

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:

400705762

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Date Received:

10/22/2014

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:

**440224**

Expiration Date:

**12/04/2017**

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: 10459  
Name: EXTRACTION OIL & GAS LLC  
Address: 1888 SHERMAN ST #200  
City: DENVER    State: CO    Zip: 80203

Contact Information

Name: NICK CURRAN  
Phone: (720) 420-5745  
Fax: (720) 420-5800  
email: nick.curran@iptenergyservices.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20130028     Gas Facility Surety ID: \_\_\_\_\_  
 Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: BURROUGHS SOUTH SENE    Number: PAD #1  
County: WELD  
Quarter: SENE    Section: 14    Township: 7N    Range: 65W    Meridian: 6    Ground Elevation: 4943

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: 2191 feet FNL from North or South section line  
230 feet FEL from East or West section line

Latitude: 40.574481    Longitude: -104.621094

PDOP Reading: 1.2    Date of Measurement: 06/04/2014

Instrument Operator's Name: DALLAS NIELSEN

## 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 #** 439635 **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>6</u>	Oil Tanks*	_____	Condensate Tanks*	_____	Water Tanks*	_____	Buried Produced Water Vaults*	_____
Drilling Pits	_____	Production Pits*	_____	Special Purpose Pits	_____	Multi-Well Pits*	_____	Modular Large Volume Tanks	_____
Pump Jacks	_____	Separators*	_____	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*	_____	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:

INTRA FLOWLINES ARE GENERALLY 3" (ALTHOUGH MAY BE 2") FUSION BONDED SCHEDULED 40 STEEL

## CONSTRUCTION

Date planned to commence construction: 12/10/2014 Size of disturbed area during construction in acres: 4.70  
Estimated date that interim reclamation will begin: 06/01/2015 Size of location after interim reclamation in acres: 1.57  
Estimated post-construction ground elevation: 4943

## 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? No

Reuse Facility ID: \_\_\_\_\_ or Document Number: \_\_\_\_\_

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

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: ANTHONY & VIOLA BURROUGHS Phone: \_\_\_\_\_

Address: 39701 CR 47

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

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

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

City: AULT State: CO Zip: 80610

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 10/07/2014

**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:	768 Feet	_____ Feet
Building Unit:	768 Feet	_____ Feet
High Occupancy Building Unit:	5280 Feet	_____ Feet
Designated Outside Activity Area:	5280 Feet	_____ Feet
Public Road:	217 Feet	_____ Feet
Above Ground Utility:	850 Feet	_____ Feet
Railroad:	5280 Feet	_____ Feet
Property Line:	230 Feet	_____ 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: 10/07/2014

## 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.

THIS PAD IS A WELLS-ONLY LOCATION. THE BURROUGHS NORTH AND BURROUGHS SOUTH LOCATIONS WILL BOTH FLOWBACK TO THE BURROUGHS PRODUCTION FACILITY PAD (LOC ID #439635)

## 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: 73 VONA SANDY LOAM

NRCS Map Unit Name: 44 OLNEY FINE SANDY LOAM

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: 06/09/2014

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: 3750 Feet

water well: 882 Feet

Estimated depth to ground water at Oil and Gas Location 180 Feet

Basis for depth to groundwater and 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 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 318A

## 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).

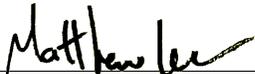
### OPERATOR COMMENTS AND SUBMITTAL

Comments CERTIFICATION LETTER TO THE DIRECTOR IS ATTACHED AS "OTHER"  
Surface owner waives the 30 day period. Signed waiver is attached.

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.  
Signed: \_\_\_\_\_ Date: 10/22/2014 Email: nick.curran@iptenergyservices.com

Print Name: NICK CURRAN Title: REG TECH

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: 12/5/2014

### 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 shall provide notice to COGCC 48 hours prior to commencing construction of this Oil and Gas Location via Form 42.
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### Best Management Practices

