

Guye, Gerry, EMNRD

From: Guye, Gerry, EMNRD
Sent: Monday, November 26, 2007 8:20 AM
To: 'mikes@ypcnm.com'
Subject: Little Box Canyon AOX #2

Mike

I have received the remediation work plan for this well and your risk based course of action is acceptable. Upon receipt of the final C-141 with indication that all areas of excavation have been back filled, OCD will close this project.

Thanks

Gerry Guye
Compliance Officer
NMDCD - Artesia
Office (505)748-1283x105
Mobile (505)626-0843
E-Mail: gerry.guye@state.nm.us

11/26/2007

NOV 21 2007
OCD-AK



**Yates Petroleum Corporation
Little Box Canyon AOX #2
Remediation Workplan
Sec. 7-21s-22e
Eddy County, N.M.**

November 20, 2007

Spill Summary and Work Plan

Incident Date: 10/17/2007

Location: Little Box Canyon AOX #2
Unit E Section 7 T21S R22E
Eddy County, New Mexico

The Little Box Canyon AOX #2 well is located 42 miles southwest of Artesia N.M., as depicted on the attached Crawley Draw, NM USGS Quadrangle Map. This site lies on an area with rolling hills which are 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 Yates & Seven Rivers formations. The area, dry at the time of the spill, consists of soil that is fine grained, loamy and interspersed with clay seams over laying Lime & Dolomite bedrock, providing a low permeability barrier to retard vertical percolation of contaminants into the subsurface. The depth to groundwater in T-21s R-22e is greater than 100' feet.

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

Depth to ground water	> 50'
Wellhead Protection Area	> 1000'
Distance to surface water body	> 1000'

Incident Description:

On 10/17/2007 the stock tank containing produced water was found to have developed a hole. The volume of the release was 20 bbls of produced water. Recovered volume was 0 bbls produced water. The impacted area was the bermed area of the tank battery.

Action Taken: A C-141 initial report was submitted to O.C.D. on 10/29/2007 reporting the release. The stock tank was repaired. 11/7/2007 Soil samples were taken for analytical from the impacted area of the tank battery.

Closure Plan:

11/7/2007 Soil samples were taken for analytical from the impacted soils located with-in the bermed area of the tank battery. Soil samples taken for analytical were submitted to a second party lab & analysis ran for TPH, B-tex & Chlorides. The analytical results reported the TPH at the surface of the impacted area to be 30 ppm & B-tex to be less than 50 ppm. At a depth of 1' analytical results reported the TPH to be 308 ppm & B-tex to be less than 50 ppm. At a depth of 3' analytical results reported the TPH to be <10 ppm & the B-tex to be less than 50 ppm.

The RRAL for the correction of the TPH at the site 5000 ppm & B-tex to less than 50 ppm has been met. The Chlorides have been documented showing a decline from 10,100 ppm at the surface of the impacted area to 3720 ppm at the 3' depth. The depth to ground water is greater than 100' in T-21s R-22e. Due to the shallow bedrock in the area of the release & the low provability of any contaminants to travel to greater vertical depths, Yates Petroleum Corporation assumes risk for the release that occurred at the Little Box Canyon AOX #1 tank battery & request no further corrective actions be required at this site.

A final C-141 form with attached analytical results from the sampling event on 11/7/2007, will be submitted by Yates Petroleum Corporation requesting closure for the release that occurred on 10/17/2007.

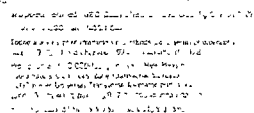
If you have questions or need additional information, please contact me at 505-748-4500.

Or E-mail me at mikes@ypcnm.com.

