ChevronTexaco

REMEDIATION DOCUMENTATION
AND
CLOSURE REPORT

FOR THE
PRODUCTION FLUID RELEASE
ASSOCIATED WITH THE

VACUUM UNIT WELL #103

API #3002503091 0000

New Mexico Oil Conservation Division
Case #

UL-F SE¼ OF THE NW¼ SECTION 6, T18S, R35E
~1.5 mile south of Buckeye
Lea County, New Mexico
Latitude 32°46'43.9"N Longitude 103°29'42.3"W

Closure

SEPTEMBER 2002

Prepared by

Environmental Plus, Inc.
2100 Avenue O
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Eunice, New Mexico 88231
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ChevTex -21619
incident - nPAC0605441260
application - pPAC0605441347

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EXECUTIVE SUMMARY

On June 17,2002, a production fluid leak consisting of an undetermined volume of crude oil, natural gas, and formation water occurred at the ChevronTexaco Vacuum Unit Well #103. The leak resulted from the failure of the polish rod stuffing box packing and oversprayed the caliche well pad and a vegetated area to the southwest encompassing approximately 16,612 ft^2. The fluid impact was restricted to the compacted caliche well pad and flowed west and south from the well head. Only minor overspray impact was observed beyond the well pad. The ground water is estimated to occur at 89 feet below ground surface and is based on water level information obtained from the New Mexico Office of the State Engineer and the New Mexico Tech Internet Mapping System. Below are the acceptable remedial goals for the Constituents of Concern (CoCs), i.e., Total Petroleum Hydrocarbon EPA method 8015M (TPH^{8015m}), Benzene, and BTEX (the sum of Benzene, Toluene, Ethyl Benzene, and Xylene). There are no surface water bodies within 1000 horizontal feet of the site.

Total Site Ranking Score and Acceptable Concentrations			
Parameter	>19 (surface to 89'bgs)	10-19 (NA)	0-9 (NA)
Benzene[1]	10 ppm	10 ppm	10 ppm
BTEX[1]	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1000 ppm	5000 ppm

A windmill and livestock watering tub are located ~203 feet west of the leak origin and approximately 130' from the affected area perimeter and was not observed to be impacted by the overspray but was nonetheless sampled and tested for Benzene, BTEX, Chloride, and Total Dissolved Solids (TDS). BTEX was not detected above the instrument detection limits for the specific parameter and the Chloride and TDS were within background levels, i.e., TDS = 343 mg/L and Chloride = 44 mg/L. On September 30, 2002, the windmill production flow stream was sampled for BTEX, Chloride, and TDS with no BTEX detected above the instrument detection limits and Chloride and TDS within background levels, i.e., 160 and 367 mg/L, respectively. The land is owned by the New Mexico State Land Office and leased for livestock grazing purposes to Giles Lee. At ChevronTexaco's request Environmental Plus, Inc. (EPI) of Eunice, New Mexico mitigated the spill. Mitigation activities involved treating the affected surface and vegetation with MicroBlaze Spill Control (a non-hazardous phosphate based detergent inoculated with petrophilic microbes to promote bio-attenuation) and spreading and blending clean soil into the affected near surface soil. Composite near surface (0-6"below ground surface (bgs)) samples were collected from each quadrant on June 18, 2002 and the Headspace Volatile Organic Constituent (VOC) surveyed using a calibrated Photoionization Detector (PID). Readings were all less than 50 ppm and were therefore sent to Cardinal Laboratories in Hobbs, New Mexico for analysis. Analytical results indicated the Total Petroleum Hydrocarbon EPA method 8015m (TPH^{8015m}) in the north, west, and south quadrants to be in excess of the New Mexico Oil Conservation Division (NMOCD) guideline threshold of 100 mg/Kg, consequently, approximately 60 cubic yards (yd^3) of impacted near surface soil was disposed of in the New Mexico Oil Conservation Division (NMOCD) approved and permitted "Texaco Land Farm" (TLF). On June 25, 2002, soil borings were advanced to 15'bgs and sampled at 5' intervals in the north, west, and south quadrants pooling areas to determine vertical extent of contamination. BTEX was not detected above the instrument detection limit in any of the boring samples and TPH^{8015m} only nominally. Chloride levels in the south borehole (SBH) were < 250 mg/Kg for all but the 3'bgs and 15'bgs samples which were 300 and 480 mg/Kg, respectively. Chloride concentrations in all samples from the West Borehole (WBH) and the North Borehole (NBH) were less than 160 mg/Kg. Based on this information the excavated area was backfilled with clean soil and contoured. The information collected during the mitigation and remediation of the site indicate that the CoC remedial goals have been achieved and justifies the NMOCD requiring "no further action" at this site.

1 VACUUM UNIT WELL #103 REMEDIATION WORK PLAN

This plan restored the impacted surface area to acceptable levels by removing soil contaminated above New Mexico Oil Conservation Division (NMOCD) guidelines. The Constituents of Concern (CoCs) were Total Petroleum Hydrocarbon using EPA method 8015M (TPH^{8015m}), Benzene, BTEX, i.e., the sum of Benzene, Toluene, Ethyl Benzene, and m, p, & o Xylene, and soil Chloride.

1.1 Remediation Strategy and Objective

The site was delineated during excavation and by advancing vertical soil borings with soil disposal as the remediation strategy. The objectives of the plan were to;

- Document achievement of acceptable environmental thresholds established by the NMOCD and
- Restore the impacted surface area to pre-release status.

1.2 Occurrence

On June 17,2002, a production fluid leak consisting of an undetermined volume of crude oil, natural gas, and formation water occurred at the ChevronTexaco Vacuum Unit Well #103. The leak resulted from the failure of the polish rod stuffing box packing and oversprayed the caliche well pad and a vegetated area to the southwest encompassing approximately 16,612 ft^2. The fluid impact was restricted to the compacted caliche well pad and flowed west and south from the well head. Only minor overspray impact was observed beyond the well pad.

1.3 Site Description

The site is located ~1.5 miles south of Buckeye, New Mexico at Latitude 32°46'43.9"N Longitude 103°29'42.3"W and ~3,975 feet above mean sea level ('asml). A site map is included as Attachment I.

1.3.1 Historical Use

This land is owned by the State of New Mexico and leased to Giles Lee. The land is used for livestock grazing and oil and gas production facilities access.

1.3.2 Legal Description

The legal description is Unit Letter-F, in the SE¼ of the NW¼ of Section 6, Township 18 South, Range 35 East.

1.3.3 Photographic documentation

Photographs of the site are included as Attachment II.

1.3.4 Ecological Description

The area is an intergrade of the Lower Great Plains and the Upper Chihuahuan Desert Biomes consisting primarily of flat to hilly clay/loam/sand terrain dominated by typical desert grasses and weeds with interspersions of Harvard Shin Oak (Querqus harvardi) and Honey Mesquite (Prosopis glandulosa). Mammals present, include Orrd's and Merriam's Kangaroo Rat, Deer Mouse, White Throated Wood Rat, Cottontail Rabbit, Black Tailed Jackrabbit, and the Mule Deer. Reptiles, Amphibians, and Birds are numerous and typical of area. A survey of Listed, Threatened, or Endangered species has not been conducted.

1.3.5 Environmental Media Characterization

Chemical parameters of the soil were characterized consistent with the New Mexico Oil Conservation Division (NMOCD) guidelines published in the following documents;

- Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993)

4. Locate, hand spot, and mark buried lines or other structures
5. Overhead powerlines are not present and will not be a hazard.
6. Lockout/Tagout: Verify pumping unit is locked out and tagged and forms completed. Pipeline companies notified of activity but LO/TO unnecessary
7. Procedure: Equipment required will be: Backhoe, Excavator, Dump Trucks
    - Daily Tail gate safety meetings and PPE check
    - Excavation Safety Checklist Form
    - Excavate visibly contaminated soil and stockpile
    - Haul stockpiled soil to NMOCD approved facility
    - Conduct field VOC headspace analyses on selected samples
    - Collect Composite Samples of the selected areas for laboratory analysis
    - Review data and calculate "Depth to Ground Water"
    - Backfill excavations with volume consistent with disposal volume
    - Photograph
    - Develop and issue site specific report
    - Contour and/or Reseed surface

2 Work Plan Implementation and Closure

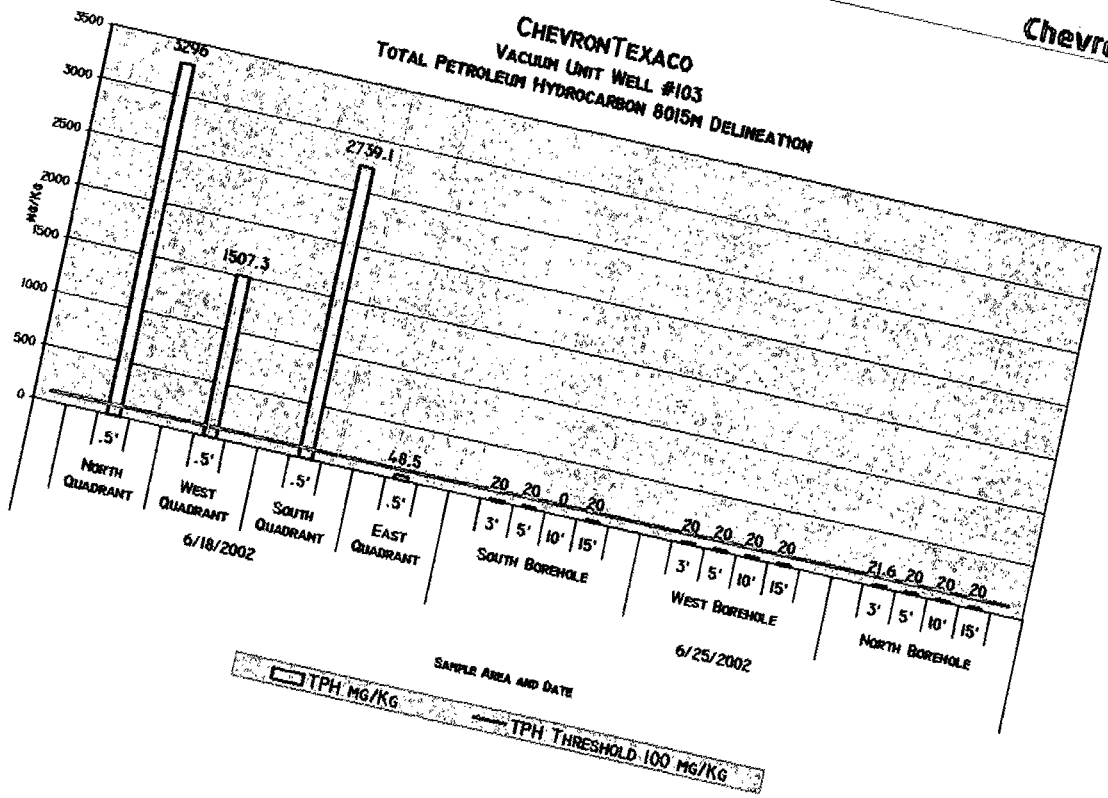
The process of excavating and disposing of contaminated soil and field surveying began on June 17, 2002 with the disposal and backfilling phase completed on June 28, 2002.

