Form C-141

State of New Mexico
Oil Conservation Division

Incident ID	nPAC0605450765
District RP	1RP-731
Facility ID	30025030 91
Application ID	pPAC0605450923

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: ***Each of the following items must be included in the closure report.***

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection).
☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
☒ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Amy Barnhill Title: Waste and Water Specialist

Signature: Date: 2-27-2020

email: ABarnhill@chevron.com Telephone: 432-687-7108

OCD Only

Received by: Date:

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Bradford Billings Date: 08/26/2021

Printed Name: Bradford Billings Title: Envi.Spec.A

ChevronTexaco

Remediation Documentation
and
Closure Report

for the
Production Fluid Release
Associated with the

Vacuum Unit Well #103

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

September 2002

Prepared by

Environmental Plus, Inc.
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P.O. Box 1558
Eunice, New Mexico 88231
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Table of Contents

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)

- Unlined Surface Impoundment Closure Guidelines (February 1993)

Acceptable "Site Specific" thresholds for the CoCs, i.e., Benzene, Chloride, TPH^{8015m}, and BTEX, were determined based on the following;

- Depth to Ground water, i.e., distance from the lower most acceptable concentration to the ground water.
- Wellhead Protection Area, i.e., distance from fresh water supply wells.
- Distance to Surface Water Body, i.e., horizontal distance to all down gradient surface water bodies.

1.3.5.1 Ground Water Level

According to the Office of the New Mexico State Engineer ground water level database, the nearest water wells with known levels in section 6 of T18S R35E average to 89'bgs. The New Mexico Tech "geo-information" website, i.e., http://geoinfo.nmt.edu/.esrimap provided well data indicating consistent ground water depth. The windmill west of the site was not accessible for water level measurement. The wells are plotted on the topographical map in Attachment I and the well reports are included Attachment IV.

1.3.5.2 Depth to Ground Water Calculation

Depth to ground water, i.e., "the vertical distance from the lowermost contaminants to the seasonal high water elevation of the ground water." For the hydrocarbon source term, i.e., TPH^{8015m}, Benzene, and BTEX, this was determined to be 86'bgs.

1.3.5.3 Ground Water Gradient

According to the USGS (Nicholson & Clbesch), the gradient is to the southeast.

1.3.5.4 Wellhead Protection Area

A windmill well and drinking tub used by livestock are located approximately 200' west of the site and 130' from the affected area perimeter.

1.3.5.5 Distance to Nearest Surface Water Body

There are no naturally occurring surface water bodies located within a 1 mile radius of the site.

1.3.5.6 Soil Assessment

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). A site sampling map is included as Attachment I. 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. Analytical reports are summarized and included in Attachment III.

1.3.5.7 Ground Water Assessment

The ground water level is conservatively estimated to occur at ~89 feet bgs. The soil assessment did not indicate that the ground water had been impacted by the hydrocarbon source term. The water in the drinking tub at the windmill well west of the site was sampled on June 17, 2002 and tested for BTEX, Chloride, and TDS. BTEX was not detected above the instrument detection limit and the Chloride and TDS were monitored to be within background tolerances, i.e., Chloride = 44 mg/L and TDS = 343 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. Analytical reports are summarized and included in Attachment III.

1.3.6 NMOCD Site Ranking and Remedial Goals

The Site information and Metrics form in Attachment V summarizes the information about the site, shows a site ranking of 30 points, and sets the following remedial goals for the CoCs.

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			

1.4 Data Quality

All laboratory analytical results were within the data quality objectives listed below.

- Laboratory data must have > 85% recovery for TPH and BTEX and >75% recovery for general chemistry parameters.
- Laboratory data must have <15% Relative Percent Difference
- Field headspace analyses must be supported with instrument calibration data and calibration gas certification.

Duplicates or blanks were not submitted to the laboratory.

1.5 Project Safety

Hazards encountered at this site include the following;

- Moving equipment
- Buried pipelines
- Highway ingress/egress
- Excavation
- Potential Hydrogen Sulfide Gas

Employees and subcontractors were required to confirm current training in these hazards. Standard personal protective equipment included;

- Personal H_2S Monitor
- Hard-hat
- Safety Glasses
- Excavation Safety
- Steel Toed Boots/Shoes

1.6 Process/Procedure

The following sequence was used to guide project implementation.

