From:

tgregsto@blm.gov

Sent:

Friday, March 04, 2011 6:09 PM

To:

Vernon Black

Cc:

dpotter@linnenergy.com; Bratcher, Mike, EMNRD; Terry gregston@nm.blm.gov

Subject:

Re: Keel West Water Flood

Unfortunately, Vernon, I will be in Artesia for required training for a week, from March 6 through March 11. As will all the other folks who would normally stand in for me when I am gone. So there's a bit of a conundrum on that one. I will be working this weekend and will have my cell phone with me during class week (though I cannot answer it during class, of course.) Give me a call on this one and we'll see what we can figure out. (575) 361-2635.

To prevent confusion, this particular project has the name of H E West B 27, federal tracking number 11NU034TG. If you call it by anything else, the odds are that I won't know which spill you are referring to. So try to keep that name on all your paperwork, emails, and references if you can. You've done that here. Just keep it up.

Give me a call,

Terry Gregston
Environmental Protection Specialist
Bureau of Land Management
620 E. Greene St.
Carlsbad, NM 88220
Office (575) 234-5958
Fax (575) 234-5927

"Vernon Black" < vernon@hungry-horse.com>

To <<u>Terry_gregston@nm.blm.gov</u>>, "'Bratcher, Mike, EMNRD'" <<u>mike.bratcher@state.nm.us</u>>

03/04/2011 11:14 AM

cc <dpotter@linnenergy.com>
Subject Keel West Water Flood

Good Morning Terry,

Our plan is to try and get to the Keel West Water Flood area (LINN Operating's HE West #27 inj Well) Tuesday morning (8Mar11)and start the delineation process. As we discussed, I plan to conduct delineation at three separate points. If this date is in conflict with your schedule, we can probably move it to Wed (9Mar11).

Thanks, Vernon

PS....I've completed the C141, but I am waiting on Dennis to sign and send it back to me. As soon as I get it, I'll forward it to you and Mike Bratcher.

From:

Vernon Black [vernon@hungry-horse.com]

Sent:

Friday, March 04, 2011 11:15 AM

To:

Terry_gregston@nm.blm.gov; Bratcher, Mike, EMNRD

Cc:

dpotter@linnenergy.com

Subject:

Keel West Water Flood

Good Morning Terry,

Our plan is to try and get to the Keel West Water Flood area (LINN Operating's HE West #27 inj Well) Tuesday morning (8Mar11) and start the delineation process. As we discussed, I plan to conduct delineation at three separate points. If this date is in conflict with your schedule, we can probably move it to Wed (9Mar11).

Thanks, Vernon

PS....I've completed the C141, but I am waiting on Dennis to sign and send it back to me. As soon as I get it, I'll forward it to you and Mike Bratcher.

From:

Bratcher, Mike, EMNRD

Sent:

Tuesday, February 22, 2011 7:35 AM

To:

'Vernon Black'

Subject:

RE: Linn Energy's Keel West Water Flood Plant

Never mind that last email. Looks like Terry Gregston has already attached it to an API number. - Mike

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

Sent: Saturday, February 19, 2011 8:49 AM **To:** Bratcher, Mike, EMNRD; <u>jamos@blm.gov</u>

Subject: Linn Energy's Keel West Water Flood Plant

Good Morning Gentlemen,

I was out with Linn Operating's Dennis Potter Friday afternoon at the sight of a release from an injection line at their Keel West Water Flood Plant. This is just east of Loco Hills 2-3 miles down Skelly Road. The release point and affected area is to the south of the water plant. Hungry Horse, LLC will be conducting the remediation. They were extracting the free standing liquid with vac trucks when I left. We will move in the first of next week and began the remediation. I plan to get the "sloppy" stuff up first and then we'll do some sampling as needed to come up with a remediation work plan for submission to you guys.

Jim, I think one of your people has already been contacted by Dennis or maybe even att eh site. I can't remember who he said it was though, seems like it was a lady. Do you prefer us to work through you on this remediation or through this person?

