

**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:

01/09/2013

Document Number:

667100022

Overall Inspection:

Violation**FIELD INSPECTION FORM**

| Location Identifier | Facility ID | Loc ID | Tracking Type | Inspector Name |
|---------------------|---------------|---------------|---------------|----------------------|
| | <u>429725</u> | <u>428927</u> | | <u>FISCHER, ALEX</u> |

Operator Information:

OGCC Operator Number: 10335 Name of Operator: AXIA ENERGY LLC
 Address: 1430 LARIMER STREET #400
 City: DENVER State: CO Zip: 80202

Contact Information:

| Contact Name | Phone | Email | Comment |
|--------------|--------------|-------------------------|---------|
| NEIDEL, KRIS | | kris.neidel@state.co.us | |
| Jess, Peonio | 720-746-5200 | jpeonio@axiaenergy.com | |

Compliance Summary:

QtrQtr: _____ Sec: _____ Twp: _____ Range: _____

Inspector Comment:

Describe Alleged Violation: On January 3, 2013, an incident occurred involving the explosion of a 300 bbl flowback water tank . As a result of the explosion, a fire consumed an approximate 20 foot by 15 foot portion of the pit liner. The pit was double lined and both liners were consumed to the fluid level of the pit. On January 9, 2013, COGCC Environmental and the Field Inspection Unit Staff conducted a site visit. At that time, the pit had fluids with oil/condensate on the surface. The majority of the oil/condensate was in the northeast corner of the pit where the liner was burnt, however, there was oil/condensate noted along the southern edge of the pit. An oil absorbent boom was also noted along the south east corner of the pit. The pit facility had not yet been completely constructed, as only 9 of the approximate 64 steel post to hold the bird netting were constructed with steel links to hold the bird netting cable. Excessive oil accumulation was observed in the pit without appropriate cover/netting. A condition of approval for the Pit Permit included: "For pits containing fluids other than freshwater only; the pit must be fenced and netted." Mr. Shane Wentzel with Axia was on site and stated that Axia believed that the upper liner was compromised near the leak detection system (not a result of the incident and fire) and that this may have occurred a couple of weeks ago and it was probably due to hoses being placed in/out of the pit. A condition of approval for the Pit Permit included: "Delivery and vacuum truck hoses will not be allowed to be placed directly onto the liner."

Related Facilities:

| Facility ID | Type | Status | Status Date | Well Class | API Num | Facility Name | |
|-------------|------|--------|-------------|------------|-----------|--------------------------------|--|
| 428928 | WELL | DG | 09/01/2012 | | 081-07727 | Bulldog 5-31H-790 | |
| 429725 | PIT | | | | - | Bulldog5-31H-790Completion Pit | |

Equipment:**Location Inventory**

| | | | |
|-----------------------------|-------------------------|----------------------|--------------------------|
| Special Purpose Pits: _____ | Drilling Pits: <u>2</u> | Wells: <u>1</u> | Production Pits: _____ |
| Condensate Tanks: _____ | Water Tanks: <u>3</u> | Separators: <u>1</u> | Electric Motors: _____ |
| Gas or Diesel Motors: _____ | Cavity Pumps: _____ | LACT Unit: _____ | Pump Jacks: _____ |
| Electric Generators: _____ | Gas Pipeline: <u>1</u> | Oil Pipeline: _____ | Water Pipeline: <u>1</u> |
| Gas Compressors: _____ | VOC Combustor: _____ | Oil Tanks: <u>5</u> | Dehydrator Units: _____ |
| Multi-Well Pits: _____ | Pigging Station: _____ | Flare: _____ | Fuel Tanks: _____ |

LocationEmergency Contact Number: (S/U/V) _____

Corrective Date: _____

Comment: _____

Inspector Name: FISCHER, ALEX

Corrective Action:

| Spills: | | | | |
|----------------|---------------|----------|---|------------|
| Type | Area | Volume | Corrective action | CA Date |
| Produced Water | Truck Loadout | > 5 bbls | Operator will define extent and remediate as appropriate. | 02/28/2013 |

☐ Multiple Spills and Releases?

| Fencing: | | | | |
|-----------------|-----------------------------|---|---------------------------|------------|
| Type | Satisfactory/Unsatisfactory | Comment | Corrective Action | CA Date |
| PIT | Unsatisfactory | High wire on wildlife fence around perimeter of fence needs to be restored. | Restore/replace highwire. | 02/28/2013 |

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

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

Predrill

Location ID: 428927

Site Preparation:

