

1R - 358

REPORTS

DATE:

2002

AMERADA HESS CORPORATION

SAMUEL W. SMALL, PE
OFFICE 915/758-6741
FAX 915/758-6768

P.O. BOX 840
SEMINOLE, TEXAS 79360
915/758-6700

July 22, 2002

Mr. Randy Bayliss
New Mexico Oil conservation Division
1220 S. St. Francis Drive
Santa Fe, New Mexico 87504

RECEIVED

JUL 29 2002

Environmental Bureau
Oil Conservation Division

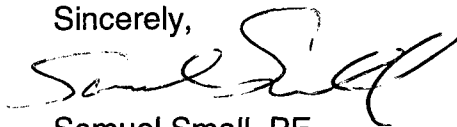
RE: **REMEDIATION PROJECT**
NMGSAU Battery No. 67
Lea County, NM

Dear Mr. Bayliss:

Enclosed find an interim report of the activities conducted to date at the subject abandoned battery site. Amerada Hess is currently evaluating remediation options for the site. The monitor wells will be re-sampled, static fluid levels will be obtained and normalized to surveyed ground level elevations and the contamination concentrations in the spoils piles will be delineated. Up-dated information will be provided to the NMOCD when it is obtained.

If you have any questions, please contact the undersigned at 915-758-6741.

Sincerely,



Samuel Small, PE
Environmental Coordinator

Xc: NMOCD District 1 w/enclosure
Houston Environmental File w/enclosure
PO Environmental File w/enclosure
Monument File w/o enclosure

**PRELIMINARY SITE INVESTIGATION REPORT
AND
REMEDATION WORK PLAN**

RECEIVED

JUL 29 2002

Environmental Bureau
Oil Conservation Division

**Amerada Hess Corporation
Chevron May Love
Tank Battery**

**SE ¼, SE ¼, Section 32, Township 19 South, Range 37 East
Lea County, New Mexico**

Prepared For:

**Amerada Hess Corporation
P. O. Box 840
Seminole, Texas 79360**

ETGI Project # AHC 1205R

Prepared By:

**Environmental Technology Group, Inc.
2540 W. Marland
Hobbs, New Mexico 88240**

June 2002


Camille Reynolds
Project Manager



Ken Dutton
New Mexico Office Manager
Senior Project Manager

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1.0 INTRODUCTION

On behalf of Amerada Hess Corporation Environmental Technology Group, Inc. (ETGI) is pleased to submit this *Preliminary Site Investigation and Remediation Work Plan* as a summary of activities completed to date at the Chevron May Love Tank Battery in Lea County, New Mexico. The site is located west of US Highway 8 approximately 1 mile south of the city of Monument, New Mexico, in the SE $\frac{1}{4}$, SE $\frac{1}{4}$ of Section 32, Township 19 South, Range 37 East, in Lea County, New Mexico. For reference, a site location and site map, are provided as Figures 1 and 2, respectively. Site investigation activities completed to date were conducted to complete delineation of the vertical and lateral extent of possible soil and ground water impactation at the site.

2.0 SUMMARY OF FIELD ACTIVITIES

ETGI was contracted on September 11, 2001 by Mr. Ricky Solomon of Amerada Hess Corporation to begin remediation activities at the Chevron May Love Tank Battery. The site consisted of 3 tanks, a heater treater, a pit area to the east, which was approximately 20 feet by 20 feet, a flare area to the northwest and a Rice Operating Junction Box to the southwest of the former tank battery area. Amerada Hess Corporation personnel removed the tanks, heater treater, and various pipelines. Rice personnel removed the Rice Junction Box and associated line after confirmation sampling was conducted. On September 17, 2001, ETGI personnel cut, capped and removed an EOTT/Enron sales line from the site that traveled through the former tank battery in an east west direction. Upon removal of the inoperable equipment ETGI began scrapping the asphaltene area surrounding the former tank battery and excavation of the former tank battery area, as per Mr. Solomon's request. Upon the removal of the asphaltene layer a composition sample of the stockpile was collected on September 18, 2001. Excavation of the former tank battery area was expanded to include the stained area to west and the Rice Junction Box area per Mr. Solomon's request. A composite sample was collected at a depth of 15 feet bgs from the former tank battery area on September 26, 2001. Excavation of the east pit began on September 27, 2001. The east pit was excavated to a depth of approximately 18 feet bgs and measured approximately 113 feet by 72 feet. Due to landowner request on October 2, 2001 a backhoe was mobilized to excavate pilot holes in order to ascertain the location of a suspected pit to the north of the tank battery area. Seven pilot holes were excavated to a depth of approximately 6 to 8 feet bgs. Mr. Solomon and Mr. Ed Johnson witnessed the excavation. The pilot holes consisted of topsoil, which was underlain by a caliche layer to a depth of approximately 6 to 8 feet bgs. There was no evidence of hydrocarbon impact to the area; the pilot holes were then backfilled. The area of the former flare was excavated to a depth of approximately 1.5 feet bgs and measured approximately 20 feet by 15 feet. Excavation of the former tank battery area continued to remove the stained soil from the pit bottom and the northern wall. On October 3, 2001 composition samples were collected from the east pit, soil samples were obtained from the pit bottom, the north sidewall, east sidewall, south sidewall, and west sidewall. Ground water was encountered and a sample was collected at 30 feet bgs in the former tank battery pit on October 5, 2001.

On October 10, 2001 ETGI mobilized an air-rotary drilling rig operated by Eades Drilling of Hobbs, New Mexico to delineate the lateral and vertical extent of subsurface impact. ETGI completed 4 ground water monitoring wells and 1 soil boring at this location. The locations of

the ground water monitoring wells and soil boring are depicted on Figure 2, and the boring logs are provided as Appendix A. As indicated on Figure 2, ground water monitoring well MW-1 and soil boring SB-1 were positioned to define the lateral and vertical extent of the subsurface impact to the area north of the former tank battery area. Ground water monitoring wells MW-2, MW-3, and MW-4 were positioned to define the vertical and lateral extent of subsurface impact to the area south and southeast of the former tank battery area. The ground water monitoring wells and soil boring were completed to a maximum depth of approximately 38 feet bgs. During the boring process, soil samples were collected at five-foot intervals utilizing either a split spoon or grab sampling methods. The soil samples collected during the boring process were field screened with a photoionization detector (PID). Each sample collected was visually inspected and described as to soil type, grain size, sorting characteristics, odor and staining present. Soil samples collected from the ground water monitoring wells MW-1, MW-2, MW-3, MW-4 and soil boring SB-1 did not exhibit any visual signs of staining, olfactory evidence or elevated PID readings during installation.

On October 18, 2001 the east pit was excavated to an approximate depth of 20 feet bgs. Excavation of the former tank battery area continued to remove visually stained soil in the pit bottom as per Mr. Solomon's request. Mr. Larry Johnson of the NMOCD was contacted on October 23, 2001 to witness the collection of a soil samples from the former tank battery pit bottom and the east pit bottom. On November 13, 2001 a 4 foot protective clay barrier was completed in the bottom of the east pit and composite samples were obtained from the east and west stockpiles. On November 27, 2001 the former tank battery pit bottom was excavated to the clay layer and additional excavation was conducted to remove the visually stained soil on the northwest sidewall. Per Mr. Solomon's request on November 23, 2001 the east pit was backfilled and confirmation samples were obtained of the backfill; soil samples were also collected from the bottom of the former tank battery pit at an approximate depth of 32 feet bgs and from the northwest sidewall. Per Mr. Solomon's request sand was obtained from the landowner and transported to the site to be installed in the bottom of the former tank battery pit, Mr. Johnson arrived on site and at his request operations at the site were suspended. On January 21, 2002 ETGI was contacted to obtain a sample of the ground water in the former tank battery area and a soil sample of the sand with Mr. Solomon of Amerada Hess Corp. and NMOCD representative Mr. Larry Johnson present.

All soil samples that were submitted to Environmental Lab of Texas, Odessa, Texas were analyzed for Total Petroleum Hydrocarbons-gasoline range organics/diesel range organics (TPH-GRO/DRO) utilizing EPA Method SW 846-8015M; Benzene, Toluene, Ethylbenzene, and Total Xylenes (BTEX), utilizing EPA Method SW 846-8021B/5030; and Total Chloride concentrations using EPA Method SW 846-9253. Ground water samples were also submitted to Environmental Lab of Texas, and tested for BTEX using EPA Method SW 846-8021B/5030, and Total Chloride concentrations utilizing EPA Method SW 846-9253. The soil and ground water analytical results are summarized in Tables 1 and 2, respectively and the laboratory results are provided as Appendix B.

Research was conducted on the New Mexico Office of the State Engineer's (NMOSE) Water Well Database for information on well locations and the average depth to ground water in the area. The database indicated that there are 6 registered water wells within Section 32. The

average depth to ground water as determined from these wells is 29 feet bgs. A copy of the NMOSE Water Well Report is provided in Appendix C. Based on local knowledge, the prevailing gradient of the groundwater in the release area trends to the southeast.

3.0 SITE DESCRIPTION

3.1 Regional Geology/Hydrogeology

In the site vicinity, the surface is composed of unconsolidated, wind blown sands and finer materials associated with the Tertiary Ogallala Formation, which serves as a major aquifer for southeastern New Mexico and several high plains states. Unconfined ground water is typically present in these sands at varying depths and generally flows from the northwest to the southeast. This aquifer is typically characterized by relatively high hydraulic conductivity and transmissivity.

The Ogallala is underlain by the Triassic Dockum Formation, locally referred to as the "red beds". While there are sand lenses within the Dockum Formation, it is more typically characterized by red silt and micaceous shale in which detectable ground water is often absent or limited in extent. Where ground water is present, the aquiclude is usually characterized by relatively low hydraulic conductivity and transmissivity.

The site is located in the *Southern Desertic Basins, Plains, and Mountains* physiographic feature as classified in the Lea County Soil Survey by the U.S. Department of Agriculture Soil Conservation Service, January 1974. The average surface elevation in the area ranges between 3,000 to 4,000 feet above sea level with the average surface topography sloping to the south and southeast at approximately 10 feet per mile. The ground water gradient in the region appears to reflect the topography with a similar slope to the south and southeast with some local variations. The site is located on Berino-Cacique Association type soils. This soil complex is about 35 percent Berino soils and 25 percent Cacique soils. Maljamar, Midessa, Pyote, Simona, Jal, Tonuco, and Wink soils make up the remaining 40 percent. This association consists of nearly level and gently sloping, well-drained soils on uplands in the southern part of Lea County. The soils generally have a loamy fine sand surface layer and a sandy clay loam subsoil. Berino-Cacique Loamy Fine Sand is moderately permeable and runoff is very slow. It has a rapid water intake and the available water holding capacity is 7 to 10 inches. Soil blowing is a severe hazard in this region.

Data collected by the United States Weather Bureau indicate that the average annual precipitation in the site vicinity is approximately 10 to 13 inches. This amount occurs primarily as storm events during the period between June and October. Infiltration and evaporation rates are generally high resulting in limited surface flow from these events. The primary utilization of these lands consists of range, wildlife habitat, and recreational areas.

3.2 Site Geology/Hydrogeology

At the site, the subsurface is composed primarily of unconsolidated sands, which vary in color from tan to white to red. The sands are very fine grained, well-sorted and interspersed with calcareous nodules. The sand was dry to a depth of approximately 20 to 25 feet bgs. Ground

water was detected at a depth of approximately 26 to 30 feet bgs as depicted on the soil boring logs in Appendix A.

