

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:

400457301

Date Received:

08/09/2013

Oil and Gas Location Assessment

New Location Refile Amend Existing Location Location#: 335188

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:

335188

Expiration Date:

09/19/2016

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: Langstaff

Number: RMV 12-16

County: GARFIELD

Quarter: LOT 11 Section: 16 Township: 6S Range: 94W Meridian: 6 Ground Elevation: 5582

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: 1722 feet FSL from North or South section line

1578 feet FWL from East or West section line

Latitude: 39.522864 Longitude: -107.897349

PDOP Reading: 2.6 Date of Measurement: 07/24/2013

Instrument Operator's Name: J. Kirkpatrick

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: ONSITE Drilling Fluids Disposal Method: Recycle/reuse

Cutting Disposal: ONSITE Cuttings Disposal Method: Cuttings trench

Other Disposal Description:

Re-use and evaporation

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: Lester Langstaff

Phone: _____

Address: _____

Fax: _____

Address: P.O. Box 1150

Email: _____

City: Glenwood Springs State: CO Zip: 81602

Surface Owner: Fee State Federal Indian

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

is committed to an oil and Gas Lease

has signed the Oil and Gas Lease

is the applicant

The Mineral Owner beneath this Oil and Gas Location is: Fee State Federal Indian

The Minerals beneath this Oil and Gas Location will be developed from or produced to this Oil and Gas Location: Yes

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

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

Date of Rule 306 surface owner consultation _____

CURRENT AND FUTURE LAND USE

Current Land Use (Check all that apply):

Crop Land: Irrigated Dry land Improved Pasture Hay Meadow CRP

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

Subdivided: Industrial Commercial Residential

Future Land Use (Check all that apply):

Crop Land: Irrigated Dry land Improved Pasture Hay Meadow CRP

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

Subdivided: Industrial Commercial Residential

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 733 Feet
Building Unit: 733 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 3100 Feet
Above Ground Utility: 4500 Feet
Railroad: 8000 Feet
Property Line: 829 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% 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: 07/25/2013

List individual species: Sage,Cheatgrass,Wheatgrass

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: 761 Feet

water well: 2187 Feet

Estimated depth to ground water at Oil and Gas Location 41 Feet

Basis for depth to groundwater and sensitive area determination:

Sensitive Area Determination is derived from onsite review data. (See attached "Sensitive Area Determination Check List")

Depth of groundwater estimated from review of surrounding wells from state database.

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

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

Signed: _____ Date: 08/09/2013 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: 9/20/2013

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

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.

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.

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.

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>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>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 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.</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 or buried 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.</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>As required for Groundwater Baseline Sampling; Operator shall comply with Rule 609. STATEWIDE GROUNDWATER BASELINE SAMPLING AND MONITORING.</p>

Best Management Practices

No	BMP/COA Type	Description
1	Planning	<p>PLANNING BMP's</p> <ul style="list-style-type: none"> * 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. * Use existing roads where possible * Combine utility infrastructure (gas, electric, and water) planning with roadway planning to avoid separate utility corridors * Where possible, consolidate pipeline and existing roadways, or roadways that are planned for development * Maximize use of remote telemetry for well monitoring to minimize traffic
2	Planning	<p>PRODUCTION/RECLAMATION BMP's</p> <ul style="list-style-type: none"> * 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 reseeded 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.
3	Planning	<p>This location was chosen due to it being existing and giving geology the distance to the BH that they require. One other existing pad would have worked almost as well but with more modification to surface disturbance and travel distance. The existing location we are using is in the SUA with the landowner. Also, existing roads will be used for this pad. No new road construction is needed.</p> <p>Will use existing pipeline corridors for new pipelines.</p>
4	Community Outreach and Notification	<p>WPX worked closely with the landowner to determine location of well and also entire plan of development. This location is in an industrial area so the only building unit < 1000' of pad is the land owner's</p>
5	Pre-Construction	<p>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</p>
6	Traffic control	<p>Applicable County and state permits will be acquired 1-2 weeks prior to moving rig on location.</p> <p>From I-70 traffic will use existing designated county roads and lease roads to get to the pad.</p>
7	General Housekeeping	<p>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.</p>

