

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:

401010291

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Date Received:

05/10/2016

Oil and Gas Location Assessment

New Location Refile Amend Existing Location Location#: 413683

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:

413683

Expiration Date:

07/10/2019

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: TEP ROCKY MOUNTAIN LLC
Address: PO BOX 370
City: PARACHUTE State: CO Zip: 81635

Contact Information

Name: Vicki Schoeber
Phone: (970) 263-2721
Fax: ()
email: vicki.schoeber@wpenergy.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20030107 Gas Facility Surety ID: _____
 Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: YOUBERG Number: SR 43-12
County: GARFIELD
Quarter: LOT 3 Section: 7 Township: 7S Range: 93W Meridian: 6 Ground Elevation: 7358

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: 1944 feet FSL from North or South section line
147 feet FWL from East or West section line

Latitude: 39.452158 Longitude: -107.825839

PDOP Reading: 2.9 Date of Measurement: 12/10/2008

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 # 323952 **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>20</u>	Oil Tanks*	<u>1</u>	Condensate Tanks*	<u>4</u>	Water Tanks*	<u>2</u>	Buried Produced Water Vaults*	_____
Drilling Pits	_____	Production Pits*	_____	Special Purpose Pits	_____	Multi-Well Pits*	_____	Modular Large Volume Tanks	_____
Pump Jacks	_____	Separators*	<u>20</u>	Injection Pumps*	_____	Cavity Pumps*	_____	Gas Compressors*	_____
Gas or Diesel Motors*	_____	Electric Motors	_____	Electric Generators*	_____	Fuel Tanks*	_____	LACT Unit*	_____
Dehydrator Units*	_____	Vapor Recovery Unit*	_____	VOC Combustor*	<u>1</u>	Flare*	_____	Pigging Station*	_____

OTHER FACILITIES*

Other Facility Type

Number

Other Facility Type	Number

Those facilities indicated by an asterisk () shall be used to determine the distance from the Production Facility to the nearest cultural feature on the Cultural Setbacks Tab.

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

No new take away pipelines are needed. Flowlines from the wellheads to the separators and to the produced water, oil, and condensate tanks will be 2" steel.
Have existing 6" Flexsteel buried water line and 8" steel buried gas line in place.
3-4.5" surface steel frac lines will be installed from the RU 14-6 frac pad to the SR 43-12 pad along existing roads/pipeline ROWs.

CONSTRUCTION

Date planned to commence construction: 07/11/2016 Size of disturbed area during construction in acres: 7.71

Estimated date that interim reclamation will begin: 05/01/2017 Size of location after interim reclamation in acres: 1.13

Estimated post-construction ground elevation: 7357

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:

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: Dr. David Youberg

Phone: 712-662-1301

Address: 215 South 10th Street

Fax: _____

Address: _____

Email: _____

City: Sac City State: IA Zip: 50583

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

Provide the distance to the nearest cultural feature as measured from Wells or Production Facilities onsite.

	From WELL	From PRODUCTION FACILITY
Building:	<u>4489</u> Feet	<u>4402</u> Feet
Building Unit:	<u>4489</u> Feet	<u>4402</u> Feet
High Occupancy Building Unit:	<u>5280</u> Feet	<u>5280</u> Feet
Designated Outside Activity Area:	<u>5280</u> Feet	<u>5280</u> Feet
Public Road:	<u>2255</u> Feet	<u>2303</u> Feet
Above Ground Utility:	<u>3521</u> Feet	<u>3431</u> Feet
Railroad:	<u>5280</u> Feet	<u>5280</u> Feet
Property Line:	<u>841</u> Feet	<u>787</u> 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.
 - For measurement purposes only, Production Facilities should only include those items with an asterisk(*) on the Facilities Tab.

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.
 - Large UMA Facility – 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: _____

FOR MULTI-WELL PADS AND PRODUCTION FACILITIES WITHIN DESIGNATED SETBACK LOCATIONS ONLY:

- Check this box if this Oil and Gas Location has or will have Production Facilities that serve multiple wells (onl or offsite) and the Production Facilities are proposed to be located less than 1,000 feet from a Building Unit. *(Pursuant to Rule 604.c.(2)E.i., the operator must evaluate alternative locations for the Production Facilities that are farther from the Building Unit, and determine whether those alternative locations were technically feasible and economically practicable for the same proposed development.)*
- By checking this box, I certify that no alternative placements for the Production Facilities, farther from the nearest Building Unit, were available based on the analysis conducted pursuant to Rule 604.c.(2)E.i.

In the space below, explain rationale for siting the multi-well Production Facility(ies) that supports your Rule 604.c.(2)E.i determination. Attach documentation that supports your determination to this Form 2A.