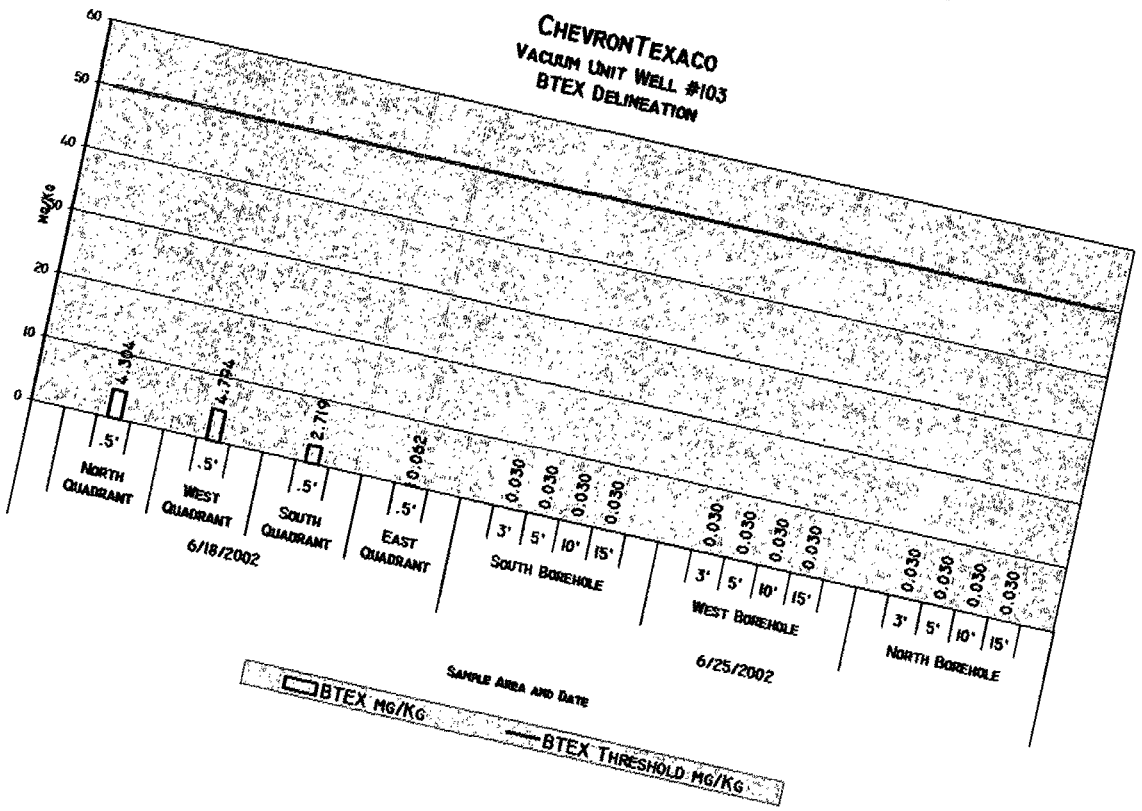
2.1 Excavation and Composite Sampling

Composite near surface (0-6"below ground surface (bgs)) samples were collected from each quadrant on June 18, 2002 and the Headspace Volatile Organic Constituent (VOC) surveyed using a calibrated Photoionization Detector (PID). Readings were all less than 50 ppm and were therefore sent to Cardinal Laboratories in Hobbs, New Mexico for analysis. Analytical results indicated the TPH^{8015m} in the north, west, and south quadrants to be in excess of the New Mexico Oil Conservation Division (NMOCD) guideline threshold of 100 mg/Kg, consequently, approximately 60 cubic yards (yd^3) of impacted near surface soil was disposed of in the New Mexico Oil Conservation Division (NMOCD) approved and permitted "Texaco Land Farm" (TLF). On June 25, 2002, soil borings were advanced to 15'bgs and sampled at 5' intervals in the north, west, and south quadrants pooling areas to determine vertical extent of contamination. BTEX was not detected above the instrument detection limit in any of the boring samples and TPH^{8015m} only nominally. Chloride levels in the south borehole (SBH) were < 250 mg/Kg for all but the 3'bgs and 15'bgs samples which were 300 and 480 mg/Kg, respectively. Chloride concentrations in all samples from the West Borehole (WBH) and the North Borehole (NBH) were less than 160 mg/Kg.

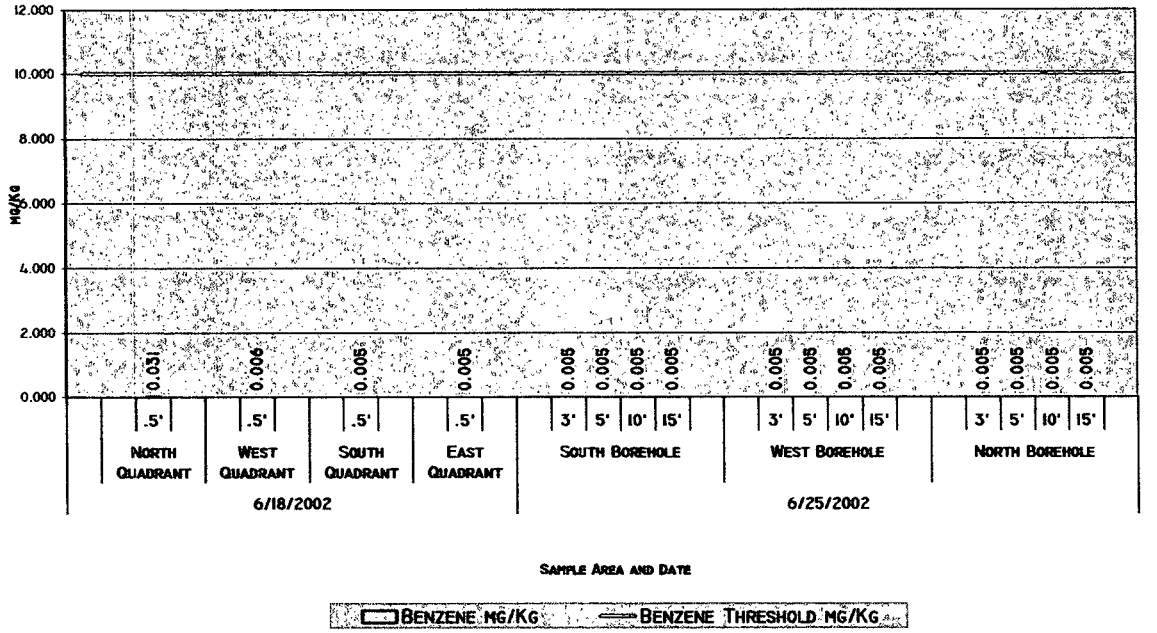
2.2 Discussion of Data

The NMOCD remedial goals have been achieved at this site. The Chloride concentrations in the South Borehole should not pose a threat to local ground water given that the surface is now covered with approximately 12" of compacted caliche. Application/treatment of the vegetated overspray area with MicroBlaze Spill Control will accelerate bio-attenuation and fertilize the area. ChevronTexaco personnel will monitor the status of the vegetation. The original laboratory analytical reports and data summary are included as Attachment III and the data is illustrated below.

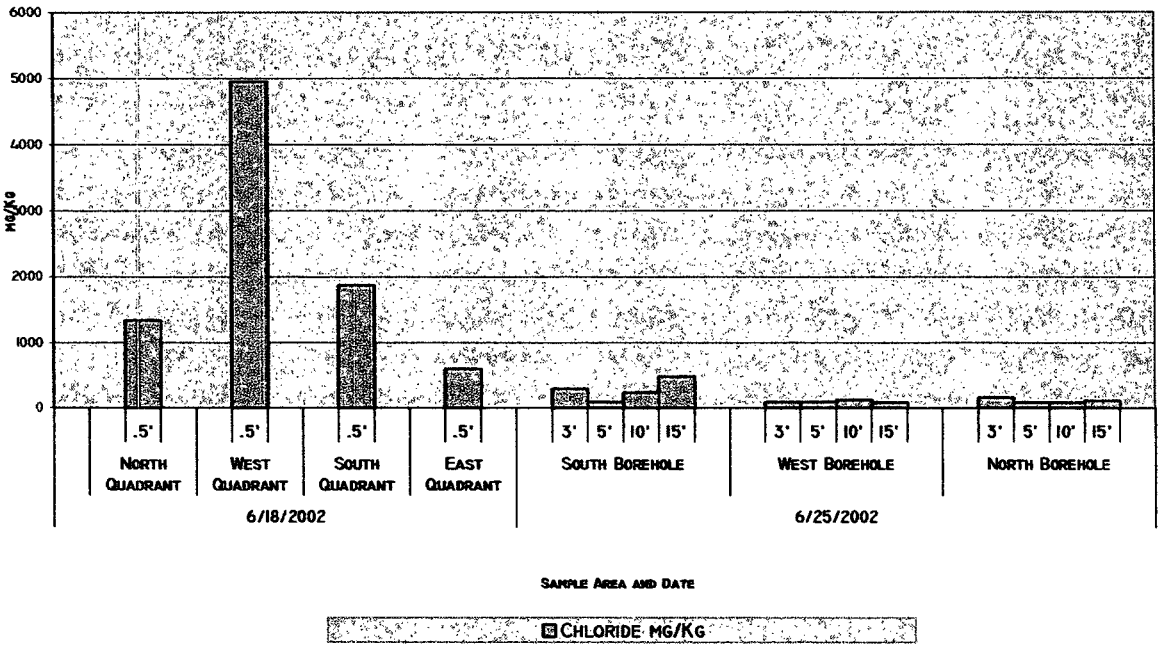

CHEVRONTEXACO
VACUUM UNIT WELL #103
TOTAL PETROLEUM HYDROCARBON 8015M DELINEATION
MG/KG
3500
3000
2500
2000
1500
1000
500
0
3296
2739.1
1507.3
46.5
21.6
.5'
NORTH QUADRANT
WEST QUADRANT
SOUTH QUADRANT
EAST QUADRANT
6/18/2002
3' 5' 10' 15'
SOUTH BOREHOLE
WEST BOREHOLE
NORTH BOREHOLE
6/25/2002
SAMPLE AREA AND DATE
TPH MG/KG
TPH THRESHOLD 100 MG/KG


CHEVRONTEXACO
VACUUM UNIT WELL #103
BTEX DELINEATION
MG/KG
60
50
40
30
20
10
0
4.394
4.774
2.719
0.082
0.030
.5'
NORTH QUADRANT
WEST QUADRANT
SOUTH QUADRANT
EAST QUADRANT
6/18/2002
3' 5' 10' 15'
SOUTH BOREHOLE
WEST BOREHOLE
NORTH BOREHOLE
6/25/2002
SAMPLE AREA AND DATE
BTEX MG/KG
BTEX THRESHOLD MG/KG

ChevronTexaco
Vacuum Unit Well #103
Benzene Delineation



ChevronTexaco
Vacuum Unit Well #103
Chloride Delineation



2.3 Soil Disposal and Backfilling

Under chain of custody, 60 yd^3 was disposed of in the NMOCD approved and permitted Texaco Land Farm (TLF). A sufficient volume of clean backfill soil, i.e.60 yd^3, was obtained from the TLF and used to bring the excavation to grade.

