

FORM
2A

Rev
02/20

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:

402442946

(SUBMITTED)

Date Received:

07/29/2020

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 <https://cogcc.state.co.us/> for all accompanying information pertinent this Oil and Gas Location Assessment.

Location ID:

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: 10177

Name: ENERPLUS RESOURCES (USA) CORPORATION

Address: 950 17TH STREET #2200

City: DENVER State: CO Zip: 80202

Contact Information

Name: Jacob Everhart

Phone: (720) 279-6743

Fax: ()

email: jeverhart@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: Calgary Streets

Number: _____

County: WELD

Quarter: SWSW Section: 26 Township: 8N Range: 67W Meridian: 6 Ground Elevation: 5154

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: 345 feet FSL from North or South section line

247 feet FWL from East or West section line

Latitude: 40.626263 Longitude: -104.868635

GPS Quality Value: 1.6 Type of GPS Quality Value: PDOP

Date of Measurement: 02/13/2020

Instrument Operator's Name: Allen Shaffett

LOCAL GOVERNMENT INFORMATION

County: WELD

Municipality: N/A

Per § 34-60-106 (1)(f)(I)(A), the following questions pertain to the "local government with jurisdiction to approve the siting of the proposed oil and gas location."

The local government with jurisdiction is: County

Does the local government with jurisdiction regulate the siting of Oil and Gas Locations, with respect to this location? If the local government does regulate the siting, but has waived its right to precede the COGCC in siting determination, indicate by selecting "YES" here and selecting "Waived" for the disposition below.

☒ Yes ☐ No

If yes, in checking this box, I hereby certify that an application has been filed with the local government with jurisdiction to approve the siting of the proposed oil and gas location. ☒

The local government siting permit type is: 1041WOGLA20-0050

The local government siting permit was filed on: 05/27/2020

The disposition of the application filed with the local government is: Approved

Additional explanation of local process:

1041WOGLA20-0050 approved on 7/23/2020

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>5</u>	Condensate Tanks* <u> </u>	Water Tanks* <u>2</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>1</u>
Pump Jacks <u>8</u>	Separators* <u>2</u>	Injection Pumps* <u> </u>	Cavity Pumps* <u> </u>	Gas Compressors* <u>4</u>
Gas or Diesel Motors* <u> </u>	Electric Motors <u> </u>	Electric Generators* <u> </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>1</u>

OTHER FACILITIES*

Other Facility Type

Number

<u>Meter Building</u>	<u>1</u>
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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:

8 - 2" Steel Gas Line, 8 - 6" Steel Gas Line, 8 - 8" Steel Gas Line, 2 - 4" Steel Gas Line, 2 - 4" Poly Water Line, 1 - 8" Gathering Line

CONSTRUCTION

Date planned to commence construction: 11/01/2020 Size of disturbed area during construction in acres: 7.90
Estimated date that interim reclamation will begin: 11/01/2021 Size of location after interim reclamation in acres: 7.90
Estimated post-construction ground elevation: 5153

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? Yes

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Method: Recycle/reuse

Cutting Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted? Yes

Reuse Facility ID: 475549 or Document Number: _____

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

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Enerplus Resources (USA)

Phone: 720-279-6743

Address: 950 17th Street #2200

Fax: _____

Address: _____

Email: jeverhart@enerplus.com

City: Denver State: CO Zip: 80202

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: applicant is owner

Surface damage assurance if no agreement is in place: _____ Surface Surety ID: _____

Date of Rule 306 surface owner consultation _____

If this Form 2A is associated with Drilling and Spacing Unit applications, list docket number(s) below:

180100058

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:	5280 Feet	5280 Feet
Building Unit:	5280 Feet	5280 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	4989 Feet	4840 Feet
Above Ground Utility:	4845 Feet	4666 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	247 Feet	80 Feet
School Facility::	5280 Feet	5280 Feet
School Property Line:	5280 Feet	5280 Feet
Child Care Center:	5280 Feet	5280 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, Designated Outside Activity Area, School Facility, and Child Care Center – as defined in 100 Series Rules.
- For measurement purposes only, Production Facilities should only include those items with an asterisk(*) on the Facilities Tab.

SCHOOL SETBACK INFORMATION

Was Notice required under Rule 305.a.(4)? ☐ Yes ☒ No

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.
- Large UMA Facility – 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 (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): Crop field

WATER RESOURCES

Is this a sensitive area: ☒ No ☐ Yes

Distance to nearest

downgradient surface water feature: 140 Feet

water well: 5634 Feet

Estimated depth to ground water at Oil and Gas Location 389 Feet

Basis for depth to groundwater and sensitive area determination:

Based on water well permit #116657 belonging to Philip Kennedy, northeast of the planned location.

