oil, condensate, and produced water storage tanks.</p>
	<p>Notify the COGCC 48 hours prior to start of pad reconstruction/regrading, rig mobilization, spud, pipeline testing, start of hydraulic stimulation operations, 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>The moisture content of any drill 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 drill cuttings are to remain/disposed of onsite, they must also meet the applicable standards of table 910-1.</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, storage vessel, or pit 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 constructed to be sufficiently impervious to contain any spilled or released material.</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 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 and 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. Inspections shall be conducted by viewing the length of the pipeline; operator will endeavor to minimize surface disturbance during pipeline monitoring. In addition, 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.

Operator must ensure no release of fluids at all stream, intermittent stream, ditch, and drainage crossings. For these crossings: operator will ensure appropriate containment by either installing over-sized pipe "sleeves" which extend the length of the crossing and beyond to a distance deemed adequate to capture and/or divert any possible release of fluids and prevent fluids from reaching the stream or drainage; or installing over-sized pipe "sleeves" which extend the length of the crossing and installing shut off valves on either side of crossing instead of catchment basins.

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.

### **Best Management Practices**

<b><u>No</u></b>	<b><u>BMP/COA Type</u></b>	<b><u>Description</u></b>
1	Planning	<p>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>Locate roads outside of drainages where possible and outside of riparian habitat. Avoid constructing any road segment in the channel of an intermittent or perennial stream.</p> <p>Minimize the number, length, and footprint of oil and gas development roads. Use existing roads where possible.</p> <p>Maximize use of remote telemetry for well monitoring to minimize traffic.</p>
2	Drilling/Completion Operations	<p>Conduct well completions with drilling operations to limit the number of rig moves and traffic.</p>
3	Interim Reclamation	<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>

Total: 3 comment(s)

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2107074	CORRESPONDENCE
2107089	REVISED CONSTRUCTION LAYOUT DRAWINGS
2107090	REVISED FACILITY LAYOUT DRAWING
2107091	OPERATOR SUPPLEMENTAL SITE INFORMATION
2107092	PIPELINE/FLOWLINE INFORMATION
2157766	MULTI-WELL PLAN
400574545	FORM 2A SUBMITTED
400631399	ACCESS ROAD MAP
400631402	HYDROLOGY MAP
400631404	LOCATION DRAWING
400631405	SENSITIVE AREA DATA
400631406	REFERENCE AREA MAP
400631408	NRCS MAP UNIT DESC
400631409	OTHER
400631412	LOCATION PICTURES
400631415	OTHER
400631426	REFERENCE AREA PICTURES
400632673	SURFACE PLAN

Total Attach: 18 Files

### General Comments

User Group	Comment	Comment Date
OGLA	<p>Oil and Gas Location ID#324258 lists one well (API# 05-045-09515) and has no documents attached; while Oil and Gas Location ID#335318 lists all three producing wells (API#s 05-045-09515, 05-045-09530, 05-045-07698) and has an Inspection Report Attached. The first location will be deleted from Online GIS and the database. Operator has provided the following clarification (email correspondence dated 08-12-14 and attached as Operator Supplemental Site Information) for this single oil and gas location:</p> <p>"I've attached a Revised Facility Layout Drawing that shows the correct number of separators and tanks for the Mesa Verde wells (3 quad and 1 single separator for each Mesa Verde well) and the Niobrara wells (2 separators for each Niobrara well). All existing and proposed tanks and separators will be located on the lower Niobrara pad.</p> <p>We designed this pad to be tiered to take advantage of better cuts and fills but to also help us with the surface spacing between the Mesa Verde wells and Niobrara wells. The upper tier will have the Mesa Verde wells and the lower tier will have the Niobrara wells. Although the actual "pads" for each tier is shown to be separate on the plats, the disturbance area will all be as one with topsoil piles and storm water BMPs being continuous around the entire surface disturbance.</p> <p>We also show separate cuttings areas. The upper, Mesa Verde, tier will have a cuttings trench that we will use to bury the cuttings from the Mesa Verde wells. Having this area this close to where the rig will sit on location helps us operationally. The cuttings area shown on the lower, Niobrara, tier will be used to manage the cuttings from the Niobrara wells. Again, this helps us operationally."</p> <p>COGCC has corrected the number of separators from 15 to 17; attached Revised Construction Layout Drawings showing current ground surface elevation contours and revised Ground Elevation: to 5457' and Estimated Post-Construction Ground Elevation: to 5455', the elevation of the lower tier pad; attached Revised Facility Layout Drawing showing proposed production equipment, all to be placed on the lower tier pad.</p> <p>Description of flowlines from wellheads to separators to tanks has been added to Facilities Tab.</p>	8/12/2014 8:02:38 AM
Permit	No LGD or public comments. Final Review--passed.	3/7/2014 7:40:23 AM
Permit	Oper. corrected # of wells on pad to 15 and submitted revised MWP.	3/6/2014 7:56:19 AM
Permit	Added plugging bond.	7/27/2014 1:39:30 PM
OGLA	<p>Initiated/Completed OGLA Form 2A review on 07-16-14 by Dave Kubeczko, requested acknowledgement of notification, fluid containment, sediment control access road, dust control, spill/release BMPs, flowback to tanks, cuttings low moisture content, pipeline testing, and tank berming COAs from operator on 07-16-14; received acknowledgement of COAs from operator on 07-17-14; received revised Construction Layout Drawings from operator on 08-11-14; corrected number of wells from 12 to 13 per multi-well plan; corrected distance to public road from 828' to 423' per location drawing spreadsheet; corrected distance to above ground utility from 325' to 205' per location drawing spreadsheet; added rangeland to land use; passed by CPW on 06-27-14 with operator submitted BMPs acceptable; passed OGLA Form 2A review on 07-23-14 by Dave Kubeczko; notification, fluid containment, sediment control access road, dust control, spill/release BMPs, flowback to tanks, cuttings low moisture content, pipeline testing, and tank berming COAs.</p>	7/16/2014 4:49:40 PM
LGD	pass, kw	7/3/2014 8:48:02 AM

DOW	The BMPs submitted by the operator adequately address wildlife concerns associated with this location.  Approved: Taylor Elm, 6/27/2014, 10:29	6/27/2014 10:29:53 AM
Permit	Passed completeness.	6/27/2014 8:39:06 AM

Total: 8 comment(s)