

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:

400483372

Date Received:

10/04/2013

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:

435175

Expiration Date:

11/22/2016

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: 10311

Name: SYNERGY RESOURCES CORPORATION

Address: 20203 HIGHWAY 60

City: PLATTEVILLE State: CO Zip: 80651

Contact Information

Name: Brianne Visconti

Phone: (970) 737-1073

Fax: (970) 737-1045

email: bvisconti@syrginfo.com

RECLAMATION FINANCIAL ASSURANCE

Plugging and Abandonment Bond Surety ID: 20090043

Gas Facility Surety ID: _____

Waste Management Surety ID: _____

LOCATION IDENTIFICATION

Name: Weld 152

Number: A-10-3NHZ

County: WELD

Quarter: SE Section: 10 Township: 6N Range: 67W Meridian: 6 Ground Elevation: 4849

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: 2504 feet FNL from North or South section line

1344 feet FWL from East or West section line

Latitude: 40.502119 Longitude: -104.884047

PDOP Reading: 1.0 Date of Measurement: 08/23/2013

Instrument Operator's Name: Aaron Demo

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>6</u>	Oil Tanks	<u> </u>	Condensate Tanks	<u>12</u>	Water Tanks	<u>4</u>	Buried Produced Water Vaults	<u> </u>
Drilling Pits	<u> </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>6</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>1</u>
Dehydrator Units	<u> </u>	Vapor Recovery Unit	<u> </u>	VOC Combustor	<u>4</u>	Flare	<u> </u>	LACT Unit	<u> </u>
								Pigging Station	<u> </u>

OTHER FACILITIES

Other Facility Type

Number

<input type="text"/>	<input type="text"/>
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Per Rule 303.b.(3)C, description of all oil, gas, and/or water pipelines:

CONSTRUCTION

Date planned to commence construction: 02/01/2014 Size of disturbed area during construction in acres: 4.10
Estimated date that interim reclamation will begin: 07/01/2014 Size of location after interim reclamation in acres: 1.65
Estimated post-construction ground elevation: 4849

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?

DRILLING WASTE MANAGEMENT PROGRAM

Drilling Fluids Disposal: OFFSITE Drilling Fluids Disposal Method: Other

Cutting Disposal: Cuttings Disposal Method:

Other Disposal Description:

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: Jon Turner

Phone: 970-204-9393

Address: 8020 South County Road 5, Suite
200

Fax: _____

Address: _____

Email: _____

City: Windsor State: CO Zip: 80528

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: _____

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

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

Date of Rule 306 surface owner consultation 05/01/2013

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): _____

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

Distance to nearest:

Building: 307 Feet
Building Unit: 1007 Feet
High Occupancy Building Unit: 4856 Feet
Designated Outside Activity Area: 5280 Feet
Public Road: 1115 Feet
Above Ground Utility: 74 Feet
Railroad: 5280 Feet
Property Line: 73 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 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: Kim loam, 3 to 5 percent slopes, Map Symbol 33
NRCS Map Unit Name: _____
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: _____
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: 131 Feet

water well: 840 Feet

Estimated depth to ground water at Oil and Gas Location 31 Feet

Basis for depth to groundwater and sensitive area determination:

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 _____

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

Please note that the distance measured to the nearest above ground utility and property line were both measured from production equipment located on the south end of the well pad. Both the property line and the above ground utility run west to east south of the location.

The nearest Building Unit at a distance of 1007' was measured by our contracted Surveyor from the closest point of the production equipment on the south west corner of the pad.

The TLVSTs will be onsite 1 to 4 weeks after drilling is completed and will remain onsite for up to 2 months until completion operations are finished.

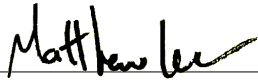
I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct and complete.

