

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:

400700579

()

Date Received:

10/20/2014

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:

**159503**

Expiration Date:

**01/03/2018**

☐ 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: 10112  
Name: FOUNDATION ENERGY MANAGEMENT LLC  
Address: 16000 DALLAS PARKWAY #875  
City: DALLAS State: TX Zip: 75248-6607

Contact Information

Name: Harrison Blacker  
Phone: (303) 244-8109  
Fax: (303) 861-0604  
email: hblacker@foundationenergy.com

RECLAMATION FINANCIAL ASSURANCE

☒ Plugging and Abandonment Bond Surety ID: 20050066 ☒ Gas Facility Surety ID: 20130004  
☐ Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: Hoffman Number: 34-O  
County: WELD  
QuarterQuarter: SESW Section: 34 Township: 8N Range: 60W Meridian: 6 Ground Elevation: 4923  
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: 388 feet FSL from North or South section line  
2272 feet FWL from East or West section line  
Latitude: 40.612572 Longitude: -104.079791  
PDOP Reading: 1.7 Date of Measurement: 07/22/2014  
Instrument Operator's Name: Adam Wright

## 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	8	Oil Tanks*	20	Condensate Tanks*		Water Tanks*	6	Buried Produced Water Vaults*	
Drilling Pits		Production Pits*		Special Purpose Pits		Multi-Well Pits*		Modular Large Volume Tanks	3
Pump Jacks	8	Separators*	6	Injection Pumps*		Cavity Pumps*		Gas Compressors*	2
Gas or Diesel Motors*	3	Electric Motors		Electric Generators*	2	Fuel Tanks*		LACT Unit*	
Dehydrator Units*		Vapor Recovery Unit*		VOC Combustor*		Flare*		Pigging Station*	

## OTHER FACILITIES\*

Other Facility Type

Number

\*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:

Each well head will be connected to the production facility via two 3-inch inch Schedule 40 steel pipelines. One line will be used for liquids and the other for gas.

Prior to well stimulations a temporary water line may be installed to transport water to the site from the a fresh water storage facility. The temporary water line will only be used to transport fresh water, permitted for consumable industrial use. A gas pipeline will be installed before production commences.

## CONSTRUCTION

Date planned to commence construction: 04/01/2015

Size of disturbed area during construction in acres: 7.25

Estimated date that interim reclamation will begin: 07/01/2016

Size of location after interim reclamation in acres: 3.62

Estimated post-construction ground elevation: 4923

## 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? No

## 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:

Use of a drilling pit or land farming is still under consideration. If a change is warranted then the new option will be in proposed in a sundry notice and will be in conformance with COGCC requirements.

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: Patricia Hoffman

Phone: 303-252-8236

Address: 2465 E 101st Court

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

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

Email: grandmasslow@live.com

City: Thorton State: CO Zip: 80229

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 07/22/2014

## 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:	4301 Feet	4417 Feet
Building Unit:	4301 Feet	4417 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	376 Feet	240 Feet
Above Ground Utility:	358 Feet	221 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	388 Feet	251 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.

Pre-application Notifications (required if location is within 1,000 feet of a building unit):

Date of Rule 305.a.(1) Urban Mitigation Area Notification to Local Government: \_\_\_\_\_

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

## FOR MULTI-WELL PADS AND PRODUCTION FACILITIES WITHIN DESIGNATED SETBACK LOCATIONS ONLY:

- ☐ Check this box if this Oil and Gas Location has or will have Production Facilities that serve multiple wells (onll or offsite) and the Production Facilities are proposed to be located less than 1,000 feet from a Building Unit. *(Pursuant to Rule 604.c.(2)E.i., the operator must evaluate alternative locations for the Production Facilities that are farther from the Building Unit, and determine whether those alternative locations were technically feasible and economically practicable for the same proposed development.)*
- ☐ By checking this box, I certify that no alternative placements for the Production Facilities, farther from the nearest Building Unit, were available based on the analysis conducted pursuant to Rule 604.c.(2)E.i.

