

Inspector Name: Rickard, Jeffrey

**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:

04/15/2014

Document Number:

674100630

Overall Inspection:

Satisfactory**FIELD INSPECTION FORM**

Location Identifier	Facility ID	Loc ID	Inspector Name:	On-Site Inspection
	246123	332821	Rickard, Jeffrey	<input type="checkbox"/> 2A Doc Num: _____

Operator Information:

OGCC Operator Number: _____

Name of Operator: PDC ENERGY INCAddress: 1775 SHERMAN STREET - STE 3000City: 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: NWNW Sec: 28 Twp: 4N Range: 66W

Insp. Date	Doc Num	Insp. Type	Insp Status	Satisfactory /Unsatisfactory	PA P/F/I	Pas/Fail (P/F)	Violation (Y/N)
08/11/2008	200193636	PR	PR	Satisfactory			No

Inspector Comment:**Related Facilities:**

Facility ID	Type	Status	Status Date	Well Class	API Num	Facility Name	Insp Status
246123	WELL	PR	03/01/1997	OW	123-13920	LODWICK 4-28	PR <input checked="" type="checkbox"/>
289049	WELL	AL	07/11/2013	LO	123-24726	Lodwick 5	AL <input checked="" type="checkbox"/>

Equipment:**Location Inventory**

Special Purpose Pits: _____	Drilling Pits: <u>1</u>	Wells: <u>2</u>	Production Pits: _____
Condensate Tanks: _____	Water Tanks: _____	Separators: <u>1</u>	Electric Motors: _____
Gas or Diesel Motors: _____	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**Signs/Marker:**

Type	Satisfactory/Unsatisfactory	Comment	Corrective Action	CA Date
BATTERY	Satisfactory			
WELLHEAD	Satisfactory			
TANK LABELS/PLACARDS	Satisfactory			

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Emergency Contact Number: (S/U/V) Satisfactory Corrective Date:

Comment:

Corrective Action:

Spills:

Type	Area	Volume	Corrective action	CA Date
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☐ Multiple Spills and Releases?

Fencing/:

Type	Satisfactory/Unsatisfactory	Comment	Corrective Action	CA Date
WELLHEAD	Satisfactory	Steel panel		

Equipment:

Type	#	Satisfactory/Unsatisfactory	Comment	Corrective Action	CA Date
Horizontal Heated Separator	1	Satisfactory			
Plunger Lift	1	Satisfactory			
Gas Meter Run	1	Satisfactory			

Facilities:

☐ New Tank

Tank ID: _____

Contents	#	Capacity	Type	SE GPS
CRUDE OIL	1	300 BBLS	STEEL AST	40.289640,-104.787470

S/U/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
Earth	Adequate	Walls Sufficient	Base Sufficient	Adequate

Corrective Action Corrective Date

Comment

Venting:

Yes/No

Comment

YES

Braden head open, see photo.

Flaring:

Type	Satisfactory/Unsatisfactory	Comment	Corrective Action	CA Date
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Predrill

Location ID: 246123

Site Preparation:

Lease Road Adeq.:

Pads:

Soil Stockpile:

S/U/V: _____

Corrective Action: _____

Date: _____

CDP Num.: _____

Form 2A COAs:**S/U/V:** _____ **Comment:** _____**CA:** _____**Date:** _____**Wildlife BMPs:**

