

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:

400654565

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Date Received:

08/27/2014

Oil and Gas Location Assessment

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

Submit signed original form. 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:

439603

Expiration Date:

10/30/2017

☒ 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: 10450

Name: EE3 LLC

Address: 4410 ARAPAHOE AVENUE #100

City: BOULDER State: CO Zip: 80303

Contact Information

Name: Ann Stephens

Phone: (303) 928-7128

Fax: (303) 218-5678

email: regulatory@petro-fs.com

RECLAMATION FINANCIAL ASSURANCE

- ☒ Plugging and Abandonment Bond Surety ID: 20130007 ☐ Gas Facility Surety ID: _____
- ☐ Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: Gregory

Number: #5-09H

County: JACKSON

QuarterQuarter: SWSW Section: 9 Township: 7N Range: 80W Meridian: 6 Ground Elevation: 8118

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: 202 feet FSL from North or South section line

71 feet FWL from East or West section line

Latitude: 40.585258 Longitude: -106.387760

PDOP Reading: 1.3 Date of Measurement: 09/12/2013

Instrument Operator's Name: RAS

RELATED REMOTE LOCATIONS

(Enter as many Related Locations as necessary. Enter the Form 2A document # only if there is no established COGCC Location ID#)

This proposed Oil and Gas Location is:

LOCATION ID # FORM 2A DOC #

FACILITIES

Indicate the number of each type of oil and gas facility planned on location

Wells	<u>1</u>	Oil Tanks	<u>8</u>	Condensate Tanks	<u> </u>	Water Tanks	<u> </u>	Buried Produced Water Vaults	<u> </u>
Drilling Pits	<u>1</u>	Production Pits	<u> </u>	Special Purpose Pits	<u> </u>	Multi-Well Pits	<u> </u>	Temporary Large Volume Above Ground Tanks	<u> </u>
Pump Jacks	<u> </u>	Separators	<u>2</u>	Injection Pumps	<u> </u>	Cavity Pumps	<u> </u>		
Gas or Diesel Motors	<u> </u>	Electric Motors	<u> </u>	Electric Generators	<u> </u>	Fuel Tanks	<u> </u>	Gas Compressors	<u> </u>
Dehydrator Units	<u> </u>	Vapor Recovery Unit	<u> </u>	VOC Combustor	<u> </u>	Flare	<u>2</u>	LACT Unit	<u> </u>
								Pigging Station	<u> </u>

OTHER FACILITIES

Other Facility Type

Number

Meter	<u>1</u>
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Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

Drilling pit will be a freshwater only storage pit.
The separators are actually heater treat units used to remove any gas from the fluids prior to being sent to the tanks.
The 8 oil tanks will actual be dual-product (oil/condensate and produced water) tanks.
Initially there will be a single 2" steel flowline (oil, gas, water) from the wellhead to the production facility located on the well pad.
Eventually the operator hopes to construct a gas gathering line and/or a water gathering line to transport produced water to a central facility for disposal.

CONSTRUCTION

Date planned to commence construction: 11/01/2014 Size of disturbed area during construction in acres: 2.49
Estimated date that interim reclamation will begin: 03/31/2015 Size of location after interim reclamation in acres: 2.49
Estimated post-construction ground elevation: 8118

DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: Yes

Is H₂S anticipated? No

Will salt sections be encountered during drilling: No

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

Will oil based drilling fluids be used? No

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE

Drilling Fluids Disposal Method: Commercial Disposal

Cutting Disposal: ONSITE

Cuttings Disposal Method: Other

Other Disposal Description:

The cuttings will be remediated onsite using EcoSponge (details provided in attached Correspondence, Cuttings Waste Management Plan).

Per the surface owner request, no reclamation is required due to current and future use of the area as a Hay Stack Yard.

Beneficial reuse or land application plan submitted? No

Reuse Facility ID: _____ or Document Number: _____

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

SURFACE & MINERALS & RIGHT TO CONSTRUCT

Name: Kohlman's O.K. Limited Pa

Phone: _____

Address: 21536 State Highway 14

Fax: _____

Address: _____

Email: _____

City: Walden State: CO Zip: 80480

Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian

Check all that apply. The Surface Owner: ☒ is the mineral owner

☒ is committed to an oil and Gas Lease

☒ has signed the Oil and Gas Lease

☐ is the applicant

The Mineral Owner beneath this Oil and Gas Location is: ☒ Fee ☐ State ☐ Federal ☐ Indian

The Minerals beneath this Oil and Gas Location will be developed from or produced to this Oil and Gas Location: Yes

The right to construct this Oil and Gas Location is granted by: oil and gas lease

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

Date of Rule 306 surface owner consultation 08/15/2013

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): Stack Yard

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): Stack Yard

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

CULTURAL DISTANCE INFORMATION

Distance to nearest:

Building: 408 Feet
Building Unit: 3944 Feet
High Occupancy Building Unit: 5280 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 5280 Feet
Above Ground Utility: 3944 Feet
Railroad: 5280 Feet
Property Line: 5280 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.