Mike, Dennis said he was going to give you a call with a verbal report on the release. I'll get the C 141 completed and get it to you. I couldn't find any info on OCD's website about this particular location.....Would it have an API number or would it be listed by some other name perhaps?

From: Sent: Vernon Black [vernon@hungry-horse.com] Wednesday, February 23, 2011 6:11 AM

To: Cc: tgregsto@blm.gov Bratcher, Mike, EMNRD

Subject:

RE: Linn Energy's Waterflood spill: H E West 27 spill map

That's certainly not a problem. I'll be contact with you.

Vernon

From: tgregsto@blm.gov [mailto:tgregsto@blm.gov]

Sent: Tuesday, February 22, 2011 6:13 PM

To: Vernon Black

Cc: 'Bratcher, Mike, EMNRD'

Subject: RE: Linn Energy's Waterflood spill: H E West 27 spill map

BLM will wish to witness the soil sampling. Contact me three days prior to set up a mutually agreeable time for the sampling. Cell number: 575-361-2635. Contractor must have jars, jar labels, and jar seals on site during the sampling event. Proper sampling protocols will be followed. BLM will sign the chain of custody lab form for all samples witnessed; witnessed samples will be sealed and sent to a 3rd party lab for analysis. Samples will be properly handled and preserved during transport and will arrive at the lab as soon as possible and within their storage limits under proper conditions.

. The BLM does not accept field titration results for closure levels or for critical parts of cleanup plan proposals. All closure/confirmation/critical samples must be sent to a 3rd party lab; analyticals to be forwarded to the BLM within 15 days of the sampling event.

Terry Gregston
Environmental Protection Specialist
Bureau of Land Management
620 E. Greene St.
Carlsbad, NM 88220
Office (575) 234-5958
Fax (575) 234-5927

"Vernon Black" <vernon@hungry-horse.com>

To <tgregsto@blm.gov>, "'Bratcher, Mike, EMNRD'" <mike.bratcher@state.nm.us>

02/22/2011 02:14 PM

Subject RE: Linn Energy's Waterflood spill: H E West 27 spill map

Terry, thanks for the well info.....this will put us all on the same page so to speak for a reference. One of our supvs was on site yesterday and they were still using vac trucks to get up the liquid. As soon as the vac trucks are out of the way and the free-standing liquid is up, we'll get started.

My firsts priority is to get the "sloppy sludge" up. This will probably mean excavating down about 1'. Once we get this stuff up, we can get a few soil samples and see exactly we're working with. Once I get the lab results back, I'll contact both of you guys for input prior to formulating a remediation plan.

We'll certainly take care as to not disturb or cross contaminate any more of the surrounding area.

Mike, based upon info I've found, depth to groundwater is 300' or greater.

If either of you have questions of concerns about what I've proposed to do to begin this project, please feel free to give me a call. I look forward to working with guys again. It's been a while since I had a remediation job on BLM land in Eddy County.

Thanks, Vernon K. Black H.S.E. Hungry Horse, LLC Hobbs, NM 575 393 3386 office 575 631 2253 cell

From: tgregsto@blm.gov [mailto:tgregsto@blm.gov]

Sent: Monday, February 21, 2011 3:50 PM

To: jamos@blm.gov

Cc: 'Bratcher, Mike, EMNRD'; Vernon Black

Subject: Re: Linn Energy's Waterflood spill: H E West 27 spill map

I was out on this spill last Thursday afternoon, 02/17/11. Apparently, it was only discovered that morning. I have tied this particular spill to the H E West #27 injection well, which sits on the same pad as the injection facility, I believe. API #3001505074, Lease #NMLC029426B. The Federal Tracking # for this spill is 11NU034TG.

