

FORM
2

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:

400885421

(SUBMITTED)

Date Received:

APPLICATION FOR PERMIT TO:

☒ Drill ☐ Deepen ☐ Re-enter ☐ Recomplete and Operate

TYPE OF WELL OIL ☒ GAS ☐ COALBED ☐ OTHER _____

Refilling ☐

ZONE TYPE SINGLE ZONE ☒ MULTIPLE ZONES ☐ COMMINGLE ZONES ☐

Sidetrack ☐

Well Name: TC AIMS

Well Number: 2-9-11

Name of Operator: EXTRACTION OIL & GAS LLC

COGCC Operator Number: 10459

Address: 370 17TH STREET SUITE 5300

City: DENVER

State: CO

Zip: 80202

Contact Name: Alyssa Andrews

Phone: (720)481-2379

Fax: ()

Email: aandrews@extractionog.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20130028

WELL LOCATION INFORMATION

QtrQtr: SENE Sec: 8 Twp: 5N Rng: 66W Meridian: 6

Latitude: 40.414340

Longitude: -104.798680

Footage at Surface: 2574 feet FNL/FSL FNL 1192 feet FEL/FWL FEL

Field Name: WATTENBERG

Field Number: 90750

Ground Elevation: 4789

County: WELD

GPS Data:

Date of Measurement: 02/21/2014 PDOP Reading: 1.0 Instrument Operator's Name: C. HOLMES

If well is ☐ Directional ☒ Horizontal (highly deviated) **submit deviated drilling plan.**

Footage at Top of Prod Zone: FNL/FSL FNL/FWL Bottom Hole: FNL/FSL FNL/FWL
2640 FSL 460 FWL 2639 FSL 2490 FWL
Sec: 9 Twp: 5N Rng: 66W Sec: 11 Twp: 5N Rng: 66W

LOCATION SURFACE & MINERALS & RIGHT TO CONSTRUCT

Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Surface Owner is: ☐ is the mineral owner beneath the location.

(check all that apply) ☐ 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 by this Well: No

The right to construct the Oil and Gas Location is granted by: Surface Use Agreement

Surface damage assurance if no agreement is in place: Surface Surety ID:

LEASE INFORMATION

Using standard QtrQtr, Sec, Twp, Rng format, describe one entire mineral lease that will be produced by this well (Describe lease beneath surface location if produced. Attach separate description page or map if necessary.)

Please see the attached lease map.

Total Acres in Described Lease: 3 Described Mineral Lease is: ☒ Fee ☐ State ☐ Federal ☐ Indian

Federal or State Lease # _____

Distance from Completed Portion of Wellbore to Nearest Lease Line of described lease: 0 Feet

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 905 Feet
Building Unit: 1043 Feet
High Occupancy Building Unit: 2312 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 1172 Feet
Above Ground Utility: 1213 Feet
Railroad: 5280 Feet
Property Line: 486 Feet

INSTRUCTIONS:

- All measurements shall be provided from center of the Proposed Well to nearest of each cultural feature as described in Rule 303.a.(5).
- 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.

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.

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: 05/21/2014

Date of Rule 305.a.(2) Buffer Zone Notification to Building Unit Owners: _____

SPACING and UNIT INFORMATION

Distance from completed portion of proposed wellbore to nearest completed portion of offset wellbore permitted or completed in the same formation: 165 Feet

Distance from Completed Portion of Wellbore to Nearest Unit Boundary 460 Feet (Enter 5280 for distance greater than 1 mile.)

