



## CONOCO INC.

### MCA ELVIS TRUNKLINE LEAK

#### ENVIRONMENTAL SITE INVESTIGATION

PERFORMED BY:

**BBC INTERNATIONAL, INC.**  
WORLD-WIDE ENVIRONMENTAL SPECIALISTS  
1324 W. MARLAND BLVD.  
P. O. BOX 805  
HOBBS, NEW MEXICO 88240  
(505)397-6388 • FAX (505)397-0397  
EMAIL: [bbc@bbcinternational.com](mailto:bbc@bbcinternational.com)  
WEBSITE: [www.bbcinternational.com](http://www.bbcinternational.com)

**NOVEMBER 19, 2001**

PREPARED FOR:

**MR. LEO GATSON**  
**CONOCO INC.**  
**1410 W. COUNTY ROAD**  
**HOBBS, NEW MEXICO 88240**

*Conoco 217817  
facility - PPAC0608132084  
incident - nPAC0608132223*

*application pPAC0608132317*



PHONE (505) 397-6388 • FAX (505) 397- 0397 • 1324 W. MARLAND • P.O. BOX 805 • HOBBS, NM 88241-0805  
E-MAIL: [bbc@bbcinternational.com](mailto:bbc@bbcinternational.com)

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April 12, 2002

Chris Williams  
NM Oil Conservation Division

Hobbs, NM 88240

**RE: Conoco, Inc. – MCA Elvis Trunkline Leak**

Dear Mr. Williams:

BBC International, Inc. respectfully submits this site investigation report for the MCA Elvis Trunkline Leak on behalf of Conoco, Inc.

This site is an area that was investigated due to an injection line leak that occurred on September 24, 2001. Approximately 450 barrels of produced water was released with 430 barrels recovered.

The initial investigation and sampling was conducted on November 30, 2001. This report details the results.

As can be found in the report, the chlorides are reduced greatly at depth. The recommendation is to halt any further investigations activities and conduct surface remediation measures only.

I look forward to your review of this report and the agreement to our recommendation. If you have any questions, please do not hesitate to contact me at (505)397-6388 or at the address above.

Sincerely,

BBC International, Inc.

Ken Swinney, CEI, CRS  
Director of Operations

KS:js

encl.

# **Conoco MCA Elvis Trunkline Leak**

## **9/24/01**

### **1.0 INTRODUCTION**

The subject site is located south of Maljamar, New Mexico in Unit Letter C of Section 29, Township 17 South, Range 32 East. The site consists of undeveloped rangeland. On September 24, 2001 a trunkline leaked approximately 450 barrels of produced water, with approximately 430 barrels being recovered from the surface.

### **2.0 SITE CHARACTERIZATION**

The leak area is in a depression surrounded by sand hills. The leak area runs North-South for approximately 160 feet. The leak area is approximately 135 feet wide at the widest point. The surface soil is red sand. There is no water source within 1,000 feet of the site. There is no surface water within 1,000 feet of the site. Based on data from the ground water monitoring well located at the Conoco Maljamar Plant, depth to ground water is approximately 90 feet.

### **3.0 SITE INVESTIGATION ACTIVITIES**

On November 30, 2001, BBC personnel conducted an inspection of the site. Two sample points were drilled at the site using BBC's tractor mount drilling rig. Sample point Elvis 1 was drilled to a depth of 25 feet. Sample point Elvis 2 was drilled to a depth of 35 feet. Samples were taken at 1 foot, 5 feet, 15 feet, and at 25 feet at sample point Elvis 1, at 1 foot, 5 feet, 15 feet, 25 feet, 30 feet, and at 35 feet at sample point Elvis 2. Field screening for chloride was performed on site. Field screening data is located on Figure 1. Soil samples were then sent to Cardinal Laboratories for analysis. Laboratory data is located on Figure 1 and in Appendix I. Photographs of the investigation activities are located in Appendix II.

