GW - 94

REPORTS

YEAR(S):

1991

TABLE OF CONTENTS

Site Investigation
Unichem International
707 N. Leech, Hobbs, New Mexico

NEW PROPOSED TANK FARM

A brief history of this area reflects that Unichem purchased this property around 1977. Unichem used this area primary as a parking area. The area south was used to store empty drums. Unichem also stored 3 square bulk delivery tanks on an existing concrete area, these tanks were usually empty. Unichem did store some lab oils and chromate material on the concrete section on this area for approximately 6 months to a year. Please refer to drawing MI-1 for the following descriptive explanations.

Area A - Had 4" to 6" of existing concrete. This concrete was removed in anticipation of building a new concrete pad for a new tank farm. During removal it was noted that a small yellow stain was found on the concrete on the southwest corner. A piece of this concrete was tested in our lab and it showed positive for total chrome. This small section was chipped out and placed in a hazardous waste drum for proper disposal. The remaining concrete and approximately 6" to 8" of dirt was removed and placed on a plastic liner called DP #1 as shown on drawing MI-#1.

After the concrete had been removed. There was a dark spot found. There was approximately 10 test holes, 6" to 8" deep, dug throughout the area "A", and one 3' hole dug on the northern end of area A next to area "B". These holes showed that dark spots were found intermittently throughout the area as layers of possible hydrocarbon. Some holes were white caliche, others were a tan sandy color. The 3' hole dug next to area "B" showed dark color soil 2 feet down with a slight crude oil smell. The bottom 1' was a clean sandy backfill looking material.

A flame ionization unit (FIU) was brought in to check the presence of hydrocarbon on the surface and in the holes. The FIU device showed no indication of hydrocarbon present over 50 ppm. Gastic tubes were used also for detection of stoddard solvent, xylene, and benzene, all were negative.

A 14' deep test hole (MI #1 & #2) was then drilled and (2) bottom hole samples were taken and analyzed for TPH (total petroleum hydrocarbons).

After the test hole was filled in with clean 200 fine sand, the next day a yellow stain appeared around the test hole area. Since chromate has a similar color, it triggered a concern of possibly chromate contamination. However this has been discounted after further testing showed no results of such contamination. The combination of the white caliche and 200 fine sand and water caused a slight yellow stain to appear.

The bottom hole results showed that a total petroleum hydrocarbon levels of 5 ppm and 28 ppm were received back from two different labs. These values are considered below any action clean-up levels by most state regulators; therefore a decision was made to continue excavating the soil for the proposed tank farm construction. Also all visible hydrocarbon bearing soil was removed and placed on a plastic liner and called DP #2. Approximately 68 yards of dirt was removed in this area.

Area B - This area is not part of the proposed new tank farm, but as we were excavating for footers in area A, we discovered that oily dirt was found and we continued the excavation to the north until we ran into a old concrete wall. We continue digging downward in area B and found an area that had hydrocarbon contaminated dirt. There were approximately 102 yards dug out until we visually obtained good soil. We found a 1942 license plate and a 1951, Dr. Pepper bottle from this hole. The dirt had a strong crude oil smell and was very soft and mushey. All of this material was removed and placed on a plastic liner (DP#2) and covered with plastic. This dirt contained no visual free liquid. There was however, an old rubber ball that had approximately 1 ounce of water entrapped in it.

Area C - Area C is a dirt area that is used as a driveway and also is being proposed to be covered with concrete as a future loading pad for the new tank farm area. Area C is significant in the fact that in August of 1987, two underground storage tanks were removed from this area. These tanks were empty and in good condition. A complete documentation and file was set-up at that time and is on file at Unichem International's Hobbs, NM office. The soil underneath these tanks were visually checked and showed no indication of any type of leak.

Sampling Program

Several soil samples were taken per SW-846 procedures to determine the extent of any further contamination. These sampling points are shown on drawing MI-1 and all listed below.

Sample #MI-1S 12,402 ppm TPH	15' deep	Located in the center of the southern one third of area "A" 14'N & 7'E of BM.
Sample #MI-1N 1,257,571 ppb TPH	15' deep	Located directly under the contaminated soil removed from area "B" 63'N & 10'E of BM.
Sample #MI-1 & 2 27 ppm TPH @ 5'	14' deep	Located in center of the northern one third of area "A" 26'N & 9'E of BM.
Sample #MI-3S 193, ppm TPH	6" below present excavated surface	Located in the center of area "A" 18'N & 9'E of BM.
Sample #MI-3M 4,0[illegible] ppm TPH	6" below present excavated surface	Located in southern one third of area "B", 45' N & 9"E of BM.
Sample #MI-3N 29,470, ppm TPH	6" below present excavated surface	Located in northern one third of area "B" -
Sample #MI-4 [illegible] ppm TPH	14' below existing surface; 6' below bottom of previously removed UST tanks	Located 13'8" N & 17'8"E of NE corner of concrete drum storage pad.

Sample #MI-5E 121 ppm	1' down from top of existing excavated east wall - <u>Wall Sample</u>	Located 31'N & 19'E of BM.
Sample #MI-5S 8 ppm	8" below north wall of existing drum storage pad - <u>Wall Sample</u>	Located 9'E of BM.

*BM - Reference level is the top and northwest corner of the existing concrete drum storage pad.

Sample #DP-1S [illegible] ppm TPH	10 samples taken from south 1/3 of dirt pile #1 for composite	Located NW of excavated hole outside of fence on RR lease.
Sample #DP-1M 14,274 ppm TPH	10 samples taken from middle 1/3 of dirt pile #1 for composite	Located NW of excavated hole outside of fence on RR lease.
Sample #DP-1N 25,393 ppm TPH	10 samples samples taken from North 1/3 of dirt pile #1 for composite	Located NW of excavated hole outside of fence on RR lease.
Sample #DP-2S 14,331 ppm TPH	10 samples samples taken from south 1/3 of dirt pile #2 for composite	Located NE & adjacent to excavated hole.
Sample #DP-2M 59,220 ppm TPH	10 samples samples taken from middle 1/3 of dirt pile #2 for composite	Located NE & adjacent to excavated hole.
Sample #DP-2N 44,227 ppm TPH	10 samples taken from north 1/3 of dirt pile #2 for composite	Located NE & adjacent to excavated hole.
Sample #MI-2S 1,478 ppm TPH	Grab sample 3' below original surface	Located in southern 1/3 of area "A".

The above sample results indicate there are <u>no hazardous substances</u> present in either the excavated dirt nor remaining in the soil. Area "A" and "C" are below any action limit (<100 ppm) for TPH (total petroleum hydrocarbon) and BETX at levels of 15 feet. Area A surface samples indicate that they range from 193 ppm to 4046 ppm going south to north. Further sampling would indicate that the

highest number is actually fringing on the south end of Area "B". If further testing was done it is Unichem's opinion that area A would not exceed the action limit (100 ppm) one foot below MI-3M. At 15' directly below this point levels of 5 ppm and 28 ppm was encountered indicating that the majority of the contaminated dirt actually is in area B.

Area "B" is the area where the majority of the contaminated dirt was found and test results substantiate that Area "B" surface samples range from 4046 ppm TPH to 29,970 ppm south to north. The soil directly beneath the heaviest contaminated dirt removed reflects a valve of 1257 ppm at 15' (MI-IN). However there is no volatiles or semi-volatiles at these levels indicating we are dealing with probably a heavy aliphatic material.

Wall sampling was conducted to determine the lateral extent of this contamination. The south wall (MI-5S) beneath the existing drum storage pad shows a TPH of 8 ppm. The east wall (MI-5E) indicated a value of 121 ppm. The north wall is concrete and the west wall was not tested. Visual appearance of the west wall looks very similar to the east wall for comparison.

Dirt pile DP#1 indicated TPH ranging from 14,000 to 25,000 ppm from south to north. The south part of DP#1 was removed from the south end of area A. The middle from the middle of area A and north (DP#1N) from the north part of area A and southern part of area "B". Once again the TPH contours indicates the heaviest oily dirt came from area "B".

Dirt pile #DP#2 was taken from area "B" respectfully.

Area C sample MI-4 was taken to re-check that no problems existed with the UST's removed in 1987. This was substantiated as shown by the test results.

Conclusion

It appears that an old service company pit was found in Area "B". The depth of this pit appeared to be approximately 4' deep. The material that was put in this pit is unknown at this time. The vertical extent of the contamination is estimated to be approximately 20' downward and limited laterally to the size of the pit approximately 19' wide.

The age of the pit seems to be approximately 40 to 50 years old and quite small in size.

