Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

1220 S. St. Frar	ncis Dr., Santa	a Fe, NM 87505	5	Sa	anta Fe	, NM 875	05						
			Rele	ease Notifi	cation	and Co	orrective A	ction					
					1RP	P-03469							
						<b>OPERA</b>	ΓOR	Ľ	Initia	al Report	XX Fin	al Repor	
Name of Co	ompany: (	Grand Banks	Energy		(	Contact: Terry Duffy or Wayne Price-Price LLC						<u>i</u>	
		rive Midland	TX				No. 432-978-11	26 or 50	5-715-28	809			
Facility Na	me: AUR	#14			F	Facility Typ	e: OIL Well						
Surface Ow	ner: NMS	SLO		Mineral (	Owner: N	MSLO			API No	.30-025-00	0365		
				1		OF REI	FASE						
Unit Letter I	Section 2	Township 16S	Range 32E	Feet from the 1980		South Line	Feet from the 660	East/We East	est Line	County Lea			
				titude		_ 0							
Type of Rele	Pase: Soo In	nitial Report A		ATURE OF 1	RELEA	ASE- See I Volume of	-		Volume I	Recovered			
Source of Re		ани пероп А	muneu				lour of Occurrence			Hour of Dis	scoverv		
Was Immedi			Yes 🗌	] No 🗌 Not R	equired	If YES, To							
By Whom?						Date and H	lour						
Was a Water	rcourse Read		Yes 🗌	] No		If YES, Vo	lume Impacting t	the Water	course.				
If a Waterco	urse was Im	pacted, Descr	ibe Fully '	*- NO									
				n Taken.* <i>See A</i> sen.* <i>See Attac</i>									
regulations a public health should their or the enviro	Ill operators or the envi operations h onment. In a	are required t ronment. The nave failed to a	o report an acceptance adequately OCD accept	e is true and comp nd/or file certain ce of a C-141 rep v investigate and n otance of a C-141	release no ort by the remediate	tifications and NMOCD m contaminati	nd perform correct arked as "Final R on that pose a thr	etive action eport" do eat to grou	ns for rel es not rel and wate	eases which ieve the ope r, surface wa	may endang trator of liab ater, human	ger vility health	
							OIL CON	SERVA	TION	DIVISIO	<u>)N</u>		
	1	1					Hydrologist						
	11/10/00	e Ma				Approved by Environmental Specialist:							
l	map	- jua				11				-			
Signature:	/						- 11 -			1	PLO		
Printed Nam	e. Wavne I	Price				-	/		/		.0		
	ie. wayne f	1100				/					111		
Title: Price	LLC-Mg M	ember			( A	Approval Dat	12/02/2	2015 Ex	piration	Date:	///		
E-mail Addr	ess: wayne	price77@eartl	nlink.net		0	Conditions of	Approval:			Attached	1 <b></b>		
Date: Oct	tober 15-20	15 Dh	one: 50-7	15-2809		///					1RP3469		

 Date:
 October 15, 2015
 Phone:
 50-715-2809

 \* Attach Additional Sheets If Necessary- See Attached Report by Price LLC

# State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe. NM 87505 Form C-141 Revised August 8, 2011 Submit 1 Copy to appropriate District Office in accordance with 19.15.29 NMAC.

1220 S. St. Francis Dr., Santa Fe, NM 87505 Santa	Fe, NM 87505							
Release Notification	on and Corrective A	ction						
	OPERATOR	Initial Report 🔲 Final Report						
Name of Company GRAND BANKS ENERGY	Contact TERRY DU	FFEY						
Address 10 DESTA DRIVE, MIDLAND, TR	Telephone No. 432-9	78-1126						
Facility Name ANDERSON EANCH UNIT	Facility Type WELL	#14						
Surface Owner NMEX STATE Mineral Owner	NMEX STATE	API No. 30-025-00365						
LOCATION OF RELEASE								
	th/South Line Feet from the	East/West Line County						
I Z 165 32E 1980	SOUTH 660	EAST LEA						
Latitude	Longitude							
NATUR	E OF RELEASE							
Type of Release FLOWLINE LEAK	Volume of Release 90 8	BL Volume Recovered NONE						
Source of Release Was Immediate Notice Given?		Date and Hour of Discovery						
Yes X No Not Require	d 11 1 ES, 10 WHOM? 12-15	-14 12-16-14 -10AM 10AM						
By Whom?	Date and Hour	- IDAM IDAM						
Was a Watercourse Reached?	If YES, Volume Impacting th	ne Watercourse.						
I Yes X No								
Describe Cause of Problem and Remedial Action Taken.* A STEEL LINE SJPPLYING POWER PUMP DEVELOPED A LAK AT A UPWARD FOR CONNECTION TO THE Describe Area Affected and Cleanup Action Taken.* APPROXIMATELY 160405 OF OUCC AND REMOVED TO AN APPROVED TAKEN BEFORE THE ARGA'IS BA I hereby certify that the information given above is true and complete to regulations all operators are required to report and/or file certain release public health or the environment. The acceptance of a C-141 report by	NELBOW in THE WELLHGAD ONTAMINATED SO LANFILL. SOIL ACKFILLES W/ T the best of my knowledge and ur notifications and perform correct	OL WAS EXCANATED OL WAS EXCANATED SAMPLES WILL BE OPSOIL Inderstand that pursuant to NMOCD rules and ive actions for releases which may endanger						
should their operations have failed to adequately investigate and remedi or the environment. In addition, NMOCD acceptance of a C-141 report federal, state, or local laws and/or regulations.	ate contamination that pose a thre does not relieve the operator of re	at to ground water, surface water, human health esponsibility for compliance with any other						
	<u>OIL CONS</u>	SERVATION DIVISION						
Signature: McOulling	Approved by Environmental Sp	ecialist:						
Printed Name: TERRY DUFFEY								
Title: AUENT	Approval Date:	Expiration Date:						
E-mail Address: TERRY. DJFFEY CATT. NET	Conditions of Approval:	Attached 🗌						
Date: 12-30-14 Phone: 432-978-11	24							

