AP - 019

STAGE 1 & 2 REPORTS

DATE:

Aug. 10, 2001

SITE ASSESSMENT REPORT

Amerada Hess Corporation Project No.: OPF005537
Meridian Alliance Group, LLC. Project No. 07C005537A

Amerada Hess Corporation
Cooper Lease
SECTION 3, T-20-S, R-36-E
LEA COUNTY, NEW MEXICO

AP-19

August 10, 2001

Prepared for:

Amerada Hess Corporation

Prepared by:

Meridian Alliance Group, L.L.C.
306 W. Wall, Suite 600
Midland, Texas 79701

District Manager – J. Curtis Henderson
Project Manager – Mark A. Ehrlich

1.0 SITE ASSESSMENT

1.1 Scope of Services

Meridian Alliance Group, LLC (MAG) has completed the approved Site Assessment Reporting activities for the Amerada Hess Corporation (Amerada Hess), Cooper Lease, located in **Section 3, T-20-S, R-36-E, Lea County New Mexico.** After consultation Amerada Hess personnel, it was agreed that four (4) soil boring would be drilled at predetermined locations around a large excavated area on the Cooper lease. Soil samples were collected from the appropriate intervals to assist with the definition of any potential vertical hydrocarbon contamination associated with the previous tank battery located over the excavated area. These soil borings were completed as groundwater monitor wells. The site monitor wells were gauged, purged of appropriate volumes of groundwater and sampled for various constituents according to the current United States Environmental Protection Agency (EPA) guidelines, to determine the possible horizontal extent of hydrocarbon contamination. Solid and liquid wastes produced during these assessment activities were disposed of at an NMOCD approved facility.

1.2 Soils Investigation

The subject area is situated on the High Plains of Eastern New Mexico. The subject area is associated with the Ogallala Formation. Pleistocene and recent soils form a thin mantle over the Ogallala Formation. Topsoils consist of three major textural types: fine sandy and silty loams, clay and clay loams, and fine sandy loams.

The investigation site surrounds a large excavated area estimated to be 250' x 200' x 30' deep. The soils were piled on the north, south and southwest sides of the excavated area. In addition, a large approximate 750' x 600' x 18" caliche pad was laid down around and underneath the excavation area. This excavated area was a the location of a former tank battery site on the Cooper lease.

MAG and Amerada Hess agreed upon the placement of the four soil boring/monitor wells. Monitor Well No. 1 (MW-1) was predetermined to be placed on the northwest side of the caliche pad area. MW-2 would be placed on the east side of the excavation area. MW-3 would be drilled south of MW-2 and on the south side of the excavated soils. MW-4 would be placed west of MW-3.

On July 26, 2001, MAG Personnel and White Drilling Company (White) drilled four (4) soil boring/monitor wells surrounding the excavated area. During the drilling, MAG Personnel collected soil samples at five (5) foot intervals to maximum depths of forty (40) feet. The collected soil samples were field screened using an Organic Vapor Monitor (OVM) to determine which soil samples to submit for laboratory analytical analysis. It was determined that in all of the soil borings, the 26-29 foot sample directly above the groundwater interface would be submitted. These samples were submitted to Millennium Laboratories, Inc. (Millennium) for analytical testing. In addition, in each soil boring, the

sample containing the highest OVM reading was submitted for analytical testing. In soil boring/monitor wells 2 and 4 the OVM reading and sample from 26-29 feet was one and the same.

The lithology of the soil borings was silty-sand and sand from the surface to the maximum depths of forty (40) feet. In Monitor Well No. 2 a hydrocarbon odor was noted in the sample from 26–28 feet.

Soil samples collected from the soil borings submitted to Millennium were analyzed for BTEX (Benzene, Toluene, Ethyl-benzene and Xylene, Method SW-846 5030B/8021B), Chloride (Method EPA 300.0) and Total Petroleum Hydrocarbons (Method 418.1).

Soil samples analyzed in boring/MW-1 were from the 5-7 foot and 27-29 foot intervals. The reports from Millennium documented that MW-1 BTEX levels were <0.125 mg/Kg in both samples. Chloride values were tested at 5.32 and 13 mg/Kg, respectively. Total Petroleum Hydrocarbons (TPH) were documented as <10.0 mg/Kg in each interval sampled.

The interval from 27-29 feet in boring/MW-2 was documented as containing <0.125 mg/Kg benzene, <0.125 mg/Kg toluene, 1.46 mg/Kg ethyl benzene and 5.44 mg/Kg total Xylene (5.44 mg/Kg Total BTEX). Chloride values were determined to be 51.8 mg/Kg and TPH values were 630 mg/Kg in this soil-boring sample.

Soil boring/ MW-3 samples were taken from 5-7 feet and 27-29 feet. In both sampled intervals benzene, toluene, ethyl benzene and Xylene were recorded to be <0.125 mg/Kg. Chloride values were detected to be 17.7 mg/Kg and 82 mg/Kg, respectively. In addition, TPH was <10.0 mg/Kg in each sample

Only one soil boring/MW-4 sample was analyzed from 26-28 feet. BTEX were documented to be <0.125 mg/Kg. Chloride constituents were 91.9 mg/Kg and TPH was <10.0 mg/Kg.

Please refer to Figure 1 for Soil Laboratory Analytical Results for the data simplified in table form.

1.3 Groundwater Investigation

Groundwater associated with the subject area is associated with the Ogallala (High Plains) Aquifer. The Ogallala Formation of late Miocene to Pliocene age uncomfortably overlies Cretaceous, Jurassic, Triassic, and Permian rocks and consists primarily of sand, silt, clay, and gravel derived from the southern Rocky Mountains to the west. The Ogallala is the major water-bearing unit of the High Plains of Eastern New Mexico. Hydraulic continuity occurs between the Ogallala Formation and both the underlying Cretaceous, Jurassic, and Triassic rocks in many areas of the High Plains, and the Quaternary deposits, where present. The High Plains Aquifer consists of the saturated

sediments of the Ogallala Formation and those geologic units that contain potable water and are in hydraulic continuity with the Ogallala.

Subsequent to the completion of drilling activities for the four (4) soil borings, they were completed as monitor wells as requested by Amerada Hess. The monitor wells are constructed of 2.0-inch diameter poly vinyl chloride (PVC) and completed to total depths of forty (40) feet below the ground surface (BGS). From forty (40) feet BGS to twenty (20) feet BGS, White installed 2.0-inch diameter, Schedule 40, threaded, slotted 0.010 PVC well screen. From twenty (20) feet BGS to approximately thirty-two (32) inches above the ground surface (AGS), White installed 2.0-inch diameter, Schedule 40, threaded, PVC riser pipe. From forty (40) feet BGS to eighteen (18) feet BGS, 8/16 sand was poured down the 5.0-inch diameter soil boring around the PVC pipe. From eighteen (18) feet BGS to sixteen (16) feet BGS, a Bentonite Pellet Seal was put in place to seal off the boring from possible surface contamination. From sixteen (16) feet BGS to the ground surface, a non-shrink grout was poured to further to seal off the boring from possible surface contamination and to set the monitor well. On the surface, a 2 x 2 foot concrete pad was installed with an upright metal vault to protect the PVC Riser Pipe from damage. A locking sealed well cap was placed on the PVC pipe and a lock was placed on the upright vault.

A third party company registered in the State of New Mexico surveyed the newly installed monitor wells. Ground surface, top of casing elevations, and monitor well locations were provided by Topographic of Midland, Texas.

On July 7 and July 24, 2001, MAG Personnel, gauged each monitoring well, then manually purged each monitoring well of three well volumes using clean, dedicated 1.5-inch diameter disposable polyethylene bailers, before any groundwater samples were collected. This evacuation procedure allows representative groundwater to enter the well. Samples collected for the agreed specified constituents were placed in the proper containers with Teflon®-lined lids. All groundwater samples were stored on ice and shipped to Millennium following strict chain-of-custody procedures.

All equipment was thoroughly cleaned with an Alconox® wash and rinsed with distilled water between each well sampling.

During the groundwater-monitoring event, depth to groundwater in MW-1, MW-2, MW-3 and MW-4 was gauged at 36.21 feet, 36.32 feet, 36.14 feet, and 36.06 feet below the top of casing (TOC), respectively. The site-specific groundwater gradient for the site is 0.0015 ft/ft (1.5×10^{-3} ft/ft), trending to the Southwest. No phase-separated hydrocarbon was noted on any of the monitor wells.

Groundwater at analyzed in Monitor Well No. 1 found <0.010 mg/L Benzene, <0.002 mg/L Toluene, <0.005 mg/L Ethyl benzene and <0.005 mg/L Xylene. TPH was <1.0 mg/L.

Monitor Well No. 2 was similar for BTEX constituents whereby Benzene, Toluene, Ethyl benzene and Xylene were nondetect for the groundwater in this location. TPH, however, was confirmed as 163 mg/L in this MW-2.

Monitor Well No. 3 was also nondetect for BTEX constituents. TPH analysis was reported as 11.6 mg/L.

In Monitor Well No. 4 BTEX was nondetect and TPH was less than <1.0 mg/L.

Please refer to Figure 2 for Groundwater Laboratory Analytical Results and Attachments 1, 2 and 3.

1.4 Waste Management and Disposition

Soil cuttings generated from the drilling activities on June 26, 2001, and purged ground water on July 7 and 24, 2001, was contained within 55-gallon sealed drums on location. These drums will be picked up for disposal by Gandy-Marley, Inc. and will be taken to their NMOCD approved facility, located west of Tatum, New Mexico. From a phone call to Mr. Bill Marley, pick-up of these drums is scheduled for the week of August 13, 2001.

1.5 Limitations

It should be noted that all environmental investigations are inherently limited in the sense that conclusions are drawn from observations and conversations only at specific locations and times designated in the report. Also, the passage of time may result in a change of conditions.

Our professional services have been performed in accordance with generally accepted environmental principals and practices. Meridian Alliance Group, LLC is not responsible for independent conclusions, opinions or recommendations made by others based on the information contained herein. Should any new information regarding the site become available during future investigations, we request that this information be presented to us so that we can review this data and make any necessary modification to this report in a timely and professional manner.