Sincerely,



Mike Stubblefield
Yates Petroleum Corporation
Environmental Regulatory Agent


$$f(x) = \frac{1}{2\pi} \int_{-\infty}^{\infty} \hat{f}(t) e^{itx} dt$$

$$f = \frac{1}{2\pi} \left(\frac{1}{\sqrt{1 - \frac{v^2}{c^2}}} - 1 \right) \approx \frac{1}{2\pi} \left(1 + \frac{1}{2} \frac{v^2}{c^2} - 1 \right) = \frac{1}{4\pi} \frac{v^2}{c^2}$$

$$f = \frac{1}{4\pi} \frac{v^2}{c^2} = \frac{1}{4\pi} \frac{(2.5 \times 10^8)^2}{(3 \times 10^8)^2} = \frac{1}{4\pi} \frac{6.25 \times 10^{16}}{9 \times 10^{16}} = \frac{1}{4\pi} \frac{6.25}{9} \approx \frac{1}{4\pi} \times 0.694 \approx \frac{0.694}{12.566} \approx 0.0552$$

$$f \approx 0.0552$$

1. $\frac{1}{2} \frac{d}{dt} \int_{\mathbb{R}^n} |u|^2 dx = \int_{\mathbb{R}^n} u \Delta u dx = - \int_{\mathbb{R}^n} |\nabla u|^2 dx \leq 0$
 2. $\frac{1}{2} \frac{d}{dt} \int_{\mathbb{R}^n} |u|^2 dx = \int_{\mathbb{R}^n} u \Delta u dx = - \int_{\mathbb{R}^n} |\nabla u|^2 dx \leq 0$
 3. $\frac{1}{2} \frac{d}{dt} \int_{\mathbb{R}^n} |u|^2 dx = \int_{\mathbb{R}^n} u \Delta u dx = - \int_{\mathbb{R}^n} |\nabla u|^2 dx \leq 0$
 4. $\frac{1}{2} \frac{d}{dt} \int_{\mathbb{R}^n} |u|^2 dx = \int_{\mathbb{R}^n} u \Delta u dx = - \int_{\mathbb{R}^n} |\nabla u|^2 dx \leq 0$
 5. $\frac{1}{2} \frac{d}{dt} \int_{\mathbb{R}^n} |u|^2 dx = \int_{\mathbb{R}^n} u \Delta u dx = - \int_{\mathbb{R}^n} |\nabla u|^2 dx \leq 0$
 6. $\frac{1}{2} \frac{d}{dt} \int_{\mathbb{R}^n} |u|^2 dx = \int_{\mathbb{R}^n} u \Delta u dx = - \int_{\mathbb{R}^n} |\nabla u|^2 dx \leq 0$
 7. $\frac{1}{2} \frac{d}{dt} \int_{\mathbb{R}^n} |u|^2 dx = \int_{\mathbb{R}^n} u \Delta u dx = - \int_{\mathbb{R}^n} |\nabla u|^2 dx \leq 0$
 8. $\frac{1}{2} \frac{d}{dt} \int_{\mathbb{R}^n} |u|^2 dx = \int_{\mathbb{R}^n} u \Delta u dx = - \int_{\mathbb{R}^n} |\nabla u|^2 dx \leq 0$
 9. $\frac{1}{2} \frac{d}{dt} \int_{\mathbb{R}^n} |u|^2 dx = \int_{\mathbb{R}^n} u \Delta u dx = - \int_{\mathbb{R}^n} |\nabla u|^2 dx \leq 0$
 10. $\frac{1}{2} \frac{d}{dt} \int_{\mathbb{R}^n} |u|^2 dx = \int_{\mathbb{R}^n} u \Delta u dx = - \int_{\mathbb{R}^n} |\nabla u|^2 dx \leq 0$

[illegible][illegible]



ARDINAL LABORATORIES

PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
YATES PETROLEUM CORP.
ATTN: MIKE STUBBLEFIELD
105 SOUTH 4th STREET
ARTESIA, NM 88210
FAX TO: (575) 748-4635

Receiving Date: 11/07/07
Reporting Date: 11/12/07
Project Number: NOT GIVEN
Project Name: LITTLE BOX CANYON AOX #2
Project Location: SEC. 7-21S-22E

Analysis Date: 11/08/07
Sampling Date: 11/07/07
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: SB
Analyzed By: KS

LAB NUMBER	SAMPLE ID	Cl ⁻ (mg/Kg)
H13662-1	001 TNK. BTTY BERM. AR. SURF.	10100
H13662-2	002 TNK. BTTY BERM. AR. 1' DPTH.	4400
H13662-3	003 TNK. BTTY BERM. AR. 3' DPTH.	3720
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		<0.1

METHOD: Std. Methods

4500-Cl⁻B

NOTE: Analyses performed on 1:4 w:v aqueous extracts.

