AP - <u>019</u> 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

> > 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

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ENVIRONMENTAL BUREAU OIL CONSERVATION DIVISION Page 1

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 2×2 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: Project Locati Project Numbu	Amerada F on: SECTIC	Hess Corpol DN 12, T-20.	ration, Cooper Le -S, R-37-E, LEA C	ase OUNTY, NEW M	EXICO		
Date & Initials	: July 2, 20(01 - JCP					
Well	Northing	Easting	Top of Ground	Top of Casing	Depth to	Water Elev.	PSH
Identification			(feet)	(feet)	Groundwater (feet)	(feet)	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	00.00
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
<i>NOTES:</i> PSH - Phase-sep(arated hydroca	Irbons					Meridian Alliance Group, LLC







	TPH 418.1	<10.0	630	<10.0	<10.0	<10.0
	Chloride	5.32	51.8	17.7	82	91.9
	BTEX	Q	0.90	QN	QN	QN
esults oper Lease r-E ICO	Total Xylenes	<0.125	5.44	<0.125	<0.125	<.0125
igure 1 ry Analytical R rporation - Co 3, T-20-S, R-37 TY, NEW MEX	Ethylbenzene	<0.125	1.46	<0.125	<0.125	<0.125
F Laborator a Hess Cor SECTION : EA COUN	Toluene	<0.125	<0.125	<0.125	<0.125	<0.125
Soil Amerada	Benzene	<0.125	<0.125	<0.125	<0.125	<0.125
	Depth (feet)	5-7	27 - 29	5-7	27 - 29	26 - 28
	Date	6/26/2001	6/26/2001	6/26/2001	6/28/2001	6/26/2001
	Location	MW-1 MW-1	MW-2	MW-3	MW-3	MW-4

NOTES: All values reported in mg/Kg



	•	L	
	TPH 418.1	<1.0	163
	Total BTEX	QN	QN
Results Lease	Total Xylenes	<0.005	<0.005
ure 2 itory Analytical oration, Cooper T-20-S, R-37-E , NEW MEXIC(Ethylbenzene	<0.005	<0.005
Fig ater Labora Hess Corp ECTION 3, A COUNTY	Toluene	<0.005	<0.005
Groundwa Amerada S LE	Benzene	<0.002	<0.002
	MtBE	<0.010	<0.010
	Date	7/7/2001	7/7/2001
	tion	5	5

Location	Date	MIBE	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	418.1	*Chloride
MW-1	7/7/2001	<0.010	<0.002	<0.005	<0.005	<0.005	QN	<1.0	97.8
MW-2	7/7/2001	<0.010	<0.002	<0.005	<0.005	<0.005	QN	163	7.1.7
MW-3	7/7/2001	<0.010	<0.002	<0.005	<0,005	<0.005	QN	11.6	71.5
MW-4	7/7/2001	<0.010	<0.002	<0.005	<0.005	<0.005	QN	<1.0	73.9
VOTES:									

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



Meridian Alliance Group, LLC

~	a. 1	Aeridia					Project Number: 7C005537A	Monito	or V MW-1	Sheet 1 of 1
	D	Iliance Group,	LLC	2		C	ontractor: /hite Drilling Company		Drilling Me Air Coring	cthod:
Project	t Name/I	ocation:				DB	riller: 0		Location: Northwest	of excavation
Amera Coope SECT	ida Hess r Lease ION 3, T	Corpora -20-S, R	tion -37-E,	1		D	ate Start: 26/01		Date Comp 6/26/01	deted:
LEAC	COUNTY	, NEW I	MEXI	co		T 3	op of Casing Elevation: 564.3'		Logged B Mark Ehr	y: rlich
	aval	covery	ĸ	fication					Con	Monitor Well Instruction Detail
Depd	Sample Into FT)	Sample Ro. FT)	Sample Typ	Soil Classif	NELD SCHEMEND SSTREMEND	s	ample Description and Conditions	Lithology	32"	Lackbay Tap Cap
									0, 11	Non Strink Circui
	5-7*	1.5	ST	SM	1.0	NETY BAND, P	ins to x. fine grainod, raybb orange (10YB 7/4).		18° 10.5 km/m 4	
10'	10-12	0.5	SS	SM	0.5	SILTY SAND, well compacted	Fine to v. fine gramod, with organics,		Threaded PTC Rise Pipe	5.8° (Samerar Hote
	15-17	0.5	SS	SM	0.2	SILTY SAND, i will compared	ine to v. first grained, Modium light gray (5.376)		16	
									18'	Sector Police Forder for
20'	20-22	0.5	SS	SM	0.5	BILTY SAND, light betwee (ST	first to \mathbf{v} , first, poorly compacted, R $6/4$		20*	Tit last
	25-27	1.5	SS	SM	0.5	SILTY SAND, f matche industri piek with UR* b	Inc. to v. fine graned, C. menut, moderate enange moderate (108, 214)			3.8" 1.3. Schooler of Thereaded, Division & PVC Well Server
30'	~#!*#J*	. 1.12.	69	301	.0.3	SILTY SAND, I caliche indurates nodales, modera	ine to v. Tore granned, I, moust, 1/4° lenestene te orange prok (108, 7/4)			
40'									40'	Ball Cap
			B/CVC	100						
S - split B - split T - shell (C - rock	spion barret by tube core	pes	Botte	om of	subm Boring Monit	itted for and g @ 30.0' or Well @ 4	dytical analysis 10.0°			

10	a .	Aeridia				Project Number: 07C005537A	Monit	for Well: MW-2 Sheet 1 of 1
	D	Allianco Group,	e LLC	0		Contractor: White Drilling Company		Drilling Method: Air Coring
pjec	t Name/I	ocation:				Driller: Bo		Location: Southeast of Excavation
Amera Coope SECT	ada Hess r Lease ION 3, T	Corpora	tion 37-E,	co		Date Start: 6/26/01		Date Completed: 6/26/01
LLA		,142,001	TIL.A.			Top of Casing Elevation: 3564.5'		Logged By: Mark Ehrlich
epth	Interval	Recovery	Type	issification	ENING Th OTA per	Sample Description	82	Monitor Well Construction Detail 32"
Q	Sample (FT)	Sample (FT)	Sample	Soil Cla	PERIO MONT	and Conomions	Litholo	Taright Vault Ground Surface
						1		O*
	5-7	1.0*	ST	SM	1.4	SULTY SAND, Fine to v. fine grained, acess organics, grayish orange (10YR-74)		Le"10 Atlente et
10'	10-12'	1.5	SS	SM	1.1	SILTY SAND, Fase to x. fine grained, very light gray (7947)		Pipe 53° Diamier 10
	15-17	2.0	88	SM	43	SELTY 76/SEX Pine to v. fine grained, very light gray (78/7)		16' Barrier Parke
20'	20-22'	0.5'	85	SM	6.1	SILTY SAND, fine to v. fine grained, U4 to U2 inch. Imeniane redules, grayish orange pink (108.8/2)	84	18' 20' Vis had
								2.8" 10. Schedule Threaded, Shelter PVC:Well Screen
30'	*27-29	2.0'	SS	SM	1110.0	SIELTY (LAND), Filter to x. first granted, 1/2" filmentome modulies, mout, hydrocarbon odor; readium graywiti orange pink (SYR 7/2)	in and a second s	
40*								40* Fail Cap
SS - split SB - split ST - shel RC - risc SH - she	imple Ty spoon t barrel by tabe k core vel (sarface)	pes	NOT Bott Bott Grou	TES: ample om of om of undwa	submi Boring Monito	tted for analytical analysis @ 29.0' or Well @ 40.0' ~ 29.0'		

