## 3R - 282

## GENERAL CORRESPONDENCE

YEAR(S): 1992-1991



FE : 13 MM 9 29

### STATE OF NEW MEXICO



ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD AZTEC, NEW MEXICO 87410 (505) 334-6178

BRUCE KING GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

MATTHEW BACA
DEPUTY SECRETARY

February 11, 1992

Meridian Oil Inc. Attn. Derin Warren P.O. Box 4289 Farmington, NM 87499-4289

RE: Meridian Hart Canyon Storage Facility #1 Pit Closure, D-25-30N-10W

Dear Mr. Warren:

Meridian Oil Inc. through their transportation division is authorized to close the Meridian Transportation Hart Canyon Storage Facility #1 pit located in D-25-30N-10W. The Oil Conservation Division has accepted for record test data from Recon sample analysis by Burlington Environmental Inc. showing the contamination was limited to the pit area which has been excavated. OCD requires the pit closure to be done in a manner directing run-off away from the pit area and mounding the backfill to prevent precipitation on the pit area from percolating into ground water.

Please be advised that approval of this pit closure does not relieve you of liability should your operation result in actual pollution of surface or ground waters which may be actionable under other laws and/or regulations.

If there are any questions, please call Denny Foust at 505-334-6178.

Yours truly,

Denny G. Foust

Environmental Geologist

XC:

OCD Environmental Bureau

DGF File

Environmental File

DGF\sh

## MERIDIAN OIL

\*92 FE ? S MM 9 28

January 27, 1992

New Mexico Oil Conservation Division P.O. Box 2088 Santa Fe, New Mexico 87504-2088 Attn: Roger Anderson

RE: Meridian Storage Facility #1 Pit Closure

Dear Mr. Anderson:

I am sending this correspondence to you at the request of Denny Foust of the Aztec office of the NMOCD.

Characterization to determine potential subsurface hydrocarbon migration at the Storage #1 Facility has been completed. Please find attached a description of the site and measurements of subsurface hydrocarbon concentrations made by Envirotech, Inc. and John Mathes & Associates, Inc. Please note that the data reported by Mathes indicates no migration of hydrocarbons from the pit has occurred.

Based on the results of this investigation, we propose the most appropriate method for closure of this pit is to return the soil previously excavated by DMRI/Envirotech to the pit and level the site by the addition of a clean soil cap. This proposal is made with consideration given to previously completed work at the site. All excavated soil currently on site was removed from directly below the original pit, and has been shown by the Mathes soil gas survey and laboratory analysis of downgradient soils to not be a source of mobile hydrocarbons. The original pit contents and heavily contaminated soils, approximately 2,095 cubic yards, have been removed to the Envirotech Landfarming operation. Additionally, the excavation has been made to a depth of more than 20 feet where a hard sandstone bottom was discovered. The Mathes survey also confirmed the presence of a contiguous sandstone layer. The results of this earlier work, taken with the results of the Mathes investigation illustrates that further excavation or removal of the soils is not necessary to control any significant impact to the local environment or ground water.

The proposed closure procedures and all testing procedures for this site have been done within the NMOCD Draft Guidelines for Surface Impoundment Closure. Also, the surface of the site will be structured to discourage the collection of standing water and percolation of water into the closed pit location.

Please accept this correspondence as a request for written confirmation of NMOCD approval for closure of this site.

Questions or requests for additional information can be directed to myself, or a Mathes representative can be made available to you.

10/21/92

Cordially,

Derin Warren

Environmental Representative

Attachments

XC:

P.L. Malter

M.J. McEneny

L.R. Marshall

**D.** Foust
Meridian Oil Inc., 3535 East 30th St., P.O. Box 4289, Farmington, New Mexico 87499-4289, Telephone 505-326-9700

TURIGE \*1

Burlin 210 W Post O Columi (618)

171777

ngton Environmental Inc.	1
est Sand Bank Road	Well/Facility HALT CLNYUN STURM
office Box 330	Well Field /ANT CANYON
bia, Illinois 62236-0330	Project Name Meridian Phase II
281-7173 FAX (618) 281-5120	
	Environmental Assessment

	Project No. 187755	Phase_ <i>0</i> 7
	Observed by M. JEFFENES	Date /2.
OBSERVATION OF POTENTIAL	Personnel On Site JEFFENE	5/6008/FL

