From:	Dena
Sent:	Friday, July 21, 2017 12:12 PM
То:	Oberding, Tomas, EMNRD
Cc:	Yu, Olivia, EMNRD; Groves, Amber
Subject:	RE: Field Screening with Horiba D-73
Attachments:	OWL Release Combined Results.xlsx; Rpt_WO_556631_ver_1_000.pdf; Rpt_WO_554912 _ver_1_000.pdf; Rpt_WO_556930_ver_1_000.pdf; Rpt_WO_556031_ver_1_000.pdf; Rpt_WO_555513_ver_1_000.pdf; Rpt_WO_554471_ver_1_000.pdf; Rpt_WO_552683_ver_1 _000.pdf; Rpt_WO_553327_ver_1_000.pdf

### Good afternoon, Doc!

Attached is the updated field screening table and laboratory results. Please let me know if you have any questions, or if you need anything else. Thank you!



## DENA M. VANDENBERG, REM, LEED AP

**Director of Environmental Services** 500 Moseley Road Cross Roads, Texas 76227 M (214)364-7627 O (940)387-0805 F (940)387-0830

From: Oberding, Tomas, EMNRD [mailto:Tomas.Oberding@state.nm.us] Sent: Friday, July 21, 2017 10:51 AM To: Dena <dena@kjenvironmental.com> Cc: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us> Subject: RE: Field Screening with Horiba D-73

Hi Dena,

Do you have any update son the samples and lab results as per the agreement below? My only copy I can find is from 6/14/17. Mahalo -Doc

Tomáš 'Doc' Oberding PhD Hydrologist, Adv-District 1 Oil Conservation Division, EMNRD (505) 476-3403 E-Mail: tomas.oberding@state.nm.us 一期一会

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Dena [mailto:dena@kjenvironmental.com] Sent: Monday, June 19, 2017 3:54 PM To: Oberding, Tomas, EMNRD <<u>Tomas.Oberding@state.nm.us</u>> Cc: psanders@oilfieldwaterlogistics.com Subject: FW: Field Screening with Horiba D-73

Good afternoon, Doc!

I wanted to follow up on the email below to see if we can proceed as described. Thank you!

From: Dena Vandenberg [mailto:dena@kjenvironmental.com] Sent: Wednesday, June 14, 2017 12:29 PM To: 'Tomas.Oberding@state.nm.us' <<u>Tomas.Oberding@state.nm.us</u>> Cc: Phillip Sanders (<u>psanders@oilfieldwaterlogistics.com</u>) <<u>psanders@oilfieldwaterlogistics.com</u>> Subject: Field Screening with Horiba D-73

Good morning, Doc!

Per our Addendum to Remediation Plan, dated April 14, 2017, we have field screened for Chlorides using the Horiba D-73 Portable Multiparamater Chloride Meter for every 20 cubic yards of excavated/blended soil and sent every 10<sup>th</sup> sample the laboratory for confirmation of analytical results. Any sections with samples which exhibit concentrations of 750 ppm or greater by field meter reading are further blended with clean soil and field screened again. Those results have been provided to you to confirm the accuracy of the meter. We are requesting that the meter be approved as accurate enough to return the soil cleared by the meter as less than 750 ppm to the lined excavation. In addition, we would like to reduce the frequency of lab sampling to one in every 50 samples to be sent to the lab. Please let me know if you have any questions, or if we can proceed as described. Thank you!



## DENA M. VANDENBERG, REM, LEED AP

Director of Environmental Services 500 Moseley Road Cross Roads, Texas 76227 M (214)364-7627 O (940)387-0805 F (940)387-0830

From:	Dena
Sent:	Monday, June 19, 2017 5:39 PM
То:	Oberding, Tomas, EMNRD
Subject:	RE: Field Screening with Horiba D-73

Thank you, Doc! We will move forward with using the meter to screen, but at the original intervals. I appreciate your response!

From: Oberding, Tomas, EMNRD [Tomas.Oberding@state.nm.us] Sent: Monday, June 19, 2017 5:11 PM To: Dena Subject: RE: Field Screening with Horiba D-73

HI Dena,

While the confirmatory samples are showing accurate analysis the OCD currently approves only the prior sampling schedule.

Thank you!