J. Curtis Henderson
District Manager

Mark A. Ehrlich
Project Manager

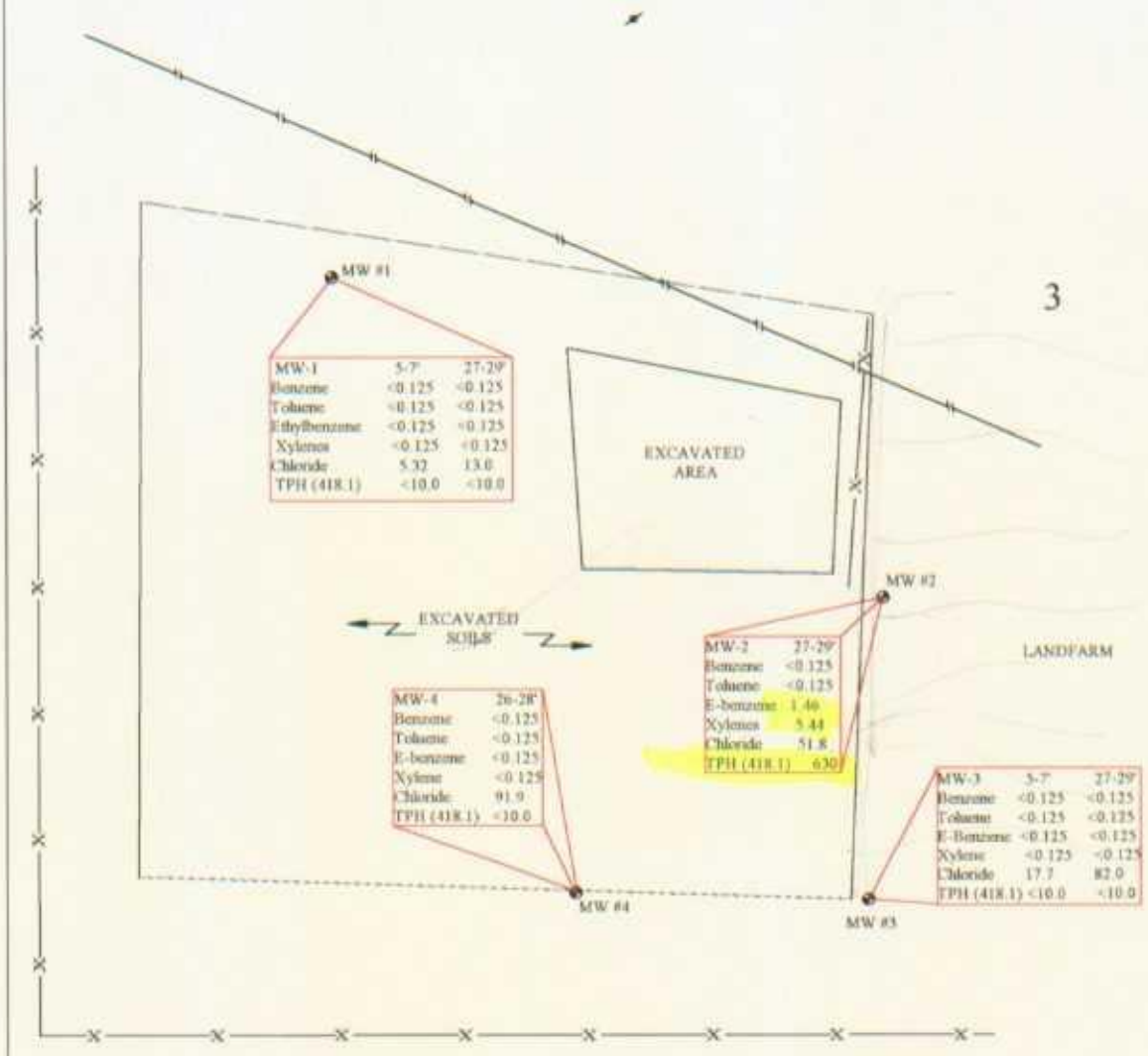
Project Name: Amerada Hess Corporation, Cooper Lease
Project Location: SECTION 12, T-20-S, R-37-E, LEA COUNTY, NEW MEXICO
Project Number: 07C005537A
Date & Initials: July 2, 2001 - JCP

Well Identification	Northing	Easting	Top of Ground (feet)	Top of Casing (feet)	Depth to Groundwater (feet)	Water Elev. (feet)	PSH Thickness (feet)
MW-1	50248	49711	3561.60	3564.30	36.21	3528.09	0.00
MW-2	50131	50021	3561.90	3564.50	36.32	3528.18	0.00
MW-3	49976	50038	3561.60	3564.10	36.14	3527.96	0.00
MW-4	50186	50082	3561.30	3563.90	36.06	3527.84	0.00

NOTES:
PSH - Phase-separated hydrocarbons

Meridian Alliance Group, LLC

Surveying Courtesy of:
TOPOGRAPHIC LAND SURVEYORS
Midland, Texas



LEGEND

- FENCE
- PIPELINE
- OIL WELL
- MONITORING WELL

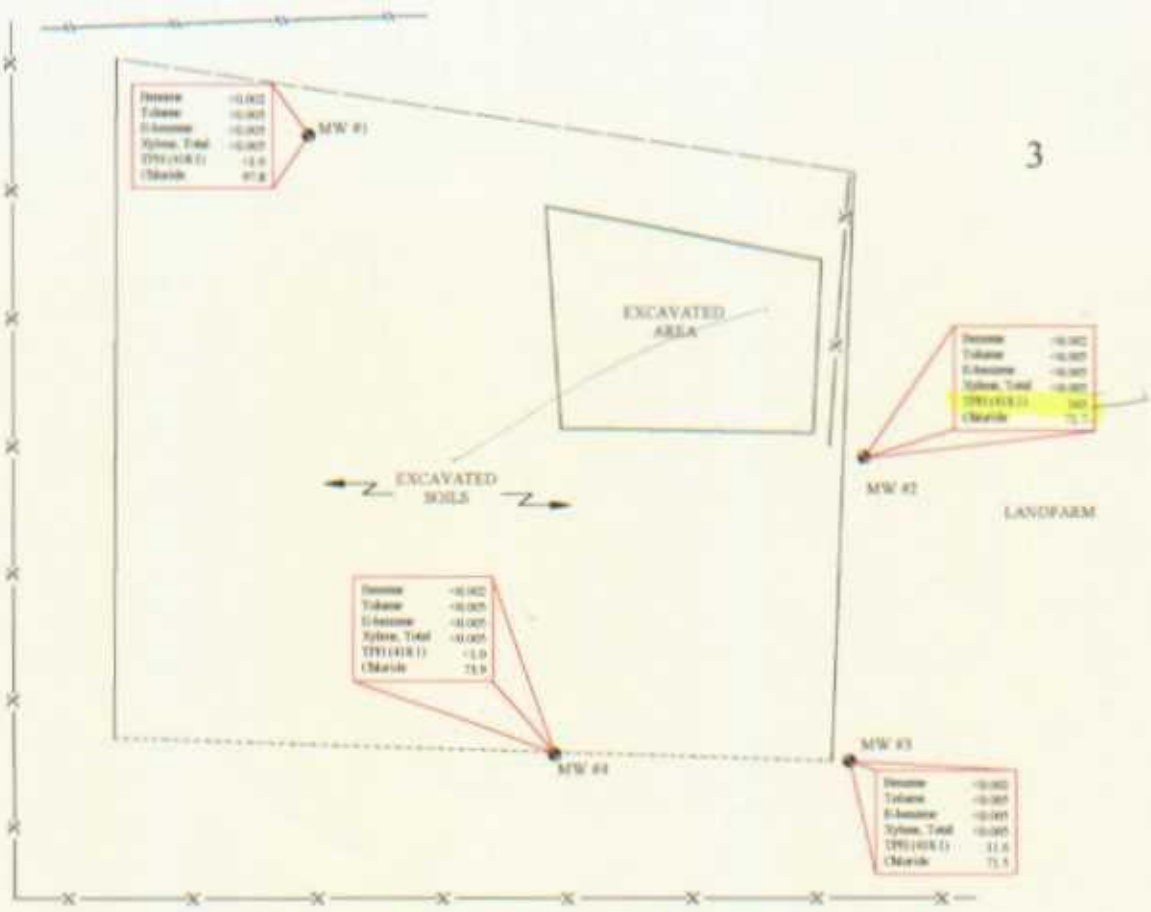
Attachment 2
Subsurface Soil Contaminant Concentration Map
Amerada Hess Corporation
Cooper Lease
SECTION 3, T-20-S, R-37-E
LEA COUNTY, NEW MEXICO

Project No.: 07C005537A	Prepared By: MAE	Meridian Alliance Group, LLC
Date: 07/03/01	Reviewed By: JB	

Surveying Courtesy of
TOPOGRAPHIC LAND SURVEYORS
Midland, Texas

4

3



N

Scale

0' 50' 100'

All values reported in mg/l

LEGEND

FENCE

PIPELINE

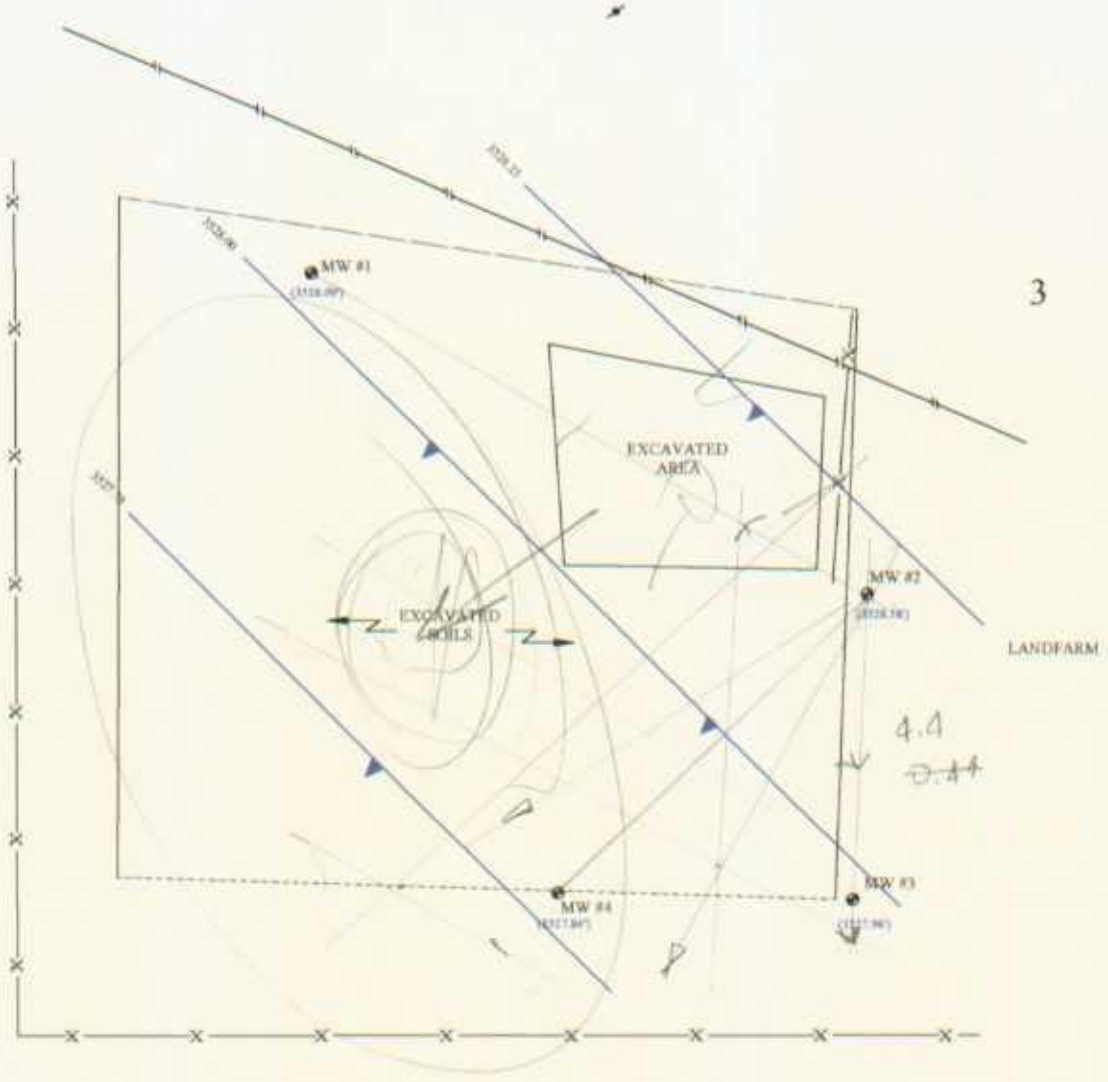
ABAND. WELL

MONITORING WELL

Attachment 3
Groundwater Concentration Map
Amerada Hess Corporation
Cooper Lease
SECTION 3, T-20-S, R-37-E
LEA COUNTY, NEW MEXICO

