

Oil Field Environmental Incident Summary

Incident: 20190510174100 **Notice:** 5/10/2019 17:41 **Occurred:** 5/10/2019 13:58

Responsible Party: Caliber Midstream
Well Operator: CALIBER MIDSTREAM NORTH DAKOTA LLC

Well Name:

Field Name:

Well File #:

Facility ID #:

County: MCKENZIE

Twp Rng Sec Qtr: 152 102 25 NE NW

Location Description: Produced Water pipeline, approximately 1 mile west of Highway 85 and 1 mile south of 39th street NW. North of our State SWD Injection site.

Submitted By: Carol Butero

Received By:

Contact Info: Carol Butero
950 17th Street, Suite 1000
Denver CO 80202

Affected Medium: Topsoil

General Land Use: Pasture

Near. Occupied Bldg:

Nearest Water Well:

Type of Incident: Pipeline Leak

Release Contained: Unknown

Reported to NRC: No

	Spilled	Units	Recovered	Units	Followup	Units
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Oil

Brine	3500	Barrels				
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Other

Oth Rel. Contaminant:

Date Inspected:

Clean Up Concluded:

Written Report Recd:

Risk Evaluation:

No immediate risk, leak has been isolated. site being cleaned up.

Areal Extent:

1/4 mile distance from isolation valve on the pipeline system ROW. No impacts to surface water.

Potential Env. Impacts:

Likely impact to soil, vegetation in area. An assessment is under way.

Action Taken/Planned:

The system was isolated and shut down. We isolated the area of the leak, contacted emergency response crew to assist with isolating the incident and start the initial removal of PW pooling in the area. The emergency response crew is isolating the area and establishing containment of the area. Further assessment of the release in the area and a plan to clean up and remediate the area is underway.

Wastes Disposal Location:

This activity will be handled by our emergency response crew, SWAT Consulting. TBD

Other Agencies Involved:

Updates

Date: 5/11/2019 **Status:** Inspection

No Further Action:

Author: DeVries, Taylor

Notes:

Inspection Date: 5/11/2019

Arrived on location at 1100. Met with Caliber Midstream rep, along with third party consultant. The release originated from an underground cement housing for Caliber's pipeline. This is where the switch valves are located. Cause of release was unknown at the time of the site visit. Saltwater exited the cement housing and ran south down a hill and stopped in a low spot on pasture land. Land owner had been notified of the release. NDIC had been notified of the release.

The starting point of the release is 47.963392° -103.679228° and ran down the hill going south. The saltwater looked to have stopped in a low area still on pasture land. The land around this pasture is cultivated. A earthen berm was placed behind the stopping point of the contamination. The path of the saltwater was very hard to see in the grass. There was no staining or discoloration of the vegetation because the dead grass from this winter was still visible.

A water sample was taken in the low area. There was a very small amount of water in this area and sampling was difficult. Sample will be taken to the lab Monday and analyzed for general chemistry, nutrients and trace metals. A chloride strip was taken at this location as well and maxed out a high range test strip (~ 6,000 ppm). Electrical conductivity was taken throughout the spill location and also in a few background areas. Photos of those readings can be found in the report folder, along with photos taken for this inspection.

A One Call had been made Friday and all lines were marked. Caliber's third party consultant had equipment on location but had not yet started digging. Caliber, the consultant and the DEQ agreed an EM survey would be fitting for preliminary delineation. A remediation plan will be put together with that data. I asked Caliber and the consultant to send us a copy.

Further follow-up is needed. More site visits will be done this week.

Updated Volumes and Contaminant None at the time of this update

Date: 5/13/2019 **Status:** Reviewed - Follow-up Required

No Further Action:

Author: Stockdill, Scott

Notes:

According to the incident summary, this spill impacted the surrounding area. Follow-up is necessary.

Updated Volumes and Contaminant None at the time of this update

Date: 5/13/2019 **Status:** Inspection

No Further Action:

Author: DeVries, Taylor

Notes:

Inspection Date: 5/13/2019

Arrived on location at 1610. Excavation has begun around underground pipe where the spill occurred. No other excavation has been done. Follow-up with responsible party and environmental company on results of the electro-magnetic survey.

