

MARTIN YATES, III
1912-1985

FRANK W. YATES
1936-1986

S.P. YATES
1914-2008



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October 28, 2016

Mr. Mike Bratcher or Ms. Heather Patterson
NMOCD District II
811 South First
Artesia, NM 88210

RE: Martha AIK Federal #1 & Martha AIK Federal #14H
30-015-26549 & 30-015-37556
Section 11, T22S-R31E
Eddy County, New Mexico

Mr. Bratcher or Ms. Patterson,

Yates Petroleum Corporation would like to submit the following plan of work to you regarding the releases that occurred at the above mentioned facilities on December 3, 2013 (2RP-2113) and September 13, 2014 (2RP-2506).

With NMOCD and BLM approval of this work plan, Yates will hold a bid meeting allowing several contractors the opportunity to submit bids on this remediation project. Bids that are received will be forwarded to Yates Management for review. Once Yates Management reviews the bids and gives approval, the remediation project will be awarded to a contractor for work to commence.

If you have any questions or concerns, I can be reached at (575) 748-4111 or by email at amber_griffin@eogresources.com.

Thank You,

Amber Griffin
Environmental Representative
Yates Petroleum Corporation



Yates Petroleum Corporation

**Martha AIK Federal #1
Martha AIK Federal #14H**

Section 11, T22S-R31E

Eddy County, New Mexico

October 28, 2016

I. Location

Go East of Carlsbad on highway 62/180 to Campbell Road (CR-29). Turn south on Campbell Road and go approximately 9 miles. Turn west on lease road and go 1 mile. Turn south and go approximately 2 miles to location.

II. Background

On December 3, 2013, Yates had a release of 100 barrels produced water, 1 barrel of crude oil with 50 barrels produced water, 0 barrels of crude oil recovered. The area affected from this release was around a tin horn and along a pipeline right-of-way to the east of the Martha AIK Federal #1 production pad. An initial Form C-141 was submitted, via e-mail, to NMOCD District II on December 12, 2013.

On January 2, 2014 Yates returned to the site and collected composite soil samples from the release area at the depths of 1', 2', 3', 4', 5' and 6' below the surface level. The soils samples were sent to an approved NMOCD laboratory and tested for BTEX 8021B, TPH 8015M, and Chlorides SM4500Cl-B. Yates received the analytical results on January 9, 2014 (Report H400014 attached to this work plan). The analytical results showed that TPH and BTEX were both below NMOCD RRALs. The analytical results also showed elevated levels of chlorides within the soil.

On February 10, 2014 Yates returned to the site and collected further composite soil samples from the release area at the depths of 7', 8' and 9' below the surface level. The soils were sent to an approved NMOCD laboratory and tested for Chlorides SM4500Cl-B. Yates received the analytical results on February 14, 2014 (Report H400425 attached to this work plan). The analytical results showed that chlorides were still at elevated levels in the soils.

On September 13, 2014 a release occurred on the Martha AIK Federal #14H production pad. The release was 40 barrels of produced water, 30 barrels of crude oil with 40 barrels of produced water, 20 barrels of crude oil recovered. The majority of this release was contained to the production pad, but some of the released fluids got off the production pad and took the same path as the Martha AIK Federal #1 (2RP-2113) release. An initial Form C-141 was submitted, via e-mail, to NMOCD District II on September 22, 2014.

On March 3, 2015 Yates returned to the site and collected soil samples from the release area along the pipeline right-of-way. The release area was split into five (5) sections. Sections 1, 4 and 5 were sampled at the depths of 1', 3', 5', 7' and 9' below the surface level. Section 2 was sampled at the depths of 1', 3', 5', 7', 9' and 11' below the surface level. Section 3 was sampled at the depths of 1', 3', 5', 7', 9', 11' and 13' below the surface level. The 1' samples from all five (5) sections were tested for TPH 8015M and BTEX 8021B. Analytical results showed that both TPH and BTEX were below NMOCD RRALs for all sections. The soils collected from all depths of all sections were tested for Chlorides SM4500Cl-B. Analytical results showed that all sections did not contain elevated chlorides in the top 4' of the soils, but chloride levels did increase at the deeper depths. Yates received the analytical results on March 10, 2015 (Reports H500620 and H500622 attached to this work plan).

On March 3, 2015 Yates also collected soil samples from the release area on the Martha AIK Federal #14H production pad. The release area on the production pad was spilt into two (2)

sections and samples were collected from the surface and the depths of 1', 3' and 5' below the surface level. The surface and 1' samples for both sections were tested for TPH 8015M and BTEX 8021B. Analytical results showed that both TPH and BTEX were below NMOCD RRALs. The surface, 1', 3' and 5' samples from both sections were tested for Chlorides SM4500Cl-B. Yates received the analytical reports on March 10, 2015 (Reports H500619 and H500623 attached to this work plan). Analytical results showed that Chlorides were elevated on the surface and at 1' for Section 1 and on the surface for Section 2. Chlorides delineated to acceptable levels for both sections on the production pad.

On December 17, 2015 Yates returned to the site with a hollow stem auger core rig and collected soil samples from the depths of 15', 20', 25' and 29' below the surface level. At 29' below the surface level, the core rig encountered a hard layer that the auger could not core through. The soil samples were sent to a NMOCD approved laboratory and tested for Chlorides 300.0. Yates received the analytical results on January 6, 2016 (Report 1512A73 attached to this work plan). The analytical results showed that chlorides delineated to acceptable chloride levels.

