

1R - 257

**GENERAL
CORRESPONDENCE**

YEAR(S):
2000 - 1998

1R0257

LA Larson & Associates, Inc.
Environmental Consultants

RECEIVED
DEC 12 2000
OIL CONSERVATION DIVISION

December 8, 2000

VIA FACSIMILE: (505) 827-8177

Mr. Wayne Price
Petroleum Engineer Specialist
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

Re: Scope of Work for Continued Investigation, D. F. Fergason Lease, NE/4 Quarter, Section 30, Township 18 South, Range 39 East, Lea County, New Mexico

Dear Mr. Price:

Texaco Exploration and Production Inc. (Texaco) has retained Larson & Associates, Inc. (LA) to prepare a scope of work for continued investigation of a former emergency overflow pit (Site), located at the D. F. Fergason Lease near Hobbs, New Mexico. The Site is located approximately 2 miles east of Hobbs, New Mexico, and is situated in the northeast quarter (NE/4), Section 30, Township 18 South, Range 39 East, Lea County, New Mexico.

Investigations were performed on behalf of Texaco at the Site during April 1997 and May 1999. Soil samples were collected from six (6) shallow hand borings advanced to approximately 2.5 feet below ground surface (BGS) during the April 1997 investigation. Soil samples were collected from eleven (11) rotary-drilled borings advanced from 20 to 53 feet BGS during the May 1999 investigation. The investigation results were reported to the New Mexico Oil Conservation Division (NMOCD) on June 3, 1999, in a report titled, "Pit Closure Investigation Report, Texaco Exploration and Production Inc., D.F. Fergason Lease (J.C. Turner Property), Former Emergency Pit, Northeast Quarter, Section 30, Township 18 South, Range 39 East, Lea County, New Mexico".

During a meeting on June 14, 2000, the NMOCD verbally requested Texaco to conduct additional investigation near the southwest corner of the Site. This letter is intended to fulfill that request. A Memorandum of Meeting or Conversation issued by the NMOCD on June 14, 2000, stated that the additional investigation was needed near the southeast corner of the Site. If I am mistaken about the location of the additional investigation, please let me know.

Piper Surveying Company was requested by Texaco to locate the former emergency pits using aerial photographs, landmarks and property boundaries. Figure 1 presents the location of the emergency pits, property boundaries and former borings. Figure 1 suggests that one of the former pits may have extended west of the J. C. Turner property, near the southwest corner of the Site. Upon entering the

Mr. Wayne Price
December 8, 2000
Page 2

Site the surveyor will stake the corners of the westernmost pit. Three additional borings will be drilled in the area of the pit at the approximate locations shown on Figure 1.

The borings will be drilled using a truck-mounted air-rotary drilling rig. Each boring will be continuously cored for a minimum of 20' with soil samples collected every two feet using a split- spoon or core sampler. The recovered core for each sampled interval will be photographed and then split approximately $\frac{1}{4} \times \frac{1}{4} \times \frac{1}{2}$. One quarter of the core will be used to fill a clean glass sample jar that is sealed with a Teflon lined cap. The sample jar will then be labeled, chilled in an ice chest, and delivered under chain-of-custody control to the laboratory. The second quarter of the core will be placed in a clean glass sample jar sealed with aluminum foil and set aside to warm up to ambient temperature for field-screening for petroleum hydrocarbons. The remainder of the core will be available for split samples, etc. The field screening for petroleum hydrocarbons will utilize the Ambient Temperature Headspace (ATH) method. The concentration of organic vapors in the sample jar will be recorded in parts per million (ppm) using a photoionization detector (PID). The probe of the PID will be inserted into the headspace of the jar (through the aluminum foil) after the sample has reached ambient temperature (approximately 15 minutes). The PID will be calibrated prior to use.

All samples collected from the boring closest to the center of the staked area will be submitted to the laboratory for analysis. The soil sample exhibiting the highest headspace gas reading and the deepest sample, as well as any other samples with apparent highly visible contamination, from each of the other two borings will also be submitted for analysis.

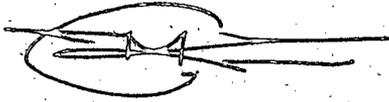
The NMOCD, in accordance with its guidelines ("Guidelines for Unlined Surface Impoundment Closure, February 1993"), allows a PID measurement of less than 100 ppm to be substituted for laboratory analysis of benzene and total BTEX. Using this field screening method the borings will be drilled to a depth where the PID reading is less than 50 ppm or 20', whichever is greater. All samples will be analyzed for total petroleum hydrocarbons (method 8015B), chlorides, and BTEX (method 8260B).

The borings will be filled with portland cement and bentonite grout, and soil cuttings will be placed adjacent to the borings until disposal is arranged, if necessary. All down-hole equipment (i.e., drilling rods, bit, etc.) will be thoroughly decontaminated between each use with high-pressure hot water. All soil sampling equipment (i.e., split-spoon sampler, core sampler, etc.) will be thoroughly washed between events with potable water and laboratory-grade detergent, and rinsed with distilled water.

A report and remediation plan will be prepared following receipt of the laboratory reports. Texaco will provide the NMOCD with 48 hours notice prior to conducting the investigation. Please call Mr. Robert Patterson with Texaco at (915) 688-4836 or myself at (915) 687-0901 if you have questions.

Mr. Wayne Price
December 8, 2000
Page 3

Respectfully yours,
Larson & Associates, Inc.

A handwritten signature in black ink, appearing to read 'Mark J. Larson', written over a horizontal line.

Mark J. Larson, CPG, CGWP
President

Encl.

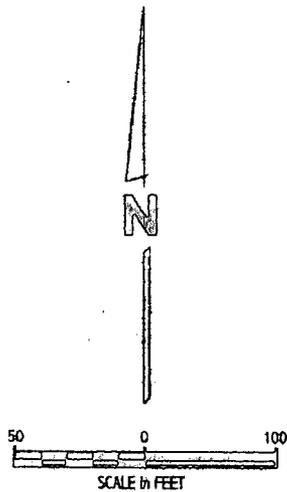
cc: Mr. Robert Patterson
Mr. Chris Williams

FIGURES

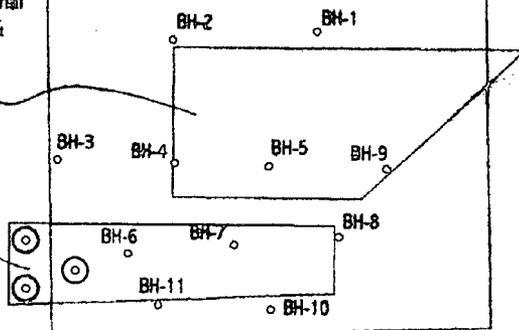
Surveys and signed by Gary L. Jones, PLS-7977.
Note: Boring locations are located by Map by Basin

SURVEY of TURNER TRACT FENCE,
OUTLINE of PITS, AND BORE HOLES
LOCATED in SECTION 30, T-18-S, R-39-E,
LEA COUNTY, NEW MEXICO

TURNER TRACT



Pits shown on Aerial
February 14, &
May 12, 1967



AFTER PIPER SURVEYING, 8/11/2000

LEGEND

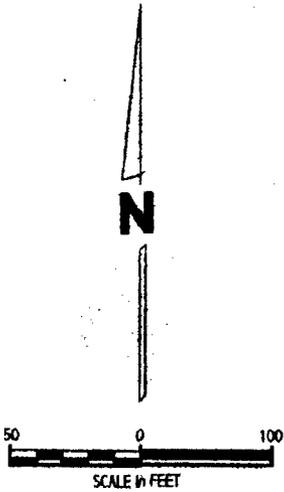
- BH-1 ○ EXISTING BORING LOCATION
- PROPOSED BORING LOCATION

FIGURE #1	
LEA COUNTY, NEW MEXICO	
TEXACO EXPLORATION & PRODUCTION INC. I.C. TURNER PROPERTY	
SITE DRAWING	
DATE: 9/4/00	Larson & Associates, Inc. Environmental Consultants
NAME:	
FILE: 00-0107	

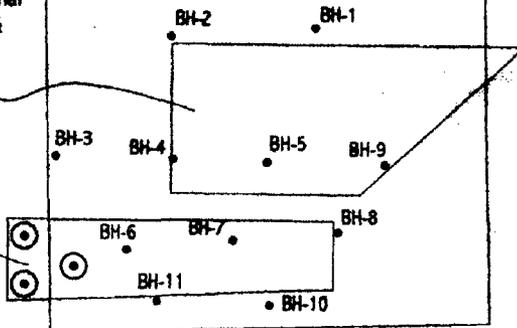
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BH-1 • EXISTING BORING LOCATION

⊙ PROPOSED BORING LOCATION

AFTER PIPER SURVEYING, 8/11/2000

DATE: 9/4/00
NAME:
FILE: 00-0107

FIGURE #1

LEA COUNTY, NEW MEXICO

TEXACO
EXPLORATION & PRODUCTION INC.
I.C. TURNER PROPERTY

SITE DRAWING

LAarson &
Associates, Inc.
Environmental Consultants

Price, Wayne

From: Price, Wayne
Sent: Friday, October 27, 2000 3:21 PM
To: 'Patterson, Robert H '
Subject: RE: address

Thanks! I discussed the Texaco- Ferguson plan with Mark Larson. OCD would like to see the sampling technique change, our normal procedure requires the sample to be placed directly into the sample jar and not into a bag to be mixed. Our experience is that you can lose volatiles that way. I would also like to see samples taken where there is highly visible contamination. Please re-submit the plan with these changes. If you have any questions please call me!

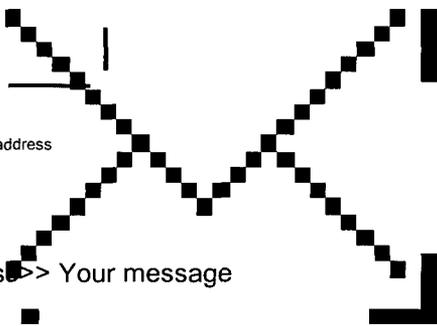
From: Patterson, Robert H [SMTP:patterh@texaco.com]
Sent: Friday, October 27, 2000 3:17 PM
To: Price, Wayne
Subject: address

My mailing address for now is:

Texaco Exploration and Production, Inc.
P. O. Box 3109
Midland, Texas 79702

Price, Wayne

From: System Administrator[SMTP:postmaster@texaco.com]
Sent: Friday, October 27, 2000 3:25 PM
To: Price, Wayne
Subject: Delivered: RE: address



RE: address

<<RE: address>> Your message

To: 'Patterson, Robert H '
Subject: RE: address
Sent: Fri, 27 Oct 2000 16:21:21 -0500

was delivered to the following recipient(s):

Patterson, Robert H on Fri, 27 Oct 2000 16:25:22 -0500
MSEXCH:MSExchangeMTA:MSXUSA:MSX01021

OCT 16 2000

October 10, 2000

Mr. Wayne Price
Petroleum Engineer Specialist
New Mexico Energy, Minerals and Natural Resources Department
Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

Re: Scope of Work for Continued Investigation, D. F. Ferguson Lease, NE/4 Quarter,
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Mr. Wayne Price
October 10, 2000
Page 2

will be drilled using a truck-mounted air-rotary drilling rig at the approximate locations shown on Figure 1. Soil samples will be collected approximately every 5 or 10 feet using a split-spoon or core sampler for field screening and possible laboratory analysis. Each sample will be collected in a clean plastic sample bag, mixed and immediately placed in a clean glass sample jar. The sample jars will be labeled, chilled in an ice chest, and delivered to the laboratory, under chain-of-custody control to the laboratory. The remainder of the sample will be retained in the sample bag, sealed and field-screened for petroleum hydrocarbons Ambient Temperature Headspace (ATH) method. The concentration of organic vapors in the sample bag headspace will be recorded in parts per million (ppm) using a photoionization detector (PID). The probe of the PID will be inserted into the headspace of the sample bag after the sample has reached ambient temperature (approximately 15 minutes). The PID will be calibrated prior to use, and the soil sample exhibiting the highest headspace gas reading and the deepest sample from each boring will be selected for laboratory analysis. The NMOCD, in accordance with its guidelines ("Guidelines for Unlined Surface Impoundment Closure, February 1993"), allows a PID measurement of 100 ppm to be substituted for laboratory analysis of benzene and total BTEX (sum of benzene, toluene, ethylbenzene and xylene). The samples will be analyzed for total petroleum hydrocarbon (TPH) by method 8015 (gasoline and diesel range hydrocarbons) and chloride. Samples exhibiting PID readings above 100 ppm will also be tested for BTEX by method 8021B.

The borings will be filled with portland cement and bentonite grout, and soil cuttings will be placed adjacent to the borings until disposal is arranged, if necessary. All down-hole equipment (i.e., drilling rods, bit, etc.) will be thoroughly decontaminated between each use with a high-pressure hot water. All soil sampling equipment (i.e., split-spoon sampler, core sampler, etc.) will be thoroughly washed between events with potable water and laboratory-grade detergent, and rinsed with distilled water.

A report and remediation plan will be prepared following receipt of the laboratory reports. Texaco will provide the NMOCD with 48 hours notice prior to conducting the investigation. Please call Mr. Robert Patterson with Texaco at (915) 688-4836 or myself at (915) 687-0901 if you have questions.

Respectfully yours,
LARSON & Associates, Inc.



Mark J. Larson, CPG, CGWP
President

Encl.

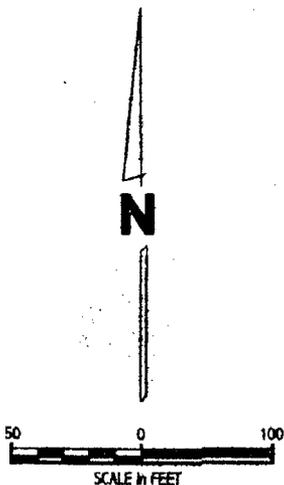
cc: Mr. Robert Patterson

FIGURES

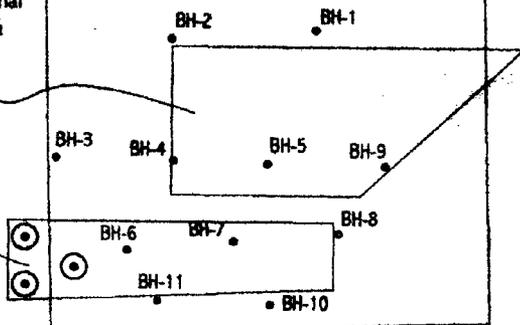
Surveys and signed by Gary L. Jones, PLS-7977.
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LEGEND

- BH-1 • EXISTING BORING LOCATION
- ⊙ PROPOSED BORING LOCATION

FIGURE #1

LEA COUNTY, NEW MEXICO

TEXACO
EXPLORATION & PRODUCTION INC.
I.C. TURNER PROPERTY

SITE DRAWING

DATE: 9/4/00

NAME:

FILE:
00-0107

LAarson &
Associates, Inc.
Environmental Consultants

Price, Wayne

From: Price, Wayne
Sent: Friday, September 15, 2000 1:15 PM
To: 'patterh@texaco.com'; Price, Wayne
Subject: RE: Texaco Ferguson Battery Pit Closure

From: Price, Wayne
Sent: Friday, September 15, 2000 1:14 PM
To: 'patterh@texaco.com'
Subject: Texaco Ferguson Battery Pit Closure

Please find enclosed a copy of the memorandum of meeting held on 6-14-00.

OCD has not heard from Texaco on this matter. Please submit a plan to address the additional investigation work for the pit closure as discussed during our meeting. Please submit by October 16, 2000.

<<File: 6-14meet.doc>>

Price, Wayne

From: System Administrator[SMTP:postmaster@texaco.com]
Sent: Friday, September 15, 2000 1:17 PM
To: Price, Wayne
Subject: Delivered: RE: Texaco Ferguson Battery Pit Closure


RE: Texaco Ferguson
Battery Pit Closure

<<RE: Texaco Ferguson Battery Pit Closure>> Your message

To: 'patterh@texaco.com'; Price, Wayne
Subject: RE: Texaco Ferguson Battery Pit Closure
Sent: Fri, 15 Sep 2000 14:15:36 -0500

was delivered to the following recipient(s):

Patterson, Robert H on Fri, 15 Sep 2000 14:17:41 -0500
MSEXCH:MSEExchangeMTA:MSXUSA:MSX01021

Price, Wayne

From: Price, Wayne
Sent: Thursday, June 22, 2000 4:24 PM
To: 'patterh@texaco.com'
Subject: Minutes & Copy of photos from 6/14/00 meeting



Memo.jpg



Scan1.jpg



Scan10.jpg



Scan11.jpg



Scan12.jpg



Scan13.jpg



Scan14.jpg



Scan15.jpg



Scan16.jpg



Scan17.jpg



Scan18.jpg



Scan19.jpg



Scan2.jpg



Scan3.jpg



Scan4.jpg



Scan6.jpg



Scan5.jpg



Scan7.jpg



Scan8.jpg



Scan9.jpg



NEW MEXICO ENERGY, MINERALS and
NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

Memorandum of Meeting or Conversation

Telephone _____
Personal X
E-Mail _____

Time: 1 pm
Date: 6-14-00

Originating Party: Texaco- Robert Patterson, Mark Larson - Highlander

Other Parties: Wayne Price, Bill Olson, Roger Anderson-OCD

Subject: Texaco Ferguson Battery Pit Closure

Discussion:

Texaco requested a meeting concerning pit closure investigation and closure plans. OCD presented investigation results from landowners. OCD requested Texaco to perform additional investigation of the SE area of the pit and present remediation plan for the on-site contamination. OCD copied Texaco on landowners findings.

Conclusions or Agreements:

Texaco requested time to discuss issue with their environmental consultant and attorneys. OCD will be notified in the near future concerning a plan to address the pit closure. OCD will E-mail pictures taken by landowners representative.

Signed: _____

CC: Robert Patterson-Texaco
Mr. Bill Robins III
OCD Hobbs Office



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
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Signed: _____

CC: Robert Patterson-Texaco
Mr. Bill Robins III
OCD Hobbs Office



TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
 4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
 E-Mail: lab@traceanalysis.com

**ANALYTICAL RESULTS FOR
 OCD**

Attention: Bill Olson
 2040 S. Pacheco
 Santa Fe, New Mexico 87505

November 8, 1999
 Receiving Date: 10/16/99
 Sample Type: Water
 Project No:
 Project Loc: East Hobbs Pool Area

Prep Date: 11/08/99
 Analysis Date: 11/08/99
 Sampling Date: 10/15/99
 Sample Condition: I & C
 Sample Received by: VW
 Project Name: Texaco-Turner

TA#	FIELD CODE	TOTAL Hg (mg/L)
T133578	9910151225	<0.0002
ICV		0.00104
CCV		0.00104
REPORTING LIMIT		0.0002
RPD		0
% Extraction Accuracy		110
% Instrument Accuracy		104

METHODS: EPA 7470A
 CHEMIST: BP
 TOTAL Hg SPIKE: 0.0010 mg/L TOTAL Hg.
 TOTAL Hg CV: 0.0010mg/L TOTAL Hg.

Director, Dr. Blair Leftwich

11-8-99

Date

Cation-Anion Balance Sheet

Sample # 133578

Date: 10/27/99

Cations

	ppm	meq/L
Calcium	91	4.5409
Magnesium	24	1.97496
Sodium	40	1.74
Potassium	3.9	0.099762

Total Cations

8.35562 in meq/L

Anions

	ppm	meq/L
Alkalinity	146	2.92
Sulfate	100	2.082
Chloride	110	3.1031
Nitrate as N	5.1	0.364089
Fluoride	1.8	0.094752

Total Anions

8.56394 in meq/L

Percentage Error

2.46246 %

(needs to be <10%)

OTHER INFORMATION

TDS	470
EC	820

Measure EC and Cation Sums	835.5622	Range should be:	738	to	902
Measure EC and Anion Sums	856.3941	Range should be:	738	to	902
Calculated TDS/Conductivity	0.5731707	Range should be:	0.55	to	0.77
Measure TDS and Cation Sums	0.5624955	Range should be:	0.55	to	0.77
Measure TDS and Anion Sums	0.5488127	Range should be:	0.55	to	0.77

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
 4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
 E-Mail: lab@traceanalysis.com

**ANALYTICAL RESULTS FOR
OCD**

October 27, 1999
 Receiving Date: 10/16/99
 Sample Type: Water
 Project No:
 Project Loc: East Hobbs Pool Area

Attention: Bill Olson
 2040 S. Pacheco
 Santa Fe, New Mexico 87505

Extraction Date: 10/18/99
 Analysis Date: 10/19/99
 Sampling Date: 10/15/99
 Sample Condition: I & C
 Sample Received by: VW
 Project Name: Texaco-Turner

FIELD CODE: 9910151225

TA #: T133578

Reporting
Limit Concentration

EPA 8270 COMPOUNDS	(mg/L)	(mg/L)	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	0.005	ND				
2-Picoline	0.005	ND				
Methyl methanesulfonate	0.005	ND				
Ethyl methanesulfonate	0.005	ND				
Phenol	0.005	ND	63	0	46	105
Aniline	0.005	ND				
bis(2-Chloroethyl)ether	0.005	ND				
2-Chlorophenol	0.005	ND		2	111	
1,3-Dichlorobenzene	0.005	ND				
1,4-Dichlorobenzene	0.005	ND	59	0	79	98
Benzyl alcohol	0.005	ND				
1,2-Dichlorobenzene	0.005	ND				
2-Methylphenol	0.005	ND				
bis(2-chloroisopropyl)ether	0.005	ND				
4-Methylphenol/3-Methylphenol	0.005	ND				
Acetophenone	0.005	ND				
n-Nitrosodi-n-propylamine	0.005	ND		2	138	
Hexachloroethane	0.005	ND				
Nitrobenzene	0.005	ND				
N-Nitrosopiperidine	0.005	ND				
Isophorone	0.005	ND				
2-Nitrophenol	0.005	ND	59			98
2,4-Dimethylphenol	0.005	ND				
bis(2-Chloroethoxy)methane	0.005	ND				
Benzoic acid	0.005	ND				
2,4-Dichlorophenol	0.005	ND	61			102
1,2,4-Trichlorobenzene	0.005	ND		1	83	
a,a-Dimethylphenethylamine	0.005	ND				
Naphthalene	0.005	ND				

2040 S. Pacheco

Santa Fe, New Mexico 87505

FIELD CODE: 9910151225

TA #: T133578

Reporting
Limits Concentration

EPA 8270 COMPOUNDS	(mg/L)	(mg/L)	QC	RPD	%EA	%IA
4-Chloroaniline	0.005	ND				
2,6-Dichlorophenol	0.005	ND				
Hexachlorobutadiene	0.005	ND	59			99
N-Nitroso-di-n-butylamine	0.005	ND				
4-Chloro-3-methylphenol	0.005	ND	62	4	114	104
2-Methylnaphthalene/1-Methylnaphthalene	0.005	ND				
1,2,4,5-Tetrachlorobenzene	0.005	ND				
Hexachlorocyclopentadiene	0.005	ND				
2,4,6-Trichlorophenol	0.005	ND	62			103
2,4,5-Trichlorophenol	0.005	ND				
2-Chloronaphthalene	0.005	ND				
1-Chloronaphthalene	0.005	ND				
2-Nitroaniline	0.005	ND				
Dimethylphthalate	0.005	ND				
Acenaphthylene	0.005	ND				
2,6-Dinitrotoluene	0.005	ND				
3-Nitroaniline	0.005	ND				
Acenaphthene	0.005	ND	60	1	116	100
2,4-Dinitrophenol	0.005	ND				
Dibenzofuran	0.005	ND				
Pentachlorobenzene	0.005	ND				
4-Nitrophenol	0.005	ND		16	37	
1-Naphthylamine	0.005	ND				
2,4-Dinitrotoluene	0.005	ND		12	112	
2-Naphthylamine	0.005	ND				
2,3,4,6-Tetrachlorophenol	0.005	ND				
Fluorene	0.005	ND				
Diethylphthalate	0.005	ND				
4-Chlorophenyl-phenylether	0.005	ND				
4-Nitroaniline	0.005	ND				
4,6-Dinitro-2-methylphenol	0.005	ND				
n-Nitrosodiphenylamine & Diphenylamine	0.005	ND	62			103
Diphenylhydrazine	0.005	ND				

OCD
 Attention: Bill Olson
 2040 S. Pacheco
 Santa Fe, New Mexico 87505

FIELD CODE: 9910151225

TA #: T133578

Reporting
 Limits Concentration

EPA 8270 COMPOUNDS	(mg/L)	(mg/L)	QC	RPD	%EA	%IA
4-Bromophenyl-phenylether	0.005	ND				
Phenacetin	0.005	ND				
Hexachlorobenzene	0.005	ND				
4-Aminobiphenyl	0.005	ND				
Pentachlorophenol	0.005	ND	51	11	103	85
Pentachloronitrobenzene	0.005	ND				
Pronamide	0.005	ND				
Phenanthrene	0.005	ND				
Anthracene	0.005	ND				
Di-n-butylphthalate	0.005	ND				
Fluoranthene	0.005	ND	62			103
Benzidine	0.005	ND				
Pyrene	0.005	ND		3	103	
p-Dimethylaminoazobenzene	0.005	ND				
Butylbenzylphthalate	0.005	ND				
Benzo[a]anthracene	0.005	ND				
3,3-Dichlorobenzidine	0.005	ND				
Chrysene	0.005	ND				
bis(2-Ethylhexyl)phthalate	0.005	ND				
Di-n-octylphthalate	0.005	ND	58			97
Benzo[b]fluoranthene	0.005	ND				
7,12-Dimethylbenz(a)anthracene	0.005	ND				
Benzo[k]fluoranthene	0.005	ND				
Benzo[a]pyrene	0.005	ND	63			106
3-Methylcholanthrene	0.005	ND				
Dibenzo(a,j)acridine	0.005	ND				
Indeno[1,2,3-cd]pyrene	0.005	ND				
Dibenz[a,h]anthracene	0.005	ND				
Benzo[g,h,i]perylene	0.005	ND				

OCD

Attention: Bill Olson
2040 S. Pacheco
Santa Fe, New Mexico 87505

FIELD CODE: 9910151225

TA #: T133578

SURROGATES	% RECOVERY
2-Fluorophenol SURR	61
Phenol-d6 SURR	36
Nitrobenzene-d5 SURR	107
2-Fluorobiphenyl SURR	118
2,4,6-Tribromophenol SURR	94
Terphenyl-d14 SURR	106

METHODS: EPA SW 846-3510C, 8270C

CHEMIST: MA



Director, Dr. Blair Leftwich

10-27-99

Date

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
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ANALYTICAL RESULTS FOR

Page 1 of 2

October 27, 1999
 Receiving Date: 10/16/99
 Sample Type: Water
 Project No:
 Project Loc: East Hobbs Pool Area

OCD
 Attention: Bill Olson
 2040 S. Pacheco
 Santa Fe, New Mexico 87505

Prep Date: 10/19/99
 Analysis Date: 10/19/99
 Sampling Date: 10/15/99
 Sample Condition: I & C
 Sample Received by: VW
 Project Name: Texaco-Turner

FIELD CODE: 9910151225

TA #: T133578

8260 Compounds	Reporting		QC	RPD	EA	IA
	Limit (ug/L)	Concentration (ug/L)				
Dichlorodifluoromethane	2	ND				
Chloromethane	2	ND				
Vinyl chloride	2	ND	97			97
Bromomethane	5	ND				
Chloroethane	2	ND				
Trichlorofluoromethane	2	ND				
1,1-Dichloroethene	2	ND	95	1	96	95
Methylene chloride	5	ND				
trans-1,2-Dichloroethene	2	ND				
1,1-Dichloroethane	2	ND				
cis-1,2-Dichloroethene	2	ND				
Chloroform	2	ND	93			93
2,2-Dichloropropane	2	ND				
Bromochloromethane	2	ND				
1,2-Dichloroethane	2	ND				
1,1,1-Trichloroethane	2	ND				
Carbon Tetrachloride	2	ND				
1,1-Dichloropropene	2	ND				
Benzene	2	ND		1	92	
1,2-Dichloropropane	2	ND	103			103
Trichloroethene	2	ND		0	93	
Dibromomethane	2	ND				
Bromodichloromethane	2	ND				
cis-1,3-Dichloropropene	2	ND				
trans-1,3-Dichloropropene	2	ND				
Toluene	2	ND	101	2	94	101
1,1,2-Trichloroethane	2	ND				
1,3-Dichloropropane	2	ND				
MTBE	2	ND				

FIELD CODE: 9910151225

TA #: T133578

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
8260 Compounds						
Dibromochloromethane	2	ND				
1,2-Dibromoethane	2	ND				
Tetrachloroethene	2	ND				
Chlorobenzene	2	ND	101	2	99	101
1,1,1,2-Tertachloroethane	2	ND				
Ethylbenzene	2	ND	110			110
m & p-Xylene	2	ND				
Bromoform	2	ND				
Styrene	2	ND				
o-Xylene	2	ND				
1,1,2,2-Tetrachloroethane	2	ND				
1,2,3-Trichloropropane	2	ND				
Isopropylbenzene	2	ND				
Bromobenzene	2	ND				
2-Chlorotoluene	2	ND				
n-Propylbenzene	2	ND				
4-Chlorotoluene	2	ND				
1,3,5-Trimethylbenzene	2	ND				
tert-Butylbenzene	2	ND				
1,2,4-Trimethylbenzene	2	ND				
1,4-Dichlorobenzene	2	ND				
sec-Butylbenzene	2	ND				
1,3-Dichlorobenzene	2	ND				
4-Isopropyltoluene	2	ND				
1,2-Dichlorobenzene	2	ND				
n-Butylbenzene	2	ND				
1,2-Dibromo-3-chloropropane	5	ND				
1,2,3-Trichlorobenzene	5	ND				
Naphthalene	2	ND				
1,2,4-Trichlorobenzene	5	ND				
Hexachlorobutadiene	5	ND				

% Recovery

Dibromofluoromethane	108
Toluene-d8	11
4-Bromofluorobenzene	90

ND = Not Detected

Methods: EPA SW 846-5035, 8260B

CHEMIST: JG



Director, Dr. Blair Leftwich

10-27-99

Date



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 E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Bill Olson
 OCD
 2040 S. Pacheco
 Santa Fe, NM 87505

Report Date: 10/27/99

Project Number: N/A
 Project Name: Texaco-Turner
 Project Location: East Hobbs Pool Area

Order ID Number: 99101604

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to TraceAnalysis, Inc. for analysis:

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
133578	9910151225	Water	10/15/99	12:25	10/16/99

