

**FORM
INSP**

Rev
05/11

**State of Colorado
Oil and Gas Conservation Commission**

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109



Inspection Date:

06/02/2016

Document Number:

674103196

Overall Inspection:

SATISFACTORY

FIELD INSPECTION FORM

Location Identifier	Facility ID	Loc ID	Inspector Name:	On-Site Inspection	2A Doc Num:
	441811	441811	Rickard, Jeff	<input type="checkbox"/>	

Operator Information:

OGCC Operator Number:	<u>10459</u>
Name of Operator:	<u>EXTRACTION OIL & GAS LLC</u>
Address:	<u>370 17TH STREET SUITE 5300</u>
City:	<u>DENVER</u> State: <u>CO</u> Zip: <u>80202</u>

- THIS IS A FOLLOW UP INSPECTION
- FOLLOW UP INSPECTION REQUIRED
- NO FOLLOW UP INSPECTION REQUIRED
- INSPECTOR REQUESTS FORM 42 WHEN CORRECTIVE ACTIONS ARE COMPLETED

Contact Information:

Contact Name	Phone	Email	Comment
		COGCCInspections@extracti onog.com	All Inspectors
Adamczyk, Megan		megan.adamczyk@state.co.u s	

Compliance Summary:

QtrQtr: NWSW Sec: 5 Twp: 2N Range: 68W

Insp. Date	Doc Num	Insp. Type	Insp Status	Satisfactory /Action Required	PA P/F/I	Pas/Fail (P/F)	Violation (Y/N)
12/03/2015	682400116			SATISFACTORY			No
11/24/2015	682400080			ACTION REQUIRED			No

Inspector Comment:

Related Facilities:

Facility ID	Type	Status	Status Date	Well Class	API Num	Facility Name	Insp Status	
441807	WELL	DG	12/04/2015	LO	123-41517	Fairview 10	DG	<input checked="" type="checkbox"/>
441808	WELL	DG	12/02/2015	LO	123-41518	Fairview 7	DG	<input type="checkbox"/>
441809	WELL	DG	12/01/2015	LO	123-41519	Fairview 6	DG	<input type="checkbox"/>
441810	WELL	DG	12/03/2015	LO	123-41520	Fairview 9	DG	<input type="checkbox"/>
441812	WELL	DG	12/01/2015	LO	123-41521	Fairview 5	DG	<input type="checkbox"/>
441813	WELL	DG	11/29/2015	LO	123-41522	Fairview 3	DG	<input type="checkbox"/>
441814	WELL	DG	11/30/2015	LO	123-41523	Fairview 4	DG	<input type="checkbox"/>
441821	WELL	DG	12/05/2015	LO	123-41524	Fairview 11	DG	<input type="checkbox"/>

Inspector Name: Rickard, Jeff

441822	WELL	DG	12/03/2015	LO	123-41525	Fairview 8	DG	<input type="checkbox"/>
442099	WELL	DG	11/29/2015	LO	123-41666	Fairview 2	DG	<input type="checkbox"/>
442100	WELL	DG	11/28/2015	LO	123-41667	Fairview 1	DG	<input type="checkbox"/>

Equipment: Location Inventory

Special Purpose Pits: _____	Drilling Pits: _____	Wells: <u>11</u>	Production Pits: _____
Condensate Tanks: _____	Water Tanks: <u>6</u>	Separators: <u>11</u>	Electric Motors: _____
Gas or Diesel Mortors: _____	Cavity Pumps: _____	LACT Unit: _____	Pump Jacks: _____
Electric Generators: _____	Gas Pipeline: _____	Oil Pipeline: _____	Water Pipeline: _____
Gas Compressors: _____	VOC Combustor: _____	Oil Tanks: <u>24</u>	Dehydrator Units: _____
Multi-Well Pits: _____	Pigging Station: _____	Flare: _____	Fuel Tanks: _____

Location

Lease Road:

Type	Satisfactory/Action Required	comment	Corrective Action	Date

Signs/Marker:

Type	Satisfactory/Action Required	Comment	Corrective Action	CA Date

Emergency Contact Number (S/AR): _____ Corrective Date: _____

Comment: _____

Corrective Action: _____

Good Housekeeping:

Type	Satisfactory/Action Required	Comment	Corrective Action	CA Date

Spills:

Type	Area	Volume	Corrective action	CA Date

Multiple Spills and Releases?