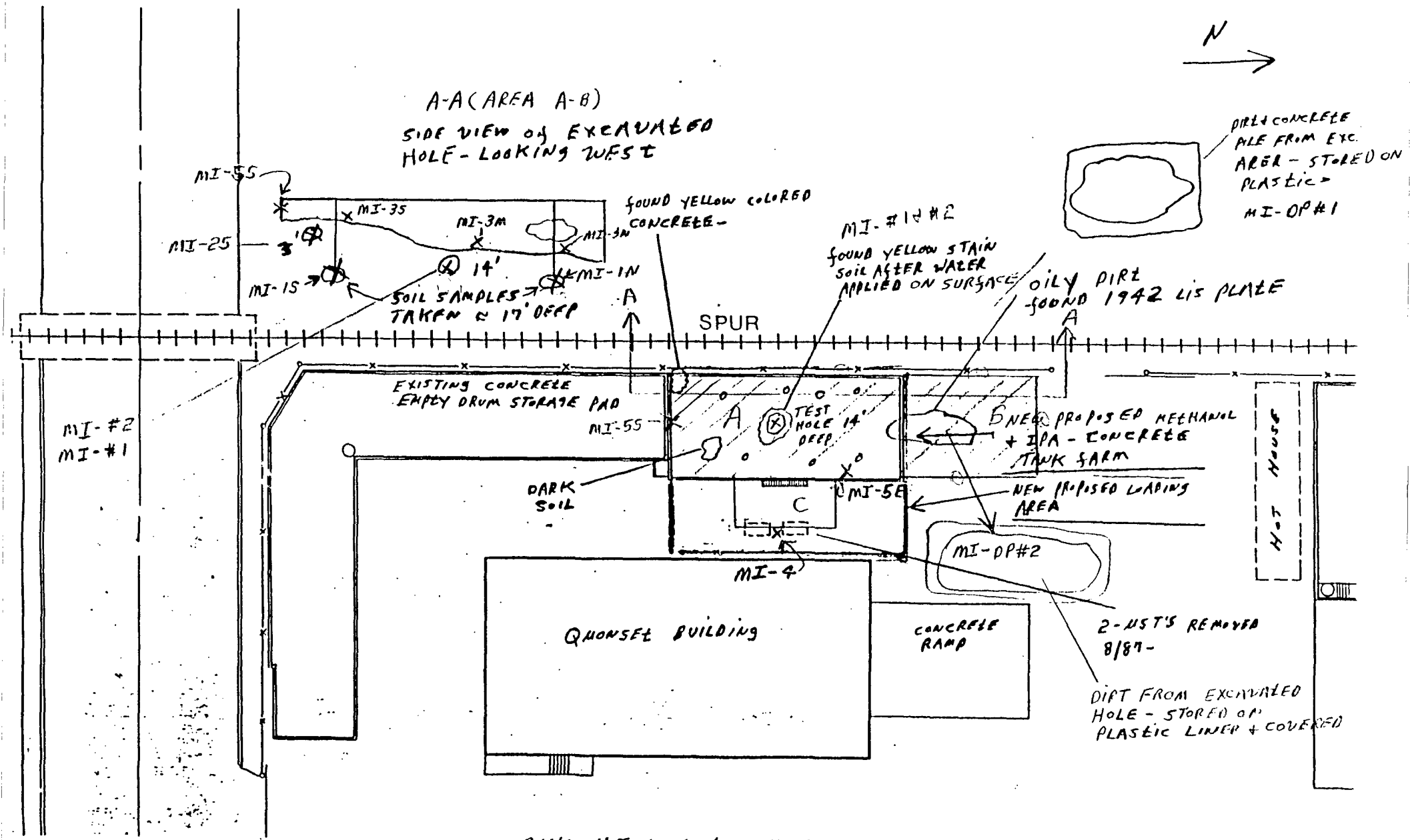
Remediation Proposal

Unichem has already removed the source of contamination and will dispose of this soil in a responsible and legal manner under your guidance and recommendations. We would like to propose building the new concrete tank farm over area's A&C. We would also commit to putting in an impermeable liner and back filling area "B" with a clean suitable backfill material.

II. Site Plot Plan Drawing MI-1

B - ≈ 36' x 19'
C - ≈ 40' x 19'

EXCAVATED AREA
PROPOSED LOADING AREA



UNICHEM INTL - 707 N LEECH
HOBBS NM DRAWING MI-1

III. Soil Sample Analysis and Chain of Custody Reports

MITCHEM INTERNATIONAL INC.
ENVIRONMENTAL INVESTIGATIONS OR MIKE ALLEN
Att: GERALD BOWLING CHAIN OF CUSTODY RECORD

Laboratory: JORDAN LABS - 842 CANTWELL DR. CORPUS CHRISTI TX 78409 512-384-0371

Project No. ME #2 Project Name HOBBS PLANT - PROPOSED METHANOL IPA TANK FARM SOIL SURVEY -

SAMPLERS: (Signature)

Site Number	Date	Time			Sample Identification	Site Description	TPH							No. of Containers	REMARKS
#1	2/7/91	11:35 AM	1 qt		MI-#2 (DIRT SAMPLE FROM BOTTOM HOLE SAMPLE)	TEST HOLE 14' DEEP - LOCATED 26'N + 9'W OF NE CORNER OF EXISTING EMPTY DRUM STORAGE PAD - HOBBS PLANT - 707 N LEECH HOBBS N.M.	X							1	1QT GLASS JAR LID SEALED W. EH TAPE STORED AT ROOM TEMP. 72° F
					CALL IN RESULTS TO WAYNE PRICE 505-393-7751 WITH-IN 24 HOURS - KEEP REMAINING SAMPLE & PRESERVE FOR FUTURE TESTING -										

Relinquished by: (Sign.)	Date	Time	Received by: (Sign.)
WAYNE PRICE	2/11/91	1:00 PM	
Relinquished by: (Sign.)	Date	Time	Received by: (Sign.)
Relinquished by: (Sign.)	Date	Time	Received for Laboratory by: (Sign.)
	2/12-91	0930	

REMARKS: COOL 4°C FOR SHIPPING - ON 2/11/91
KEEP SOIL REMAINS
PLEASE RETURN COOLER!!

TEL. 512-884-0371 PO BOX 2552 7840

JORDAN LABORATORIES, INC.
CHEMISTS AND ENGINEERS
CORPUS CHRISTI, TEXAS
FEBRUARY 13, 1991

UNICHEM INTERNATIONAL
P.O. BOX 1499
HOBBS, NEW MEXICO 88240

REPORT OF UNDERGROUND STORAGE TANK SOIL ANALYSES

LAB. NO.	IDENTIFICATION SITE: HOBBS PLANT	SAMPLE DATE	TOTAL PETROLEUM HYDROCARBONS PPM	MOISTURE WT.%
M29-1238	MI-#2 DIRT SAMPLE BOTTOM OF HOLE-14'	2-7-91	5	13.6

TPH ANALYSIS DATE: 2-12-91
TPH EXTRACTION DATE: 2-12-91

NOTES: #1 RESULTS ON BASIS OF SAMPLE DRIED AT 105 DEG.C.
#2 EPA METHODS 3550 & 418.1

RESPECTFULLY SUBMITTED,

CARL F. CROWNOVER

JORDAN LABORATORIES, INC.
Chemists and Engineers
Corpus Christi, Texas

FEBRUARY 13, 1991

QUALITY ASSURANCE REPORT

Duplicates and spikes are run on at least a 10% basis. The data are archived on computer magnetic disk and are retrievable by analysis date. The data are available for inspection by authorized customer representatives or agency personnel during regular working hours.

BASIS:

1. 'Less Than' values are converted to 1/2 the implied detection limit for calculation purposes.
2. % Deviations are calculated as the absolute difference of the values divided by the larger of the two values. Duplicate 'Less Than's' are excluded from averages.
3. % Recoveries are computed as Value 2 divided by the sum of Value 1 plus the amount spiked.