Federal or State Unit Name (if appl): _____ Unit Number: _____

SPACING & FORMATIONS COMMENTS

Sec. 9-5N-66W: S/2N/2 & N/2S/2
Sec. 10-5N-66W: S/2N/2 & N/2S/2
Sec. 11-5N-66W: S/2NW/4 & N/2SW/4

OBJECTIVE FORMATIONS

| Objective Formation(s) | Formation Code | Spacing Order Number(s) | Unit Acreage Assigned to Well | Unit Configuration (N/2, SE/4, etc.) |
|------------------------|----------------|-------------------------|-------------------------------|--------------------------------------|
| NIOBRARA | NBRR | | 800 | GWA |

DRILLING PROGRAM

Proposed Total Measured Depth: 20174 Feet

Distance from proposed wellbore to nearest existing or permitted wellbore belonging to another operator:

518 Feet (Including plugged wells)

Will a closed-loop drilling system be used? Yes

Is H₂S gas reasonably expected to be encountered during drilling operations at concentrations greater than or equal to 100 ppm? No (If Yes, attach an H₂S Drilling Operations Plan)

Will salt sections be encountered during drilling? No

Will salt based (>15,000 ppm Cl) drilling fluids be used? No

Will oil based drilling fluids be used? Yes

BOP Equipment Type: ☒ Annular Preventor ☒ Double Ram ☒ Rotating Head ☐ None

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 318A

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Methods: Commercial Disposal

Cuttings Disposal: OFFSITE Cuttings Disposal Method: Commercial Disposal

Other Disposal Description:

Beneficial reuse or land application plan submitted?

Reuse Facility ID: _____ or Document Number: _____

CASING PROGRAM

| Casing Type | Size of Hole | Size of Casing | Wt/Ft | Csg/Liner Top | Setting Depth | Sacks Cmt | Cmt Btm | Cmt Top |
|-------------|--------------|----------------|-------|---------------|---------------|-----------|---------|---------|
| CONDUCTOR | 24 | 16 | 42 | 0 | 80 | 100 | 80 | 0 |
| SURF | 12+1/4 | 9+5/8 | 36 | 0 | 1500 | 400 | 1500 | 0 |
| 1ST LINER | 7+7/8 | 5+1/2 | 20 | 0 | 20174 | 1900 | 20174 | 1500 |

☐ Conductor Casing is NOT planned

DESIGNATED SETBACK LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 604.a.(1)A. Exception Zone (within 500' of Building Unit)
- ☐ 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)

GREATER WATTENBERG AREA LOCATION EXCEPTIONS

Check all that apply:

- ☒ Rule 318A.a. Exception Location (GWA Windows).
- ☒ Rule 318A.c. Exception Location (GWA Twinning).

RULE 502.b VARIANCE REQUEST

☐ Rule 502.b. Variance Request from COGCC Rule or Spacing Order Number _____

OTHER LOCATION EXCEPTIONS

Check all that apply:

- ☐ Rule 318.c. Exception Location from Rule or Spacing Order Number _____
- ☐ Rule 603.a.(2) Exception Location (Property Line Setback).

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

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| Comments | Distance to nearest wellbore permitted/completed in the same formation: 165' (TC Aims C4-9-11) Distance to nearest wellbore from another operator: 518' (Moen J #8-9) The proposed APD is on a Large UMA Location. Please see the related 2A doc #401040773 for details. The surface owner has waived Rules 318A.a. & 318A.c. in the SUA which is highlighted on p.4 of the SUA attached to the APD. |
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This application is in a Comprehensive Drilling Plan _____ CDP #: _____

Location ID: 436824

Is this application being submitted with an Oil and Gas Location Assessment application? Yes

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

Signed: _____ Print Name: Alyssa Andrews

Title: Regulatory Analyst Date: _____ Email: aandrews@extractionog.com

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: _____
Expiration Date: _____

API NUMBER

05

Conditions Of Approval

All representations, stipulations and conditions of approval stated in the Form 2A for this location shall constitute representations, stipulations and conditions of approval for this Form 2 Permit-to-Drill and are enforceable to the same extent as all other representations, stipulations and conditions of approval stated in this Permit-to-Drill.

