



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**  
Governor

**Joanna Prukop**  
Cabinet Secretary  
Acting Director  
Oil Conservation Division

June 1, 2004

Conoco Phillips  
Celeste Dale  
4001 Penbrook, PB-325  
Odessa, TX 79762

Re: Closure Approval  
Philmex #32 Flowline Leak  
UL-H Sec 28-T17S-R33E

Dear Mr. Anderson,

The remediation closure proposal referenced above and submitted to the New Mexico Oil Conservation Division (OCD) for ConocoPhillips by BBC is **hereby approved**.

Please be advised that OCD approval of this plan does not relieve ConocoPhillips of liability should their operations fail to adequately investigate and remediate contaminants that threaten ground water, surface water, human health or the environment. In addition, OCD approval does not relieve ConocoPhillips of responsibility for compliance with any other federal, state, or local laws and/or regulations.

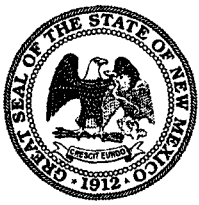
If you have any questions or need assistance please write or call: (505) 393-6161, ext. 113, or e-mail: [psheeeley@state.nm.us](mailto:psheeeley@state.nm.us)

Sincerely,

Paul Sheeley-Environmental Engineer

Cc: Roger Anderson - Environmental Bureau Chief  
Chris Williams - District I Supervisor  
Larry Johnson - Environmental Engineer

*incident - nPAC0606037106*  
*application - pPAC0606037329*



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

Joanna Prukop  
Cabinet Secretary

**Lori Wrotenbery**

Director

Oil Conservation Division

November 19, 2003

BBC International, Inc., (BBC)  
Attn: Ken Swinney  
1324 Marland  
Hobbs, NM 88240

Re: Work Plan Approval  
Philmex #32 Flowline Leak - Dated: October 28, 2003  
UL-E Sec 27-T17S-R33E

Dear Mr. Swinney,

The remediation work plan referenced above and submitted to the New Mexico Oil Conservation Division (OCD) for ConocoPhillips by BBC is **hereby approved**.

Please be advised that OCD approval of this plan does not relieve ConocoPhillips of liability should their operations fail to adequately investigate and remediate contaminants that threaten ground water, surface water, human health or the environment. In addition, OCD approval does not relieve ConocoPhillips of responsibility for compliance with any other federal, state, or local laws and/or regulations.

If you have any questions or need assistance please write or call: (505) 393-6161, ext. 113, or e-mail: [psheeeley@state.nm.us](mailto:psheeeley@state.nm.us)

Sincerely,

Paul Sheeley-Environmental Engineer

Cc: Roger Anderson - Environmental Bureau Chief  
Chris Williams - District I Supervisor  
William Olson - OCD Hydrologist  
Larry Johnson - Environmental Engineer

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 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**

**OPERATOR**

☐ Initial Report ☒ Final Report

Name of Company <b>ConocoPhillips Co.</b>	Contact <b>Kenneth N. Andersen</b>
Address <b>1004 Penbrook, Odessa, TX 79762</b>	Telephone No. <b>505.676.5569</b>
Facility Name <b>Philmex # 32</b>	Facility Type <b>Oil and Gas</b>

Surface Owner <b>State of New Mexico</b>	Mineral Owner <b>State Of New Mexico</b>	Lease No <b>B 2229</b>
--	--	------------------------

**LOCATION OF RELEASE**

API# 30025 3039600 00

Unit Letter <b>H</b>	Section <b>28</b>	Township <b>17S</b>	Range <b>33E</b>	Feet from the <b>1980</b>	North/South Line <b>North</b>	Feet from the <b>660</b>	East/West Line <b>East</b>	County <b>LEA</b>
-------------------------	----------------------	------------------------	---------------------	------------------------------	----------------------------------	-----------------------------	-------------------------------	----------------------

Latitude **32.48'26"N** Longitude **103.39'29"W**

**NATURE OF RELEASE**

Type of Release <b>Crude Oil &amp; Produced Water</b>	Volume of Release <b>7 bbl (2 oil, 5 water)</b>	Volume Recovered <b>(0 oil, 0 water)</b>
Source of Release <b>Flowline Leak ~ 200' west of Philmex # 22 UL "E", Sec. 27, T 17S, R 33E, Lea Co., NM</b>	Date and Hour of Occurrence <b>07/28/03 10:00pm</b>	Date and Hour of Discovery <b>07/29/03 3:30pm</b>
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully.*		
Describe Cause of Problem and Remedial Action Taken.* <b>Internal Corrosion Leak; clamped line; replacing flowline with Marlex or Polyline.</b>		
Describe Area Affected and Cleanup Action Taken.* <b>60'X85' of dry caliche rock/soil pasture. See attachment for Cleanup Action Taken.</b>		

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: <i>Kenneth N. Andersen</i>	<b>OIL CONSERVATION DIVISION</b>	
Printed Name: <b>Kenneth N Andersen</b>	Approved by District Supervisor:	
Title: <b>SHEAr Specialist</b>	Approval Date:	Expiration Date:
E-mail Address: <b>ken.n.andersen@conocophillips.com</b>	Conditions of Approval:	Attached <input type="checkbox"/>
Date: <b>05/25/04</b> Phone: <b>505.676.5569</b>		

- Attach Additional Sheets If Necessary



Philmex #32 attachment.

There is no water source or surface water within 1,000 feet of the spill site and the site is not in a Wellhead Protection Area. Based on data from the USGS Ground-water levels for the Nation web page, depth to ground water is approximately 167 feet. Due to the above data, the Ranking Criteria Score from the NMOCD "Guideline for Remediation of Leaks, Spills, and Releases" is 10ppm Benzene, 50ppm BTEX, and 5,000ppm TPH.

On September 4, 2003, ConocoPhillips Co. (COPC) personnel took a four-point composite sample. As you can see by the enclosed laboratory data, the results for TPH and BTEX are below NMOCD cleanup guidelines for groundwater depths greater than 100 feet. The result for the chloride concentration however, is 37200mg/kg.

On September 17, 2003, BBC International personnel (Ken Swinney, phone # 505.397.6388, e-mail address [kswinney@bbcinternational.com](mailto:kswinney@bbcinternational.com)) took four grab and one four-point sample of the spill site. As you can see by the enclosed laboratory data, the result for chloride concentrations is still high.

On October 10, 2003, BBC personnel returned to the site and bored the spill site to a depth of 20 feet. As you can see by the enclosed laboratory data, chlorides clean up to 80mg/kg at 20 feet.

On October 28, 2003, ConocoPhillips Co. submitted a recommendation prepared by BBC International to remove the surface soils to the hard rock layer at approximately two feet below the surface, which was approved by Paul Sheeley of the NMOCD in his letter dated November 19, 2003.

In March 2004, the top two feet of soil was removed from the spill site and four grab samples were taken on March 17, 2004 with the chlorides still high (see enclosed laboratory results). On April 5, 2004, three inches of soil was removed and a composite sample taken on April 19, 2004 with chloride remaining high (see enclosed laboratory results). Another three inches of soil was removed and a composite sample taken on May 6, 2004 with chloride finally at 176mg/kg (see enclosed laboratory results).

Taking into consideration that the depth to groundwater is greater than 147 feet, and the subsurface soil lithology at the site consists of caliche and sandstone layers; it is evident that the migration of the chlorides of this spill to groundwater is unlikely.

