District I 1625 N. French Dr., Hobbs, NM 88240 1501 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Road, Aztec, NM 87410 District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

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 October 10, 2003

Submit 2 Copies to appropriate
District Office in accordance
with Rule 116 on back
side of form

Release Notification and Corrective Action											
	3000	15322	28			OPERAT	OR Z	5.3	Initia	al Report     Final Report	
Name of Co	<del></del>	Devon Ene					Steve Zink				
					Telephone No. 505-632-0244						
					Facility Type Gas Well						
Surface Owner BLM/BOR Mineral Owner				wner	BLM Lease No. NEBU 330						
LOCATION OF RELEASE											
Unit Letter	Section	Township	Range	Feet from the		South Line	Feet from the		Vest Line	County	
K	27	31N	7W	2,400	Sout	h Line	2,260	We	est Line	San Juan	
	<b>.</b>		Lati	tudeN 36°52	.191'	_ Longitud	<b>e</b> _W 107° 33.54	8'			
				NAT	URE	OF RELI	EASE				
Type of Release Produced Water						Volume of Release 83 Bbls Volume Re					
Source of Re		Opened ended	poly line				our of Occurrence	;	Date and	Hour of Discovery 11/5/4 13:30	
Was Immedia	ate Notice (		Yes [	No 🗌 Not Re	quired	If YES, To Denny Fo					
By Whom?	Darren	Smith					our November 5				
Was a Water	course Read	ched?	Yes [	] No		If YES, Vo 73 Barrels	lume Impacting th	ne Wate	ercourse.		
16 - W/											
If a Watercourse was Impacted, Describe Fully.* Produced water drained from location down ravine below the high water level (HWL) of Navajo Lake. Spill did not reach current water level of lake. A trace amount of compressor lube oil was present in the produced water stream. This oil was captured high in the drainage in the vicinity of the release site and did not reach the HWL. Water in-filtrated the sandy soils along the spill path. Spill start location was Lat.: N 36° 52.191' Long.: W 107° 33.548' EL.: 6318'. Spill end location was Lat.: N 36° 52.034' Long.: W 107° 33.795' EL: 6063'. Lake water location was Lat.: N 36° 51.823' Long.: W 107° 33.897' EL.: 6011'.  Describe Cause of Problem and Remedial Action Taken.* Valve at water valve culvert was accidentally opened by crew that was painting equipment. Line was open ended at the NEBU 330 location. Produced water from the NEBU 494 coal well and line leaked and drained into ravine. Valve was locked closed. Polyline was excavated and capped.  Describe Area Affected and Cleanup Action Taken.* Ravine and dry lake bed. Salt stained soils were mixed with existing non-contaminated soils in a few locations high in the drainage. A soil sample at the beginning and at the end of the leak was obtained and analyzed for Chlorides and SAR value (see attached).  Soil sampling results were as follows: Start Chloride level = 83.7 mg/kg SAR=2.2 End Chloride level = 14.5 mg/kg SAR= 0.2 Also attached is a current water analysis from the source of the leak the NEBU 494. Soil sampling was witnessed by the OCD's Denny Foust on 11/8/04.											
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.											
Signature:				OIL CONSERVATION DIVISION  1 Server Tourt							
Printed Nam	e: Steve	Zink				Approved by District Supervisor: Cor Frank Chave >					
Title: Produ	ction Forer	nan				Approval Da	م ا حمدید		Expiration		
E-mail Addr	ess: Steve	.Zink@dvn.co	om			Conditions of	Approval:			Attached	
Date: No	vember 12,	2004 Pho	one: 505-	632-0244							

\* Attach Additional Sheets If Necessary

NDGF0431446679



Mg

## **BJ SERVICES**

## Farmington District Lab Water Analysis Report

Test # FW04-0135

					Test #	FW04-0135	
Customer/We	ell Informatio	on was a second				the second	
Company:	Devon		Date:		11/8/2004		
Well Name:	Nebu 494 2	nd Tank		red for:	Kyle Beebe		
Location:	14000 404 2	ina rank		itted by:	Dave Shephard		
State:	County, NN	Λ		red by:			
Formation:	Fruitland Co			Type:	Roger Calki Produced	113	
Depth:	ft	Jai	Water	Type.	rioduced		
		See on a company of the company of t	ear on I and are water				
Background	Intormation						
Reason for T	esting:	Routine Sample A	Analysis				
Completion t	уре:	N/A					
Well History:	i :	N/A					
Comments:							
Sample Char	acteristics	***					
Sample Temp		<b>81</b> (°F)	Visco	CONTRACTOR	The second secon		
pH:	٠.	8.15	Color	-	clear		
Specific Grav	vity:	1.010	Odor:			netallic smell	
S.G. (Correct		1.014 @ 60 °F			medium		
Resistivity (N	•	<b>0.65</b> Ω-m	Filtrat	-	suspended black particles		
- '			rase reserve and				
Sample Com	position						
CATIONS			mg/l	me/l	ppm		
	Sodium (ca	lc.)	267	11.6			
	Calcium		321	16.0			
	Magnesium	<u> </u>	608	50.0			
	Barium		0	0.0			
	Potassium		240	6.1	238		
444040	iron		1.00	0.0	0.99		
ANIONS	low see		1000	00.0	000		
	Chloride		1000	28.2			
	Sulfate	·	270	5.6	1		
	Hydroxide		0	0.0	0		
	Carbonate Bicarbonate		< 1 3050	50.0	3020		
SUMMARY	Dicarbonate	<i>5</i>	] 3030	50.0	3020		
JUMINIAU I	Total Disso	lved Solids(calc.)	5516		5462		
		ness as CaCO3	3302	66.0	1		
Scaling Tend			// (//w)			- T	
						D000IDI =	
CaCO3 Facto			Calcium Carbona				
CaSO4 Facto	r	86616 C	alcium Sulfate			HEMOTE	
			ar an	### 1053##F###			
Stiff Plot							
	30	20 10	00	10	20	30	
	<del> </del>		<del></del>	+ 1 + + + +		<del></del>	
Na & K						CI	
Ca						HCO3	



## SAR, Cl Analysis

Client: Devon Energy Project #: 01058-001 Sample ID: NEBU 330 Start Date Reported: 11-11-04 Laboratory Number: 31177 Date Sampled: 11-08-04 Chain of Custody: 13257 Date Received: 11-08-04 Sample Matrix: Soil Date Extracted: 11-10-04 Preservative: Cool Date Analyzed: 11-11-04 Condition: Cool & Intact

Analytical Result **Parameter Units** Calcium 119 mg/Kg Magnesium < 0.01 mg/Kg Sodium 85.5 mg/Kg Sodium Absorption Ratio (SAR) 2.2 ratio Chloride 83.7 mg/Kg

Reference:

U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Comments:

NEBU 330.

Alex C. Oyun

Review



## SAR, CI Analysis

Client: Devon Energy Project #: 01058-001 Sample ID: NEBU 330 End Date Reported: 11-11-04 Laboratory Number: 31178 Date Sampled: 11-08-04 Chain of Custody: 13257 Date Received: 11-08-04 Sample Matrix: Soil Date Extracted: 11-10-04 Preservative: Cool Date Analyzed: 11-11-04 Condition: Cool & Intact

Parameter	Analytical Result	Units	
Calcium Magnesium	14.0 <0.01	mg/Kg mg/Kg	
Sodium	2.6	mg/Kg	
Sodium Absorption Ratio (SAR)	0.2	ratio	
Chloride	14.5	mg/Kg	

Reference:

U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Comments:

NEBU 330.

Analyst C. Oglenn

Review