

**PIT REMED.**

**PLAN AND  
CLOSURE**

**REPORTS**

District I  
P.O. Box 1980, Hobbs, NM  
District II  
P.O. Drawer DD, Artesia, NM 88211  
District III  
1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION  
2040 S. Pacheco  
Santa Fe, New Mexico 87505

SUBMIT 1 COPY  
APPROPRIATE  
DISTRICT OFFICE  
AND 1 COPY  
SANTA FE OFFICE  
(Revised 3/85)

## PIT REMEDIATION AND CLOSURE REPORT

Operator: \_\_\_\_\_ Telephone: (713) 296-65

Address: Apache Corp. 2000 Post Oak Blvd. Houston, Tx 77056

Facility Or: Flying M Battery #4 (Pits 1 & 2 Combined)

Well Name

Location: Unit or Qtr/Qtr Sec D Sec 29 T 9S R 33E County Lea

Pit Type: Separator Dehydrator Other Production Pit

Land Type: BLM, State XX, Fee, Other

Pit Location: Pit dimensions: length 30', width 30', depth 2'  
(Attach diagram)

Reference: wellhead, other actual measurements

Footage from reference: within production equipment area

Direction from reference: Degrees East North  
of  
West South

Depth To Ground Water:  
(Vertical distance from  
contaminants to seasonal  
high water elevation of  
ground water)

Less than 50 feet (20 points)  
50 feet to 99 feet (10 points)  
Greater than 100 feet (0 Points)

Wellhead Protection Area:  
(Less than 200 feet from a private  
domestic water source, or; less than  
1000 feet from all other water sources)

Yes (20 points)  
No (0 points)

Distance To Surface Water:  
(Horizontal distance to perennial  
lakes, ponds, rivers, streams, creeks,  
irrigation canals and ditches)

Less than 200 feet (20 points)  
200 feet to 1000 feet (10 points)  
Greater than 1000 feet (0 points)

RANKING SCORE (TOTAL POINTS):

Date Remediation Started: 08/93 Date Completed: 12/97

Remediation Method: Excavation \_\_\_\_\_ Approx. cubic yards \_\_\_\_\_  
(Check all appropriate sections) Landfarmed \_\_\_\_\_ Insitu Bioremediation XX  
Other \_\_\_\_\_

Remediation Location: Onsite XX Offsite \_\_\_\_\_  
(ie. landfarmed onsite, name and location of offsite facility)

General Description Of Remedial Action: As per State approved Treatment & Closure Plan for Oil Field Production Pits

Ground Water Encountered: No XX Yes \_\_\_\_\_ Depth \_\_\_\_\_

Final Pit: Sample location Please see attached  
Closure Sampling: \_\_\_\_\_  
(if multiple samples, attach sample results and diagram of sample locations and depths) Sample depth \_\_\_\_\_

Sample date \_\_\_\_\_ Sample time \_\_\_\_\_

Sample Results

Benzene(ppm) \_\_\_\_\_

Total BTEX(ppm) \_\_\_\_\_

Field headspace(ppm) \_\_\_\_\_

TPH \_\_\_\_\_

Ground Water Sample: Yes \_\_\_\_\_ No \_\_\_\_\_ (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE April 23, 1998

SIGNATURE

PRINTED NAME Michael D. Bernard  
AND TITLE

# **ANALYTICAL REPORT 1-72071**

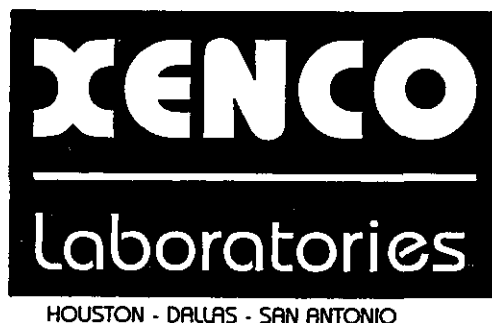
**for**

**Biotek Environmental Services, Inc.**

**Project Manager: Tom Hayman**

**Project Name: Coastal New Mexico**

**September 15, 1997**



**11381 Meadowglen Lane Suite L \* Houston, Texas 77082-2647**  
**Phone (281) 589-0692 Fax (281) 589-0695**



11381 Meadowglen Suite L  
Houston, Texas 77082-2647  
(281) 589-0692 Fax: (281) 589-0695  
Houston - Dallas - San Antonio

September 15, 1997

Project Manager: Tom Hayman  
Biotek Environmental Services, Inc.  
3200 Wilcrest, #400  
Houston, TX 77042

Reference: **XENCO Report No.: 1-72071**  
**Project Name: Coastal New Mexico**

**Project Address: New Mexico**

Dear Tom Hayman:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with XENCO Chain of Custody Number 1-72071. All results being reported to you apply only to the samples analyzed, properly identified with a Laboratory ID number. This letter documents the official transmission of the contents of the report and validates the information contained within.