1. Site visit: Photograph and map
2. Issue "One Call" and notifying utilities
3. Complete the "ChevronTexaco Digging Permit" and signature approval process

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

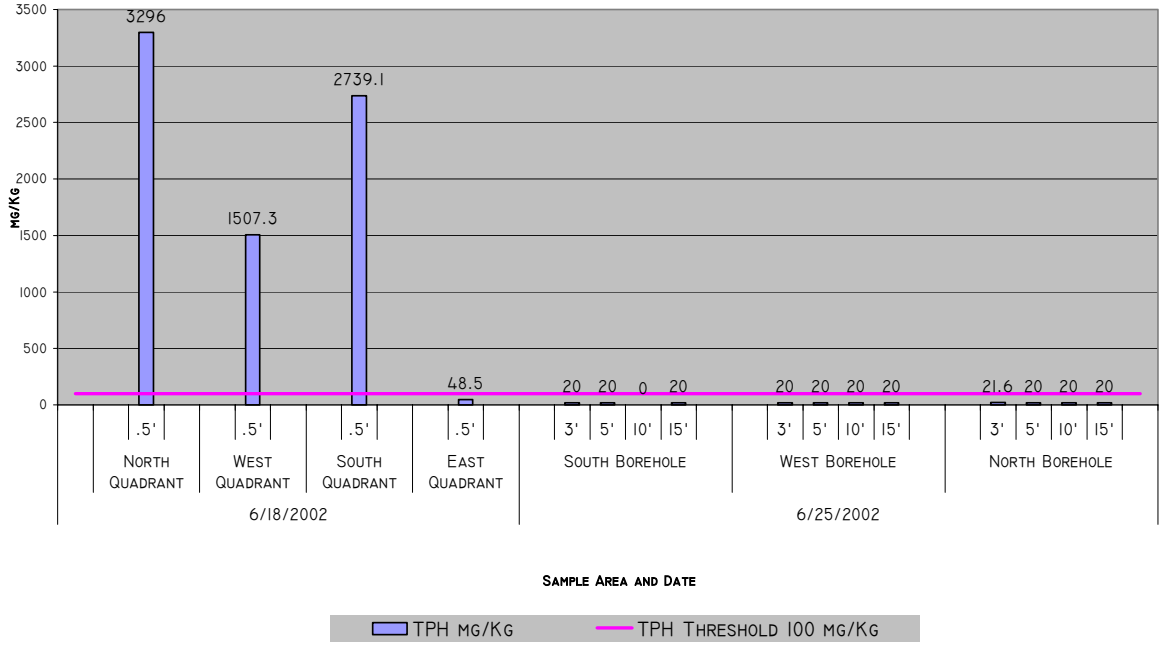
Composite near surface (0-6"below ground surface (bgs)) samples were collected from each quadrant on June 18, 2002 and the Headspace Volatile Organic Constituent (VOC) surveyed using a calibrated Photoionization Detector (PID). Readings were all less than 50 ppm and were therefore sent to Cardinal Laboratories 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

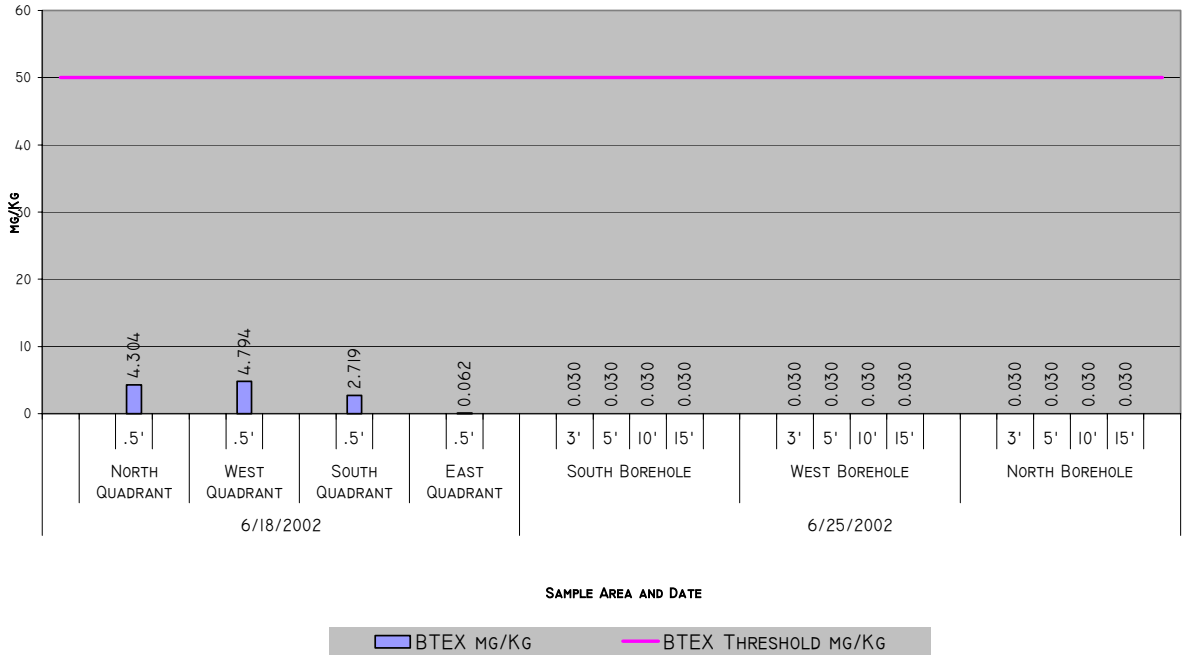
The NMOCD remedial goals have been achieved at this site. The Chloride concentrations in the South Borehole should not pose a threat to local ground water given that the surface is now covered with approximately 12" of compacted caliche. Application/treatment of the vegetated overspray area with MicroBlaze 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.

