

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:

400717092

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Date Received:

03/02/2015

Oil and Gas Location Assessment

New Location     Refile     Amend Existing Location    Location#: 306752

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:

**306752**

Expiration Date:

**04/02/2018**

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: Penrose    Number: 2-8H & 3-8H  
 County: LA PLATA  
 Quarter: SWSW    Section: 8    Township: 32N    Range: 6W    Meridian: N    Ground Elevation: 6389

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: 932 feet FSL from North or South section line  
 892 feet FWL from East or West section line

Latitude: 37.026900    Longitude: -107.529840

PDOP Reading: 6.0    Date of Measurement: 07/31/2014

Instrument Operator's Name: D. ALEX JOHNSON



## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: David & Evelyn Engler

Phone: 970-883-2340

Address: 10340 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 10/20/2014

## 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): existing oil & gas location

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.

	<b>From WELL</b>	<b>From PRODUCTION FACILITY</b>
Building:	732 Feet	710 Feet
Building Unit:	868 Feet	846 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	555 Feet	532 Feet
Above Ground Utility:	893 Feet	871 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	173 Feet	172 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: 01/28/2015

**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 (on 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.

Expanding existing Penrose 1RX well pad to accommodate the drilling, completion and facilities for the proposed wells.

**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 3-10% slopes.  
 NRCS Map Unit Name: 82. Zyme-Rock outcrop complex, 12-65% slopes.  
 NRCS Map Unit Name: \_\_\_\_\_

## PLANT COMMUNITY:

Complete this section only if any portion of the disturbed area of the location's current land use is on non-crop land.

Are noxious weeds present: Yes  No

Plant species from:  NRCS or,  field observation Date of observation: 10/15/2014

List individual species: RABBITBRUSH, BIG SAGEBRUSH, BLUE GRAMA

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: 350 Feet

water well: 940 Feet

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

Basis for depth to groundwater and sensitive area determination:

Measured from proposed Penrose 3-8H well spot to existing domestic water well (permit #183234) with static water level = 40.

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 608 \_\_\_\_\_

## 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 Penrose 1RX pressure monitoring well pad will be an expanded to accomodate the drilling of the proposed Penrose 2-8H & 3-8H wells. Surface owner waived consultation/notification requirements. A closed loop mud system will be used for drilling. DOW consultation under Rule 306.c is required under Rule 1201d94.

The proposed pad extension involves an increase in surface disturbance of approximately 1.93 acres.

Reference area pictures will submitted on a sundry at a later date during growing season.

The existing Penrose 1RX pressure monitoring well does not have any associated production equipment; although it is counted in the "wells" portion of the Facilities tab.

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

Signed: \_\_\_\_\_ Date: 03/02/2015 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: 4/3/2015

**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.**

<b>COA Type</b>	<b>Description</b>
	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>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 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>
	Notify the COGCC 48 hours prior to start of pad reconstruction/regrading, rig mobilization, spud, pipeline testing, 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).
	Operator shall comply with Buffer Zone Move-In, Rig-Up Notice Rule 305.h (effective 9/30/2014).

### **Best Management Practices**

No BMP/COA Type	Description
1	<p>A. Noise - Sound mitigation will be added to the pump jacks and production equipment in order to comply with the residential/agricultura/rural requirements in Rule 802. Drilling, completion, workover, and construction operations will also comply with Rule 802.</p> <p>B. Closed Loop Drilling Systems - A closed loop drilling system will be used. Fresh water pits are not planned.</p> <p>C. Green Completions - Emission Control Systems - Pipelines and production equipment, including burning flares, capable of supporting green completions will be used.</p> <p>D. Traffic Plan - Access is from CR 328. Operator will comply with any La Plata County traffic control measures required for this well. Access road will be built and maintained for all weather use and be able to accommodate local emergency vehicle access requirements.</p> <p>E. Multiwell Pads - Multiple wells will be drilled from this pad in order to minimize surface disturbance and impacts to wildlife. No other pad will be necessary to develop the Fruitland Coal in the 320 acre spacing unit being developed by these wells.</p> <p>F. Leak Detection Plan - Pipelines will be pressure tested prior to use and wells will be monitored daily.</p> <p>G. Berms will be constructed with a corrugated steel containment berm with poly liner and will be large enough to contain 150% of the largest single tank.</p> <p>H. Blow preventer Equipment (BOPE) - BOPE equipment will consist of a double ram with blind ram and pipe ram.</p> <p>I. BOPE testing for drilling operations - BOPE will be pressured tested upon initial rig up and at least once every 30 days during drilling operations.</p> <p>J. BOPE for well servicing operations - Adequate blowout prevention equipment will be used on all well servicing operations.</p> <p>K. Pit level Indicators - Pit level indicators will be used.</p> <p>L. Drill stem tests - No drill stem tests will be performed.</p> <p>M. Fencing requirements - Fencing will be placed around all equipment with moving parts and will be designed and constructed to keep wildlife away from the equipment.</p> <p>N. Control of Fire Hazards - Any material not in use that might constitute a fire hazard shall be removed a minimum of 25 feet from the wellhead, tanks, and separators. Any electrical equipment installations inside the bermed area shall comply with API RP 500 classifications and comply with the current national electrical code as adopted by the State of Colorado.</p> <p>O. Loadlines - Loadlines will be bullplugged or capped.</p> <p>P. Removal of Surface trash - All surface trash, debris, scrap or discarded material connected with the operations of the property will be removed from the premises and disposed of in a legal manner.</p> <p>Q. Guy line Anchors - Guy line anchors will be identified by a marker of bright color not less than 4 feet in height and not greater than one foot east of the guy line anchor.</p> <p>R. Tank specifications - No crude oil or condensate storage tanks will be used.</p> <p>S. Access roads - Access road will be built and maintained for all weather use and be able to accommodate local emergency vehicle access requirements.</p> <p>T. Well site cleared - Within 90 days after the wells are plugged and abandoned the well site shall be cleared of all nonessential equipment, trash, and debris.</p> <p>U. Identification of plugged and abandoned wells - Upon plugging and abandoning the well the location of the wellbore shall be marked with a permanent monument as specified in Rule 319.a(5).</p> <p>V. Development from existing well pads - Development from existing well pads is not feasible due to directional drilling constraints, lack of access, and lack of subsurface rights.</p> <p>W. Site Specific Measures - None.</p>