	a,	Assidio				Project Number: 07C005537A	Me	nitor WW-3	Sheet 1 of 1
	D	lliance Froup,	LLC	2		Contractor: White Drilling Company		Drilling Me Air Coring	thod:
roject	t Name/I	ocation:				Driller: Bo		Location: South of Mo	mitor well No. 2
mera looper ECTI	da Hess r Lease ION 3, T	Corpora -20-S, R-	tion 37-E,			Date Start: 6/26/01		Date Comp 6/26/01	leted:
EA C	OUNTY	, NEW 1	MEXI	co		Top of Casing Elevation: 3564.1'		Logged By Mark Ehr	r: fich
pth	nterval	tecovery	Type	sification	-	Sample Description	0	N Con	Aonitor Well struction Detail
å	Sample [(FT)	Sample F (FT)	Sample	Soil Clas	PIELD SCHERE	and Conditions	Litholog		Upright Vealt Circums Eastface
									- Nas Sietak Groot
	*5-7	1.5	ST	SM	1.1	graysh mange (10YE 216)		14" 13. Schedup 48 Threaded PTC Black	
10'	10-12	0.5	SS	SM	1.8	SILTY SAND, First to a first granted, very light grey (70/7)			
	15-17	1.0	SS	SM	1.1	SILTY SAND, First to v. first project, 1° shert modules, broady comparised, very light gray (7907)		16'	Bossuite Fulte
20'	20-22	0.5	SS	SM	0.9	SELTY SAND, first to v. fine gramed, 14 to 1/2 mob	-	- 20'	2
						, insemmer reduke, very agin gray († 1873			LP 13. Yokaddi Directed, Statist PYC Will Science
107	*27-27	1.5	88	SM	0.5	BLUY SAND, fine to v. first granted, U4 to 1/2 and Intentione modules, mend, very light gray (2 N7)			
10°							-	40'	TalCa
Sa split t-split	mple Ty spoon barret	pes	NOT - si Botte	TES: ample om of	subm Borin;	itted for analytical analysis			

-	9	Aoridia		_		Project Number: 07C005537A	Monit	or WW-4	Sheet 1 of 1
	D	Iliance Group,				Contractor: White Drilling Company		Drilling Me Air Coring	ethod:
rojec	t Name/L	ocation:				Driller: Bo		Location: Southwest	of Excavation Area
Amera Coope SECT	ida Hess r Lease ION 3, T-	Corporat	tion -37-E.,			Date Start: 6/26/01		Date Comp 6/26/01	eted:
LEA C	OUNTY	, NEW M	MEXI	co		Top of Casing Elevation: 3563.9'		Logged B Mark Ehr	y: rlich
4	erval	covery	pe	fication	. 1	Comple Basedation		Cor	Monitor Well astruction Detail
Dept	Sample Int (FT)	Sample Re (FT)	Sample Ty	Soil Classi	TODAT NOT NOT AND TRANSPORT	and Conditions	Lithology	32"	Lanking Top Cap Upright Youli Ground Sector
								0,	New York, Great
	5-7	1.0	st	SM	1.5	SELTY SAND, Fine to v. fire granned, grayish compa (10YB, 7/0)		1710.1444.0	
10'	10-12	0.5	88	SM	0.7	SILTY BAND, Fire to a first grained, were held gray (75/7)		Thereaded PTC River Phys	
ka i	15-17	1.5	SS	SM	21	SILTY SAND, Fine to v. fine grammed,			
			-Jacob -			wixy light gray (7947)		16' 18'	Bestinike Polisi (se
207	20-22	1.5	SS	SM	0.7	SILTY SAND, find to v. first grained, very paid or ange (10YR 8/2)		20'	
	*26-28	1.5	88	SM	2.4	SILTY SAND, for to x fire graned, 1/4" ferentiaet technice, second, very pole trange			2.0" LD. Sub-dati 40 Threaded, Shoked KJ PVC Walk larves
301	28-307	L.S'	88	SM	1.0	(10.7.8. NZ) SELTT SAND, fine to v. fine grammit, 1/4" Innexture modulos, noved, light gray (7. N. 7)			
40'								40'	Tai Cu
-	male To	Des	NOT	ES:					
S - split 8 - split T - shell tC - rock	spoon barrel by tube	pes -	Botte	om of	subm Boring Monit	itted for analytical analysis g @ 30.0' or Well @ 40.0'			

Revised June 1972

STATE ENGINEER OFFICE WELL RECORD

Section 1. GENERAL INFORMATION

(A)	Owner of well <u>Amerada Hess Corporation(Cooper Lease</u>) Owner's Well No. <u>MW-1</u> Street or Post Office Address <u>P.O.</u> Box 840 City and State Seminole, TX 79360
Well	GPS:N-32-36-25.6 was drilled under Permit No and is located in the: W-103-14-48.9

____ ¼ _____ ¼ _____ ¼ of Section <u>3</u> Township <u>T-20-S</u> Range <u>R-37-E</u> N.M.P.M. a. .

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

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

_____ feet, Y=_____ feet, N.M. Coordinate System____ _ Zone in d. X≃ .__ _ Grant. the ____

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

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

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

Elevation of land surface or top of casing elevat 40.0 ft. Total depth of well 40.0 ft.

