

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:

402863441

Date Received:

11/15/2021

Spill report taken by:

ALLISON, RICK

Spill/Release Point ID:

480564

SPILL/RELEASE REPORT (SUPPLEMENTAL)

This form is to be submitted by the party responsible for the oil and gas spill or release. Refer to COGCC Rule 912.b. for reporting requirements of spills or releases of E&P Waste, produced Fluids, or unauthorized Releases of natural gas. Submit a Site Investigation and Remediation Workplan (Form 27) if Rule 913.c. applies.

OPERATOR INFORMATION

Name of Operator: <u>TAPROOT ROCKIES MIDSTREAM LLC</u>	Operator No: <u>10718</u>	Phone Numbers
Address: <u>555 17TH STREET SUITE 800</u>		Phone: <u>(701) 509-2063</u>
City: <u>DENVER</u>	State: <u>CO</u>	Mobile: <u>(701) 509-2063</u>
Zip: <u>80202</u>		Email: <u>dbrazeal@taprootep.com</u>
Contact Person: <u>Dave Brazeal</u>		

☐ Transfer of Operatorship: Pursuant to Rule 912.f, this Supplemental Form 19 is being submitted to designate the Buying Operator as the responsible Operator for this Spill and Release.

INITIAL SPILL/RELEASE REPORT

Initial Spill/Release Report Doc# 402785623

Initial Report Date: 08/19/2021 Date of Discovery: 08/18/2021 Spill Type: Recent Spill

Spill/Release Point Location:

QTRQTR NESE SEC 14 TWP 8N RNG 60W MERIDIAN 6Latitude: 40.659151 Longitude: -104.049033Municipality (if within municipal boundaries): N/A County: WELD

Enter Lat./long measurement of the actual Spill/Release Point. Lat./Long. Data shall meet standards of Rule 216.

Reference Location:

Facility Type: PRODUCED WATER TRANSFER SYSTEM☒ Facility/Location ID No 467382Spill/Release Point Name: Boomslang 14B PW Leak☐ Well API No. (Only if the reference facility is well) 05- -☐ No Existing Facility or Location ID No.

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

Estimated Oil Spill Volume(bbl): 0Estimated Condensate Spill Volume(bbl): 0Estimated Flow Back Fluid Spill Volume(bbl): 0Estimated Produced Water Spill Volume(bbl): >=100Estimated Other E&P Waste Spill Volume(bbl): 0Estimated Drilling Fluid Spill Volume(bbl): 0

Specify: _____

Has the subject Spill/Release been controlled at the time of reporting? Yes

Land Use:

Current Land Use: NON-CROP LAND

Other(Specify): _____

Weather Condition: Sunny and drySurface Owner: OTHER (SPECIFY)Other(Specify): Private Owner

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

The leak was discovered on the Bison Boomslang 14B well pad on 08/18/2021. It was determined to be from the Taproot Produced Water Transfer system. The system was shut down, isolated, and cleanup began. Most of the spill was contained on pad and within the retention pond built with the pad. Initial indications are that a section of 6" Thermoflex 750 psi pipeline had buckled, and the thin spot created by the buckling failed at about 482 psig (well below the 750 psig rating). The piping has been in service since January of 2020. Taproot replaced all Thermoflex piping on this line with Flexsteel, and will no longer be using Thermoflex piping on any future lines.

List of Agencies and Other Parties Notified Pursuant to Rule 912.b.(7)-(11):

OTHER NOTIFICATIONS

Date	Agency/Party	Contact	Phone	Response
8/19/2021	Weld County OEM/LEPC	OEM Spill Report Form	-	Online Submittal

REPORT CRITERIA

Rule 912.b.(1) Report to the Director (select all criteria that apply):

- No Rule 912.b.(1).A: A Spill or Release of any size that impacts or threatens to impact any Waters of the State, Public Water System, residence or occupied structure, livestock, wildlife, or publicly-maintained road.
- Waters of the State: _____ Public Water System: _____
- Residence or Occupied Structure: _____ Livestock: _____
- Wildlife: _____ Publicly-Maintained Road: _____
- Yes Rule 912.b.(1).B: A Spill or Release in which 1 barrel or more of E&P Waste or produced fluids is spilled or released outside of berms or other secondary containment.
- Yes Rule 912.b.(1).C: A Spill or Release of 5 barrels or more of E&P Waste or produced Fluids regardless of whether the Spill or Release is completely contained within berms or other secondary containment.
- No Rule 912.b.(1).D: Within 6 hours of discovery, a Grade 1 Gas Leak. For a Grade 1 Gas Leak from a Flowline, the Operator also must submit the Form 19 – Initial, document number on a Form 44, Flowline Report, for the Grade 1 Gas Leak
- Enter the approximate time of discovery _____ (HH:MM)
- Enter the Document Number of the Grade 1 Gas Leak Report, Form 44 _____
- Was there a reportable accident associated with either a Grade 1 Gas Leak or an E&P waste spill or release? _____
- Enter the Document Number of the Initial Accident Report, Form 22 _____
- Was there damage during excavation? _____
- Was CO 811 notified prior to excavation? _____
- Yes Rule 912.b.(1).E: The discovery of 10 cubic yards or more of impacted material resulting from a current or historic Spill or Release. Discovery and reporting will not be contingent upon confirmation samples demonstrating exceedance of Table 915-1 standards.
- Estimated Volume of Impacted Solids (cu. yd.): _____ 300
- No Rule 912.b.(1).F: The discovery of impacted Waters of the State, including Groundwater. Discovery and reporting will not be contingent upon confirmation samples demonstrating exceedance of Table 915-1 standards. The presence of free product or hydrocarbon sheen on Groundwater or surface water is reportable. The presence of contaminated soil in contact with Groundwater or surface water is reportable. Check all that apply:
- ☐ The presence of free product or hydrocarbon sheen Surface Water
- ☐ The presence of free product or hydrocarbon sheen on Groundwater
- ☐ The presence of contaminated soil in contact with Groundwater
- ☐ The presence of contaminated soil in contact with Surface water
- No Rule 912.b.(1).G: A suspected or actual Spill or Release of any volume where the volume cannot be immediately determined, including a spill or release of any volume that daylight from the subsurface.

