

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 |
|----|----|----|----|

Inspection Date:
11/30/2015

Document Number:
674102791

Overall Inspection:
SATISFACTORY

FIELD INSPECTION FORM

| | | | | | |
|---------------------|---------------|---------------|----------------------|--------------------------|-------------|
| Location Identifier | Facility ID | Loc ID | Inspector Name: | On-Site Inspection | 2A Doc Num: |
| | <u>438708</u> | <u>438706</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: SESE Sec: 32 Twp: 4N Range: 66W

Inspector Comment:

Related Facilities:

| Facility ID | Type | Status | Status Date | Well Class | API Num | Facility Name | Insp Status | |
|-------------|------|--------|-------------|------------|-----------|-----------------------|-------------|-------------------------------------|
| 438703 | WELL | XX | 08/31/2014 | | 123-40091 | Tarin Federal 32Y-404 | XX | <input checked="" type="checkbox"/> |
| 438704 | WELL | DG | 11/12/2015 | | 123-40092 | Tarin Federal 32W-434 | WO | <input checked="" type="checkbox"/> |
| 438705 | WELL | XX | 08/31/2014 | | 123-40093 | Tarin Federal 32X-204 | XX | <input checked="" type="checkbox"/> |
| 438707 | WELL | XX | 08/31/2014 | | 123-40094 | Tarin Federal 32Y-314 | XX | <input checked="" type="checkbox"/> |
| 438708 | WELL | DG | 10/31/2015 | | 123-40095 | Tarin Federal 32W-234 | WO | <input checked="" type="checkbox"/> |
| 438709 | WELL | XX | 08/31/2014 | | 123-40096 | Tarin Federal 32X-314 | DG | <input checked="" type="checkbox"/> |
| 438710 | WELL | XX | 08/31/2014 | | 123-40097 | Tarin Federal 32Y-214 | XX | <input checked="" type="checkbox"/> |
| 438711 | WELL | XX | 08/31/2014 | | 123-40098 | TARIN FEDERAL 32X-334 | XX | <input checked="" type="checkbox"/> |

Equipment:

Location Inventory

| | | | |
|------------------------------|-------------------------|----------------------|-------------------------|
| Special Purpose Pits: _____ | Drilling Pits: _____ | Wells: <u>8</u> | Production Pits: _____ |
| Condensate Tanks: _____ | Water Tanks: <u>8</u> | Separators: <u>8</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>6</u> | Oil Tanks: <u>24</u> | Dehydrator Units: _____ |
| Multi-Well Pits: _____ | Pigging Station: _____ | Flare: _____ | Fuel Tanks: _____ |

Location

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

Comment: _____

Corrective Action:

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

| Venting: | |
|-----------------|---------|
| Yes/No | Comment |
| | |

| Flaring: | | | | |
|-----------------|------------------------------|---------|-------------------|---------|
| Type | Satisfactory/Action Required | Comment | Corrective Action | CA Date |
| | | | | |

Predrill

Location ID: 438708

Site Preparation:

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

S/AV: _____

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

Form 2A COAs:

S/AV: _____ **Comment:**

CA: **Date:** _____

Wildlife BMPs:

| BMP Type | Comment |
|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Construction | Access Roads: PDC will utilize the lease access road from CR 29 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 | <p>Leak Detection. PDC Pumpers and roustabouts are responsible for inspecting assigned facilities as part of their regular work routine. All aboveground pipes, valves, and appurtenances are inspected as a part of the routine operations. The inspections include an assessment of the general condition of flange joints, valve glands and bodies, drip pans, load line buckets, pipeline supports, and other such items. Drainage ditches and other watercourses in and around the facilities are inspected for oil accumulation on a regular basis. All malfunctions, improper operation of equipment, evidence of leakage, spills, stained or discolored soil, etc. are logged and communicated in a timely manner to the supervisor for proper response. All flowlines and intra-facility gathering lines and associated valves and equipment are compatible with the type of production fluids, their potential corrosivity, volume, and pressure, and other conditions expected in the operational environment. The aboveground flowlines, intra-facility gathering lines, and associated appurtenances are inspected on a regular schedule for leaks, oil discharges, corrosion, or other conditions that could lead to a discharge. Corrective actions will be taken and needed repairs will be made for conditions identified during the inspection. Any accumulations of oil will be promptly removed or stabilization and remediation actions will be initiated. Personnel visually inspect the outside of all ASTs routinely for signs of deterioration and maintenance needs. All tanks, flow-through vessels, tank supports, and foundations undergo a visual inspection for integrity (pitting, rusting). PDC also conducts, at a minimum, an annual pressure testing of flowlines as per COGCC requirements. PDC's standard protocol for pressure testing of flowlines, dumplines and facility equipment involves the following key steps:</p> <ul style="list-style-type: none"> ? Isolate flowline at header and install appropriate gauge; ? Pressure flowline using well head pressure, preferably maximum casing pressure and isolate well head; ? Allow pressure to stabilize; ? Record beginning pressure/time on the Facility Pressure Test Report (F.P.T.R.); ? Monitor for 30 minutes; ? At the end of 30 minutes record pressure/time at end of test on F.P.T.R.; ? Any loss of pressure needs immediate action taken (e.g. eliminate isolation points as source, hydro test for final confirmation); ? If flowline fails test, isolate well and turn in work order; ? If flowline tests good, return well back to normal production; and, ? Turn in Facility Pressure Test Report to a supervisor. <p>Inspection reports are maintained at the PDC field office in Evans, Colorado for a period of three years.</p> <p>Any leak discovered in a flowline or appurtenances is promptly addressed by shutting-in the well and isolating the damaged portion of the line. The faulty piece of equipment is then repaired or replaced.</p> |
| Material Handling and Spill Prevention | Loadlines: All loadlines shall be bullplugged or capped. |
| Construction | Containment berms will be constructed using steel rings, designed and installed to prevent leakage and resist degradation from erosion or routine operation. Secondary containment will be constructed with a geosynthetic liner that contains all tanks and flowlines at this location and will be connected to the steel ring to prevent leakage. Operator will 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 located from the nearest well head. |
| Drilling/Completion Operations | 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. |
| Traffic control | Traffic Plan: If required by the local government, a traffic plan will be coordinated with the local jurisdiction prior to commencement of operations. |
| Dust control | Site Specific Measures: (odor, dust, light) - PDC will comply with the visual impact rules set forth in Rule 804, and odors and dust rules set forth in Rule 805.b(1)-(c). Building Unit owner has waived any further measures. |
| Interim Reclamation | 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. |