2.4 Conclusion

Production fluid contamination at this site resulted in soil contamination above the NMOCD remedial guidelines. The data support the conclusion that the site has been remediated to acceptable levels for the CoCs and as such justifies the NMOCD requiring "no further action" at this site.

2.5 Follow Up

The vegetated overspray area will be visually monitored by ChevronTexaco personnel.

ChevronTexaco
Site Information and Metrics

Incident Date and NMOCD Notified? June 17, 2002	
SITE: Vacuum Unit Well #103	Assigned Site Reference #:
Company: ChevronTexaco	
Street Address: 15 Smith Road 79705	
Mailing Address: P.O. Box 1150	
City, State, Zip: Midland, Texas 79702	
Representative: Rodney Bailey	
Representative Telephone: 915.238.4274	FAX: 915.687.7110
Telephone: Office 915.687.7251	
Fluid volume released (bbls): ?	Recovered (bbls): ?
>25 bbls: Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days. (Also applies to unauthorized releases >500 mcf Natural Gas)	
5-25 bbls:Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas)	
Leak, Spill, or Pit (LSP) Name: Vacuum Unit Well #103	
Source of contamination: Well head stuffing box leak	
Land Owner, i.e., BLM, ST, Fee, Other: New Mexico State Land (leased by Giles Lee)	
LSP Dimensions ~180' x 120'	
LSP Area: 16,612 ft^2	
Location of Reference Point (RP)	
Location distance and direction from RP	
Latitude: 32°46'43.967"N	
Longitude: 103°29'42.268"W	
Elevation above mean sea level: 3975'amsl	
Feet from South Section Line	
Feet from West Section Line	
Location- Unit or ¼¼: SE¼ of the NW ¼	Unit Letter: F
Location- Section: 6	
Location- Township: 18S	
Location- Range: 35E	
Surface water body within 1000 ' radius of site: None	
Surface water body within 1000 ' radius of site:	
Domestic water wells within 1000' radius of site: None	
Domestic water wells within 1000' radius of site:	
Agricultural water wells within 1000' radius of site: Windmill 203' west	
Agricultural water wells within 1000' radius of site:	
Public water supply wells within 1000' radius of site: None	
Public water supply wells within 1000' radius of site:	
Depth from land surface to ground water (DG) ~89'bgs	
Depth of contamination (DC) –	
Depth to ground water (DG – DC = DtGW) -	

1. Ground Water	2. Wellhead Protection Area	3. Distance to Surface Water Body
If Depth to GW <50 feet: *20 points*	If <1000' from water source, or;<200' from private domestic water source: *20 points*	<200 horizontal feet: *20 points*
If Depth to GW 50 to 99 feet: *10 points*		200-100 horizontal feet: *10 points*
If Depth to GW >100 feet: *0 points*	If >1000' from water source, or; >200' from private domestic water source: *0 points*	>1000 horizontal feet: *0 points*
Ground water Score = 10	*Wellhead Protection Area Score= 20*	*Surface Water Score= 0*

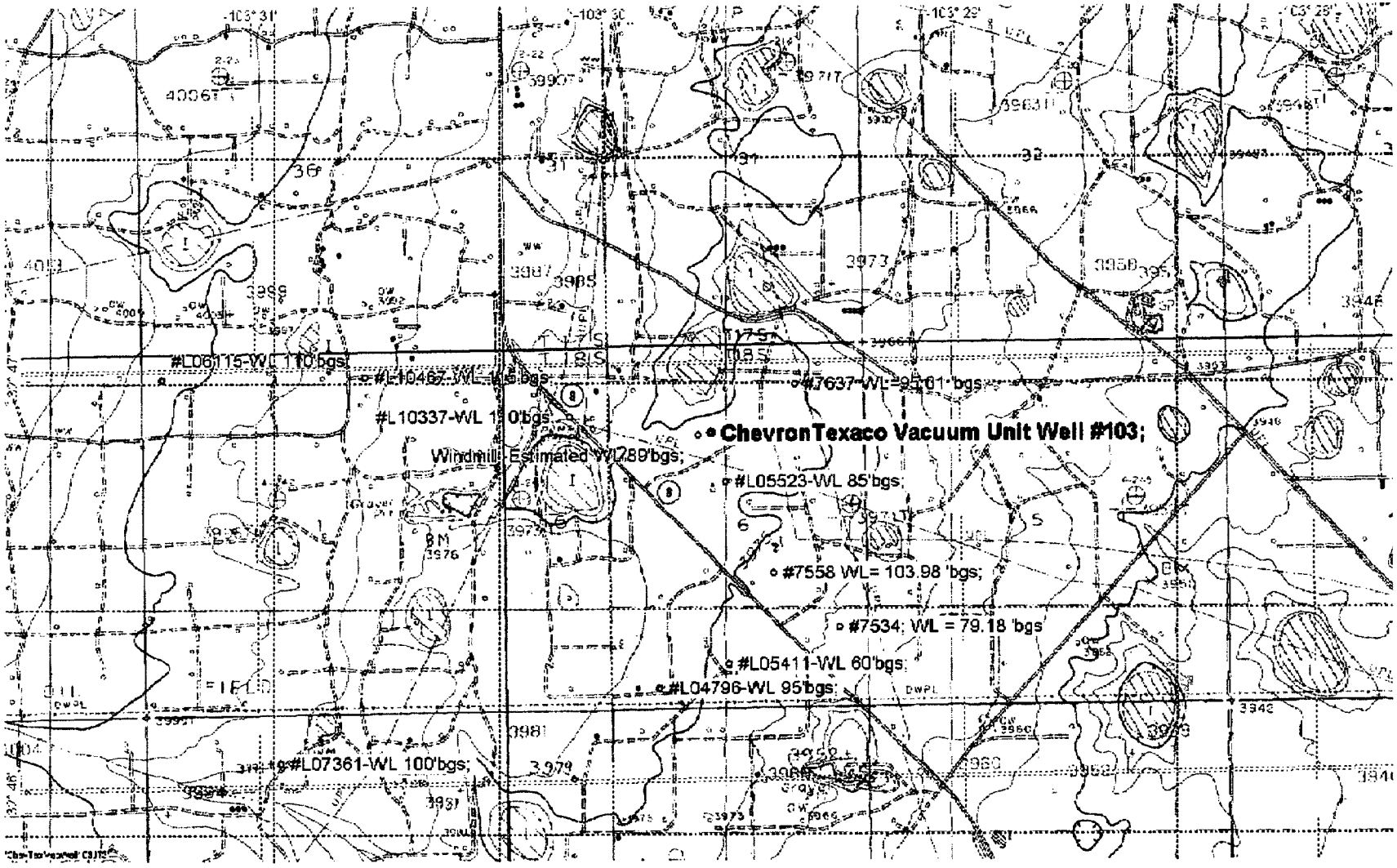
Site Rank (1+2+3) = 30

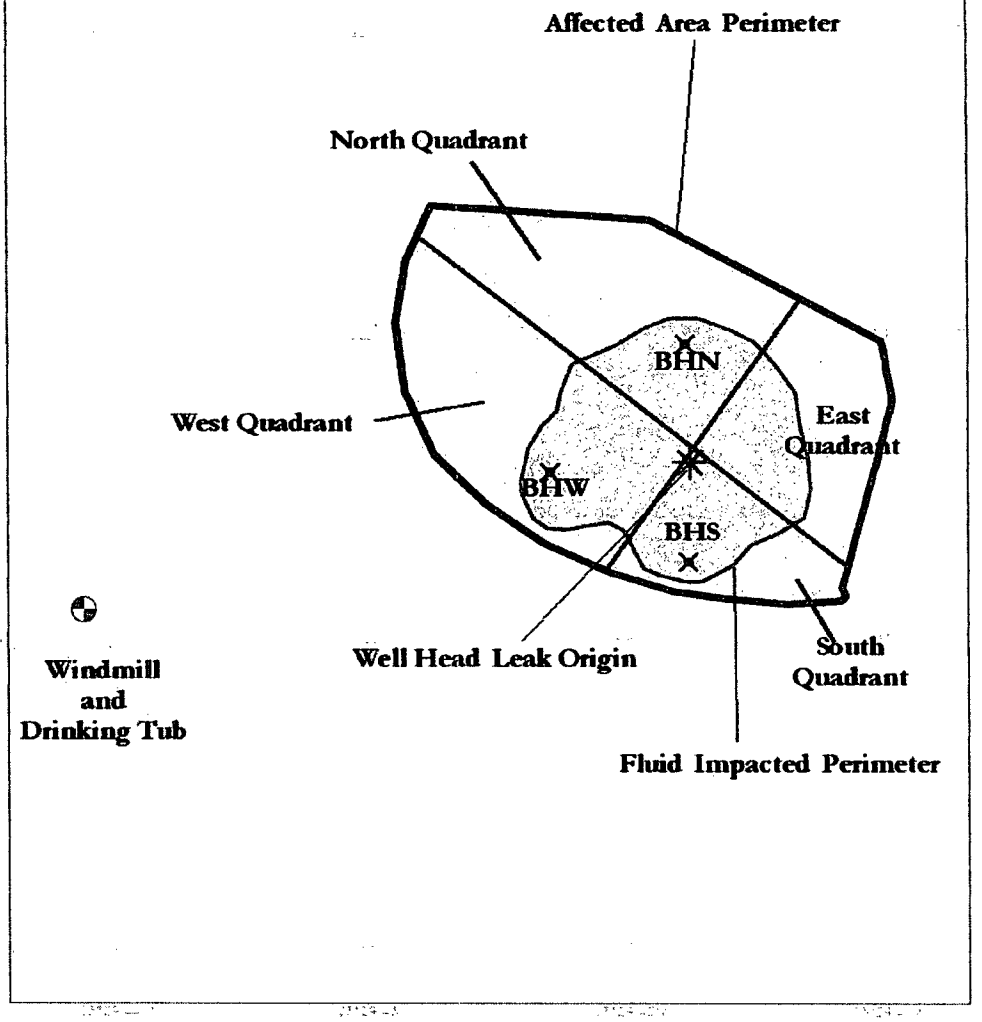
Total Site Ranking Score and Acceptable Concentrations

Parameter	>19 (surface to 89'bgs)	10-19 (NA)	0-9
Benzene[1]	10 ppm	10 ppm	10 ppm
BTEX[1]	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1000 ppm	5000 ppm

[1]100 ppm field VOC headspace measurement may be substituted for lab analysis

Attachment I: Site Maps


#L06115-WL 110'bgs;
#L10462-WL 95'bgs;
#L10337-WL 100'bgs;
Windmill- Estimated WL 289'bgs;
ChevronTexaco Vacuum Unit Well #103;
#L05523-WL 85'bgs;
#7637-WL=95.01 'bgs
#7558 WL= 103.98 'bgs;
#7534; WL = 79.18 'bgs
#L05411-WL 60'bgs;
#L04796-WL 95'bgs;
#L07361-WL 100'bgs;