No	Rule 912.b.(1).H: Spill or Release resulting in vaporized hydrocarbon mists that leave the Oil and Gas Location or Off-Location Flowline right of way from an Oil and Gas Location and impacts or threatens to impact off-location property.
	<input type="checkbox"/> Areas offsite of Oil & Gas Location <input type="checkbox"/> Off-Location Flowline right of way
No	Rule 912.b.(1).I: A Release of natural gas that results in an accumulation of soil gas or gas seeps.
No	Rule 912.b.(1).J: A Release that results in natural gas in Groundwater.

SPILL/RELEASE DETAIL REPORTS

#1	Supplemental Report Date: 08/28/2021		
FLUIDS	BBL's SPILLED	BBL's RECOVERED	Unknown
OIL	0	0	<input type="checkbox"/>
CONDENSATE	0	0	<input type="checkbox"/>
PRODUCED WATER	600	126	<input 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? 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): 15 Width of Impact (feet): 30

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

How was extent determined?

Excavation area was surveyed and extent was determined by analytical results. In addition to the excavation above, a secondary shallow excavation (~2500 sq. ft.) around the main release area was excavated from 3-6" deep. Additional shallow 3-6" excavation (~3' x 400') was performed along the trench that led to the retention pond, and in the area beyond the retention pond that slightly overflowed. The retention pond was excavated 2-4' beyond the walls of the original pond dimensions.

Soil/Geology Description:

sandy loam, cohesive clay was noted in the area in and around the retention pond and drainage leading to the retention pond.

Depth to Groundwater (feet BGS) 43 Number Water Wells within 1/2 mile radius: 2

If less than 1 mile, distance in feet to nearest

Water Well _____	None <input checked="" type="checkbox"/>	Surface Water _____	None <input checked="" type="checkbox"/>
Wetlands _____	None <input checked="" type="checkbox"/>	Springs _____	None <input checked="" type="checkbox"/>
Livestock <u>1050</u>	None <input type="checkbox"/>	Occupied Building _____	None <input checked="" type="checkbox"/>

Additional Spill Details Not Provided Above:

Water wells with permit #43844 and permit #14646 were identified with the DWR well view. These wells are not in use and per owner have not been for many years. Their location has been surveyed by Taproot and distance noted above is measured from the release point. Depth to groundwater was measured in well #43844 and #14646 at 44.6' and 19.85' below ground surface. Regional topography indicates surface groundwater flow is likely to the southeast, and the release location lies approximately 23' topographically higher than both wells.

CORRECTIVE ACTIONS

#1 Supplemental Report Date: 11/12/2021

Root Cause of Spill/Release Pipe, Weld, or Joint Failure

Other (specify) _____

Type of Equipment at Point of Spill/Release: Other

If "Other" selected above, specify or describe here:

****6" Thermoflex produced water line****

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

6" Thermoflex Eco 750# composite pipe with aramid fiber reinforcement expands significantly with increasing pressure and temperature. This expansion stress resulted in a short section of pipe moving upward and buckling. The thin area created at the point of the buckle failed well below the 750 psig pipe rating. The expansion properties of aramid fiber reinforced Thermoflex pipe creates an inherent design/installation problem. To prevent the pipe from buckling, the soil surrounding the pipe has to be designed and installed with properties sufficient to hold the pipe in place (a containment surrounding the pipe itself).

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

This segment of pipeline has been replaced with Flexsteel 750# pipe. The operating pressure has been temporarily lowered for segments of the gathering system with Thermoflex brand pipe in service.

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): 0

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, check all that apply)
 - ☐ Horizontal and Vertical extents of impacts have been delineated.
 - ☐ Documentation of compliance with Table 915-1 is attached.
 - ☐ All E&P Waste has been properly treated or disposed.
 - ☒ Work proceeding under an approved Form 27 (Rule 912.c).
 - Form 27 Remediation Project No: 2
 - ☐ SUSPECTED Spill/Release did not occur or was below Rule 912.a.(5) reporting thresholds.

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: Dale Hunt

Title: VP of Engineering Date: 11/15/2021 Email: dhunt@taprootep.com

COA Type	Description

Attachment List

<u>Att Doc Num</u>	<u>Name</u>
402869753	OTHER
402869754	OTHER
402869755	PHOTO DOCUMENTATION
402869756	ANALYTICAL RESULTS
402869757	SOIL SAMPLE LOCATION MAP
402869758	SOIL SAMPLE LOCATION MAP
402869759	ANALYTICAL RESULTS
402869770	DISPOSAL MANIFEST
402869787	AERIAL IMAGE
402869859	OTHER

Total Attach: 10 Files

General Comments

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

Total: 0 comment(s)