

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:

400700991

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Date Received:

10/17/2014

Oil and Gas Location Assessment

☐ New Location ☐ Refile ☒ Amend Existing Location Location#: 438078

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:

438078

Expiration Date:

11/19/2017

☒ 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: 96155
Name: WHITING OIL & GAS CORPORATION
Address: 1700 BROADWAY STE 2300
City: DENVER State: CO Zip: 80290

Contact Information

Name: Michael Brown
Phone: (307) 237-9310
Fax: ()
email: ml_brown@bresnan.net

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20030110 ☐ Gas Facility Surety ID: _____
☐ Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: Horsetail Number: 19N-1924M-R
County: WELD
QuarterQuarter: SWSE Section: 19 Township: 10N Range: 57W Meridian: 6 Ground Elevation: 4748
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: 660 feet FSL from North or South section line
2616 feet FEL from East or West section line
Latitude: 40.818861 Longitude: -103.794103
PDOP Reading: 1.8 Date of Measurement: 09/30/2014
Instrument Operator's Name: Luke Perrin

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>2</u>	Condensate Tanks*	<u> </u>	Water Tanks*	<u>26</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> </u>	Separators*	<u> </u>	Injection Pumps*	<u>1</u>	Cavity Pumps*	<u> </u>	Gas Compressors*	<u> </u>
Gas or Diesel Motors*	<u> </u>	Electric Motors	<u> </u>	Electric Generators*	<u>1</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

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:

There will be approximately 100' of 4" High Pressure Fiberglass pipe from the pumps to the disposal well. There will be 4, 6, and 8 inch fiberglass pipe between the tanks and pumps. There will be 4 and 6 inch carbon steel pipe between the tanks and truck loadouts and existing pipeline corridor.

CONSTRUCTION

Date planned to commence construction: 11/26/2014 Size of disturbed area during construction in acres: 4.05
Estimated date that interim reclamation will begin: 04/26/2015 Size of location after interim reclamation in acres: 3.00
Estimated post-construction ground elevation: 4748

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: ONSITE Cuttings Disposal Method: Other

Other Disposal Description:

Bio-remediation

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: <u>RJM Land Company LLC</u>	Phone: <u>970-522-1560</u>
Address: <u>13217 CR 15</u>	Fax: _____
Address: _____	Email: _____
City: <u>Sterling</u> State: <u>CO</u> Zip: <u>80751</u>	

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: No

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 _____

CURRENT AND FUTURE LAND USE

Current Land Use (Check all that apply):

Crop Land: <input type="checkbox"/> Irrigated <input type="checkbox"/> Dry land <input type="checkbox"/> Improved Pasture <input type="checkbox"/> Hay Meadow <input type="checkbox"/> CRP
Non-Crop Land: <input checked="" type="checkbox"/> Rangeland <input type="checkbox"/> Timber <input type="checkbox"/> Recreational <input type="checkbox"/> Other (describe): _____
Subdivided: <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Residential

Future Land Use (Check all that apply):

Crop Land: <input type="checkbox"/> Irrigated <input type="checkbox"/> Dry land <input type="checkbox"/> Improved Pasture <input type="checkbox"/> Hay Meadow <input type="checkbox"/> CRP
Non-Crop Land: <input checked="" type="checkbox"/> Rangeland <input type="checkbox"/> Timber <input type="checkbox"/> Recreational <input type="checkbox"/> Other (describe): _____
Subdivided: <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> 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:	2940 Feet	2800 Feet
Building Unit:	2940 Feet	2800 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	5280 Feet	5280 Feet
Above Ground Utility:	5250 Feet	5020 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	660 Feet	710 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: 31 - Kim-Mitchell complex

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: 11/27/2013

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: 5280 Feet

water well: 2640 Feet

Estimated depth to ground water at Oil and Gas Location 70 Feet

Basis for depth to groundwater and sensitive area determination:

Water Well Permit #31990

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: No

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 609

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: This location is being amended to include a new well.

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

Signed: _____ Date: 10/17/2014 Email: ml_brown@bresnan.net

Print Name: Michael Brown Title: Agent

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: 11/20/2014

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	Storm Water/Erosion Control	Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with oil and gas development throughout the State of Colorado. BMPs will be constructed as necessary to prevent stormwater from leaving the construction site. BMPs used will vary according to the location, and will remain until the pad is reclaimed.
2	Material Handling and Spill Prevention	Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with oil and gas operations throughout the State of Colorado. <ul style="list-style-type: none">• Materials and fluids will be stored in a neat and orderly fashion.• Waste will be collected regularly and disposed of at an offsite facility.• Prompt cleanup is required of spills to minimize waste materials entering the stormwater runoff.• Drip pans will be used during fueling and maintenance to contain spills or leaks.• Cleanup of trash and discarded material will be done at the end of the work day.• Cleanup will consist of monitoring the road, location and any other work areas.• Material to be cleaned up includes trash, scrap, and contaminated soil.

Total: 2 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2238292	FACILITIES LAYOUT DRAWING
2477424	CORRESPONDENCE
400700991	FORM 2A SUBMITTED
400701208	LOCATION DRAWING
400701210	LOCATION PICTURES
400710830	SURFACE AGRMT/SURETY

Total Attach: 6 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	11/17/2014 10:04:58 AM
OGLA	IN PROCESS - Operator provided pipeline description, distances to cultural features from the facilities, and revised date planned to commence construction.	11/11/2014 1:20:07 PM
OGLA	ON HOLD - Requested pipeline description, distances from facilities to nearest Cultural features, and a revised date planned to commence construction.	11/11/2014 9:44:59 AM
Permit	Operator added additional facilities on the Facilities tab. 2 - oil tanks 1 - injection pump 1 - electric generator 26 - water tanks Facility layout drawing attached.	11/11/2014 9:07:31 AM
OGLA	No Public Comments. OGLA task passed.	11/7/2014 7:31:45 AM
Permit	Permit review complete 11/6/14	11/6/2014 11:05:55 AM
OGLA	Operator has indicated the first well at this location had issues with the cementing and will need to PA'd. The second well will be used for monitoring and after being used for monitoring, it will be converted to a salt water disposal well which will require the disturbance area and that all appropriate permits will be acquired prior to conversion. OGLA review complete. Waiting on Public Comment period.	10/30/2014 1:47:09 PM
Permit	Passed Completeness	10/17/2014 12:45:18 PM

Total: 8 comment(s)