

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:

400752776

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Date Received:

04/01/2015

Oil and Gas Location Assessment

☒ New Location ☐ Refile ☐ Amend Existing Location Location#: \_\_\_\_\_

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:

**443138**

Expiration Date:

**09/07/2018**

☒ 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: 100264

Name: XTO ENERGY INC

Address: 382 CR 3100

City: AZTEC State: NM Zip: 87410

Contact Information

Name: Cherylene Weston

Phone: (505) 333-3190

Fax: (505) 333-3284

email: cherylene\_weston@xtoenergy.com

RECLAMATION FINANCIAL ASSURANCE

- ☒ Plugging and Abandonment Bond Surety ID: 20100210 ☐ Gas Facility Surety ID: \_\_\_\_\_
- ☐ Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: Anderson

Number: 2-5H & 3-5H

County: LA PLATA

QuarterQuarter: SESE Section: 5 Township: 32N Range: 6W Meridian: N Ground Elevation: 6428

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: 178 feet FSL from North or South section line

154 feet FEL from East or West section line

Latitude: 37.039460 Longitude: -107.515330

PDOP Reading: 6.0 Date of Measurement: 09/06/2014

Instrument Operator's Name: D. Alex Johnson

## RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

This proposed Oil and Gas Location is:

LOCATION ID # FORM 2A DOC #

## FACILITIES

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

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

## OTHER FACILITIES\*

Other Facility Type

Number

Water Pipeline	<u>1</u>
Gas Pipeline	<u>1</u>

\*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:

3,597.55' x 40' width, 6" NPS Schedule 40 steel gas pipeline

5,174.55' x 40' width, 2" NPS polyethylene water pipeline.

## CONSTRUCTION

Date planned to commence construction: 07/20/2015 Size of disturbed area during construction in acres: 2.41

Estimated date that interim reclamation will begin: 09/01/2015 Size of location after interim reclamation in acres: 1.50

Estimated post-construction ground elevation: 6427

## DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes

Is H<sub>2</sub>S anticipated? No

Will salt sections be encountered during drilling: No

Will salt based mud (>15,000 ppm Cl) be used? No

Will oil based drilling fluids be used? No

## DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Method: Commercial Disposal

Cutting Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted?       

Reuse Facility ID:        or Document Number:       

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

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Franklin & Martha Anderso

Phone: \_\_\_\_\_

Address: 9871 ST HWY 151

Fax: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

City: IGNACIO State: CO Zip: 81137

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: Surface Use Agreement

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

Date of Rule 306 surface owner consultation 06/04/2014

## 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:	1608 Feet	1587 Feet
Building Unit:	1685 Feet	1587 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	2091 Feet	2017 Feet
Above Ground Utility:	1775 Feet	1675 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	154 Feet	60 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.

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 (onll 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 be 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: 14 - Bodot Clay 3 to 10 percent slope

NRCS Map Unit Name: 81 - Zyme Clay loam 3 to 25 percent slope

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: \_\_\_\_\_

List individual species:

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:  Feet

water well:  Feet

Estimated depth to ground water at Oil and Gas Location  Feet

Basis for depth to groundwater and sensitive area determination:

Closest water well on database in 1412' (permit #214648) to the north; however no static water level or construction information is available. Closest active water well (permit #72153) with a static water level of 20 feet is 1805' to the west. Closest surface water feature is a dry/unused irrigation ditch (117') which will be moved, per SUA.

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  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: \_\_\_\_\_

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

## DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- ☐ Rule 604.b.(1)A. Exception Location (existing or approved Oil & Gas Location now within a Designated Setback as a result of Rule 604.a.)
- ☐ Rule 604.b.(1)B. Exception Location (existing or approved Oil & Gas Location is within a Designated Setback due to Building Unit construction after Location approval)
- ☐ Rule 604.b.(2) Exception Location (SUA or site-specific development plan executed on or before August 1, 2013)
- ☐ Rule 604.b.(3) Exception Location (Building Units constructed after August 1, 2013 within setback per an SUA or site-specific development plan)

## RULE 502.b VARIANCE REQUEST

- ☐ Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number \_\_\_\_\_

ALL exceptions and variances require attached Request Letter(s). Refer to applicable rule for additional required attachments (e.g. waivers, certifications, SUAs).