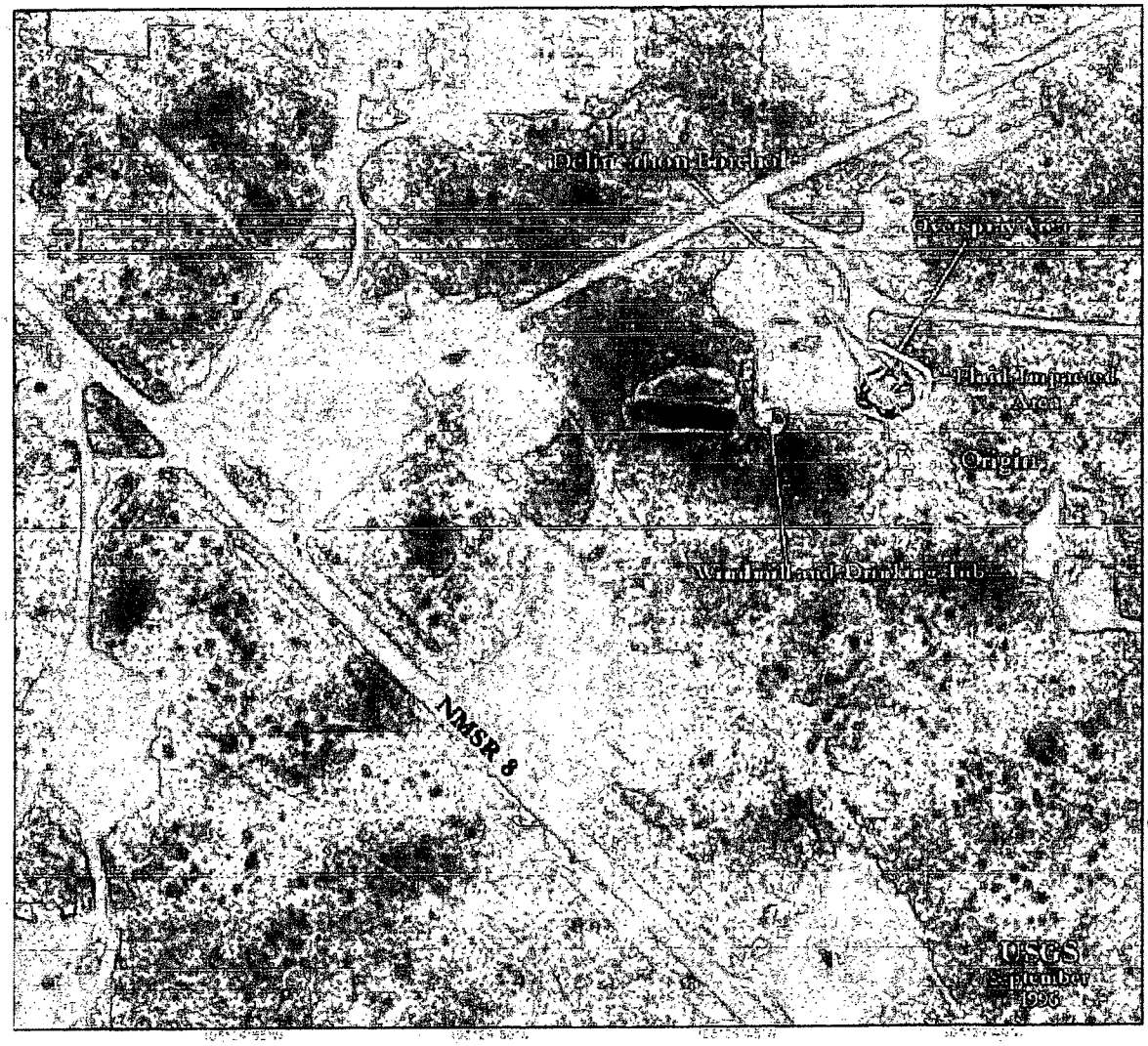
CHEVRONTEXACO VACUUM UNIT WELL #103
UL-F SECTION 6 T18S R35E LEA CO. NEW MEXICO
AFFECTED SURFACE AREA ~16,612 SQFT

UNIVERSAL TRANSVERSE MERCATOR
13 NORTH
NAD 1983 HPGN (NEW MEXICO)

N

SCALE 1:700
0 80.00
FEET

CHTXVACUI03P.COR
9/28/2002



CHEVRONTEXACO
VACUUM UNIT
WELL #103
UL-F SEC 6
T18S R35E
LEA CO. NM
AFFECTED
SURFACE AREA
~16,612 SQFT

N

SCALE 1:3,500

0 400.0

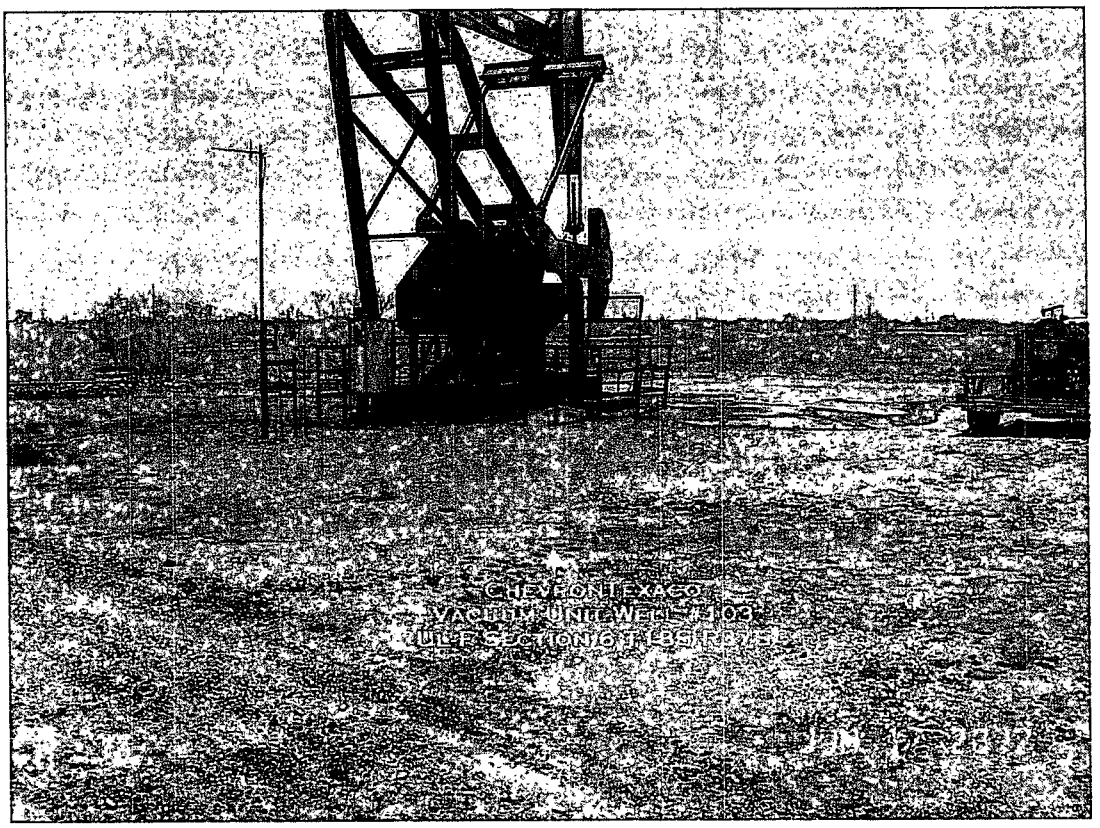
FEET

UNIVERSAL TRANSVERSE MERCATOR
13 NORTH
NAD 1983 -PGN (NEW MEXICO)