3.3 New Mexico Oil Conservation Division (NMOCD) Soil Classification

As stated in the previous section, field data have determined depth to ground water at the site is approximately 29 to 30 feet bgs.

The water well database, maintained by the New Mexico State Engineer's Office, was accessed in order to determine the location and type of nearby water wells in the area. The data indicate that there are no known water wells located within 1,000 feet of the site.

3.4 Distribution of Hydrocarbons in the Unsaturated Zone

Review of laboratory analysis of the soil samples collected from MW-1, MW-2, MW-3, and MW-4 indicate that the soil in these areas has not been impacted by oil and gas production activities. The former tank battery site and east pit were excavated to clean (<100 ppm TPH) material. Soil sample analyses are summarized in Table 1.

The distribution of hydrocarbons in the unsaturated zone has been estimated by utilizing the following techniques:

- Visual observation of surface staining
- Visual observation of subsurface soil samples, and
- Review of laboratory analyses of selected soil samples.

3.5 Distribution of Hydrocarbons in the Saturated Zone

Ground water was encountered at depths varying from 26 to 30 feet bgs in the monitoring wells. Reviews of the analytical results from the ground water samples collected indicate ground water has not been impacted at the location, as shown on Table 2.

4.0 QA/QC PROCEDURES

4.1 Soil Sampling

Samples of subsurface soils were obtained utilizing a split spoon sampler. Representative soil samples were divided into two separate portions using clean, disposable gloves and clean sampling tools. One portion of the soil sample was placed in a disposable sample bag. The bag was labeled and sealed for headspace analysis using a PID calibrated to a 100 ppm isobutylene standard. Each sample was allowed to volatilize for approximately thirty minutes at ambient temperature prior to conducting the analysis.

The other portion of the soil sample was placed in a sterile glass container equipped with a Teflon-lined lid furnished by the analytical laboratory. The container was filled to capacity to limit the amount of headspace present. Each container was labeled and placed on ice in an insulated cooler. Upon selection of samples for analysis, the cooler was sealed for shipment.

to the laboratory. Proper chain-of-custody documentation was maintained throughout the sampling process.

Soil samples were delivered to Environmental Lab of Texas, Inc., in Odessa, Texas for BTEX, TPH, and Total Chloride analyses using the methods described below. Samples were analyzed for BTEX, TPH-GRO/DRO, and Total Chloride concentration within fourteen days following the collection date.

The soil samples were analyzed as follows:

- BTEX concentrations in accordance with EPA Method 8260B/5030
- TPH concentrations in accordance with modified EPA Method 8015M GRO/DRO
- Total Chloride concentrations in accordance with EPA Method 9253

4.2 Ground Water Sampling

The ground water monitoring wells were purged of approximately 3 well volumes of water or until the wells were dry using an electrical Grundfos Pump. Ground water was allowed to recharge and samples were obtained using a disposable Telfon sampler. Water samples were stored in clean, glass containers provided by the laboratory and placed on ice in the field. Purge water was collected in a polystyrene tank and disposed of by Pate Trucking, Hobbs, New Mexico or Vista Trucking, Eunice, New Mexico utilizing a licensed disposal facility (NMOCD AO SWD-730). Groundwater samples were delivered to Environmental Lab of Texas, Odessa, Texas for analysis of BTEX, and Chlorides using the methods described below. All samples were analyzed within approved holding times following the collection date.

- BTEX concentrations in accordance with EPA Method 8260B/5030;
- Total Chlorides concentrations in accordance with EPA Method 9253

4.4 Decontamination Of Equipment

The drilling crew utilized a high-pressure steam cleaning machine to wash the drilling and sampling equipment prior to drilling and prior to starting successive hole. Prior to use, the sampling equipment was cleaned with Liqui-Nox[®] detergent and rinsed with distilled water. A single-use, clear, poly-liner was utilized for collection of each sample.

4.4 Laboratory Protocol

The laboratory was responsible for proper QA/QC procedures after signing the chain-of-custody form. These procedures were either transmitted with the laboratory reports or are on file at the laboratory.

5.0 LIMITATIONS

Environmental Technology Group, Inc. has prepared this Preliminary Site Investigation Report to the best of its ability. No other warranty, expressed or implied, is made or intended. Environmental Technology Group, Inc. has examined and relied upon documents referenced

in the report and has relied on oral statements made by certain individuals. Environmental Technology Group, Inc. has not conducted an independent examination of the facts contained in referenced materials and statements. We have presumed the genuineness of the documents and that the information provided in documents or statements is true and accurate. Environmental Technology Group, Inc. has prepared this report in a professional manner, using the degree of skill and care exercised by similar environmental consultants. Environmental Technology Group, Inc. also notes that the facts and conditions referenced in this report may change over time and the conclusions and recommendations set forth herein are applicable only to the facts and conditions as described at the time of this report.

This report has been prepared for the benefit of Amerada Hess Corporation. The information contained in this report, including all exhibits and attachments, may not be used by any other party without the express consent of Environmental Technology Group, Inc. and/or Amerada Hess Corp.

TABLES

TABLE 1

SOIL CHEMISTRY

AMERADA HESS
CHEVRON MAY LOVE
MONUMENT, NEW MEXICO
ETGI PROJECT # AHC-1205R

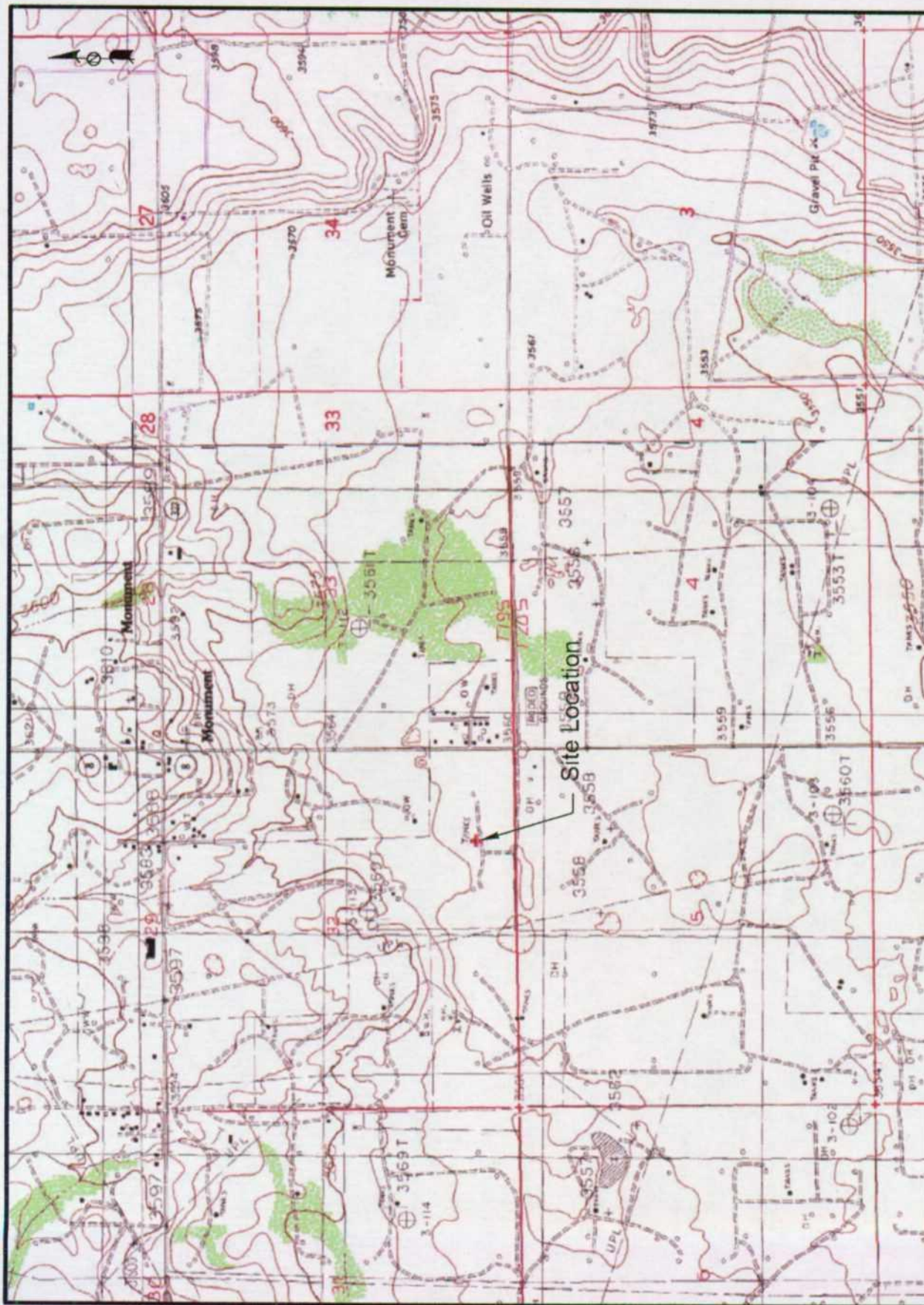
SAMPLE LOCATION	SAMPLE DATE	METHOD: EPA SW 846-8021B, 5030					METHOD: 8015M		METHOD: 9253
		BENZENE (mg/kg)	TOLUENE (mg/kg)	ETHYL- BENZENE (mg/kg)	M.P.- XYLENES (mg/kg)	O-XYLENE (mg/kg)	GRO (mg/kg)	DRO (mg/kg)	
ASPHALTENE	09/18/01	<0.025	0.156	0.191	0.688	0.124	<50	1170	CHLORIDES (mg/kg) 37
TANK BATTERY BOTTOM	09/26/01	<0.025	0.050	0.078	0.354	0.087	<125	4220	246
EAST PIT, NORTH WALL	10/03/01	<0.025	0.062	<0.025	0.093	<0.025	<50	138	20
EAST PIT, WEST WALL	10/03/01	<0.025	0.074	0.029	0.147	<0.025	<50	60	21
EAST PIT, EAST WALL	10/03/01	<0.025	0.031	<0.025	0.029	<0.025	<50	62	21
EAST PIT, BOTTOM	10/03/01	<0.040	<0.040	<0.040	0.052	<0.040	<100	574	21
EAST PIT, BOTTOM	10/23/01	<0.025	<0.025	<0.025	<0.025	<0.025	<10	24	51
EAST PIT, SOUTH WALL	10/03/01	<0.025	<0.025	<0.025	0.038	<0.025	<10	12	21
MW-1 30'	10/10/01						<10	<10	18
MW-2 30'	10/10/01						<10	<10	24
MW-3 25'	10/10/01						<10	<10	18
MW-4 25'	10/10/01						<10	<10	24
TANK BATTERY PIT BOTTOM	10/23/01	<0.025	<0.025	<0.025	0.033	<0.025	<50	1190	66
EAST STOCKPILE	11/13/01	<0.100	1.62	0.334	0.263	<0.100	<10	811	42
WEST STOCKPILE	11/13/01	<0.025	0.042	<0.025	0.030	<0.025	<10	649	310
STAINED WEST STOCKPILE	11/13/01	<0.100	<0.100	<0.100	<0.100	<0.100	<10	358	35
FORMER TANK BATT. PIT BOTTOM	11/28/01	<0.025	<0.025	<0.025	<0.025	<0.025	<10	41	66
EAST PIT BACKFILL 5-10'	11/28/01	<0.025	<0.025	<0.025	<0.025	<0.025	<10	202	18
FORMER TANK BATT. NW SIDEWALL	11/28/01	<0.025	<0.025	<0.025	<0.025	<0.025	<10	142	75
COMP. SAND	01/21/02	<0.025	<0.025	<0.025	<0.025	<0.025	<10	<10	18

GROUND WATER CHEMISTRY

AMERADA HESS
CHEVRON MAY LOVE
MONUMENT, NEW MEXICO
ETGI PROJECT # AHC-1205R

[illegible]

FIGURES



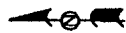
Environmental Technology
Group, Inc.



