FORM 19 Rev 8/13

State of Colorado
Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203
Phone: (303) 894-2100 Fax: (303) 894-2109

Document Number: 401056830
Date Received: 06/03/2016

Spill report taken by: GINTAUTAS, PETER
Spill/Release Point ID: 445916

SPILL/RELEASE REPORT (SUPPLEMENTAL)

This form is to be submitted by the party responsible for the oil and gas spill or release. Any spill or release which may impact waters of the State must be reported as soon as practicable; any spill over 20 bbls must be reported within 24 hours and all spills over five bbls must be reported within ten days. Submit a Site Investigation and Remediation Workplan (Form 27) when requested by the Director.

OPERATOR INFORMATON

Name of Operator: KERR MCGEE OIL & GAS ONSHORE LP Operator No: 47120
Address: P O BOX 173779
City: DENVER State: CO Zip: 80217-3779
Contact Person: Sam LaRue

Phone Numbers
Phone: (970) 335-3600
Mobile: (970) 515-1238
Email: Sam.LaRue@anadarko.com

INITIAL SPILL/RELEASE REPORT

Initial Spill/Release Report Doc# 401055055

Initial Report Date: 05/27/2016 Date of Discovery: 05/27/2016 Spill Type: Historical Release

Spill/Release Point Location:

Locationof Spill/Release: QTRQTR NWSW SEC 31 TWP 4N RNG 66W MERIDIAN 6
Latitude: 40.267376 Longitude: -104.825587
`Municipality (if within municipal boundaries): County: WELD

Reference Location:

Facility Type: TANK BATTERY ☐ Facility/Location ID No
☒ No Existing Facility or Location ID No.
☐ Well API No. (Only if the reference facility is well) 05- -

Fluid(s) Spilled/Released (please answer Yes/No):

Was one (1) barrel or more spilled outside of berms or secondary containment? Yes

*Secondary containment, **including walls & floor regardless of construction material**, must be sufficiently impervious to contain any discharge from primary containment until cleanup occurs.*

Were Five (5) barrels or more spilled? No

Estimated Total Spill Volume: use same ranges as others for values

Estimated Oil Spill Volume(bbl): Unknown
Estimated Condensate Spill Volume(bbl): Unknown
Estimated Flow Back Fluid Spill Volume(bbl): 0
Estimated Produced Water Spill Volume(bbl): Unknown
Estimated Other E&P Waste Spill Volume(bbl): 0
Estimated Drilling Fluid Spill Volume(bbl): 0
Specify:

Land Use:

Current Land Use: CROP LAND Other(Specify):
Weather Condition: 60's, Overcast
Surface Owner: FEE Other(Specify):

Check if impacted or threatened by spill/Release (please answer Yes/No to all that apply):

Waters of the State ☒ Residence/Occupied Structure ☐ Livestock ☐ Public Byway ☐ Surface Water Supply Area ☐

As defined in COGCC 100-Series Rules

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

While performing construction work at the HSR-Hall 64N66W31NWSW production facility, impacts were encountered beneath the partially buried produced water sump. Groundwater was encountered in the excavation at a depth of approximately eleven (11) feet below ground surface (bgs). A groundwater sample (GW01) was collected and submitted to Origins Laboratory in Denver, Colorado, for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA method 8260. Analytical results received on May, 27, 2016 indicated that the benzene, toluene, and total xylenes concentrations exceeded COGCC Table 910-1 standards. Excavation activities at the site are ongoing, and further information will be provided in a forthcoming Form 19 Supplemental Release Report.

List Agencies and Other Parties Notified:

OTHER NOTIFICATIONS

Date	Agency/Party	Contact	Phone	Response
5/27/2016	County	Roy Rudisill	-- Email	
5/27/2016	County	Tom Parko	-- Email	
5/27/2016	County	Troy Swain	-- Email	
5/27/2016	Land Owner	Private	-- Phone	

SPILL/RELEASE DETAIL REPORTS

#1 Supplemental Report Date: 06/01/2016

FLUIDS	BBL's SPILLED	BBL's RECOVERED	Unknown
OIL			☒
CONDENSATE			☒
PRODUCED WATER			☒
DRILLING FLUID	0	0	☐
FLOW BACK FLUID	0	0	☐
OTHER E&P WASTE	0	0	☐

specify:

Was spill/release completely contained within berms or secondary containment? NO Was an Emergency Pit constructed? NO

*Secondary containment, **including walls & floor regardless of construction material**, must be sufficiently impervious to contain any discharge from primary containment until cleanup occurs.*

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) ☒ Soil ☒ Groundwater ☐ Surface Water ☐ Dry Drainage Feature

Surface Area Impacted: Length of Impact (feet): 41 Width of Impact (feet): 32

Depth of Impact (feet BGS): 11 Depth of Impact (inches BGS):

How was extent determined?