PARAM	ANALYSIS DATE	% DEVIATION AVG	% DEVIATION THIS DATE	% RECOVERY AVG	% RECOVERY THIS DATE
TPH	2-12	16.6	16.4		

PARAM	LAB NO	DATE	ANALYST	TYPE	VALUE1	+SPIKE	VALUE 2
TPH	1217	2-12	DO	OT	1	0	1
TPH	1238	2-12	DO	SL	10	0	5
TPH	1073	2-12	DO	OT	160	0	120
TPH	1083	2-12	DO	OT	11810	0	12400
TPH	1093	2-12	DO	OT	2250	0	1940
TPH	1097	2-12	DO	OT	770	0	810
Standards and Blanks							
TPH	----	2-12	DO	BL	<1	0	<1
TPH	----	2-12	DO	ST	50	0	50
TPH	----	2-12	DO	ST	100	0	97

Signed: Carl F. Crownover

GEOCHEM INTERNATIONAL INC.
ENVIRONMENTAL INVESTIGATIONS

ATT: BRUCE McDONELL CHAIN OF CUSTODY RECORD

Laboratory: LUBBOCK CHRISTIAN UNIVERSITY - LAB - LUBBOCK TX - 5601 W 19TH ST 806 - 796 - 8900

Project No. MI - #1

Project Name HOBBS PLANT - PROPOSED METHANOL IPA TANK FARM SOIL SURVEY -

SAMPLERS: (Signature) WAYNE PRICE

Site Number	Date	Time			Sample Identification	Site Description	TPH 418.1							No. of Containers	REMARKS
19720 #1	2/7/91	11:35 AM MST	1 QT		MI-#1 (DIRT SAMPLE - BOTTOM HOLE SAMPLE)	TEST HOLE 14' DEEP - LOCATED 26' N & 9' W OF NE CORNER OF EXISTING EMPTY DRUM STORAGE PAD - HOBBS PLANT - 707 N LEGION HOBBS N.M.	X							1	1 QT WIDE-MOUTH GLASS JAR LID SEALED WITH TAPE COOL 4°C
					CALL IN RESULTS TO WAYNE PRICE -	505-393-7751									

Relinquished by: (Sign.)	Date	Time	Received by: (Sign.)
WAYNE PRICE	2/7/91	X	X
Relinquished by: (Sign.)	Date	Time	Received by: (Sign.)
Relinquished by: (Sign.)	Date	Time	Received for Laboratory by: (Sign.)
			2/7/91 5:40

REMARKS:
TEST for: TOTAL PETROLEUM HYDROCARBONS

SEND FINAL REPORT TO
M.I P.O 1499 HOBBS N MEX 88241
ATT: WAYNE PRICE -

RETURN CHAIN of CUSTODY

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407 • (806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL, INC.
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

February 08, 1991
Receiving Date: 2/07/91
Sample Type: Soil
Project No: MI-#1
Project Location: Hobbs Plant

Sampling Date: 2/07/91
Sample Condition: Intact & Cool
Sample Received by: McD
Project Name: Proposed Methanol IPA Tank Farm

LCUIWR #	Field Code	TRPHC (ppb)
Y19720	MI-#1 Bottom Hole	27,955
QC	Quality Control	86,781

% Precision	88
% Extraction Accuracy	---
% Instrument Accuracy	102

METHODS: EPA 418.1.

TRPHC SPIKE AND QC: Sample spiked with 225,000 ppb TRPHC.
Blank spiked with 85,280 ppb TRPHC.

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

2-8-91
Date

Lubbock Christian University Institute of Water Research
5601 West 19th Street • Lubbock, Texas 79407

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: UNICHEM INTL. WAYNE PRICE

Phone #: 505-393-7751

Address: PO BOX 1499 HOBBS N.M. 88240

FAX #: 505-393-6754

Project Number: MI-91

Project Name: —

Project Location: HOBBS

Sampler Signature: Wayne Price

Sample ID	Lab # (Lab use only)	# CONTAINERS	Volume/Amount	Matrix: WATER	Matrix: SOIL	Matrix: AIR	Matrix: SLUDGE	Matrix: OTHER	Method Preserved: HCl	Method Preserved: HNO_3	Method Preserved: ICE	Method Preserved: NONE	Method Preserved: OTHER	Sampling: DATE	Sampling: TIME	BTEX, MTBE	TPH	TCLP - CHROME	TCLP - ~~CATIONS~~ Semi VOL	TCLP - ~~BENZENE~~ VOL	~~PH~~ ~~Corrosivity~~	TOX-	RCI
MI #2S 3'	21283		QT		X							X		3-14-91	1:00 PM	X	X	X	X	X	~~X~~	X	X

ANALYSIS REQUEST | OTHER | SPECIAL HANDLING

Relinquished by:	Date	Time	Received by:
Wayne Price	3/19/91	12:30 PM MST	
Relinquished by	Date	Time	Received by:
Relinquished by	Date	Time	Received by Laboratory:
	3-19-91		[signature]

Remarks:

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407
(806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 03, 1991
Receiving Date: 3/19/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: 3/14/91
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: NA

LCUIWR #	Field Code	TRPHC (ppb)	MTBE (ppb)	BENZENE (ppb)	TOLUENE (ppb)	ETHYL-BENZENE (ppb)	M,P,O XYLENE (ppb)	TOX (ppm)
Y21283	MI - 25 3'	1,478,680	<1	<1	<1	<1	<1	<15
QC	Quality Control	85,911	196	203	209	206	593	54
Air Blank		---	<1	<1	<1	<1	<1	---
% Precision		93	100	101	101	97	93	100
% Extraction Accuracy		115	97	90	94	90	83	100
% Instrument Accuracy		101	98	102	104	103	99	100

		TCLP Cr (ppm)
Y21283	MI - 25 3'	<0.1
Y21283	Corrected Sample	<0.1
QC	Quality Control	1.03
% Precision		100
% Extraction Accuracy		83
% Instrument Accuracy		103
Detection Limit		0.1

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 9020, 1311, 6010; EPA 418.1.
BTEX SPIKE AND QC: Sample and Blank Spiked with 200 ppb EACH VOLATILE ORGANICS.
TRPHC SPIKE AND QC: Sample spiked with 225,000 ppb TRPHC and Blank spiked with 85,280 ppb TRPHC.
TOX SPIKE AND QC: Sample Spiked with 60 ppm TCP Cl- and Blank Spiked with 54 ppm TCP Cl-.
TCLP Cr QC: Blank Spiked with 1.00 ppm Cr.

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-3-91
Date

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407 • (806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 03, 1991
Receiving Date: 3/19/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: 3/14/91
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: NA

TCLP SEMI-VOLATILES (ppm)	Y21283 MI-25 3'	Y21283 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.03	0.005	10.0	100	NR	100
m-Cresol	<200.0	<200.0	0.01	0.2	100	187	94
o-Cresol	<200.0	<200.0	0.01	0.2	100	NR	90
p-Cresol	<200.0	<200.0	0.01	0.2	100	187	94
Total Cresol	<200.0	<200.0	0.01	0.6	100	NR	93
1,4-Dichlorobenzene	<7.5	<7.5	0.01	0.1	100	168	100
2,4-Dinitrotoluene	<0.13	<0.13	0.01	0.1	100	99	116
Heptachlor (and its hydroxide)	<0.008	<0.008	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.5	0.005	0.2	100	107	100
Hexachlorobenzene	<0.13	<0.13	0.001	0.1	100	105	88
Hexachlorooethane	<3.0	<3.0	0.01	0.1	100	109	84
Nitrobenzene	<2.0	<2.0	0.05	0.1	100	93	109
Pyridine	<5.0	<5.0	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<100.0	0.1	0.4	100	NR	85
2,4,5-Trichlorophenol	<400.0	<400.0	0.01	0.1	100	89	94
2,4,6-Trichlorophenol	<2.0	<2.0	0.05	0.1	100	92	106
Endrin	<0.02	<0.02	0.005	20.0	100	NR	99
Lindane	<0.4	<0.4	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<10.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<10.0	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<1.0	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.5	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-3-91
Date

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407 • (806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 03, 1991
Receiving Date: 3/19/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: 3/14/91
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: NA

TCLP VOLATILES (ppm)	Y21283 MI-25 3'	Y21283 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.5	0.002	0.84	100	89	84
Carbon Tetrachloride	<0.5	<0.5	0.002	0.90	100	103	90
Chlorobenzene	<100.0	<100.0	0.002	1.00	100	114	100
Chloroform	<6.0	<6.0	0.02	0.87	100	108	87
1,2-Dichloroethane	<0.5	<0.5	0.002	0.83	100	102	83
1,1-Dichloroethylene	<0.7	<0.7	0.002	0.93	100	96	93
Methyl ethyl ketone	<200.0	<200.0	0.02	1.00	100	124	100
1,4-Dichlorobenzene	<7.5	<7.5	0.002	0.90	100	110	90
Tetrachloroethylene	<0.7	<0.7	0.002	1.00	100	103	100
Trichloroethylene	<0.5	<0.5	0.002	0.85	100	97	85
Vinyl chloride	<0.2	<0.2	0.002	0.83	100	89	83

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-3-91
Date

Lubbock Christian University Institute of Water Research

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(806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 03, 1991
Receiving Date: 3/19/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: 3/14/91
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: NA

LCUIWR #	Field Code	REACTIVITY Sulfides (ppm)	REACTIVITY Cyanides	CORROSIVITY pH (s.u.)	IGNITABILITY
Y21283	MI - 25 3'	<25.0	<2.5	8.02	Nonignitable
QC	Quality Control	---	---	7.0	---
% Precision		100	100	100	100
% Instrument Accuracy		---	---	100	---

METHODS: EPA SW 846-7.3.4.2, 7.3.3.2, 9040, 1010; EPA 600/4-79-020.

