3R - 391

REPORTS

DATE:

Dec. 2002

3R0391

ENVIROTECH INC.

CHEVRONTEXACO INC.

GALLEGOS GALLUP SAND UNIT ADDITIONAL PIT ASSESSMENT

SAN JUAN COUNTY
NEW MEXICO

PROJECT # 01079-002

DECEMBER 2002

5796 U.S. HWY 64 · FARMINGTON, NEW MEXICO 87401 · (505) 632-0615

CHEVRONTEXACO INC.

GALLEGOS GALLUP SAND UNIT
ADDITIONAL PIT ASSESSMENT
SAN JUAN COUNTY, NEW MEXICO

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INTRODUCTION

Envirotech Inc. of Farmington, New Mexico, was contracted by ChevronTexaco Inc. to provide drilling, sampling, analytical, and environmental services at the Gallegos Gallup Sand Unit disposal pit. It appears that this unlined pit has been out of service for some time but could have been utilized during the 1950s and 1960s. This pit is located near Gallegos Canyon in Section 7, Township 26N, Range 11W, San Juan County, New Mexico. This pit is located on the Navajo Indian Reservation and is adjacent to the NAPI irrigation project. It is accessible by the El Paso Gas Chaco Plant blacktop approximately 5 miles west from State Highway 550 south of Bloomfield and an unimproved dirt road that is part of the oil and gas fields in the area. The location of the pit is shown on ***Figure 1, Vicinity Map.***

Previous work at this location included installation of five (5) monitor wells, soil and groundwater sampling, and reporting. This work was conducted during September 2001 and documented in the report "Gallegos Gallup Sand Unit" dated September 20, 2001.

SCOPE OF WORK

The scope of work included constructing an additional deep groundwater monitor well, soil and water sampling, geologic services, and reporting. The purpose of these activities was to assess if water in the bedrock unit had been impacted by hydrocarbons and based on the findings, establish a reasonable cleanup level for the hydrocarbon soil in the pit that will adequately protect the environment. Representatives of the Region IX USEPA and Navajo Nation EPA had previously approved the monitor well location presented in a workplan dated September 4, 2002.

DESCRIPTION OF WORK

Drilling of monitor well MW-6 was conducted on November 25 & 26, 2002. Present during the drilling and completion of this well were: Bob Sterrett, Principal Hydrogeologist of Engineering Management Support, Inc. of Arvada, Colorado; Jack Collins, Chief Geologist of Envirotech; Jim Walker Region IX USEPA; and Bill Freeman of the Navajo Nation EPA.

The drilling was conducted using a CME Model 75 truck mounted portable hollow stem auger rig equipped with split spoon samplers. The sediments encountered are believed to be Holocene Age dune sands consisting of mainly fine-medium grained unconsolidated sands. Bedrock was encountered at a depth of 58-feet below ground surface (bgs). The bedrock lithology consisted of well consolidated gray to green siltstones and shale. The total depth of the well was 72-feet bgs. The well was constructed using 2" threaded PVC with 10-feet of gravel packed screen. The screen was placed between a depth interval of 62-feet and 72-feet and gravel packed with # 10-12 Colorado Silica sand. The gravel pack was sealed with approximately 30 pounds of bentonite pellets and then grouted to the surface with cement-bentonite slurry. The cement was allowed to set up overnight, then the well was purged by hand bailing. Approximately 10-gallons of water were bailed, which de-watered the well. The new monitor well was surveyed in with reference to the pit and existing monitor wells. Following the development of the new well, it was sampled for benzene, toluene, ethyl benzene, and xylenes (BTEX) using USEPA Method 8021b, as well as for standard ground water quality Cation/Anion analysis. Due to slow recover of the well, MW-6 was not sampled until December of 2002, whereas the other monitoring wells were sampled

in November of 2002. A site map was constructed from the surveyed data and is included as ***Figure 2, Site Map.***

The lithology log showing the sediments encountered, organic vapor meter readings taken during the drilling, and the monitor well construction log is included as ***Appendix A, Above Grade Well Completion Diagram/Lithology Log.***

GROUNDWATER IMPACT

Water levels were measured in each of the five (5) existing monitor wells on November 23, 2002. Water level measurements indicate that groundwater is moving to the northwest at a gradient of 0.0096 ft/ft, which is consistent with previous measurements. Water levels are shown on ***Figure 3, Water Level Map.***

Water samples were collected from MW-6 on December 2 and 16, 2002. Samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) per USEPA Method 8021B. All BTEX components were below the New Mexico Oil Conservation Division (NMOCD) recommended action levels. ***Appendix B, Letter from Lab Manager,*** is a letter from Envirotech's Senior Chemist/Lab Manager clarifying the impact of pH on BTEX analysis of aqueous samples.

The BTEX water analyses are listed in ***Table 1, Laboratory Results of Water Sample Analyses: EPA Method 8021B.***

SOIL IMPACT

Monitor well MW-6 was drilled on November 25, 2002, and completed on November 26, 2002. No soil samples were collected from MW-6 as the unconsolidated sediments that were encountered had been tested, characterized, and sampled during the previous work of September 2001.

Within the pit, soil samples were collected at 3-foot intervals from a hand augured soil boring (SB-3). The location of this soil boring is shown on ***Figure 2.*** Soil samples were collected at 3-feet, 6-feet, and 9-feet and were analyzed for BTEX per USEPA Method 8021B and for Total Petroleum Hydrocarbons (TPH) per USEPA Method 8015B and USEPA Method 418.1. Total BTEX varied from 3.8 ppm at 9 feet to 4.3 ppm at 6 feet. TPH varied from 2,580 ppm at 6 feet to 6,270 ppm at 9 feet using USEPA Method 8015B. TPH varied from 7,850 ppm at 6 feet to 14,640 ppm at 9 feet using USEPA Method 418.1. These results show the lighter ends of the hydrocarbons are probably gone and the remaining hydrocarbons are the heavier fractions, which are less soluble and less mobile and do not readily go into solution.

The soil sample analyses are summarized in ***Table 2, Laboratory Results of Soil Sample Analyses,*** and are shown as ***Figure 4, BTEX and TPH Soil Concentrations.*** Laboratory Certificates are included in ***Appendix C, Laboratory Analysis.*** Field notes are included in ***Appendix D, Field Notes.***

WATER QUALITY

The water quality analysis consisted of major cation/anion, total dissolved solids, pH, and conductivity. Water samples were collected from MW-6 on December 2 and 16, 2002, for water quality analysis.

Nitrate nitrogen values varied in MW-6 from 1.0 mg/L on December 2, 2002, to 0.7 mg/L on December 16, 2002. A normal value of nitrate nitrogen for groundwater in this area should be in the range of 0.5 to 3 mg/L, so the groundwater present in MW-6 appears to be un-impacted by nitrate nitrogen.

Nitrite nitrogen values varied in MW-6 from 0.047 to 0.163 mg/L on December 16, 2002. A normal value for nitrite nitrogen should be in the range of 0.001 to 0.2 mg/L.

Waters from MW-1, MW-2, MW-3, and MW-5 would be formally classified as sodium sulfate type waters; see ***Table 3, Laboratory Results of Water Sample Analyses: Cation/Anion. Figure 5, Water Quality,*** shows the relationship of each water quality sample using Piper MEQ diagrams. Waters from MW-4 would be classed as calcium sulfate water. The water samples from MW-6 do not fall into either of the two (2) categories stated previously. It is believed that the unusual water analysis (high pH) found in MW-6 can be attributed to a reaction with the cement grouting used for surface completion of the well. It is believed that the water in MW-6 is a mixture of waters from the bedrock and surficial materials. Monitor well MW-6 takes approximately 3-5 days to recover after bailing dry. Water levels are currently several feet lower in MW-6 than in the other shallow wells.

Several differences are apparent in the water quality analysis between the two sampling events of 12/02/03 and 12/16/02 for monitor well MW-6. Specifically, TDS went from 2,300 ppm during the first sampling event to 1,070 ppm in the second event. Calcium went from 216 ppm to 34 ppm. Magnesium dropped from 537 ppm to < 0.01 ppm, nitrate and nitrite remained about the same with only slight changes in either and sulfate decreased from 685 ppm to 67 ppm. Sodium and Potassium increased from 175 ppm to 531 ppm. The pH changed from 11.85 to 10.76, a decrease of one order of magnitude. These changes indicate the water has still not reached an equilibrium state even after 14 days. Therefore, the dissolved solids are still coming out of solution as the pH changes to an equilibrium state. As the water continues to stabilize, the pH should stabilize around 7.5 to 8.0 and the other major cations and anions should continue to decrease, similar to those previously noted. Further analysis would confirm this theory. At this time however, it is presumably unnecessary to perform additional analyses since they are beyond the scope of work for this project.

Bedrock has not been impacted by hydrocarbons. Based on a geologic description of the lithology present within the screened interval, the bedrock in this area is a low permeability confining bed that could be classed as an Aquifuge such as an unfractured siltstone or shale. This interpretation is consistent with observed characteristics at the site. Approximately 1,000 feet to the southwest is a spring near the base of the sand dunes that is exposed in a narrow gully that is part of Gallegos Canyon. This spring is at approximately the same stratigraphic horizon as the bedrock encountered in monitor well MW-6.

There appears to be no impact on the shallow groundwater from hydrocarbons in the pit.

RECOMMENDATIONS

Results from the soil and groundwater investigations at the Gallegos Gallup Sand Unit Pit indicate groundwater has not been impacted. While the pit has not impacted groundwater, to insure the future protection of the existing shallow groundwater, it is recommended that the contaminated soil in the pit be excavated and landfarmed off-site. Excavation should be done vertically and horizontally until field and/or lab analysis TPH values meet the OCD guidelines. We recommend an OCD cutoff level of 5,000 ppm, as this value has been shown to be an appropriate cleanup level that would be protective of the existing groundwater.

STATEMENT OF LIMITATIONS

Envirotech performed delineation drilling, soil sampling, analysis, and reporting at the ChevronTexaco Inc. Gallegos Gallup Sand Unit Pit near Gallegos Canyon, New Mexico. The work and services provided by Envirotech were under the guidelines of the USEPA, NNEPA, and BIA. All observations and conclusions provided here are based on the information and current site conditions found during this investigation.