COA Type

Description

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Best Management Practices

No BMP/COA Type

Description

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| 1 | Planning | This location has an approved Use by Special Review (USR 6:14) permit from the City of Greeley. Refer to the USR plan set for detail. |
| 2 | Planning | Landscape and screening plan was approved as part of the approved Use by Special Review (USR 6:14) permit from the City of Greeley. Generally, screening shall consist of earthen berms along the east, south, and west sides of the pad. Landscaping consisting of trees and shrubs will be installed along the north and west sides of the pad. Refer to landscape plans within the USR plan set. |

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| 3 | Planning | 604.c(2)M. Fencing: The location will be adequately fenced to restrict access by unauthorized persons. Fencing will be installed around facilities and wellheads. Additional perimeter fencing will be installed along the north and west sides of the location per approved landscape plans. Fence shall be six (6) feet in height, of noncombustible material, and will include a gate that shall be locked. |
| 4 | Planning | Access to the property will be controlled by a motorized gate operated by a key pad. |
| 5 | Planning | 604.c.(2)J.i 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. |
| 6 | Planning | 604.c.(2)J.ii Backup stabbing valves will be required on well servicing operations during reverse circulation. Valves shall be pressure tested before each well servicing operation using both low-pressure air and high-pressure fluid. |
| 7 | 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. |
| 8 | Planning | 604.c.(2)N. Any material not in use that might constitute a fire hazard shall be removed a minimum of twenty-five (25) feet from the wellhead, tanks and separator. Any electrical equipment installations inside the bermed area shall comply with API RP 500 classifications and comply with the current national electrical code as adopted by the State of Colorado. |
| 9 | Planning | All operations shall comply with Federal, State, and Local Laws including applicable standards included in 18.56 Oil & Gas Operations of the Greeley Development code. |
| 10 | Planning | The operator has developed an emergency response and fire protection plan specific to this site. |
| 11 | Planning | All tanks on site must be no taller than 12.5 feet. |
| 12 | Community Outreach and Notification | A sign with Extraction's contact information and a 24-hour contact number will be placed at or near the access road entrance. |
| 13 | Community Outreach and Notification | Public Notice was a part of the City of Greeley Use by Special Review process. Two neighborhood meetings were held prior to the public hearings. This project was heard at the December 8, 2015 and the January 5, 2016 City of Greeley Planning Commission hearings and at City of Greeley City Council on March 8, 2016. |
| 14 | 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. During construction and through the life of this location, Operator will utilize watering, via water trucks, to control fugitive dust. Additionally, the access road will be constructed with aggregate road base material and vehicle speeds will be limited to 15 miles per hour to reduce dust. |
| 15 | Traffic control | 604.c.(2)D: A Traffic Impact Study (TIS) was completed and approved as part of the Use by Special Review permit. The proposed haul route and overweight haul route for construction, drilling, completion, and production traffic was designated. Virtually all construction and permanent truck traffic will be directed to arrive and depart the site from the north on 71st Avenue to minimize delay for other vehicles on 71st Avenue. There will be approximately 30 random truck trips to the site to deliver earthwork equipment and the drilling rig that could exceed the existing weight restrictions of the bridge over the Sheep Draw. These trucks must use the U.S. 34 By-Pass and 71st Avenue to the south and will be directed to avoid street and school peak hours. All other site traffic is expected to arrive and depart using 71st Avenue equally to the north and south. |
| 16 | Traffic control | Water will not be trucked to the location for completion operations. |
| 17 | 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. |
| 18 | General Housekeeping | 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. No drilling waste (cuttings, etc.) may be stored or kept on the site. |