Lease Road Adeq.: _____

Pads: _____

Soil Stockpile: _____

Corrective Action: _____

Date: _____ CDP Num.: _____

Form 2A COAs:

| Group | User | Comment | Date |
|-------|----------|--|------------|
| OGLA | kubeczko | <p>SITE SPECIFIC COAs:</p> <p>A closed loop system must be implemented during drilling (which operator has indicated on the Form 2A); or, if a drilling pit is constructed, it must be lined. All cuttings generated during drilling with oil based muds or high chloride/TDS mud must be kept in the lined drilling pit, or placed either in containers or on a lined/bermed portion of the well pad; prior to offsite disposal. The moisture content of any drill cuttings in a cuttings pit, trench, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts.</p> <p>Operator must ensure 110 percent secondary containment for any volume of fluids (excluding freshwater) contained at well site during drilling and completion operations; including, but not limited to, construction of a berm or diversion dike, diversion/collection trenches within and/or outside of berms/dikes, site grading, or other comparable measures (i.e., best management practices (BMPs) associated with stormwater management) sufficiently protective of nearby surface water. Any berm constructed at the well pad location will be stabilized, inspected at regular intervals (at least every 14 days), and maintained in good condition.</p> <p>Operator must implement best management practices to contain any unintentional release of fluids, including any fluids conveyed via buried or temporary surface pipelines.</p> <p>The access road will be constructed as to not allow any sediment to migrate from the access road to nearby surface water or any drainages leading to surface water.</p> <p>The location is in an area of moderate to high run off/run-on potential; therefore the pad shall be constructed to prevent any stormwater run-on and/or stormwater runoff. Standard stormwater BMPs must be implemented at this location to insure compliance with CDPHE and COGCC requirements and to prevent any stormwater run-on and /or stormwater runoff.</p> <p>The moisture content of any freshwater generated drill cuttings in a cuttings pit, trench, or pile shall be as low as practicable to prevent accumulation of liquids greater than de minimis amounts. At the time of closure, if the freshwater generated drill cuttings are to be onsite, they must also meet the applicable standards of table 910-1.</p> <p>A form 15 Earthen Pit Permit must be submitted and approved prior to construction/use of the completions pit.</p> <p>Any pit constructed to hold oil based muds or salt based fluids and/or cuttings must be lined.</p> <p>Notify COGCC Oil and Gas Location Assessment (OGLA) Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us) and the COGCC Field Inspection Supervisor for Northwest Colorado (Shaun Kellerby; email shaun.kellerby@state.co.us) 48 hours prior to start of construction of the well pad, start of construction of the pit (if different), pit liner installation, and start of fracing operations (via Form 42).</p> | 04/22/2012 |
| OGLA | kubeczko | <p>FORM 15 PIT PERMIT COAs:</p> <p>Notify COGCC Oil and Gas Location Assessment (OGLA) Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us) and the COGCC Field Inspection Supervisor for Northwest Colorado (Shaun Kellerby; email shaun.kellerby@state.co.us) 48 hours prior to start of construction of the well pad, start of construction of the pit (if different), pit liner installation, and start of fracing operations (via Form 42).</p> <p>The completions pit must be double-lined. The pit will also require a leak detection system (Rule 904.e).</p> | 04/22/2012 |

Delivery and vacuum truck hoses will not be allowed to be placed directly onto the pit liner. Operator will construct a loading/unloading station located next to the pit, to deliver fluids to or remove fluids from the pit by truck. The loading/unloading station shall be designed and utilized to prevent hoses from being dropped into the pits and dragged over the liner, which could lead to liner damage. The loading/unloading station will be the only permitted access for manual fluids transfers to or from the pit. Vehicles will not be allowed to approach the pit any closer than the loading/unloading station. Each station will have a catch basin in case a leak occurs while operations personnel are connecting or disconnecting hoses. Signs clearly marking the truck loading/unloading station shall be provided and maintained by the operator.

Operator must submit as-built drawings (plan view and cross-sections) of the completion pit within 14 calendar days of construction.

Operator shall pressure test pipelines in accordance with Rule 1101.e.(1) prior to putting into initial service any temporary surface pipelines or configuration of the permanent pipeline network.

After installation of the uppermost liner and prior to operating the pit, the synthetic liner(s) shall be tested by filling the pit with at least 70 percent of operating capacity of water, measured from the base of the pit (not to exceed the 2-foot freeboard requirement). The operator shall monitor the pit for leaks for a period of 72 hours prior to draining the pit and commencing operations. The leak detection system must also be monitored during the entire test. Operator shall notify the COGCC Oil and Gas Location Assessment (OGLA) Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us) 48 hours prior to start of the hydrotest. Hydrotest monitoring results must be maintained by the operator for the life of the pit and provided to COGCC prior to using the pit.

