

# Oil Field Environmental Incident Summary

**Incident:** 20200113170629      **Notice:** 1/13/2020    17:06      **Occurred:** 1/13/2020    07:30

**Responsible Party:** Cobra Oil & Gas Corporation  
**Well Operator:** COBRA OIL & GAS CORPORATION  
**Well Name:** ROWE-STATE 1  
**Field Name:** SHERWOOD  
**Well File #:** 3525  
**Facility ID #:**  
**County:** RENVILLE  
**Twp Rng Sec Qtr:** 164 85 36  
**Location Description:**  
**Submitted By:** Edward Winters  
**Received By:**  
**Contact Info:** Charles Gibson  
2201 Kell Boulevard  
Wichita Falls TX 76307

**Affected Medium:** Topsoil  
**General Land Use:** Cultivated  
**Near. Occupied Bldg:**

**Nearest Water Well:**  
**Type of Incident:** Pipeline Leak  
**Release Contained:** No  
**Reported to NRC:** No

|              | <b>Spilled</b> | <b>Units</b> | <b>Recovered</b> | <b>Units</b> | <b>Followup</b> | <b>Units</b> |
|--------------|----------------|--------------|------------------|--------------|-----------------|--------------|
| <b>Oil</b>   |                |              |                  |              |                 |              |
| <b>Brine</b> | 200            | Barrels      |                  |              |                 |              |

## **Other**

**Oth Rel. Contaminant:** Snow melt is associated with this release.

**Date Inspected:**

**Clean Up Concluded:**

**Written Report Recd:**

**Risk Evaluation:**

There is no immediate risk to human health.

**Areal Extent:**

A two prong impact area of approx 1000 square feet; 50 yards west of the Nelson State #1 location.

**Potential Env. Impacts:**

There is no further risk to the environment.

**Action Taken/Planned:**

The impact area has had the lowing lying spots contained with a temporary earthen dike to prevent further migration. We are trying to determine if we can spot equipment, including hydrovac and/or vacuum trucks, to recover any free standing fluids. The location remains shut in until the pipeline break can be exposed and repaired. The line will be pressure tested upon repair and start-up.

**Wastes Disposal Location:**

All impacted soil material will be sent to CleanHarbors for disposal.

**Other Agencies Involved:**

NDIC Inspector Scott Dehlie.  
NDDEQ Russell Martin

**Updates**

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

**Author:** Martin, Russell

**Notes:**

Release due to pipeline leak on pipeline ROW. Follow-up is necessary.

**Updated Volumes and Contaminant** None at the time of this update

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

**Author:** Martin, Russell

**Notes:**

Phone calls with landowner and responsible party concerning incident.

**Updated Volumes and Contaminant** None at the time of this update

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**Date:** 1/14/2020

**Status:** Inspection - More Follow-up Required

**No Further Action:**

**Author:** Washek, Sandi

**Notes:**

Arrived onsite at 12:22pm; weather was partly sunny with wind out of the NW at 15 miles/hr.; temperature of -12 degrees F.

Landowner was onsite and requested follow-up reports on what is happening. Company rep was onsite and informed the Department rep that they have called One Call due to other gas/oil lines in the field where the pipeline break occurred. The pipeline break (GPS N48.99356 W101.63655) is located directly west of the Nelson State 1 Pump jack in a harvest field. The company has dug a small hole at the location but needed to wait to do additional digging due to the other company oil lines.

The brine daylighted at the break and took two flow paths. One was along the west of the break to a small dry slough and flowed south into a larger slough. The other flow path was SE of the break across the field, then it flowed into the south slough too. The company scraped up a small dam (GPS N49.99284 W101.63473) to prevent any additional free flowing product from flowing east in the field. They also scraped a small hole in the south slough directly south of the Nelson State 1 pump jack to start sucking up the free flowing product. (GPS N48.99215 W101.63564)

The Department rep walked the south slough to the east to see how far the product had flowed. There is open field to the east of the south slough before it meets up with another slough to the east that is adjacent to Hwy 28. You could see where the truck tracks had moved through the snow along the south slough and there was visible melted snow in the bottom of the tracks. (GPS N48.99165 W101.63410). The department rep checked the far east slough and did not see any melted snow or flowing water in it. The Department rep also checked the culvert along Hwy 28 to ensure that no flowing water was moving under the highway.