The undersigned has conducted this service at the above referenced site. This work has been conducted and reported in accordance with generally accepted professional practices in geology, engineering, environmental chemistry, and hydrogeology.

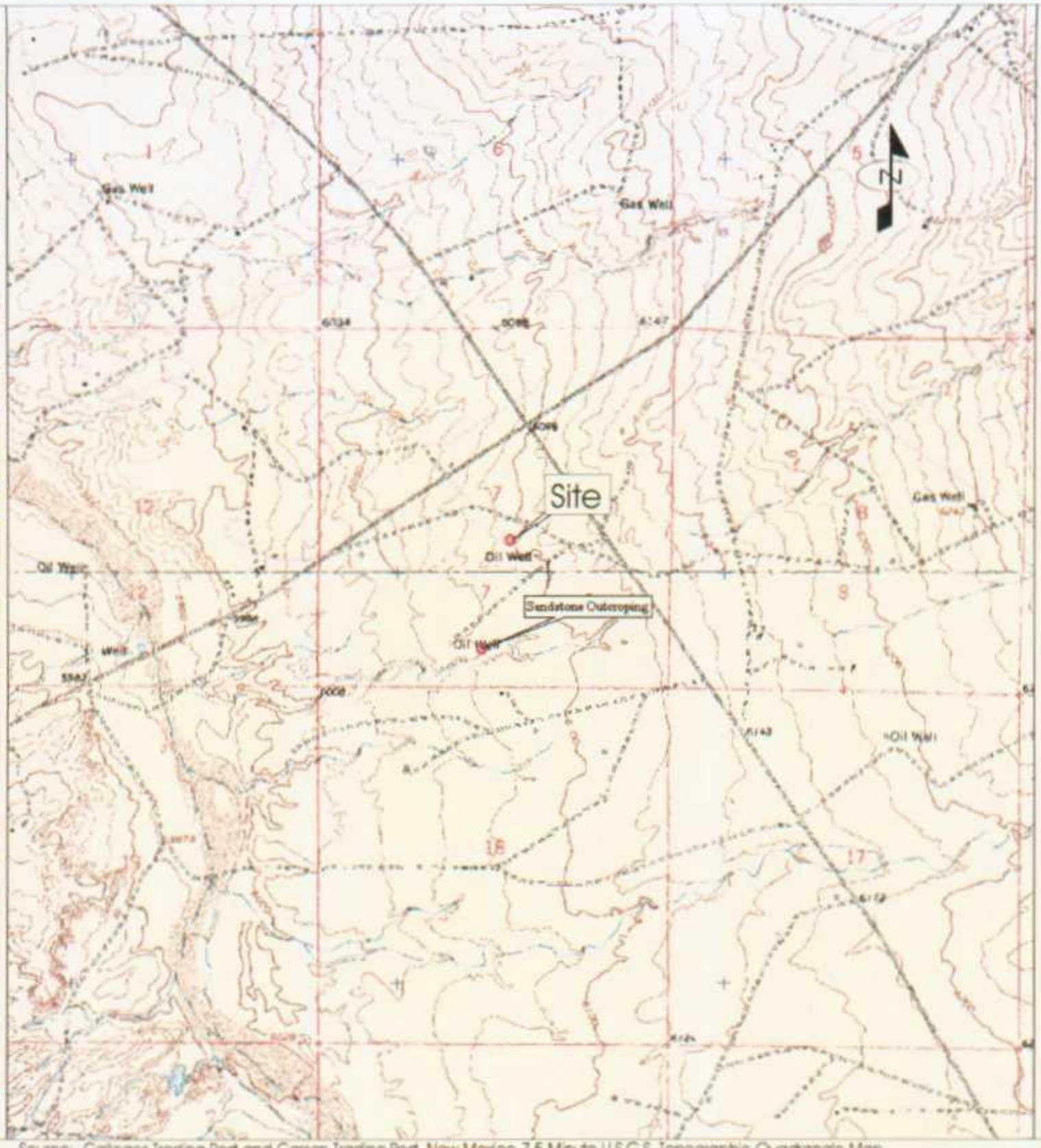
Respectfully Submitted,
ENVIROTECH INC.

C. Jack Collins, P.G. #1822
NM Certified Scientist #038
jcollins@envirotech-inc.com

Reviewed by:

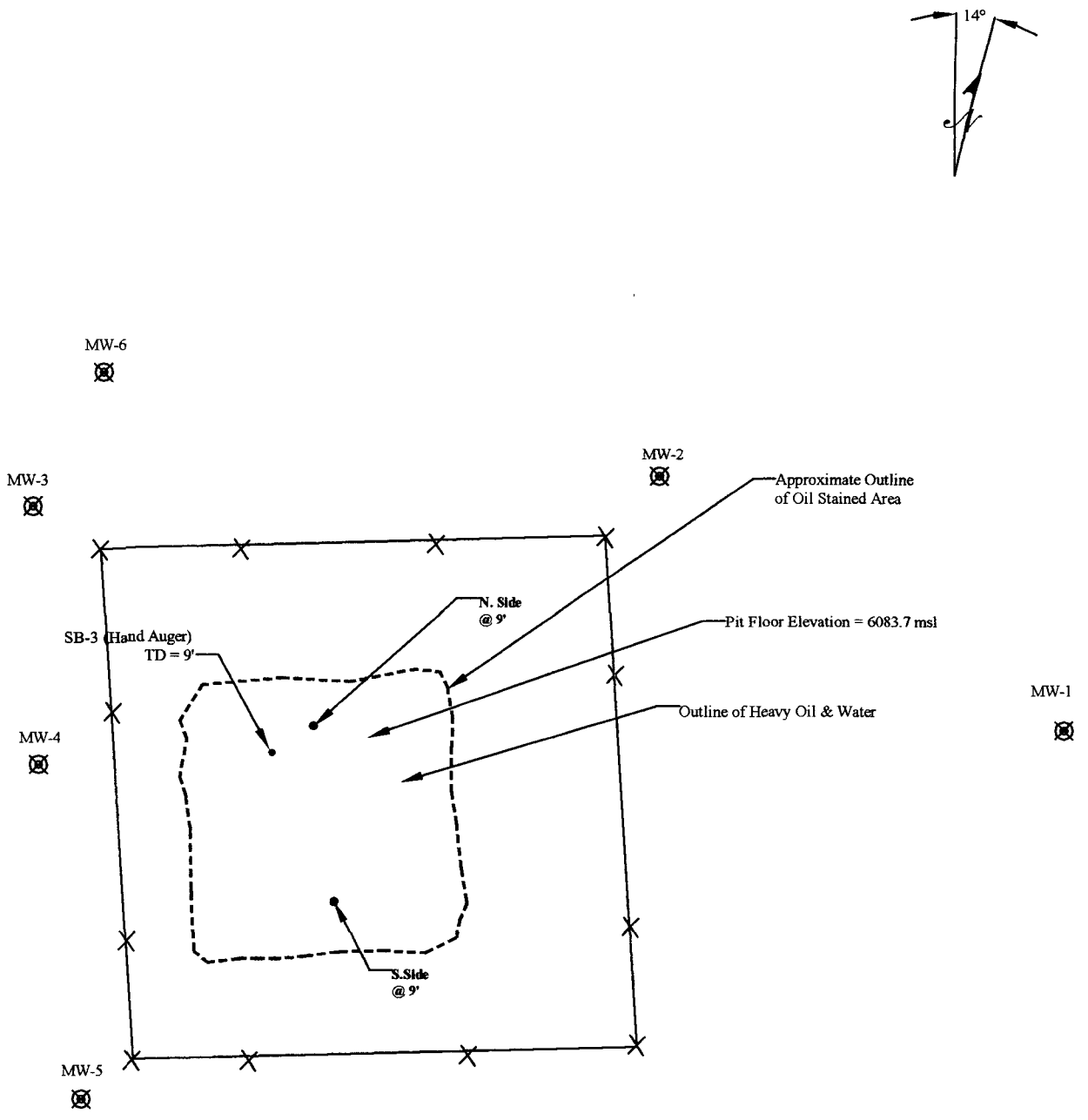
Morris D. Young
President
myoung@envirotech-inc.com

FIGURES



Source: Gallegos Trading Post and Carson Trading Post, New Mexico 7.5 Minute U.S.G.S. Topographic Quadrangle Map
Scale: 1:24,000 1" = 2000'

ChevronTexaco Inc. Gallegos Gallup Sand Unit Pit Assessment NWSE S7 T26N R11W	ENVIROTECH INC. ENVIRONMENTAL SCIENTISTS & ENGINEERS 5796 U.S. HIGHWAY 64 FARMINGTON, NEW MEXICO 87401 PHONE: (505) 632-0615	Vicinity Map Figure 1
Project# 01079-002 | Date Drawn: 09/20/01		Drawn By: Kyle Kerr | Project Manager: C. Jack Collins