\* Attach Additional Sheets If Necessary

October 11, 2015

### Attachment for Final C-141 Closure Report for Grand Banks 1RP-03469 AUR#14 Well Site:

<u>Background:</u> On December 14, 2014 Grand Banks had a 90-barrel release of crude oil near the AUR#14 wellhead. The oil spilled on the pad and ran off in sheet flow fashion until it entered a series of small erosional features and flowed approximately 400-500 ft., stopping in a small depressed low lying area where it pooled.

Due to the site location and sensitivity of a nearby playa lake, immediate emergency response actions were taken by removing approximately 160 yards of oily saturated soils. The soils were disposed of at the OCD permitted Gandy-Marley Landfill. See attached aerial plot plan depicting the original spill footprint and sample points.

<u>Site Hydrogeology</u>: The ARU#14 sets at an elevation of approximately 4397 AMSL upon a hard caliche bedrock. Just west of the well pad is a significant relief feature sloping 23 feet into a nearby playa lake, where the local rancher has dug a cattle drinker pond.

The soil underlying the well pad is typical hardpan caliche and transgresses into a red stiff clay loam just off of the west end of the well pad.

The area overlays the Ogallala water bearing formation where the depth of groundwater ranges from 180-220 ft., below the surface.

<u>Site Investigation</u>: After the emergency response actions, Grand Bands requested Price LLC to perform a site assessment to determine if any "Constituents of Concerns" (COC's) remained in the soil that exceeded the OCD leak and spill guidelines.

Price LLC collected several random and selected soil samples through out the site and tested for Volatile Organics, TPH, and Chlorides using field test equipment. In addition, the site was screened and noted for olfactory smells and visual oil stains.

There were six areas that were singled out and concentrated on; these were marked as Pool #1, 2, 2A, 3, 4 and 5. The field test results are compiled in an excel spreadsheet and attached hereto for reference. Theses locations are also marked on the aerial plot plan.

The emergency response actions were successful in mitigating any significant threats to both surface and groundwater. There were two areas which needed addressing and that was Pool #3, the far area where the oil pooled and stopped flowing, and Pool #5, which was the pad itself.

<u>Natural Attenuation</u>: Since the spill consisted of predominantly light crude oil, with very little salt, it was decided to allow natural attenuation of the remaining areas and monitor these periodically for progress. This was allowed during the time period of February thru early June. This method work extreamely well for the exposed soils, especially for the more mobile volatile organics.

June Site Inspection and Additional Work: Price LLC re-inspected the site in June of 2015 and a decision was made to remove additional soils predominantly from the Pool #3 and Pool #5 areas, and some minor visually contaminated soils from the other areas, including Pool #2. Approximately 60 yards of contaminated soils were excavated and hauled to the Gandy-Marley Landfill. Caliche backfill was brought back in to rebuild the pad area and to install a berm to prevent future runoff. See attached the June excavation photos showing the additional excavated areas of concern.

Pool #3 and Pool #5 and a total site bottom composite sample was collected from the entire site and submitted to the lab for confirmation. The samples were analyzed for BTEX, TPH and Chlorides. The results were basically "ND" for all samples submitted. See attached Lab Reports.

### July-Aug-September 2015 Final Work:

During the summer of 2015 this area experienced an unusual amount of rainfall and it was apparent that the previous erosional features and excavated areas were in need of some attention. Therefore, Grand Banks approved a landscaping project to improve the runoff area features.

Both the State Land Office and the Rancher were in agreement as this entailed removing the snakeweed, bitter weed and mesquite in the drainage path, fill in the erosional features and contour the site by converting it into sheet flow conditions rather than point source features.