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: 45 - Morval-Tridell Complex, 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: 03/17/2016

List individual species: Sage, Wheatgrass, Serviceberry

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: 946 Feet

water well: 5993 Feet

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

Basis for depth to groundwater and sensitive area determination:

See attached Sensitive Area Determination

Is the location in a riparian area: No Yes

Was an Army Corps of Engineers Section 404 permit filed No Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer 501-2640 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: Yes

Is the Location within a Floodplain? No Yes Floodplain Data Sources Reviewed (check all that apply)

Federal (FEMA)

State

County

Local

Other _____

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 a Building Unit) and is in an Urban Mitigation Area
- 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

Because this location is in a Sensitive Area (See attached SAD), WPX will employ the following BMPs to support protection of surface and ground water:

- 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.

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

Signed: _____ Date: 05/10/2016 Email: vicki.schoeber@wpxenergy.com

Print Name: Vicki Schoeber Title: Regulatory Specialist

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: 7/11/2016

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.

<u>COA Type</u>	<u>Description</u>
	In addition to the notifications required by COGCC listed in the Northwest Notification Policy (Notice of Intent to Construct a New Location, Notice of Intent to Spud Surface Casing, and Notice of Intent to Commence Hydraulic Fracturing Operations) and Rule 316C. COGCC Form 42. FIELD OPERATIONS NOTICE (a. Notice of Intent to Conduct Hydraulic Fracturing Treatment and c. Notice of Construction or Major Change); operator shall notify the COGCC 48 hours prior to pipeline testing (flowlines from wellheads to separators to tanks; and/or any temporary surface lines used for hydraulic stimulation and/or flowback operations) using the Form 42 (as described in Rule 316C.m. Notice of Completion of Form 2/2A Permit Conditions). The appropriate COGCC individuals will automatically be email notified.

Operator must ensure secondary containment for any volume of fluids contained at the 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 fluid containment/control as well as stormwater management for the control of run-on and run-off) sufficiently protective of nearby surface water. Any berm constructed at the well pad location will be stabilized, inspected at regular intervals as required by CDPHE (at least every 14 days and after precipitation events), and maintained in good condition.

The design/build of any perimeter berm or fluid management structures shall be sized, constructed, and compacted sufficiently to contain and/or manage potential fluid releases during operations in a manner that prevents or controls potential sedimentation and scouring on adjacent lands and drainages. Such design/build of perimeter berms or fluid management structures may include, but are not limited to the following: on location berms; diversion ditches; enhanced vegetation; or other design features necessary to achieve the goal of protecting adjacent lands and drainages from potential sedimentation and scouring.

The location is in an area of moderate to high run-on/run-off potential; therefore standard stormwater BMPs must be implemented; prior to, during, and after construction, as well as during drilling, completion, and production operations; at this location to insure compliance with CDPHE and COGCC requirements and to prevent any stormwater run-on and /or stormwater run-off.

The access road will be maintained as to not allow sediment to migrate from the access road to nearby surface water or any drainages leading to surface water.

Strategically apply fugitive dust control measures, including encouraging established speed limits on private roads, to reduce fugitive dust and coating of vegetation and deposition in water sources.

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 permanent produced water, oil, and condensate storage tanks.

The moisture content of water/bentonite based mud (WBM) generated drill cuttings managed onsite shall be kept as low as practicable to prevent accumulation of liquids greater than de minimis amounts. After drilling and completion operations have been completed, the WBM drill cuttings that will remain on the well pad location (cuttings management area, the cut portion of the pad, cuttings trench, dry cuttings drilling pit), must meet the applicable standards of Table 910-1. No liners are allowed to be disposed of with the drill cuttings. After the drill cuttings have been amended (if necessary) and placed on the well pad, sampling frequency of the drill cuttings (to be determined by the operator) shall be representative of the material left on location. No offsite disposal of cuttings to another oil and gas location shall occur without prior approval of a Waste Management Plan (submitted via a Form 4 Sundry Notice) specifying disposal location and waste characterization method. Commercial disposal of drill cuttings will only require notification to COGCC via a Form 4 Sundry Notice.

Flowback and stimulation fluids must be sent to enclosed tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline storage vessel, or other open top containment located on the well pad; or into tanker trucks for offsite disposal. No open top tanks can be used for initial flowback fluids containment. 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. No additional downgradient berming is required if operator constructs a sufficiently sized perimeter berm.

Potential odors associated with the completions process and/or with long term production operations must be controlled/mitigated.

