

Describe what is known about the spill/release event (what happened -- including how it was stopped, contained, and recovered):

While removing the partially buried produced water vessel at the Nordstrom 5-4 Pad (321510), suspected soil impacts were observed. Vertical and horizontal definition is being pursued with conventional excavation, and clearance samples will be collected from the bottom and sidewalls of the excavation. In accordance with the submitted Form 27 (Doc# 401621115), collected samples will be field-screened and submitted for laboratory analysis.

List Agencies and Other Parties Notified:

OTHER NOTIFICATIONS

| Date | Agency/Party | Contact | Phone | Response |
|-----------|-------------------|---------|-------|---------------------|
| 5/9/2018 | Landowner | | - | Verbal notification |
| 5/10/2018 | Broomfield County | | - | Email notification |

Was there a Grade 1 Gas Leak associated with this E & P waste spill or release? Yes No

If YES, enter the Document Number of the Initial Grade 1 Gas Leak Report Form 44: _____

Was there a reportable accident associated with this E & P waste spill or release? Yes No

If YES, enter the Document Number of the Initial Accident Report, Form 22: _____

SPILL/RELEASE DETAIL REPORTS

| | | | | |
|---|---------------------------|-----------------|-------------------------------------|--|
| #1 | Supplemental Report Date: | 05/09/2018 | | |
| FLUIDS | BBL's SPILLED | BBL's RECOVERED | Unknown | |
| OIL | _____ | _____ | <input checked="" type="checkbox"/> | |
| CONDENSATE | _____ 0 | _____ 0 | <input type="checkbox"/> | |
| PRODUCED WATER | _____ | _____ | <input checked="" type="checkbox"/> | |
| DRILLING FLUID | _____ 0 | _____ 0 | <input type="checkbox"/> | |
| FLOW BACK FLUID | _____ 0 | _____ 0 | <input type="checkbox"/> | |
| OTHER E&P WASTE | _____ 0 | _____ 0 | <input type="checkbox"/> | |
| specify: _____ | | | | |
| Was spill/release completely contained within berms or secondary containment? <u>YES</u> Was an Emergency Pit constructed? <u>NO</u> | | | | |
| <i>Secondary containment, including walls & floor regardless of construction material, must be sufficiently impervious to contain any discharge from primary containment until cleanup occurs.</i> | | | | |
| A Form 15 Pit Report shall be submitted within 30 calendar days after the construction of an emergency pit | | | | |
| Impacted Media (Check all that apply) <input checked="" type="checkbox"/> Soil <input type="checkbox"/> Groundwater <input type="checkbox"/> Surface Water <input type="checkbox"/> Dry Drainage Feature | | | | |
| Surface Area Impacted: Length of Impact (feet): _____ | | | Width of Impact (feet): _____ | |
| Depth of Impact (feet BGS): _____ | | | Depth of Impact (inches BGS): _____ | |
| How was extent determined? | | | | |
| The extent of impacts will be determined through conventional excavation. Soil samples will be collected from the sidewalls and base of the excavation and analyzed for organic (TPH and BTEX) and inorganic (SAR, EC and pH) constituents of concern to direct additional excavations and further delineate impacts horizontally and vertically. Subsequent soil samples will be analyzed for any constituents of concern above allowable limits that were identified in the initial round of samples, until the areal and vertical extents of the excavation are within COGCC Table 910-1 allowable limits. If groundwater is encountered during excavation activities, one sample will be collected and analyzed for BTEX. | | | | |
| Soil/Geology Description: | | | | |
| Onsite soils are Renohil Loam. | | | | |
| Depth to Groundwater (feet BGS) <u>22</u> Number Water Wells within 1/2 mile radius: <u>0</u> | | | | |

If less than 1 mile, distance in feet to nearest Water Well 1450 None Surface Water 250 None
 Wetlands _____ None Springs _____ None
 Livestock _____ None Occupied Building 220 None

Additional Spill Details Not Provided Above:

CORRECTIVE ACTIONS

#1 Supplemental Report Date: 05/09/2018

Cause of Spill (Check all that apply) Human Error Equipment Failure Historical-Unknown
 Other (specify) _____

Describe Incident & Root Cause (include specific equipment and point of failure)

While removing a partially buried produced water vessel, historical soil impacts were observed in the sidewalls and base of the excavation. It appears that equipment failure in the base or sidewalls of the vessel caused a discharge of fluids resulting in soil impacts.

Describe measures taken to prevent the problem(s) from reoccurring:

The failed partially buried produced water vessel has been removed from the location. The vessel will be replaced with a new or reused partially buried vessel, or if production considerations indicate, permanently closed.

Volume of Soil Excavated (cubic yards): _____

Disposition of Excavated Soil (attach documentation) Offsite Disposal Onsite Treatment
 Other (specify) _____

Volume of Impacted Ground Water Removed (bbls): _____

Volume of Impacted Surface Water Removed (bbls): _____

REQUEST FOR CLOSURE

Spill/Release Reports should be closed when impacts have been remediated or when further investigation and corrective actions will take place under an approved Form 27.

Basis for Closure: Corrective Actions Completed (documentation attached)
 Work proceeding under an approved Form 27
 Form 27 Remediation Project No: 11332

OPERATOR COMMENTS:

Laboratory results and site investigation details will be provided in the Supplemental Form 27 submitted to document closure of the assigned remediation project. If no additional information is needed in conjunction with this report, please open and close the incident number assigned to this release.

I hereby certify all statements made in this form are to the best of my knowledge true, correct, and complete.

Signed: _____ Print Name: Chris Hines
 Title: Project Manager Date: 05/14/2018 Email: chris.hines@apexcos.com

| COA Type | Description |
|----------|-------------|
| | |

Attachment Check List

| Att Doc Num | Name |
|-------------|---------------------------|
| 401634719 | SPILL/RELEASE REPORT(I/S) |

| | |
|-----------|-------------------|
| 401635118 | TOPOGRAPHIC MAP |
| 401635121 | SITE MAP |
| 401657297 | FORM 19 SUBMITTED |

Total Attach: 4 Files

General Comments

| <u>User Group</u> | <u>Comment</u> | <u>Comment Date</u> |
|--------------------------|-----------------------|----------------------------|
| | | Stamp Upon Approval |

Total: 0 comment(s)