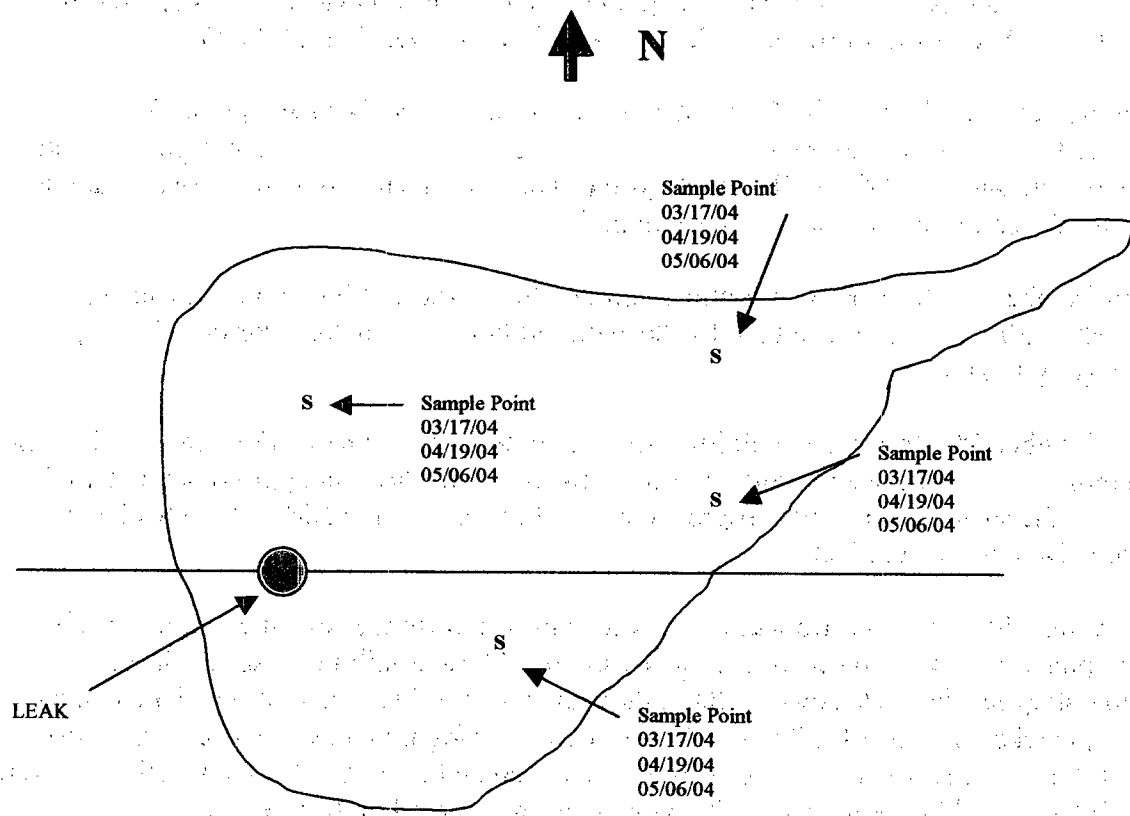
H<sub>2</sub>S is a safety concern at the spill site.



The driving directions to the spill site are as follows:

From the Buckeye store go North on 238 to intersection with CR 125. Turn West on CR 125 and go approximately 8 miles to dirt road. Turn North on road to wellsite Philmex # 22. The spill site is about 200 feet West of Philmex # 22. (See enclosed map).

Therefore, ConocoPhillips is submitting this completed closure plan for NMOCD approval. Should there be any questions, please contact me at 505.390.4821. Thank You.





# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Lori Wrotenbery**

Director

**Oil Conservation Division**

November 19, 2003

BBC International, Inc., (BBC)

Attn: Ken Swinney

1324 Marland

Hobbs, NM 88240

Re: Work Plan Approval  
Philmex #32 Flowline Leak - Dated: October 28, 2003  
UL-E Sec 27-T17S-R33E

Dear Mr. Swinney,

The remediation work plan referenced above and submitted to the New Mexico Oil Conservation Division (OCD) for ConocoPhillips by BBC is hereby approved.

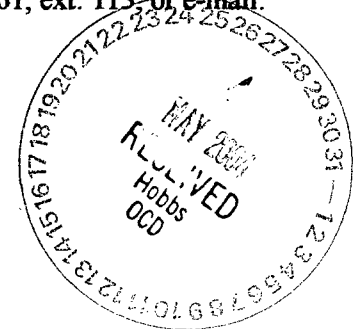
Please be advised that OCD approval of this plan does not relieve ConocoPhillips of liability should their operations fail to adequately investigate and remediate contaminants that threaten ground water, surface water, human health or the environment. In addition, OCD approval does not relieve ConocoPhillips of responsibility for compliance with any other federal, state, or local laws and/or regulations.

If you have any questions or need assistance please write or call: (505) 393-6161, ext. 113, or e-mail: [psheeley@state.nm.us](mailto:psheeley@state.nm.us)

Sincerely,

Paul Sheeley-Environmental Engineer

Cc: Roger Anderson - Environmental Bureau Chief  
Chris Williams - District I Supervisor  
William Olson - OCD Hydrologist  
Larry Johnson - Environmental Engineer



# **ConocoPhillips Philmex #32**

## **Flowline Leak 07-28-03**

### **1.0 INTRODUCTION**

The subject site is located east of Maljamar, New Mexico in Unit Letter E of Section 27, Township 17 South, Range 33 East. The site consists of undeveloped rangeland. On July 28, 2003, a 2.0 inch flowline for the Philmex #32 well, leaked approximately 5 barrels of produced water and 2 barrels of oil. The leak was discovered on July 29, 2003.

### **2.0 SITE CHARACTERIZATION**

The leak area runs North-South for approximately 85 feet and East-West for approximately 60 feet. The surface soil is brown dirt mixed with caliche. 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 New Mexico Office of the State Engineer, depth to ground water is approximately 160 feet.

### **3.0 SITE INVESTIGATION ACTIVITIES**

On September 4, 2003, ConocoPhillips personnel took a four point composite sample at the site for laboratory analysis. This sample was taken at a depth of 1 foot. The laboratory results are located in Appendix I. On September 17, 2003, BBC personnel conducted an inspection of the site. Four grab samples and one four point composite sample were collected at the site at a depth of 1 foot. The laboratory results are located in Appendix II. On October 10, 2003, BBC personnel returned to the site to take additional soil samples at a greater depth. One sample point was drilled at the approximate center of the leak site to a depth of 20 feet, using an air rotary drilling rig. Field screening consisted of field chloride titrations. Samples were taken at the 3', 5', 10', 15', and 20' intervals. All samples were submitted to Cardinal Laboratories in Hobbs, New Mexico for analysis. Laboratory results are located in Appendix III. A site drawing showing the locations of the sample points is located on Figure I. Laboratory analysis of the reservoir fluids is also available for review in Appendix IV.

### **4.0 CONCLUSION AND RECOMMENDATION**

Laboratory results for TPH and BTEX are below OCD cleanup guidelines for groundwater depths greater than 100 feet. The data shows a significant reduction in chloride concentrations from an average of 37,200 ppm at 1 foot, to 3439 ppm at 3 feet, and 80 ppm at 20 feet. Taking into consideration that the depth to groundwater is greater than 150 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 the surface soils be removed to the hard rock layer at

approximately 2 feet below surface. The excavated soil will be disposed of at an OCD approved disposal site. Clean soil will be used to backfill the excavation and the site will be seeded with BLM #3 seed mix to revegetate.



**SPILL CATEGORY:****C****Record of Accidental Discharge  
of Crude Oil, Water or Hazardous Substances****PERMIAN BASIN BUSINESS UNIT - EXPLORATION AND PRODUCTION**

