

**FORM
INSP**Rev
X/15**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:

11/28/2017

Submitted Date:

12/04/2017

Document Number:

681700958**FIELD INSPECTION FORM**Loc ID 331062 Inspector Name: Arauza, Steven On-Site Inspection ☐ 2A Doc Num: _____**Operator Information:**OGCC Operator Number: 10112Name of Operator: FOUNDATION ENERGY MANAGEMENT LLCAddress: 5057 KELLER SPRINGS RD STE 650City: ADDISON State: TX Zip: 75001**Status Summary:**

- ☒
- THIS IS A FOLLOW UP INSPECTION
-
- ☒
- FOLLOW UP INSPECTION REQUIRED
-
- ☐
- NO FOLLOW UP INSPECTION REQUIRED

Findings:32 Number of Comments24 Number of Corrective Actions

- ☒
- Corrective Action Response Requested

Contact Information:

| Contact Name | Phone | Email | Comment |
|---------------|-------|----------------------------------|---------------------------------|
| Allison, Rick | | rick.allison@state.co.us | |
| , | | dnr_cogccenforcement@state.co.us | |
| Leonard, Mike | | mike.leonard@state.co.us | |
| , | | regulatory@foundationenergy.com | All Inspections |

Inspected Facilities:

| Facility ID | Type | Status | Status Date | Well Class | API Num | Facility Name | Insp Status |
|-------------|------|--------|-------------|------------|-----------|---------------|-------------|
| 258177 | WELL | PR | 11/01/2000 | GW | 123-20097 | HOFFMAN 34-10 | EI |

General Comment:

COGCC environmental inspection of well, pit complex, and production facility. Follow-up to Remediation Projects #1836 & #9287, and Field Inspection Reports #684904469 & #681700932.

Out of twenty four (24) corrective actions included in this report, twenty one (21) remain unresolved from previous FIRs. Where corrective actions from previous field inspection reports remain unresolved, original corrective action dates remain unchanged.

| Location | | | | |
|--|--|----------|--|------------------|
| Overall Good: <input type="checkbox"/> | | | | |
| Signs/Marker: | | | | |
| Type | WELLHEAD | | | |
| Comment: | No sign at wellhead. This corrective action remains unresolved from previous FIR. | | | |
| Corrective Action: | Install sign to comply with Rule 210.b. | | | Date: 11/24/2017 |
| Emergency Contact Number: | | | | |
| Comment: | | | | |
| Corrective Action: | | | | Date: _____ |
| Good Housekeeping: | | | | |
| Type | WEEDS | | | |
| Comment: | Accumulation of wind-blown weeds at pump jack and wellhead. Uncontrolled weeds growing inside/along both produced water pits, as indicated in previous Field Inspection Reports. See photos. | | | |
| Corrective Action: | Comply with Rule 603.f. | | | Date: 10/06/2017 |
| Type | UNUSED EQUIPMENT | | | |
| Comment: | NOT IN USE: Uncapped, steel 2" flowline riser west of northern crude oil AST. Two 2" steel flowline risers (one bullplugged, one uncapped) at SE corner of crude oil AST berms. Uncapped 2" steel riser north of produced water pit, marked by T-post, as indicated on previous FIR. See photos. | | | |
| Corrective Action: | Comply with Rule 603.f. (flowlines) | | | Date: 03/04/2018 |
| Overall Good: <input type="checkbox"/> | | | | |
| Spills: | | | | |
| Type | Area | Volume | | |
| Crude Oil | Tank | <= 1 bbl | | |
| Comment: | Oily rag and small pile of oil-stained soil at skim tank. See photos. This corrective action remains unresolved from previous FIRs. | | | |
| Corrective Action: | Remove and properly dispose of oily waste, per Rule 907.e. (skim tank) | | | Date: 10/26/2017 |
| Other | Pump Jack | <= 1 bbl | | |
| Comment: | Localized accumulations of oil-stained soil beneath day tank at SW corner of pump jack. See photos. This corrective action remains unresolved from previous FIRs. | | | |
| Corrective Action: | Remove and properly dispose of non-E&P waste in accordance with Rule 907A. (day tank) | | | Date: 10/26/2017 |
| Lube Oil | Pump Jack | <= 1 bbl | | |
| Comment: | Localized accumulation of oil-stained soil beneath pump jack, as indicated in previous Field Inspection Reports. See photos. | | | |
| Corrective Action: | Remove and properly dispose of non-E&P waste in accordance with Rule 907A. (pump jack) | | | Date: 09/28/2017 |
| Crude Oil | Tank | <= 1 bbl | | |
| Comment: | Localized, oil-stained soil underlying crude oil AST valves. See photos. This corrective action remains unresolved from previous FIRs. | | | |
| Corrective Action: | Remove and properly dispose of oily waste in accordance with Rule 907.e. (crude oil ASTs) | | | Date: 10/26/2017 |
| Crude Oil | Separator | <= 1 bbl | | |
| Comment: | Localized, oil-stained soil and historical accumulations of oily waste inside of separator shed. See photos. This corrective action remains unresolved from previous FIRs. | | | |
| Corrective Action: | Remove and properly dispose of oily waste, per Rule 907.e. (separator shed) | | | Date: 10/26/2017 |