Signed: _____ Date: 10/04/2013 Email: bvisconti@syrginfo.com

Print Name: Brianne Visconti Title: Administrator

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: 11/23/2013

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
	Operators or their designated representatives shall conduct regular visual inspections of the exterior wall and general area for any integrity deficiencies. These inspections will be recorded and maintained for a period of at least 5 years per Rule 205. Inspection records shall be provided to the COGCC upon request.
	Best Management Practices shall be employed to prevent injuries, property damage or environmental impacts, such as erosion of onsite sediment into nearby surface water
	Access to the tanks shall be limited to operational personnel.
	Signs shall be posted on each TLVST to indicate contents are freshwater and that no E&P waste fluids are allowed. Location and additional signage shall conform to Rule 210.
	Temporary Large Volume Storage Tanks (TLVSTs) may only be utilized for the storage of freshwater obtained legally from an adjudicated consumable water supply. E&P wastes, including treated E&P wastes and flowback during hydraulic fracturing operations, are not allowed.
	All liner seams shall be welded at the liner manufacturers facility; field welded liners shall not be used. If liners are re-used, liner installation shall be noticed on a Form 42 to COGCC 48-hours prior to installation.
	Site preparation and installation oversight will be provided by a Professional Engineer or their designated representative.
	Operator shall develop a Contingency Plan for any TLVST leak or catastrophic failure of the tank integrity and resulting loss of fluid. The plan should include a notification process to the COGCC and local Emergency authority (municipality, county or both) for any failure and resulting loss of fluid. The Contingency Plan shall be made available to the COGCC upon request.
	Operator must implement site-specific best management practices in accordance with good engineering practices, including, but not limited to, construction of a berm or diversion dike, site grading, or other comparable measures, sufficient to protect the ponds located 131 feet and 165 feet southeast, and the irrigation ditches located 136 feet north, 167 feet east, 206 feet south, and 282 feet south of the oil and gas location from a release of drilling, completion, produced fluids, and chemical products.
	TLVSTs will be brought into service incrementally, by loading to 25%, 50%, 75%, and 100% capacity (subject to freeboard) and held at each level without leaks for 24-hours prior to increasing load.
	Should a failure of TLVST integrity occur, operator shall notify COGCC upon discovery, report the incident to COGCC on a Form 22-Accident Report within 10 days and shall conduct a "root cause analysis" and provide it to COGCC on a Form 4-Sundry Notice within 30 days of the failure.
	TLVST designs shall be sealed by a Colorado Licensed Professional Engineer.
	COGCC Rules 604.a. and 605.a.(2,3,5,6,7, and 8), as applicable to tank setbacks at the time of installation shall apply to the siting of TLVSTs.
	TLVSTs will be operated with a minimum of 1 foot freeboard.
	TLVSTs shall not be located on non-engineered fill material. If areas are to be graded and disturbed, the operator shall conduct such activity in accordance with COGCC Rules 1002.b. and 1002.c.

Best Management Practices

No	BMP/COA Type	Description

Attachment Check List

<u>Att Doc Num</u>	<u>Name</u>
1667897	HYDROLOGY MAP
1667898	LOCATION DRAWING
1667940	FACILITY LAYOUT DRAWING
1667941	OTHER
1667942	OTHER
1667943	CORRESPONDENCE
2167516	ACCESS ROAD MAP
400483372	FORM 2A SUBMITTED
400483406	OIL & GAS LEASE
400483410	NRCS MAP UNIT DESC
400483412	MULTI-WELL PLAN
400483413	OTHER
400483417	LOCATION PICTURES
400489795	EXCEPTION LOC WAIVERS
400489796	EXCEPTION LOC REQUEST
400490296	WASTE MANAGEMENT PLAN
400499249	MINERAL LEASE MAP
400499258	SURFACE AGRMT/SURETY

Total Attach: 18 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
Permit	Final Review complete.	11/21/2013 2:33:49 PM
OGLA	Changed distance to nearest DOAA from 4,771 feet to 5,280 feet, changed distance to nearest downgradient surface water feature from 169 feet to 131 feet, added operator provided basis for depth to groundwater determination, and changed sensitive area from NO to YES. OGLA review complete and task passed.	11/20/2013 2:19:02 PM
Permit	Attached Access Road Map from opr.	10/29/2013 1:59:07 PM
Permit	Wells on same location as tanks, but are 200+ FSL and above ground utilities. Requested Access Road Map from Opr.	10/28/2013 2:53:01 PM
Permit	Operator attached SUA and Lease map. Corrected Groundwater Sampling Rule 318 A. Added comment about distance to utility. This form has passed completeness.	10/22/2013 10:10:39 AM
Permit	Returned to draft: 1) SHL in Wattenberg: Change Groundwater Sampling Rule is 318A. 2) Facilities tab complete? Note any temporary tanks in comments. 3) Right to construct is SUA. Please provide SUA. 4) Lease discription unclear. Please provide lease map. 5) Need comment about distance to utility and property line: measured from what? Can you mark the spot reference taken from on the Location Drawing?	10/21/2013 9:50:11 AM
Permit	Returned to draft: 1) Groundwater Sampling Rule is 318A. 2) Facilities tab complete? 3) Right to construct is lease. 4) Need comment about distance to utility and property line: measured from what?	10/7/2013 7:58:53 AM

Total: 7 comment(s)