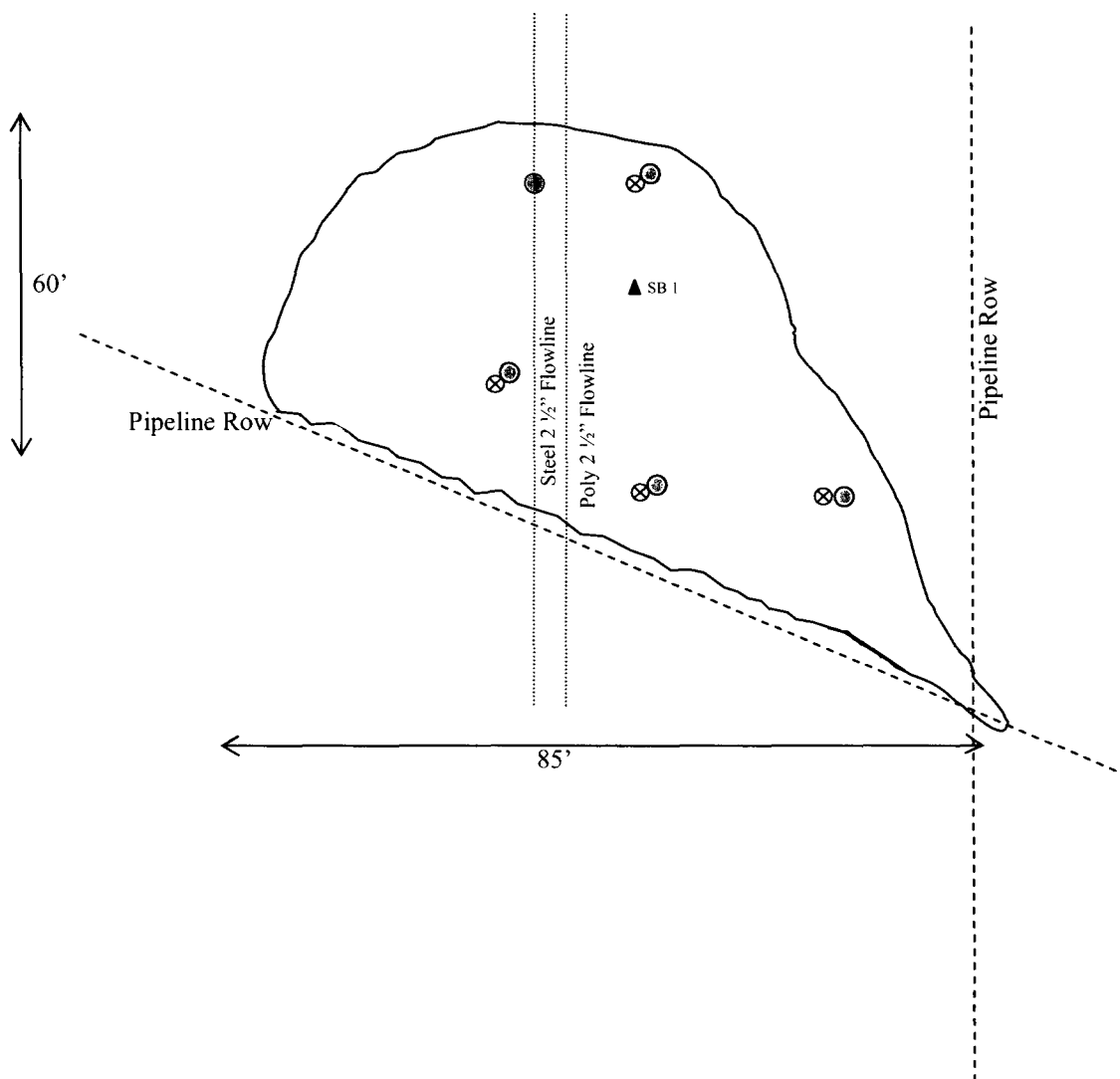
1. Lease	PHILMEX # 32	2. Field	MALJAMAR	3. Person in charge of site	LYLE HIGDON			
4. Person Reporting Discharge	JOE JACKSON	Person Receiving Report	KEN ANDERSEN					
5. Discharge Discovered By	JOE JACKSON	Date and Time Discovered	7-29-03 AT 3:30 P.M.					
Witnesses	NONE							
6. How Did Company Learn of Discharge	JOE JACKSON CALLED BUKEYE OFFICE THEN BUCKEYE OFFICE GOT A HOLD OF LYLE HIGDON							
7. Date and Time Discharge Began	7-28-03 10:00 P.M.	7a. Date and Time Discharge Ended	7-29-03 AT 4:00 P.M.	8. Date and Time Initial Report Received	7-29-03 AT 3:30 P.M.			
9. Discharge Site	Unit Letter	Sec	28	Blk/TWP	17S-R33E			
	County	LEA		Lease No.				
Highway Map Location	GO NORTH ON COUNTY ROAD 125 APPR. 8 MILES TURN NORTH ON CALICHES ROAD GO APPR. 1/4 MILE LEAK WAS ON EAST SIDE OF ROAD 1000 FEET				Survey/Range R33 State N.M.			
10. Location of Discharge	EAST OF PHILMEX # 32	X	Flowline	2000	feet to Wellhead No 32			
			Injection Line		feet to Wellhead No			
11. Specific Source of Discharge	Pipe	2	inches					
<input checked="" type="checkbox"/> Steel	<input type="checkbox"/> Buried	<input type="checkbox"/> Coated	<input type="checkbox"/> Line Chem Treated	<input type="checkbox"/> Tank Piping	<input type="checkbox"/> Chemical Storage Containers			
<input type="checkbox"/> Fiberglass	<input type="checkbox"/> Surface	<input checked="" type="checkbox"/> Internal	<input type="checkbox"/> Wellhead Connections	<input type="checkbox"/> Vessel Piping	<input type="checkbox"/> Chemical Storage Units			
<input type="checkbox"/> Plastic	<input checked="" type="checkbox"/> Bare	<input type="checkbox"/> CMT	<input type="checkbox"/> PL	<input type="checkbox"/> Tank	<input type="checkbox"/> Injection Equipment			
<input type="checkbox"/> Transite	<input type="checkbox"/> External	<input type="checkbox"/> Fbgl.	<input type="checkbox"/> Vessel	<input type="checkbox"/> Pump	<input type="checkbox"/> Casing/Tubing Communication			
12. Possible Reason for Discharge	12a. Describe Cause of Discharge and Action Taken to Prevent Reoccurrence							
<input checked="" type="checkbox"/> Corrosion	<input type="checkbox"/> Human Error	EXTERNAL CORROSION LEAK WILL REPLACE FLOWLINE WITH MARLE OR POLY LINE						
<input type="checkbox"/> External	<input type="checkbox"/> Pressure							
<input checked="" type="checkbox"/> Internal	<input type="checkbox"/> Instrumentation							
<input checked="" type="checkbox"/> Fatigue	<input type="checkbox"/> Mechanical							
<input checked="" type="checkbox"/> Age	<input type="checkbox"/> Weather							
13. Names and Volumes of Substances Involved	14. Remedial Action - Picked Up							
2 Bbls. Oil	5 Bbls. Water	<input type="checkbox"/> Fresh	B/O	<input type="checkbox"/> Fresh				
Other	Other Volume	<input checked="" type="checkbox"/> Salt	Other Volume	<input type="checkbox"/> Salt				
15. Describe Nature and Extent of Area Affected and Cleanup Action Take	10FOOT x 20 FOOT AREA AFFECTED WILL REMEDIATE AREA				Contained Within Dike ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
16. Water Courses Reached	<input checked="" type="checkbox"/> None	<input type="checkbox"/> River	<input type="checkbox"/> Running	Volume Entering Water				
		<input type="checkbox"/> Creek	<input type="checkbox"/> Dry	Bbls. Oil	Other			
Name		<input type="checkbox"/> Pond	<input type="checkbox"/> Intermittent	Bbls. Water				
17. How Was Discharge Stopped	CLAMPED LINE							
18. Operating Conditions at Time of Discharge	<input checked="" type="checkbox"/> Pumping Well <input type="checkbox"/> Flowing Well							
Injection Well	BWPD at	psi	BOPD	3	BWPD	30	Line psi	30
19. General Weather Conditions at Time of Discharge	SUNNY		20. Cost of Repair/Cleanup	\$ 800				
21. Federal, State, and Local Agencies Notified and/or Non-Company On-Site Investigators								
Agency	Person Notified	Date/Time Notified	Method Used	Person Notifying				
22. State/Federal Lease No.	Unit/CA No.	Right of Way No.						
23. Landowner/Tenant	Telephone Number:							
I Hereby Certify That The Information Above Is True and Complete To The Best of My Knowledge.								
Name and Title	LYLE HIGDON MSO							
Date and Location	7-30-03 MALJAMAR OFFICE							



# Figure 1



# CONOCOPHILLIPS PHILMEX 32 FLOWLINE



## LEGEND

- Leak point
- ⊙ BBC sample point - grab sample
- ⊗ ConocoPhillips composite sample
- ▲ Soil Boring

BBC INTERNATIONAL, INC.