LEGEND

MW-3 - Monitor Well Location & Number

● - Hand Auger Sample Location

CHEVRONTEXACO INC
Gallegos Gallup Sand Unit
Pit Assessment

REVISIONS
BY KPK DATE 12/02/02
BY ___ DATE ___

PROJECT #01079-002

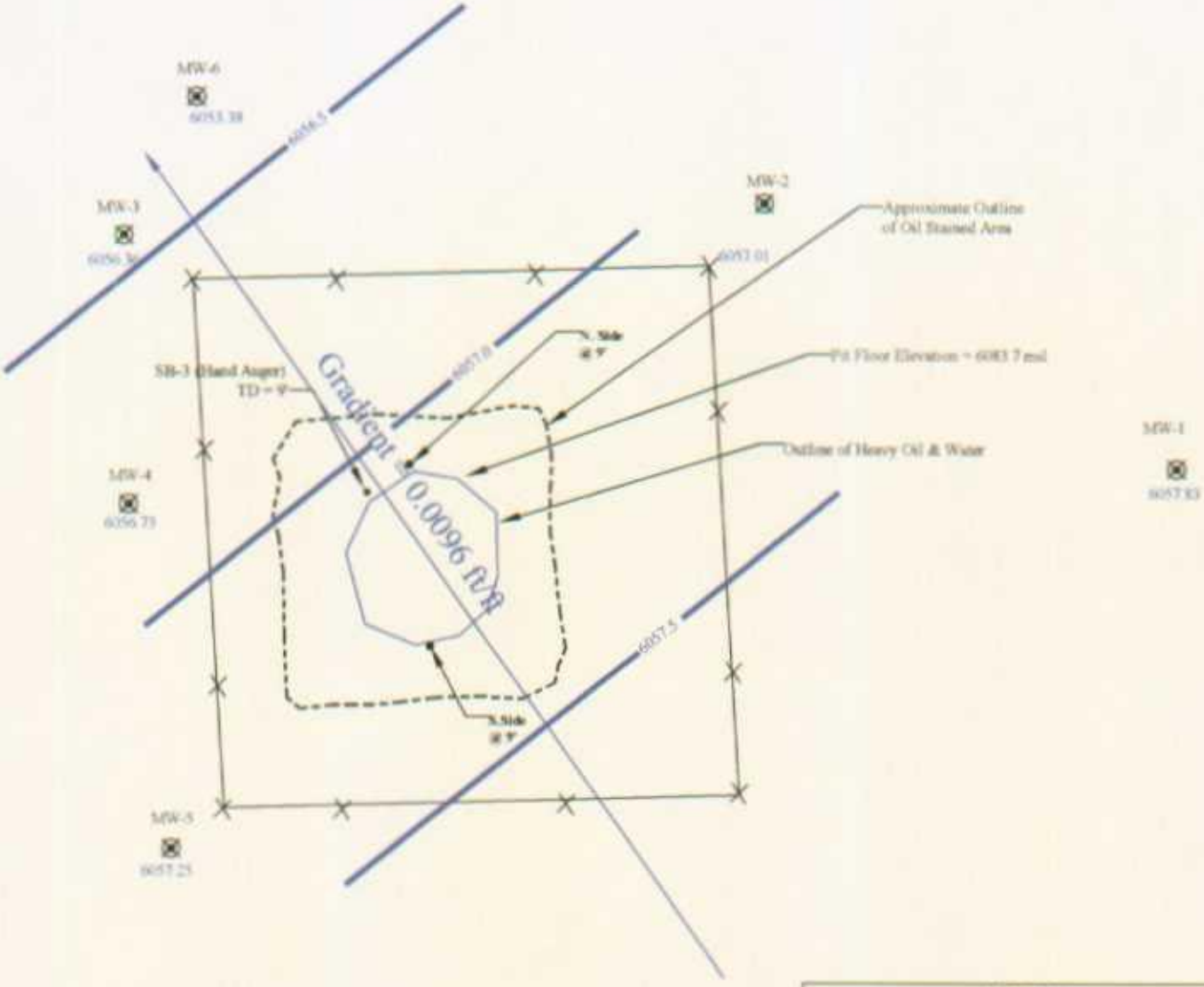
ENVIROTECH INC.

ENVIRONMENTAL SCIENTISTS & ENGINEERS
5796 U.S. HIGHWAY 64
FARMINGTON, NEW MEXICO 87401
(505) 632-0615

SITE MAP

DATE 09/20/01 DRAWN CJC
SCALE 1" = 30' APPROVED CJC

FIGURE 2



LEGEND

MW-3 ⊠ - Monitor Well Location & Number

6056.44 - Water Level Elevation

• - Hand Auger Sample Location

CHEVRONTEXACO INC
Gallegos Gallup Sand Unit
Pit Assessment

ENVIROTECH INC.

WATER LEVEL MAP
Date Measured:11/25/02

REVISIONS
BY KPK DATE 12/02/02
BY ___ DATE ___

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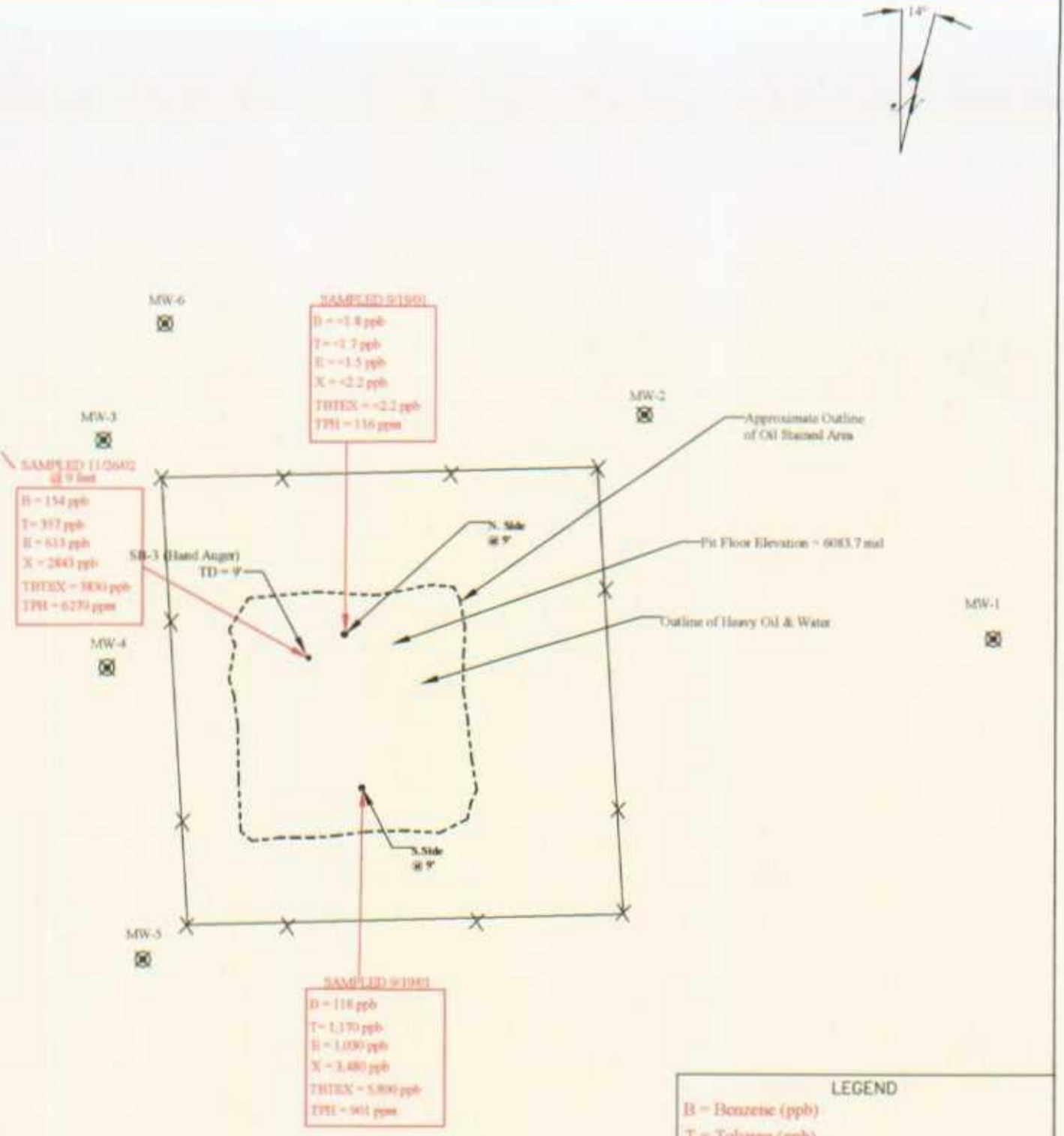
DATE 09/20/01 DRAWN CJC
SCALE 1" = 30' APPROVED CJC

FIGURE 3



CHEVRONTEXACO INC
Gallegos Gallup Sand Unit
Pit Assessment

REVISIONS
BY KPK DATE 12/02/02
BY ___ DATE ___

PROJECT #01079-002

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(505) 632-0615

BTEX AND TPH SOIL CONCENTRATIONS

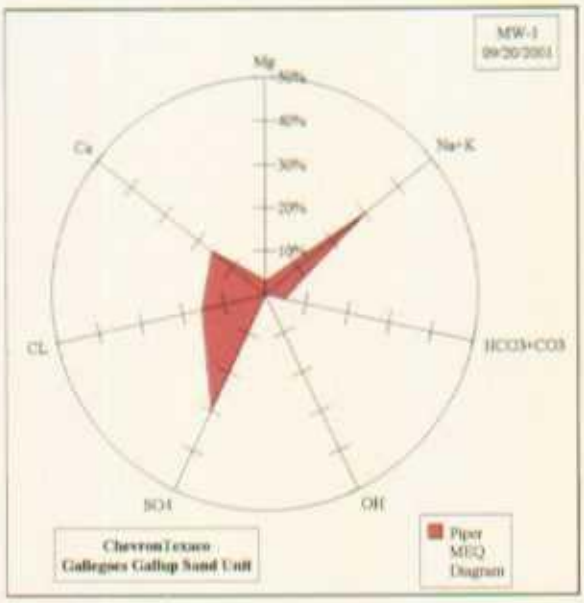
DATE 09/20/01 DRAWN CJC
SCALE 1" = 30' APPROVED CJC