Buster Suplebo
Chemist

11/12/07
Date



PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

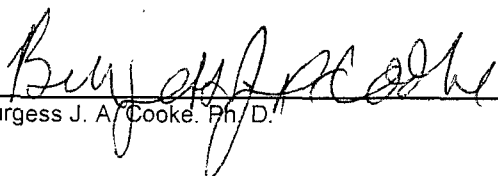
ANALYTICAL RESULTS FOR
YATES PETROLEUM CORP.
ATTN: MIKE STUBBLEFIELD
105 SOUTH 4th STREET
ARTESIA, NM 88210
FAX TO: (575) 748-4635

Receiving Date: 11/07/07
Reporting Date: 11/08/07
Project Number: NOT GIVEN
Project Name: LITTLE BOX CANYON AOX #2
Project Location: SEC. 7-21S-22E

Sampling Date: 11/07/07
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: SB
Analyzed By: BC

LAB NO.	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		11/08/07	11/08/07	11/07/07	11/07/07	11/07/07	11/07/07
H13662-1	001 TNK. BTTY BERM. AR. SURF.	<10.0	30.7	<0.002	<0.002	<0.002	<0.006
H13662-2	002 TNK. BTTY BERM. AR. 1' DPTH.	<10.0	308	<0.002	<0.002	<0.002	<0.006
H13662-3	003 TNK. BTTY BERM. AR. 3' DPTH.	<10.0	<10.0	<0.002	<0.002	<0.002	<0.006
Quality Control		749	780	0.101	0.104	0.106	0.306
True Value QC		800	800	0.100	0.100	0.100	0.300
% Recovery		93.7	97.5	101	104	106	102
Relative Percent Difference		3.4	5.4	6.5	1.2	2.1	8.3

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8260.


Burgess J. A. Cooke, Ph.D.

11/8/07
Date

H13662A YATES

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325) 673-7020

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <i>ma steel</i>		Date: <i>11/7/2007</i>	Received By:	Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:
		Time: <i>4:00 PM</i>		Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Fax #:
Relinquished By:		Date:	Received By:	REMARKS:
		Time:	<i>Sue Barnes 11/7/07 4:00 PM</i>	
Delivered By: (Circle One)		Sample Condition		CHECKED BY:
Sampler - UPS - Bus - <u>Other:</u>		Cool Intact		(Initials)
		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No		<i>SB</i>

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

Guye, Gerry, EMNRD

From: Guye, Gerry, EMNRD
Sent: Thursday, November 01, 2007 10:13 AM
To: 'mikes@ypcnm.com'
Subject: Little Box Canyon AOX #2 (30.015.30222)

Mike

This office is in receipt of your C-141 on the produced water release, at this facility.

NMOCD Rule 19.15.3.116 states in part ... "The responsible person must complete **division approved corrective action** for releases which endanger public health or the environment. Releases will be addressed in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with Section 19 of 19.15.1 NMAC."

Information and tools for proper corrective action may be found in the Environmental Handbook on our web site www.emnrd.state.nm.us/ocd under the heading publications.

Remediation requirements may be subject to other federal, state and local laws or regulations.

Within 30 days, **on or before November 30, 2007**, completion of a remediation plan should be finalized and submitted to the Division, summarizing all actions taken to mitigate environmental damage and the required analytical data related to the leak, spill or release, for approval.

Please be advised that NMOCD acceptance and/or approval of documents or work plans does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance and/or approval of documents or work plans do not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

If I may be of further service or if you have any questions please feel free to contact me.

Gerry Guye
Compliance Officer
NMOCD - Artesia
Office (505)748-1283x105
Mobile (505)626-0843
E-Mail: gerry.guye@state.nm.us