Remediation Summary Report Form

General Information

This remediation summary report, as prepared by Hungry Horse, LLC, is in response to the release at Devon Energy Production Company's North Pure Gold 8 Fed 11 SWD that occurred on 1Sept15, releasing 20 bbls of produced water due to a hole forming the a high pressure hose.

Date: 1Dec15

Client: Devon Energy Production Company

Site Name: North Pure Gold 8 Fed 11 SWD

State: New Mexico County: Eddy

Site Coordinates

Latitude: 32.31545

Longitude: -103.79585

Property Owner: BLM

New Mexico Oil Conservation Division No.: 2 RP-3233

Release Description and Assessment

Date of Spill: 1Sept15

Type of Spill:

Oil

X Produced Water

Condensate

Other (Specify):

Equipment Failure Cause of Spill:

Valve Failure X Line Rupture Leaking Tank

Tank Overfill

Other (Specify):

Other Contributing Factors or Comments: N/A

Quantity Spilled: 20 bbls

Quantity Recovered: 18 bbls

Total Released: 2 bbls

Method of Recovery: X Vacuum Truck

Other (Specify):

New Mexico Oil Conservation Division Notified: X Yes No

C-141 Completed and Submitted: X Yes

No

Spill Area Impacted:

Inside Firewall X On Production Pad

X In Pasture

In Cultivated Land

Other (Specify):

Total Square Foot Impacted: Approx 9600

Estimated Depth:

Volume (Cu. Yards): 420 yds

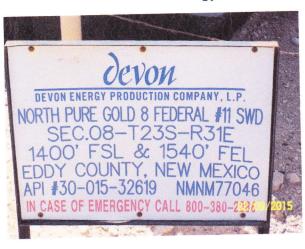
Other Comments: Excavation was a very irregular shape and depth of excavation varied form 1'-2' on the pad and 5' in the pasture.

Remediation Activity Summary

The site was remediated as per the NM OCD/BLM approved work plan. Approximately 2' of impacted material inside the fence was hand excavated. The impacted area on the pad was excavated to a depth of 1' BGS and the impacted area off the north edge of the pad was excavated to a depth of 5' BGS. All impacted soil was transported to a division approved disposal facility and fresh soil was from a local source was used for backfill.

Vernon K. Black, Hungry Horse, LLC

Devon Energy Production Company-North Pure Gold 8 Fed 11 SWD













Devon Energy Production Company- North Pure Gold 8 Fed 11 SWD













Vernon Black

From:

Tucker, Shelly <stucker@blm.gov>

Sent:

Friday, October 30, 2015 10:05 AM

To:

Vernon Black

Cc:

Bratcher, Mike, EMNRD; Brett Fulks (Brett.Fulks@dvn.com); Patterson, Heather, EMNRD

Subject:

Re: Devon - North Pure Gold 8 Fed 11 SWD Revised Work Plan

BLM concurs with NMOCD stipulations.

The BLM approval/acceptance does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment or if the location fails to reclaim properly. In such an event that the location does not revegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until the contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state or local laws/regulations.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

Shelly J Tucker

Environmental Protection Specialist Bureau of Land Management

620 E. Greene St Carlsbad, NM 88220

575.234.5905 - Direct 575.361.0084 - Cellular

stucker@blm.gov



On Fri, Oct 30, 2015 at 8:43 AM, Vernon Black < <u>vblack@hungry-horse.com</u>> wrote:

Thanks Mike, I'll get this scheduled and completed.

Vernon

From: Bratcher, Mike, EMNRD [mailto:mike.bratcher@state.nm.us]

Sent: Friday, October 30, 2015 7:52 AM

To: Vernon Black < vblack@hungry-horse.com>

Cc: Shelly J. Tucker (stucker@blm.gov) < stucker@blm.gov>; Brett Fulks (Brett.Fulks@dvn.com)

< Brett.Fulks@dvn.com>; Patterson, Heather, EMNRD < Heather.Patterson@state.nm.us>

Subject: RE: Devon - North Pure Gold 8 Fed 11 SWD Revised Work Plan

RE: Devon Energy * North Pure Gold 8 Fed 11 * 30-015-32619

2RP-3233 * Date of release: 9/1/2015

Vernon,

Your proposal for remediation of the above referenced release is approved. As indicated, the area on the pad identified as SP 1 will be deferred until site closure. Notations will be made in OCD well records indicating this deferment. Federal sites will require like approval by BLM.

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.

If you have any questions or concerns, and for notification, please contact me.

