

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:

402092786

Date Received:

09/09/2019

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

Location ID:

**474767**

Expiration Date:

**04/01/2023**

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: County Line    Number: Pad

County: WELD

Quarter: SWSE    Section: 31    Township: 1N    Range: 65W    Meridian: 6    Ground Elevation: 5022

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: 340 feet FSL from North or South section line

2540 feet FEL from East or West section line

Latitude: 40.001456    Longitude: -104.706341

GPS Quality Value: 1.2    Type of GPS Quality Value: PDOP    Date of Measurement: 05/24/2019

Instrument Operator's Name: Taylor Onley

### 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: 07/31/2019

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

Additional explanation of local process:

WOGLA approved 10/11/2019 permit no WOGLA19-0183

### 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>32</u>	Oil Tanks*	<u>32</u>	Condensate Tanks*	_____	Water Tanks*	<u>16</u>	Buried Produced Water Vaults*	_____
Drilling Pits	_____	Production Pits*	_____	Special Purpose Pits	_____	Multi-Well Pits*	_____	Modular Large Volume Tanks	<u>1</u>
Pump Jacks	_____	Separators*	<u>32</u>	Injection Pumps*	_____	Cavity Pumps*	_____	Gas Compressors*	<u>1</u>
Gas or Diesel Motors*	_____	Electric Motors	_____	Electric Generators*	_____	Fuel Tanks*	_____	LACT Unit*	<u>1</u>
Dehydrator Units*	_____	Vapor Recovery Unit*	<u>6</u>	VOC Combustor*	<u>4</u>	Flare*	_____	Pigging Station*	_____

### OTHER FACILITIES\*

<u>Other Facility Type</u>	<u>Number</u>
Heater Treaters	<u>4</u>
VRT	<u>6</u>
Meter Building	<u>1</u>

\*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: (32) 3" flowlines from the wellheads to the separators (32) 3" gas injection lines from the compressor to the wellheads, (32) 2" dump lines from the separators to the tanks, and (32) 1" gas supply lines from the wellheads to the separators. Poly will be utilized to supply gas to the tubing motor valves, including (32) 1" lines from the separators to the motor valves on the wellheads.

## CONSTRUCTION

Date planned to commence construction: 08/01/2020 Size of disturbed area during construction in acres: 19.30  
Estimated date that interim reclamation will begin: 02/01/2021 Size of location after interim reclamation in acres: 11.20  
Estimated post-construction ground elevation: 5022

## DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes

Is H<sub>2</sub>S 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:

See Waste Management Plan Attached.

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: Verdad Resources

Phone: \_\_\_\_\_

Address: 5950 CEDAR SPRINGS ROAD

Fax: \_\_\_\_\_

Address: \_\_\_\_\_

Email: \_\_\_\_\_

City: Dallas State: TX Zip: 75235

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: 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): \_\_\_\_\_

## 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:	806 Feet	859 Feet
Building Unit:	806 Feet	859 Feet
High Occupancy Building Unit:	4614 Feet	4634 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	324 Feet	549 Feet
Above Ground Utility:	689 Feet	747 Feet
Railroad:	1029 Feet	933 Feet
Property Line:	310 Feet	198 Feet
School Facility::	4614 Feet	4634 Feet
School Property Line:	4362 Feet	4405 Feet
Child Care Center:	2288 Feet	2260 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: 08/16/2019

## 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.

Two pads were consolidated into one and was placed as close to the CR and away from houses as possible. This location gives us the ability to have a short access road while maximizing the distance from the pad to the BU to the North. Pipelines are going to be laid directly to the pad based off of the current configuration and will allow for the reduction of tanks and overall consolidation of the pad.

## 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: 5—Ascalon sandy loam, 0 to 3 percent slopes

NRCS Map Unit Name: 73—Vona loamy sand, 3 to 5 percent slopes

NRCS Map Unit Name: 77—Vona sandy loam, 3 to 5 percent slopes & 76 - Vona sandy loam, 1 to 3 percent slopes

**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: 80 Feet

water well: 714 Feet

Estimated depth to ground water at Oil and Gas Location 8 Feet

Basis for depth to groundwater and sensitive area determination:

The nearest constructed water well permit 51244-F 714 feet to the southeast - domestic well. A monitoring water well with a static water level of 8 feet is approximately 1,000 feet to the southwest of the Location, water well permit 54621-MH.

