

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:

400538841

Date Received:

02/10/2014

Oil and Gas Location Assessment

New Location Refile Amend Existing Location Location#: 419862

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:

419862

Expiration Date:

05/17/2017

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: Mead

Number: RWF 43-23

County: GARFIELD

Quarter: NESE Section: 23 Township: 6S Range: 94W Meridian: 6 Ground Elevation: 5604

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: 2292 feet FSL from North or South section line

264 feet FEL from East or West section line

Latitude: 39.510011 Longitude: -107.847131

PDOP Reading: 2.2 Date of Measurement: 01/13/2010

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 # 400551 **FORM 2A DOC #** _____

Well Site is served by Production Facilities

FACILITIES

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

Wells	<u>16</u>	Oil Tanks	_____	Condensate Tanks	<u>2</u>	Water Tanks	<u>2</u>	Buried Produced Water Vaults	_____
Drilling Pits	_____	Production Pits	_____	Special Purpose Pits	_____	Multi-Well Pits	_____	Temporary Large Volume Above Ground Tanks	_____
Pump Jacks	_____	Separators	<u>16</u>	Injection Pumps	_____	Cavity Pumps	_____		
Gas or Diesel Motors	_____	Electric Motors	_____	Electric Generators	_____	Fuel Tanks	_____	Gas Compressors	_____
Dehydrator Units	_____	Vapor Recovery Unit	_____	VOC Combustor	<u>1</u>	Flare	_____	LACT Unit	_____
								Pigging Station	_____

OTHER FACILITIES

Other Facility Type

Number

Other Facility Type	Number

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

1 - 8" buried steel gas line from pad to the RWF 33-23 pad following the edge of the field.
1 - 4" buried flexsteel water supply line from pad to the RWF 33-23 pad following the edge of the field.
3 - 4.5" temporary surface frac lines from pad to the RWF 33-23 pad following the edge of the field.

CONSTRUCTION

Date planned to commence construction: 06/02/2014 Size of disturbed area during construction in acres: 6.26

Estimated date that interim reclamation will begin: 05/01/2015 Size of location after interim reclamation in acres: 1.33

Estimated post-construction ground elevation: 5599

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:

Spent drilling fluids are treated with a dewatering unit. Separated mud solids are placed with drill cuttings in the onsite trench. Separated water is re-used for drilling, or disposed at a permitted inj. well. (See additional comments on submit tab)

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: Ronald Mead

Phone: _____

Address: 7109 County Rd 320

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: 681 Feet
Building Unit: 679 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 1706 Feet
Above Ground Utility: 799 Feet
Railroad: 1773 Feet
Property Line: 81 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: 12/13/2013

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: 55. Potts loam, 3 to 6 percent slopes.

NRCS Map Unit Name: 34. Ildefonso stony loam, 25 to 45 percent slopes.

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: 06/24/2010

List individual species: Sage, 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, 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: 1242 Feet

water well: 764 Feet

Estimated depth to ground water at Oil and Gas Location 110 Feet

Basis for depth to groundwater and sensitive area determination:

Sensitive Area Determination document 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 Form 2A is submitted as a re-file. All documents were attached to the original 2A. The location was not built but will be in the near future.

Any documents attached had minor revisions.

In the event that the onsite cuttings trench and cut backfill area cannot handle all of the drill cuttings generated during drilling, the excess cuttings will be sent to a nearby Form 2A permitted cutting trench pad and documented with a Form 4 Sundry.

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

Signed: _____ Date: 02/10/2014 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: 5/18/2014

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 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 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 frac 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. Operator shall notify the COGCC OGLA Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us) 48 hours prior to placement of temporary surface poly pipelines.</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 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 and with additional downgradient perimeter berming.</p>
	<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>In the event that the onsite cuttings trench and cut backfill area cannot handle all of the drill cuttings generated during drilling, the operator shall submit a form 4 Sundry for prior approval to send the excess cuttings to an alternate Form 2A permitted cutting trench pad.</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>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>Maximize the use of directional drilling to minimize habitat loss/fragmentation. Maximize use of remote completion/frac operations to minimize traffic. Maximize use of remote telemetry for well monitoring to minimize traffic.</p> <p>A visual/noise berm will be constructed out of the material generated from building the cuttings trench on the south side of the pad.</p>
2	Community Outreach and Notification	The neighboring building unit owners were contacted and this project discussed.
3	Pre-Construction	Strip and segregate topsoil prior to construction. Appropriately configure topsoil piles and immediately seed to control erosion, prevent weed establishment and maintain soil microbial activity
4	Traffic control	Most likely, traveling east on CR 320 to the private lease road will be used to get to the pad. Appropriate state, county, and town official would be contacted and permits obtained. This would also be done 1-2 weeks prior to rig moving on location. Pilot cars will be used to get the larger rig traffic to location.
5	General Housekeeping	All garbage and trash will be stored in enclosed trash containers and removed and deposited in an approved sanitary landfill within one week following termination of drilling operations. No garbage or trash will be disposed of in the cuttings management area. The well site and access road will be kept free of trash and debris at all times.
6	Wildlife	<p>Use only certified weed-free native seed in seed mixes, except for non-native plants that benefit wildlife.</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>Water for completions operations will be piped from an existing water pit which will reduce truck traffic.</p>
7	Storm Water/Erosion Control	<p>Onsite and offsite erosion control, re-vegetation of disturbed areas and source and storage of topsoil BMP's will be installed prior to, during and immediately following construction as practicable with consideration given to safety, access, and ground conditions at the time of construction. Due to the nature of the topography at various sites, any number of BMP combinations may be utilized at any phase of the project. Constant efforts will be employed to limit the extent of vegetative disturbance at the time of soil exposure during all construction activities and structural BMP implementation.</p> <p>Stormwater is addressed under a field-wide CDPHE plan/permit.</p>
8	Material Handling and Spill Prevention	<p>Automated high tank alarms are installed on tanks along with emergency shut down systems.</p> <p>In addition to 2-3 times/week onsite inspections by pumpers they also have routine quarterly checklists that are filled out and kept on file regarding dump line/flow line pressures and also a checklist done for everything regarding compliance at the wellhead and production equipment.</p> <p>Pallets and materials (drilling and production materials and supplies) that are stored on the pallets are kept > 25' from wellheads during production and drilling operations.</p>
9	Dust control	Fugitive dust control will be implemented during all phases of operations on an as-needed basis.