### **4.0 CONCLUSION AND RECOMMENDATION**

The data shows a reduction in chloride concentrations from 1 foot to approximately 35 feet. At the 25 feet and 35 feet depths the chloride concentrations are 576 ppm and 144 ppm respectively, this reduction is significant. The lab results for chloride is located on Figure 1 and in Appendix I. Taking into consideration that the depth to groundwater is greater than fifty-five feet, and the subsurface soil lithology at the site consists of caliche and sandstone layers, it is evident that the migration of chlorides to groundwater is unlikely. Therefore it is recommended that only surface remediation is necessary. This could consist of the addition of gypsum, ammonium nitrate, Salt Block, or other amendments that will reduce the chloride concentrations in the soil to allow for revegetation.

**CONOCO**

Conoco Inc.

**Record of Accidental Discharge  
of Crude Oil, Water or  
Hazardous Substances****SPILL CATEGORY: B**

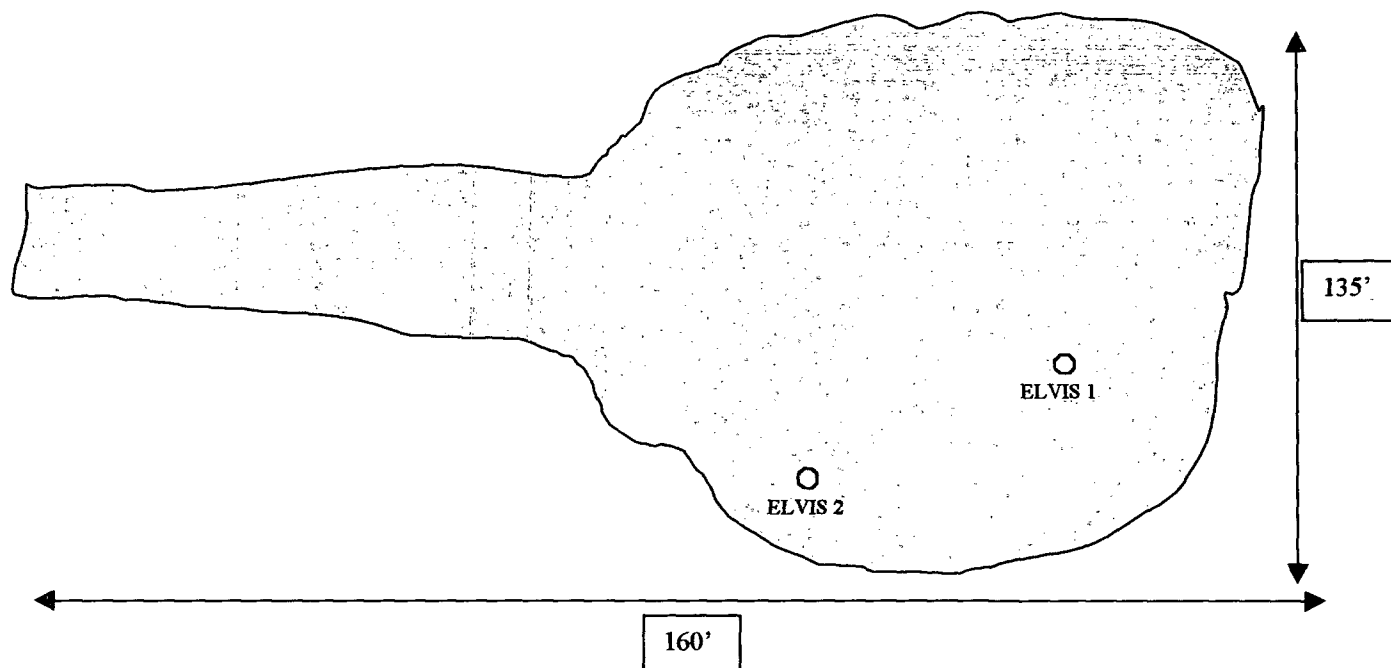
EP - Americas

10/18/99

1. Lease <b>MCA PROD. WTR TRUNK LINE</b>		2. Field <b>BMP</b>		3. Person In Charge of Site <b>LARRY MINNICK</b>	
4. Person Reporting Discharge <b>KEN ANDERSEN</b>			Person Receiving Report <b>DEEN, GATSON, RITTER</b>		
5. Discharge Discovered By <b>KEVIN McNABB</b>				Date and Time Discovered <b>9/24/01 @ 08:00am</b>	
Witnesses <b>KEVIN McNABB</b>					
6. How Did Company Learn of Discharge <b>SAW LEAK FROM TRUCK</b>					
7. Date and Time Discharge Began <b>9/24/01 @ 03:00am</b>		7a. Date and Time Discharge Ended <b>9/24/01 @ 08:30am</b>		8. Date and Time Initial Report Received	
9. Discharge Site	Unit Letter <b>C</b>	Section <b>29</b>	Blk./ TWP <b>17S</b>	Survey/Range <b>32E</b>	County <b>LEA</b> State <b>NM</b>
Highway Map Location <b>GO SOUTH FROM MALJAMAR ON MALJAMAR ROAD 3.25 MILES, THEN WEST FOR 1.5 MILES</b>					
10. Location of Discharge Click Here Feet to Wellhead No. Other <b>4" PROD WTR TRUNK LINE 200' NORTH OF MCA # 110</b>					