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Results Report

Sample Number: 133578
Description: 9910151225

Param	Flag	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
Alkalinity (mg/L as CaCo3)										
Hydroxide Alkalinity		<1.0	1	E 310.1	10/22/99	10/22/99	JS	PB02818	QC03559	1
Carbonate Alkalinity		<1.0	1	E 310.1	10/22/99	10/22/99	JS	PB02818	QC03559	1
Bicarbonate Alkalinity		146	1	E 310.1	10/22/99	10/22/99	JS	PB02818	QC03559	1
Total Alkalinity		146	1	E 310.1	10/22/99	10/22/99	JS	PB02818	QC03559	1
Conductivity (uMHOS/cm)										
Specific Conductance		820	1	SM 2510B	10/19/99	10/20/99	MD	PB02766	QC03472	
Ion Chromatography (IC) (mg/L)										
CL		110	1	E 300.0	10/18/99	10/18/99	JS	PB02756	QC03457	0.5
Fluoride		1.8	1	E 300.0	10/18/99	10/18/99	JS	PB02756	QC03457	0.1
Nitrate-N	*	5.1	1	E 300.0	10/18/99	10/18/99	JS	PB02756	QC03457	0.2
Sulfate		100	1	E 300.0	10/18/99	10/18/99	JS	PB02756	QC03457	0.5
* Nitrate-N - Sample ran out of holding time for NO3.										
pH (s.u.)										
pH	*	7.3	1	E 150.1	10/16/99	10/16/99	RS	PB02741	QC03443	1
* pH - Out of holding time.										
TDS (mg/L)										
Total Dissolved Solids		470	1	E 160.1	10/18/99	10/19/99	MD	PB02755	QC03455	10
Total Metals (mg/L)										
Total Aluminum		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Arsenic		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Barium		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Boron		0.17	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Cadmium		<0.01	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.01
Total Calcium		91	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.2
Total Chromium		<0.05	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.05
Total Cobalt		<0.05	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.05
Total Copper		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Iron		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Lead		<0.05	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.05
Total Magnesium		24	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.2
Total Manganese		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Molybdenum		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Nickel		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Potassium		3.9	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.2
Total Selenium		<0.05	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.05
Total Silica		22	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.5
Total Silver		<0.05	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.05
Total Sodium		40	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.2
Total Zinc		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1

Quality Control Report Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Hydroxide Alkalinity (mg/L as CaCo3)		<1.0	1	10/22/99	PB02818	QC03559
Carbonate Alkalinity (mg/L as CaCo3)		<1.0	1	10/22/99	PB02818	QC03559
Bicarbonate Alkalinity (mg/L as CaCo3)		<4.0	1	10/22/99	PB02818	QC03559
Total Alkalinity (mg/L as CaCo3)		<4.0	1	10/22/99	PB02818	QC03559

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Specific Conductance (uMHOS/cm)		17.2		10/20/99	PB02766	QC03472

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
CL (mg/L)		<0.5	0.5	10/18/99	PB02756	QC03457
Fluoride (mg/L)		<0.1	0.1	10/18/99	PB02756	QC03457
Nitrate-N (mg/L)		<0.2	0.2	10/18/99	PB02756	QC03457
Sulfate (mg/L)		<0.5	0.5	10/18/99	PB02756	QC03457

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Total Dissolved Solids (mg/L)		<10	10	10/19/99	PB02755	QC03455

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Total Aluminum (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Arsenic (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Barium (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Boron (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Cadmium (mg/L)		<0.01	0.01	10/21/99	PB02751	QC03544
Total Calcium (mg/L)		<0.20	0.2	10/21/99	PB02751	QC03544
Total Chromium (mg/L)		<0.05	0.05	10/21/99	PB02751	QC03544
Total Cobalt (mg/L)		<0.05	0.05	10/21/99	PB02751	QC03544
Total Copper (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Iron (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Lead (mg/L)		<0.05	0.05	10/21/99	PB02751	QC03544
Total Magnesium (mg/L)		<0.20	0.2	10/21/99	PB02751	QC03544
Total Manganese (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Molybdenum (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Nickel (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Potassium (mg/L)		<0.20	0.2	10/21/99	PB02751	QC03544
Total Selenium (mg/L)		<0.05	0.05	10/21/99	PB02751	QC03544
Total Silica (mg/L)		<0.50	0.5	10/21/99	PB02751	QC03544
Total Silver (mg/L)		<0.05	0.05	10/21/99	PB02751	QC03544
Total Sodium (mg/L)		<0.20	0.2	10/21/99	PB02751	QC03544
Total Zinc (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544

Report Date: 10/27/99
N/A

Order ID Number: 99101604
Texaco-Turner

Page Number: 4 of 9
East Hobbs Pool Area

Quality Control Report Matrix Spike and Matrix Duplicate Spike

Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	CL (mg/L)	110	1	62.5	168.93	94		80 - 120	0 - 20	QC03457
MS	Fluoride (mg/L)	1.8	1	12.5	13.17	91		80 - 120	0 - 20	QC03457
MS	Nitrate-N (mg/L)	5.1	1	25	28.55	94		80 - 120	0 - 20	QC03457
MS	Sulfate (mg/L)	100	1	62.5	167.90	109		80 - 120	0 - 20	QC03457
MSD	CL (mg/L)	110	1	62.5	169.24	95	1	80 - 120	0 - 20	QC03457
MSD	Fluoride (mg/L)	1.8	1	12.5	13.04	90	1	80 - 120	0 - 20	QC03457
MSD	Nitrate-N (mg/L)	5.1	1	25	28.63	94	0	80 - 120	0 - 20	QC03457
MSD	Sulfate (mg/L)	100	1	62.5	168.25	109	1	80 - 120	0 - 20	QC03457

Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	Total Aluminum (mg/L)	<0.10	1	1	1.05	79		75 - 125	0 - 20	QC03544
MS	Total Calcium (mg/L)	163	1	1000	1239	108		75 - 125	0 - 20	QC03544
MS	Total Copper (mg/L)	<0.10	1	1	1.01	101		75 - 125	0 - 20	QC03544
MS	Total Lead (mg/L)	<0.05	1	1	0.99	99		75 - 125	0 - 20	QC03544
MS	Total Magnesium (mg/L)	44	1	1000	1122	108		75 - 125	0 - 20	QC03544
MS	Total Potassium (mg/L)	5.0	1	1000	1062	106		75 - 125	0 - 20	QC03544
MS	Total Sodium (mg/L)	60	1	1000	1134	107		75 - 125	0 - 20	QC03544
MSD	Total Aluminum (mg/L)	<0.10	1	1	1.01	75	5	75 - 125	0 - 20	QC03544
MSD	Total Calcium (mg/L)	163	1	1000	1220	106	2	75 - 125	0 - 20	QC03544
MSD	Total Copper (mg/L)	<0.10	1	1	0.97	97	4	75 - 125	0 - 20	QC03544
MSD	Total Lead (mg/L)	<0.05	1	1	0.95	95	4	75 - 125	0 - 20	QC03544
MSD	Total Magnesium (mg/L)	44	1	1000	1091	105	3	75 - 125	0 - 20	QC03544
MSD	Total Potassium (mg/L)	5.0	1	1000	1044	104	2	75 - 125	0 - 20	QC03544
MSD	Total Sodium (mg/L)	60	1	1000	1094	103	4	75 - 125	0 - 20	QC03544

Quality Control Report Duplicates

Standard	Param	Flag	Duplicate Result	Sample Result	Dilution	RPD	RPD Limit	QC Batch #
Duplicate	Hydroxide Alkalinity (mg/L as CaCo)		<1.0	<1.0	1	0	0 - 20	QC03559
Duplicate	Carbonate Alkalinity (mg/L as CaCo)		<1.0	<1.0	1	0	0 - 20	QC03559
Duplicate	Bicarbonate Alkalinity (mg/L as CaC)		38	38	1	0	0 - 20	QC03559
Duplicate	Total Alkalinity (mg/L as CaCo3)		38	38	1	0	0 - 20	QC03559

Standard	Param	Flag	Duplicate Result	Sample Result	Dilution	RPD	RPD Limit	QC Batch #
Duplicate	Specific Conductance (uMHOS/cm)		1353	1400	1	3	0 - 20	QC03472

Standard	Param	Flag	Duplicate Result	Sample Result	Dilution	RPD	RPD Limit	QC Batch #
Duplicate	pH (s.u.)		7.3	7.3	1	0	0 - 20	QC03443

Standard	Param	Flag	Duplicate Result	Sample Result	Dilution	RPD	RPD Limit	QC Batch #
Duplicate	Total Dissolved Solids (mg/L)		449	440	1	2	0 - 20	QC03455

Quality Control Report Lab Control Spikes and Duplicate Spike

Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS Total Aluminum (mg/L)	<0.10	1	2	2.00	100		75 - 125	0 - 20	QC03544
LCS Total Calcium (mg/L)	<0.20	1	1000	1044	104		75 - 125	0 - 20	QC03544
LCS Total Copper (mg/L)	<0.10	1	1	2.06	103		75 - 125	0 - 20	QC03544
LCS Total Lead (mg/L)	<0.05	1	1	2.08	104		75 - 125	0 - 20	QC03544
LCS Total Magnesium (mg/L)	<0.20	1	1000	1061	106		75 - 125	0 - 20	QC03544
LCS Total Potassium (mg/L)	<0.20	1	1000	1067	107		75 - 125	0 - 20	QC03544
LCS Total Sodium (mg/L)	<0.20	1	1000	1052	105		75 - 125	0 - 20	QC03544
LCSD Total Aluminum (mg/L)	<0.10	1	2	2.00	100	0	75 - 125	0 - 20	QC03544
LCSD Total Calcium (mg/L)	<0.20	1	1000	1051	105	1	75 - 125	0 - 20	QC03544
LCSD Total Copper (mg/L)	<0.10	1	1	2.06	103	0	75 - 125	0 - 20	QC03544
LCSD Total Lead (mg/L)	<0.05	1	1	2.08	104	0	75 - 125	0 - 20	QC03544
LCSD Total Magnesium (mg/L)	<0.20	1	1000	1059	106	0	75 - 125	0 - 20	QC03544
LCSD Total Potassium (mg/L)	<0.20	1	1000	1081	108	1	75 - 125	0 - 20	QC03544
LCSD Total Sodium (mg/L)	<0.20	1	1000	1061	106	1	75 - 125	0 - 20	QC03544

Quality Control Report

Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Hydroxide Alkalinity (mg/L as CaCo3)		0	<1.0	0	80 - 120	10/22/99	QC03559
ICV	Carbonate Alkalinity (mg/L as CaCo3)		0	2000	0	80 - 120	10/22/99	QC03559
ICV	Bicarbonate Alkalinity (mg/L as CaCo3)		0	110	0	80 - 120	10/22/99	QC03559
ICV	Total Alkalinity (mg/L as CaCo3)		2400	2110	88	80 - 120	10/22/99	QC03559
CCV (1	Hydroxide Alkalinity (mg/L as CaCo3)		0	<1.0	0	80 - 120	10/22/99	QC03559
CCV (1	Carbonate Alkalinity (mg/L as CaCo3)		0	2000	0	80 - 120	10/22/99	QC03559
CCV (1	Bicarbonate Alkalinity (mg/L as CaCo3)		0	220	0	80 - 120	10/22/99	QC03559
CCV (1	Total Alkalinity (mg/L as CaCo3)		2400	2220	93	80 - 120	10/22/99	QC03559

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Specific Conductance (uMHOS/cm)		1413	1306	92	80 - 120	10/20/99	QC03472
CCV (1	Specific Conductance (uMHOS/cm)		1413	1331	94	80 - 120	10/20/99	QC03472

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	CL (mg/L)		12.5	11.76	94	80 - 120	10/18/99	QC03457
ICV	Fluoride (mg/L)		2.5	2.40	96	80 - 120	10/18/99	QC03457
ICV	Nitrate-N (mg/L)		5	4.84	97	80 - 120	10/18/99	QC03457
ICV	Sulfate (mg/L)		12.5	12.56	100	80 - 120	10/18/99	QC03457
CCV (1	CL (mg/L)		12.5	11.75	94	80 - 120	10/18/99	QC03457
CCV (1	Fluoride (mg/L)		2.5	2.40	96	80 - 120	10/18/99	QC03457
CCV (1	Nitrate-N (mg/L)		5	4.85	97	80 - 120	10/18/99	QC03457
CCV (1	Sulfate (mg/L)		12.5	12.45	100	80 - 120	10/18/99	QC03457

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	pH (s.u.)		7	7.0	100	80 - 120	10/16/99	QC03443
CCV (1	pH (s.u.)		7	7.0	100	80 - 120	10/16/99	QC03443

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Total Dissolved Solids (mg/L)		1000	987	99	80 - 120	10/19/99	QC03455
CCV (1	Total Dissolved Solids (mg/L)		1000	1004	100	80 - 120	10/19/99	QC03455

Quality Control Report

Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Total Aluminum (mg/L)		1	0.98	98	75 - 125	10/21/99	QC03544
ICV	Total Arsenic (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Barium (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Boron (mg/L)		1	1.04	104	75 - 125	10/21/99	QC03544
ICV	Total Cadmium (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Calcium (mg/L)		20	20.0	100	75 - 125	10/21/99	QC03544
ICV	Total Chromium (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Cobalt (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Copper (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Iron (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Lead (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Magnesium (mg/L)		20	20.4	102	75 - 125	10/21/99	QC03544
ICV	Total Manganese (mg/L)		1	1.0	100	75 - 125	10/21/99	QC03544
ICV	Total Molybdenum (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Nickel (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Potassium (mg/L)		20	20.3	102	75 - 125	10/21/99	QC03544
ICV	Total Selenium (mg/L)		1	0.98	98	75 - 125	10/21/99	QC03544
ICV	Total Silica (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Silver (mg/L)		0.2	0.197	99	75 - 125	10/21/99	QC03544
ICV	Total Sodium (mg/L)		20	20.4	102	75 - 125	10/21/99	QC03544
ICV	Total Zinc (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
CCV (1	Total Aluminum (mg/L)		1	0.94	94	75 - 125	10/21/99	QC03544
CCV (1	Total Arsenic (mg/L)		1	0.96	96	75 - 125	10/21/99	QC03544
CCV (1	Total Barium (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Boron (mg/L)		1	1.02	102	75 - 125	10/21/99	QC03544
CCV (1	Total Cadmium (mg/L)		1	0.96	96	75 - 125	10/21/99	QC03544
CCV (1	Total Calcium (mg/L)		20	20.1	101	75 - 125	10/21/99	QC03544
CCV (1	Total Chromium (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Cobalt (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Copper (mg/L)		1	0.94	94	75 - 125	10/21/99	QC03544
CCV (1	Total Iron (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Lead (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Magnesium (mg/L)		20	20.6	103	75 - 125	10/21/99	QC03544
CCV (1	Total Manganese (mg/L)		1	0.96	96	75 - 125	10/21/99	QC03544
CCV (1	Total Molybdenum (mg/L)		1	0.94	94	75 - 125	10/21/99	QC03544
CCV (1	Total Nickel (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Potassium (mg/L)		20	20.3	102	75 - 125	10/21/99	QC03544
CCV (1	Total Selenium (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Silica (mg/L)		1	0.98	98	75 - 125	10/21/99	QC03544
CCV (1	Total Silver (mg/L)		0.2	0.188	94	75 - 125	10/21/99	QC03544

Quality Control Report
Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
CCV (1	Total Sodium (mg/L)		20	19.6	98	75 - 125	10/21/99	QC03544
CCV (1	Total Zinc (mg/L)		1	0.96	96	75 - 125	10/21/99	QC03544

133578

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
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1 (800) 378-1296

TraceAnalysis, Inc.

4725 Ripley Dr., Ste A
El Paso, Texas 79922-1028
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 99101607

Company Name: OC-D
Phone #: (505) 827-7154
Address: 2040 S. Pacheco Santa Fe NM 87505 (SOS) 827-8177
Contact Person: BILL OLSON
Fax #:

Invoice to: (if different from above)
Project #:
Project Name: Exaco-Turney

Project Location: East Hobbs Pool Area
Sampler Signature: Wayne Price

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD				DATE	TIME
				WATER	SOIL	AIR	SLUDGE	HCL	HNO3	ICE	NONE		
133578	9910151225	2	40ml X	X				X	X			10/15/99	1225
	9910151225	1	40ml X	X				X	X			10/15/99	1226
	9910151225	1	100ml X	X				X	X			10/15/99	1227
	9910151225	1	1gt X	X				X	X			10/15/99	1227

ANALYSIS REQUEST

(Circle or Specify Method No.)

MTBE 8021B/602	
BTEX 8021B/602	
TPH 418.1/TX1005	
PAH 8270C	
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
TCLP Pesticides	
RCI	
GC-MS Vol. 8260B/624	
GC/MS Semi. Vol. 8270C/625	
PCB's 8082/608	
Pesticides 8081A/608	
BOD, TSS, pH	
8260 X. OGD METALS + CU HG	
8270 X. OGD SEM CHEM	
Turn Around Time if different from standard	Hold

REMARKS: 10/28

LAB USE ONLY

Intact Y / N
Headspace Y / N
Temp 2°
Log-in Review

Relinquished by: Wayne Price Date: 10/15/99 Time: 1:39pm
Received by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____
Received by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____
Received at Laboratory by: Christina Schmidt Date: 10/16/99 Time: 10:00

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

Carrier # Blue 702-259-256-8



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 E-Mail: lab@traceanalysis.com

ANALYTICAL RESULTS FOR
 OCD

Attention: Bill Olson
 2040 S. Pacheco
 Santa Fe, New Mexico 87505

Prep Date: 11/08/99
 Analysis Date: 11/08/99
 Sampling Date: 10/15/99
 Sample Condition: I & C
 Sample Received by: VW
 Project Name: Texaco-Rodriquez

November 8, 1999
 Receiving Date: 10/16/99
 Sample Type: Water
 Project No:
 Project Loc: East Hobbs Pool Area

TA#	FIELD CODE	TOTAL Hg (mg/L)
T133577	9910151303	0.00036
ICV		0.00104
CCV		0.00104
REPORTING LIMIT		0.0002
RPD		0
% Extraction Accuracy		110
% Instrument Accuracy		104

METHODS: EPA 7470A
 CHEMIST: BP
 TOTAL Hg SPIKE: 0.0010 mg/L TOTAL Hg.
 TOTAL Hg CV: 0.0010mg/L TOTAL Hg.

Director, Dr. Blair Leftwich

11-8-99

Date

Cation-Anion Balance Sheet

Sample # 133577

Date: 10/27/99

Cations

	ppm	meq/L
Calcium	163	8.1337
Magnesium	44	3.62076
Sodium	60	2.61
Potassium	5	0.1279

Total Cations
14.4924 in meq/L

Anions

	ppm	meq/L
Alkalinity	119	2.38
Sulfate	160	3.3312
Chloride	290	8.1809
Nitrate as N	5	0.35695
Fluoride	1.6	0.084224

Total Anions
14.3333 in meq/L

Percentage Error
1.10378 %
 (needs to be <10%)

OTHER INFORMATION

TDS	740
EC	1400

Measure EC and Cation Sums	1449.236	Range should be:	1260	to	1540
Measure EC and Anion Sums	1433.3274	Range should be:	1260	to	1540
Calculated TDS/Conductivity	0.5285714	Range should be:	0.55	to	0.77
Measure TDS and Cation Sums	0.5106139	Range should be:	0.55	to	0.77
Measure TDS and Anion Sums	0.5162812	Range should be:	0.55	to	0.77



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 E-Mail: lab@traceanalysis.com

ANALYTICAL RESULTS FOR
 OCD

October 27, 1999
 Receiving Date: 10/16/99
 Sample Type: Water
 Project No:
 Project Loc: East Hobbs Pool Area

Attention: Bill Olson
 2040 S. Pacheco
 Santa Fe, New Mexico 87505

Prep Date: 10/19/99
 Analysis Date: 10/19/99
 Sampling Date: 10/15/99
 Sample Condition: I & C
 Sample Received by: VW
 Project Name: Texaco-Rodriguez

FIELD CODE: 9910151303

TA #: T133577

8260 Compounds	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
Dichlorodifluoromethane	2	ND				
Chloromethane	2	ND				
Vinyl chloride	2	ND	97			97
Bromomethane	5	ND				
Chloroethane	2	ND				
Trichlorofluoromethane	2	ND				
1,1-Dichloroethene	2	ND	95	1	96	95
Methylene chloride	5	ND				
trans-1,2-Dichloroethene	2	ND				
1,1-Dichloroethane	2	ND				
cis-1,2-Dichloroethene	2	ND				
Chloroform	2	ND	93			93
2,2-Dichloropropane	2	ND				
Bromochloromethane	2	ND				
1,2-Dichloroethane	2	ND				
1,1,1-Trichloroethane	2	ND				
Carbon Tetrachloride	2	ND				
1,1-Dichloropropene	2	ND				
Benzene	2	ND		1	92	
1,2-Dichloropropane	2	ND	103			103
Trichloroethene	2	ND		0	93	
Dibromomethane	2	ND				
Bromodichloromethane	2	ND				
cis-1,3-Dichloropropene	2	ND				
trans-1,3-Dichloropropene	2	ND				
Toluene	2	ND	101	2	94	101
1,1,2-Trichloroethane	2	ND				
1,3-Dichloropropane	2	ND				
MTBE	2	ND				

FIELD CODE: 9910151303

TA #: T133577

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
8260 Compounds						
Dibromochloromethane	2	ND				
1,2-Dibromoethane	2	ND				
Tetrachloroethene	2	ND				
Chlorobenzene	2	ND	101	2	99	101
1,1,1,2-Tertachloroethane	2	ND				
Ethylbenzene	2	ND	110			110
m & p-Xylene	2	ND				
Bromoform	2	ND				
Styrene	2	ND				
o-Xylene	2	ND				
1,1,2,2-Tetrachloroethane	2	ND				
1,2,3-Trichloropropane	2	ND				
Isopropylbenzene	2	ND				
Bromobenzene	2	ND				
2-Chlorotoluene	2	ND				
n-Propylbenzene	2	ND				
4-Chlorotoluene	2	ND				
1,3,5-Trimethylbenzene	2	ND				
tert-Butylbenzene	2	ND				
1,2,4-Trimethylbenzene	2	ND				
1,4-Dichlorobenzene	2	ND				
sec-Butylbenzene	2	ND				
1,3-Dichlorobenzene	2	ND				
4-Isopropyltoluene	2	ND				
1,2-Dichlorobenzene	2	ND				
n-Butylbenzene	2	ND				
1,2-Dibromo-3-chloropropane	5	ND				
1,2,3-Trichlorobenzene	5	ND				
Naphthalene	2	ND				
1,2,4-Trichlorobenzene	5	ND				
Hexachlorobutadiene	5	ND				

% Recovery

Dibromofluoromethane	109
Toluene-d8	111
4-Bromofluorobenzene	89

ND = Not Detected

Methods: EPA SW 846-5035, 8260B

CHEMIST: JG



Director, Dr. Blair Leftwich

10-27-99

Date



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 E-Mail: lab@traceanalysis.com

ANALYTICAL RESULTS FOR
 OCD

October 27, 1999
 Receiving Date: 10/16/99
 Sample Type: Water
 Project No:
 Project Loc: East Hobbs Pool Area

Attention: Bill Olson
 2040 S. Pacheco
 Santa Fe, New Mexico 87505

Extraction Date: 10/18/99
 Analysis Date: 10/19/99
 Sampling Date: 10/15/99
 Sample Condition: I & C
 Sample Received by: VW
 Project Name: Texaco-Rodriguez

FIELD CODE: 9910151303

TA #: T133577

Reporting
 Limit Concentration

EPA 8270 COMPOUNDS	(mg/L)	(mg/L)	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	0.005	ND				
2-Picoline	0.005	ND				
Methyl methanesulfonate	0.005	ND				
Ethyl methanesulfonate	0.005	ND				
Phenol	0.005	ND	63	0	46	105
Aniline	0.005	ND				
bis(2-Chloroethyl)ether	0.005	ND				
2-Chlorophenol	0.005	ND		2	111	
1,3-Dichlorobenzene	0.005	ND				
1,4-Dichlorobenzene	0.005	ND	59	0	79	98
Benzyl alcohol	0.005	ND				
1,2-Dichlorobenzene	0.005	ND				
2-Methylphenol	0.005	ND				
bis(2-chloroisopropyl)ether	0.005	ND				
4-Methylphenol/3-Methylphenol	0.005	ND				
Acetophenone	0.005	ND				
n-Nitrosodi-n-propylamine	0.005	ND		2	138	
Hexachloroethane	0.005	ND				
Nitrobenzene	0.005	ND				
N-Nitrosopiperidine	0.005	ND				
Isophorone	0.005	ND				
2-Nitrophenol	0.005	ND	59			98
2,4-Dimethylphenol	0.005	ND				
bis(2-Chloroethoxy)methane	0.005	ND				
Benzoic acid	0.005	ND				
2,4-Dichlorophenol	0.005	ND	61			102
1,2,4-Trichlorobenzene	0.005	ND		1	83	
a,a-Dimethylphenethylamine	0.005	ND				
Naphthalene	0.005	ND				

2040 S. Pacheco

Santa Fe, New Mexico 87505

FIELD CODE: 9910151303

TA #: T133577

Reporting
Limits Concentration

EPA 8270 COMPOUNDS	(mg/L)	(mg/L)	QC	RPD	%EA	%IA
4-Chloroaniline	0.005	ND				
2,6-Dichlorophenol	0.005	ND				
Hexachlorobutadiene	0.005	ND	59			99
N-Nitroso-di-n-butylamine	0.005	ND				
4-Chloro-3-methylphenol	0.005	ND	62	4	114	104
2-Methylnaphthalene/1-Methylnaphthalene	0.005	ND				
1,2,4,5-Tetrachlorobenzene	0.005	ND				
Hexachlorocyclopentadiene	0.005	ND				
2,4,6-Trichlorophenol	0.005	ND	62			103
2,4,5-Trichlorophenol	0.005	ND				
2-Chloronaphthalene	0.005	ND				
1-Chloronaphthalene	0.005	ND				
2-Nitroaniline	0.005	ND				
Dimethylphthalate	0.005	ND				
Acenaphthylene	0.005	ND				
2,6-Dinitrotoluene	0.005	ND				
3-Nitroaniline	0.005	ND				
Acenaphthene	0.005	ND	60	1	116	100
2,4-Dinitrophenol	0.005	ND				
Dibenzofuran	0.005	ND				
Pentachlorobenzene	0.005	ND				
4-Nitrophenol	0.005	ND		16	37	
1-Naphthylamine	0.005	ND				
2,4-Dinitrotoluene	0.005	ND		12	112	
2-Naphthylamine	0.005	ND				
2,3,4,6-Tetrachlorophenol	0.005	ND				
Fluorene	0.005	ND				
Diethylphthalate	0.005	ND				
4-Chlorophenyl-phenylether	0.005	ND				
4-Nitroaniline	0.005	ND				
4,6-Dinitro-2-methylphenol	0.005	ND				
n-Nitrosodiphenylamine & Diphenylamine	0.005	ND	62			103
Diphenylhydrazine	0.005	ND				

OCD
 Attention: Bill Olson
 2040 S. Pacheco
 Santa Fe, New Mexico 87505

FIELD CODE: 9910151303

TA #: T133577

EPA 8270 COMPOUNDS	Reporting		QC	RPD	%EA	%IA
	Limits	Concentration				
	(mg/L)	(mg/L)				
4-Bromophenyl-phenylether	0.005	ND				
Phenacetin	0.005	ND				
Hexachlorobenzene	0.005	ND				
4-Aminobiphenyl	0.005	ND				
Pentachlorophenol	0.005	ND	51	11	103	85
Pentachloronitrobenzene	0.005	ND				
Pronamide	0.005	ND				
Phenanthrene	0.005	ND				
Anthracene	0.005	ND				
Di-n-butylphthalate	0.005	ND				
Fluoranthene	0.005	ND	62			103
Benzidine	0.005	ND				
Pyrene	0.005	ND		3	103	
p-Dimethylaminoazobenzene	0.005	ND				
Butylbenzylphthalate	0.005	ND				
Benzo[a]anthracene	0.005	ND				
3,3-Dichlorobenzidine	0.005	ND				
Chrysene	0.005	ND				
bis(2-Ethylhexyl)phthalate	0.005	ND				
Di-n-octylphthalate	0.005	ND	58			97
Benzo[b]fluoranthene	0.005	ND				
7,12-Dimethylbenz(a)anthracene	0.005	ND				
Benzo[k]fluoranthene	0.005	ND				
Benzo[a]pyrene	0.005	ND	63			106
3-Methylcholanthrene	0.005	ND				
Dibenzo(a,j)acridine	0.005	ND				
Indeno[1,2,3-cd]pyrene	0.005	ND				
Dibenz[a,h]anthracene	0.005	ND				
Benzo[g,h,i]perylene	0.005	ND				

OCD

Attention: Bill Olson

2040 S. Pacheco

Santa Fe, New Mexico 87505

FIELD CODE: 9910151303

TA #: T133577

SURROGATES	% RECOVERY
2-Fluorophenol SURR	63
Phenol-d6 SURR	36
Nitrobenzene-d5 SURR	116
2-Fluorobiphenyl SURR	121
2,4,6-Tribromophenol SURR	100
Terphenyl-d14 SURR	101

METHODS: EPA SW 846-3510C, 8270C

CHEMIST: MA



Director, Dr. Blair Leftwich

10-27-95

Date



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E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Bill Olson
OCD
2040 S. Pacheco
Santa Fe, NM 87505

Report Date: 10/27/99

Project Number: N/A
Project Name: Texaco-Rodriguez
Project Location: East Hobbs Pool Area

Order ID Number: 99101603

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to TraceAnalysis, Inc. for analysis:

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
133577	9910151303	Water	10/15/99	13:03	10/16/99