Completed well is 🗇 shallow 🗆 artesian. Monitor We blpth to water upon completion of well ______ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth	in Feet	Thickness	Description of Water Preving Formation	Estimated Yield
From	To	in Feet	Description of water-Bearing Formation	(gallons per minute)
29.0	•		Mod. orange pink silty sand	
· .			W/Callche & fimescone	
-				

Section 3. RECORD OF CASING

Diameter	Pounds	Threads	Depth	in Feet	Length	Tune of Shoe	Perfor	ations
(inches)	per foot	per in.	Тор	Bottom	(feet)	Type of Shoe	From	То
2.0		4	0.0	40.0	20.0	point	20.0	40.0
						· · · · · · · · · · · · · · · · · · ·		

Section 4. RECORD OF MUDDING AND CEMENTING

Depth	in Feet	Hole	Sacks	Cubic Feet	Method of Blacement
From	То	Diameter	of Mud	of Cement	Method of Placement
40.0	18.0	5.0	5.5	gravel pac	ked poured
18.0	16.0	5.0	1.0	bent. pell	ets poured
16.0	0.0	5.0	6.5	cement	poured

Section 5. PLUGGING RECORD

Plugging Contractor				
Address	No	Depth	in Feet	Cubic Feet
Plugging Method	140.	Тор	Bottom	of Cement
Date Well Plugged	1			
Plugging approved by:	2			
	3			
State Engineer Representative	4			

FOR USE OF STATE ENGINEER ONLY

Use

Date Received

Quad _____ FWL ____ FSL___

File No ..

_____ Location No.____'



Depth From	in Feet	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. grange pink silty sand w/caliche & limestone
	40.0		
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Section 7. REMARKS AND ADDITIONAL INFORMATION

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

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.

Diller

λ.

Revised June 1972

STATE ENGINEER OFFICE WELL RECORD

Section 1. GENERAL INFORMATION

A) Owner of Street or City and S	well <u>Ame</u> Post Office Add State <u>Sem</u>	dress <u>P.O.</u>	Corp. (Cooper Lease) Owner Box 840 79360	's Well No
Well was drilled	under Permit l	No	GPS: N and is located in the: W	-32-36-25.6 -103-14-48.9
a	_ ¼ ¼	¼	4 of Section 3 Township T-20-S Ran	ge <u>R-37-E</u> N.M.P.M.
b. Tract I	No	of Map No	of the	
c. Lot No Subdiv	o (vision, recorded	of Block No	of the County.	
d. X= the		_ feet, Y=	feet, N.M. Coordinate System	Zone in Grant.
(B) Drilling C	ontractor <u>W</u>	hit <u>e Drill</u> 906 -	ing Company License No. W Clyde, TX 79510	ID-1456
Drilling Began .	6/26/01	Complete	ed <u>6/26/01</u> Type tools	Size of hole in.
Elevation of lar	nd surface or \underline{t}	op of casi	ng elevation well is 3564.5 ft. Total depth	of well ft.
Completed wel	lis □ sh ,	allow 🗖 artes	sian. Monitor WeDapth to water upon completion	of well <u>29.0</u> ft.
		Section	2. PRINCIPAL WATER-BEARING STRATA	
Depth From	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	Pounds	Threads	Depth	in Feet	Length	ength True of Shee	Perforations	
(inches)	per foot	per in.	Тор	Bottom	(feet)	Type of Shoe	From	To
2.0		4	0.0	40.0	20.0	point	20.0	40.0
<u></u>		· · ·				·		
					1			

Section 4. RECORD OF MUDDING AND CEMENTING

Depth	in Feet	Hole	Sacks	Cubic Feet	
From	То	Diameter	of Mud	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

Address	Nie	Depth	in Feet	Cubic Feet
Plugging Method	INO.	Тор	Bottom	of Cement
Date Well Plugged	1	1		1
Plugging approved by:	2		1	
	3			
State Engineer Representative	_4		L <u></u>	

Date Received

FOR USE OF STATE ENGINEER ONLY

Use.

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File No .__

Location No.

Quad _____ FWL ____ FSL ____

Section 6. LOG OF HOLE					
Depth	in Feet	Thickness	Color and Turns of Material Economics		
From	Τo	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		
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Section 7. REMARKS AND ADDITIONAL INFORMATION

The undersigned here by 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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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

Street or Post Office Address P.O. Box 840 City and State <u>Seminole</u> , TX 79360 GPS: N-32-36-25.6 Well was drilled under Permit No and is located in the: W-103-14-48.9
City and State <u>Seminole</u> , TX 79360 GPS: N-32-36-25.6 Well was drilled under Permit No and is located in the: W-103-14-48.9
GPS: N-32-36-25.6 Well was drilled under Permit No and is located in the: W-103-14-48.9
a $\frac{1}{4}$ $\frac{1}{4}$ $\frac{1}{4}$ of Section3 Township $\frac{T-20-S}{T-20-S}$ Range $\frac{R-37-E}{T-20-S}$ N.M.P.N
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 Gram
(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 3564.1 ft. Total depth of well 40.0
Completed well is is shallow artesian. Monitor Welplepth to water upon completion of well 29.0 f
Section 2. PRINCIPAL WATER-BEARING STRATA
Depth in Feet Thickness Estimated Yield From To in Feet Description of Water-Bearing Formation Estimated Yield
29.0 Very light gray silty sand w/limestone

Diameter	Pounds Threads Depth in Feet	in Feet	Length	Tune of Shee	Perforations			
(inches)	per foot	per in.	Тор	Bottom	(feet)		From	То
2.0		4	0.0	40.0	20.0	point	20.0	40.0

Section 4. RECORD OF MUDDING AND CEMENTING

Depth	in Feet	Hole	Sacks	Cubic Feet		Math at at Diseases	
From	То	Díameter	of Mud	of Cement		Method of Placement	
40.0	18.0	5.0	5.5	gravel pad	keđ	poured	
18.0	16.0	5.0	1.0	bent. pell	lets	poured	
16.0	0.0	5.0	6.5	cement		poured	

Section 5. PLUGGING RECORD

Plugging Contractor				
Address	Nie	Depth	in Feet	Cubic Feet
Plugging Method	NO.	Тор	Bottom	of Cement
Date Well Plugged	1	[
Plugging approved by:	2			
	3			
State Engineer Representative	4			

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Date	Received

File No.__

Location No.