11. Source of Discharge - Pipe Piping Size ( In Inches) <b>4"</b>		Type <b>Fiberglass</b>	Placement <b>Buried</b>	Coating <b>Bare</b>	Other Source of Discharge <b>N/A</b>
12. Possible Reason for Discharge <b>Fatigue(Pressure)</b>		12a. Describe Cause of Discharge and Action Taken to Prevent Recurrence <b>4" TEE SETTLED ON LINE PULLING OUT OF LINE. WILL PUT BRACING UNDER LINE UNDER GROUND AND ABOVE GROUND. ALARM LINE WITH TRANSDUCER.</b>			
13. Names and Volumes of Substances Involved Bbls. Oil Bbls. Water <b>450</b> Salt Other Other Volume			14. Remedial Action - Picked Up Bbls. Oil Other Volume Bbls. Water <b>430</b> Salt		
15. Describe Nature and Extent of Area Affected and Cleanup Action Taken <b>100'X200' OF SANDY PASTURE DAMP FROM RAIN WITH NO COWS PRESENT. WILL CORE AREA AND TAKE APPROPRIATE ACTION TO REMEDIATE LEAK.</b>					
16. Water Courses Reached Name		Type <b>None</b>	Condition <b>N/A</b>	Volume Entering Water Bbls. Oil Bbls. Water Other	
17. How Was Discharge Stopped <b>SHUT VALVES @ BTRY # 1, ELVIS, &amp; 4000 BBL TANK.</b>					
18. Operating Conditions at Time of Discharge Click Here BOPD Injection Well BWPD @ PSI BWPD Line PSI					
19. General Weather Conditions at Time of Discharge <b>CLEAR AND COOL</b>				20. Cost of Repair/Cleanup <b>\$2,000.00</b>	
21. Federal, State, and Local Agencies Notified and/or Non - Company On - Site Investigators					
Agency	Person Notified	Date Notified	Time Notified	Method Used	Person Notifying
<b>BLM</b>	<b>ANDREA</b>	<b>09/24/01</b>		<b>PHONE</b>	<b>KEN ANDERSEN</b>
<b>NMOCD</b>	<b>SILVIA DICKEY</b>	<b>09/25/01</b>	<b>10:10 AM</b>	<b>PHONE</b>	<b>KEN ANDERSEN</b>
22. Federal Lease No. <b>LC - 029410A</b>		Unit/CA No. <b>8920003410</b>		Right of Way No. <b>ONE CALL # 2001390409</b>	
23. Landowner/ Tenant Telephone Number:					
I Hereby Certify That The Information Above Is True and Complete To The Best of My Knowledge.					
Signature and Title <b>Kenneth N. Andersen MSD</b>			Date and Location <b>9/25/01 @ MALJAMAR, NM</b>		