Tomáš 'Doc' Oberding PhD Hydrologist, Adv-District 1 Oil Conservation Division, EMNRD (505) 476-3403 E-Mail: <u>tomas.oberding@state.nm.us</u> 一期一会

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From: Dena [mailto:dena@kjenvironmental.com] Sent: Monday, June 19, 2017 3:54 PM To: Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us> Cc: psanders@oilfieldwaterlogistics.com Subject: FW: Field Screening with Horiba D-73

Good afternoon, Docl

I wanted to follow up on the email below to see if we can proceed as described. Thank you!

From: Dena Vandenberg [mailto:dena@kjenvironmental.com] Sent: Wednesday, June 14, 2017 12:29 PM To: 'Tomas.Oberding@state.nm.us' <<u>Tomas.Oberding@state.nm.us</u>> Cc: Phillip Sanders (<u>psanders@oilfieldwaterlogistics.com</u>) <<u>psanders@oilfieldwaterlogistics.com</u>> Subject: Field Screening with Horiba D-73

Good morning, Doc!

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DENA M. VANDENBERG, REM, LEED AP Director of Environmental Services 500 Moseley Road Cross Roads, Texas 76227 M (214)364-7627 O (940)387-0805 F (940)387-0830

From:	Oberding, Tomas, EMNRD <tomas.oberding@state.nm.us></tomas.oberding@state.nm.us>
Sent:	Wednesday, June 14, 2017 12:15 PM
То:	Dena Vandenberg
Subject:	RE: OWL Remediation Field Screening Results

Aloha Dena,

Thank you for sending in this updated set of data on the site.

Please send in a specific written request on email. The data is looking positive here. Mahalo -Doc

Tomáš 'Doc' Oberding PhD Hydrologist, Adv-District 1 Oil Conservation Division, EMNRD (505) 476-3403 E-Mail: <u>tomas.oberding@state.nm.us</u> 一期一会

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

From: Dena Vandenberg [mailto:dena@kjenvironmental.com]
Sent: Tuesday, June 13, 2017 7:38 AM
To: Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us>
Subject: OWL Remediation Field Screening Results

Good morning, Doc!

I hope all is well! Attached are the field results and laboratory results we have collected so far. We are still awaiting some lab results, but I wanted you to be able to verify that the meter is working to your satisfaction as a screening tool. We have actually found it to be more accurate than the filed titration method. TSS1-TSS6 on the table and in the lab results are the samples indicated on the map, which we spoke about previously. Soon, we will be moving on to Spill Area No. 1 and will take similar samples there. I will send you those results once we have them. Please let me know if you have any questions. Thank you!



DENA M. VANDENBERG. REM. LEED AP Director of Environmental Services 500 Moseley Road Cross Roads, Texas 76227 M (214)364-7627 O (940)387-0805 F (940)387-0830

From:	Dena Vandenberg <dena@kjenvironmental.com></dena@kjenvironmental.com>
Sent:	Wednesday, June 14, 2017 12:29 PM
То:	'Tomas.Oberding@state.nm.us'
Cc:	Phillip Sanders (psanders@oilfieldwaterlogistics.com)
Subject:	Field Screening with Horiba D-73

Good morning, Doc!

Per our Addendum to Remediation Plan, dated April 14, 2017, we have field screened for Chlorides using the Horiba D-73 Portable Multiparamater Chloride Meter for every 20 cubic yards of excavated/blended soil and sent every 10<sup>th</sup> sample the laboratory for confirmation of analytical results. Any sections with samples which exhibit concentrations of 750 ppm or greater by field meter reading are further blended with clean soil and field screened again. Those results have been provided to you to confirm the accuracy of the meter. We are requesting that the meter be approved as accurate enough to return the soil cleared by the meter as less than 750 ppm to the lined excavation. In addition, we would like to reduce the frequency of lab sampling to one in every 50 samples to be sent to the lab. Please let me know if you have any questions, or if we can proceed as described. Thank you!



DENA M. VANDENBERG, REM, LEED AP Director of Environmental Services 500 Moseley Road Cross Roads, Texas 76227 M (214)364-7627 O (940)387-0805 F (940)387-0830

From:	Oberding, Tomas, EMNRD <tomas.oberding@state.nm.us></tomas.oberding@state.nm.us>
Sent:	Monday, June 19, 2017 3:59 PM
То:	Dena
Subject:	RE: Follow up (OWL Remediation)

Good Afternoon Dena,

Thank you for the updates. Based on the documentation the OCD approves the modifications. Cheers -Doc

Tomáš 'Doc' Oberding PhD Hydrologist, Adv-District 1 Oil Conservation Division, EMNRD (505) 476-3403 E-Mail: <u>tomas.oberding@state.nm.us</u> 一期一会

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From: Dena Vandenberg [mailto:dena@kjenvironmental.com] Sent: Wednesday, June 14, 2017 3:25 PM To: Oberding, Tomas, EMNRD <Tomas.Oberding@state.nm.us> Cc: Phillip Sanders <psanders@oilfieldwaterlogistics.com> Subject: RE: Follow up (OWL Remediation)

Good afternoon, Doc!

