

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:

401312378

Date Received:

06/30/2017

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:

452112

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: 10658

Name: CAPTIVA ENERGY PARTNERS LLC

Address: PO BOX 281108

City: LAKEWOOD State: CO Zip: 80228

Contact Information

Name: Kaitlyn Cook

Phone: (303) 309-1655

Fax: ()

email: kcook@progressivepcs.net

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20170055 ☐ Gas Facility Surety ID: _____

☐ Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: STILLROVEN FARM Number: PAD

County: WELD

QuarterQuarter: NENE Section: 5 Township: 3N Range: 68W Meridian: 6 Ground Elevation: 5074

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: 565 feet FNL from North or South section line

310 feet FEL from East or West section line

Latitude: 40.260750 Longitude: -105.018810

PDOP Reading: 2.1 Date of Measurement: 05/08/2017

Instrument Operator's Name: SCOTT SHERARD

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>12</u>	Oil Tanks*	<u>16</u>	Condensate Tanks*	<u> </u>	Water Tanks*	<u>4</u>	Buried Produced Water Vaults*	<u> </u>
Drilling Pits	<u> </u>	Production Pits*	<u> </u>	Special Purpose Pits	<u> </u>	Multi-Well Pits*	<u> </u>	Modular Large Volume Tanks	<u> </u>
Pump Jacks	<u> </u>	Separators*	<u>12</u>	Injection Pumps*	<u> </u>	Cavity Pumps*	<u> </u>	Gas Compressors*	<u> </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>2</u>	VOC Combustor*	<u> </u>	Flare*	<u> </u>	Pigging Station*	<u> </u>

OTHER FACILITIES*

Other Facility Type

Number

Sales Meter	<u>1</u>
ECD	<u>4</u>
Vapor Recovery Towers	<u>2</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:

2" and/or 3" Schedule 40 steel flowlines, carrying oil, gas, and water from wellheads to production equipment and sales.

CONSTRUCTION

Date planned to commence construction: 10/15/2017 Size of disturbed area during construction in acres: 9.80

Estimated date that interim reclamation will begin: 12/15/2017 Size of location after interim reclamation in acres: 5.80

Estimated post-construction ground elevation: 5074

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: STILLROVEN FARMS INC

Phone: _____

Address: 17629 County Road 5

Fax: _____

Address: _____

Email: _____

City: Berthoud State: CO Zip: 80513

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 04/18/2017

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:	616 Feet	682 Feet
Building Unit:	616 Feet	682 Feet
High Occupancy Building Unit:	4710 Feet	4874 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	297 Feet	154 Feet
Above Ground Utility:	334 Feet	351 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	310 Feet	157 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: 04/28/2017

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.

The location of the proposed well pad and production facility were selected by the Surface Owner, who is also the Mineral Owner, in 2011. A Surface Use Agreement was executed and recorded in the public records at that time. The surface owner runs a commercial hunting operation and has significant concerns about the potential impact of the drilling pad location and production facilities on its commercial operations. We prefer to drill the wells up-dip from east to west, so the location was ideally suited from a geologic standpoint. Additional Siting Rationale is attached.

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: Wiley-Colby complex, 1 to 3 percent slopes

NRCS Map Unit Name: _____

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: 66 Feet

water well: 1844 Feet

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

Basis for depth to groundwater and sensitive area determination:

Sensitive area determination based on distance to downgradient water feature and proximity to reservoirs and depth to ground water. Water well permit #1026, Receipt # 9058636 Depth to ground water determined by static water level on the closest water well.

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

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 The STILLROVEN FARM #1 well was used as the reference point for footages, cultural distances and lat/long data listed under the Location Identification data.