Figure 1
Site Location Map
Anarada Hess Corp.
Chevron May Love
Monument, NM



Scale 1" = 200'
June 20, 2002
ETGI Project # AHC0205R
Prep By: JDI
Checked By: CR



SB-1

Flare Area

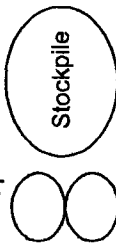


Groundwater Depth	31 ft. BGS
Benzene	<0.001 ppm
Toluene	<0.001 ppm
Ethyl-Benzene	<0.001 ppm
Xylenes	<0.001 ppm
Chlorides	266 ppm



MW-1

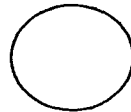
Stockpile



Stockpile

Former Tank Battery Area

West Stockpile



East Pit

East Stockpile

Caliche Road



MW-4

Groundwater Depth	26.5 ft. BGS
Benzene	<0.001 ppm
Toluene	<0.001 ppm
Ethyl-Benzene	<0.001 ppm
Xylenes	<0.001 ppm
Chlorides	301 ppm



MW-2

Groundwater Depth	31 ft. BGS
Benzene	<0.001 ppm
Toluene	<0.001 ppm
Ethyl-Benzene	<0.001 ppm
Xylenes	<0.001 ppm
Chlorides	248 ppm



MW-3

Groundwater Depth	26.5 ft. BGS
Benzene	<0.001 ppm
Toluene	<0.001 ppm
Ethyl-Benzene	<0.001 ppm
Xylenes	<0.001 ppm
Chlorides	213 ppm

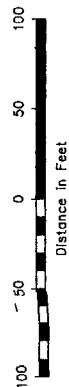


Figure 2
Site Map

Amaranda Hess Comp.
Chevron May Love
Monument, NM



Environmental Technology
Group, Inc.

Scale: 1" = 100'
June 20, 2002
Prep By: JDU
Checked By: CR
ETG Project #: A42126R

APPENDICES

APPENDIX A
SOIL BORING LOGS

Soil Boring SB-1

Depth
(feet)

0 5 10 15 20 25 30 35 40

Soil
Columns



PID
Reading

0.0

0.0

0.0

0.0

Petroleum
Odor

None

None

None

None

Petroleum
Stain

None

None

None

None

Soil
Description

Sand (SP)-Tan, Very Fine Grained, Well Sorted, Imbedded with Caliche Nodules.

Caliche Layer

Sand (SP)-Tan, Very Fine Grained, Well Sorted, Imbedded with Caliche Nodules.

Sand (SP)-Tan, Very Fine Grained, Well Sorted, Imbedded with Abundant Caliche Nodules.

Boring Was Plugged And Abandoned With Bentonite
No Groundwater Was Encountered

Cavity - No Return

PID Head-space reading in ppm obtained
with a photo-ionization detector.
Indicates samples selected for
laboratory analysis.

Date Drilled: October 10, 2001

Soil Boring Log Details
SB-1

Amarada Hess Corp.

Chevron May Love

Monument, NM

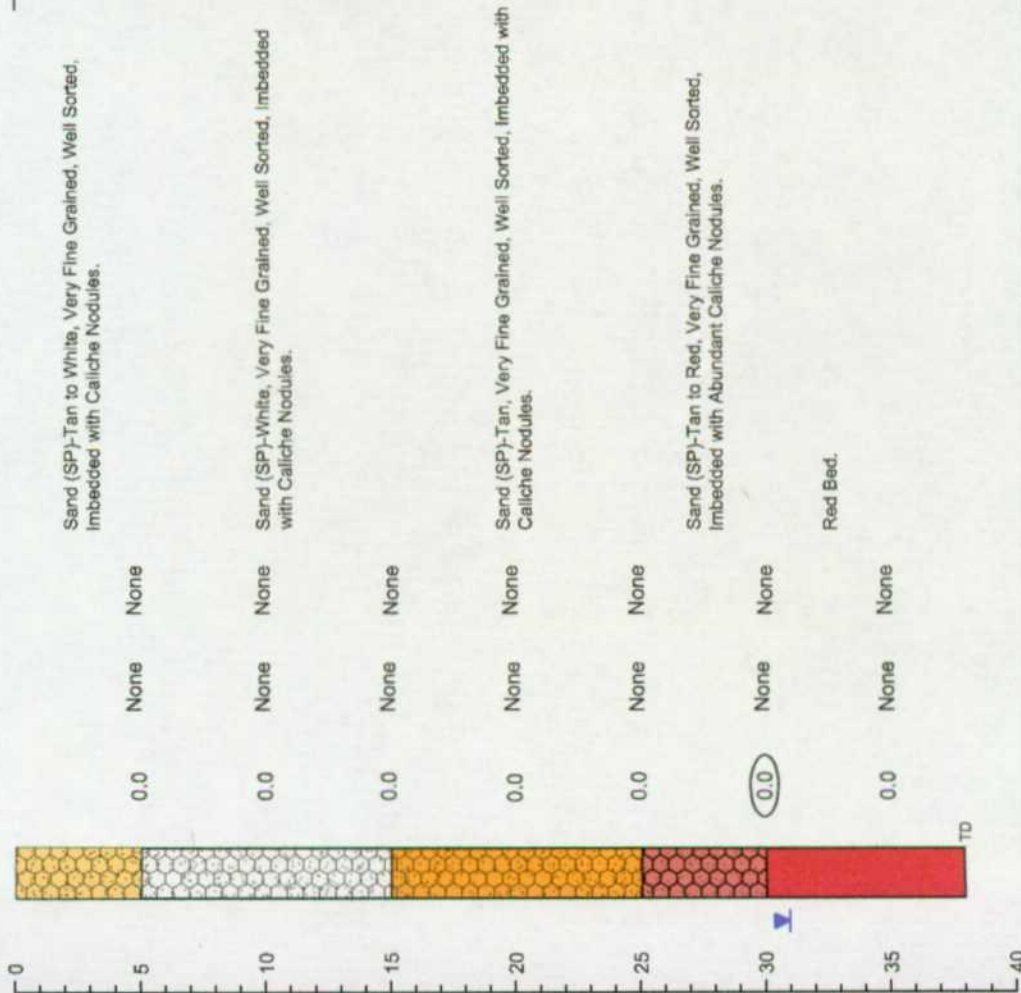
Environmental Technology
Group, Inc.



Scale Use Scale
June 27, 2002
Prep By: JDU
Checked By: CR
ETGI Project #: AHC1200R

Monitor Well MW-1

Depth (feet) Soil Columns PID Reading Petroleum Odor Soil Stain Description



Monitoring Well Details

Date Drilled: 10 - 10 - 01
 Thickness of Bentonite Seal: 5 ft
 Length of PVC Well Screen: 15 ft
 Depth of PVC Well: 38 ft
 Depth of Exploratory Well: 38 ft

Grout Surface Seal

Bentonite Pellet Seal

Sand Pack

Screen

Indicates the groundwater level measured on date of drilling.

PID Head-space reading in ppm obtained with a photo-ionization detector.

Indicates samples selected for laboratory analysis.

Completion Notes

- The monitoring well was installed on date using air rotary drilling techniques.
- The well was constructed with 2" ID, 0.020 inch factory slotted, threaded joint, schedule 40 PVC pipe.
- The well is protected with a locked stick up steel cover and a compression cap.
- The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
- The depths indicated are referenced from the ground surface.

Soil Boring Log Details
MW-1

Amarada Hess Corp.

Chevron May Love

Monument, NM



Environmental Technology
Group, Inc.

Scale/Use Scale Prep By: JDU Checked By: CR

June 27, 2002 ETGI Project # AHC1208R

Monitor Well MW-2

Depth (feet) Soil Columns PID Reading Petroleum Odor Soil Stain Description



Monitoring Well Details

Date Drilled: 10 - 10 - 01
 Thickness of Bentonite Seal: 1.5 ft
 Length of PVC Well Screen: 15 ft
 Depth of PVC Well: 33 ft
 Depth of Exploratory Well: 33 ft

Grout Surface Seal
 Bentonite Pellet Seal
 Sand Pack
 Screen

Indicates the groundwater level measured on date of drilling
 PID
 Head-space reading in ppm obtained with a photo-ionization detector.
 Indicates samples selected for laboratory analysis.

Completion Notes

- The monitoring well was installed on date using air rotary drilling techniques.
- The well was constructed with 2" ID, 0.020 inch factory slotted, threaded joint, schedule 40 PVC pipe.
- The well is protected with a locked stick up steel cover and a compression cap.
- The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
- The depths indicated are referenced from the ground surface.

Soil Boring Log Details
 MW-2

Amarada Hess Corp.

Chevron May Love

Monument, NM

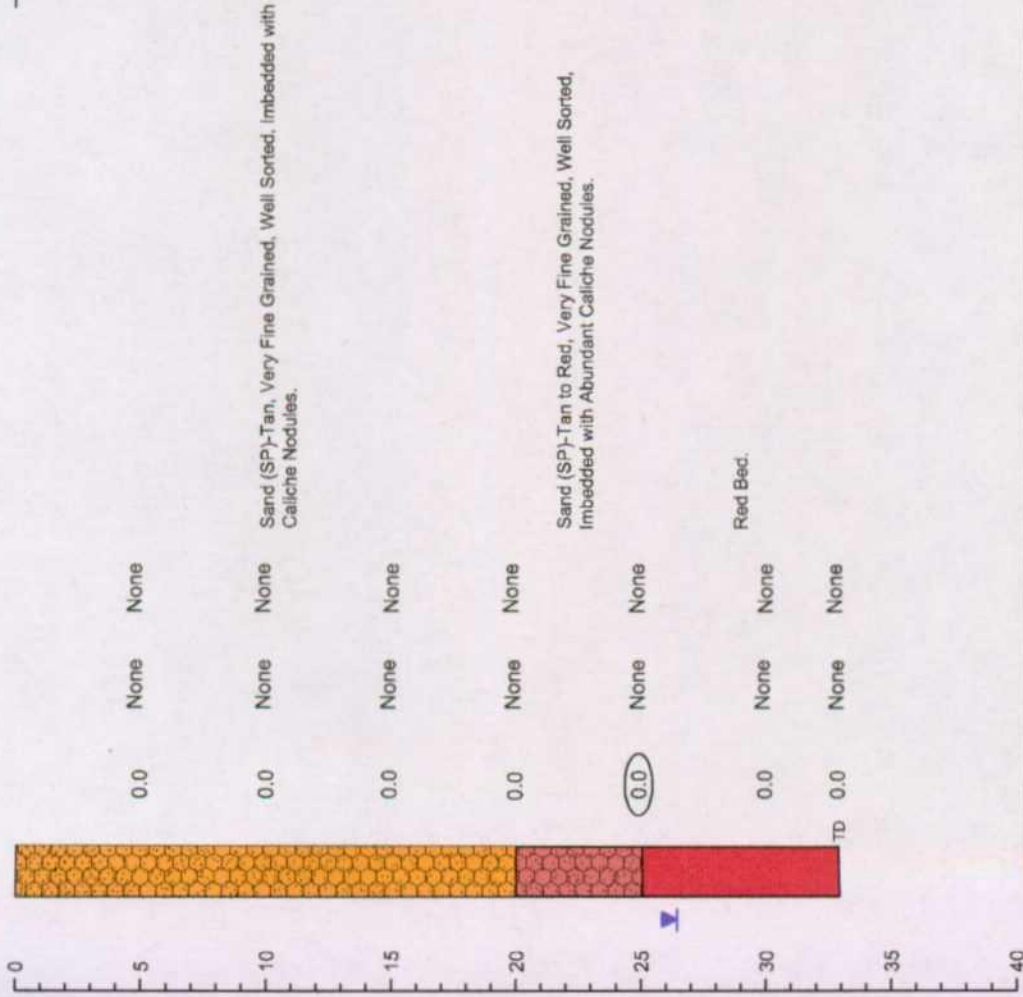


Environmental Technology
 Group, Inc.

