MARTIN YATES, III
1912-1985
FRANK W. YATES
1936-1986
S.P YATES
1914-2008

YATES PETROLEUM CORPORATION

JOHN A. YATES SR.
CHAIRMAN EMERITUS
JOHN A. YATES JR.
CHAIRMAN OF THE BOARD
DOUGLAS E. BROOKS
PRESIDENT / CEO

105 SOUTH FOURTH STREET
ARTESIA, NEW MEXICO 88210-2118
TELEPHONE (575) 748-1471

May 24, 2016

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

RE: State CO SWD System (Johnston BE Battery)
30-015-20054
Section 8, T19S-R25E
Eddy County, New Mexico

Mr. Bratcher or Ms. Patterson,

Yates Petroleum Corporation (Yates) would like to submit the attached plan of work to you regarding the release that occurred at the above mentioned facility on April 12, 2016 (2RP-3650).

With NMOCD 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 agriffin@yatespetroleum.com.

Thank You,

Amber Griffin

Amber Griffin
Environmental Representative
Yates Petroleum Corporation

# Yates Petroleum Corporation

## State CO SWD System (Johnston BE Battery)

## Section 8, T19S-R25E

## Eddy County, New Mexico

## May 24, 2016

## I. Location

The release is located approximately 9 miles south of Artesia on Highway 285 and 7.6 miles west of Highway 285, via Kincaid Ranch Road and lease roads.

## II. Background

On April 12, 2016, Yates had a release of 30 barrels produced water, with 15 barrels produced water recovered. The area affected from this release was a pasture near a pipeline right-of-way on Fee surface. An initial Form C-141 was submitted, via e-mail, to the NMOCD District II office on April 15, 2016 for this release.

On April 13, 2016 personnel returned to the release area and collected soil samples from the release area using a backhoe. The release area was split into three separate sections for the sampling process. The soil samples were sent to an approved NMOCD laboratory and tested for BTEX 8021B, TPH 8015M, and Chlorides 300.0. Yates received the analytical results on April 25, 2016 and May 4, 2016 (Reports 1604667 and 1604C23 attached to this work plan). The analytical results showed the following:

- BTEX and TPH were at levels below NMOCD RRAL's for all three sections.
- Chloride levels in Section 1 were found to be elevated and would need further vertical delineation.
- Chloride levels in Section 2 were completely delineated.
- Chloride levels in Section 3 were delineated with a spike at 4' below the surface level, Yates believed that this was a result of cross contamination issues during the sampling process. Yates had a 5' sample in their possession and sent it to the laboratory for analysis. Yates received the 5' analytical result and levels were found to be less than 240 ppm and confirmed that the spike in chlorides at the 4' interval was in fact from cross contamination during the sampling process.

On May 3, 2016 personnel returned to the release area and collected further soil samples from Section 1 of the release area using a trackhoe. The soil samples were sent to an approved NMOCD laboratory and tested for Chlorides 300.0. Yates received the analytical results on May 13, 2016 (Report 1605295 attached to this work plan). The analytical results showed that Yates had fully delineated the chlorides in Section 1.