| | |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Planning | Multiwell Pads: This 2A application is for a 8-well pad. No suitable existing locations are in the area. |
| Drilling/Completion Operations | 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. |
| 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. |
| Material Handling and Spill Prevention | 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. |
| Construction | 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. |
| Drilling/Completion Operations | 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. |
| General Housekeeping | 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 | 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 | 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 | 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. |
| Material Handling and Spill Prevention | 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. |
| Storm Water/Erosion Control | 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. |
| Noise mitigation | Noise: PDC will comply with the noise rules set forth in Rule 802. Building Unit owner has waived any further measures. |
| Final Reclamation | 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 | Development From Existing Well Pads: Development From Existing Well Pads: An existing pad was not available to utilize to develop these wells. |
| Construction | Berm Construction: Containment berms will be constructed using steel rings, designed and installed to prevent leakage and resist degradation from erosion or routine operation. Secondary containment will be constructed with a geosynthetic liner that contains all tanks and flowlines at this location and will be mechanically connected to the steel ring to prevent leakage. Operator will implement site-specific best management practices in accordance with good engineering practices. |
| Drilling/Completion Operations | 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. |

S/AV: _____ **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: <u>438703</u> | Type: <u>WELL</u> | API Number: <u>123-40091</u> | Status: <u>XX</u> | Insp. Status: <u>XX</u> |
| Facility ID: <u>438704</u> | Type: <u>WELL</u> | API Number: <u>123-40092</u> | Status: <u>DG</u> | Insp. Status: <u>WO</u> |
| Facility ID: <u>438705</u> | Type: <u>WELL</u> | API Number: <u>123-40093</u> | Status: <u>XX</u> | Insp. Status: <u>XX</u> |
| Facility ID: <u>438707</u> | Type: <u>WELL</u> | API Number: <u>123-40094</u> | Status: <u>XX</u> | Insp. Status: <u>XX</u> |
| Facility ID: <u>438708</u> | Type: <u>WELL</u> | API Number: <u>123-40095</u> | Status: <u>DG</u> | Insp. Status: <u>WO</u> |
| Facility ID: <u>438709</u> | Type: <u>WELL</u> | API Number: <u>123-40096</u> | Status: <u>XX</u> | Insp. Status: <u>DG</u> |

Well Drilling

Rig: Rig Name: Ensign 135 Pusher/Rig Manager: _____
 Permit Posted: SATISFACTORY Access Sign: _____

Well Control Equipment:
 Pipe Ram: _____ Blind Ram: _____ Hydril Type: _____
 Pressure Test BOP: _____ Test Pressure PSI: _____ Safety Plan: _____

Drill Fluids Management:
 Lined Pit: _____ Unlined Pit: _____ Closed Loop: YES Semi-Closed Loop: _____
 Multi-Well: YES Disposal Location: _____

Comment:

| | | | | |
|----------------------------|-------------------|------------------------------|-------------------|-------------------------|
| Facility ID: <u>438710</u> | Type: <u>WELL</u> | API Number: <u>123-40097</u> | Status: <u>XX</u> | Insp. Status: <u>XX</u> |
| Facility ID: <u>438711</u> | Type: <u>WELL</u> | API Number: <u>123-40098</u> | Status: <u>XX</u> | Insp. Status: <u>XX</u> |

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: Rickard, Jeff

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: DRY LAND, 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 _____

Final Reclamation/ Abandoned Location:

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

Final Land Use: DRY LAND, IRRIGATED

Reminder: _____

Comment: _____

Inspector Name: Rickard, Jeff

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 |
|------------------|-----------------|-------------------------|-----------------------|---------------|--------------------------|---------|
| Berms | Pass | | | | | |
| Ditches | Pass | | | | | |

S/A/V: SATISFACTOR Corrective Date: _____
Y _____

Comment: _____
 CA: _____

Pits: NO SURFACE INDICATION OF PIT