Scale/Lose Scale Prep By: JDU Checked By: CR
 June 27, 2002 ETGI Project # ANCI200R

Monitor Well MW-3

Depth (feet) Soil Columns PID Reading Petroleum Odor Soil Stain Description



Monitoring Well Details

Date Drilled: 10 - 10 - 01
 Thickness of Bentonite Seal: 3 ft.
 Length of PVC Well Screen: 15 ft.
 Depth of PVC Well: 33 ft.
 Depth of Exploratory Well: 33 ft.

- Grout Surface Seal
- Bentonite Pellet Seal
- Sand Pack
- Screen
- PID
- Head-space reading in ppm obtained with a photo-ionization detector.
- Indicates the groundwater level measured on date of drilling.
- Indicates samples selected for laboratory analysis.

Completion Notes

- The monitoring well was installed on date using air rotary drilling techniques.
- The well was constructed with 2" ID, 0.020 inch factory slotted, threaded joint, schedule 40 PVC pipe.
- The well is protected with a locked stick up steel cover and a compression cap.
- The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
- The depths indicated are referenced from the ground surface.

Soil Boring Log Details
 MW-3

Amarada Hess Corp.

Chevron May Love

Monument, NM

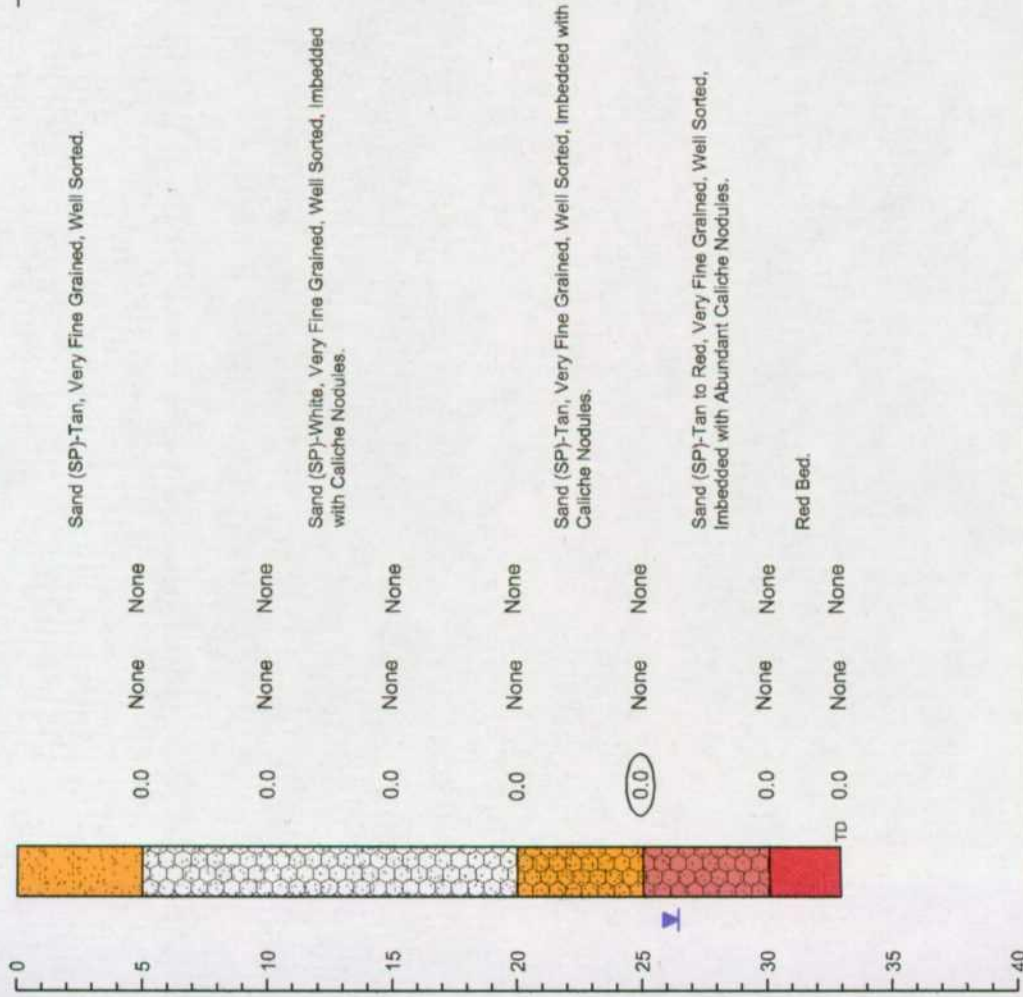


Environmental Technology
 Group, Inc.

Scale/Use: Soils Prep By: JDU Checked By: CR
 June 27, 2002 ETGI Project #: AHC1205R

Monitor Well MW-4

Depth (feet) Columns Reading PID Petroleum Odor Soil Stain Description



Monitoring Well Details

Date Drilled: 10 - 10 - 01
 Thickness of Bentonite Seal: 3 ft
 Length of PVC Well Screen: 15 ft
 Depth of PVC Well: 33 ft
 Depth of Exploratory Well: 33 ft

Grout Surface Seal
 Bentonite Pellet Seal
 Sand Pack
 Screen

Indicates the groundwater level measured on date of drilling
 PID
 Head-space reading in ppm obtained with a photo-ionization detector.
 Indicates samples selected for laboratory analysis.

Completion Notes

- The monitoring well was installed on data using air rotary drilling techniques.
- The well was constructed with 2" ID, 0.020 inch factory slotted, threaded joint, schedule 40 PVC pipe.
- The well is protected with a locked stick up steel cover and a compression cap.
- The lines between material types shown on the profile log represent approximate boundaries. Actual transitions may be gradual.
- The depths indicated are referenced from the ground surface.

Soil Boring Log Details
 MW-4

Amarada Hess Corp.

Chevron May Love

Monument, NM



Environmental Technology
 Group, Inc.

Scale/Use Scale
 Prep By: JDU
 Checked By: CR
 June 27, 2002
 ETGI Project #: AHC1205R

APPENDIX B
LABORATORY RESULTS

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: MR. KEN DUTTON
2540 W. MARLAND
HOBBS, NM 88240
FAX: 505-397-4701

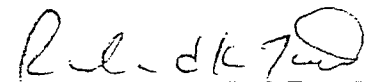
Sample Type: Soil
Sample Condition: Intact/ Iced/ 16.5 deg C
Project Name: Chevron May Love
Project #: AHC 1205R
Project Location: Monument, NM

Sampling Date: 09/18/01
Receiving Date: 09/19/01
Analysis Date: 09/19/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
0101594-01	Asphaltene	<0.025	0.156	0.191	0.688	0.124

QUALITY CONTROL	0.101	0.096	0.095	0.194	0.091
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% IA	101	96	95	97	91
SPIKED AMOUNT	0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE	<0.025	<0.025	<0.025	0.050	<0.025
SPIKE	0.102	0.098	0.098	0.197	0.092
SPIKE DUP	0.100	0.094	0.095	0.193	0.090
%EA	102	98	98	98	92
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
RPD	1.98	4.17	3.11	8.51	2.20

METHODS: EPA SW 846-8021B, 5030


Raland K. Tuttle

9-21-01
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: MR. KEN DUTTON
2540 W. MARLAND
HOBBS, NM 88240
FAX: 505-397-4701

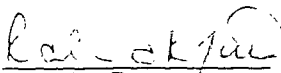
Sample Type: Soil
Sample Condition: Intact/ Iced/ 16.5 deg C
Project Name: Chevron May Love
Project #: AHC-1205R
Project Location: Monument, NM

Sampling Date: 09/18/01
Receiving Date: 09/19/01
Analysis Date: 09/20/01

ELT#	FIELD CODE	GRO	DRO
		C6-C10 mg/kg	>C10-C28 mg/kg
0101594-01	Asphaltene	<50	1170

QUALITY CONTROL	543	475
TRUE VALUE	500	500
% INSTRUMENT ACCURACY	109	95
SPIKED AMOUNT	476	476
ORIGINAL SAMPLE	<10	<10
SPIKE	389	445
SPIKE DUP	398	480
% EXTRACTION ACCURACY	84	101
BLANK	<10	<10
RPD	2.29	7.57

Methods: SW 846-8015M


Raiaud K. Tuttle

9-21-01
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: MR. KEI DUTTON
2540 W. MARLAND
HOBBS, NM 88240
FAX: 505-397-4701

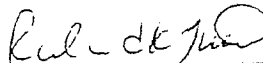
Sample Type: Soil
Sample Condition: Intact/ Iced/ 16.5 deg C
Project Name: Chevron May Love
Project #: AHC-1205R
Project Location: Monument, NM

Sampling Date: 09/18/01
Receiving Date: 09/19/01
Analysis Date: 09/19/01

ELT#	FIELD CODE	Chloride mg/kg
0101594-01	Asphaltene	37

QUALITY CONTROL	5050
TRUE VALUE	5000
% INSTRUMENT ACCURACY	101
SPIKED AMOUNT	500
ORIGINAL SAMPLE	35
SPIKE	541
SPIKE DUP	541
% EXTRACTION ACCURACY	101
BLANK	<5.00
RPD	0.00

Methods: SW 846-9253


Roland K. Tuttle

9-21-01
Date

ENVIRONMENTAL

LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: MR. KEN DUTTON
2540 W. MARLAND
HOBBS, NM 86240
FAX: 505-397-4701

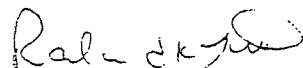
Sample Type: Soil
Sample Condition: Intact/ Iced/ 0 deg C
Project #: AHC-1205R
Project Name: Chevron May-Love
Project Location: Monument, NM

Sampling Date: 09/26/01
Receiving Date: 09/28/01
Analysis Date: 09/30/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
0101668-01	TB Bottom	<0.025	0.050	0.078	0.354	0.087