ENVIRONIMENTAL CONCERN	Contractors On Site / MINKS
(Create one Sheet for Each Area of Potential Concern)	Meridian Personnel On Site DILLEN WILLEN
	Reviewed by Date
Location of Area Investigated: Downgradent of  MAET (ANYON)	Source Pot (UNLINED WASTE/TANK ON PIT)
Media and Potential Contaminants: <u>Petroleum</u> w	
Sources of Potential Contamination:	UNLINES PIT (referred To as "Source PIT")  FORM 2 SKETCH.
Estimated Dimensions of Potential Contamination (in FEET):	Length Width Depth
ਟੇਟਡਾਂs for Estimating Dim <b>ensions (Check ALL that apply)</b> :	Usible Staining on Ground Surface  Distressed Vegetation Surface Soil Samples Subsurface Soil Samples Headspace Analysis Groundwater Samples  Other (specify) √/7F SKSTCH (FOLM 2) To SCNS
Methods of Sample Collection: (Attach a copy of the Chain o	f Custody Record and mark locations on Site Sketch)
<ul> <li>Drill Rig (attach Record of Subsurface Explora</li> </ul>	tion), Number of Boreholes <u>/// /</u>
Sample Designations	

RECON System (attach RECON System Work Sheets), Number of Probeholes 4 Sample Designations SEE Coc FURM \$4704 Sample Designations \_\_\_\_\_\_// ☐ Drum Sampling \_ N/A Sample Designations Sample Designations

Photographs Taken: Yes

Attach the following forms:

Form 1 - Observations of Potential Environmental Concern

Form 2 - Site Sketches (showing sample and feature locations)

Form 3 - Chain of Custody Fam # 4704

Form 4 - Field Supervisors Daily Log

Form 5 - Daily Job Cost Summary

Form 6 - Record of Subsurface Exploration\*

Form 7 - RECON<sup>®</sup> System Sampling Work Sheet<sup>®</sup> Form 8 - RECON<sup>®</sup> System Analysis Work Sheet<sup>®</sup>

Form 9 - Well Construction Forms\*

Form 10 - Asbestos Assessment Summary\*

FORM 11- PHOTOGRAPHS (IN PROGRESS)

124286\FORM\MERIDIAN.(12/2/91)

If applicable.

Meridian (12/2/91)

### - PRIVILEGED AND CONFIDENTIAL -

Burlington Environmental Inc. 210 West Sand Bank Road Post Office Box 330 Columbia, Illinois 62236-0330 (618) 281-7173 FAX (618) 281-5120

12-19-91 Page 1 6 2 FIELD SUPERVISORS DAILY LOG

TYPED COPY ATTACHED

The following was noted:

Well/Facility_	ART CANYO	W STORK	ist No. I
Well Field ///	RT CANYEN	<u> </u>	
Project Name	Meridian	Phase II	Limited
	Environment	el Assessmen	t
Project No. /2	4733	Phase6	494
Observed by 1			-19-91
Weather (	LOUDY	Temperatu	ro 34°F
Personnel On Si	10 M. JEFLER	KS/6. WO	0) / M. FLORA
Contractors On	Site_MATHE	<u> </u>	
Meridian Person	nel On Site/	ARREN WA	new
Reviewed by		Date	

STORAGE NO. 1 SITE ACTIVITY
Acrived 1030, described by Doven Harrow Mendian is a facility
where oil from tanks was emptited into an unlived pit
Source pit in Shetch-form 2). Lowering For a soil gas
definition langualient to This Suize pit
you wility check, placed First probable 1010 ssw of Th
pit. Placed For because releation is That dumping into unlin
not has been conducted in you and that the sou here is a
Fil moterial However, upon probling.
pit. Placed for because advention in That dumping into unline.  At has been conducted in your aid that the sour here, so a fill moterial However, upon problem,  PH-1 should non-detection down to 46' retusal
bose also should an detection. (46 Refusal.)
Moved 30' West of pit. DH-3: 501/ ses at 28' refused
Moved 30' west of pit, PH-3; soil gas at 28' refused
Moved closest to sit edge PH-4 and again, at all
Moved closest to sit edge PH-4, and again, at all  Tested internals, So-, -gas showed non-detection. Refused
(CUNTINUED NEXT PACE)

FIELD REPORT

Hart Canyon Storage #1 Notes from Field Supervisor's Daily Log Page 1 of 2

## STORAGE No. 1 SITE ACTIVITY

Arrived 1030.

described by Derin Warren of Meridian as a facility where oil from tanks was emptied into an unlined pit ("source pit" in Sketch-Form 2). Looking for a soil-gas definition downgradient to this source pit.

