

FORM  
2A

Rev  
08/13

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:

401273780

Date Received:

07/07/2017

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:

**452118**

Expiration Date:

**09/07/2020**

☐ 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: Kenny Trueax

Phone: (720) 651-8409

Fax: ( )

email: Regulatory@verdadoil.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20170009 ☐ Gas Facility Surety ID: \_\_\_\_\_

☐ Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: WARNER-OTTESEN FACILITY Number: #1

County: WELD

QuarterQuarter: SWSE Section: 17 Township: 1N Range: 64W Meridian: 6 Ground Elevation: 5082

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: 270 feet FSL from North or South section line

2066 feet FEL from East or West section line

Latitude: 40.044838 Longitude: -104.572839

PDOP Reading: 1.5 Date of Measurement: 03/17/2017

Instrument Operator's Name: Alec Shull

## 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 #

Production Facilities Location serves Well(s)

401273477

## FACILITIES

Indicate the number of each type of oil and gas facility planned on location

Wells	Oil Tanks*	24	Condensate Tanks*		Water Tanks*	8	Buried Produced Water Vaults*	4
Drilling Pits	Production Pits*		Special Purpose Pits		Multi-Well Pits*		Modular Large Volume Tanks	1
Pump Jacks	Separators*	12	Injection Pumps*		Cavity Pumps*		Gas Compressors*	2
Gas or Diesel Motors*	Electric Motors		Electric Generators*		Fuel Tanks*		LACT Unit*	
Dehydrator Units*	Vapor Recovery Unit*		VOC Combustor*	8	Flare*	1	Pigging Station*	

## OTHER FACILITIES\*

Other Facility Type

Number

Heater Treater

6

\*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:

Flowlines are 2" schedule 80 welded FBE, (16) 3" schedule 80 FBE flowline from wellhead to separator. (16) 1" steel schedule 80 FBE gas supply lines off casing side to separators in case pilot at separator needs supply; (16) 2" steel schedule 80 FBE line gas lift lines from compressor back to wellhead; and (16) 1" poly lines back to wellhead for gas supply to solenoid for tubing motor valve control, gas supplied from scrubber at separators.

## CONSTRUCTION

Date planned to commence construction: 08/01/2017

Size of disturbed area during construction in acres: 5.74

Estimated date that interim reclamation will begin: 03/01/2018

Size of location after interim reclamation in acres: 2.87

Estimated post-construction ground elevation: 5080

## 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:

Drilling Fluids Disposal Method:

Cutting Disposal:

Cuttings Disposal Method:

Other Disposal Description:

No drill cuttings will be stored on the facility pad.

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: Betty J Ottesen Trust

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

Address: 1675 46th Ave. Ct

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

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

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

City: Greeley State: CO Zip: 80634

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 \_\_\_\_\_

## 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:	_____ Feet	3382 Feet
Building Unit:	_____ Feet	3382 Feet
High Occupancy Building Unit:	_____ Feet	5280 Feet
Designated Outside Activity Area:	_____ Feet	5280 Feet
Public Road:	_____ Feet	1890 Feet
Above Ground Utility:	_____ Feet	3062 Feet
Railroad:	_____ Feet	5280 Feet
Property Line:	_____ Feet	86 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, and Designated Outside Activity Area - as defined in 100-Series Rules.  
- For measurement purposes only, Production Facilities should only include those items with an asterisk(\*) on the Facilities Tab.

## 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: 79-Weld loam, 1 to 3 percent slopes

NRCS Map Unit Name: 18-Colby Adena Loams, 3 to 9 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: 03/17/2017

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: 1211 Feet

water well: 1551 Feet

Estimated depth to ground water at Oil and Gas Location 420 Feet

Basis for depth to groundwater and sensitive area determination:

Based on COGIS data this location neither fell within the COGCC definition for a groundwater sensitive area nor presented any extraneous circumstances to surface waters. The closest domestic water well is located 1551' south (measured from edge of pad) with a static depth to ground water at 420'. Ref: CDWR water well Receipt 3643402 permit 282262. Operator acknowledges shallower groundwater may exist.

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  zone:

If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified:

Is the Location within a Floodplain? ☒ No ☐ Yes Floodplain Data Sources Reviewed (check all that apply)

☒ Federal (FEMA)

☒ State

☒ County

☐ Local

☐ Other

## GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 318A

## WILDLIFE

- ☐ This location is included in a Wildlife Mitigation Plan
- ☐ This location was subject to a pre-consultation meeting with CPW held on \_\_\_\_\_

## 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

- Please see SUA Amendment on page 7 of the SUAs that covers the SWSE Sec. 17 T1N-R64W.
- Surface Use Agreement has waivers for Rules 305, 306, 318A.a, 318A.c and 603.a.(2). Please see page 3 of the SUAs attached.
- This proposed oil and gas location is located in a rural rangeland area. The nearest building unit is located  $\pm 3382'$  away from this proposed oil and gas location, therefore it is not within a Designated Setback Location and is exempt from 604.c.
- No drill cuttings will be stored on facility pad.
- Depth to water  $\pm 420$  based on closest water well to pad. Operator acknowledges shallower groundwater may exist.