Mike Bratcher

NMOCD District 2

811 S. First Street

Artesia, NM 88210

O: 575-748-1283 X108

C: 575-626-0857

F: 575-748-9720
From: Vernon Black [mailto:vblack@hungry-horse.com] Sent: Thursday, October 29, 2015 3:54 PM To: Bratcher, Mike, EMNRD Cc: Shelly J. Tucker (stucker@blm.gov); Brett Fulks (Brett.Fulks@dvn.com) Subject: RE: Devon - North Pure Gold 8 Fed 11 SWD Revised Work Plan
Hello Mike,
Please see the attached lab analysis. As per your request further delineation was conducted at SP #1 by use of an excavator. Samples were obtained in 2' increments starting at 12' BGS. Based on this information, I'm requesting NM OCD approval of the work plan as previously submitted.
Thanks, Vernon
From: Bratcher, Mike, EMNRD [mailto:mike.bratcher@state.nm.us] Sent: Thursday, October 08, 2015 10:20 AM To: Vernon Black < <u>vblack@hungry-horse.com</u> >; Shelly J. Tucker (<u>stucker@blm.gov</u>) < <u>stucker@blm.gov</u> > Cc: Patterson, Heather, EMNRD < <u>Heather.Patterson@state.nm.us</u> > Subject: RE: Devon - North Pure Gold 8 Fed 11 SWD Revised Work Plan
Vernon,
OCD requirements at this time is to get chloride delineation to 250 mg/kg or natural background levels. The area identified as SP1 will require additional delineation.

Thank you,

Mike Bratcher

NMOCD District 2

811 S. First Street

Artesia, NM 88210

O: 575-748-1283 X108

C: 575-626-0857

F: 575-748-9720

From: Vernon Black [mailto:vblack@hungry-horse.com]

Sent: Monday, September 28, 2015 9:44 AM

To: Bratcher, Mike, EMNRD; Shelly J. Tucker (<u>stucker@blm.gov</u>)
Subject: Devon - North Pure Gold 8 Fed 11 SWD Revised Work Plan

Good Morning Shelly and Mike,

Please see the attached work plan. We conducted a delineation as per your request. We were only able to get to 10' BGS with a backhoe before hitting rock. I put the lab and field test numbers together on a spread sheet for you. The ones in bold red are lab results and the black numbers are field test results, hopefully it's not confusing. Call me if you have any questions.

Vernon

Vernon Black

From:

Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>

Sent:

Friday, October 30, 2015 7:52 AM

To:

Vernon Black

Cc:

Shelly J. Tucker (stucker@blm.gov); Brett Fulks (Brett.Fulks@dvn.com); Patterson,

Heather, EMNRD

Subject:

RE: Devon - North Pure Gold 8 Fed 11 SWD Revised Work Plan

RE: Devon Energy * North Pure Gold 8 Fed 11 * 30-015-32619

2RP-3233 * Date of release: 9/1/2015

Vernon,

Your proposal for remediation of the above referenced release is approved. As indicated, the area on the pad identified as SP 1 will be deferred until site closure. Notations will be made in OCD well records indicating this deferment. Federal sites will require like approval by BLM.

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.

If you have any questions or concerns, and for notification, please contact me.

Mike Bratcher NMOCD District 2 811 S. First Street Artesia, NM 88210 O: 575-748-1283 X108

C: 575-626-0857 F: 575-748-9720

From: Vernon Black [mailto:vblack@hungry-horse.com]

Sent: Thursday, October 29, 2015 3:54 PM

To: Bratcher, Mike, EMNRD

Cc: Shelly J. Tucker (stucker@blm.gov); Brett Fulks (Brett.Fulks@dvn.com) Subject: RE: Devon - North Pure Gold 8 Fed 11 SWD Revised Work Plan

Hello Mike,

Please see the attached lab analysis. As per your request further delineation was conducted at SP #1 by use of an excavator. Samples were obtained in 2' increments starting at 12' BGS. Based on this information, I'm requesting NM OCD approval of the work plan as previously submitted.

Thanks, Vernon From: Bratcher, Mike, EMNRD [mailto:mike.bratcher@state.nm.us]

Sent: Thursday, October 08, 2015 10:20 AM

To: Vernon Black < vblack@hungry-horse.com >; Shelly J. Tucker (stucker@blm.gov) < stucker@blm.gov >

Cc: Patterson, Heather, EMNRD < Heather.Patterson@state.nm.us> Subject: RE: Devon - North Pure Gold 8 Fed 11 SWD Revised Work Plan

Vernon,

OCD requirements at this time is to get chloride delineation to 250 mg/kg or natural background levels. The area identified as SP1 will require additional delineation.

Thank you,

Mike Bratcher NMOCD District 2 811 S. First Street Artesia, NM 88210 O: 575-748-1283 X108

C: 575-626-0857 F: 575-748-9720

From: Vernon Black [mailto:vblack@hungry-horse.com]

Sent: Monday, September 28, 2015 9:44 AM

To: Bratcher, Mike, EMNRD; Shelly J. Tucker (stucker@blm.gov) Subject: Devon - North Pure Gold 8 Fed 11 SWD Revised Work Plan

Good Morning Shelly and Mike,

Please see the attached work plan. We conducted a delineation as per your request. We were only able to get to 10' BGS with a backhoe before hitting rock. I put the lab and field test numbers together on a spread sheet for you. The ones in bold red are lab results and the black numbers are field test results, hopefully it's not confusing. Call me if you have any questions.

Vernon