10	Noise mitigation	The mufflers on the rig will be oriented to point to the north thus directing the noise from the engines away from the residential building units. Plumb dump lines into tanks to muffle sound. Rubber cushions in lubricators are used to muffle sound for plunger lift.
11	Emissions mitigation	WPX uses combusters and API tanks with thief hatches and enardo valves and pipe everything to the combustion unit.
12	Odor mitigation	WPX use combusters and API tanks with thief hatches and enardo valves and pipe everything to the combustion unit.
13	Drilling/Completion Operations	Use centralized hydraulic fracturing operations. Conduct well completions with drilling operations to limit the number of rig moves and traffic. Water for completions operations will be piped from an existing water pit which will reduce truck traffic.
14	Interim Reclamation	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. As soon as possible after (within 6 mos) well is placed on first sales perform interim reclamation on all disturbed areas not needed for active support of production operations. Seed during appropriate season to increase likelihood of reclamation success . Conduct seeding in a manner that ensures that seedbed preparation and planting techniques are targeted toward the varied needs of grasses, forbs and shrubs (e.g., seed forbs and shrubs separately from grasses, broadcast big sagebrush but drill grasses, etc.).
15	Final Reclamation	Will complete final reclamation activities so that seeding occurs during the first optimal season following plugging and abandonment of oil and gas wells.

Total: 15 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2106939	CORRESPONDENCE
2106940	BUFFER ZONE BUILDING UNIT NOTIFICATIONS
400538841	FORM 2A SUBMITTED
400538850	CONST. LAYOUT DRAWINGS
400551872	LOCATION DRAWING
400551878	OTHER
400551937	REFERENCE AREA PICTURES

Total Attach: 7 Files

General Comments

User Group	Comment	Comment Date
Permit	Casing changes provided by operator to resolve downhole issues.	5/14/2014 5:53:45 AM
OGLA	Form 2A put on hold pending downhole changes on related Form 2s. All previously identified surface issues are resolved with this Form 2A.	5/5/2014 12:42:21 PM
Final Review	Operator provided revised language for waste handling, comments updated, COA added. Form 2s will need to be revised accordingly.	5/2/2014 8:16:50 AM
OGLA	placed on hold for more specificity regarding waste disposal.	4/27/2014 3:57:38 PM
Permit	Final review completed on this refile. No LGD comments.	4/24/2014 2:34:01 PM
Permit	Operator supplied the refile statements.	4/24/2014 2:33:41 PM
Permit	Requested refile statements.	4/22/2014 11:12:25 AM
LGD	pass, gdb	2/26/2014 2:17:57 PM
OGLA	Initiated/Completed OGLA Form 2A review on 02-18-14 by Dave Kubeczko; previously submitted and approved (10-15-10) Form 2A#400088441; OGCC Facility ID#419862; previous COAs apply - fluid containment, spill/release BMPs, cuttings moisture content, lined pits, no pit in fill; sent an email to operator on 02-18-14 indicating that the following COAs would be added - notification, flowback to tanks, and pipeline COAs; passed by CPW on 02-12-14 with BMPs and WMP acceptable; passed OGLA Form 2A review on 03-05-14 by Dave Kubeczko; fluid containment, spill/release BMPs, cuttings moisture content, lined pits, no pit in fill, notification, flowback to tanks, and pipeline COAs.	2/18/2014 3:23:05 PM
OGLA	<p>PREVIOUS FORM 2A#400088411 COAs:</p> <p>Operator must ensure 110 percent 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. If fluids are conveyed via pipeline, operator must implement best management practices to contain any unintentional release of fluids.</p> <p>The location is in an area of moderate run off/run-on potential; therefore the pad shall be constructed to prevent any stormwater run-on and/or stormwater runoff.</p> <p>No portion of any pit that will be used to hold liquids shall be constructed on fill material, unless the pit and fill slope are designed and certified by a professional engineer, subject to review and approval by the director prior to construction of the pit. The construction and lining of the pit shall be supervised by a professional engineer or their agent. The entire base of the pit must be in cut.</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, the drill cuttings must also meet the applicable standards of table 910-1.</p> <p>Any pit that will hold liquids [if constructed], must be lined or a closed loop system (which has been indicated on the Form 2A by Williams) must be implemented during drilling.</p>	2/18/2014 3:23:04 PM

DOW	This location is within the boundary of the approved WPX-CPW Wildlife Mitigation Plan. The BMPs were developed and agreed upon in the consultation and development of the Wildlife Mitigation Plan. CPW affirms that the BMPs and conditions of approval of the Wildlife Mitigation Plan suffice to address wildlife mitigation concerns. Approved: Jim Komatinsky 2-12-2014	2/12/2014 8:57:42 AM
Permit	Passed completeness.	2/12/2014 8:02:50 AM

Total: 12 comment(s)