| | | | | |
|--------------------|--|----------|--|------------------|
| Lube Oil | Pump Jack | <= 1 bbl | | |
| Comment: | Localized accumulations of oil-stained soil beneath prime mover and exhaust. See photos. This corrective action remains unresolved from previous FIRs. | | | |
| Corrective Action: | Remove and properly dispose of non-E&P waste in accordance with Rule 907A. (prime mover) | | | Date: 10/26/2017 |

In Containment: No

Comment:

☒ Multiple Spills and Releases?

| | | | | |
|---------------------------------|--|--|--|------------------|
| Equipment: | | | | corrective date |
| Type: Ancillary equipment | # 2 | | | |
| Comment: | Two day tanks located at SW and SE corners of pump jack. 55-gallon drum used as day tank at SW corner of pump jack lacks secondary containment. See photos. This corrective action remains unresolved from previous FIR. | | | |
| Corrective Action: | Repair or install berms or other secondary containment devices per Rule 906.d.(1). (day tanks) | | | Date: 11/24/2017 |
| Type: Pump Jack | # 1 | | | |
| Comment: | Lube oil staining on either side of pump jack equipment and stained soil underlying pump jack, as documented on previous Field Inspection Report. | | | |
| Corrective Action: | Securely fasten all valves, pipes, and fittings to ensure good mechanical condition, inspect at regular intervals and maintain in good mechanical condition per Rule 605.d. (pump jack) | | | Date: 11/24/2017 |
| Type: Other | # 1 | | | |
| Comment: | Fresh crude oil stains observed on wellhead equipment. See photos. This corrective action remains unresolved from previous FIR. | | | |
| Corrective Action: | Securely fasten all valves, pipes, and fittings to ensure good mechanical condition, inspect at regular intervals and maintain in good mechanical condition per Rule 605.d. (wellhead) | | | Date: 11/24/2017 |
| Type: Prime Mover | # 1 | | | |
| Comment: | Historical accumulations of oil-stained soil beneath prime mover. Operator was instructed to ensure integrity in previous Field Inspection Reports. See photos. | | | |
| Corrective Action: | Securely fasten all valves, pipes, and fittings to ensure good mechanical condition, inspect at regular intervals and maintain in good mechanical condition per Rule 605.d. (prime mover) | | | Date: 10/26/2017 |
| Type: Horizontal Heater Treater | # 1 | | | |
| Comment: | Localized, oil-stained soil and historical accumulations of oily waste inside of separator shed. See photos. This corrective action remains unresolved from previous FIR. | | | |
| Corrective Action: | Securely fasten all valves, pipes, and fittings to ensure good mechanical condition, inspect at regular intervals and maintain in good mechanical condition per Rule 605.d. (treater) | | | Date: 11/24/2017 |
| Type: Vertical Separator | # 1 | | | |
| Comment: | Localized, oil-stained soil and historical accumulations of oily waste inside of separator shed. See photos. This corrective action remains unresolved from previous FIR. | | | |
| Corrective Action: | Securely fasten all valves, pipes, and fittings to ensure good mechanical condition, inspect at regular intervals and maintain in good mechanical condition per Rule 605.d. (separator) | | | Date: 11/24/2017 |