## 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.

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

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

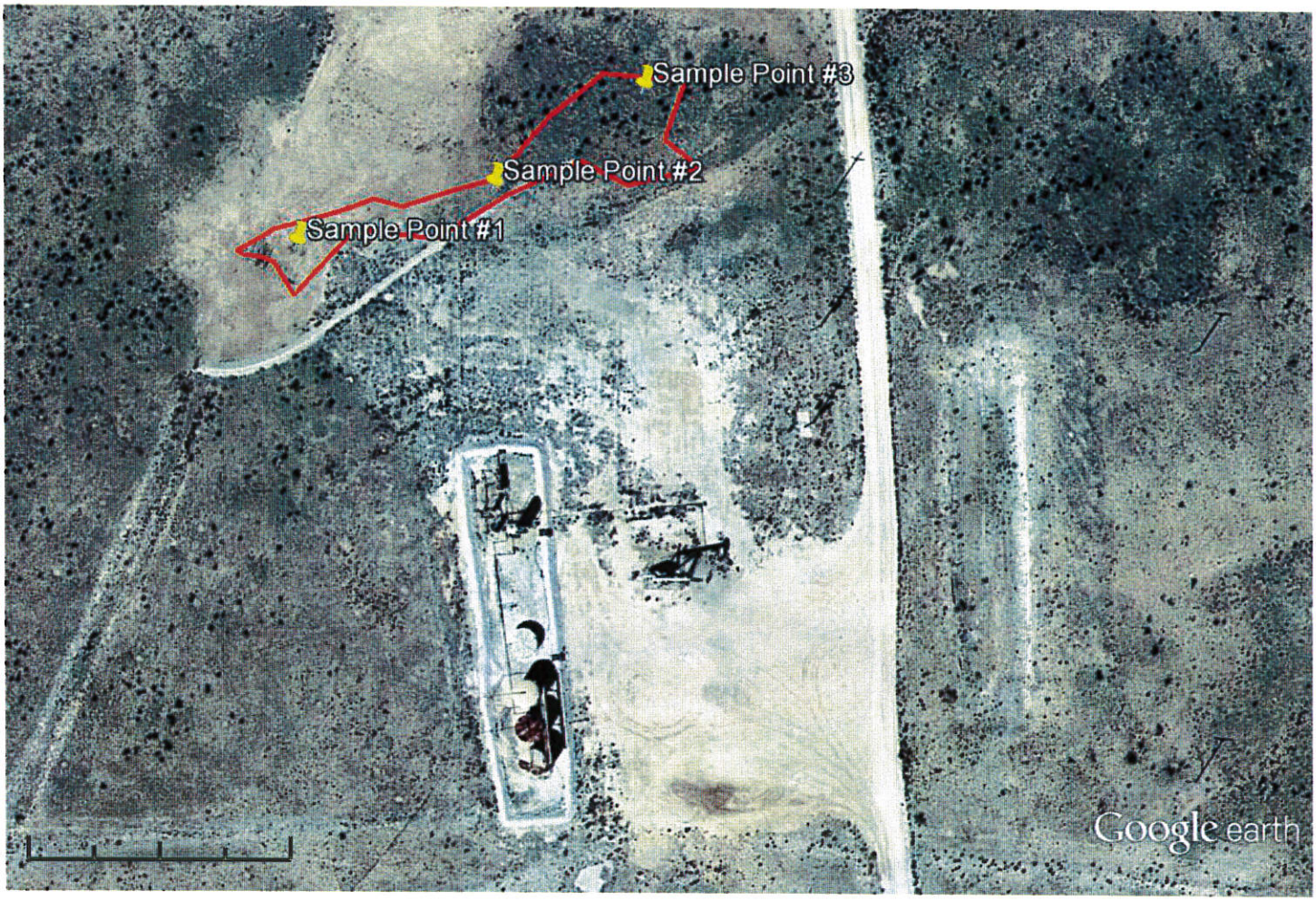
## IV. Soils

The area consists of soils that are caliche and clay.

## V. Scope of Work

Based off the analytical reports which show complete vertical delineation, Yates proposes the following work:

- Excavate 4' from Section 1 of the release area. After excavation, a 20 mil liner will be placed in the bottom of the excavation. A 6" layer of topsoil will be placed on top of the liner to provide protection from any rock. The remaining excavation will be backfilled with clean, like soils.
- Excavate 3.5' from Section 2 of the release area. The excavation will be backfilled with clean, like soils.
- Excavation 1' from Section 3 of the release area. The excavation will be backfilled with clean, like soils.
- Contaminated soils that are excavated will be hauled to a NMOCD approved disposal facility.
- The backfill material for the excavation will be purchased from a nearby pit.
- The release area will be re-seeded.
- Once all excavation and backfill work is complete, Yates will submit a Final Form C-141 to NMOCD requesting closure of this release.




Google earth

feet 300
meters 100

# State CO SWD System (Johnston BE Battery)

| | Sample Area | Sample Date | Analytical Report | Sample Type | Depth | BTEX | GRO | DRO | TOTAL | Chlorides |
|---|---|---|---|---|---|---|---|---|---|---|
| 1-1' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 1' | ND | ND | ND | ND | 7,900 |
| 1-2' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 2' | ND | ND | ND | ND | 4,000 |
| 1-3' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 3' | ND | ND | ND | ND | 1,500 |
| 1-4' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 4' | 0.038 | ND | ND | ND | 17,000 |
| 1-5' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 5' | ND | ND | ND | ND | 9,600 |
| 1-6' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 6' | ND | ND | ND | ND | 9,600 |
| 1-7' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 7' | ND | ND | ND | ND | 8,200 |
| 1-8' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 8' | ND | ND | ND | ND | 18,000 |
| 1-9' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 9' | ND | ND | ND | ND | 7,200 |
| 1-'10 | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 10' | ND | ND | ND | ND | 5,100 |
| 1-12' | Release area | 5/3/2016 | 1605295 | Grab/Trackhoe | 12' | - | - | - | - | 3,600 |
| 1-14' | Release area | 5/3/2016 | 1605295 | Grab/Trackhoe | 14' | - | - | - | - | 2,700 |
| 1-16' | Release area | 5/3/2016 | 1605295 | Grab/Trackhoe | 16' | - | - | - | - | 2,100 |
| 1-18' | Release area | 5/3/2016 | 1605295 | Grab/Trackhoe | 18' | - | - | - | - | 700 |
| 1-20' | Release area | 5/3/2016 | 1605295 | Grab/Trackhoe | 20' | - | - | - | - | 530 |
| 2-1' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 1' | 0.341 | ND | ND | ND | 17,000 |
| 2-2' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 2' | 0.23 | ND | ND | ND | 18,000 |
| 2-3' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 3' | ND | ND | ND | ND | 11,000 |
| 2-4' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 4' | 0.028 | ND | ND | ND | 260 |
| 2-5' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 5' | ND | ND | ND | ND | ND |
| 2-6' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 6' | ND | ND | ND | ND | ND |
| 2-7' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 7' | ND | ND | ND | ND | ND |
| 2-8' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 8' | ND | ND | ND | ND | ND |
| 2-9' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 9' | 0.024 | ND | ND | ND | 140 |
| 2-10' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 10' | 0.040 | ND | ND | ND | 71 |
| 3-1' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 1' | ND | ND | ND | ND | 1,600 |
| 3-2' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 2' | ND | ND | ND | ND | ND |
| 3-3' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 3' | ND | ND | ND | ND | 55 |
| 3-4' | Release area | 4/13/2016 | 1604667 | Grab/Backhoe | 4' | ND | ND | ND | ND | 1,300 |
| 3-5' | Release area | 4/13/2016 | 1604C23 | Grab/Backhoe | 5' | - | - | - | - | 170 |

Site Ranking is ZERO (0). Depth to Ground Water >100' (approx. 150', per ChevronTexaco trend map).

All results are ppm.Chlorides for documentation.

Released: 30 B/PW; Recovered: 15 B/PW. Release Date: 4/12/2016, 2RP-3650