

FORM  
2A

Rev  
04/18

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:

401675789

(SUBMITTED)

Date Received:

Oil and Gas Location Assessment

☐ New Location ☐ Refile ☒ Amend Existing Location Location#: 336435

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:

**336435**

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: Erin Lind  
Phone: (720) 410-8478  
Fax: ( )  
email: erin.lind@crestonepr.com

FINANCIAL ASSURANCE

- ☒ Plugging and Abandonment Bond Surety ID (Rule 706): 20160104 ☐ Gas Facility Surety ID (Rule 711): \_\_\_\_\_
- ☐ Waste Management Surety ID (Rule 704): \_\_\_\_\_

LOCATION IDENTIFICATION

Name: Kugel Number: 18H-H267  
County: WELD  
QuarterQuarter: SENE Section: 18 Township: 2N Range: 67W Meridian: 6 Ground Elevation: 4953  
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: 2178 feet FNL from North or South section line  
681 feet FEL from East or West section line  
Latitude: 40.139661 Longitude: -104.926457  
PDOP Reading: 1.1 Date of Measurement: 05/31/2018  
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	14	Oil Tanks*		Condensate Tanks*	16	Water Tanks*	4	Buried Produced Water Vaults*	
Drilling Pits		Production Pits*		Special Purpose Pits		Multi-Well Pits*		Modular Large Volume Tanks	
Pump Jacks		Separators*	14	Injection Pumps*		Cavity Pumps*		Gas Compressors*	
Gas or Diesel Motors*		Electric Motors		Electric Generators*		Fuel Tanks*		LACT Unit*	1
Dehydrator Units*		Vapor Recovery Unit*	9	VOC Combustor*	12	Flare*		Pigging Station*	

## OTHER FACILITIES\*

### Other Facility Type

### Number

Automation Rack	1
Buffer Vessel	1
Bulk Treater	1
Chemical Tote and Injection Pump	1
Closed Drain Tank	1
Instrument Air Skid	1
Meter House - Gas	2
Off Spec LP Separator	1
Oil Vapor Knockout	1
Sales Gas Scrubber	1
Vapor Recovery Tower	1
Water Vapor Knockout	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:

Oil, water and gas will flow combined from the wellheads to the production facilities through flowlines (one flowline from each wellhead). The flowlines are 3" FCA3 steel, epoxy coated, welded and pressure tested. They will be buried 4' deep. A gas sales pipeline will be determined by KMG at a later date. Oil and water may be trucked off site.

## CONSTRUCTION

Date planned to commence construction: 02/15/2019

Size of disturbed area during construction in acres: 10.71

Estimated date that interim reclamation will begin: 02/15/2020

Size of location after interim reclamation in acres: 2.05

Estimated post-construction ground elevation: 4953

## 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: 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?           

Reuse Facility ID:                      or Document Number:                     

Centralized E&P Waste Management Facility ID, if applicable:                     

## SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Town of Firestone

Phone:                     

Address: 131 Grant Ave.

Fax:                     

Address: P.O. Box 100

Email:                     

City: Firestone State: CO Zip: 80520-0100

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 02/13/2018

## 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:	761 Feet	736 Feet
Building Unit:	792 Feet	784 Feet
High Occupancy Building Unit:	4445 Feet	4409 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	670 Feet	756 Feet
Above Ground Utility:	331 Feet	103 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	392 Feet	231 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: 06/11/2018

## 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 options for a surface location were limited for this oil and gas facility. Due to future development of the area by the surface owner and where our leasehold exists, we had to stay in the NE/4 of Section 17. We chose to propose the pad in the SENE since it was further from the St Vrain Ranch neighborhood to the north, across CR 22. By being in the SE corner of this parcel, we are also trying to reduce our permanent surface footprint so that we don't interfere with the future development plans of this land. The production facilities have been oriented to be as far away from as many Building Units as possible (on the west side of the well heads).