The spill origin point was midway between the H E West 27 and the H E West 29. The spill had a pooling area at the point of origin, ran 500 feet south-southwest, and created a second large pool area at the terminal point of the spill measuring approx. 80x75 feet across. Terminal pool was in a heavily vegetated low area just north of the H E West B 24 well pad.

Spill was predominantly produced water, but it had a lot of oil associated with it as well. Although a new spill, it ran along a previously disturbed area, so archeology is not an issue. Operator was given verbal permission to go ahead and vacuum up freestanding fluids and to remove oiled surface contamination. It was emphasized to the operator that surface contamination should be picked up and removed and NOT pushed or bladed into surrounding soils or into piles (a practice that only spreads the contamination). The contractor should scoop it up and put it in a dump truck to haul off rather than attempt to push it with a blade. The operator was also going to have to put a temporary road in to access the spill site and perform cleanup operations. This temporary road should be removed and reclaimed as part of the spill cleanup plan.

See attached spill map. Spill area is in blue/green.

Terry Gregston
Environmental Protection Specialist
Bureau of Land Management
620 E. Greene St.
Carlsbad, NM 88220
Office (575) 234-5958
Fax (575) 234-5927

James Amos/CFO/NM/BLM/DOI

02/19/2011 01:01 PM

To "Vernon Black" <vernon@hungry-horse.com>, Terry G Gregston/CFO/NM/BLM/DOI@BLM cc "'Bratcher, Mike, EMNRD'" <mike.bratcher@state.nm.us>

Subject Re: Linn Energy's Keel West Water Flood PlantLink

I've sent Terry Gregston this info. Terry is the lead for Eddy County, Trishia Bad Bear is the lead in Lea County. I back-up both, thanks

"Vernon Black" <vernon@hungry-horse.com>

02/19/2011 08:49 AM

To "Bratcher, Mike, EMNRD" <mike.bratcher@state.nm.us>, <jamos@blm.gov>

CC

Subject Linn Energy's Keel West Water Flood Plant

Good Morning Gentlemen,

I was out with Linn Operating's Dennis Potter Friday afternoon at the sight of a release from an injection line at their Keel West Water Flood Plant. This is just east of Loco Hills 2-3 miles down Skelly Road. The release point and affected area is to the south of the water plant. Hungry Horse, LLC will be conducting the remediation. They were extracting the free standing liquid with vac trucks when I left. We will move in the first of next week and began the remediation. I plan to get the "sloppy" stuff up first and then we'll do some sampling as needed to come up with a remediation work plan for submission to you guys.

Jim, I think one of your people has already been contacted by Dennis or maybe even att eh site. I can't remember who he said it was though, seems like it was a lady. Do you prefer us to work through you on this remediation or through this person?

Mike, Dennis said he was going to give you a call with a verbal report on the release. I'll get the C 141 completed and get it to you. I couldn't find any info on OCD's website about this particular location.....Would it have an API number or would it be listed by some other name perhaps?

From:

tgregsto@blm.gov

Sent:

Tuesday, February 22, 2011 6:13 PM

To:

Vernon Black

Cc:

Bratcher, Mike, EMNRD

Subject:

RE: Linn Energy's Waterflood spill: H E West 27 spill map

BLM will wish to witness the soil sampling. Contact me three days prior to set up a mutually agreeable time for the sampling. Cell number: 575-361-2635. Contractor must have jars, jar labels, and jar seals on site during the sampling event. Proper sampling protocols will be followed. BLM will sign the chain of custody lab form for all samples witnessed; witnessed samples will be sealed and sent to a 3rd party lab for analysis. Samples will be properly handled and preserved during transport and will arrive at the lab as soon as possible and within their storage limits under proper conditions.

The BLM does not accept field titration results for closure levels or for critical parts of cleanup plan proposals. All closure/confirmation/critical samples must be sent to a 3rd party lab; analyticals to be forwarded to the BLM within 15 days of the sampling event.

