

**FORM
INSP**
Rev
05/11

**State of Colorado
Oil and Gas Conservation Commission**

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109



Inspection Date:
02/23/2016
Document Number:
682400401
Overall Inspection:
SATISFACTORY

FIELD INSPECTION FORM

Location Identifier	Facility ID	Loc ID	Inspector Name:	On-Site Inspection	2A Doc Num:
	442427	442427	Binschus, Chris	<input type="checkbox"/>	

Operator Information:

OGCC Operator Number: 10311
 Name of Operator: SYNERGY RESOURCES CORPORATION
 Address: 20203 HIGHWAY 60
 City: PLATTEVILLE State: CO Zip: 80651

- THIS IS A FOLLOW UP INSPECTION
- FOLLOW UP INSPECTION REQUIRED
- NO FOLLOW UP INSPECTION REQUIRED
- INSPECTOR REQUESTS FORM 42 WHEN CORRECTIVE ACTIONS ARE COMPLETED

Contact Information:

Contact Name	Phone	Email	Comment
Paddington, Dave		dpennington@syrginfo.com	All Inspections

Compliance Summary:

QtrQtr: NWSW Sec: 12 Twp: 6N Range: 66W

Inspector Comment:

This is a construction inspection. See COGCC comments.

Related Facilities:

Facility ID	Type	Status	Status Date	Well Class	API Num	Facility Name	Insp Status	
442421	WELL	XX	07/10/2015	LO	123-41847	Fagerberg 36C-7-M	CI	<input checked="" type="checkbox"/>
442422	WELL	XX	07/10/2015	LO	123-41848	Fagerberg 25N-7B-M	CI	<input checked="" type="checkbox"/>
442423	WELL	XX	07/10/2015	LO	123-41849	Fagerberg 11C-7-M	CI	<input checked="" type="checkbox"/>
442424	WELL	XX	07/10/2015	LO	123-41850	Fagerberg Federal I13-685	CI	<input checked="" type="checkbox"/>
442425	WELL	XX	07/10/2015	LO	123-41851	Fagerberg 25N(S)-7B-M	CI	<input checked="" type="checkbox"/>
442426	WELL	XX	07/10/2015	LO	123-41852	Fagerberg 23N-7C-M	CI	<input checked="" type="checkbox"/>
442428	WELL	XX	07/10/2015	LO	123-41853	Fagerberg 36N-7B-M	CI	<input checked="" type="checkbox"/>
442429	WELL	XX	07/10/2015	LO	123-41854	Fagerberg 25N-7C-M	CI	<input checked="" type="checkbox"/>
442430	WELL	XX	07/10/2015	LO	123-41855	Fagerberg 11N-7B-M	CI	<input checked="" type="checkbox"/>

Equipment:

Location Inventory

Empty box for equipment and location inventory details.

Special Purpose Pits: _____	Drilling Pits: _____	Wells: <u>9</u>	Production Pits: _____
Condensate Tanks: _____	Water Tanks: <u>13</u>	Separators: <u>18</u>	Electric Motors: _____
Gas or Diesel Mortors: _____	Cavity Pumps: _____	LACT Unit: <u>2</u>	Pump Jacks: <u>9</u>
Electric Generators: <u>3</u>	Gas Pipeline: _____	Oil Pipeline: _____	Water Pipeline: _____
Gas Compressors: <u>5</u>	VOC Combustor: <u>24</u>	Oil Tanks: <u>20</u>	Dehydrator Units: _____
Multi-Well Pits: _____	Pigging Station: _____	Flare: _____	Fuel Tanks: _____

Location

Lease Road:

Type	Satisfactory/Action Required	comment	Corrective Action	Date

Signs/Marker:

Type	Satisfactory/Action Required	Comment	Corrective Action	CA Date

Emergency Contact Number (S/AR): _____ Corrective Date: _____

Comment: _____

Corrective Action: _____

Good Housekeeping:

Type	Satisfactory/Action Required	Comment	Corrective Action	CA Date

Spills:

Type	Area	Volume	Corrective action	CA Date

Multiple Spills and Releases?

