

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:

400654282

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Date Received:

09/10/2014

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:

**439530**

Expiration Date:

**10/29/2017**

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: Sonia Stephens  
Phone: (720) 420-5745  
Fax: (720) 420-5800  
email: Sonia.Stephens@iptenergyservic  
es.com

RECLAMATION FINANCIAL ASSURANCE

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

LOCATION IDENTIFICATION

Name: BURROUGHS NORTH    Number: NENE PAD #1  
County: WELD  
Quarter: NENE    Section: 14    Township: 7N    Range: 65W    Meridian: 6    Ground Elevation: 4947

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: 760 feet FNL from North or South section line  
355 feet FEL from East or West section line  
Latitude: 40.578419    Longitude: -104.621522  
PDOP Reading: 1.8    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 #** **FORM 2A DOC #**

Well Site is served by Production Facilities

400655044

## FACILITIES

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

Wells	<u>7</u>	Oil Tanks	_____	Condensate Tanks	_____	Water Tanks	_____	Buried Produced Water Vaults	_____
Drilling Pits	_____	Production Pits	_____	Special Purpose Pits	_____	Multi-Well Pits	_____	Temporary Large Volume Above Ground Tanks	_____
Pump Jacks	_____	Separators	_____	Injection Pumps	_____	Cavity Pumps	_____		
Gas or Diesel Motors	_____	Electric Motors	_____	Electric Generators	_____	Fuel Tanks	_____	Gas Compressors	_____
Dehydrator Units	_____	Vapor Recovery Unit	_____	VOC Combustor	_____	Flare	_____	LACT Unit	_____
								Pigging Station	_____

## OTHER FACILITIES

**Other Facility Type**

**Number**

Other Facility Type	Number

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: 10/15/2014 Size of disturbed area during construction in acres: 6.10

Estimated date that interim reclamation will begin: 04/15/2015 Size of location after interim reclamation in acres: 1.60

Estimated post-construction ground elevation: 4947

## 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: Jay Ann Pulis

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

Address: 1916 NE 101 St.

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

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

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

City: Kansas City State: MO Zip: 64155

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 07/28/2014

### 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

Distance to nearest:

Building: 472 Feet  
Building Unit: 505 Feet  
High Occupancy Building Unit: 5280 Feet  
Designated Outside Activity Area: 5280 Feet  
Public Road: 346 Feet  
Above Ground Utility: 338 Feet  
Railroad: 5280 Feet  
Property Line: 105 Feet

### INSTRUCTIONS:

- All measurements shall be provided from center of nearest Well or edge of nearest Production Facility to nearest of each cultural feature as described in Rule 303.b.(3)A.  
- Enter 5280 for distance greater than 1 mile.  
- Building - nearest building of any type. If nearest Building is a Building Unit, enter same distance for both.  
- Building Unit, High Occupancy Building Unit, and Designated Outside Activity Area - as defined in 100-Series Rules.

## DESIGNATED SETBACK LOCATION INFORMATION

Check all that apply. This location is within a:  Buffer Zone  
 Exception Zone  
 Urban Mitigation Area

- Buffer Zone - as described in Rule 604.a.(2), within 1,000' of a Building Unit.  
- Exception Zone - as described in Rule 604.a.(1), within 500' of a Building Unit.  
- Urban Mitigation Area - as defined in 100-Series Rules.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: \_\_\_\_\_  
Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: 07/28/2014

## 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: 44; OLNEY FINE SANDY LOAM

NRCS Map Unit Name: 73; VONA 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: 06/04/2014

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: 3570 Feet

water well: 611 Feet

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

Basis for depth to groundwater and sensitive area determination:

CDWR Permit # 91338 receipt # 9065923  
NENE Section 14, Township 7North, Range 65W

Ditch is located +/- 342 to the east

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: No

## 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 THE BURROUGHS NORTH PAD WILL FLOW BACK TO THE BURROUGHS PRODUCTION FACILITY (400655044)  
CERTIFICATION LETTER TO THE DIRECTOR IS ATTACHED AS "OTHER"

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.  
Signed: \_\_\_\_\_ Date: 09/10/2014 Email: sonia.stephens@iptenergyservices.com

Print Name: Sonia Stephens Title: Project Manager

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: Matthew Lee Director of COGCC Date: 10/30/2014

### **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

<b>No</b>	<b>BMP/COA Type</b>	<b>Description</b>
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	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; and rig shrouding is not believed necessary, however, at its election the operator may install temporary engineering controls consisting of perimeter sound walls shall be used on the location during drilling and completion activities to provide noise relief. Permanent equipment on location shall be muffled to reduce noise, or shall be appropriately buffered.
7	Drilling/Completion Operations	Closed Loop Drilling Systems – Pit Restrictions. Not applicable; a closed-loop system will be used for drilling.
8	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.
9	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
10	Drilling/Completion Operations	Pit level indicators. Not applicable; a closed-loop system will be used and no pits shall be dug.
11	Drilling/Completion Operations	Drill stem tests. Not applicable; no Drill Stem tests are planned.
12	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.
13	Drilling/Completion Operations	Guy line anchors. All guy line anchors shall be brightly marked pursuant to Rule 604.c (2)Q.
14	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.
15	Final Reclamation	Identification of plugged and abandoned wells. P&A’d wells shall be identified pursuant to 319.a.(5).

Total: 15 comment(s)

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1668556	PROPERTY LINE WAIVER
1668557	CORRESPONDENCE
1668559	RULE 306.E. CERTIFICATION
400654282	FORM 2A SUBMITTED
400654533	LOCATION PICTURES
400654620	MULTI-WELL PLAN
400654630	ACCESS ROAD MAP
400654631	LOCATION DRAWING
400654887	HYDROLOGY MAP
400656056	WASTE MANAGEMENT PLAN
400658945	NRCS MAP UNIT DESC
400658951	REFERENCE AREA PICTURES
400658953	REFERENCE AREA MAP
400663167	FACILITY LAYOUT DRAWING
400681217	OTHER

Total Attach: 15 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	10/29/2014 10:30:17 AM
OGLA	No Public Comments. Operator provided the Rule 306.e. certification. OGLA task passed.	10/7/2014 9:33:35 AM
OGLA	IN PROCESS - Operator agreed to revise distance to nearest Building, Building Unit, downgradient surface water feature, change Sensitive Area designation to YES, removing the BMPs for production facilities and modified the Noise mitigation BMP. OGLA review complete. Waiting on Public Comment period.	9/26/2014 2:13:03 PM
OGLA	Operator has indicated the Property Line that is 105 feet away separates two tracts/parcels that are both owned by the Surface Owner. See attached Property Line Waiver.	9/26/2014 11:22:57 AM
OGLA	ON HOLD - Requested revising the distance to nearest Building, Building Unit, downgradient surface water feature. Change Sensitive Area designation to YES due to domestic water well within 1/8-mile. Remove BMPs for production facilities and modify the Noise mitigation BMP. Due by 10/26/14.	9/26/2014 11:18:44 AM
Permit	Passed Completeness	9/12/2014 11:08:57 AM
OGLA	Passed Buffer Zone completeness check, Building Unit distance on form does not match Location dwg correct during technical review	9/11/2014 4:14:56 PM
Permit	Within Buffer Zone, sent to John Noto for further review.	9/11/2014 8:20:10 AM

Total: 8 comment(s)