BMP Type	Comment
PROPOSED BMPs	<p>Hazardous materials and petroleum products used in construction of a pad include fuel and lubricants for construction equipment and vehicles, small quantities of paints and solvents; water or gel based frac fluids (surfactant, friction reducer, dilute hydrochloric acid, potassium chloride) used during well completion; produced water; and, crude oil/condensate. Material Safety Data Sheets (MSDS) for materials to be used or that are produced are listed in the Health and Safety Plan, which is filled at the Merit Evans Field Office.</p> <p>JUL' 0 9 2009</p> <p>COGCC</p> <p>Refueling and lubrication of vehicles and equipment will be conducted a minimum of 100 feet from flowing streams and wetlands. Any spills will be promptly cleaned and contaminated materials will be hauled off -site and disposed of/recycled properly. Quantities of fuel and lubricates will be limited to "as- needed" for the immediate operations underway.</p> <p>Sediment and Erosion Control</p> <p>Sediment and Erosion control will be accomplished through a combination of construction techniques, vegetation and revegetation, and structural features. The book entitled "Field Manual on Sediment and Erosion Control Best Management Practices for Contractors and Inspectors" (Field Manual) by Jerald S. Fifield will be an indispensable component of Merit's SWMP in order to accomplish the goals and requirements of the SWMP.</p> <p>Erosion Reduction and Control</p> <p>Construction of a pad requires the removal of vegetative cover and topsoil that increases peak flood flows, water velocity, and the volume of stormwater runoff. An increase in water runoff volume and velocity results in increased erosion. Erosion reduction and control will be accomplished by using the following erosion control methods: diversion and control of runoff water, vegetation planting and maintenance, and application and maintenance of mulches.</p> <p>Runoff control procedures that will be used to mitigate and reduce the erosive and sediment transport forces of stormwater during and after construction of a pad will include but will not be limited to the following:</p>

- Temporary slope drains;
- Vegetative buffer strips;
- Grass -lined channels;
- Diversion dikes;
- Conveyance channels;
- Rock -lined channels;
- Check dams; and
- Culverts

Sediment Reduction and Control

The control and reduction of sediment contained in stormwater runoff will be accomplished by the use of sediment containment systems. Sediment containment systems are hydraulic controls that allow the deposition of suspended particles by gravity. Some of the more

common systems are silt fences, sediment basins, sediment ponds, and sediment traps.

Sediment controls that will be used are listed in the SWMP inspection section and include sediment containment systems, barriers, and check systems (e.g. silt fence, silt containment, etc.)

PROPOSED BMPs

Properly constructed and graveled roads and pads provide the best off -site

Off -site Soil Tracking Controls

control. Merit's policy is to gravel the entry of access roads adjacent to paved county roads in order to prevent or minimize any off -site soil tracking from pad areas or access roads.

SARA Title III Section 313 Water Priority Chemicals

No spills of water priority chemicals have occurred at any pad; consequently, no SARA Title III Section 313 water priority chemicals have been release or spilled.

Significant spills or leaks of toxic or hazardous substances

No toxic or hazardous substances spills or leaks have occurred at any of the Merit pads.

Waters of the State

All Wattenberg Field area drainages eventually empty into the South Platte River. The area drainage for each pad is entered on each pad inspection form.

Runoff coefficients

Runoff coefficients for pad locations within the Wattenberg Field vary from 0.05 to 0.20 and are not expected to significantly change. Pad areas range from flat cropland to slightly hilly rangeland.

BEST MANAGEMENT PRACTICES

Material Handling and Spill Prevention

CQG

g CC

trac

Merit is committed to operating the Wattenberg Field project in accordance with Section 112.7 of the Oil Pollution Prevention Regulations that are issued under the Federal Water Pollution Control Act (40 CFR Part 112). These regulations require the owners /operators of certain facilities and projects to prepare and implement a Spill Prevention Control and Countermeasure (SPCC) plan. Copies of Merit's SPCC and SWMP plans are kept on file at the Merit Evans Field Office.

The Merit SPCC plan contains information pertaining to the potential for oil (as defined in 40 CFR Part 112.2) to impact stormwater discharges. The plan also provides the quantities of oil that potentially could be discharged from a pad. The SPCC plan contains employee training information pertaining to spill prevention and response. Agencies to be contacted in the event of a release or spill are listed in the SPCC plan.

PROPOSED BMPs

- Significant spills or leaks of toxic or hazardous substances.