Fencing/:

Type	Satisfactory/Action Required	Comment	Corrective Action	CA Date

Equipment:

Type:	#	Satisfactory/Action Required:
Comment		
Corrective Action		Date: _____

Venting:

Yes/No
Comment

Flaring:

Type	Satisfactory/Action Required
Comment:	
Corrective Action:	Correct Action Date: _____

Predrill

Location ID: 442427

Site Preparation:

Lease Road Adeq.: _____ Pads: _____ Soil Stockpile: _____

S/AR: _____

Corrective Action: _____ Date: _____ CDP Num.: _____

Form 2A COAs:

Group	User	Comment	Date
OGLA	andrewsd	Operator shall provide notice to COGCC 48 hours prior to commencing construction of this Oil and Gas Location via Form 42. Please note that this notice is now required under Rule 316C.c.	06/08/2015
Permit	kosolaj	Operator shall comply with Buffer Zone Move-In, Rig-Up Notice Rule 305.h (effective 9/30/2014).	06/29/2015
OGLA	andrewsd	Operator shall minimize total area disturbed for this Oil and Gas Location disturbance size, consistent with Rule 1002.d. and 1002.e.	06/08/2015
OGLA	andrewsd	Operator shall minimize post-completion disturbance per Rule 1003.	06/08/2015

S/AR: _____ **Comment:** _____

CA: _____ **Date:** _____

Wildlife BMPs:

BMP Type	Comment
Construction	COGCC Rule 604.c.(2)G. Berm construction. Construction: <ul style="list-style-type: none"> Berms or other secondary containment devices in Designated Setback Locations shall be constructed around crude oil, condensate, and produced water storage tanks and shall enclose an area sufficient to contain and provide secondary containment for one-hundred fifty percent (150%) of the largest single tank. Berms or other secondary containment devices shall be sufficiently impervious to contain any spilled or released material. All berms and containment devices shall be inspected at regular intervals and maintained in good condition. No potential ignition sources shall be installed inside the secondary containment area unless the containment area encloses a fired vessel. Refer to American Petroleum Institute Recommended Practices, API RP - D16.
Construction	COGCC Rule 604.c.(2)M. Fencing requirements. Construction: <ul style="list-style-type: none"> Adequate fencing will be installed to comply with the fencing requirement. The landowner has requested to not use fencing around the location.
Emissions mitigation	COGCC Rule 604.c.(2).C. Green Completions – Emission Control Systems. Emissions Mitigation: <ul style="list-style-type: none"> Flow lines, separators, and sand traps capable of supporting green completions as described in Rule 805 shall be installed at any Oil and Gas Location at which commercial quantities of gas are reasonably expected to be produced based on existing adjacent wells within 1 mile. Uncontrolled venting shall be prohibited in an Urban Mitigation Area. Temporary flowback flaring and oxidizing equipment shall include the following: <ul style="list-style-type: none"> Adequately sized equipment to handle 1.5 times the largest flowback volume of gas experienced in a ten (10) mile radius; Valves and porting available to divert gas to temporary equipment or to permanent flaring and oxidizing equipment; and Auxiliary fuel with sufficient supply and heat to sustain combustion or oxidation of the gas mixture when the mixture includes non-combustible gases.