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| 19 | Storm Water/Erosion Control | 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). An Erosion and Sediment Control Plan was submitted as part of the Use By Special Review process with the City of Greeley and will be covered under Extraction Oil & Gas's field wide permit, permit number COR03M013. |
| 20 | Material Handling and Spill Prevention | 604.c.(2)R Tank Specifications: Tanks will be designed, constructed and maintained in accordance with NFPA Code 30 (2008 version). All tanks are visually inspected by operator on a regular schedule and annual SPCC inspections will be conducted and documented. Inspection and record retention of tank inspections will be in accordance per SPCC regulation. All records will be made available to the COGCC upon to request. |
| 21 | Material Handling and Spill Prevention | 604.c.(2)F. Leak Detention Plan: Operator will monitor production facilities on a regular schedule to identify fluid leaks, including, but not limited to, visually inspecting all wellheads, tanks and fittings. Additionally annual SPCC inspections will be conducted and documented. Annual flowline testing will also occur according to COGCC rules 1101 and 1102. Inspection and record retention of flowline testing will be in accordance per COGCC regulation. All records will be made available to the COGCC upon to request. |
| 22 | Material Handling and Spill Prevention | 604.c.(4)B.ii. Operator will monitor production facilities on a regular schedule to identify fluid leaks, including, but not limited to, visually inspecting all wellheads, tanks and fittings. Additionally annual SPCC inspections will be conducted and documented. Annual flowline testing will also occur according to COGCC rules 1101 and 1102. Extraction will conduct yearly pressure tests of all flowlines to ensure the integrity of each flowline on the location. Extraction will monitor pressures on either end of the flowline: wellhead and separator. This monitoring will ensure early detection of any leaks in the flowline. |
| 23 | Dust control | 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. |
| 24 | Dust control | 604.c.(4)B.vi. Proppant dust control. Silica dust from sand used during hydraulic fracturing will be minimized through use of "Sandbox" proppant delivery process, or equivalent system. If necessary, silica dust will be contained using a dust suppression vacuum system. |
| 25 | 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. |
| 26 | Construction | 604.c.(2).E. This will be a multi-well pad, located in a manner which allows for the greatest distances possible from building units. |
| 27 | Construction | 803 Light sources during all phases of operations will be directed downwards and away from occupied structures where possible. Lighting shield devices will be installed on all of the more conspicuous lights and the rig floor will be shrouded. A lighting plan was completed and approved as part of the Use by Special Review permit and must comply with the City of Greeley's lighting standards, Section 18.40.110 of the Development Code. |
| 28 | Construction | 604.c.(3)B. 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. All berms will be visually checked periodically to ensure proper working condition |
| 29 | Construction | Operational system will be automated to allow remote shut in, remote monitoring, and off-site response to emergencies. |
| 30 | Construction | 604.c.(3)i. An engineered containment system will be constructed around the tank battery. The containment system will be constructed of a perimeter of metal walls that are post driven into the ground around a flexible geotextile base. |

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| 31 | Construction | 604.c.(3)ii. The interior of the containment system will be sprayed with a polyurea liner technology. This liner technology maintains impermeability and puncture resistance under exposure to UV rays, weather extremes, and chemicals commonly encountered in oil and natural gas production, and provides seamless protection. |
| 32 | Noise mitigation | 802. 32 foot tall sound walls will be installed around the perimeter of the location during drilling and completion operations in accordance with the approved Use by Special Review permit. |
| 33 | Noise mitigation | The operation must comply with the City of Greeley's Noise Regulations, in accordance with Title 9, Article II of the City of Greeley's Municipal Code as is consistent with the Rules and Regulations of the COGCC. |
| 34 | Noise mitigation | Operator will power the drilling rig off of high line power. The proper infrastructure has been supplied by Xcel Energy. |
| 35 | Noise mitigation | The Operator shall continuously monitor noise and continuously collect and store noise readings with instruments placed between the Oil and Gas Location and residential Building Units. An ambient sound level survey has been conducted. Operator shall conduct the monitoring and data collection during construction, drilling, and completions operations. This data shall be available to COGCC on tables or graphs within 48 hours of being requested by COGCC. |
| 36 | Noise mitigation | To provide long term noise mitigation at this location all production equipment will be powered by electricity. Once flowback operations are complete, a noise study will be completed to determine if additional permanent noise mitigation measures are needed. If found necessary by the sound study, permanent sound panels will be installed around the compressors. |
| 37 | Noise mitigation | During the completion phase, only modern low-noise diesel engines (or electric motors) may be utilized. |
| 38 | 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. |
| 39 | Emissions mitigation | 604.c.(2)C.iii. Operator will tie into an existing gas sales line that will be extended to the location. Extraction will send salable quality gas immediately down the sales line. |
| 40 | Emissions mitigation | Emission Control Devices (ECDs) and vapor recovery units (VRUs) will be installed. Both units function to reduce volatile organic compound (VOC) emissions that are generated from the crude oil condensate tanks. The ECD and VRU devices reduce VOC emissions by at least 95% through combustion and sequestration. |
| 41 | Odor mitigation | 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. The production facilities will have VOC combustors with emission control devices to comply with the Department of Public Health and Environment, Air Quality Control Commission. Operator is in the process of implementing a new base fluid for Oil Base Mud systems. The aromatics and BTEX concentrations are much less than that of generic diesel. With these two things being the major contributors to the odor from diesel, this should lead to less odor at the drill site caused by OBM. |
| 42 | Odor mitigation | 802.e. Exhaust from all engines, motors, coolers, and other mechanized equipment shall be vented away from all occupied buildings. |
| 43 | Drilling/Completion Operations | 604.c.(2)B.i. A closed loop system will be utilized during drilling. No open pits will be used |
| 44 | Drilling/Completion Operations | 604.c.(2)L. Closed chamber drill stem tests shall be allowed. All other drill stem tests shall require approval by the Director. None planned for this well. |
| 45 | Drilling/Completion Operations | 604.c.(2).K. No pits on location. |
| 46 | Drilling/Completion Operations | 604.c.(2).O. All loadlines shall be bull plugged or capped. |