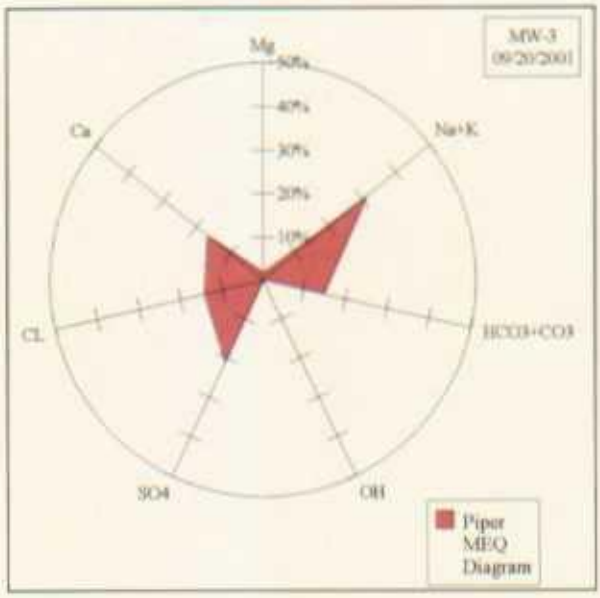
FIGURE 4

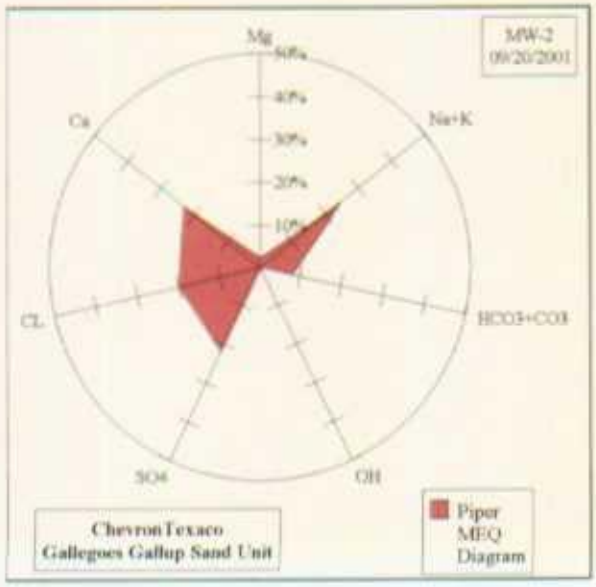
Envirotech Inc.
Farmington, NM

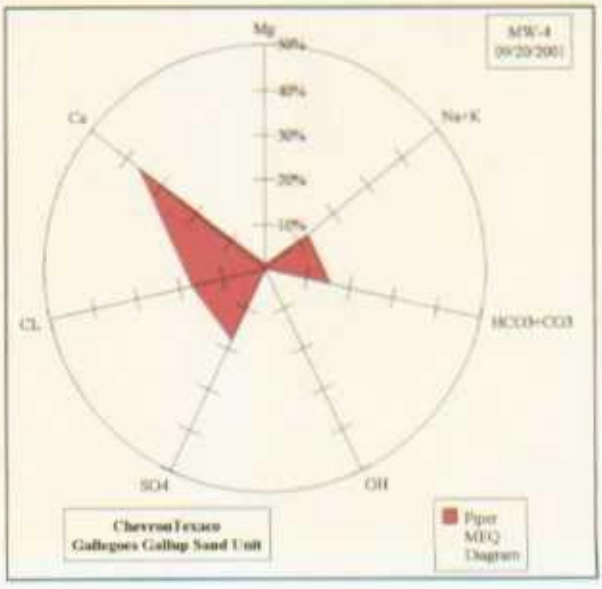
FIGURE 5 WATER QUALITY

ChevronTexaco Inc.
Gallegos Gallup Sand Unit
Pit Assessment 01/15/03





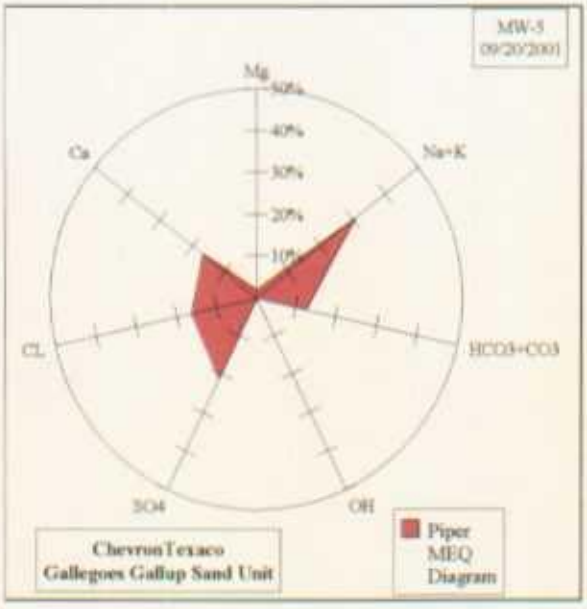


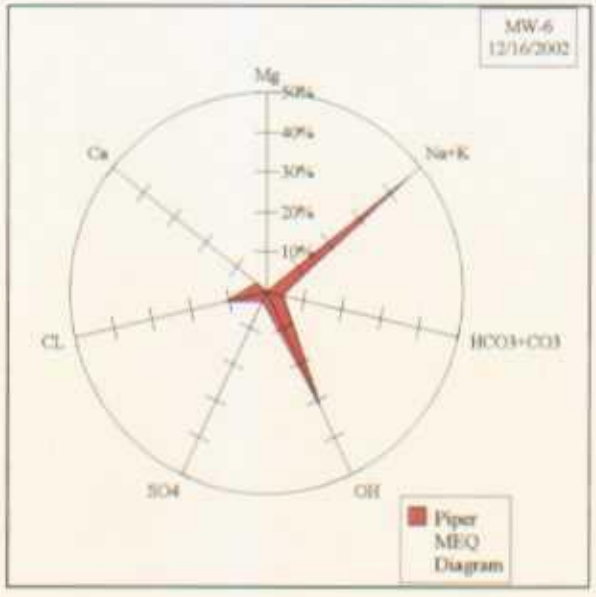


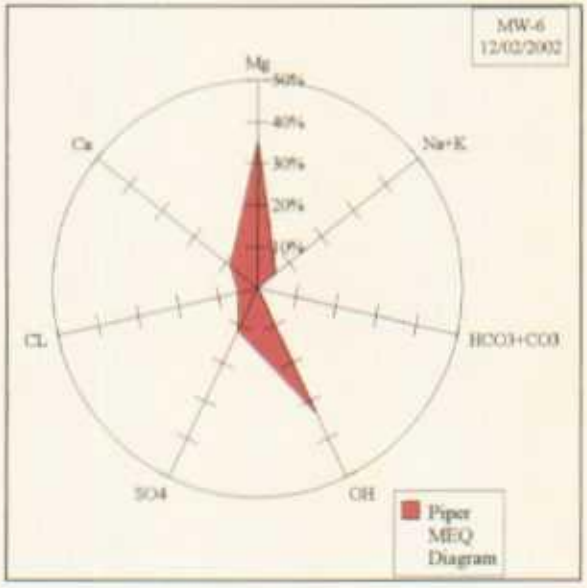
Envirotech Inc.
Farmington, NM

FIGURE 5 WATER QUALITY

ChevronTexaco Inc.
Gallegos Gallup Sand Unit
Pit Assessment 01/15/03







TABLES

Site	ChevronTexaco Inc.
Location	Gallegos Gallup Sand Unit Pit
Date	December 16, 2002
Project	# 01079-002

Table 1
Laboratory Results of Water Sample Analyses: BTEX by U.S. EPA Method 8021B

NNEPA/EPA Action Levels		5 ppb	2000 ppb	680 ppb	440 ppb	NA
Well #	Sample Date	Benzene (ppb)	Toluene (ppb)	Ethylbenzene (ppb)	Total Xylenes (ppb)	Total BTEX
MW-1	09/20/01	0.6	<0.2	<0.2	2.6	3.2
	11/26/02	<0.2	<0.2	<0.2	<0.2	<0.2
MW-2	09/20/01	<0.2	3.6	3.7	66.0	73.3
	11/26/02	<0.2	<0.2	0.4	<0.2	0.4
MW-3	09/20/01	<1.8	2.5	6.8	20.3	29.6
	11/26/02	<0.2	<0.2	0.2	0.7	0.9
MW-4	09/20/01	1.0	<0.2	0.9	5.8	7.7
	11/26/02	0.3	<0.2	<0.2	<0.2	0.3
Dup	11/26/02	<0.2	<0.2	<0.2	<0.2	<0.2
MW-5	09/20/01	<0.2	<0.2	<0.2	<0.4	<0.2
	11/26/02	<0.2	<0.2	<0.2	<0.2	<0.2
MW-6	12/02/02	0.8	0.5	5.2	0.6	7.1
	12/16/02	<0.2	<0.2	5.8	<0.2	5.8
Trip Blank	12/16/02	<0.2	<0.2	<0.2	<0.2	<0.2

Site	ChevronTexaco Inc.
Location	Gallegos Gallup Sand Unit Pit
Date	December 16, 2002
Project	# 01079-002

Table 2
Laboratory Results of Soil Sample Analyses

Sample #	Sample Date	Sample Depth (ft)	BTEX EPA Method 8021b					TPH U.S. EPA Method 8015B (ppm)	TPH U.S. EPA Method 418.1 (ppm)
			Benzene (ppm)	Toluene (ppm)	Ethylbenzene (ppm)	Total Xylenes (ppm)	Total BTEX (ppm)		
MW-1	09/18/01	35'	0.026	0.02	0.014	0.2160	0.3	6	
MW-2	09/18/01	26'	<0.0018	<0.0017	<0.0015	0.0280	0.0	3	
		30'	<0.0018	<0.0017	<0.0015	0.0285	0.0	<0.2	
MW-3	09/19/01	25'	<0.0018	0.0248	0.0162	0.1290	0.2	1	
		35'	<0.0018	0.0297	0.0167	0.1896	0.2	0	
MW-4	09/19/01	25'	<0.0018	0.0675	0.0261	0.4460	0.5	1	
		30'	<0.0018	0.0044	0.0058	0.0507	0.1	<0.2	
MW-5	09/19/01	25'	<0.0018	0.0062	0.0113	0.0077	0.0	<0.2	
		31'	<0.0018	<0.0017	<0.0015	<0.0032	<0.0032	<0.2	
N.Side (hand auger)	9/19/2001	9'	<0.0018	<0.0018	<0.0018	<0.0018	<0.0018	116	
S.Side (hand auger)	9/19/2001	9'	0.118	1.17	1.03	3.4800	5.8	901	
SB-3 (hand auger)	11/26/2002	3'	0.0701	0.438	0.589	2.8400	3.9	3,300	11,890
	11/26/2002	6'	<0.0018	0.486	0.674	3.0950	4.3	2,580	7,850
	11/26/2002	9'	0.0154	0.357	0.613	2.8430	3.8	6,270	14,640

