

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:
04/22/2016
Document Number:
682400674
Overall Inspection:
SATISFACTORY

FIELD INSPECTION FORM

Location Identifier	Facility ID	Loc ID	Inspector Name:	On-Site Inspection	2A Doc Num:
	445300	445300	Binschus, Chris	<input type="checkbox"/>	

Operator Information:

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

- 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
		cogccinspection@pdce.com	All inspections

Compliance Summary:

QtrQtr: SENE Sec: 19 Twp: 5N Range: 63W

Inspector Comment:

This is a construction inspection.

Related Facilities:

Facility ID	Type	Status	Status Date	Well Class	API Num	Facility Name	Insp Status	
445297	WELL	XX	03/30/2016		123-43006	Cockroft 19V-314	CI	<input checked="" type="checkbox"/>
445298	WELL	XX	03/30/2016		123-43007	Cockroft 19V-204	CI	<input checked="" type="checkbox"/>
445299	WELL	XX	03/30/2016		123-43008	Cockroft 19W-314	CI	<input checked="" type="checkbox"/>
445301	WELL	XX	03/30/2016		123-43009	Cockroft 19V-214	CI	<input checked="" type="checkbox"/>
445302	WELL	XX	03/30/2016		123-43010	Cockroft 19V-304	CI	<input checked="" type="checkbox"/>
445303	WELL	XX	03/30/2016		123-43011	Cockroft 19V-234	CI	<input checked="" type="checkbox"/>
445304	WELL	XX	03/30/2016		123-43012	Cockroft 19U-334	CI	<input checked="" type="checkbox"/>
445305	WELL	XX	03/30/2016		123-43013	Cockroft 19W-214	CI	<input checked="" type="checkbox"/>
445309	WELL	XX	03/31/2016		123-43014	Cockroft 19U-404	CI	<input checked="" type="checkbox"/>

Equipment:

Location Inventory

Special Purpose Pits: _____	Drilling Pits: _____	Wells: <u>9</u>	Production Pits: _____
Condensate Tanks: _____	Water Tanks: _____	Separators: <u>9</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>8</u>	Oil Tanks: <u>18</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:	445300
Site Preparation:	
Lease Road Adeq.:	SATISFACTORY
Pads:	_____
Soil Stockpile:	SATISFACTORY
S/AR:	_____
Corrective Action:	_____
Date:	_____
CDP Num.:	_____
Form 2A COAs:	
S/AR:	_____
Comment:	_____

CA: Date: **Wildlife BMPs:**

BMP Type	Comment
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.
Drilling/Completion Operations	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.
Drilling/Completion Operations	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.
Drilling/Completion Operations	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.
Dust control	805.b(1)-(c) Odors and Dust: Oil and gas facilities and equipment will operate in a manner that odors and dust do not constitute a nuisance or hazard to public welfare. Odors: Oil and gas operations will be in compliance with the Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emission, 5 C.C.R. 1001-4, Regulation No. 3 (5 C.C.R. 1001-5), and Regulation No. 7 Section XVII.B.1 (a-c) and Section XII. Dust; 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.
Drilling/Completion Operations	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.

<p>Drilling/Completion Operations</p>	<p>MLVTs: 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: 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. 9) 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. 10) 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. 11) 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. 12) PDC Energy Inc. hereby certifies to the Director that the Modular Large Volume Tanks, utilized for the afore mentioned location, will be designed and implemented consistent with the Colorado Oil and Gas Conservation Commission policy dated June 13, 2014.</p> <p>MLVT Certification PDC Energy Inc. hereby certifies to the Director that the Modular Large Volume Tanks, utilized for the afore mentioned location, will be designed and implemented consistent with the Colorado Oil and Gas Conservation Commission policy dated June 13, 2014.</p>
<p>Emissions mitigation</p>	<p>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.</p>
<p>Planning</p>	<p>604c.(2).E. Multiwell Pads: This 2A application is for a 9-well pad. Location was selected partly due to Landowner preference. We need to keep the wellheads and production facility outside of the irrigation pivot while maintaining desired distance between wellheads and production facility. We also needed to consider the drilling kick limits and stay within those parameters.</p>

Drilling/Completion Operations	604c.(2).I. BOPE Testing for Drilling Operations: PDC's contractors will supply a double ram BOPE (Blinds and pipes). BOPE is always function tested and all seals and ram block rubbers are inspected. 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 with a third party tester, all tests are digitally recorded and any failed equipment or seals are replaced and re-tested.
Drilling/Completion Operations	604.c.(2).W. Site Specific Measures: Lights should be turned downward and away from building units within the 1,000 foot buffer area. Dust mitigation will be provided as necessary on lease access roads.
Storm Water/Erosion Control	This Stormwater Management Plan contains required elements associated with PDC's construction activities, 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).V. Development From Existing Well Pads: An existing pad was not available to utilize to develop these wells.
Drilling/Completion Operations	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.
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.
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.
Drilling/Completion Operations	604c.(2).O. Loadlines: All loadlines shall be bullplugged or capped.
Drilling/Completion Operations	804. Visual Impact: Production facilities, regardless of construction date, which are observable from any public highway will be painted with uniform, non-contrasting, non-reflective color tones (similar to the Munsell Soil Color Coding System), and with colors matched to but slightly darker than the surrounding landscape.
Construction	604c.(2).G. Berm Construction: Containment berms shall be constructed of steel rings with a geosynthetic liner, designed and installed to prevent leakage and resist degradation from erosion or routine operation. All berms will be visually checked periodically to ensure proper working condition. Secondary containment devices shall be sufficiently impervious to contain any spilled or released material. Due to a downgradient surface water body within 500', tertiary containment (such as an earthen berm or the like), will be installed around Production Facilities.
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. These baseline surveys are utilized for site specific noise modeling to determine if any mitigation measures are warranted. A review was conducted to identify potential receptors within 1000 feet of the proposed pad site. There are four (4) building units of concern located 406', 577', 733' and 919'. Light and sound mitigation will be installed to the Southeast of the proposed location. Methods of noise mitigation shall include but not be limited to hay bales, sound walls, or customized semi-trailers. 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.
Drilling/Completion Operations	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.
Drilling/Completion Operations	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.

Inspector Name: Binschus, Chris

Drilling/Completion Operations	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.
Drilling/Completion Operations	604c.(2).F. Leak Detection Plan: See attached.
Drilling/Completion Operations	To prevent adverse impacts to shallow groundwater, buried produced water vault shall be installed above an impermeable synthetic or geosynthetic liner system which shall be tied back into the surface liner.
Traffic control	604c.(2).S. Access Roads: PDC will utilize an improved lease access road off of County Road 388 for all heavy truck traffic and rig moves along with drilling operations and maintenance equipment. The lease access road will be properly constructed and maintained to accommodate for local emergency vehicle access. Dust will be mitigated as necessary on lease access road.

S/AR: _____ Comment: _____

CA: _____ Date: _____

Stormwater:

Erosion BMPs	Present	Other BMPs	Present
DITCHES	Yes		

S/AR: SATISFACTORY

Corrective Action: _____ Date: _____

Comments: Erosion BMPs: **BMP installed prior to construction. Refer to attached photos in Doc.# 682400675.**

Other BMPs: _____

Comment: **Need to stabilize topsoil stockpile upon completion of salvage process.**

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: 445297 Type: WELL API Number: 123-43006 Status: XX Insp. Status: CI

Facility ID: 445298	Type: WELL	API Number: 123-43007	Status: XX	Insp. Status: CI
Facility ID: 445299	Type: WELL	API Number: 123-43008	Status: XX	Insp. Status: CI
Facility ID: 445301	Type: WELL	API Number: 123-43009	Status: XX	Insp. Status: CI
Facility ID: 445302	Type: WELL	API Number: 123-43010	Status: XX	Insp. Status: CI
Facility ID: 445303	Type: WELL	API Number: 123-43011	Status: XX	Insp. Status: CI
Facility ID: 445304	Type: WELL	API Number: 123-43012	Status: XX	Insp. Status: CI
Facility ID: 445305	Type: WELL	API Number: 123-43013	Status: XX	Insp. Status: CI
Facility ID: 445309	Type: WELL	API Number: 123-43014	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:

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

Field Parameters:

Sample Location:

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: _____

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

Inspector Name: Binschus, Chris

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

Attached Documents

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

Document Num	Description	URL
682400675	Location Photos	http://ogccweblink.state.co.us/DownloadDocumentPDF.aspx?DocumentId=3845303