Upon utility check, placed first probehole @ 110' SSW of this pit. Placed far because indication was that dumping into unlined pit has been conducted for years and that the soil here is all fill material. However, upon probing, PH-1 showed non-detection down to 46' refusal.

Moved up to PH-2, @ 45' from source pit, full profile base also showed non-detection. (46' refusal)

Moved 30' west of pit, PH-3, soil gas at 28' refusal also showed non-detection.

Moved closest to pit edge, PH-4, and again, at all tested intervals, soil-gas showed non-detection. Refusal \*at PH-4 was 47', also non-detect.

<sup>\*</sup> Taken from page 2 of 2

- PRIVILEGED AN	D CONFIDENTIAL - Form 4
Burlington Environmental Inc.	1100
210 West Sand Bank Road	Well/Facility HART CANFON STORAGE NO.
Post Office Box 330 Columbia, Illinois 62236-0330	Well Field HART CANYON
(618) 281-7173 FAX (618) 281-5120	Project Name Meridian Phase II Limited
, , , , , , ,	Environmental Assessment
	Project No. 124733 Phase 6494
12-19-90	2 Observed by M. TEFFERILS Date 12-19-91
FIELD SUPERVISORS DAILY LO	Observed by 77, 7(77272) Date 72-71-11
FIELD SUPERVISORS DAILY LO	G Weather CLOUDY Temperature
TYPEO COPY A	TACHED Personnel On Site M. JESTENES 6. WOOD M FLORA
	Contractors On Site MATHES
The following was noted:	Meridian Personnel On Site <u>NARLEN WARLEN</u>
	Reviewed by Date
	·
STROACE NIN 1 SITE ACTIVITY OF	
STORAGE NO 1 SITE ACTIVITY CONT	<u>D</u> ·
	AMARIAN
4 00 1	1:
at PH-4 was 47', al	so non-detect.
(1500-1700) During probing of PH.	it went at home house To
	) della maria vonice
- Johston Ferland # 26 To	obtain surficial soil samples From
- Sety Willer + Separator PIJ	. ( his per warren, this over was not
To be recon-investigated	
- (0) (0) (1)	
1) Stawed So Sante From	viening of PH-4 at 22 lepth.
relained for BISX + TPH	makers ( See CVE # 4704)
This supk 15 # HC-52-	
- 17/13 Juppe 13 1/14(-32-)	20 3
	1 2-1 (0-2-1)
- It's sample also head spaced	by LEUN ( & HC-52-30-56) and
al Ala dotato	by LEUN. (& HC-52-20-5L) and
- Thoward 140 ECCICETAIN	
-	
(lest site @ 1700)	

Hart Canyon Storage #1 Notes from Field Supervisor's Daily Log Page 2 of 2

## STORAGE No. 1 SITE ACTIVITY CONT'D

(1500-1700)

During probing of PH-4, went with Derin Warren to Johnston Federal #26 to obtain sufficient soil samples from dehydrator and separator pit (as per Warren, this area was not to be recon-investigated).

Obtained soil sample from vicinity of PH-4 at 22' depth. Retained for BTSX and TPH analysis (See COC #4704) This sample is # HC-S1-20-S

This sample also headspaced by RECON (# HC-S1-20-SL) and showed no detection.

(Left site @ 1700)

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Data Summary Talle

Phase 6494 Task 77 124733 Project No.

Date 12-19-91

	No.	_	<u>ل</u> ا	× 3							$\overrightarrow{T}$	1	T		
Comments	ar-System Blank		QC-System Blank	OC-Reagent Blank	OC-Roch Blank	Soil-gas	soil-gas	soil-gas	soil-ogs	50il-9as	50il-qas	soil-gas	soil-gas	soil-gas	Soil-gas
* (1/gu)	11) 0 11	1.100	(DQ)	ND(1)	(1)00	NDCI	20(1)	NO(1)	NP(I)	אסמי	אסני)	ND(I)	(V)d(v)	Notel	ND(1)
X/J/Y		200	NGCO	(DGN	(1)(12	(1)((1)	গ্রেথ	(1)0/4	(1)4(1)	NP(I)	(DIA	רוזסמ	(); d(v	li da	CORV
Ethy   benzelle		ND(1)	ND (t)	(50%)	ND(r)	ND(1)	אסנא	ND(t)	ND(1)	UDCI)	(1)02	ND(t)	(1) <b>(</b> (1)	(ואסמ	(L)QW
Toluene/E)		NOW	NO(1)	() JUN	SD(c)	ND(1)	202	רו) אר	(1)0(1)	(1)00	2000	(1) QN	(1) Ø(1)	NDCI)	(i)dN
Benganger	i An	Sø(1)	(1)0(1)	(1/00.4	(1) dV	CION	(1)0(2)	0000	משמ	(1) Ø(N	(D@N	(1)00	NDW	ND(1)	(i)dN
Depth		(	(	1	(	e	7	<u>0</u>	27	30	39	97	e	2	9
Probe Hole			(			10-Hd	04-51	PH-01				Γ'''	PH-02	$\overline{}$	P4-02
	_	Blank -54	Rouk-55	7 7 7 70	12/10/15/20	<del></del>		17-41. 3. 56		10-51-5-5G PU+-01	10-40 55-7-12 DM	11-71-46	HC-S1-8-56 PH-02	46-51-9-56	HC-51-10-56 PA-02