All the results for the quality control samples passed thorough examination. Also, all parameters for data reduction and validation checked satisfactorily. In view of this, we are able to release the analytical data for this report within acceptance criteria for accuracy, precision, and completeness.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 3 years in our archives and after that time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in COC No. 1-72071 will be filed for 60 days, and after that time they will be properly disposed of without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

XENCO Laboratories is accredited by the American Association for Laboratory Accreditation (A2LA) for technical competence in the field of Environmental Testing (Certificate No. 0343-01). In accordance with A2LA's guidelines, XENCO operates a Quality System that meets ISO/IEC Guide 25 requirements and is strictly implemented and enforced through our standard QA/QC procedures.

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Sincerely,

  
Eddie Yanez, Ph.D.  
QA/QC Manager

*Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.*  
*Certified in California, Oklahoma, Kansas, Arkansas, and approved by numerous other States and Agencies.*  
*A Small Business and Minority Status Company that delivers SERVICE and QUALITY!*

Contractor <i>Dyntek</i>		Phone (713) 370-6973		No. coolers this shipment: <i>None</i>		Contractor COC #	
Address <i>3200 Belvidere Ste 100</i>				Carrier <i>XENCO</i>		Quote #:	
Project Name <i>Caratal N.Mex</i>		Project Director		Airbill No.		P.O. No:	
Project Location <i>New Mexico</i>		Project Manager <i>Jam</i>					
Sampler Signature <i>James Carr</i>		Project No.					

SAMPLE CHARACTERIZATION										Turn-around - ASAP - 24 hrs - 48 hrs - Standard	Remarks
Field ID	Date	Time	DEPTH	SOIL	WATER	COMPS	GRA	Container Size Type P, G	Preservative Ice Other		
1	9/3	300	X	X		X				Sample Description: <i>Shallow M. East</i>	
2	9/3	3:10	X	X		X				Sample Description: <i>Shallow M. East</i>	
3	9/3	4:10	X	X		X				Sample Description: <i>Shallow M. East</i>	
4	9/3	4:10	X	X		X				Sample Description: <i>Shallow M. East</i>	
5	9/3	4:10	X	X		X				Sample Description: <i>Shallow M. East</i>	
6	9/3	4:10	X	X		X				Sample Description: <i>Shallow M. East</i>	
7											
8											
9											
10											

Remarks

Received by	Signature	DATE	TIME
<i>James Carr</i>		9/9/97	9:30
<i>James Carr</i>		9/9/97	9:30
Received For Laboratory by		9/9/97	09:36

**CERTIFICATE OF ANALYSIS SUMMARY 1-72071**
**Biotek Environmental Services, Inc.**

Project Name: Coastal New Mexico

Date Received in Lab : Sep 9, 1997 09:36 by AS

Project Manager: Tom Hayman

Date Report Faxed: Sep 15, 1997

Project Location: New Mexico

XENCO contact : Scott Sample/Edward Yonemoto

Analysis Requested	Lab ID: Field ID:	Date Analyzed - Analytical Results						ppm (mg/L - mg/Kg)
		172071-001 Baum State 5 Bottom	172071-002 2-State 5 Top	172071-003 3 Flying M E-Bottom	172071-004 4-Flying M E-Top	172071-005 5-Flying M W-Bottom	172071-006 6-Flying M W-Top	
TPH-DRO (Diesel) by EPA 8015 M		Sep 10, 1997 < 50.0	Sep 10, 1997 25.7	Sep 10, 1997 646	Sep 10, 1997 545	Sep 10, 1997 < 50.0	Sep 10, 1997 < 50.0	
Total Petroleum Hydrocarbons								

This report summary, and the entire report it represents, has been made for the exclusive and confidential use of Biotek Environmental Services, Inc.. The interpretations and results expressed through this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories, however, assumes no responsibility and makes no warranty to the end use of the data hereby presented.