In the space below, explain rationale for siting the multi-well Production Facility(ies) that supports your Rule 604.c.(2)E.i determination. Attach documentation that supports your determination to this Form 2A.

## SOIL

List all soil map units that occur within the proposed location. attach the National Resource Conservation Service (NRCS) report showing the "Map Unit Description" report listing the soil typical vertical profile. This data is to 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: 40 Nunn loam 0 to 6% slopes

NRCS Map Unit Name: 44 Olney fine sand loam 0 to 6% slopes

NRCS Map Unit Name: 54 Platner laom 0 to 3% slopes

## PLANT COMMUNITY:

Complete this section only if any portion of the disturbed area of the location's current land use is on non-crop land.

Are noxious weeds present: Yes ☐ No ☒

Plant species from: ☐ NRCS or, ☐ field observation Date of observation: \_\_\_\_\_

List individual species: \_\_\_\_\_

### Check all plant communities that exist in the disturbed area.

- ☐ Disturbed Grassland (Cactus, Yucca, Cheatgrass, Rye)
- ☐ Native Grassland (Bluestem, Grama, Wheatgrass, Buffalograss, Fescue, Oatgrass, Brome)
- ☐ Shrub Land (Mahogany, Oak, Sage, Serviceberry, Chokecherry)
- ☐ Plains Riparian (Cottonwood, Willow, Aspen, Maple, Poplar, Russian Olive, Tamarisk)
- ☐ Mountain Riparian (Cottonwood, Willow, Blue Spruce)
- ☐ Forest Land (Spruce, Fir, Ponderosa Pine, Lodgepole Pine, Juniper, Pinyon, Aspen)
- ☐ Wetlands Aquatic (Bullrush, Sedge, Cattail, Arrowhead)
- ☐ Alpine (above timberline)
- ☐ Other (describe): \_\_\_\_\_

## WATER RESOURCES

Is this a sensitive area: ☒ No ☐ Yes

Distance to nearest

downgradient surface water feature: 2500 Feet

water well: 1850 Feet

Estimated depth to ground water at Oil and Gas Location 91 Feet

Basis for depth to groundwater and sensitive area determination:

Ground water depth from static water level in water well located 2964' SE (Permit number: 10309).

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: \_\_\_\_\_

## 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 Corrected per October 22, email.  
Our plan of development calls for two or three drilling periods that will be separated by approximately nine months.  
  
We plan on installing two 40,000 BBL MLVTs. They will be installed in May 2015 and will remain on site through August of 2015.  
  
We plan to submit APD's for the Hoffman pad in the first Quarter of 2015.

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

Signed: \_\_\_\_\_ Date: 10/20/2014 Email: rgrant@foundationenergy.com

Print Name: Rachel Eisterhold Title: Senior HSE/Regulatory Tec

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: 1/4/2015

### 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

	Prior to installation of the MLVTs, Operator shall submit a Form 4 Sundry to the COGCC with the MLVT manufacturer/vendor.
	Operator shall provide notice to COGCC 48 hours prior to commencing construction of this Oil and Gas Location via Form 42.

### Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Storm Water/Erosion Control	The company will conduct regular inspections to insure compliance with applicable storm water regulations including the use of erosion control devices where necessary.
2	Material Handling and Spill Prevention	Operator will implement best practices to contain any unintentional release of fluids. All permanent tanks will be have secondary containment of at least 110% of the tank volume.
3	Drilling/Completion Operations	Foundation Energy Certifies that all MLVT's will be designed, installed, and operated in conformance with the COGCC policy on Large Volume Modular Tanks, dated June 13, 2014.