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 318A

## WILDLIFE

This location is included in a Wildlife Mitigation Plan

This location was subject to a pre-consultation meeting with CPW held on 10/25/2018

## 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 County Line 3112-01H 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 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.

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

Adams county was notified of this location and requested the following information and Verdad will comply with the requests

Comment 1: The pad location is in Weld County and this specific segment of 168th Avenue is maintained by Weld County, which gives them the authority to determine the required road improvements. Adams County Development Engineering has no comments regarding the proposed development.

Comment 2: Provide screening along the southerly and easterly pad perimeters to provide for visual mitigation.

Comment 3: Pursuant to Rule 804, paint tank battery and accessory, permanent structures in uniform, non-contrasting, non-reflective color tones with the colors matched to, but slightly darker than the surrounding landscape.

Comment 4: Require final landscaping of the disturbed areas along the south and southwest perimeter in a manner that is compatible with surrounding landscape to include provisions for landscape maintenance and weed management.

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

Signed: \_\_\_\_\_ Date: 09/09/2019 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: 4/2/2020

## 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.**

<u>COA Type</u>	<u>Description</u>
Planning	Operator shall not begin well drilling operations on the location until an Air Monitoring Plan has been submitted via Form 4 Sundry to the COGCC and approved by the Director
Construction	The Approved Form 2A permit will be posted at the location during construction, drilling, and completions operations.
Material Handling and Spill Prevention	Prior to construction, Verdad will install three groundwater monitoring wells, two that are outside of and adjacent to the southern and western location boundaries and one upgradient well. The wells will be constructed with screened intervals in the shallow unconfined aquifer. The top of each well casing will be surveyed to determine its elevation. Baseline samples will be collected from the three monitoring wells prior to the commencement of drilling activities. Water samples will be collected from the two potential downgradient wells on a quarterly basis for the first five years and on a semiannual basis thereafter. Sampling frequency and sample parameters will be determined by COGCC in the event of a spill or release at the location. Depth to water will be measured in all wells during each sampling event. All samples will be analyzed for the parameters listed in COGCC Rule 318.A.f.(6), (7), (8), and (9). Sampling and analysis will be conducted in conformance with accepted industry standards as described in COGCC Rule 910.b.(2). Sample results and groundwater measurements will be provided to COGCC within 30-days of receiving analytical results from the laboratory.

<b>No BMP/COA Type</b>		<b>Description</b>	<b>Best Management Practices</b>
1	Planning		Verdad has an approved 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. Access road permits are through the WOGLA process.
2	Planning		Verdad is finalizing an agreement with ECCV with BMPs to protect the water supply. Verdad will install monitoring wells on our well pad and conduct regular sampling of wells pursuant to COGCC regulation and agreement.
3	Planning		Verdad will consider this pad for future development of other reservoirs or units.  This pad has been consolidated from two wells pads to one to reduce the impacts to surrounding BUOs and to reduce the number of BUOs impacted.
4	Community Outreach and Notification		Verdad had a community meeting May 2, 2019 and heard the concerns of community. As a result Verdad combined 2 separate pads into one location. Members requested the production equipment be placed near the crown of the hill, so they would not be visible from their houses. Verdad remains in touch with the community and continues to address their concerns. Two were notified of the location pursuant to Rule 305 a.(2) and they will be noticed for comment period as well.
5	General Housekeeping		Cleanup of trash, scrap, and discarded materials will be conducted at the end of each workday.
6	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.
7	General Housekeeping		Verdad will fence the location and maintain it.
8	General Housekeeping		All loadlines shall be bullplugged or capped.
9	General Housekeeping		At the time of construction, all leasehold roads shall be constructed to accommodate local emergency vehicle access requirements, and shall be maintained in a reasonable condition.
10	Storm Water/Erosion Control		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 rip-rap, aggregate and/or wattles to further filter runoff. These control measures will be inspected at the following frequencies: Storm water controls will be inspected every 14 days during construction, drilling and completions. Once per month after that, until interim reclamation is completely established (approximately 2 years). Once per year after that until facility abandoned.
11	Storm Water/Erosion Control		Flammable liquids will not be stored within fifty (50) feet of the wellbore.  Any material not in use that might constitute a fire hazard shall be removed a minimum of twenty-five (25) feet from the wellhead, tanks and separator. Any electrical equipment installations inside the bermed area shall comply with API RP 500 classifications and comply with the current national electrical code as adopted by the State of Colorado.
12	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.