Department rep collected:

Water samples from the south slough (SKW20200114-001 GPS N48.99202 W101.63563)

Soil samples by the hole where the company had collected slough water ( SKW20200114-003 GPS 48.99202 W101.63571)

Water samples from the pipeline break hole ( SKW20200114-002 GPS N48.99356 W101.63655)

NDIC rep was onsite and collected conductivity probe readings of the soil by the collection hole and maxed out his probe.

Additional follow-up needed.

**Updated Volumes and Contaminant** None at the time of this update

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**Date:** 1/16/2020      **Status:** Inspection - More Follow-up Required      **No Further Action:**

**Author:** Washek, Sandi

**Notes:**

Arrived onsite at 11:41am; weather was sunny with wind out of the NW at 20 miles/hr.; temp of -16 degrees F.

Talked to company rep onsite and was informed that they are having a consultant and clean up company work the site. They plan to start digging onsite on Monday. They also installed a dike between the south slough and the east slough to prevent water flowing from south to east.

They have informed everyone to be careful of where they drive in the field due to snow cover. If you go off trail you might hit a soft spot. Keep to existing trails.

Additional follow-up needed.

**Updated Volumes and Contaminant** None at the time of this update

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**Date:** 1/27/2020      **Status:** Inspection - More Follow-up Required      **No Further Action:**

**Author:** Schiermeister, Robin

**Notes:**

Arrived on site on 1-22-2020 at 11:55. It was sunny with temperatures in the 20s. Talked to the contractor dealing with fixing the leak in the pipeline. During the inspection, the pipeline had been fixed and the contaminated material was stockpiled around it. The contractor has put up a dirt berm approximately 400 feet southeast of the release and multiple sumps in the flow path. It was difficult to see the full extent of the impacts due to the recent snow fall; however, the slough and sumps, including the pit dug to fix the pipeline, are full of contaminated water. The contractor was waiting for a vactruck to come to pump out the water. LTE was onsite on 1-21-2020, sampling and delineating the site. It was noted that they went down 8 feet in some areas and still found contamination. A call will be needed for those results. The ground in the flow path is soggy; however, no soil has been hauled off site yet. Further follow-up is needed regarding Cobra's action and sampling plan.

**Updated Volumes and Contaminant** None at the time of this update

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**Date:** 2/3/2020      **Status:** Reviewed - Follow-up Required      **No Further Action:**

**Author:** Uhlman, James

**Notes:**

Arrived on site at 1335 on January 30, 2020, temperature 23F, cloudy. I met with the LT Environmental representative and we discussed the current work. There was a large excavator on site digging test holes for sampling purposes and filling them back in, some as deep as 8 feet. LT Environmental was field testing soil samples and preparing samples for lab analysis. There were at least twelve excavations observed for this purpose. The pipeline that created the release had been replaced from the well pad/tank battery to past the release location (to the southwest) and was functioning. The area where the lines were connected remain exposed. No water was being removed from the site today. Photos were taken and have been added to the incident folder.

**Updated Volumes and Contaminant** None at the time of this update

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**Date:** 2/4/2020      **Status:** Correspondence - More Follow-up Required      **No Further Action:**

**Author:** Washek, Sandi

**Notes:**

Received lab results from sample taken on 1/14/2020 and added them to the incident folder.

**Updated Volumes and Contaminant**    None at the time of this update

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**Date:** 2/13/2020      **Status:** Inspection - More Follow-up Required      **No Further Action:**

**Author:** Martin, Russell

**Notes:**

2/12/2020, on location. Walked site. Excavation for pipeline still exposed, partially filled with mostly frozen water, though unfrozen water is visible adjacent to the pipeline. Dirt berms between impacted wetlands/sloughs and large slough to east are still in place, and no liquid water observed, though there is some thin ice and snow accumulating in the trenches in front of the berms. Ground frozen in majority of the site, however soft soil (despite subzero temperatures) observed along pipeline excavation and within wetland/slough areas impacted during the initial release. Large slough to the east, adjacent to Highway 28, still shows no observable surface impacts and ice on slough appears frozen thick.

**Updated Volumes and Contaminant**    None at the time of this update

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**Date:** 2/27/2020      **Status:** Correspondence - More Follow-up Required      **No Further Action:**

**Author:** Martin, Russell

**Notes:**

Added site documents from initial sampling conducted by consultant.