CONOCO ELVIS TRUNKLINE

Date: 10-28-03

Drawn By: JG

Disk:

Sheet of Sheets

Scale: Not to Scale

File Name



# **Appendix I**



† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476.

## **Appendix II**



# ARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

ANALYTICAL RESULTS FOR  
BBC INTERNATIONAL, INC.  
ATTN: C. BRUNSON  
P.O. BOX 805  
HOBBS, NM 88240  
FAX TO: (505) 397-0397

Receiving Date: 09/18/03  
Reporting Date: 09/24/03  
Project Owner: CONOCO PHILLIPS  
Project Name: PHILMEX 32  
Project Location: MALJAMAR, NM

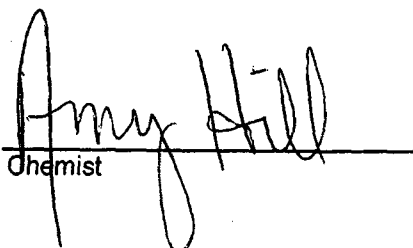
Analysis Date: 09/18/03  
Sampling Date: 09/17/03  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: GP  
Analyzed By: AH

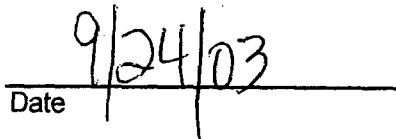
LAB NUMBER	SAMPLE ID	Cl <sup>-</sup> (mg/Kg)
H8013-2	GRAB #1	10100
H8013-3	GRAB #2	57200
H8013-4	GRAB #3	43600
H8013-5	GRAB #4	38400
Quality Control		970
True Value QC		1000
% Recovery		97.0
Relative Percent Difference		1.0

METHOD: Std. Methods

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

NOTE: Analyses performed on 1:4 w:v aqueous extracts.

  
Chemist

  
Date 9/24/03

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.





# ARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

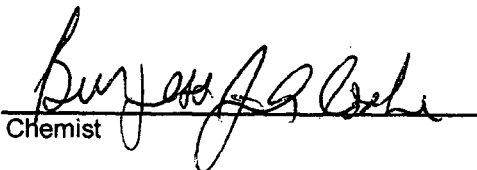
ANALYTICAL RESULTS FOR  
BBC INTERNATIONAL, INC.  
ATTN: C. BRUNSON  
P.O. BOX 805  
HOBBS, NM 88240  
FAX TO: (505) 397-0397

Receiving Date: 09/18/03  
Reporting Date: 09/19/03  
Project Owner: CONOCO PHILLIPS  
Project Name: PHILMEX 32  
Project Location: MALJAMAR, NM

Sampling Date: 09/17/03  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: GP  
Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		09/18/03	09/18/03	09/18/03	09/18/03
H8013-1	COMPOSITE #1	<0.005	0.008	0.014	0.028
Quality Control		0.097	0.102	0.099	0.295
True Value QC		0.100	0.100	0.100	0.300
% Recovery		97.4	102	99.3	98.2
Relative Percent Difference		2.8	2.5	0.5	1.2

METHOD: EPA SW-846 8260

  
Chemist

9/19/03  
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.

H8013B.XLS

**ARDINAL 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

Page 1 of 1

ANALYSIS REQUEST									
BILL TO		PO #:							
Company Name: <b>BBC International, Inc.</b>				Company:					
Project Manager: <b>C. Dawson</b>				Attn:					
Address: <b>1324 W. Macleod</b>				Address:					
City: <b>Hobbs</b>				City:					
State: <b>NM</b>				State:					
Zip: <b>88240</b>				Zip:					
Phone #: <b>(505) 397-6388</b>				Phone #:					
Fax #: <b>(505) 397-0997</b>				Fax #:					
Project #: <b>Project Owner: Conoco Phillips</b>				Project #:					
Project Name: <b>Phillmes 33</b>				Project Name:					
Project Location: <b>McJannet, N.M.</b>				Project Location:					
FOR LAB USE ONLY									
LAB I.D.	Sample I.D.	# CONTAINERS	(G) RAB OR (C) OMP	MATRIX	PRES.	SAMPLING	DATE	TIME	
118013-1	Composite #1	6	1	WASTEWATER			9-17-03	14:50	✓
118013-2	Grab #1	6	1	WASTEWATER			9-17-03	14:51	✓
118013-3	Grab #2	6	1	WASTEWATER			9-17-03	14:54	✓
118013-4	Grab #3	6	1	WASTEWATER			9-17-03	14:57	✓
118013-5	Grab #4	6	1	WASTEWATER			9-17-03	14:59	✓
<p>PLEASE NOTE: Liability and Damages. Cardinal's facility and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the 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 30 days after completion of the applicable services. In no event shall Cardinal be liable for indirect 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.</p>									
<p>Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.</p>									
<p>Sampler Relinquished:</p> <p>Relinquished By: <i>James P. D'Aponte</i></p> <p>Delivered By: <i>James P. D'Aponte</i></p> <p>Sampler - UPS - Bus (Other):</p>				<p>Received By: <i>James P. D'Aponte</i></p> <p>Received By: (Lab Staff)</p> <p>Sample Condition</p> <p>Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/></p> <p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>					
<p>Date: 9-17-03</p> <p>Time: 12:06</p> <p>Date: 9-18-03</p> <p>Time: 8:06</p>				<p>Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Additional Fax #: <input type="checkbox"/> Yes <input type="checkbox"/> No</p>					
REMARKS:									

† Cardinal cannot accept verbal changes. Please fax written changes to 915-673-7020.

## **Appendix III**



# ARDINAL LABORATORIES

PHONE (325) 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

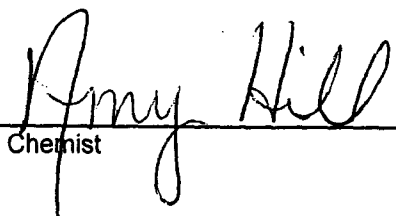
Receiving Date: 10/02/03  
Reporting Date: 10/03/03  
Project Owner: CONOCO PHILLIPS  
Project Name: PHILMEX 32 FLOWLINE  
Project Location: MALJAMAR, NM

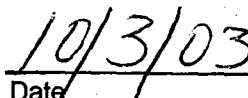
Analysis Date: 10/03/03  
Sampling Date: 10/02/03  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: BC  
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Cl <sup>-</sup> (mg/Kg)
H8062-1	PHILMEX 32-SB1-3'	3439
H8062-2	PHILMEX 32-SB1-5'	3359
H8062-3	PHILMEX 32-SB1-10'	304
H8062-4	PHILMEX 32-SB1-15'	144
H8062-5	PHILMEX 32-SB1-20'	80
Quality Control		1050
True Value QC		1000
% Recovery		105
Relative Percent Difference		6.7

METHOD: Standard Methods	4500-Cl <sup>-</sup> B
--------------------------	------------------------

Note: Analyses performed on 1:4 w:v aqueous extracts.

  
Chemist

  
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.

h8062

22111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240  
(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

\* Cardinal cannot accept work changes. Plans for union change to 100

† Cardinal cannot accept verbal changes. Please fax written changes to (800) 383-2476.