Project No.: 07C005537A	Prepared By: MAE	Meridian Alliance Group, LLC
Date: 07/03/01	Reviewed By: JH	

Surveying Courtesy of:
TOPOGRAPHIC LAND SURVEYORS
Midland, Texas



LEGEND

- FENCE
- PIPELINE
- OIL WELL
- MONITORING WELL

Site specific groundwater gradient is 0.0015 ft/ft. to the southwest

Attachment 4
Groundwater Gradient Map
Amerada Hess Corporation
Cooper Lease
SECTION 3, T-20-S, R-37-E
LEA COUNTY, NEW MEXICO

Project No.: 07C005537A	Prepared By: MAE	Meridian Alliance Group, LLC
Date: 07/03/01	Reviewed By: JB	

Figure 1
Soil Laboratory Analytical Results
Amerada Hess Corporation - Cooper Lease
SECTION 3, T-20-S, R-37-E
LEA COUNTY, NEW MEXICO

Location	Date	Depth (feet)	Benzene	Toluene	Ethylbenzene	Total Xylenes	BTEX	Chloride	TPH 418.1
MW-1	6/26/2001	5 - 7	<0.125	<0.125	<0.125	<0.125	ND	5.32	<10.0
MW-1	6/26/2001	27 - 29	<0.125	<0.125	<0.125	<0.125	ND	13	<10.0
MW-2	6/26/2001	27 - 29	<0.125	<0.125	1.46	5.44	6.90	51.8	630
MW-3	6/26/2001	5 - 7	<0.125	<0.125	<0.125	<0.125	ND	17.7	<10.0
MW-3	6/26/2001	27 - 29	<0.125	<0.125	<0.125	<0.125	ND	82	<10.0
MW-4	6/26/2001	26 - 28	<0.125	<0.125	<0.125	<.0125	ND	91.9	<10.0

NOTES:
All values reported in mg/Kg

Meridian Alliance Group, LLC

Figure 2
Groundwater Laboratory Analytical Results
Amerada Hess Corporation, Cooper Lease
SECTION 3, T-20-S, R-37-E
LEA COUNTY, NEW MEXICO

Location	Date	MtBE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	TPH 418.1	*Chloride
MW-1	7/7/2001	<0.010	<0.002	<0.005	<0.005	<0.005	ND	<1.0	97.8
MW-2	7/7/2001	<0.010	<0.002	<0.005	<0.005	<0.005	ND	163	71.7
MW-3	7/7/2001	<0.010	<0.002	<0.005	<0.005	<0.005	ND	11.6	71.5
MW-4	7/7/2001	<0.010	<0.002	<0.005	<0.005	<0.005	ND	<1.0	73.9

NOTES:
*Samples retaken 7/24/01 for chloride only
All values reported in mg/L

Meridian Alliance Group, LLC

Meridian Alliance Group, LLC

Project Number: 07C005537A	Monitor W[illegible] MW-1	Sheet 1 of 1
Contractor: White Drilling Company		Drilling Method: Air Coring
Driller: Bo		Location: Northwest of excavation
Date Start: 6/26/01		Date Completed: 6/26/01
Top of Casing Elevation: 3564.3'		Logged By: Mark Ehrlich

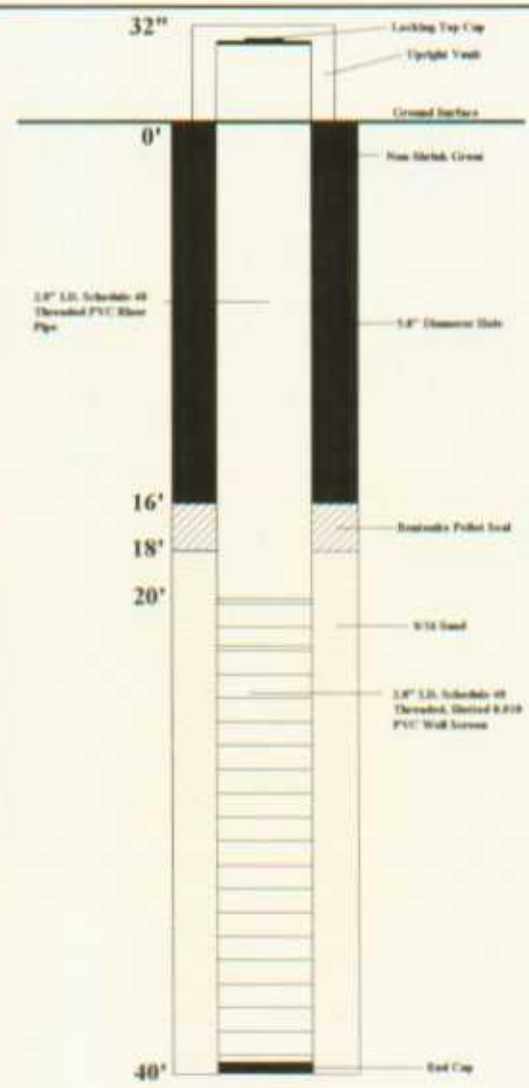
Project Name/Location:

Amerada Hess Corporation
Cooper Lease
SECTION 3, T-20-S, R-37-E,
LEA COUNTY, NEW MEXICO

Depth	Sample Interval (FT)	Sample Recovery (FT)	Sample Type	Soil Classification	FIELD SCREENING INSTRUMENT: PID-OVM UNITS: ppm	Sample Description and Conditions
	5-7*	1.5'	ST	SM	1.0	SILTY SAND, Fine to v. fine grained, some organics, grayish orange (10YR 7/4)
10'						
	10-12'	0.5'	SS	SM	0.5	SILTY SAND, Fine to v. fine grained, well compacted with organics, very light gray (7N/7)
	15-17'	0.5'	SS	SM	0.2	SILTY SAND, fine to v. fine grained, well compacted, Medium light gray (6 N/6)
20'						
	20-22'	0.5'	SS	SM	0.5	SILTY SAND, fine to v. fine, poorly compacted, light brown (5YR 6/4)
	25-27'	1.5'	SS	SM	0.5	SILTY SAND, fine to v. fine grained, caliche indurated, moist, moderate orange pink with 1/4" limestone nodules (10R 7/4)
	*27-29'	1.5'	SS	SM	0.3	SILTY SAND, fine to v. fine grained, caliche indurated, moist, 1/4" limestone nodules, moderate orange pink (10R 7/4)
30'						
40'						

Lithology

Monitor Well Construction Detail



Sample Types
SS - split spoon
SB - split barrel
ST - shelby tube
RC - rock core
SH - shovel (surface)

NOTES:
*** - sample submitted for analytical analysis**
Bottom of Boring @ 30.0'
Bottom of Monitor Well @ 40.0'
Groundwater @ ~ 29.0'

Meridian Alliance Group, LLC

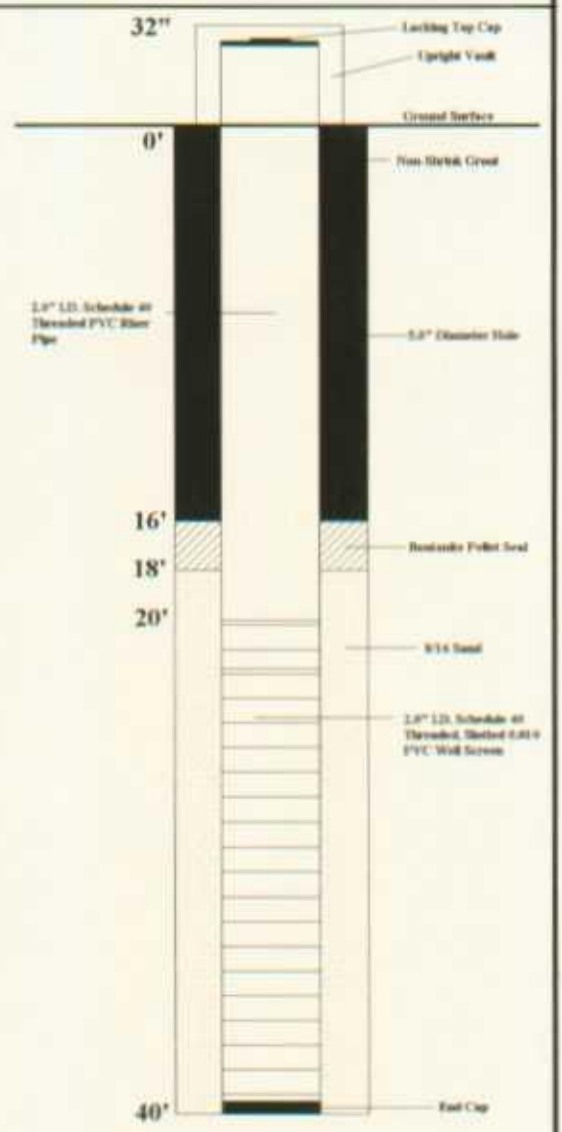
Project Number: 07C005537A	Monitor Well: MW-2	Sheet 1 of 1
Contractor: White Drilling Company		Drilling Method: Air Coring
Driller: Bo		Location: Southeast of Excavation
Date Start: 6/26/01		Date Completed: 6/26/01
Top of Casing Elevation: 3564.5'		Logged By: Mark Ehrlich

Project Name/Location:

Amerada Hess Corporation
Cooper Lease
SECTION 3, T-20-S, R-37-E,
LEA COUNTY, NEW MEXICO