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Results Report

Sample Number: 133577
Description: 9910151303

Param	Flag	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
Alkalinity (mg/L as CaCo3)										
Hydroxide Alkalinity		<1.0	1	E 310.1	10/22/99	10/22/99	JS	PB02818	QC03559	1
Carbonate Alkalinity		<1.0	1	E 310.1	10/22/99	10/22/99	JS	PB02818	QC03559	1
Bicarbonate Alkalinity		119	1	E 310.1	10/22/99	10/22/99	JS	PB02818	QC03559	1
Total Alkalinity		119	1	E 310.1	10/22/99	10/22/99	JS	PB02818	QC03559	1
Conductivity (uMHOS/cm)										
Specific Conductance		1400	1	SM 2510B	10/19/99	10/20/99	MD	PB02766	QC03472	
Ion Chromatography (IC) (mg/L)										
CL		290	1	E 300.0	10/18/99	10/18/99	JS	PB02756	QC03457	0.5
Fluoride		1.6	1	E 300.0	10/18/99	10/18/99	JS	PB02756	QC03457	0.1
Nitrate-N	*	5.0	1	E 300.0	10/18/99	10/18/99	JS	PB02756	QC03457	0.2
Sulfate		160	1	E 300.0	10/18/99	10/18/99	JS	PB02756	QC03457	0.5
* Nitrate-N - Sample ran out of holding time for NO3.										
pH (s.u.)										
pH	*	7.3	1	E 150.1	10/16/99	10/16/99	RS	PB02741	QC03443	1
* pH - Out of holding time.										
TDS (mg/L)										
Total Dissolved Solids		740	1	E 160.1	10/18/99	10/19/99	MD	PB02755	QC03455	10
Total Metals (mg/L)										
Total Aluminum		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Arsenic		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Barium		0.12	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Boron		0.18	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Cadmium		<0.01	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.01
Total Calcium		163	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.2
Total Chromium		<0.05	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.05
Total Cobalt		<0.05	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.05
Total Copper		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Iron		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Lead		<0.05	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.05
Total Magnesium		44	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.2
Total Manganese		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Molybdenum		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Nickel		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Potassium		5.0	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.2
Total Selenium		<0.05	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.05
Total Silica		21	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.5
Total Silver		<0.05	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.05
Total Sodium		60	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.2
Total Zinc		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1

Quality Control Report Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Hydroxide Alkalinity (mg/L as CaCo3)		<1.0	1	10/22/99	PB02818	QC03559
Carbonate Alkalinity (mg/L as CaCo3)		<1.0	1	10/22/99	PB02818	QC03559
Bicarbonate Alkalinity (mg/L as CaCo3)		<4.0	1	10/22/99	PB02818	QC03559
Total Alkalinity (mg/L as CaCo3)		<4.0	1	10/22/99	PB02818	QC03559

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Specific Conductance (uMHOS/cm)		17.2		10/20/99	PB02766	QC03472

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
CL (mg/L)		<0.5	0.5	10/18/99	PB02756	QC03457
Fluoride (mg/L)		<0.1	0.1	10/18/99	PB02756	QC03457
Nitrate-N (mg/L)		<0.2	0.2	10/18/99	PB02756	QC03457
Sulfate (mg/L)		<0.5	0.5	10/18/99	PB02756	QC03457

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Total Dissolved Solids (mg/L)		<10	10	10/19/99	PB02755	QC03455

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Total Aluminum (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Arsenic (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Barium (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Boron (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Cadmium (mg/L)		<0.01	0.01	10/21/99	PB02751	QC03544
Total Calcium (mg/L)		<0.20	0.2	10/21/99	PB02751	QC03544
Total Chromium (mg/L)		<0.05	0.05	10/21/99	PB02751	QC03544
Total Cobalt (mg/L)		<0.05	0.05	10/21/99	PB02751	QC03544
Total Copper (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Iron (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Lead (mg/L)		<0.05	0.05	10/21/99	PB02751	QC03544
Total Magnesium (mg/L)		<0.20	0.2	10/21/99	PB02751	QC03544
Total Manganese (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Molybdenum (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Nickel (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Potassium (mg/L)		<0.20	0.2	10/21/99	PB02751	QC03544
Total Selenium (mg/L)		<0.05	0.05	10/21/99	PB02751	QC03544
Total Silica (mg/L)		<0.50	0.5	10/21/99	PB02751	QC03544
Total Silver (mg/L)		<0.05	0.05	10/21/99	PB02751	QC03544
Total Sodium (mg/L)		<0.20	0.2	10/21/99	PB02751	QC03544
Total Zinc (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544

Report Date: 10/27/99
N/A

Order ID Number: 99101603
Texaco-Rodriquez

Page Number: 4 of 9
East Hobbs Pool Area

Quality Control Report Matrix Spike and Matrix Duplicate Spike

Standard	Param	Sample		Spike	Matrix	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
		Result	Dil.	Amount Added	Spike Result					
MS	CL (mg/L)	110	1	62.5	168.93	94		80 - 120	0 - 20	QC03457
MS	Fluoride (mg/L)	1.8	1	12.5	13.17	91		80 - 120	0 - 20	QC03457
MS	Nitrate-N (mg/L)	5.1	1	25	28.55	94		80 - 120	0 - 20	QC03457
MS	Sulfate (mg/L)	100	1	62.5	167.90	109		80 - 120	0 - 20	QC03457
MSD	CL (mg/L)	110	1	62.5	169.24	95	1	80 - 120	0 - 20	QC03457
MSD	Fluoride (mg/L)	1.8	1	12.5	13.04	90	1	80 - 120	0 - 20	QC03457
MSD	Nitrate-N (mg/L)	5.1	1	25	28.63	94	0	80 - 120	0 - 20	QC03457
MSD	Sulfate (mg/L)	100	1	62.5	168.25	109	1	80 - 120	0 - 20	QC03457

Standard	Param	Sample		Spike	Matrix	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
		Result	Dil.	Amount Added	Spike Result					
MS	Total Aluminum (mg/L)	<0.10	1	1	1.05	79		75 - 125	0 - 20	QC03544
MS	Total Calcium (mg/L)	163	1	1000	1239	108		75 - 125	0 - 20	QC03544
MS	Total Copper (mg/L)	<0.10	1	1	1.01	101		75 - 125	0 - 20	QC03544
MS	Total Lead (mg/L)	<0.05	1	1	0.99	99		75 - 125	0 - 20	QC03544
MS	Total Magnesium (mg/L)	44	1	1000	1122	108		75 - 125	0 - 20	QC03544
MS	Total Potassium (mg/L)	5.0	1	1000	1062	106		75 - 125	0 - 20	QC03544
MS	Total Sodium (mg/L)	60	1	1000	1134	107		75 - 125	0 - 20	QC03544
MSD	Total Aluminum (mg/L)	<0.10	1	1	1.01	75	5	75 - 125	0 - 20	QC03544
MSD	Total Calcium (mg/L)	163	1	1000	1220	106	2	75 - 125	0 - 20	QC03544
MSD	Total Copper (mg/L)	<0.10	1	1	0.97	97	4	75 - 125	0 - 20	QC03544
MSD	Total Lead (mg/L)	<0.05	1	1	0.95	95	4	75 - 125	0 - 20	QC03544
MSD	Total Magnesium (mg/L)	44	1	1000	1091	105	3	75 - 125	0 - 20	QC03544
MSD	Total Potassium (mg/L)	5.0	1	1000	1044	104	2	75 - 125	0 - 20	QC03544
MSD	Total Sodium (mg/L)	60	1	1000	1094	103	4	75 - 125	0 - 20	QC03544

Quality Control Report Duplicates

Standard	Param	Duplicate Flag	Duplicate Result	Sample Result	Dilution	RPD	RPD Limit	QC Batch #
Duplicate	Carbonate Alkalinity (mg/L as CaCo)	<1.0	<1.0	1	0	0 - 20	QC03559	
Duplicate	Bicarbonate Alkalinity (mg/L as CaC)	38	38	1	0	0 - 20	QC03559	
Duplicate	Total Alkalinity (mg/L as CaCo3)	38	38	1	0	0 - 20	QC03559	

Standard	Param	Flag	Duplicate Result	Sample Result	Dilution	RPD	RPD Limit	QC Batch #
Duplicate	Specific Conductance (uMHOS/cm)		1353	1400	1	3	0 - 20	QC03472

Standard	Param	Flag	Duplicate Result	Sample Result	Dilution	RPD	RPD Limit	QC Batch #
Duplicate	pH (s.u.)		7.3	7.3	1	0	0 - 20	QC03443

Standard	Param	Flag	Duplicate Result	Sample Result	Dilution	RPD	RPD Limit	QC Batch #
Duplicate	Total Dissolved Solids (mg/L)		449	440	1	2	0 - 20	QC03455

Quality Control Report Lab Control Spikes and Duplicate Spike

Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS Total Aluminum (mg/L)	<0.10	1	2	2.00	100		75 - 125	0 - 20	QC03544
LCS Total Calcium (mg/L)	<0.20	1	1000	1044	104		75 - 125	0 - 20	QC03544
LCS Total Copper (mg/L)	<0.10	1	1	2.06	103		75 - 125	0 - 20	QC03544
LCS Total Lead (mg/L)	<0.05	1	1	2.08	104		75 - 125	0 - 20	QC03544
LCS Total Magnesium (mg/L)	<0.20	1	1000	1061	106		75 - 125	0 - 20	QC03544
LCS Total Potassium (mg/L)	<0.20	1	1000	1067	107		75 - 125	0 - 20	QC03544
LCS Total Sodium (mg/L)	<0.20	1	1000	1052	105		75 - 125	0 - 20	QC03544
LCS Total Aluminum (mg/L)	<0.10	1	2	2.00	100	0	75 - 125	0 - 20	QC03544
LCS Total Calcium (mg/L)	<0.20	1	1000	1051	105	1	75 - 125	0 - 20	QC03544
LCS Total Copper (mg/L)	<0.10	1	1	2.06	103	0	75 - 125	0 - 20	QC03544
LCS Total Lead (mg/L)	<0.05	1	1	2.08	104	0	75 - 125	0 - 20	QC03544
LCS Total Magnesium (mg/L)	<0.20	1	1000	1059	106	0	75 - 125	0 - 20	QC03544
LCS Total Potassium (mg/L)	<0.20	1	1000	1081	108	1	75 - 125	0 - 20	QC03544
LCS Total Sodium (mg/L)	<0.20	1	1000	1061	106	1	75 - 125	0 - 20	QC03544

Quality Control Report Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Hydroxide Alkalinity (mg/L as CaCo3)		0	<1.0	0	80 - 120	10/22/99	QC03559
ICV	Carbonate Alkalinity (mg/L as CaCo3)		0	2000	0	80 - 120	10/22/99	QC03559
ICV	Bicarbonate Alkalinity (mg/L as CaCo3)		0	110	0	80 - 120	10/22/99	QC03559
ICV	Total Alkalinity (mg/L as CaCo3)		2400	2110	88	80 - 120	10/22/99	QC03559
CCV (1	Hydroxide Alkalinity (mg/L as CaCo3)		0	<1.0	0	80 - 120	10/22/99	QC03559
CCV (1	Carbonate Alkalinity (mg/L as CaCo3)		0	2000	0	80 - 120	10/22/99	QC03559
CCV (1	Bicarbonate Alkalinity (mg/L as CaCo3)		0	220	0	80 - 120	10/22/99	QC03559
CCV (1	Total Alkalinity (mg/L as CaCo3)		2400	2220	93	80 - 120	10/22/99	QC03559

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Specific Conductance (uMHOS/cm)		1413	1306	92	80 - 120	10/20/99	QC03472
CCV (1	Specific Conductance (uMHOS/cm)		1413	1331	94	80 - 120	10/20/99	QC03472

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	CL (mg/L)		12.5	11.76	94	80 - 120	10/18/99	QC03457
ICV	Fluoride (mg/L)		2.5	2.40	96	80 - 120	10/18/99	QC03457
ICV	Nitrate-N (mg/L)		5	4.84	97	80 - 120	10/18/99	QC03457
ICV	Sulfate (mg/L)		12.5	12.56	100	80 - 120	10/18/99	QC03457
CCV (1	CL (mg/L)		12.5	11.75	94	80 - 120	10/18/99	QC03457
CCV (1	Fluoride (mg/L)		2.5	2.40	96	80 - 120	10/18/99	QC03457
CCV (1	Nitrate-N (mg/L)		5	4.85	97	80 - 120	10/18/99	QC03457
CCV (1	Sulfate (mg/L)		12.5	12.45	100	80 - 120	10/18/99	QC03457

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	pH (s.u.)		7	7.0	100	80 - 120	10/16/99	QC03443
CCV (1	pH (s.u.)		7	7.0	100	80 - 120	10/16/99	QC03443

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Total Dissolved Solids (mg/L)		1000	987	99	80 - 120	10/19/99	QC03455
CCV (1	Total Dissolved Solids (mg/L)		1000	1004	100	80 - 120	10/19/99	QC03455

Quality Control Report

Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Total Aluminum (mg/L)		1	0.98	98	75 - 125	10/21/99	QC03544
ICV	Total Arsenic (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Barium (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Boron (mg/L)		1	1.04	104	75 - 125	10/21/99	QC03544
ICV	Total Cadmium (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Calcium (mg/L)		20	20.0	100	75 - 125	10/21/99	QC03544
ICV	Total Chromium (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Cobalt (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Copper (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Iron (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Lead (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Magnesium (mg/L)		20	20.4	102	75 - 125	10/21/99	QC03544
ICV	Total Manganese (mg/L)		1	1.0	100	75 - 125	10/21/99	QC03544
ICV	Total Molybdenum (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Nickel (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Potassium (mg/L)		20	20.3	102	75 - 125	10/21/99	QC03544
ICV	Total Selenium (mg/L)		1	0.98	98	75 - 125	10/21/99	QC03544
ICV	Total Silica (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Silver (mg/L)		0.2	0.197	99	75 - 125	10/21/99	QC03544
ICV	Total Sodium (mg/L)		20	20.4	102	75 - 125	10/21/99	QC03544
ICV	Total Zinc (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
CCV (1	Total Aluminum (mg/L)		1	0.94	94	75 - 125	10/21/99	QC03544
CCV (1	Total Arsenic (mg/L)		1	0.96	96	75 - 125	10/21/99	QC03544
CCV (1	Total Barium (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Boron (mg/L)		1	1.02	102	75 - 125	10/21/99	QC03544
CCV (1	Total Cadmium (mg/L)		1	0.96	96	75 - 125	10/21/99	QC03544
CCV (1	Total Calcium (mg/L)		20	20.1	101	75 - 125	10/21/99	QC03544
CCV (1	Total Chromium (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Cobalt (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Copper (mg/L)		1	0.94	94	75 - 125	10/21/99	QC03544
CCV (1	Total Iron (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Lead (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Magnesium (mg/L)		20	20.6	103	75 - 125	10/21/99	QC03544
CCV (1	Total Manganese (mg/L)		1	0.96	96	75 - 125	10/21/99	QC03544
CCV (1	Total Molybdenum (mg/L)		1	0.94	94	75 - 125	10/21/99	QC03544
CCV (1	Total Nickel (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Potassium (mg/L)		20	20.3	102	75 - 125	10/21/99	QC03544
CCV (1	Total Selenium (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Silica (mg/L)		1	0.98	98	75 - 125	10/21/99	QC03544
CCV (1	Total Silver (mg/L)		0.2	0.188	94	75 - 125	10/21/99	QC03544

Quality Control Report
Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
CCV (1	Total Sodium (mg/L)		20	19.6	98	75 - 125	10/21/99	QC03544
CCV (1	Total Zinc (mg/L)		1	0.96	96	75 - 125	10/21/99	QC03544

133577

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

4725 Ripley Dr., Site A
El Paso, Texas 79922-1028
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

TraceAnalysis, Inc.

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 99101603

Company Name: **OCD** Phone #: **(505) 827-7154**

Address: **2040 S. PAGHELD SANTA FE** Fax #: **505 827-8177**

Contact Person: **BILL OLSON**

Invoice to: (if different from above)

Project #: _____

Project Name: **TEXAS - RODRIGUEZ**

Project Location: **EAST Hobbs Pool Area**

Sampler Signature: **ZAYNE PRICE**

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD				DATE	SAMPLING TIME
				WATER	SOIL	AIR	SLUDGE	HCL	HNO3	ICE	NONE		
133577	9910151303	2	400ml X	X				X				10/15/97	1303
	9910151303	1	400ml X	X				X				10/15/97	1304
	9910151303	1	1000ml X	X				X				10/15/97	1306
	9910151303	1	1qt X	X				X				10/15/97	1308

Relinquished by: **Zayne Price** Date: **10/15/97** Time: **1:34pm**

Received by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____

Received at Laboratory by: **Penelope Jimenez** Date: **10/16/97** Time: **1:00**

ANALYSIS REQUEST

(Circle or Specify Method No.)

MTBE 8021B/602	
BTEX 8021B/602	
TPH 418.1/TX1005	
PAH 8270C	
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
TCLP Pesticides	
RCI	
GC-MS Vol. 8260B/624	
GC/MS Semi. Vol. 8270C/625	
PCB's 8082/608	
Pesticides 8081A/608	
BOD, TSS, pH	
Hold	

LAB USE ONLY

Intact Y / N _____

Headspace Y / N _____

Temp _____ °

Log-in Review _____

REMARKS: **10/28**

Carrier # **Buy - 902 259 2579**

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

January 13, 2000

CERTIFIED MAIL
RETURN RECEIPT NO. Z 142 564 924

MR. Eddie Seay
601 W. Illinois
Hobbs, NM 88240

Re: Texaco/Turner/Rodriquez

Subject: Analytical Results from Water Wells

Dear Mr. Seay:

Please find enclosed a copy of the analytical results from the recent water well sampling which was conducted by the New Mexico Oil Conservation Division (NMOCD) on 10/15/99. Pursuant to our telephone conversation NMOCD understands you will distribute copies to the Turners' and Rodriquezs'. If they have any specific questions please do not hesitate to contact the NMOCD.

The only water quality constituent that exceed the Water Quality Control Commission (WQCC) regulation limits was chlorides found at 290 mg/l for the Rodriquez well. The WQCC limit is 250 mg/l.

Please note the NMOCD had requested information in our October 1, 1999 letter to Mr. Bill Robins concerning the D.F. Fergason Oil Battery located in Unit H, Sec 30-Ts18s-R39e. As of this date, we have not received the requested information. Would you please check the progress of this request and inform NMOCD within 30 days.

If you require any further information or assistance please do not hesitate to write or call me at (505-827-7155).

Sincerely Yours,

Wayne Price-Pet. Engr. Spec.
Environmental Bureau

cc: OCD Hobbs Office

attachments-2



TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
 4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
 E-Mail: lab@traceanalysis.com

**ANALYTICAL RESULTS FOR
OCD**

Attention: Bill Olson
 2040 S. Pacheco
 Santa Fe, New Mexico 87505

Prep Date: 11/08/99
 Analysis Date: 11/08/99
 Sampling Date: 10/15/99
 Sample Condition: I & C
 Sample Received by: VW
 Project Name: Texaco-Rodriguez

November 8, 1999
 Receiving Date: 10/16/99
 Sample Type: Water
 Project No:
 Project Loc: East Hobbs Pool Area

TA#	FIELD CODE	TOTAL Hg (mg/L)
T133577	9910151303	0.00036
ICV		0.00104
CCV		0.00104
REPORTING LIMIT		0.0002
RPD		0
% Extraction Accuracy		110
% Instrument Accuracy		104

METHODS: EPA 7470A
 CHEMIST: BP
 TOTAL Hg SPIKE: 0.0010 mg/L TOTAL Hg.
 TOTAL Hg CV: 0.0010mg/L TOTAL Hg.

Director, Dr. Blair Leftwich

11-8-99

Date

Cation-Anion Balance Sheet

Sample # 133577

Date: 10/27/99

Cations

	ppm	meq/L
Calcium	163	8.1337
Magnesium	44	3.62076
Sodium	60	2.61
Potassium	5	0.1279

Total Cations

14.4924 in meq/L

Anions

	ppm	meq/L
Alkalinity	119	2.38
Sulfate	160	3.3312
Chloride	290	8.1809
Nitrate as N	5	0.35695
Fluoride	1.6	0.084224

Total Anions

14.3333 in meq/L

Percentage Error

1.10378 %

(needs to be <10%)

OTHER INFORMATION

TDS	740
EC	1400

Measure EC and Cation Sums	1449.236	Range should be:	1260	to	1540
Measure EC and Anion Sums	1433.3274	Range should be:	1260	to	1540
Calculated TDS/Conductivity	0.5285714	Range should be:	0.55	to	0.77
Measure TDS and Cation Sums	0.5106139	Range should be:	0.55	to	0.77
Measure TDS and Anion Sums	0.5162812	Range should be:	0.55	to	0.77

TRACE ANALYSIS, INC.

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 E-Mail: lab@traceanalysis.com

ANALYTICAL RESULTS FOR OCD

Page 1 of 2

October 27, 1999

Receiving Date: 10/16/99

Sample Type: Water

Project No:

Project Loc: East Hobbs Pool Area

Attention: Bill Olson

2040 S. Pacheco

Santa Fe, New Mexico 87505

Prep Date: 10/19/99

Analysis Date: 10/19/99

Sampling Date: 10/15/99

Sample Condition: I & C

Sample Received by: VW

Project Name: Texaco-Rodriguez

FIELD CODE: 9910151303

TA #: T133577

8260 Compounds	Reporting	Concentration (ug/L)	QC	RPD	EA	IA
	Limit (ug/L)					
Dichlorodifluoromethane	2	ND				
Chloromethane	2	ND				
Vinyl chloride	2	ND	97			97
Bromomethane	5	ND				
Chloroethane	2	ND				
Trichlorofluoromethane	2	ND				
1,1-Dichloroethene	2	ND	95	1	96	95
Methylene chloride	5	ND				
trans-1,2-Dichloroethene	2	ND				
1,1-Dichloroethane	2	ND				
cis-1,2-Dichloroethene	2	ND				
Chloroform	2	ND	93			93
2,2-Dichloropropane	2	ND				
Bromochloromethane	2	ND				
1,2-Dichloroethane	2	ND				
1,1,1-Trichloroethane	2	ND				
Carbon Tetrachloride	2	ND				
1,1-Dichloropropene	2	ND				
Benzene	2	ND		1	92	
1,2-Dichloropropane	2	ND	103			103
Trichloroethene	2	ND		0	93	
Dibromomethane	2	ND				
Bromodichloromethane	2	ND				
cis-1,3-Dichloropropene	2	ND				
trans-1,3-Dichloropropene	2	ND				
Toluene	2	ND	101	2	94	101
1,1,2-Trichloroethane	2	ND				
1,3-Dichloropropane	2	ND				
MTBE	2	ND				

FIELD CODE: 9910151303

TA #: T133577

	Reporting Limit (ug/L)	Concentration (ug/L)	QC	RPD	EA	IA
8260 Compounds						
Dibromochloromethane	2	ND				
1,2-Dibromoethane	2	ND				
Tetrachloroethene	2	ND				
Chlorobenzene	2	ND	101	2	99	101
1,1,1,2-Tetrachloroethane	2	ND				
Ethylbenzene	2	ND	110			110
m & p-Xylene	2	ND				
Bromoform	2	ND				
Styrene	2	ND				
o-Xylene	2	ND				
1,1,2,2-Tetrachloroethane	2	ND				
1,2,3-Trichloropropane	2	ND				
Isopropylbenzene	2	ND				
Bromobenzene	2	ND				
2-Chlorotoluene	2	ND				
n-Propylbenzene	2	ND				
4-Chlorotoluene	2	ND				
1,3,5-Trimethylbenzene	2	ND				
tert-Butylbenzene	2	ND				
1,2,4-Trimethylbenzene	2	ND				
1,4-Dichlorobenzene	2	ND				
sec-Butylbenzene	2	ND				
1,3-Dichlorobenzene	2	ND				
4-Isopropyltoluene	2	ND				
1,2-Dichlorobenzene	2	ND				
n-Butylbenzene	2	ND				
1,2-Dibromo-3-chloropropane	5	ND				
1,2,3-Trichlorobenzene	5	ND				
Naphthalene	2	ND				
1,2,4-Trichlorobenzene	5	ND				
Hexachlorobutadiene	5	ND				

% Recovery

Dibromofluoromethane	109
Toluene-d8	111
4-Bromofluorobenzene	89

ND = Not Detected

Methods: EPA SW 846-5035, 8260B

CHEMIST: JG



Director, Dr. Blair Leftwich

10-27-99

Date

TRACE ANALYSIS, INC.

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ANALYTICAL RESULTS FOR

OCD

Page 1 of 4

Attention: Bill Olson

2040 S. Pacheco
 Santa Fe, New Mexico 87505

Extraction Date: 10/18/99

Analysis Date: 10/19/99

Sampling Date: 10/15/99

Sample Condition: I & C

Sample Received by: VW

Project Name: Texaco-Rodriguez

October 27, 1999

Receiving Date: 10/16/99

Sample Type: Water

Project No:

Project Loc: East Hobbs Pool Area

FIELD CODE: 9910151303

TA #: T133577

Reporting

Limit Concentration

EPA 8270 COMPOUNDS	(mg/L)	(mg/L)	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	0.005	ND				
2-Picoline	0.005	ND				
Methyl methanesulfonate	0.005	ND				
Ethyl methanesulfonate	0.005	ND				
Phenol	0.005	ND	63	0	46	105
Aniline	0.005	ND				
bis(2-Chloroethyl)ether	0.005	ND				
2-Chlorophenol	0.005	ND		2	111	
1,3-Dichlorobenzene	0.005	ND				
1,4-Dichlorobenzene	0.005	ND	59	0	79	98
Benzyl alcohol	0.005	ND				
1,2-Dichlorobenzene	0.005	ND				
2-Methylphenol	0.005	ND				
bis(2-chloroisopropyl)ether	0.005	ND				
4-Methylphenol/3-Methylphenol	0.005	ND				
Acetophenone	0.005	ND				
n-Nitrosodi-n-propylamine	0.005	ND		2	138	
Hexachloroethane	0.005	ND				
Nitrobenzene	0.005	ND				
N-Nitrosopiperidine	0.005	ND				
Isophorone	0.005	ND				
2-Nitrophenol	0.005	ND	59			98
2,4-Dimethylphenol	0.005	ND				
bis(2-Chloroethoxy)methane	0.005	ND				
Benzoic acid	0.005	ND				
2,4-Dichlorophenol	0.005	ND	61			102
1,2,4-Trichlorobenzene	0.005	ND		1	83	
a,a-Dimethylphenethylamine	0.005	ND				
Naphthalene	0.005	ND				

FIELD CODE: 9910151303

TA #: T133577

EPA 8270 COMPOUNDS	Reporting		QC	RPD	%EA	%IA
	Limits	Concentration				
	(mg/L)	(mg/L)				
4-Chloroaniline	0.005	ND				
2,6-Dichlorophenol	0.005	ND				
Hexachlorobutadiene	0.005	ND	59			99
N-Nitroso-di-n-butylamine	0.005	ND				
4-Chloro-3-methylphenol	0.005	ND	62	4	114	104
2-Methylnaphthalene/1-Methylnaphthalene	0.005	ND				
1,2,4,5-Tetrachlorobenzene	0.005	ND				
Hexachlorocyclopentadiene	0.005	ND				
2,4,6-Trichlorophenol	0.005	ND	62			103
2,4,5-Trichlorophenol	0.005	ND				
2-Chloronaphthalene	0.005	ND				
1-Chloronaphthalene	0.005	ND				
2-Nitroaniline	0.005	ND				
Dimethylphthalate	0.005	ND				
Acenaphthylene	0.005	ND				
2,6-Dinitrotoluene	0.005	ND				
3-Nitroaniline	0.005	ND				
Acenaphthene	0.005	ND	60	1	116	100
2,4-Dinitrophenol	0.005	ND				
Dibenzofuran	0.005	ND				
Pentachlorobenzene	0.005	ND				
4-Nitrophenol	0.005	ND		16	37	
1-Naphthylamine	0.005	ND				
2,4-Dinitrotoluene	0.005	ND		12	112	
2-Naphthylamine	0.005	ND				
2,3,4,6-Tetrachlorophenol	0.005	ND				
Fluorene	0.005	ND				
Diethylphthalate	0.005	ND				
4-Chlorophenyl-phenylether	0.005	ND				
4-Nitroaniline	0.005	ND				
4,6-Dinitro-2-methylphenol	0.005	ND				
n-Nitrosodiphenylamine & Diphenylamine	0.005	ND	62			103
Diphenylhydrazine	0.005	ND				

FIELD CODE: 9910151303

TA #: T133577

EPA 8270 COMPOUNDS	Reporting		QC	RPD	%EA	%IA
	Limits	Concentration				
	(mg/L)	(mg/L)				
4-Bromophenyl-phenylether	0.005	ND				
Phenacetin	0.005	ND				
Hexachlorobenzene	0.005	ND				
4-Aminobiphenyl	0.005	ND				
Pentachlorophenol	0.005	ND	51	11	103	85
Pentachloronitrobenzene	0.005	ND				
Pronamide	0.005	ND				
Phenanthrene	0.005	ND				
Anthracene	0.005	ND				
Di-n-butylphthalate	0.005	ND				
Fluoranthene	0.005	ND	62			103
Benzidine	0.005	ND				
Pyrene	0.005	ND		3	103	
p-Dimethylaminoazobenzene	0.005	ND				
Butylbenzylphthalate	0.005	ND				
Benzo[a]anthracene	0.005	ND				
3,3-Dichlorobenzidine	0.005	ND				
Chrysene	0.005	ND				
bis(2-Ethylhexyl)phthalate	0.005	ND				
Di-n-octylphthalate	0.005	ND	58			97
Benzo[b]fluoranthene	0.005	ND				
7,12-Dimethylbenz(a)anthracene	0.005	ND				
Benzo[k]fluoranthene	0.005	ND				
Benzo[a]pyrene	0.005	ND	63			106
3-Methylcholanthrene	0.005	ND				
Dibenzo(a,j)acridine	0.005	ND				
Indeno[1,2,3-cd]pyrene	0.005	ND				
Dibenz[a,h]anthracene	0.005	ND				
Benzo[g,h,i]perylene	0.005	ND				

OCD
Attention: Bill Olson
2040 S. Pacheco
Santa Fe, New Mexico 87505

FIELD CODE: 9910151303
TA #: T133577

SURROGATES	% RECOVERY
2-Fluorophenol SURR	63
Phenol-d6 SURR	36
Nitrobenzene-d5 SURR	116
2-Fluorobiphenyl SURR	121
2,4,6-Tribromophenol SURR	100
Terphenyl-d14 SURR	101

METHODS: EPA SW 846-3510C, 8270C
CHEMIST: MA



Director, Dr. Blair Leftwich

10-27-95

Date



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Analytical and Quality Control Report

Bill Olson
OCD
2040 S. Pacheco
Santa Fe, NM 87505

Report Date: 10/27/99

Project Number: N/A
Project Name: Texaco-Rodriquez
Project Location: East Hobbs Pool Area

Order ID Number: 99101603

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to TraceAnalysis, Inc. for analysis:

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
133577	9910151303	Water	10/15/99	13:03	10/16/99