III. Surface and Ground Water

Area surface geology is Cenozoic. The ChevronTexaco depth to ground water map shows the depth to groundwater to be approximately 150' feet making the site ranking for this site a zero (0). Watercourses in the area are dry except for infrequent flows in response to major precipitation events.

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

IV. Soils

The area consists of soils that are sand, caliche and clay seams.

V. Scope of Work

- Pipeline right-of-way

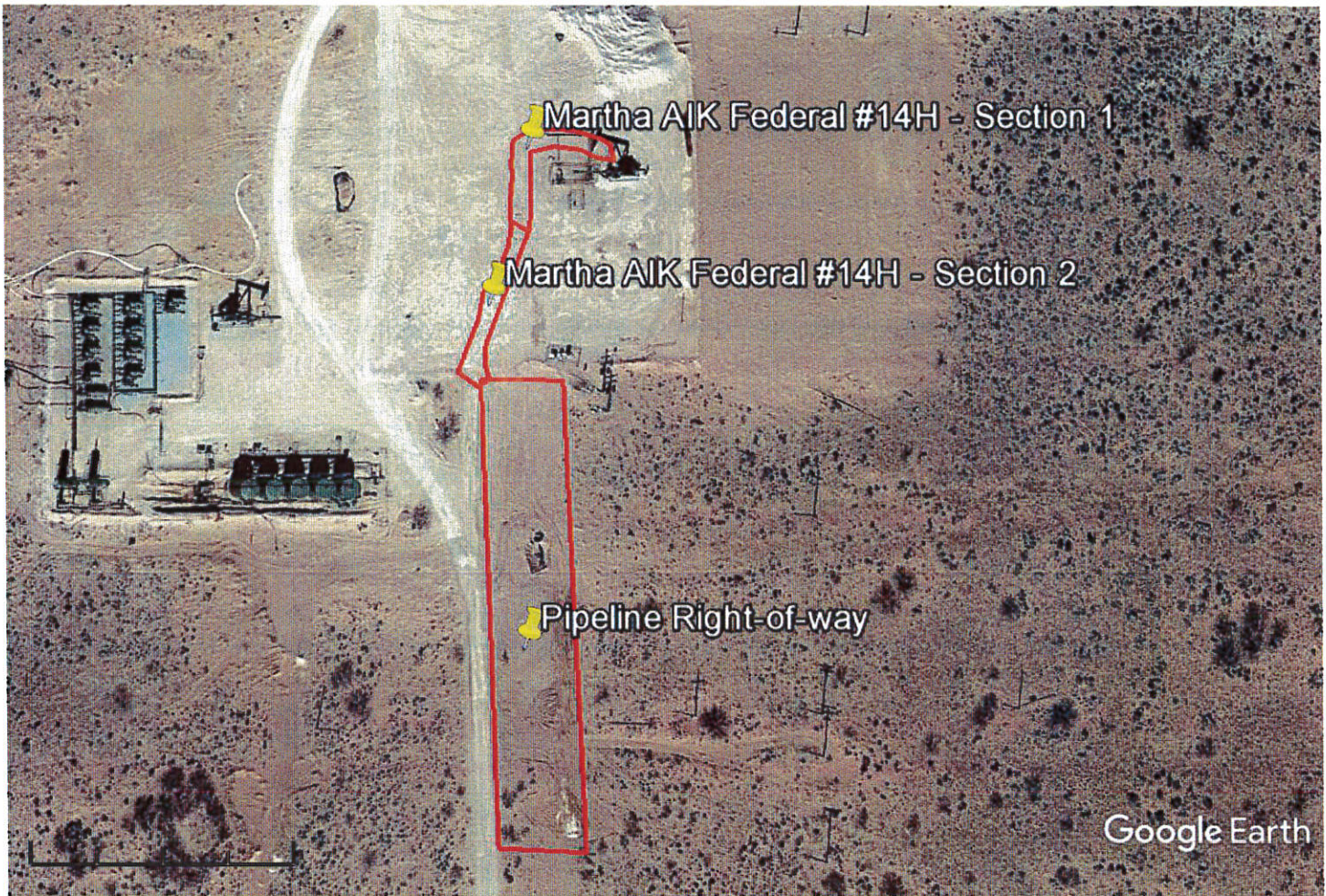
Based off analytical results which show no chlorides in the top 4' of the release area, we propose to excavate 4' of soils from the release area. The excavated soils will be put to the side and not hauled off for disposal. A 20 mil synthetic liner will then be placed in the bottom of the excavation and under any pipelines that exist in the right-of-way. The excavated soils will then be pushed back into the excavation. The pipeline right-of-way will be re-seeded with BLM LPC Seed mix to ensure that vegetation is re-established.

- Martha AIK Federal #14H Production Pad

Based off analytical results for the release area that remained on the production pad, we propose to excavate 1.5' from Section 1 and 6" from Section 2.

Confirmation soil samples will be pulled from the bottom of the excavated areas and field tested for chlorides using "Hach Chloride QuanTab® Test Strips, 30-600 mg/L". If the field tests show that chlorides are less than 1,000 ppm, Yates will ask for permission to move forward with backfill operations. If the field tests show that chlorides are greater than 1,000 ppm, Yates will excavate additional soils until field tests show that the chlorides are less than 1,000 ppm. All excavated soils will be hauled to a NMOCD approved disposal facility. Clean caliche will be purchased from the nearest caliche pit.

Once all work has been completed Final C-141s will be submitted to NMOCD requesting closure for both 2RP-2113 and 2RP-2506.



Google Earth



*** NOT TO SCALE ***