Section 6. LOG OF HOLE						
Depth i	n Feet	Thickness				
From	To	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			
			· · · · · · · · · · · · · · · · · · ·			
			· · · · · · · · · · · · · · · · · · ·			
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Section 7. REMARKS AND ADDITIONAL INFORMATION

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

Driller

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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 Ame	rada Hess	Corp. (Coop	<u>er Lease)</u>		vner's Well No. <u>MW</u>	-4
(11)	Street or	Post Office Ad	dress P.O.	Box 840				
	City and	State Sem	inole, TX	79360				<u> </u>
	0.1.9 0.1.0					GPS	5: N-32-36-2	5.6
Well	was drilled	under Permit	No		and is locate	d in the:	W-103-14-	48.9
	a	_ ¼ ¼	¹ ⁄4	4 of Section <u>3</u>	Township .	<u>T-20-S</u>	Range <u>R-37-E</u>	N.M.P.M.
	b. Tract	No	of Map No	o	the			_ · · · · · · · · · · · · · · · · · · ·
	c. Lot N	0	of Block No	0	the			
	Subdi	vision, recorded	in		_ County.			
			fort V-	<i>f</i> • •	N.M. Coordinat	- Eviation		Zone in
	d. x=		_ ieet, i =	iee	, N.M. Coordinate	e System		Zone in
	the						······	Orant.
(B)	Drilling C	Contractor <u>W</u>	hite Drill	ing Company		License No	WD-1456	
Addı	ress P .	0. Box 9	06 –	Clyde, TX	79510	<u> </u>		
Drill	ing Began	6/26/01	Complete	ed <u>6/26/01</u>	Type tools		Size of hole	<u>5.0</u> in.
Elevi	ation of la	nd surface or t	op of casi	ng elevatiç	Rwell is 3563	9_ ft. Total de	pth of well 40	0 ft.
Com	pleted wel	lis 🗔 sl	nallow 🗔 artes	_{sian.} Monitor	We b lpth to wat	er upon comple	tion of well <u>29</u>	<u>0</u> ft.
			Section	2. PRINCIPAL W	TER-BEARING	STRATA		
	Depth	in Feet	Thickness				Estimated	Yield
	From	То	in Feet	Description	of Water-Bearing	Formation	(gallons per	minute)
2	9.0			Light gray	silty sand	1 w/limes	tone	
								· · · · · · · · · · · · · · · · · · ·
<u> </u>	<u></u>				······	· · · · ·		
		1	<u> </u>					

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

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole	Sacks	Cubic Feet	Math ad af Planaut
From	То	Diameter	of Mud	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	N	Depth	in Feet	Cubic Feet
Plugging Method	NO.	Тор	Bottom	of Cement
Date Well Plugged	1			
Plugging approved by:	2			
	3			
State Engineer Representative	4			

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Date Received

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Quad _____ FWL ____ FSL___

File No ...

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Location No.

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			Section 6. LOG OF HOLE
Depth i From	n Feet	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
- <u></u>			

Section 7. REMARKS AND ADDITIONAL INFORMATION

See. 3

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. Amerada Hess Corporation Cooper Lease Lea County, New Mexico



Soil boring/Monitor Well No. 1



Soil boring/Monitor Well No. 2



Meridian Alliance Group, LLC



Amerada Hess Corporation Cooper Lease Lea County, New Mexico





Soil boring/Monitor Well No. 3



Soil boring/Monitor Well No. 4



Report No: 2001060214

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

MBTEX/TPH Summary Report

,							
units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Lead	N/A	N/A	N/A	N/A	N/A	N/A	
ТРН С6-С28	N/A	N/A	N/A	N/A	N/A	N/A	
ТРН С12-С28	N/A	N/A	N/A	N/A	N/A	N/A	
ТРН С6-С12	N/A	N/A	N/A	N/A	N/A	N/A	
MtBE	N/A	N/A	N/A	N/A	N/A	N/A	
Total BTEX*	QN	QN	6.900	QN	QN	QN	
Xylenes, total	<0.125	<0.125	5.44	<0.125	<0.125	<0.125	
Ethylbenzene	<0.125	<0.125	1.46	<0.125	<0.125	<0.125	
Toluene	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	
Benzene	<0.125	<0.125	<0.125	<0.125	<0.125	<0.125	
Sample Matrix	Soil	Soil	Soil	Soil	Soil	Soil	
Sample Description	, MW-1	MW-1	MW-2	MW-3	MW-3	MW-4	
Sample Number	-	2	ы	4	ъ	9	

* 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	ple No.: 1 Date Collected: 06/26/2001 Time Collected: 08:07:00		Matrix: Soil			
Description: MW-1	Proje	ect Name: Co	ooper			
Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
Benzene	SW-846 5030B/8021	B <0.125	mg/Kg	0.125	07/04/2001	MEP
Toluene	SW-846 5030B/8021	B <0.125	mg/Kg	0.125	07/04/2001	MEP
Ethylbenzene	SW-846 5030B/8021	B <0.125	mg/Kg	0.125	07/04/2001	MEP
Xylenes, total	SW-846 5030B/8021	B <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
ГРН (418.1)	418.1	<10.0	mg/Kg	10.000	07/09/2001	MAT
Sample No.: 2	Date Collected: 06/26	/2001	Time Collecte	ed: 08:32:00	Matrix: Soil	
Description: MW-1	Proje	ect Name: Co	ooper			
Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
Benzene	SW-846 5030B/8021	B <0.125	mg/Kg	0.125	07/04/2001	MEP
Foluene	SW-846 5030B/80211	B <0.125	mg/Kg	0.125	07/04/2001	MEP
Ethylbenzene	SW-846 5030B/8021	B <0.125	mg/Kg	0.125	07/04/2001	MEP
Kylenes, total	SW-846 5030B/8021	B <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 Collecte	ed: 14:24:00	Matrix: Soil	
Description: MW-2	Proje	ect Name: Co	ooper			
Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
Benzene	SW-846 5030B/8021	B <0.125	mg/Kg	0.125	07/04/2001	MEP
Toluene	SW-846 5030B/80211	B <0.125	mg/Kg	0.125	07/04/2001	MEP
Ethylbenzene	SW-846 5030B/80211	B 1.46	mg/Kg	0.125	07/04/2001	MEP
Kylenes, total	SW-846 5030B/80211	B 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 Collecte	ed: 12:51:00	Matrix: Soil	
Description: MW-3	Proje	ect Name: Co	ooper			
Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
Benzene	SW-846 5030B/80211	B <0.125	mg/Kg	0.125	07/04/2001	MEP
Toluene	SW-846 5030B/80211	B <0.125	mg/Kg	0.125	07/04/2001	MEP
Sthylbenzene	SW-846 5030B/80211	B <0.125	mg/Kg	0.125	07/04/2001	MEP
Kylenes, total	SW-846 5030B/80211	B <0.125	mg/Kg	0.125	07/04/2001	MEP