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Results Report

Sample Number: 133577
Description: 9910151303

Param	Flag	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
Alkalinity (mg/L as CaCo3)										
Hydroxide Alkalinity		<1.0	1	E 310.1	10/22/99	10/22/99	JS	PB02818	QC03559	1
Carbonate Alkalinity		<1.0	1	E 310.1	10/22/99	10/22/99	JS	PB02818	QC03559	1
Bicarbonate Alkalinity		119	1	E 310.1	10/22/99	10/22/99	JS	PB02818	QC03559	1
Total Alkalinity		119	1	E 310.1	10/22/99	10/22/99	JS	PB02818	QC03559	1
Conductivity (uMHOS/cm)										
Specific Conductance		1400	1	SM 2510B	10/19/99	10/20/99	MD	PB02766	QC03472	
Ion Chromatography (IC) (mg/L)										
CL		290	1	E 300.0	10/18/99	10/18/99	JS	PB02756	QC03457	0.5
Fluoride		1.6	1	E 300.0	10/18/99	10/18/99	JS	PB02756	QC03457	0.1
Nitrate-N	*	5.0	1	E 300.0	10/18/99	10/18/99	JS	PB02756	QC03457	0.2
Sulfate		160	1	E 300.0	10/18/99	10/18/99	JS	PB02756	QC03457	0.5
* Nitrate-N - Sample ran out of holding time for NO3.										
pH (s.u.)										
pH	*	7.3	1	E 150.1	10/16/99	10/16/99	RS	PB02741	QC03443	1
* pH - Out of holding time.										
TDS (mg/L)										
Total Dissolved Solids		740	1	E 160.1	10/18/99	10/19/99	MD	PB02755	QC03455	10
Total Metals (mg/L)										
Total Aluminum		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Arsenic		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Barium		0.12	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Boron		0.18	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Cadmium		<0.01	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.01
Total Calcium		163	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.2
Total Chromium		<0.05	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.05
Total Cobalt		<0.05	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.05
Total Copper		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Iron		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Lead		<0.05	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.05
Total Magnesium		44	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.2
Total Manganese		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Molybdenum		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Nickel		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Potassium		5.0	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.2
Total Selenium		<0.05	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.05
Total Silica		21	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.5
Total Silver		<0.05	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.05
Total Sodium		60	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.2
Total Zinc		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1

Quality Control Report Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Hydroxide Alkalinity (mg/L as CaCo3)		<1.0	1	10/22/99	PB02818	QC03559
Carbonate Alkalinity (mg/L as CaCo3)		<1.0	1	10/22/99	PB02818	QC03559
Bicarbonate Alkalinity (mg/L as CaCo3)		<4.0	1	10/22/99	PB02818	QC03559
Total Alkalinity (mg/L as CaCo3)		<4.0	1	10/22/99	PB02818	QC03559

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Specific Conductance (uMHOS/cm)		17.2		10/20/99	PB02766	QC03472

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
CL (mg/L)		<0.5	0.5	10/18/99	PB02756	QC03457
Fluoride (mg/L)		<0.1	0.1	10/18/99	PB02756	QC03457
Nitrate-N (mg/L)		<0.2	0.2	10/18/99	PB02756	QC03457
Sulfate (mg/L)		<0.5	0.5	10/18/99	PB02756	QC03457

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Total Dissolved Solids (mg/L)		<10	10	10/19/99	PB02755	QC03455

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Total Aluminum (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Arsenic (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Barium (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Boron (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Cadmium (mg/L)		<0.01	0.01	10/21/99	PB02751	QC03544
Total Calcium (mg/L)		<0.20	0.2	10/21/99	PB02751	QC03544
Total Chromium (mg/L)		<0.05	0.05	10/21/99	PB02751	QC03544
Total Cobalt (mg/L)		<0.05	0.05	10/21/99	PB02751	QC03544
Total Copper (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Iron (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Lead (mg/L)		<0.05	0.05	10/21/99	PB02751	QC03544
Total Magnesium (mg/L)		<0.20	0.2	10/21/99	PB02751	QC03544
Total Manganese (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Molybdenum (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Nickel (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Potassium (mg/L)		<0.20	0.2	10/21/99	PB02751	QC03544
Total Selenium (mg/L)		<0.05	0.05	10/21/99	PB02751	QC03544
Total Silica (mg/L)		<0.50	0.5	10/21/99	PB02751	QC03544
Total Silver (mg/L)		<0.05	0.05	10/21/99	PB02751	QC03544
Total Sodium (mg/L)		<0.20	0.2	10/21/99	PB02751	QC03544
Total Zinc (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544

Report Date: 10/27/99
N/A

Order ID Number: 99101603
Texaco-Rodriquez

Page Number: 4 of 9
East Hobbs Pool Area

Quality Control Report Matrix Spike and Matrix Duplicate Spike

Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	CL (mg/L)	110	1	62.5	168.93	94		80 - 120	0 - 20	QC03457
MS	Fluoride (mg/L)	1.8	1	12.5	13.17	91		80 - 120	0 - 20	QC03457
MS	Nitrate-N (mg/L)	5.1	1	25	28.55	94		80 - 120	0 - 20	QC03457
MS	Sulfate (mg/L)	100	1	62.5	167.90	109		80 - 120	0 - 20	QC03457
MSD	CL (mg/L)	110	1	62.5	169.24	95	1	80 - 120	0 - 20	QC03457
MSD	Fluoride (mg/L)	1.8	1	12.5	13.04	90	1	80 - 120	0 - 20	QC03457
MSD	Nitrate-N (mg/L)	5.1	1	25	28.63	94	0	80 - 120	0 - 20	QC03457
MSD	Sulfate (mg/L)	100	1	62.5	168.25	109	1	80 - 120	0 - 20	QC03457

Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	Total Aluminum (mg/L)	<0.10	1	1	1.05	79		75 - 125	0 - 20	QC03544
MS	Total Calcium (mg/L)	163	1	1000	1239	108		75 - 125	0 - 20	QC03544
MS	Total Copper (mg/L)	<0.10	1	1	1.01	101		75 - 125	0 - 20	QC03544
MS	Total Lead (mg/L)	<0.05	1	1	0.99	99		75 - 125	0 - 20	QC03544
MS	Total Magnesium (mg/L)	44	1	1000	1122	108		75 - 125	0 - 20	QC03544
MS	Total Potassium (mg/L)	5.0	1	1000	1062	106		75 - 125	0 - 20	QC03544
MS	Total Sodium (mg/L)	60	1	1000	1134	107		75 - 125	0 - 20	QC03544
MSD	Total Aluminum (mg/L)	<0.10	1	1	1.01	75	5	75 - 125	0 - 20	QC03544
MSD	Total Calcium (mg/L)	163	1	1000	1220	106	2	75 - 125	0 - 20	QC03544
MSD	Total Copper (mg/L)	<0.10	1	1	0.97	97	4	75 - 125	0 - 20	QC03544
MSD	Total Lead (mg/L)	<0.05	1	1	0.95	95	4	75 - 125	0 - 20	QC03544
MSD	Total Magnesium (mg/L)	44	1	1000	1091	105	3	75 - 125	0 - 20	QC03544
MSD	Total Potassium (mg/L)	5.0	1	1000	1044	104	2	75 - 125	0 - 20	QC03544
MSD	Total Sodium (mg/L)	60	1	1000	1094	103	4	75 - 125	0 - 20	QC03544

Quality Control Report Duplicates

Standard	Param	Duplicate Flag	Duplicate Result	Sample Result	Dilution	RPD	RPD Limit	QC Batch #
Duplicate	Hydroxide Alkalinity (mg/L as CaCo)		<1.0	<1.0	1	0	0 - 20	QC03559
Duplicate	Carbonate Alkalinity (mg/L as CaCo)		<1.0	<1.0	1	0	0 - 20	QC03559
Duplicate	Bicarbonate Alkalinity (mg/L as CaC)		38	38	1	0	0 - 20	QC03559
Duplicate	Total Alkalinity (mg/L as CaCo3)		38	38	1	0	0 - 20	QC03559

Standard	Param	Flag	Duplicate Result	Sample Result	Dilution	RPD	RPD Limit	QC Batch #
Duplicate	Specific Conductance (uMHOS/cm)		1353	1400	1	3	0 - 20	QC03472

Standard	Param	Flag	Duplicate Result	Sample Result	Dilution	RPD	RPD Limit	QC Batch #
Duplicate	pH (s.u.)		7.3	7.3	1	0	0 - 20	QC03443

Standard	Param	Flag	Duplicate Result	Sample Result	Dilution	RPD	RPD Limit	QC Batch #
Duplicate	Total Dissolved Solids (mg/L)		449	440	1	2	0 - 20	QC03455

Quality Control Report Lab Control Spikes and Duplicate Spike

Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS Total Aluminum (mg/L)	<0.10	1	2	2.00	100		75 - 125	0 - 20	QC03544
LCS Total Calcium (mg/L)	<0.20	1	1000	1044	104		75 - 125	0 - 20	QC03544
LCS Total Copper (mg/L)	<0.10	1	1	2.06	103		75 - 125	0 - 20	QC03544
LCS Total Lead (mg/L)	<0.05	1	1	2.08	104		75 - 125	0 - 20	QC03544
LCS Total Magnesium (mg/L)	<0.20	1	1000	1061	106		75 - 125	0 - 20	QC03544
LCS Total Potassium (mg/L)	<0.20	1	1000	1067	107		75 - 125	0 - 20	QC03544
LCS Total Sodium (mg/L)	<0.20	1	1000	1052	105		75 - 125	0 - 20	QC03544
LCSD Total Aluminum (mg/L)	<0.10	1	2	2.00	100	0	75 - 125	0 - 20	QC03544
LCSD Total Calcium (mg/L)	<0.20	1	1000	1051	105	1	75 - 125	0 - 20	QC03544
LCSD Total Copper (mg/L)	<0.10	1	1	2.06	103	0	75 - 125	0 - 20	QC03544
LCSD Total Lead (mg/L)	<0.05	1	1	2.08	104	0	75 - 125	0 - 20	QC03544
LCSD Total Magnesium (mg/L)	<0.20	1	1000	1059	106	0	75 - 125	0 - 20	QC03544
LCSD Total Potassium (mg/L)	<0.20	1	1000	1081	108	1	75 - 125	0 - 20	QC03544
LCSD Total Sodium (mg/L)	<0.20	1	1000	1061	106	1	75 - 125	0 - 20	QC03544

Quality Control Report Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Hydroxide Alkalinity (mg/L as CaCo3)		0	<1.0	0	80 - 120	10/22/99	QC03559
ICV	Carbonate Alkalinity (mg/L as CaCo3)		0	2000	0	80 - 120	10/22/99	QC03559
ICV	Bicarbonate Alkalinity (mg/L as CaCo3)		0	110	0	80 - 120	10/22/99	QC03559
ICV	Total Alkalinity (mg/L as CaCo3)		2400	2110	88	80 - 120	10/22/99	QC03559
CCV (1	Hydroxide Alkalinity (mg/L as CaCo3)		0	<1.0	0	80 - 120	10/22/99	QC03559
CCV (1	Carbonate Alkalinity (mg/L as CaCo3)		0	2000	0	80 - 120	10/22/99	QC03559
CCV (1	Bicarbonate Alkalinity (mg/L as CaCo3)		0	220	0	80 - 120	10/22/99	QC03559
CCV (1	Total Alkalinity (mg/L as CaCo3)		2400	2220	93	80 - 120	10/22/99	QC03559

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Specific Conductance (uMHOS/cm)		1413	1306	92	80 - 120	10/20/99	QC03472
CCV (1	Specific Conductance (uMHOS/cm)		1413	1331	94	80 - 120	10/20/99	QC03472

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	CL (mg/L)		12.5	11.76	94	80 - 120	10/18/99	QC03457
ICV	Fluoride (mg/L)		2.5	2.40	96	80 - 120	10/18/99	QC03457
ICV	Nitrate-N (mg/L)		5	4.84	97	80 - 120	10/18/99	QC03457
ICV	Sulfate (mg/L)		12.5	12.56	100	80 - 120	10/18/99	QC03457
CCV (1	CL (mg/L)		12.5	11.75	94	80 - 120	10/18/99	QC03457
CCV (1	Fluoride (mg/L)		2.5	2.40	96	80 - 120	10/18/99	QC03457
CCV (1	Nitrate-N (mg/L)		5	4.85	97	80 - 120	10/18/99	QC03457
CCV (1	Sulfate (mg/L)		12.5	12.45	100	80 - 120	10/18/99	QC03457

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	pH (s.u.)		7	7.0	100	80 - 120	10/16/99	QC03443
CCV (1	pH (s.u.)		7	7.0	100	80 - 120	10/16/99	QC03443

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Total Dissolved Solids (mg/L)		1000	987	99	80 - 120	10/19/99	QC03455
CCV (1	Total Dissolved Solids (mg/L)		1000	1004	100	80 - 120	10/19/99	QC03455

Quality Control Report Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Total Aluminum (mg/L)		1	0.98	98	75 - 125	10/21/99	QC03544
ICV	Total Arsenic (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Barium (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Boron (mg/L)		1	1.04	104	75 - 125	10/21/99	QC03544
ICV	Total Cadmium (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Calcium (mg/L)		20	20.0	100	75 - 125	10/21/99	QC03544
ICV	Total Chromium (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Cobalt (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Copper (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Iron (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Lead (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Magnesium (mg/L)		20	20.4	102	75 - 125	10/21/99	QC03544
ICV	Total Manganese (mg/L)		1	1.0	100	75 - 125	10/21/99	QC03544
ICV	Total Molybdenum (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Nickel (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Potassium (mg/L)		20	20.3	102	75 - 125	10/21/99	QC03544
ICV	Total Selenium (mg/L)		1	0.98	98	75 - 125	10/21/99	QC03544
ICV	Total Silica (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Silver (mg/L)		0.2	0.197	99	75 - 125	10/21/99	QC03544
ICV	Total Sodium (mg/L)		20	20.4	102	75 - 125	10/21/99	QC03544
ICV	Total Zinc (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
CCV (1	Total Aluminum (mg/L)		1	0.94	94	75 - 125	10/21/99	QC03544
CCV (1	Total Arsenic (mg/L)		1	0.96	96	75 - 125	10/21/99	QC03544
CCV (1	Total Barium (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Boron (mg/L)		1	1.02	102	75 - 125	10/21/99	QC03544
CCV (1	Total Cadmium (mg/L)		1	0.96	96	75 - 125	10/21/99	QC03544
CCV (1	Total Calcium (mg/L)		20	20.1	101	75 - 125	10/21/99	QC03544
CCV (1	Total Chromium (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Cobalt (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Copper (mg/L)		1	0.94	94	75 - 125	10/21/99	QC03544
CCV (1	Total Iron (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Lead (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Magnesium (mg/L)		20	20.6	103	75 - 125	10/21/99	QC03544
CCV (1	Total Manganese (mg/L)		1	0.96	96	75 - 125	10/21/99	QC03544
CCV (1	Total Molybdenum (mg/L)		1	0.94	94	75 - 125	10/21/99	QC03544
CCV (1	Total Nickel (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Potassium (mg/L)		20	20.3	102	75 - 125	10/21/99	QC03544
CCV (1	Total Selenium (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Silica (mg/L)		1	0.98	98	75 - 125	10/21/99	QC03544
CCV (1	Total Silver (mg/L)		0.2	0.188	94	75 - 125	10/21/99	QC03544

Quality Control Report
Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
CCV (1	Total Sodium (mg/L)		20	19.6	98	75 - 125	10/21/99	QC03544
CCV (1	Total Zinc (mg/L)		1	0.96	96	75 - 125	10/21/99	QC03544

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Trace Analysis, Inc.

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El Paso, Texas 79922-1028
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 99101603

Company Name: OCD Phone #: (505) 827-7154
 Address: 2040 S. PACHECO SANTA FE Fax #: 505 827-8177
 Contact Person: BILL OLSON

Invoice to: (If different from above)
 Project #: _____
 Project Name: TEXACO - RODRIGUEZ

Project Location: EAST HOBBS POOL AREA
 Sampler Signature: WAYNE PACE

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD				DATE	SAMPLING TIME
				WATER	SOIL	AIR	SLUDGE	HCL	HNO3	ICE	NONE		
133577	9910151303	2	400ml X	X				X				10/15/99	1303
	9910151303	1	400ml Y	X				X				10/15/99	1304
	9910151303	1	1000ml X	X				X				10/15/99	1306
	9910151303	1	1qt X	X				X				10/15/99	1308

ANALYSIS REQUEST (Circle or Specify Method No.)	LAB USE ONLY
MTBE 8021B/602	
BTEX 8021B/602	
TPH 418.1/TX1005	
PAH 8270C	
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
TCLP Pesticides	
FCI	
GC-MS Vol. 8260B/624	
GC/MS Semi. Vol. 8270C/625	
PCB's 8082/608	
Pesticides 8081A/608	
BOD, TSS, PH	
8260	X
OCD METALS + CV Hg	X
8270	X
OCD BEN CHEM	X
Turn Around Time if different from standard	

Relinquished by: Wayne Pace Date: 10/15/99 Time: 1:34pm
 Received by: _____ Date: _____ Time: _____
 Relinquished by: _____ Date: _____ Time: _____
 Received by: Penelope Schmidt Date: 10/16/99 Time: 1500

Carrier # Bus - 952 259 2579



TRACE ANALYSIS, INC.

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 4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
 E-Mail: lab@traceanalysis.com

ANALYTICAL RESULTS FOR
 OCD

Attention: Bill Olson
 2040 S. Pacheco
 Santa Fe, New Mexico 87505

Prep Date: 11/08/99
 Analysis Date: 11/08/99
 Sampling Date: 10/15/99
 Sample Condition: I & C
 Sample Received by: VW
 Project Name: Texaco-Turner

November 8, 1999
 Receiving Date: 10/16/99
 Sample Type: Water
 Project No:
 Project Loc: East Hobbs Pool Area

TA#	FIELD CODE	TOTAL Hg (mg/L)
T133578	9910151225	<0.0002
ICV		0.00104
CCV		0.00104
REPORTING LIMIT		0.0002
RPD		0
% Extraction Accuracy		110
% Instrument Accuracy		104

METHODS: EPA 7470A
 CHEMIST: BP
 TOTAL Hg SPIKE: 0.0010 mg/L TOTAL Hg.
 TOTAL Hg CV: 0.0010mg/L TOTAL Hg.

 Director, Dr. Blair Leftwich

11-8-99

 Date

Cation-Anion Balance Sheet

Sample # 133578

Date: 10/27/99

Cations

	ppm	meq/L
Calcium	91	4.5409
Magnesium	24	1.97496
Sodium	40	1.74
Potassium	3.9	0.099762

Total Cations
8.35562 in meq/L

Anions

	ppm	meq/L
Alkalinity	146	2.92
Sulfate	100	2.082
Chloride	110	3.1031
Nitrate as N	5.1	0.364089
Fluoride	1.8	0.094752

Total Anions
8.56394 in meq/L

Percentage Error
2.46246 %
 (needs to be <10%)

OTHER INFORMATION

TDS 470
 EC 820

Measure EC and Cation Sums	835.5622	Range should be:	738	to	902
Measure EC and Anion Sums	856.3941	Range should be:	738	to	902
Calculated TDS/Conductivity	0.5731707	Range should be:	0.55	to	0.77
Measure TDS and Cation Sums	0.5624955	Range should be:	0.55	to	0.77
Measure TDS and Anion Sums	0.5488127	Range should be:	0.55	to	0.77

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ANALYTICAL RESULTS FOR OCD

Page 1 of 4

Attention: Bill Olson

2040 S. Pacheco
 Santa Fe, New Mexico 87505

Extraction Date: 10/18/99

Analysis Date: 10/19/99

Sampling Date: 10/15/99

Sample Condition: I & C

Sample Received by: VW

Project Name: Texaco-Turner

October 27, 1999

Receiving Date: 10/16/99

Sample Type: Water

Project No:

Project Loc: East Hobbs Pool Area

FIELD CODE: 9910151225

TA #: T133578

Reporting

EPA 8270 COMPOUNDS	Limit (mg/L)	Concentration (mg/L)	QC	RPD	%EA	%IA
N-Nitrosodimethylamine	0.005	ND				
2-Picoline	0.005	ND				
Methyl methanesulfonate	0.005	ND				
Ethyl methanesulfonate	0.005	ND				
Phenol	0.005	ND	63	0	46	105
Aniline	0.005	ND				
bis(2-Chloroethyl)ether	0.005	ND				
2-Chlorophenol	0.005	ND		2	111	
1,3-Dichlorobenzene	0.005	ND				
1,4-Dichlorobenzene	0.005	ND	59	0	79	98
Benzyl alcohol	0.005	ND				
1,2-Dichlorobenzene	0.005	ND				
2-Methylphenol	0.005	ND				
bis(2-chloroisopropyl)ether	0.005	ND				
4-Methylphenol/3-Methylphenol	0.005	ND				
Acetophenone	0.005	ND				
n-Nitrosodi-n-propylamine	0.005	ND		2	138	
Hexachloroethane	0.005	ND				
Nitrobenzene	0.005	ND				
N-Nitrosopiperidine	0.005	ND				
Isophorone	0.005	ND				
2-Nitrophenol	0.005	ND	59			98
2,4-Dimethylphenol	0.005	ND				
bis(2-Chloroethoxy)methane	0.005	ND				
Benzoic acid	0.005	ND				
2,4-Dichlorophenol	0.005	ND	61			102
1,2,4-Trichlorobenzene	0.005	ND		1	83	
a,a-Dimethylphenethylamine	0.005	ND				
Naphthalene	0.005	ND				

FIELD CODE: 9910151225

TA #: T133578

EPA 8270 COMPOUNDS	Reporting		QC	RPD	%EA	%IA
	Limits	Concentration				
	(mg/L)	(mg/L)				
4-Chloroaniline	0.005	ND				
2,6-Dichlorophenol	0.005	ND				
Hexachlorobutadiene	0.005	ND	59			99
N-Nitroso-di-n-butylamine	0.005	ND				
4-Chloro-3-methylphenol	0.005	ND	62	4	114	104
2-Methylnaphthalene/1-Methylnaphthalene	0.005	ND				
1,2,4,5-Tetrachlorobenzene	0.005	ND				
Hexachlorocyclopentadiene	0.005	ND				
2,4,6-Trichlorophenol	0.005	ND	62			103
2,4,5-Trichlorophenol	0.005	ND				
2-Chloronaphthalene	0.005	ND				
1-Chloronaphthalene	0.005	ND				
2-Nitroaniline	0.005	ND				
Dimethylphthalate	0.005	ND				
Acenaphthylene	0.005	ND				
2,6-Dinitrotoluene	0.005	ND				
3-Nitroaniline	0.005	ND				
Acenaphthene	0.005	ND	60	1	116	100
2,4-Dinitrophenol	0.005	ND				
Dibenzofuran	0.005	ND				
Pentachlorobenzene	0.005	ND				
4-Nitrophenol	0.005	ND		16	37	
1-Naphthylamine	0.005	ND				
2,4-Dinitrotoluene	0.005	ND		12	112	
2-Naphthylamine	0.005	ND				
2,3,4,6-Tetrachlorophenol	0.005	ND				
Fluorene	0.005	ND				
Diethylphthalate	0.005	ND				
4-Chlorophenyl-phenylether	0.005	ND				
4-Nitroaniline	0.005	ND				
4,6-Dinitro-2-methylphenol	0.005	ND				
n-Nitrosodiphenylamine & Diphenylamine	0.005	ND	62			103
Diphenylhydrazine	0.005	ND				

FIELD CODE: 9910151225

TA #: T133578

EPA 8270 COMPOUNDS	Reporting		QC	RPD	%EA	%IA
	Limits (mg/L)	Concentration (mg/L)				
4-Bromophenyl-phenylether	0.005	ND				
Phenacetin	0.005	ND				
Hexachlorobenzene	0.005	ND				
4-Aminobiphenyl	0.005	ND				
Pentachlorophenol	0.005	ND	51	11	103	85
Pentachloronitrobenzene	0.005	ND				
Pronamide	0.005	ND				
Phenanthrene	0.005	ND				
Anthracene	0.005	ND				
Di-n-butylphthalate	0.005	ND				
Fluoranthene	0.005	ND	62			103
Benzidine	0.005	ND				
Pyrene	0.005	ND		3	103	
p-Dimethylaminoazobenzene	0.005	ND				
Butylbenzylphthalate	0.005	ND				
Benzo[a]anthracene	0.005	ND				
3,3-Dichlorobenzidine	0.005	ND				
Chrysene	0.005	ND				
bis(2-Ethylhexyl)phthalate	0.005	ND				
Di-n-octylphthalate	0.005	ND	58			97
Benzo[b]fluoranthene	0.005	ND				
7,12-Dimethylbenz(a)anthracene	0.005	ND				
Benzo[k]fluoranthene	0.005	ND				
Benzo[a]pyrene	0.005	ND	63			106
3-Methylcholanthrene	0.005	ND				
Dibenzo(a,j)acridine	0.005	ND				
Indeno[1,2,3-cd]pyrene	0.005	ND				
Dibenz[a,h]anthracene	0.005	ND				
Benzo[g,h,i]perylene	0.005	ND				

OCD

Attention: Bill Olson

2040 S. Pacheco

Santa Fe, New Mexico 87505

Page 4 of 4

FIELD CODE: 9910151225

TA #: T133578

SURROGATES	% RECOVERY
2-Fluorophenol SURR	61
Phenol-d6 SURR	36
Nitrobenzene-d5 SURR	107
2-Fluorobiphenyl SURR	118
2,4,6-Tribromophenol SURR	94
Terphenyl-d14 SURR	106

METHODS: EPA SW 846-3510C, 8270C

CHEMIST: MA



Director, Dr. Blair Leftwich

10-27-99

Date

TRACE ANALYSIS, INC.

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ANALYTICAL RESULTS FOR

Page 1 of 2

October 27, 1999

OCD

Receiving Date: 10/16/99

Attention: Bill Olson

Prep Date: 10/19/99

Sample Type: Water

2040 S. Pacheco

Analysis Date: 10/19/99

Project No:

Santa Fe, New Mexico 87505

Sampling Date: 10/15/99

Project Loc: East Hobbs Pool Area

Sample Condition: I & C

Sample Received by: VW

Project Name: Texaco-Turner

FIELD CODE: 9910151225

TA #: T133578

8260 Compounds	Reporting	Concentration (ug/L)	QC	RPD	EA	IA
	Limit (ug/L)					
Dichlorodifluoromethane	2	ND				
Chloromethane	2	ND				
Vinyl chloride	2	ND	97			97
Bromomethane	5	ND				
Chloroethane	2	ND				
Trichlorofluoromethane	2	ND				
1,1-Dichloroethene	2	ND	95	1	96	95
Methylene chloride	5	ND				
trans-1,2-Dichloroethene	2	ND				
1,1-Dichloroethane	2	ND				
cis-1,2-Dichloroethene	2	ND				
Chloroform	2	ND	93			93
2,2-Dichloropropane	2	ND				
Bromochloromethane	2	ND				
1,2-Dichloroethane	2	ND				
1,1,1-Trichloroethane	2	ND				
Carbon Tetrachloride	2	ND				
1,1-Dichloropropene	2	ND				
Benzene	2	ND		1	92	
1,2-Dichloropropane	2	ND	103			103
Trichloroethene	2	ND		0	93	
Dibromomethane	2	ND				
Bromodichloromethane	2	ND				
cis-1,3-Dichloropropene	2	ND				
trans-1,3-Dichloropropene	2	ND				
Toluene	2	ND	101	2	94	101
1,1,2-Trichloroethane	2	ND				
1,3-Dichloropropane	2	ND				
MTBE	2	ND				

FIELD CODE: 9910151225

TA #: T133578

8260 Compounds	Reporting	Concentration	QC	RPD	EA	IA
	Limit (ug/L)	(ug/L)				
Dibromochloromethane	2	ND				
1,2-Dibromoethane	2	ND				
Tetrachloroethene	2	ND				
Chlorobenzene	2	ND	101	2	99	101
1,1,1,2-Tertachloroethane	2	ND				
Ethylbenzene	2	ND	110			110
m & p-Xylene	2	ND				
Bromoform	2	ND				
Styrene	2	ND				
o-Xylene	2	ND				
1,1,2,2-Tetrachloroethane	2	ND				
1,2,3-Trichloropropane	2	ND				
Isopropylbenzene	2	ND				
Bromobenzene	2	ND				
2-Chlorotoluene	2	ND				
n-Propylbenzene	2	ND				
4-Chlorotoluene	2	ND				
1,3,5-Trimethylbenzene	2	ND				
tert-Butylbenzene	2	ND				
1,2,4-Trimethylbenzene	2	ND				
1,4-Dichlorobenzene	2	ND				
sec-Butylbenzene	2	ND				
1,3-Dichlorobenzene	2	ND				
4-Isopropyltoluene	2	ND				
1,2-Dichlorobenzene	2	ND				
n-Butylbenzene	2	ND				
1,2-Dibromo-3-chloropropane	5	ND				
1,2,3-Trichlorobenzene	5	ND				
Naphthalene	2	ND				
1,2,4-Trichlorobenzene	5	ND				
Hexachlorobutadiene	5	ND				

% Recovery

Dibromofluoromethane	108
Toluene-d8	11
4-Bromofluorobenzene	90

ND = Not Detected

Methods: EPA SW 846-5035, 8260B

CHEMIST: JG



Director, Dr. Blair Leftwich

10-27-99

Date



TRACE ANALYSIS, INC.

