

FORM
2A

Rev
08/19

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:

402216196

(RESUBMITTED)

Date Received:

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:

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: 10651
Name: VERDAD RESOURCES LLC
Address: 5950 CEDAR SPRINGS ROAD
City: DALLAS State: TX Zip: 75235

Contact Information

Name: Heather Mitchell
Phone: (720) 845-6917
Fax: ()
email: regulatory@verdadoil.com

FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID (Rule 706): 20170009 Gas Facility Surety ID (Rule 711): _____
- Waste Management Surety ID (Rule 704): _____

LOCATION IDENTIFICATION

Name: Georgene Number: 2828-2833
County: WELD
Quarter: SESE Section: 28 Township: 2N Range: 64W Meridian: 6 Ground Elevation: 5018

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: 226 feet FSL from North or South section line
641 feet FEL from East or West section line
Latitude: 40.102705 Longitude: -104.549059

PDOP Reading: 1.6 Date of Measurement: 07/22/2019

Instrument Operator's Name: Brent Garcia

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: 1041 WOGLA _____

The local government siting permit was filed on: _____

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

Additional explanation of local process:

WOGLA19- 0009 was approved 11/14/2019

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	8	Oil Tanks*	8	Condensate Tanks*	_____	Water Tanks*	4	Buried Produced Water Vaults*	_____
Drilling Pits	_____	Production Pits*	_____	Special Purpose Pits	_____	Multi-Well Pits*	_____	Modular Large Volume Tanks	1
Pump Jacks	_____	Separators*	8	Injection Pumps*	_____	Cavity Pumps*	_____	Gas Compressors*	1
Gas or Diesel Motors*	_____	Electric Motors	_____	Electric Generators*	_____	Fuel Tanks*	_____	LACT Unit*	1
Dehydrator Units*	_____	Vapor Recovery Unit*	3	VOC Combustor*	4	Flare*	_____	Pigging Station*	_____

OTHER FACILITIES*

<u>Other Facility Type</u>	<u>Number</u>
Air compressor	1
Heater Treater	1
Sales meter	1
VRT	2

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:

The majority of flowlines will be schedule 80 FBE welded steel including: (8) 3" flowlines from the wellheads to the separators (8) 3" gas injection lines from the compressor to the wellheads, (8) 2" dump lines from the separators to the tanks, and (8) 1" gas supply lines from the wellheads to the separators. Poly will be utilized to supply gas to the tubing motor valves, including (8) 1"lines from the separators to the motor valves on the wellheads.

CONSTRUCTION

Date planned to commence construction: 05/01/2020 Size of disturbed area during construction in acres: 7.60
Estimated date that interim reclamation will begin: 11/01/2020 Size of location after interim reclamation in acres: 4.20
Estimated post-construction ground elevation: 5018

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: 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: James J. Brnak

Phone: _____

Address: P.O. Box 305

Fax: _____

Address: _____

Email: _____

City: Keenesburg State: CO Zip: 80643

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 11/14/2017

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

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:	2124 Feet	1738 Feet
Building Unit:	2215 Feet	1812 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	217 Feet	43 Feet
Above Ground Utility:	254 Feet	82 Feet
Railroad:	438 Feet	526 Feet
Property Line:	226 Feet	54 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: Colby Loam, 1 to 3 percent slopes

NRCS Map Unit Name: Weld loam, 1 to 3 percent slopes

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: 335 Feet

water well: 1108 Feet

Estimated depth to ground water at Oil and Gas Location 25 Feet

Basis for depth to groundwater and sensitive area determination:

The basis for the depth to groundwater is Rulh, GH (Permit #10155-R, Receipt #9060286) ~7700' southwest of the proposed pad location. The total depth of the well according to the permit is 25'.

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 318A

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 The Georgene 2833-01H is the reference well used for this location identification. The distances for the cultural setbacks were provided from the nearest proposed well and equipment on the pad.
Facility layout is not required because there are no BUO within 1000' of the location.
Surveyors identified a low area that collects surface water at ~335' from the location. This is not mapped on the COGCC website, but it is indicated on the hydrology map.