13	Material Handling and Spill Prevention	Containment will be used during fueling of equipment to contain spills and leaks during 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 meets or exceeds reporting limit.
14	Material Handling and Spill Prevention	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. Verdad will conduct integrity management on the flowlines at the County Line Well Pad using pressure testing and instrument monitoring (infrared camera), per COGCC rule 1104.
15	Material Handling and Spill Prevention	Verdad will use a closed loop system - No pits will be on location, but there are level indicators on the drilling mud tanks
16	Material Handling and Spill Prevention	All newly installed or replaced crude oil and condensate storage tanks shall be designed, constructed, and maintained in accordance with National Fire Protection Association (NFPA) Code 30 (2008 version). The operator shall maintain written records verifying proper design, construction, and maintenance, and shall make these records available for inspection by the Director. Only the 2008 version of NFPA Code 30 applies to this rule. This rule does not include later amendments to, or editions of, the NFPA Code 30.
17	Material Handling and Spill Prevention	Separators are encompassed by steel berms and will be lined with an impervious poly or spray in liner. Sites are visited daily. The berms and liner would contain a spill from leaving the area around the separators
18	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.
19	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. Water will be piped to the MLVT.
20	Noise mitigation	Operator consulted with owners of residences 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.
21	Noise mitigation	Verdad will construct sound walls on the North and the east of the pad and the utilization of "quiet" frac/auxiliary equipment will be constructed and utilized to dampen noise in the direction of residential units. Additional soundwalls will be considered to the west or south based on noise review.
22	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.
23	Emissions mitigation	Verdad 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.  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.

24	Emissions mitigation	The temporary tank emissions will be controlled with an enclosed combustor. The initial flowback temporary tanks will be on location for ~1 month and then the wells will be turned over to permanent facilities.
25	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.
26	Drilling/Completion Operations	All guy line anchors left buried for future use shall be identified by a marker of bright color not less than four (4) feet in height and not greater than one (1) foot east of the guy line anchor. If a workover rig is required it will use a base been and the big rig will use guyline anchors.
27	Final Reclamation	The operator shall identify the location of the wellbore with a permanent monument as specified in Rule 319.a.(5). The operator shall also inscribe or imbed the well number and date of plugging upon the permanent monument.  Within ninety (90) days after a well is plugged and abandoned, the well site shall be cleared of all non-essential equipment, trash, and debris. F

Total: 27 comment(s)

### **Attachment Check List**

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
2316570	HYDROLOGY MAP
2316609	NRCS MAP UNIT DESC
2316610	PRE-APPLICATION NOTIFICATION CERTIFICATION
2316611	PRE-APPLICATION NOTIFICATION CERTIFICATION
2316612	LOCATION DRAWING
2316613	FACILITY LAYOUT DRAWING
2316636	CORRESPONDENCE
2316637	CORRESPONDENCE
2316638	CORRESPONDENCE
2316639	OBJECTIVE CRITERIA REVIEW MEMO
2316640	COGCC PUBLIC COMMENT RESPONSE
402092786	FORM 2A SUBMITTED
402092824	NRCS MAP UNIT DESC
402092825	NRCS MAP UNIT DESC
402092833	LOCATION PICTURES
402092834	ACCESS ROAD MAP
402136038	WASTE MANAGEMENT PLAN
402148495	MULTI-WELL PLAN
402168011	NRCS MAP UNIT DESC
402169997	RULE 305.a.(3) EVIDENCE OF COMPLIANCE
402170000	RULE 305.a.(3) EVIDENCE OF COMPLIANCE