Tanks and Berms:

| Contents | # | Capacity | Type | Tank ID | SE GPS |
|--------------------|---|----------|----------------|---------|------------------|
| PRODUCED WATER | 1 | 300 BBLS | FIBERGLASS AST | | , |
| Comment: | Small puddle of water beneath loadout on NE side of produced water AST. See photos. This corrective action remains unresolved from previous FIR. | | | | |
| Corrective Action: | Securely fasten all valves, pipes, and fittings to ensure good mechanical condition, inspect at regular intervals and maintain in good mechanical condition per Rule 605.d. (PW tank) | | | | Date: 11/24/2017 |

| | | | | | | |
|--------------------|--|---------------------|---------------------|-------------|--------|------------------|
| <u>Paint</u> | | | | | | |
| Condition | | | | | | |
| Other (Content) | | | | | | |
| Other (Capacity) | | | | | | |
| Other (Type) | | | | | | |
| <u>Berms</u> | | | | | | |
| Type | Capacity | Permeability (Wall) | Permeability (Base) | Maintenance | | |
| Earth | Adequate | Walls Sufficent | | Adequate | | |
| Comment: | Earthen berms shared with 110 bbl fiberglass PBV and separator shed. See photos. | | | | | |
| Corrective Action: | | | | | | Date: |
| Contents | # | Capacity | Type | Tank ID | SE GPS | |
| PRODUCED WATER | 1 | OTHER | PBV FIBERGLASS | | , | |
| Comment: | | | | | | |
| Corrective Action: | | | | | | Date: |
| <u>Paint</u> | | | | | | |
| Condition | | | | | | |
| Other (Content) | | | | | | |
| Other (Capacity) | | | | | | |
| Other (Type) | | | | | | |
| <u>Berms</u> | | | | | | |
| Type | Capacity | Permeability (Wall) | Permeability (Base) | Maintenance | | |
| Earth | Adequate | Walls Sufficent | | Adequate | | |
| Comment: | Earthen berms shared with fiberglass produced water AST and separator shed. See photos. | | | | | |
| Corrective Action: | | | | | | Date: |
| Contents | # | Capacity | Type | Tank ID | SE GPS | |
| OTHER | 1 | OTHER | Open Top | | , | |
| Comment: | Open-top fiberglass skim tank lacks NFPA placard and volume labels. See photos. This corrective action remains unresolved from previous FIRs. | | | | | |
| Corrective Action: | Install sign to comply with Rule 210.d. (skim tank) | | | | | Date: 12/24/2017 |
| <u>Paint</u> | | | | | | |
| Condition | | | | | | |
| Other (Content) | | | | | | |
| Other (Capacity) | unknown | | | | | |
| Other (Type) | skim tank | | | | | |
| <u>Berms</u> | | | | | | |
| Type | Capacity | Permeability (Wall) | Permeability (Base) | Maintenance | | |
| Earth | Inadequate | | | | | |
| Comment: | Skim tank buried in SW pit berm, but lacks adequate secondary containment of its own. See photos. This corrective action remains unresolved from previous FIR. | | | | | |
| Corrective Action: | Repair or install berms or other secondary containment devices per Rule 605.a.(4). (skim tank) | | | | | Date: 11/24/2017 |
| Contents | # | Capacity | Type | Tank ID | SE GPS | |

| | | | | | |
|--------------------|--|---------------------|---------------------|-------------|------------------|
| CRUDE OIL | 2 | 300 BBLs | STEEL AST | | |
| Comment: | Localized, oil-stained soil underlying valves attached to crude oil ASTs. See photos. This corrective action remains unresolved from previous FIR. | | | | |
| Corrective Action: | Securely fasten all valves, pipes, and fittings to ensure good mechanical condition, inspect at regular intervals and maintain in good mechanical condition per Rule 605.d. (crude oil ASTs) | | | | Date: 11/24/2017 |
| Paint | | | | | |
| Condition | | | | | |
| Other (Content) | | | | | |
| Other (Capacity) | | | | | |
| Other (Type) | | | | | |
| Berms | | | | | |
| Type | Capacity | Permeability (Wall) | Permeability (Base) | Maintenance | |
| Earth | Adequate | Walls Sufficient | | Inadequate | |
| Comment: | Earthen berms are eroded and in need of repair. See photos. This corrective action remains unresolved from previous FIR. | | | | |
| Corrective Action: | Repair or install berms or other secondary containment devices per Rule 605.a.(4). (crude oil ASTs) | | | | Date: 11/24/2017 |
| Venting: | | | | | |
| Yes/No | | | | | |
| Comment: | | | | | |
| Corrective Action: | | | | | Date: |
| Flaring: | | | | | |
| Type | | | | | |
| Comment: | | | | | |
| Corrective Action: | | | | | Date: |