# **Appendix IV**

10/08/2003 14:03 15053931150

BJ UNICHEM

PAGE 01

Analytical Laboratory Report for:

Phillips

BJ Unichem  
Chemical Services

UNICHEM Representative:

## Production Water Analysis

Listed below please find water analysis report from: Phil Mex, #33

Lab Test No:	23441	Sample Date:	02/07/1999
Specific Gravity:	1.075		
TDS:	113909		
pH:	7.07		

Cations:	mg/L	as:
Calcium	2839	(Ca <sup>++</sup> )
Magnesium	841	(Mg <sup>++</sup> )
Sodium	39773	(Na <sup>+</sup> )
Iron	75.05	(Fe <sup>++</sup> )
Barium	0.24	(Ba <sup>++</sup> )
Strontium	47.66	(Sr <sup>++</sup> )
Manganese	1.46	(Mn <sup>++</sup> )
Anions:	mg/L	as:
Bicarbonate	732	(HCO <sub>3</sub> <sup>-</sup> )
Hydroxide	0.00	(OH <sup>-</sup> )
Sulfate	4600	(SO <sub>4</sub> <sup>-2</sup> )
Chloride	65000	(Cl <sup>-</sup> )
Gases:		
Carbon Dioxide	40	(CO <sub>2</sub> )
Hydrogen Sulfide	51	(H <sub>2</sub> S)

Comments:



PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

**ANALYTICAL RESULTS FOR  
CONOCO PHILLIPS  
ATTN: KEN ANDERSEN  
P.O. BOX 180  
MALJAMAR, NM 88264-0180  
FAX TO: (505) 676-2377**

Receiving Date: 03/17/04  
Reporting Date: 03/17/04  
Project Number: NOT GIVEN  
Project Name: PHILMEX #32  
Project Location: MALJAMAR, NM

Analysis Date: 03/17/04  
Sampling Date: 03/17/04  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: GP  
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Cl <sup>-</sup> (mg/Kg)
H8534-1*	GRAB #1	512
H8534-2	GRAB #2	5678
H8534-3	GRAB #3	7598
H8534-4	GRAB #4	8877
Quality Control		1000
True Value QC		1000
% Recovery		100
Relative Percent Difference		0

METHOD: Standard Methods	4500-CIB
--------------------------	----------

**Note: Analyses performed on 1:4 w:v aqueous extracts.**

\*Matrix interference (color) observed.

Amy Hill  
Chemist

3/17/04  
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.





PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

ANALYTICAL RESULTS FOR  
CONOCO PHILLIPS  
ATTN: KEN ANDERSEN  
P.O. BOX 180  
MALJAMAR, NM 88264-0180  
FAX TO: (505) 676-2377

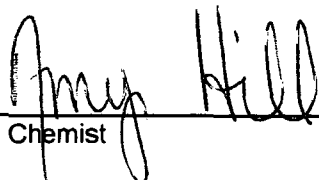
Receiving Date: 04/19/04  
Reporting Date: 04/20/04  
Project Number: NOT GIVEN  
Project Name: PHILMEX 32  
Project Location: MALJAMAR, NM

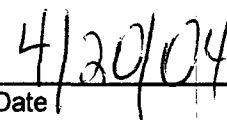
Analysis Date: 04/20/04  
Sampling Date: 04/19/04  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: AH  
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Cl <sup>-</sup> (mg/Kg)
H8618-1	PHILMEX 32	5438
Quality Control		1000
True Value QC		1000
% Recovery		100
Relative Percent Difference		5.0

METHOD: Standard Methods	4500-Cl <sup>-</sup> B
--------------------------	------------------------

Note: Analysis performed on a 1:4 w:v aqueous extract.

  
Chemist

  
Date



# ARDINAL LABORATORIES

PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

ANALYTICAL RESULTS FOR  
CONOCO PHILLIPS  
ATTN: KEN ANDERSEN  
P.O. BOX 180  
MALJAMAR, NM 88264-0180  
FAX TO: (505) 676-2377

Receiving Date: 05/06/04  
Reporting Date: 05/07/04  
Project Number: NOT GIVEN  
Project Name: PHILMEX 32  
Project Location: MALJAMAR, NM

Analysis Date: 05/07/04  
Sampling Date: 05/06/04  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: GP  
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Cl <sup>-</sup> (mg/Kg)
H8677-1	PHILMEX 32	176
Quality Control		1010
True Value QC		1000
% Recovery		101
Relative Percent Difference		3.0