BB

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-3-91

Date

Lubbock Christian University Institute of Water Research

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 03, 1991
Receiving Date: 3/19/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: 3/14/91
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: NA

TCLP SEMI-VOLATILES (ppm)	Y21283 MI-25 3'	Y21283 Actual	Y21283 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.005	<0.03	0.005	10.0	100	NR	100
m-Cresol	<200.0	0.013	<200.0	0.01	0.2	100	187	94
o-Cresol	<200.0	<0.01	<200.0	0.01	0.2	100	NR	90
p-Cresol	<200.0	0.013	<200.0	0.01	0.2	100	187	94
Total Cresol	<200.0	0.026	<200.0	0.01	0.6	100	NR	93
1,4-Dichlorobenzene	<7.5	<0.01	<7.5	0.01	0.1	100	168	100
2,4-Dinitrotoluene	<0.13	<0.01	<0.13	0.01	0.1	100	99	116
Heptachlor (and its hydroxide)	<0.008	<0.008	<0.008	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.005	<0.5	0.005	0.2	100	107	100
Hexachlorobenzene	<0.13	<0.001	<0.13	0.001	0.1	100	105	88
Hexachlorooethane	<3.0	<0.01	<3.0	0.01	0.1	100	109	84
Nitrobenzene	<2.0	<0.05	<2.0	0.05	0.1	100	93	109
Pyridine	<5.0	<0.1	<5.0	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	0.14	<100.0	0.1	0.4	100	NR	85
2,4,5-Trichlorophenol	<400.0	<0.01	<400.0	0.01	0.1	100	89	94
2,4,6-Trichlorophenol	<2.0	<0.05	<2.0	0.05	0.1	100	92	106
Endrin	<0.02	<0.005	<0.02	0.005	20.0	100	NR	99
Lindane	<0.4	<0.05	<0.4	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<1.0	<10.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<0.01	<10.0	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<0.02	<1.0	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.1	<0.5	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

4-3-91

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

Date

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407 • (806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 03, 1991
Receiving Date: 3/19/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: 3/14/91
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: NA

TCLP VOLATILES (ppm)	Y21283 MI-25 3'	Y21283 Actual	Y21283 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.002	<0.5	0.002	0.84	100	89	84
Carbon Tetrachloride	<0.5	<0.002	<0.5	0.002	0.90	100	103	90
Chlorobenzene	<100.0	<0.002	<100.0	0.002	1.00	100	114	100
Chloroform	<6.0	<0.02	<6.0	0.02	0.87	100	108	87
1,2-Dichloroethane	<0.5	<0.002	<0.5	0.002	0.83	100	102	83
1,1-Dichloroethylene	<0.7	<0.002	<0.7	0.002	0.93	100	96	93
Methyl ethyl ketone	<200.0	<0.02	<200.0	0.02	1.00	100	124	100
1,4-Dichlorobenzene	<7.5	<0.002	<7.5	0.002	0.90	100	110	90
Tetrachloroethylene	<0.7	<0.002	<0.7	0.002	1.00	100	103	100
Trichloroethylene	<0.5	<0.002	<0.5	0.002	0.85	100	97	85
Vinyl chloride	<0.2	<0.002	<0.2	0.002	0.83	100	89	83

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell 4-3-91
Date

Lubbock Christian University Institute of Water Research
5601 West 19th Street • Lubbock, Texas 79407

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: UNICHEM INT. WAYNE PRICE
Phone #: 505-393-7751

Address: P.O. 1499 HOBBS NM 88240
FAX #: 505-393-6754

Project Number: MI-91
Project Name: PROPOSED MECHANICAL/IAN TANK FARM

Project Location: HOBBS
[illegible]
Sampler Signature: Wayne Price MI-IN, +15

Sample ID	Lab # (Lab use only)	# CONTAINERS	Volume/Amount	Matrix: WATER	Matrix: SOIL	Matrix: AIR	Matrix: SLUDGE	Matrix: OTHER	Method Preserved: HCl	Method Preserved: HNO_3	Method Preserved: ICE	Method Preserved: NONE	Method Preserved: OTHER	Sampling: DATE	Sampling: TIME	BTEX, MTBE	TPH	TCLP - ALL METALS	TCLP - VOLATILES	TCLP - SEMI-VOLATILES	TOX	RCI
MI # IN	21728	1	qt		X						X					X	X	X	X	X	X	X
MI # 1S	21729	1	qt		X						X					X	X	X	X	X	X	X
MI # 3S	21730	1	qt		X						X					X	X	X	X	X	X	X
MI # 3M	21731	1	qt		X						X					X	X	X	X	X	X	X
MI # 3N	21732	1	qt		X						X					X	X	X	X	X	X	X
MI # 4	21733	1	qt		X						X					X	X	X	X	X	X	X
MI # 5S	21734	1	qt		X						X					X	X					
MI # 5E	21735	1	qt		X						X					X	X	X	X	X	X	X
PP # 1S	21736	1	qt		X						X					X	X	X	X	X	X	X
PP # 1M	21737	1	qt		X						X					X	X	X	X	X	X	X
PP # 1N	21738	1	qt		X						X					X	X	X	X	X	X	X

Relinquished by	Date	Time	Received by
[illegible]	3-29-91	3:45	(signature)
			Received by Laboratory:

Remarks: CI

Lubbock Christian University Institute of Water Research
5601 West 19th Street • Lubbock, Texas 79407

CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Mitchell INT Phone #: 505-393-7251

Address: PO 1499 Hobbs N.M. 88240 FAX #: 505-393-6254

Project Number: NE 91

Project Name: Proposed Methanol & LPG Tank Farm

Project Location: Hobbs

Sampler Signature:

Sample ID	Lab # (Lab use only)	# CONTAINERS	Volume/Amount	Matrix: WATER	SOIL	AIR	SLUDGE	OTHER	Method Preserved: HCl	HNO3	ICE	NONE	OTHER	Sampling: DATE	TIME	ANALYSIS REQUEST: BTEX, MTBE	TPH	TCLP - All Metals	TCLP - Volatiles	TCLP - Semi - Vol's	Tox	RCI	OTHER	SPECIAL HANDLING
BP-2S	21739	1/4L			X						X					X	X	X	X	X	X	X		
BP-2M	21740	1/4L			X						X					X	X	X	X	X	X	X		
BP-2N	21741	1/4L			X						X					X	X	X	X	X	X	X		

Relinquished by: Linda Jaudon — Date/Time: 3-29-91 3:45 — Received by:

Relinquished by — Date/Time — Received by:

Relinquished by — Date/Time — Received by Laboratory:

Remarks: CI

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407
(806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 02, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

LCUIWR #	Field Code	TRPHC (ppb)	MTBE (ppb)	BENZENE (ppb)	TOLUENE (ppb)	ETHYL-BENZENE (ppb)	M,P,O XYLENE (ppb)	TOX (ppm)
Y21728	MI #1N	1,257,571	<1	<1	1	<1	<1	35
Y21729	MI #1S	12,402	<1	<1	<1	<1	<1	<18
Y21730	MI #3S	193,087	<1	<1	<1	<1	<1	<18
Y21731	MI #3M	4,046,336	<1	<1	<1	<1	<1	<18
Y21732	MI #3N	29,470,941	<1	1	<1	<1	<1	18
Y21733	MI #4	13,437	<1	<1	<1	<1	<1	<18
Y21734	MI #5S	8,091	<1	<1	<1	<1	<1	NR
Y21735	MI #5E 5F	121,335	<1	<1	<1	<1	<1	<18
Y21736	DP #15 1S	10,753,520	<1	<1	<1	<1	<1	<18
Y21737	DP #1M	14,274,825	<1	1	<1	<1	<1	<18
Y21738	DP #1N	25,393,383	<1	2	<1	<1	<1	35
Y21739	DP #2S	14,331,099	<1	<1	<1	<1	<1	18
Y21740	DP #2M	50,820,105	<1	2	<1	<1	<1	35
Y21741	DP #2N	44,227,682	<1	3	<1	<1	<1	35
QC	Quality Control	87,379	211	202	204	204	615	54
Air Blank		---	<1	<1	<1	<1	<1	---
% Precision		99	100	104	92	100	100	100
% Extraction Accuracy		97	95	98	92	85	82	88
% Instrument Accuracy		102	105	101	102	102	102	100

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020; EPA 418.1.
BTEX SPIKE AND QC: Sample and Blank Spiked with 200 ppb EACH VOLATILE ORGANICS.
TRPHC SPIKE AND QC: Sample spiked with 225,000 ppb TRPHC and Blank spiked with 85,280 ppb TRPHC.
TOX SPIKE AND QC: Sample Spiked with 60 ppm TCP Cl- and Blank Spiked with 54 ppm TCP Cl-.