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

Signed: _____ Date: 06/30/2017 Email: kcook@progressivepcs.net

Print Name: Kaitlyn Cook Title: Regulatory Analyst

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

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

	Operator shall post a copy of the approved Form 2A Oil & Gas Location Assessment on the location during all construction, drilling, and completion activities.
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Best Management Practices

No BMP/COA Type

Description

1	Planning	604.c(2)M. Fencing: A meeting with the surface owner will determine a fencing plan.
2	Planning	804. Visual Impacts: All long term facility structures will be painted a color that enables the facilities to blend in with the natural background color of the landscape, as seen from a viewing distance and location typically used by the public. Maintain appearance with garbage clean-up; a trash bin will be located on site to accumulate waste by the personnel drilling the wells. Site will have unused equipment, trash and junk removed immediately. Per agreement with the Surface Owner, the Operator will construct an earthen berm around the tank battery which will allow for vehicle access thereto, and plant trees on the berm to minimize the visual impact on the Building Units to the east. The Operator and Surface Owner will agree as to the number and type of trees for planting.
3	Planning	604.c.(2)N. Control of fire hazards: All material that is considered a fire hazard shall be a minimum of 25' from the wellhead tanks or separators. Electrical equipment shall comply with API IRP 500 and will comply with the current national electrical code.
4	Planning	604.c.(2)V - Development from existing well pads: An existing pad was not available to utilize to develop these wells and their BHLs.
5	Traffic control	604.c.(2)S. Access Roads: The access road will be constructed to accommodate local emergency vehicles. This road will be maintained for access at all times. Traffic will be routed to minimize local interruption. Dust control measures will also be utilized.
6	Traffic control	Rule 604.c.(2)D: If required by the local government, a traffic plan shall be coordinated with the local jurisdiction prior to commencement of move in and rig up. Any subsequent modification to the traffic plan must be coordinated with the local jurisdiction. Captiva Energy Partners is in contact with the Town of Mead regarding traffic, and has a Traffic Narrative in place per the request of Weld County. No traffic plan is required.
7	General Housekeeping	604.c.(2)P. Trash Removal: All trash, debris and material not intrinsic to the operation of the oil and gas facility shall be removed and legally disposed of as applicable.

8	General Housekeeping	604.c.(2)T. - Within 90 days subsequent to the time of plugging and abandonment of the entire site, superfluous debris and equipment shall be removed from the site. Identification of plugged and abandoned wells will be identified pursuant to 319.a.(5).
9	Material Handling and Spill Prevention	604.c.(2)F. Leak Detention Plan: Pumper will visit the location daily and visually inspect all tanks and fittings for leaks. All leaks will be immediately repaired, affected areas remediated, and any spills reported as required by COGCC and CDPHE regulations. Annual flowline testing will occur according to COGCC Rule 1101. All inspection records will be kept for a period of 3 years and made available to COGCC upon request. Additionally, monthly documented SPCCP inspections will be conducted pursuant to 40 CFR 112.
10	Material Handling and Spill Prevention	604.c.(2)R Tank Specifications: Tanks will be designed, constructed and maintained in accordance with NFPA Code 30. The tanks are visually inspected once a day for issues, and recorded inspections are conducted once a month.
11	Construction	604.c.(2)G. Berm Construction: Tank berms shall be constructed of steel rings with a synthetic or engineered liner and designed to contain 150% of the capacity of the largest tank. All berms will be visually checked periodically to ensure proper working condition. Secondary containment devices shall be sufficiently impervious to contain any spilled or released material. Tertiary containment, such as an earthen berm, will be installed around production facilities. Berms will be visually inspected daily to ensure proper working condition. Inspection and record retention of berm inspections will be in accordance per SPCC regulation. All records will be retained for a period of 3 years made available to the COGCC upon request.
12	Construction	803 Light sources during all phases of operations will be directed downwards and away from occupied structures where possible. Once the drilling and completion rigs leave the site, there will be no permanently installed lighting on site.
13	Construction	604.c.(2).Q. 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.
14	Construction	604.c.(2).E. This will be a multi-well pad.
15	Noise mitigation	604.c.(2)A. The Operator will work with a qualified sound mitigation contractor to develop a sound mitigation program to meet COGCC requirements during drilling and completion operations. The location and type of sound mitigation measures will be determined by the Operator from the recommendations of a sound model using existing sound survey data from drilling rigs prior to commencing drilling operations, as well as recommendations from a sound mitigation contractor. During drilling and completion operations, the Operator anticipates that, at a minimum, there will be sound mitigation measures placed along the east side of the location to mitigate the Building Unit directly to the east (~616 ft away from the wells). Examples of anticipated sound mitigation measures include sound walls, sound barriers, and/or hay bales. If the sound mitigation program requires additional mitigation measures to achieve compliance levels, they will be implemented. Please note, the entrance to the pad is on the east side of the location, so there will be a break in the sound barrier to accommodate the access road.
16	Emissions mitigation	604.c.(2)C.i. Green Completions - Emission Control System: Test separators and associated flow lines and sand traps shall be installed on-site to accommodate green completions techniques pursuant to COGCC Rules. Flowback 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 flowback 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 combustions where non-combustible gases are present. It is anticipated that there will be a gas sales line in place prior to flowback and first production. Saleable gas during flowback and production will be put to gas sales.
17	Emissions mitigation	Rule 805: Oil & gas facilities and equipment shall be operated in such a manner that odors and dust do not constitute a nuisance or hazard to public welfare.
18	Drilling/Completion Operations	604.c.(2)K - Pit level indicators: 604.c.(2).K. Drilling and Completion - Pit level Indicators shall be used on location. No pit is planned on this location.
19	Drilling/Completion Operations	604.c.(2)B.i - Operator will be utilizing a closed loop system.