Page 2 of 3

Report No.: 2001060214 07/19/2001 Client: Meridian Alliance Group Page 3 of 3

TEST RESULTS BY SAMPLE

Sample No.: 4	Date Collected: 06/20	6/2001	Time Collecte	ed: 12:51:00	Matrix: Soil	
Description: MW-3	Proj	ect Name: C	ooper			
Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
romofluorobenzene	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
PH (418.1)	418.1	<10.0	mg/Kg	10.000	07/09/2001	MAT
Sample No.: 5	Date Collected: 06/2	6/2001	Time Collecte	ed: 13:05:00	Matrix: Soil	
Description: MW-3	Proj	ect Name: Co	ooper			
Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
enzene	SW-846 5030B/8021	B <0.125	mg/Kg	0.125	07/04/2001	MEP
oluene	SW-846 5030B/8021	B <0.125	mg/Kg	0.125	07/04/2001	MEP
thylbenzene	SW-846 5030B/8021	B <0.125	mg/Kg	0.125	07/04/2001	MEP
ylenes, total	SW-846 5030B/8021	B <0.125	mg/Kg	0.125	07/04/2001	MEP
romofluorobenzene	8021 Surrogate	98.4	% Rec.	0.000	07/04/2001	MEP
hloride	EPA 300.0	82.0	mg/Kg	0.100	07/14/2001	KF
PH (418.1)	418.1	<10.0	mg/Kg	10.000	07/09/2001	MAT
Sample No.: 6	Date Collected: 06/2	6/2001	Time Collecte	ed: 09:38:00	Matrix: Soil	
Description: MW-4	Proj	ect Name: Co	ooper			
Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
enzene	SW-846 5030B/8021	B <0.125	mg/Kg	0.125	07/04/2001	MEP
oluene	SW-846 5030B/8021	B <0.125	mg/Kg	0.125	07/04/2001	MEP
thylbenzene	SW-846 5030B/8021	B <0.125	. mg/Kg	0.125	07/04/2001	MEP
ylenes, total	SW-846 5030B/8021	B <0.125	mg/Kg	0.125	07/04/2001	MEP
romofluorobenzene	8021 Surrogate	96.9	% Rec.	0.000	07/04/2001	MEP
hloride	EPA 300.0	91.9	mg/Kg	0.100	07/14/2001	KF
PH (418.1)	418.1	<10.0	mg/Kg	10.000	07/09/2001	MAT





QC SUMMARY REPORT

BTEX by EPA Method 8021B - Soil

QC Batch ID: 0120099C

Laboratory Control Sample (LCS/LCSD) Method Blank Results

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

Sample Matrix Spikes (MS/MSD)

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

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Sequence Date(s):

7/3/01

Batch Extraction/Prep Date: 7/

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)



QC SUMMARY REPORT

QC Batch ID: 070901S

TPH by 418.1 Method

Laboratory Control Sample (LCS/LCSD) Method Blank Results

	Method	Spike	L	cs	LC	CSD	LCS/D	QC	Acceptance Criteria
CONSTITUENT	Blank	Added	Result	Recovery	Result	Recovery	RPD	RPD	Spike % Recovery
	(ppm)	(ppm)	(ppm)	(%)	(ppm)	(%)	(%)	(%)	(Low - High Limit)
TPH - 418.1	<10.0	500.0	421	84.2%	436	87.2%	4%	<u>+</u> 30	70 - 130

Sample Matrix Spikes (MS/MSD)

	Sample	Spike	٨	1S	М	SD	MS/D	QC	Acceptance Criteria
CONSTITUENT	Result	Added	Result	Recovery	Result	Recovery	RPD	RPD	Spike % Recovery
	(ppm)	(ppm)	(ppm)	(%)	(ppm)	(%)	(%)	(%)	(Low - High Limit)
TPH - 418.1	<10.0	500.0	441	88.2%	449	89.8%	2%	<u>+</u> 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

QC SUMMARY REPORT

QC Batch ID: 71401

Anions by EPA Method 300.0

Laboratory Control Sample (LCS)

	Method	Spike	L	CS	QC Acceptance Criteria
CONSTITUENT	Blank	Added	Result	Recovery	Spike % Recovery
	(ppm)	(ppm)	(ppm)	(%)	(Low - High Limit)
Chloride	<dl< td=""><td>50.00</td><td>45.556</td><td>91.0%</td><td>85 - 115</td></dl<>	50.00	45.556	91.0%	85 - 115

Sample Matrix Spikes (MS)

	Sample	Sample Dup	Spike		NS,	QC Acceptance Criteria
CONSTITUENT	Result	Result	Added	Result	Recovery	Spike % Recovery
	(ppm)	(ppm)	(ppm)	(ppm)	(%)	(Low - High Limit)
Chloride	3,797	3,633	10.00	3808.7	117.0%	75 - 125
Sequence Date(s):	7/14/01		Batch Extrac	tion/Prep	Date:	7/14/01
Sample ID - MS/DUP:	2001060213-6					
Data Qualifiers:	NONE - associated	with this batch o	of samples.			
Project(s) In Batch:	2001060213 2001060214					

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PL CUSIODY RECORD				(281)	The \ 362-84§	Voodla 0 Phc	nds, T ne	exas (281) (77380 362-84	191 Fa	X			Laus - r	roject Number	of /	
REPORT TO:		ANI	OICING	INFO	RMATI	NO	PR		INFOR	RMATI	NO			AB USE		Number each	chain
ų	d.	# 0			,		0	750	وكرم	31	A	200	<u>'</u>	9		per proje	ţ
ton			TNRCC Re-L	nbursemen nce agreem	tt Site - Invoi ent	e per	Site No			600	<u>ل</u> ب		-Soll: If,	C ₆ -C ₂₈ total	100 ppm An	alyze one sampl	e with
pd	<u>· \</u>	ष्र	Non-Funded sgreement/qu	Project Site ote	- Invoice per		Sam	pled by:	Print Nat	me(s) Be	low.	∎ ∎	-Water: If,	C ₆ -C ₂₈ total :	5.0 ppmCO	highest C ₁₀ -C ₂₈ Incentration	
			Direct Billing Chain of Cust	to Client ody	Include inforr	ration with	1	ark	En	clic 1			S: Analyze detect,	the cleanest select sample	sampling point based on with lowest aromatic co	TPH (Total) - If TPH ntent on BTEX (Toto	s non-
ion:			Priority Projec invoice for Ru	:t - Millenn. sh Fees	um Labs is au	thorized to	- 7					ax R	sults:	Yes	°2 S		
ion:	32	nd Invoice	Proje	ct Manag		er to narks	Σ	eridian-/		Personn		teport	ing Le	rel: Level	II Level III	TRPP	
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			Turnar	ound Tir	ne	1.8	0		-	(1.8	0					۹ -	
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Sample Identification	Collect Date	ted Time	Matris W S	Σ V X	ethod C	ar S	vudw	IT NC	LE	4T Σ	Vd z	م	Oth			00	Total N Contai
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ed by: Marke Rehe ?		ate: 6.2	7.01	Time:	llam	Recei	ved by:				٥	ate:		Time:	Condition of	' Sample(s) Re Lab	c'd At
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of Shipment: [see back c	opy for shil	pping ad	dress & i	nstruc	tions]	Rec	eived	by Mi	<u>llenni</u>	<u>um L</u>	abs: D	ate:		Time:	Sample(s) Rec'd Iced/Cool	, , ,	٥²
thound Inext-day Air Contracts FedEx-UPS	Contract Courier	Pers	ratory onnel	Ĕ ₽	-Delivery m Client	X						5.28		- 'A	Sample	rature of イ(s(s):	
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Report No.: 2001070200 07/30/2001

