

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:

402052168

Date Received:

06/25/2019

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:

471794

Expiration Date:

02/23/2023

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: Fiscus Fed Number: 2627

County: WELD

Quarter: SWNW Section: 26 Township: 9N Range: 58W Meridian: 6 Ground Elevation: 4775

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: 1833 feet FNL from North or South section line

439 feet FWL from East or West section line

Latitude: 40.724553 Longitude: -103.838864

PDOP Reading: 1.2 Date of Measurement: 09/26/2016

Instrument Operator's Name: Eric Purcell

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: WOGLA

The local government siting permit was filed on: 09/04/2019

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

Additional explanation of local process:

1041 WOGLA 19-0018 was submitted 9/4/2019 and approved 10/31/2019

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	<u>5</u>	Oil Tanks*	<u>10</u>	Condensate Tanks*	<u> </u>	Water Tanks*	<u>5</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> </u>	Separators*	<u>5</u>	Injection Pumps*	<u> </u>	Cavity Pumps*	<u> </u>	Gas Compressors*	<u>1</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>2</u>	VOC Combustor*	<u>4</u>	Flare*	<u> </u>	Pigging Station*	<u> </u>

OTHER FACILITIES*

Other Facility Type **Number**

Other Facility Type	Number
Meter Building	1
Heater Treater	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: (5) 3" flowlines from the wellheads to the separators (5) 3" gas injection lines from the compressor to the wellheads, (5) 2" dump lines from the separators to the tanks, and (5) 1" gas supply lines from the wellheads to the separators. Poly will be utilized to supply gas to the tubing motor valves, including (5) 1" lines from the separators to the motor valves on the wellheads.

Gas gatherers are near the proposed pad and Verdad will work with the appropriate parties to ensure a timely gas gathering connections.

CONSTRUCTION

Date planned to commence construction: 03/15/2020 Size of disturbed area during construction in acres: 8.97
Estimated date that interim reclamation will begin: 09/15/2020 Size of location after interim reclamation in acres: 6.10
Estimated post-construction ground elevation: 4775

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: Vera E. Fiscus Phone: _____

Address: P.O. BOX 36 Fax: _____

Address: _____ Email: _____

City: New Raymer State: CO Zip: 80742

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 01/19/2017

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:	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:	5280 Feet	5280 Feet
Above Ground Utility:	441 Feet	673 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	439 Feet	671 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 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: Platner loam, 0 to 3 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: 08/19/2019

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: 3050 Feet

water well: 5280 Feet

Estimated depth to ground water at Oil and Gas Location 55 Feet

Basis for depth to groundwater and sensitive area determination:

The closest well shown on the COGCC interactive map is owned by US Forest Service (Permit# 37176, Receipt# 9063997) at a distance of 6500 feet from the proposed pad with a depth to water of 15 feet. The total depth of the well is 35 feet; however, this well is located at lower elevation. Based on information from other wells in the area, the depth to ground water at the Location is expected to be approximately 55 feet bgs.

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

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 The Fiscus Fed 2627-01H is the reference well used for the location identification. The distances for the cultural setbacks were provided from the nearest proposed well and production facility on the pad.

Verdad has a contract to tie into a nearby Sterling gas line for permanent facilities.

There are no surface water features within 1000' of the location so a hydrology map is not required.

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

Signed: _____ Date: 06/25/2019 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: 2/24/2020

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	Operator submitted a WOGLA application with Weld county on 09/04/2019 that addressed site safety and contained 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. The 1041 WOGLA #19-0018 was approved 10/31/2019.
2	General Housekeeping	Cleanup of trash, scrap, and discarded materials will be conducted at the end of each workday.
3	General Housekeeping	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>Stormwater management plans (SWMP) will be in place to address construction, drilling, and operations associated with CDPHE permits. BMPs for stormwater will be implemented around the perimeter of the pad prior to or during construction and will vary according to the Location. These BMPs will remain in place and maintained throughout operations until final reclamation.</p> <p>The Location will have stormwater control measures consisting of a berm around the perimeter of the location to divert clean water away from disturbed areas and to divert onsite runoff into a sediment trap, a ditch around the location to collect and divert runoff to a sediment trap, and two to four sediment traps to allow sediment to settle out of diverted stormwater runoff. Sediment trap spill way will use 2-inch to 4-inch stone, rip-rap, aggregate and/or wattles to further filter runoff. These control measures will be inspected at the following frequencies: Storm water controls are inspected every 14 days during construction, drilling, and completions. Once per month after that until interim reclamation is completely established - estimated to be approximately 2 years; once per year after that until the facility is reclaimed.</p>
5	Material Handling and Spill Prevention	<p>Drip pans will be used during fueling of equipment to contain spills and leaks. Visual inspections of pipe and connections will be performed frequently to detect leaks which will be immediately corrected, repaired and reported to COGCC as required. A leak detection plan will be in place to address any possible spill associated with oil and gas operations.</p>
6	Material Handling and Spill Prevention	<p>Operator will employ automated tank gauges to allow for the gauging of liquids without opening the thief hatch. This will minimize the number of times a thief hatch will be opened and further reduce the vapor emissions from tank.</p> <p>Operator's wells will have remote shut-in capabilities to mitigate spills and safety issues. Remote shut-in will allow them 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> <p>Separators are encompassed by steel berms and surrounded by compacted road base which is sufficiently impervious 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> <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> <p>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.</p>
7	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>
8	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. The MLVT will be on site for approximately 30 days during completion operations.</p>
9	Emissions mitigation	<p>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.</p>