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Analytical and Quality Control Report

Bill Olson
OCD
2040 S. Pacheco
Santa Fe, NM 87505

Report Date: 10/27/99

Project Number: N/A
Project Name: Texaco-Turner
Project Location: East Hobbs Pool Area

Order ID Number: 99101604

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to TraceAnalysis, Inc. for analysis:

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
133578	9910151225	Water	10/15/99	12:25	10/16/99

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 9 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Leftwich, Director

Analytical Results Report

Sample Number: 133578
Description: 9910151225

Param	Flag	Result	Dilution	Analytical Method	Date Prepared	Date Analyzed	Analyst	Prep Batch #	QC Batch #	RDL
Alkalinity (mg/L as CaCo3)										
Hydroxide Alkalinity		<1.0	1	E 310.1	10/22/99	10/22/99	JS	PB02818	QC03559	1
Carbonate Alkalinity		<1.0	1	E 310.1	10/22/99	10/22/99	JS	PB02818	QC03559	1
Bicarbonate Alkalinity		146	1	E 310.1	10/22/99	10/22/99	JS	PB02818	QC03559	1
Total Alkalinity		146	1	E 310.1	10/22/99	10/22/99	JS	PB02818	QC03559	1
Conductivity (uMHOS/cm)										
Specific Conductance		820	1	SM 2510B	10/19/99	10/20/99	MD	PB02766	QC03472	
Ion Chromatography (IC) (mg/L)										
CL		110	1	E 300.0	10/18/99	10/18/99	JS	PB02756	QC03457	0.5
Fluoride		1.8	1	E 300.0	10/18/99	10/18/99	JS	PB02756	QC03457	0.1
Nitrate-N	*	5.1	1	E 300.0	10/18/99	10/18/99	JS	PB02756	QC03457	0.2
Sulfate		100	1	E 300.0	10/18/99	10/18/99	JS	PB02756	QC03457	0.5
* Nitrate-N - Sample ran out of holding time for NO3.										
pH (s.u.)										
pH	*	7.3	1	E 150.1	10/16/99	10/16/99	RS	PB02741	QC03443	1
* pH - Out of holding time.										
TDS (mg/L)										
Total Dissolved Solids		470	1	E 160.1	10/18/99	10/19/99	MD	PB02755	QC03455	10
Total Metals (mg/L)										
Total Aluminum		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Arsenic		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Barium		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Boron		0.17	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Cadmium		<0.01	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.01
Total Calcium		91	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.2
Total Chromium		<0.05	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.05
Total Cobalt		<0.05	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.05
Total Copper		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Iron		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Lead		<0.05	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.05
Total Magnesium		24	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.2
Total Manganese		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Molybdenum		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Nickel		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1
Total Potassium		3.9	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.2
Total Selenium		<0.05	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.05
Total Silica		22	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.5
Total Silver		<0.05	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.05
Total Sodium		40	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.2
Total Zinc		<0.10	1	E 200.7	10/19/99	10/21/99	RR	PB02751	QC03544	0.1

Quality Control Report Method Blanks

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Hydroxide Alkalinity (mg/L as CaCo3)		<1.0	1	10/22/99	PB02818	QC03559
Carbonate Alkalinity (mg/L as CaCo3)		<1.0	1	10/22/99	PB02818	QC03559
Bicarbonate Alkalinity (mg/L as CaCo3)		<4.0	1	10/22/99	PB02818	QC03559
Total Alkalinity (mg/L as CaCo3)		<4.0	1	10/22/99	PB02818	QC03559

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Specific Conductance (uMHOS/cm)		17.2		10/20/99	PB02766	QC03472

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
CL (mg/L)		<0.5	0.5	10/18/99	PB02756	QC03457
Fluoride (mg/L)		<0.1	0.1	10/18/99	PB02756	QC03457
Nitrate-N (mg/L)		<0.2	0.2	10/18/99	PB02756	QC03457
Sulfate (mg/L)		<0.5	0.5	10/18/99	PB02756	QC03457

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Total Dissolved Solids (mg/L)		<10	10	10/19/99	PB02755	QC03455

Param	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
Total Aluminum (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Arsenic (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Barium (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Boron (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Cadmium (mg/L)		<0.01	0.01	10/21/99	PB02751	QC03544
Total Calcium (mg/L)		<0.20	0.2	10/21/99	PB02751	QC03544
Total Chromium (mg/L)		<0.05	0.05	10/21/99	PB02751	QC03544
Total Cobalt (mg/L)		<0.05	0.05	10/21/99	PB02751	QC03544
Total Copper (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Iron (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Lead (mg/L)		<0.05	0.05	10/21/99	PB02751	QC03544
Total Magnesium (mg/L)		<0.20	0.2	10/21/99	PB02751	QC03544
Total Manganese (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Molybdenum (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Nickel (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544
Total Potassium (mg/L)		<0.20	0.2	10/21/99	PB02751	QC03544
Total Selenium (mg/L)		<0.05	0.05	10/21/99	PB02751	QC03544
Total Silica (mg/L)		<0.50	0.5	10/21/99	PB02751	QC03544
Total Silver (mg/L)		<0.05	0.05	10/21/99	PB02751	QC03544
Total Sodium (mg/L)		<0.20	0.2	10/21/99	PB02751	QC03544
Total Zinc (mg/L)		<0.10	0.1	10/21/99	PB02751	QC03544

Report Date: 10/27/99
N/A

Order ID Number: 99101604
Texaco-Turner

Page Number: 4 of 9
East Hobbs Pool Area

Quality Control Report Matrix Spike and Matrix Duplicate Spike

Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	CL (mg/L)	110	1	62.5	168.93	94		80 - 120	0 - 20	QC03457
MS	Fluoride (mg/L)	1.8	1	12.5	13.17	91		80 - 120	0 - 20	QC03457
MS	Nitrate-N (mg/L)	5.1	1	25	28.55	94		80 - 120	0 - 20	QC03457
MS	Sulfate (mg/L)	100	1	62.5	167.90	109		80 - 120	0 - 20	QC03457
MSD	CL (mg/L)	110	1	62.5	169.24	95	1	80 - 120	0 - 20	QC03457
MSD	Fluoride (mg/L)	1.8	1	12.5	13.04	90	1	80 - 120	0 - 20	QC03457
MSD	Nitrate-N (mg/L)	5.1	1	25	28.63	94	0	80 - 120	0 - 20	QC03457
MSD	Sulfate (mg/L)	100	1	62.5	168.25	109	1	80 - 120	0 - 20	QC03457

Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	Total Aluminum (mg/L)	<0.10	1	1	1.05	79		75 - 125	0 - 20	QC03544
MS	Total Calcium (mg/L)	163	1	1000	1239	108		75 - 125	0 - 20	QC03544
MS	Total Copper (mg/L)	<0.10	1	1	1.01	101		75 - 125	0 - 20	QC03544
MS	Total Lead (mg/L)	<0.05	1	1	0.99	99		75 - 125	0 - 20	QC03544
MS	Total Magnesium (mg/L)	44	1	1000	1122	108		75 - 125	0 - 20	QC03544
MS	Total Potassium (mg/L)	5.0	1	1000	1062	106		75 - 125	0 - 20	QC03544
MS	Total Sodium (mg/L)	60	1	1000	1134	107		75 - 125	0 - 20	QC03544
MSD	Total Aluminum (mg/L)	<0.10	1	1	1.01	75	5	75 - 125	0 - 20	QC03544
MSD	Total Calcium (mg/L)	163	1	1000	1220	106	2	75 - 125	0 - 20	QC03544
MSD	Total Copper (mg/L)	<0.10	1	1	0.97	97	4	75 - 125	0 - 20	QC03544
MSD	Total Lead (mg/L)	<0.05	1	1	0.95	95	4	75 - 125	0 - 20	QC03544
MSD	Total Magnesium (mg/L)	44	1	1000	1091	105	3	75 - 125	0 - 20	QC03544
MSD	Total Potassium (mg/L)	5.0	1	1000	1044	104	2	75 - 125	0 - 20	QC03544
MSD	Total Sodium (mg/L)	60	1	1000	1094	103	4	75 - 125	0 - 20	QC03544

Quality Control Report Duplicates

Standard	Param	Duplicate Flag	Duplicate Result	Sample Result	Dilution	RPD	RPD Limit	QC Batch #
Duplicate	Hydroxide Alkalinity (mg/L as CaCo)		<1.0	<1.0	1	0	0 - 20	QC03559
Duplicate	Carbonate Alkalinity (mg/L as CaCo)		<1.0	<1.0	1	0	0 - 20	QC03559
Duplicate	Bicarbonate Alkalinity (mg/L as CaC)		38	38	1	0	0 - 20	QC03559
Duplicate	Total Alkalinity (mg/L as CaCo3)		38	38	1	0	0 - 20	QC03559

Standard	Param	Flag	Duplicate Result	Sample Result	Dilution	RPD	RPD Limit	QC Batch #
Duplicate	Specific Conductance (uMHOS/cm)		1353	1400	1	3	0 - 20	QC03472

Standard	Param	Flag	Duplicate Result	Sample Result	Dilution	RPD	RPD Limit	QC Batch #
Duplicate	pH (s.u.)		7.3	7.3	1	0	0 - 20	QC03443

Standard	Param	Flag	Duplicate Result	Sample Result	Dilution	RPD	RPD Limit	QC Batch #
Duplicate	Total Dissolved Solids (mg/L)		449	440	1	2	0 - 20	QC03455

Quality Control Report Lab Control Spikes and Duplicate Spike

Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS Total Aluminum (mg/L)	<0.10	1	2	2.00	100		75 - 125	0 - 20	QC03544
LCS Total Calcium (mg/L)	<0.20	1	1000	1044	104		75 - 125	0 - 20	QC03544
LCS Total Copper (mg/L)	<0.10	1	1	2.06	103		75 - 125	0 - 20	QC03544
LCS Total Lead (mg/L)	<0.05	1	1	2.08	104		75 - 125	0 - 20	QC03544
LCS Total Magnesium (mg/L)	<0.20	1	1000	1061	106		75 - 125	0 - 20	QC03544
LCS Total Potassium (mg/L)	<0.20	1	1000	1067	107		75 - 125	0 - 20	QC03544
LCS Total Sodium (mg/L)	<0.20	1	1000	1052	105		75 - 125	0 - 20	QC03544
LCSD Total Aluminum (mg/L)	<0.10	1	2	2.00	100	0	75 - 125	0 - 20	QC03544
LCSD Total Calcium (mg/L)	<0.20	1	1000	1051	105	1	75 - 125	0 - 20	QC03544
LCSD Total Copper (mg/L)	<0.10	1	1	2.06	103	0	75 - 125	0 - 20	QC03544
LCSD Total Lead (mg/L)	<0.05	1	1	2.08	104	0	75 - 125	0 - 20	QC03544
LCSD Total Magnesium (mg/L)	<0.20	1	1000	1059	106	0	75 - 125	0 - 20	QC03544
LCSD Total Potassium (mg/L)	<0.20	1	1000	1081	108	1	75 - 125	0 - 20	QC03544
LCSD Total Sodium (mg/L)	<0.20	1	1000	1061	106	1	75 - 125	0 - 20	QC03544

Quality Control Report Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Hydroxide Alkalinity (mg/L as CaCo3)		0	<1.0	0	80 - 120	10/22/99	QC03559
ICV	Carbonate Alkalinity (mg/L as CaCo3)		0	2000	0	80 - 120	10/22/99	QC03559
ICV	Bicarbonate Alkalinity (mg/L as CaCo3)		0	110	0	80 - 120	10/22/99	QC03559
ICV	Total Alkalinity (mg/L as CaCo3)		2400	2110	88	80 - 120	10/22/99	QC03559
CCV (1	Hydroxide Alkalinity (mg/L as CaCo3)		0	<1.0	0	80 - 120	10/22/99	QC03559
CCV (1	Carbonate Alkalinity (mg/L as CaCo3)		0	2000	0	80 - 120	10/22/99	QC03559
CCV (1	Bicarbonate Alkalinity (mg/L as CaCo3)		0	220	0	80 - 120	10/22/99	QC03559
CCV (1	Total Alkalinity (mg/L as CaCo3)		2400	2220	93	80 - 120	10/22/99	QC03559

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Specific Conductance (uMHOS/cm)		1413	1306	92	80 - 120	10/20/99	QC03472
CCV (1	Specific Conductance (uMHOS/cm)		1413	1331	94	80 - 120	10/20/99	QC03472

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	CL (mg/L)		12.5	11.76	94	80 - 120	10/18/99	QC03457
ICV	Fluoride (mg/L)		2.5	2.40	96	80 - 120	10/18/99	QC03457
ICV	Nitrate-N (mg/L)		5	4.84	97	80 - 120	10/18/99	QC03457
ICV	Sulfate (mg/L)		12.5	12.56	100	80 - 120	10/18/99	QC03457
CCV (1	CL (mg/L)		12.5	11.75	94	80 - 120	10/18/99	QC03457
CCV (1	Fluoride (mg/L)		2.5	2.40	96	80 - 120	10/18/99	QC03457
CCV (1	Nitrate-N (mg/L)		5	4.85	97	80 - 120	10/18/99	QC03457
CCV (1	Sulfate (mg/L)		12.5	12.45	100	80 - 120	10/18/99	QC03457

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	pH (s.u.)		7	7.0	100	80 - 120	10/16/99	QC03443
CCV (1	pH (s.u.)		7	7.0	100	80 - 120	10/16/99	QC03443

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Total Dissolved Solids (mg/L)		1000	987	99	80 - 120	10/19/99	QC03455
CCV (1	Total Dissolved Solids (mg/L)		1000	1004	100	80 - 120	10/19/99	QC03455

Quality Control Report Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Total Aluminum (mg/L)		1	0.98	98	75 - 125	10/21/99	QC03544
ICV	Total Arsenic (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Barium (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Boron (mg/L)		1	1.04	104	75 - 125	10/21/99	QC03544
ICV	Total Cadmium (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Calcium (mg/L)		20	20.0	100	75 - 125	10/21/99	QC03544
ICV	Total Chromium (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Cobalt (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Copper (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Iron (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Lead (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Magnesium (mg/L)		20	20.4	102	75 - 125	10/21/99	QC03544
ICV	Total Manganese (mg/L)		1	1.0	100	75 - 125	10/21/99	QC03544
ICV	Total Molybdenum (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Nickel (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Potassium (mg/L)		20	20.3	102	75 - 125	10/21/99	QC03544
ICV	Total Selenium (mg/L)		1	0.98	98	75 - 125	10/21/99	QC03544
ICV	Total Silica (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
ICV	Total Silver (mg/L)		0.2	0.197	99	75 - 125	10/21/99	QC03544
ICV	Total Sodium (mg/L)		20	20.4	102	75 - 125	10/21/99	QC03544
ICV	Total Zinc (mg/L)		1	0.99	99	75 - 125	10/21/99	QC03544
CCV (1	Total Aluminum (mg/L)		1	0.94	94	75 - 125	10/21/99	QC03544
CCV (1	Total Arsenic (mg/L)		1	0.96	96	75 - 125	10/21/99	QC03544
CCV (1	Total Barium (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Boron (mg/L)		1	1.02	102	75 - 125	10/21/99	QC03544
CCV (1	Total Cadmium (mg/L)		1	0.96	96	75 - 125	10/21/99	QC03544
CCV (1	Total Calcium (mg/L)		20	20.1	101	75 - 125	10/21/99	QC03544
CCV (1	Total Chromium (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Cobalt (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Copper (mg/L)		1	0.94	94	75 - 125	10/21/99	QC03544
CCV (1	Total Iron (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Lead (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Magnesium (mg/L)		20	20.6	103	75 - 125	10/21/99	QC03544
CCV (1	Total Manganese (mg/L)		1	0.96	96	75 - 125	10/21/99	QC03544
CCV (1	Total Molybdenum (mg/L)		1	0.94	94	75 - 125	10/21/99	QC03544
CCV (1	Total Nickel (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Potassium (mg/L)		20	20.3	102	75 - 125	10/21/99	QC03544
CCV (1	Total Selenium (mg/L)		1	0.95	95	75 - 125	10/21/99	QC03544
CCV (1	Total Silica (mg/L)		1	0.98	98	75 - 125	10/21/99	QC03544
CCV (1	Total Silver (mg/L)		0.2	0.188	94	75 - 125	10/21/99	QC03544

Quality Control Report
Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
CCV (1	Total Sodium (mg/L)		20	19.6	98	75 - 125	10/21/99	QC03544
CCV (1	Total Zinc (mg/L)		1	0.96	96	75 - 125	10/21/99	QC03544

133578

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

Trace Analysis, Inc.

4725 Ripley Dr., Ste A
El Paso, Texas 79922-1028
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 99101604

Company Name: OCD

Phone #: (505) 827-7154

Address: 2040 S. Pacheco Santa Fe NM 87505

Fax #: (505) 827-8177

Contact Person: BILL OLSON

Invoice to: (If different from above)

Project #:

Project Name: Texaco - Turney

Project Location: East Hobbs Pool Area

Sampler Signature: Wayne Price

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX				PRESERVATIVE METHOD				DATE	SAMPLING TIME
				WATER	SOIL	AIR	SLUDGE	HCL	HNO3	ICE	NONE		
133578	9910151225	2	40ml X	X				X				10/15/99	1225
	9910151225	1	400ml X	X				X				10/15/99	1226
	9910151225	1	1000ml X	X				X				10/15/99	1227
	9910151225	1	1gt X	X				X				10/15/99	1227

ANALYSIS REQUEST

(Circle or Specify Method No.)

MTBE 8021B/602	
BTEX 8021B/602	
TPH 418.1/XX1005	
PAH 8270C	
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	
TCLP Metals Ag As Ba Cd Cr Pb Se Hg	
TCLP Volatiles	
TCLP Semi Volatiles	
TCLP Pesticides	
RCI	
GC-MS Vol. 8260B/624	
GC/MS Semi. Vol. 8270C/625	
PCB's 8082/608	
Pesticides 8081A/608	
BOD, TSS, PH	
8260 X	
OCD METALS + CV Hg	X
8270	X
OCD GEN CHEM	X
Turn Around Time if different from standard	
Hold	

REMARKS: 10/28

LAB USE ONLY

Intact Y / N _____

Headspace Y / N _____

Temp _____ °

Log-in Review _____

Relinquished by: Wayne Price Date: 10/15/99 Time: 1:39pm

Received by: _____ Date: _____ Time: _____

Relinquished by: _____ Date: _____ Time: _____

Received by: Jennifer Schmitt Date: 10/16/99 Time: 1:00

Carrier # Bus 702 - 259 - 256-8

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

ORIGINAL COPY



**NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT**

OIL CONSERVATION DIVISION
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-7131

October 1, 1999

CERTIFIED MAIL
RETURN RECEIPT NO.Z 357 870 139

Mr. Bill Robins III
Robins, Cloud & Lubel, L.L.P.
ATTORNEYS AT LAW
910 Travis, Suite 2020
Houston, Texas 77002

Re: D.F. Fergason Oil Battery located in Unit H, Sec. 30-Ts18s-R39e

Dear Mr. Robbins:

The New Mexico Oil Conservation Division (NMOCD) has received Texaco Exploration and Productions, Inc. pit closure report dated June 3, 1999 and technical information from your law firm dated February 11th and 26th, 1999 for the above captioned site. NMOCD has reviewed the information submitted and there appears to be substantial variation of data results. In order for NMOCD to properly evaluate the information submitted by Robins, Cloud & Lubel, L.L.P. and Texaco Exploration and Productions, Inc. we have the following request:

1. Please provide a detailed scaled site map depicting where soil samples were collected in reference to Texaco's samples. Please find enclosed a copy of the site map submitted by Texaco for reference.
2. NMOCD is requesting permission to sample the water wells in question. Please make arrangements and notify NMOCD on an agreed time and date. The first three weeks in October of this year is open on our schedule at this time.

The NMOCD appreciates your cooperation in this matter. If you require any further information or assistance please do not hesitate to write or call me at (505-827-7155).

Sincerely Yours,

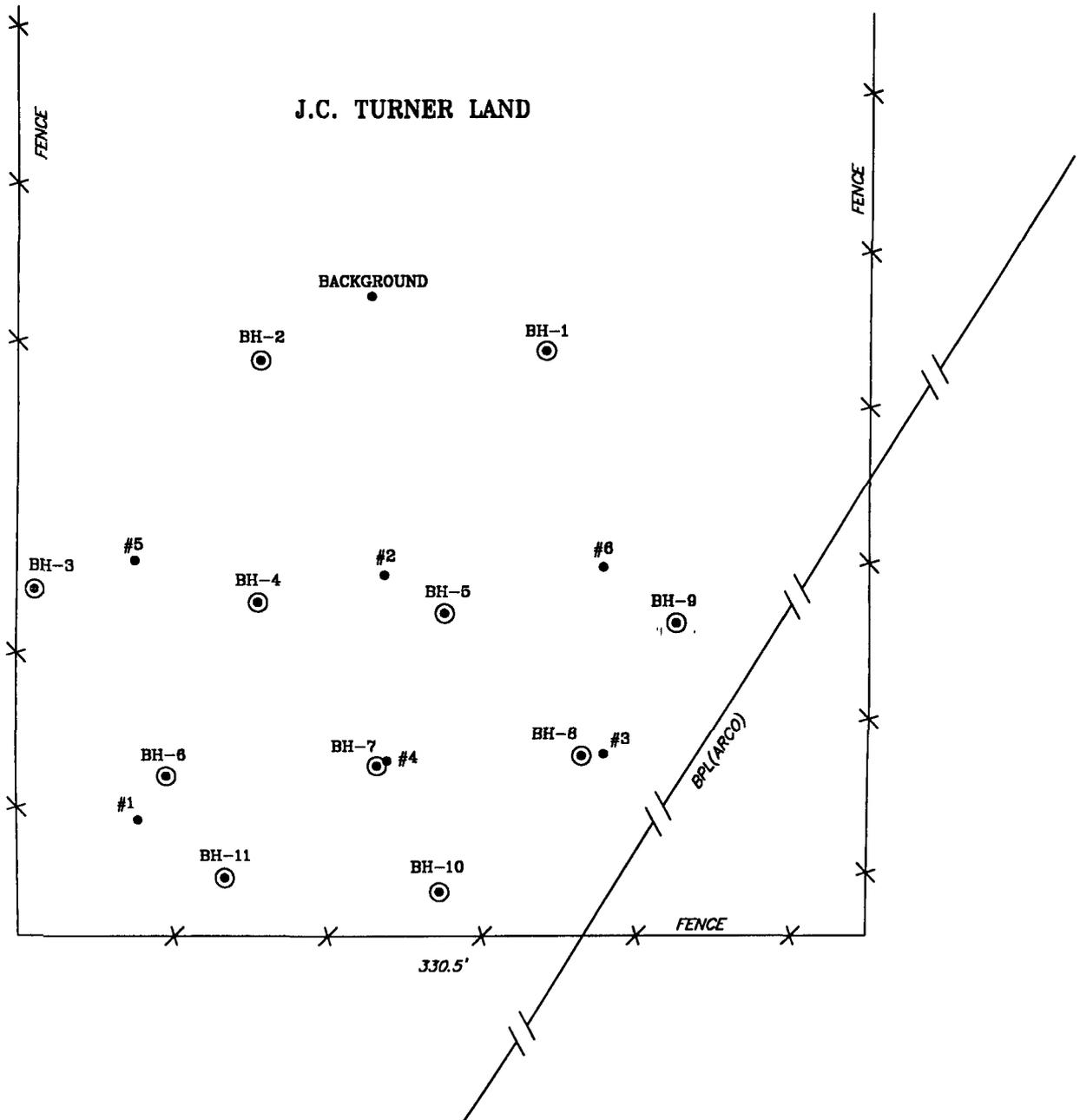
Wayne Price-Pet. Engr. Spec.
Environmental Bureau

cc: OCD Hobbs Office

attachments-1

BOREHOLE DATA

BOREHOLE NUMBER	GROUND ELEVATION FEET AMSL
BH-1	3593.1
BH-2	3593.9
BH-3	3594.7
BH-4	3594.7
BH-5	3594.3
BH-6	3595.1
BH-7	3594.7
BH-8	3594.8
BH-9	3594.0
BH-10	3595.3
BH-11	3595.6



SCALE
(FEET)



LEGEND	
#1	HAND AUGER BOREHOLE LOCATION (4/10/97)
BH-1	ROTARY DRILLED BOREHOLE LOCATION (4/28-29/99)
-X-	FENCE
-/-	PIPELINE

FIGURE NO. 2

LEA COUNTY, NEW MEXICO

TEXACO EXPLORATION & PRODUCTION, INC.

SITE DRAWING

HIGHLANDER ENVIRONMENTAL
MIDLAND, TEXAS

DATE
5/17/99
DRAWN BY
JCA
SCALE
AS SHOWN ON SITE

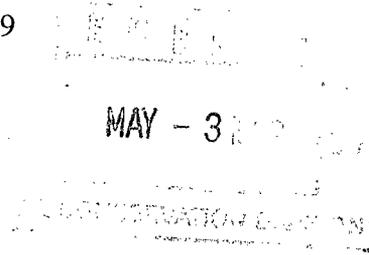


Highlander Environmental Corp.

Midland, Texas

April 29, 1999

Mr. Wayne Price
Environmental Engineer
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505



Re: Request for Extension and Use of EPA Method 8015 (Modified) D. F. Fergason Lease (J. C. Turner Property), Section 30, Township 18 South, Range 39 East, Lea County, New Mexico

Dear Mr. Price:

Highlander Environmental Corp. (Highlander) has been retained by Texaco Exploration and Production, Inc. (Texaco) to investigate alleged environmental impacts from a suspect oilfield pit(s) at the above-referenced location (Site). The purpose of this letter is to confirm our telephone conversation today pertaining to an extension for submittal of a report, and use of EPA test method 8015 (Modified) for total petroleum hydrocarbons (TPH), in connection with the above-referenced matter.

On April 26 - 28, 1999, Highlander personnel conducted an investigation at the Site. The investigation was conducted in accordance with a work plan approved by the New Mexico Oil Conservation Division (NMOCD) on February 4, 1999. In its approval letter, the NMOCD requested submittal of a comprehensive investigation report by May 3, 1999. Highlander personnel discussed an extension with Ms. Donna L. Williams of the NMOCD on April 28, 1999, which was followed up by our telephone call today. Based on our telephone call, a comprehensive investigation report will be submitted to the NMOCD on or before June 4, 1999. Also, you approved the use of EPA method 8015 modified (GRO and DRO) for TPH, rather than method 418.1, as presented in your February 4, 1999 approval letter.

Please call me at (9915) 682-4559 if you have any questions.

Sincerely,
Highlander Environmental Corp.

Mark J. Larson
Senior Project Manager

cc: Rodney Bailey - Texaco
Robert Patterson - Texaco
Donna Williams - NMOCD Hobbs



Texaco E & P

105 E. Bender Blvd.
Hobbs NM 88240
505 393 7191

Date: April 7, 1999

Donna Williams
Environmental Engineer
New Mexico Oil Conservation Division
Hobbs NM 88240

Re: Pit Closure Investigation
D.F. Ferguson Lease
NE/4 Sec 30-T 18S-R 39E

RECEIVED

APR 11 1999

Environmental Bureau
Oil Conservation Division

This is notice to inform the NMOCD Texaco has received permission to enter the J.C Turner property and conduct the investigation of the old pit area, formally known as the D.F. Ferguson lease. Texaco will began drilling on this property the week of April 19, 1999. Texaco will be on site April 14, 1999 to stake the areas to be drilled.

If you have any questions call me at 505-397-0422.

Sincerely,

Rodney Bailey
SH&E Professional
Hobbs Operating Unit

Copy: Wayne Price



Texaco Exploration
and Production Inc

500 North Loraine
Midland TX 79701

P O Box 3109
Midland TX 79702

April 5, 1999

Ms. Donna Williams
New Mexico Oil Conservation Division
P. O. Box 1980
Hobbs, New Mexico 88241

Re: Pit Closure Investigation Work Plan
D. F. Ferguson Lease
NE/4 Section 30, T-18-S, R-39-E

RECEIVED
APR 0 1999
Environmental Bureau
Oil Conservation Division

Dear Ms. Williams:

In reference to your letter of February 4, 1999 to Mr. Rodney Bailey approving our proposed plan for the subject property, you stated that Texaco must submit a report to the NMOCD by May 3, 1999. This is to advise you that we will not be able to complete the investigation by that date due to our inability to gain access to the property in a timely manner. However, since my conversation on March 31st with you and Mr. Price, our attorney received a call granting access on April 1, 1999.

The Turners, who currently own the subject property, have retained an attorney, Mr. Bill Robbins III (713-222-8080), and filed suit against Texaco and others. Since the property is in litigation, Texaco's access to the property must be obtained from the Turners' through Mr. Robbins. After writing two letters and making phone calls to Mr. Robbins requesting access, our attorney was contacted by Mr. Robbins on April 1, 1999, allowing access.

Now that access has been granted, we anticipate the project being initiated in the next two weeks. We will keep you apprised of our progress.

We appreciate your patience in this matter.

Sincerely,

Robert H. Patterson
Business Unit Coordinator

RHP:cfb

Ms. Donna Williams
NMOCD

2

04/02/99

Mr. Chris Williams
New Mexico Oil Conservation Division
P. O. Box 1980
Hobbs, New Mexico 88241

Mr. Wayne Price
New Mexico Oil Conservation Division
Oil Contracts Division
2040 S Pacheco St
Santa Fe, NM 87505

Miller, Stratvert & Torgerson, P.A.
Ms. Marte Lightstone
500 Marquette N.W., Suite 1100
P. O. Box 25687
Albuquerque, NM 87102

Mr. Robert Plumb, Texaco Legal, Houston
Mr. Tim Miller, Texaco, Hobbs
Mr. Rodney Bailey, Texaco, Hobbs



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
DISTRICT I HOBBS
PO BOX 1980, Hobbs, NM 88241
(505) 393-6161
FAX (505) 393-0720

Jennifer A. Salisbury
CABINET SECRETARY

February 4, 1999

Rodney Bailey
Texaco E&P
205 E. Bender Blvd.
Hobbs, NM 88240

Re: Pit Closure Investigation Work Plan
D.F. Ferguson Lease
NE/4 Sec 30-Ts18s-R39e

*Wayne Price
is this the
one you
wanted? Donna*

Dear Mr. Bailey:

New Mexico Oil Conservation Division (NMOCD) is in receipt of the investigation work plan dated September 28, 1998 for the above referenced facility submitted by Highlander Environmental Corp. **NMOCD hereby approves of the plan with the following conditions:**

1. NMOCD will allow field screening techniques as mentioned in the plan to delineate the migration of oilfield contaminants, except all bottom hole samples shall be collected and analyzed pursuant to EPA approved laboratory methods. Each bottom hole soil sample shall be analyzed at a minimum for BTEX (method 8020), TPH (418.1) and Chlorides.
2. Texaco shall notify the NMOCD Hobbs District office at least 48 hours in advance of all scheduled activities such that the NMOCD has the opportunity to witness the events and/or split samples.
3. Upon discovery of groundwater contamination Texaco shall notify NMOCD pursuant to Rule 116.
4. NMOCD approves of Texaco's initial groundwater sampling plan as contained in Appendix B, except metals shall be those listed in the New Mexico Water Quality Control Commission (WQCC) regulation standards, not RCRA metals as proposed.

Texaco shall submit a comprehensive investigation report to the NMOCD by May 3, 1999. The report shall be submitted to the NMOCD Hobbs District Office with a copy to the NMOCD Environmental Bureau.