CHTXVACU103P.COR

9/29/2002

Attachment II: Photographs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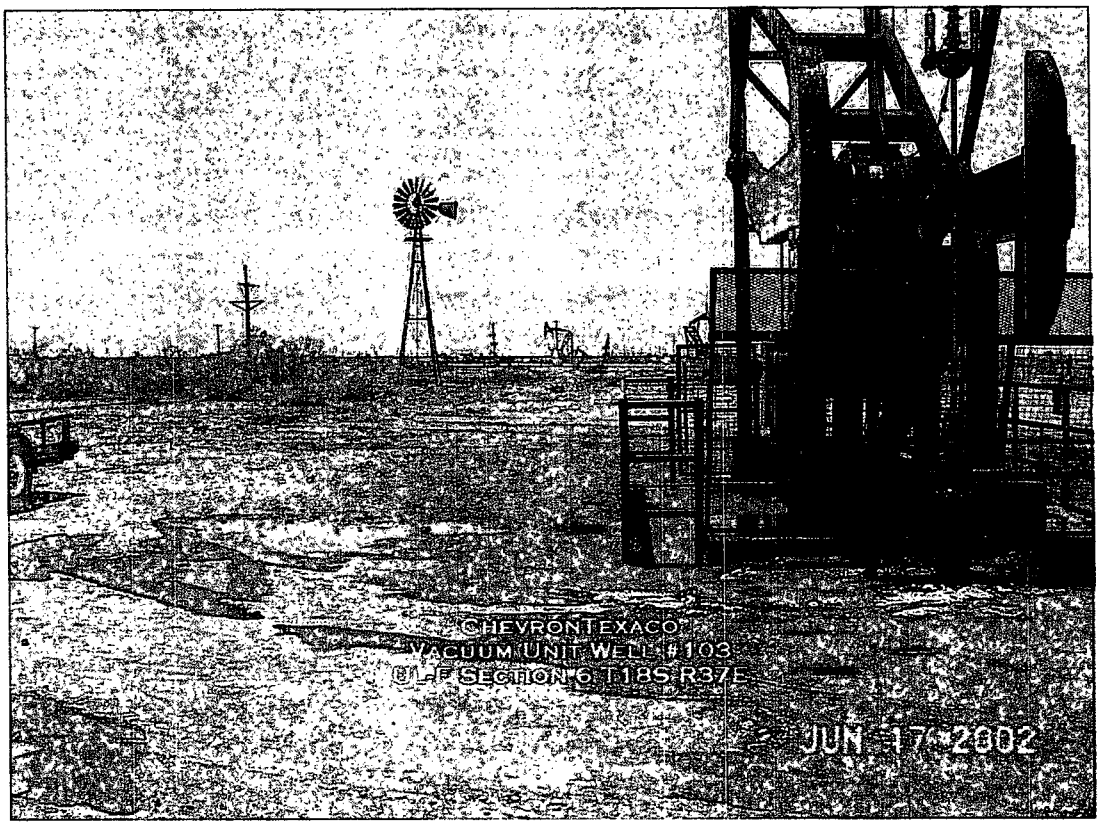
VACUUM UNIT WELL #103
UL-F SECTION 6 T18S R37E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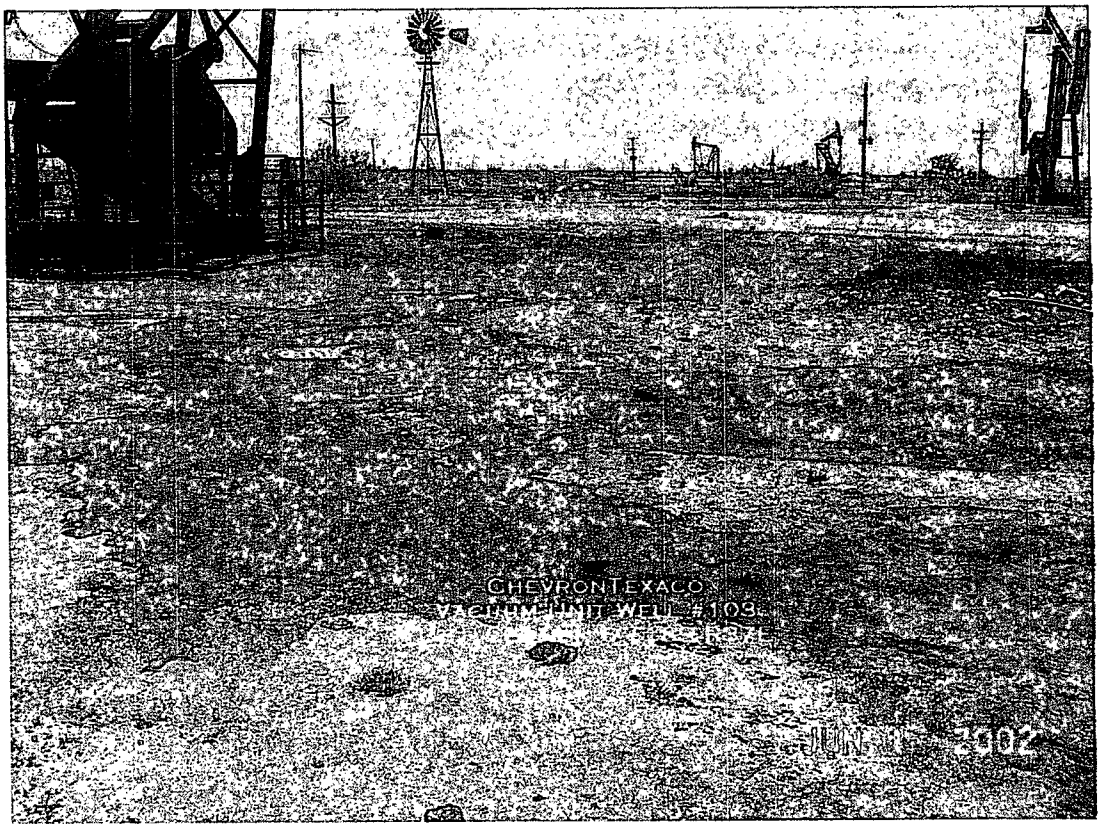
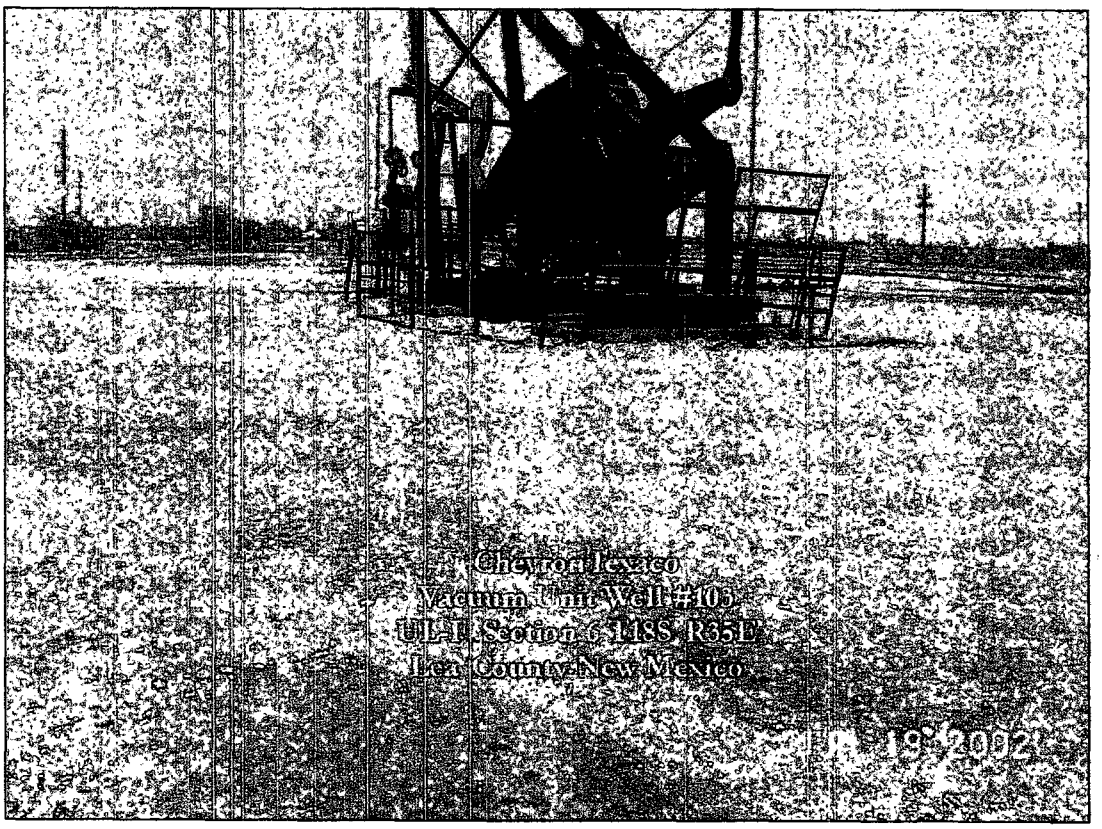
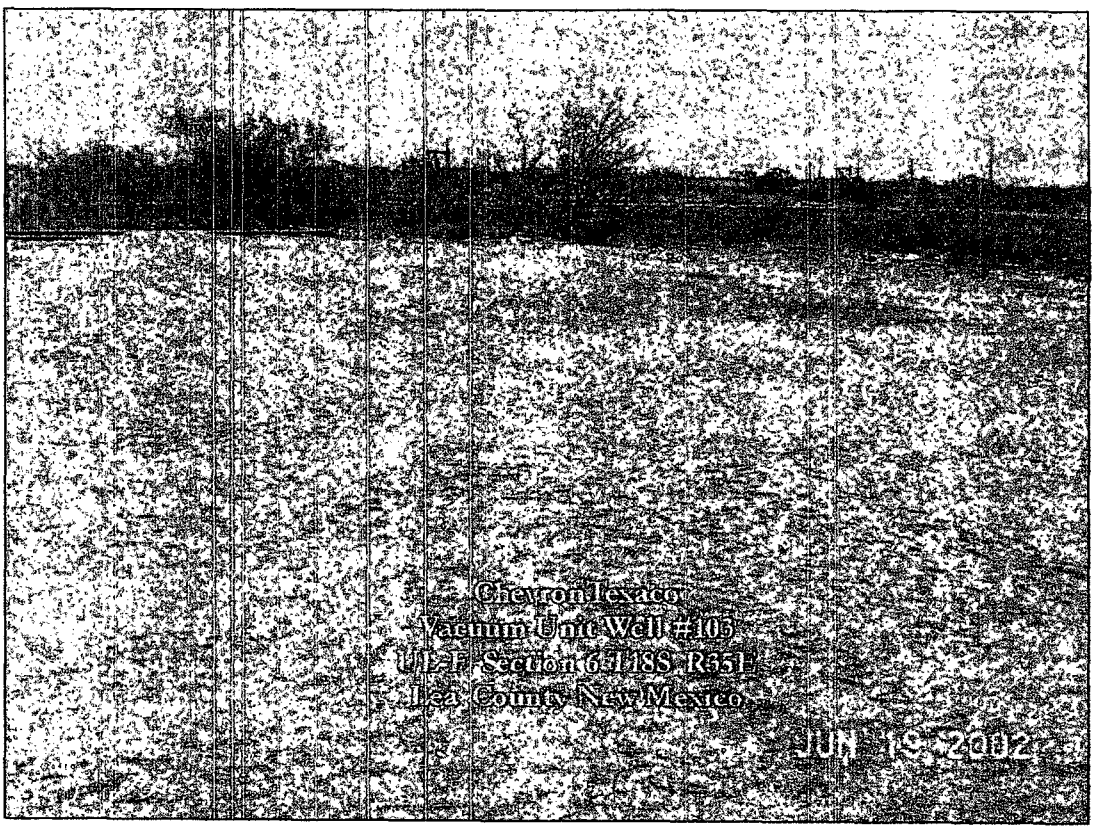
UL-F SECTION 6 T18S R37E
JUN 17 2002


CHEVRONTEXACO
VACUUM UNIT WELL #103


Chevron Texaco
Vacuum Unit Well #103
U.L. F Section 6 T18S R35E
Lea County, New Mexico


ChevronTexaco
Vacuum Unit Well #105
ULP Section 6 T18S R35E
Lea County New Mexico
JUN 19 2012


ChevronTexaco
Vacuum Unit Well #105
ULP Section 6 T18S R35E
Lea County New Mexico
JUN 19 2012


Windmill and Drinking Tub
West of Vacuum Unit Well #103
Treated Overspray Area
Vegetation appears vigorous
ChevronTexaco
Vacuum Unit Well #103
UL-F Section 6 T18S R35E
Lea County New Mexico
9/30/2002 9:49am


Drinking Tub Overflow Pond
Appears to be unaffected and unstressed
(not present during release in June 2002)
ChevronTexaco
Vacuum Unit Well #103
UL-F Section 6 T18S R35E
Lea County New Mexico
9/30/2002 9:28am

