

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:

402060001

Date Received:

06/28/2019

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:

468727

Expiration Date:

10/21/2022

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: 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: Timbro Number: 0101
 County: WELD
 Quarter: NWNE Section: 1 Township: 9N Range: 59W Meridian: 6 Ground Elevation: 4947
 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: 356 feet FNL from North or South section line
 2217 feet FEL from East or West section line
 Latitude: 40.786474 Longitude: -103.925325
 PDOP Reading: 1.2 Date of Measurement: 03/15/2018
 Instrument Operator's Name: Taylor Onley

LOCAL GOVERNMENT INFORMATION

County: WELD Municipality: N/A

CONSTRUCTION

Date planned to commence construction: 04/01/2020 Size of disturbed area during construction in acres: 11.20
Estimated date that interim reclamation will begin: 09/29/2020 Size of location after interim reclamation in acres: 9.00
Estimated post-construction ground elevation: 4947

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: Timbro Ranch and Cattle

Phone: _____

Address: 5566 S Sycamore Street

Fax: _____

Address: _____

Email: _____

City: Littleton State: CO Zip: 80120

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 03/19/2018

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:	2697 Feet	2384 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:	347 Feet	475 Feet
Above Ground Utility:	474 Feet	602 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	356 Feet	483 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 (onl 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: Kim-Mitchell complex, 0 to 6 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: 03/15/2018

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: 2133 Feet

water well: 2400 Feet

Estimated depth to ground water at Oil and Gas Location 60 Feet

Basis for depth to groundwater and sensitive area determination:

The closest well shown on the COGCC interactive Map is owned by New Frontier Bank (Permit# 278640, Receipt# 3632612A) at a distance of 2400 feet from the proposed pad. No depth to groundwater reported. Depth to groundwater taken from next nearest water well Permit #7956.

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 The Timbro 0101-01H 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.

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 provide a land application Facility # or beneficial reuse ID prior to drilling and disposal of water based cuttings or fluids via a Form 4 Sundry.

ECDs and VOCs on layout are the same.

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

Signed: _____ Date: 06/28/2019 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: 10/22/2019

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.

COA Type

Description

<u>COA Type</u>	<u>Description</u>
	To minimize potential impacts to soil, the operator shall line the secondary containment areas for the tanks with an impervious material.
	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, will still be required during production operations.

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	Storm Water/Erosion Control	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.
4	Storm Water/Erosion Control	Stormwater management plans (SWMP) will be in place to address construction, drilling, and operations associated with CDPHE permits. 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 northeast and southeast 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 natural vegetative buffer over 500 feet to the East and 100 feet to the North. 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, that will direct stormwater flow to the East, will not allow stormwater to flow from the pad into a drainage across the road and over 300 feet to the North of the pad disturbance.
5	Material Handling and Spill Prevention	<p>Containment will be used during fueling of equipment to contain spills and leaks during drilling and completion operations.</p> <p>Spill prevention Control Countermeasure (SPCC) will be in place to address any spills associated with oil and gas operations. Tank secondary containment will be impervious lined steel berms with capacity > 150% volume of the largest tank. Pad will also have tertiary containment of ditch and berm to prevent any spills from leaving site. Any spills will be immediately cleaned up and reported if volume exceeds reporting limit.</p>
6	Dust control	To prevent dust from becoming a nuisance to the public, water trucks will be utilized to spread water across any dust problem areas.
7	Construction	Verdad will follow the COGCC guidance policy dated June 13, 2014 on the use of MLVTs.
8	Construction	Verdad will build steel berms built into compacted roadbase around the separators. The road base is approximately 1-2 feet thick 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.
9	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.
10	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: 10 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2479138	LOCATION DRAWING
2479139	LOCATION PICTURES
2479140	CORRESPONDENCE
2479148	OBJECTIVE CRITERIA REVIEW MEMO
402060001	FORM 2A SUBMITTED
402063675	MULTI-WELL PLAN
402063679	ACCESS ROAD MAP
402063681	HYDROLOGY MAP
402063685	REFERENCE AREA MAP
402063686	REFERENCE AREA PICTURES
402063721	NRCS MAP UNIT DESC
402064089	SURFACE AGRMT/SURETY

Total Attach: 12 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	The Objective Criteria Review Memo (Doc# 2479148) is attached to the Form 2A associated with this APD. 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.	09/19/2019
OGLA	Operator provided an additional Stormwater/Erosion Control BMP.	09/19/2019
OGLA	Operator confirmed when the WOGLA Application was submitted, confirmed the Land Use and provide plant species information, provided updated Location Drawing and Location Pictures attachments, revised the estimated depth to groundwater, concurred with replacing the Mud Control BMP with a COA, & concurred with removing the Noise mitigation BMP as there are no Building Units within a mile. No Public Comments. OGLA review completed and task passed.	09/12/2019
OGLA	COGCC staff conducted its technical review of this Form 2A Oil and Gas Location Assessment within the context of SB 19-181 and the required Objective Criteria. This Form 2A met Objective Criteria # 8.	09/03/2019
OGLA	Requested operator confirm if/when a WOGLA Application was submitted, confirm the Land Use and provide plant species information, revise the estimated depth to groundwater, replace the Mud Control BMP with a COA, & concur with removing the Noise mitigation BMP as there are no Building Units within a mile. Due by 10/3/19.	09/03/2019
OGLA	Operator indicated the Surface Onwer is not the mineral owner, not committed to an oil and gas lease, and have not signed an oil and gas lease.	07/15/2019
Permit	Passed Completeness.	07/05/2019

Total: 7 comment(s)