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

If you require any further information or assistance please do not hesitate to write or call me at (505-393-6161).

Sincerely,

Donna Williams
Environmental Engineer
Cc: Wayne Price; Chris Williams;

Price, Wayne

From: Price, Wayne
Sent: Tuesday, March 16, 1999 11:06 AM
To: Williams, Donna
Cc: Bill Olson
Subject: Texaco Ferguson approval letter

Donna!

Please send us a copy so we may put in our files!

ROBINS, CLOUD & LUBEL, L.L.P.

ATTORNEYS AT LAW
910 TRAVIS, SUITE 2020
HOUSTON, TEXAS 77002

TELEPHONE 713/650-1200
TELECOPY 713/650-1400

MAR - 1 1999

BILL ROBINS III
Board Certified-Personal Injury Trial Law
Texas Board of Legal Specialization

E-MAIL: robins@rcellaw.com

February 26, 1999

Mr. Roger Anderson
Environmental Bureau Chief
Oil Conservation Division
State of New Mexico
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: D.F. Fergason Oil Battery located in Unit H, Sec. 30, T.18, R.39E

No. D 0101-CV-9801302; *J.C. Turner, et al. vs. Texaco, Inc., et al.*; In the First Judicial
District Court - State of New Mexico - County of Santa Fe

Dear Mr. Anderson:

Enclosed please find the results of our recent soil testing. I would appreciate your considering this information, along with the other information that we have previously provided to you, in evaluating any plans submitted by Texaco.

Thank you for your cooperation.

Very truly yours,



Bill Robins III

BRR:vjw
Enclosure

cc: HOBBS

Mr. Roger Anderson
Environmental Bureau Chief
February 26, 1999
Page 2

cc: Mr. and Mrs. J.C. Turner (w/encl.)
4601 East Seminole Highway
Hobbs, New Mexico 88240

E

C

D

RECEIVED
FEB 22 1999

Mr. Bill Robbins
Robbins, Cloud & Lewbel
910 Travis
Suite 2020
Houston, TX 77002

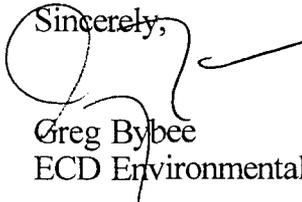
2/19/99

Dear Mr. Robbins,

Enclosed are the chemical analysis and photographs of soil samples taken on January 27, 1999 from the pit area between the Turner and Rodriguez water wells. The photographs were taken by Mr. Eddie Seay.

Please feel free to contact me if you have any questions.

Sincerely,



Greg Bybee
ECD Environmental, Inc.

Turner 00161

E

C

D

Soil samples were taken using a backhoe. Samples were taken at two depths and analyzed for the following compounds: TPH (total petroleum hydrocarbons) and BTEX (benzene, toluene, ethylbenzene and xylene). Background soil and decon water samples were also analyzed for anions and cations. The backhoe bucket was steam cleaned before the backhoe was moved to a new sample site. All sample sites were marked with a flag and a GPS position taken.

Background Sample

A background soil sample was taken from the front of the Turner home, far away from the pit area to the south. A soft calechee layer was encountered at six feet. Sample taken at six feet. Soil was a light brown and the calechee was a bright white. There was no hydrocarbon odor.

GPS reading: 31° 43.51n, 102° 04.67w

Sample #2

Southeast corner of pit area. Samples were taken at 12" and at 4'. Discolored calechee was encountered at 3'10". Strong hydrocarbon odor.

GPS reading: 32° 43.31n, 103° 04.73w

Sample #3

Center of pit area. Samples taken at 14" and 32". Calechee was discolored and encountered at 30". Soil discolored with hydrocarbon odor.

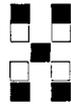
GPS reading: 32° 43.34n, 103° 04.74w

Sample #4

Samples taken from the west side of the pit. VERY strong hydrocarbon odor. Calechee was highly discolored and very powdery. Calechee did not seem to have any structure. Samples taken at 16", 6'5" and 13'5" (the limit of the backhoe arm). Discoloration was still present at backhoe limit.

GPS reading: 32° 43.44n, 103° 04.79w

All samples were taken to Hall Environmental Laboratory for chemical analysis .



**Hall Environmental
Analysis Laboratory**

February 18, 1999

Hall Environmental Analysis Laboratory
4901 Hawkins NE, Ste. A
Albuquerque, NM 87109

ECD Environmental
P. O. Box 9328
Albuquerque, NM 87119

Dear Mr. Greg Bybee:

Enclosed are the results for the analyses that were requested. These were done according to EPA procedures or equivalent.

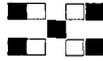
Detection limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Scott Hallenbeck
Laboratory Manager

Project: 9901106/Turner Rodriguez



**Hall Environmental
Analysis Laboratory**

Client: ECD Environmental
Project: Turner Rodriguez
Project Manager: Greg Bybee
Project Number: -

Date Collected: 1/27/99
Date Received: 1/28/99
Sample Matrix: Soil
Date Extracted: 1/27/99

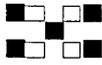
EPA Method - 8021
Methanol Field Extraction/Dry Weight Basis

Units: PPM(mg/kg)

HEAL LAB ID	Sample ID	Benzene	Toluene	Ethyl-benzene	Total Xylenes	BFB % Recovery	Dilution Factor	Date Analyzed
9901106-1	Background 6'	ND	ND	ND	ND	93	1	1/28/99
9901106-3	#2-12"	ND	ND	ND	ND	95	1	1/28/99
9901106-4	#2-4'	ND	ND	ND	ND	95	1	1/28/99
9901106-6	#3-32"	ND	ND	ND	ND	97	1	1/28/99
9901106-8	#4-6.5	<1.3	2.9	26	31	101	25	1/28/99
9901106-9	#4-13.5	<1.3	3.7	31	46	99	25	1/28/99

MRL

0.05 0.05 0.05 0.05



**Hall Environmental
Analysis Laboratory**

Client: ECD Environmental
Project: Turner Rodriguez
Project Manager: Greg Bybee
Project Number: -

Date Collected: 1/27/99
Date Received: 1/28/99
Sample Matrix: Aqueous
Date Extracted: NA

EPA Method - 8021
Units: PPB(ug/L)

HEAL LAB ID	Sample ID	Benzene	Toluene	Ethyl-benzene	Total Xylenes	BFB % Recovery	Dilution Factor	Date Analyzed
-	Reagent Blank	ND	ND	ND	ND	103	1	1/28/99

MRL	0.5	0.5	0.5	0.5
-----	-----	-----	-----	-----

**Hall Environmental
Analysis Laboratory**

Client: ECD Environmental Date Collected: 1/27/99
 Project: Turner Rodriguez Date Received: 1/28/99
 Project Manager: Greg Bybee Sample Matrix: Soil
 Project Number: Extraction Date: 1/27/99

EPA Method - 8015B GRO

Units: PPM (mg/kg) - Methanol Field Extraction - Dry Weight Basis

HEAL ID	Client ID	Dilution	Gasoline Range (mg/kg)	% BFB	Analysis Date
9901106-3	#2-12"	1	42	95	1/28/99
9901106-8	#4-6.5	25	1,900	112	1/28/99
Reagent Blank	-	1	ND	103	1/28/99

MRL 5.0

QA/QC: BS/BSD
 Sample ID: BS/BSD 1/28
 Sample Amt. <5.0 Spike 25.0 Rec. 23.8 % 95 Dup. 22.9 % 92 RPD 4

Turner 00166

**Hall Environmental
Analysis Laboratory**

Client: ECD Environmental
 Project: Turner Rodriguez
 Project Manager: Greg Bybee
 Project Number: -

Date Collected: 1/27/99
 Date Received: 1/28/99
 Sample Matrix: Soil
 Extraction Date: 2/1/99

EPA Method - 8015B Modified DRO

HEAL ID	Client ID	Dilution	Diesel Range (mg/kg)	Motor Oil Range (mg/kg)	% DNOP	Analysis Date
9901106-3	#2-12"	100	23,000	14,000	**	2/7/99
9901106-8	#4-6.5	40	16,000	6,000	**	2/7/99
Extracton Blank	-	1	ND	ND	96	2/7/99

**Surrogate not recoverable due to matrix interference and sample dilution.

MRL	5.0	50
-----	-----	----

QA/QC

Sample ID:	Sample Amt.	Spike	Rec.	%	Dup.	%	RPD
Blank Spike 2/1	<5.0	50	47	94	44	88	7



**Hall Environmental
Analysis Laboratory**

Client: ECD Environmental
Project: Turner Rodriguez
Project Manager: Greg Bybee
Project Number:

Date Collected: 1/27/99
Date Received: 1/28/99
Sample Matrix: Soil
Extraction Date: 1/28/99

EPA Method - 418.1

HEAL ID	Client ID	Dilution	TPH (mg/kg)	Analysis Date
9901106-1	Background 6'	1	ND	1/29/99
9901106-3	#2 12"	50	38,000	1/29/99
9901106-4	#2 4'	5	910	1/29/99
9901106-5	#3 14"	20	3,100	1/29/99
9901106-6	#3 32"	50	7,000	1/29/99
9901106-7	#4 16"	20	2,700	1/29/99
9901106-8	#4 6.5	40	30,000	1/29/99
9901106-9	#4 13.5	100	28,000	1/29/99
Extraction Blank	-	1	ND	1/29/99

MRL	20
-----	----

QA/QC

<u>Sample ID:</u>	<u>Sample Amount</u>	<u>Spike</u>	<u>Recovery</u>	<u>% Recovery</u>
BS 1/28	<20	100	100	100

<u>Sample ID:</u>	<u>Sample Amount</u>	<u>Duplicate</u>	<u>RPD</u>
Ext. Blk. Dup 1/28	<20	<20	NA

Sincerely:


 Andy Freeman
 Assistant Lab Manager

4901 Hawkins NE Suite A, Albuquerque, NM 87109
 Ph (505) 345-3975, Fax (505) 345-4107

Turner 00168



**Hall Environmental
Analysis Laboratory**

Client: ECD Environmental
Project: Turner Rodriguez
Project Manager: Greg Bybee
Project Number:

Date Collected: 1/27/99
Date Received: 1/28/99
Sample Matrix: Aqueous
Extraction Date: 2/2/99

EPA Method - 418.1

HEAL ID	Client ID	Dilution	TPH (mg/L)	Analysis Date
9901106-2	Decon H2O	1	ND	2/3/99
Extraction Blank	-	1	ND	2/3/99

MRL	1.0
-----	-----

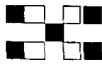
QA/QC

<u>Sample ID:</u> BS 2/2	<u>Sample Amount</u> <1.0	<u>Spike</u> 5.0	<u>Recovery</u> 4.6	<u>% Recovery</u> 92
-----------------------------	------------------------------	---------------------	------------------------	-------------------------

<u>Sample ID:</u> Ext. Blk. Dup	<u>Sample Amount</u> <1.0	<u>Duplicate</u> <1.0	<u>RPD</u> NA
------------------------------------	------------------------------	--------------------------	------------------

Sincerely:


 Andy Freeman
 Assistant Lab Manager



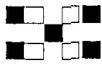
Hall Environmental Analysis Laboratory

Client: ECD Environmental
Project: Turner/Rodriguez
Project Manager: Greg Bybee
Project Number: -

Date Collected: 1/27/99
Date Received: 1/28/99
Sample Matrix: Soil

Inorganic Compounds

HEAL LAB ID	Sample ID	Fluoride (mg/kg)	Chloride (mg/kg)	Nitrite (mg/kg)	Bromide (mg/kg))	Nitrate (mg/kg)	Sulfate (mg/kg)	o-Phosphate-P (mg/kg)
9901106-1	Background 6'	1.4	3.3	<0.6	<0.6	3.6	7.8	<3.0
9901106-1 Dup	Background 6'	1.5	3.3	<0.6	<0.6	3.5	6.6	<3.0
Detection Limits		0.3	0.3	0.3	0.3	0.3	1.5	1.5
Method		300.0	300.0	300.0	300.0	300.0	300.0	300.0
Date Analyzed		2/4/99	2/4/99	2/4/99	2/4/99	2/4/99	2/4/99	2/4/99



Hall Environmental Analysis Laboratory

Client:
Project:
Project Manager:
Project Number:

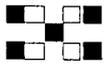
ECD Environmental
Turner/Rodriguez
Greg Bybee

Date Collected: 1/27/99
Date Received: 1/28/99
Sample Matrix: Soil

Inorganic Compounds

HEAL LAB ID	Sample ID	Sodium (mg/kg)	Potassium (mg/kg)	Magnesium (mg/kg)	Calcium (mg/kg)
9901106-1	Background 6'	1.4	17	7.0	120
9901106-1 Dup	Background 6'	-	-	-	130
Detection Limits		0.3	0.3	0.3	0.3
Method		300.0	300.0	300.0	300.0
Date Analyzed		2/17/99	2/17/99	2/17/99	2/17/99

Turner 00171



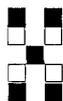
Hall Environmental Analysis Laboratory

Client: ECD Environmental
Project: Turner/Rodriguez
Project Manager: Greg Bybee
Project Number: -

Date Collected: 1/27/99
Date Received: 1/28/99
Sample Matrix: Aqueous

Inorganic Compounds

HEAL LAB ID	Sample ID	Fluoride (mg/L)	Chloride (mg/L)	Nitrite (mg/L)	Bromide (mg/L)	Nitrate (mg/L)	Sulfate (mg/L)	o-Phosphate-P (mg/L)
9901106-2	Decon H ₂ O	0.8	90	ND	0.6	4.4	96	ND
Detection Limits		0.1	0.1	0.1	0.1	0.1	0.5	0.5
Method		300.0	300.0	300.0	300.0	300.0	300.0	300.0
Date Analyzed		1/28/99	2/9/99	1/28/99	1/28/99	1/28/99	2/9/99	1/28/99



Hall Environmental Analysis Laboratory

Client: ECD Environmental
Project: Turner Rodriguez
Project Manager: Greg Bybee
Project Number: -

Date Collected: 1/27/99
Date Received: 1/28/99
Sample Matrix: Soil
Date Extracted: NA

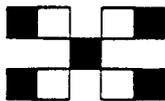
8021 QC: BS/BSD 1/28

<u>Compound</u>	<u>Sample Amount (mg/kg)</u>	<u>Spike</u>	<u>Recovery</u>	<u>% Rec</u>	<u>Dup</u>	<u>% Dup</u>	<u>RPD</u>
Benzene	<0.05	1.00	1.02	102	1.00	100	2
Toluene	<0.05	1.00	1.04	104	1.02	102	2
Ethylbenzene	<0.05	1.00	1.03	103	1.02	102	1
Total Xylenes	<0.05	3.00	3.14	105	3.07	102	2

4901 Hawkins NE, Albuquerque, NM 87109
Ph (505) 345-3975, Fax (505) 345-4107

Turner

00173



CHAIN-OF-CUSTODY RECORD

Client: ECD Environmental
 Project Name: Turner Rodriguez
 Address: PO Box 9328
Albuquerque N.M
87119
 Project #: _____
 Project Manager: _____
 Sampler: GB
 Phone #: (505) 768-7686
 Fax #: _____
 Samples Cold?: Yes No

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative		HEAL No.
					HgCl ₂	HCl	
12/7/99	8:00 AM	soil	Baldson 6				9901106-1
"	8:10 AM	H ₂ O	Deer H ₂ O				-2
"	8:30	soil	#2 12"				-3
"	8:30	soil	#2 4'				-4
"	8:45	soil	#3 14"				-5
"	8:45	soil	#3 32"				-6
"	9:20	soil	#4 16"				-7
"	9:30	soil	#4 6.5				-8
"	9:45	soil	#4 13.5				-9

Date: 12/7/99 Time: 11:00 Relinquished By: (Signature) _____
 Date: _____ Time: _____ Relinquished By: (Signature) _____
 Received By: (Signature) Jaycee Callum
 Received By: (Signature) _____

ANALYSIS REQUEST

BTEX + MTBE + TPH (Gasoline Only)	BTEX + MTBE + THMs (8021)	TPH Method 8015B MOD (Gas/Diesel)	TPH (Method 418.1)	Volatiles Full List (8021)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Cations (Na, K, Ca, Mg)	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / PCBs (8082)	8260 (VOA)	8270 (Semi-VOA)	Air Bubbles or Headspace (Y or N)
X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Remarks: _____

methodologies, if necessary; or appropriate due to the nature of composition of the sample or otherwise based on the reasonable judgement of HEAL, which deviation, if any will be made on a basis consistent with recognized standards of industry and/or HEAL'S Standard Operating Procedures.

Upon timely delivery of samples, HEAL will use its best efforts to comply with storage, processing and analytical holding time limits as set forth in applicable EPA or state guidelines or otherwise requested by the Customer or set forth on the Price Schedule. However, unless specifically made part of a written agreement between HEAL and the Customer, such time limits cannot be guaranteed. Unless specifically indicated on the Price Schedule or expressly made part of a written agreement between HEAL and the Customer, analytical turnaround times are not guaranteed.

At HEAL'S sole discretion, verbal Results may be given in advance of the written report of Results. Such verbal Results are TENTATIVE; RESULTS ONLY, subject to confirmation or change based on HEAL'S standard quality assurance review procedures.

HEAL warrants only that its services will fulfill obligations set forth in Section 4.3 and 4.4 hereof. This warranty is the sole and exclusive warranty given by HEAL in connection with any such services, and HEAL gives and makes no other representation or warranty of any kind, express or implied. No representative of HEAL is authorized to give or make any other representation or warranty or modify the warranty in any way.

The liability and obligations of HEAL, and the remedies of the Customer in connection with any services performed by HEAL, will be limited to repeating the services performed or, at the sole option of HEAL, refunding in full or in part fees paid by the Customer for such services. HEAL'S obligation to repeat any services with respect to any sample will be contingent on the Customer's providing, at the request of HEAL and at the Customer's expense, an additional sample if necessary. Any reanalysis generating Results consistent with the Original Results will be at the Customer's expense. Except as otherwise specifically provided herein, HEAL shall have no liability, obligation or responsibility of any kind for any losses, costs, expenses, or other damages (including but not limited to any special, indirect, incidental or consequential damages) for any representation or warranty of a kind with respect to HEAL'S Services or Results.

In no event shall HEAL have any responsibility or liability to the Customer for any failure or delay in performance by HEAL, which results, directly or indirectly, in whole or in part, from any cause or circumstance beyond the reasonable control of HEAL. Such cause and circumstance shall include, but not be limited to, acts of God, acts of Customer, acts of orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disputes, difficulties or delays in transportation, mail or delivery services, inability to obtain from HEAL usual sources sufficient services or supplies, or any other cause beyond HEAL'S reasonable control.

All results provided by HEAL are strictly for the use of its Customers, and HEAL is in no way responsible for the use of such results by Customers or third parties. All results should be considered in their entirety, and HEAL is in no way responsible for the separation, detachment, or other use of any portion of the results.

The customer represents and warrants that any sample delivered to HEAL will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by the customer. The Customer further warrants that any sample containing any hazardous substance, which is to be delivered to HEAL'S premises will be packaged, labeled, transported and delivered properly and in accordance with applicable laws.

It is understood and agreed that all samples and cuttings of materials containing hazardous contaminants are the property and the responsibility of the Customer. All contaminated samples and laboratory byproducts will be returned to the Customer for disposal. It is understood and agreed that HEAL is not, and has no responsibility as, a generator, treater, storer, or disposer of hazardous or toxic substances found or identified at a site, and the Customer agrees to assume the responsibility for the foregoing.

4.4
4.5
4.6

5. **WARRANTIES, LIABILITY AND INDEMNIFICATION**

5.1
5.2

5.3
5.4
5.5
5.6

6. **ENTIRE AGREEMENT; SEVERABILITY**

6.1
6.2

7. **AMENDMENTS AND WAIVERS**

7.1
7.2

8. **SAMPLE STORAGE**

8.1

9. **SECTION HEADING**

9.1

10. **GOVERNING LAW**

10.1

11. **DEFINITIONS**

11.1
11.2
11.3
11.4
11.5
11.6

12. **ORDERS**

12.1
12.2

13. **PAYMENT TERMS**

13.1
13.2
13.3

14. **RECEIPT OF SAMPLES AND DELIVERY OF SERVICES**

14.1
14.2
14.3

15. **SECTION HEADING**

15.1

16. **GOVERNING LAW**

16.1

17. **SECTION HEADING**

17.1

18. **SECTION HEADING**

18.1

19. **SECTION HEADING**

19.1

20. **SECTION HEADING**

20.1

ROBINS, CLOUD & LUBEL, L.L.P.

ATTORNEYS AT LAW

910 TRAVIS, SUITE 2020

HOUSTON, TEXAS 77002

TELEPHONE 713/650-1200

TELECOPY 713/650-1400

BILL ROBINS III
Board Certified-Personal Injury Trial Law
Texas Board of Legal Specialization

E-MAIL: robins@rcllaw.com

February 11, 1999

FEB 16 1999

Mr. Roger Anderson
Environmental Bureau Chief
Oil Conservation Division
State of New Mexico
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: D.F. Fergason Oil Battery located in Unit H, Sec. 30, T.18, R.39E

No. D 0101-CV-9801302; *J.C. Turner, et al. vs. Texaco, Inc., et al.*; In the First Judicial District Court - State of New Mexico - County of Santa Fe

Dear Mr. Anderson:

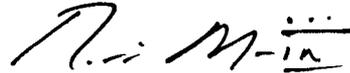
Enclosed please find recent test results from the water wells on my clients' property. As you will determine from these test results, it appears that our clients' water wells have been impacted by toluene and other contaminants. My clients are very concerned about the health affects of their exposure to these substances. They have been using these water wells for many years. Upon receipt of these test results, we immediately instructed our clients to cease using these water wells for consumption. We have also recently taken additional soil samples and will provide those to you upon receipt.

It is my understanding that the OCD has requested that Texaco provide it with a plan to remedy the situation at or near my clients' property with respect to the large pit associated with the D.F. Fergason Oil Battery. My clients would very much appreciate your considering these test results in evaluating any plan Texaco may submit regarding the clean-up operations.

Mr. Roger Anderson
February 11, 1999
Page 2

Thank you very much for your cooperation in this matter. If I need to take any further action, please do not hesitate to contact me.

Very truly yours,

A handwritten signature in cursive script, appearing to read "Bill Robins III". The signature is written in dark ink on a white background.

Bill Robins III

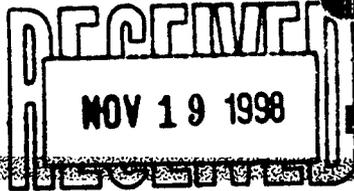
BRR:vjw
Enclosure

cc: Mr. and Mrs. J.C. Turner (w/encl.)
4601 East Seminole Highway
Hobbs, New Mexico 88240

E

C

D



ECD Environmental, Inc.

P.O. Box 9328
Albuquerque, NM 87119-9328
Telephone 505 / 768-7686
Fax 505 / 768-7601

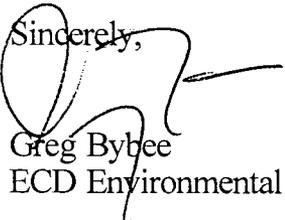
Mr. Bill Robbins
Robbins, Cloud & Lewbel
910 Travis
Suite 2020
Houston, TX 77002

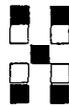
11/16/98

Dear Mr. Robbins,

Enclosed is the chemical analysis data on the water samples obtained from the Turner and Rodriguez water wells. The samples were taken 10/28/98. Please feel free to contact me if you have any questions.

Sincerely,


Greg Bybee
ECD Environmental



**Hall Environmental
Analysis Laboratory**

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Suite A
Albuquerque, NM 87109

11/12/98

ECD Environmental
P. O. Box 9328
Albuquerque, NM 87119

Dear Mr. Greg Bybee,

Enclosed are the results for the analyses that were requested. These were done according to EPA procedures or equivalent.

Detection limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely:

Andy Freeman
Assistant Lab Manager

Project: 9810128 - Turner/Rodriguez



**Hall Environmental
Analysis Laboratory**

Client: ECD
 Project: Turner/Rodriguez
 Project Manager: Greg Bybee
 Project Number:

Date Collected: 10/28/98
 Date Received: 10/30/98
 Sample Matrix: Aqueous
 Extraction Date: 11/4/98

EPA Method - 418.1

HEAL ID	Client ID	Dilution	TPH (mg/L)	Analysis Date
9810128-5	Background	1	ND	11/5/98
Extraction Blank	-	1	ND	11/5/98

MRL	1.0
-----	-----

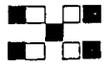
QA/QC

<u>Sample ID:</u>	<u>Sample Amount</u>	<u>Spike</u>	<u>Recovery</u>	<u>% Recovery</u>
Blank Spike 11/4	<1.0	5.0	3.9	78

<u>Sample ID:</u>	<u>Sample Amount</u>	<u>Duplicate</u>	<u>RPD</u>
Blank Duplicate 11/4	<1.0	<1.0	NA

Sincerely:


 Andy Freeman
 Semi Volatiles Supervisor



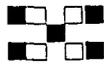
Hall Environmental Analysis Laboratory

Client: ECD Environmental
Project: Turner/Rodriguez
Project Manager: Greg Bybee
Project Number:

Date Collected: 10/28/98
Date Received: 10/30/98
Sample Matrix: Aqueous

Inorganic Compounds

HEAL LAB ID	Sample ID	Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrate/Nitrite (mg/L)	Sulfate (mg/L)	o-Phosphate-P (mg/L)
9810128-5	Background	1.6	44	0.4	2.8	78	ND
9810128-5	Background Dup	1.6	45	0.4	2.8	-	ND
Detection Limits		0.1	0.1	0.1	0.1	0.5	0.5
Method		300.0	300.0	300.0	300.0	300.0	300.0
Date Analyzed		10/29/98	10/29/98	10/29/98	10/29/98	11/9/98	10/29/98



Hall Environmental Analysis Laboratory

Client:
Project:
Project Manager:
Project Number:

ECD Environmental
Turner/Rodriguez
Greg Bybee

Date Collected:
Date Received:
Sample Matrix:

10/28/98
10/30/98
Aqueous

Inorganic Compounds

HEAL LAB ID	Sample ID	Sodium (mg/L)	Potassium (mg/L)	Magnesium (mg/L)	Calcium (mg/L)
9810128-5	Background	36	2.7	20	70
9810128-5	Background Dup	37	-	21	72
Detection Limits		0.1	0.1	0.1	0.1
Method		300.0	300.0	300.0	300.0
Date Analyzed		11/11/98	11/11/98	11/11/98	11/11/98



**Hall Environmental
Analysis Laboratory**

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Suite A
Albuquerque, NM 87109

11/12/98

ECD Environmental
P. O. Box 9328
Albuquerque, NM 87119

Dear Mr. Greg Bybee,

Enclosed are the results for the analyses that were requested. These were done according to EPA procedures or equivalent.

Detection limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely:

Andy Freeman
Assistant Lab Manager

Project: 9810128 - Turner/Rodriguez



**Hall Environmental
Analysis Laboratory**

Client: ECD Environmental
Project: Turner/Rodriguez
Project Manager: Greg Bybee
Project Number:

Date Collected: 10/28/98
Date Received: 10/30/98
Sample Matrix: Aqueous
Extraction Date: 11/4/98

EPA Method - 418.1

HEAL ID	Client ID	Dilution	TPH (mg/L)	Analysis Date
9810128-2	Turner House Well #1	1	19	11/5/98
9810128-4	Rodriguez House Well	1	2.6	11/5/98
Extraction Blank	-	1	ND	11/5/98

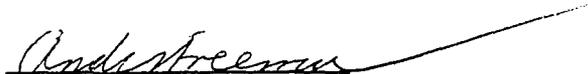
MRL	1.0
-----	-----

QA/QC

<u>Sample ID:</u>	<u>Sample Amount</u>	<u>Spike</u>	<u>Recovery</u>	<u>% Recovery</u>
Blank Spike 11/4	<1.0	5.0	3.9	78

<u>Sample ID:</u>	<u>Sample Amount</u>	<u>Duplicate</u>	<u>RPD</u>
Blank Dup. 11/4	<1.0	<1.0	NA

Sincerely:


Andy Freeman
Semi Volatiles Supervisor



Hall Environmental Analysis Laboratory

Client: ECD Environmental
Project: Turner/Rodriguez
Project Manager: Greg Bybee
Project Number:

Date Collected: 10/28/98
Date Received: 10/30/98
Sample Matrix: Aqueous

Inorganic Compounds

HEAL LAB ID	Sample ID	Fluoride (mg/L)	Chloride (mg/L)	Bromide (mg/L)	Nitrate/Nitrite (mg/L)	Sulfate (mg/L)	o-Phosphate-P (mg/L)
9810128-2	TH Well #1	1.0	94	0.9	3.6	88	ND
9810128-4	RH Well	0.8	270	2.4	3.4	130	ND

Detection Limits							
Method							
Date Analyzed							
	0.1	0.1	0.1	0.1	0.1	0.5	0.5
	300.0	300.0	300.0	300.0	300.0	300.0	300.0
	10/29/98	10/29/98	10/29/98	10/29/98	10/29/98	11/9/98	10/29/98



Hall Environmental Analysis Laboratory

Client: ECD Environmental
Project: Turner/Rodriguez
Project Manager: Greg Bybee
Project Number:

Date Collected: 10/28/98
Date Received: 10/30/98
Sample Matrix: Aqueous

Inorganic Compounds

HEAL LAB ID	Sample ID	Sodium (mg/L)	Potassium (mg/L)	Magnesium (mg/L)	Calcium (mg/L)
9810128-2	TH Well #1	48	2.5	21	87
9810128-4	RH Well	64	3.3	40	150

Detection Limits	0.1	0.1	0.1	0.1
Method	300.0	300.0	300.0	300.0
Date Analyzed	11/11/98	11/11/98	11/11/98	11/11/98



Hall Environmental Analysis Laboratory

Client: ECD Environmental
Project: Turner/Rodriguez
Project Manager: Greg Bybee
Project Number:

Date Collected: 10/28/98
Date Received: 10/30/98
Sample Matrix: Aqueous
Date Extracted: NA

8021 QC: 9810128-3 MS/MSD 11/2/98

<u>Compound</u>	<u>Sample Amount (ug/L)</u>	<u>Spike</u>	<u>Recovery</u>	<u>% Rec</u>	<u>Dup</u>	<u>% Dup</u>	<u>RPD</u>
MTBE	<2.5	40.0	40.0	94	40.4	101	1
Benzene	<0.5	20.0	20.1	102	20.1	101	0
Toluene	<0.5	20.0	19.8	99	20.0	100	1
Ethylbenzene	<0.5	20.0	20.0	100	20.1	101	0
Total Xylenes	<0.5	60.0	60.7	101	60.8	101	0
1,3,5-TMB	<0.5	20.0	20.8	104	21.0	105	1
1,2,4-TMB	<0.5	20.0	20.9	105	20.7	104	1

CHAIN-OF-CUSTODY RECORD

Client: ECD Environmental
 Project Name: W. New Pedreguer
 Address: 20. Box 9328
Albuquerque, N.M.
 Project #: _____
 Project Manager: Greg Byler
 Sampler: Greg Byler
 Samples Cold?: Yes No

Date	Time	Matrix	Sample I.D. No.	Number/Volume	Preservative		HEAL No.
					HgCl ₂	HCl	
10/28/98	11:40	H ₂ O	Tucson House wall #119				9810128-1
"	12:30	H ₂ O	Tucson House wall #119				-2
"	3:45	H ₂ O	Rocky Mountain wall #1	1 st pug			-3
"	4:10	H ₂ O	Rocky Mountain wall				-4
"	5:00	H ₂ O	Barren				-5
			Trip BIK				-6

Date: 10/28/98 Relinquished By: (Signature) _____ Received By: (Signature) _____
 Date: _____ Relinquished By: (Signature) _____ Received By: (Signature) _____

HALL ENVIRONMENTAL ANALYSIS LABORATORY
 4901 Hawkins NE, Suite A
 Albuquerque, New Mexico 87109
 505.345.3975
 Fax 505.345.4107

ANALYSIS REQUEST

BTEX + MTBE + TMBs (8021)	BTEX + MTBE + TPH (Gasoline Only)	TPH Method 8015B MOD (Gas/Diesel)	TPH (Method 418.1)	Volatiles Full List (8021)	EDB (Method 504.1)	EDC (Method 8021)	8310 (PNA or PAH)	RCRA 8 Metals	Cations (Na, K, Ca, Mg)	Anions (F, Cl, NO ₃ , NO ₂ , PO ₄ , SO ₄)	8081 Pesticides / PCBs (8082)	8260 (VOA)	8270 (Semi-VOA)	Air Bubbles or HeadSpace (Y or N)
X			X	X					X	X				
X			X	X					X	X				
X			X	X					X	X				
X			X	X					X	X				

Remarks:

Price, Wayne

From: Price, Wayne
Sent: Tuesday, February 02, 1999 2:48 PM
To: Williams, Donna
Cc: 'Chris Williams'
Subject: Texaco Fergason Draft

Donna! This is in word!



texferga.doc



Texaco E & P

205 E. Bender Blvd.
Hobbs NM 88240
505 393 7191

October 1, 1998

Chris Williams
District 1 Supervisor
Oil Conservation Division
Hobbs, New Mexico

Re: D.F. Fergason Work plan

Dear Mr. Williams:

In response to your letter of August 25, 1998, Texaco Exploration and Production Inc. (TEPI) requested Highlander Environmental Corp. to prepare a work plan to investigate the pit closure on the D.F. Fergason lease. Attached is the work plan for the site as developed by Highlander.