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

Signed: \_\_\_\_\_ Date: 07/07/2017 Email: Regulatory@verdadoil.com

Print Name: Kenny Trueax Title: Regulatory Manager

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved:  \_\_\_\_\_ Director of COGCC Date: 9/8/2017

## Surface Owner Information

Owner Name	Address	Phone	Fax	Email
Betty J Ottesen Trust	1675 46th Ave. Ct Greeley, CO 80634			
Robert Warner	PO Box 9 Brighton, CO 80301			

2 Surface Owner(s)

## 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**

	The Approved Form 2A permit will be posted at the location during construction, drilling, and completions operations.
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**Best Management Practices**

**No BMP/COA Type**

**Description**

1	Planning	In order to reduce surface impact, this production facility is to planned to serve 16 wells.
2	General Housekeeping	Mud control: when conditions exist that roads are excessively muddy, additional fill material will be added in order to dehydrate the environment and reduce the amount of material that is transported from the wells roads and location to off-site areas.
3	Storm Water/Erosion Control	Material Handling: 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	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.
5	Construction	Berm Construction: Operator will create secondary containment via construction of a berm around the crude oil and produced water storage tank battery capable of containing 150% of the volume of the largest single tank. The berm will be constructed of materials sufficiently impervious to contain any spilled or released material.
6	Construction	Tank Specifications: Tanks will be designed, constructed and maintained in accordance with NFPA Code 30 (2008 version). All tanks are visually inspected by the operator weekly at a minimum to a maximum of daily and annual SPCC inspections will be conducted and documented. Inspection and record retention of tank inspections will be in accordance per SPCC regulation. All records will be made available to the COGCC upon to request.
7	Construction	Location will be graded to divert surface runoff away from surface water features. Operator will create tertiary containment by construction of a berm, diversion ditch, sediment trap or comparable measures sufficient to direct stormwater away from the Denver Hudson Canal and ditches to the west.
8	Emissions mitigation	Test separators and associated flow lines and sand traps shall be installed on-site to accommodate Green completions techniques pursuant to COGCC Rules. The flow-back gas shall be thermally oxidized in an emissions control device (ECD), which will be installed and kept in operable condition for least the first 90-days of production pursuant to CDPHE rules. This ECD shall have an adequate capacity for 1.5 times the largest flow-back within a 10-mile radius, will be flanged to route gas to other or permanent oxidizing equipment and shall be provided with the equipment needed to maintain combustion where noncombustible gases are present.
9	Odor mitigation	Hydrocarbon odors from production facilities are minimized and eliminated by keeping produced fluid hydrocarbons and natural gas contained within pipes, separators, tanks, and combustors. All tanks will be sealed with thief hatches and gaskets. Tank vapors are captured with properly sized piping and combustors.
10	Drilling/Completion Operations	Verdad plans to use a Modular Large Volume Tank (MLVT). The planned tank is a 36K BBL tank approximately 148' in diameter. The MLVT is manufactured by Big Holdings and will be supplied and set up by a third-party vendor. 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.

Total: 10 comment(s)

## **Attachment Check List**

<b><u>Att Doc Num</u></b>	<b><u>Name</u></b>
401273780	FORM 2A SUBMITTED
401303812	ACCESS ROAD MAP
401303814	LOCATION DRAWING
401303827	NRCS MAP UNIT DESC
401303829	NRCS MAP UNIT DESC
401303832	WASTE MANAGEMENT PLAN
401340000	LOCATION PICTURES
401348268	REFERENCE AREA MAP
401348273	REFERENCE AREA PICTURES
401367995	SURFACE AGRMT/SURETY
401368001	SURFACE AGRMT/SURETY

Total Attach: 11 Files

## General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	09/05/2017
OGLA	Operator concurred with removing comment regarding reference area photos as photos attached were during the growing season. Also removed the reference to 604.c.(2) as the location is not in a designated setback area. Public comment is from the Weld County LGD for the WOGLA permit. No other public comments were made. OGLA review complete and task passed.	08/31/2017
OGLA	OGLA review: This is a production only location outside a designated setback location area. Waste information is completed on the 2A for the wells this production serves with the Waste Management Plan attached, and the Operator states that no cuttings will be stored on location. Potential for groundwater to be shallower and Operator acknowledges the depth listed is from the nearest well. The Operator included wildlife BMPs with the location approximately 900 feet from the edge of the sensitive wildlife habitat buffer mapped polygon. Comment from the Operator regarding reference area photos to be submitted, yet attached reference area photos are during the current growing season. Contact the Operator to remove this comment. BMPs reference the 604.c.(2) Rule while the location is not in a designated setback location area, so contact the Operator to keep BMP and remove 604.c.(2) reference.	08/28/2017
Permit	Permitting Review Complete.	08/21/2017
LGD	This proposed oil and gas facility is in the Agricultural Zoned District of unincorporated Weld County. A Weld Oil and Gas Location Assessment, WOGLA17-0061 was Administratively Approved on August 7, 2017. Copies of all related documentation are available from Weld County Government. A building permit is required for the production facilities (tank battery, separators, pump jacks, compressors, generators, etc.) from the Department of Planning Services. Access (Permit AP17-00322) is off WCR 53. Use of County right-of-way requires a permit from the Department of Public Works. Troy Swain, Weld Oil/Gas Liaison and LGD (970) 400-3579.	08/15/2017
Permit	Passes completeness.	08/08/2017
Permit	Returned to draft: --address OGLA completeness review issues --neither SUA describes SWSE of S. 17 where this production facility is located --delete related forms	07/12/2017
OGLA	Completeness review: missing location photos and reference area photos. Need to fill in related remote location for wells to be served by from Warner location and under surface and minerals missing the 306 date. Push back to draft	07/12/2017

Total: 8 comment(s)