Fencing/:

Type	Satisfactory/Action Required	Comment	Corrective Action	CA Date

Equipment:

Type:	#	Satisfactory/Action Required:
Comment		
Corrective Action		Date: _____

Venting:

Yes/No	
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Comment	
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Flaring:

Type	Satisfactory/Action Required
Comment:	
Corrective Action:	Correct Action Date:

Predrill

Location ID: 441811

Lease Road Adeq.: _____ Pads: _____ Soil Stockpile: _____

S/AR: _____

Corrective Action: _____ Date: _____ CDP Num.: _____

Form 2A COAs:

Group	User	Comment	Date
OGLA	treitzr	Operator shall provide notice to COGCC 48 hours prior to commencing construction of this Oil and Gas Location via Form 42 per Rule 316C.c.	05/14/2015

S/AR: _____ **Comment:** _____

CA: _____ **Date:** _____

Wildlife BMPs:

BMP Type	Comment
Pre-Construction	<p>Anti-collision: Operator will perform an anti-collision evaluation of all active (producing, shut in, or temporarily abandoned) offset wellbores that have the potential of being within 150 feet of a proposed well prior to drilling operations for the proposed well. Notice shall be given to all offset operators prior to drilling.</p> <p>Identification of plugged and abandoned wells will be identified pursuant to 319.a.(5)</p>
Interim Reclamation	Operator shall be responsible for segregating the topsoil, backfilling, repacking, reseeding, and recontouring the surface of any disturbed area so as not to interfere with Owner's operations and shall reclaim such area to be returned to pre-existing conditions as best as possible with control of all noxious weeds.
Emissions mitigation	Green Completions - Emission Control System: Test separators and associated flow lines and sand traps shall be installed to accommodate green completions techniques pursuant to COGCC Rules. In the anticipated absence of a viable gas sales line, the flowback gas shall be thermally oxidized in an emissions control device (ECD), which will be installed and kept in operable condition for at 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.
Construction	<p>Guy line anchors: All guy line anchors shall be brightly marked pursuant to Rule 604.c.(2)Q.</p> <p>Berm Construction- Tanks 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.</p> <p>Containment berms shall be constructed and designed to prevent leakage and resist degradation from erosion or routine operation. Tertiary containment, such as an earthen berm, will be installed as required for Production Facilities within 500 feet of a downgradient surface water feature. All berms will be visually checked periodically to ensure proper working condition.</p>

<p>Planning</p>	<p>Multi-well Pads are located in a manner which allows for resource extraction while maintaining the highest distances possible from the offsetting residential areas and complies with the wishes of the surface owner.</p> <p>A meeting with the surface owner will determine the fencing plan.</p> <p>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. Because tanks are within the buffer zone, Operator will utilize low-profile tanks.</p> <p>Operator will be purchasing, installing and maintaining landscape screening on the east side of facilities closest to building units.</p>
<p>Traffic control</p>	<p>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.</p>
<p>Drilling/Completion Operations</p>	<p>A closed –loop system will be used for drilling operations.</p> <p>Blowout Prevention Equipment (“BOPE”): A double ram and annular preventer will be used during drilling. Stabbing valves shall be installed in the event of reverse circulation and shall be prior tested with low and high pressure fluid.</p> <p>Lighting: Site lighting shall be directed downward and inward and shielded so as to avoid glare on public roads and Building Units within one thousand (1000) feet where possible. Once the drilling and completion rigs leave the site, there will be no permanently installed lighting on site.</p> <p>Bradenhead Monitoring: Operator acknowledges and will comply with COGCC Policy for Bradenhead Monitoring during Hydraulic Fracturing Treatments in the Greater Wattenberg Area dated May 29, 2012.</p> <p>Open hole resistivity and gamma logs shall be run to describe the stratigraphy of the entire well bore and to adequately verify the setting depth of surface casing and aquifer coverage. On a multi-well pad, these open hole logs are only required on one of the first wells drilled on the pad and the Drilling Completion Report - Form 5 for every well on the pad shall identify which well was logged.</p>
<p>Final Reclamation</p>	<p>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. The Operator shall restore the surface of the Land affected by such terminated operations as near as possible to the previous state that existed prior to operations.</p>
<p>Storm Water/Erosion Control</p>	<p>Use water bars, and other measures to prevent erosion and non-source pollution. Implement and maintain BMPs to control stormwater runoff in a manner that minimizes erosion, transport of sediment offsite, and site degradation. Co-locate gas and water gathering lines whenever feasible, and mitigate any erosion problems that arise due to the construction of any pipeline(s).</p>