Site	ChevronTexaco Inc.
Location	Gallegos Gallup Sand Unit Pit
Date	December 16, 2002
Project	# 01079-002

Table 3
Laboratory Results of Water Sample Analyses: Cation/Anion

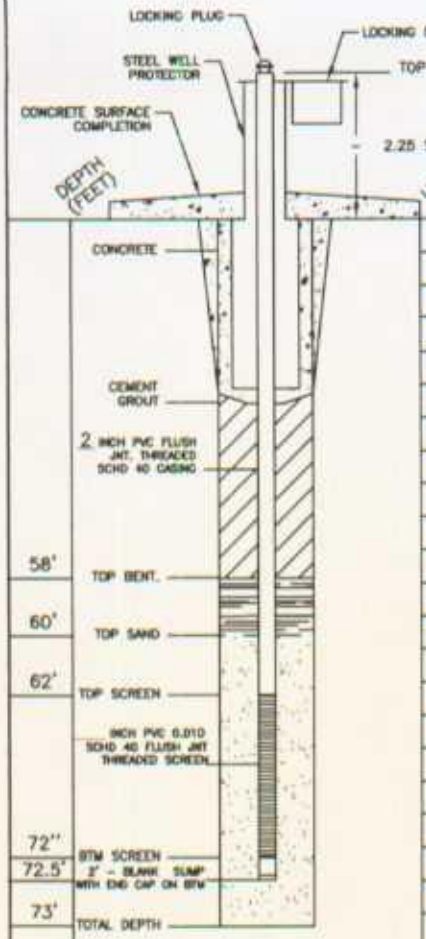
		Units										
Well #	Sample Date	s.u. pH	umhos/cm Conductivity @ 25 C	mg/L Total Dissolved Solids @ 180C	mg/L Calcium	mg/L Magnesium	mg/L Sodium + Potassium	mg/L Chloride	mg/L Nitrate Nitrogen	mg/L Nitrite Nitrogen	mg/L Sulfate	mg/L Bicarbonate
MW-1	09/20/01	7.79	3,550	1,770	184	21.50	402	304	26.0	1.040	795	160
MW-2	09/20/01	7.66	2,020	1,000	146	8.79	178	218	15.5	0.020	325	150
MW-3	09/20/01	7.80	1,750	872	94	5.86	201	138	8.3	1.980	273	245
MW-4	09/20/01	7.50	1,800	904	206	3.91	81	168	14.5	0.001	239	255
MW-5	09/20/01	7.90	1,550	1,550	90	6.84	190	150	13.5	0.031	266	195
MW-6	12/02/02	11.85	4,600	2,300	216	537.00	175	226	1.0	0.047	685	<0.1
	12/16/02	10.76	2,150	1,070	34	<0.01	531	192	0.7	0.163	67	<0.1

APPENDIX A

Above Grade Well Completion Diagram/Lithology Log

ABOVE GRADE WELL COMPLETION DIAGRAM / LITHOLOGY LOG

MW-6



DEPTH (FEET)	USCS	SAMPLE TYPE	HEADSPACE (PPM)	LITHOLOGY	SAMPLE DESCRIPTION	DEPTH (FEET)
					SAND, MEDIUM-COARSE GRAINED, TAN-ORANGE, SOFT, UNCONSOLIDATED, DRY, NO ODOR	
		A				
		A			SAND, MEDIUM-COARSE GRAINED, TAN-ORANGE, SOFT, UNCONSOLIDATED, DRY, NO ODOR	10
					PEBBLE FRAGMENTS TO 1/2"	
		A				
		A			SAND, MEDIUM-COARSE GRAINED, TAN-ORANGE, SOFT, UNCONSOLIDATED, MOIST, NO ODOR	20
58'					TOP BENT.	
60'		A			TOP SAND	
62'					TOP SCREEN	
		A		▼	WATER LEVEL ON 11/25/02 @ 09:58 AM	30
					SAND, MEDIUM-COARSE GRAINED, TAN-ORANGE, SOFT, UNCONSOLIDATED, MOIST, NO ODOR	
		A				
72"					SAND, MEDIUM-COARSE GRAINED, TAN-ORANGE, SOFT, UNCONSOLIDATED, WET, NO ODOR	40
72.5'		A			BTM SCREEN 2' - BLANK SUMP WITH END CAP ON BTM	
73'					TOTAL DEPTH	
		A				
		A				50
		A			GRAVEL	
		A		—	Bedrock at 58 feet	60
	SS		0.0	—	SILTSTONE, GRAY/GREEN, FIRM, HARD, NO ODOR	
		A		—		70
	SS		0.0	—	SHALE, DARK GRAY/GREEN, DRY, NO ODOR	
					Total Depth = 72'	
						75

Well Materials Used:

- 5 Sks 10-12 Silica Sand
- 5 Gal Bentonite Pellets
- 12 Sks Class "A" Cement
- ___ Sks Quickcrete
- 64 Ft Blank Casing
- 10 Ft Screen

Well Development:

- X Bailed
- ___ Pumped
- 10 Gallons of Water

Remarks:

SS = SPLIT SPOON
A = AUGER

DRILLER: KELLY PADILLA
HELPER: THURMAN BENALLY
DRILLING COMPANY: ENVIROTECH
DRILLING METHOD: H.S.A.

BIT SIZE: 7 5/8"
TOTAL BORING DEPTH: 72'
DATE STARTED: 11/25/02
SAMPLER TYPE: SPLIT SPOON

LOCATION: NWSE S7 T26N R11W
ELEVATION: 6085.85 TOC MSL
DATE COMPLETED 11/25/02
GEOLOGIST: CJC / BOB STERRET

CHEVRONTEXACO INC.
GALLEGOS GALLUP SAND UNIT
PIT ASSESSMENT

REVISIONS
BY ___ DATE ___
BY ___ DATE ___

JOB #01079-002

ENVIROTECH INC.

ENVIRONMENTAL SCIENTISTS & ENGINEERS
5796 U.S. HIGHWAY 64
FARMINGTON, NEW MEXICO 87401
(505) 632-0615

MW-6
LITHOLOGY LOG COMPLETION

DATE 12/02/02 DRAWN KPK
SCALE NONE APPROVED CJC

PAGE 1 OF 1

APPENDIX B

Letter from Lab Manager

ENVIROTECH LABS
PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

January 20, 2003

Re: Impact of pH on BTEX analysis of aqueous samples.

BTEX (Benzene, Toluene, Ethyl Benzene and Xylene) are analyzed using USEPA Method 5030B – Purge-and-Trap for Aqueous Samples. This method is predicated on the very slightly or non-solubility of the Volatile compounds in an aqueous media. The volatile compounds are physically purged from the sample in a closed system and contained on an appropriate trap for introduction into the Gas Chromatograph for separation and analysis. The pH of the sample has no effect on the efficiency of the purging of the volatile compounds in this method.

Dennis Ajeman
Laboratory Manager/Senior Chemist

5796 U.S. Highway 64 ◦ Farmington, NM 87401 ◦ Tel 505 ◦ 632 ◦ 0615 • Fax 505 • 632 ◦ 1865

APPENDIX C

Laboratory Analysis

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Chevron Texaco	Project #:	01079-002
Sample ID:	MW - 1	Date Reported:	11-27-02
Chain of Custody:	09550	Date Sampled:	11-26-02
Laboratory Number:	24333	Date Received:	11-26-02
Sample Matrix:	Water	Date Analyzed:	11-27-02
Preservative:	Cool	Analysis Requested:	BTEX
Condition:	Cool & Intact		

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
Benzene	**ND**	**1**	**0.2**
Toluene	**ND**	**1**	**0.2**
Ethylbenzene	**ND**	**1**	**0.2**
p,m-Xylene	**ND**	**1**	**0.2**
o-Xylene	**ND**	**1**	**0.1**
Total BTEX	**ND**		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	fluorobenzene	**97 %**
	1,4-difluorobenzene	**97 %**
	4-bromochlorobenzene	**97 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **Gallegos Gallup Sand Unit.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Chevron Texaco	Project #:	01079-002
Sample ID:	MW - 2	Date Reported:	11-27-02
Chain of Custody:	09550	Date Sampled:	11-26-02
Laboratory Number:	24334	Date Received:	11-26-02
Sample Matrix:	Water	Date Analyzed:	11-27-02
Preservative:	Cool	Analysis Requested:	BTEX
Condition:	Cool & Intact		

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
Benzene	**ND**	**1**	**0.2**
Toluene	**ND**	**1**	**0.2**
Ethylbenzene	**0.4**	**1**	**0.2**
p,m-Xylene	**ND**	**1**	**0.2**
o-Xylene	**ND**	**1**	**0.1**
Total BTEX	**0.4**		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	fluorobenzene	**97 %**
	1,4-difluorobenzene	**97 %**
	4-bromochlorobenzene	**97 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **Gallegos Gallup Sand Unit.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Chevron Texaco	Project #:	01079-002
Sample ID:	MW - 3	Date Reported:	11-27-02
Chain of Custody:	09550	Date Sampled:	11-26-02
Laboratory Number:	24335	Date Received:	11-26-02
Sample Matrix:	Water	Date Analyzed:	11-27-02
Preservative:	Cool	Analysis Requested:	BTEX
Condition:	Cool & Intact		

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
Benzene	**ND**	**1**	**0.2**
Toluene	**ND**	**1**	**0.2**
Ethylbenzene	**0.2**	**1**	**0.2**
p,m-Xylene	**ND**	**1**	**0.2**
o-Xylene	**0.7**	**1**	**0.1**
Total BTEX	**0.9**		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	fluorobenzene	**97 %**
	1,4-difluorobenzene	**97 %**
	4-bromochlorobenzene	**97 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **Gallegos Gallup Sand Unit.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Chevron Texaco	Project #:	01079-002
Sample ID:	MW - 4	Date Reported:	11-27-02
Chain of Custody:	09550	Date Sampled:	11-26-02
Laboratory Number:	24336	Date Received:	11-26-02
Sample Matrix:	Water	Date Analyzed:	11-27-02
Preservative:	Cool	Analysis Requested:	BTEX
Condition:	Cool & Intact		