<p>Planning</p>	<p>COGCC Rule 604.c.(2)L. Drill stem tests. Planning: <ul style="list-style-type: none"> • Closed chamber drill stem tests shall be allowed. All other drill stem tests shall require approval by the Director. </p>
<p>General Housekeeping</p>	<p>COGCC Rule 604.c.(2)P. Removal of surface trash. General Housekeeping: <ul style="list-style-type: none"> • All surface trash, debris, scrap or discarded material connected with the operations of the property shall be removed from the premises or disposed of in a legal manner. </p>
<p>Material Handling and Spill Prevention</p>	<p>COGCC Rule 604.c.(2)K. Pit level indicators. Material Handling and Spill Prevention: <ul style="list-style-type: none"> • Due to using a closed loop system pits will not be used. </p>
<p>Construction</p>	<p>1. A contiguous spray liner will be installed and will underlay the entire tank battery. The location of a partially buried cement water vault will be excavated prior to liner install.</p> <p>2. A 60 bbl cement water vault will be utilized to collect excess produced water from oil tanks. Produced water in the vault will be removed as needed and disposed of in an approved UIC disposal well. The cement water vault is one piece with no seams designed to minimize potential for leaks. All piping associated with the use of the water vault will be aboveground and visually inspected on a regular basis.</p> <p>3. The partially buried cement water vault will be installed above the spray in liner.</p> <p>4. A sized steel secondary containment ring will be installed surrounding the entire tank battery. Sand and gravel bedding will be installed to protect the liner prior to placing equipment in the containment area.</p> <p>1. A contiguous spray liner will be installed and will underlay the entire tank battery. The location of a partially buried cement water vault will be excavated prior to liner install.</p> <p>2. A 60 bbl cement water vault will be utilized to collect excess produced water from oil tanks. Produced water in the vault will be removed as needed and disposed of in an approved UIC disposal well. The cement water vault is one piece with no seams designed to minimize potential for leaks. All piping associated with the use of the water vault will be aboveground and visually inspected on a regular basis.</p> <p>3. The partially buried cement water vault will be installed above the spray in liner.</p> <p>4. A sized steel secondary containment ring will be installed surrounding the entire tank battery. Sand and gravel bedding will be installed to protect the liner prior to placing equipment in the containment area.</p>
<p>Planning</p>	<p>COGCC Rule 604.c.(2)U. Identification of plugged and abandoned wells. Planning: <ul style="list-style-type: none"> • The operator shall identify the location of the wellbore with a permanent monument as specified in Rule 319.a.(5). The operator shall also inscribe or imbed the well number and date of plugging upon the permanent monument. </p>
<p>Planning</p>	<p>COGCC Rule 604.c.(2)J. BOPE for well servicing operations. Planning: <ul style="list-style-type: none"> • Adequate blowout prevention equipment shall be used on all well servicing operations. • Backup stabbing valves shall be required on well servicing operations during reverse circulation. Valves shall be pressure tested before each well servicing operation using both low-pressure air and high-pressure fluid. </p>

Storm Water/Erosion Control	Stormwater management plans (SWMP) are in place to address construction, drilling and operations associated with Oil & Gas development throughout the state of Colorado in accordance with Colorado Department of Public Health and Environment (CDPHE) General Permit No. COR- 038637. BMP's will be constructed around the perimeter of the site prior to, or at the beginning of construction. BMP's used will vary according to the location, and will remain in place and maintained until the pad reaches final reclamation.
Material Handling and Spill Prevention	Spill Prevention Control and Countermeasures (SPCC) plans are in place to address any possible spill associated with Oil & Gas operations throughout the state of Colorado in accordance with CFR 112.
General Housekeeping	Housekeeping will consist of neat and orderly storage of materials and fluids. Wastes will be temporarily stored in sealed containers and regularly collected and disposed of at offsite, suitable facilities. If spills occur prompt cleanup is required to minimize any commingling of waste materials with stormwater runoff. Routine maintenance will be limited to fueling and lubrication of equipment. Drip pans will be used during routine fueling and maintenance to contain spills or leaks. Any waste product from maintenance will be containerized and transported offsite for disposal or recycling. There will be no major equipment overhauls conducted onsite. Equipment will be transported offsite for major overhauls. Cleanup of trash and discarded materials will be conducted at the end of each work day. Cleanup will consist of patrolling the roadway, access areas, and other work areas to pickup trash, scrap debris, other discarded materials, and any contaminated soil. These materials will be disposed of properly.
Planning	<ul style="list-style-type: none"> • A temporary sound wall is planned for the drill pad located closest to the residence. This wall will be located between the residence and the drill pad/MLVT pads. The wall will mitigate noise and light associated with the MLVT operations and will also divert a breach in the MLVT away from the residence. • Water will be used to mitigate any dust issues.
Planning	<p>COGCC Rule 604.c.(2)E. Multiwell Pads.</p> <p>Planning:</p> <ul style="list-style-type: none"> • This location includes 9 proposed wells and one production facility to reduce surface impact.
Planning	<p>COGCC Rule 604.c.(2)I. BOPE testing for drilling operations.</p> <p>Planning:</p> <ul style="list-style-type: none"> • Upon initial rig-up and at least once every thirty (30) days during drilling operations thereafter, pressure testing of the casing string and each component of the blowout prevention equipment including flange connections shall be performed to seventy percent (70%) of working pressure or seventy percent (70%) of the internal yield of casing, whichever is less. Pressure testing shall be conducted and the documented results shall be retained by the operator for inspection by the Director for a period of one (1) year. Activation of the pipe rams for function testing shall be conducted on a daily basis when practicable.
Planning	<p>COGCC Rule 604.c.(2)V. Development from existing well pads.</p> <p>Planning:</p> <ul style="list-style-type: none"> • Where possible, operators shall provide for the development of multiple reservoirs by drilling on existing pads or by multiple completions or commingling in existing wellbores (see Rule 322). If any operator asserts it is not possible to comply with, or requests relief from, this requirement, the matter shall be set for hearing by the Commission and relief granted as appropriate.
Drilling/Completion Operations	<p>COGCC Rule 604.c.(2)H. Blowout preventer equipment ("BOPE").</p> <p>Drilling/Completion Operations:</p> <ul style="list-style-type: none"> • Blowout prevention equipment for drilling operations in a Designated Setback Location shall consist of (at a minimum): <ul style="list-style-type: none"> o Rig with Kelly. Double ram with blind ram and pipe ram; annular preventer or a rotating head. o Rig without Kelly. Double ram with blind ram and pipe ram. <p>Mineral Management certification or Director approved training for blowout prevention shall be required for at least one (1) person at the well site during drilling operations.</p>