QUALITY CONTROL	0.101	0.101	0.099	0.203	0.095
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% IA	101	101	99	101	95
SPIKE AMOUNT	0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE	<0.025	0.080	<0.025	0.102	<0.025
SPIKE	0.096	0.098	0.096	0.205	0.093
SPIKE DUP	0.096	0.096	0.085	0.178	0.087
%EA	96	95	96	100	93
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
RPD	0.00	2.13	12.2	13.9	6.67

METHODS: SW 846-8021B, 5030


Roland K. Tuttle

10-01-01
Date

ENVIRONMENTAL

LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: MR. KEI DUTTON
2540 W. MARLAND
HOBBBS, NM 86240
FAX: 505-397-4701

Sample Type: Soil
Sample Condition: Intact/ Iced/ 0 deg C
Project Name: Chevron May-Love
Project #: AHC-1205R
Project Location: Monument, NM

Sampling Date: 09/26/01
Receiving Date: 09/29/01
Analysis Date: 09/29/01

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
0101668-01	TB Bottom	<125	4220

QUALITY CONTROL	499	492
TRUE VALUE	500	500
% INSTRUMENT ACCURACY	100	98
SPIKED AMOUNT	476	476
ORIGINAL SAMPLE	<10	<10
SPIKE	447	476
SPIKE DUP	431	469
% EXTRACTION ACCURACY	94	100
BLANK	<10	<10
RPD	4.35	2.02

Methods: SW 846-8015M


Raiaud K. Tuttle

10-01-01
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, II, C.
ATTN: MR. KEI DUTTON,
2540 W. MARLAND
HOBBES, NM 88240
FAX: 505-397-4701

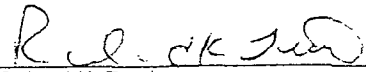
SampleType: Soil
Sample Condition: Intact/ Iced/ 0 deg C
Project #: AHC-1205R
Project Name: Chevron May-Love
Project Location: Monument, NM

Sampling Date: 09/25/01
Receiving Date: 09/28/01
Analysis Date: 10/01/01

ELT#	FIELD CODE	Chloride mg/kg
0101668-01	TB Bottom	246

QUALITY CONTROL	5050
TRUE VALUE	5000
% INSTRUMENT ACCURACY	101
SPIKED AMOUNT	556
ORIGINAL SAMPLE	246
SPIKE	807
SPIKE DUP	798
% EXTRACTION ACCURACY	99
BLANK	<5.00
RPD	1.21

METHODS: SW 846-9253


Raland K. Tuttle

10-01-01
Date

COC #135

Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Ken Dutton

Company Name ETGI

end.

88248

Fax No (505) 397-4701

Emile + Imelda

[illegible]

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: CAMILLE REYNOLDS
2540 W. MARLAND
HOBBS, NM 88240
FAX: 505-397-4701

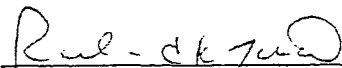
Sample Type: Soil
Sample Condition: Intact/ Iced/ -0.5 deg C
Project Name: Chevron May Love
Project #: AHC 1205R
Project Location: Monument, NM

Sampling Date: 10/03/01
Receiving Date: 10/05/01
Analysis Date: 10/05/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
0101722-01	East Pit, North Wall	<0.025	0.062	<0.025	0.093	<0.025
0101722-02	East Pit, West Wall	<0.025	0.074	0.029	0.147	<0.025
0101722-03	East Pit, East Wall	<0.025	0.031	<0.025	0.029	<0.025

QUALITY CONTROL	0.104	0.103	0.102	0.212	0.099
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% IA	104	103	102	106	99
SPIKED AMOUNT	0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE	<0.025	<0.025	<0.025	<0.025	<0.025
SPIKE	0.097	0.094	0.093	0.193	0.089
SPIKE DUP	0.092	0.090	0.088	0.179	0.084
%EA	102	81	91	81	93
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
RPD	10	9	14	16	8

METHODS: SW 846-8021B, 5030


Randal K. Tuttle

10-12-01
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: CAMILLE REYNOLDS
2540 W. MARLAND
HOBBES, NM 88240
FAX: 505-397-4701

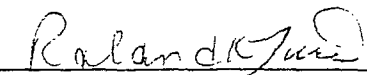
Sample Type: Soil
Sample Condition: Intact/ Iced/ -0.5 deg C
Project Name: Chevron May Love
Project #: AHC 1205R
Project Location: Monument, NM

Sampling Date: 10/03/01
Receiving Date: 10/05/01
Analysis Date: 10/06/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
0101722-04	East Pit, Bottom	<0.040	<0.040	<0.040	0.052	<0.040
0101722-05	East Pit, South Wall	<0.025	<0.025	<0.025	0.038	<0.025

QUALITY CONTROL	0.105	0.105	0.103	0.214	0.099
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% IA	105	105	103	107	99
SPIKED AMOUNT	0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE	<0.025	<0.025	<0.025	0.038	<0.025
SPIKE	0.093	0.094	0.086	0.176	0.086
SPIKE DUP	0.102	0.101	0.098	0.200	0.093
%EA	97	94	93	96	89
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
RPD	6	4	6	7	7

METHODS: SW 846-8021B, 5030


Raland K. Tuttle

10-12-01
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

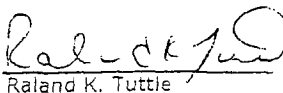
ENVIRONMENTAL TECHNOLOGY GROUP, INC.
ATTN: CAMILLE REYNOLDS
2540 W. MARLAND
HOBBES, NM 88240
FAX: 505-397-4701

Sample Type: Soil
Sample Condition: Intact/ Iced/ -0.5 deg C
Project #: AHC 1205R
Project Name: Chevron May Love
Project Location: Monument, NM

Sampling Date: 10/03/01
Receiving Date: 10/05/01
Analysis Date: 10/08/01

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
0101722-01	East Pit, North Wall	<50	138
0101722-02	East Pit, West Wall	<50	60
0101722-03	East Pit, East Wall	<50	62
0101722-04	East Pit, Bottom	<100	574
0101722-05	East Pit, South Wall	<10	12
	QUALITY CONTROL	592	544
	TRUE VALUE	500	500
	% INSTRUMENT ACCURACY	118	109
	SPIKED AMOUNT	476	476
	ORIGINAL SAMPLE	<10	68
	SPIKE	589	679
	SPIKE DUP	573	686
	% EXTRACTION ACCURACY	124	128
	BLANK	<10	<10
	RPD	2.75	1.02

Methods: SW 846-8015M


Ralene K. Tuttle

10-12-01
Date

ENVIRONMENTAL

LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

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2540 W. MARLAND
HOBBS, NM 88240
FAX: 505-397-4701

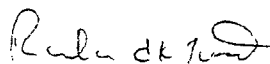
Sample Type: Soil
Sample Condition: Intact/ Iced/ -0.5 deg C
Project Name: Chevron May Love
Project #: AHC 1205R
Project Location: Monument, NM

Sampling Date: 10/03/01
Receiving Date: 10/05/01
Analysis Date: 10/08/01

ELT#	FIELD CODE	Chloride mg/kg
0101722-01	East Pit, North Wall	20
0101722-02	East Pit, West Wall	21
0101722-03	East Pit, East Wall	21
0101722-04	East Pit, Bottom	21
0101722-05	East Pit, South Wall	21

QUALITY CONTROL	5050
TRUE VALUE	5000
% INSTRUMENT ACCURACY	101
SPIKED AMOUNT	556
ORIGINAL SAMPLE	20
SPIKE	581
SPIKE DUP	591
% EXTRACTION ACCURACY	101
BLANK	<5.00
RPD	1.71

Methods: SW 846-9253


Ralene K. Tuttle

10-12-01
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOGY GROUP, INC.
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2540 W. MARLAND
HOBBS, NM 88240
FAX: 505-397-4701

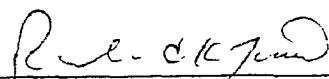
Sample Type: Water
Sample Condition: Intact/ Iced/ HCl/ -0.5 deg C
Project Name: Chevron May Love
Project #: AHC 1205R
Project Location: Monument, NM

Sampling Date: 10/05/01
Receiving Date: 10/05/01
Analysis Date: 10/08/01

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
0101722-06	GW	<0.001	<0.001	<0.001	<0.001	<0.001

QUALITY CONTROL	0.111	0.110	0.107	0.220	0.102
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% IA	111	110	107	110	102
SPIKED AMOUNT	0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE	<0.001	0.010	0.010	0.075	0.041
SPIKE	0.104	0.113	0.112	0.293	0.137
SPIKE DUP	0.103	0.110	0.108	0.282	0.135
%EA	104	103	102	109	96
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001
RPD	0.97	2.96	4.00	4.69	2.10

METHODS: SW 846-8021B, 5030


Raland K. Tuttle

10-12-01
Date

ENVIRONMENTAL LAB OF , INC.

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ENVIRONMENTAL TECHNOLOGY GROUP, INC
ATTN: CAMILLE REYNOLDS
2540 W. MARLAND
HOBBES, NM 86240
FAX: 505-397-4701

Sample Type: Water
Sample Condition: Intact/ Iced/ -0.5 deg C
Project Name: Chevron May Love
Project #: AHC 1205R
Project Location: Monument, NM

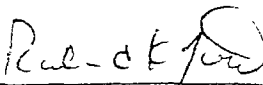
Sampling Date: 10/05/01
Receiving Date: 10/05/01
Analysis Date: See Below

ELT#	FIELD CODE	Chloride mg/L	TDS mg/L
0101722-06	GW	284	1158

QUALITY CONTROL	5050	N/A
TRUE VALUE	5000	N/A
% INSTRUMENT ACCURACY	101	N/A
SPIKED AMOUNT	500	N/A
ORIGINAL SAMPLE	284	N/A
SPIKE	789	N/A
SPIKE DUP	789	N/A
% EXTRACTION ACCURACY	101	N/A
BLANK	<5.00	<5.0
RPD	0.0	0

ANALYSIS DATE	10/08/01	10/10/01
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Methods: SW 846-9253, EPA 160.1


Raiana K. Tuttle

10-12-01
Date

Doc # 145

Phone: 915-563-1800
Fax: 915-563-1713

Project Name: Chexron May Love

1917

Project Loc: Monument, nm

PO #:

Analyze for:

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative					Matrix					TCLP	TOTAL	Analyze For:
					HNO ₃	HCl	NaOH	H ₂ SO ₄	None	Other (Specify)	Water	Sludge	Soil	Other (Specify)			
0101722-01	EAST P.I.T., North wall	10-3-01	1500	1	X												
02	EAST P.I.T., West wall		1520														
03	EAST P.I.T., EAST wall		1510														
04	EAST P.I.T., Bottom		0800														
05	EAST P.I.T., South wall		1515														
06	GLW	10-5-01	07250	3	X												

Special Instructions:

Requested by: *amulet holds*

Collected by: *Simon G. G. G.*

Received by: *Simon G. G. G.*

Received by ELOT: *Deanne M. G. G.*

Date: 10/5/01

Date: 10/5/01

Time: 0800

Time: 1137

Sample Contains Infract? ☒

Temperature Upon Receipt: *10-05-01*

Laboratory Comments: *Add TDS to (001) per 10-09-01*

Standard: *QUSH TAT Pre-Screening*

Method: *10-05-01*

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOG GROUP INC
ATTN: KEN DUTTON
2540 W. MARLAND
HOBBBS, NM 86240
FAX: 505-397-4701