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
Benzene	**0.3**	**1**	**0.2**
Toluene	**ND**	**1**	**0.2**
Ethylbenzene	**ND**	**1**	**0.2**
p,m-Xylene	**ND**	**1**	**0.2**
o-Xylene	**ND**	**1**	**0.1**
Total BTEX	**0.3**		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	fluorobenzene	**98 %**
	1,4-difluorobenzene	**98 %**
	4-bromochlorobenzene	**98 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **Gallegos Gallup Sand Unit.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Chevron Texaco	Project #:	01079-002
Sample ID:	MW - 4D	Date Reported:	11-27-02
Chain of Custody:	09550	Date Sampled:	11-26-02
Laboratory Number:	24337	Date Received:	11-26-02
Sample Matrix:	Water	Date Analyzed:	11-27-02
Preservative:	Cool	Analysis Requested:	BTEX
Condition:	Cool & Intact		

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
Benzene	**ND**	**1**	**0.2**
Toluene	**ND**	**1**	**0.2**
Ethylbenzene	**ND**	**1**	**0.2**
p,m-Xylene	**ND**	**1**	**0.2**
o-Xylene	**ND**	**1**	**0.1**
Total BTEX	**ND**		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	fluorobenzene	**98 %**
	1,4-difluorobenzene	**98 %**
	4-bromochlorobenzene	**98 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **Gallegos Gallup Sand Unit.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Chevron Texaco	Project #:	01079-002
Sample ID:	MW - 5	Date Reported:	11-27-02
Chain of Custody:	09550	Date Sampled:	11-26-02
Laboratory Number:	24338	Date Received:	11-26-02
Sample Matrix:	Water	Date Analyzed:	11-27-02
Preservative:	Cool	Analysis Requested:	BTEX
Condition:	Cool & Intact		

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
Benzene	**ND**	**1**	**0.2**
Toluene	**ND**	**1**	**0.2**
Ethylbenzene	**ND**	**1**	**0.2**
p,m-Xylene	**ND**	**1**	**0.2**
o-Xylene	**ND**	**1**	**0.1**
Total BTEX	**ND**		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	fluorobenzene	**98 %**
	1,4-difluorobenzene	**98 %**
	4-bromochlorobenzene	**98 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **Gallegos Gallup Sand Unit.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS
QUALITY ASSURANCE REPORT

Client:	N/A	Project #:	N/A
Sample ID:	11-27-BTEX QA/QC	Date Reported:	11-27-02
Laboratory Number:	24333	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-27-02
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	2.6914E-002	2.6968E-002	0.20%	ND	0.2
Toluene	3.3709E-002	3.3716E-002	0.02%	ND	0.2
Ethylbenzene	5.8262E-002	5.8379E-002	0.20%	ND	0.2
p,m-Xylene	7.1891E-002	7.1905E-002	0.02%	ND	0.2
o-Xylene	5.4522E-002	5.4686E-002	0.30%	ND	0.1

Duplicate Conc. (ug/L)	Sample	Duplicate	%Diff.	Accept Limit
Benzene	ND	ND	0.0%	0 - 30%
Toluene	ND	ND	0.0%	0 - 30%
Ethylbenzene	ND	ND	0.0%	0 - 30%
p,m-Xylene	ND	ND	0.0%	0 - 30%
o-Xylene	ND	ND	0.0%	0 - 30%

Spike Conc. (ug/L)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Limits
Benzene	ND	50.0	49.9	99.8%	39 - 150
Toluene	ND	50.0	49.9	99.8%	46 - 148
Ethylbenzene	ND	50.0	50.0	100.0%	32 - 160
p,m-Xylene	ND	100	99.9	99.8%	46 - 148
o-Xylene	ND	50.0	49.9	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for samples 24333 - 24341.

Analyst

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CHAIN OF CUSTODY RECORD

09550

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
Chevron/TEXACO	Galegos Gallup Sand unit	
Sampler: Jack Collins	Client No. 01079-002	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	~~8015~~ 8021 BTEX						Remarks
MW-1	11-26-02	0900	24333	H_2O	2	✓						
MW-2		0930	24334	H_2O	2	✓						
MW-3		0900	24335	H_2O	2	✓						
MW-4		0946	24336	H_2O	2	✓						
MW-4D		0950	24337	H_2O	2	✓						
MW-5		0935	24338	H_2O	2	✓						
~~89~~												

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
C. Jack Collins	11-26-02	1420	Glenn E. Aplin	11-26-02	1420
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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Sample Receipt	Y	N	N/A
Received Intact	✓		
Cool - Ice/Blue Ice	✓		

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Chevron Texaco	Project #:	01079-002
Sample ID:	MW 6	Date Reported:	12-03-02
Laboratory Number:	24349	Date Sampled:	12-02-02
Chain of Custody:	10445	Date Received:	12-02-02
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	12-03-02
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		Units
pH	**11.85**	s.u.		
Conductivity @ 25° C	**4,600**	umhos/cm		
Total Dissolved Solids @ 180C	**2,300**	mg/L		
Total Dissolved Solids (Calc)	**2,270**	mg/L		
SAR	**1.2**	ratio		
Total Alkalinity as CaCO3	**704**	mg/L		
Total Hardness as CaCO3	**2,740**	mg/L		
Bicarbonate as HCO3	**<0.1**	mg/L	0.00	meq/L
Carbonate as CO3	**<0.1**	mg/L	0.00	meq/L
Hydroxide as OH	**704**	mg/L	41.40	meq/L
Nitrate Nitrogen	**1.0**	mg/L	0.02	meq/L
Nitrite Nitrogen	**0.047**	mg/L	0.00	meq/L
Chloride	**226**	mg/L	6.38	meq/L
Fluoride	**0.83**	mg/L	0.04	meq/L
Phosphate	**1.7**	mg/L	0.05	meq/L
Sulfate	**685**	mg/L	14.26	meq/L
Iron	**0.069**	mg/L	0.00	meq/L
Calcium	**216**	mg/L	10.78	meq/L
Magnesium	**537**	mg/L	44.19	meq/L
Potassium	**25.0**	mg/L	0.64	meq/L
Sodium	**150**	mg/L	6.53	meq/L
Cations			62.14	meq/L
Anions			62.15	meq/L
Cation/Anion Difference			**0.02%**	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983. Water And Waste Water", 18th ed., 1992.

Comments: **Gallegos Gallup Sand Unit.**

Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Chevron Texaco	Project #:	01079-002
Sample ID:	MW 6	Date Reported:	12-03-02
Chain of Custody:	10445	Date Sampled:	12-02-02
Laboratory Number:	24349	Date Received:	12-02-02
Sample Matrix:	Water	Date Analyzed:	12-03-02
Preservative:	Cool	Analysis Requested:	BTEX
Condition:	Cool & Intact		

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
Benzene	**0.8**	**1**	**0.2**
Toluene	**0.5**	**1**	**0.2**
Ethylbenzene	**5.2**	**1**	**0.2**
p,m-Xylene	**ND**	**1**	**0.2**
o-Xylene	**0.6**	**1**	**0.1**
Total BTEX	**7.1**		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	fluorobenzene	**100 %**
	1,4-difluorobenzene	**100 %**
	4-bromochlorobenzene	**100 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **Gallegos Gallup Sand Unit.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS
QUALITY ASSURANCE REPORT

Client:	N/A	Project #:	N/A
Sample ID:	12-03-BTEX QA/QC	Date Reported:	12-03-02
Laboratory Number:	24349	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	12-03-02
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	2.6914E-002	2.6968E-002	0.20%	ND	0.2
Toluene	3.3709E-002	3.3716E-002	0.02%	ND	0.2
Ethylbenzene	5.8262E-002	5.8379E-002	0.20%	ND	0.2
p,m-Xylene	7.1891E-002	7.1905E-002	0.02%	ND	0.2
o-Xylene	5.4522E-002	5.4686E-002	0.30%	ND	0.1

Duplicate Conc. (ug/L)	Sample	Duplicate	%Diff.	Accept Limit
Benzene	0.8	0.8	0.0%	0 - 30%
Toluene	0.5	0.5	0.0%	0 - 30%
Ethylbenzene	5.2	5.3	1.9%	0 - 30%
p,m-Xylene	ND	ND	0.0%	0 - 30%
o-Xylene	0.6	0.6	0.0%	0 - 30%

Spike Conc. (ug/L)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Limits
Benzene	0.8	50.0	50.8	100.0%	39 - 150
Toluene	0.5	50.0	50.6	100.2%	46 - 148
Ethylbenzene	5.2	50.0	55.3	100.2%	32 - 160
p,m-Xylene	ND	100	99.9	99.8%	46 - 148
o-Xylene	0.6	50.0	50.5	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for samples 24349, 24355 - 24356.