2	Wildlife	<p>The Penrose 2-8H &amp; 3-8H will be drilled on an expanded existing well pad to reduce surface disturbance impacts.</p> <p>A closed-loop mud system will be used during drilling operations.</p> <p>Surface equipment that could be potentially damaging to wildlife will be fenced with livestock fence panels. Prevents wildlife entry to potentially harmful equipment.</p> <p>The access road will be gated in order to restrict general public access.</p> <p>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.</p> <p>Do not place staging, refueling, or chemical storage areas within 100 feet of mapped riparian zones and floodplains.</p> <p>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.</p> <p>Recycle drilling fluids: Mud systems are dewatered, recycled and water is reused during drilling operations, reducing the amount of water needed to be trucked for drilling operations. Mud can be transported to next drilling location, reducing truck traffic to dispose of drilling fluids.</p> <p>Adhere to the developed weed management plan pursuant to both the La Plata County Land Use Code and Colorado Noxious Weed Act. Protects the productivity of adjacent wildlife habitats.</p> <p>Seed mix will be determined by Surface Owner.</p> <p>Educate employees and contractors on wildlife conservation practices, including no harassment or feeding of wildlife.</p> <p>Forbid use of firearms and dogs on location.</p> <p>Utilize bear proof dumpsters and trash receptacles for food related trash at all facilities that generate such trash.</p>
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3	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> <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>
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Total: 3 comment(s)

### Attachment Check List

<b>Att Doc Num</b>	<b>Name</b>
2107322	CORRESPONDENCE
2519714	NRCS MAPUNIT DESC
400717092	FORM 2A SUBMITTED
400756494	LOCATION PICTURES
400756496	LOCATION PICTURES
400756502	MULTI-WELL PLAN
400756524	ACCESS ROAD MAP
400759040	LOCATION DRAWING
400784607	NRCS MAP UNIT DESC
400784768	HYDROLOGY MAP A, TOPO
400784769	HYDROLOGY MAP B, AERIAL
400790172	CONST. LAYOUT DRAWINGS
400797542	30 DAY NOTICE LETTER
400800854	SURFACE AGRMT/SURETY
400801610	WASTE MANAGEMENT PLAN
400801865	REFERENCE AREA MAP
400801875	OTHER
400801877	PROPOSED BMPS
400801882	DOW CONSULTATION

Total Attach: 19 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	4/3/2015 10:46:30 AM
Permit	Distance to building unit not corresponding to the location drawing. Changed from 732' to 868'. Location drawing measurements taken from the 2-8H location and not the 3-8H location. Cultural setbacks of the form 2A are measured from the 2-8H location so the coordinates of the 2A were changed to the 2-8H location from the 3-8H location. Approved by operator.	3/24/2015 9:13:16 AM
OGLA	Initiated/Completed OGLA Form 2A review on 03-20-15 by Dave Kubeczko; requested Rule 604.c.(2). A. thru W. Setback and Mitigation Measures and 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 12-29-14; received acknowledgement of COAs from operator on 03-26-15; conducted COGCC onsite on 03-23-15; passed by CPW on 03-20-15 with operator submitted and agreed to (in a CPW pre-consultation) BMPs acceptable; passed OGLA Form 2A review on 03-27-15 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.	3/20/2015 2:10:07 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 and agrees that the proposed BMPs will minimize impacts to wildlife.	3/20/2015 8:30:24 AM
Permit	Operator revised form 2A drilling fluids disposal to be the same as the form 2's.	3/4/2015 9:02:34 AM
Permit	Operator revised 305 notification date on form 2A. Other forms are correct.	3/4/2015 8:58:24 AM
Permit	This 2A location should be the same as the 3-8H well location. Not submitted yet.	3/4/2015 8:56:55 AM
Permit	Date 2/15/2015 for building unit buffer zone notification is not 30 days before submittal of permit. Please verify date.	3/3/2015 11:43:35 AM
Permit	Operator is requesting approval within shortest possible timeframe. Forms have too many issues for quick approval.	3/2/2015 2:04:12 PM
Permit	Missing NRCS attachment for soil unit 82. Attached provided description.	3/2/2015 1:36:29 PM

Total: 10 comment(s)