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| 47 | Drilling/Completion Operations | 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. |
| 48 | Drilling/Completion Operations | Operator acknowledges and will comply with COGCC policy for Bradenhead Monitoring during Hydraulic Fracturing treatments in the Greater Wattenberg Area dated May 29, 2012. |
| 49 | Drilling/Completion Operations | 317.p One of the first wells drilled on the pad will be logged with open-hole Resistivity Log and Gamma Ray Log from the kick-off point into the surface casing. All wells on the pad will have a cement bond log with gamma-ray run on production casing (or on intermediate casing if production liner is run) into the surface casing. The horizontal portion of every well will be logged with a measured-while-drilling gamma-ray log. The Form 5, Completion Report, for each well on the pad will list all logs run and have those logs attached. The Form 5 for a well without open-hole logs shall clearly state "No open-hole logs were run" and shall clearly identify (by API#, well name & number) the well in which open-hole logs were run. |
| 50 | Drilling/Completion Operations | The Colorado Division of Wildlife defines the active nesting season for Red Tail Hawks as February 15th through July 15th. If the Red Tail Hawk nest is determined to be in use during the nesting season, no drilling will occur while the nest is active. Drilling operations may commence once the nest has been determined to be fledged. If the nest is determined to be inactive, no timing stipulation will occur. Additionally, Extraction will have a certified report completed by a licensed biologist incorporating best management Practices (BMPs) that would mitigate affects to the hawk during the nesting season. These mitigation measures would be employed during the active nesting season from February 15th through July 15th, and allow drilling operations to continue during this period. |
| 51 | Drilling/Completion Operations | 604.c.(3)iii. For locations within five hundred (500) feet and up-gradient of a surface water body, tertiary containment, such as an earthen berm, is required around Production Facilities. After drilling and completion operations are complete, a water quality retention pond will be constructed along the north edge of the pad. The pond design and volume was submitted and approved as part of the Use by Special Review permit. The water quality pond will provide tertiary containment for this location which is upstream of the Sheep Draw. |
| 52 | Drilling/Completion Operations | 604.c.(3)vi. No more than two (2) crude oil or condensate storage tanks shall be located within a single berm. An engineered containment design is still in the process of being determined, but will meet Rule 604.c.(3)vi. |
| 53 | Drilling/Completion Operations | 604.c.(4)B.i. 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. Extraction complies 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. In addition Extraction maintains an Emergency Response Plan (ERP) that is designed to provide Extraction employees and designated Emergency Response Team (ERT) members with the information necessary to respond to incidents in a safe, rapid, effective, and efficient manner. To provide lightning mitigation, all equipment within the facility will be grounded in the event that lightning were to strike a piece of equipment. The equipment will be attached to a grounding grid that is buried below grade and dissipates any electricity from a lightning event into this subsurface grid. |
| 54 | Drilling/Completion Operations | 604.c.(4)B.iii. The location will be completely automated monitor all production operations remotely. In the event that the facility is not operating under normal conditions, the automation system will immediately notify the operator. The automation system also has the ability to remotely perform an emergency shut down if necessary. |
| 55 | Drilling/Completion Operations | 604.c.(4)B.iv. There will be no flaring or venting of gas upon completion unless there are upset or emergency conditions, or unless there is prior approval from the Director for necessary maintenance conditions. |