## 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: 47: Olney fine sandy loam, 1 to 3 percent slopes



NRCS Map Unit Name: 73 - Vona Loamy sand 3 to 5 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: Sideoats grama, sand dropseed, thickspike wheatgrass and prairie sandreed.

### 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: 3660 Feet

water well: 556 Feet

Estimated depth to ground water at Oil and Gas Location 30 Feet

Basis for depth to groundwater and sensitive area determination:

This is not a sensitive area since the groundwater is deeper than 25'. Nearest water well, permit #77702-A has a water level of 30'; nearest downgradient water feature is 3660' away.

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: No

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 NRCS Map Unit Description 73 has been added. 47 is already on file.

A temporary completions area of approximately four acres will be utilized for 2-3 fresh water storage tanks to be used during completions operations. 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 approximately 95 days. Once completions operations are complete, this area will be completely reclaimed. 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." Please see attached map for the location of the tanks.

An amended surface use agreement is currently being negotiated with the Town of Firestone. When the new agreement is finalized, a memorandum will be supplied to the Commission.

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

Signed: \_\_\_\_\_ Date: \_\_\_\_\_ Email: toby.sachen@crestonepr.com

Print Name: Toby Sachen Title: Contractor

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

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## Best Management Practices

No	BMP/COA Type	Description
1	Planning	Additional mitigation measures may be discussed with the Town of Firestone during the municipal permitting process and mutually agreed upon prior to approval of the Special Use Permit for this location.
2	Traffic control	An access route from the highway or county road to the proposed oil and gas location will be chosen and agreed upon with the Town of Firestone during the municipal permitting process. Required access road permits will be obtained before construction begins and any special requirements outlined by the Town will be followed. Emergency routes will be chosen prior to the commencement of operations and will be clearly marked and maintained throughout drilling, completion and production activities.
3	General Housekeeping	Any material not in use that might constitute a fire hazard will be removed a minimum of twenty-five (25) feet from the wellhead, tanks and separator. Any electrical equipment installations inside the bermed area will comply with API RP 500 classifications and comply with the current national electrical code as adopted by the State of Colorado.
4	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.
5	General Housekeeping	The well site will be cleared of all non-essential equipment, trash and debris after ninety days of a well P&A.
6	General Housekeeping	Crestone will identify plugged and abandoned wellbores according to Rule 319.a.(5). including the location of the wellbore with a permanent monument as specified in Rule 319.a.(5). Crestone will also inscribe or imbed the well number and date of plugging upon the permanent monument.
7	General Housekeeping	Flammable liquids shall not be stored within fifty (50) feet of the wellbore, except for the fuel in the tanks of operating equipment or supply for injections pumps. Where terrain and location configuration do not permit maintaining this distance, equivalent safety measures should be taken.
8	General Housekeeping	Crestone Peak Resources places road base, rock and recycled asphalt to assist with dust abatement. During construction, drilling, completions and reclamations phases, Crestone monitors each site and if needed we will run water trucks.
9	Material Handling and Spill Prevention	Frequency on valve and fitting inspections: Crestone Lease Operators inspect all equipment on their locations at a minimum of once every 48 hours, but most sites are inspected every 24 hours. Valves and fittings inspections are part of the daily job duties of our lease operators. Any valve or fitting that is found to be leaking is either repaired immediately by the lease operator or shut-in procedures are implemented as described below. Additionally, lease operators conduct a documented monthly inspection of the facility and this includes inspection of all valves and fittings.
10	Material Handling and Spill Prevention	Measures for when leaks are discovered: - If we suspect a leak we shut in the well and hydrotest the line. If it passes, then the well is brought back onto production. - If there is an actual leak, well is kept shut in while leak is found and fixed. Not until the line has passed hydrotesting, would the well be brought back online.
11	Material Handling and Spill Prevention	All loadlines will be capped for every location in the DJ.
12	Material Handling and Spill Prevention	Well effluent containing more than ten (10) barrels per day of condensate or within two (2) hours after first encountering hydrocarbon gas of salable quality will be directed to a combination of sand traps, separators, surge vessels, and tanks as needed to ensure safe separation of sand, hydrocarbon liquids, water, and gas and to ensure salable products are efficiently recovered for sale or conserved and that non-salable products are disposed of in a safe and environmentally responsible manner.