<p>Planning</p>	<p>COGCC Rule 604.c.(2)W. Site-specific measures. Planning: <ul style="list-style-type: none"> • Earthen ditch and berm will be used around the drilling rig pads. Drill rig lights will be positioned facing down and light plants will be pointed away from Building Unit owners. The existing well located East of the proposed production facility will be barricaded during operations. Following temporary operations NEI will work with the residence to address any concerns they may have regarding the permanent facility. • A sound wall will be installed on the east side of the temporary access road from CR70 to mitigate visual impacts from vehicle headlights turning into location at night. </p>
<p>Material Handling and Spill Prevention</p>	<p>COGCC Rule 604.c.(2)F. Leak Detection Plan. Material Handling and Spill Prevention: <ul style="list-style-type: none"> • Noble Energy Inc. designs facilities to avoid releases and to be compliant with all regulations specific to leak detection and control (i.e. SPCC 40CFR112). Daily, monthly and annual inspections are performed at each facility to confirm operational integrity and regulatory compliance. Noble will perform maintenance if it is deemed necessary through any of the scheduled inspections. Automation technology is utilized to monitor any variations in pressures and fluid gauges which could indicate a leak. </p>
<p>Drilling/Completion Operations</p>	<p>COGCC Rule 604.c.(2)O. Loadlines. Drilling/Completion Operations: <ul style="list-style-type: none"> • All loadlines will be bullplugged or capped. </p>
<p>Material Handling and Spill Prevention</p>	<p>COGCC Rule 604.c.(2)N. Control of fire hazards. Material Handling and Spill Prevention: <ul style="list-style-type: none"> • Any material not in use that might constitute a fire hazard shall be removed a minimum of twenty-five (25) feet from the wellhead, tanks and separator. Any electrical equipment installations inside the bermed area shall comply with API RP 500 classifications and comply with the current national electrical code as adopted by the State of Colorado. </p>
<p>Construction</p>	<p>COGCC Rule 604.c.(2)S. Access roads. Construction: <ul style="list-style-type: none"> • At the time of construction, all leasehold roads shall be constructed to accommodate local emergency vehicle access requirements, and shall be maintained in a reasonable condition. NEI plans on building ingress and egress points off Weld County Road 70 for temporary operations and CR 35 for the permanent facility. </p>
<p>Noise mitigation</p>	<p>COGCC Rule 604.c.(2)A. Noise. Noise Mitigation: <ul style="list-style-type: none"> • Temporary operations – Baseline survey to be completed, engineered sound walls will be used along the edge of the pad positioned between the operations and the residence of concern. The use of equipment specific sound walls might be required around the rig generators in the event of sound impacts during operations. • Permanent facility - Additional permanent location/equipment sound mitigation will be determined following sound surveys performed after facility startup. </p>
<p>Construction</p>	<p>COGCC Rule 604.c.(2)R. Tank specifications. Construction: <ul style="list-style-type: none"> • All newly installed or replaced crude oil and condensate storage tanks shall be designed, constructed, and maintained in accordance with National Fire Protection Association (NFPA) Code 30 (2008 version). The operator shall maintain written records verifying proper design, construction, and maintenance, and shall make these records available for inspection by the Director. Only the 2008 version of NFPA Code 30 applies to this rule. This rule does not include later amendments to, or editions of, the NFPA Code 30. NFPA Code 30 may be examined at any state publication depository library. Upon request, the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203, will provide information about the publisher and the citation to the material. </p>

