

FORM
2A

Rev
04/01

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:

400441348

Date Received:

07/02/2013

Oil and Gas Location Assessment

☒ New Location ☐ Amend Existing Location Location#: _____

Submit original plus one copy. This form is to be submitted to the COGCC prior to any ground disturbance activity associated with oil and gas development operations. This Assessment may be approved as a standalone application or submitted as an informational report accompanying an Application for Permit-To-Drill, Form 2. Approval of this 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. This form may serve as notice to land owners and other interested parties, please see the COGCC web site at <http://colorado.gov/cogcc/> for all accompanying information pertinent to this Oil and Gas Location Assessment.

Location ID:

433757

Expiration Date:

07/30/2016

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

1. 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.

2. Operator

Operator Number: 96850

Name: WPX ENERGY ROCKY MOUNTAIN LLC

Address: 1001 17TH STREET - SUITE #1200

City: DENVER State: CO Zip: 80202

3. Contact Information

Name: Greg Davis

Phone: (303) 606-4071

Fax: (303) 629-8268

email: greg.j.davis@wpxenergy.com

4. Location Identification:

Name: Savage RWF Number: 23-25 Frac

County: GARFIELD

QuarterQuarter: NESW Section: 25 Township: 6S Range: 94W Meridian: 6 Ground Elevation: 6108

Define a single point as a location reference for the facility location. This point should be used as the point of measurement in the drawings to be submitted with this application. When the location is to be used as a well site then the point shall be a well location.

Footage at surface: 1806 feet FSL, from North or South section line, and 1681 feet FWL, from East or West section line.

Latitude: 39.494416 Longitude: -107.840065 PDOP Reading: 1.7 Date of Measurement: 05/28/2013

Instrument Operator's Name: J. Kirkpatrick

5. Facilities (Indicate the number of each type of oil and gas facility planned on location):

Special Purpose Pits: <input type="text"/>	Drilling Pits: <input type="text"/>	Wells: <input type="text"/>	Production Pits: <input type="text"/>	Dehydrator Units: <input type="text"/>
Condensate Tanks: <input type="text" value="1"/>	Water Tanks: <input type="text" value="7"/>	Separators: <input type="text"/>	Electric Motors: <input type="text" value="2"/>	Multi-Well Pits: <input type="text"/>
Gas or Diesel Motors: <input type="text"/>	Cavity Pumps: <input type="text" value="4"/>	LACT Unit: <input type="text"/>	Pump Jacks: <input type="text"/>	Pigging Station: <input type="text"/>
Electric Generators: <input type="text"/>	Gas Pipeline: <input type="text"/>	Oil Pipeline: <input type="text"/>	Water Pipeline: <input type="text"/>	Flare: <input type="text"/>
Gas Compressors: <input type="text"/>	VOC Combustor: <input type="text"/>	Oil Tanks: <input type="text"/>	Fuel Tanks: <input type="text"/>	

Other: Temporary equipment

6. Construction:

Date planned to commence construction: 08/15/2013 Size of disturbed area during construction in acres: 0.81
 Estimated date that interim reclamation will begin: 08/15/2016 Size of location after interim reclamation in acres: 0.00
 Estimated post-construction ground elevation: 6107 Will a closed loop system be used for drilling fluids: Yes ☐
 Will salt sections be encountered during drilling: Yes ☐ No ☒ Is H2S anticipated? Yes ☐ No ☒
 Will salt (>15,000 ppm TDS Cl) or oil based muds be used: Yes ☐ No ☒
 Mud disposal: Offsite ☐ Onsite ☐ Method: Land Farming ☐ Land Spreading ☐ Disposal Facility ☐
 Other: _____

7. Surface Owner:

Name: _____ Phone: _____
 Address: _____ Fax: _____
 Address: _____ Email: _____
 City: _____ State: _____ Zip: _____ Date of Rule 306 surface owner consultation: _____
 Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian
 Mineral Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian
 The surface owner is: ☐ the mineral owner ☐ committed to an oil and gas lease
 ☐ is the executer of the oil and gas lease ☐ the applicant
 The right to construct the location is granted by: ☐ oil and gas lease ☒ Surface Use Agreement ☐ Right of Way
 ☐ applicant is owner
 Surface damage assurance if no agreement is in place: ☐ \$2000 ☐ \$5000 ☐ Blanket Surety ID _____

8. Reclamation Financial Assurance:

☒ Well Surety ID: 20030107 ☐ Gas Facility Surety ID: _____ ☐ Waste Mgnt. Surety ID: _____

9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes ☐ No ☒
 Distance, in feet, to nearest building: 2400, public road: 2900, above ground utility: 1589,
 railroad: 8000, property line: 1783

10. 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

11. 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

12. Soils:

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.gov/> 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: 58. Potts-Ildefonso complex, 12 to 25 percent slopes.