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: _____

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

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: Nr-Norrison gravelly sandy loam

NRCS Map Unit Name: St-Stumpp clay loam

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: 09/12/2013

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: 298 Feet

water well: 1967 Feet

Estimated depth to ground water at Oil and Gas Location 60 Feet

Basis for depth to groundwater and sensitive area determination:

Closest downgradient surface water feature is a ditch. The closest water well with static water level is CDWR Permit #73212-A at 3988' away. The closest water well is CDWR Permit #73209 at 1967' away but has no recorded static water level. Depth to first water-bearing groundwater zone is estimated to be between 60 and 100 feet below ground surface based on total well depth and casing intervals.

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: No

GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING

Water well sampling required per Rule 609

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)

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

This 2A will have one APD for horizontal wellbore permitted: Doc 400652662. Rule 303.b.(3)J.iii: no Building Unit Owners within 1000' so no pre-application notifications to Building Unit Owners necessary, therefore, no evidence of mailing attached.

LAND USE RECLAMATION:

EE3, LLC has the following language in an Amendment to a Surface Use Agreement that covers the Gregory #05-09H location:

Restoration of Certain Well Pads & Facility Sites. Surface Owner and Operator have agreed that Operator shall be permitted to construct the following well pads and facility sites in Jackson County, Colorado:

Ray Ranch Central Facility located in SE/4 SW/4 of Section 32-T8N-R80W (located at the site of an abandoned saw mill).
Gregory 5-09H Well Pad located in the SW/4 SW/4 Section 9-T7N-R80W (located on an existing improved hay stack yard).

Janet 1-05H Well Pad located in the NE/4 NE/4 Section 5-T7N-R80W (located on an existing improved hay stack yard).

If Operator constructs any or all of these locations, Operator shall not be required to perform any interim reclamation. When Operator permanently abandons each of these well pads and facilities, Operator is specifically precluded from performing any restoration. Surface Owner values the improvements made by Operator and wants to use the sites for its own ranching purposes after Operator is finished.

The landowner has agreed verbally to this language but has not yet had a chance to sign and return the Amendment to EE3. Once signed and available, we will submit the official document to the COGCC via sundry.

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

Signed: _____ Date: 08/27/2014 Email: regulatory@petro-fs.com

Print Name: Ann L Stephens Title: Regulatory Manager

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: Matthew Lee Director of COGCC Date: 10/31/2014

Conditions Of Approval

All representations, stipulations and conditions of approval stated in this Form 2A for this location shall constitute representations, stipulations and conditions of approval for any and all subsequent operations on the location unless this Form 2A is modified by Sundry Notice, Form 4 or an Amended Form 2A.

COA Type

Description

	Operator shall pressure test pipelines in accordance with Rule 1101.e.(1) prior to putting into initial service any temporary surface or permanent buried pipelines and following any reconfiguration of the pipeline network.
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	<p>The moisture content of drill cuttings managed onsite shall be kept as low as practicable to prevent accumulation of liquids greater than de minimis amounts. After drilling and completion operations have been completed, the drill cuttings that will remain on the well pad location (cuttings management area, the cut portion of the pad, cuttings trench, dry cuttings drilling pit), must meet the applicable standards of Table 910-1. After the drill cuttings have been amended (if necessary) and placed on the well pad, sampling frequency of the drill cuttings (to be determined by the operator) shall be representative of the material left on location. No offsite disposal of cuttings to another oil and gas location shall occur without prior approval of a Waste Management Plan (submitted via a Form 4 Sundry Notice) specifying disposal location and waste characterization method. Commercial disposal of drill cuttings will only require notification to COGCC via a Form 4 Sundry Notice.</p> <p>If the wells are be hydraulically stimulated, flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline or storage vessel located on the well pad; or into tanker trucks for offsite disposal. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment must be placed on the well pad in an area constructed to be sufficiently impervious to contain any spilled or released material.</p> <p>Potential odors associated with the completions process and/or with long term production operations must be controlled/mitigated.</p>
	<p>Operator must ensure secondary containment for any volume of fluids contained at well site during drilling and completion operations; including, but not limited to, construction of a berm or diversion dike, diversion/collection trenches within and/or outside of berms/dikes, site grading, or other comparable measures sufficiently protective of nearby surface water. Any berm constructed at the well pad location will be stabilized, inspected at regular intervals (at least every 14 days and after precipitation events), and maintained in good condition.</p> <p>The access road will be constructed and maintained as to not allow any sediment to migrate from the access road to nearby surface water or any drainages leading to surface water.</p> <p>Strategically apply fugitive dust control measures, including enforcing established speed limits on private roads, to reduce fugitive dust and coating of vegetation and deposition in water sources.</p> <p>Berms or other containment devices shall be constructed to be sufficiently impervious (corrugated steel with poly liner) to contain any spilled or released material around crude oil, condensate, and produced water storage tanks.</p>