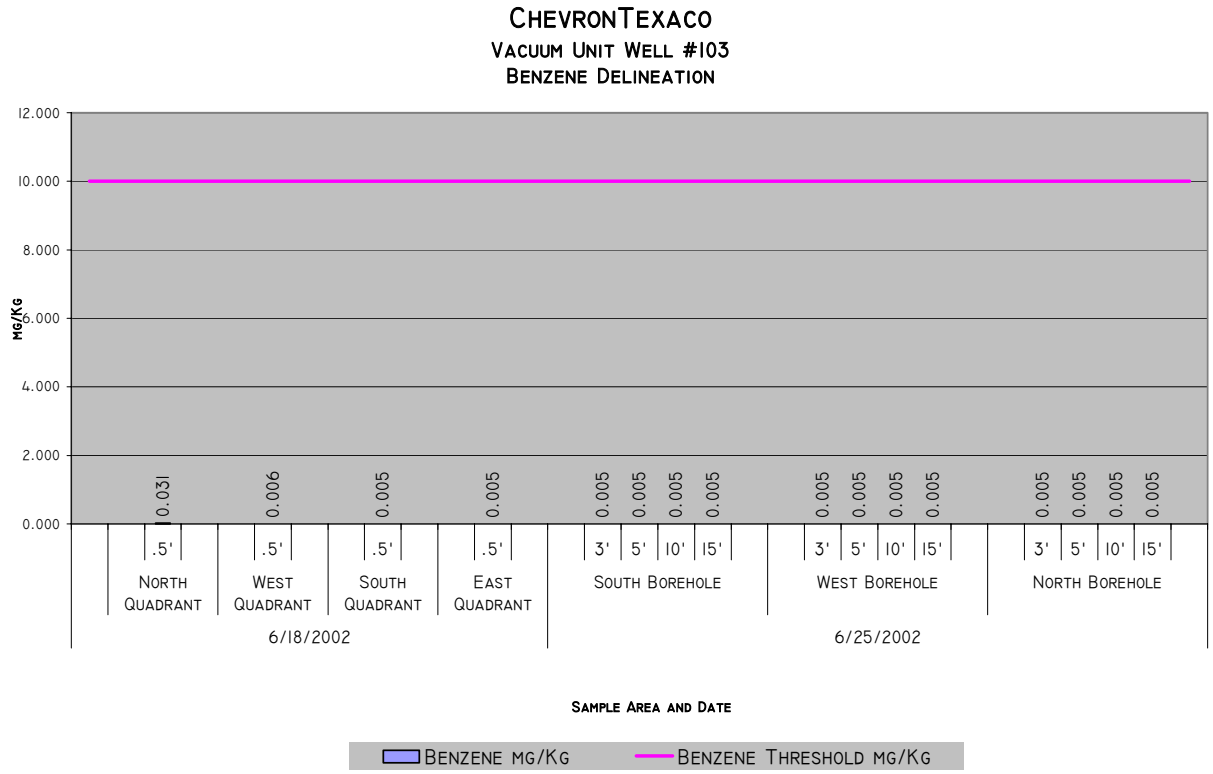
ChevronTexaco

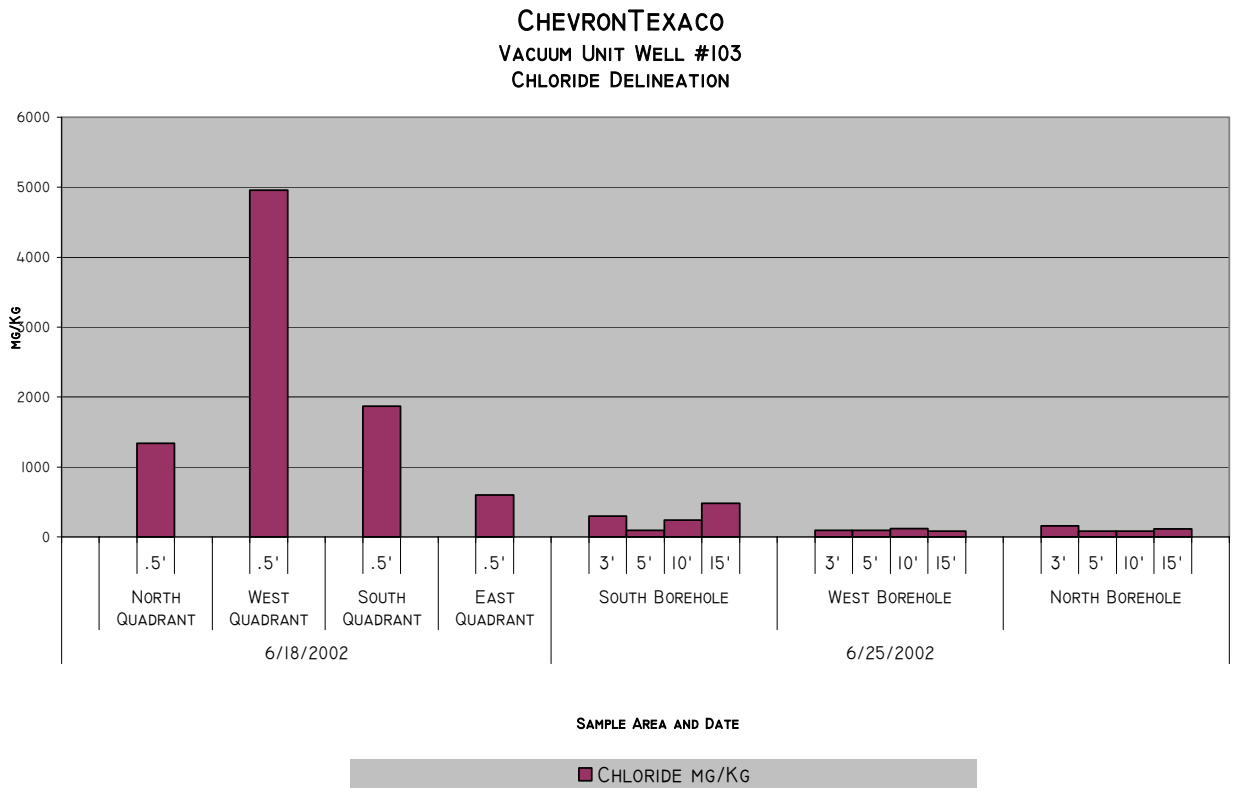
ChevronTexaco
Vacuum Unit Well #103
Total Petroleum Hydrocarbon 8015m Delineation