I also want to confirm that since you received the lab results and field screening results for TSS1-TSS6, as requested in the email below, that we are approved to complete the previously requested modified corrective action as described below. Thank you!



DENA M. VANDENBERG, REM. LEED AP Director of Environmental Services 500 Moseley Road Cross Roads, Texas 76227 M (214)364-7627 O (940)387-0805 F (940)387-0830

From: Oberding, Tomas, EMNRD [mailto:Tomas.Oberding@state.nm.us] Sent: Friday, May 19, 2017 12:42 PM To: Dena Vandenberg <<u>dena@kjenvironmental.com</u>> Cc: 'Phillip Sanders' <<u>psanders@oilfieldwaterlogistics.com</u>>; 'Kevin Ware' <<u>kevin@kjenvironmental.com</u>>; <u>Aaron.Prefontaine@yorkrsg.com</u> Subject: RE: Follow up

Aloha Dena et al,

Thank you for the update. This does sound like positive turn of events. Please send in the lab sample results to confirm. The OCD agrees that once the lab samples confirm this idea that modified corrective action as described is applicable.

Mahalo -Doc

Tomáš 'Doc' Oberding PhD Hydrologist, Adv-District 1 Oil Conservation Division, EMNRD (505) 476-3403 E-Mail: <u>tomas.oberding@state.nm.us</u> 一期一会

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From: Dena Vandenberg [mailto:dena@kjenvironmental.com] Sent: Wednesday, May 17, 2017 1:46 PM To: Oberding, Tomas, EMNRD <<u>Tomas.Oberding@state.nm.us</u>> Cc: 'Phillip Sanders' <<u>psanders@oilfieldwaterlogistics.com</u>>; 'Kevin Ware' <<u>kevin@kjenvironmental.com</u>>; <u>Aaron.Prefontaine@yorkrsg.com</u> Subject: RE: Follow up

Good afternoon, Doc!

On the attached map, you'll see samples 34-39 (in green boxes), which are just northwest of the powerlines indicated with the yellow dashed line, which exceeded the action limit. Then you'll see samples 41-46 & 33 (in white boxes), southeast of the powerlines, which are all below action limits. The driller would not sample any closer in to the powerlines than the locations of 41-46 & 33 at the time of delineation because there is a significant increase in elevation southeast of the powerlines. We collected samples TSS1-TSS6 (in blue circles) via excavator, in a line 15' southeast of the powerlines at one-foot intervals for field screening, and at a depth of 4' for laboratory sampling, to evaluate whether there were any impacts on the up-gradient side of that significant elevation change. The results indicated no impact in excess of the action limits. We believe that there was never any impact southeast of that elevation change at the powerlines; however, we didn't have the data until now to demonstrate that, due to drilling rig sampling limitations; so we were assuming the soil to be impacted to the next closest clean samples (41-46 & 33). Since we now have the additional data, we would like to leave the soil in-place southeast of the elevation change at the powerlines. I attached pictures for your reference. Thanks!



DENA M. VANDENBERG, REM, LEED AP Director of Environmental Services 500 Moseley Road Cross Roads, Texas 76227 M (214)364-7627 O (940)387-0805 F (940)387-0830

From: Oberding, Tomas, EMNRD [mailto:Tomas.Oberding@state.nm.us] Sent: Wednesday, May 17, 2017 9:24 AM To: Dena Vandenberg <<u>dena@kjenvironmental.com</u>> Cc: 'Phillip Sanders' <<u>psanders@oilfieldwaterlogistics.com</u>>; 'Kevin Ware' <<u>kevin@kjenvironmental.com</u>>; <u>Aaron.Prefontaine@yorkrsg.com</u> Subject: RE: Follow up

Sorry for the confusion. There may be some email issues. I will investigate further. Thank you in advance for the updated map. Mahalo -Doc