BB

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-2-91

Date

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407
(806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 02, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

LCUIWR #	Field Code	REACTIVITY Sulfides (ppm)	REACTIVITY Cyanides	CORROSIVITY pH (s.u.)	IGNITABILITY
Y21728	MI #1N	<25.0	<2.5	7.76	Nonignitable
Y21729	MI #1S	<25.0	<2.5	7.86	Nonignitable
Y21730	MI #3S	<25.0	<2.5	7.87	Nonignitable
Y21731	MI #3M	<25.0	<2.5	7.39	Nonignitable
Y21732	MI #3N	<25.0	<2.5	7.23	Nonignitable
Y21733	MI #4	<25.0	<2.5	8.34	Nonignitable
Y21735	MI #SE 5E	<25.0	<2.5	7.94	Nonignitable
Y21736	DP #15 15	<25.0	<2.5	7.91	Nonignitable
Y21737	DP #1M	<25.0	<2.5	7.73	Nonignitable
Y21738	DP #1N	<25.0	<2.5	8.00	Nonignitable
Y21739	DP #2S	<25.0	<2.5	7.76	Nonignitable
Y21740	DP #2M	<25.0	<2.5	7.11	Nonignitable
Y21741	DP #2N	<25.0	<2.5	7.25	Nonignitable
QC	Quality Control	---	---	7.0	---
% Precision		100	100	100	100
% Instrument Accuracy		---	---	100	---

METHODS: EPA SW 846-7.3.4.2, 7.3.3.2, 9040, 1010; EPA 600/4-79-020.

BL

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-2-91

Date

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407
(806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP METALS (ppm)

LCUIWR #	Field Code	As	Se	Cr	Cd	Pb	Ba	Hg	Ag
Y21728	MI #1N	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
Y21728	Corrected	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
QC	Quality Control	0.977	1.09	1.10	1.10	1.04	0.996	0.0104	0.821
% Precision		97	100	100	100	95	95	98	100
% Extraction Accuracy		97	100	99	96	100	99	80	93
% Instrument Accuracy		98	109	110	110	104	100	104	82
Detection Limit		0.1	0.2	0.1	0.1	0.1	1.0	0.001	0.01
Y21729	MI #1S	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
Y21729	Corrected	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
QC	Quality Control	0.977	1.09	1.10	1.10	1.04	0.996	0.0104	0.821
% Precision		97	100	100	100	95	95	98	100
% Extraction Accuracy		80	100	93	96	96	99	82	92
% Instrument Accuracy		98	109	110	110	104	100	104	82
Detection Limit		0.1	<0.2	<0.1	<0.1	<0.1	1.0	0.001	0.01

METHODS: EPA SW 846-6010, 1311, 7471.
TCLP METALS QC: Blank Spiked with 1.00 ppm As, Se, Cr, Cd, Pb, Ba, Ag; 0.0100 ppm Hg.

BL

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-10-91

Date

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407
(806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP METALS (ppm)

LCUIWR #	Field Code	As	Se	Cr	Cd	Pb	Ba	Hg	Ag
Y21730	MI #3S	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
Y21730	Corrected	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
QC	Quality Control	0.977	1.09	1.10	1.10	1.04	0.996	0.0104	0.821
% Precision		97	100	100	100	95	95	98	100
% Extraction Accuracy		89	100	96	100	99	93	73	93
% Instrument Accuracy		98	109	110	110	104	100	104	82
Detection Limit		0.1	0.2	0.1	0.1	0.1	1.0	0.001	0.01
Y21731	MI #3M	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
Y21731	Corrected	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
QC	Quality Control	0.977	1.09	1.10	1.10	1.04	0.996	0.0104	0.821
% Precision		97	100	100	100	95	95	98	100
% Extraction Accuracy		81	100	94	90	98	100	76	92
% Instrument Accuracy		98	109	110	110	104	100	104	82
Detection Limit		0.1	<0.2	<0.1	<0.1	<0.1	1.0	0.001	0.01

METHODS: EPA SW 846-6010, 1311, 7471.
TCLP METALS QC: Blank Spiked with 1.00 ppm As, Se, Cr, Cd, Pb, Ba, Ag; 0.0100 ppm Hg.

BL

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-10-91

Date

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407
(806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP METALS (ppm)

LCUIWR #	Field Code	As	Se	Cr	Cd	Pb	Ba	Hg	Ag
Y21732	MI #3N	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
Y21732	Corrected	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
QC	Quality Control	0.977	1.09	1.10	1.10	1.04	0.996	0.0104	0.821
% Precision		97	100	100	100	95	95	98	100
% Extraction Accuracy		86	100	96	93	100	100	77	96
% Instrument Accuracy		98	109	110	110	104	100	104	82
Detection Limit		0.1	0.2	0.1	0.1	0.1	1.0	0.001	0.01
Y21733	MI #4	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
Y21733	Corrected	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
QC	Quality Control	0.977	1.09	1.10	1.10	1.04	0.996	0.0104	0.821
% Precision		97	100	100	100	95	95	98	100
% Extraction Accuracy		90	100	98	95	97	99	82	78
% Instrument Accuracy		98	109	110	110	104	100	104	82
Detection Limit		0.1	<0.2	<0.1	<0.1	<0.1	1.0	0.001	0.01

METHODS: EPA SW 846-6010, 1311, 7471.
TCLP METALS QC: Blank Spiked with 1.00 ppm As, Se, Cr, Cd, Pb, Ba, Ag; 0.0100 ppm Hg.

BB

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-10-91

Date

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407
(806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP METALS (ppm)

LCUIWR #	Field Code	As	Se	Cr	Cd	Pb	Ba	Hg	Ag
Y21735	MI #SE 5E	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
Y21735	Corrected	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
QC	Quality Control	0.977	1.09	1.10	1.10	1.04	0.996	0.0104	0.821
% Precision		97	100	100	100	95	95	98	100
% Extraction Accuracy		93	100	95	98	100	100	75	100
% Instrument Accuracy		98	109	110	110	104	100	104	82
Detection Limit		0.1	0.2	0.1	0.1	0.1	1.0	0.001	0.01
Y21736	DP #15S	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
Y21736	Corrected	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
QC	Quality Control	0.977	1.09	1.10	1.10	1.04	0.996	0.0104	0.821
% Precision		97	100	100	100	95	95	98	100
% Extraction Accuracy		100	100	99	99	100	100	84	100
% Instrument Accuracy		98	109	110	110	104	100	104	82
Detection Limit		0.1	<0.2	<0.1	<0.1	<0.1	1.0	0.001	0.01

METHODS: EPA SW 846-6010, 1311, 7471.
TCLP METALS QC: Blank Spiked with 1.00 ppm As, Se, Cr, Cd, Pb, Ba, Ag; 0.0100 ppm Hg.

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-10-91
Date

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407
(806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP METALS (ppm)

LCUIWR #	Field Code	As	Se	Cr	Cd	Pb	Ba	Hg	Ag
Y21737	DP #1M	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
Y21737	Corrected	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
QC	Quality Control	0.977	1.09	1.10	1.10	1.04	0.996	0.0104	0.821
% Precision		97	100	100	100	95	95	98	100
% Extraction Accuracy		95	100	97	100	100	100	83	76
% Instrument Accuracy		98	109	110	110	104	100	104	82
Detection Limit		0.1	0.2	0.1	0.1	0.1	1.0	0.001	0.01
Y21738	DP #1N	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
Y21738	Corrected	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
QC	Quality Control	0.977	1.09	1.10	1.10	1.04	0.996	0.0104	0.821
% Precision		97	100	100	100	95	95	98	100
% Extraction Accuracy		100	99	100	99	91	90	82	99
% Instrument Accuracy		98	109	110	110	104	100	104	82
Detection Limit		0.1	<0.2	<0.1	<0.1	<0.1	1.0	0.001	0.01

METHODS: EPA SW 846-6010, 1311, 7471.
TCLP METALS QC: Blank Spiked with 1.00 ppm As, Se, Cr, Cd, Pb, Ba, Ag; 0.0100 ppm Hg.

