

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



DE	ET	OE	ES
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Inspection Date:
07/21/2015

Document Number:
674102483

Overall Inspection:
SATISFACTORY

FIELD INSPECTION FORM

Location Identifier	Facility ID	Loc ID	Inspector Name:	On-Site Inspection	2A Doc Num:
	<u>437890</u>	<u>437893</u>	<u>Rickard, Jeff</u>	<input type="checkbox"/>	

Operator Information:

OGCC Operator Number:	<u>69175</u>
Name of Operator:	<u>PDC ENERGY INC</u>
Address:	<u>1775 SHERMAN STREET - STE 3000</u>
City:	<u>DENVER</u> State: <u>CO</u> Zip: <u>80203</u>

- 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
General, All inspections	(970) 332-3520	cogccinspection@pdce.com	All PDC inspection

Compliance Summary:

QtrQtr: NENE Sec: 34 Twp: 5N Range: 64W

Inspector Comment:

Related Facilities:

Facility ID	Type	Status	Status Date	Well Class	API Num	Facility Name	Insp Status	
159532	SPILL OR RELEASE	CL	01/05/2015		-	SPILL/RELEASE POINT	CL	<input type="checkbox"/>
437890	WELL	PR	06/10/2015		123-39754	Suden 34U-403	PR	<input checked="" type="checkbox"/>
437891	WELL	PR	06/10/2015		123-39755	Suden 34R-323	PR	<input checked="" type="checkbox"/>
437892	WELL	PR	06/10/2015		123-39756	Suden 34R-423	PR	<input checked="" type="checkbox"/>
437894	WELL	PR	06/10/2015		123-39757	Suden 34U-243	PR	<input checked="" type="checkbox"/>

Equipment:

Location Inventory

Special Purpose Pits: _____	Drilling Pits: _____	Wells: <u>4</u>	Production Pits: _____
Condensate Tanks: _____	Water Tanks: <u>4</u>	Separators: <u>4</u>	Electric Motors: _____
Gas or Diesel Mortors: _____	Cavity Pumps: _____	LACT Unit: _____	Pump Jacks: _____
Electric Generators: _____	Gas Pipeline: _____	Oil Pipeline: _____	Water Pipeline: _____
Gas Compressors: _____	VOC Combustor: <u>2</u>	Oil Tanks: <u>12</u>	Dehydrator Units: _____
Multi-Well Pits: _____	Pigging Station: _____	Flare: _____	Fuel Tanks: _____

Location

Signs/Marker:				
Type	Satisfactory/Action Required	Comment	Corrective Action	CA Date
TANK LABELS/PLACARDS	SATISFACTORY			

Inspector Name: Rickard, Jeff

BATTERY	SATISFACTORY			
WELLHEAD	SATISFACTORY			

Emergency Contact Number (S/A/V): SATISFACTORY Corrective Date: _____

Comment: _____

Corrective Action: _____

Spills:

Type	Area	Volume	Corrective action	CA Date
<input type="checkbox"/> Multiple Spills and Releases?				

Fencing/:

Type	Satisfactory/Action Required	Comment	Corrective Action	CA Date
WELLHEAD	SATISFACTORY			

Equipment:

Type	#	Satisfactory/Action Required	Comment	Corrective Action	CA Date
Compressor	1	SATISFACTORY			
Horizontal Heated Separator	4	SATISFACTORY			
Plunger Lift	4	SATISFACTORY			
Emission Control Device	3	SATISFACTORY			
Gas Meter Run	4	SATISFACTORY			

Facilities: New Tank Tank ID: _____

Contents	#	Capacity	Type	SE GPS
PRODUCED WATER	2	100 BBLs	PBV FIBERGLASS	40.362470,-104.531370

S/A/V: SATISFACTORY Comment: _____

Corrective Action: _____ Corrective Date: _____

Paint

Condition	Adequate
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Other (Content) _____

Other (Capacity) _____

Other (Type) _____

Berms

Type	Capacity	Permeability (Wall)	Permeability (Base)	Maintenance
Metal	Adequate	Walls Sufficient	Base Sufficient	Adequate

Corrective Action _____ Corrective Date _____

Comment _____

Facilities: New Tank Tank ID: _____

Contents	#	Capacity	Type	SE GPS
PRODUCED WATER	4	400 BBLs	FIBERGLASS AST	40.362470,-104.531370