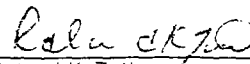
Sample Type: Soil
Sample Condition: Intact/ Iced/ -0.5 deg C
Project Name: Chevron May Love
Project #: AHC-1205R
Project Location: Monument, NM

Sampling Date: 10/10/01
Receiving Date: 10/11/01
Analysis Date: 10/12/01

ELT#	FIELD CODE	GRO	DRO
		C6-C10 mg/kg	>C10-C28 mg/kg
0101755-01	MW-1 30'	<10	<10

QUALITY CONTROL	598	567
TRUE VALUE	500	500
% INSTRUMENT ACCURACY	120	113
SPIKED AMOUNT	476	476
ORIGINAL SAMPLE	<10	<10
SPIKE	556	544
SPIKE DUP	491	550
% EXTRACTION ACCURACY	103	116
BLANK	<10	<10
RPD	12.4	1.10

Methods: SW 846-8015M


Ralanda K. Tuttle

10-13-01
Date

ENVIRONMENTAL LAB OF INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOG GROUP INC.
ATTN: KEN DUTTON
2540 W. MARLANE
HOBBBS, NM 88240
FAX: 505-397-4701

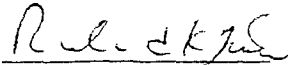
Sample Type: Soil
Sample Condition: Intact/ Iced/ -0.5 deg C
Project Name: Chevron May Love
Project #: AHC-1205R
Project Location: Monument, NM

Sampling Date: 10/10/01
Receiving Date: 10/11/01
Analysis Date: 10/12/01

ELT#	FIELD CODE	GRO	DRO
		C6-C10 mg/kg	>C10-C28 mg/kg
0101755-02	MW-2 30'	<10	<10
0101755-03	MW-3 25'	<10	<10
0101755-04	MW-4 25'	<10	<10

QUALITY CONTROL	553	573
TRUE VALUE	500	500
% INSTRUMENT ACCURACY	111	115
SPIKED AMOUNT	476	476
ORIGINAL SAMPLE	<10	<10
SPIKE	525	656
SPIKE DUP	559	676
% EXTRACTION ACCURACY	110	138
BLANK	<10	<10
RPD	6.27	3.00

Methods: SW 846-8015M


Randall K. Tuttle

10-15-01
Date

ENVIRONMENTAL

LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENVIRONMENTAL TECHNOLOG[®] GROUP, INC.
ATTN: KEN DUTTON
2540 W. MARLAND
HOBBES, NM 86240
FAX: 505-397-4701

Sample Type: Soil
Sample Condition: Intact/ Iced/ -0.5 deg C
Project Name: Chevron May Love
Project #: AHC-1205R
Project Location: Monument, NM

Sampling Date: 10/10/01
Receiving Date: 10/11/01
Analysis Date: 10/12/01

ELT#	FIELD CODE	Chloride mg/kg
0101755-01	MW-1 30'	18
0101755-02	MW-2 30'	24
0101755-03	MW-3 25'	18
0101755-04	MW-4 25'	24

QUALITY CONTROL	5052
TRUE VALUE	5000
% INSTRUMENT ACCURACY	101
SPIKED AMOUNT	500
ORIGINAL SAMPLE	18
SPIKE	523
SPIKE DUP	523
% EXTRACTION ACCURACY	101
BLANK	<5.00
RPD	0.0

Methods: SW 846-9253


Randall K. Tuttle

10-15-01
Date

Environmental Lab of Texas, Inc.

12600 West 1-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: KEN BUTTON

Company Name: ETGI
Company Address: 2546 W. MARLBOROUGH

City/State/Zip: Hobbs NM 88240

Telephone No: (505) 397-4882
Fax No: (505) 397-4701

Sample Signature:

[Handwritten signature]

[illegible]

ENVIRONMENTAL

LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ELT G-1
ATTN: KEN DUTTON
2540 W. MARLAND
HOBBES, NM 88240
FAX: 505-397-4701

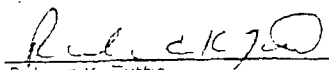
Sample Type: Water
Sample Condition: Intact/ Iced/ HCl/ -1.0 deg C
Project Name: Chevron May Love
Project #: ARC 1205R
Project Location: Monument, NM

Sampling Date: 10/17/01
Receiving Date: 10/17/01
Analysis Date: 10/19/01

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
0101789-01	MW 1	<0.001	<0.001	<0.001	<0.001	<0.001
0101789-02	MW 2	<0.001	<0.001	<0.001	<0.001	<0.001
0101789-03	MW 3	<0.001	<0.001	<0.001	<0.001	<0.001
0101789-04	MW 4	<0.001	<0.001	<0.001	<0.001	<0.001

QUALITY CONTROL	0.102	0.104	0.112	0.226	0.094
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% IA	102	104	112	113	94
SPIKED AMOUNT	0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE	<0.001	<0.001	<0.001	<0.001	<0.001
SPIKE	0.094	0.093	0.085	0.171	0.085
SPIKE DUP	0.092	0.091	0.088	0.177	0.087
%EA	94	93	85	86	85
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001
RPD	2.15	2.17	3.47	2.30	2.32

METHODS: EPA SW 846-8021B, 5030


Roland K. Tuttle

10-22-01
Date

ENVIRONMENTAL

LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

ENV. SCI.
ATTN: KEN TUTTLE
2540 W. MAPLAND
HOBBE, NM 86240
FAX: 505-397-4701

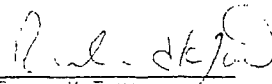
Sample Type: Water
Sample Condition: Intact/ Iced/ -1.0 deg C
Project Name: Chevron May Love
Project #: AHC 1205R
Project Location: Monument, NM

Sampling Date: 10/17/01
Receiving Date: 10/17/01
Analysis Date: 10/19/01

ELT#	FIELD CODE	Chloride mg/L
0101789-01	MW 1	266
0101789-02	MW 2	248
0101789-03	MW 3	213
0101789-04	MW 4	301

QUALITY CONTROL	5050
TRUE VALUE	5000
% INSTRUMENT ACCURACY	101
SPIKED AMOUNT	500
ORIGINAL SAMPLE	266
SPIKE	762
SPIKE DUP	771
% EXTRACTION ACCURACY	101
BLANK	<5.00
RPD	1.17

Methods: SW 846-9253


Roland K. Tuttle

10-22-01
Date

Environmental Lab of Texas, Inc.

12600 West 1-20 East
Odessa, Texas 79763

Phone: 915-563-1800
Fax: 915-563-1713

Project Manager: KEN DUTTON

Company Name: ETGI

Company Address: 2540 W. MARLAND

City/State/Zip: HOBBS NM 88240

Telephone No: (505) 397-4872

Fax No: (505) 397-4707

Sampler Signature: Simon Casas

COC 156

CHAIN OF CUSTODY RECORD AND ANALYSIS REPORT

Project Name: CHEVRON MAY LOVE

Project #: AIC 1205 R

Project Loc: MONUMENT NMS

PO #:

LAB # (1015 and only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative					Matrix					Analyze For
					HNO ₃	HCl	NaOH	H ₂ SO ₄	None	Other (Specify)	Water	Sediment	Soil	Other (Specify)	
0101109-01	MW 1	10/7/01	1000	3		X									
02	MW 2		1045	1		X									
03	MW 3		1020			X									
04	MW 4		1110			X									

Special Instructions:

Delivered by:

Simon Casas

Date

10-7-01

Time

1500

Received by:

Delivered by:

Jonathan Biggles

Date

10/7/01

Time

1500

Sample Containers Initials
Temperature Upon Receipt
Laboratory Comments

100

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

E.T.G.I.
ATTN: CAMILLE REYNOLDS
2540 W. MARLAND
HOBBS, NM 86240
FAX: 505-397-4701

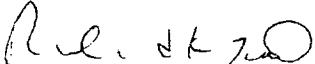
Sample Type: Soil
Sample Condition: Intact/ Iced/ 4.0 deg C
Project Name: AHC-Chevron May Love
Project #: AHC-1205R
Project Location: Monument, NM

Sampling Date: 10/23/01
Receiving Date: 10/23/01
Analysis Date: 10/24/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
0101827-01	East Pit Bottom	<0.025	<0.025	<0.025	<0.025	<0.025
0101827-02	Tank Battery Pit Bottom	<0.025	<0.025	<0.025	0.033	<0.025

QUALITY CONTROL	0.091	0.095	0.094	0.191	0.089
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% IA	91	95	94	95	89
SPIKED AMOUNT	0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE	<0.025	<0.025	<0.025	<0.025	<0.025
SPIKE	0.091	0.090	0.087	0.173	0.085
SPIKE DUP	0.097	0.091	0.086	0.174	0.085
%EA	91	90	87	86	85
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
RPD	6.38	1.10	1.16	1.16	0.00

METHODS: EPA SW 846-8021B ,5030


Ralend K. Tuttle

10-25-01
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

E.T.G.I.
ATTN: CAMILLE REYNOLDS
2540 W. MARLAND
HOBBBS, NM 86240
FAX: 505-397-4701

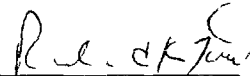
Sample Type: Soil
Sample Condition: Intact/ Iced/ 4.0 deg C
Project #: AHC-1205R
Project Name: AHC-Chevron May Love
Project Location: Monument, NM

Sampling Date: 10/23/01
Receiving Date: 10/23/01
Analysis Date: 10/23/01

ELT #	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
0101827-01	East Pit Bottom	<10	24
0101827-02	Tank Battery Pit Bottom	<50	1190

QUALITY CONTROL	582	512
TRUE VALUE	500	500
% INSTRUMENT ACCURACY	116	102
SPIKED AMOUNT	500	500
ORIGINAL SAMPLE	<10	<10
SPIKE	560	496
SPIKE DUP	557	481
% EXTRACTION ACCURACY	111	96
BLANK	<10	<10
RPD	0.54	3.07

Methods: SW 846-8015M


Randall K. Tuttle

10-25-01
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

E.T.G.I.
ATTN: CAMILLE REYNOLDS
2540 W. MARLAND
HOBBS, NM 86240
FAX: 505-397-4701

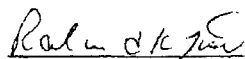
Sample Type: Soil
Sample Condition: Intact/ Iced/ 4.0 deg C
Project #: AHC-1205R
Project Name: AHC-Chevron May Love
Project Location: Monument, NM

Sampling Date: 10/23/01
Receiving Date: 10/23/01
Analysis Date: 10/24/01

ELT#	FIELD CODE	Chloride mg/kg
0101827-01	East Pit Bottom	51
0101827-02	Tank Battery Pit Bottom	66

QUALITY CONTROL	5050
TRUE VALUE	5000
% INSTRUMENT ACCURACY	101
SPIKED AMOUNT	714
ORIGINAL SAMPLE	51
SPIKE	772
SPIKE DUP	772
% EXTRACTION ACCURACY	101
BLANK	<5.00
RPD	0.0

Methods: SW 846-9253


Roland K. Tuttle

10-25-01
Date

12600 West I-20 East
Odessa, Texas 79763

Phone: 915-563-1800
Fax: 915-563-1743

Project Manager:

Company Name

Company Address:

City/State/Zip:

Telephone No. 646-1111

Sampler Signature

Fax: 915-563-1743
Camille Reynolds

1111

2540 W. Maryland

Hobbs and others

45) 397-4882

amelle turgida

coc: 161

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name: ATC-Chevron May 201

Project #: AHC-12052

Project Loc: Monument, NM

203

[illegible]

Oct 25 01 08:40a

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

B.T.G.I.
ATTN: CAMILLE REYNOLDS
2540 WEST MARLAND
HOBBBS, NM 88240
FAX: 505-397-4701


Sample Type: Soil
Sample Condition: Intact/ Iced/ 3.5 deg C
Project Name: AHC Chevron May Love
Project #: AHC 1205R
Project Location: Monument, NM

Sampling Date: 11/13/01
Receiving Date: 11/14/01
Analysis Date: 11/14/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
0102008-01	East Stockpile	<0.100	1.62	0.334	0.263	<0.100
0102008-02	West Stockpile	<0.025	0.042	<0.025	0.030	<0.025
0102008-03	Stained West Stockpile	<0.100	<0.100	<0.100	<0.100	<0.100

QUALITY CONTROL	0.111	0.112	0.107	0.214	0.105
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% INSTRUMENT ACCURACY	111	112	107	107	105
SPIKED AMOUNT	0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE	<0.025	0.026	<0.025	<0.025	<0.025
SPIKE	0.105	0.105	0.108	0.218	0.105
SPIKE DUP	0.114	0.113	0.119	0.245	0.115
% EXTRACTION ACCURACY	105	104	108	109	105
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
RPD	8.22	7.41	9.69	11.2	9.09

METHODS: EPA SW 846-8021B, 5030


Roland K. Tuttle

11-15-01
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

E.T.G.
ATTN: CAMILLE REYNOLDS
2540 WEST MARLAND
MOBBS, NM 88240
FAX: 505-397-4701

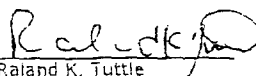
Sample Type: Soil
Sample Condition: Intact/ Iced/ 3.5 deg C
Project Name: AHC Chevron May Love
Project #: AHC 1205R
Project Location: Monument, NM

Sampling Date: 11/13/01
Receiving Date: 11/14/01
Analysis Date: 11/14/01

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
0102008-01	East Stockpile	<10	811
0102008-02	West Stockpile	<10	649
0102008-03	Stained West Stockpile	<10	358

QUALITY CONTROL	435	533
TRUE VALUE	500	500
% INSTRUMENT ACCURACY	87	107
SPIKED AMOUNT	476	476
ORIGINAL SAMPLE	<10	<10
SPIKE	450	491
SPIKE DUP	444	491
% EXTRACTION ACCURACY	110	124
BLANK	<10	<10
RPD	1.14	0.00

Methods: SW 846-8015M


Roland K. Tuttle

11-15-01
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

E.T.G.I.
ATTN: CAMILLE REYNOLDS
2540 WEST MARLAND
HOBBS, NM 88240
FAX: 505-297-4701

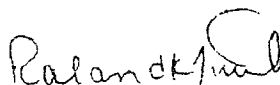
Sample Type: Soil
Sample Condition: Intact/ Iced/ 3.5 deg C
Project Name: AHC Chevron May Love
Project #: AHC 1205R
Project Location: Monument, NM

Sampling Date: 11/13/01
Receiving Date: 11/14/01
Analysis Date: 11/14/01

ELT #	FIELD CODE	Chloride mg/kg
0102008-01	East Stockpile	42
0102008-02	West Stockpile	310
0102008-03	Stained West Stockpile	35

QUALITY CONTROL	5050
TRUE VALUE	5000
% INSTRUMENT ACCURACY	101
SPIKED AMOUNT	625
ORIGINAL SAMPLE	1310
SPIKE	1930
SPIKE DUP	1940
% EXTRACTION ACCURACY	99
BLANK	<5.00
RPD	0.52

Methods: SW 846-9253


Roland K. Tuttle

11-15-01
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

E.T.G.I.
ATTN: CAMILLE REYNOLDS
2540 WEST MARLAND
HOBBS, NM 88240
FAX: 505-397-4701

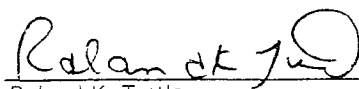
Sample Type: Soil
Sample Condition: Intact/ Iced/ -0.5 deg C
Project Name: AHC Chevron May Love
Project #: AHC 1205R
Project Location: Monument, NM

Sampling Date: 11/28/01
Receiving Date: 11/30/01
Analysis Date: 11/29/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
0102098-01	Former Tank Batt. Pit Bottom	<0.025	<0.025	<0.025	<0.025	<0.025
0102098-02	East Pit Backfill 5-10'	<0.025	<0.025	<0.025	<0.025	<0.025
0102098-03	Former Tank Batt. NW Sidewall	<0.025	<0.025	<0.025	<0.025	<0.025

QUALITY CONTROL	0.090	0.089	0.093	0.192	0.089
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% IA	90	89	93	96	89
SPIKED AMOUNT	0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE	<0.025	0.061	0.257	0.418	0.143
SPIKE	0.089	0.090	0.101	0.198	0.097
SPIKE DUP	0.090	0.095	0.110	0.220	0.106
%EA	90	93	100	102	100
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
RPD	1.12	5.52	9.42	12.5	9.42

METHODS: EPA SW 846-8021B ,5030


Ralanda K. Tuttle

12-04-01
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

E.T.G.I.
ATTN: CAMILLE REYNOLDS
2540 WEST MARLAND
HOBBS, NM 88240
FAX: 505-397-4701

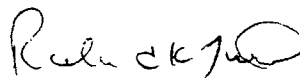
Sample Type: Soil
Sample Condition: Intact/ Iced/ -0.5 deg C
Project Name: AHC Chevron May Love
Project #: AHC 1205R
Project Location: Monument, NM

Sampling Date: 11/28/01
Receiving Date: 11/30/01
Analysis Date: 12/02/01

ELT#	FIELD CODE	GRO	DRO
		C6-C10 mg/kg	>C10-C28 mg/kg
0102098-01	Former Tank Batt. Pit Bottom	<10	41
0102098-02	East Pit Backfill 5-10'	<10	202
0102098-03	Former Tank Batt. NW Sidewall	<10	142

QUALITY CONTROL	483	586
TRUE VALUE	500	500
% INSTRUMENT ACCURACY	97	117
SPIKED AMOUNT	476	476
ORIGINAL SAMPLE	<10	<10
SPIKE	499	638
SPIKE DUP	503	634
% EXTRACTION ACCURACY	106	123
BLANK	<10	<10
RPD	0.80	0.63

Methods: SW 846-8015M


Raland K. Tuttle

12-04-01
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

E.T.G.I.
ATTN: CAMILLE REYNOLDS
2540 WEST MARLAND
HOBBS, NM 88240
FAX: 505-397-4701

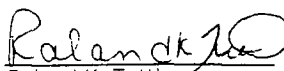
Sample Type: Soil
Sample Condition: Intact/ Iced/ -0.5 deg C
Project Name: AHC Chevron May Love
Project #: AHC 1205R
Project Location: Monument, NM

Sampling Date: 11/28/01
Receiving Date: 11/30/01
Analysis Date: 12/03/01

ELT#	FIELD CODE	Chloride mg/kg
0102098-01	Former Tank Batt. Pit Bottom	66
0102098-02	East Pit Backfill 5-10'	18
0102098-03	Former Tank Batt. NW Sidewall	75

QUALITY CONTROL	5050
TRUE VALUE	5000
% INSTRUMENT ACCURACY	101
SPIKED AMOUNT	500
ORIGINAL SAMPLE	18
SPIKE	523
SPIKE DUP	523
% EXTRACTION ACCURACY	101
BLANK	<10
RPD	0.0

Methods: SW 846-8015M


Raland K. Tuttle

12-04-01
Date

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

FO #:

[illegible]

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

E.T.G.I.
ATTN: CAMILLE REYNOLDS
2540 WEST MARLAND
HOBBS, NM 88240
FAX: 505-397-4701

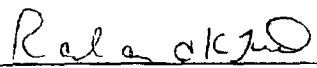
Sample Type: Soil
Sample Condition: Intact/ Iced/ -1.0 deg. C
Project Name: Chevron May Love
Project #: AHC 1205R
Project Location: Monument, NM

Sampling Date: 01/21/02
Receiving Date: 01/22/02
Analysis Date: 01/23/02

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
0202453-01	Comp. Sand	<0.025	<0.025	<0.025	<0.025	<0.025

QUALITY CONTROL	0.103	0.102	0.093	0.197	0.091
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% IA	103	102	93	98	91
SPIKED AMOUNT	0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE	<0.025	<0.025	<0.025	<0.025	<0.025
SPIKE	0.105	0.107	0.102	0.218	0.100
SPIKE DUP	0.105	0.107	0.102	0.220	0.102
%EA	105	107	102	109	100
BLANK	<0.025	<0.025	<0.025	<0.025	<0.025
RPD	0.00	0.00	0.00	0.91	1.98

METHODS: EPA SW 846-8021B, 5030


Celey D. Keene
Raland K. Tuttle

1-25-02
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

E.T.C.I
ATTN: CAMILLE REYNOLDS
2540 W. MARLAND
HOBBS, NM 88240
FAX: 505-397-4701

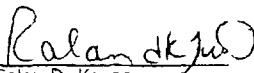
Sample Type: Soil
Sample Condition: Intact/ Iced/ -1.0 deg C
Project Name: Chevron May Love
Project #: AHC 1205R
Project Location: Monument, NM

Sampling Date: 01/21/02
Receiving Date: 01/22/02
Analysis Date: 01/23/02

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
0202453-01	Comp. Sand	<10	<10

QUALITY CONTROL	524	551
TRUE VALUE	500	500
% INSTRUMENT ACCURACY	105	110
SPIKED AMOUNT	476	476
ORIGINAL SAMPLE	<10	<10
SPIKE	505	494
SPIKE DUP	516	518
% EXTRACTION ACCURACY	106	104
BLANK	<10	<10
RPD	2.15	4.74

Methods: SW 846-8015M


Celey D. Keene
Rand K. Tuttle

1-25-02
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

E.T.G.I.
ATTN: CAMILLE REYNOLDS
2540 WEST MARLAND
HOBBS, NM 88240
FAX: 505-397-4701

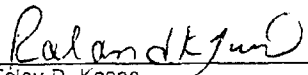
Sample Type: Soil
Sample Condition: Intact/ Iced/ -1.0 deg C
Project Name: Chevron May Love
Project #: AHC 1205R
Project Location: Monument, NM

Sampling Date: 01/21/02
Receiving Date: 01/22/02
Analysis Date: 01/23/02

ELT#	FIELD CODE	Chloride mg/kg
0202453-01	Comp. Sand	18

REPORT LIMIT	5.00
QUALITY CONTROL	5050
TRUE VALUE	5000
% INSTRUMENT ACCURACY	101
SPIKED AMOUNT	714
ORIGINAL SAMPLE	76
SPIKE	785
SPIKE DUP	785
% EXTRACTION ACCURACY	99
BLANK	<5.00
RPD	0.0