Total Attach: 21 Files

### **General Comments**

<b>User Group</b>	<b>Comment</b>	<b>Comment Date</b>
OGLA	Cultural distance to the property line was not measured to the middle of the road, but to the edge of the road. The distance to the property line was originally measured from the VRU to the southern property line. The tanks on the east side are closer to the property line. Updated distances and Operator provided a revised Location Drawing (attached). The flood plain to the south was not originally on the hydrology map. Operator provided a revised hydrology map with the flood plain and all wetlands in the area (attached).	03/31/2020
OGLA	Request revised hydrology map to include floodplain and wetlands. Request confirmation on cultural distances to the property line and public road from the wells and production facilities. Request further information on BMP for access road permit.	03/26/2020
Final Review	Final Approval Pending - referred to OGLA and Permitting staff for follow up.	03/25/2020
OGLA	Changed pre-application to be Pre-application Certification from 305.A compliance	03/25/2020
OGLA	Operator added LACT unit - added to the facility list and attached revised Location and Facility Layout Drawings. Asked Operator to consider soundwalls to the west and south - replied they would like to leave one side open and based on review of the Location will consider adding a sound wall to the west or south. Updated BMP regarding "submitted WOGLA" and changed to "has an approved WOGLA" based on earlier information from the Operator.	03/20/2020
OGLA	IN PROCESS: Water well permit 51524- MH is mapped at 994 feet southeast of the proposed location and was not constructed, water well 51244 is a domestic well that has been constructed and is 714 feet from the Location - update water resource section to match hydrology map and accurate information.	03/13/2020
Final Review	Final Review Pending – referred to OGLA staff for follow up.	03/13/2020
OGLA	Public Comments received for this Form 2A are summarized and addressed in the attached Public Comment Consideration Memo (Doc# 2316640).	03/11/2020
OGLA	The Objective Criteria Review Memo (Doc# 2316639) 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.	03/11/2020
OGLA	Checked with Operator and water for the MLVT will be piped to the Location. Correspondence with the Operator attached as doc no 2316636, 2316637, and 2316638.	03/10/2020
OGLA	Spoke with Operator on the phone to update the construction date to 8/1/2020 and interim reclamation to 2/2/21	02/20/2020
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 # 1 for Building units within 1,500 feet; #3 for municipal or county boundary within 1,500 feet; #5.c. for sensitive water for surface and groundwater; #6 for wildlife RSO and SWH; and #8 for storage of 18 or more tanks.	12/02/2019
OGLA	Request additional clarification and information on the BMPs to be site specific. Place 2A on hold until response.	11/25/2019
OGLA	OGLA reviewed the revised attachments provided - Location drawing and facility layout drawing do not match. Request information. Also has a "plugged pipeline" labeled. Request information on if it's a flowline or pipeline and information on it's start and end points. Attached additional NRCS, 306.e. certification, and 305.a. pre-application. Operator had provided 305.a. letters previously.	11/20/2019
OGLA	Operator responded via email to clarification questions, updated from 64 oil tanks to 32 and from 32 water tanks to 16. Operator provided revised drawings. Operator concurred with cultural distance section to have the boxes checked and provided siting rationale- added to the section. Operator provided NRCS attachment for #76 and added to soils section of the 2A. Updated water well information as water well permit no 51524-MH approx. 714 feet from the location the water well permit was issued but the water well was not constructed. Updated section for domestic well at 995 feet to the southeast and depth to water from monitoring well approx 1000 ft to the southwest. Moved BMP discussing Adams County to the Operator comments section. Met with CPW on 10/24/2018 – Nest in tree across the road from the location was falling down. CPW said there was a new nest further south – more than a ½ mile away. CPW comment reflects site visit.	11/06/2019

DOW	CPW has not recently documented any actively nesting bald eagles at this nest immediately south of County Line Road and east of I-76. Instead, CPW has documented an active bald eagle nest approximately 5 blocks south of this inactive and dilapidated nest. Therefore, CPW has no wildlife concerns for development near this inactive nest.  If anyone has any further questions or concerns about this matter, please contact CPWs Northeast Region Energy Liaison (Brandon Murette) at (303) 291-7327.	10/30/2019
OGLA	OGLA review: Operator called COGCC regarding tank count and reducing numbers - request via email: revised tank count with revised drawings and cultural distances, buffer zone boxes need to be checked and siting rationale, need NRCS unit 76, water well distance to constructed water well update and depth to groundwater to be 8 feet instead of 70 feet based off constructed monitoring well, need all 604.c.(2) BMPs, need 305.a. certification and 306.e. certification, request information on CPW pre-consultation.	10/30/2019
Permit	Multi-Well Plan evaluated. Spacing Order 407-2957 has been approved for a 2560-acre DSU in sections 30, 31, 6, 7, 1, & 12 as depicted on the multi-well plan.  Passed Permitting.	10/07/2019
OGLA	Passed Completeness.	09/24/2019
OGLA	Returned to draft for: - "Consultation & Contact Info" tab: the consultation boxes for "sensitive wildlife habitat" and "wildlife restricted surface occupancy area" need to be checked - "Submit" tab: please move the BMP "An onsite took place in October of 2018 that determined nest was inactive with CPW, COGCC and Verdad" to the comment section	09/23/2019
OGLA	Referred to OGLA Supervisor for buffer zone review.	09/23/2019
OGLA	Send back to Draft per Operator request	09/10/2019

Total: 22 comment(s)