

FORM
2A

Rev
04/18

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:

401478241

Date Received:

01/14/2019

Oil and Gas Location Assessment

New Location Refile Amend Existing Location Location#: _____

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:

461838

Expiration Date:

02/10/2022

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: 10177

Name: ENERPLUS RESOURCES (USA) CORPORATION

Address: 950 17TH STREET #2200

City: DENVER State: CO Zip: 80202

Contact Information

Name: Sarah Miller

Phone: (720) 279-5512

Fax: (720) 279-5550

email: smiller@enerplus.com

FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID (Rule 706): 20170023 Gas Facility Surety ID (Rule 711): _____
- Waste Management Surety ID (Rule 704): _____

LOCATION IDENTIFICATION

Name: Colorado Rivers Pad Number: _____

County: WELD

Quarter: NWNW Section: 33 Township: 8N Range: 67W Meridian: 6 Ground Elevation: 5177

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: 428 feet FNL from North or South section line

1037 feet FWL from East or West section line

Latitude: 40.624170 Longitude: -104.903650

PDOP Reading: 1.8 Date of Measurement: 06/30/2017

Instrument Operator's Name: Charlie Scott

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Karen and Robert Deselms

Phone: _____

Address: 3602 Buckeye St

Fax: _____

Address: _____

Email: _____

City: Fort Collins State: CO Zip: 80524-4501

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 _____

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:	1969 Feet	2135 Feet
Building Unit:	2068 Feet	2240 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	4206 Feet	4370 Feet
Above Ground Utility:	803 Feet	590 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	204 Feet	160 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

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: _____

- 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.
- Large UMA Facility - as defined in 100-Series Rules.

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.

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: 48—Olney fine sandy loam, 3 to 5 percent slopes

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: _____

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: 57 Feet

water well: 1906 Feet

Estimated depth to ground water at Oil and Gas Location 73 Feet

Basis for depth to groundwater and sensitive area determination:

The nearest water well that has been drilled is to the SE of the pad and is permit #191853. The water well to the SW of the pad that is permitted by Leonard and Susan Aldrige was field verified on 9/20/2018 and had not yet been drilled, and as of January 10, 2019 the Aldridges confirmed it has not yet been drilled. The nearest water feature is an intermittent stream to the south of the pad.

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: _____

Is the Location within a Floodplain? No Yes Floodplain Data Sources Reviewed (check all that apply)

Federal (FEMA)

State

County

Local

Other

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

WILDLIFE

- This location is included in a Wildlife Mitigation Plan
- This location was subject to a pre-consultation meeting with CPW held on _____

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- Rule 604.a.(1)A. Exception Zone (within 500' of a Building Unit) and is in an Urban Mitigation Area
- 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 Location Identification tab based off the San Juan 8-67-33-4C well.

Enerplus certifies that the MLVTs will be designed and implemented consistent with the COGCC Policy on the Use of Modular Large Volume Tanks in Colorado. MLVT Design Package, certified and sealed by a licensed professional engineer, is available upon request:
 Vendor of MLVT: Wellwater Solutions
 Manufacturer: Nalfo Fab-tech Inc., LLC
 Size and Volume: One (1) 156' diameter -40,000 BBLs
 Anticipated time frame on site: 90 days

This pad will be drilled out in phase development. Enerplus plans to drill the Avignon well into the unit to the west and the Arkansas well in the unit that drills to the south off of this pad initially. Enerplus plans to evaluate well results before committing to drilling out the remainder of the Colorado Rivers unit while also keeping interim reclamation timing in mind.

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

Signed: _____ Date: 01/14/2019 Email: smiller@enerplus.com
 Print Name: Sarah Miller Title: Permitting 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: 2/11/2019

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.

<u>COA Type</u>	<u>Description</u>
	Green Completions -Test separators and associated flow lines, sand traps and emission control systems shall be installed on-site to accommodate green completions techniques. When commercial quantities of salable quality gas are achieved at each well, the gas shall be immediately directed to a sales line or shut in and conserved. If a sales line is unavailable or other conditions prevent placing the gas into a sales line, the operator shall not produce the wells without an approved variance per Rule 805.b.(3)C.