In lieu of conducting an initial hydrostatic test of the pit, the operator can monitor fluid levels in the pit continuously using a minimum of two pressure transducers located at the upgradient and downgradient ends of the pit (based on the original topographic profile). These pressure transducers should be linked to the operator's SCADA system such that they can be remotely monitored. In addition, the pit liner will be marked at the two foot freeboard depth line so that operations personnel (as well as COGCC inspectors) can easily verify that the required fluid free board is being maintained. The electronically collected water level measurement data shall be used to confirm changes in pit inflow and outflow during operations based on estimates from truck and/or pipeline delivery or removal activities. Any abnormalities that are noticed during operations will be reported to the operator's field supervisor immediately so that any necessary follow-up can be scheduled.

Flowback and stimulation fluids must be sent to tanks, separators, or other containment/filtering equipment before the fluids can be placed into any pipeline or pit located on the well pad or into tanker trucks for offsite disposal. The flowback and stimulation fluid tanks, separators, or other containment/filtering equipment must be placed on the well pad in an area with additional downgradient perimeter berming. The area where flowback fluids will be stored/reused must be constructed to be sufficiently impervious to contain any spilled or released material.

No portion of any pit that will be used to hold liquids shall be constructed on fill material, unless the pit and fill slope are designed and certified by a professional engineer, subject to review and approval by the director prior to construction of the pit. The construction and lining of the pit shall be supervised by a professional engineer or their agent. The entire base of the pit must be in cut.

For pits containing fluids other than freshwater only; the pit must be fenced. If the pit is not drained, or closure has not begun within 30 days after last use for well completion, the pit must be netted. The operator must maintain the fencing and netting until the pit is closed.

Submit additional disposal facilities (wells, pits, etc.), if necessary (i.e., if original disposal option changes), for pit liquid contents to COGCC via a Form 4 Sundry prior to disposal.

Pits used exclusively for drilling shall be closed in accordance with the 1000-Series Rules. Any pit(s) used for purposes other than drilling shall be closed in accordance with Rule 905. Closure of Pits, and Buried or Partially Buried Produced Water Vessels; with an approved Site Investigation and Remediation Workplan, Form 27.

At the time of pit closure, operator must submit disposal information for solids, if necessary, via a Form 4 Sundry Notice to the COGCC Location Specialist for Western Colorado (Dave Kubeczko; email dave.kubeczko@state.co.us). The disposal method will need to be approved prior to operator starting pit closure.

At the time of pit closure, operator must submit disposal information via a Form 4 Sundry Notice to Dave Kubeczko (Dave Kubeczko; email dave.kubeczko@state.co.us). The disposal method will need to be approved prior to operator starting pit closure.

Comment:**CA:****Date:****Wildlife BMPs:**

| BMP Type | Comment |
|----------|--|
| Wildlife | <p>1) Restrict post-development well site visitations to between the hours of 10:00 a.m. and 3:00 p.m. and reduce well site visitations between December 1 and April 15 in elk winter range.</p> <p>2) Establish company guidelines (policies) to minimize wildlife mortality from vehicle collisions on roads (post speed limits on private roads, conduct safety training, etc).</p> <p>3) Gate single-purpose roads and restrict general public access to reduce traffic disruptions to wildlife if applicable on private roads.</p> <p>4) Fence and net pits to exclude wildlife, with wildlife appropriate fencing and netting materials.</p> <p>5) Construct 4:1 escape ramps in completion pits with a chain link fence surface for traction. Escape ramp should extend from the edge of the pit to below the surface of the water. Escape ramps should be installed on each side of the completion pit (4 ramps per pit), and be 4 to 5 feet in width. CPW can provide more specific examples or specifications if requested by the operator.</p> <p>6) Muffle sound from compressors, pump jacks or other motors necessary to run operations at the site.(If mufflers are used, point upward to dissipate sound and vibration.)</p> <p>7) Close and immediately reclaim all roads that are redundant, not used regularly, or have been abandoned to the maximum extent possible to minimize disturbance and habitat fragmentation.</p> <p>8) Reclaim site (interim and final) to match existing vegetation.</p> |

Comment:**CA:****Date:****Stormwater:**

| | | | |
|--------------|---------|------------|---------|
| Erosion BMPs | Present | Other BMPs | Present |
| | | | |

Corrective Action: _____ Date: _____

Comments: Erosion BMPs: _____

Other BMPs: _____

Comment:**Staking:****On Site Inspection (305):**

Inspector Name: FISCHER, ALEX

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:

Environmental

Spills/Releases:

Type of Spill: WATER Description: At temporary manifold to pit. Estimated Spill Volume: 23

Comment: Operator will evaluate and remediate impacted area.