Notify the COGCC 48 hours prior to start of pad construction, rig mobilization, spud, pipeline testing, start of hydraulic stimulation operations, and start of flowback operations using Form 42 (the appropriate COGCC individuals will automatically be email notified, including the LGD for hydraulic stimulation operations).

After completion of the well, operator shall submit a Form 4 Sundry Notice with a waiver request to the 1000 Series Rules, signed by the surface owner. The Sundry shall adhere to:

Rule 1001.c. Surface owner waiver of 1000-Series Rules. The Commission shall not require compliance with Rules 1002. (except Rules 1002.e.(1), 1002.e.(4), and 1002.f, for which compliance will continue to be required), Rule 1003, or Rule 1004 (except Rules 1004.c.(4) and 1004.c.(5), for which compliance will continue to be required), if the operator can demonstrate to the Director's or the Commission's satisfaction both that compliance with such rules is not necessary to protect the public health, safety and welfare, including prevention of significant adverse environmental impacts, and that the operator has entered into an agreement with the surface owner regarding topsoil protection and reclamation of the land. Absent bad faith conduct by the operator, penalties may only be imposed for non-compliance with a Commission order issued after a determination that, notwithstanding such agreement, compliance is necessary to protect public health, safety and welfare. Prior to final reclamation approval as to a specific well, the operator shall either comply with the rules or obtain a variance under Rule 502.b. This rule shall not have the effect of relieving an operator from compliance with the 900 Series Rules.

The Sundry should also attach details about the hay stack yard, a drawing showing its relation to the wellhead and equipment, and the signed amendment to the SUA.

Best Management Practices

No	<u>BMP/COA Type</u>	<u>Description</u>
1	General Housekeeping	<p>Fence the well site after drilling to restrict public and wildlife access. Keep well site location, road and the pipeline easement free of noxious weeds, litter and debris.</p> <p>Spray for noxious weeds and implement dust control, as needed.</p> <p>Operator will not permit the release or discharge of any toxic or hazardous chemicals or wastes on Owner's Land.</p> <p>Construct and maintain gates where any roads used by operator, its employees, or contractors cross through fences on the leased premises.</p>
2	Wildlife	<p>Where oil and gas activities must occur within the greater sage grouse leks or within other mapped greater sage grouse breeding or summer habitat, Operator will conduct these activities outside the period between March 1 and June 30.</p> <p>Restrict post development well site visitations to portions of the day between 9:00 am and 4:00 pm during the lekking season (March 1 to May 15).</p> <p>Use hospital grade mufflers for compressors, pump jacks or other motors necessary to run operations at the site. Mufflers will be pointed upward to dissipate potential vibration.</p> <p>Establish company guidelines to minimize wildlife mortality from vehicle collisions on roads. Slow speeds and increased awareness among employees and contractors should lessen impacts to wildlife.</p> <p>Install and utilize bear-proof dumpsters and trash receptacles for all food-related trash on location, following COGCC Rule 1204.a.(1).</p>
3	Wildlife	<p>Within greater sage-grouse production sensitive wildlife habitat conduct all construction activities outside the period of March 1 to June 30.</p>
4	Storm Water/Erosion Control	<p>Use water bars and other measures to prevent erosion and non-source pollution. Implement and maintain BMPs to control storm water runoff in a manner that minimizes erosion, transport of sediment offsite, and site degradation.</p> <p>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>
5	Construction	<p>Remove only the minimum amount of vegetation necessary for the construction of roads and facilities.</p> <p>Conserve topsoil during excavation and reuse as cover on disturbed areas to facilitate regrowth of vegetation.</p> <p>No construction or routine maintenance activities will be performed during periods when the soil is too wet to adequately support construction equipment.</p>
6	Noise mitigation	<p>The drill site is far enough away from any building units that noise mitigation will not be required.</p>
7	Drilling/Completion Operations	<p>A closed-loop drilling mud system will be used to preclude the use of an earthen reserve pit when available. Light Sources will likewise be directed downwards and away from occupied structures, where possible. Once the drilling and completion rigs leave the site, there will be no permanently installed lighting on site.</p>
8	Interim Reclamation	<p>Utilize only such area around each producing well as is reasonably necessary. Restore the remainder of the well site location to its original condition within a reasonable time after the completion of operations.</p> <p>All reseeding shall be done with grasses consistent with the Rocky Mountain native mix or other grasses reasonably requested by surface owner and during planting period suggested by Owner.</p>
9	Final Reclamation	<p>All surface restoration shall be accomplished to the satisfaction of Owner.</p> <p>All reseeding shall be done with grasses consistent with the Rocky Mountain native mix or other grasses reasonably requested by surface owner and during planting period suggested by Owner.</p> <p>Final reclamation shall be completed to the reasonable satisfaction of the Owner as soon as practical after installation (weather permitting) and in accordance with regulatory agency standards (BLM/COGCC).</p>