METHODS: SW846-9253


Coley D. Keene
Ralanda K. Tuttle

1-25-02
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

E.T.G.I.
ATTN: CAMILLE REYNOLDS
2540 WEST MARLAND
HOBBS, NM 88240
FAX: 505-397-4701

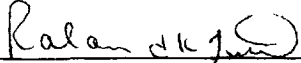
Sample Type: Water
Sample Condition: Intact/ Iced/ HCl/ -1.0 deg. C
Project Name: Chevron May Love
Project #: AHC 1205R
Project Location: Monument, NM

Sampling Date: 01/21/02
Receiving Date: 01/22/02
Analysis Date: 01/23/02

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
0202453-02	Former Tank Batt. Pit	<0.001	<0.001	<0.001	<0.001	<0.001

QUALITY CONTROL	0.103	0.102	0.093	0.197	0.091
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% IA	103	102	93	98	91
SPIKED AMOUNT	0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE	<0.001	<0.001	<0.001	<0.001	<0.001
SPIKE	0.094	0.092	0.086	0.186	0.086
SPIKE DUP	0.102	0.099	0.093	0.200	0.092
%EA	102	99	93	100	92
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001
RPD	8.16	7.33	7.82	7.25	6.74

METHODS: EPA SW 846-8021B ,5030


Coley D. Keene
Randal K. Tuttle

1-25-02
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

E.T.G.I.
ATTN: CAMILLE REYNOLDS
2540 WEST MARLAND
HOBBS, NM 88240
FAX: 505-397-4701

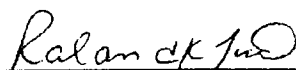
Sample Type: Water
Sample Condition: Intact/ Iced/ -1.0 deg C
Project Name: Chevron May Love
Project #: AHC 1205R
Project Location: Monument, NM

Sampling Date: 01/21/02
Receiving Date: 01/22/02
Analysis Date: 01/23/02

ELT#	FIELD CODE	Chloride mg/L
0202453-03	Former Tank Batt. Pit	319

REPORT LIMIT	5.00
QUALITY CONTROL	5050
TRUE VALUE	5000
% INSTRUMENT ACCURACY	101
SPIKE AMOUNT	500
ORIGINAL SAMPLE	319
SPIKE	824
SPIKE DUP	824
% EXTRACTION ACCURACY	101
BLANK	<5.00
RPD	0.0

METHODS: SW846-9253


Celey D. Keene
Randall K. Tuttle

1-25-02
Date

12600 West 1-20 East
Odessa, Texas 79763

Phone: 915-563-1800
Fax: 915-563-1713

Fax: 915-563-1713

Project Manager:

Company Name

Company Address:

City/State/Zip:

Telephone No. () _____

Sampler Signature:

ec#007-

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name:

Project #:

Project Location:

PO#:

Fax No. (505) 397-4701

505) 397.4882

Camille Reynolds

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763

Phone: 915-563-1800
Fax: 915-563-1713

Fax: 915-563-1713

Project Manager:

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Company Address:

City/State/Zip:

Telephone No. () _____

Sampler Signature:

ec#007-

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Name:

Project #:

Project Location:

PO#:

Fax No. (505) 397-4701

505) 397.4882

Camille Reynolds

[illegible]

APPENDIX C

**NEW MEXICO OFFICE OF THE STATE ENGINEER WATER
WELL DATA BASE REPORT AND RECORD OF
COMMUNICATION**

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: Range: Sections: NAD27 X: Y: Zone: Search Radius: County: Basin: Number: Suffix: Owner Name: (First) (Last) ☐ Non-Domestic ☐ Domestic
☒ All**AVERAGE DEPTH OF WATER REPORT 06/12/2002**

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg
L	19S	37E	32				6	25	35	29

Record Count: 6

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 19S Range: 37E Sections: 32

NAD27 X: Y: Zone: Search Radius:

County: LE 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

WELL / SURFACE DATA REPORT 06/12/2002

DB File Nbr	(acre ft per annum)	Use	Diversion	Owner	Well Number
L 03380		DOM	3	MONUMENT METHODIST CHURCH	L 03380
L 03938		DOM	3	ROBERT L. PATE	L 03380 APPRO
L 04153		DOM	3	A. G. WATSON	L 03938
L 04823		DOM	3	JIMMIE T. COOPER	L 03938 APPRO
L 05049		STK	3	DELL J. BARBER	L 04153
L 06492		DOM	3	VERNON CLARK	L 04153 APPRO EXP
					L 04823
					L 05049
					L 06492

Record Count: 9

New Mexico Office of the State Engineer
Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y
L 03380	19S	37E	32	2	1	2			

Driller Licence: 46 ABBOTT BROS.

Driller Name: ABBOTT, MURRELL

Source: Shallow

Drill Start Date: 12/07/1956

Drill Finish Date: 12/07/1956

Log File Date: 01/09/1957

PCW Received Date:

Pump Type:

Pipe Discharge Size:

Casing Size:

Estimated Yield:

Depth Well: 40

Depth Water: 35

Water Bearing Stratifications:	Top	Bottom	Description
	35	40	Shallow Alluvium/Basin Fill

New Mexico Office of the State Engineer
Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y
L 03380 APPRO	19S	37E	32	2	1	2			

Driller Licence: 46 ABBOTT BROS.

Driller Name: ABBOTT BROS.

Source: Shallow

Drill Start Date: 12/07/1956

Drill Finish Date: 12/07/1956

Log File Date: 01/09/1957

PCW Received Date:

Pump Type:

Pipe Discharge Size:

Casing Size:

Estimated Yield:

Depth Well: 40

Depth Water: 35

New Mexico Office of the State Engineer
Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y
L 03938	19S	37E	32	4					

Driller Licence: 208 VAN NOY, W.L.

Driller Name: VAN NOY, W.L.

Source: Shallow

Drill Start Date: 09/04/1958

Drill Finish Date: 09/05/1958

Log File Date: 09/15/1958

PCW Received Date:

Pump Type:

Pipe Discharge Size:

Casing Size: 6

Estimated Yield:

Depth Well: 40

Depth Water: 25

Water Bearing Stratifications:	Top	Bottom	Description
	35	40	Shallow Alluvium/Basin Fill

Casing Perforations:	Top	Bottom
	20	40

New Mexico Office of the State Engineer
Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y
L 03938 APPRO	19S	37E	32	4					

Driller Licence: 208 VAN NOY, W.L.

Driller Name:

Source: Shallow

Drill Start Date: 09/04/1958

Drill Finish Date: 09/05/1958

Log File Date: 09/15/1958

PCW Received Date:

Pump Type:

Pipe Discharge Size:

Casing Size:

Estimated Yield:

Depth Well: 40

Depth Water: 25

New Mexico Office of the State Engineer
Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y
L 04153	19S	37E	32	2					

Driller Licence:	
Driller Name:	Source:
Drill Start Date:	Drill Finish Date:
Log File Date:	PCW Received Date:
Pump Type:	Pipe Discharge Size:
Casing Size:	Estimated Yield:
Depth Well:	Depth Water:

New Mexico Office of the State Engineer
Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y
L 04823	19S	37E	32	2	2				

Driller Licence:

Driller Name:

Drill Start Date:

Log File Date:

Pump Type:

Casing Size:

Depth Well:

Source:

Drill Finish Date:

PCW Received Date:

Pipe Discharge Size:

Estimated Yield:

Depth Water:

New Mexico Office of the State Engineer
Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y
L 05049	19S	37E	32	3					

Driller Licence: 208 VAN NOY, W.L.

Driller Name:

Source: Shallow

Drill Start Date: 04/21/1963

Drill Finish Date: 04/23/1963

Log File Date: 05/02/1963

PCW Received Date:

Pump Type:

Pipe Discharge Size:

Casing Size:

Estimated Yield:

Depth Well: 50

Depth Water: 27

New Mexico Office of the State Engineer
Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y
L 06492	19S	37E	32	1	1				

Driller Licence: 208 VAN NOY, W.L.

Driller Name:

Drill Start Date: 04/03/1969

Log File Date: 04/25/1969

Pump Type:

Casing Size:

Depth Well: 50

Source:

Drill Finish Date: 04/04/1969

PCW Received Date:

Pipe Discharge Size:

Estimated Yield:

Depth Water: 27

Oct 22 01 11:51a

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

E.T.G.I.
ATTN: KEN DUTTON
2540 W. MARLAND
HOBBS, NM 88240
FAX: 505-397-4701

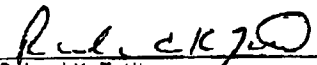
Sample Type: Water
Sample Condition: Intact/ Iced/ HCl/ -1.0 deg C
Project Name: Chevron May Love
Project #: AHC 1205R
Project Location: Monument, NM

Sampling Date: 10/17/01
Receiving Date: 10/17/01
Analysis Date: 10/19/01

ELT#	FIELD CODE	BENZENE mg/L	TOLUENE mg/L	ETHYLBENZENE mg/L	m,p-XYLENE mg/L	o-XYLENE mg/L
0101789-01	MW 1	<0.001	<0.001	<0.001	<0.001	<0.001
0101789-02	MW 2	<0.001	<0.001	<0.001	<0.001	<0.001
0101789-03	MW 3	<0.001	<0.001	<0.001	<0.001	<0.001
0101789-04	MW 4	<0.001	<0.001	<0.001	<0.001	<0.001

QUALITY CONTROL	0.102	0.104	0.112	0.226	0.094
TRUE VALUE	0.100	0.100	0.100	0.200	0.100
% IA	102	104	112	113	94
SPIKED AMOUNT	0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE	<0.001	<0.001	<0.001	<0.001	<0.001
SPIKE	0.094	0.093	0.085	0.171	0.085
SPIKE DUP	0.092	0.091	0.088	0.177	0.087
%EA	94	93	85	86	85
BLANK	<0.001	<0.001	<0.001	<0.001	<0.001
RPD	2.15	2.17	3.47	2.30	2.32

METHODS: EPA SW 846-8021B ,5030


Raland K. Tuttle

10-22-01
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

E.T.G.I.
ATTN: KEN DUTTON
2540 W. MARLAND
HOBBS, NM 88240
FAX: 505-397-4701

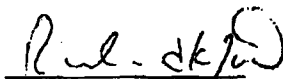
Sample Type: Water
Sample Condition: Intact/ Iced/ -1.0 deg C
Project Name: Chevron May Love
Project #: AHC 1205R
Project Location: Monument, NM

Sampling Date: 10/17/01
Receiving Date: 10/17/01
Analysis Date: 10/18/01

ELT#	FIELD CODE	Chloride mg/L
0101789-01	MW 1	266
0101789-02	MW 2	248
0101789-03	MW 3	213
0101789-04	MW 4	301

QUALITY CONTROL	5050
TRUE VALUE	5000
% INSTRUMENT ACCURACY	101
SPIKED AMOUNT	500
ORIGINAL SAMPLE	266
SPIKE	762
SPIKE DUP	771
% EXTRACTION ACCURACY	101
BLANK	<5.00
RPD	1.17

Methods: SW 846-9253


Roland K. Tuttle

10-22-01
Date

Environmental Lab of Texas, Inc.

**12600 West I-20 East
Odessa, Texas 79763**

Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

COE: 156

Project Manager: MEV Watson

Company Name ETG.I

Company Address: 2540 W. MYRA AND

City/State/Zip: HOBBS NM 88240

Telephone No. (505) 397-4882

Fax No (505) 397-4707

Sampler Signature: James Jones

Project Name: Cherish My Love

Project #: ATC 1205 R

Project Loc: MEMPHIS, TN

PO:

[illegible]