<p>Storm Water/Erosion Control</p>	<p>STOCKPILE/SWMP BMPS</p> <ul style="list-style-type: none"> • Stockpile management includes measures to minimize erosion and sediment transport from soil stockpiles. Erosion and Sediment Control Plans for Drilling Pad and Production Facility Pad, and Grading Plan are attached to this Form 4 Sundry. • BMPs for sediment and erosion control will be accomplished through a combination of construction techniques, vegetation and re-vegetation, and structural features. • During pre-construction, drilling, and other active construction processes, the focus will be primarily on containment-type BMPs and on-flow diversion BMPs. An example would be a continuous berm to contain storm water pollutants on site. • Erosion reduction and control will be accomplished by using several methods, which include but are not limited to diversion and control of run-on water, diversion and control of runoff water, vegetation planting and maintenance, and application and maintenance of mulches, blankets, tackifiers, tracking, and/or contouring. • Runoff control procedures will be used to mitigate and reduce the erosive transport forces of storm water during and after construction of the well site, e.g., earth berms, culvert protection, diversion ditches, swales, or other methods. • Existing vegetation cover and topsoil are removed only where necessary for the operation of equipment and construction of the pad. Trees and large shrubs that are not cleared from the pad area will be protected from damage during construction by avoiding them with equipment. • To prevent tracking of sediment onto public roads, portions of access roads shall be graveled, as appropriate. Other means such as track pads may be utilized. • Where conditions warrant, erosion control structures such as berms, culverts, and swales will be constructed to divert water away from the project area. These controls will also reduce soil erosion. • Stockpile surfaces will be stabilized with surface roughening, temporary seeding and mulching, erosion control blankets, and/or soil binders. Where seeding, mulch and/or soil binders are used, reseeded or reapplication of soil binder may be necessary. • Perimeter controls will be installed in accordance with their respective design details. • Maintenance of stockpiles will consist of inspecting perimeter controls and inlet protection. • When the stockpile is no longer needed, proper disposal of excess materials and revegetation will be done to stabilize the ground surface where it was located. • During the reclamation of the site, all cut and fill slopes in steep terrain will be graded and contoured to blend into the adjoining landscape. When possible, cut and fill slopes will be constructed so they are no steeper than a 3:1 ratio. • Keep well site location and road free of noxious weeds, litter and debris. Spray for noxious weeds, and implement dust control, as needed. • At all times, the property shall be maintained and/or watered to prevent wind-caused erosion. • Topsoil shall be stockpiled to the extent practicable on the site for use on areas to be re-vegetated. Any and all stockpiles shall be located and protected from erosive elements.
<p>General Housekeeping</p>	<p>Visual Impacts: Equipment, regardless of construction date, which are observable from any public highway shall be painted with uniform, non-contrasting, non-reflective color tones (similar to the Munsell Soil Color Coding System), and with colors matched to, but slightly darker than, the surrounding landscape.</p> <p>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. Operator shall keep the Surface Use Area as well as any roads or other areas used by Operator safe and in good order, including control of noxious weeds litter and debris.</p>
<p>Odor mitigation</p>	<p>Equipment shall be operated in such a manner that odors and dust do not constitute a nuisance or hazard to public welfare.</p> <p>Oil and gas operations shall 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.</p>