BL

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-10-91

Date

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407
(806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP METALS (ppm)

LCUIWR #	Field Code	As	Se	Cr	Cd	Pb	Ba	Hg	Ag
Y21739	DP #2S 5	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
Y21739	Corrected	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
QC	Quality Control	0.977	1.09	1.10	1.10	1.04	0.996	0.0104	0.821
% Precision		97	100	100	100	95	95	98	100
% Extraction Accuracy		100	93	100	100	92	93	80	86
% Instrument Accuracy		98	109	110	110	104	100	104	82
Detection Limit		0.1	0.2	0.1	0.1	0.1	1.0	0.001	0.01
Y21740	DP #2M	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
Y21740	Corrected	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
QC	Quality Control	0.977	1.09	1.10	1.10	1.04	0.996	0.0104	0.821
% Precision		97	100	100	100	95	95	98	100
% Extraction Accuracy		100	92	100	100	89	90	78	69
% Instrument Accuracy		98	109	110	110	104	100	104	82
Detection Limit		0.1	<0.2	<0.1	<0.1	<0.1	1.0	0.001	0.01

METHODS: EPA SW 846-6010, 1311, 7471.
TCLP METALS QC: Blank Spiked with 1.00 ppm As, Se, Cr, Cd, Pb, Ba, Ag; 0.0100 ppm Hg.

BB

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-10-91

Date

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407
(806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP METALS (ppm)

LCUIWR #	Field Code	As	Se	Cr	Cd	Pb	Ba	Hg	Ag
Y21741	DP #2N	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
Y21741	Corrected	<5.0	<1.0	<5.0	<1.0	<2.5	<100.0	<0.2	<5.0
QC	Quality Control	0.977	1.09	1.10	1.10	1.04	0.996	0.0104	0.821
% Precision		97	100	100	100	95	95	98	100
% Extraction Accuracy		100	98	100	100	95	92	72	97
% Instrument Accuracy		98	109	110	110	104	100	104	82
Detection Limit		0.1	0.2	0.1	0.1	0.1	1.0	0.001	0.01

METHODS: EPA SW 846-6010, 1311, 7471.
TCLP METALS QC: Blank Spiked with 1.00 ppm As, Se, Cr, Cd, Pb, Ba, Ag; 0.0100 ppm Hg.

Director, Dr. Blair Leftwich

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4-10-91
Date

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21728 MI #1N	Y21728 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.03	0.005	10.0	100	NR	100
m-Cresol	<200.0	<200.0	0.01	0.2	100	91	94
o-Cresol	<200.0	<200.0	0.01	0.2	100	NR	90
p-Cresol	<200.0	<200.0	0.01	0.2	100	91	94
Total Cresol	<200.0	<200.0	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<7.5	0.01	0.1	100	109	100
2,4-Dinitrotoluene	<0.13	<0.13	0.01	0.1	100	69	116
Heptachlor (and its hydroxide)	<0.008	<0.008	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.5	0.005	0.2	100	86	100
Hexachlorobenzene	<0.13	<0.13	0.001	0.1	100	84	88
Hexachlorooethane	<3.0	<3.0	0.01	0.1	100	89	84
Nitrobenzene	<2.0	<2.0	0.05	0.1	100	65	109
Pyridine	<5.0	<5.0	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<100.0	0.1	0.4	100	112	85
2,4,5-Trichlorophenol	<400.0	<400.0	0.01	0.1	100	100	94
2,4,6-Trichlorophenol	<2.0	<2.0	0.05	0.1	100	110	106
Endrin	<0.02	<0.02	0.005	20.0	100	NR	99
Lindane	<0.4	<0.4	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<10.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<10.0	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<1.0	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.5	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

Director, Dr. Blair Leftwich

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4-10-91
Date

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21729 MI #1S	Y21729 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.03	0.005	10.0	100	NR	100
m-Cresol	<200.0	<200.0	0.01	0.2	100	86	94
o-Cresol	<200.0	<200.0	0.01	0.2	100	NR	90
p-Cresol	<200.0	<200.0	0.01	0.2	100	86	94
Total Cresol	<200.0	<200.0	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<7.5	0.01	0.1	100	50	100
2,4-Dinitrotoluene	<0.13	<0.13	0.01	0.1	100	86	116
Heptachlor (and its hydroxide)	<0.008	<0.008	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.5	0.005	0.2	100	91	100
Hexachlorobenzene	<0.13	<0.13	0.001	0.1	100	106	88
Hexachlorooethane	<3.0	<3.0	0.01	0.1	100	111	84
Nitrobenzene	<2.0	<2.0	0.05	0.1	100	150	109
Pyridine	<5.0	<5.0	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<100.0	0.1	0.4	100	123	85
2,4,5-Trichlorophenol	<400.0	<400.0	0.01	0.1	100	81	94
2,4,6-Trichlorophenol	<2.0	<2.0	0.05	0.1	100	98	106
Endrin	<0.02	<0.02	0.005	20.0	100	NR	99
Lindane	<0.4	<0.4	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<10.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<10.0	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<1.0	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.5	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21730 MI #3S	Y21730 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.03	0.005	10.0	100	NR	100
m-Cresol	<200.0	<200.0	0.01	0.2	100	98	94
o-Cresol	<200.0	<200.0	0.01	0.2	100	NR	90
p-Cresol	<200.0	<200.0	0.01	0.2	100	98	94
Total Cresol	<200.0	<200.0	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<7.5	0.01	0.1	100	54	100
2,4-Dinitrotoluene	<0.13	<0.13	0.01	0.1	100	95	116
Heptachlor (and its hydroxide)	<0.008	<0.008	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.5	0.005	0.2	100	91	100
Hexachlorobenzene	<0.13	<0.13	0.001	0.1	100	92	88
Hexachlorooethane	<3.0	<3.0	0.01	0.1	100	93	84
Nitrobenzene	<2.0	<2.0	0.05	0.1	100	144	109
Pyridine	<5.0	<5.0	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<100.0	0.1	0.4	100	77	85
2,4,5-Trichlorophenol	<400.0	<400.0	0.01	0.1	100	125	94
2,4,6-Trichlorophenol	<2.0	<2.0	0.05	0.1	100	125	106
Endrin	<0.02	<0.02	0.005	20.0	100	NR	99
Lindane	<0.4	<0.4	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<10.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<10.0	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<1.0	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.5	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

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Date

Lubbock Christian University Institute of Water Research

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21731 MI #3M	Y21731 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.03	0.005	10.0	100	NR	100
m-Cresol	<200.0	<200.0	0.01	0.2	100	93	94
o-Cresol	<200.0	<200.0	0.01	0.2	100	NR	90
p-Cresol	<200.0	<200.0	0.01	0.2	100	93	94
Total Cresol	<200.0	<200.0	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<7.5	0.01	0.1	100	79	100
2,4-Dinitrotoluene	<0.13	<0.13	0.01	0.1	100	84	116
Heptachlor (and its hydroxide)	<0.008	<0.008	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.5	0.005	0.2	100	83	100
Hexachlorobenzene	<0.13	<0.13	0.001	0.1	100	95	88
Hexachlorooethane	<3.0	<3.0	0.01	0.1	100	93	84
Nitrobenzene	<2.0	<2.0	0.05	0.1	100	81	109
Pyridine	<5.0	<5.0	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<100.0	0.1	0.4	100	94	85
2,4,5-Trichlorophenol	<400.0	<400.0	0.01	0.1	100	73	94
2,4,6-Trichlorophenol	<2.0	<2.0	0.05	0.1	100	81	106
Endrin	<0.02	<0.02	0.005	20.0	100	NR	99
Lindane	<0.4	<0.4	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<10.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<10.0	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<1.0	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.5	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

Director, Dr. Blair Leftwich

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4-10-91
Date

Lubbock Christian University Institute of Water Research

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21732 MI #3N	Y21732 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.03	0.005	10.0	100	NR	100
m-Cresol	<200.0	<200.0	0.01	0.2	100	198	94
o-Cresol	<200.0	<200.0	0.01	0.2	100	NR	90
p-Cresol	<200.0	<200.0	0.01	0.2	100	198	94
Total Cresol	<200.0	<200.0	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<7.5	0.01	0.1	100	50	100
2,4-Dinitrotoluene	<0.13	<0.13	0.01	0.1	100	109	116
Heptachlor (and its hydroxide)	<0.008	<0.008	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.5	0.005	0.2	100	189	100
Hexachlorobenzene	<0.13	<0.13	0.001	0.1	100	146	88
Hexachlorooethane	<3.0	<3.0	0.01	0.1	100	72	84
Nitrobenzene	<2.0	<2.0	0.05	0.1	100	190	109
Pyridine	<5.0	<5.0	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<100.0	0.1	0.4	100	86	85
2,4,5-Trichlorophenol	<400.0	<400.0	0.01	0.1	100	291	94
2,4,6-Trichlorophenol	<2.0	<2.0	0.05	0.1	100	245	106
Endrin	<0.02	<0.02	0.005	20.0	100	NR	99
Lindane	<0.4	<0.4	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<10.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<10.0	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<1.0	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.5	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