Depth	Sample Interval (FT)	Sample Recovery (FT)	Sample Type	Soil Classification	FIELD SCREENING INSTRUMENT: PHOTOVAC 10S70, ppm	Sample Description and Conditions	Lithology
	5-7'	1.0'	ST	SM	1.4	SILTY SAND; Fine to v. fine grained, some organics, grayish orange (10YR 7/4)	
10'	10-12'	1.5	SS	SM	1.1	SILTY SAND; Fine to v. fine grained, very light gray (7N/7)	
	15-17'	2.0	SS	SM	4.3	SILTY SAND; Fine to v. fine grained, very light gray (7N/7)	
20'	20-22'	0.5'	SS	SM	6.1	SILTY SAND; fine to v. fine grained, 1/4 to 1/2 inch limestone nodules; grayish orange pink (10R 8/2)	
	*27-29'	2.0'	SS	SM	1110.0	SILTY SAND; Fine to v. fine grained; 1/2" limestone nodules, moist, hydrocarbon odor; medium grayish orange pink (5YR 7/2)	
30'							
40'							

Monitor Well Construction Detail



Sample Types

SS - split spoon
SB - split barrel
ST - shelby tube
RC - rock core
SH - shovel (surface)

NOTES:
* - sample submitted for analytical analysis
Bottom of Boring @ 29.0'
Bottom of Monitor Well @ 40.0'
Groundwater @ ~ 29.0'

Meridian Alliance Group, LLC

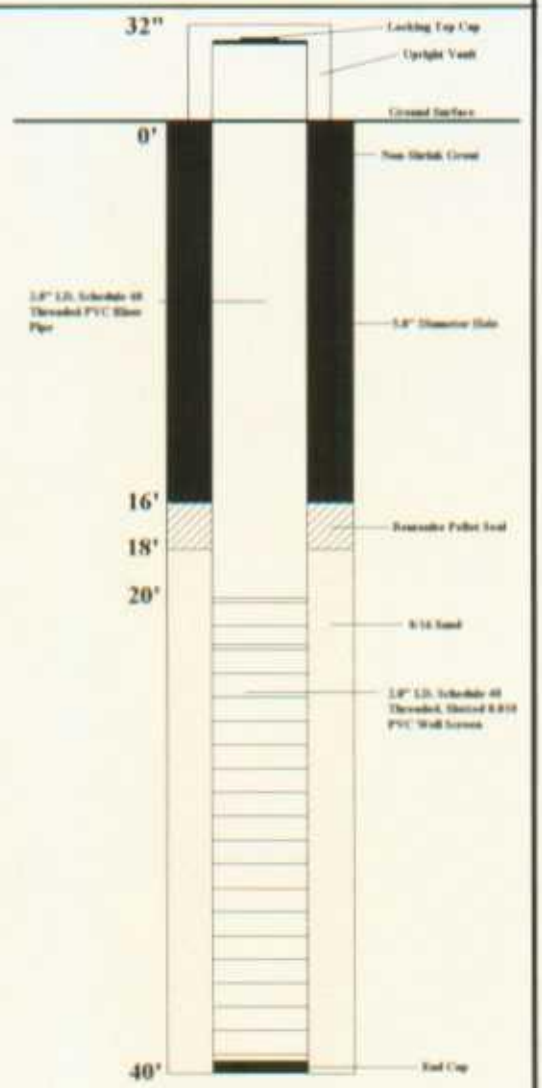
Project Number: 07C005537A	**Monitor Well:** MW-3	**Sheet** 1 of 1
Contractor: White Drilling Company		**Drilling Method:** Air Coring
Driller: Bo		**Location:** South of Monitor well No. 2
Date Start: 6/26/01		**Date Completed:** 6/26/01
Top of Casing Elevation: 3564.1'		**Logged By:** Mark Ehrlich

Project Name/Location:

Amerada Hess Corporation
Cooper Lease
SECTION 3, T-20-S, R-37-E,
LEA COUNTY, NEW MEXICO

Depth	Sample Interval (FT)	Sample Recovery (FT)	Sample Type	Soil Classification	FIELD SCREENING INSTRUMENT: PID/FID (UNITS: ppm)	Sample Description and Conditions	Lithology
	*5-7'	1.5'	ST	SM	1.1	SILTY SAND, Fine to v. fine grained, grayish orange (10YR 7/4)	
10'	10-12'	0.5	SS	SM	1.8	SILTY SAND, Fine to v. fine grained, very light gray (7N/7)	
	15-17'	1.0'	SS	SM	1.1	SILTY SAND, Fine to v. fine grained, 1" chert nodules, loosely compacted, very light gray (7N/7)	
20'	20-22'	0.5'	SS	SM	0.9	SILTY SAND, fine to v. fine grained, 1/4 to 1/2 inch limestone nodules, very light gray (7 N7)	
	*27-29'	1.5'	SS	SM	0.5	SILTY SAND, fine to v. fine grained, 1/4 to 1/2 inch limestone nodules, moist, very light gray (7 N7)	
30'							
40'							

Monitor Well Construction Detail



Sample Types

S - split spoon
SB - split barrel
ST - shelby tube
RC - rock core
SH - shovel (surface)

NOTES:
* - sample submitted for analytical analysis
Bottom of Boring @ 29.0'
Bottom of Monitor Well @ 40.0'
Groundwater @ ~ 29.0'

Meridian Alliance Group, LLC

Project Number: 07C005537A	Monitor Well: MW-4	Sheet 1 of 1
Contractor: White Drilling Company	Drilling Method: Air Coring	
Driller: Bo	Location: Southwest of Excavation Area	
Date Start: 6/26/01	Date Completed: 6/26/01	
Top of Casing Elevation: 3563.9'	Logged By: Mark Ehrlich	

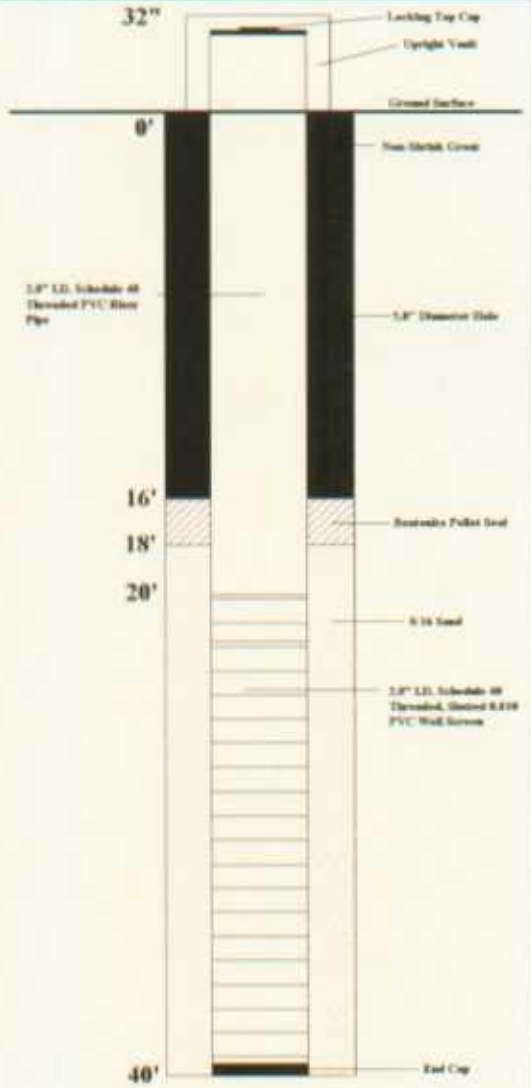
Project Name/Location:

Amerada Hess Corporation
Cooper Lease
SECTION 3, T-20-S, R-37-E,
LEA COUNTY, NEW MEXICO

Depth	Sample Interval (FT)	Sample Recovery (FT)	Sample Type	Soil Classification	Field Screening Instrument: PID-OVM Units, ppm	Sample Description and Conditions
	5-7'	1.0	ST	SM	1.5	SILTY SAND, Fine to v. fine grained, grayish orange (10YR 7/4)
10'	10-12'	0.5	SS	SM	0.7	SILTY SAND; Fine to v. fine grained, very light gray (7N/7)
	15-17'	1.5'	SS	SM	2.1	SILTY SAND; Fine to v. fine grained, very light gray (7N/7)
20'	20-22'	1.5	SS	SM	0.7	SILTY SAND; fine to v. fine grained, very pale orange (10YR 8/2)
	*26-28	1.5'	SS	SM	2.4	SILTY SAND; fine to v. fine grained, 1/4" limestone nodules, moist, very pale orange (10YR 8/2)
30'	28-30'	1.5'	SS	SM	1.0	SILTY SAND; fine to v. fine grained, 1/4" limestone nodules, moist, light gray (7 N 7)
40'						

Lithology

Monitor Well Construction Detail



Sample Types

SS - split spoon
SB - split barrel
ST - shelby tube
RC - rock core
SH - shovel (surface)

NOTES:

*** - sample submitted for analytical analysis**
Bottom of Boring @ 30.0'
Bottom of Monitor Well @ 40.0'
Groundwater @ ~ 29.0'

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Amerada Hess Corporation(Cooper Lease) Owner's Well No. MW-1
Street or Post Office Address P.O. Box 840
City and State Seminole, TX 79360

Well was drilled under Permit No. _____ and is located in the: GPS:N-32-36-25.6 W-103-14-48.9

a. ____ ¼ ____ ¼ ____ ¼ ____ ¼ of Section 3 Township T-20-S Range R-37-E N.M.P.M.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____
Subdivision, recorded in _____ County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor White Drilling Company License No. WD-1456

Address P.O. Box 906, Clyde, TX 79510

Drilling Began 6/26/01 Completed 6/26/01 Type tools _____ Size of hole 5.0 in.

Elevation of land surface or top of casing elevation at well is 3564.3' ft. Total depth of well 40.0 ft.

Completed well is ☐ shallow ☐ artesian. Monitor Well Depth to water upon completion of well 29.0 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
29.0			Mod. orange pink silty sand w/caliche & limestone	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
2.0		4	0.0	40.0	20.0	point	20.0	40.0

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
40.0	18.0	5.0	5.5	gravel packed	poured
18.0	16.0	5.0	1.0	bent. pellets	poured
16.0	0.0	5.0	6.5	cement	poured

Section 5. PLUGGING RECORD

Plugging Contractor _____
Address _____
Plugging Method _____
Date Well Plugged _____
Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received

Quad _____ FWL _____ FSL _____

File No. _____ Use _____ Location No. _____

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0.0	10.0	10	Grayish orange silty sand w/some organics
10.0	15.0	5	Very light gray silty sand w/organics
15.0	20.0	5	Med. light gray silty sand
20.0	25.0	5	Light brown silty sand
25.0	27.0	2	Mod. Orange pink silty sand w/caliche & limestone
27.0	40.0	13	Mod. orange pink silty sand w/caliche & limestone

Section 7. REMARKS AND ADDITIONAL INFORMATION

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1(a) and Section 5 need be completed.