Loading and unloading operations

The majority of loading and unloading activities occur during well drilling and well completion activities. Well drilling and completion surfactants, friction reducers, dilute hydrochloric acid, potassium chloride solutions, drilling mud, and other fluids are transported or unloaded directly into the well from trucks, on site tanks, and the reserve pit. Dry drilling mud components are contained in paper bags and are stacked on pallets, which are unloaded using a forklift or by hand. In the event of a spill, the SWMP material handling and spill prevention procedures will be followed. Other activities include unloading of drill pipe (casing), completion pipe, and natural gas line pipe, which are not potential pollution sources.

Outdoor storage activities

Outdoor storage activities were reviewed and inspected and there are no chemicals or stormwater pollutant sources stored at these pads.

Dust or particulate generating processes or activities

On -site waste disposal practices

All waste from materials imported to the construction site are removed for disposal/recycling to an appropriate licensed disposal/recycling facility. This also includes sanitary sewage facilities (typically portable). No waste - materials shall be buried, dumped, or discharged to waters of the State.

On -site pad activities

An evaluation of dust or particulate generating processes or sources was completed and one source was identified that may produce dust and particulates. Dust and/or particulates generated from vehicle traffic on access roads may produce fugitive emissions. Dust and particulate generation is at its' highest during dry and hot times of the year. If dust from vehicle traffic on access roads becomes significant, dust suppression procedures will be implemented that include road watering or the application of dust suppressants.

The most common substances that may be spilled on a pad area are: 1) fuel and lubricants used by vehicles and construction equipment; 2) frac fluids (surfactants, friction reducers, hydrochloric acid, and potassium chloride) used during well completion procedures; 3) production water from the well; and 4) produced crude oil and condensates.

PROPOSED BMPs	<p>The designated Merit SWMP administrator is Glenn Markgraf who is the District Manager with the company. Following provides contact information:</p> <p>Mr. Glenn Markgraf Merit Energy Company 1221 40 Street Evans, CO 80620 Office: 970 - 330 -5157 Fax: 303-857-6789</p> <p>The SWMP administrators' responsibilities include but are not limited to the development, implementation, maintenance, and revision of the SWMP. Following provides areas of responsibility for the SWMP administrator:</p> <ul style="list-style-type: none">• Authority who dedicates the necessary financial and human resources to implement the SWMP;• Implements spill clean up procedures;• Notifies local authorities and local residents in the event that a significant release of stormwater and sediment that leaves a pad area;• Signatory authority;• Coordinates various stages of plan development and implementation;• Conducts and/or administers inspections;• Coordinates employee training programs;• Maintain all records;• Ensure that all appropriate reports are submitted as necessary;• Coordinate the implementation of the preventive maintenance program, and• Oversees spill response and housekeeping measures. <p>IDENTIFICATION OF POTENTIAL POLLUTANT SOURCES</p> <p>In order to identify, evaluate, and assess potential sources of stormwater runoff pollutants that may be at a pad, the following activities and pollutant sources were evaluated:</p> <ul style="list-style-type: none">• Loading and unloading operations;• Outdoor storage activities;• Significant dust or particulate generating processes;• On -site pad, waste disposal practices;• On -site pad activities:• Off -site soil tracking controls
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• SARA Title III Section 313 water priority chemicals; and

S/U/V: _____ **Comment:** _____

CA: _____ **Date:** _____

Stormwater:

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: 246123 Type: WELL API Number: 123-13920 Status: PR Insp. Status: PR

Producing Well

Comment: PR

BradenHead

Comment: Braden head open, venting.

CA: _____

CA Date: _____

Facility ID: 289049 Type: WELL API Number: 123-24726 Status: AL Insp. Status: AL

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 _____

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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. 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? _____ 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 _____

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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 ☐

Storm Water:

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

S/U/V: Satisfactory _____

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
674100631	open braden head.	http://ogccweblink.state.co.us/DownloadDocumentPDF.aspx?DocumentId=3321256