8	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>By using an existing pad we have minimized the number, size and distribution of well pads and locate pads along existing roads where possible.</p> <p>Water for completions operations will be piped from an existing water pit which will reduce truck traffic.</p>
9	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>Storm water is addressed under a field-wide CDPHE plan/permit.</p>
10	Material Handling and Spill Prevention	<p>Automated high tank alarms are installed on tanks along with emergency shutdown 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>
11	Dust control	<p>Fugitive dust control will be implemented during all phases of operations on an as-needed basis.</p>
12	Noise mitigation	<p>The mufflers on the rig will be oriented on the southwest end of the pad and will pointed up (toward the sky) so noise will not be directed toward the building unit.</p> <p>Plumb dump lines into tanks to muffle sound</p> <p>Rubber cushions in lubricators are used to muffle sound for plunger lift</p>
13	Emissions mitigation	<p>A rig that uses natural gas as fuel for the engines versus diesel will be used at this location.</p> <p>Combustors and we use API tanks with thief hatches and enardo valves and pipe everything to the combustion unit.</p>
14	Odor mitigation	<p>We use combustors and we use API tanks with thief hatches and enardo valves and pipe everything to the combustion unit.</p>
15	Drilling/Completion Operations	<p>Water for completions operations will be piped from an existing water pit which will reduce truck traffic.</p>

16	Interim Reclamation	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.)
17	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: 17 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2106759	CORRESPONDENCE
400457301	FORM 2A APPROVED
400458985	LOCATION PICTURES
400458989	ACCESS ROAD MAP
400458991	HYDROLOGY MAP
400458993	REFERENCE AREA MAP
400458994	CONST. LAYOUT DRAWINGS
400459008	MULTI-WELL PLAN
400460256	REFERENCE AREA PICTURES
400460257	SENSITIVE AREA DATA
400460282	OTHER
400460290	PROPOSED BMPs
400464754	SURFACE AGRMT/SURETY
400473999	LOCATION DRAWING
400474050	WAIVERS
400474051	EXCEPTION LOC REQUEST
400474139	NRCS MAP UNIT DESC
400483733	FORM 2A SUBMITTED

Total Attach: 18 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	No LGD or public comments. Final Review--passed.	9/20/2013 11:22:59 AM
LGD	pass, gdb	9/16/2013 3:44:15 PM
OGLA	Initiated/Completed OGLA Form 2A review on 09-16-13 by Dave Kubeczko; sent acknowledgement of notification, GW baseline sampling, fluid containment, spill/release BMPs, tank berming, cuttings low moisture content, pipeline, and flowback to tanks COAs to operator on 09-16-13; passed by CPW on 08-29-13 with WMP acceptable; passed Form 2A review on 09-20-13 by Dave Kubeczko; notification, GW baseline sampling, fluid containment, spill/release BMPs, tank berming, cuttings low moisture content, pipeline, and flowback to tanks COAs.	9/16/2013 9:32:43 AM
Permit	Exception request ltr. for existing location within buffer zone attached. Only building unit owner is surface owner; SUA attached. Mitigation measures outlined.	9/11/2013 8:45:50 AM
DOW	This location is within the boundary of the approved WPX-CPW Wildlife Mitigation Plan (WMP). 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 for the WMP suffice to address wildlife concerns at this location. Approved by: Taylor Elm, 8/29/2013, 10:01	8/29/2013 10:41:40 AM
Permit	Operator corrected surface and minerals information and attached NRCS attachment. This form has passed completeness.	8/29/2013 8:57:54 AM
Permit	Returned to draft. Requested NRCS map unit attachment and verification of surface and minerals information.	8/29/2013 7:12:10 AM

Total: 7 comment(s)