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| 56 | Drilling/Completion Operations | 604.c.(4)B.v. Operator will use the following mechanisms to manage storage tank pressure and fluids at the location: Use of a LACT unit, use of stepped ECDs to handle different pressures, and use of jumper lines that help release pressure to the larger burners for upset conditions on both the tanks and the separators. |
| 57 | Drilling/Completion Operations | The operator shall only utilize Lease Automatic Custody Transfer (LACT) meters during the production phase. |
| 58 | Drilling/Completion Operations | 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 site shall be prepared in accordance with the specifications of the design package prior to tank installation; including ensuring that proper compaction requirements have been met. |
| 59 | Drilling/Completion Operations | 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. |
| 60 | Drilling/Completion Operations | All liner seams will be welded and tested in accordance with applicable ASTM International standards. |
| 61 | Drilling/Completion Operations | Operator will be present during initial filling of the MLVT and the contractor will supervise and inspect the MLVT for leaks during filling. |
| 62 | Drilling/Completion Operations | Operator will comply with the testing and re-inspection requirements and associated written standard operating procedures (SOP) listed on the design package. |
| 63 | Drilling/Completion Operations | Signs will be posted on the MLVT indicating that the contents are freshwater. |
| 64 | Drilling/Completion Operations | The MLVT will be operated with a minimum of 1 foot of freeboard at all times. |
| 65 | Drilling/Completion Operations | Access to the MLVT will be limited to operational personnel and authorized regulatory agency personnel. |
| 66 | Drilling/Completion Operations | Operator or contractor will conduct daily visual inspections of the exterior wall and surrounding area for integrity deficiencies |
| 67 | Drilling/Completion Operations | Operator has developed a contingency plan/emergency response plan associated with the MLVT and it is on file at their office. |
| 68 | Drilling/Completion Operations | Tanks will be filled using the city of Greeley's water system or other local source through temporary waterlines. No water will be trucked to location. |
| 69 | Drilling/Completion Operations | A fabric reinforced liner will be utilized. In the event that a tank breach were to occur, the fabric reinforced liner will prevent a "zippering" failure from occurring. The liner will meet the specifications per the design package. |
| 70 | Drilling/Completion Operations | 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. |
| 71 | Interim Reclamation | Operator shall be responsible for segregating the topsoil, backfilling, repacking, reseeding, and re-contouring 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. |
| 72 | Final Reclamation | 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. |
| 73 | Final Reclamation | 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) |

Total: 73 comment(s)

Attachment Check List

| <u>Att Doc Num</u> | <u>Name</u> |
|--------------------|----------------------------|
| 400885590 | WELL LOCATION PLAT |
| 400886066 | DIRECTIONAL DATA |
| 400886067 | DEVIATED DRILLING PLAN |
| 401032354 | SURFACE AGRMT/SURETY |
| 401035449 | EXCEPTION LOC REQUEST |
| 401063732 | MINERAL LEASE MAP |
| 401075557 | PROPOSED SPACING UNIT |
| 401076403 | OffsetWellEvaluations Data |

Total Attach: 8 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|-------------------|----------------|---------------------|
| | | |

Total: 0 comment(s)