Drilling/Completion Operations	<p>COGCC Rule 604.c.(2)B. Closed Loop Drilling Systems – Pit Restrictions. Drilling/Completion Operations:</p> <ul style="list-style-type: none"> • Closed loop drilling systems are required within the Buffer Zone Setback. • Pits are not allowed on Oil and Gas Locations within the Buffer Zone Setback, except fresh water storage pits, reserve pits to drill surface casing, and emergency pits as defined in the 100-Series Rules. • Fresh water pits within the Exception Zone shall require prior approval of a Form 15 pit permit. In the Buffer Zone, fresh water pits shall be reported within 30-days of pit construction. • Fresh water storage pits within the Buffer Zone Setback shall be conspicuously posted with signage identifying the pit name, the operator’s name and contact information, and stating that no fluids other than fresh water are permitted in the pit. Produced water, recycled E&P waste, or flowback fluids are not allowed in fresh water storage pits. • Fresh water storage pits within the Buffer Zone Setback shall include emergency escape provisions for inadvertent human access.
Traffic control	<p>COGCC Rule 604.c.(2)D. Traffic Plan. Traffic Control:</p> <p>If required by the local government, a traffic plan will be coordinated with the local jurisdiction prior to commencement of operations. Temporary operations - Dust suppression (water trucks) will be used on the access roads and pads during construction, drilling, and completion activities. Unpaved surrounding county roads to be used will be stabilized with chemical treatment for dust mitigation.</p>
General Housekeeping	<p>COGCC Rule 604.c.(2)T. Well site cleared. General Housekeeping:</p> <ul style="list-style-type: none"> • Within ninety (90) days after a well is plugged and abandoned, the well site shall be cleared of all non-essential equipment, trash, and debris. For good cause shown, an extension of time may be granted by the Director.
Drilling/Completion Operations	<p>COGCC Rule 604.c.(2)Q. Guy line anchors. Drilling/Completion Operations:</p> <ul style="list-style-type: none"> • All guy line anchors left buried for future use shall be identified by a marker of bright color not less than four (4) feet in height and not greater than one (1) foot east of the guy line anchor.

S/AR: _____ **Comment:** _____

CA: _____ **Date:** _____

Stormwater:

Erosion BMPs	Present	Other BMPs	Present
DITCHES	Yes		

S/AR: SATISFACTORY

Corrective Action: _____ Date: _____

Comments: Erosion BMPs: **Stormwater and sediment control BMPs installed before construction.**

Other BMPs: _____

Comment: _____

Staking:

On Site Inspection (305):

Surface Owner Contact Information:

Name: _____ Address: _____

Phone Number: _____ Cell Phone: _____

Operator Rep. Contact Information:

Landman Name: _____ Phone Number: _____

Date Onsite Request Received: _____ Date of Rule 306 Consultation: _____
 Request LGD Attendance: _____
LGD Contact Information:
 Name: _____ Phone Number: _____ Agreed to Attend: _____
Summary of Landowner Issues:

Summary of Operator Response to Landowner Issues:

Onsite Inspection Memorandum Summarizing Discussions at Inspection as Attachment:

Facility

Facility ID: 442421	Type: WELL	API Number: 123-41847	Status: XX	Insp. Status: CI
Facility ID: 442422	Type: WELL	API Number: 123-41848	Status: XX	Insp. Status: CI
Facility ID: 442423	Type: WELL	API Number: 123-41849	Status: XX	Insp. Status: CI
Facility ID: 442424	Type: WELL	API Number: 123-41850	Status: XX	Insp. Status: CI
Facility ID: 442425	Type: WELL	API Number: 123-41851	Status: XX	Insp. Status: CI
Facility ID: 442426	Type: WELL	API Number: 123-41852	Status: XX	Insp. Status: CI
Facility ID: 442428	Type: WELL	API Number: 123-41853	Status: XX	Insp. Status: CI
Facility ID: 442429	Type: WELL	API Number: 123-41854	Status: XX	Insp. Status: CI
Facility ID: 442430	Type: WELL	API Number: 123-41855	Status: XX	Insp. Status: CI