1041 WOGLA application, has not yet been submitted.

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

Signed: _____ Date: _____ Email: regulatory@verdadoil.com

Print Name: Heather Mitchell Title: Regulatory Manager

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	Planning	Verdad will submit a WOGLA application with Weld county that addresses site safety and contains an emergency action and tactical response plan. Each location is assigned a physical address for emergency responders to locate the site in the event of an emergency.
2	General Housekeeping	Cleanup of trash, scrap, and discarded materials will be conducted at the end of each workday.
3	General Housekeeping	Mud control: Operator will implement effective, temporary vehicle tracking control at the location egress to prevent transport of sediment offsite and onto the public road during construction, drilling, completions, stimulation, and flowback operations. Appropriate vehicle tracking control, such as a properly sized cattle guard or 2-inch to 4-inch stone, will still be required during production operations.

4	Storm Water/Erosion Control	<p>A Stormwater management plan (SWMP) will be in place to address construction, drilling, and operations associated with the CDPHE permit. Control measures for stormwater will be implemented around the perimeter of the pad prior to construction. The control measures will include: a diversion ditch and berm around the perimeter of the pad disturbance, to keep stormwater from flowing off the pad, with a culvert at the access road to allow stormwater to flow freely around the pad to sediment removal control measures; two sediment traps with armored inlets and outlets at the northwest and southwest corners of the pad to detain stormwater runoff from the pad and allow sediment to settle from the stormwater; and wattles at the sediment trap outlets to slow the departure of the water from the sediment trap and further remove any remaining sediment from the stormwater as well as a crop vegetative buffer over 200 feet to the North and over 1000 feet to the Northwest, the most likely directions of flow from the sediment trap outlets. These control measures will remain in place and maintained throughout operations until final reclamation and be modified as appropriate to observations during Stormwater inspections. The control measures described and the local natural gradient will direct stormwater flow to the Northwest and North, away from the intermittent drainage low spot or pond 335 feet from the east of the pad. Every 14 days during construction, drilling and completions.</p> <p>Once per month after that, until interim reclamation is completely established (approximately 2 years).</p> <p>Once per year after that until facility abandoned</p>
5	Material Handling and Spill Prevention	<p>During drilling operations, we anticipate 4-5 loads, @ 20 yards per load, of cuttings per day will be transported off-site to an approved disposal facility in accordance with Operator's waste management plan. All loads leaving the location will have a manifest and will be documented. Water-based and Oil-based cuttings will be disposed of offsite and at a licensed, commercial disposal site. No cuttings will be stored on location.</p>
6	Material Handling and Spill Prevention	<p>During drilling operations 12 inches of cement is placed under the rig surrounded by a compacted soil berm to prevent any soil contamination. Drilling mud is stored in large volume tanks that will be surrounded by impervious secondary containment</p>
7	Material Handling and Spill Prevention	<p>Separators are encompassed by steel berms and surrounded road base that is approximately 1-2 feet and it is sufficiently impervious per SPCC regulation to greatly minimize impact to the soil from any potential leak or drip from the separators. Sites are visited daily so a spill would be detected and cleaned up before any significant infiltration could occur. The berms would contain a spill from leaving the area around the separators.</p>
8	Material Handling and Spill Prevention	<p>To minimize potential impacts to soil, the operator shall line the secondary containment areas for the tanks with an impervious poly or spray in liner.</p>
9	Material Handling and Spill Prevention	<p>Verdad wells have remote shut-in capabilities to mitigate spills and safety issues. Remote shut-in will allow Verdad to immediately shut a well in the event of a reported problem on location or in the event of a potential threat such as a grass fire or flood.</p>
10	Dust control	<p>To prevent dust from becoming a nuisance to the public, water trucks will be utilized to spread water across any dust problem areas.</p>
11	Construction	<p>MLVT Size is 120'DX14'H and the volume is 25,000 BBLs. Vendor/Manufacture will be Select Energy Services. It will be on location for 45 days during completion operations. Verdad will follow the COGCC guidance policy dated June 13, 2014 on the use of MLVTs.</p>
12	Noise mitigation	<p>Operator will consult with owners of residents and occupied structures and other stakeholders to reduce impact of noise and light during drilling and completion operations. The direction of prevailing winds is considered when planning the location in order to mitigate odor and noise from being a nuisance to the surrounding residents and occupied structures. In order to minimize sound levels during drilling operations at nearby residences, rig generators will be located as far as possible from the residence by rig orientation. Rig lighting will also be directed away from residential units.</p>