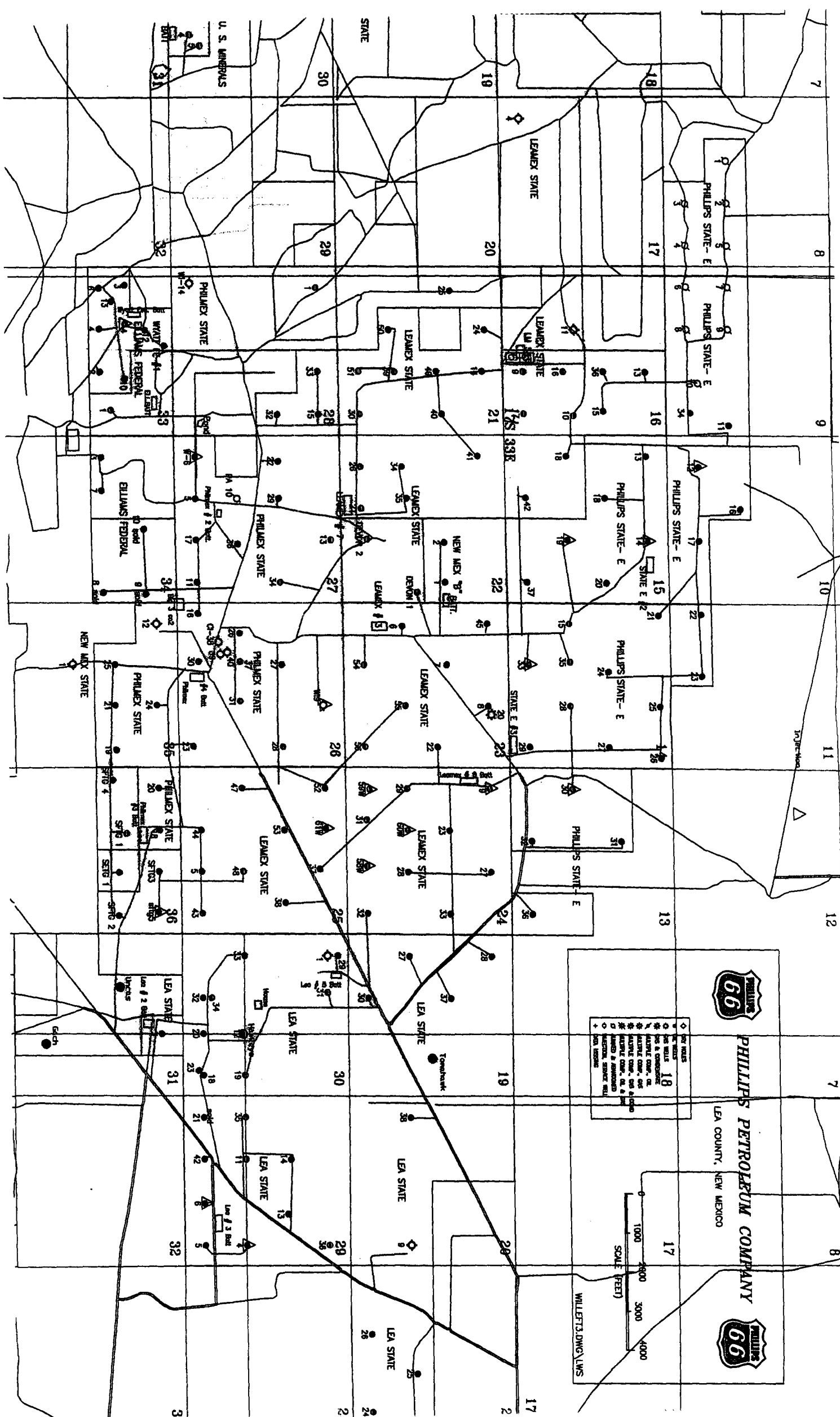
METHOD: Standard Methods

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

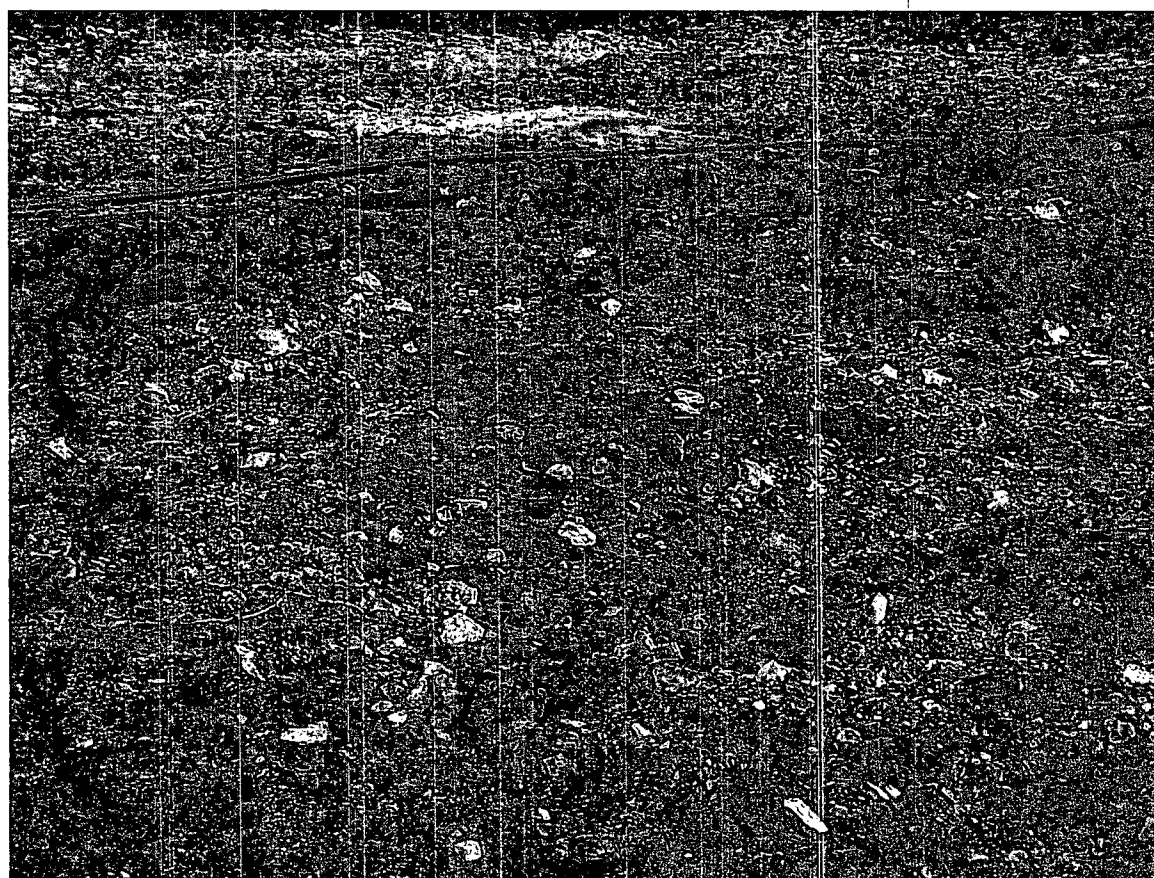
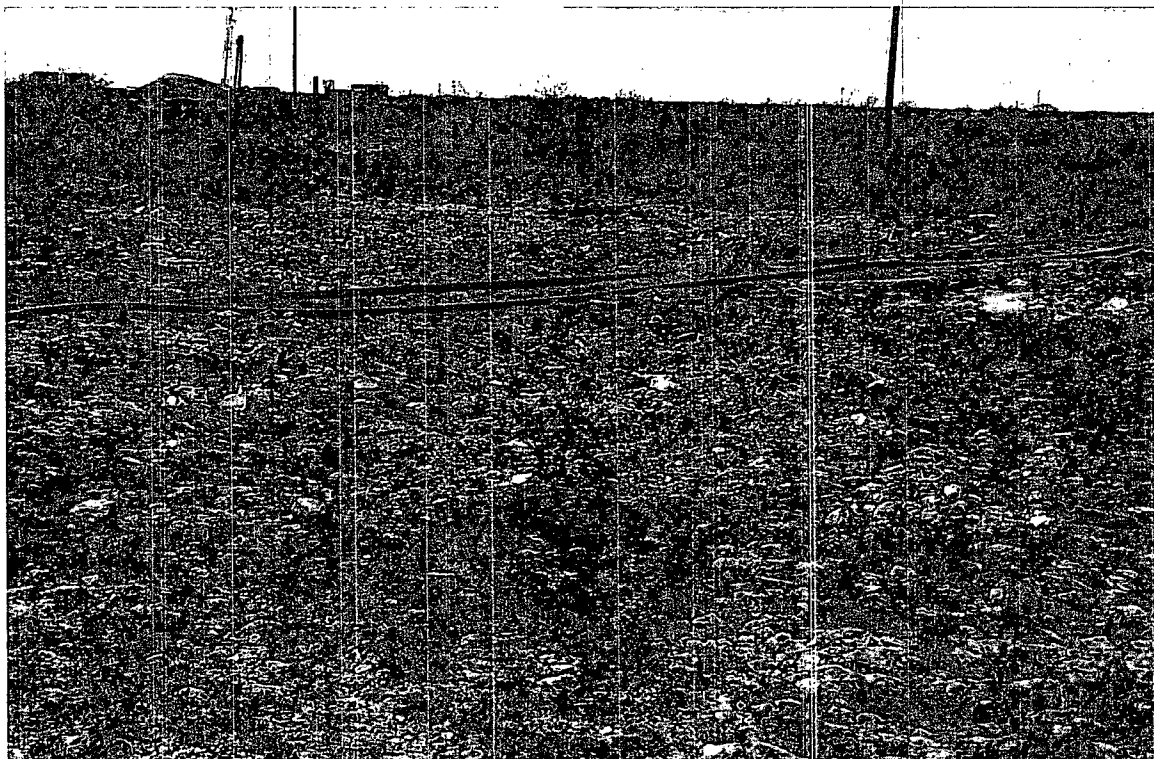
Note: Analysis performed a on 1:4 w:v aqueous extract.