Total: 3 comment(s)

### Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1696434	MULTI-WELL PLAN
2477442	CONST. LAYOUT DRAWINGS
2477443	CORRESPONDENCE
400700579	FORM 2A APPROVED
400707004	ACCESS ROAD MAP
400707019	HYDROLOGY MAP A, TOPO
400707023	LOCATION DRAWING
400707024	LOCATION PICTURES
400707028	OTHER
400714966	SURFACE AGRMT/SURETY
400715052	NRCS MAP UNIT DESC
400715054	NRCS MAP UNIT DESC
400715056	NRCS MAP UNIT DESC
400763071	FORM 2A SUBMITTED

Total Attach: 14 Files

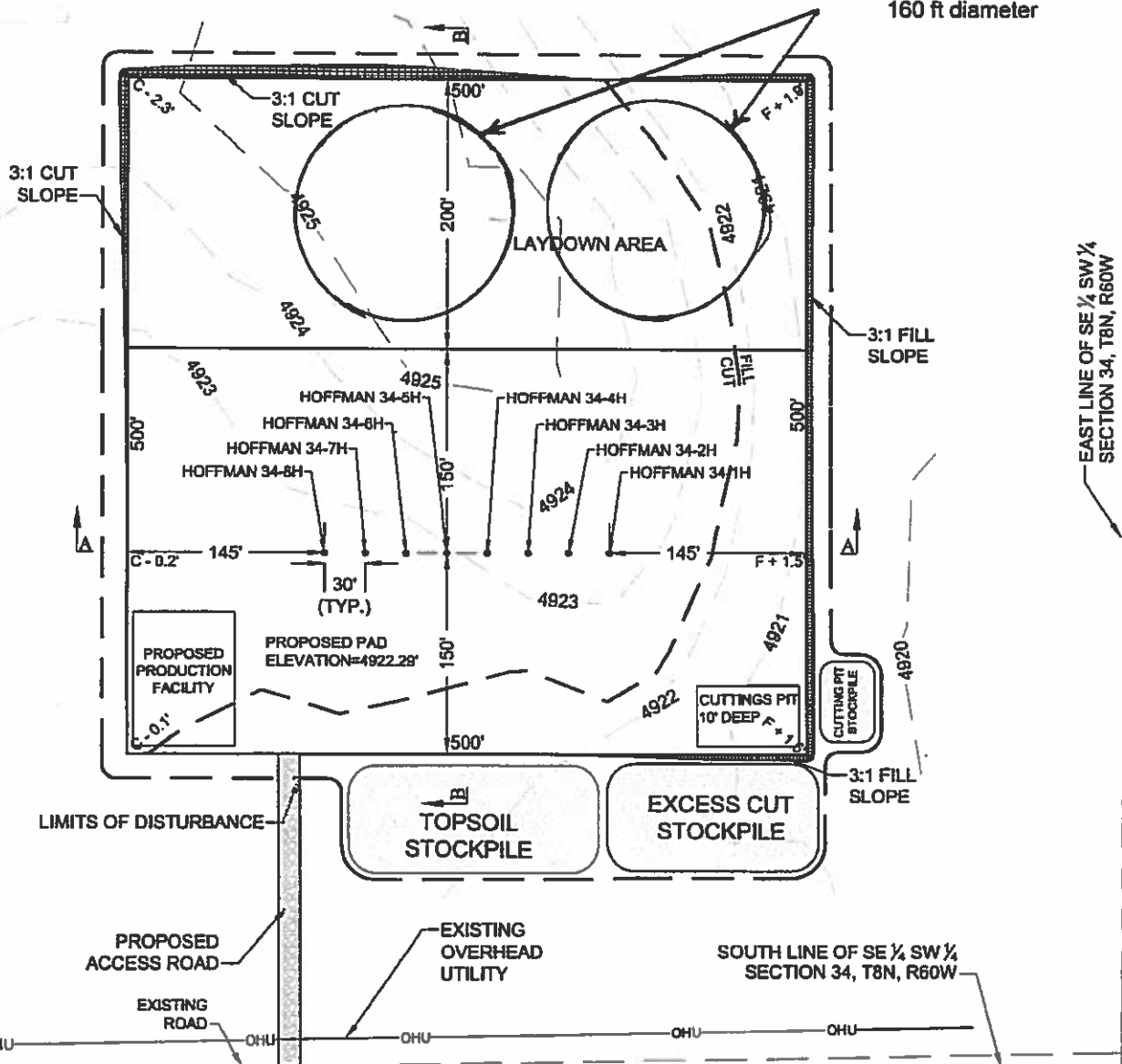
### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Corrected submitter to Rachel Eisterhold. Changed right to construct to O&G lease, added operator's plans to submit APD's for the Hoffman pad in the first Quarter of 2015 to Operator's comments.	12/22/2014 12:58:48 PM
Final Review	On Hold to correct contact and submitter information, to correct right to construct, and to ask operator plans for submittal of drilling permits.	12/20/2014 2:55:33 PM
Permit	Final Review Completed. No LGD or public comment received.	12/16/2014 9:58:47 AM
Permit	Harrison "Hal" Blacker is on the approved agents list for operator. Attached corrected Multi-Well Plan. Per operator uncheck the "This location Assessment is included as part of a permit application." No permits submitted. Permitting Review Completed.	12/16/2014 9:57:16 AM
Permit	ON HOLD: Contact is not on approved agents list for operator. Need corrected Multi-Well Plan. Need to uncheck the "This location Assessment is included as part of a permit application." No permits submitted.	11/19/2014 9:48:12 AM
OGLA	IN PROCESS - Operator confirmed the number of wells, provided a pipeline description, revised date construction will commence and interim reclamation will begin, distance to nearest downgradient surface water feature and additional MLVT information. No Public Comments. OGLA task passed.	11/18/2014 1:31:37 PM
OGLA	ON HOLD - Operator to confirm number of wells, provide a complete pipeline description and additional MLVT information. Requested removing drilling pit from Facilities list, revise date interim reclamation will begin, and distance to nearest downgradient surface water feature. Land Use is Cropland so Reference Area Map & Pictures attachment not required. Due by 12/10/14.	11/10/2014 10:31:33 AM
Permit	Passed Completeness	10/27/2014 11:52:05 AM
Permit	Returned to Draft: 1. Attached SUA needs compensation amounts redacted. 2. NRCS Maps need to be added to attachments 3. Contact is not on approved agents list for operator.	10/22/2014 10:01:41 AM