Corrective Action: Evlauate and remediate impacted area.

Date: 02/28/2013

Reportable: YES

GPS: Lat 40.600627

Long -107.512497

Proximity to Surface Water: 1000

Depth to Ground Water: 40

Water Well:

DWR Receipt Num: 9119754

Owner Name: HOEFER, JOHN

Lat _____ Long _____
GPS : 40.594353 -107.523467

Field Parameters:

Sample Location: _____

Waste Management:

| Type | Management | Condition | Comment | GPS (Lat) | (Long) |
|------|------------|------------|---|-----------|-------------|
| | Pits | Inadequate | Condensate on surface of fluids in pit. | 40.600627 | -107.512497 |

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

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 REVEGETATIONCropland

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 _____

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 | | | Multi-Well Location <input type="checkbox"/> | | | |
| Storm Water: | | | | | | |
| Loc Erosion BMPs | BMP Maintenance | Lease Road Erosion BMPs | Lease BMP Maintenance | Chemical BMPs | Chemical BMP Maintenance | Comment |
| | | | | | | |
| S/U/V: _____ Corrective Date: _____ | | | | | | |
| Comment: _____ | | | | | | |
| CA: _____ | | | | | | |
| Pits: | | | | | | |
| Pit Type: Completion | | Lined: YES | Pit ID: 428927 | Lat: 40.599719 | Long: -107.511350 | |
| Lining: | | | | | | |
| Liner Type: HDPE | | Liner Condition: Inadequate | | | | |
| Comment: Fire compromised liner; Operator rep beleived that upper liner was compromised near leak detection prior to the fire. | | | | | | |
| Fencing: | | | | | | |
| Fencing Type: Wildlife | | Fencing Condition: Inadequate | | | | |
| Comment: High wire fence needs to be restored on fenced perimeter of pit. | | | | | | |
| Netting: | | | | | | |
| Netting Type: _____ | | Netting Condition: _____ | | | | |
| Comment: Post and appratus to hold netting up was in in construction phase. (Links were welded or secured on 9 of the 64 posts. | | | | | | |
| Anchor Trench Present: _____ | | Oil Accumulation: YES | | 2+ feet Freeboard: _____ | | |
| Pit (S/U/V): _____ | | Comment: Fire burnt liner down to fluid level. | | | | |
| Corrective Action: Take pit out of service immediately. | | | | | Date: 01/09/2013 | |
| Permit: | Facility ID | Permit Num | Expiration Date | | | |
| | 429725 | 400306819 | | | | |
| | 429725 | 400306819 | | | | |

COGCC Comments

| Comment | User | Date |
|---|----------|------------|
| Describe Alleged Violation: On January 3, 2013, an incident occurred involving the explosion of a 300 bbl flowback water tank . As a result of the explosion, a fire consumed an approximate 20 foot by 15 foot portion of the pit liner. The pit was double lined and both liners were consumed to the fluid level of the pit. On January 9, 2013, COGCC Environmental and the Field Inspection Unit Staff conducted a site visit. At that time, the pit had fluids with oil/condensate on the surface. The majority of the oil/condensate was in the northeast corner of the pit where the liner was burnt, however, there was oil/condensate noted along the southern edge of the pit. An oil absorbent boom was also noted along the south east corner of the pit. The pit facility had not yet been completely constructed, as only 9 of the approximate 64 steel post to hold the bird netting were constructed with steel links to hold the bird netting cable. Excessive oil accumulation was observed in the pit without appropriate cover/netting. A condition of approval for the Pit Permit included: "For pits containing fluids other than freshwater only; the pit must be fenced and netted." Mr. Shane Wentzel with Axia was on site and stated that Axia believed that the upper liner was compromised near the leak detection system (not a result of the incident and fire) and that this may have occurred a couple of weeks ago and it was probably due to hoses being placed in/out of the pit. A condition of approval for the Pit Permit included: "Delivery and vacuum truck hoses will not be allowed to be placed directly onto the liner." | fischera | 01/29/2013 |
| Additionally, there is an open excavation/trench to the east of completions pit. The openexcavation/ trench may potentiall act as a conduit to shallow ground water. The excavation/trench is also a violation of stormwater rules 1002.f. | | |