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CHAIN OF CUSTODY RECORD

10445

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
Chevron	Gallegos Gallup Sand Unit	
Sampler: Jack Collins	Client No. 01079-002	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	BTEX	CAT/ANION					Remarks
MW 6	12-02-02	1410	24349	H_2O	3	✓	✓					

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Jack Collins	12/2/02	1600	[signature]	12/2/02	1600
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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Sample Receipt	Y	N	N/A
Received Intact	✓		
Cool - Ice/Blue Ice	✓		

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Chevron Texaco	Project #:	01079-002
Sample ID:	MW - 6	Date Reported:	12-18-02
Laboratory Number:	24421	Date Sampled:	12-16-02
Chain of Custody:	10469	Date Received:	12-16-02
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	12-17-02 12-18-02
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		Units
pH	**10.76**	s.u.		
Conductivity @ 25° C	**2,150**	umhos/cm		
Total Dissolved Solids @ 180C	**1,070**	mg/L		
Total Dissolved Solids (Calc)	**1,030**	mg/L		
SAR	**24.3**	ratio		
Total Alkalinity as CaCO3	**328**	mg/L		
Total Hardness as CaCO3	**86.0**	mg/L		
Bicarbonate as HCO3	**<0.1**	mg/L	0.00	meq/L
Carbonate as CO3	**64.0**	mg/L	2.13	meq/L
Hydroxide as OH	**264**	mg/L	15.52	meq/L
Nitrate Nitrogen	**0.7**	mg/L	0.01	meq/L
Nitrite Nitrogen	**0.163**	mg/L	0.00	meq/L
Chloride	**192**	mg/L	5.42	meq/L
Fluoride	**1.88**	mg/L	0.10	meq/L
Phosphate	**<0.1**	mg/L	0.00	meq/L
Sulfate	**67.2**	mg/L	1.40	meq/L
Iron	**0.037**	mg/L	0.00	meq/L
Calcium	**34.4**	mg/L	1.72	meq/L
Magnesium	**<0.01**	mg/L	0.00	meq/L
Potassium	**12.5**	mg/L	0.32	meq/L
Sodium	**518**	mg/L	22.53	meq/L
Cations			24.57	meq/L
Anions			24.59	meq/L
Cation/Anion Difference			**0.06%**	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983. Water And Waste Water", 18th ed., 1992.

Comments: **Gallegos Wash Gallup Sand Unit.**

Christine M Walters
Analyst

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Chevron Texaco	Project #:	01079-002
Sample ID:	MW - 6	Date Reported:	12-17-02
Chain of Custody:	10469	Date Sampled:	12-16-02
Laboratory Number:	24421	Date Received:	12-16-02
Sample Matrix:	Water	Date Analyzed:	12-17-02
Preservative:	Cool	Analysis Requested:	BTEX
Condition:	Cool & Intact		

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
Benzene	**ND**	**1**	**0.2**
Toluene	**ND**	**1**	**0.2**
Ethylbenzene	**5.8**	**1**	**0.2**
p,m-Xylene	**ND**	**1**	**0.2**
o-Xylene	**ND**	**1**	**0.1**
Total BTEX	**5.8**		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	fluorobenzene	**96 %**
	1,4-difluorobenzene	**96 %**
	4-bromochlorobenzene	**96 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **Gallegos Wash Gallup Sand Unit.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Chevron Texaco	Project #:	01079-002
Sample ID:	Trip Blank	Date Reported:	12-17-02
Chain of Custody:	10469	Date Sampled:	12-16-02
Laboratory Number:	24422	Date Received:	12-16-02
Sample Matrix:	Water	Date Analyzed:	12-17-02
Preservative:	Cool	Analysis Requested:	BTEX
Condition:	Cool & Intact		

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
Benzene	**ND**	**1**	**0.2**
Toluene	**ND**	**1**	**0.2**
Ethylbenzene	**ND**	**1**	**0.2**
p,m-Xylene	**ND**	**1**	**0.2**
o-Xylene	**ND**	**1**	**0.1**
Total BTEX	**ND**		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	fluorobenzene	**96 %**
	1,4-difluorobenzene	**96 %**
	4-bromochlorobenzene	**96 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **Gallegos Wash Gallup Sand Unit.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS
QUALITY ASSURANCE REPORT

Client:	N/A	Project #:	N/A
Sample ID:	12-17-BTEX QA/QC	Date Reported:	12-17-02
Laboratory Number:	24421	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	12-17-02
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	2.6914E-002	2.6968E-002	0.20%	ND	0.2
Toluene	3.3709E-002	3.3716E-002	0.02%	ND	0.2
Ethylbenzene	5.8262E-002	5.8379E-002	0.20%	ND	0.2
p,m-Xylene	7.1891E-002	7.1905E-002	0.02%	ND	0.2
o-Xylene	5.4522E-002	5.4686E-002	0.30%	ND	0.1

Duplicate Conc. (ug/L)	Sample	Duplicate	%Diff.	Accept Limit
Benzene	ND	ND	0.0%	0 - 30%
Toluene	ND	ND	0.0%	0 - 30%
Ethylbenzene	5.8	5.7	1.7%	0 - 30%
p,m-Xylene	ND	ND	0.0%	0 - 30%
o-Xylene	ND	ND	0.0%	0 - 30%

Spike Conc. (ug/L)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Limits
Benzene	ND	50.0	50.0	100.0%	39 - 150
Toluene	ND	50.0	50.0	100.0%	46 - 148
Ethylbenzene	5.8	50.0	55.7	99.8%	32 - 160
p,m-Xylene	ND	100	99.9	99.8%	46 - 148
o-Xylene	ND	50.0	49.9	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: *Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.*
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for samples 24221 - 24222.

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CHAIN OF CUSTODY RECORD

10469

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
Chevron Texaco	Gallegos Wash Gallup Sand Unit	

Sampler:	Client No.
JLS	01079-002

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	Cation / Anion	8021 BTEX	Trip Blank				Remarks
MW-6	12-16-02	1202	24421	Water	3	1	✓					
Trip Blank	12-16-02		24422	Water	1		✓					

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Jodi Saunders Lee	12-16-02	1410		12/16/02	1410
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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Sample Receipt	Y	N	N/A
Received Intact	✓		
Cool - Ice/Blue Ice	✓		

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Chevron Texaco	Project #:	01079-002
Sample ID:	SB - 3 @ 3'	Date Reported:	11-27-02
Laboratory Number:	24339	Date Sampled:	11-26-02
Chain of Custody:	09551	Date Received:	11-26-02
Sample Matrix:	Soil	Date Analyzed:	11-27-02
Preservative:	Cool	Date Extracted:	11-27-02
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**70.1**	**1.8**
Toluene	**438**	**1.7**
Ethylbenzene	**589**	**1.5**
p,m-Xylene	**2,080**	**2.2**
o-Xylene	**760**	**1.0**
Total BTEX	**3,940**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**97 %**
	1,4-difluorobenzene	**97 %**
	Bromochlorobenzene	**97 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Gallegos Gallup Sand Unit.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Chevron Texaco	Project #:	01079-002
Sample ID:	SB - 3 @ 6'	Date Reported:	11-27-02
Laboratory Number:	24340	Date Sampled:	11-26-02
Chain of Custody:	09551	Date Received:	11-26-02
Sample Matrix:	Soil	Date Analyzed:	11-27-02
Preservative:	Cool	Date Extracted:	11-27-02
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**ND**	**1.8**
Toluene	**486**	**1.7**
Ethylbenzene	**674**	**1.5**
p,m-Xylene	**2,180**	**2.2**
o-Xylene	**915**	**1.0**
Total BTEX	**4,260**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:

Parameter	Percent Recovery
Fluorobenzene	**97 %**
1,4-difluorobenzene	**97 %**
Bromochlorobenzene	**97 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Gallegos Gallup Sand Unit.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Chevron Texaco	Project #:	01079-002
Sample ID:	SB - 3 @ 9'	Date Reported:	11-27-02
Laboratory Number:	24341	Date Sampled:	11-26-02
Chain of Custody:	09551	Date Received:	11-26-02
Sample Matrix:	Soil	Date Analyzed:	11-27-02
Preservative:	Cool	Date Extracted:	11-27-02
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	**15.4**	**1.8**
Toluene	**357**	**1.7**
Ethylbenzene	**613**	**1.5**
p,m-Xylene	**2,000**	**2.2**
o-Xylene	**843**	**1.0**
Total BTEX	**3,830**	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	**97 %**
	1,4-difluorobenzene	**97 %**
	Bromochlorobenzene	**97 %**

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Gallegos Gallup Sand Unit.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS
QUALITY ASSURANCE REPORT

Client:	N/A	Project #:	N/A
Sample ID:	11-27-BTEX QA/QC	Date Reported:	11-27-02
Laboratory Number:	24333	Date Sampled:	N/A
Sample Matrix:	Water	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-27-02
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc	Detect. Limit
Benzene	2.6914E-002	2.6968E-002	**0.20%**	**ND**	**0.2**
Toluene	3.3709E-002	3.3716E-002	**0.02%**	**ND**	**0.2**
Ethylbenzene	5.8262E-002	5.8379E-002	**0.20%**	**ND**	**0.2**
p,m-Xylene	7.1891E-002	7.1905E-002	**0.02%**	**ND**	**0.2**
o-Xylene	5.4522E-002	5.4686E-002	**0.30%**	**ND**	**0.1**

Duplicate Conc. (ug/L)	Sample	Duplicate	%Diff.	Accept Limit
Benzene	**ND**	**ND**	**0.0%**	**0 - 30%**
Toluene	**ND**	**ND**	**0.0%**	**0 - 30%**
Ethylbenzene	**ND**	**ND**	**0.0%**	**0 - 30%**
p,m-Xylene	**ND**	**ND**	**0.0%**	**0 - 30%**
o-Xylene	**ND**	**ND**	**0.0%**	**0 - 30%**

Spike Conc. (ug/L)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Limits
Benzene	**ND**	**50.0**	**49.9**	**99.8%**	**39 - 150**
Toluene	**ND**	**50.0**	**49.9**	**99.8%**	**46 - 148**
Ethylbenzene	**ND**	**50.0**	**50.0**	**100.0%**	**32 - 160**
p,m-Xylene	**ND**	**100**	**99.9**	**99.8%**	**46 - 148**
o-Xylene	**ND**	**50.0**	**49.9**	**99.8%**	**46 - 148**

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: **QA/QC for samples 24333 - 24341.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Chevron Texaco	Project #:	01079-002
Sample ID:	SB - 3 @ 3'	Date Reported:	11-27-02
Laboratory Number:	24339	Date Sampled:	11-26-02
Chain of Custody No:	09551	Date Received:	11-26-02
Sample Matrix:	Soil	Date Extracted:	11-27-02
Preservative:	Cool	Date Analyzed:	11-27-02
Condition:	Cool and Intact	Analysis Needed:	TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**11,890**	**50**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Gallegos Gallup Sand Unit.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Chevron Texaco	Project #:	01079-002
Sample ID:	SB - 3 @ 6'	Date Reported:	11-27-02
Laboratory Number:	24340	Date Sampled:	11-26-02
Chain of Custody No:	09551	Date Received:	11-26-02
Sample Matrix:	Soil	Date Extracted:	11-27-02
Preservative:	Cool	Date Analyzed:	11-27-02
Condition:	Cool and Intact	Analysis Needed:	TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**7,850**	**50**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Gallegos Gallup Sand Unit.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 418.1
TOTAL PETROLEUM HYDROCARBONS

