

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:

401229828

Date Received:

03/15/2017

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:

450093

Expiration Date:

04/24/2020

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) 394-0933
 Fax: ()
 email: Regulatory@verdadoil.com

RECLAMATION FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID: 20172009 Gas Facility Surety ID: _____
- Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: Lost Creek Number: 03N-62W-08-NW
 County: WELD
 Quarter: NWNW Section: 8 Township: 3N Range: 62W Meridian: 6 Ground Elevation: 4698

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: 320 feet FNL from North or South section line
1314 feet FWL from East or West section line

Latitude: 40.246910 Longitude: -104.352548

PDOP Reading: 1.9 Date of Measurement: 03/03/2017

Instrument Operator's Name: Alan Hnizdo

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>1</u>	Oil Tanks*	<u>3</u>	Condensate Tanks*	<u> </u>	Water Tanks*	<u>1</u>	Buried Produced Water Vaults*	<u>1</u>
Drilling Pits	<u> </u>	Production Pits*	<u> </u>	Special Purpose Pits	<u> </u>	Multi-Well Pits*	<u> </u>	Modular Large Volume Tanks	<u>1</u>
Pump Jacks	<u> </u>	Separators*	<u>1</u>	Injection Pumps*	<u> </u>	Cavity Pumps*	<u> </u>	Gas Compressors*	<u>1</u>
Gas or Diesel Motors*	<u> </u>	Electric Motors	<u> </u>	Electric Generators*	<u> </u>	Fuel Tanks*	<u> </u>	LACT Unit*	<u> </u>
Dehydrator Units*	<u> </u>	Vapor Recovery Unit*	<u> </u>	VOC Combustor*	<u>1</u>	Flare*	<u>1</u>	Pigging Station*	<u> </u>

OTHER FACILITIES*

Other Facility Type

Number

Heater Treater

1

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, (1) 2" schedule 80 FBE flowline from wellhead to separator. (1) 1" steel schedule 80 FBE gas supply lines off casing side to separators in case pilot at separator needs supply; (1) 2" steel schedule 80 FBE line gas lift lines from compressor back to wellhead; and (1) 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: 05/01/2017 Size of disturbed area during construction in acres: 5.74

Estimated date that interim reclamation will begin: 11/01/2017 Size of location after interim reclamation in acres: 3.77

Estimated post-construction ground elevation: 4698

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: Lost Creek Land and Cattl

Phone: _____

Address: PO Box 85

Fax: _____

Address: _____

Email: _____

City: Roggen State: CO Zip: 80652

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 _____

CURRENT AND FUTURE LAND USE

Current Land Use (Check all that apply):

Crop Land: Irrigated Dry land Improved Pasture Hay Meadow CRP

Non-Crop Land: Rangeland Timber Recreational Other (describe): _____

Subdivided: Industrial Commercial Residential

Future Land Use (Check all that apply):

Crop Land: Irrigated Dry land Improved Pasture Hay Meadow CRP

Non-Crop Land: Rangeland Timber Recreational Other (describe): _____

Subdivided: Industrial Commercial Residential

CULTURAL DISTANCE INFORMATION

Provide the distance to the nearest cultural feature as measured from Wells or Production Facilities onsite.

	From WELL	From PRODUCTION FACILITY
Building:	5280 Feet	5280 Feet
Building Unit:	5280 Feet	5280 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	5280 Feet	5280 Feet
Above Ground Utility:	3920 Feet	3780 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	320 Feet	65 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

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: _____

- 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.

FOR MULTI-WELL PADS AND PRODUCTION FACILITIES WITHIN DESIGNATED SETBACK LOCATIONS ONLY:

- Check this box if this Oil and Gas Location has or will have Production Facilities that serve multiple wells (on or offsite) and the Production Facilities are proposed to be located less than 1,000 feet from a Building Unit. *(Pursuant to Rule 604.c.(2)E.i., the operator must evaluate alternative locations for the Production Facilities that are farther from the Building Unit, and determine whether those alternative locations were technically feasible and economically practicable for the same proposed development.)*
- By checking this box, I certify that no alternative placements for the Production Facilities, farther from the nearest Building Unit, were available based on the analysis conducted pursuant to Rule 604.c.(2)E.i.

In the space below, explain rationale for siting the multi-well Production Facility(ies) that supports your Rule 604.c.(2)E.i determination. Attach documentation that supports your determination to this Form 2A.

SOIL

List all soil map units that occur within the proposed location. attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" report listing the soil typical vertical profile. This data is to used when segregating topsoil.

The required information can be obtained from the NRCS web site at <http://soildatamart.nrcs.usda.org/> or from the COGCC web site GIS Online map page found at <http://colorado.gov/cogcc>. Instructions are provided within the COGCC web site help section.

NRCS Map Unit Name: Osgood sand, 0 to 3 percent slopes

NRCS Map Unit Name: Valent sand, 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: 03/14/2017

List individual species: Soaptree yucca (Yucca glauca), sagebrush (Artemisia filifolia/frigida), brome (Bromus spp.), yarrow (Achillea millefolium), Russian thistle (Salsola tragus), sand dropseed (Sporobolus cryptandrus), alkalai sacaton (Sporobolus airoides), gramma

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: 5280 Feet

water well: 4745 Feet

Estimated depth to ground water at Oil and Gas Location 20 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. There are no surface water features within 1000' of the pad disturbance area. The closest domestic water well is located 4745' NW w/a depth to water at 40'. Ref: CDWR water well permit #: 34088-- Depth to groundwater is based on the static water level reported for DWR Water Well Permit #28444.

