

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:

400571188

Date Received:

03/21/2014

Oil and Gas Location Assessment

New Location Refile Amend Existing Location Location#: 432252

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:

432252

Expiration Date:

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: (303) 928-7128

Fax: (303) 218-5678

email: regulatory@petro-fs.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20130028

Gas Facility Surety ID: _____

Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: Hiner

Number: 36 Pad

County: WELD

Quarter: NENE Section: 36 Township: 6N Range: 66W Meridian: 6 Ground Elevation: 4662

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: 940 feet FNL from North or South section line

904 feet FEL from East or West section line

Latitude: 40.449431 Longitude: -104.719093

PDOP Reading: 1.4 Date of Measurement: 01/22/2014

Instrument Operator's Name: Tommy Burden

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>8</u>	Oil Tanks	<u>24</u>	Condensate Tanks	<u> </u>	Water Tanks	<u>4</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>	Temporary Large Volume Above Ground Tanks	<u> </u>
Pump Jacks	<u> </u>	Separators	<u> </u>	Injection Pumps	<u> </u>	Cavity Pumps	<u> </u>		
Gas or Diesel Motors	<u> </u>	Electric Motors	<u> </u>	Electric Generators	<u> </u>	Fuel Tanks	<u> </u>	Gas Compressors	<u> </u>
Dehydrator Units	<u> </u>	Vapor Recovery Unit	<u>4</u>	VOC Combustor	<u> </u>	Flare	<u> </u>	LACT Unit	<u> </u>
								Pigging Station	<u> </u>

OTHER FACILITIES

Other Facility Type

Number

Emission Control Devices	<u>8</u>
VRT's Vapor Recovery Towers	<u>2</u>

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

3" Schedule 80 Steel pipe from wellhead to separators, 1 line per well. 2" Schedule 40 Steel pipe for oil and water from separators to tanks.

CONSTRUCTION

Date planned to commence construction: 05/01/2014 Size of disturbed area during construction in acres: 5.82

Estimated date that interim reclamation will begin: 11/01/2014 Size of location after interim reclamation in acres: 2.91

Estimated post-construction ground elevation: 4662

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: Commercial Disposal

Cutting Disposal: OFFSITE Cuttings Disposal Method: Other

Other Disposal Description:

Cuttings will be disposed of by land spreading.

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: RM Hiner Construction Phone: 719-336-3467
 Address: 11 Austin Road Fax: _____
 Address: _____ Email: _____
 City: Lamar State: CO Zip: 80152
 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

Distance to nearest:

Building: 492 Feet
Building Unit: 516 Feet
High Occupancy Building Unit: 1394 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 583 Feet
Above Ground Utility: 539 Feet
Railroad: 5280 Feet
Property Line: 400 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: 02/10/2014

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: 01/31/2014

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: 3 Aquolls and Aquents, gravelly substratum

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: 01/22/2014

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: 426 Feet

water well: 966 Feet

Estimated depth to ground water at Oil and Gas Location 6 Feet

Basis for depth to groundwater and sensitive area determination:

CDWR Permit 45975

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

Rule 318.A.a. Surface Owner Exception Location Consent has been waived and addressed in the Surface Use Agreement, which is attached and highlighted in Section 15. Specific BMPs for Hiner 36 Pad have been added for Floodplain/Floodway and addressing Urban Mitigation Area. Operator has provided the required pre-application notifications to all Building Unit Owners within the Buffer Zone Setback pursuant to Rule 305.a. Due to the fact that there are over forty (4) building unit owners, attached please find Operator Certification letter to the Director, per Rule 303.b.(3) J.iii that Extraction has complied with the Pre-application notices and proof of receipt is on file at their office.