4-10-91

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Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21733 MI #4	Y21733 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.03	0.005	10.0	100	NR	100
m-Cresol	<200.0	<200.0	0.01	0.2	100	100	94
o-Cresol	<200.0	<200.0	0.01	0.2	100	NR	90
p-Cresol	<200.0	<200.0	0.01	0.2	100	100	94
Total Cresol	<200.0	<200.0	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<7.5	0.01	0.1	100	87	100
2,4-Dinitrotoluene	<0.13	<0.13	0.01	0.1	100	81	116
Heptachlor (and its hydroxide)	<0.008	<0.008	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.5	0.005	0.2	100	NR	100
Hexachlorobenzene	<0.13	<0.13	0.001	0.1	100	99	88
Hexachlorooethane	<3.0	<3.0	0.01	0.1	100	128	84
Nitrobenzene	<2.0	<2.0	0.05	0.1	100	136	109
Pyridine	<5.0	<5.0	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<100.0	0.1	0.4	100	NR	85
2,4,5-Trichlorophenol	<400.0	<400.0	0.01	0.1	100	140	94
2,4,6-Trichlorophenol	<2.0	<2.0	0.05	0.1	100	120	106
Endrin	<0.02	<0.02	0.005	20.0	100	NR	99
Lindane	<0.4	<0.4	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<10.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<10.0	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<1.0	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.5	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

BS

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-10-91

Date

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21735 MI #SE	Y21735 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.03	0.005	10.0	100	NR	100
m-Cresol	<200.0	<200.0	0.01	0.2	100	90	94
o-Cresol	<200.0	<200.0	0.01	0.2	100	NR	90
p-Cresol	<200.0	<200.0	0.01	0.2	100	90	94
Total Cresol	<200.0	<200.0	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<7.5	0.01	0.1	100	194	100
2,4-Dinitrotoluene	<0.13	<0.13	0.01	0.1	100	77	116
Heptachlor (and its hydroxide)	<0.008	<0.008	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.5	0.005	0.2	100	94	100
Hexachlorobenzene	<0.13	<0.13	0.001	0.1	100	81	88
Hexachlorooethane	<3.0	<3.0	0.01	0.1	100	92	84
Nitrobenzene	<2.0	<2.0	0.05	0.1	100	98	109
Pyridine	<5.0	<5.0	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<100.0	0.1	0.4	100	19	85
2,4,5-Trichlorophenol	<400.0	<400.0	0.01	0.1	100	104	94
2,4,6-Trichlorophenol	<2.0	<2.0	0.05	0.1	100	153	106
Endrin	<0.02	<0.02	0.005	20.0	100	NR	99
Lindane	<0.4	<0.4	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<10.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<10.0	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<1.0	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.5	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

RB

4-10-91

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. C. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21736 DP #1,5 S	Y21736 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.03	0.005	10.0	100	NR	100
m-Cresol	<200.0	<200.0	0.01	0.2	100	NR	94
o-Cresol	<200.0	<200.0	0.01	0.2	100	NR	90
p-Cresol	<200.0	<200.0	0.01	0.2	100	NR	94
Total Cresol	<200.0	<200.0	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<7.5	0.01	0.1	100	157	100
2,4-Dinitrotoluene	<0.13	<0.13	0.01	0.1	100	95	116
Heptachlor (and its hydroxide)	<0.008	<0.008	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.5	0.005	0.2	100	96	100
Hexachlorobenzene	<0.13	<0.13	0.001	0.1	100	101	88
Hexachlorooethane	<3.0	<3.0	0.01	0.1	100	99	84
Nitrobenzene	<2.0	<2.0	0.05	0.1	100	96	109
Pyridine	<5.0	<5.0	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<100.0	0.1	0.4	100	85	85
2,4,5-Trichlorophenol	<400.0	<400.0	0.01	0.1	100	85	94
2,4,6-Trichlorophenol	<2.0	<2.0	0.05	0.1	100	82	106
Endrin	<0.02	<0.02	0.005	20.0	100	NR	99
Lindane	<0.4	<0.4	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<10.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<10.0	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<1.0	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.5	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

BS

4-10-91

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

Date

Lubbock Christian University Institute of Water Research

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21737 DP #1M	Y21737 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.03	0.005	10.0	100	NR	100
m-Cresol	<200.0	<200.0	0.01	0.2	100	98	94
o-Cresol	<200.0	<200.0	0.01	0.2	100	NR	90
p-Cresol	<200.0	<200.0	0.01	0.2	100	98	94
Total Cresol	<200.0	<200.0	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<7.5	0.01	0.1	100	82	100
2,4-Dinitrotoluene	<0.13	<0.13	0.01	0.1	100	84	116
Heptachlor (and its hydroxide)	<0.008	<0.008	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.5	0.005	0.2	100	93	100
Hexachlorobenzene	<0.13	<0.13	0.001	0.1	100	89	88
Hexachlorooethane	<3.0	<3.0	0.01	0.1	100	113	84
Nitrobenzene	<2.0	<2.0	0.05	0.1	100	104	109
Pyridine	<5.0	<5.0	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<100.0	0.1	0.4	100	74	85
2,4,5-Trichlorophenol	<400.0	<400.0	0.01	0.1	100	165	94
2,4,6-Trichlorophenol	<2.0	<2.0	0.05	0.1	100	137	106
Endrin	<0.02	<0.02	0.005	20.0	100	NR	99
Lindane	<0.4	<0.4	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<10.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<10.0	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<1.0	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.5	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

Director, Dr. Blair Leftwich

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4-10-91
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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21738 DP #1N	Y21738 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.03	0.005	10.0	100	NR	100
m-Cresol	<200.0	<200.0	0.01	0.2	100	105	94
o-Cresol	<200.0	<200.0	0.01	0.2	100	NR	90
p-Cresol	<200.0	<200.0	0.01	0.2	100	105	94
Total Cresol	<200.0	<200.0	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<7.5	0.01	0.1	100	188	100
2,4-Dinitrotoluene	<0.13	<0.13	0.01	0.1	100	90	116
Heptachlor (and its hydroxide)	<0.008	<0.008	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.5	0.005	0.2	100	102	100
Hexachlorobenzene	<0.13	<0.13	0.001	0.1	100	84	88
Hexachlorooethane	<3.0	<3.0	0.01	0.1	100	112	84
Nitrobenzene	<2.0	<2.0	0.05	0.1	100	166	109
Pyridine	<5.0	<5.0	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<100.0	0.1	0.4	100	95	85
2,4,5-Trichlorophenol	<400.0	<400.0	0.01	0.1	100	100	94
2,4,6-Trichlorophenol	<2.0	<2.0	0.05	0.1	100	122	106
Endrin	<0.02	<0.02	0.005	20.0	100	NR	99
Lindane	<0.4	<0.4	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<10.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<10.0	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<1.0	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.5	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21739 DP #255	Y21739 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.03	0.005	10.0	100	NR	100
m-Cresol	<200.0	<200.0	0.01	0.2	100	91	94
o-Cresol	<200.0	<200.0	0.01	0.2	100	NR	90
p-Cresol	<200.0	<200.0	0.01	0.2	100	91	94
Total Cresol	<200.0	<200.0	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<7.5	0.01	0.1	100	138	100
2,4-Dinitrotoluene	<0.13	<0.13	0.01	0.1	100	79	116
Heptachlor (and its hydroxide)	<0.008	<0.008	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.5	0.005	0.2	100	84	100
Hexachlorobenzene	<0.13	<0.13	0.001	0.1	100	89	88
Hexachlorooethane	<3.0	<3.0	0.01	0.1	100	91	84
Nitrobenzene	<2.0	<2.0	0.05	0.1	100	123	109
Pyridine	<5.0	<5.0	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<100.0	0.1	0.4	100	82	85
2,4,5-Trichlorophenol	<400.0	<400.0	0.01	0.1	100	133	94
2,4,6-Trichlorophenol	<2.0	<2.0	0.05	0.1	100	93	106
Endrin	<0.02	<0.02	0.005	20.0	100	NR	99
Lindane	<0.4	<0.4	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<10.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<10.0	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<1.0	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.5	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