S/A/V: SATISFACTORY Comment: _____

Corrective Action: _____ Corrective Date: _____

Paint

Condition	
Other (Content)	_____
Other (Capacity)	_____
Other (Type)	_____

Berms

Type	Capacity	Permeability (Wall)	Permeability (Base)	Maintenance
Metal	Adequate	Walls Sufficient	Base Sufficient	Adequate
Corrective Action				Corrective Date
Comment				

Facilities: New Tank Tank ID: _____

Contents	#	Capacity	Type	SE GPS
CRUDE OIL	12	400 BBLS	STEEL AST	40.362470,-104.531370
S/A/V: SATISFACTORY	Comment: _____			
Corrective Action:				Corrective Date:

Paint

Condition	Adequate
Other (Content)	_____
Other (Capacity)	_____
Other (Type)	_____

Berms

Type	Capacity	Permeability (Wall)	Permeability (Base)	Maintenance
Metal	Adequate	Walls Sufficient	Base Sufficient	Adequate
Corrective Action				Corrective Date
Comment				

Venting:

Yes/No	Comment

Flaring:

Type	Satisfactory/Action Required	Comment	Corrective Action	CA Date

Predrill

Location ID: 437890

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

S/A/V: _____
 Corrective Action: _____ Date: _____ CDP Num.: _____

Form 2A COAs:

Group	User	Comment	Date
OGLA	andrewsd	COGCC Rules 605.a.(3,5,6,7, and 8), as applicable to tank setbacks at the time of installation shall apply to the siting of this MLVT.	06/09/2014

OGLA	andrewsd	All MLVT liner seams shall be welded and tested in accordance with applicable ASTM international standards. Any repairs to liners shall be made using acceptable practices and applicable standards.	06/09/2014
OGLA	andrewsd	The MLVT shall be constructed and operated in accordance with a design package certified and sealed by a Licensed Professional Engineer either in Colorado or the state where the MLVT was designed or manufactured.	06/09/2014
OGLA	andrewsd	MLVTs may only be utilized for the storage of freshwater. E&P wastes, including produced water, treated E&P wastes, and flowback from hydraulic fracturing operations, are not allowed.	06/09/2014

S/AV: _____ **Comment:** _____

CA: _____ **Date:** _____

Wildlife BMPs:

BMP Type	Comment
Planning	604c.(2).V. Development From Existing Well Pads: An existing pad was not available to utilize to develop these wells.
Planning	<p>PDC Energy, Inc. (PDC) has developed Best Management Practices (BMPS) to prevent injuries, property damage or environmental impacts and a Contingency Plan for any Modular Large Volume Tank (MLVT) leak or catastrophic failure of the tank integrity and resulting loss of fluid. These BMPs include, but not limited, by the following:</p> <ol style="list-style-type: none"> 1) PDC determines MLVT locations based on size of location, nearby surface waters, site visibility, surrounding land use, property lines, onsite traffic, site security, tear-away tank fill connections, topography (high, low, slope, direction), nearby building units, roads, access points, and surface owner requests. 2) Signs shall be posted on each MLVT to indicate that the contents are fresh water and that no E&P waste fluids are allowed. Location and additional signage shall conform to Rule 210. 3) MLVTs will be operated with a minimum of 1 foot freeboard at all times. 4) Access to the tanks shall be limited to operational personnel. 5) Construction and installation of the tank structure, liner and sub-grade shall meet or exceed the manufacturer specifications. PDC follows manufacturer's Standard Operating Procedures (SOPs) and will provide these SOPs upon request to the COGCC. 6) PDC will conduct daily, visual inspections of the exterior wall and general area for any integrity deficiencies before, during, and after filling the MLVTs. PDC uses Construction Sign-Off, Site Preparation Sign-Off, Completion Sign-Off, Pre-Fill, and Site Visit checklists to maintain a written record of inspections. However, when the fluid level in the MLVTs is less than two (2) feet and there is no activity going on (i.e. during holidays or a small break between completions), only intermittent inspections will be conducted. Two feet is the safe volume of fluid level that is needed to hold the liner down and keep the MLVT stable. 7) Each location where MLVT's are used will have its own set of unique site-specific characteristics and associated risks (e.g., rural vs. urban setting, grade of the location, etc.) to be considered in a worst case scenario. These characteristics must be identified and addressed prior to the MLVT construction phase and should be documented in the MLVT construction checklist. Ensuring the safety of our employees, contractors, and the public are a top priority. This can be addressed with the implementation of MLVT pre-construction risk assessment measures to address safety concerns, and minimize environmental impacts and property damage in the unlikely event of a MLVT release. 8) In the event of a catastrophic MLVT failure, the Operator shall notify the COGCC as soon as practicable but not more than 24 hours after discovery, submit a Form 22-Accident Report within 10 days after discovery, conduct a "root cause analysis", and provide same to COGCC on a Form 4-Sundry Notice within 30 days of the failure.
Planning	604c.(2).E. Multiwell Pads: This 2A application is for a 4-well pad. No suitable existing locations are in the area. Area was reviewed and determined that this was the most suitable location. Other locations would require extensive earth work and possibly some blasting.