<p>Material Handling and Spill Prevention</p>	<p>Leak Detention Plan: Pumper will visit the location daily and visually inspect all wellheads, tanks and fittings for leaks. Additionally, monthly documented SPCCP inspections are conducted pursuant to 40 CFR 112.</p> <p>Control of fire hazards: All material that is considered a fire hazard shall be a minimum of 25' from the wellheads, tanks or separators. Electrical equipment shall comply with API IRP 500 and will comply with the current national electrical code.</p> <p>Operator shall comply with state and federal laws, rules and regulations governing the presence of any petroleum products, toxic or hazardous chemicals or wastes on the Subject lands.</p>
<p>Construction</p>	<p>COGCC MLVT BMPs</p> <ul style="list-style-type: none"> • Operator has an MLVT Design Package, certified and sealed by a licensed professional engineer, which is on file in their office and available upon request. • The MLVT will be at least 75 feet from a wellhead, fired vessel, heater-treater, or a compressor with a rating of 200 horsepower or more. It will be placed at least 50 feet from a separator, well test unit, or other non-fired equipment. • All liner seams will be welded and tested in accordance with applicable ASTM International standards. • Operator will be present during initial filling of the MLVT and the contractor will supervise and inspect the MLVT for leaks during filling. • Operator will comply with the testing and reinspection requirements and associated written standard operating procedures (SOP) listed on the design package. • Signs will be posted on the MLVT indicating that the contents are freshwater. • The MLVT will be operated with a minimum of 1 foot of freeboard at all times. • Access to the MLVT will be limited to operational personnel and authorized regulatory agency personnel. • Operator or contractor will conduct daily visual inspections of the exterior wall and surrounding area for integrity deficiencies. • Operator has developed a contingency plan/emergency response plan associated with the MLVT and it is on file at their office. • Dust: Operator shall employ practices for control of fugitive dust caused by their operations. Such practices shall 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. • Construction: Operator acknowledges and will comply with the Colorado Oil & Gas Conservation Commission Policy on the Use of Modular Large Volume Tanks in Colorado dated June 13, 2014. • Noise: Operator will stay under the maximum permissible noise levels stated in COGCC Rule 604.c.(2)A. If necessary, operator will use appropriately sized sound walls that will be installed around compressors to dampen noise.
<p>Dust control</p>	<p>Operator shall employ practices for control of fugitive dust caused by their operations. Such practices shall 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 may be used.</p>
<p>Noise mitigation</p>	<p>Sound walls and/or hay bales will be used to shield sensitive areas to the East during drilling operations should noise be a concern to Building Unit owner(s).</p> <p>Additional Sound mitigation measures will be considered and implemented pursuant to third party recommendations.</p> <p>Sound walls will be used to surround the generators during drilling operations to shield sensitive areas.</p> <p>Sound walls will be used to surround the vapor recovery units and/or combustion engines during production operations to shield sensitive areas.</p> <p>Operator will investigate the possibility of using electricity to power the facilities in order to decrease the amount of noise from combustion generators and/or engines.</p>

S/AR: _____ Comment:

CA: _____ **Date:** _____

Comment: _____

Staking:

On Site Inspection (305):

Surface Owner Contact Information:
 Name: _____ Address: _____
 Phone Number: _____ Cell Phone: _____

Operator Rep. Contact Information:
 Landman Name: _____ Phone Number: _____
 Date Onsite Request Received: _____ Date of Rule 306 Consultation: _____
 Request LGD Attendance: _____

LGD Contact Information:
 Name: _____ Phone Number: _____ Agreed to Attend: _____

Summary of Landowner Issues:

Summary of Operator Response to Landowner Issues:

Onsite Inspection Memorandum Summarizing Discussions at Inspection as Attachment:

Facility

Facility ID: 441807 Type: WELL API Number: 123-41517 Status: DG Insp. Status: DG

Complaint

Comment: Complaint DOC#200439589. Area resident complained about noise coming from the Fairview Pad. Continuous monitoring data was obtained by the COGCC from the sound station to the east of location for the 24 hour period of 5/28/16 (attached). C-scale levels above the 65db limit are observed, however it should be noted that background noise has been established to be 72-75dbC for the area 24 hours a day. Principal stations show this and past COGCC sound surveys have confirmed this. No C-scale noise is observed in the data that is above background noise for both day and night. 18A DOC#200439600.

Environmental

Spills/Releases:

Type of Spill: _____ Description: _____ Estimated Spill Volume: _____

Comment: _____

Corrective Action: _____ Date: _____

Reportable: _____ GPS: Lat _____ Long _____

Proximity to Surface Water: _____ Depth to Ground Water: _____

Water Well:

DWR Receipt Num: _____ Owner Name: _____ GPS: _____ Lat _____ Long _____

Field Parameters:

Sample Location: _____

Emission Control Burner (ECB): _____

Comment: _____

Pilot: _____ Wildlife Protection Devices (fired vessels): _____

Reclamation - Storm Water - Pit

Interim Reclamation:

Date Interim Reclamation Started: _____ Date Interim Reclamation Completed: _____

Land Use: IRRIGATED

Comment: _____

1003a. Waste and Debris removed? _____

CM _____

CA _____ CA Date _____

Unused or unneeded equipment onsite? _____

CM _____

CA _____ CA Date _____

Pit, cellars, rat holes and other bores closed? _____

CM _____

CA _____ CA Date _____

Guy line anchors marked? _____

CM _____

CA _____ CA Date _____

1003b. Area no longer in use? _____ Production areas stabilized? _____

1003c. Compacted areas have been cross ripped? _____

1003d. Drilling pit closed? _____ Subsidence over on drill pit? _____

Cuttings management: _____

1003e. Areas no longer needed for drilling or subsequent operations for have been re-vegetated to 80% of pre-existing? _____

Production areas have been stabilized? _____

Segregated soils have been replaced? _____

RESTORATION AND REVEGETATION

Cropland

Top soil replaced _____ Recontoured _____ Perennial forage re-established _____

Non-Cropland

Top soil replaced _____ Recontoured _____ 80% Revegetation _____

1003 f. Weeds Noxious weeds? _____

Comment: _____

Overall Interim Reclamation _____

Final Reclamation/ Abandoned Location:

Date Final Reclamation Started: _____ Date Final Reclamation Completed: _____

Final Land Use: IRRIGATED

Reminder: _____

Comment: _____

Well plugged _____ Pit mouse/rat holes, cellars backfilled _____

Inspector Name: Rickard, Jeff

Debris removed _____ No disturbance /Location never built _____

Access Roads Regraded _____ Contoured _____ Culverts removed _____

Gravel removed _____

Location and associated production facilities reclaimed _____ Locations, facilities, roads, recontoured _____

Compaction alleviation _____ Dust and erosion control _____

Non cropland: Revegetated 80% _____ Cropland: perennial forage _____

Weeds present _____ Subsidence _____

Comment: _____

Corrective Action: _____ Date _____

Overall Final Reclamation _____ Well Release on Active Location Multi-Well Location

Storm Water:

Loc Erosion BMPs	BMP Maintenance	Lease Road Erosion BMPs	Lease BMP Maintenance	Chemical BMPs	Chemical BMP Maintenance	Comment

S/A/V: _____ Corrective Date: _____

Comment: _____

CA: _____

Pits: NO SURFACE INDICATION OF PIT

Attached Documents

You can go to COGCC Images (<https://cogcc.state.co.us/weblink/>) and search by document number:

Document Num	Description	URL
674103197	Sound data for 5/28/16	http://ogccweblink.state.co.us/DownloadDocumentPDF.aspx?DocumentId=3869957