NRCS Map Unit Name: _____
NRCS Map Unit Name: _____

13. 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: 05/13/2013
List individual species: Cheatgrass, Wheatgrass, Brome, 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): _____

14. Water Resources:

Rule 901.e. may require a sensitive area determination be performed. If this determination is performed the data is to be submitted with the Form 2A.

Is this a sensitive area: ☒ No ☐ Yes Was a Rule 901.e. Sensitive Areas Determination performed: ☐ No ☒ Yes
Distance (in feet) to nearest surface water: 351, water well: 2272, depth to ground water: 40
Is the location in a riparian area: ☒ No ☐ Yes Was an Army Corps of Engineers Section 404 permit filed ☒ No ☐ Yes
Is the location within a Rule 317B Surface Water Supply Area buffer zone:
☒ No ☐ 0-300 ft. zone ☐ 301-500 ft. zone ☐ 501-2640 ft. 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: ☐ No ☐ Yes

15. Comments:

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

Signed: _____ Date: 07/02/2013 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: Matthew Lee Director of COGCC Date: 7/31/2013

**CONDITIONS OF
APPROVAL, IF ANY:**

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.

GENERAL SITE COAs:

Notify the COGCC 48 hours prior to start of frac pad construction 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).

Operator must implement best management practices to contain any unintentional release of fluids at the frac pad location, as well as any fluids conveyed via temporary surface or buried permanent pipelines.

Operator must ensure secondary containment for any volume of fluids contained at frac pad site during 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 pit/frac pad location will be stabilized, inspected at regular intervals (at least every 14 days), and maintained in good condition.

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.

Operator shall stabilize exposed soils and slopes as an interim measure during pit operations at this site.

Flowback and stimulation fluids from the wells/pads being completed using this frac pad (if applicable) 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 and a Form 15 Earthen Pit Permitted 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.

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.

Additional containment shall be required where temporary or permanent pumps and other necessary equipment or chemicals are located.

Operator will use adequately sized containment devices for all chemicals and/or hazardous materials stored or used on location.

Operator will implement measures to ensure that adequate separation of hydrocarbons from the influent occurs to prevent accumulation of oil on the surface of stored fluids. Operator shall also employ a method for monitoring buildup of phase-separated hydrocarbons on the surface of stored fluids.

TEMPORARY SURFACE PIPELINE COAs:

Operator shall pressure test pipelines in accordance with Rule 1101.e.(1) prior to putting into initial service any temporary surface pipelines or configuration of the permanent pipeline network.

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.

Operator must routinely inspect the entire length of the surface pipeline to ensure integrity.

Operator must ensure 110 percent secondary containment for any potential volume of fluids that may be released from the surface pipeline at all stream, intermittent stream, ditch, and drainage crossings.

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.

Attachment Check List

Att Doc Num	Name
2106688	CORRESPONDENCE
400441348	FORM 2A SUBMITTED
400441414	LOCATION PICTURES
400441415	LOCATION DRAWING
400441416	HYDROLOGY MAP
400441417	ACCESS ROAD MAP
400441419	REFERENCE AREA MAP
400441421	NRCS MAP UNIT DESC
400441423	PROPOSED BMPs
400441425	SENSITIVE AREA DATA
400441426	OTHER
400441462	SURFACE AGRMT/SURETY
400441774	CONST. LAYOUT DRAWINGS

Total Attach: 13 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	No LGD or public comments. Final Review--passed.	7/26/2013 11:26:57 AM
LGD	pass, gdb	7/23/2013 12:42:03 PM
OGLA	Initiated/Completed OGLA Form 2A review on 07-09-13 by Dave Kubeczko; placed fluid containment, spill/release BMPs, flowback to tanks, tank berming, dust control, secondary containment, temp pipeline, pipeline testing, and notification COAs on the Form 2A; passed by CPW with WMP acceptable; passed OGLA Form 2A review on 07-24-13 by Dave Kubeczko; fluid containment, spill/release BMPs, flowback to tanks, tank berming, dust control, secondary containment, temp pipeline, pipeline testing, and notification COAs.	7/9/2013 11:14:43 AM
DOW	This location is within the boundary of the approved WPX-CPW SOR 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 and those included in the Form 2A application suffice to address wildlife mitigation concerns. Approved: Jim Komatinsky 7-3-2013	7/3/2013 2:29:38 PM

Total: 4 comment(s)

BMP

<u>Type</u>	<u>Comment</u>
Planning	Planning <ul style="list-style-type: none">• Plan pipelines routes ahead of time to avoid field fitting and reduce excessive ROW widths and reclamation.• Adequately size infrastructure and facilities to accommodate both current and future gas production.