Emissions mitigation	604c.(2).C. Green Completions: Flowlines, 48" HLPs, sand traps all 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 and or oil are reasonable expected to be produced based on existing wells. All green flow back equipment will be able to handle more than 1.5 times the amount of any know volumes in the surrounding field. First sign of salable gas will be put into production equipment and turned down line.
Planning	604c.(2).J. BOPE for Well Servicing Operations: All valves will also be tested to maximum rating by a third party prior to being delivered to location. Whenever snubbing operations are being used the snubbing stack will be pressure tested at the same time the BOPE is being tested which consist of a single pipe ram and a annular bag.
Drilling/Completion Operations	604c.(2).O. Loadlines: All loadlines shall be bullplugged or capped.
Material Handling and Spill Prevention	604c.(2).K. Pit Level Indicators: PDC uses an Electronic Drilling Recorder (EDR) with pit level monitor(s) and alarm(s) for production rigs. Basic level gages are used on steel pits utilized for the surface rig.
Construction	604c.(2).M. Fencing Requirements: The completed wellsites will be surrounded with a fence and gate. PDC personnel will monitor the wellsites regularly upon completion of the wells. Authorized representatives and/or PDC personnel shall be on-site during drilling and completion operations.
General Housekeeping	604c.(2).N. Control of Fire Hazards: PDC will ensure that any material that might be deemed a fire hazard will be will remain no less than twenty-five (25) feet from the wellhead(s), tanks and separator(s). PDC installs automation equipment for tank level and pressure monitoring inside the bermed area that complies with API RP 500 classifications and with the current national electrical code as adopted by the State of Colorado.
Dust control	PDC will employ practices for control of fugitive dust caused by operations include but not limited to the use of speed restrictions, regular road maintenance, restriction of construction activity during high-wind days, and silica dust controls when handling sand used in hydraulic fracturing operations. When necessary, PDC coordinates dust mitigation with the county on gravel roads, places road base where allowed by surface owner around tanks and wellheads to minimize dust, and will water the roads and locations when dry. In addition, automation is used on all new wells to minimize truck traffic.
General Housekeeping	604c.(2).P. Removal of Surface Trash: A commercial size trash bin for removing debris will be located on site. This bin will be for use by all parties affiliated with the operation.
Material Handling and Spill Prevention	To prevent adverse impacts to shallow groundwater, buried produced water vault shall be constructed of fiberglass and installed above an impermeable synthetic or geosynthetic liner system which shall be tied back into the surface liner.
Construction	604c.(2).S. Access Roads: PDC will utilize the lease access road from WCR 52 for drilling operations and maintenance equipment. The road will be properly constructed and maintained to accommodate for local emergency vehicle access.
Material Handling and Spill Prevention	604c.(2).F. Leak Detection Plan: See attached.
General Housekeeping	604c.(2).T. Well Site Cleared: The wellsite will be cleared of all non-essential equipment within ninety (90) days after all wells associated with the pad have been plugged and abandoned.
Construction	604c.(2).Q. Guy Line Anchors: Rig guy wires are anchored to the rig's base beam that the rig stands on, temporary and permanent anchors will not be set on this location.
Construction	604c.(2).R. Tank Specifications: Condensate storage tanks will be designed, constructed and maintained in accordance with National Fire Protection Association (NFPA) Code 30 (2008 version). PDC will maintain written records to verify proper design, construction and maintenance. All records will be available for inspection by the Director.

