

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:

400908411

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Date Received:

10/21/2015

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:

**444296**

Expiration Date:

**12/12/2018**

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: 10423  
Name: ANGUS NATURAL RESOURCES LLC  
Address: 1323 EAST 71ST STREET #400  
City: TULSA State: OK Zip: 74136

Contact Information

Name: Jose A. Moncayo  
Phone: (918) 936-4251  
Fax: ( )  
email: jmoncayo@angusnr.com

RECLAMATION FINANCIAL ASSURANCE

- Plugging and Abandonment Bond Surety ID: 20120065     Gas Facility Surety ID: \_\_\_\_\_
- Waste Management Surety ID: \_\_\_\_\_

LOCATION IDENTIFICATION

Name: Hair 15-45 Number: #1-14  
County: CHEYENNE  
Quarter: SWNE Section: 14 Township: 15S Range: 45W Meridian: 6 Ground Elevation: 4354

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: 2314 feet FNL from North or South section line  
2325 feet FEL from East or West section line

Latitude: 38.747740 Longitude: -102.414600

PDOP Reading: 1.3 Date of Measurement: 09/10/2015

Instrument Operator's Name: Elijah Frane

## 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>1</u>	Condensate Tanks*	<u>    </u>	Water Tanks*	<u>2</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>	Modular Large Volume Tanks	<u>    </u>
Pump Jacks	<u>1</u>	Separators*	<u>1</u>	Injection Pumps*	<u>    </u>	Cavity Pumps*	<u>    </u>	Gas Compressors*	<u>    </u>
Gas or Diesel Motors*	<u>    </u>	Electric Motors	<u>    </u>	Electric Generators*	<u>    </u>	Fuel Tanks*	<u>    </u>	LACT Unit*	<u>    </u>
Dehydrator Units*	<u>    </u>	Vapor Recovery Unit*	<u>    </u>	VOC Combustor*	<u>1</u>	Flare*	<u>    </u>	Pigging Station*	<u>    </u>

## OTHER FACILITIES\*

Other Facility Type

Number

<u>Other Facility Type</u>	<u>Number</u>
<input type="text"/>	<input type="text"/>

\*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:

If the well is commercially successful, tanks and a separator will be located 100' Southeast of the wellhead. A 3" flowline will connect the wellhead and the separator.

## CONSTRUCTION

Date planned to commence construction: 12/15/2015 Size of disturbed area during construction in acres: 2.50  
Estimated date that interim reclamation will begin: 03/15/2016 Size of location after interim reclamation in acres: 1.50  
Estimated post-construction ground elevation: 4354

## DRILLING PROGRAM

Will a closed loop system be used for drilling fluids: No

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: ONSITE Drilling Fluids Disposal Method: Evaporation

Cutting Disposal: ONSITE Cuttings Disposal Method: Drilling pit

Other Disposal Description:

Dry and bury

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: Orville Hair Living Trust

Phone: (785) 481-2218

Address: 19999 AA Road \_\_\_\_\_

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

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

Email: \_\_\_\_\_

City: Brownell State: KS Zip: 67521

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 \_\_\_\_\_

### 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.

	<b>From WELL</b>	<b>From PRODUCTION FACILITY</b>
Building:	4050 Feet	4050 Feet
Building Unit:	4145 Feet	4145 Feet
High Occupancy Building Unit:	5280 Feet	5280 Feet
Designated Outside Activity Area:	5280 Feet	5280 Feet
Public Road:	2957 Feet	2957 Feet
Above Ground Utility:	2957 Feet	2957 Feet
Railroad:	5280 Feet	5280 Feet
Property Line:	322 Feet	322 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 (on or offsite) and the Production Facilities are proposed to be located less than 1,000 feet from a Building Unit. *(Pursuant to Rule 604.c.(2)E.i., the operator must evaluate alternative locations for the Production Facilities that are farther from the Building Unit, and determine whether those alternative locations were technically feasible and economically practicable for the same proposed development.)*
- By checking this box, I certify that no alternative placements for the Production Facilities, farther from the nearest Building Unit, were available based on the analysis conducted pursuant to Rule 604.c.(2)E.i.

