


FORM 2A Rev 04/01	State of Colorado Oil and Gas Conservation Commission 1120 Lincoln Street, Suite 801, Denver, Colorado 80205 Phone: (303) 894-2100 Fax: (303) 894-2109		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">DE</td> <td style="width: 25%;">ET</td> <td style="width: 25%;">OE</td> <td style="width: 25%;">ES</td> </tr> </table> <p style="text-align: center;">Document Number: 400131614</p>	DE	ET	OE	ES																					
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Oil and Gas Location Assessment			<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> Location ID: 423995 </div> <div style="border: 1px solid black; padding: 5px;"> Expiration Date: 06/29/2014 </div>																									
<input checked="" type="checkbox"/> New Location <input type="checkbox"/> Amend Existing Location Location#: _____																												
<p>Submit original plus one copy. This form is to be submitted to the COGCC prior to any ground disturbance activity associated with oil and gas development operations. This Assessment may be approved as a standalone application or submitted as an informational report accompanying an Application for Permit-To-Drill, Form 2. Approval of this 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. This form may serve as notice to land owners and other interested parties, please see the COGCC web site at http://colorado.gov/cogcc/ for all accompanying information pertinent to this Oil and Gas Location Assessment.</p>																												
<input checked="" type="checkbox"/> This location assessment is included as part of a permit application.																												
1. CONSULTATION <input type="checkbox"/> This location is included in a Comprehensive Drilling Plan. CDP # _____ <input type="checkbox"/> This location is in a sensitive wildlife habitat area. <input type="checkbox"/> This location is in a wildlife restricted surface occupancy area. <input type="checkbox"/> This location includes a Rule 306.d.(1)A.ii. variance request.																												
2. Operator Operator Number: <u>10311</u> Name: <u>SYNERGY RESOURCES CORPORATION</u> Address: <u>20203 HIGHWAY 60</u> City: <u>PLATTEVILLE</u> State: <u>CO</u> Zip: <u>80651</u>		3. Contact Information Name: <u>Rhonda Sandquist</u> Phone: <u>(970) 737-1073</u> Fax: <u>(970) 737-1045</u> email: <u>rsandquist@syrginfo.com</u>																										
4. Location Identification: Name: <u>SRC Haythorn</u> Number: <u>36CD</u> County: <u>WELD</u> QuarterQuarter: <u>NENE</u> Section: <u>36</u> Township: <u>7N</u> Range: <u>66W</u> Meridian: <u>6</u> Ground Elevation: <u>4853</u> Define a single point as a location reference for the facility location. This point should be used as the point of measurement in the drawings to be submitted with this application. When the location is to be used as a well site then the point shall be a well location. Footage at surface: <u>816</u> feet <u>FNL</u> , from North or South section line, and <u>1211</u> feet <u>FEL</u> , from East or West section line. Latitude: <u>40.536900</u> Longitude: <u>-104.720211</u> PDOP Reading: <u>2.8</u> Date of Measurement: <u>01/11/2011</u> Instrument Operator's Name: <u>Mark Hall</u>																												
5. Facilities (Indicate the number of each type of oil and gas facility planned on location): <table style="width: 100%; border: none;"> <tr> <td>Special Purpose Pits: <input type="text"/></td> <td>Drilling Pits: <input type="text"/></td> <td>Wells: <input type="text" value="5"/></td> <td>Production Pits: <input type="text"/></td> <td>Dehydrator Units: <input type="text"/></td> </tr> <tr> <td>Condensate Tanks: <input type="text"/></td> <td>Water Tanks: <input type="text" value="1"/></td> <td>Separators: <input type="text" value="4"/></td> <td>Electric Motors: <input type="text"/></td> <td>Multi-Well Pits: <input type="text"/></td> </tr> <tr> <td>Gas or Diesel Motors: <input type="text"/></td> <td>Cavity Pumps: <input type="text"/></td> <td>LACT Unit: <input type="text"/></td> <td>Pump Jacks: <input type="text"/></td> <td>Pigging Station: <input type="text"/></td> </tr> <tr> <td>Electric Generators: <input type="text"/></td> <td>Gas Pipeline: <input type="text" value="1"/></td> <td>Oil Pipeline: <input type="text"/></td> <td>Water Pipeline: <input type="text"/></td> <td>Flare: <input type="text"/></td> </tr> <tr> <td>Gas Compressors: <input type="text"/></td> <td>VOC Combustor: <input type="text" value="2"/></td> <td>Oil Tanks: <input type="text" value="4"/></td> <td>Fuel Tanks: <input type="text"/></td> <td></td> </tr> </table> Other: _____				Special Purpose Pits: <input type="text"/>	Drilling Pits: <input type="text"/>	Wells: <input type="text" value="5"/>	Production Pits: <input type="text"/>	Dehydrator Units: <input type="text"/>	Condensate Tanks: <input type="text"/>	Water Tanks: <input type="text" value="1"/>	Separators: <input type="text" value="4"/>	Electric Motors: <input type="text"/>	Multi-Well Pits: <input type="text"/>	Gas or Diesel Motors: <input type="text"/>	Cavity Pumps: <input type="text"/>	LACT Unit: <input type="text"/>	Pump Jacks: <input type="text"/>	Pigging Station: <input type="text"/>	Electric Generators: <input type="text"/>	Gas Pipeline: <input type="text" value="1"/>	Oil Pipeline: <input type="text"/>	Water Pipeline: <input type="text"/>	Flare: <input type="text"/>	Gas Compressors: <input type="text"/>	VOC Combustor: <input type="text" value="2"/>	Oil Tanks: <input type="text" value="4"/>	Fuel Tanks: <input type="text"/>	
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6. Construction:

Date planned to commence construction: 11/30/2011 Size of disturbed area during construction in acres: 2.12
Estimated date that interim reclamation will begin: 02/10/2012 Size of location after interim reclamation in acres: 1.32
Estimated post-construction ground elevation: 4853 Will a closed loop system be used for drilling fluids: Yes ☒
Will salt sections be encountered during drilling: Yes ☐ No ☒ Is H2S anticipated? Yes ☐ No ☒
Will salt (>15,000 ppm TDS Cl) or oil based muds be used: Yes ☐ No ☒
Mud disposal: Offsite ☒ Onsite ☐ Method: Land Farming ☐ Land Spreading ☐ Disposal Facility ☒
Other: _____

7. Surface Owner:

Name: _____ Phone: _____
Address: _____ Fax: _____
Address: _____ Email: _____
City: _____ State: _____ Zip: _____ Date of Rule 306 surface owner consultation: _____
Surface Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian
Mineral Owner: ☒ Fee ☐ State ☐ Federal ☐ Indian
The surface owner is: ☒ the mineral owner ☐ committed to an oil and gas lease
☐ is the executer of the oil and gas lease ☐ the applicant
The right to construct the location is granted by: ☒ oil and gas lease ☐ Surface Use Agreement ☐ Right of Way
☐ applicant is owner
Surface damage assurance if no agreement is in place: ☐ \$2000 ☐ \$5000 ☐ Blanket Surety ID _____

8. Reclamation Financial Assurance:

☒ Well Surety ID: 20090043 ☐ Gas Facility Surety ID: _____ ☐ Waste Mgmt. Surety ID: _____

9. Cultural:

Is the location in a high density area (Rule 603.b.): Yes ☐ No ☒
Distance, in feet, to nearest building: 972 , public road: 816 , above ground utilit: 836
 , railroad: 1728 , property line: 816

10. 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

11. 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

12. Soils:

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.gov/> 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: 31- Kim loam, 0 to 1 percent slopes

NRCS Map Unit Name: _____

NRCS Map Unit Name: _____

13. 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): _____

14. Water Resources:

Rule 901.e. may require a sensitive area determination be performed. If this determination is performed the data is to be submitted with the Form 2A.

Is this a sensitive area: ☒ No ☐ Yes Was a Rule 901.e. Sensitive Areas Determination performed: ☒ No ☐ Yes

Distance (in feet) to nearest surface water: 103, water well: 765, depth to ground water: 37

Is the location in a riparian area: ☒ No ☐ Yes Was an Army Corps of Engineers Section 404 permit filed ☒ No ☐ Yes

Is the location within a Rule 317B Surface Water Supply Area buffer zone:

☒ No ☐ 0-300 ft. zone ☐ 301-500 ft. zone ☐ 501-2640 ft. 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 ☐ Yes

15. Comments:

All five (5) SRC Haythorn wells are proposed to be drilled from one central drill pad at the bottom of a flood irrigated crop field. We have agreed to drill from this location to limit the surface impact for future development. The tank battery will be constructed on the same pad as the drilling activity.

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

Signed: _____ Date: 06/08/2011 Email: crasmuson@syrgeinfor.com

Print Name: Craig Rasmuson Title: Mgr of Land & Field Ops

IMPORTANT: SOME DATA FIELDS HAVE BEEN MODIFIED.

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: _____

David G. Neslin

Director of COGCC

Date: 6/30/2011

CONDITIONS OF APPROVAL, IF ANY:

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.

Attachment Check List

Att Doc Num	Name
2613723	CORRESPONDENCE
400131614	FORM 2A SUBMITTED
400131645	ACCESS ROAD MAP
400131648	HYDROLOGY MAP
400131652	MULTI-WELL PLAN
400131801	LOCATION PICTURES
400131946	OIL & GAS LEASE
400134920	DEVIATED DRILLING PLAN
400173063	NRCS MAP UNIT DESC

Total Attach: 9 Files

General Comments

<u>User Group</u>	<u>Comment</u>	<u>Comment Date</u>
OGLA	changed distance to surface water from 740 feet to 103 feet based on Hydrology Map; changed distance to nearest water well from 20715 feet to 765 feet based on water well permit 20715-R. Ready to Pass 6/30/2011.	6/9/2011 3:03:06 PM
Permit	Permission from Opr-Rhonda to add plugging bond. sf	6/9/2011 8:54:13 AM

Total: 2 comment(s)

BMP

<u>Type</u>	<u>Comment</u>

Total: 0 comment(s)