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Amerada Hess Corp. (Cooper Lease) Owner's Well No. MW-2
Street or Post Office Address P.O. Box 840
City and State Seminole, TX 79360

Well was drilled under Permit No. _____ and is located in the: GPS: N-32-36-25.6 W-103-14-48.9

a. ____ ¼ ____ ¼ ____ ¼ ____ ¼ of Section 3 Township T-20-S Range R-37-E N.M.P.M.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____
Subdivision, recorded in _____ County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor White Drilling Company License No. WD-1456

Address P.O. Box 906 - Clyde, TX 79510

Drilling Began 6/26/01 Completed 6/26/01 Type tools _____ Size of hole 5.0 in.

Elevation of land surface or top of casing elevation at well is 3564.5 ft. Total depth of well 40.0 ft.

Completed well is ☐ shallow ☐ artesian. Monitor Well Depth to water upon completion of well 29.0 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
29.9			Med. grayish orange pink silty sand w/limestone nodules	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
2.0		4	0.0	40.0	20.0	point	20.0	40.0

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
40.0	18.0	5.0	5.5	gravel packed	poured
18.0	16.0	5.0	1.0	bent. pellets	poured
16.0	0.0	5.0	6.5	cement	poured

Section 5. PLUGGING RECORD

Plugging Contractor _____
Address _____
Plugging Method _____
Date Well Plugged _____
Plugging approved by:
_____
State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received

Quad _____ FWL _____ FSL _____

File No. _____ Use _____ Location No. _____

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0.0	10.0	10	Grayish orange silty sand w/organics
10.0	20.0	10	Very light gray silty sand
20.0	40.0	20	Grayish orange pink silty sand w/limestone

Section 7. REMARKS AND ADDITIONAL INFORMATION

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1(a) and Section 5 need be completed.

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Amerada Hess Corp. (Cooper Lease) Owner's Well No. MW-3

Street or Post Office Address P.O. Box 840

City and State Seminole, TX 79360

Well was drilled under Permit No. _____ and is located in the: GPS: N-32-36-25.6 W-103-14-48.9

a. ____ ¼ ____ ¼ ____ ¼ ____ ¼ of Section 3 Township T-20-S Range R-37-E N.M.P.M.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____ Subdivision, recorded in _____ County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor White Drilling Company License No. WD-1456

Address P.O. Box 906 - Clyde, TX 79510

Drilling Began 6/26/01 Completed 6/26/01 Type tools _____ Size of hole 5.0 in.

Elevation of land surface or top of casing elevation at well is 3564.1 ft. Total depth of well 40.0 ft.

Completed well is ☐ shallow ☐ artesian. Monitor Well Depth to water upon completion of well 29.0 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
29.0			Very light gray silty sand w/limestone	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
2.0		4	0.0	40.0	20.0	point	20.0	40.0

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
40.0	18.0	5.0	5.5	gravel packed	poured
18.0	16.0	5.0	1.0	bent. pellets	poured
16.0	0.0	5.0	6.5	cement	poured

Section 5. PLUGGING RECORD

Plugging Contractor _____

Address _____

Plugging Method _____

Date Well Plugged _____

Plugging approved by:

_____ State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received

Quad _____ FWL _____ FSL _____

File No. _____ Use _____ Location No. _____

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0.0	10.0	10	Grayish orange silty sand
10.0	15.0	5	Very light gray silty sand
15.0	20.0	5	Very light gray silty sand w/chert nodules
20.0	40.0	20	Very light gray silty sand w/limestone

Section 7. REMARKS AND ADDITIONAL INFORMATION

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1(a) and Section 5 need be completed.

Revised June 1972

STATE ENGINEER OFFICE

WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well Amerada Hess Corp. (Cooper Lease) Owner's Well No. MW-4

Street or Post Office Address P.O. Box 840

City and State Seminole, TX 79360

GPS: N-32-36-25.6
W-103-14-48.9

Well was drilled under Permit No. _____ and is located in the:

a. ____ ¼ ____ ¼ ____ ¼ ____ ¼ of Section 3 Township T-20-S Range R-37-E N.M.P.M.

b. Tract No. _____ of Map No. _____ of the _____

c. Lot No. _____ of Block No. _____ of the _____
Subdivision, recorded in _____ County.

d. X= _____ feet, Y= _____ feet, N.M. Coordinate System _____ Zone in the _____ Grant.

(B) Drilling Contractor White Drilling Company License No. WD-1456

Address P.O. Box 906 - Clyde, TX 79510

Drilling Began 6/26/01 Completed 6/26/01 Type tools _____ Size of hole 5.0 in.

Elevation of land surface or top of casing elevation is 3563.9 ft. Total depth of well 40.0 ft.

Completed well is ☐ shallow ☐ artesian. Monitor Well Depth to water upon completion of well 29.0 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Depth in Feet To	Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
29.0			Light gray silty sand w/limestone	

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To
2.0		4	0.0	40.0	20.0	point	20.0	40.0

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
40.0	18.0	5.0	5.5	gravel packed	poured
18.0	16.0	5.0	1.0	bent. pellets	poured
16.0	0.0	5.0	6.5	cement	poured

Section 5. PLUGGING RECORD

Plugging Contractor _____

Address _____

Plugging Method _____

Date Well Plugged _____

Plugging approved by:

_____
State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
1			
2			
3			
4			

FOR USE OF STATE ENGINEER ONLY

Date Received

Quad _____ FWL _____ FSL _____

File No. _____ Use _____ Location No. _____

Section 6. LOG OF HOLE

Depth in Feet From	Depth in Feet To	Thickness in Feet	Color and Type of Material Encountered
0.0	10.0	10	Grayish orange silty sand
10.0	20.0	10	Very light gray silty sand
20.0	26.0	6	Very pale orange silty sand
26.0	28.0	2	Very pale orange silty sand w/limestone
28.0	40.0	12	Light gray silty sand w/limestone

Section 7. REMARKS AND ADDITIONAL INFORMATION

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Driller

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Amerada Hess Corporation
Cooper Lease
Lea County, New Mexico

Soil boring/Monitor Well No. 1

Soil boring/Monitor Well No. 2

Amerada Hess Corporation
Cooper Lease
Lea County, New Mexico

Soil boring/Monitor Well No. 3

Soil boring/Monitor Well No. 4

MILLENNIUM LABORATORIES, INC.

1544 Sawdust Road, Suite 402. The Woodlands, Texas 77380. ph. 281-362-8490. fax 281-362-8491.

Report No: 2001060214

Client: Meridian Alliance Group
Project Name: Cooper
Project Number: 07C005537A

MBTEX/TPH Summary Report

Sample Number	Sample Description	Sample Matrix	Benzene	Toluene	Ethylbenzene	Xylenes, total	Total BTEX*	MtBE	TPH C6-C12	TPH C12-C28	TPH C6-C28	Lead	units
1	MW-1	Soil	<0.125	<0.125	<0.125	<0.125	ND	N/A	N/A	N/A	N/A	N/A	mg/Kg
2	MW-1	Soil	<0.125	<0.125	<0.125	<0.125	ND	N/A	N/A	N/A	N/A	N/A	mg/Kg
3	MW-2	Soil	<0.125	<0.125	1.46	5.44	6.900	N/A	N/A	N/A	N/A	N/A	mg/Kg
4	MW-3	Soil	<0.125	<0.125	<0.125	<0.125	ND	N/A	N/A	N/A	N/A	N/A	mg/Kg
5	MW-3	Soil	<0.125	<0.125	<0.125	<0.125	ND	N/A	N/A	N/A	N/A	N/A	mg/Kg
6	MW-4	Soil	<0.125	<0.125	<0.125	<0.125	ND	N/A	N/A	N/A	N/A	N/A	mg/Kg

* Total BTEX calculation does not include MtBE
ND = Not Detected
N/A = Analysis not requested

Report Date 07/19/2001

Report No.: 2001060214
07/19/2001
Client: Meridian Alliance Group

TEST RESULTS BY SAMPLE

Sample No.: 1 Date Collected: 06/26/2001 Time Collected: 08:07:00 Matrix: Soil
Description: MW-1 Project Name: Cooper

Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
Benzene	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Toluene	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Ethylbenzene	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Xylenes, total	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Bromofluorobenzene	8021 Surrogate	95.8	% Rec.	0.000	07/04/2001	MEP
Chloride	EPA 300.0	5.32	mg/Kg	0.100	07/19/2001	KF
TPH (418.1)	418.1	<10.0	mg/Kg	10.000	07/09/2001	MAT

Sample No.: 2 Date Collected: 06/26/2001 Time Collected: 08:32:00 Matrix: Soil
Description: MW-1 Project Name: Cooper

Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
Benzene	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Toluene	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Ethylbenzene	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Xylenes, total	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Bromofluorobenzene	8021 Surrogate	96.9	% Rec.	0.000	07/04/2001	MEP
Chloride	EPA 300.0	13.0	mg/Kg	0.100	07/14/2001	KF
TPH (418.1)	418.1	<10.0	mg/Kg	10.000	07/09/2001	MAT

Sample No.: 3 Date Collected: 06/26/2001 Time Collected: 14:24:00 Matrix: Soil
Description: MW-2 Project Name: Cooper

Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
Benzene	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Toluene	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Ethylbenzene	SW-846 5030B/8021B	1.46	mg/Kg	0.125	07/04/2001	MEP
Xylenes, total	SW-846 5030B/8021B	5.44	mg/Kg	0.125	07/04/2001	MEP
Bromofluorobenzene	8021 Surrogate	124	% Rec.	0.000	07/04/2001	MEP
Chloride	EPA 300.0	51.8	mg/Kg	0.100	07/14/2001	KF
TPH (418.1)	418.1	630	mg/Kg	10.000	07/09/2001	MAT

Sample No.: 4 Date Collected: 06/26/2001 Time Collected: 12:51:00 Matrix: Soil
Description: MW-3 Project Name: Cooper

Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
Benzene	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Toluene	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Ethylbenzene	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Xylenes, total	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP

Report No.: 2001060214
07/19/2001
Client: Meridian Alliance Group

TEST RESULTS BY SAMPLE

Sample No.: 4 Date Collected: 06/26/2001 Time Collected: 12:51:00 Matrix: Soil
Description: MW-3 Project Name: Cooper

Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
Bromofluorobenzene	8021 Surrogate	97.1	% Rec.	0.000	07/04/2001	MEP
Chloride	EPA 300.0	17.7	mg/Kg	0.100	07/14/2001	KF
TPH (418.1)	418.1	<10.0	mg/Kg	10.000	07/09/2001	MAT

Sample No.: 5 Date Collected: 06/26/2001 Time Collected: 13:05:00 Matrix: Soil
Description: MW-3 Project Name: Cooper

Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
Benzene	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Toluene	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Ethylbenzene	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Xylenes, total	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Bromofluorobenzene	8021 Surrogate	98.4	% Rec.	0.000	07/04/2001	MEP
Chloride	EPA 300.0	82.0	mg/Kg	0.100	07/14/2001	KF
TPH (418.1)	418.1	<10.0	mg/Kg	10.000	07/09/2001	MAT

Sample No.: 6 Date Collected: 06/26/2001 Time Collected: 09:38:00 Matrix: Soil
Description: MW-4 Project Name: Cooper

Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
Benzene	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Toluene	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Ethylbenzene	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Xylenes, total	SW-846 5030B/8021B	<0.125	mg/Kg	0.125	07/04/2001	MEP
Bromofluorobenzene	8021 Surrogate	96.9	% Rec.	0.000	07/04/2001	MEP
Chloride	EPA 300.0	91.9	mg/Kg	0.100	07/14/2001	KF
TPH (418.1)	418.1	<10.0	mg/Kg	10.000	07/09/2001	MAT

Millennium Laboratories, Inc.