Tomáš 'Doc' Oberding PhD Hydrologist, Adv-District 1 Oil Conservation Division, EMNRD (505) 476-3403 E-Mail: <u>tomas.oberding@state.nm.us</u> 一期一会

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From: Dena Vandenberg [mailto:dena@kjenvironmental.com] Sent: Wednesday, May 17, 2017 8:19 AM To: Oberding, Tomas, EMNRD <<u>Tomas.Oberding@state.nm.us</u>> Cc: 'Phillip Sanders' <<u>psanders@oilfieldwaterlogistics.com</u>>; 'Kevin Ware' <<u>kevin@kjenvironmental.com</u>>; <u>Aaron.Prefontaine@yorkrsg.com</u> Subject: RE: Follow up

I think there is some confusion about this. We are preparing a map to try to illustrate what we are discussing. We will have it to you by the end of the day. Thanks!



DENA M. VANDENBERG, REM, LEED AP Director of Environmental Services 500 Moseley Road Cross Roads, Texas 76227 M (214)364-7627 O (940)387-0805 F (940)387-0830

From: Oberding, Tomas, EMNRD [mailto:Tomas.Oberding@state.nm.us] Sent: Wednesday, May 17, 2017 9:08 AM To: Dena Vandenberg <<u>dena@kjenvironmental.com</u>> Cc: Phillip Sanders <<u>psanders@oilfieldwaterlogistics.com</u>>; Kevin Ware <<u>kevin@kjenvironmental.com</u>>; <u>Aaron.Prefontaine@yorkrsg.com</u> Subject: RE: Follow up

Aloha Dena et al,

Thank you for the patience. In order to account for the discrepancy between the original sampling and the new results which indicate downward movement the OCD needs to have further delineation occur. This delineation will identify the exact distances moved and help predict further mobility of the contamination in the areas of concern. Mahalo -Doc

Tomáš 'Doc' Oberding PhD Hydrologist, Adv-District 1 Oil Conservation Division, EMNRD (505) 476-3403 E-Mail: <u>tomas.oberding@state.nm.us</u> 一期一会

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From: Dena Vandenberg [mailto:dena@kjenvironmental.com] Sent: Tuesday, May 16, 2017 10:10 AM To: Oberding, Tomas, EMNRD <<u>Tomas.Oberding@state.nm.us</u>> Cc: Phillip Sanders <<u>psanders@oilfieldwaterlogistics.com</u>>; Kevin Ware <<u>kevin@kjenvironmental.com</u>>; <u>Aaron.Prefontaine@yorkrsg.com</u> Subject: RE: Follow up

Good morning, Doc!

We are coming to a point in the remediation where we will need to have an answer on this request very soon in order to maintain efficiency. Please give me a call as soon as you can. Thanks!



# DENA M. VANDENBERG, REM, LEED AP

Director of Environmental Services 500 Moseley Road Cross Roads, Texas 76227 M (214)364-7627 O (940)387-0805 F (940)387-0830

From: Oberding, Tomas, EMNRD [mailto:Tomas.Oberding@state.nm.us] Sent: Thursday, May 11, 2017 11:25 AM To: Dena Vandenberg <<u>dena@kjenvironmental.com</u>> Subject: RE: Follow up

Aloha Dena, Just got it and have it 3<sup>rd</sup> down the list.

#### Cheers!

Tomáš 'Doc' Oberding PhD Hydrologist, Adv-District 1 Oil Conservation Division, EMNRD (505) 476-3403 E-Mail: <u>tomas.oberding@state.nm.us</u> 一期一会

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From: Dena Vandenberg [mailto:dena@kjenvironmental.com] Sent: Thursday, May 11, 2017 10:24 AM To: Oberding, Tomas, EMNRD <<u>Tomas.Oberding@state.nm.us</u>> Cc: Kevin Ware <<u>kevin@kjenvironmental.com</u>>; Phillip Sanders <<u>psanders@oilfieldwaterlogistics.com</u>> Subject: Follow up

Good morning, Doc!

I wanted to follow up with you regarding my previous email. If you have any additional questions, I am happy to respond to them. Please give me a call when you have a chance to discuss. Thanks!



DENA M. VANDENBERG, REM, LEED AP Director of Environmental Services 500 Moseley Road Cross Roads, Texas 76227 M (214)364-7627 O (940)387-0805 F (940)387-0830