Photos were taken and can be found in the report folder.

Updated Volumes and Contaminant None at the time of this update

Date: 5/17/2019 **Status:** Inspection

No Further Action:

Author: DeVries, Taylor

Notes:

Inspection Date: 5/17/2019

Arrived on location at 0925. It was raining during the inspection. No workers were out working, most likely due to the rain. Site was in the same condition as the inspection on Monday.

Photos were taken and can be found in the report folder.

Further follow-up is required to track clean-up.

Updated Volumes and Contaminant None at the time of this update

Date: 5/21/2019 **Status:** Inspection

No Further Action:

Author: Crowdus, Kory

Notes:

On location 5/21/2019, at 6:48pm. No work being done at this time. Excavation is still open and pipeline is exposed. Further follow-up is required.

Updated Volumes and Contaminant None at the time of this update

Date: 6/24/2019 **Status:** Inspection

No Further Action:

Author: DeVries, Taylor

Notes:

Inspection Date: 6/24/2019

Arrived on location at 1800. The excavation has increased in size from my last visit. The excavated area goes all the way down to the low area. The pipeline has been exposed coming out of the cement box. Awaiting sample results from responsible party's consultant.

Photos were taken and can be found in the incident folder.

Updated Volumes and Contaminant None at the time of this update

Date: 7/18/2019 **Status:** Inspection

No Further Action:

Author: DeVries, Taylor

Notes:

Inspection Date: 7/18/2019

Arrived on site at 1500. The excavation doesn't look to have grown in size. The area looks the same as the previous visit.

Contact was made with third party consultant on a progress report for this release. Sample results were sent to the DEQ (can be found in report folder). After reviewing these soil sample results it is requested that more work be done at this location. This was relayed to Caliber Midstream's third party consultant.

Photos were taken at this inspection and can be found in the report folder.

Updated Volumes and Contaminant None at the time of this update

Date: 10/9/2019 **Status:** Inspection - More Follow-up Required

No Further Action:

Author: DeVries, Taylor

Notes:

Inspection Date: 10/9/2019

Arrived on location at 1230. More soil has been removed throughout the already excavated area. Water has filled up most of the excavation.

Received most recent soil confirmation samples from consultant. Throughout the location, chloride levels are under 1000 ppm chloride. Awaiting one sample location on the eastern wall that was over 1000 ppm. Further follow up is needed.

Photos were taken and can be found in the report folder.

Updated Volumes and Contaminant None at the time of this update

Date: 12/16/2019 **Status:** Correspondence - More Follow-up Required

No Further Action:

Author: DeVries, Taylor

Notes:

Received a Monitoring Well Drill Plan from Caliber Midstream's third party consultant (SWAT Consulting Inc.). The report has been reviewed by the Spill Investigation group and has been passed onto the Groundwater group for reviewing.

That report can be found in the incident folder.

Updated Volumes and Contaminant None at the time of this update

Date: 1/13/2020 **Status:** Correspondence - More Follow-up Required **No Further Action:**

Author: DeVries, Taylor

Notes:

Received an updated monitoring well installation plan from the third party consultant. More monitoring wells will be added down gradient of the release area. Sampling results will be provided when wells are sampled. Report can be found in the incident folder.

Updated Volumes and Contaminant None at the time of this update

Date: 3/17/2020 **Status:** Inspection - More Follow-up Required **No Further Action:**

Author: DeVries, Taylor

Notes:

Inspection Date: 3/17/2020

Arrived on location at 1440. The excavation has been completely backfilled. Contact will be made with company on seeding for this spring. Awaiting monitoring well sample results.

Photos were taken and can be found in the report folder.

Updated Volumes and Contaminant None at the time of this update

Date: 6/11/2020 **Status:** Inspection - More Follow-up Required **No Further Action:**

Author: DeVries, Taylor

Notes:

Inspection Date: 6/11/2020

Arrived on location at 0900. The field where the release occurred has been planted. Whatever has been planted is growing here and there. The bottom of the hill is doing better than the top of the hill. Further follow-up at the end of the summer to assess vegetation growth.

Photos were taken and can be found in the incident folder.