QC SUMMARY REPORT

QC Batch ID: 0120099C

BTEX by EPA Method 8021B - Soil

Laboratory Control Sample (LCS/LCSD)
Method Blank Results

CONSTITUENT	*Method Blank* (ppm)	Spike Added (ppm)	*LCS* Result (ppm)	*LCS* Recovery (%)	*LCSD* Result (ppm)	*LCSD* Recovery (%)	LCS/D RPD (%)	*QC Acceptance Criteria* RPD (%)	*QC Acceptance Criteria* Spike % Recovery (Low - High Limit)
Benzene	<0.125	2.50	2.32	92.8%	2.03	81.1%	13%	± 30	70 - 130
Toluene	<0.125	2.50	3.01	120.2%	2.70	108.0%	11%	± 30	70 - 130
Ethylbenzene	<0.125	2.50	3.02	120.9%	2.75	109.8%	10%	± 30	70 - 130
Xylenes, total	<0.125	7.50	8.93	119.0%	8.12	108.3%	9%	± 30	70 - 130

Sample Matrix Spikes (MS/MSD)

CONSTITUENT	Sample Result (ppm)	Spike Added (ppm)	*MS* Result (ppm)	*MS* Recovery (%)	*MSD* Result (ppm)	*MSD* Recovery (%)	MS/D RPD (%)	*QC Acceptance Criteria* RPD (%)	*QC Acceptance Criteria* Spike % Recovery (Low - High Limit)
Benzene	<0.125	2.50	2.17	86.7%	2.23	89.0%	3%	± 30	65 - 135
Toluene	<0.125	2.50	2.68	107.2%	2.73	109.2%	2%	± 30	65 - 135
Ethylbenzene	<0.125	2.50	2.64	105.6%	2.69	107.6%	2%	± 30	65 - 135
Xylenes, Total	<0.125	7.50	7.50	100.0%	7.75	103.4%	3%	± 30	65 - 135

Sequence Date(s): 7/3/01 **Batch Extraction/Prep Date:** 7/1/01

Sample ID - MS/MSD: 2001060213-1

Data Qualifiers:

Project(s) In Batch: 2001060204 (4)
2001060213 (1-9)
2001060214 (1-6)
2001060225 (1-4)

Millennium Laboratories, Inc.

QC SUMMARY REPORT

QC Batch ID: 070901S

TPH by 418.1 Method

Laboratory Control Sample (LCS/LCSD)
Method Blank Results

CONSTITUENT	***Method Blank*** (ppm)	Spike Added (ppm)	***LCS***		***LCSD***		LCS/D RPD (%)	***QC Acceptance Criteria***	
			Result (ppm)	Recovery (%)	Result (ppm)	Recovery (%)		RPD (%)	Spike % Recovery (Low - High Limit)
TPH - 418.1	<10.0	500.0	421	84.2%	436	87.2%	4%	± 30	70 - 130

Sample Matrix Spikes (MS/MSD)

CONSTITUENT	Sample Result (ppm)	Spike Added (ppm)	***MS***		***MSD***		MS/D RPD (%)	***QC Acceptance Criteria***	
			Result (ppm)	Recovery (%)	Result (ppm)	Recovery (%)		RPD (%)	Spike % Recovery (Low - High Limit)
TPH - 418.1	<10.0	500.0	441	88.2%	449	89.8%	2%	± 30	70 - 130

Sample Used for MS/MSD: 2001060213-9

Sequence Date(s): 7/9/2001 **Batch Extraction/Prep Date:** 7/9/2001

Data Qualifiers: NONE - associated with this batch of samples.

Project(s) In Batch: 2001060213

2001060214

Millennium Laboratories, Inc.

QC SUMMARY REPORT

QC Batch ID: 71401

Anions by EPA Method 300.0

Laboratory Control Sample (LCS)

CONSTITUENT	*Method Blank* (ppm)	*Spike Added* (ppm)	*LCS* Result (ppm)	*LCS* Recovery (%)	*QC Acceptance Criteria* Spike % Recovery (Low - High Limit)
Chloride	<DL	50.00	45.556	91.0%	85 - 115

Sample Matrix Spikes (MS)

CONSTITUENT	*Sample Result* (ppm)	*Sample Dup Result* (ppm)	*Spike Added* (ppm)	*MS* Result (ppm)	*MS* Recovery (%)	*QC Acceptance Criteria* Spike % Recovery (Low - High Limit)
Chloride	3,797	3,633	10.00	3808.7	117.0%	75 - 125

Sequence Date(s): 7/14/01 **Batch Extraction/Prep Date:** 7/14/01

Sample ID - MS/DUP: 2001060213-6

Data Qualifiers: NONE - associated with this batch of samples.

Project(s) In Batch: **2001060213**
2001060214

MILLENNIUM LABORATORIES
CHAIN OF CUSTODY RECORD
MERIDIAN-ALLIANCE GROUP

1544 Sawdust Road, Suite 402
The Woodlands, Texas 77380
(281) 362-8490 Phone (281) 362-8491 Fax

Millennium Labs - Project Number

LAB USE ONLY 2001-06c214

Page 1 of 1

Number each chain per project

REPORT TO:	INVOICING INFORMATION	PROJECT INFORMATION
☐ Houston	P.O. #:	Project Number 07C005537A
☐ Arlington	☐ TNRCC Re-Imbursement Site - Invoice per Meridian-Alliance agreement	Site Name ~~Basin~~ Cooper
☒ Midland	☒ Non-Funded Project Site - Invoice per agreement/quote	Sampled by: Print Name(s) Below
☐ Tyler	☐ Direct Billing to Client - Include information with Chain of Custody	1 Mark Ehrlich
Other Location:	☐ Priority Project - Millennium Labs is authorized to invoice for Rush Fees	2
Other Location:	Send Invoice to: ☑ Project Manager ☐ Refer to Remarks	Meridian-Alliance Personnel Yes ✓ No ___

☐ PAH-Soil: If, C_6-C_{28} total >100 ppm
☐ PAH-Water: If, C_6-C_{28} total >5.0 ppm
Analyze one sample with the highest C_{10}-C_{28} concentration
☐ TDS: Analyze the cleanest sampling point based on TPH (Total) - If TPH is non-detect, select sample with lowest aromatic content on BTEX (Total)

Fax Results: Yes ✓ No ___

Reporting Level: Level II ___ Level III ___ TRPP ___

Remarks:

Turnaround Time
☐ 10 Working Days
☑ 5 Working Days
☐ Other: ___

Lab No.	Sample Identification	Collected Date	Collected Time	Matrix W	Matrix S	Matrix X	Method G	Method C	BTEX - MTBE	TPH 1005 / 418.1	PAH 8270 / 8310	NO3 / SO4	TDS	BTEX	TPH 1005 / 418.1	PAH 8270 / 8310	GeoTechnical	Chloride			Comments	Preserved	Total Number of Containers
									Groundwater					Soil				Other					
1	MW-1	6.25.01	0807		X		X							X	X			X				Ice	2
2	MW-1	6.25.01	0832		X		X							X	X			X				Ice	2
3	MW-2	6.25.01	1424		X		X							X	X			X				Ice	2
4	MW-3	6.26.01	1251		X		X							X	X			X				Ice	2
5	MW-3	6.26.01	1305		X		X							X	X			X				Ice	2
6	MW-4	6.26.01	0938		X		X							X	X			X				Ice	2

Relinquished by: Mark Ehrlich	Date: 6.27.01	Time: 11am	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Condition of Sample(s) Rec'd At Lab
Custody Seal Intact ☐ Yes ☐ No
Sample(s) Rec'd Iced/Cool ☑ Yes ☐ No
☑ Temperature of Sample(s): 2.4°C

Method of Shipment: [see back copy for shipping address & instructions]
☐ Greyhound Express ☐ Next-day Air FedEx-UPS ☐ Contract Courier ☐ Laboratory Personnel ☐ OTC-Delivery From Client

Received by Millennium Labs: Date: 6.28.01 Time: 8:00

Report No.: 2001070200
07/30/2001
Client: Meridian Alliance Group

TEST RESULTS BY SAMPLE

Sample No.: 1 Date Collected: 07/24/2001 Time Collected: 17:30:00 Matrix: Groundwater
Description: MW-1 Project Name: Amarada Hess

Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
Chloride	EPA 300.0	97.8	mg/L	0.100	07/30/2001	KF

Sample No.: 2 Date Collected: 07/24/2001 Time Collected: 17:45:00 Matrix: Groundwater
Description: MW-2 Project Name: Amarada Hess

Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
Chloride	EPA 300.0	71.7	mg/L	0.100	07/30/2001	KF

Sample No.: 3 Date Collected: 07/24/2001 Time Collected: 18:00:00 Matrix: Groundwater
Description: MW-3 Project Name: Amarada Hess

Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
Chloride	EPA 300.0	71.5	mg/L	0.100	07/30/2001	KF

Sample No.: 4 Date Collected: 07/24/2001 Time Collected: 18:20:00 Matrix: Groundwater
Description: MW-4 Project Name: Amarada Hess

Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
Chloride	EPA 300.0	73.9	mg/L	0.100	07/30/2001	KF

Millennium Laboratories, Inc.

QC SUMMARY REPORT

QC Batch ID: 72701

Anions by EPA Method 300.0

Laboratory Control Sample (LCS)

CONSTITUENT	*Method Blank* (ppm)	*Spike Added* (ppm)	*LCS* Result (ppm)	*LCS* Recovery (%)	*QC Acceptance Criteria* Spike % Recovery (Low - High Limit)
Chloride	<DL	50.00	46.448	93.0%	90 - 110

Sample Matrix Spikes (MS)

CONSTITUENT	*Sample Result* (ppm)	*Sample Dup Result* (ppm)	*Spike Added* (ppm)	*MS* Result (ppm)	*MS* Recovery (%)	*QC Acceptance Criteria* Spike % Recovery (Low - High Limit)
Chloride	73.8	72.7	10.00	83.260	95.0%	75 - 125

Sequence Date(s): 7/30/01 **Batch Extraction/Prep Date:** 7/27/01

Sample ID - MS/DUP: 2001070200-4

Data Qualifiers: NONE - associated with this batch of samples.

