

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:

401852663

(SUBMITTED)

Date Received:

Oil and Gas Location Assessment

New Location Refile Amend Existing Location Location#: 432518

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:

432518

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: Timbro Number: 3131
 County: WELD
 Quarter: SESE Section: 31 Township: 10N Range: 59W Meridian: 6 Ground Elevation: 5161

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: 285 feet FSL from North or South section line
1213 feet FEL from East or West section line
 Latitude: 40.787352 Longitude: -104.015825

PDOP Reading: 1.5 Date of Measurement: 05/10/2018

Instrument Operator's Name: Brent Garcia

LOCAL GOVERNMENT INFORMATION

County: WELD Municipality: N/A

CONSTRUCTION

Date planned to commence construction: 10/01/2020 Size of disturbed area during construction in acres: 10.00
Estimated date that interim reclamation will begin: 04/01/2021 Size of location after interim reclamation in acres: 5.00
Estimated post-construction ground elevation: 5161

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 & Cattle Co. Phone: _____

Address: 5566 S Sycamore St 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 06/01/2018

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:	4509 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:	1180 Feet	1112 Feet
Above Ground Utility:	5280 Feet	5280 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	285 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: Epping silt loam, 0 to 9 percent slopes

NRCS Map Unit Name: Nunn clay loam, 0 to 6 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: 1411 Feet

water well: 3378 Feet

Estimated depth to ground water at Oil and Gas Location 100 Feet

Basis for depth to groundwater and sensitive area determination:

The closest water well shown on the hydrology map and the COGCC interactive Map is owned by Dale E. Sherrill (Permit# 86729, Receipt# 0912489) approximately 3378 feet from the proposed location. The total depth of the well is 100 feet.

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 The Timbro 3131 02H 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.

There is no surface water feature within 1000' of the proposed location.

Facilities to be used on site are covered in the location drawing attached.

The Timbro Ranch 1-31-10-59 is an existing well currently on the pad. Verdad is proposing to add fourteen (14) more wells for a total of fifteen (15) wells on the pad.

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	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.

5	Material Handling and Spill Prevention	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.
6	Material Handling and Spill Prevention	Containment will be used during fueling of equipment to contain spills and leaks all phases of operations. 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. All spills will be immediately cleaned up and will be reported if volume exceeds reporting limit.
7	Material Handling and Spill Prevention	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.
8	Material Handling and Spill Prevention	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.
9	Material Handling and Spill Prevention	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.
10	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.
11	Construction	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.
12	Noise mitigation	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.
13	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.
14	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.
15	Odor 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 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.

Total: 15 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401873079	MULTI-WELL PLAN
401896615	REFERENCE AREA PICTURES
401896619	REFERENCE AREA MAP
401896620	HYDROLOGY MAP
401896624	ACCESS ROAD MAP
401896695	SURFACE AGRMT/SURETY
401896739	NRCS MAP UNIT DESC
401896743	NRCS MAP UNIT DESC
402198766	LOCATION DRAWING
402198770	LOCATION PICTURES

Total Attach: 10 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)

Public Comments

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