Client: Meridian Alliance Group

Sample No.:	1	Date Collected: 07/2	24/2001	Time Collect	ed: 17:30:00	Matrix: Groun	ndwater
Description:	MW-1	Pro	ject Name: A	marada 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: 07/2	24/2001	Time Collect	ed: 17:45:00	Matrix: Groun	ndwater
Description:	MW-2	Pro	ject Name: A	marada 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: 07/2	24/2001	Time Collect	ed: 18:00:00	Matrix: Groun	ndwater
Description:	MW-3	Pro	ject Name: A	marada 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: 07/2	24/2001	Time Collect	ed: 18:20:00	Matrix: Groun	ndwater
Description:	MW-4	Pro	ject Name: A	marada Hess			
Test	na mi gy ferdala i s	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
Chloride		EPA 300.0	73.9	mg/L	0.100	07/30/2001	KF

TEST RESULTS BY SAMPLE

Page 2 of 2

QC SUMMARY REPORT

QC Batch ID: 72701

Anions by EPA Method 300.0

Laboratory Control Sample (LCS)

	Method	Spike	L	cs	QC Acceptance Criteria
CONSTITUENT	Blank	Added	Result	Recovery	Spike % Recovery
	(ppm)	(ppm)	(ppm)	(%)	(Low - High Limit)
Chloride	<dl< td=""><td>50.00</td><td>46.448</td><td>93.0%</td><td>90 - 110</td></dl<>	50.00	46.448	93.0%	90 - 110

Sample Matrix Spikes (MS)

	Sample	Sample Dup	Spike		NS	QC Acceptance Criteria
CONSTITUENT	Result	Result	Added	Result	Recovery	Spike % Recovery
	(ppm)	(ppm)	(ppm)	(ppm)	(%)	(Low - High Limit)
Chloride	73.8	72.7	10.00	83.260	95.0%	75 - 125
Sequence Date(s):	7/30/01		Batch Extrac	tion/Prep	Date:	7/27/01
Sample ID - MS/DUP:	2001070200-4					
Data Qualifiers:	NONE - associated	l with this batch o	of samples.			
Project(s) In Batch:	2001070199					
	2001070200					

MILLEN UM LABORATOR	IES	1544 Sa	awdust read, St	uite 402				-		•
CHAIN OF CUSTODY RECORD		The Wo	odlands, Texas	77380	2	lillennium	Labs - Proje	ct Number	of	 I
MERIDIAN-ALLIANCE GROUP		(281) 362-8490	Phone (281)	362-8491	Fax					
REPORT TO:	INVOICIN	G INFORMATION		INFORMA	LION		AB USE ONLY	L	Number each d	hain
Houston	P.O. #: 07 CO	05537-4	Project Number	760055	37.4 2	≥-∕00	8	5	per project	
Arlington	TNRCC Re- Meridian-Al	-Imbursement Site - Invoice pe liance agreement	د Site Name	ARADA H	° SS	PAH-Soit: If,	C6-C28 total > 100 pl	pm And	ze one sample v	with
A Midland CUET HENDERSON	Non-Funder agreement/o	d Project Site - Invoice per quote	Sampled by	: Print Name(s)	Below	PAH-water: If,	Co-C28 total >5.0 pp	the h conc	ighest C ₁₀ -C ₂₈ :entration	
Tyler	Direct Billin Chain of Cu	g to Client - Include informatio stody	n with 1 SREC	Pritter	VeV	IDS: Analyze detect,	the cleanest sampli select sample with lo	ing point based on TP owest aromatic conte	H (Total) - If TPH is n int on BIEX (Total)	μġ
Other Location:	Priority Proj invoice for F	ect - Millennium Labs is author tush Pees	rized to 2		F.	tx Results:	Yes	No		
Other Location:	Send Invoice	ject Manager	o Meridian Ka Yes	-Alliance Perso	nnel	porting Le	r el: Level II	Level III	TRPP	
Remarks:) S				
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Lab Sample Identification Dote	ected Matr	ix Method BT	Groundwater	TT TB TT	Vd IS	Oth C			σ φ •	ronar n Contai
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7 Mw. 3 2-24	× ∞:8/					~			_	
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Relinquished by:	Date: 7-24-01	Time: / 8. 30	Received by:		Da	te:	Time:	Condition of S	iample(s) Rec' Lab	d At
Relinquished by:	Date:	Time:	Received by:		Da	te:	Time:	Custody Seal Intact		₅
Method of Shipment: [see back copy for s	hipping address &	instructions]	Received by M	<u>lillennium</u>	<u>Labs</u> : D	ate:	Time:	Sample(s) Rec'd Iced/Cool		٦²
Express FedEx-UPS Courier	Laboratory Personnel	Trom Client				22(-1	14.	Tempera Sample(s): <2/~	
							2]

MILLENNIUM CABORATORIES, 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 Page 2 of 3