No	BMP/COA Type	Description
1	Planning	Multi-well Pads. It is a multi-well pad located in a manner which allows for resource extraction while maintaining the highest distances possible from the offsetting residential areas.
2	Traffic control	Access roads. The access road will be constructed to accommodate local emergency vehicles. This road will be maintained for access at all times
3	General Housekeeping	Fencing requirements. A permanent fencing plan will be reviewed by the surface owner, & the applicant.
4	General Housekeeping	Removal of surface trash. All trash, debris and material not intrinsic to the operation of the oil and gas facility shall be removed and legally disposed of as is applicable
5	Material Handling and Spill Prevention	Load-lines. All load-lines shall be bull-plugged or capped
6	Material Handling and Spill Prevention	8. Material Handling and Spill Prevention
7	Noise mitigation	Lighting abatement measures shall be implemented, including the installation lighting shield devices on all of the more conspicuous lights, low density sodium lighting where practicable; Operator will install temporary engineering controls consisting of perimeter sound walls that shall be used on location during drilling and completion activities. Permanent equipment on location shall be muffled to reduce noise, or shall be appropriately buffered.
8	Odor mitigation	Per Rule 805: Oil & gas facilities and equipment shall be operated in such a manner that odors and dust do not constitute a nuisance or hazard to public welfare.
9	Drilling/Completion Operations	Closed Loop Drilling Systems – Pit Restrictions. Not applicable; a closed-loop system will be used for drilling.
10	Drilling/Completion Operations	Blowout preventer equipment (“BOPE”). A double ram and annular preventer will be used during drilling. At least the drilling company shall have a valid well blowout prevention certifications.
11	Drilling/Completion Operations	BOPE for well servicing operations. Adequate BOP equipment shall be used. Stabbing valves shall be installed in the event of reverse circulation and shall be prior tested with low and high pressure fluid.
12	Drilling/Completion Operations	Pit level indicators. Not applicable; a closed-loop system will be used and no pits shall be dug
13	Drilling/Completion Operations	Drill stem tests. Not applicable; no Drill Stem tests are planned
14	Drilling/Completion Operations	Control of fire hazards. All materials which are considered fire hazards shall be a minimum of 25’ from the wellhead tanks or separators. Electrical equipment shall comply with API RP 500 and will comply with the current national electrical code. An emergency response plan has been generated for this site.
15	Drilling/Completion Operations	Guy line anchors. All guy line anchors shall be brightly marked pursuant to Rule 604.c (2)Q
16	Final Reclamation	Well site cleared. Within 90-day subsequent to the time of plugging and abandonment of the entire site, superfluous debris and equipment shall be removed from the site.
17	Final Reclamation	Identification of plugged and abandoned wells. P&A’d wells shall be identified pursuant to 319.a.(5).

Total: 17 comment(s)

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
901160	SURFACE AGRMT/SURETY
2477434	CORRESPONDENCE
2477455	RULE 306.E. WAIVER
400705762	FORM 2A SUBMITTED
400705802	ACCESS ROAD MAP
400705804	HYDROLOGY MAP
400705807	LOCATION PICTURES
400705808	MULTI-WELL PLAN
400705809	LOCATION DRAWING
400705810	WASTE MANAGEMENT PLAN
400705815	REFERENCE AREA MAP
400705817	REFERENCE AREA PICTURES
400714298	OTHER
400719016	NRCS MAP UNIT DESC
400719311	FACILITY LAYOUT DRAWING
400722864	30 DAY NOTICE LETTER

Total Attach: 16 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received. Changed date of planned construction per operator to 12/10/2014.	12/3/2014 9:22:11 AM
OGLA	No Public Comments. Operator provided a Rule 306.e. Waiver. OGLA task passed.	11/25/2014 10:12:24 AM
OGLA	IN PROCESS - Operator agreed to requested changes. OGLA review complete. Waiting on Public Comment period.	11/14/2014 11:15:41 AM
OGLA	ON HOLD - Requested removing production facility BMPs as this is a well only location, revise distance to nearest downgradient surface water feature, correct Related Remote Locations. Due by 12/14/14.	11/14/2014 10:25:40 AM
Permit	Operator corrected right to construct to oil and gas lease. Attached SUA with operator's signature.	11/13/2014 8:37:19 AM
Permit	Passed Buffer Zone completeness review. Signed waiver letter is attached as 30 Day Notice Letter. Pre-Application Notification Evidence letter dated 9/8/14 and attached as OTHER certifies that all Building Unit owners recieved the notification.	11/3/2014 4:41:24 PM
Permit	Resubmitted, my issues addressed, sending to OGLA for re-review.	10/29/2014 7:42:31 AM
Permit	Returned to Draft: 1. For reason's outlined by OGLA review 2. SUA not attached 3. NRCS map only attached for 73, not 44 OLNEY FINE SANDY LOAM	10/28/2014 1:35:20 PM
OGLA	Buffer Zone completeness review identified that a Facility Layout Drawing required by Rule 303.b.(3)J is not attached. The Noise Mitigation BMP states the operator is the landowner - this does not appear to be correct based on the parcel ownership on the Weld County Assessor website. Rule 305.a (2) Pre-Application Notification date is less than 30 days prior to form submittal. Return to DRAFT status	10/28/2014 12:08:23 PM
Permit	Within buffer zone, sent to OGLA for further review.	10/23/2014 7:47:52 AM

Total: 10 comment(s)