

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:

401244002

**(SUBMITTED)**

Date Received:

04/20/2017

## 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:

Expiration Date:

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: 10633  
 Name: CRESTONE PEAK RESOURCES OPERATING LLC  
 Address: 1801 CALIFORNIA STREET #2500  
 City: DENVER      State: CO      Zip: 80202

### Contact Information

Name: Chris McRickard  
 Phone: (720) 410-8487  
 Fax: ( )  
 email: chris.mcrickard@crestonepr.com

### RECLAMATION FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID: \_\_\_\_\_     Gas Facility Surety ID: \_\_\_\_\_  
 Waste Management Surety ID: 20160109

### LOCATION IDENTIFICATION

Name: Pratt      Number: 29H-P168-TCA  
 County: WELD  
 Quarter: NESW    Section: 29    Township: 1N    Range: 68W    Meridian: 6    Ground Elevation: 5158

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: 2075 feet FSL from North or South section line  
2414 feet FWL from East or West section line

Latitude: 40.020450      Longitude: -105.028317

PDOP Reading: 1.9      Date of Measurement: 03/10/2017

Instrument Operator's Name: Jason Dahlman



## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: WWD, LLC

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

Address: PO Box 1937

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

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

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

City: Longmont State: CO Zip: 80502

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 05/21/2013

## 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	_____ Feet
Building Unit:	_____ Feet	_____ Feet
High Occupancy Building Unit:	_____ Feet	_____ Feet
Designated Outside Activity Area:	_____ Feet	_____ Feet
Public Road:	_____ Feet	_____ Feet
Above Ground Utility:	_____ Feet	_____ Feet
Railroad:	_____ Feet	_____ Feet
Property Line:	_____ Feet	_____ 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 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: 67- Ulm clay Loam, 3 to 5 percent slopes

NRCS Map Unit Name: 36 - Midway-Shingle complex, 5 to 20 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: 615 Feet

water well: 328 Feet

Estimated depth to ground water at Oil and Gas Location 7 Feet

Basis for depth to groundwater and sensitive area determination:

1) Permit #294253 (monitor well) used to determine depth to ground water at 74 feet. 2) Permit #52362-MH (monitor well) - no depth to ground water listed. 3) Permit #17239-MH (monitor well) - no depth to ground water listed. 4) Permit #165423 has perf'd casing at 10 and is upgradient of the location. 5) Permit #294252 has perf'd casing top of 7' and perf'd bottom of 75' (basis for estimate depth to ground water).  
 2) Nearest water well is 328' as surveyed on attached location drawing.

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 \_\_\_\_\_

## Operator Proposed Wildlife BMPs

No BMP

## 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

- 1) This pad was constructed by the previous operator between 11/2014-12/2014.
- 2) This pad will be used for fresh water storage. Surface pipes will supply water from third party supplier.
- 3) This pad will be used to stage completions equipment.
- 4) This pad may use a combination of 500 bbl tanks and 2 MLVT's for fresh water storage. Up to 60 (qty) 500 bbl tanks may be on location for fresh water storage, produced water and flowback. Produced water tanks will utilize vapor control. No produced water will be stored in the MLVT.
- 5) MLVT drawings are attached.
- 6) Once completions operations are done, this area will be completely reclaimed.
- 7) Proposed reclamation drawing was agreed upon by CDPHE, COGCC & landowner and is attached.
- 8) Cultural Distances are measured from the edge of the temporary completions pad and are listed on the attached location drawing: Building - 2,213' NW; Building Unit-2,213' NW; Property Line-339' W, Public Road-2,338' SW; Above Ground Utility-3,132' NE; High Occupancy Building Unit-5,280'; Railroad-5,280'; DOAA-5,280'.

