

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:

401069459

Date Received:

07/12/2016

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:

448913

Expiration Date:

01/09/2020

☒ 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: 10503

Name: RED HAWK PETROLEUM LLC

Address: 4125 BLACKHAWK PLAZA CIRCLE SUITE 201A

City: DANVILLE State: CA Zip: 94506

Contact Information

Name: Angie Galvan

Phone: (281) 716-5730

Fax: (281) 815-2882

email: Angie.Galvan@stxra.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20140027 ☐ Gas Facility Surety ID: _____

☐ Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: L.E. Gerkin Number: 9H

County: WELD

QuarterQuarter: NWNE Section: 13 Township: 2N Range: 64W Meridian: 6 Ground Elevation: 4874

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: 240 feet FNL from North or South section line

1498 feet FEL from East or West section line

Latitude: 40.144940 Longitude: -104.495770

PDOP Reading: 1.4 Date of Measurement: 09/30/2014

Instrument Operator's Name: Marc Woodared

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>8</u>	Oil Tanks*	<u>24</u>	Condensate Tanks*	<u> </u>	Water Tanks*	<u>8</u>	Buried Produced Water Vaults*	<u> </u>
Drilling Pits	<u> </u>	Production Pits*	<u> </u>	Special Purpose Pits	<u> </u>	Multi-Well Pits*	<u>1</u>	Modular Large Volume Tanks	<u> </u>
Pump Jacks	<u>8</u>	Separators*	<u>6</u>	Injection Pumps*	<u> </u>	Cavity Pumps*	<u> </u>	Gas Compressors*	<u>1</u>
Gas or Diesel Motors*	<u>8</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>2</u>	Pigging Station*	<u> </u>

OTHER FACILITIES*

Other Facility Type

Number

Fresh Water Storage Pit

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:

A temporary water line may be installed to transport water to the well from the above ground fresh water storage facilities prior to stimulation. The temporary water line would only be used to transport fresh water, permitted for consumable industrial use, and would be removed no later than 60 days following the installation of such lines. The temporary water line is 4-6" aluminum pipe and/or Polyurethane hose with an expected pressure of 0#

A gas pipeline is expected to be installed before production of the well is established. The gas pipeline is to be installed and owned by a marketing company and will be 2" buried fiberglass with a pressure of up to 125#

CONSTRUCTION

Date planned to commence construction: 05/01/2017

Size of disturbed area during construction in acres: 9.60

Estimated date that interim reclamation will begin: 10/15/2017

Size of location after interim reclamation in acres: 4.00

Estimated post-construction ground elevation: 4870

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? No

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: Vince Gerkin

Phone: _____

Address: 29593 CR 20

Fax: _____

Address: _____

Email: _____

City: Keenesburg State: CO Zip: 80643

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: oil and gas lease

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:	4059 Feet	3933 Feet
Building Unit:	4059 Feet	3933 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	3780 Feet	3617 Feet
Above Ground Utility:	3309 Feet	3158 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	240 Feet	71 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: (70) Valent Sand, 3 to 9 percent slopes

NRCS Map Unit Name: (49) Osgood sand 0 to 3 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: _____ 900 Feet

water well: _____ 1700 Feet

Estimated depth to ground water at Oil and Gas Location _____ 290 Feet

Basis for depth to groundwater and sensitive area determination:

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

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 fresh water pit will be reclaimed 180 days after stimulation is complete. There will not be netting.
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I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: _____ Date: 07/12/2016 Email: Angie.Galvan@stxra.com

Print Name: Angie Galvan Title: Regulatory

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: Matthew Lee Director of COGCC Date: 1/10/2017

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
	If groundwater is encountered during pit construction the base of the pit shall be constructed at a depth above the water table. The pit shall be constructed with a liner. A Form 42 will be submitted to the COGCC with revisions of pit dimensions as necessary.

Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	The fresh water storage pit which will be constructed will be used for storage of fresh water only. The installation of the a temporary fresh water storage pit is necessary for the stimulation of the proposed wells and the pit will be filled with fresh water which comes from a water provider having water sources permitted for consumable industrial use. The fresh water pit will fenced and a sign will be posted for notice that the pit must only contain fresh water.
2	Storm Water/Erosion Control	Material handling and spill prevention procedures and practices will be followed to help prohibit discharges to surface waters. Internal storm water inspections will be conducted per applicable stormwater regulations. Any excessive precipitation accumulation within containment should be removed as appropriate and disposed of properly. Implement appropriate erosion control devices where necessary to minimize erosion of the access road and pad.
3	Material Handling and Spill Prevention	Operator will ensure 110 percent secondary containment for any volume of fluids contained at the well site during drilling and completion. Operator will implement best practices to contain any unintentional release of fluids.
4	Construction	The location will be fenced and the fenced area will include the fresh water containment. Fresh water for the fresh water storage comes from a water provider, water sources permitted for consumable industrial use.
5	Drilling/Completion Operations	Drill cuttings will be hauled to an approved waste disposal facility. Drilling fluids will be contained and hauled to an approved waste disposal facility. Flowback and stimulation fluids will be sent to tanks and/or filters to allow the sand to settle out before the fluids are hauled to a state approved disposal facility. Diking, berms, ditches and other forms of containment and diversions will be utilized around tanks, frac tanks, liquids, and/or well pad.

Total: 5 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1668990	HYDROLOGY MAP
1668991	LOCATION DRAWING
1668996	CORRESPONDENCE
401069570	HYDROLOGY MAP
401069572	LOCATION PICTURES
401069574	REFERENCE AREA PICTURES
401069575	MULTI-WELL PLAN
401069577	ACCESS ROAD MAP
401069580	NRCS MAP UNIT DESC
401069581	NRCS MAP UNIT DESC
401077125	REFERENCE AREA MAP
401080708	CONST. LAYOUT DRAWINGS

Total Attach: 12 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	Correspondence with Operator. Updated construction date to May 1, 2017 and interim rec date 6 months out - Oct 15, 2017	01/10/2017
Permit	Final Review Completed.	01/04/2017
Permit	Permitting Review Complete.	12/29/2016
OGLA	Operator sent final concurrence on changes to 2A. OGLA review complete. Not a designated set back zone. OGLA task passed.	08/22/2016
OGLA	Operator sent a response (attached as correspondence). Updated BMP, distance to water features, and added COA.	08/15/2016
OGLA	Operator responded to questions - updated 2A accordingly.	08/10/2016
LGD	This proposed oil and gas facility is located in unincorporated Weld County. As of today's date August 8, 2016 the Weld County Oil and Gas Liaison/LGD has not been contacted by any nearby resident(s) or governmental jurisdiction(s) regarding this proposed location. Oil and Gas Exploration and Production activities are currently considered a Use by Right in the Agricultural Zoned District and no land use permitting is required by the County. A building permit is required for the production facilities (tank battery, separators, pump jacks, etc.) from the Department of Planning Services. Access points from a County road require Access Permits from the Department of Public Works, which include any necessary traffic control plans. The crossing or use of a County right-of-way requires a Right-Of-Way Permit from the Department of Public Works. Troy Swain, Weld County Oil and Gas Liaison and LGD (970) 400-3579.	08/08/2016
OGLA	OGLA review - ask Operator for WMP; no comment on lack of hydrology map; water resource section - depth to water more shallow and distances from reference point not edge of disturbance; under facilities - special purpose pit - but indicated fresh water pit - not on location drawing and multi-well pit; cultural distances BU is same as building - need to update as BU is closer than 5280. Send operator email.	08/03/2016
Permit	Attached revised Access road map.	07/21/2016
Permit	Passed completeness.	07/19/2016
Permit	Attached revised Construction Layout Drawing and deleted old one per operator request.	07/19/2016
Permit	Amended location name per operator request.	07/14/2016

Total: 12 comment(s)