Terry Gregston
Environmental Protection Specialist
Bureau of Land Management
620 E. Greene St.
Carlsbad, NM 88220
Office (575) 234-5958
Fax (575) 234-5927

"Vernon Black" <vernon@hungry-horse.com>

To <tgregsto@blm.gov>, "'Bratcher, Mike, EMNRD'" <mike.bratcher@state.nm.us>

CC

02/22/2011 02:14 PM

Subject RE: Linn Energy's Waterflood spill: H E West 27 spill map

Terry, thanks for the well info.....this will put us all on the same page so to speak for a reference. One of our supvs was on site yesterday and they were still using vac trucks to get up the liquid. As soon as the vac trucks are out of the way and the free-standing liquid is up, we'll get started.

My firsts priority is to get the "sloppy sludge" up. This will probably mean excavating down about 1'. Once we get this stuff up, we can get a few soil samples and see exactly we're working with. Once I get the lab results back, I'll contact both of you guys for input prior to formulating a remediation plan.

We'll certainly take care as to not disturb or cross contaminate any more of the surrounding area.

Mike, based upon info I've found, depth to groundwater is 300' or greater.

If either of you have questions of concerns about what I've proposed to do to begin this project, please feel free to give me a call. I look forward to working with guys again. It's been a while since I had a remediation job on BLM land in Eddy County.

Thanks,

Vernon K. Black H.S.E. Hungry Horse, LLC Hobbs, NM 575 393 3386 office 575 631 2253 cell

From: tgregsto@blm.gov [mailto:tgregsto@blm.gov]

Sent: Monday, February 21, 2011 3:50 PM

To: jamos@blm.gov

Cc: 'Bratcher, Mike, EMNRD'; Vernon Black

Subject: Re: Linn Energy's Waterflood spill: H E West 27 spill map

I was out on this spill last Thursday afternoon, 02/17/11. Apparently, it was only discovered that morning. I have tied this particular spill to the H E West #27 injection well, which sits on the same pad as the injection facility, I believe. API #3001505074, Lease #NMLC029426B. The Federal Tracking # for this spill is 11NU034TG.

The spill origin point was midway between the H E West 27 and the H E West 29. The spill had a pooling area at the point of origin, ran 500 feet south-southwest, and created a second large pool area at the terminal point of the spill measuring approx. 80x75 feet across. Terminal pool was in a heavily vegetated low area just north of the H E West B 24 well pad.

Spill was predominantly produced water, but it had a lot of oil associated with it as well. Although a new spill, it ran along a previously disturbed area, so archeology is not an issue. Operator was given verbal permission to go ahead and vacuum up freestanding fluids and to remove oiled surface contamination. It was emphasized to the operator that surface contamination should be picked up and removed and NOT pushed or bladed into surrounding soils or into piles (a practice that only spreads the contamination). The contractor should scoop it up and put it in a dump truck to haul off rather than attempt to push it with a blade. The operator was also going to have to put a temporary road in to access the spill site and perform cleanup operations. This temporary road should be removed and reclaimed as part of the spill cleanup plan.

See attached spill map. Spill area is in blue/green.

Terry Gregston
Environmental Protection Specialist
Bureau of Land Management
620 E. Greene St.
Carlsbad, NM 88220
Office (575) 234-5958
Fax (575) 234-5927

James Amos/CFO/NM/BLM/DOI

02/19/2011 01:01 PM

To "Vernon Black" <vernon@hungry-horse.com>, Terry G Gregston/CFO/NM/BLM/DOI@BLM cc "'Bratcher, Mike, EMNRD'" <mike.bratcher@state.nm.us>

Subject Re: Linn Energy's Keel West Water Flood Plant \underline{Link}

I've sent Terry Gregston this info. Terry is the lead for Eddy County, Trishia Bad Bear is the lead in Lea County. I back-up both, thanks

"Vernon Black" <vernon@hungry-horse.com>

02/19/2011 08:49 AM

To "'Bratcher, Mike, EMNRD'" <mike.bratcher@state.nm.us>, <jamos@blm.gov> cc
Subject Linn Energy's Keel West Water Flood Plant