D-duplicate analysis

QC=quality control

ug/L\*microgram/Liter

\*VOCS calculated relative to benzene response factor. For petroleum hydrocarbons, total VOCs represents Total Recoverable 'Petroleum Hydrocarbons (TPH) — any non-retained peak (methane).

- SchsT.Tic Fort 7

RECON SAMPLE ANALYSIS

d page 户 of

> 18-19-91 Date

Project No.

Data Summary Taile Phase 6494 Task 77 124733

C. 1. 1. 1. 1. 1. 19C-SystemBlawk ac-System Blank QC-Duplicate 02-Duplicate Comments Spil-gas Soil-gas -595 Soil-gas Soil-gos -505 5011 50! 150° 1 ्गवत्य CHAIN (1) dN NOU NOW 40 (1) TUDIA Naci (3分配) TOOK 11101 100V NDCI (vara NO(I) THER 500 884/129°s 421.41 TUIN 1205 NOW (I)DN 1707 ND(I) CHOIN राज्यत् ्र व (1) (1) Tolugue | Ethylbentere COUNT SOL (1) d/ ND(I) Now V DC (1) 011 (I) D(V) VOCA 1) 0(4 COCK ND(I) 1707 ND(1) NOCI ND(1) CUON (1)Q(1) ND(1) (1)0CH COOK **LID OLA** JOIN) COOP (DOM **1007** Noce المقلد 1) OCA भावत 100CH NOCH MACH Bentaggl) रंगवार WD(1) (1)00 JOC.) NOCE 300 CHACK NDC Depth (ft) 2000 22 2 30 7 4c-51-13-56/PH-02/46 6 8 20 8 HC-51-15-56/PH-OUT 147 2 27 Probe Hole Number HC-51-16-56 1 PH-04 HC-51-18-56 PH-04 HC-51-19-5G PH-04 HC-51-50-54 PH-04 HC-S1-12-5G| PH-02 HC-51-14-83 184-03 HC-51-11-56 1 PH-02 HC-51-17-5G | PH-04 PH-02 4C-51-20-5C-01 PH-04 HC-51-10-56-D Blank-58 Blank -59 Sample I.D.

D=duplicate analysis

QC=quality control

ug/L≠microgram/Liter

\*VOCs calculated relative to benzene response factor. For petroleum hydrocarbons, tcta. VOCs represents Total Recoverable . Petroleum Hydrocarbons (TPH) — any non-retained peak (methane).

- PRIVILEGED AND CONFIDENTIAL -

Page L of 3 Van 5218 Meridian Phase II Limited Environmental Assessment /Flore Project No. 124133 Phase 6494 Task 77 (18)Contractors On Site Jefferies/Wood Observed by G. Load Date [2-19-91 Meridian Personnel On Site ( ) A R (LEN Carvon SE-54 / 15 meter 0.53 Storage Column DB-624 / 30 meter 0.53 5 Personnel On Site\_ Reviewed by \Vell/Fecility\_ Project Name\_ \ /ell Field\_ Final Temp.\_ Temp. 2 Time 2\_ Pressure (kPa)\_ Temp ('C) 300 TIMO 1 ISOTHERMAL 50° Equipment: GC Hewlett-Packard 5890 A FAX (818) 281-5120 B. Wood Burlington Environmental Inc. Columbia, Illinois 62236-0330 Oven Temp. Profile Temp. 1\_ 210 West Sand Bank Road Carrier Gas: H2 / He Injector Temp. (°C) 200 Post Office Box 330 (618) 281-7173 GC Operator\_ Dector FID ភ