Amy Hill  
Chemist

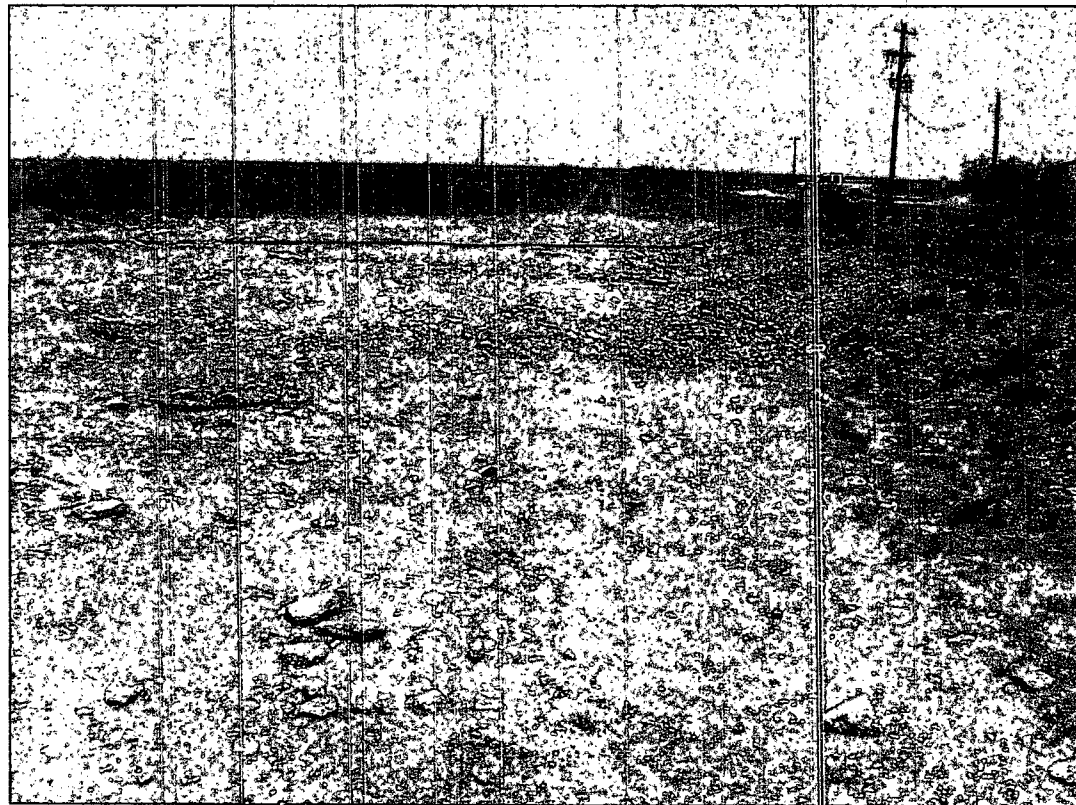
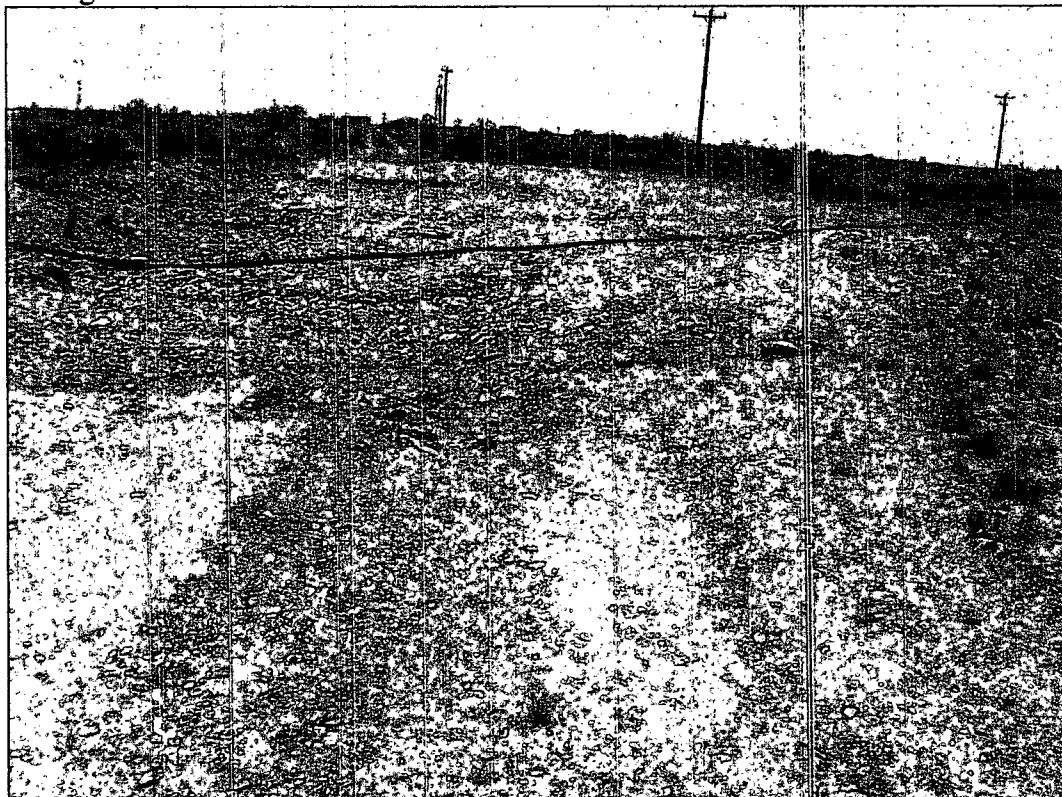
5/7/04  
Date



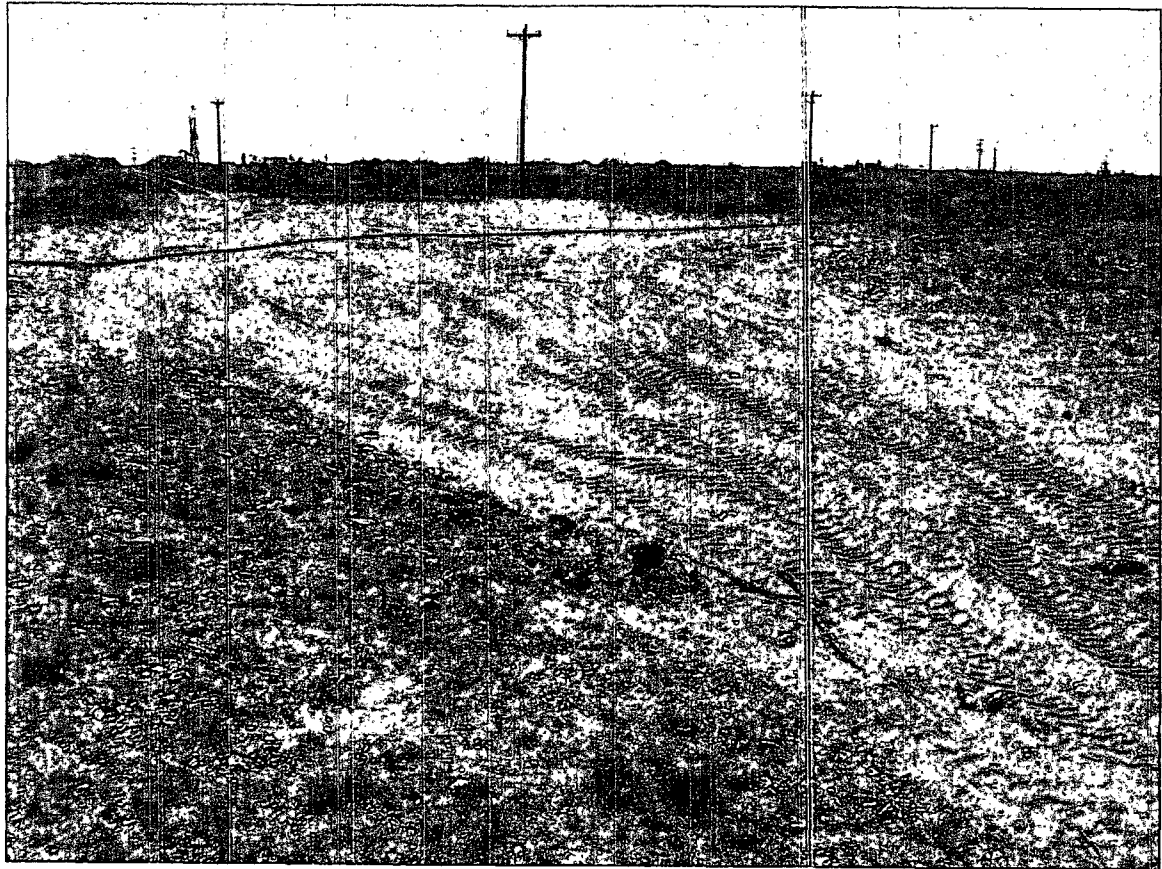
Before remediation



During remediation



After remediation



Water Resources

Data Category:

Ground Water

Geographic Area:

United States

go

# Ground-water levels for the Nation

## Search Results -- 1 sites found

### Search Criteria

Agency code = usgs

site\_no list = • 324940103365801

[Save file of selected sites to local disk for future upload](#)

## USGS 324940103365801 17S.33E.13.34122

Lea County, New Mexico

Latitude 32°49'40", Longitude 103°36'58" NAD27

Gage datum 4,125.00 feet above sea level NGVD29

The depth of the well is 252 feet below land surface.

