

POLREP 07  
Mystery Oil Discharge – Steele Run  
Along Oil Spring Run  
Near Petroleum, Ritchie County, WV 26161

Lat. 39.2100  
Long. -81.2759

**NRC#1035635**

**FPN: E13302**

**SITE ID: Z3M2**

REPOSE AUTHORITY: Oil Pollution Act (OPA)

Attn: EPA RRC3  
WVDEP D. Gilbert  
EPA G. Heston  
USCG Case Mgmt John Hahn  
USCG NPFC

I. SITUATION (as of 5/30/13)

EVENT: Continuation of Oil Removal Action

- A. The subject Site consists of a discharge of oil upon Steele Run a tributary of Oil Spring Run in Ritchie County, West Virginia. The discharge location is approximately 150 feet upstream of the confluence of Steele Run with Oil Spring Run. The discharge is visible as pooled oil, oil droplets, and sheen upon Steele Run. The discharge is upon a navigable water of the United States. See prior POLREPs for Assessment information.
- B. There are numerous abandoned oil wells in the vicinity of the discharge. Very few of the wells are located on any available maps. As such, the OSC expects that there may be unfound wells in the area that may be component to the leaking facility.
- C. On March 5, the FPN ceiling was raised to \$248,000 to allow for the implementation of an oil removal action. The OSC issued a Pollution Funding Removal Authorization (PRFA) to the WVDEP. The PRFA ceiling is \$133,000. The PRFA requests that WVDEP initiate oil removal activities consisting of the plugging of, minimally, the 2 abandoned wells found closest to the point of discharge (e.g., #1 ID: 80614 and #2 ID:80615). Both the OSC and WVDEP understand that there may be additional unfound wells closer to the point of discharge. In fact, 2 such wells have now been found.
- D. On March 22, 2013, the OSC completed a search for a potential Responsible Party. The documentation was sent to USCG-NPFC Case Officer. The OSC's examination of all available information indicates that the Responsible Party for the facility believed to be the source of the discharge is no longer in existence. Therefore, the OSC was unable to identify a Responsible Party capable of conducting a removal action.
- E. The WVDEP and its contractors initiated removal actions during the week of April 8, 2013. Initial actions focused on construction of access roads and stream crossings in order to locate heavy equipment upon the abandoned wells.

- F. Removal actions continued during the week of April 15, 2013. During this week, the rig was positioned on top of the well (80614) that was found to be located closest to the point of oil discharge, along the watercourse of Steele Run. An underflow dam was constructed downstream of the rig location. The underflow dam was also constructed to perform as a stream crossing necessary to gain access to the additional well location. The contractors completed plugging operations on Well #1 (80614) on May 13, 2013, when the cement plug was observed in Well #1 (80614) and WVDEP felt that the wellbore was successfully sealed. However, oil continued to emerge into Steele Run, at a higher elevation in the stream bank, suggesting the probability that additional wells are part of the source of oil discharge. The contractors rigged down and continued to construct the access road to Well #2 (80615).
- G. During the week of May 13, 2013, the OSC and the EPA contractor were on Site to assess the condition of the Site, observe current operations, and continue efforts to identify additional sources of the oil discharge into Steele Run. Along with WVDEP, the OSC investigated Steele Run at locations upstream of Well #1 (80614). A piece of well casing was found under debris. Utilizing digging tools and a strong signal from a magnetometer, a wellbore was located buried beneath the stream bed. This well was located between Well #1 (80614) and #2 (80615), approximately 100 feet upstream of Well #1 (80614). In addition, another well was located atop the ridge of the left descending bank of Steele Run.
- H. Throughout the course of activities conducted at the subject Site, the OSC has continued to try and identify wells located on the leaking Steele Run Facility. At this time, the OSC believes that there are 6 wells in the watercourse of Steele Run (including the well now being addressed) upstream from the discharge point, and at least 10 wells on the hillside above the discharge point. At least 3 of these wells are close to the point of discharge and are closer than the second well now being considered to be within the scope of the PRFA for this incident. The OSC is continuing to define the Facility.
- I. The OSC and WVDEP discussed the scope of the ongoing action. At this time, the contractors have completed plugging Well #1 (80614) and are near completion of plugging Well #2 (80615). The initial scope of the PRFA action included effort to properly plug the 2 wells found closest to the point of discharge. The OSC and WVDEP initially agreed that well IDs 80614 and 80615 were the appropriate candidates due to their location in the watercourse and upstream to the point of discharge. At this time, new wells have been identified which are closer than 80615. The OSC has directed, however, that the scope remain the same due to significant issues which affect the costs associated with addressing the newly found wells. One of the newly found wells is located on a steep hillside, and one of the newly found wells is located in a very narrow segment of Steele Run where access will be extremely difficult. The third newly found well is located well behind the current position of the access route now being constructed. These situations will necessitate funding above that currently available in the PRFA – as such the OSC has opted to continue the current course and work with USCG- NPFC on additional scope and funding to address the newly identified components of this leaking Facility.