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

Signed: _____ Date: 03/21/2014 Email: regulatory@petro-fs.com

Print Name: Sonia Stephens Title: Regulatory Technician

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: _____

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

<u>COA Type</u>	<u>Description</u>

Best Management Practices

No BMP/COA Type

Description

1	Planning	Multi-well Pads are located in a manner that allows for resource extraction while maintaining the highest distances possible from the offsetting residential areas and complies with the wishes of the surface owner.
2	Planning	Visual Impacts: All long term facility structures will be painted a color that enables the facilities to blend in with the natural background color of the landscape, as seen from a viewing distance and location typically used by the public. Maintain appearance with garbage clean-up; a trash bin will be located on site to accumulate waste by the personnel drilling the wells. Site will have unused equipment, trash and junk removed immediately.
3	Planning	Light sources during all phases of operations will be directed downwards and away from occupied structures where possible. Once the drilling and completion rigs leave the site, there will be no permanently installed lighting on site. Lighting shall be mounted at compressor stations on a pole or building and directed downward to illuminate key areas within the facility, while minimizing the amount of light projected outside the facility.
4	Planning	Operator has applied for and submitted a Flood Hazard Development Permit (FHDP) application to Weld County, which is currently being processed for approval.
5	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. Traffic will be routed to minimize local interruption.
6	General Housekeeping	Removal of 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 applicable.
7	General Housekeeping	Fencing: A meeting with the surface owner will determine a fencing plan.
8	Material Handling and Spill Prevention	Leak Detention Plan: Pumper will visit the location daily and visually inspect all tanks and fittings for leaks. Additionally, monthly documented SPCCP inspections are conducted pursuant to 40 CFR 112.
9	Material Handling and Spill Prevention	Tank Specifications: Tanks will be designed, constructed and maintained in accordance with NFPA Code 30. The tanks are visually inspected once a day for issues, and recorded inspections are conducted once a month.
10	Construction	Berm Construction: Tank berms shall be constructed of steel rings with a synthetic or engineered liner and designed to contain 150% of the capacity of the largest tank. All berms will be visually checked periodically to ensure proper working condition.

11	Construction	Proposed tanks included within the location will be anchored. Tank anchoring will be performed in the manner previously agreed upon with the Weld County Stormwater and Floodplain Management Division, as stated in the FHDP application to Weld County.
12	Noise mitigation	Noise: The drill site will be powered by electricity, mitigating the majority of noise from drilling operations. Sound walls and/or hay bales will be used to surround the well site during drilling operations.
13	Emissions mitigation	Green Completions: Emission Control System. Test separators and associated flow lines and sand traps shall be installed on-site to accommodate green completions techniques pursuant to COGCC Rules. In the anticipated absence of a viable gas sales line, the flowback gas shall be thermally oxidized in an emissions control device (ECD), which will be installed and kept in operable condition for least the first 90-days of production pursuant to CDPHE rules. This ECD shall have an adequate capacity for 1.5 times the largest flowback within a 10 mile radius, will be flanged to route gas to other or permanent oxidizing equipment and shall be provided with the equipment needed to maintain combustions where non-combustible gases are present.
14	Drilling/Completion Operations	A closed-loop system will be used for drilling.
15	Drilling/Completion Operations	Blowout Prevention Equipment ("BOPE"): A double ram and annular preventer will be used during drilling. Stabbing valves shall be installed in the event of reverse circulation and shall be prior tested with low and high pressure fluid.
16	Drilling/Completion Operations	No drill stem tests are planned.
17	Drilling/Completion Operations	Control of fire hazards: All material that is considered a fire hazard shall be a minimum of 25' from the wellhead tanks or separators. Electrical equipment shall comply with API IRP 500 and will comply with the current national electrical code.
18	Drilling/Completion Operations	All guy line anchors shall be brightly marked pursuant to Rule 604.c (2) Q.
19	Drilling/Completion Operations	Bradenhead Monitoring: Operator will comply with COGCC Policy for Bradenhead Monitoring during Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated May 29, 2012.
20	Drilling/Completion Operations	Anti-Collision: Prior to drilling operations. Operator will perform an anti-collision scan of existing offset wells that have the potential of being within close proximity of the proposed wells. The anti-collision scan will include definitive MWD or gyro surveys of the offset wells with included error of uncertainty per survey instrument, and compared against the proposed wellpath with its respective error of uncertainty. If current surveys do not exist for the offset wells, operators may have gyro surveys conducted to verify bottomhole location. The proposed well will only be drilled if the anti-collision, or harm to people or the environment. For the proposed well, upon conclusion of drilling operations, a constructed survey will be submitted to COGCC with the Form 5.
21	Final Reclamation	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.
22	Final Reclamation	Identification of plugged and abandoned wells will be identified pursuant to 319.a (5)

Total: 22 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400571188	FORM 2A SUBMITTED
400571302	LOCATION PICTURES
400571303	ACCESS ROAD MAP
400571307	NRCS MAP UNIT DESC
400571310	HYDROLOGY MAP
400571312	MULTI-WELL PLAN
400571965	SURFACE AGRMT/SURETY
400574237	REFERENCE AREA MAP
400574239	REFERENCE AREA PICTURES
400574400	CORRESPONDENCE
400576259	FACILITY LAYOUT DRAWING
400576263	LOCATION DRAWING
400577651	CORRESPONDENCE

Total Attach: 13 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Returned to draft. This form cannot be submitted until 30 days after notification of LGD, April 23, 2014, or later. Otherwise, this form has passed completeness.	3/24/2014 2:17:10 PM
Permit	Returned to draft. Require either certification of notifying the LGD or a waiver of notification from the LGD. Rule 305.a.1	3/24/2014 10:44:33 AM

Total: 2 comment(s)