This well is completed in OGALLALA FORMATION (121OGLL)

### Output formats

[Table of data](#)[Tab-separated data](#)[Graph of data](#)[Reselect period](#)

Date	Time	Water level, feet below land surface	Status
1952-05-24		147.77	
1952-07-23		148.09	
1952-08-01		147.98	
1952-09-01		148.39	
1952-10-01		148.19	
1952-11-01		147.74	
1952-12-01		146.97	
1953-01-01		146.36	
1953-02-01		146.05	
1953-03-01		146.86	
1953-04-01		147.96	
1953-05-01		148.21	
1953-06-01		148.39	
1953-07-01		148.74	

Date	Time	Water level, feet below land surface	Status
1965-08-01		159.75	
1965-09-01		159.70	
1965-10-01		159.79	
1965-11-01		159.70	
1965-12-01		159.65	
1966-01-01		159.77	
1966-01-13		160.84	
1966-02-01		159.95	
1966-02-07		159.74	
1966-04-01		159.85	
1966-05-01		159.89	
1966-07-01		160.12	
1967-01-09		160.51	
1968-01-08		161.43	

1953-08-01		149.21		1969-01-09		162.09	
1953-09-01		148.79		1970-01-05		161.08	
1953-10-01		149.22		1970-01-12		162.18	
1953-11-01		149.21		1970-08-26		161.20	
1953-12-03		149.54		1971-01-13		161.34	
1954-01-01		148.79		1972-01-12		160.57	
1954-01-03		149.82		1973-01-10		161.99	
1954-02-01		148.29		1973-08-08		162.65	
1954-03-01		147.84		1974-01-08		163.23	
1954-04-01		148.62		1974-08-13		164.48	
1954-05-01		149.49		1975-01-08		165.46	
1954-06-01		149.76		1975-03		165.70	
1954-07-01		150.20		1975-04		165.63	
1954-08-01		150.31		1975-05		165.79	
1954-09-01		150.53		1975-06		165.83	
1954-10-01		150.59		1975-07		166.10	
1954-11-01		150.25		1975-08		166.38	
1954-12-01		150.29		1975-08-12		166.46	
1955-01-01		150.12		1975-09		166.44	
1955-01-10		151.46		1975-10		166.52	
1955-02-01		150.07		1975-11		166.46	
1955-03-01		150.38		1975-12		166.60	
1955-04-01		150.07		1976-01		167.09	
1955-05-01		149.97		1976-01-13		167.18	
1955-06-01		149.90		1976-02		167.03	
1955-07-01		150.36		1976-03		167.02	
1955-08-01		150.52		1976-04		167.02	
1955-09-01		150.47		1976-05		167.21	
1955-10-01		150.53		1976-06		167.25	
1955-11-01		150.99		1976-07		167.37	
1955-12-01		151.09		1976-08		167.44	
1956-01-05		151.49		1976-08-10		167.39	
1956-01-13		152.59		1976-09		167.65	
1956-03-14		151.93		1976-10		167.71	
1956-05-09		151.86		1976-11		167.76	
1956-07-26		152.35		1976-12		167.96	
1956-09-07		152.50		1977-01		168.12	
1956-11-30		152.70		1977-01-08		170.70	



1957-01-15		153.67		1977-02		168.27	
1957-01-23		152.57		1977-03		168.44	
1957-03-06		152.97		1977-04		168.59	
1957-03-18		154.29		1977-05		168.73	
1957-06-06		153.19		1977-06		168.99	
1957-09-11		153.78		1977-07		169.05	
1958-01-15		154.14		1977-08		169.29	
1958-01-20		155.24		1977-08-01		169.26	
1958-06-22		154.76		1977-09		169.56	
1958-09-10		154.90		1977-11		169.53	
1959-01-16		156.20		1977-12		169.76	
1959-01-18		155.10		1978-01		169.71	
1959-03-10		155.14		1978-01-04		169.82	
1959-06-02		155.44		1978-02		169.55	
1959-09-15		155.51		1978-03		169.82	
1960-01-07		157.04		1978-04		170.03	
1960-01-15		155.44		1978-05		170.19	
1960-03-23		156.06		1978-06		170.38	
1960-06-02		156.22		1978-07		170.62	
1960-09-01		156.47		1978-08		170.75	
1960-11-22		156.90		1978-08-09		170.76	
1961-01-01		156.81		1978-09		170.86	
1961-01-06		158.01		1978-10		171.00	
1961-01-17		156.91		1978-11		170.96	
1961-02-01		156.77		1978-12		170.86	
1961-03-01		156.70		1979-01		171.19	
1961-04-03		156.67		1979-01-04		171.04	
1961-05-01		156.74		1979-02		171.43	
1961-06-01		156.94		1979-03		171.65	
1961-07-01		157.00		1979-04		171.88	
1961-08-01		157.11		1979-05		172.09	
1961-09-01		157.22		1979-06		172.18	
1961-10-01		157.22		1979-07		172.21	
1961-11-01		157.14		1979-07-25		172.26	
1961-12-01		157.34		1979-08		172.44	
1962-01-04		158.74		1979-09		172.30	
1962-01-15		157.40		1979-10		172.32	
1962-02-01		157.46		1979-11		172.55	

1962-03-01		157.54		1979-12		172.74	
1962-04-01		157.57		1980-01		172.91	
1962-05-01		157.71		1980-01-03		172.80	
1962-06-01		158.00		1980-02		173.04	
1962-07-01		157.50		1980-03		173.23	
1962-08-01		157.67		1980-04		173.32	
1962-09-01		158.08		1980-05		173.52	
1962-10-01		158.30		1980-06		173.61	
1962-11-01		158.30		1980-07		173.69	
1962-12-01		158.10		1980-08		173.82	
1963-01-01		158.11		1980-09		173.88	
1963-01-03		159.31		1980-10		174.06	
1963-02-01		158.22		1981-01-06		174.33	
1963-03-01		158.10		1981-08-27		174.74	
1963-04-01		158.30		1982-01-06		173.93	
1963-05-01		158.21		1982-08-31		173.73	
1963-06-01		158.27		1983-01-03		171.49	
1963-07-01		158.30		1983-08-17		171.72	
1963-08-01		158.35		1984-01-05		170.38	
1963-09-01		158.48		1984-09-04		171.28	
1963-10-01		158.49		1985-01-08		168.79	
1963-11-01		158.48		1985-08-27		169.18	
1963-12-01		158.46		1986-01-08		169.50	
1964-01-01		158.57		1986-09-03		169.95	
1964-01-11		159.70		1987-01-06		174.15	
1964-02-01		158.64		1987-08-19		169.76	
1964-03-01		158.74		1988-01-07		170.35	
1964-04-01		158.64		1988-08-03		170.60	
1964-05-01		158.88		1989-01-04		172.42	
1964-06-01		158.89		1989-08-07		174.79	
1964-07-01		158.95		1990-01-02		172.80	
1964-08-01		158.96		1990-08-28		173.60	
1964-09-01		158.93		1991-01-02		171.50	
1964-10-01		159.08		1991-07-29		174.59	
1964-11-01		159.20		1991-12-11		173.74	
1964-12-01		159.03		1992-01-08		179.10	
1965-01-01		159.15		1992-08-19		175.96	
1965-01-12		160.40		1993-01-04		177.80	

1965-02-01		159.14		1993-07-15		176.27	
1965-03-01		159.20		1994-01-08		178.15	
1965-04-01		159.20		1994-08-23		178.75	
1965-05-01		159.28		2000-01-03		172.39	
1965-06-01		159.41		2001-01-03		172.05	
1965-07-01		159.49		2002-01-03		170.60	
				2003-01-05		168.34	
				2004-01-08		167.87	

Questions about data [h2oteam@usgs.gov](mailto:h2oteam@usgs.gov)  
Feedback on this website [gs-w\\_support\\_nwisweb@usgs.gov](mailto:gs-w_support_nwisweb@usgs.gov)  
Ground water for USA: Water Levels  
<http://waterdata.usgs.gov/nwis/gwlevels?>

[Top](#)  
[Explanation of terms](#)

Retrieved on 2004-05-25 12:26:10 EDT  
Department of the Interior, U.S. Geological Survey  
[Privacy Statement](#) || [Disclaimer](#) || [Accessibility](#)  
1.1 1.07 nadww01

CONOCOPHILLIPS  
P.O. BOX 180  
1000 CONOCO ROAD  
MALJAMAR, NM 88264  
505/676-2371  
FAX 505/676-2377

## FACSIMILE TRANSMITTAL SHEET

TO: Paul Sheely	FROM: Ken Andersen
COMPANY: NMOC D	DATE: 3-29-04
FAX NUMBER: 505.393.0720	TOTAL NO. OF PAGES INCLUDING COVER: 3
PHONE NUMBER: 505.393.6161 ext 113	SENDER'S REFERENCE NUMBER:
RE: Philmex #32	YOUR REFERENCE NUMBER:

☐ ORDER

## NOTES/COMMENTS:

Paul, my phone # is 505.676.5569  
mobile # 505.390.4821  
Fax # 505.676.2377

e-mail ken.n.andersen@conocophillips.com