20	Drilling/Completion Operations	604.c.(2).O. - All loadlines shall be bullplugged or capped.
21	Final Reclamation	604.c.(2)U - Identification of plugged and abandoned wells: 604.c.(2).U. 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.

Total: 21 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2478323	OTHER
2478324	CORRESPONDENCE
2478325	RULE 306.E. CERTIFICATION
2478348	SITING RATIONALE
2478349	CORRESPONDENCE
401312378	FORM 2A SUBMITTED
401313446	LOCATION PICTURES
401313461	MULTI-WELL PLAN
401318872	WASTE MANAGEMENT PLAN
401318874	SURFACE AGRMT/SURETY
401326432	ACCESS ROAD MAP
401326434	FACILITY LAYOUT DRAWING
401326438	HYDROLOGY MAP
401326441	LOCATION DRAWING
401327160	NRCS MAP UNIT DESC
401329016	PRE-APPLICATION NOTIFICATION CERTIFICATION

Total Attach: 16 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed.	09/06/2017
OGLA	At the request of the OGLA Supervisor, operator clarified the distance to the nearest Building & Building Unit from a production facility, provided additional Siting Rationale, revised the Noise mitigation & Visual Impact mitigation BMPs, and revised the date construction will commence. OGLA task passed.	09/06/2017
Permit	Permitting Review Complete.	08/23/2017
OGLA	IN PROCESS - Operator updated the Other Facilities section to include a sales meter, confirmed the method of drill cuttings and drilling fluids disposal, revised the distance to the nearest High Occupancy Building Unit, revised the Traffic Control BMP, revised the Leak Detection BMP, clarified the Lighting BMP, provided missing 604.c.(2) mitigation measure BMPs, & provided the Rule 306.e. certification letter. OGLA review complete. Waiting on Siting Rationale review by OGLA Supervisor.	08/09/2017
OGLA	ON HOLD - Requested operator update the Other Facilities section to include the sales meter, confirm the method of drill cuttings and drilling fluids disposal, revise the distance to the nearest High Occupancy Building Unit, revise the Traffic Control BMP, revise the Leak Detection BMP, clarify the Lighting BMP, provide missing 604.c.(2) mitigation measure BMPs, & provide the Rule 306.e. certification letter. Due by 8/31/17.	07/31/2017
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. The operator has noticed their intent to apply for a WOGLA and the proposed location is in the 28-day notification/comment period. A building permit is required for the production facilities (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.	07/28/2017
Permit	Passed completeness.	07/11/2017
OGLA	Passed Buffer Zone completeness review. Address drilling waste management during technical review. Captiva does not have an approved centralized E&P waste management facility on record.	07/10/2017

Total: 8 comment(s)