**Figure 1**

# CONOCO MCA ELVIS TRUNKLINE



SAMPLE DEPTH	ELVIS 1 FIELD CI-	ELVIS 1 LAB CI-	ELVIS 2 FIELD CI-	ELVIS 2 LAB CI-
1 FOOT	2800 PPM	3679 PPM	1840 PPM	1056 PPM
5 FEET	3550 PPM	5758 PPM	5560 PPM	7518 PPM
15 FEET	1330 PPM	2159 PPM	3810 PPM	4799 PPM
25 FEET	440 PPM	576 PPM	2550 PPM	3119 PPM
30 FEET	-	-	1350 PPM	1951 PPM
35 FEET	-	-	360 PPM	144 PPM

## LEGEND

○ BBC sample point - grab sample

**BBC INTERNATIONAL, INC.**

**CONOCO ELVIS TRUNKLINE**

Date: 12-20-01

Drawn By: Ken

Disk:

Sheet of Sheets

Scale: Not to Scale

File Name

# **Appendix I**



# CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
BBC INTERNATIONAL, INC.  
ATTN: CLIFF BRUNSON  
P.O. BOX 805  
HOBBS, NM 88241  
FAX TO: (505) 397-0397

Receiving Date: 12/07/01  
Reporting Date: 12/10/01  
Project Owner: CONOCO  
Project Name: ELVIS TRUNKLINE  
Project Location: MALJAMAR, NM

Analysis Date: 12/10/01  
Sampling Date: 11/30, 12/03, 12/06/01  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: AH  
Analyzed By: HM

LAB NUMBER	SAMPLE ID	Cl <sup>-</sup> (mg/Kg)
H6329-1	ELVIS 1-1'	3679
H6329-2	ELVIS 1-5'	5758
H6329-3	ELVIS 1-15'	2159
H6329-4	ELVIS 1-25'	576
H6329-5	ELVIS 2-1'	1056
H6329-6	ELVIS 2-5'	7518
H6329-7	ELVIS 2-15'	4799
H6329-8	ELVIS 2-25'	3119
H6329-9	ELVIS 2-30'	1951
H6329-10	ELVIS 2-35'	144
Quality Control		1050
True Value QC		1000
% Accuracy		105
Relative Percent Difference		5.0

METHOD: Standard Methods

4500-Cl<sup>-</sup>B

Amy Hill  
Chemist

12-10-01  
Date

PLEASE NOTE: **Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

H6329





# CARDINAL LABORATORIES, INC.

2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240

(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 1

Company Name: <b>ARC International</b>		BILITO PO #:	
Project Manager: <b>Cliff Brown</b>		Company:	
Address: <b>1324 W. Packard</b>		Attn:	
City: <b>Hobbs</b> State Zip: <b>88240</b>		Address: <b>Same</b>	
Phone #: <b>(505) 397-2388</b>		City:	
Fax #: <b>(505) 397-0897</b>		State:	
Project #: <b>Project Owner: Conoco</b>		Zip:	
Project Name: <b>Elvis Truckline</b>		Phone #:	
Project Location: <b>Malheur</b>		Fax #:	
FOR LAB USE ONLY		MATRIX PRES. SAMPLING	
LAB I.D.		Sample I.D.	
(G)RAB OR (C)OMP.		# CONTAINERS	
GROUNDWATER		WASTEWATER	
SOIL		OIL	
SLUDGE		OTHER:	
ACID:		ICE / COOL	
OTHER:		DATE	
TIME		ANALYSIS REQUEST	
H16389-1		Elvis 1-1'	
-2		Elvis 1-5'	
-3		Elvis 1-95'	
-4		Elvis 1-25'	
-5		Elvis 2-1'	
-6		Elvis 2-5'	
-7		Elvis 2-15'	
-8		Elvis 2-25'	
-9		Elvis 2-30'	
-10		Elvis 2-35'	
11-30-01 10:00a		✓	
11-30-01 10:15a		✓	
11-30-01 11:45a		✓	
11-30-01 2:45pm		✓	
11-30-01 2:49pm		✓	
11-30-01 2:53pm		✓	
12-3-01 9:10am		✓	
12-3-01 1:25pm		✓	
12-6-01 1:30pm		✓	
12-6-01 2:35pm		✓	
Chloride			