ChevronTexaco
Vacuum Unit Well #103
BTEX Delineation




ChevronTexaco
Vacuum Unit Well #103
Benzene Delineation
12.000
10.000
8.000
6.000
4.000
2.000
0.000
mg/Kg
0.031
0.006
0.005
0.005
0.005
0.005
0.005
0.005
0.005
0.005
0.005
0.005
0.005
0.005
.5'
3'
5'
10'
15'
North Quadrant
West Quadrant
South Quadrant
East Quadrant
South Borehole
West Borehole
North Borehole
6/18/2002
6/25/2002
Sample Area and Date
Benzene mg/Kg
Benzene Threshold mg/Kg


ChevronTexaco
Vacuum Unit Well #103
Chloride Delineation
6000
5000
4000
3000
2000
1000
0
mg/Kg
.5'
3'
5'
10'
15'
North Quadrant
West Quadrant
South Quadrant
East Quadrant
South Borehole
West Borehole
North Borehole
6/18/2002
6/25/2002
Sample Area and Date
Chloride mg/Kg

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.

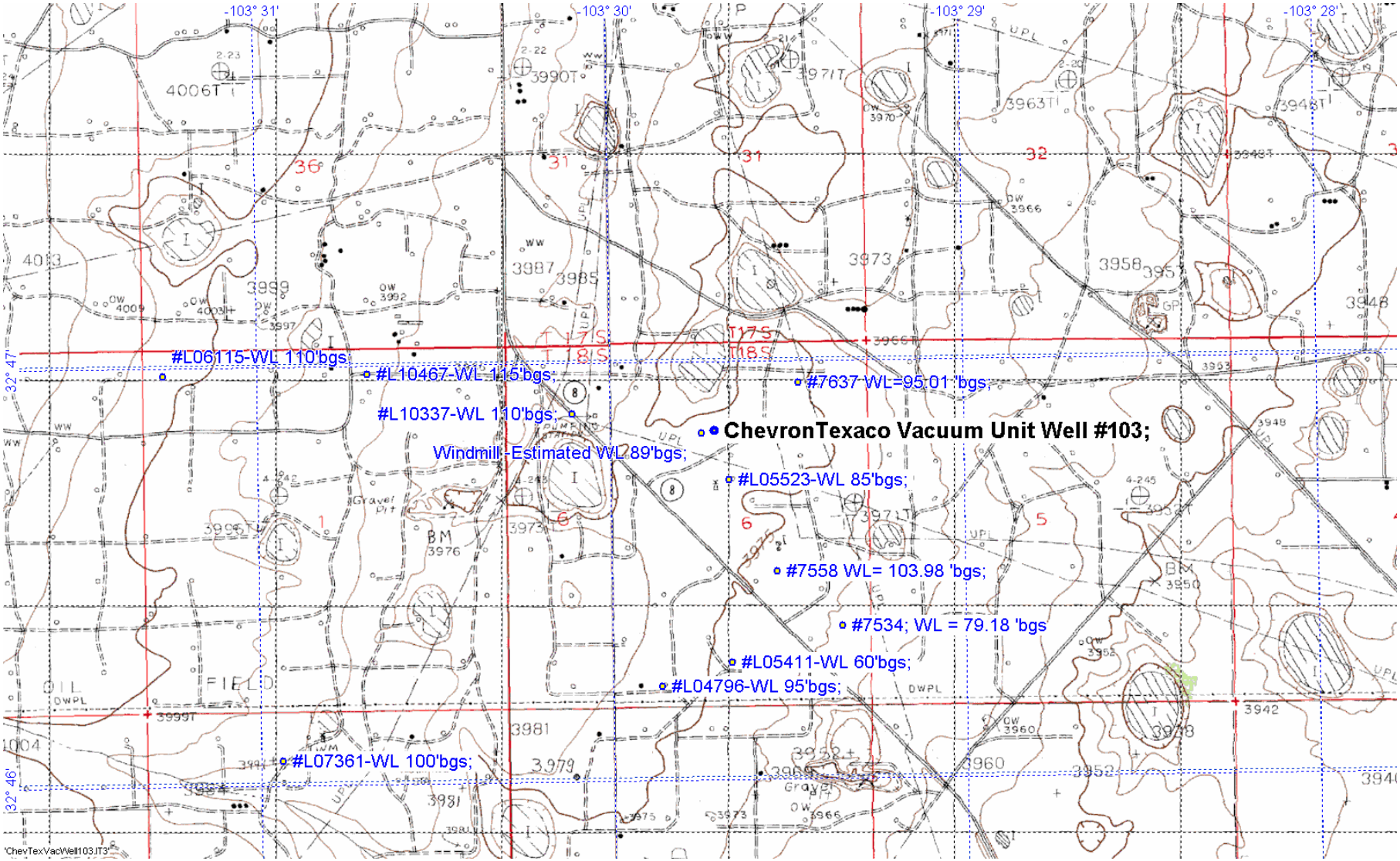
2.4 Conclusion

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.