There is a permitted water well 2414' to the SE of the proposed location, however, this well has not been drilled at the time this application was submitted.

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 _____

Operator Proposed Wildlife BMPs

No BMP

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	<p>The footages & latitude/longitude used on the Form 2A are in reference to the proposed Crowchild 7-67-3-34C.</p> <p>The DSU associated with this pad is Order No. 407-2359 & 535-939.</p> <p>Due to siting restrictions, Enerplus is limited on the area available to develop this location. In accordance with rule 1003.b. Interim reclamation of areas no longer in use, Enerplus is maximizing the use of the working pad space and considers the limited working area to be deemed reasonably necessary for production operations of this site.</p> <p>Operator will ensure the new oil and gas operations align with the spirit of the new regulations of protecting public health, safety, welfare, the environment and wildlife resources set by SB 19-181. The location does not meet any of the Director's Objective Criteria.</p>
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I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: _____ Date: 07/29/2020 Email: jeverhart@enerplus.com

Print Name: Jacob Everhart Title: Regulatory Coordinator

Based on the information provided herein, this Oil and Gas Location Assessment complies with COGCC Rules, applicable orders, and SB 19-181 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

Best Management Practices

No	BMP/COA Type	Description
1	Traffic control	Operator shall ensure that at the time of construction that all leasehold roads shall be constructed to accommodate local emergency vehicle access requirements and shall be maintained in a reasonable condition. Operator worked with the Weld County Public Works Department to develop a road maintenance agreement and specific haul routes.
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	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). Operator 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.

4	Material Handling and Spill Prevention	The wells will be equipped with remote shut-in capabilities prior to commencing production. Remote capabilities include the ability to shut-in the well via a SCADA computer system for gathering, monitoring, and analyzing data in real time. Operator will also have remote monitoring and shut down capabilities including automatic shutdown pressure devices installed on process vessels. All produced fluids are routed onsite via subsurface pipelines to separators and then to the oil and produced water storage tanks at this tank battery.
5	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.
6	Dust control	Operator shall employ practices for control of fugitive dust caused by their operations. Such practices shall include the use of speed restrictions, regular road maintenance, restriction of construction activity during high-wind days, watering of lease roads and pad during construction, 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.
7	Construction	Visual Impacts: Equipment, regardless of construction date, which are observable from any public highway shall be painted with uniform, non-contrasting, non-reflective color tones (similar to the Munsell Soil Color Coding System), and with colors matched to, but slightly darker than, the surrounding landscape.
8	Construction	Operator 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.
9	Emissions mitigation	Associated Gas Flaring BMP. Following the last stage of separation associated gas will flow through a liquid knockout drum to remove entrained liquid phases. Following the liquid knockout drum, associated gas will flow to a smokeless combustion device capable of a 98% control efficiency. The combustion device will be equipped with a continuous pilot gas flame and an auto-ignitor. Operator will comply with all applicable Colorado Air Pollution Control Division requirements to ensure adequate design and operation of the control device is maintained.
10	Emissions mitigation	Light sources during all phases of operations will be directed downwards and away from occupied structures.
11	Odor mitigation	Operator will use D822 as the base fluid which is a distillate. The characteristics of D822 allow for benefits stemming from lower BTEX levels and lower odor levels when compared to traditional diesel oil-based mud. If odor complaints are received and it is determined that they are caused by the invert drilling fluid, other mitigation steps will be reviewed which may involve the use of chemical additives to mitigate odor impacts. When planning a location, operator will take special consideration to the orientation of the drilling rig to the residential units to minimize the odor impacts. Operator will inspect the site for sources of Odor within 24 hours of a complaint and implement additional odor controls when necessary.
12	Interim Reclamation	Operator shall be responsible for segregating the topsoil, backfilling, re-compacting, reseeded, cross-ripping compacted soils, and re-contouring the surface of any disturbed area so as not to interfere with Owner's operations. Areas not required for ongoing production operations or not required for subsequent drilling operations to be commenced within twelve months shall be reclaimed per COGCC Interim Reclamation requirements.

Total: 12 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
402447675	NRCS MAP UNIT DESC
402447676	HYDROLOGY MAP
402447687	LOCATION PICTURES
402447694	ACCESS ROAD MAP
402447768	WASTE MANAGEMENT PLAN
402447804	MULTI-WELL PLAN
402456115	LOCATION DRAWING
402461384	CONST. LAYOUT DRAWINGS

Total Attach: 8 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	This Form is being returned to Draft for the following updates: 1. The Construction Layout Drawing does not meet guidance. The production facility is not included on the drawing. 2. Verify the MLVT count in the Facilities section.	08/04/2020

Total: 1 comment(s)

Public Comments

No public comments were received on this application during the comment period.

