

Mr. Joel Martin  
Drilling Manager  
NADEL AND GUSSMAN PERMIAN, LLC  
601 N. Marienfeld, Suite 508  
Midland, TX 79701

**HOBBS OCD**

25 September 2012

**OCT 01 2012**

Mr. Geoffrey Leking  
OIL CONSERVATION DIVISION  
1625 N. French Drive  
Hobbs, NM 88240

**RECEIVED**

Re: Loco Ocho State No. 1 Pad and Pit Final Remediation Report  
U/L N Sec. 33 16S 35E 660 FSL 1980 FWL

**1RP-8-12-2844**  
**API No.: 30-025-36285**

Dear Mr. Leking:

Nadel and Gussman Permian, LLC (NGP) submitted its notice of intent for final closure of the Loco Ocho State No. 1 drilling pad and pit on August 15, 2012 following NGP's P&A activities that were completed on this location during February 2012. Final reclamation implementation was based on the results of the August 21, 2012 New Mexico Oil and Gas Conservation Division (NMOCD) onsite inspection of the, then, current pit area(s) and pad conditions. NGP had sampled the drilling pad on 18 March 2011 in preparation for closure. During the actual closure event, a total of 4 more sampling events were needed to verify onsite conditions following excavation, prior to release by the NMOCD

On August 1st, the NMOCD made an independent assessment of the Loco Ocho State No. 1 pit area(s) and mandated that the pit area(s) located along the northern edge of the drilling pad will be closed by excavation. NGP was required to delineate vertical and horizontal contamination levels of the pit area(s) due to the close proximity of the groundwater table located at approximately 59' to 61'. Subsequently, after using the backhoe to assess the situation, excavation began. At all levels of the excavation, every effort was made to reduce the amount of material hauled to CRI for disposal.

The pad caliche from the northwest corner was also hauled to disposal as mandated by the NMOCD because soil chlorides were in excess of 2,500 mg/Kg. Efforts were made to resample on several occasions but horizontal movement of the pit area(s) discharges, which had both surfaced and moved horizontally by several feet, significantly influenced contamination in this area to levels greater than 20,000 mg/Kg. Tank battery areas had very limited excavation, totaling less than approximately 6 yards. There was approximately only 6 to 8 inches of contaminated material present where the separator was previously located, making this a very small footprint. In fact, infield sampling shows beneath the caliche layer here, soils meet background at 88 mg/Kg. Summarily then, the total amount of material hauled to CRI from the Loco Ocho State No.1 was approximately 110 loads.

*Approved*  
*Jeff Loring*  
*Env. Specialist*  
*NMOCD-DIST1*  
*10/01/12*

Prior to backfilling, all excavated areas were final tested to ensure compliance with NMOCD Recommended Remediation Action Levels (RRAL's). The entire area was then treated with calcium sulfate and nitrate to reduce the influence of any remaining soil chlorides and enhance degradation of remaining hydrocarbons. Since the excavation limits were arrested at the cap that covers this area in an undulating fashion, sometimes outcropping at a few inches and in other areas plunging to depths greater than 15 feet, the actual amount of material hauled off was significantly reduced.

Post excavation, the clean caliche remaining on the pad and the access road area was used for backfilling, again reducing haul and material costs for closure. This material contained a significant amount of excess soil resulting from the push back of the caliche into a long ridge across the pad from which it was moved into the old pit area(s). The topsoil was available onsite and used to cover the caliche prior to seeding. It is important to note that the area is highly rocky and topsoil very thin, found only among the rocky masses. In order for the final topographic relief to match the surrounding terrain, excessive additional soil could not be applied. Therefore, utilization of the onsite materials was sufficient.

The "bald areas" located along the west, north and east sides of the drilling pad were tested for soil chlorides prior to completion of the reclamation process. These areas were found to be a naturally occurring "scar" on the landscape caused by lichen present during low moisture conditions.

Reclamation activities were completed and NMOCD's final inspection occurred on September 19th. Seeding the footprint with a local grass seed mixture approved by the NMOCD occurred on September 21st.

Please call (432-682-4429) should you have questions.