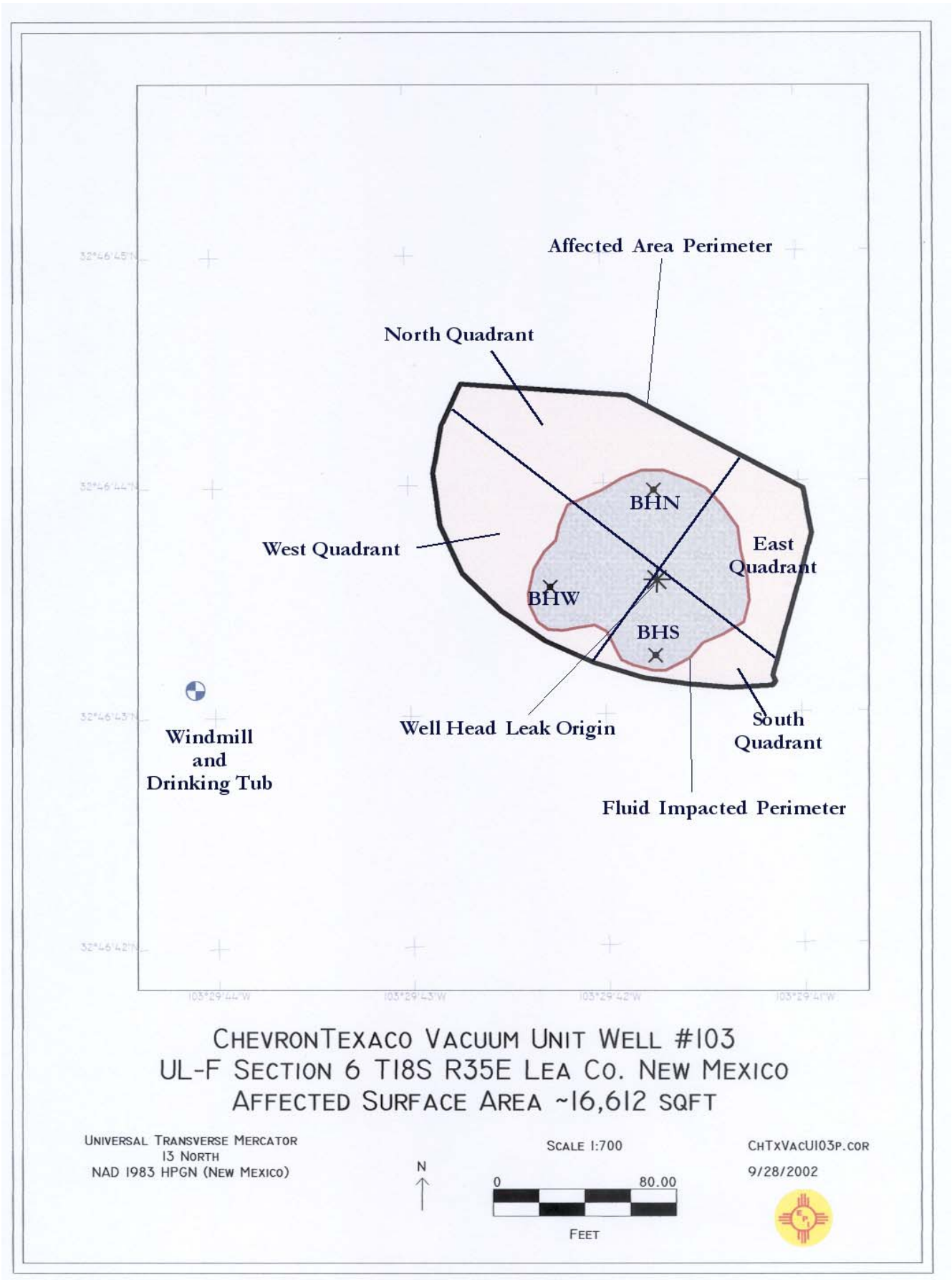
2.5 Follow Up

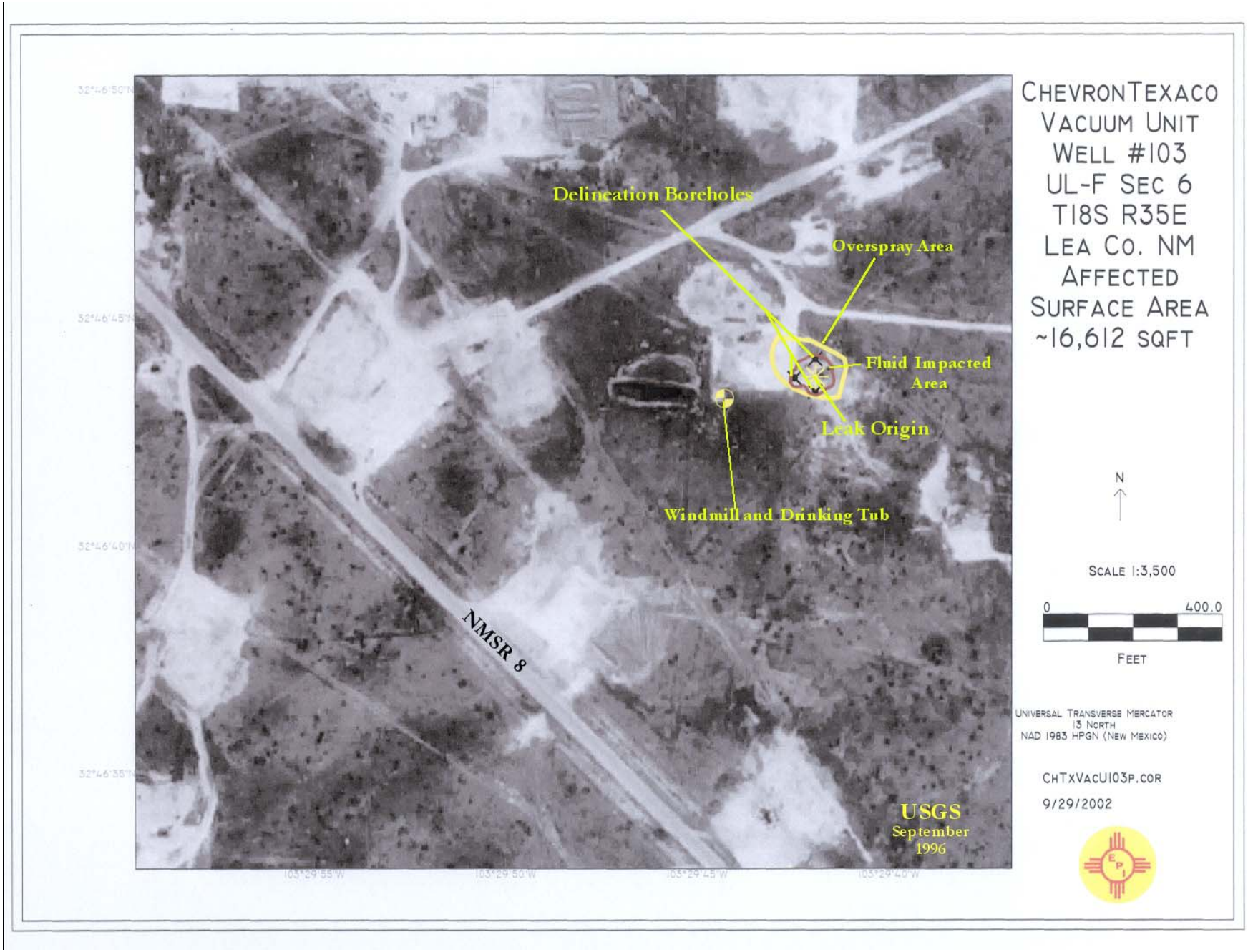
The vegetated overspray area will be visually monitored by ChevronTexaco personnel.

Attachment I: Site Maps



ChevronTexaco





Attachment II: Photographs


ChevronTexaco
Vacuum Unit Well #103
UL-F Section 6 T18S R37E
JUN 17 2002


ChevronTexaco
Vacuum Unit Well #103
UL-F Section 6 T18S R37E
JUN 17 2002


ChevronTexaco
Vacuum Unit Well #103
UL-F Section 6 T18S R37E
JUN 17 2002


CENTRAL VACUUM UNIT
ChevronTexaco
Vacuum Unit Well #103
UL-F Section 6 T18S R35E
Lea County New Mexico
JUN 19 2002


ChevronTexaco
Vacuum Unit Well #103
UL-F Section 6 T18S R35E
Lea County New Mexico
JUN 19 2002


ChevronTexaco
Vacuum Unit Well #103
UL-F Section 6 T18S R35E
Lea County New Mexico
JUN 19 2002


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.