# RECON\*\* SYSTEM SAMPLE ANALYSIS WORK SHEET

Sample I.D.	Probe Hole Number	Depth (ft)	Analysis Time	Inj. Vol. (u1)	Multiplier	VAC tn. Hg	Comments
Blank-54			0635	500	0.1		QC-Systam Blank
STD-1219			5020	05	1	l	Calibration Standard
Blank-55			2110	005	) .0	(	C-system Blank
8(ank-56			5710	005	).0	1	OC-Reagent Blank
Blank-57			hSbO	005	0.1	l	ac-Rad Blank
HC-51-1-5B	) 0-Hd	9	1401	200	) . Q	Ø	50il-gas
HC-51-2-56	PH-01	12	1048	500	0.1	19	Soil-9025
HC-51- 3-56	PH-01	. 8	1055	200	0-1	61	50il-9a.5
HC-SI- 4-56	PH-01	24	1111	200	0.(	6	soil-gas
HC-51-5-5G	PH-01	30	6]]]	500	) 0	6	5011-9as
HC-51-6-56	PHOI	39	1127	500	0. (	6)	50il-gas
QC-quality control	1	D-duplicate	sample analysis	lysts		Ţ	

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Page 2 of 3 Maridian Phase II Limited Environmental Assessment Ven 5218 Flore Project No. 124733 Phase 6494 Task 77 (FEC) (15) Contractors On Site Jefferies / Wood 12-19-91 Lange L Hart Canvon Stologe SE-54 / 15 meter 0,53 Column DB-624 / 30 meter 0.53 Observed by 6. ( Doodbate Meridian Personnel On Site Personnel On Site\_\_ Project Name Feviewed by Vvell/Facility\_ Well Field Final Temp. 20 Temp. 2 Time 2 Temp ('C) 300 Pressure (kPa)\_ Time 1 ISOTHERMAL Equipment: GC Hewlett-Peckard 5890 A FAX (618) 281-5120 G. Dood Burlington Environmental Inc. Columbia, Illinole 62236-0330 Oven Temp. Profile Temp. 1\_ 210 West Sand Bank Road Carrier Gas: H2 V He Injector Temp. (°C) 200 Post Office Box 330 (618) 281-7173 GC Operator\_ Dector FID ភ

RECON\*\* SYSTEM SAMPLE ANALYSIS WORK SHEET

	וורו.						
Sample I.D.	Probe Hole Number	Depth (ft) An	Analysis Time	Inj. Vol. (ul)	Multiplier	VAC in. Hg	Comments
HC-51-7-56 PH-01	PH-01	97	1145	205	)-0	6	soil-025
HC-S1-8-SB	PH-02	9	1212	500	0.	6	soil-gas
HC-51-9-56	PH.02	7	1224	500	ص ص	9	5011-cas
HC-51-10-5G	PH-02	(8	1232	500	0.(	6	50il-9a5
HC-51-10-56-D	PH-02	18	1239	500	0.1	6	Oc-Duplicate
Blank-58			1247	500	0.(	<u>;</u>	Qc-System Blank
HC-51-11-56	PH-02	27	1254	500	0. (	19	50il-9as
HC-51- 12-5G	PH-02	36	1313	500	٥٠(	[9	501 -qas
HC-51-13-56	PH-02	95	1324	500	0	9	50il -9as
HC-51-14-56 PH-03	PH-03	28	142	500	0	5	501-9as
HC-S1-15-56 PH-04	PH-04	٦٦	1500	500	0.1	5	501/-9a5