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 318A

No	BMP/COA Type	Description
1	Planning	604c(2)S. Access Roads: Verdad will utilize an existing lease access road from the southeast for drilling, completions, and production operations. The road will be properly constructed and maintained to accommodate local emergency vehicle access.
2	Planning	A permeant fencing plan will be reviewed by the surface owner and applicant.
3	General Housekeeping	Cleanup of trash, scrap, and discarded materials will be conducted at the end of each workday.
4	General Housekeeping	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.
5	Material Handling and Spill Prevention	Drip pans will be used during fueling of equipment to contain spills and leaks. Visual inspections of pipe and connections will be performed frequently to detect leaks which will be immediately corrected, repaired and reported to COGCC as required. Spill prevention Control Countermeasure (SPCC) plans will be in place to address any possible spill associated with oil and gas operations.
6	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 Verdad'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.
7	Material Handling and Spill Prevention	Stormwater management plans (SWMP) are in place to address construction, drilling, and operations associated oil and gas development in accordance with CDPHE requirements. 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 the entirety of production operations until final reclamation.
8	Dust control	When conditions exist that dust is a nuisance to the public, water trucks will be utilized to spread water across the dust problem areas.
9	Dust control	Company 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.
10	Emissions mitigation	Green Completions - Emission Control Systems: Test separators and associated flow lines and sand traps shall be installed on-site to accommodate Green completions techniques pursuant to COGCC Rules. In the anticipated absence of a viable gas sales line, 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 non-combustible gases are present.
11	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.
12	Drilling/Completion Operations	Verdad will use a closed loop system for drilling and fluid management. No pits will be dug.
13	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.
14	Final Reclamation	P&A'd wells will be identified and marked pursuant to 319.a.(5). Within 90-day subsequent to the time of plugging and abandonment of the entire site, superfluous debris and equipment shall be removed from the site.

15	CPW-Wildlife - Minimization-Burrowing Owl	<p>If new oil and gas operations must occur within any active or inactive prairie dog colonies, between March 1-October 31, then the operator will survey the prairie dog colonies using CPW's recommended survey protocol and actions to protect nesting Burrowing Owls.</p> <p>Verdad Resources will conduct a pre-disturbance survey to include burrowing owl, raptors, and other sensitive species. If any of the above-mentioned are located during this survey, Verdad will consult with CPW.</p>
16	CPW-Wildlife - Avoidance-RAPTORS	<p>Prior to commencement of oil and gas operations, the operator agrees to survey suitable nesting habitat (cliffs, large trees, snags, old growth forest, ect) within 1/2 mile of the proposed activity for nests. See CPW Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors (August 2009).</p>
17	CPW-Wildlife - Avoidance-RAPTORS	<p>The operator will provide raptor survey data for incorporation into the CPW raptor database which is used to update COGCC Wildlife Maps.</p> <p>Verdad Resources will conduct a pre-disturbance raptor survey. Nesting raptors of any species within 1/2 mile of the proposed disturbance area will be geo-located with sub-meter GPS and shapefiles will be shared with CPW. If raptor nests, or incidental sightings, are observed during this survey, Verdad will consult with CPW and/or appropriate federal agencies for Bald and Golden Eagle Protection Act compliance.</p>

Total: 17 comment(s)

Attachment Check List

Att Doc Num	Name
401229828	FORM 2A SUBMITTED
401230102	NRCS MAP UNIT DESC
401230109	ACCESS ROAD MAP
401230113	LOCATION DRAWING
401230115	LOCATION PICTURES
401230121	WASTE MANAGEMENT PLAN
401232269	REFERENCE AREA MAP
401234613	SURFACE AGRMT/SURETY

Total Attach: 8 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Surface Restoration Bond on file with SLB. Final Review Completed.	04/24/2017
OGLA	Per Operator request, removed unnecessary wildlife BMPs. - Mule Deer - Aquatic Species - Prairie Dogs - Black Footed Ferret - Bat Roosts	04/21/2017
OGLA	Location lies within the Lost Creek Designated Basin and in an area with potential shallow groundwater. Changed Sensitive Area to YES. Changed the depth to groundwater to 20 feet based on DWR Water Well Permit #28444. Added: "Depth to groundwater is based on the static water level reported for DWR Water Well Permit #28444," to the Basis Statement. Operator is using pitless operations. No additional Conditions of Approval are warranted at this time.	04/17/2017
OGLA	Distance to the nearest above ground utility differs from the distance listed on the Location Drawing. - Per Operator, changed the distance to the nearest above ground utility to 3920 feet as reported on the Location Drawing.	04/17/2017
Permit	Emailed the State Land Board (SLB) for verification of Surface Restoration Bond. Permitting Review Complete.	04/11/2017
LGD	This proposed oil and gas facility is located in the Agricultural Zoned District of unincorporated Weld County. A Weld Oil and Gas Location Assessment (WOGLA) is required prior to constructing any improvements related to oil and gas exploration and production and prior to the issuance of any building permits. A building permit is required for production equipment (tank battery, separators, pump jacks, compressors, generators, etc.) from the Department of Planning Services. Access points from County roads require an Access Permit from the Department of Public Works, which includes any necessary traffic control plans and Improvement Agreements. The 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.	03/28/2017
Permit	Passes completeness.	03/17/2017
Permit	returned to draft at operator's request.	03/16/2017
Permit	Returned to draft: --SUA needs dollar amounts redacted --reference area photos must be taken during growing season. Please delete and make comment that they will be submitted by sundry within one year. --add related APD document to Related Forms Tab	03/16/2017

Total: 9 comment(s)