Sincerely



Joel Martin  
Drilling Manager

Enclosures: Laboratory Analyticals

State of New Mexico  
Energy, Minerals and Natural Resources Department

Susana Martinez  
Governor

John H. Bemis  
Cabinet Secretary

Brett F. Woods, Ph.D.  
Deputy Cabinet Secretary

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Jami Bailey, Division Director  
Oil Conservation Division  
HOBBS OCD



OCT 01 2012

September 28, 2012

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Re: Nadel and Gussman Permian Loco Ocho State 001 Remediation of Former Pit Area

My first visit to the Nadel and Gussman Permian Loco Ocho State 001, API# 30-025-36285-00-00, N-33-16S-35E site was on August 1, 2012. I went by myself in order to be uninfluenced by other personnel's observations. Of the areas of concern that I identified, the most striking was the large bare area running north and northwest of the northwest portion of the pad. Although I suspected that part of the bare area could possibly be an old pit area, it was evident that a larger contamination issue was present than just an old pit footprint. The soils were heavily stained with white chloride residue which reached onto the pad's northwest corner as well to the west and north. I came to the conclusion that whatever the source of the contamination was, it would have to be remediated in order to protect the environment; both the surficial and underlying soils as well as the ground water which is estimated to be between 55 feet to 70 feet below ground surface in the area. On August 24, 2012 I returned to the site to observe the progress of the soils investigation. Excavation of the area north of the pad's northwest portion displayed that it was indeed the location of an old drilling pit containing drilling mud and other contaminated material. Although liner material was observed, it did not appear to have been used in the closure of the pit, but probably was part of the liner when the pit was operating. It was apparent it was not or had not prevented the leaching of contamination from the pit in its present condition. Research into historical documentation of the site has not produced any evidence that there was a design plan or closure plan for the drilling pit. From my observations of the contamination surrounding the pit area and the contents of the pit, I decided that the pit contents should be excavated and disposed of to the greatest extent practically possible in order to adequately protect the environment. In addition, I suggested that Nadel and Gussman should install a liner to protect the environment from any residual contamination left in the pit area after excavation. Instead, Nadel and Gussman suggested the less expensive application of CaSO<sub>4</sub> H<sub>2</sub>O to the bottom and north end of the excavated pit area in order to fix any residual chlorides that still exist. This alternative was approved by OCD. Nadel and Gussman has been successful in remediating this area of concern and the OCD will be mindful of this success in future interactions with the company.

Geoffrey Leking  
Environmental Specialist  
NMOCD-Hobbs  
1625 N. French Drive  
Hobbs, NM 88240  
Office: (575) 393-6161 Ext. 113  
Cell: (575) 399-2990  
email: [geoffreyr.leting@state.nm.us](mailto:geoffreyr.leting@state.nm.us)

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From: "Leking, Geoffrey R, EMNRD" <GeoffreyR.Leking@state.nm.us>  
Subject: Nadel Gussman Loco Ocho State #1 Remediation Complete  
Date: 24 September 2012 09:21:32 CDT  
To: "Sanchez, Daniel J., EMNRD" <daniel.sanchez@state.nm.us>  
Cc: "Gonzales, Elidio L, EMNRD" <ElidioL.Gonzales@state.nm.us>, "cmwink@mac.com" <cmwink@mac.com>

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Daniel

Nadel Gussman has completed the remediation at the Loco Ocho State #1. Reseeding took place Friday. The final report, C-141 and other documentation will be submitted this week. Thank you.

Geoffrey Leking  
Environmental Specialist  
NMOCD-Hobbs  
1625 N. French Drive  
Hobbs, NM 88240  
Office: (575) 393-6161 Ext. 113  
Cell: (575) 399-2990  
email: [geoffreyr.levking@state.nm.us](mailto:geoffreyr.levking@state.nm.us)

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09/19/2012



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Report Date: September 11, 2012

Work Order: 12083004

Page Number: 1 of 3

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Summary Report

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Joel Martin
Nadel & Gussman Permian LLC
600 N. Marienfeld
Suite 508
Midland, TX 79701

Report Date: September 11, 2012

Work Order: 12083004



Project Name: Loco Ocho State #1
Project Number: Pad and Pit Closure

Table with 6 columns: Sample, Description, Matrix, Date Taken, Time Taken, Date Received. Lists 15 samples from 308156 to 308315.