Environmental**Spill/Remediation:**

Comment: Remediation Project #1836 documents previous operator's intent to apply oil-saturated soils to area north of produced water pit for land treatment. Field inspection report and attachments dated 3/15/2006 (doc #2090054) document continued TPH impacts at pit complex. To date, neither current nor previous operator have filed follow-up compliance documentation to COGCC. Operator contacted the COGCC on 10/27/2017 to briefly discuss active remediation project.

Corrective Action: Contact EPS Steven Arauza to discuss closure requirements and submission requirements for REM #1836. Provide update to EPS Rick Allison regarding status of Remediation Project #9287.

Date: 12/15/2017

Emission Control Burner (ECB): _____

Comment: _____

Pilot: _____ Wildlife Protection Devices (fired vessels): _____

Reclamation - Storm Water - Pit

Storm Water:

| Loc Erosion BMPs | BMP Maintenance | Lease Road Erosion BMPs | Lease BMP Maintenance | Chemical BMPs | Chemical BMP Maintenance | Comment |
|------------------|-----------------|-------------------------|-----------------------|---------------|--------------------------|---------|
| | | | | | | |

Comment: Deep ruts at NW, SW, and SE sides of pump jack have allowed precipitation to pool on-site during previous inspections. While no precipitation was observed on date of this report, the ruts and depressions remained at the well pad.

Corrective Action: Install or repair required BMPs per Rule 1002.f.

Date: 11/24/2017

Pits: ☐ NO SURFACE INDICATION OF PIT

Type: Produced Water Lined: NO Pit ID: 273443 Lat: 40.621436 Long: -104.074689

Reference Point: _____ Other: _____ Length: _____ Width: _____

Lining:

Liner Type: _____ Liner Condition: _____

Comment: _____

Corrective Action: _____

Date: c

Fencing:

Fencing Type: _____ Fencing Condition: _____

Comment: No fence

Corrective Action: _____

Date: _____

Netting:

Netting Type: _____ Netting Condition: _____

Comment: No net

Corrective Action: _____

Date: _____

Anchor Trench Present: _____ Oil Accumulation: _____ 2+ feet Freeboard: _____

Comment: Uncontrolled weeds growing in and around pit. See Housekeeping section for corrective actions. Significant burrow damage observed around pit berms. Oil-stained soil inside of berms at north end of pit and SE corner.

Corrective Action: _____

Remove and properly dispose of oily waste, per Rule 907.e. (north pit)

Date: 12/06/2017

Type: Produced Water Lined: NO Pit ID: 273442 Lat: 40.621210 Long: -104.075049

Reference Point: _____ Other: _____ Length: 90 Width: 40

Lining:

Liner Type: _____ Liner Condition: _____

Comment: _____

Corrective Action: _____

Date: c

Fencing:

Fencing Type: _____ Fencing Condition: _____

Comment: No fence

Corrective Action: _____

Date: _____

| | | |
|------------------------|--|--------------------|
| Netting: | | |
| Netting Type: | Netting Condition: | |
| Comment: | No net | |
| Corrective Action | | |
| Anchor Trench Present: | Oil Accumulation: | 2+ feet Freeboard: |
| Comment: | Localized, oil-stained soil and weeds at SW corner of pit, near skim tank outlet, and NE corner of pit, near plumbing to secondary pit. See photos. This corrective action remains unresolved from previous FIR. | |
| Corrective Action | Remove and properly dispose of oily waste, per Rule 907.e. (south pit) | |
| | | Date: 10/26/2017 |

Attached Documents

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

| Document Num | Description | URL |
|--------------|--------------|---|
| 681700963 | Field photos | http://ogccweblink.state.co.us/DownloadDocumentPDF.aspx?DocumentId=4316664 |