

JUN 23 2008  
OCD-ARTESIA

Yates Petroleum Corporation  
Gulf KC State #1  
Remediation Workplan  
Sec. 18-18s-25e  
Eddy County, N.M.

June 23, 2008

6/23/2008

## Spill Summary and Work Plan

**Incident Date:** 4/28/2008

**Location:** Gulf KC State #1  
Unit C Section 18 T18S R25E  
Eddy County, New Mexico

The well is located 25 miles south west of Artesia, as depicted on the attached Dayton USGS Quadrangle Map. This site lies on the edge of a westward sloping plain cut by dry drainage channels.

Watercourses in the area are dry except for infrequent flows in response to major precipitation events. Area surface geology includes Quaternary Pleistocene conglomerate. The area, dry at the time of the spill, consists of soil that is fine grained, loamy and interspersed with clay seams providing a low permeability barrier to retard vertical percolation of contaminants into the subsurface. Groundwater in the area is estimated to be at a depth of >100 feet.

The ranking for this site is zero (0) based on the as following:

Depth to ground water	> 100'
Wellhead Protection Area	> 1000'
Distance to surface water body	> 1000'

### Incident Description:

The water leg on gun barrel broke due to high winds.

The water leg was repaired on the gun barrel. The volume of the release was 19 bbls of produced water & 1 bbl condensate. Recovered volume 0 bbls produced water & 0 bbls condensate.

### Action Taken:

The impacted area was located in the bermed area of the tank battery. The berm around the battery was not completed when constructed; there was a partial opening in the berm on the north side of the tank battery. The area around the gun barrel was impacted and there was a flow path running from the gun barrel to the berm located on the east side of the tank battery. Most of the release pooled in the area along the berm on the eastside of the battery. The battery area was partially bermed. A small amount of fluid ran from the opening in the berm. The pasture on the eastside of the battery was impacted. This area measured to be 15'x30'. The berm and the impacted soil running along side of the berm were immediately excavated and stockpiled on a liner, which was placed on the location. The excavated area measure to be 4' in depth x 7' wide x 90' long.

6/3/2008 using a hand auger soil samples were taken from the excavated area, the area surrounding the gun barrel and the impacted area in the pasture. The soil samples were submitted to Cardinal Lab. Analysis was run for TPH using EPA Method 8015M, B-TEX using EPA Method 8260B, and Chlorides using EPA Method 300. Analytical results for soil samples taken on 6/3/2008 from the excavated area along the berm on the east side of the tank battery reported; TPH bottom of the excavated area GRO 11.3 ppm, DRO 175 ppm, B-TEX <50 ppm. Chlorides 464 ppm, Westside wall - GRO 16.1 ppm, DRO 731 ppm, B-TEX <50 ppm. Chlorides 528 ppm, Southside wall - GRO <10 ppm, DRO 432 ppm, B-TEX <50 ppm. Chlorides 160 ppm, Eastside wall - GRO 31.6 ppm, DRO 799 ppm, B-TEX <50 ppm. Chlorides 1,250 ppm, North side wall - GRO 23.5, DRO 189 ppm, B-TEX <50ppm, Chlorides 176 ppm.

Analytical results from soil samples taken on 6/3/2008 from outside of the bermed area in the pasture reported surface GRO <48.3 DRO 1,810 ppm, B-TEX <50 ppm. Chlorides 1,970 ppm, Chlorides at a depth of 3' BGS in the impacted area of the pasture were reported to be CL. 528 ppm.

Analytical results from soil samples taken on 6/3/2008 in the area around the gun barrel reported surface - GRO 325 ppm, DRO 6,130 ppm, B-TEX <50 ppm. Chlorides 10,200 ppm.

A five spot composite soil sample was taken for the stockpiled soil. Analytical results reported GRO <10.0 ppm, DRO 69.6, Chlorides 320 ppm.

#### **Closure Plan:**

Analytical results dated 6/9&10/2008 reported the TPH & B-TEX to be under the RRAL for the site from soil samples taken in the excavated area located on the eastside of the battery Chlorides were reported in ranges from 1,250 ppm to 160 ppm.

The excavated area on the eastside of the battery will be backfilled back to grade using the stockpiled soil on location. The removed berm will then be reconstructed.

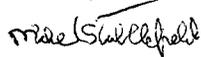
Analytical results dated 6/9&10/2008 reported the TPH & B-TEX to be under the RRAL for the site from soil samples taken in the impacted area of the pasture. Chlorides were reported in the impacted area of the pasture to be 1,970 ppm at the surface, 3' BGS Chlorides declined to 528 ppm. The impacted area located in the pasture on the eastside of the battery will be deep ripped. This corrective action was approved by the Ranch manager Mr. Darrel Brown on 7/3/2008.

Analytical results dated 6/9&10/2008 reported the TPH to be above the RRAL for the site in soil samples taken on 6/3/2008 from the impacted soil located around the gun barrel. The impacted soil located around the gun barrel will be excavated and hauled to an NMOCD approved solid waste disposal facility. After excavation soil samples will be taken and then submitted to a second party lab for analysis. The soil samples submitted to lab will be tested for TPH using EPA method 8215M, B-TEX EPA method 8260B and Chlorides using EPA method 300. When analytical results taken from the excavated area around the gun barrel report the TPH & B-TEX to be under the RRAL for the site. Chlorides have been documented to decline from CL. 10,200 ppm to a range that is reasonable for the site. The excavated area will be backfilled back to grade using a combination of the stockpiled soil on location and clean soil brought to the location. A final C-141 form with attached analytical results will be submitted to the NMOCD, requesting closure for the release that occurred on 4/28/2008.

If you have questions or need additional information, please contact me at 505-748-4500.

Or E-mail me at [mikes@ypcnm.com](mailto:mikes@ypcnm.com).

Sincerely,



Mike Stubblefield  
Yates Petroleum Corporation  
Environmental Regulatory Agent