13	Material Handling and Spill Prevention	<p>Leak Detection Program</p> <ul style="list-style-type: none"> <li>• Annual hydrostatic test on the oil dump line from the separator to the tank battery.</li> <li>• Annual hydrostatic “static” tests on our oil tanks.</li> <li>• Annual hydrostatic “static” tests on our produced water tank and water dump line from the separator to the produced water tank.</li> <li>• Lease Operator inspections of all equipment not to exceed 48 hours.</li> <li>• Monthly documented inspections (EU).</li> <li>• Annual environmental inspections of all battery and well equipment and pads.</li> <li>• UT inspections of the pressure vessels every five years and input into Crestone’s RIPL Predictive Integrity Maintenance Program. (HLP separators and fuel gas separators)</li> </ul>
14	Material Handling and Spill Prevention	<p>The Crestone lease operator inspections are done as a routine part of the lease operators job. The lease operator would typically visit each of their assigned locations daily. They conduct a visual inspection of the facility which includes all valves, fittings, wellhead, tanks, vapor control systems and all connections. The lease operator also checks our Cygnet automation system for system pressures and flows.</p> <p>The monthly documented inspection is done using an electronic form that is recorded in the EU system. This inspection and documentation requires the lease operator to inspect all aspects of the site and then triggers work orders for any leaks, or housekeeping issues.</p> <p>The Lease operators also conduct a weekly CDPHE Regulation 7 – Audible, Visual, and Olfactory (AVO) inspection, which focus on the tanks and vapor control system. In addition, the sites are inspected with optical gas imaging cameras on a routine schedule, annually for compliance purposes with our Spill Prevention Containment and Countermeasures (SPCC) plan; depending on the status of reclamation the sites are also inspected on either a 14-day, 30-day, annual or rain triggered event in accordance with both the COGCC and the CDPHE Stormwater Management Plans (SWMP).</p>
15	Dust control	<p>Crestone will adhere to COGCC Rule 805.c. concerning fugitive dust. Crestone will employ practices for control of fugitive dust caused by their operations. Such practices will include but are not limited to the use of speed restrictions, regular road maintenance, restriction of construction activity during high-wind days, and silica dust controls when handling sand used in hydraulic fracturing operations. Additional management practices such as road surfacing, wind breaks and barriers, or automation of wells to reduce truck traffic may also be required if technologically feasible and economically reasonable to minimize fugitive dust emissions. Crestone will use a rock base tracking pad at the access point to help remove dirt and prevent debris from collecting on CR 15. As necessary, Crestone will sweep roads nearest the access point of dirt and debris to maintain a clean entrance. Water trucks could also be used to suppress dry soils and dust.</p>
16	Construction	<p>Crestone will install fencing to restrict access to wellheads and equipment. Fencing style will be installed as required by the Town of Firestone (also the surface owner).</p>
17	Construction	<p>The pad will be constructed in such a manner that noise mitigation may be installed and removed without disturbing the site or landscaping.</p>
18	Construction	<p>Subject pad will have all weather access roads to allow for operator and emergency response.</p>
19	Construction	<p>Crestone utilizes 24” tall corrugated galvanized metal berm walls with a capacity in excess of 150% of the largest tank contained within the wall. In addition, Crestone best practices mandates the use of impervious liners that extends under each storage tank and up the walls, permanently affixed to the top of the metal berm wall. Protrusions of piping that come through the liner include a fully sealed “boot” to prevent leakage.</p>
20	Construction	<p>At the time of construction, all leasehold roads will be constructed to accommodate local emergency vehicle access requirements, and will be maintained in a reasonable condition.</p>