Total: 9 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1347725	CORRESPONDENCE
1347726	LOCATION DRAWING
1347727	WASTE MANAGEMENT PLAN
2158206	ACCESS ROAD MAP #2
2158207	NRCS MAP UNIT DESC
2158210	OBJECTIVE CRITERIA REVIEW MEMO
402052168	FORM 2A SUBMITTED
402052230	LOCATION PICTURES
402052231	REFERENCE AREA MAP
402052232	REFERENCE AREA PICTURES
402052276	MULTI-WELL PLAN
402062612	ACCESS ROAD MAP
402066242	SURFACE AGRMT/SURETY
402072171	NRCS MAP UNIT DESC

Total Attach: 14 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Final Review	Final Review task PASSED; Objective Criteria Review Memo completed and attached.	02/21/2020
Final Review	The Objective Criteria Review Memo (Doc# 2158210) is attached to this Form 2A. Following additional analysis arising out of the Objective Criteria, the Director determined that this application meets the standard for the protection of public health, safety, welfare, the environment and wildlife resources set by SB 19-181.	02/21/2020
Final Review	Final review still PENDING: finishing Objective Criteria Review Memo.	02/11/2020
Final Review	Corrections made with operator concurrence: <ul style="list-style-type: none"> - attached revised Access Road Map and deleted incorrect one. - attached revised Location Drawing and deleted incorrect one. - attached additional NRCS soil type description. - removed Hydrology Map and added related comment to Submit tab. - updated acreage of disturbed area. - updated construction/reclamation dates - revised distance to nearest water well 	02/11/2020
Final Review	Final Review status PENDING - contacted operator for additional corrections: <ul style="list-style-type: none"> - request revised Access Road Map to include corrected driving directions and close-up map showing access road entering proposed oil & gas location. - request revised Location Drawing to show the topsoil stockpile is included in the location's disturbed area. - request updated acreage for disturbed area. - request to remove Hydrology Map as it no longer depicts the accurate size for this Location; as there are no surface water features within 1000 feet, no attachment required. - request updated construction/reclamation dates. - request additional NRCS attachment and updated Soils tab for second soil type on the west side of the Location. - request revision of "distance to nearest water well" to 5280 feet since nearest well is beyond 1 mile away. 	02/06/2020
OGLA	Corrections made with Operator concurrence: <ul style="list-style-type: none"> - Added WOGLA submit & approval dates. - Added statement of gas pipeline availability to Submit tab comments. - Added BMPs for tank emissions control, remote well shut in capabilities, separator secondary containment, tank lined containment, and onsite inspections for leaks. 	01/06/2020

Final Review	Final Review status still PENDING additional information from operator: <ul style="list-style-type: none"> - request statement of gas pipeline availability - request WOGLA submit date and approval date if applicable - request BMPs for tank battery (remote monitoring, secondary containment, inspections) 	01/02/2020
Final Review	Corrections made with operator concurrence: <ul style="list-style-type: none"> - updated construction/interim rec acreage - tanks confirmed @ 400 bbls each; this meets Objective Criteria #8 - checked NRCS and field observation boxes and added field observation date on Soils tab - deleted Noise BMP as there are no residences within 1 mile of this location 	01/02/2020
Final Review	Final Review status PENDING - referred to OGLA staff for additional review: <ul style="list-style-type: none"> - update local gov info - update construction/interim rec acreage to match revised location drawing - request confirmation of total oil + water tank volume - request confirmation of method of plant identification on Soils tab - request clarification on language in BMP #8 (Noise) 	12/04/2019
OGLA	Operator provided an updated Location Drawing on 12/2/2019 since Weld County is requiring additional disturbance on location for drainage. Uploaded the new Location Drawing and asked Verdad for concurrence on the additional disturbance acreage.	12/03/2019
OGLA	COGCC staff conducted its technical review of this Form 2 Application for Permit to Drill (APD) within the context of SB 19-181 and the required Objective Criteria. This APD met Objective Criteria # 8.	11/07/2019
OGLA	Technical Review: Operator clarified disposal of oil-based drilling fluid (OBM) will be offsite at a commercial facility. Operator provided a Waste Mgmt Plan for this 2A. Operator concurred the depth to ground water was greater than 15 feet; based on relative elevation of the Location and the USFS water well, it appears to be 85 feet lower which may mean that the depth to ground water is actually 55 feet to 60 feet bgs at the Location. Objective Criteria 5.c is not met and the need for Director review eliminated. Based on a review of aerial photos land use appears to be rangeland and operator concurred. Requested a change to the mud control BMP to clarify Operator's specific VTC. Operator concurred. Operator provided typical stormwater BMPs to be used. There are no BUs within 1-mile - removed strawbale sound walls as a BMP at this Location. No Public Comments received. OGLA technical review completed and task passed.	11/06/2019
Permit	Multi-Well Plan evaluated. APDs for five (5) proposed wells submitted using approved DSU 535-787. Passed Permitting.	10/24/2019
Permit	Passed Completeness.	07/02/2019

Total: 14 comment(s)