13	Emissions mitigation	To reduce odors during drilling and completion, the rig will be washed of oily debris before moving in. D822 is our base fluid which is a distillate and has the benefits of lower BTEX levels and is recognized as having lower odor than traditional oil based mud. We will utilize drying shakers or vertical dryers which will minimize residual oil on cuttings prior to transport and will promptly remove 4-5 loads of cuttings per day during drilling operations which should help to reduce odors.
14	Emissions mitigation	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
15	Emissions mitigation	AVO (Audio, Visual, Olfactory) inspections of pipe and connections will be performed daily on production equipment to detect leaks which will be immediately corrected, repaired and reported to COGCC as required.

Total: 15 comment(s)

Attachment Check List

Att Doc Num	Name
402216196	FORM 2A SUBMITTED
402265830	FORM 2A REJECTED
402267006	MULTI-WELL PLAN
402267007	ACCESS ROAD MAP
402267010	HYDROLOGY MAP
402267011	LOCATION DRAWING
402267013	LOCATION PICTURES
402267018	NRCS MAP UNIT DESC
402267021	WASTE MANAGEMENT PLAN
402267026	SURFACE AGRMT/SURETY

Total Attach: 10 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA (Rejected)	<p>This application has been reviewed by COGCC staff and cannot be approved based on the information submitted; therefore, the COGCC is rejecting this application consistent with the Rejection Process – Form 2 and 2A (May 21, 2019) posted in the Form 2 and Form 2A Instructions section of our website. In compliance with § 24-65.1-108(1), C.R.S., the COGCC is returning this application to the applicant to remedy the deficiencies. The applicant may resubmit this application for COGCC review; upon determination of completeness for any resubmitted application, the COGCC will have 60 days in which to approve, deny, or request all additional information necessary to complete the regulatory review.</p> <p>In addition to all standard required information and attachments, the COGCC hereby confirms the following information is necessary prior to determination of completeness:</p> <ol style="list-style-type: none"> 1. Location Drawing update. The disturbed area in the Location Drawing does not include the area disturbed by the spoil pile. The equipment on the Location Drawing does not match the equipment listed in the Facilities section of the Form 2A. The name on the Location Drawing does not match the name on the Form 2A. 2. Multi-Well Plan update. Two separate Multi-Well Plans were submitted for the location, each covering four of the wells. These will need to be combined into one Multi-Well Plan, showing all of the wells. Check naming convention for consistency with Form 2A. 3. Location Pictures. The name on the Location Pictures does not match the Form 2A. 4. Hydrology Map. The name on the Hydrology Map does not match the Form 2A. 5. Operator Contact and Submitter email addresses are incorrect. 6. Pipeline descriptions. The discussion of pipelines only covers four of the wells on location. 7. Size of disturbed area during construction in acres. The size listed on the Form 2A does not include the spoil pile on location. 8. Depth to water. For water wells in this area, wells drawing from the Laramie-Foxhills aquifer will not be representative of depth to water. New sources for determining depth to water will be needed. 	12/17/2019
LGD	<p>This proposed oil and gas location is situated in the Agricultural Zone District of unincorporated Weld County. A 1041 Weld Oil and Gas Location Assessment (WOGLA) is required prior to constructing any improvements related to oil and gas exploration and production.</p> <p>The operator HAS notified the Weld County LGD of their intent to apply for a WOGLA, but HAS NOT submitted an application as of this comment. 1041WOGLA19-0025 has been assigned to this location, and any files associated with this location are viewable online under Weld County's E-Permit Center.</p> <p>A building permit is required for the production facilities (tank battery, separators, pump jacks, compressors, generators, etc.) from the Department of Planning Services. Access points from County roads require an Access Permit from the Department of Public Works, which includes any necessary traffic control plans and Improvement Agreements. The use of County right-of-way requires a permit from the Department of Public Works.</p> <p>Jason Maxey, Director - Oil Gas Energy Department and LGD 970-400-3580</p>	12/16/2019
OGLA	Begin OGLA technical review.	12/09/2019
OGLA	Completeness - Passed	12/03/2019

Total: 4 comment(s)

Public Comments

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