Environmental

Spills/Releases:
 Type of Spill: _____ Description: _____ Estimated Spill Volume: _____
 Comment: _____
 Corrective Action: _____ Date: _____
 Reportable: _____ GPS: Lat _____ Long _____
 Proximity to Surface Water: _____ Depth to Ground Water: _____

Water Well:
 DWR Receipt Num: _____ Owner Name: _____ GPS: _____
 Lat _____ Long _____

Field Parameters:

 Sample Location: _____

Inspector Name: Binschus, Chris

Emission Control Burner (ECB): _____

Comment: _____

Pilot: _____ Wildlife Protection Devices (fired vessels): _____

Reclamation - Storm Water - Pit

Interim Reclamation:

Date Interim Reclamation Started: _____ Date Interim Reclamation Completed: _____

Land Use: IRRIGATED

Comment: _____

1003a. Waste and Debris removed? _____

CM _____

CA _____ CA Date _____

Unused or unneeded equipment onsite? _____

CM _____

CA _____ CA Date _____

Pit, cellars, rat holes and other bores closed? _____

CM _____

CA _____ CA Date _____

Guy line anchors marked? _____

CM _____

CA _____ CA Date _____

1003b. Area no longer in use? _____ Production areas stabilized? _____

1003c. Compacted areas have been cross ripped? _____

1003d. Drilling pit closed? _____ Subsidence over on drill pit? _____

Cuttings management: _____

1003e. Areas no longer needed for drilling or subsequent operations for have been re-vegetated to 80% of pre-existing? _____

Production areas have been stabilized? _____ Segregated soils have been replaced? _____

RESTORATION AND REVEGETATION

Cropland

Top soil replaced _____ Recontoured _____ Perennial forage re-established _____

Non-Cropland

Top soil replaced _____ Recontoured _____ 80% Revegetation _____

1003 f. Weeds Noxious weeds? _____

Comment: _____

Overall Interim Reclamation _____

Final Reclamation/ Abandoned Location:

Date Final Reclamation Started: _____ Date Final Reclamation Completed: _____

Final Land Use: IRRIGATED

Reminder: _____

Comment: _____

Inspector Name: Binschus, Chris

Well plugged _____ Pit mouse/rat holes, cellars backfilled _____
 Debris removed _____ No disturbance /Location never built _____
 Access Roads Regraded _____ Contoured _____ Culverts removed _____
 Gravel removed _____
 Location and associated production facilities reclaimed _____ Locations, facilities, roads, recontoured _____
 Compaction alleviation _____ Dust and erosion control _____
 Non cropland: Revegetated 80% _____ Cropland: perennial forage _____
 Weeds present _____ Subsidence _____
 Comment: _____
 Corrective Action: _____ Date _____
 Overall Final Reclamation Well Release on Active Location Multi-Well Location

Storm Water:

Loc Erosion BMPs	BMP Maintenance	Lease Road Erosion BMPs	Lease BMP Maintenance	Chemical BMPs	Chemical BMP Maintenance	Comment

S/A/V: _____ Corrective Date: _____
 Comment: _____
 CA: _____

Pits: NO SURFACE INDICATION OF PIT

COGCC Comments

Comment	User	Date
This is a construction inspection. Stormwater and sediment control BMPs (ditch and berm) installed prior to construction. Spoke with operator ensuring compaction of outer perimeter berm. Topsoil salvage in process. Topsoil stockpile needs to be stabilized upon completion of salvage process.	binschusc	02/26/2016
Refer to photos in Doc.#682400402		
Previous Noble location permitted for 9 wells. Synergy proposing 14 wells at location.	binschusc	02/26/2016

Attached Documents

You can go to COGCC Images (<https://cogcc.state.co.us/weblink/>) and search by document number:

Document Num	Description	URL
682400402	Location Photos	http://ogccweblink.state.co.us/DownloadDocumentPDF.aspx?DocumentId=3794178