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

**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: NRCS Map 42-Stoneham loam, 3 to 6 percent slopes  
 NRCS Map Unit Name: NRCS Map 40-Schamber-Stoneham complex, 6 to 35 percent slopes  
 NRCS Map Unit Name: \_\_\_\_\_

**PLANT COMMUNITY:**

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

Are noxious weeds present: Yes  No

Plant species from:  NRCS or,  field observation Date of observation: 09/10/2015

List individual species: Native Grassland

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: 819 Feet

water well: 4312 Feet

Estimated depth to ground water at Oil and Gas Location 212 Feet

Basis for depth to groundwater and sensitive area determination:

DWR Data, DWR permit 111785, 1000' Hydrology Map and subsurface geology  
Location lies within the East Cheyenne Designated Basin and Groundwater Management Area

Is the location in a riparian area:  No  Yes

Was an Army Corps of Engineers Section 404 permit filed  No  Yes If yes attach permit.

Is the location within a Rule 317B Surface Water Supply Area buffer zone: No

If the location is within a Rule 317B Surface Water Supply Area buffer have all public water supply systems within 15 miles been notified: \_\_\_\_\_

Is the Location within a Floodplain?  No  Yes Floodplain Data Sources Reviewed (check all that apply)

Federal (FEMA)

State

County

Local

Other \_\_\_\_\_

**GROUNDWATER BASELINE SAMPLING AND MONITORING AND WATER WELL SAMPLING**

Water well sampling required per Rule 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

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

Signed: \_\_\_\_\_ Date: 10/21/2015 Email: jmoncayo@angusnr.com

Print Name: Jose A. Moncayo Title: Reservoir Engineer

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: 12/13/2015

**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**

	<p>Per discussion with Operator, changed Operator BMP from:</p> <p>"If the well is commercially successful, Operator shall submit a survey showing the location and the lat/longs of the tank battery to the COGCC via form 4-Sundry Notice within 30 days of the tank battery construction."</p> <p>to:</p> <p>"If the well is commercially successful, Operator shall submit a survey showing the location and the lat/longs of the tank battery to the COGCC via form 4-Sundry Notice prior to construction of the tank battery."</p>
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## Best Management Practices

<u>No</u>	<u>BMP/COA Type</u>	<u>Description</u>
1	Planning	Provide 48 hour notice to the COGCC prior to commencing construction of this Oil and Gas Location via electronic Form 42.
2	Pre-Construction	If the well is commercially successful, Operator shall submit a survey showing the location and the lat/longs of the tank battery to the COGCC via form 4-Sundy Notice prior to construction of the tank battery.
3	Storm Water/Erosion Control	1) Storm water BMPs shall be constructed to prevent storm water migration into the nearby drainages located Northwest of location. 2) The proposed location is in a sensitive area in proximity to a surface water drainage. Containment areas shall be lined with an impermeable liner and berms shall be impermeable and constructed with structurally stable materials. If during construction, shallow groundwater is encountered, the drilling pit shall not be used and operations will switch to a closed loop system.

Total: 3 comment(s)

## Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
400908411	FORM 2A SUBMITTED
400908481	TOPO MAP
400908484	NRCS MAP UNIT DESC
400908485	NRCS MAP UNIT DESC
400908486	ACCESS ROAD MAP
400908489	HYDROLOGY MAP
400908491	LOCATION DRAWING
400908493	LOCATION PICTURES

Total Attach: 8 Files

### General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	Per Operator request, added 1 VOC Combustor.  Per discussion with the Operator - Operator does not anticipate triggering combustion requirement for emissions, however, will be monitoring production and will add the VOC Combustor at a later date if conditions warrant.	12/9/2015 3:38:04 PM
Final Review	asked about emissions control acknowledgement - pushed to HOLD	12/4/2015 5:33:51 PM
Permit	Final Review Completed. No LGD or public comment received.	12/4/2015 2:57:53 PM
OGLA	Added "Location lies within the East Cheyenne Designated Basin and Groundwater Management Area" to the Basis Statement  Changed Estimated Depth to Groundwater to 212 feet based on the static water level reported for DWR Water Well Permit #111785	11/25/2015 2:55:28 PM
OGLA	Discussed with Operator: Building Unit is located 4145 feet to the northeast Building is located 4050 feet to the northeast	11/25/2015 1:42:58 PM
OGLA	Per Operator Request: Changed Estimated Date of Construction to 12/15/2015	11/25/2015 1:13:50 PM
OGLA	Per Operator request, changed Drilling Fluids management to "Onsite, Evaporation" and Drilling Waste Management to "Dry and bury"	11/24/2015 12:34:22 PM
Permit	Passed completeness.	10/23/2015 10:15:04 AM

Total: 8 comment(s)