The final step including plowing, disking and applying a winter (Hold Over) conditional fertilizer, (8-8-8).

This provided a two-fold advantage; it eliminated any possible point source to the nearby playa lake, and drastically improved the ability of this landscape to return to its natural state.

The site was not re-seeded, as any SLO/BLM seed mix will not survive in the predominately iron rich stiff red-clay loam until natural processes take place. The playa buffalo grass will eventually take hold after a natural process of successful species replacement.

Please find attached a series of photos showing the final reclamation.

## Conclusion and Recommendations:

It was apparent that the initial remedial actions taken prevented any significant mobility of the oil. The deepest vertical migration was noted to be less than 18" even in the pooled areas.

In addition, the natural attenuation saved the company considerable cost in the long run and allowed money available for final site restoration with new installed BMP's.

The site has been cleaned-up and remediated to OCD guidelines. On behalf of Grand Banks, Price LLC respectfully request approval and acceptance of the Final C-141 attached hereto.



	Grand Banks-1RP-03469	Field Test Re	esults				
	Feb 13-16 2015						
			Cal 100 Iso	-B Drexsi	1	Hach H-	-L
			PID-ppm	TPH-pp	m	Cl's-ppn	n
Sample ID	Description			418.1 \	with methanol		
 see Plot Plan				extract	ion		
Pool #1	Sheet Flow Area Just West of Pad		0.5	100	6	ND	<60 ppm
 Pool #2	Bottom of small excavated erosioal path-ditch		8.3	425	8	ND	<60 ppm
 Pool #2A	Bottom of small excavated erosioal path-ditch		1.2	98	6	0.2	<60 ppm
Pool #3	Where majority of oil pooled and stopped-excavated	d one foot	341.9	>10,00	0	0.2	<60 ppm
 Pool #4	Side finger flow-excavted area		4.7	34	4	ND	<60 ppm
 Pool #5	Pad Area near Wellhead-Area scraped down 8"		254.6	>10,00	<mark>0</mark>	200	
 	Areas of Concern Highligthed in Yellow						

# June 2015 Photos After Additional Excavation.



Pool #5 Pad Area Looking West, background shows Playa Lake and Cattle Pond.-This area was excavated to remove oily stained soil and sampled.



Pool #5 Area and wellhead-A composite bottom hole sample was collected and sent to Lab for confirmation.



Pool 2 & 2A drainage area after excavation. Area was screened with Field Test and all were below guideline criteria.



Pool #3 depressed area where oil flow stopped. Area has been excavated and resampled and sent to Lab for confirmation. Foreground shows drainage path.

# **Summary Report**

Lester Waynce Price Jr. Price LLC 312 Encantado Ridge Ct. NE Rio Rancho, NM 87124

Report Date: June 23, 2015

Work Order: 15061211

Project Location: Maljamar, NM Project Name: Grandbanks ARU #14

			Date	Time	Date
Sample	Description	Matrix	Taken	Taken	Received
395526	Surface Composite	soil	2015-06-05	14:10	2015-06-11
395527	Pool 3	soil	2015-06-05	12:50	2015-06-11
395528	Pool 5	soil	2015-06-05	12:40	2015-06-11

	BTEX				MTBE	TPH DRO - NEW	TPH GRO
	Benzene	Benzene Toluene Ethylbenzene Xylene				DRO	GRO
Sample - Field Code	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)	(mg/Kg)
395526 - Surface Composite	< 0.0200	< 0.0200	< 0.0200	< 0.0200		<50.0	<4.00
395527 - Pool 3	< 0.0200	< 0.0200	< 0.0200	< 0.0200		$<\!50.0$	<4.00
395528 - Pool 5	< 0.0200	< 0.0200	< 0.0200	< 0.0200		$<\!50.0$	<4.00

#### Sample: 395526 - Surface Composite

Param	Flag	Result	Units	$\operatorname{RL}$
Chloride	Qs	$<\!25.0$	m mg/Kg	25

### Sample: 395527 - Pool 3

Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		<25.0	mg/Kg	25

#### Sample: 395528 - Pool 5

Param	Flag	Result	Units	$\operatorname{RL}$
Chloride		<25.0	m mg/Kg	25

TraceAnalysis, Inc. • 6701 Aberdeen Ave., Suite 9 • Lubbock, TX 79424-1515 • (806) 794-1296 This is only a summary. Please, refer to the complete report package for quality control data.

# **Final Reclamation Photos:**



Pool #5-Well Pad Re-built-looking North.



Well Pad-Showing New Runoff Berm-Looking SW.



Pool #1 Area-plowed, disked and fertilizer application-Looking East with well pad in background.



Looking West-



Standing on West end of well pad-looking SW- Area plowed, disked and fertilized.