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

[7]Italicized values are < the instrument detection limit.

[8]N/A Not Analyzed

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

ChevronTexaco

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

Chemist

6-20-02
Date

H6812

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: 06/18/02
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*	CTVUW10361702 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	2.9	4.8

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

Burgess J. Cooke
Chemist

6/20/02
Date

FOR 125.XLS

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

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
H68121-1	CTV UW 10361702 HP 40 ML	G	2	X							X		6/17/02	2 PM	X			
-2	CTV UW 10361702 ST 40 ML	G	2	X							X		"	2:30	X			
	CTV UW 10361702 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 Ey	Fax Results To Pat McCasland 505-394-2601
Relinquished by: Mata Ey	Date 6-18-02 Time 12:05	Received By: (lab staff) Amy Hill	REMARKS:
Delivered by Sampler	Sample Cool & Intact Yes / No	Checked By:	

ChevronTexaco

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	2.62
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

EDS1AB.XLS

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

Receiving Date: 06/19/02
Reporting Date: 06/20/02
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/AH

LAB NUMBER	SAMPLE ID	GRO (C_6-C_{10}) (mg/Kg)	DRO (>C_{10}-C_{28}) (mg/Kg)	Cl* (mg/Kg)
ANALYSIS DATE		06/19/02	06/19/02	06/20/02
H6814-1	CTVUW10361802N	368	2930	1340
H6814-2	CTVUW10361802W	47.3	1460	4960
H6814-3	CTVUW10361802S	59.1	2680	1870
H6814-4	CTVUW10361802E	<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.

Burgett J.A. Cooke
Chemist

6/20/02
Date

H6814A.XLS

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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

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 8015 m	BTEX (8021B/5260)	[redacted]	Chlorides		
H6814-1	CTVUW103@1802N	G	6			/					/		6-18-02		5	/		/		
-2	CTVUW103@1802W	G				/					/		6-18-02		/	/		/		
-3	CTVUW103@1802S	G				/					/		6-18-02		/	/		/		
-4	CTVUW103@1802E	G				/					/		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:	Date: 6-18-02 Time: 4:00	Received By:	Phone Result ☐ Yes ☐ No Additional Fax #:
Eddie J Harper		Roger Boone	Fax Result: ☐ Yes ☐ No
Relinquished By:	Date: 6/19/02 Time: 8:50	Received By: (Lab Staff)	REMARKS:
Roger Boone		Burgess J. Cook	
Delivered By: (Circle One)		Sample Condition: Cool / Intact ☒ Yes ☒ Yes ☐ No ☐ No	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:			

† 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-5'	<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

6/24/02
Date

H6845A.XLS

ChevronTexaco

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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

ChevronTexaco

CARDINAL LABORATORIES, INC.
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PAGE 03

Page ___ of ___

Company Name: Environmental Plus
Project Manager: Pat McCasland
Address: 2100 Ave O
City: Eunice State: N.M. Zip: 88231
Phone #: 505-394-3481 Fax #: 505-394-2601
Project #: Project Owner: Chevron/Texaco
Project Name: Vacuum Unit Well 103
Project Location:
Sampler Name: Brad Billman
FOR LAB USE ONLY

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

ANALYSIS REQUEST

Lab I.D.	Sample I.D.	MATRIX: (G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	PRESERV: ACID/BASE:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	TPH 8015m	BTEX 8021B	Chlorides
H08415-1	SCTVU103@2SEAST BH-3'	G	1			X					X		6-25-02	8:40	X	X	X
-2	SCTVU103@2SOUTH BH-5'	G	1			X					X		6-25-02	8:55	X	X	X
-3	SCTVU103@2SOUTH BH-10'	G	1			X					X		6-25-02	9:15	X	X	X
-4	SCTVU103@2SOUTH BH-15'	G	1			X					X		6-25-02	9:35	X	X	X
-5	SCTVU103@2WEST BH-3'	G	1			X					X		6-25-02	10:20	X	X	X
-6	SCTVU103@2WEST BH-5'	G	1			X					X		6-25-02	10:35	X	X	X
-7	SCTVU103@2WEST BH-10'	G	1			X					X		6-25-02	10:50	X	X	X
-8	SCTVU103@2WEST BH-15'	G	1			X					X		6-25-02	11:30	X	X	X

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Relinquished By: Date: 6-25-02 Time: Received By:
Relinquished By: Date: 6/25/02 Time: 13:20 Received By: (Lab Staff)
Delivered By: (Circle One) Sampler - UPS - Bus - Other: Cool Intact Yes No
Sample Condition CHECKED BY: (Initials)