Table with 7 columns: Sample - Field Code, Benzene (mg/Kg), Toluene (mg/Kg), BTEX Ethylbenzene (mg/Kg), Xylene (mg/Kg), MTBE (mg/Kg), TPH DRO - NEW DRO (mg/Kg), TPH GRO GRO (mg/Kg). Contains detailed chemical analysis for 15 samples.

Sample: 308156 - Pit @ 1'

1 Sample dilution due to hydrocarbons.

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Report Date: September 11, 2012

Work Order: 12083004

Page Number: 2 of 3

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Param	Flag	Result	Units	RL
Chloride		<b>13000</b>	mg/Kg	4

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**Sample: 308157 - Pit @ 2'**

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Param	Flag	Result	Units	RL
Chloride		<b>10400</b>	mg/Kg	4

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**Sample: 308158 - Pit NW Area**

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Param	Flag	Result	Units	RL
Chloride		<b>372</b>	mg/Kg	4

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**Sample: 308159 - Pit SE Area**

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Param	Flag	Result	Units	RL
Chloride		<b>223</b>	mg/Kg	4

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**Sample: 308160 - NE Battery Comp.**

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Param	Flag	Result	Units	RL
Chloride		<b>273</b>	mg/Kg	4

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**Sample: 308161 - SW Battery Comp.**

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Param	Flag	Result	Units	RL
Chloride		<b>335</b>	mg/Kg	4

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**Sample: 308162 - Brown Spots**

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Param	Flag	Result	Units	RL
Chloride		<b>74.5</b>	mg/Kg	4

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**Sample: 308163 - Background**

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Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

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Report Date: September 11, 2012

Work Order: 12083004

Page Number: 3 of 3

**Sample: 308313 - Pad NW**

Param	Flag	Result	Units	RL
Chloride		811	mg/Kg	4

**Sample: 308314 - Pad SE**

Param	Flag	Result	Units	RL
Chloride		861	mg/Kg	4

**Sample: 308315 - Pit N Boundary**

Param	Flag	Result	Units	RL
Chloride		817	mg/Kg	4

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Report Date: September 14, 2012

Work Order: 12091333

Page Number: 1 of 1

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## Summary Report

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Nadel & Gussman Permian LLC  
600 N. Marienfeld  
Suite 508  
Midland, TX 79701

Report Date: September 14, 2012

Work Order: 12091333



Project Name: Loco Ocho State #1  
Project Number: Pad and Pit Closure

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
309263	Pad NW @ 4'	soil	2012-09-12	16:50	2012-09-13
309264	Pad SE @ 1'	soil	2012-09-12	17:10	2012-09-13
309265	Pit North Boundary	soil	2012-09-12	16:20	2012-09-13

**Sample: 309263 - Pad NW @ 4'**

Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

**Sample: 309264 - Pad SE @ 1'**

Param	Flag	Result	Units	RL
Chloride		102	mg/Kg	4

**Sample: 309265 - Pit North Boundary**

Param	Flag	Result	Units	RL
Chloride		<20.0	mg/Kg	4

NADEL AND GUSSMAN PERMIAN L.L.C.

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LOCO OCHO STATE #1

660' FSL & 1980' FWL

UNIT N, SEC. 33, T16S, R35E

API #30-025-36285

06/27/2012

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Report Date: April 5, 2011

Work Order: 11032803

Page Number: 1 of 2

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### Summary Report

Nadel & Gussman Permian LLC  
600 N. Marienfeld  
Suite 508  
Midland, TX 79701

Report Date: April 5, 2011

Work Order: 11032803



Project Location: Drilling Pad Closure - P & A  
Project Name: Loco Ocho State No. 1

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
261823	Drilling Pad Closure - SE Area	soil	2011-03-18	13:00	2011-03-25
261824	Drilling Pad Closure - SW Area	soil	2011-03-18	13:20	2011-03-25
261825	Drilling Pad Closure - NE Area	soil	2011-03-18	13:45	2011-03-25
261826	Drilling Pad Closure - NW Area	soil	2011-03-18	14:00	2011-03-25
261827	Drilling Pad Closure - Wellhead Area	soil	2011-03-18	14:10	2011-03-25
261828	Drilling Pad Closure - Background	soil	2011-03-18	14:25	2011-03-25

Sample - Field Code	BTEX				MTBE MTBE (mg/Kg)	TPH DRO - NEW DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)			
261823 - Drilling Pad Closure - SE Area	<0.0200	<0.0200	<0.0200	<0.0200		<50.0	<2.00
261824 - Drilling Pad Closure - SW Area	<0.0200	<0.0200	<0.0200	<0.0200		<50.0	<2.00
261825 - Drilling Pad Closure - NE Area	<0.0200	<0.0200	<0.0200	<0.0200		<50.0	<2.00
261826 - Drilling Pad Closure - NW Area	<0.0200	<0.0200	<0.0200	<0.0200		<50.0	<2.00
261827 - Drilling Pad Closure - Wellhead Area	<0.0200	<0.0200	<0.0200	<0.0200		<50.0	<2.00
261828 - Drilling Pad Closure - Background	<0.0200	<0.0200	<0.0200	<0.0200		<50.0	<2.00

**Sample: 261823 - Drilling Pad Closure - SE Area**

Param	Flag	Result	Units	RL
Chloride		38.5	mg/Kg	2.50

**Sample: 261824 - Drilling Pad Closure - SW Area**

Param	Flag	Result	Units	RL
Chloride		38.5	mg/Kg	2.50

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**Sample: 261825 - Drilling Pad Closure - NE Area**

Param	Flag	Result	Units	RL
Chloride		38.5	mg/Kg	2.50

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**Sample: 261826 - Drilling Pad Closure - NW Area**

Param	Flag	Result	Units	RL
Chloride		2450	mg/Kg	2.50

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**Sample: 261827 - Drilling Pad Closure - Wellhead Area**

Param	Flag	Result	Units	RL
Chloride		721	mg/Kg	2.50

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**Sample: 261828 - Drilling Pad Closure - Background**

Param	Flag	Result	Units	RL
Chloride		<2.50	mg/Kg	2.50

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### Summary Report

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Zach Hernandez  
Nadel & Gussman Permian LLC  
600 N. Marienfeld  
Suite 508  
Midland, TX 79701

Report Date: July 25, 2012

Work Order: 12071124



Project Location: Drilling Pad Closure - P & A  
Project Name: Loco Ocho State No. 1

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
303336	Pad NW Area @ 1'	soil	2012-07-11	08:30	2012-07-11
303337	Rectangular Tank Battery @ 2'	soil	2012-07-11	09:10	2012-07-11
303338	Tank Battery @ 4'	soil	2012-07-11	09:20	2012-07-11
303339	Pit East @ 6 in.	soil	2012-07-11	09:40	2012-07-11

Sample - Field Code	BTEX				TPH DRO - NEW DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
	Benzene (mg/Kg)	Toluene (mg/Kg)	Ethylbenzene (mg/Kg)	Xylene (mg/Kg)		
303336 - Pad NW Area @ 1'	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	<2.00
303337 - Rectangular Tank Battery @ 2'	<0.100	<0.100	0.277	0.195	2330	87.7
303338 - Tank Battery @ 4'	<0.0200	<0.0200	0.0845	0.0776	310	108 Jc
303339 - Pit East @ 6 in.	<0.0200	<0.0200	<0.0200	<0.0200	<50.0	2.96

Sample: 303336 - Pad NW Area @ 1'

Param	Flag	Result	Units	RL
Chloride		87.9	mg/Kg	4

Sample: 303337 - Rectangular Tank Battery @ 2'

Param	Flag	Result	Units	RL
Chloride		11500	mg/Kg	4

Sample: 303338 - Tank Battery @ 4'

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Param	Flag	Result	Units	RL
Chloride		<b>732</b>	mg/Kg	4

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**Sample: 303339 - Pit East @ 6 in.**

Param	Flag	Result	Units	RL
Chloride		<b>26000</b>	mg/Kg	4

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