Total: 9 comment(s)

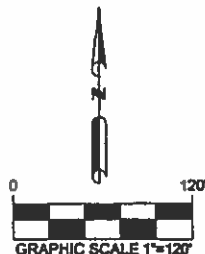
# HOFFMAN 34-O PAD FOUNDATION ENERGY PAD LAYOUT

Two 40,000 BBL MBVT's  
160 ft diameter



## NOTES:

1. A COMPLETE UTILITIES LOCATION IS RECOMMENDED BEFORE CONSTRUCTION.
2. GEOGRAPHIC POSITIONS/COORDINATES SHOWN HEREON ARE IN NAD83 DATUM.
3. EARTHWORK QUANTITIES ARE APPROXIMATE & FOR INFORMATION ONLY. 8" OF TOPSOIL HAS BEEN SUBTRACTED FROM EXISTING SURFACE PRIOR TO PERFORMING EARTHWORK CALCULATIONS.
4. STOCKPILES ARE ASSUMED TO BE 10' IN HEIGHT WITH 2:1 SIDE SLOPES.



## SITE QUANTITIES

FINISHED GRADE ELEVATION	4922.29'
TOTAL CUT FOR WELL PAD	7,499 CY
FILL FOR WELL PAD	3,162 CY
10% FILL FACTOR	316 CY
TOTAL FILL	3,478 CY
NET EXCESS MATERIAL	4,021 CY
TOPSOIL FROM GRADED AREA	4,764 CY
TOTAL DISTURBANCE AREA	7.3 ACRES

PREPARED BY:



FIELD DATE:

07-28-14

DRAWING DATE:

09-08-14

BY:  
DWW

CHECKED BY:  
KAD

PAD NAME:

HOFFMAN 34-O PAD

SURFACE LOCATION:

SE 1/4, SW 1/4, SEC. 34, T8N, R60W, 6TH P.M.  
WELD COUNTY, COLORADO

PREPARED FOR:

