FORM INSP Rev 05/11

State of Colorado
Oil and Gas Conservation Commission

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Phone: (303) 894-2100 Fax: (303) 894-2109

FIELD INSPECTION FORM

Inspection Date: 04/06/2016
Document Number: 682400605
Overall Inspection: SATISFACTORY

Location Identifier	Facility ID	Loc ID	Inspector Name:	On-Site Inspection	2A Doc Num:
	437882	437887	Binschus, Chris	☐	

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

Compliance Summary:

QtrQtr: NENW Sec: 28 Twp: 5N Range: 64W

Inspector Comment:

This is a follow up interim reclamation inspection. Any corrective actions from previous inspections that have not been addressed are still applicable. See COGCC comments.

Related Facilities:

Facility ID	Type	Status	Status Date	Well Class	API Num	Facility Name	Insp Status	
437882	WELL	PR	07/01/2015	OW	123-39747	Churchill 28M-443	RI	☒
437883	WELL	PR	06/01/2015	OW	123-39748	Churchill 28J-343	RI	☒
437884	WELL	PR	07/01/2015	OW	123-39749	Churchill 28J-423	RI	☒
437885	WELL	PR	07/01/2015	OW	123-39750	Churchill 28J-203	RI	☒
437886	WELL	PR	06/01/2015	OW	123-39751	Churchill 28E-203	RI	☒
437888	WELL	PR	06/01/2015	OW	123-39752	Churchill 28J-443	RI	☒
437889	WELL	PR	07/01/2015	OW	123-39753	Churchill 28M-343	RI	☒
438086	WELL	PR	06/01/2015	OW	123-39869	Churchill 28E-423	RI	☒

Equipment: Location Inventory

Inspector Name: Binschus, Chris

Special Purpose Pits:		Drilling Pits:		Wells:	8	Production Pits:	
Condensate Tanks:		Water Tanks:		Separators:		Electric Motors:	
Gas or Diesel Mortors:		Cavity Pumps:		LACT Unit:		Pump Jacks:	
Electric Generators:		Gas Pipeline:		Oil Pipeline:		Water Pipeline:	
Gas Compressors:		VOC Combustor:		Oil Tanks:		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
TRASH	SATISFACTORY	Waste material has been removed		

Spills:

Type	Area	Volume	Corrective action	CA Date

☐ Multilple 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: 437882

Site Preparation:

Lease Road Adeq.: 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).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.
Planning	604c.(2).V. Development From Existing Well Pads: An existing pad was not available to utilize to develop these wells.
Planning	604.c.(2).W. Site Specific Measures: Vehicle tracking pads will be utilized at pad site to control mud and sediment from leaving pad construction site. 24 hour supervision will be provided for drilling and completion operations. Traffic will be directed as to minimize any congestion on county roads. Water will be used for dust abatement on dirt access road. Lighting will be provided during drilling and completion operations to ensure worker safety and compliance with all regulations. To the extent practicable, site lighting shall be directed downward and inward and shielded so as to avoid glare on public roads and building units within one thousand (1000) feet. Sound wall along north and west perimeter will also provide light mitigation.
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.
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 Churchill 28J-HZ pad site. There are 4 building units of concern are located north of the proposed pad at a distance of approximately 720, 725, 740 and 880 feet and 2 building units of concern located west of proposed pad at a distance of approximately 630 and 787 feet. As a result, noise modeling was conducted for the proposed pad located in the SENW Section 28 – T 5N – R 64W. Based on the results, projected noise levels would not exceed the Light Industrial Zone standard of 65 decibels (db) at the receptor locations during drilling operations. Results do indicate that noise levels would exceed 65 decibels 350 feet to the north-west during completion operations. Therefore, mitigation will be necessary for the Churchill 28J-HZ pad and will be installed prior to drilling and completion operations. Methods of noise mitigation shall include full blanket soundwalls on the north and west sides of the pad site at a height adequate to reduce noise.
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).S. Access Roads: PDC will utilize the lease access road from WCR 53 for drilling operations and maintenance equipment. The road will be properly constructed and maintained to accommodate for local emergency vehicle access. PDC will be working with Weld County on traffic planning.
Material Handling and Spill Prevention	604c.(2).F. Leak Detection Plan: See attached.

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.
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.
Planning	604c.(2).E. Multiwell Pads: This 2A application is for a 8-well pad. Entire area was reviewed at length for alternate locations. No other locations were suitable that would provide a greater distance between production facilities and building units. S2NW of Section 33 was reviewed and it was determined that 5 building units would be potentially within the 1000 ft. buffer area and extensive crop damage would occur. Section 33 has a large center pivot and approximately 40 acres would become unusable. No other suitable existing locations are in the area.
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.
Drilling/Completion Operations	604c.(2).O. Loadlines: All loadlines shall be bullplugged or capped.
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).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.
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.
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.
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.
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.

S/AR: _____ **Comment:**

CA: **Date:**

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:	437882	Type:	WELL	API Number:	123-39747	Status:	PR	Insp. Status:	RI
Facility ID:	437883	Type:	WELL	API Number:	123-39748	Status:	PR	Insp. Status:	RI
Facility ID:	437884	Type:	WELL	API Number:	123-39749	Status:	PR	Insp. Status:	RI
Facility ID:	437885	Type:	WELL	API Number:	123-39750	Status:	PR	Insp. Status:	RI
Facility ID:	437886	Type:	WELL	API Number:	123-39751	Status:	PR	Insp. Status:	RI
Facility ID:	437888	Type:	WELL	API Number:	123-39752	Status:	PR	Insp. Status:	RI
Facility ID:	437889	Type:	WELL	API Number:	123-39753	Status:	PR	Insp. Status:	RI
Facility ID:	438086	Type:	WELL	API Number:	123-39869	Status:	PR	Insp. Status:	RI

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: RANGELAND

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? In Production areas stabilized ? Pass

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 Pass 80% Revegetation In

1003 f. Weeds Noxious weeds?

Comment: See COGCC comments.

Overall Interim Reclamation In Process

Final Reclamation/ Abandoned Location:

Date Final Reclamation Started: Date Final Reclamation Completed:

Final Land Use: RANGELAND

Reminder:

Inspector Name: Binschus, Chris

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
Waddles	Pass					

S/A/V: SATISFACTORY Corrective Date: _____

Comment: BMPs were installed. See COGCC comments.

CA:

Pits: ☐ NO SURFACE INDICATION OF PIT

COGCC Comments

Comment	User	Date
Corrective actions have been performed. Stormwater BMP controls have been installed along southern, eastern, and northern location areas to control sediment leaving location and to control erosion along the interim reclamation area. All waste material has been removed from the location. Refer to attached photos in Doc.#682400606.	binschusc	04/20/2016
The entire topsoil stockpile was used during interim reclamation. COGCC recommends leaving a sufficient amount of topsoil for final reclamation. Topsoil contains nutrients, seeds, other propagules, microorganisms, and living organisms, which are site specific, will improve establishment of vegetative cover. As long as the topsoil stockpile is properly protected from erosion (wind and soil erosion), properly stored(limit steepness), and seeded with perennial vegetation, it should remain viable and a great benefit for final reclamation.	binschusc	04/20/2016

Attached Documents

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

Document Num	Description	URL
682400606	Location Photos	http://ogccweblink.state.co.us/DownloadDocumentPDF.aspx?DocumentId=3837026