While performing construction work at the HSR-Hall 64N66W31NWSW production facility, impacts were encountered beneath the partially buried produced water sump. Approximately 220 cubic yards of impacted material were excavated and transported to the Buffalo Ridge Landfill in Keenesburg, Colorado for disposal. Excavation activities were guided in the field by screening soil for volatile organic compound (VOC) concentrations using a photoionization detector (PID). Eight (8) soil samples were collected from the sidewalls of the final extent of the excavation area at approximately 10 feet below ground surface (bgs). Soil samples were submitted to Origins Laboratory in Denver, Colorado for analysis of benzene, toluene, ethylbenzene, total xylenes (BTEX), total petroleum hydrocarbons (TPH) - gasoline range organics (GRO) by USEPA Method 8260C, TPH - diesel and oil range organics (DRO and ORO) by United States Environmental Protection Agency (USEPA) Method 8015, electrical conductivity (EC), and pH. Analytical results indicated that constituent concentrations in soil samples collected from the final lateral extent of the excavation area were below the applicable COGCC Table 910-1 standards. Groundwater was encountered within the excavation area at approximately 11 feet bgs. A groundwater sample (GW01) was subsequently collected from the excavation and submitted for laboratory analysis of BTEX by USEPA Method 8260C. Analytical results received on May 27, 2016, indicated that the benzene, toluene, and total xylenes concentrations exceeded COGCC Table 910-1 standards. On May 31, 2016, approximately 80 barrels of groundwater were removed from the excavation area via vacuum truck and transported to a licensed injection facility for disposal. A second groundwater sample (GW02) was subsequently collected from the excavation and submitted for laboratory analysis of BTEX by USEPA Method 8260C.

Soil/Geology Description:

Fine to coarse grain sand.

Depth to Groundwater (feet BGS) 11 Number Water Wells within 1/2 mile radius: 26

If less than 1 mile, distance in feet to nearest Water Well 900 None ☐ Surface Water None ☒

Wetlands None ☒ Springs None ☒

Livestock None ☒ Occupied Building 1565 None ☐

Additional Spill Details Not Provided Above:

Analytical results received on June 1, 2016, indicated that the benzene, toluene, and total xylenes concentrations in groundwater sample GW02 remained above the applicable COGCC Table 910-1 groundwater standards. Prior to backfilling the excavation, approximately 220 pounds of activated carbon were introduced to the groundwater table to mitigate remaining aqueous phase hydrocarbon impacts. Soil and groundwater analytical results are summarized in Table 1 and Table 2, respectively, and sample locations are illustrated on Figure 2. Additional monitoring/remediation activities will be presented in a forthcoming Form 27.

CORRECTIVE ACTIONS

#1 Supplemental Report Date: 06/01/2016

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)

During construction activities, historical hydrocarbon impacts were discovered along the produced water sump dumplines. All associated fittings and equipment were working properly and showed no indication of leaking.

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

The production facility will be removed and not replaced.

Volume of Soil Excavated (cubic yards): 220

Disposition of Excavated Soil (attach documentation) ☒ Offsite Disposal ☐ Onsite Treatment

☐ Other (specify)

Volume of Impacted Ground Water Removed (bbls): 80

Volume of Impacted Surface Water Removed (bbls): 0

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:

OPERATOR COMMENTS:

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

Signed: Print Name: Sam LaRue

Title: Senior HSE Representative Date: 06/03/2016 Email: Sam.LaRue@anadarko.com

COA Type	Description

Attachment Check List

Att Doc Num	Name
401056830	FORM 19 SUBMITTED
401057593	TOPOGRAPHIC MAP
401057630	SITE MAP
401057632	ANALYTICAL RESULTS

Total Attach: 4 Files

General Comments

User Group	Comment	Comment Date

Total: 0 comment(s)