Client:	Chevron Texaco	Project #:	01079-002
Sample ID:	SB - 3 @ 9'	Date Reported:	11-27-02
Laboratory Number:	24341	Date Sampled:	11-26-02
Chain of Custody No:	09551	Date Received:	11-26-02
Sample Matrix:	Soil	Date Extracted:	11-27-02
Preservative:	Cool	Date Analyzed:	11-27-02
Condition:	Cool and Intact	Analysis Needed:	TPH-418.1

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	**14,640**	**50**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **Gallegos Gallup Sand Unit.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 418.1
TOTAL PETROLEUM
HYROCARBONS
QUALITY ASSURANCE REPORT

Client:	QA/QC	Project #:	N/A
Sample ID:	QA/QC	Date Reported:	11-27-02
Laboratory Number:	11-27-TPH.QA/QC 24339	Date Sampled:	N/A
Sample Matrix:	Freon-113	Date Analyzed:	11-27-02
Preservative:	N/A	Date Extracted:	11-27-02
Condition:	N/A	Analysis Needed:	TPH

Calibration	I-Cal Date	C-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
	06-04-02	**11-27-02**	**1,228**	**1,235**	**0.5%**	**+/- 10%**

Blank Conc. (mg/Kg)	Concentration	Detection Limit
TPH	**ND**	**5.0**

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
TPH	**11,890**	**11,790**	**0.8%**	**+/- 30%**

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
TPH	**11,890**	**2,000**	**13,850**	**99.7%**	**80 - 120%**

ND = Parameter not detected at the stated detection limit.

References: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis os Water and Waste, USEPA Storet No. 4551, 1978.

Comments: **QA/QC for samples 24339 - 24341.**

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Chevron Texaco	Project #:	01079-002
Sample ID:	SB - 3 @ 3'	Date Reported:	11-27-02
Laboratory Number:	24339	Date Sampled:	11-26-02
Chain of Custody No:	09551	Date Received:	11-26-02
Sample Matrix:	Soil	Date Extracted:	11-27-02
Preservative:	Cool	Date Analyzed:	11-27-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**452**	**0.2**
Diesel Range (C10 - C18)	**1,743**	**0.1**
Diesel Range (C18 - C28)	**1,108**	**0.2**
Total Petroleum Hydrocarbons	**3,300**	**0.2**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Gallegos Gallup Sand Unit.**

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Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Chevron Texaco	Project #:	01079-002
Sample ID:	SB - 3 @ 6'	Date Reported:	11-27-02
Laboratory Number:	24340	Date Sampled:	11-26-02
Chain of Custody No:	09551	Date Received:	11-26-02
Sample Matrix:	Soil	Date Extracted:	11-27-02
Preservative:	Cool	Date Analyzed:	11-27-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**376**	**0.2**
Diesel Range (C10 - C18)	**1,530**	**0.1**
Diesel Range (C18 - C28)	**670**	**0.2**
Total Petroleum Hydrocarbons	**2,580**	**0.2**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Gallegos Gallup Sand Unit.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Chevron Texaco	Project #:	01079-002
Sample ID:	SB - 3 @ 9'	Date Reported:	11-27-02
Laboratory Number:	24341	Date Sampled:	11-26-02
Chain of Custody No:	09551	Date Received:	11-26-02
Sample Matrix:	Soil	Date Extracted:	11-27-02
Preservative:	Cool	Date Analyzed:	11-27-02
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	**787**	**0.2**
Diesel Range (C10 - C18)	**3,776**	**0.1**
Diesel Range (C18 - C28)	**1,706**	**0.2**
Total Petroleum Hydrocarbons	**6,270**	**0.2**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Gallegos Gallup Sand Unit.**

Analyst

Review

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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	11-27-TPH QA/QC	Date Reported:	11-27-02
Laboratory Number:	24330	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	11-27-02
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	04-25-02	2.7355E-002	2.7328E-002	**0.10%**	**0 - 15%**
Diesel Range C10 - C28	04-25-02	2.4557E-002	2.4508E-002	**0.20%**	**0 - 15%**

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	**ND**	**0.2**
Diesel Range C10 - C28	**ND**	**0.1**
Total Petroleum Hydrocarbons	**ND**	**0.2**

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	**ND**	**ND**	**0.0%**	**0 - 30%**
Diesel Range C10 - C28	**ND**	**ND**	**0.0%**	**0 - 30%**

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	**ND**	**250**	**250**	**100.0%**	**75 - 125%**
Diesel Range C10 - C28	**ND**	**250**	**250**	**100.0%**	**75 - 125%**

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **QA/QC for samples 24330 - 24332, 24339 - 24341.**

Analyst

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CHAIN OF CUSTODY RECORD

09551

Client / Project Name	Project Location	ANALYSIS / PARAMETERS
CHEVRON TEXACO	GALLEGOS GALLUP SAND UNIT	
Sampler: JACK COLLINS	Client No. 01079-002	

Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	BTEX 8021	TPH 418.1	TPH 8015M (5-PC C10-C28)				Remarks
SB-3 @ 3'	11/26/02	1143	24339	~~Soil~~ Soil	1	✓	✓	✓				
SB-3 @ 6'	"	1155	24340	Soil	1	✓	✓	✓				
SB-3 @ 9'	"	1215	24341	Soil	1	✓	✓	✓				

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
C. Jack Collins	11-26-02	1430	Dawn E. Aleem	11-26-02	1430
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

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Sample Receipt	Y	N	N/A
Received Intact	✓		
Cool - Ice/Blue Ice	✓		

APPENDIX D

Field Notes

ENVIROTECH INC.
FARMINGTON, NM 5796 HIGHWAY 64
MONITOR WELL DATA

Date: 11/25/02 Project No: 01079-002

Project Name: CHEVRON-TEXACO GALLEGOS SAND UNIT Chain of Custody No: _____

Location: _____

Project Manager: JACK COLLINS Sampler: CJC / Bob Sterret

MONITOR WELL DATA

WELL #	TIME	OVM ppm	pH	COND. µS	TEMP. °F	DEPTH TO WATER FT.	TOTAL DEPTH FT.	WATER COLUMN FT.	BAILED Water Gal.	PRODUCT Ft.	WATER LEVEL FT.	
1	0809					37.55	40.0	2.45	1.7	60	57.83	3
2	0811					33.38	34.5	1.1	0.6	60	57.01	5
3	0820					30.14	34.5	4.3	2.6	60	56.36	4GAL
4	0815					31.69	35.5	3.8	1.9	60	56.73	
5	0813					32.31	39.5	7.9	3.6	60	57.25	5GAL
11-26-02 6	1104					30.92						1 gal
12-02-02 6	1320					32.17	75.0	42.83	9.0	60	58.68	
12-05-02 6	1545	JLS				41.06	—	—	—	—	—	
12-09-02 6	1100	JLS	11.5	2.67	57.0	32.82	75.6		8.5		Bailed	
12-16-02 6	1120	JLS	10.7	2.92	57.4	34.60			8.25	—	dry	

Notes: TOC = Top of Casing
Bailed = 3 well volumes:
1.25" well = 0.19 gal/ft.
2.00" well = 0.49 gal/ft.
4.00" well = 1.96 gal/ft.
Note well diameter if not one of the above.

ENVIROTECH INC.
FARMINGTON, NM 5796 HIGHWAY 64
MONITOR WELL DATA

Date: 12-09-03 Project No: 01079-002

Project Name: Chevron Texaco Chain of Custody No: _____

Location: Sullyns

Project Manager: CJC Sampler: JLS

MONITOR WELL DATA

WELL #	TIME	OVM ppm	pH	COND. µS	TEMP. °F	DEPTH TO WATER FT.	TOTAL DEPTH FT.	WATER COLUMN FT.	BAILED Water Gal.	PRODUCT Ft.	WATER LEVEL FT.
MW-6	1000					32.81	76.50	43.69	22 gallons		
	1005		11.8	4.22	59.0				2 gallons		
	1015		11.5	4.16	57.0				2 gallons		
	1030		11.5	4.54	58.8				2 gallons		
	1045		11.5	3.16	57.6				2 gallons		
	1100		11.5	2.67	57.0				0.5 gallons		
							Total		8.5	gallons	

Notes: TOC = Top of Casing
Bailed = 3 well volumes:
1.25" well = 0.19 gal/ft.
2.00" well = 0.49 gal/ft.
4.00" well = 1.96 gal/ft.
Note well diameter if not one of the above.

ENVIROTECH INC.
FARMINGTON, NM 5796 HIGHWAY 64
MONITOR WELL DATA

Date: Dec 16, 2002 Project No: 01079-002

Project Name: Chevron Texaco Chain of Custody No: _____

Location: Bolleys West Bolleys Sand Unit

Project Manager: CJC Sampler: JLS

MONITOR WELL DATA

WELL #	TIME	OVM ppm	pH	COND. µS	TEMP. °F	DEPTH TO WATER FT.	TOTAL DEPTH FT.	WATER COLUMN FT.	BAILED Water Gal.	PRODUCT Ft.	WATER LEVEL FT.
MW-6	1120					34.6					
	1127		11.5	4.05	56.8				.25 gal		
	1134		10.4	3.94	55.4				2 gal.		
	1142		10.6	3.70	57.7				2 gal		
				3.71	57.8				2 gal		
	1202		10.7	3.92	57.4				2 gal	Sample	

Notes: TOC = Top of Casing
Bailed = 3 well volumnes:
1.25" well = 0.19 gal/ft.
2.00" well = 0.49 gal/ft.
4.00" well = 1.96 gal/ft.
Note well diameter if not one of the above.