  
 Edward H. Yonemoto, Ph.D.  
 QA/QC Manager



11381 Meadowgreen Suite L Houston, Texas 77062  
(713) 589-0692 Fax (713) 589-0695

# CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST FORM

Page of

Lab. Batch #

171752-H

Contractor <i>Quintek Env</i>		Phone (713) 782-3581		No coolers this shipment		Contractor COC #	
Address 3200 Wilcrest Ste 500		Project Director <i>Jam Haysman</i>		Carrier		Quote #:	
Project Name <i>Coastal -</i>		Project Manager <i>Jam</i>		Airbill No.		P.O. No.:	
Project Location <i>New Mexico</i>		Project No.		BTX (5030-6020-602)		TFH (483)	
Sampler Signature <i>Jam Haysman</i>		Project No.		8015 D -		Please Hold	
SAMPLE CHARACTERIZATION		Utl Dts Ker Unknown		Turn-around		ID #	
Field ID		Date		Time		Remarks	
3		7-31		4P		1	
4		7-31		4P		2	
5		7-31		4P		3	
6		7-31		4P		4	
7		7-31		4P		5	
8		7-31		4P		6	
9		7-31		4P		7	
10		7-31		4P		8	
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250		7-31					



# CERTIFICATE OF ANALYSIS SUMMARY 1-71752

## Biotek Environmental Services, Inc.

Project Name: Coastal

Date Received in Lab : Aug 4, 1997 12:49 by RT


Project Manager: Tom Hayman  
Project Location: New Mexico