Project(s) In Batch:

2001070199
2001070200

MILLENNIUM LABORATORIES
CHAIN OF CUSTODY RECORD
MERIDIAN-ALLIANCE GROUP

1544 Sawdust Road, Suite 402
The Woodlands, Texas 77380
(281) 362-8490 Phone (281) 362-8491 Fax

Millennium Labs - Project Number
LAB USE ONLY
200 1-070 200

Page 1 of 1
Number each chain per project

REPORT TO:	INVOICING INFORMATION	PROJECT INFORMATION
☐ Houston	P.O. #: 07C005537-A	Project Number 07C005537-A
☐ Arlington	☐ TNRCC Re-Imbursement Site - Invoice per Meridian-Alliance agreement	Site Name Amarada Hess
☒ Midland Curt Henderson	☒ Non-Funded Project Site - Invoice per agreement/quote	Sampled by: Print Name(s) Below
☐ Tyler	☐ Direct Billing to Client - Include information with Chain of Custody	1 Eric Bohannon
Other Location:	☐ Priority Project - Millennium Labs is authorized to invoice for Rush Fees	2
Other Location:	Send Invoice to: ☒ Project Manager ☐ Refer to Remarks	Meridian-Alliance Personnel Yes X No ___

☐ PAH-Soil: If, C_6-C_{28} total >100 ppm
☐ PAH-Water: If, C_6-C_{28} total >5.0 ppm
Analyze one sample with the highest C_{10}-C_{28} concentration
☐ TDS: Analyze the cleanest sampling point based on TPH (Total) - If TPH is non-detect, select sample with lowest aromatic content on BTEX (Total)

Fax Results: Yes ___ No ___
Reporting Level: Level II ___ Level III ___ TRPP ___

Remarks:

Turnaround Time
☐ 10 Working Days
☐ 5 Working Days
☒ Other: 48 HRS

Lab No.	Sample Identification	Collected Date	Collected Time	Matrix W	Matrix S	Matrix X	Method G	Method C	Groundwater BTEX - MTBE	Groundwater TPH 1005 / 418.1	Groundwater PAH 8270 / 8310	Groundwater NO3 / SO4	Groundwater TDS	Soil BTEX	Soil TPH 1005 / 418.1	Soil PAH 8270 / 8310	Soil GeoTechnical	Other CHLORIDES	Other	Other	Comments	Preserved	Total Number of Sample Containers
1	MW-1	7-24	17:30	X														1					1
2	MW-2	7-24	17:45	X														1					1
3	MW-3	7-24	18:00	X														1					1
4	MW-4	7-24	18:20	X														1					1

Relinquished by: [signature]	Date: 7-24-01	Time: 18:30	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
			Received by Millennium Labs: [signature]	Date: 7-26-01	Time: 14:__

Condition of Sample(s) Rec'd At Lab
Custody Seal Intact: ☑ Yes ☐ No
Sample(s) Rec'd Iced/Cool: ☑ Yes ☐ No
Temperature of Sample(s): 4°C

Method of Shipment: [see back copy for shipping address & instructions]
☒ Greyhound Express ☐ Next-day Air FedEx-UPS ☐ Contract Courier ☐ Laboratory Personnel ☐ OTC-Delivery From Client

MILLENNIUM LABORATORIES, INC.

1544 Sawdust Road, Suite 402. The Woodlands, Texas 77380. ph. 281-362-8490. fax 281-362-8491.

Report No: 2001070090

Client: Meridian Alliance Group

Project Name: Cooper Lease

Project Number: 07C005537-A

MBTEX/TPH Water Summary Report

Sample Number	Sample Description	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	**Total BTEX*** (mg/L)	MtBE (mg/L)	TPH C6-C12 (mg/L)	TPH C12-C28 (mg/L)	**TPH C6-C28** (mg/L)
1	MW-1	<0.002	<0.005	<0.005	<0.005	ND	<0.010	N/A	N/A	N/A
2	MW-2	<0.002	<0.005	<0.005	<0.005	ND	<0.010	N/A	N/A	N/A
3	MW-3	<0.002	<0.005	<0.005	<0.005	ND	<0.010	N/A	N/A	N/A
4	MW-4	<0.002	<0.005	<0.005	<0.005	ND	<0.010	N/A	N/A	N/A

* = Total BTEX calculation does not include MtBE

ND = Not Detected

N/A = Analysis not requested

Report Date: 07/17/2001

Report No.: 2001070090
07/17/2001
Client: Meridian Alliance Group

TEST RESULTS BY SAMPLE

Sample No.: 1 Date Collected: 07/07/2001 Time Collected: 14:30:00 Matrix: Groundwater
Description: MW-1 Project Name: Cooper Lease

Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
MtBE	SW-846 5030B/8021B	<0.010	mg/L	0.010	07/14/2001	TRE
Benzene	SW-846 5030B/8021B	<0.002	mg/L	0.002	07/14/2001	TRE
Toluene	SW-846 5030B/8021B	<0.005	mg/L	0.005	07/14/2001	TRE
Ethylbenzene	SW-846 5030B/8021B	<0.005	mg/L	0.005	07/14/2001	TRE
Xylenes, total	SW-846 5030B/8021B	<0.005	mg/L	0.005	07/14/2001	TRE
TPH (418.1)	418.1	<1.0	mg/L	1.000	07/17/2001	MAT

Sample No.: 2 Date Collected: 07/07/2001 Time Collected: 15:45:00 Matrix: Groundwater
Description: MW-2 Project Name: Cooper Lease

Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
MtBE	SW-846 5030B/8021B	<0.010	mg/L	0.010	07/14/2001	TRE
Benzene	SW-846 5030B/8021B	<0.002	mg/L	0.002	07/14/2001	TRE
Toluene	SW-846 5030B/8021B	<0.005	mg/L	0.005	07/14/2001	TRE
Ethylbenzene	SW-846 5030B/8021B	<0.005	mg/L	0.005	07/14/2001	TRE
Xylenes, total	SW-846 5030B/8021B	<0.005	mg/L	0.005	07/14/2001	TRE
TPH (418.1)	418.1	163	mg/L	10.000	07/17/2001	MAT

Sample No.: 3 Date Collected: 07/07/2001 Time Collected: 17:00:00 Matrix: Groundwater
Description: MW-3 Project Name: Cooper Lease

Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
MtBE	SW-846 5030B/8021B	<0.010	mg/L	0.010	07/14/2001	TRE
Benzene	SW-846 5030B/8021B	<0.002	mg/L	0.002	07/14/2001	TRE
Toluene	SW-846 5030B/8021B	<0.005	mg/L	0.005	07/14/2001	TRE
Ethylbenzene	SW-846 5030B/8021B	<0.005	mg/L	0.005	07/14/2001	TRE
Xylenes, total	SW-846 5030B/8021B	<0.005	mg/L	0.005	07/14/2001	TRE
TPH (418.1)	418.1	11.6	mg/L	1.000	07/17/2001	MAT

Sample No.: 4 Date Collected: 07/07/2001 Time Collected: 16:25:00 Matrix: Groundwater
Description: MW-4 Project Name: Cooper Lease

Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
MtBE	SW-846 5030B/8021B	<0.010	mg/L	0.010	07/14/2001	TRE
Benzene	SW-846 5030B/8021B	<0.002	mg/L	0.002	07/14/2001	TRE

Report No.: 2001070090
07/17/2001
Client: Meridian Alliance Group

TEST RESULTS BY SAMPLE

Sample No.: 4 Date Collected: 07/07/2001 Time Collected: 16:25:00 Matrix: Groundwater
Description: MW-4 Project Name: Cooper Lease

Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
Toluene	SW-846 5030B/8021B	<0.005	mg/L	0.005	07/14/2001	TRE
Ethylbenzene	SW-846 5030B/8021B	<0.005	mg/L	0.005	07/14/2001	TRE
Xylenes, total	SW-846 5030B/8021B	<0.005	mg/L	0.005	07/14/2001	TRE
TPH (418.1)	418.1	<1.0	mg/L	1.000	07/17/2001	MAT

Millennium Laboratories, Inc.

QC SUMMARY REPORT

BTEX by EPA Method 8021B - Water

QC Batch ID: 0170281

Laboratory Control Sample (LCS/LCSD)
Method Blank Results

CONSTITUENT	*Method Blank* (ppm)	Spike Added (ppm)	*LCS* Result (ppm)	*LCS* Recovery (%)	*LCSD* Result (ppm)	*LCSD* Recovery (%)	LCS/D RPD (%)	*QC Acceptance Criteria* RPD (%)	*QC Acceptance Criteria* Spike % Recovery (Low - High Limit)
MtBE	<0.010	0.100	0.110	109.6%	0.117	117.2%	7%	± 30	70 - 130
Benzene	<0.002	0.100	0.099	98.8%	0.103	103.0%	4%	± 30	70 - 130
Toluene	<0.005	0.100	0.105	105.0%	0.109	109.1%	4%	± 30	70 - 130
Ethylbenzene	<0.005	0.100	0.104	103.9%	0.110	109.6%	5%	± 30	70 - 130
Xylenes, total	<0.005	0.300	0.320	106.6%	0.341	113.5%	6%	± 30	70 - 130

Sample/Sample Duplicate

CONSTITUENT	Sample Result (ppm)	Sample Dup. Result (ppm)	Dup. RPD (%)	*QC Acceptance Criteria* RPD (%)
MtBE	0.667	0.683	2%	± 30
Benzene	<0.002	<0.002	N/A	± 30
Toluene	<0.005	<0.005	N/A	± 30
Ethylbenzene	<0.005	<0.005	N/A	± 30
Xylenes, Total	<0.005	<0.005	N/A	± 30

Sample Matrix Spike (MS)

CONSTITUENT	Sample Result (ppm)	Spike Added (ppm)	*MS* Result (ppm)	*MS* Recovery (%)	*QC Acceptance Criteria* Spike % Recovery (Low - High Limit)
MtBE	<0.010	0.100	0.124	124.0%	70 - 130
Benzene	0.0383	0.100	0.152	113.6%	70 - 130
Toluene	<0.005	0.100	0.121	121.1%	70 - 130
Ethylbenzene	<0.005	0.100	0.123	122.8%	70 - 130
Xylenes, Total	<0.005	0.300	0.371	123.5%	70 - 130

Sequence Date(s): 7/13/01
Sample ID - MS: 2001070089-4
Sample ID - Duplicate: 2001070086-1

Project(s) In Batch: 2001070082 (3-5)
2001070085 (1)
2001070086 (1)
2001070087 (1-2)
2001070088 (1-3)
2001070089 (1-8)
200170090 (1-2)

Millennium Laboratories, Inc.