D-duplicate sample analysis

QC-quality control

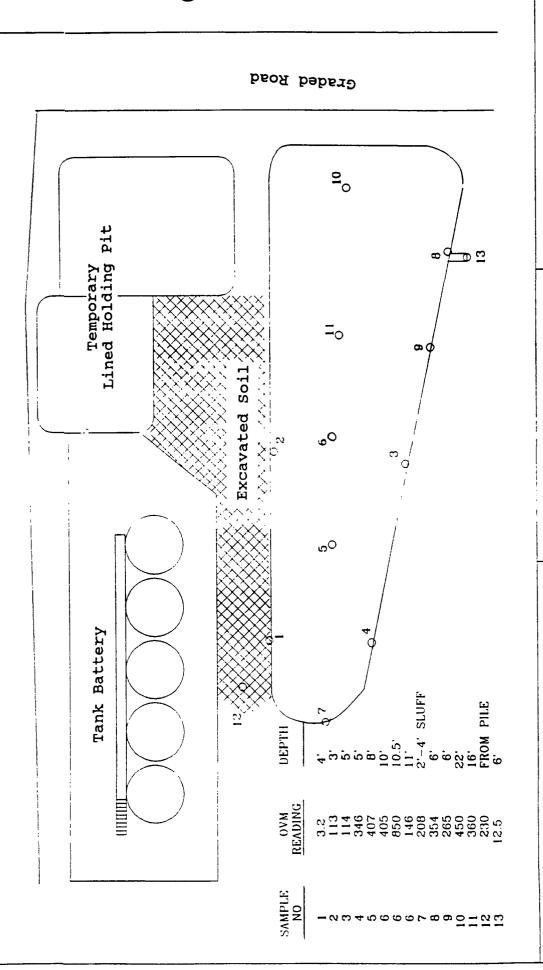
Page 2 of 3 Meridian Phase II Limited Environmental Assessment Contractors on Site Jefferies / 1200d / Flora F oject No. 124133 Phase 6494 Task 77 (|8) Chanved by G. Logod Date 12-19-9 Meridian Personnel On Site 12 CREEN Hart Canyon Stolage SE-54 / 15 meter 0.53 Cc.umn DB-624 / 30 meter 0.53 Fersonnel On Site\_\_ Reviewed by P.oject Name\_ V'ell/Facility\_ 50° Final Temp.\_ Temp. 2 Time 2 Pressure (kPa)\_ Temp ('C) 300 Time 1\_ISOTHERMAL Equipment: GC Hewlett-Packard 5890 A FAX (618) 281-5120 G. Wood Burlington Environmental Inc. Oven Temp. Profile Temp. 1\_\_\_ Columbia, illinola 62236-0330 210 West Sand Bank Road Injector Temp. (°C) 200 Post Office Box 330 (618) 281-7173 Cerrier Gas: H2 v GC Operator\_\_\_ Dector FID S

# RECON\*\* SYSTEM SAMPLE ANALYSIS WORK SHEET

Sample I.D.	Probe Hole Number	Depth (ft)	Analysis Time	Inj. Vol; (ul)	Multiplier	VAC in. Hg	Comments
HC-SI-16-56 PH-04	PH-04	0)	1526	500	9.0	6)	50il-qas
14C-51-17-56	P14-04	20	1534	500	<u>)</u>	5	, 50il-9as
HC-51-18-5G	PH-04	ง ภ	1543	500	0.1	6)	soil-gas
HC-51-19-56	PH-04	30	1558	500	٥٠(	19	50il-9as
HC-51-20-5		22	(713	500	0.(	\	50,1
HC-51-20-5 -D	PH-04	22	1722	500	1.0		Soil
Blank-59			(730	500	0 · (	-	50i
QC-quality control	01	D-duplicate 88	sample analysis	lysis			

FIELD MEASUREMENTS OF SOIL HYDROCARRON CONCENTRATIONS TAKEN DURING EXCAVATION

MEASUREMENTS WITH OVM PID DETECTOR BY ENVIROTECH



## MERIDIAN OIL IIART CANYON NE OF AZTEC, NM

# ENVIRONMENTAL SCIENTISTS

ENVIRONMENTAL SCIENTISTS 5796 U.S. HICHWAY 64-3014 FARMINGTON, NEW MEXICO 87401 PHONE: (50!) 632-0615

## DRAFTED BY: J. DEWEY SITE PLAN JANUARY 10, 1992

## MERIDIAN OIL

PLOGRESSION AND DIVISION REPORTED HIS 8 58

October 11, 1991

Roger Anderson New Mexico Oil Conservation Division P.O. Box 2088 Land Office Building Santa Fe, NM 87504-2088

Dear Mr. Anderson:

Meridian would like your approval to bioremediate pit waste at our Hart Canyon Storage 1 facility. As we discussed on Wednesday, October 10, 1991 we are currently in the process of cleaning the pit. All dirt removed from the pit will be placed inside constructed lined pits. These pits will be constructed of dirt approximately 20' X 30' X 3'. Remediation treatment will be similar to that of Amoco and other producers using the compost method. The Storage 1 facility is completely bermed or diked so that runoff cannot leave the location.

If you have any problems or questions concerning this project please call me as indicated below. In the event the composting does not effectively clean the soil, the contaminated soil will be disposed of at a local land farming operation.

Yours Truly,

M.J. McEneny

Regional Safety/Environmental Supervisor

TGM/vka:142