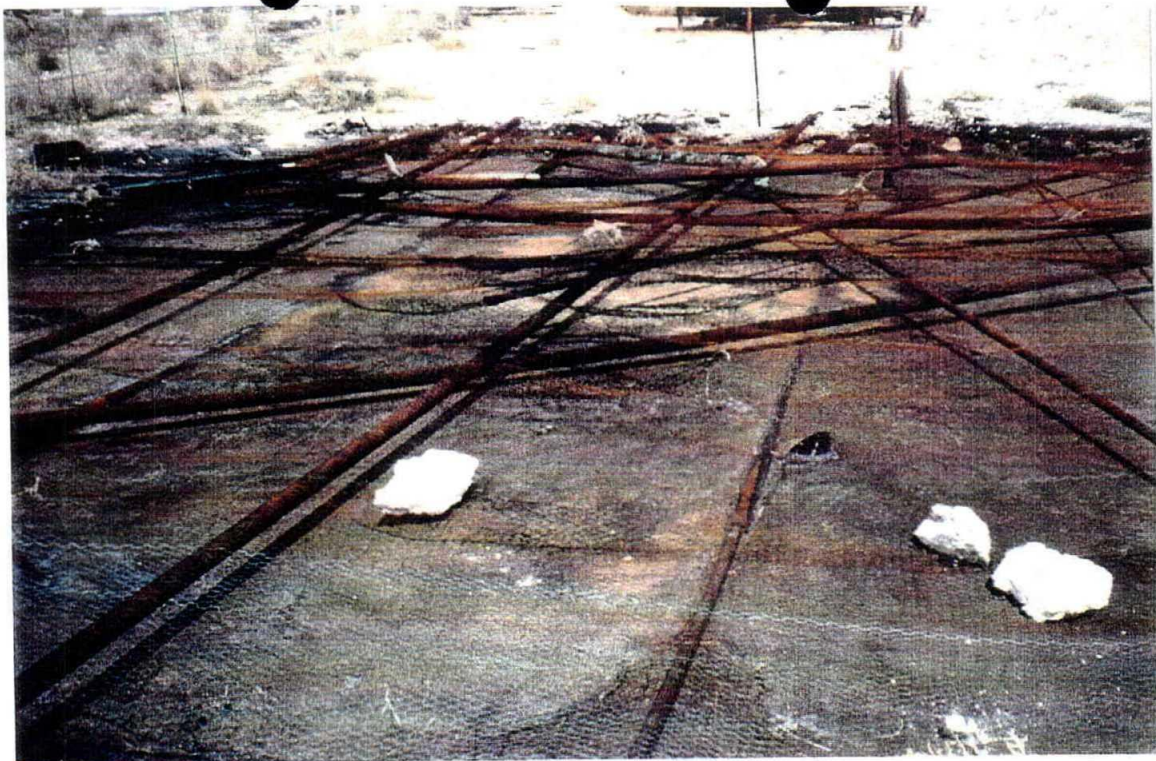
Date Reported: Aug 5, 1997

XENCO contact : Scott Sample/Edward Yonemoto

Analysis Requested	Lab ID: Field ID: Depth:	Date Analyzed - Analytical Results						ppm (mg/L - mg/Kg)
		171752-003	171752-004	171752-005	171752-006			
TPH-DRO (Diesel) by EPA 8015 M		3	4	5	6			
		Aug 4, 1997	Aug 4, 1997	Aug 4, 1997	Aug 4, 1997			
Total Petroleum Hydrocarbons		1650	283	625	56.9			

This report summary, and the entire report it represents, has been made for the exclusive and confidential use of Biotek Environmental Services, Inc.. The interpretations and results expressed through this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories, however, assumes no responsibility and makes no warranty to the end use of the data hereby presented.

  
Edward H. Yonemoto, Ph.D.  
QA/QC Manager



Flying "M" Battery #4  
Pit #1







Flying "M" Battery #4  
Pit #1



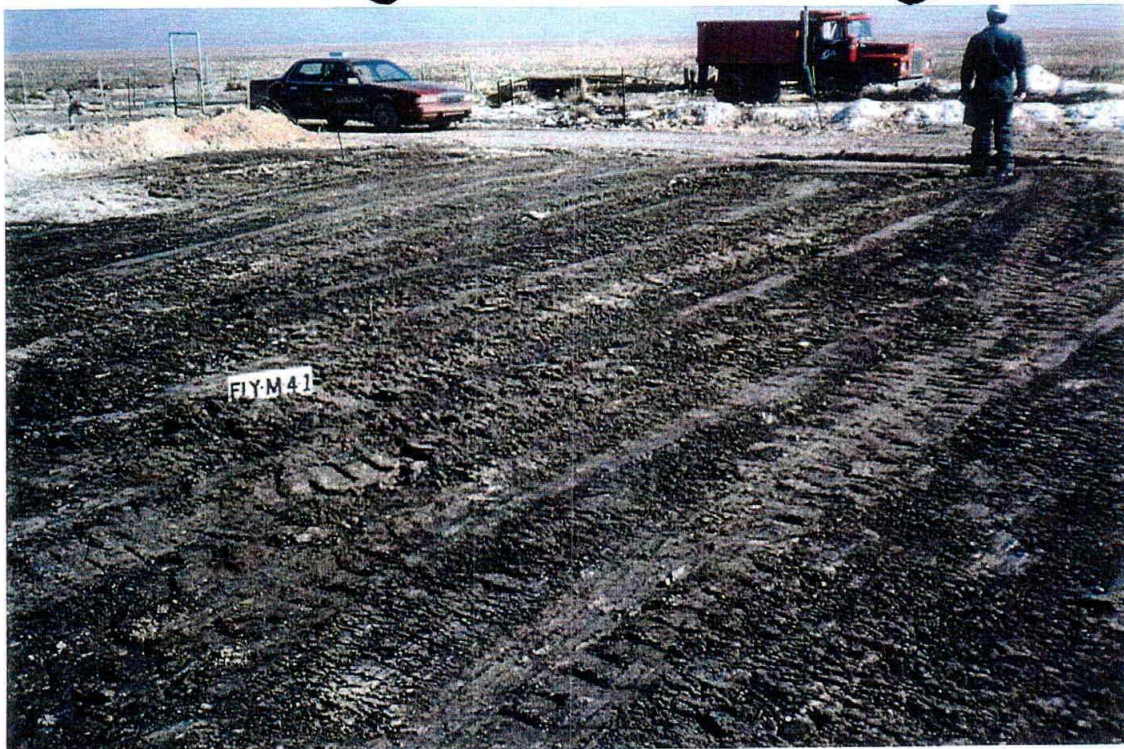




Flying "M" Battery #4  
Pit #1







Flying "M" Battery #4  
Pit #1







Flying "M" Battery #4  
Pit #2







Flying "M" Battery #4  
Pit #2







Flying "M" Battery #4  
Pit #2







Flying "M" Battery #4  
Pit #2