Good Morning Gentlemen,

I was out with Linn Operating's Dennis Potter Friday afternoon at the sight of a release from an injection line at their Keel West Water Flood Plant. This is just east of Loco Hills 2-3 miles down Skelly Road. The release point and affected area is to the south of the water plant. Hungry Horse, LLC will be conducting the remediation. They were extracting the free standing liquid with vac trucks when I left. We will move in the first of next week and began the remediation. I plan to get the "sloppy" stuff up first and then we'll do some sampling as needed to come up with a remediation work plan for submission to you guys.

Jim, I think one of your people has already been contacted by Dennis or maybe even att eh site. I can't remember who he said it was though, seems like it was a lady. Do you prefer us to work through you on this remediation or through this person?

Mike, Dennis said he was going to give you a call with a verbal report on the release. I'll get the C 141 completed and get it to you. I couldn't find any info on OCD's website about this particular location.....Would it have an API number or would it be listed by some other name perhaps?

From:

Vernon Black [vernon@hungry-horse.com] Tuesday, February 22, 2011 2:14 PM

Sent:

tgregsto@blm.gov; Bratcher, Mike, EMNRD

Subject:

RE: Linn Energy's Waterflood spill: H E West 27 spill map

Terry, thanks for the well info.....this will put us all on the same page so to speak for a reference. One of our supvs was on site yesterday and they were still using vac trucks to get up the liquid. As soon as the vac trucks are out of the way and the free-standing liquid is up, we'll get started.

My firsts priority is to get the "sloppy sludge" up. This will probably mean excavating down about 1'. Once we get this stuff up, we can get a few soil samples and see exactly we're working with. Once I get the lab results back, I'll contact both of you guys for input prior to formulating a remediation plan.

We'll certainly take care as to not disturb or cross contaminate any more of the surrounding area.

Mike, based upon info I've found, depth to groundwater is 300' or greater.

If either of you have questions of concerns about what I've proposed to do to begin this project, please feel free to give me a call. I look forward to working with guys again. It's been a while since I had a remediation job on BLM land in Eddy County.

Thanks, Vernon K. Black H.S.E. Hungry Horse, LLC Hobbs, NM 575 393 3386 office 575 631 2253 cell

From: tgregsto@blm.gov [mailto:tgregsto@blm.gov]

Sent: Monday, February 21, 2011 3:50 PM

To: jamos@blm.gov

Cc: 'Bratcher, Mike, EMNRD'; Vernon Black

Subject: Re: Linn Energy's Waterflood spill: H E West 27 spill map

I was out on this spill last Thursday afternoon, 02/17/11. Apparently, it was only discovered that morning. I have tied this particular spill to the H E West #27 injection well, which sits on the same pad as the injection facility, I believe. API #3001505074, Lease #NMLC029426B. The Federal Tracking # for this spill is 11NU034TG.

The spill origin point was midway between the H E West 27 and the H E West 29. The spill had a pooling area at the point of origin, ran 500 feet south-southwest, and created a second large pool area at the terminal point of the spill measuring approx. 80x75 feet across. Terminal pool was in a heavily vegetated low area just north of the H E West B 24 well pad.

Spill was predominantly produced water, but it had a lot of oil associated with it as well. Although a new spill, it ran along a previously disturbed area, so archeology is not an issue. Operator was given verbal permission to go ahead and vacuum up freestanding fluids and to remove oiled surface contamination. It was emphasized to the operator that surface contamination should be picked up and removed and NOT pushed or bladed into surrounding soils or into piles (a practice that only spreads the contamination). The contractor should scoop it up and put it in a dump truck to haul off rather than attempt to push it with a blade. The operator was also going to have to put a temporary road in to access the

spill site and perform cleanup operations. This temporary road should be removed and reclaimed as part of the spill cleanup plan.

See attached spill map. Spill area is in blue/green.

Terry Gregston
Environmental Protection Specialist
Bureau of Land Management
620 E. Greene St.
Carlsbad, NM 88220
Office (575) 234-5958
Fax (575) 234-5927

James Amos/CFO/NM/BLM/DOI

02/19/2011 01:01 PM

To "Vernon Black" <vernon@hungry-horse.com>, Terry G Gregston/CFO/NM/BLM/DOI@BLM

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

Subject Re: Linn Energy's Keel West Water Flood PlantLink

I've sent Terry Gregston this info. Terry is the lead for Eddy County, Trishia Bad Bear is the lead in Lea County. I back-up both, thanks

"Vernon Black" <vernon@hungry-horse.com>

To "Bratcher, Mike, EMNRD" <mike.bratcher@state.nm.us>, <jamos@blm.gov>

02/19/2011 08:49 AM

Subject Linn Energy's Keel West Water Flood Plant

Good Morning Gentlemen,

I was out with Linn Operating's Dennis Potter Friday afternoon at the sight of a release from an injection line at their Keel West Water Flood Plant. This is just east of Loco Hills 2-3 miles down Skelly Road. The release point and affected area is to the south of the water plant. Hungry Horse, LLC will be conducting the remediation. They were extracting the free standing liquid with vac trucks when I left. We will move in the first of next week and began the remediation. I plan to get the "sloppy" stuff up first and then we'll do some sampling as needed to come up with a remediation work plan for submission to you guys.

Jim, I think one of your people has already been contacted by Dennis or maybe even att eh site. I can't remember who he said it was though, seems like it was a lady. Do you prefer us to work through you on this remediation or through this person?

Mike, Dennis said he was going to give you a call with a verbal report on the release. I'll get the C 141 completed and get it to you. I couldn't find any info on OCD's website about this particular location.....Would it have an API number or would it be listed by some other name perhaps?

From:

Bratcher, Mike, EMNRD

Sent:

Tuesday, February 22, 2011 7:32 AM

To:

'Vernon Black'

Subject:

RE: Linn Energy's Keel West Water Flood Plant

Vernon,

If it is just a battery, it will not have an API number. It would make it much easier to track and do the data entry if we can associate it with an API number. If there is a well at the battery, that would be great. If not, we may be able to use the closest well this battery sends water to for injection. I will be out in the field most of the day today, but if you need to call, I should be back in the office after 3:30 PM.

MIKE BRATCHER

NMOCD District 2 1301 W. Grand Ave. Artesia, NM 88210 575-748-1283 Ext.108 575-626-0857 mike.bratcher@state.nm.us

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

Sent: Saturday, February 19, 2011 8:49 AM **To:** Bratcher, Mike, EMNRD; <u>jamos@blm.gov</u>

Subject: Linn Energy's Keel West Water Flood Plant

Good Morning Gentlemen,

I was out with Linn Operating's Dennis Potter Friday afternoon at the sight of a release from an injection line at their Keel West Water Flood Plant. This is just east of Loco Hills 2-3 miles down Skelly Road. The release point and affected area is to the south of the water plant. Hungry Horse, LLC will be conducting the remediation. They were extracting the free standing liquid with vac trucks when I left. We will move in the first of next week and began the remediation. I plan to get the "sloppy" stuff up first and then we'll do some sampling as needed to come up with a remediation work plan for submission to you guys.

Jim, I think one of your people has already been contacted by Dennis or maybe even att eh site. I can't remember who he said it was though, seems like it was a lady. Do you prefer us to work through you on this remediation or through this person?

Mike, Dennis said he was going to give you a call with a verbal report on the release. I'll get the C 141 completed and get it to you. I couldn't find any info on OCD's website about this particular location.....Would it have an API number or would it be listed by some other name perhaps?

Thanks, Vernon K. Black H.S.E. Hungry Horse, LLC Hobbs, NM 575 393 3386 office 575 631 2253 cell