REMARKS: Report to Rodney Bailey / Fax results as per PMCC

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

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

ChevronTexaco

CARDINAL LABORATORIES, INC.
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101 East Marland, Hobbs, NM 88240 (505) 393-2326 Fax (505) 393-2476

Page ____ of ____

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

ANALYSIS REQUEST

LAB USE ONLY 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
H985-9	SCTV1036 2502 NBH-3'	G	1			X					X		6-25-02	12:45	X	X	X
-10	SCTV1036 2502 NBH-5	G	1			X					X		6-25-02	1:00	X	X	X
-11	SCTV1036 2502 NBH-10	G	1			X					X		6-25-02	1:30	X	X	X
-12	SCTV1036 2502 NBH-15'	G	1			X					X		6-25-02	2:00	X	X	X

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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 invoicing, and all costs of collections, including attorney's fees.

Sampler Relinquished:	Date: 6-25-02	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time:		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date: 6/25/02	Received By: (Lab Staff)	REMARKS:
	Time: 3:20		
Delivered By: (Circle One)	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

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: 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	0.108	0.310
True Value QC		0.100	0.100	0.100	0.300
% Recovery		103	103	108	103
Relative Percent Difference		0.3	0.2	0.7	0.8

METHOD: EPA SW-846 8260

Chemist

10/3/02
Date

H7089.XLS

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
H7089-1	WCTVU10393002WM	G	3	X							X		9/30	8:30	X		X	X

Sampler Relinquished: Roger Boone	Date 9-30 Time 10:20	Received By:	**Fax Results To Pat McCasland 505-394-2601**
Relinquished by:	Date 9/30 Time 10:28	Received By: (lab staff) Burrell R Cooke	REMARKS:
Delivered by Sampler	Sample Cool & Intact: Yes (No)	Checked By:	

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

ChevronTexaco

New Mexico Office of the State Engineer Page 1 of 1

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

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet) Min	Max	Avg
L	17S	34E	36				2	102	105	104

Record Count: 2

http://seowaters.ose.state.nm.us/awdProd/awd.html?email_address=enviplus1@aol.com&t... 9/28/2002

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 18S Range: 34E Sections: 1,2,11,12

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

							(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
L	18S	34E	01				5	100	115	107
L	18S	34E	02				2	102	102	102
L	18S	34E	11				1	110	110	110
L	18S	34E	12				4	76	100	92

Record Count: 12

http://seowaters.ose.state.nm.us/awdProd/awd.html?email_address=enviplus1@aol.com&t... 9/28/2002

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 17S Range: 35E Sections: 31

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

							(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
L	17S	35E	31				2	95	117	106

Record Count: 2

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

							(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	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

http://seowaters.ose.state.nm.us/awdProd/awd.html?email_address=enviplus1@aol.com&t... 9/28/2002

Attachment V: Site Metrics and Information Form

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 VI: Chevron Digging Permit

ChevronTexaco

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 ~~2[illegible]~~ 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 / _____ EPI 6-12-02
Chevron Representative / Emergency Phone # Contractor 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 Shorter 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 250416

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

Date

REVISED
02.05.01

TITLE		
Energy Control (Lockout/Tagout) Procedures		SOP
EFFECTIVE 1-1-92	REVISED 12-1-96	Denver Division

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/SS 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.

Brake 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]	Chevron VCU Well 103	Eddie J Harper	Lockout Tagout #1	Eddie J Harper
	Chuck Motes	Chevron VCU Well 103		" " #2	
	John Robinson	Chevron VCU Well 103		" " #3	

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-141
Revised March 17, 1999

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR

☑ Initial Report ☐ Final Report

Name of Company: ChevronTexaco	Contact: Rodney Bailey
Address: 15 Smith Rd. Midland Tx 79702	Telephone No.: 915-687-7251
Facility Name: Central Vacuum Unit #103	Facility Type: Producing

Surface Owner	Mineral Owner	Lease No.
	API# 3002503091 GG CC	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
G	6	18S	35E					Lea

NATURE OF RELEASE

Type of Release: Produce water & Crude Oil	Volume of Release: 10 water 4 oil	Volume Recovered: 7 water 3 oil
Source of Release: Stuffing Box	Date and Hour of Occurrence: 6-17-02	Date and Hour of Discovery: 6-17-02
Was Immediate Notice Given? ☐ Yes ☐ No ☑ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☐ Yes ☑ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
One foot of soil was Removed and hauled to Texaco Landfarm Ong location so Caliche was replaced. Report with analysis will Follow-

Describe Area Affected and Cleanup Action Taken.*
Affected Area 16,612 ft. Ground Water 89 ft.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Rodney Bailey	OIL CONSERVATION DIVISION
Printed Name:	Approved by District Supervisor:
Title: HES Champion	Approval Date: / Expiration Date:
Date: 6-24-02 Phone:	Conditions of Approval: / Attached ☐

* Attach Additional Sheets If Necessary

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 37189

CONDITIONS

Operator: CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 37189
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
bbillings	None	8/26/2021