Updated Volumes and Contaminant None at the time of this update

Date: 1/13/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:**

Author: DeVries, Taylor

Notes:

Met with responsible party and environmental consultant. Received the first set of groundwater samples from the monitoring wells that were installed last year. There are 3 wells (20MW01, 20MW03, and 20MWH01) that have high elevations of chloride in the groundwater. A plan is being written up by the consultant for ground water extraction and monitoring. Further follow-up is needed.

Updated Volumes and Contaminant None at the time of this update

Date: 2/9/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:**

Author: DeVries, Taylor

Notes:

Received a final groundwater management plan. The NDDEQ approved the plan. The plan describes water quality monitoring procedures as well as groundwater recovery.

Report can be found in the incident folder.

Updated Volumes and Contaminant None at the time of this update

Date: 5/3/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:**

Author: DeVries, Taylor

Notes:

Received first quarter groundwater sample results from the first year of monitoring. Monitoring wells MW01, MW03, and MWHS01 have chloride readings at or above 1,000 ppm chloride. The highest chloride level monitoring well is MW03 at 2,340 ppm. Further follow-up is needed.

Report can be found in the incident folder.

Updated Volumes and Contaminant None at the time of this update

Date: 8/3/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:**

Author: DeVries, Taylor

Notes:

Received the second quarter ground water sampling results. MW03 has increased from 2,340 to 3,080 ppm chloride. MW01 has increased from 932 to 1,000 ppm chloride. And MWHS01 have had a decline from 1,740 to 1,640 ppm chloride. Further follow-up is needed.

Report can be found in the incident folder.

Updated Volumes and Contaminant None at the time of this update

Date: 11/4/2021 **Status:** Correspondence - More Follow-up Required **No Further Action:**

Author: DeVries, Taylor

Notes:

Received quarter 3 of groundwater sampling. MW01 was sampled this quarter and has a lower concentration of chloride levels at 937ppm. The highest contaminated monitoring well was not sampled in the third quarter. MW04 has started to rise in chloride levels and is now at 254 ppm chloride. MWHS01 has steadily decreased throughout the quarters, which now is at 1,230 ppm chloride. Three extraction wells have been added and all have chloride levels over 1,000 ppm. Further follow-up is needed.

Report can be found in the incident folder.

Updated Volumes and Contaminant None at the time of this update

Date: 11/9/2022 **Status:** Correspondence - More Follow-up Required **No Further Action:**

Author: DeVries, Taylor

Notes:

Received the latest sampling data. To summarize, groundwater monitoring wells 1, 3, 4, 8, HS 01 and EW1, EW2, EW3 have levels over 250 ppm chloride. Some wells are declining while others are rising. Further follow-up is needed. Reports can be found in the incident folder.

Updated Volumes and Contaminant None at the time of this update

Date: 11/15/2022 **Status:** Correspondence - More Follow-up Required **No Further Action:**

Author: DeVries, Taylor

Notes:

Total amount of ground water recovered in the 2022 season was 3,038 barrels.

Email can be found in incident folder.

Updated Volumes and Contaminant None at the time of this update

Date: 11/22/2022 **Status:** Inspection - More Follow-up Required **No Further Action:**

Author: DeVries, Taylor

Notes:

Inspection Date: 11/22/2022

Arrived on location at 0910. There was some evidence that vegetation is slowly coming back. Did observe some bare spots. Ground water removal will continue at the location, in addition to monitoring.

Photos were taken and can be found in the incident folder.

Updated Volumes and Contaminant None at the time of this update

Date: 6/26/2023 **Status:** Inspection - More Follow-up Required **No Further Action:**

Author: DeVries, Taylor

Notes:

Arrived on location at 1610 on 6/26/2023. Tanks are still located at the top of the hill. The well pad near the site has been reclaimed and the prairie is returning. Observed a small bare spot near the bottom of the hill. Caliber Midstream sent the DEQ the latest quarter of groundwater results. They can be found in the incident folder.

Groundwater readings are as high as 2920 mg/L and as low as 79mg/L. There are a total of 14 sampling locations.

Updated Volumes and Contaminant None at the time of this update