General Housekeeping	<p>General</p> <ul style="list-style-type: none"> • Treat/control noxious weeds/plants including Tamarisk • Focus BMPs on critical wildlife seclusion and “crucial habitats” • Continue to Support Operation Game Thief • Continue to support CDOW sportsman’s programs • Restrict and/or manage grazing to benefit wildlife • Support research to test the effectiveness of specific Best Management Practices
General Housekeeping	<p>Although this location is located within 500 ft. of perennial, ephemeral, or intermittent surface water according to USGS mapped surface waters, the attached Sensitive Area Determination concludes that the location is not within a sensitive area due to the low potential for impacts to surface water in the case of a facility release. However, in order to satisfy COGCC guidance requiring that all locations within 500 ft. of mapped surface water incorporate BMPs to protect that surface water, WPX will employ the following BMPs at this location:</p> <ul style="list-style-type: none"> • WPX will ensure 110 percent secondary containment for any volume of fluids contained at well site during drilling and completion operations. • WPX will implement best management practices to contain any unintentional release of fluids. • Either a lined drilling pit or closed loop system will be implemented.
Construction	<p>Construction</p> <ul style="list-style-type: none"> • Surface roads to ensure that the anticipated volume of traffic and the weight and speed of vehicles using the road do not cause environmental damage, including generation of fugitive dust and contribution of sediment to downstream areas. • Salvage topsoil from all road construction and other rights-of-way and re-apply during interim and final reclamation. • 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
Drilling/Completion Operations	<p>Drilling/Completions</p> <ul style="list-style-type: none"> • Promptly report spills that affect wildlife to the CPW. • Store and stage emergency spill response equipment at strategic locations so that it is available to expedite effective spill response. • Limit parking to already disturbed areas that have not yet been reclaimed
Final Reclamation	<p>Production/Reclamation</p> <ul style="list-style-type: none"> • Install automated emergency response systems (e.g., high tank alarms, emergency shut- down systems, etc.). • Implement fugitive dust control program • Locate above-ground facilities to minimize the visual effect (e.g., low profile equipment, appropriate paint color, vegetation screening in wooded areas, etc.). • Apply an aggressive, integrated, noxious and invasive weed management plan. Utilize an adaptive management strategy that permits effective responses to monitored findings and reflects local site and geologic conditions • Evaluate the utility of soil amendment application or consider importing topsoil to achieve effective reclamation. • Use locally adapted seed whenever available and approved by landowner. • Use appropriately diverse reclamation seed mixes that mirror an appropriate reference area for the site being reclaimed where approved by landowner. • 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.) • Seed during appropriate season to increase likelihood of reclamation success • Do not include aggressive, non-native grasses in reclamation seed mixes • Choose reference areas as goals for reclamation that have high wildlife value, with attributes such a diverse and productive understory of vegetation, productive and

palatable shrubs, and a high prevalence of native species.

- Establish vegetation with total perennial non-invasive plant cover of at least eighty (80) percent of pre-disturbance or reference area levels.
- Establish vegetation with plant diversity of non-invasive species which is at least half that of pre-disturbance or reference area levels. Quantify diversity of vegetation using a metric that considers only species with at least 3 percent relative plant cover.
- Establish permanent and monumented photo points and vegetation measurement plots or transects; monitor at least annually until plant cover, composition, and diversity standards have been met.
- Observe and maintain a performance standard for reclamation success characterized by the establishment of a self-sustaining, vigorous, diverse, locally appropriate plant community on the site, with a density sufficient to control erosion and non-native plant invasion and diversity sufficient to allow for normal plant community development.
- Use early and effective reclamation techniques, including interim reclamation to accelerate return of disturbed areas for use by wildlife
- Remove all unnecessary infrastructure during the production phase.
- Remediate hydrocarbon spills on disturbed areas prior to reclamation.
- Complete final reclamation activities so that seeding occurs during the first optimal season following plugging and abandonment of oil and gas wells.
- Perform interim reclamation to final reclamation species composition and establishment standards.
- Perform interim reclamation on all disturbed areas not needed for active support of production operations
- Remove and properly dispose of degraded silt fencing and erosion control materials after their utility has expired
- Apply certified weed free mulch and crimp or tacy to remain in place to reclaim areas for seed preservation and moisture retention
- Control weeds in areas surrounding reclamation areas in order to reduce weed competition
- Educate employees and contractors about weed issues
- Census and assess the utilization of the reclaimed areas by the target species
- Maintain pre and post development site inspection records and monitor operations for compliance
- Utilize GIS technologies to assess the extent of disturbance and document the reclamation progression and the footprint of disturbances
- Identify native species for which commercial seed sources are not available. Provide support to contractors for developing cultivation and seed production techniques for needed species
- Conduct reclamation field trials to match seed mixes, soil preparation techniques, and planting methods to local conditions.

Total: 6 comment(s)