## OPERATOR COMMENTS AND SUBMITTAL

Comments

The proposed Anderson 2-5H and 3-5H wells will be drilled on a new multi-well pad. Surface owner waived consultation/notification requirements. A closed loop mud system will be used. The proposed pad will involve a total of 2.41 acres of new disturbance.

The proposed well location is not within 1000' of a building unit. A facility layout drawing is not required.

There are no conventional or plugged & abandoned wells within 1/4 mile (1,320') of the proposed wells. A P&A Risk Assessment was not done.

The well pad's proposed disturbance is less than 10% slope prior to cut and fill.

Per the SUA with the landowner, XTO will move the irrigation ditch to be aligned with the new access road ditch. See page 6 of the SUA.

Reference Area map attached. Please note, reference area photos will be submitted within 12 months of Form 2A submission.

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

Signed: \_\_\_\_\_ Date: 04/01/2015 Email: cherylene\_weston@xtoenergy.com

Print Name: Cherylene Weston Title: Sr. Permitting Analyst

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: 9/8/2015

## 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>Notify the COGCC 48 hours prior to start of pad construction, rig mobilization, spud, start of hydraulic stimulation operations, start of flowback operations (if different than hydraulic stimulation operations), and pipeline testing using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).</p>
	<p>Operator must ensure secondary containment for any volume of fluids contained at well site during drilling and completion operations (as shown on the Proposed BMPs attachment); 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. Any berm constructed at the well pad location will be stabilized, inspected at regular intervals (at least every 14 days [per CDPHE requirements] and after significant precipitation events), and maintained in good condition.</p> <p>Berms or other containment devices shall be constructed to be sufficiently impervious (corrugated steel with poly liner) to contain any spilled or released material around crude oil, condensate, and produced water storage tanks.</p>
	<p>The moisture content of drill cuttings managed onsite shall be kept as low as practicable to prevent accumulation of liquids greater than de minimis amounts.</p> <p>If the wells are to be hydraulically stimulated, 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.</p> <p>Potential odors associated with the completions process and/or with long term production operations must be controlled/mitigated.</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.</p>

## Best Management Practices

No	BMP/COA Type	Description
1	Wildlife	<ul style="list-style-type: none"> <li>• A closed-loop mud system will be used during drilling operations.</li> <li>• Fencing new well pad: to avoid possible injury to Surface Owner or surface tenant livestock, Operator shall provide new 5-wire T-post fencing around the new well pad and cattle guard in the new access road.</li> <li>• The access road will be gated in order to restrict general public access. *Access Road is currently gated.</li> <li>• All fired vessel and heat transfer stacks, vents or other openings shall be equipped with screens or other appropriate equipment to prevent entry by wildlife, including migratory birds.</li> <li>• Do not place staging, refueling, or chemical storage areas within 100 feet of mapped riparian zones and floodplains.</li> <li>• Construction, drilling and completion activities will be scheduled to avoid critical winter use periods for deer and elk from December 1 - April 15. During post-drilling operations, the operator will make good faith efforts to minimize the number of well visits during this critical winter use period.</li> <li>• Recycle drilling fluids.</li> <li>• Mud systems are dewatered, recycled and water is reused during drilling operations, reducing the amount of water needed to be trucked for drilling operations.</li> <li>• Mud can be transported to next drilling location, reducing truck traffic to dispose of drilling fluids.</li> <li>• Adhere to the developed weed management plan pursuant to both the La Plata County Land Use Code and Colorado Noxious Weed Act.               <ul style="list-style-type: none"> <li>o Protects the productivity of adjacent wildlife habitats.</li> </ul> </li> <li>• Seed mix will be determined by Surface Owner.</li> <li>• Educate employees and contractors on wildlife conservation practices, including no harassment or feeding of wildlife.</li> <li>• Forbid use of firearms and dogs on location.</li> <li>• Utilize bear proof dumpsters and trash receptacles for food related trash at all facilities that generate such trash.</li> </ul>
2	Construction	<p>Certificate to Discharge Under CDPS General Permit No. COR-03000 Stormwater Discharges Associated with Construction. Certification No. COR03C483</p> <ul style="list-style-type: none"> <li>• A Field Wide Stormwater Management Plan (SWMP) for the La Plata Infill Program is on file at the XTO Energy Inc. (72 Suttle Street, Suite J, Durango, CO, 81303) office. A Site Specific SWMP including a Site Plan will be developed for each location.</li> <li>• Spill Prevention, Control and Countermeasures (SPCC) for the La Plata Infill Program is on file at the XTO Energy Inc. (72 Suttle Street, Suite J, Durango, CO, 81303) office. The Field Wide and Site Specific SWMPs each address SPCC during construction operations. See attached diagram for site specific BMPs.</li> <li>• Inspections of the project site and maintenance of installed BMP's shall be conducted in accordance with the CDPHE CDPS permit and field wide plan.</li> <li>• The attached Table 1 lists BMP's which may be utilized during the construction phase and in development of the Site Specific SWMP. BMP selection is based on site specific conditions including topography, existing vegetation, timing, construction sequencing, etc.</li> </ul>