Total: 9 comment(s)

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
2107119	CORRESPONDENCE
2107126	CORRESPONDENCE, SURFACE OWNER WAIVER TO 1000 SERIES RULES
2107127	CORRESPONDENCE, CUTTINGS WASTE MANAGEMENT PLAN
21674886	LOCATION PICTURES
400654565	FORM 2A SUBMITTED
400670011	LOCATION DRAWING
400670012	ACCESS ROAD MAP
400670014	HYDROLOGY MAP
400670018	REFERENCE AREA MAP
400670034	NRCS MAP UNIT DESC
400670036	NRCS MAP UNIT DESC
400670038	REFERENCE AREA PICTURES
400670042	CONST. LAYOUT DRAWINGS
400678982	FORM 2A SUBMITTED

Total Attach: 14 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review Completed. No LGD or public comment received.	10/28/2014 11:11:15 AM
OGLA	Initiated/Completed OGLA Form 2A review on 10-20-14 by Dave Kubeczko, requested acknowledgement of notification, fluid containment, sediment control, dust control, spill/release BMPs, flowback to tanks, odor control, cuttings low moisture content, pipeline testing, reclamation waiver sundry, and tank berming COAs from operator on 10-20-14; received acknowledgement of COAs from operator on 10-28-14; the building listed at 408 feet to the southwest is a calving barn; per the surface owner request, no reclamation is required due to current and future use of the area as a Stack Yard; passed by CPW on 09-29-14 with operator submitted BMPs acceptable; passed OGLA Form 2A review on 10-28-14 by Dave Kubeczko; notification, fluid containment, sediment control, dust control, spill/release BMPs, flowback to tanks, odor control, cuttings low moisture content, pipeline testing, reclamation waiver sundry, and tank berming COAs.	10/20/2014 7:54:33 AM
DOW	The BMPs provided by the operator are sufficient to address wildlife concerns associated with this location. Additionally, the operator has confirmed that electric pumps are to be used at this location to minimize the effects of noise to nearby greater sage-grouse habitat. By: Taylor Elm, 9/29/2014, 11:35	9/29/2014 11:37:32 AM
Permit	Attached corrected location photos as per opr. Opr reports that the building noted on the location drawing is a calving barn only used during April & May. Ready to pass pending public comment 9/25/14.	9/22/2014 2:08:51 PM
Permit	Location pics have same photo for "looking East and Looking South. Opr notified.	9/18/2014 9:55:45 AM
Permit	Passed completeness. SWH now marked.	9/4/2014 8:39:00 AM
Permit	Return to draft. Location in Sensitive Wildlife Habitat but not marked on form. Submitter Ann L Stephens designated agent.	9/3/2014 9:45:21 AM
Permit	Kristi is not on the authorized agent list for EE3 LLC.	8/29/2014 1:18:25 PM

Total: 8 comment(s)