PLEASE NOTE: Liability and defense exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruption, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services rendered by Cardinal. The client warrants that the above stated reasons or otherwise.

Sampler Relinquished: **Ken Seering** Date: **12-1-01** Time: **12:10** Received By: **Frank Hill**

Relinquished By: **Ken Seering** Date: **12/1/01** Time: **12:05** Received By: **Frank Hill**

Delivered By: (Circle One) **Sample** UPS Bus Other: ☒ Yes ☐ No

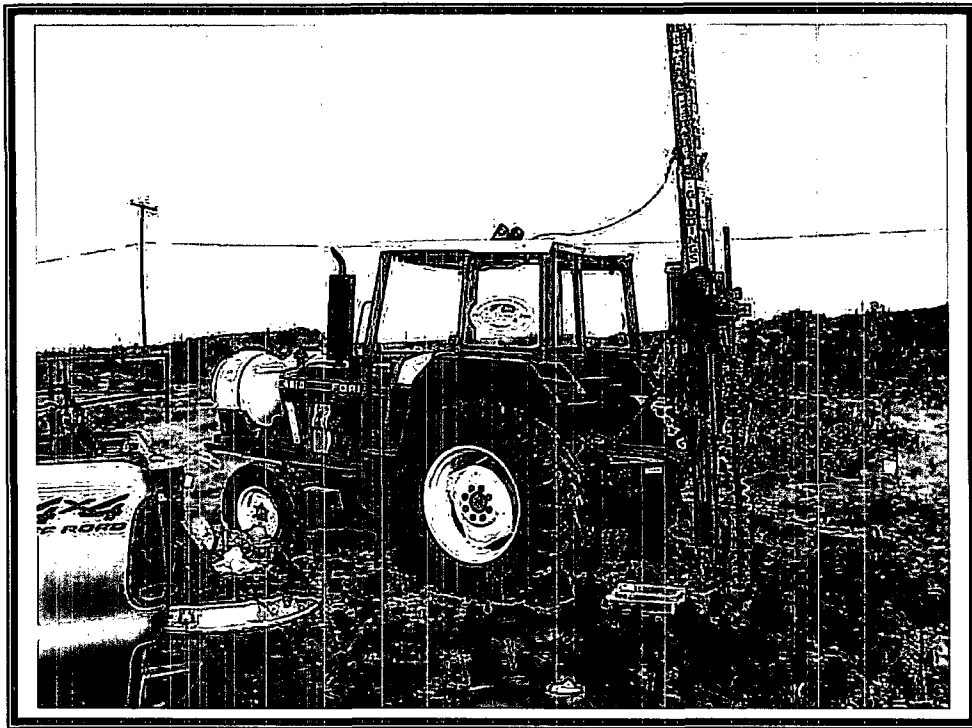
Sample Condition: ☒ Cool ☐ Intact ☐ Yes ☐ No

CHECKED BY: (Initials)

REMARKS: **Phone Result: ☐ Yes ☐ No Additional Fax #: ☐ Yes ☐ No**

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 2 1/2% per annum from the original date of invoice, and at cost of collection, including attorney's fees.

## **Appendix II**



Elvis Truckline – Spill date 9-24-01 – Sample taken at 1', 5', 15', 25', 30', 35' on 11-30-01, 12-03-01, 12-6-01