**Updated Volumes and Contaminant**    None at the time of this update

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**Date:** 3/9/2020      **Status:** Correspondence - More Follow-up Required      **No Further Action:**

**Author:** Martin, Russell

**Notes:**

Conversation with responsible party on future plans at site. Based on area affected and quantity involved, RP is looking into in situ remediation methods, as opposed to a complete excavation of the area. Discussed various in situ methods such as electrokinetic remediation. Regardless of method chosen, stressed need to keep spill contained to current impact area, to avoid contaminating nearby wetlands to the east. Also discussed electromagnetic survey in the area.

**Updated Volumes and Contaminant**    None at the time of this update

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**Date:** 3/26/2020      **Status:** Correspondence - More Follow-up Required      **No Further Action:**

**Author:** Martin, Russell

**Notes:**

Received complaint from landowner concerning site. Contacted company with concerns from complaint. NDDEQ field inspector to follow-up at site. Also discussed site with county EM, and added miscellaneous documents to file.

**Updated Volumes and Contaminant**    None at the time of this update

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**Date:** 3/27/2020      **Status:** Correspondence - More Follow-up Required      **No Further Action:**

**Author:** Martin, Russell

**Notes:**

Received response from company inspection of site. Added it to incident folder.

**Updated Volumes and Contaminant**    None at the time of this update

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**Date:** 4/2/2020      **Status:** Correspondence - More Follow-up Required      **No Further Action:**

**Author:** Martin, Russell

**Notes:**

Added miscellaneous correspondence to folder.

**Updated Volumes and Contaminant**    None at the time of this update

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**Date:** 4/29/2020      **Status:** Inspection - More Follow-up Required      **No Further Action:**

**Author:** Stockdill, Scott

**Notes:**

Arrived on location 2:01 4/29/2020.

No sign of any additional work having taken place since the last inspection. Excavation is still open with contaminated water still present. Soil around excavation still grossly contaminated.

More follow-up is necessary.

**Updated Volumes and Contaminant**    None at the time of this update

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**Date:** 5/1/2020      **Status:** Correspondence - More Follow-up Required      **No Further Action:**

**Author:** Martin, Russell

**Notes:**

Received update for work done at site, and detailing continued efforts to delineate the site. Formal work plan for site expected within the next week.

**Updated Volumes and Contaminant**    None at the time of this update

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**Date:** 6/1/2020      **Status:** Inspection - More Follow-up Required      **No Further Action:**

**Author:** Suess, Bill

**Notes:**

Inspected the site on 5/28/2020. Excavation trench was still open with water in the trench. Chloride titration strips were used to test the water in the trench. The chloride concentrations exceeded the maximum capacity on both the low and high range strips indicating a chloride concentration in excess of 6,178 ppm. More follow-up is needed.

**Updated Volumes and Contaminant**    None at the time of this update

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**Date:** 7/10/2020      **Status:** Correspondence - More Follow-up Required      **No Further Action:**

**Author:** Martin, Russell

**Notes:**

Added various correspondence and historical data from NDIC well files in the area. Of note, as of 7/9/2020, additional samples requested by NDDEQ have been taken and sent to lab for analysis. Phase 1 excavation has started but recent rains have slowed work.

**Updated Volumes and Contaminant**    None at the time of this update

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**Date:** 8/4/2020      **Status:** Correspondence - More Follow-up Required      **No Further Action:**

**Author:** Martin, Russell

**Notes:**

Received data update for site on 7/16/2020 & 7/17/2020, reviewed and sent responses back to company & consultant. Update from consultant on 7/29/2020 indicated drainage tile installation had begun and the trench/sump had been dug.

**Updated Volumes and Contaminant**    None at the time of this update

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**Date:** 9/9/2020      **Status:** Inspection - More Follow-up Required      **No Further Action:**

**Author:** Martin, Russell

**Notes:**

9/3/2020 at 15:38, on location. First, took two samples east of site on either side of Hwy 28 to evaluate historical issues. Then walked area starting from the release point and working my way counter-clockwise through the site. Excavation has been filled in and site is level, only one small 2x2 ft depression that may be an issue if not levelled out. Drain field area has sporadic new vegetation growing. Sump/drainage trench is partially filled with water. South wetland/slough has starkly visible impacts, spots of uniform green vegetation and cattails are surrounded by bleached white dead cattails and other dead vegetation. Using the green vegetation as a guide, impact appears to still be contained within the south wetland/slough, though interceptor trench at east end of wetland/slough does have a bare spot beyond it to the east extending for about 50 feet before the vegetation appears uniform again. More follow-up needed as cleanup progresses.