Total: 2 comment(s)



## **Attachment Check List**

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
901307	MULTI-WELL PLAN
2107620	CONST. LAYOUT DRAWINGS
2107629	OPERATOR CORRESPONDENCE
400752776	FORM 2A SUBMITTED
400789238	ACCESS ROAD MAP
400789246	LOCATION PICTURES
400789259	LOCATION DRAWING
400789363	NRCS MAP UNIT DESC
400789499	SURFACE AGRMT/SURETY
400805357	HYDROLOGY MAP A, TOPO
400805361	HYDROLOGY MAP B, AERIAL
400806852	DOW CONSULTATION
400807090	NRCS MAP UNIT DESC
400807507	PROPOSED BMPS
400818072	CONST. LAYOUT DRAWINGS
400819016	OTHER
400819028	OTHER
400820724	REFERENCE AREA MAP

Total Attach: 18 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Operator submitted another update to the multi-well plan, which has been uploaded to this form.	9/4/2015 4:22:22 PM
OGLA	Initiated/Completed OGLA Form 2A review on 07-14-15 by Dave Kubeczko; requested acknowledgement of fluid containment, spill/release BMPs, flowback to tanks only, cuttings low moisture content, notification, odor control, tank berming, and pipeline testing COAs from operator on 07-14-15; received Construction Layout Drawing x-sections from operator on 07-14-15; received acknowledgement of COAs from operator on 07-21-15; per operator and review of COGCC's Online GIS Map, corrected distance from PRODUCTION FACILITY to BUILDING (from 1608' to 1587'), BUILDING UNIT (from 1685' to 1587'), PUBLIC ROAD (from 2091' to 2017'), ABOVE GROUND UTILITY (from 1775' to 1675'), and PROPERTY LINE (from 154' to 60'); passed by CPW on 04-20-15 with operator submitted and agreed to (in a CPW pre-consultation) BMPs acceptable; passed OGLA Form 2A review on 07-23-15 by Dave Kubeczko; fluid containment, spill/release BMPs, flowback to tanks only, cuttings low moisture content, notification, odor control, tank berming, and pipeline testing COAs.	7/14/2015 7:53:03 AM
Permit	Operator submitted updated multi-well plan, which has been uploaded to this form.  Final Review Completed. No LGD or public comment received.	6/18/2015 2:37:53 PM
Permit	Multi-well plan is based on a previous drilling plan that has since been modified. Contacted operator to provide updated multi-well plan that reflects current wellbore trajectories.	6/17/2015 4:26:19 PM
Permit	1) Corrected distance to building unit from 5280' to 1685' (residence SSE of well). 2) Corrected distance to above ground utility from 2229' to 1775' (utility pole SSE of well).	4/22/2015 3:21:51 PM
Permit	Deleted duplicate bullet point under BMP Item #2.	4/22/2015 3:18:23 PM
DOW	Operator pre-consulted with CPW on this location. Operator has proposed a number of BMPs to minimize impacts to wildlife, including a December 1 - April 15 seasonal restriction on construction, drilling, and completion activities to avoid impacts to wintering big game. CPW appreciates the Operators efforts in this regard.	4/20/2015 12:24:50 PM
Permit	Passed completeness.	4/6/2015 1:00:34 PM
Permit	Missing Reference Area Map attachment. Missing Reference Area Photos attachment. Return to draft.	4/6/2015 8:23:39 AM

Total: 9 comment(s)