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

Signed: \_\_\_\_\_ Date: 04/20/2017 Email: chris.mcrickard@crestonepr.com

Print Name: Chris McRickard 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: \_\_\_\_\_

## 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**

COA Type	Description

## Best Management Practices

No	BMP/COA Type	Description
1	General Housekeeping	All surface trash, debris, scrap or discarded material connected with the operations of the property shall be removed from the premises or disposed of in a legal manner.
2	Storm Water/Erosion Control	Crestone will comply with COGCC Rule 1002.f.(2). by utilizing BMPs at the oil and gas location to control stormwater runoff in a manner that minimizes erosion, transport of sediment offsite, site degradation and protects surface waters.
3	Construction	Subject pad will have all weather access roads to allow for operator and emergency response.
4	Construction	All leasehold roads will be constructed to accommodate local emergency vehicle access requirements, and will be maintained in a reasonable condition.
5	Noise mitigation	Crestone will perform a baseline noise survey prior to any operational activity measuring dBA at a distance 350 feet from the noise source or sound levels will be measured at a point twenty-five (25) feet from the structure towards the noise source. In situations where measurement of noise levels at three hundred and fifty (350) feet is impractical or unrepresentative due to topography, the measurement may be taken at a lesser distance and extrapolated to a 350-foot equivalent using the formula stated in Rule 802 of the State of Colorado Oil and Gas Conservation Commission. As necessary, based on the survey, Crestone will install temporary sound walls to minimize noise and light impacts during drilling and completions and will install permanent noise mitigation at the facility location as necessary to meet all COGCC regulations.
6	Emissions mitigation	Temporary flowback flaring and oxidizing equipment will include adequately sized equipment to handle 1.5 times the largest flowback volume of gas experienced in a ten mile radius. If there is overrun, Crestone will shut in or choke back the well versus freely venting.
7	Drilling/Completion Operations	This temporary completions area of approximately 6.5 acres will be utilized for fresh water storage, produced water storage and completions equipment. We may use up to 60 temporary 500 bbl enclosed tanks and up to 2 MLVTs at this location. MLVTs will be utilized for fresh water storage only. Produced water tanks will have vapor control. The state-licensed manufacturer for the subject site will either be MWS or Pinnacle Manufacturing. The tanks will hold between 40,000-42,000 barrels, are between 153'-158' in diameter, and plan to be on location for from September 2017 through December 2017 or until completions operations are done. Once completions operations are done, this area will be reclaimed per Final Reclamation BMP. Crestone certifies that the MLVTs are designed and implemented consistent with the June 13, 2014 "Policy on the Use of Modular Large Volume Tanks in Colorado."
8	Final Reclamation	The final reclamation plan has been coordinated with staff at CDPHE, COGCC and the surface owner. The proposed plan for reclamation of the temporary completions area is as follows: Reclamation of the site will use onsite, existing fill dirt to spread outward from the pad. No heavy equipment is approved to encroach upon undisturbed land. Toward the northern portion of the TCA, approximately 1-2 feet of existing fill dirt will be left in Area 1 of the attachment diagram. In Area 2 of the attached diagram, approximately 1 foot of existing fill dirt will be spread evenly. Outlying contours will be filled with existing fill dirt; any excess fill dirt will be hauled off. Top soil will then be spread over the newly created area and seeded. Dirt estimates would be approximately 6-12 inches of certified top soil placed directly over the fill dirt for direct seed germination. Reclamation standards will be followed according to the COGCC 1000 Series Reclamation Rules. If trash is encountered on any level, Crestone Peak will contact CDPHE immediately.

Total: 8 comment(s)

### Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401244002	FORM 2A SUBMITTED
401245150	ACCESS ROAD MAP
401245159	LOCATION DRAWING
401245160	LOCATION PICTURES
401245161	SURFACE AGRMT/SURETY
401245166	NRCS MAP UNIT DESC
401264182	OTHER
401264183	OTHER
401264184	OTHER
401264185	OTHER
401264200	OTHER
401266352	NRCS MAP UNIT DESC
401268431	HYDROLOGY MAP
401268450	OTHER
401268452	OTHER
401270649	SURFACE AGRMT/SURETY

Total Attach: 16 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
		Stamp Upon Approval

Total: 0 comment(s)

**Public Comments**

No public comments were received on this application during the comment period.