**Updated Volumes and Contaminant**    None at the time of this update

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**Date:** 12/15/2020      **Status:** Correspondence - More Follow-up Required      **No Further Action:**

**Author:** Martin, Russell

**Notes:**

Received results for samples taken to evaluate historical issues during previous inspection. Elevated chloride levels to the west side of highway 28 do not appear present in farm field on the east side.

**Updated Volumes and Contaminant**    None at the time of this update

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**Date:** 8/4/2021      **Status:** Inspection - More Follow-up Required      **No Further Action:**

**Author:** Martin, Russell

**Notes:**

6/18/2021 at 10:01, on location. Walked site, irrigation system in use, puddles of standing water visible throughout affected area. Scattered vegetation regrowing, but many bare spots remain. South slough still mostly unvegetated. Took two water samples from large slough to the east, at landowner's request. More follow-up needed.

**Updated Volumes and Contaminant**   None at the time of this update

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**Date:** 8/4/2021      **Status:** Correspondence - More Follow-up Required      **No Further Action:**

**Author:** Martin, Russell

**Notes:**

Received sample results for samples taken during 6/18/2021 inspection. Results indicate historical contamination still present in large slough to east. Sent sampling results to landowner. Also added results to file along with additional documents from consultant received this year.

**Updated Volumes and Contaminant**   None at the time of this update

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**Date:** 10/19/2021      **Status:** Inspection - More Follow-up Required      **No Further Action:**

**Author:** Martin, Russell

**Notes:**

10/11/2021 at 16:24, on location. Irrigation system removed. Inspected site, due to drought, large slough to the southeast mostly dry. Took soil sample from bed of south easternmost portion of slough to compare with water samples taken previously. More follow-up needed.

**Updated Volumes and Contaminant**   None at the time of this update

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**Date:** 5/20/2022      **Status:** Correspondence - More Follow-up Required      **No Further Action:**

**Author:** Martin, Russell

**Notes:**

Received 2022 first quarter report for site (email format). Reviewed report and received response on clarification questions. Discussed site with landowner afterward. More follow-up required.

**Updated Volumes and Contaminant**   None at the time of this update

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**Date:** 6/24/2022      **Status:** Inspection - More Follow-up Required      **No Further Action:**

**Author:** Martin, Russell

**Notes:**

6/23/2022 at 11:30, on location. Walked site, vegetation visible in uneven thicknesses throughout the site except for the southern portion adjacent to the recovery sump trench. Vegetation to the southeast where interceptor trench was installed is fairly uniform. More follow-up needed.

**Updated Volumes and Contaminant**   None at the time of this update



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**Date:** 10/20/2022      **Status:** Correspondence - More Follow-up Required      **No Further Action:**

**Author:** Martin, Russell

**Notes:**

Received Q2 progress report 7/13/2022.

**Updated Volumes and Contaminant**    None at the time of this update

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**Date:** 11/29/2022      **Status:** Inspection - More Follow-up Required      **No Further Action:**

**Author:** Martin, Russell

**Notes:**

11/18/2022, on location. Site partially covered in snow. Southern portion directly adjacent to recovery trench still mostly bare. Recovery trench partially filled with snow, no liquid water visible. More follow-up needed during 2023 growing season.

**Updated Volumes and Contaminant**    None at the time of this update

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**Date:** 12/8/2022      **Status:** Correspondence - More Follow-up Required      **No Further Action:**

**Author:** Martin, Russell

**Notes:**

Received 3rd quarter remediation status report on 12/2/2022. Conference call with company, consultant, and landowner on current site status and future plans. Made recommendations and discussed options to achieve site cleanup goals.

**Updated Volumes and Contaminant**    None at the time of this update

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**Date:** 4/6/2023      **Status:** Correspondence - More Follow-up Required      **No Further Action:**

**Author:** Martin, Russell

**Notes:**

Received 1st quarter remediation status update with plans for 2023 remedial work once site is accessible.

**Updated Volumes and Contaminant**    None at the time of this update