Best Management Practices

No	BMP/COA Type	Description
1	Traffic control	<p>Enerplus shall ensure that at the time of construction, all leasehold roads shall be constructed to accommodate local emergency vehicle access requirements, and shall be maintained in a reasonable condition.</p> <p>Enerplus will work with the Weld County Public Works Department to determine the extent of a Traffic Management Plan if required. Enerplus will adhere to all required state, county and local government roadway requirements prior to the commencement of operations.</p>
2	General Housekeeping	All trash, debris, scrap or discarded material connected with the operations of the property shall be removed from the premises and disposed of in a legal manner.
3	Storm Water/Erosion Control	<p>Implement and maintain BMPs to control stormwater runoff in a manner that minimizes erosion, transport of sediment offsite, and site degradation. Location will comply with applicable Colorado stormwater permitting requirements and associated stormwater management plan (SWMP). Enerplus utilizes a ditch and berm around the perimeter of the pad to contain sediment and will install sediment traps when adequate slopes allow. At the conclusion of construction, disturbed areas not required for ongoing operations and the topsoil spoil pile will be seeded with an appropriate seed mix. Inspections will occur per CDPHE stormwater regulatory requirements and any evidence of stormwater erosion will be repaired. Culverts will be installed along the lease road and maintained clear of sediment where appropriate.</p>
4	Material Handling and Spill Prevention	Annual flowline testing will also occur according to COGCC rule 1104. Inspection and record retention of flowline testing will be in accordance per COGCC regulation. All records will be made available to the COGCC upon request.
5	Dust control	Operator shall employ practices for control of fugitive dust caused by their operations. Such practices shall include but are not limited to the use of speed restrictions, regular road maintenance, restriction of construction activity during high- wind days, and silica dust controls when handling sand used in hydraulic fracturing operations. Additional management practices such as road surfacing, wind breaks and barriers may be used.
6	Construction	Enerplus certifies that the MLVTs used during completion operations shall only hold fresh water and will be designed and implemented consistent with the COGCC June 13, 2014 Policy on the Use of Modular Large Volume Tanks in Colorado.
7	Emissions mitigation	<p>Enerplus will comply with Green Completion requirements in Rule 805b.(3). Enerplus will employ sand traps, surge vessels, separators, and tanks as soon as practicable during flowback and cleanout operations to safely maximize resource recovery and minimize releases to the environment. If it is safe and technically feasible, closed-top tanks shall utilize backpressure systems that exert a minimum of four (4) ounces of backpressure and a maximum that does not exceed the pressure rating of the tank to facilitate gathering and combustion of tank vapors. Vent/backpressure values, the combustor, lines to the combustor, and knock-outs shall be sized and maintained so as to safely accommodate any surges the system may encounter.</p>
8	Odor mitigation	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	Interim Reclamation	Operator shall be responsible for segregating the topsoil, backfilling, re-compacting, reseeding, and re-contouring the surface of any disturbed area so as not to interfere with Owner's operations and shall reclaim such area to be returned to pre-existing conditions as best as possible with control of all noxious weeds.

Total: 9 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2479002	LOCATION DRAWING
2479003	CORRESPONDENCE
401478241	FORM 2A SUBMITTED
401897452	NRCS MAP UNIT DESC
401904237	SURFACE AGRMT/SURETY
401904245	SURFACE AGRMT/SURETY
401904247	HYDROLOGY MAP
401904249	MULTI-WELL PLAN
401904261	ACCESS ROAD MAP
401904269	LOCATION PICTURES
401904341	WASTE MANAGEMENT PLAN

Total Attach: 11 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	02/11/2019
OGLA	No Public Comments. OGLA task passed.	02/08/2019
Permit	Permitting Review Complete.	02/06/2019
OGLA	Operator updated the Location Drawing to show all proposed wells and confirmed the estimated post-construction ground elevation. OGLA review completed. Waiting on Public Comment period.	02/04/2019
OGLA	Requested operator update the Location Drawing to show all proposed wells and confirm the estimated post-construction ground elevation. Due by 3/4/19.	02/04/2019
Permit	Passed completeness.	01/16/2019

Total: 6 comment(s)