## II. ACTIONS

- A. On May 20, 2013, the contractors completed construction of the access road leading to Well #2 (80615). Due to the uneven terrain surrounding the well, which was located in Steele Run, the contractors utilized a large amount of materials to stabilize the staging location of the rig. First, 60 feet of 2-foot diameter culvert was used to divert the stream around the wellbore. A 2-foot culvert was placed perpendicularly around the well. Then, a total of five loads of stone were placed in the creek bank surrounding the well to provide a level surface for the rig. Tie mats, in aggregate 4 feet by 16 feet, utilized to stabilize the rig, were placed atop the stone surface, and the rig was moved onto location.
- B. On May 21, 2013, due to the odd size of the pipe at the top of the well, which was 5 7/8 inches, the contractors had to weld joints of pipe over the top of the well to enable connection. One 6 5/8-inch pipe and two 7-inch pipes, totaling 77 inches, were used to raise the top of the well to a height which would allow connection to drilling tools. The contractors rigged up and arranged the appropriate hoses for drilling operations. The mud tanks and pump were moved on location. The water truck was filled from Old Oil Spring Run and moved on location.
- C. On May 22, 2013, drilling operations began. The contractors connected the first drilling collar, 26.25 feet in length, 2 7/8-inch in diameter, and approximately 1,000 pounds, and began drilling. Initially, sands were recovered from the wellbore. Then the first wooden plug was hit and drilled out; the wood was soaked with oil. A second drilling collar, 30.85 feet in length, was connected, and another wooden plug was hit. The contractors continued drilling operations, recovering wooden plugs at approximately every 15 feet in depth.
- D. On May 23, 2013, a third drilling collar, 31.50 feet in length was connected. The contractors continued to recover oil and wooden plugs. Atop the approximate 90 feet of drilling collars, three 22-foot joints of 2 7/8-inch pipe were connected to the drilling string. By the end of the day, a depth of 119 feet was reached, and an aggregate total of approximately 30 feet of wooden plugs and oil were recovered. Near 119 feet in depth, additional materials, including leather straps and miscellaneous junk metal, were recovered. The presence of the metal shavings at a depth of 119 feet suggested that the Total Depth (TD) of the wellbore was near.
- E. Over the holiday weekend, some materials settled into the wellbore. On May 28, 2013, operations resumed. The contractors drilled out the caved in materials and then proceeded to continue drilling at the prior depth of 119 feet, where extremely hard materials and wooden plug was recovered.
- F. On May 29, 2013, the contractors reached a depth of approximately 125 feet. Metal shavings were prevalent, the wooden plug was removed, and the TD of the well was reached. Preparations, including insertion of seven joints of 2 3/8-inch tubing into the wellbore, connection of the hoses and pump, and clearing an area for

cement staging, were made for cementing operations of the wellbore the following day.

G. A cement plug was set and the well was plugged May 30<sup>th</sup>, 2013.

H. EPA's contractor was on Site intermittently throughout drilling operations to correspond with WVDEP, document Site activities, and update the OSC on progress of the Removal Action. The OSC maintained contact with WVDEP and EPA's contractor to oversee Site operations.

I. Although there was not a significant amount of visible green-colored oil observed discharging into the waterway, EPA's contractor observed a significant amount of sheen along the lower portion of Steele Run, in the same vicinity where formerly, large amounts of green oil protruded from both beneath the stream bed and along the stream banks. This is documented in photographs that are posted on the OSC's website.

### III. FUTURE ACTIONS

A. A monument will be set and the API number welded onto the monument.

B. Following appropriate plugging of Well #2 (80615), the contractor will remove all equipment from the well location and reclaim the areas surrounding both Well #1 (80614) and Well #2 (80615). The contractor will prepare all equipment for mobilization to the next facility. In addition, the contractor will pump all oily liquids from the bermed area that was utilized for collection of the oil from Steele Run and transport the fluids off Site for disposal.

C. The OSC will begin planning for and coordinating with USCG NPFC regarding effort to address additional abandoned oil wells that are component to the Facility. Existing project ceilings are insufficient to address the abandoned wells contributing to the continued discharge of oil into Steele Run.

D. The OSC will continue to try and locate any additional abandoned wells that are located near the point of discharge.

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Michael Towle, OSC  
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