Attachment III: Analyses

Chevron-Texaco Vacuum Unit Well #103

Sample Area	Sample Type	Sampling Interval (FT. BGS[1])	SAMPLE ID#	Date	Lithology	HEADSPACE VOC[2] (ppm)	GRO[3] mg/Kg	DRO[4] mg/Kg	TPH[5] mg/Kg	BTEX mg/Kg	Benzene mg/Kg	Toluene mg/Kg	Ehtyl Benzene mg/Kg	m,p-o Xylene mg/Kg	Chloride mg/Kg	Total Dissolved Solids mg/Liter	Chloride mg/Liter
Windmill Drinking Tub	Grab	na	CTVUW10361702ST	6/17/2002	Ground Water	na	na	na	**na**	**na**	<0.010	<0.010	<0.010	<0.030	44	343	44
Puddle (hoof print) adjacent to the Drinking Tub	Grab	na	CTVUW10361702HP	6/17/2002	Ground Water	na	na	na	**na**	**na**	<0.002	<0.002	<0.002	<0.006	na	na	na
Windmill	Grab	na	WCTVU10393002	9/30/2002	Ground Water	na	na	na	**na**	**na**	<0.002	<0.002	<0.002	<0.006	na	367	160
North Quadrant	Comp	0-6"	CTVUW10361802N	6/18/2002	Caliche	38.2	366	2930	**3296**	4.304	0.031	0.223	1.010	3.040	1340	na	na
West Quadrant	Comp	0-6"	CTVUW10361802W	6/18/2002	Sand/Caliche	10.1	*47.3*	1460	**1507.3**	4.794	0.006	0.458	1.510	2.820	4960	na	na
South Quadrant	Comp	0-6"	CTVUW10361802S	6/18/2002	Sand/Caliche	17.9	59.1	2680	**2739.1**	2.719	*0.005*	0.401	0.903	1.410	1870	na	na
East Quadrant	Comp	0-6"	CTVUW10361802E	6/18/2002	Sand/Caliche	8.2	*10*	*38.5*	*48.5*	*0.062*	*0.005*	0.006	0.022	0.029	600	na	na
South Borehole	Grab	3'	SCTV10362502SBH-3'	6/25/2002	Caliche	4.1	*10*	*10*	*20*	*0.030*	*0.005*	*0.005*	*0.005*	*0.015*	300	na	na
	Grab	5'	SCTV10362502SBH-5'	6/25/2002	Sand/Caliche	2.7	*10*	*10*	*20*	*0.030*	*0.005*	*0.005*	*0.005*	*0.015*	96	na	na
	Grab	10'	SCTV10362502SBH-10'	6/25/2002	Sand/Caliche	1.4	*10*	*10*	*20*	*0.030*	*0.005*	*0.005*	*0.005*	*0.015*	240	na	na
	Grab	15'	SCTV10362502SBH-15'	6/25/2002	Sand/Caliche	0.0	*10*	*10*	*20*	*0.030*	*0.005*	*0.005*	*0.005*	*0.015*	480	na	na
West Borehole	Grab	3'	SCTV10362502WBH-3'	6/25/2002	Caliche	3.7	*10*	*10*	*20*	*0.030*	*0.005*	*0.005*	*0.005*	*0.015*	96	na	na
	Grab	5'	SCTV10362502WBH-5'	6/25/2002	Sand/Caliche	0.9	*10*	*10*	*20*	*0.030*	*0.005*	*0.005*	*0.005*	*0.015*	96	na	na
	Grab	10'	SCTV10362502WBH-10'	6/25/2002	Sand/Caliche	0.4	*10*	*10*	*20*	*0.030*	*0.005*	*0.005*	*0.005*	*0.015*	120	na	na
	Grab	15'	SCTV10362502WBH-15'	6/25/2002	Sand/Caliche	0.0	*10*	*10*	*20*	*0.030*	*0.005*	*0.005*	*0.005*	*0.015*	80	na	na
North Borehole	Grab	3'	SCTV10362502NBH-3'	6/25/2002	Caliche	9.5	*10*	*11.6*	*21.6*	*0.030*	*0.005*	*0.005*	*0.005*	*0.015*	160	na	na
	Grab	5'	SCTV10362502NBH-5'	6/25/2002	Sand/Caliche	0.4	*10*	*10*	*20*	*0.030*	*0.005*	*0.005*	*0.005*	*0.015*	80	na	na
	Grab	10'	SCTV10362502NBH-10'	6/25/2002	Sand/Caliche	0.2	*10*	*10*	*20*	*0.030*	*0.005*	*0.005*	*0.005*	*0.015*	80	na	na
	Grab	15'	SCTV10362502NBH-15'	6/25/2002	Brown Sand	0.0	*10*	*10*	*20*	*0.030*	*0.005*	*0.005*	*0.005*	*0.015*	112	na	na

[1]bgs – below ground surface

[2]VOC–Volatile Organic Contaminants/Constituents

[3]GRO-Gasoline Range Organics C_6-C_{10}

[4]DRO-Diesel Range Organics C_{10}-C_{28}

[5]TPH-Total Petroleum Hydrocarbon = GRO+DRO.

Bolded values are in excess of the New Mexico Oil Conservation Division guideline threshold for the parameter

Italicized values are < the instrument detection limit.

[6]N/A Not Analyzed

Reported detection limits are considered "de minimus" values and are included in the GRO/DRO and BTEX summations.

CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
CHEVRON TEXACO
ATTN: RODNEY BAILEY
P.O. BOX 3109
MIDLAND, TX 79702
FAX TO:

Receiving Date: 06/18/02
Reporting Date: 06/20/02
Project Owner: TEXACO
Project Name: TEXACO
Project Location: VACUUM UNIT WELL 103

Sampling Date: 06/17/02
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: AH

LAB NUMBER	SAMPLE ID	TDS (mg/L)	Cl (mg/L)
ANALYSIS DATE:		06/19/02	06/18/02
H6812-2	CTVUW10361702ST	343	44
Quality Control		NR	1020
True Value QC		NR	1000
% Recovery		NR	102
Relative Percent Difference		8.8	4.0

METHODS: EPA 600/4-79-02	160.1	4500-ClB*

*Std. Methods

Amy Hill
Chemist

6-20-02
Date

H6812

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
CHEVRON TEXACO
ATTN: RODNEY BAILEY
P.O. BOX 3109
MIDLAND, TX 79702
FAX TO:

Receiving Date: 06/18/02
Reporting Date: 06/20/02
Project Owner: TEXACO
Project Name: TEXACO
Project Location: VACUUM UNIT WELL 103

Sampling Date: 06/17/02
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		06/18/02	06/18/02	06/18/02	06/18/02
H6812-1*	CTVUW10381702 HP	<0.010	<0.010	<0.010	<0.030
H6812-2	CTVUW10361702 ST	<0.002	<0.002	<0.002	<0.006
Quality Control		0.102	0.108	0.107	0.316
True Value QC		0.100	0.100	0.100	0.300
% Recovery		102	108	107	105
Relative Percent Difference		4.1	6.7	2.8	4.8

METHOD: EPA SW-846 8260
*Dilution required due to pronounced odor and foaming during purge/trap.

Chemist

6/20/02
Date

Cardinal Laboratories Inc.

2111 Beechwood, Abilene, TX 79603
915-673-7001 Fax 915-673-7020

101 East Marland, Hobbs, NM 88240
505-393-2326 Fax 505-393-2476

Company Name	Texaco
Project Manager	Rodney Bailey
Address	
City, State, Zip	
Phone#/Fax#	
Project #/Owner	Texaco
Project Name	Texaco
Project Location	Vacuum Unit Well 103
Sampler Name	Eddie J Harper

Bill To

Texaco
Rodney Bailey

Analysis Request

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	WASTEWATER	SOIL	CUDE OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE/COOL	OTHER	SAMPLING: DATE	TIME	BTEX 8021B	TPH 8015M	Cl	TDS
H68121	CTV UW 10361202 HP 40 mL	G	2	X							X		6/12/02	2 PM	X			
-2	CTV UW 10361202 ST 40 mL	G	2	X							X		"	2:30	X			
	CTV UW 10361202 ST Quart	G	1	X							X		"	2:30			X	X

Sampler Relinquished: Eddie J Harper	Date: 6-17-02 Time: 10:30	Received By: Mata Cy	Fax Results To Pat McCasland 505-394-2601
Relinquished by: Mata Cy	Date: 6-18-02 Time: 12:05	Received By: (lab staff) Amy Hill	REMARKS:
Delivered by Sampler	Sample Cool & Intact: Yes / No	Checked By:	

CARDINAL LABORATORIES

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

ANALYTICAL RESULTS FOR
CHEVRON TEXACO
ATTN: RODNEY BAILEY
P.O. BOX 3109
MIDLAND, TX 79702
FAX TO:

Receiving Date: 06/19/02
Reporting Date: 06/21/02
Project Number: NOT GIVEN
Project Name: CHEVRON TEXACO
Project Location: VACUUM UNIT WELL 103

Sampling Date: 06/18/02
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		06/19/02	06/19/02	06/19/02	06/19/02
H6814-1	CTVUW10361802N	0.031	0.223	1.01	3.04
H6814-2	CTVUW10361802W	0.006	0.458	1.51	2.82
H6814-3	CTVUW10361802S	<0.005	0.401	0.903	1.41
H6814-4	CTVUW10361802E	<0.005	0.006	0.022	0.029
Quality Control		0.107	0.102	0.101	0.290
True Value QC		0.100	0.100	0.100	0.300
% Recovery		107	102	101	97.6
Relative Percent Difference		5.0	6.1	5.7	8.9

METHOD: EPA SW-846 8260

Chemist

6/21/02
Date

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

ANALYTICAL RESULTS FOR
CHEVRON TEXACO
ATTN: RODNEY BAILEY
P.O. BOX 3109
MIDLAND, TX 79702
FAX TO:

Receiving Date: 08/19/02
Reporting Date: 08/20/02
Project Number: NOT GIVEN
Project Name: CHEVRON TEXACO
Project Location: VACUUM UNIT WELL 103

Sampling Date: 08/18/02
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC/AH

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/Kg)	DRO (>C_{10}-C_{28}) (mg/Kg)	Cl* (mg/Kg)
ANALYSIS DATE		08/19/02	08/19/02	08/20/02
H6814-1	CTVUW10381602N	368	2930	1340
H6814-2	CTVUW10381602W	47.3	1460	4960
H6814-3	CTVUW10381602S	59.1	2680	1870
H6814-4	CTVUW10381602E	<10.0	38.5	600
Quality Control		764	818	1020
True Value QC		800	800	1000
% Recovery		95.4	102	102
Relative Percent Difference		7.3	2.3	4.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl: Std. Methods 4500-Cl B
*Analyses performed on 1:4 w:v aqueous extracts.

Chemist

6/20/02
Date

H6814A.XLS

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

CARDINAL LABORATORIES, INC.

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101 East Marland, Hobbs, NM 88240 (505) 393-2326 Fax (505) 393-2476

Page ____ of ____

Company Name: Chevron Texaco	BILL TO PO #:
Project Manager: Rodney Bailey	Company: Chevron Texaco
Address:	Attn: Rodney Bailey
City: State: Zip:	Address:
Phone #:	City:
Fax #:	State: Zip:
Project #: Project Owner:	Phone #:
Project Name: Chevron Texaco	Fax #:
Project Location: Vacuum Unit Well 103	

FOR LAB USE ONLY				MATRIX						PRES.			SAMPLING		ANALYSIS REQUEST															
LAB I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID:	ICE / COOL	OTHER :	DATE	TIME	TPH 8015m	BTEX (8021B/8260)	[illegible]	Chlorides												
H6814-1	CTVUW103@8ft	6				✓					✓		6-18-02		✓	✓		✓												
-2	CTVUW103@18ft	6				✓					✓		6-18-02		✓	✓		✓												
-3	CTVUW103@23ft	6				✓					✓		6-18-02		✓	✓		✓												
-4	CTVUW103@28ft E.C.	6				✓					✓		6-18-02		✓	✓		✓												

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Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished: Eddie J Harper	Date: 6-18-02 Time: 4:00	Received By: Roger Boone	Phone Result: ☐ Yes ☐ No Additional Fax #:
Relinquished By: Roger Boone	Date: 6/19/02 Time: 8:50	Received By: (Lab Staff) Burgett JA Cobb	Fax Result: ☐ Yes ☐ No
Delivered By: (Circle One) Sample - UPS - Bus - Other:		Sample Condition: Cool: ☒ Yes ☐ No Intact: ☒ Yes ☐ No	CHECKED BY: (Initials)
			REMARKS:

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

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

ANALYTICAL RESULTS FOR
CHEVRON TEXACO
ATTN: RODNEY BAILEY
P.O. BOX 3109
MIDLAND, TX 79702
FAX TO:

Receiving Date: 06/26/02
Reporting Date: 06/28/02
Project Owner: CHEVRON TEXACO
Project Name: VACUUM UNIT WELL 103
Project Location: NOT GIVEN

Sampling Date: 06/25/02
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: BC/AH

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/Kg)	DRO (>C_{10}-C_{28}) (mg/Kg)	Cl* (mg/Kg)
ANALYSIS DATE		06/27/02	06/27/02	06/28/02
H6845-1	SCTV10362502SBH-3'	<10.0	<10.0	300
H6845-2	SCTV10362502SBH-5'	<10.0	<10.0	96
H6845-3	SCTV10362502SBH-10'	<10.0	<10.0	240
H6845-4	SCTV10362502SBH-15'	<10.0	<10.0	480
H6845-5	SCTV10362502WBH-3'	<10.0	<10.0	96
H6845-6	SCTV10362502WBH-6'	<10.0	<10.0	96
H6845-7	SCTV10362502WBH-10'	<10.0	<10.0	120
H6845-8	SCTV10362502WBH-15'	<10.0	<10.0	80
H6845-9	SCTV10362502NBH-3'	<10.0	11.6	160
H6845-10	SCTV10362502NBH-5'	<10.0	<10.0	80
H6845-11	SCTV10362502NBH-10'	<10.0	<10.0	80
H6845-12	SCTV10362502NBH-15'	<10.0	<10.0	112
Quality Control		718	766	1040
True Value QC		800	800	1000
% Recovery		89.7	95.8	104
Relative Percent Difference		2.2	6.4	2.0

METHODS: TPH GRO & DRO: EPA SW-846 8015 M; Cl: Std. Methods 4500-ClB
*Analyses performed on 1:4 w:v aqueous extracts.

Chemist

6/28/02
Date

H6845A.XLS

CARDINAL LABORATORIES

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ANALYTICAL RESULTS FOR
CHEVRON TEXACO
ATTN: RODNEY BAILEY
P.O. BOX 3109
MIDLAND, TX 79702
FAX TO:

Receiving Date: 06/26/02
Reporting Date: 06/28/02
Project Owner: CHEVRON TEXACO
Project Name: VACUUM UNIT WELL 103
Project Location: NOT GIVEN

Sampling Date: 06/25/02
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: AH
Analyzed By: BC

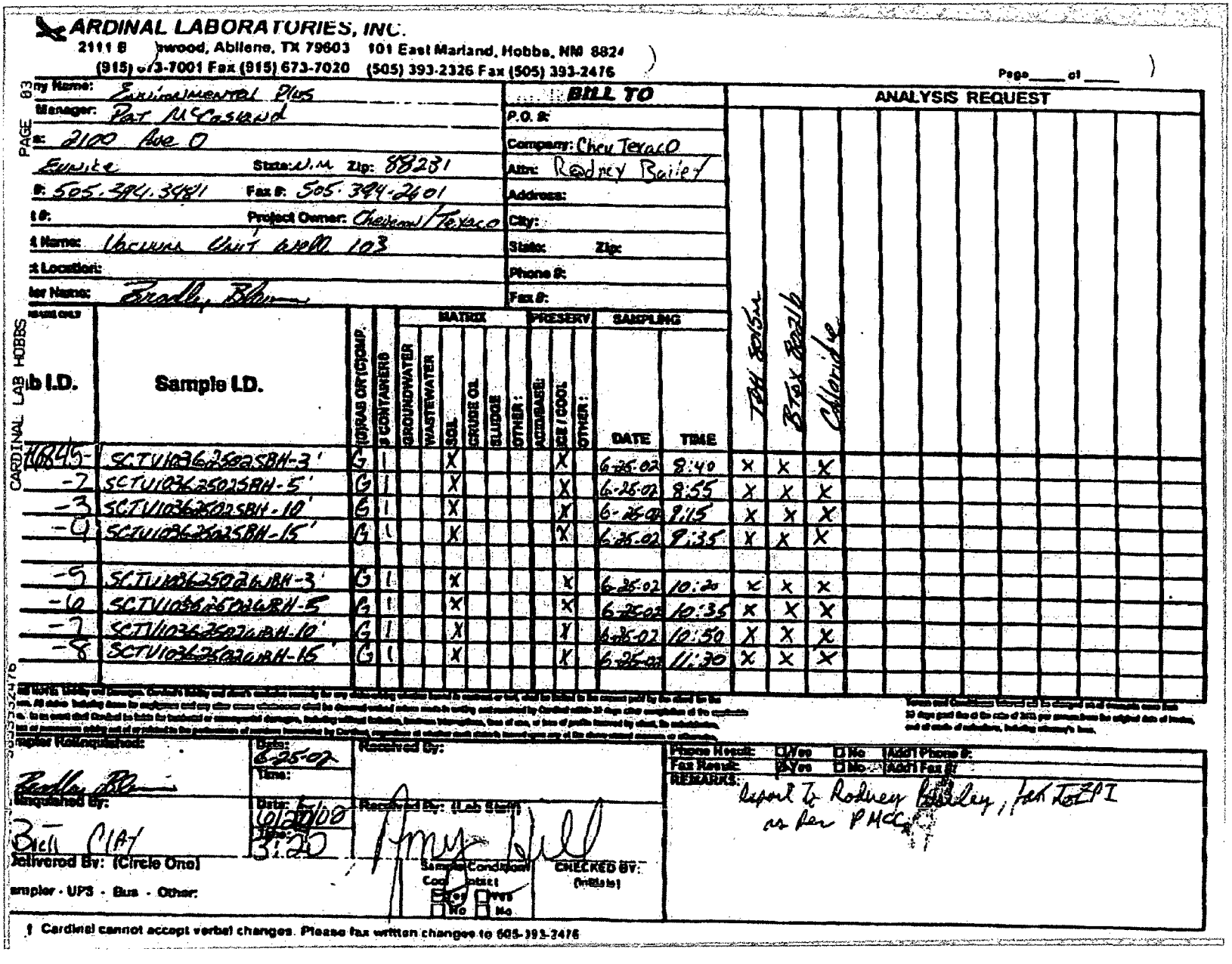
LAB NO.	SAMPLE ID	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE		06/27/02	06/27/02	06/27/02	06/27/02
H6845-1	SCTV10362502SBH-3'	<0.005	<0.005	<0.005	<0.015
H6845-2	SCTV10362502SBH-5'	<0.005	<0.005	<0.005	<0.015
H6845-3	SCTV10362502SBH-10'	<0.005	0.008	<0.005	<0.015
H6845-4	SCTV10362502SBH-15'	<0.005	<0.005	<0.005	<0.015
H6845-5	SCTV10362502WBH-3'	<0.005	<0.005	<0.005	<0.015
H6845-6	SCTV10362502WBH-5'	<0.005	<0.005	<0.005	<0.015
H6845-7	SCTV10362502WBH-10'	<0.005	<0.005	<0.005	<0.015
H6845-8	SCTV10362502WBH-15'	<0.005	<0.005	<0.005	<0.015
H6845-9	SCTV10362502NBH-3'	<0.005	<0.005	<0.005	<0.015
H6845-10	SCTV10362502NBH-5'	<0.005	<0.005	<0.005	<0.015
H6845-11	SCTV10362502NBH-10'	<0.005	<0.005	<0.005	<0.015
H6845-12	SCTV10362502NBH-15'	<0.005	<0.005	<0.005	<0.015
Quality Control		0.102	0.097	0.100	0.288
True Value QC		0.100	0.100	0.100	0.300
% Recovery		102	97.0	99.7	95.9
Relative Percent Difference		0.3	5.1	4.3	3.9

METHOD: EPA SW-846 8260

Chemist

6/24/02
Date

H6845 ATS



CARDINAL LABORATORIES, INC.

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Page ____ of ____

PAGE 03

CARDINAL LAB HOBBS

Company Name:	Environmental Plus
Manager:	Pat McCasland
Address:	2100 Ave O
City: Eunice	State: N.M. Zip: 88231
Phone #: 505.394.3481	Fax #: 505.394.2601
P.O. #:	Project Owner: Chevron/Texaco
Project Name:	Vacuum Unit well 103
Project Location:	
Sampler Name:	Bradley Blum

BILL TO

P.O. #:	
Company:	Chevron Texaco
Attn:	Rodney Bailey
Address:	
City:	
State:	Zip:
Phone #:	
Fax #:	

ANALYSIS REQUEST

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER :	PRESERV: ACID/BASE:	ICE / COOL	OTHER :	SAMPLING: DATE	TIME	TPH 8015m	BTEX 8021b	Chlorides
16845-1	SCTVU036-2502SBH-3'	G	1			X					X		6-25-02	8:40	X	X	X
-2	SCTVU036-2502SBH-5'	G	1			X					X		6-25-02	8:55	X	X	X
-3	SCTVU036-2502SBH-10'	G	1			X					X		6-25-02	9:15	X	X	X
-4	SCTVU036-2502SBH-15'	G	1			X					X		6-25-02	9:35	X	X	X
-5	SCTVU036-2502aBH-3'	G	1			X					X		6-25-02	10:20	X	X	X
-6	SCTVU036-2502aBH-5'	G	1			X					X		6-25-02	10:35	X	X	X
-7	SCTVU036-2502aBH-10'	G	1			X					X		6-25-02	10:50	X	X	X
-8	SCTVU036-2502aBH-15'	G	1			X					X		6-25-02	11:30	X	X	X

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Relinquished by:	Date: 6-25-02	Received by:	
Relinquished by:	Date: 6/26/02	Received by: (Lab Staff)	
Delivered By: (Circle One)	Time: 3:20		
Sampler - UPS - Bus - Other:		Sample Conditions: Cool / Intact: Yes / No	CHECKED BY: (Initials)

Phone Result: ☐ Yes ☐ No Add'l Phone #:

Fax Result: ☑ Yes ☐ No Add'l Fax #:

REMARKS: Report to Rodney Bailey, Jack ToEPI as per PMCC

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

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Page ____ of ____

Company Name: Environmental Plus	BILL TO
Project Manager: Pat McCasland	P.O. #:
Address: 2100 Ave O	Company: Chevron Texaco
City: Eunice State: N.M. Zip: 88231	Attn: Ashley Bailey
Phone #: 505-394-3481 Fax #: 505-394-2601	Address:
Project #: Project Owner: Chevron/Texaco	City:
Project Name: Vacuum 103	State: Zip:
Project Location:	Phone #:
Sampler Name: Bradley Blevins	Fax #:

ANALYSIS REQUEST: TPH 8015m; BTEX 8021B; Chlorides

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	PRESERV: ACID/BASE	ICE / COOL	OTHER:	SAMPLING: DATE	TIME
2885-9	SCTV1036 2502 NBH-3'	G	1			X					X		6-25-02	12:45
-10	SCTV1036 2502 NBH-5'	G	1			X					X		6-25-02	1:00
-11	SCTV1036 2502 NBH-10'	G	1			X					X		6-25-02	1:30
-12	SCTV1036 2502 NBH-15'	G	1			X					X		6-25-02	2:00

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Terms and Conditions: Interest will be charged on all invoices more than 30 days past due at the rate of 1.5% per month from the original date of invoice, and all costs of collections, including attorney's fees.