QC SUMMARY REPORT

BTEX by EPA Method 8021B - Water

QC Batch ID: 0170276

Laboratory Control Sample (LCS/LCSD)
Method Blank Results

CONSTITUENT	*Method Blank* (ppm)	Spike Added (ppm)	*LCS* Result (ppm)	*LCS* Recovery (%)	*LCSD* Result (ppm)	*LCSD* Recovery (%)	LCS/D RPD (%)	*QC Acceptance Criteria* RPD (%)	*QC Acceptance Criteria* Spike % Recovery (Low - High Limit)
MtBE	<0.010	0.100	0.110	110.0%	0.105	104.9%	5%	± 30	70 - 130
Benzene	<0.002	0.100	0.108	108.0%	0.108	107.5%	0%	± 30	70 - 130
Toluene	<0.005	0.100	0.104	104.1%	0.103	102.5%	2%	± 30	70 - 130
Ethylbenzene	<0.005	0.100	0.100	100.3%	0.099	99.4%	1%	± 30	70 - 130
Xylenes, total	<0.005	0.300	0.303	101.0%	0.297	99.0%	2%	± 30	70 - 130

Sample/Sample Duplicate

CONSTITUENT	Sample Result (ppm)	Sample Dup. Result (ppm)	Dup. RPD (%)	*QC Acceptance Criteria* RPD (%)
MtBE	<0.010	<0.010	N/A	± 30
Benzene	<0.002	<0.002	N/A	± 30
Toluene	<0.005	<0.005	N/A	± 30
Ethylbenzene	<0.005	<0.005	N/A	± 30
Xylenes, Total	<0.005	<0.005	N/A	± 30

Sample Matrix Spike (MS)

CONSTITUENT	Sample Result (ppm)	Spike Added (ppm)	*MS* Result (ppm)	*MS* Recovery (%)	*QC Acceptance Criteria* Spike % Recovery (Low - High Limit)
MtBE	<0.010	0.100	0.107	106.8%	70 - 130
Benzene	<0.002	0.100	0.105	105.0%	70 - 130
Toluene	<0.005	0.100	0.119	119.3%	70 - 130
Ethylbenzene	<0.005	0.100	0.122	121.7%	70 - 130
Xylenes, Total	<0.005	0.300	0.371	123.5%	70 - 130

Sequence Date(s): 7/13/01
Sample ID - MS: 2001070102-6
Sample ID - Duplicate: 2001070090-3

Project(s) In Batch: 2001070090 (3-4), 2001070091 (1-3), 2001070094 (1-3), 2001070097 (1), 2001070098 (1-2), 2001070102 (1-9)

Millennium Laboratories, Inc.

QC SUMMARY REPORT

TPH by 418.1 Method

QC Batch ID: 071701W

Laboratory Control Sample (LCS/LCSD)
Method Blank Results

CONSTITUENT	***Method Blank*** (ppm)	Spike Added (ppm)	***LCS*** Result (ppm)	***LCS*** Recovery (%)	***LCSD*** Result (ppm)	***LCSD*** Recovery (%)	LCS/D RPD (%)	***QC Acceptance Criteria*** RPD (%)	***QC Acceptance Criteria*** Spike % Recovery (Low - High Limit)
TPH - 418.1	<1.0	50.0	43.1	86.2%	44.2	88.4%	3%	± 30	70 - 130

Sample Matrix Spikes (MS/MSD)

CONSTITUENT	Sample Result (ppm)	Spike Added (ppm)	***MS*** Result (ppm)	***MS*** Recovery (%)	***MSD*** Result (ppm)	***MSD*** Recovery (%)	MS/D RPD (%)	***QC Acceptance Criteria*** RPD (%)	***QC Acceptance Criteria*** Spike % Recovery (Low - High Limit)
TPH - 418.1	<1.0	50.0	43.6	87.2%	44.5	89.0%	2%	± 30	70 - 130

Sample Used for MS/MSD: 2001050211-1

Sequence Date(s): 7/17/2001 **Batch Extraction/Prep Date:** 7/17/2001

Data Qualifiers: NONE - associated with this batch of samples.

Project(s) In Batch:

2001070084
2001070089
2001070090
2001070097

MILLENNIUM LABORATORIES
CHAIN OF CUSTODY RECORD
MERIDIAN-ALLIANCE GROUP

1544 Sawdust Road, Suite 402
The Woodlands, Texas 77380
(281) 362-8490 Phone (281) 362-8491 Fax

Millennium Labs - Project Number

LAB USE ONLY
200 1-07 00 90

Page 1 of 1

Number each chain per project

REPORT TO:	INVOICING INFORMATION	PROJECT INFORMATION
☐ Houston	P.O. #: 07C005537-A	Project Number 07C005537-A
☐ Arlington	☑ TNRCC Re-Imbursement Site - Invoice per Meridian-Alliance agreement	Site Name Cooper Lease
☒ Midland CURT HENDERSON	☐ Non-Funded Project Site - Invoice per agreement/quote	Sampled by: Print Name(s) Below
☐ Tyler	☐ Direct Billing to Client - Include information with Chain of Custody	1 ERIC BOHANNON
Other Location:	☐ Priority Project - Millennium Labs is authorized to invoice for Rush Fees	2
Other Location:	Send Invoice to: ☒ Project Manager ☐ Refer to Remarks	Meridian-Alliance Personnel Yes X No ___

☐ PAH-Soil: If, C_6-C_{28} total >100 ppm
☐ PAH-Water: If, C_6-C_{28} total >5.0 ppm
Analyze one sample with the highest C_{10}-C_{28} concentration
☐ TDS: Analyze the cleanest sampling point based on TPH (Total) - If TPH is non-detect, select sample with lowest aromatic content on BTEX (Total)

Fax Results: Yes ___ No ___

Reporting Level: Level II ___ Level III ___ TRPP ___

Remarks:

Turnaround Time
☒ 10 Working Days
☐ 5 Working Days
☐ Other: ___

Lab No.	Sample Identification	Collected Date	Collected Time	Matrix W	Matrix S	Matrix X	Method G	Method C	Groundwater: BTEX - MTBE	Groundwater: TPH 1005 / 418.1	Groundwater: PAH 8270 / 8310	Groundwater: NO3 / SO4	Groundwater: TDS	Soil: BTEX	Soil: TPH 1005 / 418.1	Soil: PAH 8270 / 8310	Soil: GeoTechnical	Other	Other	Other	Comments	Preserved	Total Number of Containers
1	MW-1	7-7	14:30	X					2	1													3
2	MW-2	7-7	15:45	X					2	1													3
3	MW-3	7-7	17:00	X					2	1													3
4	MW-4	7-7	16:25	X					2	1													3

Relinquished by: E. Bohannon	Date: 7-7-01	Time: 17:30	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:

Condition of Sample(s) Rec'd At Lab

Custody Seal Intact	☐ Yes	☐ No
Sample(s) Rec'd Iced/Cool	☑ Yes	☐ No
☑ Temperature of Sample(s): 2.5		

Method of Shipment: [see back copy for shipping address & instructions]

☒ Greyhound Express ☐ Next-day Air FedEx-UPS ☐ Contract Courier ☐ Laboratory Personnel ☐ OTC-Delivery From Client

Received by Millennium Labs: Date: 7-12-1 Time: 10:10

GANDY•MARLEY, INC.

P.O. Box 1658
Roswell, NM 88202
(505) 625-9206
Fax (505) 625-9706

No. 3359

LEASE OPERATOR/SHIPPER/COMPANY: Amerada Hess

LEASE NAME: Cooper

TRANSPORTER COMPANY: Marley **TIME:** 4:30 AM/PM

DATE: 8/20/1 **VEHICLE NO.:** 1 **DRIVER NO.:**

CHARGE TO: Meridian Alliance 07C0055537A

TYPE OF MATERIAL

OCD

[ ] ~~Other Material:~~ [ ] Contaminated soil [ ] C-117 No.:_____

[ ] BS&W content:_____

Description: Drill Cuttings + Purge H_2O - 1 Drum 750 BBL

VOLUME OF MATERIAL [ ]: ~~YARDS~~ 4 Drums **CELL#** 14 : [ ]_____

AS A CONDITION TO GANDY•MARLEY, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, OPERATOR/SHIPPER REPRESENTS AND WARRANTS THAT THE WASTE MATERIAL SHIPPED HEREWITH IS MATERIAL EXEMPT FROM THE RESOURCE, CONSERVATION AND RECOVERY ACT OF 1976, AS AMENDED FROM TIME TO TIME, 40 U.S.C. §6901, et seq., THE NM HEALTH AND SAF. CODE, §361.001, et seq. AND REGULATIONS RELATED THERETO, BY VIRTUE OF THE EXEMPTION AFFORDED CONTAMINATED SOILS AND OTHER WASTE ASSOCIATED WITH THE EXPLORATION, DEVELOPMENT OR PRODUCTION OF CRUDE OIL OR NATURAL GAS OR GEOTHERMAL ENERGY.

ALSO AS A CONDITION TO GANDY•MARLEY, INC.'S ACCEPTANCE OF THE MATERIALS SHIPPED WITH THIS JOB TICKET, TRANSPORTER REPRESENTS AND WARRANTS THAT ONLY THE MATERIAL DELIVERED BY OPERATOR/SHIPPER TO TRANSPORTER IS NOW DELIVERED BY TRANSPORTER TO GANDY•MARLEY, INC.'S FACILITY FOR DISPOSAL.

THIS WILL CERTIFY that the above Transporter loaded the material represented by this Transporter Statement at the above described location, and that it was tendered by the above described shipper. This will certify that no additional materials were added to this load, and that the material was delivered without incident.

DRIVER: _____

FACILITY REPRESENTATIVE: _____

White - GMI Canary - Shipper Pink - GMI Gold - Transporter

GML inc.
Gandy Marley, Inc.
P.O. Box 1658 Roswell, NM 88202
Phone 505-347-0434 Fax 505-347-0435

Amerada Hess Corp.
Box 840
Seminole, TX 79360

8/29/01

Detailed Report of material for Invoices 3382 thru 3383

EXEMPT OCD

Origin: 07C005537

Date:	Ticket No:	Discription:	Transporter:	Cell:	Units	Unit Type:
8/15/01	3360	OCD EXEMPT SOILS	Bill Marley	14	4	BBLS
		07C005537 Total BBLS.			4 BBLS	

Origin: 07C005537A

Date:	Ticket No:	Discription:	Transporter:	Cell:	Units	Unit Type:
8/20/01	3359	OCD EXEMPT SOILS	Bill Marley	14	4	BBLS
		07C005537A Total BBLS.			4 BBLS	
		EXEMPT OCD Total BBLS.			8 BBLS	

Origin: 07C005537

Date:	Ticket No:	Discription:	Transporter:	Cell:	Units	Unit Type:
8/15/01	3360	OCD EXEMPT LIQUIDS	Bill Marley		55	GAL
		07C005537 Total GAL.			55 GAL	

Origin: 07C005537A

Date:	Ticket No:	Discription:	Transporter:	Cell:	Units	Unit Type:
8/20/01	3359	OCD EXEMPT LIQUIDS	Bill Marley		55	GAL
		07C005537A Total GAL.			55 GAL	
		EXEMPT OCD Total GAL.			110 GAL	
		EXEMPT OCD Total Units.			118 Units	

Amerada Hess Corp. Total Units. 118 Units