Planning	604c.(2).U. Identification of Plugged and Abandoned Wells: Pursuant to rule 319.a.(5)., once the well has been plugged and abandoned, PDC will identify the location of the wellbore with a permanent monument that will detail the well name and date of plugging.
Construction	604c.(2).G. Berm Construction: A geosynthetic liner will be laid under the tanks on this location and a metal containment will be constructed. 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 down gradient water sources (barrow ditch) located 198 and 231 feet north and (ditch) 402 feet north-west from the nearest well head.
Storm Water/Erosion Control	This Stormwater Management Plan contains required elements associated with PDC's construction activities for Areas 1, 2, 3, and 5, as defined in the CDPS General Permit for Stormwater Discharges Associated with Construction Activity, Authorization to Discharge Under the Colorado Discharge Permit System (Permit No. COR-030000, re-issued and effective July 1, 2007).BMPs for sediment and erosion control will be accomplished through a combination of construction techniques, vegetation and re-vegetation, administrative controls, and structural features.
Planning	604c.(2).L. Drill Stem Tests: PDC does not conduct drill stem tests, but will seek prior approval from the director if a drill stem test will be preformed.
Traffic control	604c.(2).D. Traffic Plan: If required by the local government, a traffic plan will be coordinated with the local jurisdiction prior to commencement of operations.
Planning	604.c.(2).W. Site Specific Measures: Dust abatement will be applied and properly maintained on CR 52 to minimize dust. Lights should be turned downward and away from building unit. The building unit of concern is located west of the proposed pad at a distance of approximately 805 feet.
Noise mitigation	604c.(2).A. Noise: WELL PAD: PDC has conducted baseline noise surveys for all drilling rigs that are being contracted and has also conducted a baseline noise survey for hydraulic fracture stimulation operations on a representative horizontal well. A review was completed to identify potential receptors within 1000 feet of the proposed Suden 34U-HZ Pad site. The only building unit of concern is located West of the proposed pad at a distance of approximately 805 feet. As a result, noise modeling was reviewed for the proposed pad located in the NENE Section 34 – T5N – R64W. Based on the results, projected noise levels should not exceed the Light Industrial Zone standard of 65 decibels (db) at the receptor location, additional mitigation will not be necessary for the Suden 34U pad. Sound mitigation is to be installed west and south of the Suden 34R Pad, which is west of this proposed location. PRODUCTION FACILITIES: It is not anticipated that noise mitigation will be necessary at the proposed tank battery location. After construction is completed, equipment installed and production begins, noise levels will be assessed to determine if mitigation measures will be required to be compliant with Rule 802.
Planning	604c.(2).I. BOPE Testing for Drilling Operations: PDC's contractors will supply a double ram-5000' PSI rated BOPE (Blinds and pipes) and always function test BOPE's prior to placement on the well head and inspect and replace all seals and ram block rubbers. After installation of the BOPE, PDCE conducts a pressure test on the BOPE at a low pressure of (200-400 psi) and a high pressure test to the maximum amount of the BOPE rating with a third party tester, all tests are digitally recorded.

S/AV: _____ **Comment:** _____

CA: _____ **Date:** _____

Stormwater:

Comment: _____

Staking:

On Site Inspection (305):

Surface Owner Contact Information:

Name: _____ Address: _____

Phone Number: _____ Cell Phone: _____

Inspector Name: Rickard, Jeff

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: 437890 Type: WELL API Number: 123-39754 Status: PR Insp. Status: PR

Producing Well

Comment: PR

BradenHead

Comment: Braden head is exposed at surface.

CA: _____

CA Date: _____

Facility ID: 437891 Type: WELL API Number: 123-39755 Status: PR Insp. Status: PR

Producing Well

Comment: PR

BradenHead

Comment: Braden ehad is exposed at surface.

CA: _____

CA Date: _____

Facility ID: 437892 Type: WELL API Number: 123-39756 Status: PR Insp. Status: PR

Producing Well

Comment: PR

BradenHead

Comment: BRaden head is exposed at surface.

CA: _____

CA Date: _____

Facility ID: 437894 Type: WELL API Number: 123-39757 Status: PR Insp. Status: PR

Producing Well

Comment: PR

BradenHead

Comment: Braden ehad is exposed at surface.

CA: _____

CA Date: _____

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: _____

Emission Control Burner (ECB): Y

Comment: _____

Pilot: ON Wildlife Protection Devices (fired vessels): YES

Reclamation - Storm Water - Pit

Interim Reclamation:

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

Land Use: RANGELAND

Comment: _____

1003a. Debris removed? _____ CM _____

CA _____ CA Date _____

Waste Material Onsite? _____ 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 removed? Pass CM _____

CA _____ CA Date _____

Guy line anchors marked? _____ CM _____

CA _____ CA Date _____

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

1003c. Compacted areas have been cross ripped? _____

Inspector Name: Rickard, Jeff

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: RANGELAND _____

Reminder: _____

Comment: _____

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
Gravel	Pass					
Mulching	Pass					

S/A/V: SATISFACTOR Corrective Date: _____

Y

Comment: _____

CA: _____

Pits: NO SURFACE INDICATION OF PIT