Relinquished:	Date: 6-25-02	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
Relinquished By:	Time:		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Bradley Blevins	Date: 6/26/02	Received By: (Lab Staff)	REMARKS:
Delivered By: (Circle One)	Time: 3:20	Sample Condition: Cool ☑ Yes ☐ No; Intact ☑ Yes ☐ No	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:			

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

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

ANALYTICAL RESULTS FOR
CHEVRON TEXACO
ATTN: RODNEY BAILEY
P.O. BOX 3109
MIDLAND, TX 79702
FAX TO:

Receiving Date: 09/30/02
Reporting Date: 10/03/02
Project Number: NOT GIVEN
Project Name: VACUUM UNIT #103
Project Location: BUCKEYE, NM

Sampling Date: 09/30/02
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: AH

LAB NUMBER	SAMPLE ID	TDS (mg/L)	Cl (mg/L)
ANALYSIS DATE:		10/02/02	10/01/02
H7089-1	WCTVU10393002WM	367	160
Quality Control		NR	940
True Value QC		NR	1000
% Recovery		NR	94.0
Relative Percent Difference		8.8	6.0

METHODS: EPA 600/4-79-02	160.1	4500-ClB*

*Std. Methods

Chemist

10-3-02
Date

H7089

CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
CHEVRON TEXACO
ATTN: RODNEY BAILEY
P.O. BOX 3109
MIDLAND, TX 79702
FAX TO:

Receiving Date: 09/30/02
Reporting Date: 10/03/02
Project Number: NOT GIVEN
Project Name: VACUUM UNIT #103
Project Location: BUCKEYE

Sampling Date: 09/30/02
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC

LAB NUMBER	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		09/30/02	09/30/02	09/30/02	09/30/02
H7089-1	WCTVU10393002WM	<0.002	<0.002	<0.002	<0.006
Quality Control		0.103	0.103	0.106	0.310
True Value QC		0.100	0.100	0.100	0.300
% Recovery		103	103	106	103
Relative Percent Difference		0.3	0.2	0.7	0.8

METHOD: EPA SW-846 8260

Chemist

10/3/02
Date

ChevronTexaco

Cardinal Laboratories Inc.

2111 Beechwood, Abilene, TX 79603
915-673-7001 Fax 915-673-7020

101 East Marland, Hobbs, NM 88240
505-393-2326 Fax 505-393-2476

Company Name	Chevron Texaco
Project Manager	Rodney Bailey
Address	
City, State, Zip	
Phone#/Fax#	
Project #/Owner	
Project Name	Vacuum Unit # 103
Project Location	Buckeye
Sampler Name	Roger Boone

Bill To: Same

Analysis Request: BTEX 8021B; TPH 8015M; Cl; TDS

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	WASTEWATER	SOIL	CUDE OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE/COOL	OTHER	SAMPLING: DATE	TIME	BTEX 8021B	TPH 8015M	Cl	TDS
H7087-1	WCTVU10393002WM	G	3	X							X		9/30	8:30	X		X	X

Sampler Relinquished: Roger Boone	Date 9-30 Time 1520	Received By:	**Fax Results To Pat McCasland 505-394-2601**
Relinquished by:	Date 9/30 Time 1525	Received By: (lab staff) Burgell McCook	REMARKS:
Delivered by Sampler	Sample Cool & Intact: Yes / No	Checked By:	

VACUUM UNIT WELL #103

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Attachment IV: New Mexico Office of the State Engineer Well Reports

New Mexico Office of the State Engineer

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 17S Range: 34E Sections: 36

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) Non-Domestic Domestic
All

Well / Surface Data Report | Avg Depth to Water Report
Water Column Report
Clear Form | WATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 09/28/2002

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 18S Range: 35E Sections: 5,6,7,8

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) Non-Domestic Domestic All

Well / Surface Data Report | Avg Depth to Water Report | Water Column Report | Clear Form | WATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 09/28/2002

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet) Min	Max	Avg
L	18S	35E	05				7	60	75	69
L	18S	35E	06				5	60	110	89
L	18S	35E	07				8	75	95	85

Record Count: 20

Attachment V: Site Metrics and Information Form

Attachment VI: Chevron Digging Permit

CHEVRON U.S.A. INC.

WEST ASSET TEAM / DIGGING PERMIT

PERMIT FOR DIGGING, TRENCHING, OR EXCAVATING WITH ANY TYPE OF POWERED TOOL OR MECHANIZED EQUIPMENT

Supervisor: ~~Rodney Bailey~~ Eddie Harper Date Authorized: 6-17-02
Field Location: Vacuum unit well 103
Type Work: Back dragging & excavating contaminated soil
Emergency Leak Repair
Specific Restrictions: /
Other:

Mechanical digging equipment should not be used within 12" of an underground line.

PERMIT REQUIREMENTS:

Basic Precautions:

	Yes	No	N/A
1. Has an underground line map been reviewed? ..... *Piping plan must be used when work is performed within a facility.*	✓		
2. Has the person operating the digging equipment isolated the energy source and performed LOTO? ..... *If electrical energy source cannot be accurately located, utilize electrical contractor with electric line locating equipment.*	✓		
3. Have digging operations been discussed w/ an employee familiar with the area?	✓		
4. Has a metal detecting line finder been used in the area to be excavated?	✓		
5. Are there any line markers near the excavation area?	✓		
6. Is there a visible right-of-way where the digging will be done?	✓		
7. Are there special concerns with any equipment, i.e., tank batteries, satellites, wells, buildings, power poles, etc., within 150' of the excavation area?	✓		
8. Are there special concerns with overhead power lines within 100' of the excavation?	✓		
9. Will digging exceed 16" in depth? *If yes, see Special Precaution below.*			✓
10. Have you discussed the importance of not creating a spill and what to do if one occurs?	✓		

If contact with a line results in a release of oil and or produced water contact Chevron Representative at Emergency Phone # listed below immediately.

Special Precaution:

If work is to be performed within a 3rd party right-of-way, location near a populated area, designated area, or if underground utilities are in the vicinity then 1-800-545-6005 (TX) or 1-800 321-2537 (NM) (One-Call Notification) MUST be made 48 hours in advance of any excavation work.

1. Has One-Call Notification been called? Yes Date of call: 6-17-02 Time of call: 11:45 am
2. Permitted start date and time: 6-19-02 21:45 pm Estimated duration of job: 6-19-02
3. One-Call Notification confirmation # 2002 [redacted] 250565

THIS PERMIT MUST BE COMPLETED PRIOR TO MECHANICAL DIGGING AND AVAILABLE FOR REVIEW AT THE WORKSITE.
If contact is made with an underground line or cable, this permit will be attached to the accident report, otherwise, it should be attached to the work ticket.

Rodney Bailey / _____ — Chevron Representative / Emergency Phone #
EPI — Contractor
6-12-02 — Date

REVISED
02/05/01

CHEVRON U.S.A. INC.

WEST ASSET TEAM / DIGGING PERMIT

PERMIT FOR DIGGING, TRENCHING, OR EXCAVATING WITH ANY TYPE OF POWERED TOOL OR MECHANIZED EQUIPMENT

Supervisor: ~~Rodney~~ Bailey Eddie JSA Date Authorized: 6-17-02
Field Location: Vacuum unit well 103
Type Work: Back dragging & Excavating Contaminated soil

Specific Restrictions: _____
Other: _____

Mechanical digging equipment should not be used within 12" of an underground line.

PERMIT REQUIREMENTS:

Basic Precautions:	Yes	No	N/A
1. Has an underground line map been reviewed? *Piping plan must be used when work is performed within a facility.*	✓		
2. Has the person operating the digging equipment isolated the energy source and performed LOTO? *If electrical energy source cannot be accurately located, utilize electrical contractor with electric line locating equipment.*	✓		
3. Have digging operations been discussed w/ an employee familiar with the area?	✓		
4. Has a metal detecting line finder been used in the area to be excavated?	✓		
5. Are there any line markers near the excavation area?	✓		
6. Is there a visible right-of-way where the digging will be done?	✓		
7. Are there special concerns with any equipment, i.e., tank batteries, satellites, wells, buildings, power poles, etc., within 150' of the excavation area?	✓		
8. Are there special concerns with overhead power lines within 100' of the excavation?	✓		
9. Will digging exceed 16" in depth? *If yes, see Special Precaution below.*			✓
10. Have you discussed the importance of not creating a spill and what to do if one occurs?	✓		

If contact with a line results in a release of oil and or produced water contact Chevron Representative at Emergency Phone # listed below immediately.

Special Precaution:

If work is to be performed within a 3rd party right-of-way, location near a populated area, designated area, or if underground utilities are in the vicinity then 1-800-545-6005 (TX) or 1-800 321-2537 (NM) (One-Call Notification) **MUST** be made 48 hours in advance of any excavation work.

1. Has One-Call Notification been called? Yes Date of call: 6-17-02 Time of call: 11:45 am
2. Permitted start date and time: 6-19-02 11:45 am Estimated duration of job: _____
3. One-Call Notification confirmation # 2002 350416

THIS PERMIT MUST BE COMPLETED PRIOR TO MECHANICAL DIGGING AND AVAILABLE FOR REVIEW AT THE WORKSITE.

If contact is made with an underground line or cable, this permit will be attached to the accident report, otherwise, it should be attached to the work ticket.

Rodney Bailey / _____ EPI _____
Chevron Representative / Emergency Phone # Contractor Date

REVISED
02.05.01

APPENDIX 7.A, Annual Inspection Certification Form

Sequence of Applying Energy Controls:

Indicate if the sequence of applying energy controls was followed by checking the appropriate line.

Y 1. Energy isolation was applied only by an authorized employee.

Y 2. All affected employees were notified.

Y 3. Equipment was prepared for shut down (types and level/quantity of energy and hazards involved).

Y 4. Equipment was properly shut down using correct operating controls.

Y 5. Equipment was isolated (operate all energy devices to assure that the equipment is isolated from the energy source).

Y 6. Lockout and tagout devices were applied.

Y 7. Provision was made for control of stored energy (stop all moving parts, install ground wires, relieve trapped pressure, release tension springs, block hydraulic parts, bleed lines down, blind or blank flanges, watch for stored energy to reaccumulate).

Y 8. Isolation of equipment was verified (clear of personnel, unnecessary tools and equipment).

Y 9. Work was performed while watching for any work operations that could reactivate the equipment.

Y 10. When work was finished, lockout/tagout device was removed.

APPENDIX 7.B (cont.)
Annual Inspection Log Book Example

The following is a record of the Annual Inspection Performance of the energy control procedures in place for the authorized employees and equipment involved in lockout/tagout operations.

Date of Inspection	Authorized Employee(s) Inspected	Equipment on which Energy Control Applied	Name of Inspector	Comments	Signature of Inspector
6/18/02	[redacted]	ChevTex VCU Well 103	Eddie J Harper	Lockout Tagout #1	Eddie J Harper
	Chuck Mata	ChevTex VCU Well 103		" " #2	
	John Robinson	ChevTex VCU Well 103		" " #3	