TEPI is submitting this work plan in the spirit of cooperation with the Oil Conservation Division (OCD) and will continue to cooperate with the OCD to gather data regarding the pit closure. However, by submitting this work plan, TEPI does not admit responsibility for any remedial action.

Should you desire to discuss this work plan please advise. If you approve of the plan we are prepared to start with the assessment as soon as we make arrangements with the landowner for access.

Rodney Bailey
EHS Professional
Hobbs Operating Unit

Wayne,
I have reviewed
this and am
waiting for your
response. Thanks
Donna



Highlander Environmental Corp.

Midland, Texas

September 28, 1998

Mr. Chris Williams
District 1 Supervisor
Oil Conservation Division
New Mexico Energy, Minerals and Natural Resources Department
P. O. Box 1980
Hobbs, New Mexico 88241

**Re: Scope of Work for Pit Closure Investigation, Texaco Exploration and Production, Inc.,
D. F. Fergason Lease, Northeast Quarter, Section 30, Township 18 South, Range 39
East, Lea County, New Mexico**

Dear Mr. Williams:

Texaco Exploration and Production, Inc. (Texaco) has requested Highlander Environmental Corp. (Highlander) to prepare a scope of work to investigate a former emergency overflow pit (Site) at the D. F. Fergason Lease, located approximately two mile east of Hobbs, New Mexico. The Site is located in the northeast quarter (NE/4), Section 30, Township 18 South, Range 39 East, Lea County, New Mexico. Figure 1 presents a Site location and topographic map.

1.0 Background

On August 25, 1998, the New Mexico Oil Conservation Division (OCD) requested that Texaco submit a work plan to investigate closure of the pit. Appendix A presents correspondence from the OCD. On July 7, 1998 and July 16, 1998, Texaco had submitted correspondence to the OCD regarding its operation of the Site. Prior to about 1969, Texaco operated the Site for temporary containment of oil and gas waste (i.e., oil, produced water, etc.) during upset conditions or unscheduled shutdown of its tank battery. Texaco sold its interest at the D. F. Fergason Lease in 1969, and aerial photographs indicate that the Site may have been closed at that time. The Site is mainly covered by caliche and measures approximately 200 x 300 feet.

2.0 Scope of Work

The purpose of the investigation is to assess the presence and extent of oil and gas wastes at the Site, and to determine the potential for impact to subsurface soil and groundwater. The investigation will include installation of rotary drilled borings and collection of soil samples for laboratory tests. Monitoring wells may be installed for collection of groundwater samples if the investigation suggests that oil and gas wastes, if present, have affected groundwater.

Three (3) to five (5) soil borings may be installed at the Site to determine the presence of oil and gas wastes and to evaluate the potential for impacts to groundwater. The borings will be drilled using a truck-mounted air rotary drilling rig and soil samples will be collected approximately every ten (10) feet for field and possible laboratory analysis. The soil samples may be collected using a split-spoon sampler, if possible. However, if soil conditions prohibit use of the split-spoon sampler, or equivalent device, the samples will be collected as drill cuttings exit the borehole. The soil samples will be placed in clean glass sample containers, and a portion of the sample will be retained in a clean sample bag for soil headspace gas analysis. Should the concentration of petroleum hydrocarbons observed from the soil headspace analysis decrease below measurable levels prior to encountering groundwater, drilling will cease, and the soil boring will be plugged. If plugged, the boring(s) will be filled to ground surface with cement and bentonite grout. However, if soil headspace analysis suggest that oil and gas wastes have migrated to groundwater, monitoring wells may be installed. Texaco will work with the OCD to select monitoring well locations. Soil cuttings from drilling will be placed on plastic adjacent to the borings and covered until disposal is arranged.

The soil samples will be field screened for petroleum hydrocarbons using the Ambient Temperature Headspace (ATH) method. The ATH method consists of collecting a discrete or composite soil sample and placing the sample in a clean plastic sample bag, leaving a vacant headspace in the top of the bag. The bag is sealed and after approximately fifteen minutes at ambient temperature storage, the concentration of organic vapors in the sample bag headspace is measured using a photoionization detector (PID). A Thermo Environmental Instruments, Model 580B, Organic Vapor Meter, calibrated to a 75 parts per million (ppm) isobutylene standard, will be used to measure the headspace. The PID has a detection limit of 0.1 ppm. The soil headspace gas analysis will be used to evaluate soil samples for possible laboratory tests.

According to OCD guidelines (Guidelines for Unlined Surface Impoundment Closure, February 1993), a soil headspace gas measurement of 100 ppm may be substituted for laboratory analysis of benzene and total BTEX (sum of benzene, toluene, ethylbenzene and xylene). However, a headspace gas analysis cannot be substituted for total petroleum hydrocarbon (TPH) analysis. The soil sample exhibiting the highest headspace gas reading and the lower most sample collected from the borings will be selected for laboratory analysis. If the soil samples exhibit headspace gas readings above 100 ppm, the samples will be analyzed for benzene, total BTEX and TPH. However, if the samples exhibit headspace gas readings below 100 ppm, then the samples will only be tested for TPH.

If soil sample field screening strongly suggests that groundwater has been affected from oil and gas waste, and it is determined that one or more groundwater monitoring wells may be required, the monitoring wells will be installed in accordance with procedures presented in Appendix B. All down-hole equipment (i.e., drilling rods, bit, etc.) will be thoroughly decontaminated between each use with a high-pressure hot water wash and rinse. All soil sampling equipment (i.e., split-spoon sampler, samples trowels, etc.) will be thoroughly washed between events with potable water and



Mr. Chris Williams
September 28, 1998
Page 3

laboratory-grade detergent and rinsed with distilled water.

Upon receipt of analytical data from the laboratory, Highlander will review all data and prepare a report for submittal to Texaco and the OCD summarizing the investigation results. Please call if you have questions.

Respectfully yours,
Highlander Environmental Corp.



Mark J. Larson
Senior Project Manager

Encl.

cc: Mr. Rodney Bailey, Texaco
Mr. Larry Hall, Texaco



FIGURES



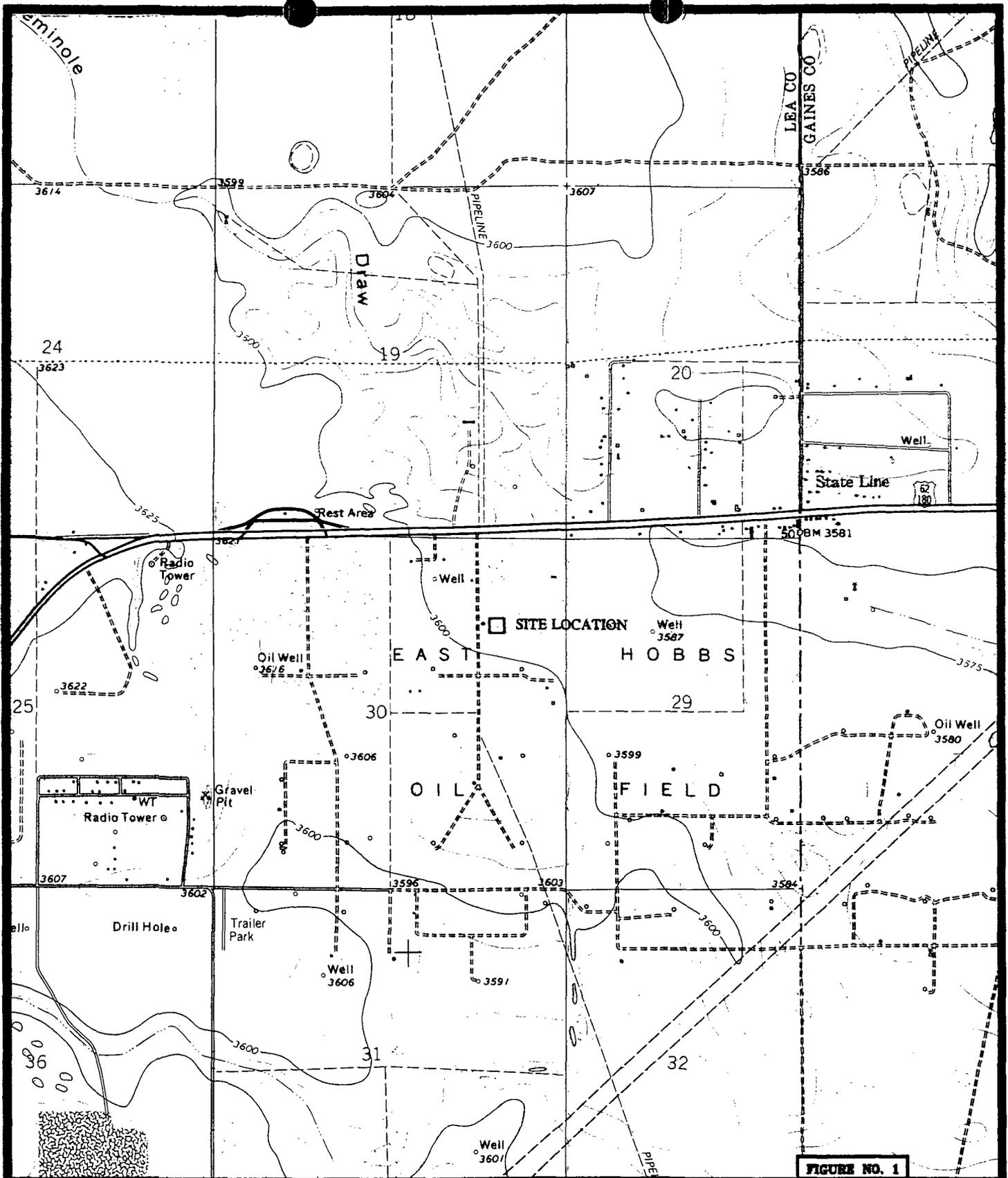


FIGURE NO. 1

LEA COUNTY, NEW MEXICO

TEXACO EXPLORATION
& PRODUCTION, INC.

TOPOGRAPHIC
MAP

HIGHLANDER ENVIRONMENTAL CORP.
MIDLAND, TEXAS

TAKEN FROM U.S.G.S.
HOBBS EAST, TEX.-N. MEX.
7.5' QUADRANGLES



LEGEND
□ SITE LOCATION

SCALE: 1"=2,000'

APPENDIX A

OCD CORRESPONDENCE





NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
DISTRICT I HOBBS
PO BOX 1980, HOBBS, NM 88241
(505) 393-6161
FAX (505) 393-0720

Jennifer A. Salisbury
CABINET SECRETARY

August 25, 1998

Mr. L.R. Hall
Texaco-North America Production (TNAP)
P.O. Box 3109
Midland, Tx 79702

Re: D.F. Fergason Lease
NE/4 Sec 30-Ts18s-R39e

Dear Mr. Hall:

New Mexico Oil Conservation Division (NMOCD) is in receipt of your correspondence dated July 7 and July 16, 1998 concerning the above referenced site. It appears that TNAP closed the pit located on the above location.

In order to ensure protection of public health, fresh water and the environment, NMOCD is requiring TNAP to submit within 30 days of receipt of this letter a pit closure investigation and work plan for NMOCD approval. The NMOCD will review the plan and approve as is or with conditions. Please note the NMOCD can allow additional time for a good cause shown.

If you require any further information or assistance please do not hesitate to call (505-393-6161) or write this office.

Sincerely Yours,

Chris Williams-NMOCD District I Supervisor

file: wp98/ferpit

cc: Gallagher, Lewis & Downey-Houston, Tx

APPENDIX B

**Procedures
for
Monitoring Well Installation, Development and Groundwater Sample
Collection**



**Procedures
for
Monitoring Well Installation, Development and Groundwater Sample Collection**

Groundwater monitoring wells may be installed at the Site to evaluate groundwater quality. Records of the New Mexico State Engineer's office indicate that groundwater occurs in the vicinity of the Site, and varies from about 70 to 80 feet below ground surface (BGS). If installed, the monitoring wells will be drilled approximately 15 feet into the upper groundwater zone. The wells will be constructed using two (2) inch diameter schedule 40 PVC threaded casing and factory slotted screen. The well screen, approximately twenty (20) feet in length, will be installed in the drilled boring with about five (5) feet of screen above the groundwater and about fifteen (15) feet into the groundwater. The well screen will be surrounded with a graded silica sand to a depth approximately 2 feet above the screen. A layer of bentonite pellets, approximately 2 feet thick, will be placed in the annulus above the sand and hydrated with potable water. The remainder of the annulus will be filled with cement and bentonite grout to about one foot below ground. The well will be secured with a locking cap and steel protector anchored in a concrete pad measuring approximately 3 feet by 3 feet.

The wells will be developed following installation to remove fine-grained sediment disturbed during drilling, and prior to collection of groundwater samples. The well will be developed by bailing or pumping with a submersible pump. Water removed from the wells will be placed in an appropriate container (i.e., 55-gallon drums, portable tank, etc.) and stored at the Site until disposal is arranged. After well development, groundwater samples will be collected and analyzed for BTEX, major cations and anions, total dissolved solids (TDS), dissolved metals (RCRA 8) and polynuclear aromatic hydrocarbons (PAH). Samples for metals will be filtered in the field prior to submittal to the laboratory. The well will be inspected for the presence of phase-separated hydrocarbons (PSH) and, if present, a sample will be collected and analyzed by gas chromatography (GC) to determine composition and possible source. If PSH is detected in a monitor well groundwater samples will not be collected from the well. All samples will be delivered to the laboratory via overnight delivery and under chain-of-custody control. Quality Assurance/Quality Control (QA/QC) samples (i.e., duplicate, trip blank, field blank, etc.) will be collected during the investigation for data validation.

All groundwater sampling equipment (i.e., water level indicator, interface probe, submersible pump, etc.) will be thoroughly washed between events with potable water and laboratory-grade detergent and rinsed with distilled water.





Texaco E & P

205 E. Bender Blvd.
Hobbs NM 88240
505 393 7191

September 21, 1998

Mr. Chris Williams
NMOCD
District I Supervisor

Re: D.F. Ferguson Lease
NE/4 Sec 30-T 18S-R 39E

Dear Mr. Williams

In response to your letter dated August 25, 1998, Texaco is in receipt of a draft copy of a work plan for investigating the pit closure on the D.F. Ferguson lease. This plan is being developed by Highlander Environmental Corp. Texaco is currently reviewing the draft copy. It is apparent we can not meet the September 25, 1998 deadline. Texaco would like to ask for a 10-day extension to complete the review and final copy printing.

Thank you for your understanding and assistance in this matter. If you have any questions please call me at 505-397-0422.

Rodney Bailey
EHS Professional
Hobbs Operating Unit



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
DISTRICT I HOBBS
PO BOX 1980, Hobbs, NM 88241
(505) 393-6161
FAX (505) 393-0720

Jennifer A. Salisbury
CABINET SECRETARY

August 25, 1998

Mr. L.R. Hall
Texaco North America Production (TNAP)
P.O. Box 3109
Midland, Tx 79702

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NE/4 Sec 30-Ts18s-R39e

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Sincerely Yours,

Chris Williams-NMOCD District I Supervisor

file: wp98/ferpit

cc: Gallagher, Lewis & Downey-Houston, Tx



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

June 11, 1998

CERTIFIED MAIL
RETURN RECEIPT NO. Z-235-437-288

Mr. Bill Robins III
Gallagher, Lewis & Downey
40th Floor, Nations Bank Center
700 Louisiana
Houston, Texas 77002

**RE: FORMER UNLINED PIT AND SPILL AREA
TEXACO FERGASON TANK BATTERY/ARCO PIPELINE SPILL**

Dear Mr. Robins:

The New Mexico Oil Conservation Division (OCD) has reviewed Gallagher, Lewis & Downey's January 29, 1998 correspondence which states that the water wells of Mr. J.C. Turner and Ms. Idolina Rodriguez have been sampled and found to be contaminated as a result of a former Texaco unlined pit at the D.F. Fergason Tank Battery and a former Arco Pipeline spill located in Unit H, Sec. 30, T18N, R39E, NMPM, Lea County, New Mexico.

In order to initiate a ground water assessment and to be able to assess potential health impacts from contaminants in these water wells, the OCD requests that you provide a copy of the laboratory analytical data sheets of all water quality samples taken from the Turner and Rodriguez water wells.

If you have any questions, please call me at (505) 827-7152 or Bill Olson of my staff at (505) 827-7154.

Sincerely,

A handwritten signature in cursive script, appearing to read "Roger C. Anderson".

Roger C. Anderson
Environmental Bureau Chief

xc: Wayne Price, OCD Hobbs District Office

Z 235 437 288

US Postal Service

Receipt for Certified Mail

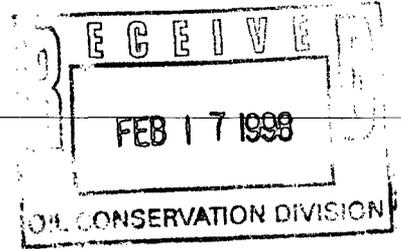
No Insurance Coverage Provided.

Do not use for International Mail (*See reverse*)

Sent to	
Street & Number	
Post Office, State, & ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	

PS Form 3800, April 1995

Price, Wayne



From: Price, Wayne
Sent: Wednesday, February 11, 1998 2:18 PM
To: Roger Anderson; Carroll, Rand
Cc: Chris Williams; Bill Olson
Subject: Law firm inquiry concerning Groundwater contamination

Dear Roger,

Please note I am dropping in the US Mail today a copy of a letter and my response to a law firm making an inquiry concerning an old Texaco Pit and groundwater contamination out in the East Hobbs Pool Water Study Area.

This area is located just east of Hobbs, NM and adjacent to the NM-Texas State line.



**NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT**

OFFICE OF THE SECRETARY
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-8880

Jennifer A. Salisbury
CABINET SECRETARY

February 11, 1998

Bill Robins III
Gallagher, Lewis & Downey
NationsBank Center 40th Floor
700 Louisiana
Houston, Texas 77002

Re: D.F. Fergason Oil Battery located in Unit H, Sec 30-T18s-R39e

Dear Mr. Robins III:

New Mexico Oil Conservation Division (NMOCD) is in receipt of your letter dated January 29, 1998 concerning groundwater and oilfield contamination at and/or near the above referenced site.

Please note groundwater contamination cases are normally handled by the NMOCD Environmental Bureau located at 2040 S. Pacheco, Santa Fe, NM 87505. The NMOCD District I office in Hobbs, NM is forwarding your letter to the NMOCD Environmental Bureau Chief, Mr. Roger Anderson. Mr. Anderson can be contacted by telephone at 505-827-7152.

If you require any further information or assistance please do not hesitate to call (505-393-6161) or write this office.

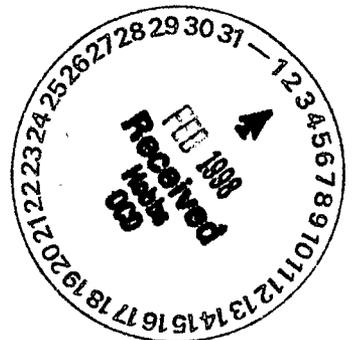
Sincerely Yours,

Wayne Price-Environmental Engineer

cc: Chris Williams-NMOCD District I Supervisor
Roger Anderson-Environmental Bureau Chief, Santa Fe, NM
Rand Carroll-NMOCD Legal Counsel
File- East Hobbs Pool Water Study

GALLAGHER, LEWIS & DOWNEY
ATTORNEYS AT LAW

40th Floor
NationsBank Center
700 Louisiana
Houston, Texas 77002
Telephone 713/222-8080
Telecopy 713/222-0066



Bill Robins III
Board Certified-Personal Injury Trial Law
Texas Board of Legal Specialization

Direct Line 713/238-7880

January 29, 1998

Mr. Wayne Price
Environmental
State of New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, New Mexico 88240

Re: D.F. Fergason Oil Battery located in Unit H, Sect. 30, T. 18, R. 39 E.

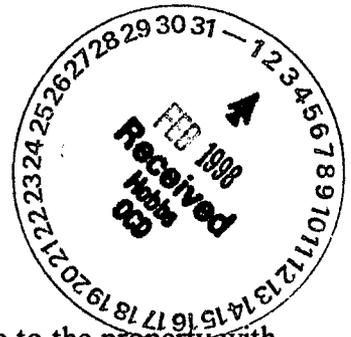
Dear Mr. Price:

Our law firm represents J.C. Turner and his wife, Donna Turner, as well as Idolina Rodriguez. Mr. and Mrs. Turner own a property located at 4601 East Seminole Highway, Hobbs, New Mexico 88240. Mr. and Mrs. Turner have been living at this address since 1987. During the last approximately ten years, Mr. Turner has been attempting to grow crops on his land. However, on an approximately five acre portion of his property, Mr. Turner was unable to successfully grow any crops or vegetation, despite extensive efforts at discing, tilling, plowing, and also, by adding many kinds of fertilizer. In fact, despite his efforts, the land appeared to be sterile.

This sterile area actually was a large pit associated with the D.F. Fergason Oil Battery located in Unit H, Section 30, T. 18, R. 39 E. This property was drilled and operated by Texaco for many years. It was subsequently operated by Martindale Petroleum Corporation, Hillin-Simon Oil Company, Marshall R. Young Oil Company, and Fredonia Resources, Inc., as well as possibly others.

Recently, Mr. Turner learned the old pit posed a serious health hazard to him and his family. In December, 1996, Mr. Turner filed a complaint about the pit area with the State of New Mexico - Oil Conservation Division. In addition, Mr. Turner also notified the above-listed operators by letter dated January 27, 1997. Water wells on Mr. and Mrs. Turner's property were sampled and have been impacted by contaminants. In addition, the water well of Ms. Rodriguez, who lives adjacent to the old pit area, has also been impacted.

Mr. Wayne Price
Environmental
State of New Mexico OCD
January 29, 1998
Page 2



In April, 1997, Texaco's environmental person, Rodney Bailey, came to the property with consultants from Highlander Environmental and did sampling of the soil. Eddie Seay, with Eddie Seay Consulting, also met with Rodney Bailey about the environmental report and analysis. Mr. Bailey admitted there was a problem but told Mr. Seay that Texaco was not going to do anything about the problem. In fact, Mr. Bailey told Mr. Seay that if the Turners and Ms. Rodriguez wanted anything from Texaco, they had no choice but to get a lawyer.

In addition, Arco Pipeline Company has a pipeline that runs across the Turner property in the vicinity of the old pit. Arco recently had a substantial spill in this area. Arco began efforts to attempt to clean up its spill, but when it encountered the remnants of the old pit, refused to do any further remediation. As a result, Mr. and Mrs. Turner's property has also been significantly impacted by Arco's operations.

The purpose of this letter is to request that your department take whatever action is necessary to compel Texaco, Arco, and any and all other responsible parties to clean up the environmental damage that has taken place on Mr. Turner's property and which is impacting the health, safety, and welfare of the Turners and their neighbor, Ms. Rodriguez. We would certainly appreciate any cooperation that you could provide to us in this regard.

We look forward to working with you. If you have any questions, or need any additional information, please do not hesitate to contact me.

Very truly yours,

Bill Robins III

BRK:vjw
126916/97-26444

cc: Mr. and Mrs. J.C. Turner
4601 East Seminole Highway
Hobbs, New Mexico 88240

Ms. Idolina Rodriguez
c/o Mr. and Mrs. J.C. Turner
4601 East Seminole Highway
Hobbs, New Mexico 88240

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GALLAGHER, LEWIS & DOWNEY JUL 16 1998

ATTORNEYS AT LAW
40TH FLOOR
NATIONSBANK CENTER
700 LOUISIANA
HOUSTON, TEXAS 77002

Telephone: 713/222-8080
Telecopy: 713/222-0066

BILL ROBINS III
Board Certified-Personal Injury Trial Law
Texas Board of Legal Specialization

DIRECT LINE 713/238-7880

July 9, 1998

Mr. Roger Anderson
Environmental Bureau Chief
Oil Conservation Division
State of New Mexico
2040 South Pacheco
Santa Fe, New Mexico 87505

CERTIFIED MAIL:RRR
#P 436 345 757

Re: Former Unlined Pit in Spill Area at Texaco Ferguson Battery/ARCO Pipeline Spill

Dear Mr. Anderson:

Thank you for your letter dated June 11, 1998 regarding the complaint made by my clients, J.C. Turner and Ms. Idolina Rodriguez. Pursuant to your request, enclosed please find copies of the analytical results for Ms. Rodriguez' water well, and for J.C. Turner's water wells. The samples for Mr. Turner's water wells were taken by Eddie Seay Consulting on January 5, 1997, and the sample for Ms. Rodriguez' water well was taken on June 11, 1997. We would anticipate that additional sampling will be necessary.

Thank you very much for your attention to this matter. If you need any additional information, or if I can be of any further assistance to you, please do not hesitate to contact me.

Very truly yours,



Bill Robins III

BRR:vjw
Enclosure
134074/97-26444

A
Development
Team
OO

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OK
27 10 11



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

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

PHONE (505) 326-4669 • 118 S. COMMERCIAL AVE. • FARMINGTON, NM 87401

ANALYTICAL RESULTS FOR
 EDDIE SEAY CONSULTING
 ATTN: EDDIE SEAY
 601 W. ILLINOIS
 HOBBS, NM 88240
 FAX TO:

Receiving Date: 01/06/97
 Reporting Date: 01/09/97
 Project Number: NOT GIVEN
 Project Name: J.C. TURNER
 Project Location: EAST HOBBS

Sampling Date: 01/05/97
 Sample Type: GROUNDWATER
 Sample Condition: COOL & INTACT
 Sample Received By: BC
 Analyzed By: GP/BC

LAB NUMBER SAMPLE ID	P-Alkalinity (mg/L)	T-Alkalinity (mg/L)	Hardness (mg/L)	Chloride (mg/L)	Sulfates (mg/L)	pH (s u.)
ANALYSIS DATE	1/7/97	1/7/97	1/7/97	1/7/97	1/7/97	1/7/97
H2751-2 DEEP WATER WELL	0	144	360	160	108	7.57
Quality Control	NR	NR	NR	496	99.5	7.00
True Value QC	NR	NR	NR	500	100	7.00
% Accuracy	NR	NR	NR	99.2	99.5	100
Relative Percent Difference	NR	NR	NR	0.0	0.5	0.1

METHODS: EPA 600/4-79-020, Standard Method	-	-	130.2	325.3	375.4	150.1
	2320 B	2320 B	-	-	-	-

LAB NUMBER SAMPLE ID	Hydroxides (mg/L)	Carbonates (mg/L)	Bicarbonates (mg/L)	Conductivity (umhos/cm)	TDS (mg/L)
ANALYSIS DATE	1/7/97	1/7/97	1/7/97	1/7/97	1/8/97
H2751-2 DEEP WATER WELL	0	0	176	875	640
Quality Control	NR	NR	NR	1413	NR
True Value QC	NR	NR	NR	1413	NR
% Accuracy	NR	NR	NR	100	NR
Relative Percent Difference	NR	NR	NR	0.0	6.8

METHODS: EPA 600/4-79-020, Standard Method	-	-	-	120.1	160.1
	2320 B	2320 B	2320 B	-	-

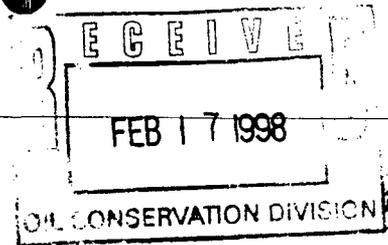

 Chemist

01/09/97
 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. H2751-2 XUS 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.