Operator shall pressure test pipelines (flowlines from wellheads to separators to tanks; and any temporary surface lines used for hydraulic stimulation and/or flowback operations) 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 will implement BMPs necessary to mitigate a potential for a release of fluids to impact streams, intermittent streams, ditches, and drainage crossings. For these crossings: if poly pipe is used on the surface, 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 (catchment basins) and/or divert any possible release of fluids and prevent fluids from reaching the stream or drainage; 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; or develop an alternative means for containment. For all other pipeline materials, operator will implement BMPs necessary to mitigate a potential for E&P fluids not to reach groundwater or flowing surface water.

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 temporary surface pipelines. This will reduce surface disturbance and fragmentation of wildlife habitat in the area.

Best Management Practices

No	BMP/COA Type	Description
1	Planning	<ul style="list-style-type: none"> * 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. * Minimize newly planned activities and operations within 300 feet of the ordinary high water mark of any reservoir, lake, wetland, or natural perennial or seasonally flowing stream or river. * Avoid constructing any road segment in the channel of an intermittent or perennial stream * Minimize the number, length, and footprint of oil and gas development roads * Use existing roads where possible * Combine utility infrastructure (gas, electric, and water) planning with roadway planning to avoid separate utility corridors * Combine and share roads to minimize habitat fragmentation * Where possible, consolidate pipeline and existing roadways, or roadways that are planned for development * Maximize the use of directional drilling to minimize habitat loss/fragmentation * Maximize use of long-term centralized tank batteries to minimize traffic * Maximize use of remote telemetry for well monitoring to minimize traffic * Phase and concentrate development activities, so that large areas of undisturbed habitat for wildlife remain. * Maintain undeveloped areas within development boundaries sufficient to allow wildlife to persist within development * boundaries during all phases of construction, drilling, and production.
2	Drilling/Completion Operations	<ul style="list-style-type: none"> * WPX will ensure 110 percent secondary containment for any volume of fluids contained at the well site during drilling and completions 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. * Install and maintain adequate measures to exclude all types of wildlife (e.g., big game, birds, and small rodents) from all fluid pits (e.g., fencing, netting, and other appropriate exclusion measures).
3	Interim Reclamation	<ul style="list-style-type: none"> * 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 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.

Total: 3 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2107885	317B NOTIFICATION LETTER
2107886	CORRESPONDENCE
401010291	FORM 2A SUBMITTED
401040251	SENSITIVE AREA DATA
401040253	NRCS MAP UNIT DESC
401040255	LOCATION PICTURES
401040256	OTHER
401040372	SURFACE AGRMT/SURETY
401040373	ACCESS ROAD MAP
401040374	CONST. LAYOUT DRAWINGS
401040375	HYDROLOGY MAP
401040376	LOCATION DRAWING
401040379	REFERENCE AREA MAP
401041156	REFERENCE AREA PICTURES
401044206	MULTI-WELL PLAN

Total Attach: 15 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final review complete.	7/8/2016 3:38:04 PM
OGLA	Initiated/Completed OGLA Form 2A review on 07-06-16 by Dave Kubeczko; requested letter(s) sent to public water supply system(s) since location is within a 317B buffer and acknowledgement of notification, fluid containment, spill/release BMPs, construction stormwater BMPs, sediment and dust control access road, flowback to tanks, tank berming, odor control, cuttings low moisture/management, and pipeline testing COAs from operator on 07-06-16; received letter(s) sent to public water supply system(s) since location is within a 317B buffer and acknowledgement/concurrence of COAs from operator on 07-07-16; COGCC corrected several distances on the Cultural Features tab, including: corrected distance from Wellhead to Building/Building Unit from 4519' to 4489', corrected distance from Wellhead to Public Road from 2277' to 2255', corrected distance from Wellhead to Aboveground Utility 3564' to 3521', corrected distance from Wellhead to Property Line from 870' to 841', corrected distance from Production Facility to Public Road from 2382' to 2303', corrected distance from Production Facility to Aboveground Utility from 36002' to 3431' - per review of COGCC's Online GIS Map and the Location Drawing attachment; changed Date planned to commence construction from 07-01-16 to 07-11-16; no CPW; passed OGLA Form 2A review on 07-07-16 by Dave Kubeczko; notification, fluid containment, spill/release BMPs, construction stormwater BMPs, sediment and dust control access road, flowback to tanks, tank berming, odor control, cuttings low moisture/management, and pipeline testing COAs.	7/6/2016 1:18:23 PM
Permit	There is no previous 2A for this location. It is a built pad with four producing wells. Corrected right to construct from SUA to Lease with operator approval. Some wells on this pad have BHL's in different leases causing the lease information to change on some of the APD's. Initial review complete.	5/31/2016 1:47:53 PM
Permit	Passed completeness.	5/19/2016 11:21:34 AM

Total: 4 comment(s)