21	Construction	<p>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. Examples of engineering controls that could be used when needed are:</p> <ul style="list-style-type: none"> <li>o Surface roughening</li> <li>o Silt fence</li> <li>o Erosion control blanket</li> <li>o Temporary slope drain</li> <li>o Temporary outlet protection</li> <li>o Sediment control log</li> <li>o Vehicle tracking control</li> <li>o Sediment trap</li> <li>o Stabilized staging area</li> </ul>
22	Construction	<p>All newly installed or replaced crude oil and condensate storage tanks will be designed, constructed, and maintained in accordance with National Fire Protection Association (NFPA) Code 30 (2008 version). Crestone will maintain written records verifying proper design, construction, and maintenance, and will make these records available for inspection by the Director. In addition, onsite inspections are conducted internally to insure guidelines are met.</p>
23	Noise mitigation	<p>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.</p>
24	Noise mitigation	<p>The subject location will be constructed to allow potential future noise mitigation installation without disturbance.</p>
25	Emissions mitigation	<p>Flow lines, separators, and sand traps capable of supporting green completions as described in Rule 805 will be installed on subject location at which commercial quantities of gas are reasonably expected to be produced based on existing adjacent wells within 1 mile.</p>
26	Emissions mitigation	<p>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 the well versus freely venting. First sign of salable gas will be turned down the line.</p>
27	Emissions mitigation	<p>Crestone will follow and comply with all leak detection and repair and storage tank emission management plan conditions as required by Colorado Air Quality Control Commission Regulation Number 7. This will include at least monthly Audible, Visual and Olfactory (AVO) inspections of the components and tanks at our Production Facilities at most weekly or at least monthly starting on January 1, 2017. In addition, Crestone will perform infra-red camera inspections of these components and the storage tanks at most monthly or at least annually.</p>
28	Odor mitigation	<p>Crestone operations will be in compliance with the Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emission, 5 C.C.R. 1001-4, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII. Where possible, drilling rig and completion equipment engine exhaust will be directed away from occupied buildings to assist in mitigating potential odors. As necessary, Crestone may utilize chemical additives during drilling operations to mitigate odor impacts. Sealed tanks with pressure relief valves and emissions controls will be utilized for the production facilities.</p>
29	Drilling/Completion Operations	<p>Crestone will employ a rig without kelly that has double ram with blind and pipe ram and an annular preventer. At least one person at the well site during drilling operations will have Mineral Management certification or Director approved training for blowout prevention.</p>

30	Drilling/Completion Operations	Guy line anchors in the DJ Basin are not installed. Crestone will use an engineered base beam that we guy wire anchor the derricks to.
31	Drilling/Completion Operations	Closed-top tanks will utilize backpressure systems that exert a minimum of four (4) ounces of backpressure and a maximum that does not exceed the pressure rating of the tank to facilitate gathering and combustion of tank.
32	Drilling/Completion Operations	Crestone will utilize a closed-loop system for drilling operations at this location.
33	Drilling/Completion Operations	Crestone will not utilize pits.
34	Drilling/Completion Operations	Crestone will comply with the "COGCC Policy on the Use of Modular Large Volume Tanks in Colorado" dated June 13, 2014. Crestone certifies that the MLVTs on this location will be designed and implemented consistent with the COGCC Policy on the use of MLVTs in the state of Colorado.

Total: 34 comment(s)

### Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
401695476	ACCESS ROAD MAP
401695480	LOCATION DRAWING
401695484	HYDROLOGY MAP
401695485	LOCATION PICTURES
401695486	REFERENCE AREA MAP
401695487	REFERENCE AREA PICTURES
401695775	NRCS MAP UNIT DESC
401696463	FACILITY LAYOUT DRAWING
401696464	MULTI-WELL PLAN
401697853	PRE-APPLICATION NOTIFICATION CERTIFICATION
401705992	WASTE MANAGEMENT PLAN
401771186	SURFACE AGRMT/SURETY

Total Attach: 12 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.