Price, Wayne

From: Price, Wayne
Sent: Wednesday, February 11, 1998 2:18 PM
To: Roger Anderson; Carroll, Rand
Cc: Chris Williams; Bill Olson
Subject: Law firm inquiry concerning Groundwater contamination



Dear Roger,

Please note I am dropping in the US Mail today a copy of a letter and my response to a law firm making an inquiry concerning an old Texaco Pit and groundwater contamination out in the East Hobbs Pool Water Study Area.

This area is located just east of Hobbs, NM and adjacent to the NM-Texas State line.



**NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT**

OFFICE OF THE SECRETAR
2040 South Pacheco Street
Santa Fe, New Mexico 87500
(505) 827-6980

Jennifer A. Salisbury
CABINET SECRETARY

February 11, 1998

Bill Robins III
Gallagher, Lewis & Downey
NationsBank Center 40th Floor
700 Louisiana
Houston, Texas 77002

Re: D.F. Ferguson Oil Battery located in Unit H, Sec 30-T18s-R39e

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Sincerely Yours,

Wayne Price-Environmental Engineer

cc: Chris Williams-NMOCD District I Supervisor
Roger Anderson-Environmental Bureau Chief, Santa Fe, NM
Rand Carroll-NMOCD Legal Counsel
File- East Hobbs Pool Water Study

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Direct Line 713/238-7880

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Environmental
State of New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, New Mexico 88240

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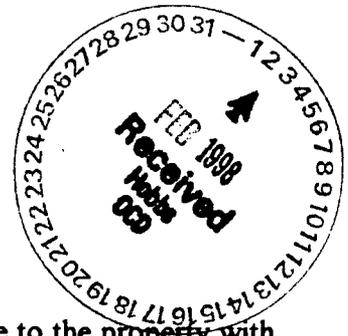
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Mr. Wayne Price
Environmental
State of New Mexico OCD
January 29, 1998
Page 2



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Very truly yours,

Bill Robins III

BRK:vjw
126916/97-26444

cc: Mr. and Mrs. J.C. Turner
4601 East Seminole Highway
Hobbs, New Mexico 88240

Ms. Idolina Rodriguez
c/o Mr. and Mrs. J.C. Turner
4601 East Seminole Highway
Hobbs, New Mexico 88240



Texaco North America Production
Permian Business Unit

500 North Loraine
Midland TX 79701

P O Box 3109
Midland TX 79702

July 16, 1998

Wayne

Mr. Chris Williams, District I Supervisor
NMOCD
Post Office Box 1980
Hobbs, New Mexico 88241

RE: D. F. Fergason Lease
NE/4 Sec. 30, T-18-S, R-39-E

Dear Mr. Williams:

In my letter to you dated July 7, 1998, I stated "that according to our information, we sold the lease in August, 1969, and Texaco did not close the pit(s). It is our understanding that it was closed by the current landowner."

Recently obtained aerial photographs (copies attached), show that there was evidence of a pit on Mr. Turner's property in the 1967 survey. In the 1971 survey, it appears that the pit(s) have been closed. This was before Mr. Turner acquired the property. We have not been able to locate any information regarding the closure of the pit(s), but we are continuing with our search.

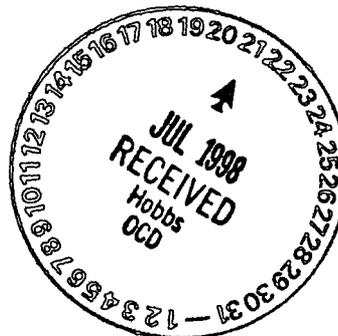
Should you need additional information please advise.

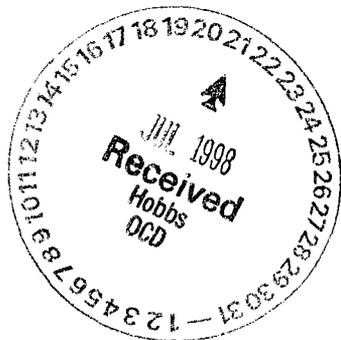
Sincerely yours,

L. R. Hall
Operations Support Manager

LRH:cfb

Brian West - Houston
Rodney Bailey - Hobbs





February 14 & May 12, 1967

103°5'30"W

103°5'16"W

103°5'0"W

103°4'45"W

32°43'30"N

32°43'3

32°43'15"N

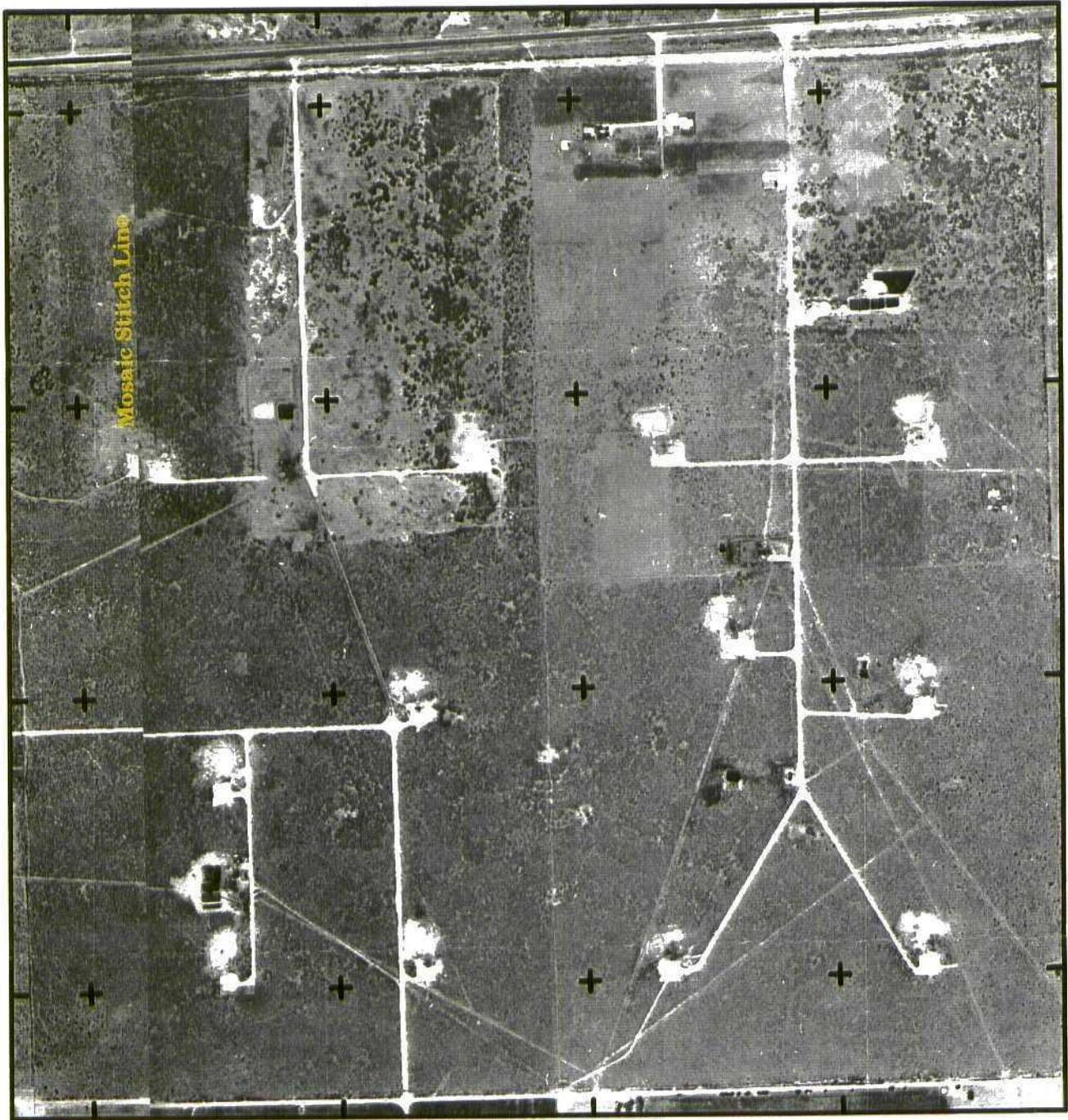
32°43'1

32°43'0"N

32°43'0

32°42'45"N

32°42'4



103°5'30"W

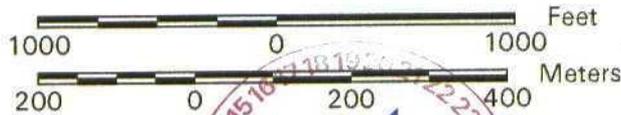
103°5'15"W

103°5'0"W

103°4'45"W

Black-and-white photo
mosaic

UTM Zone 13
Clarke 1866 Spheroid
NAD 27



Section 30
Hobbs East Quadrangle

Texaco Remote Sensing Laboratory



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
A
JUL 1998
Received
Hobbs
OCD

STANDARD

July 9, 1971

103°5'30"W

103°5'15"W

103°5'0"W

103°4'45"W

32°43'30"N

32°43'30"

32°43'15"N

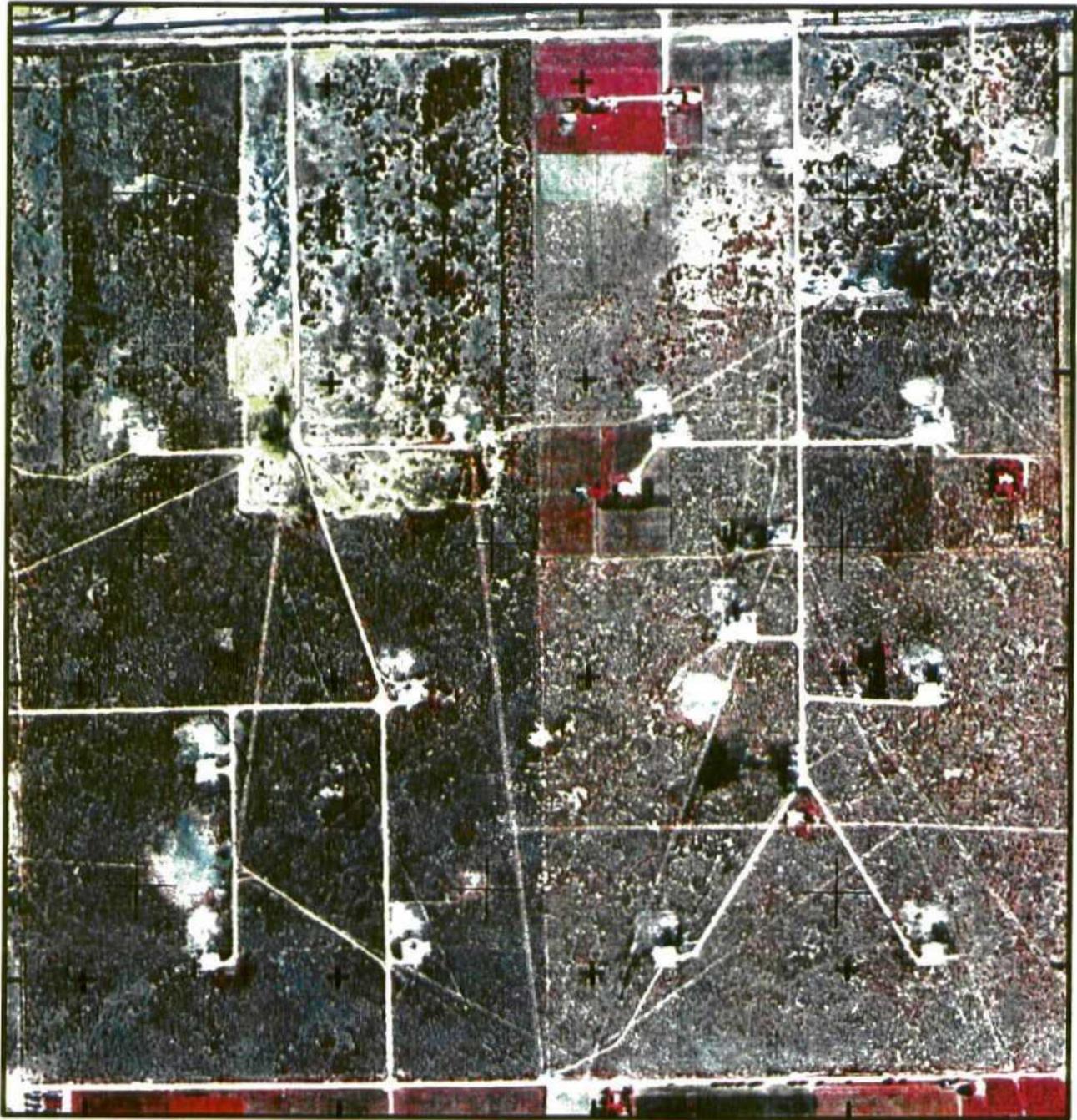
32°43'15"

32°43'0"N

32°43'00"

32°42'45"N

32°42'45"



103°5'30"W

103°5'15"W

103°5'0"W

103°4'45"W

Color Infrared Photograph



Section 30
Hobbs East Quadrangle

UTM Zone 13
Clarke 1866 Spheroid
NAD 27



Texaco Remote Sensing Laboratory



12 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
A
MAY 1998
Received
Hobbs
DCD

12 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31



Texaco North America Production
Permian Business Unit

500 North Loraine
Midland TX 79701

P O Box 3109
Midland TX 79702

July 7, 1998

Mr. Chris Williams, District I Supervisor
New Mexico Oil Conservation Division
P. O. Box 1980
Hobbs, New Mexico 88241

RE: D. F. Fergason Lease
NE/4 Sec. 30, T-18-S, R-39-E



Dear Mr. Williams:

I am in receipt of your letter of June 12, 1998, addressed to Mr. Rodney Bailey, in which you requested Texaco to provide pit closure information on an "Old Pit" on property owned by Mr. J. C. Turner.

This is to advise that according to our information, we sold the lease in August, 1969, and Texaco did not close the pit(s). It is our understanding that it was closed by the current landowner.

Should you need additional information, please advise.

Sincerely yours,

L. R. Hall
Operations Support Manager

LRH:cfb

B. S. West -- Legal - Houston
R. G. Bailey - Hobbs





STATE OF NEW MEXICO
 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
 OIL CONSERVATION DIVISION
 HOBBS DISTRICT OFFICE

POST OFFICE BOX 1980
 HOBBS, NEW MEXICO 88241-1980
 (505) 393-6161

June 12, 1998

Mr. Rodney Bailey
 Texaco E & P
 205 E. Bender Blvd.
 Hobbs, NM 88240

Re: D.F. Ferguson Lease NE/4 SE/4 Sec 30-Ts18s-R39e.

Dear Mr. Bailey:

New Mexico Oil Conservation Division (NMOCD) is making an inquiry into the "Old Pit" area located on the above referenced lease on property owned by Mr. J.C. Turner. Due to the presence of shallow groundwater in the area which is being used as a source of drinking water the NMOCD is requesting that Texaco provide pit closure information so as NMOCD can evaluate if this pit is a present or future threat to public health, groundwater, and/or the environment.

Please provide this information to the NMOCD District I office within 30 days of receipt of this letter.

If you require any further information or assistance please do not hesitate to call (505-393-6161) or write this office.

Sincerely Yours,

Chris Williams-NMOCD District I Supervisor

CW/wp98:texferg

cc: Roger Anderson-Environmental Bureau Chief, Santa Fe, NM
 Mr. JC Turner-Property Owner

7/16/98 1:25 PM
 LARRY HALL! TEXACO
 (letter of July 7) will amend
 sent to CR to reflect
 up-date info
 + all photo's
 + DAT'S!
 JP

Price, Wayne

From: Bill Olson
Sent: Friday, June 12, 1998 12:13 PM
To: Price, Wayne
Subject: Read: DF Fergason Lease Old Texaco Pit

Your message

To: Roger Anderson
Cc: Chris Williams; Bill Olson
Subject: DF Fergason Lease Old Texaco Pit
Sent: 6/12/98 11:44:02 AM

was read on 6/12/98 12:13:58 PM

Price, Wayne

From: Roger Anderson
Sent: Monday, June 15, 1998 4:20 PM
To: Price, Wayne
Subject: Read: DF Fergason Lease Old Texaco Pit

Your message

To: Roger Anderson
Cc: Chris Williams; Bill Olson
Subject: DF Fergason Lease Old Texaco Pit
Sent: 6/12/98 11:44:02 AM

was read on 6/15/98 4:20:56 PM



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
2040 S. PACHECO
SANTA FE, NEW MEXICO 87505
(505) 827-7131

June 11, 1998

CERTIFIED MAIL
RETURN RECEIPT NO. Z-235-437-288

Mr. Bill Robins III
Gallagher, Lewis & Downey
40th Floor, Nations Bank Center
700 Louisiana
Houston, Texas 77002

**RE: FORMER UNLINED PIT AND SPILL AREA
TEXACO FERGASON TANK BATTERY/ARCO PIPELINE SPILL**

Dear Mr. Robins:

The New Mexico Oil Conservation Division (OCD) has reviewed Gallagher, Lewis & Downey's January 29, 1998 correspondence which states that the water wells of Mr. J.C. Turner and Ms. Idolina Rodriguez have been sampled and found to be contaminated as a result of a former Texaco unlined pit at the D.F. Fergason Tank Battery and a former Arco Pipeline spill located in Unit H, Sec. 30, T18N, R39E, NMPM, Lea County, New Mexico.

In order to initiate a ground water assessment and to be able to assess potential health impacts from contaminants in these water wells, the OCD requests that you provide a copy of the laboratory analytical data sheets of all water quality samples taken from the Turner and Rodriguez water wells.

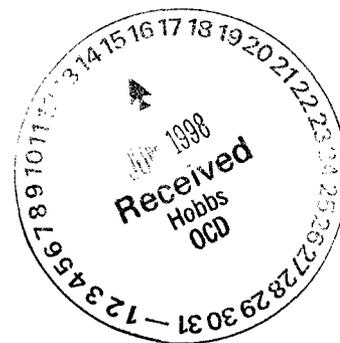
If you have any questions, please call me at (505) 827-7152 or Bill Olson of my staff at (505) 827-7154.

Sincerely,

Roger C. Anderson
Environmental Bureau Chief

xc: Wayne Price, OCD Hobbs District Office

cc: CHRIS WILLIAMS





**NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT**

OFFICE OF THE SECRETARY
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-8980

Jennifer A. Salisbury
CABINET SECRETARY

February 11, 1998

Bill Robins III
Gallagher, Lewis & Downey
NationsBank Center 40th Floor
700 Louisiana
Houston, Texas 77002

Re: D.F. Fergason Oil Battery located in Unit H, Sec 30-T18s-R39e

Dear Mr. Robins III:

New Mexico Oil Conservation Division (NMOCD) is in receipt of your letter dated January 29, 1998 concerning groundwater and oilfield contamination at and/or near the above referenced site.

Please note groundwater contamination cases are normally handled by the NMOCD Environmental Bureau located at 2040 S. Pacheco, Santa Fe, NM 87505. The NMOCD District I office in Hobbs, NM is forwarding your letter to the NMOCD Environmental Bureau Chief, Mr. Roger Anderson. Mr. Anderson can be contacted by telephone at 505-827-7152.

If you require any further information or assistance please do not hesitate to call (505-393-6161) or write this office.

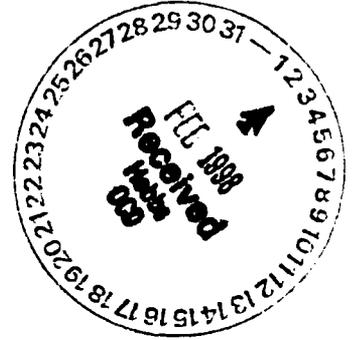
Sincerely Yours,

Wayne Price-Environmental Engineer

cc: Chris Williams-NMOCD District I Supervisor
Roger Anderson-Environmental Bureau Chief, Santa Fe, NM
Rand Carroll-NMOCD Legal Counsel
File- East Hobbs Pool Water Study

GALLAGHER, LEWIS & DOWNEY
ATTORNEYS AT LAW

40th Floor
NationsBank Center
700 Louisiana
Houston, Texas 77002
Telephone 713/222-8080
Telecopy 713/222-0066



Bill Robins III
Board Certified-Personal Injury Trial Law
Texas Board of Legal Specialization

Direct Line 713/238-7880

January 29, 1998

Mr. Wayne Price
Environmental
State of New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, New Mexico 88240

Re: D.F. Fergason Oil Battery located in Unit H, Sect. 30, T. 18, R. 39 E.

Dear Mr. Price:

Our law firm represents J.C. Turner and his wife, Donna Turner, as well as Idolina Rodriguez. Mr. and Mrs. Turner own a property located at 4601 East Seminole Highway, Hobbs, New Mexico 88240. Mr. and Mrs. Turner have been living at this address since 1987. During the last approximately ten years, Mr. Turner has been attempting to grow crops on his land. However, on an approximately five acre portion of his property, Mr. Turner was unable to successfully grow any crops or vegetation, despite extensive efforts at discing, tilling, plowing, and also, by adding many kinds of fertilizer. In fact, despite his efforts, the land appeared to be sterile.

This sterile area actually was a large pit associated with the D.F. Fergason Oil Battery located in Unit H, Section 30, T. 18, R. 39 E. This property was drilled and operated by Texaco for many years. It was subsequently operated by Martindale Petroleum Corporation, Hillin-Simon Oil Company, Marshall R. Young Oil Company, and Fredonia Resources, Inc., as well as possibly others.

Recently, Mr. Turner learned the old pit posed a serious health hazard to him and his family. In December, 1996, Mr. Turner filed a complaint about the pit area with the State of New Mexico - Oil Conservation Division. In addition, Mr. Turner also notified the above-listed operators by letter dated January 27, 1997. Water wells on Mr. and Mrs. Turner's property were sampled and have been impacted by contaminants. In addition, the water well of Ms. Rodriguez, who lives adjacent to the old pit area, has also been impacted.

Mr. Wayne Price
Environmental
State of New Mexico OCD
January 29, 1998
Page 2



In April, 1997, Texaco's environmental person, Rodney Bailey, came to the property with consultants from Highlander Environmental and did sampling of the soil. Eddie Seay, with Eddie Seay Consulting, also met with Rodney Bailey about the environmental report and analysis. Mr. Bailey admitted there was a problem but told Mr. Seay that Texaco was not going to do anything about the problem. In fact, Mr. Bailey told Mr. Seay that if the Turners and Ms. Rodriguez wanted anything from Texaco, they had no choice but to get a lawyer.

In addition, Arco Pipeline Company has a pipeline that runs across the Turner property in the vicinity of the old pit. Arco recently had a substantial spill in this area. Arco began efforts to attempt to clean up its spill, but when it encountered the remnants of the old pit, refused to do any further remediation. As a result, Mr. and Mrs. Turner's property has also been significantly impacted by Arco's operations.

The purpose of this letter is to request that your department take whatever action is necessary to compel Texaco, Arco, and any and all other responsible parties to clean up the environmental damage that has taken place on Mr. Turner's property and which is impacting the health, safety, and welfare of the Turners and their neighbor, Ms. Rodriguez. We would certainly appreciate any cooperation that you could provide to us in this regard.

We look forward to working with you. If you have any questions, or need any additional information, please do not hesitate to contact me.

Very truly yours,

Bill Robins III

BRK:vjw
126916/97-26444

cc: Mr. and Mrs. J.C. Turner
4601 East Seminole Highway
Hobbs, New Mexico 88240

Ms. Idolina Rodriguez
c/o Mr. and Mrs. J.C. Turner
4601 East Seminole Highway
Hobbs, New Mexico 88240

Price, Wayne

From: Price, Wayne
Sent: Wednesday, February 11, 1998 2:18 PM
To: Roger Anderson; Carroll, Rand
Cc: Chris Williams; Bill Olson
Subject: Law firm inquiry concerning Groundwater contamination

Dear Roger,

Please note I am dropping in the US Mail today a copy of a letter and my response to a law firm making an inquiry concerning an old Texaco Pit and groundwater contamination out in the East Hobbs Pool Water Study Area.

This area is located just east of Hobbs, NM and adjacent to the NM-Texas State line.



**NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT**

OFFICE OF THE SECRETARY
2040 South Pacheco Street
Santa Fe, New Mexico 87505
(505) 827-8980

Jennifer A. Salisbury
CABINET SECRETARY

February 11, 1998

Bill Robins III
Gallagher, Lewis & Downey
NationsBank Center 40th Floor
700 Louisiana
Houston, Texas 77002

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Sincerely Yours,

Wayne Price-Environmental Engineer

cc: Chris Williams-NMOCD District I Supervisor
Roger Anderson-Environmental Bureau Chief, Santa Fe, NM
Rand Carroll-NMOCD Legal Counsel
File- East Hobbs Pool Water Study

GALLAGHER, LEWIS & DOWNEY

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Texas Board of Legal Specialization

Direct Line 713/238-7880

January 29, 1998

Mr. Wayne Price
Environmental
State of New Mexico Oil Conservation Division
P.O. Box 1980
Hobbs, New Mexico 88240

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Mr. Wayne Price
Environmental
State of New Mexico OCD
January 29, 1998
Page 2



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We look forward to working with you. If you have any questions, or need any additional information, please do not hesitate to contact me.

Very truly yours,

A handwritten signature in cursive script that reads "Bill Robins III".

Bill Robins III

BRR:vjw
126916/97-26444

cc: Mr. and Mrs. J.C. Turner
4601 East Seminole Highway
Hobbs, New Mexico 88240

Ms. Idolina Rodriguez
c/o Mr. and Mrs. J.C. Turner
4601 East Seminole Highway
Hobbs, New Mexico 88240

GARY WICK

NEW MEXICO OIL CONSERVATION COMMISSION
FIELD TRIP REPORT

* 1:30 PM

Name WAYNE PRICE Date 10/14/97 Miles _____ District I
Time of Departure 7 AM Time of Return 4 PM Car No. G 0472

In the space below indicate the purpose of the trip and the duties performed, listing wells or leases visited and any action taken.

Signature [Handwritten Signature]

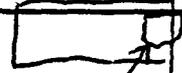
RE: ARCO P.L. LEAK - TURNER PROPERTY
SEMINOLE HWY NEAR SL LINE
OLD OF FERGASON LEASE NE 1/4 SE 1/4 30-18-39
LEA G. N.M.

MEET: ARCO PL - HASSAN AHMADY
TEXACO - BOB BAILY
ED SEAY - CONSULTANT FOR LANDOWNER

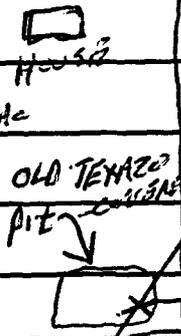
MOVED TO REQUEST ADDITIONAL
INFO FROM ALL PARTIES SO
AS TO CLOSE PIT PROPERLY?

NOTE ↑

FERGASON
LEASES



OLD
PIT - LOUGAN
FLARE



OLD TEXACO
PIT

TR
LINES

ARCO
PIT
PUSH TO PABS

ARCO
LINE
LEAK

<u>Mileage</u>	<u>Per Diem</u>	<u>Hours</u>
UIC _____	UIC _____	UIC _____
RFA _____	RFA _____	RFA _____
Other _____	Other _____	Other _____

- | TYPE INSPECTION PERFORMED | INSPECTION CLASSIFICATION | NATURE OF SPECIFIC WELL OR FACILITY INSPECTED |
|---------------------------|---|---|
| H = Housekeeping | U = Underground Injection Control - Any inspection of or related to injection project, facility, or well or resulting from injection into any well. (SWD, 2ndry injection and production wells, water flows or pressure tests, surface injection equipment, plugging, etc.) | D = Drilling |
| P = Plugging | R = Inspections relating to Reclamation Fund Activity | P = Production |
| C = Plugging Cleanup | O = Other - Inspections not related to injection or The Reclamation Fund | I = Injection |
| T = Well Test | E = Indicates some form of enforcement action taken in the field (show immediately below the letter U, R or O) | C = Combined prod. inj. operations |
| R = Repair/Workover | | S = SWD |
| F = Waterflow | | U = Underground Storage |
| M = Mishap or Spill | | G = General Operation |
| W = Water Contamination | | F = Facility or location |
| O = Other | | M = Meeting |
| | | O = Other |

12/19/96
cc: J SEATON
G WINK
P. ANDERSON
JC TURNER
MILEAGE _____
UIC: _____
OTHER: _____

OIL CONSERVATION DIVISION
COMPLAINT FORM

PERSON COMPLAINING:
NAME: JC TURNER JR.
ADDRESS: 4601 E. SEMINOLE
HOBBS NM 88240

INFORMATION TAKEN BY:
TAKEN BY: WAYNE PRICE
DATE: 12/19/96 TIME: 2:30pm
IN PERSON: YES BY PHONE: _____

PHONE: 393-1681

COMPLAINT: OLD OIL & WASTE PIT LEFT ON PROPERTY AND WATER
WELL IS CONTAMINATED, PIT AREA STILL CONTAMINATED,
COMMENTS: IS EFFECTING FAMILY'S HEALTH, FATHER DIED
OF CANCER, WIFE HAS JUST RECEIVED (6 YR) DIAGNOSIS
WITH CANCER.

- INVESTIGATION -

INVESTIGATOR: _____
DATE: _____
TIME: _____

DESCRIBE INVESTIGATION AND FINDINGS: _____

- FOLLOW-UP -

DATE: _____
TIME: _____
ACTION TAKEN: _____

*ATTACH ADDITIONAL SHEETS, IF NECESSARY

cc: J. S. ...
G. WINK
P. Anderson
JC TURNER
MILEAGE
UIC:
OTHER:

OIL CONSERVATION DIVISION
COMPLAINT FORM

PERSON COMPLAINING:

NAME: JC TURNER JR.
ADDRESS: 4601 E. SEMINOLE
HOBBS NM 88240

PHONE: 393-1681

INFORMATION TAKEN BY:

TAKEN BY: WAYNE PRICE
DATE: 12/19/96 TIME: 2:30 PM
IN PERSON: YES BY PHONE: _____

COMPLAINT: OLD BS&W PIT LEFT ON PROPERTY AND WATER
WELL IS CONTAMINATED, PIT AREA STILL CONTAMINATED,
COMMENTS: IS EXPECTING FAMILY'S HEALTH, FATHER DIED
OF CANCER, WIFE HAS JUST RECENTLY (6 YR) DIAGNOSED
WITH CANCER.

- INVESTIGATION -

INVESTIGATOR: _____
DATE: _____
TIME: _____

DESCRIBE INVESTIGATION AND FINDINGS: _____

- FOLLOW-UP -

DATE: _____
TIME: _____
ACTION TAKEN: _____

*ATTACH ADDITIONAL SHEETS, IF NECESSARY