TEST RESULTS BY SAMPLE

Sample No.: 1	Date Collected: 07/07/	2001	Time Collect	ed: 14:30:00	Matrix: Grou	ndwater
Description: MW-1	Projec	ct Name: Co	ooper Lease			
Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
MtBE	SW-846 5030B/8021E	3 <0.010	mg/L	0.010	07/14/2001	TRE
Benzene	SW-846 5030B/8021E	3 <0.002	mg/L	0.002	07/14/2001	TRE
Toluene	SW-846 5030B/8021E	3 <0.005	mg/L	0.005	07/14/2001	TRE
Ethylbenzene	SW-846 5030B/8021E	3 <0.005	mg/L	0.005	07/14/2001	TRE
Xylenes, total	SW-846 5030B/8021E	3 <0.005	mg/L	0.005	07/14/2001	TRE
ГРН (418.1)	418.1	<1.0	mg/L	1.000	07/17/2001	MAT
Sample No.: 2	Date Collected: 07/07/	2001	Time Collect	ed: 15:45:00	Matrix: Grour	ndwater
Description: MW-2	Projec	ct Name: Co	ooper Lease			
Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
MtBE	SW-846 5030B/8021E	3 <0.010	mg/L	0.010	07/14/2001	TRE
Benzene	SW-846 5030B/8021E	3 <0.002	mg/L	0.002	07/14/2001	TRE
Foluene	SW-846 5030B/8021E	3 <0.005	mg/L	0.005	07/14/2001	TRE
Ethylbenzene	SW-846 5030B/8021E	3 <0.005	mg/L	0.005	07/14/2001	TRE
Xylenes, total	SW-846 5030B/8021E	3 50.005	mg/L	0.005	07/14/2001	TRE
ГРН (418.1)	418.1	(163	mg/L	10.000	07/17/2001	MAT
Sample No.: 3	Date Collected: 07/07/	/2001	Time Collect	ed: 17:00:00	Matrix: Groun	ndwater
Description: MW-3	Projec	ct Name: Co	ooper Lease			
Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
MtBE	SW-846 5030B/8021E	3 <0.010	mg/L	0.010	07/14/2001	TRE
Benzene	SW-846 5030B/8021E	3 <0.002	mg/L	0.002	07/14/2001	TRE
Foluene	SW-846 5030B/8021E	3 <0.005	mg/L	0.005	07/14/2001	TRE
Ethylbenzene	SW-846 5030B/8021E	3 <0.005	mg/L	0.005	07/14/2001	TRE
Xylenes, total	SW-846 5030B/8021E	<0.005	mg/L	0.005	07/14/2001	TRE
ГРН (418.1)	418.1	11.6	mg/L	1.000	07/17/2001	MAT
Sample No.: 4	Date Collected: 07/07/	/2001	JTime Collect	ed: 16:25:00	Matrix: Groun	ndwater
Description: MW-4	Projec	ct Name: Co	ooper Lease	•	•	
Test	Method	Results	Units	Detection Limit	Date Analyzed	Analyst
MtBE	SW-846 5030B/8021E	3 <0.010	mg/L	0.010	07/14/2001	TRE
Benzene	SW-846 5030B/8021E	3 <0.002	mg/L	0.002	07/14/2001	TRE

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

TEST RESULTS BY SAMPLE

Page 3 of 3

Sample No.: Description:	4 MW-4	Date Collected: 07/07/2 Projec	2001 t Name: Co	Time Collecto oper Lease	ed: 16:25:00	Matrix: Groun	ndwater
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

QC Batch ID:

0170281



QC SUMMARY REPORT

BTEX by EPA Method 8021B - Water

Laboratory Control Sample (LCS/LCSD) Method Blank Results

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

Sample/Sample Duplicate

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

Sample Matrix Spike (MS)

	Sample	Spike		//S	QC Acceptance Criteria		
CONSTITUENT	Result (ppm)	Added (ppm)	Result (ppm)	Recovery (%)	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)



070086 (1) 070087 (1-2)

QC Batch ID:

0170276



QC SUMMARY REPORT

BTEX by EPA Method 8021B - Water

Laboratory Control Sample (LCS/LCSD) Method Blank Results

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

Sample/Sample Duplicate

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

Sample Matrix Spike (MS)

	Sample	Spike	٨	N S	QC Acceptance Criteria
CONSTITUENT	Result (ppm)	Added (ppm)	Result (ppm)	Recovery (%)	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)



QC Batch ID: 071701W



QC SUMMARY REPORT

TPH by 418.1 Method

Laboratory Control Sample (LCS/LCSD) Method Blank Results

	Method	Spike	L	cs	LC	CSD	LCS/D	QC	Acceptance Criteria
CONSTITUENT	Blank	Added	Result	Recovery	Result	Recovery	RPD	RPD	Spike % Recovery
	(ppm)	(ppm)	(ppm)	(%)	(ppm)	(%)	(%)	(%)	(Low - High Limit)
TPH - 418.1	<1.0	50.0	43.1	86.2%	44.2	88.4%	3%	<u>+</u> 30	70 - 130

Sample Matrix Spikes (MS/MSD)

	Sample	Spike	N	IS	М	SD	MS/D	QC	Acceptance Criteria
CONSTITUENT	Result	Added	Result	Recovery	Result	Recovery	RPD	RPD	Spike % Recovery
	(ppm)	(ppm)	(ppm)	(%)	(ppm)	(%)	(%)	(%)	(Low - High Limit)
TPH - 418.1	<1.0	50.0	43.6	87.2%	44.5	89.0%	2%	<u>+</u> 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.

2001070084

Project(s) In Batch:

2001070089

2001070090 2001070097

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MERIDIAN-ALLIANCE GROUP		(281) 362-8490	Phone	(281) 3	62-8491	Fax				5	
REPORT TO:	INV	OICING INFORMATIO	a z	ROJECT	NFORMA	TION	 ~	AB USE ONLY	(Number each c	hain
Houston	P.O. #: O	PC005537-A	Projec		2002E	533-41	<u>00 / - 00</u>	200	20	per project	
Arlington	凶	INRCC Re-Imbursement Site - Invoice Meridian-Alliance agreement	Per Site I	Name Coc	Per Lo	ASC [PAH-Solt: If,	C ₆ -C ₂₈ total >100 p	om And	yze one sample v	with
A Midland CURT HENDERSON		Non-Funded Project Site - Invoice per sgreement/quote	- S 	impled by: P	rint Name(s)	Below	PAH-Water: If,	C6-C28 total >5.0 pp	m cond	ilghest C ₁₀ -C ₂₈ centration	
Tyler		Direct Billing to Client - Include informat Chain of Custody	ion with	ERECI	So FA	J NON	TDS: Analyze detect,	the cleanest sample select sample with I	ing point based on TI owest aromatic cont	² H (Total) - If TPH is r ent on BTEX (Total)	μ.
Other Location:		Priority Project - Millennium Labs is auth nvoice for Rush Fees	orized to 2			<u>H</u>	ax Results:	Yes	No		Γ
Other Location:	Send Invoice to:	Droject Manager	to rks	Meridian-Al Yes	liance Perso No	nnel R	eporting Lev	el: Level II	Level III	TRPP	
Remarks:											
		Turnaround Time	0		1.8	0				4 -	
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		5 Working Days	/ 0/2) 500	OS ,	/ SO(/ 0/2		ð	mments	ν Φ	
		Other:	28 HV	ऽत / ६८	EX	28 H.				- >	ຍອບ ອດເມກ
Lab Sample Identification Co No.	llected Time	Watrix Method B W S X G C	Croundy Groundy	vater 11	ra TT	Noil Noil	Othe			• • • •	
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Z- WW - Z - 12	15:45	X 2									5
7 mw-3 7.7	17:00	X 2	-								M
4 mw-4 7-7	16:25	X 2								}	m
	Date: 7 - 7	2-01 Time:/7;30	Received by			ŏ	te:	Time:	Condition of S	sample(s) Rec' Lab	d At
Relinquished by:	Date:	Time:	Received by			ŭ	ite:	Time:	Custody Seal Intact		_²
Method of Shipment: [see back copy for	shipping ade	dress & instructions]	Received	d <u>by Mil</u>	ennium	<u>Labs</u> : D	ate:	Time:	Sample(s) Rec'd Iced/Cool		
Greyhound Next-day Alr Contract FedEx-UPS Courier		atory OTC-Delivery onnel From Client	Q				212-1	10.10	Sample(ture gf レス	
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	े व	GANE F	P.O. Box 1658 loswell, NM 88202 (505) 625-9206 Fax (505) 625-9706	NC. Nº	3359
LEASE	OPERATOR/	SHIPPER/COMP	ANY: Amercud	a Hess	
LEASE	NAME: Co	soper			
TRANS	PORTER CO	MPANY: Mc	iller	TIME: 4130	AMPM
DATE:	\$/20/1	VEHICL	E NO.: /	DRIVER NO	نن ب ەن - _{اس}
CHARC	SETO: Me	ridian All	ichee O'	700553	7A
		TYF	'E OF MATERIAL	· · · · · · · · · · · · · · · · · · ·	
	·· · · ·		OCD		
Other I	Material:	[] Contaminate [] BS&W conte	d soil []C-1 nt:	17 No.:	
Descrij	ption: <u>Pri//</u>	Cuttings	+ Purge bi	20 · 10 run	- 750 BB
· · ·					
VOLUN		IAL[]:YARDS_	4 Drums CE	LL# <u> </u>]
ASAC OPERATC EXEMPT F 40 U.S.C. { VIRTUÉ O	ONDITION TO GAN DR/SHIPPER REPR FROM THE RESOU §6901, et seq., THE IF THE EXEMPTION DEVELOPMENT OF	IDY MARLEY, INC.'S A ESENTS AND WARRAU IRCE, CONSERVATION NM HEALTH AND SAF. NAFFORDED CONTAM R PRODUCTION OF CI	CCEPTANCE OF THE MA NTS THAT THE WASTE M I AND RECOVERY ACT O CODE, §361.001, et seq. A IINATED SOILS AND OTH RUDE OIL OR NATURAL (ATERIALS SHIPPED WITH T ATERIAL SHIPPED HEREW F 1976, AS AMENDED FRO IND REGULATIONS RELAT ER WASTE ASSOCIATED W GAS OR GEOTHERMAL EN	HIS JOB TICKET, ITH IS MATERIAL M TIME TO TIME, ED THERETO, BY ITH THE EXPLO- ERGY.
RATION, D		TO GANDY•MARLEY 1		THE MATERIALS SHIPPED	WITH THIS JOB
ALSO / TICKET, TI PER TO TI	AS A CONDITION RANSPORTER RE RANSPORTER IS N	PRESENTS AND WARI	ROUS ACCEL TANGE OF RANTS THAT ONLY THE M RANSPORTER TO GAND	MATERIAL DELIVERED BY C Y•MARLEY, INC.'S FACILITY	PERATOR/SHIP- FOR DISPOSAL.
RATION, E ALSO TICKET, TI PER TO TI THIS W described added to ti	AS A CONDITION RANSPORTER RE RANSPORTER IS N VILL CERTIFY that i location, and that it his load, and that th	PRESENTS AND WARI IOW DELIVERED BY TI he above Transporter lo was tendered by the at e material was delivered	RANTS THAT ONLY THE N RANTS THAT ONLY THE N RANSPORTER TO GAND aded the material represer nove described shipper. Th I without incident.	ATERIAL DELIVERED BY C MARLEY, INC.'S FACILITY Inted by this Transporter State his will certify that no addition	PERATOR/SHIP- FOR DISPOSAL. ment at the above nal materials were
RATION, E ALSO TICKET, TI PER TO TI THIS W described added to th DRIVER:	AS A CONDITION RANSPORTER RE RANSPORTER IS N VILL CERTIFY that i location, and that it his load, and that th	PRESENTS AND WARI IOW DELIVERED BY TI the above Transporter Ic was tendered by the at e material was delivered	RANTS THAT ONLY THE N RANTS THAT ONLY THE N RANSPORTER TO GAND' added the material represer hove described shipper. Th d without incident.	ATERIAL DELIVERED BY C Y•MARLEY, INC.'S FACILITY nted by this Transporter State his will certify that no addition	PERATOR/SHIP- FOR DISPOSAL. ment at the above nal materials were
RATION, E ALSO TICKET, TI PER TO TI THIS W described added to ti DRIVER: _ FACILITY	AS A CONDITION RANSPORTER RE RANSPORTER IS N VILL CERTIFY that is location, and that it his load, and that th EXAMPLE	PRESENTS AND WARI NOW DELIVERED BY TI the above Transporter Ic was tendered by the at the material was delivered the material was delivered the material was delivered	RANTS THAT ONLY THE N RANSPORTER TO GAND' vaded the material represent vove described shipper. The d without incident.	ATERIAL DELIVERED BY C Y•MARLEY, INC.'S FACILITY Inted by this Transporter State his will certify that no addition	PERATOR/SHIP FOR DISPOSAL. ment at the above nal materials were

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EXEMPT OCD

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

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 BI	BLS
Origin:	07C005537A					
Date:	Ticket No:	Discription:	Transporter:	Cell:	Units	Unit Type:
8/20/01	3359	OCD EXEMPT SOILS	Bill Marley	14	4	BBLS
		07C005537	A Total BBLS.		4 BE	BLS
		EX	EMPT OCD Total BBL	.S.	8 BI	BLS
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 G/	۹L
Origin:	07C005537A					
Date:	Ticket No:	Discription:	Transporter:	Cell:	Units	Unit Type:
8/20/01	3359	OCD EXEMPT LIQUIDS	Bill Marley		55	GAL
		07C005537	A Total GAL.		55 G/	4L
		EX	EMPT OCD Total GAL		110 G/	۹L
		EXI	EMPT OCD Total Units	S.	118 Ur	nits
Amerad	a Hess C	orp. Total Units.			118 Un	its

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