BL

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21740 DP #2M	Y21740 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.03	0.005	10.0	100	NR	100
m-Cresol	<200.0	<200.0	0.01	0.2	100	90	94
o-Cresol	<200.0	<200.0	0.01	0.2	100	NR	90
p-Cresol	<200.0	<200.0	0.01	0.2	100	98	94
Total Cresol	<200.0	<200.0	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<7.5	0.01	0.1	100	137	100
2,4-Dinitrotoluene	<0.13	<0.13	0.01	0.1	100	81	116
Heptachlor (and its hydroxide)	<0.008	<0.008	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.5	0.005	0.2	100	91	100
Hexachlorobenzene	<0.13	<0.13	0.001	0.1	100	106	88
Hexachlorooethane	<3.0	<3.0	0.01	0.1	100	119	84
Nitrobenzene	<2.0	<2.0	0.05	0.1	100	164	109
Pyridine	<5.0	<5.0	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<100.0	0.1	0.4	100	90	85
2,4,5-Trichlorophenol	<400.0	<400.0	0.01	0.1	100	111	94
2,4,6-Trichlorophenol	<2.0	<2.0	0.05	0.1	100	88	106
Endrin	<0.02	<0.02	0.005	20.0	100	NR	99
Lindane	<0.4	<0.4	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<10.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<10.0	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<1.0	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.5	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21741 DP #2N	Y21741 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.03	0.005	10.0	100	NR	100
m-Cresol	<200.0	<200.0	0.01	0.2	100	97	94
o-Cresol	<200.0	<200.0	0.01	0.2	100	NR	90
p-Cresol	<200.0	<200.0	0.01	0.2	100	97	94
Total Cresol	<200.0	<200.0	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<7.5	0.01	0.1	100	88	100
2,4-Dinitrotoluene	<0.13	<0.13	0.01	0.1	100	93	116
Heptachlor (and its hydroxide)	<0.008	<0.008	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.5	0.005	0.2	100	90	100
Hexachlorobenzene	<0.13	<0.13	0.001	0.1	100	103	88
Hexachlorooethane	<3.0	<3.0	0.01	0.1	100	93	84
Nitrobenzene	<2.0	<2.0	0.05	0.1	100	91	109
Pyridine	<5.0	<5.0	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<100.0	0.1	0.4	100	151	85
2,4,5-Trichlorophenol	<400.0	<400.0	0.01	0.1	100	120	94
2,4,6-Trichlorophenol	<2.0	<2.0	0.05	0.1	100	146	106
Endrin	<0.02	<0.02	0.005	20.0	100	NR	99
Lindane	<0.4	<0.4	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<10.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<10.0	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<1.0	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.5	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

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4-10-91

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21728 MI #1N	Y21728 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.5	0.002	0.84	100	97	84
Carbon Tetrachloride	<0.5	<0.5	0.002	0.90	100	98	90
Chlorobenzene	<100.0	<100.0	0.002	1.00	100	109	100
Chloroform	<6.0	<6.0	0.02	0.87	100	93	87
1,2-Dichloroethane	<0.5	<0.5	0.002	0.83	100	103	83
1,1-Dichloroethylene	<0.7	<0.7	0.002	0.93	100	94	93
Methyl ethyl ketone	<200.0	<200.0	0.02	1.00	100	124	100
1,4-Dichlorobenzene	<7.5	<7.5	0.002	0.90	100	105	90
Tetrachloroethylene	<0.7	<0.7	0.002	1.00	100	101	100
Trichloroethylene	<0.5	<0.5	0.002	0.85	100	94	85
Vinyl chloride	<0.2	<0.2	0.002	0.83	100	88	83

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

Director, Dr. Blair Leftwich

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4-10-91
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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21729 MI #1S	Y21729 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.5	0.002	0.84	100	101	84
Carbon Tetrachloride	<0.5	<0.5	0.002	0.90	100	113	90
Chlorobenzene	<100.0	<100.0	0.002	1.00	100	114	100
Chloroform	<6.0	<6.0	0.02	0.87	100	102	87
1,2-Dichloroethane	<0.5	<0.5	0.002	0.83	100	103	83
1,1-Dichloroethylene	<0.7	<0.7	0.002	0.93	100	96	93
Methyl ethyl ketone	<200.0	<200.0	0.02	1.00	100	125	100
1,4-Dichlorobenzene	<7.5	<7.5	0.002	0.90	100	111	90
Tetrachloroethylene	<0.7	<0.7	0.002	1.00	100	106	100
Trichloroethylene	<0.5	<0.5	0.002	0.85	100	98	85
Vinyl chloride	<0.2	<0.2	0.002	0.83	100	90	83

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

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4-10-91

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21730 MI #3S	Y21730 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.5	0.002	0.84	100	98	84
Carbon Tetrachloride	<0.5	<0.5	0.002	0.90	100	111	90
Chlorobenzene	<100.0	<100.0	0.002	1.00	100	110	100
Chloroform	<6.0	<6.0	0.02	0.87	100	98	87
1,2-Dichloroethane	<0.5	<0.5	0.002	0.83	100	102	83
1,1-Dichloroethylene	<0.7	<0.7	0.002	0.93	100	93	93
Methyl ethyl ketone	<200.0	<200.0	0.02	1.00	100	123	100
1,4-Dichlorobenzene	<7.5	<7.5	0.002	0.90	100	104	90
Tetrachloroethylene	<0.7	<0.7	0.002	1.00	100	101	100
Trichloroethylene	<0.5	<0.5	0.002	0.85	100	95	85
Vinyl chloride	<0.2	<0.2	0.002	0.83	100	86	83

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21731 MI #3M	Y21731 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.5	0.002	0.84	100	98	84
Carbon Tetrachloride	<0.5	<0.5	0.002	0.90	100	112	90
Chlorobenzene	<100.0	<100.0	0.002	1.00	100	111	100
Chloroform	<6.0	<6.0	0.02	0.87	100	100	87
1,2-Dichloroethane	<0.5	<0.5	0.002	0.83	100	104	83
1,1-Dichloroethylene	<0.7	<0.7	0.002	0.93	100	94	93
Methyl ethyl ketone	<200.0	<200.0	0.02	1.00	100	125	100
1,4-Dichlorobenzene	<7.5	<7.5	0.002	0.90	100	107	90
Tetrachloroethylene	<0.7	<0.7	0.002	1.00	100	104	100
Trichloroethylene	<0.5	<0.5	0.002	0.85	100	96	85
Vinyl chloride	<0.2	<0.2	0.002	0.83	100	90	83

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

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Date

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21732 MI #3N	Y21732 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.5	0.002	0.84	100	91	84
Carbon Tetrachloride	<0.5	<0.5	0.002	0.90	100	106	90
Chlorobenzene	<100.0	<100.0	0.002	1.00	100	102	100
Chloroform	<6.0	<6.0	0.02	0.87	100	93	87
1,2-Dichloroethane	<0.5	<0.5	0.002	0.83	100	101	83
1,1-Dichloroethylene	<0.7	<0.7	0.002	0.93	100	89	93
Methyl ethyl ketone	<200.0	<200.0	0.02	1.00	100	122	100
1,4-Dichlorobenzene	<7.5	<7.5	0.002	0.90	100	100	90
Tetrachloroethylene	<0.7	<0.7	0.002	1.00	100	95	100
Trichloroethylene	<0.5	<0.5	0.002	0.85	100	88	85
Vinyl chloride	<0.2	<0.2	0.002	0.83	100	86	83

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

BL

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-10-91
Date

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407 • (806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21733 MI #4	Y21733 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.5	0.002	0.84	100	98	84
Carbon Tetrachloride	<0.5	<0.5	0.002	0.90	100	113	90
Chlorobenzene	<100.0	<100.0	0.002	1.00	100	110	100
Chloroform	<6.0	<6.0	0.02	0.87	100	98	87
1,2-Dichloroethane	<0.5	<0.5	0.002	0.83	100	101	83
1,1-Dichloroethylene	<0.7	<0.7	0.002	0.93	100	93	93
Methyl ethyl ketone	<200.0	<200.0	0.02	1.00	100	122	100
1,4-Dichlorobenzene	<7.5	<7.5	0.002	0.90	100	107	90
Tetrachloroethylene	<0.7	<0.7	0.002	1.00	100	102	100
Trichloroethylene	<0.5	<0.5	0.002	0.85	100	95	85
Vinyl chloride	<0.2	<0.2	0.002	0.83	100	85	83

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21735 MI #SE 5	Y21735 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.5	0.002	0.88	100	87	88
Carbon Tetrachloride	<0.5	<0.5	0.002	0.92	100	106	92
Chlorobenzene	<100.0	<100.0	0.002	0.99	100	98	99
Chloroform	<6.0	<6.0	0.02	0.96	100	88	96
1,2-Dichloroethane	<0.5	<0.5	0.002	0.85	100	98	85
1,1-Dichloroethylene	<0.7	<0.7	0.002	0.94	100	84	94
Methyl ethyl ketone	<200.0	<200.0	0.02	1.00	100	118	100
1,4-Dichlorobenzene	<7.5	<7.5	0.002	0.93	100	93	93
Tetrachloroethylene	<0.7	<0.7	0.002	0.98	100	93	98
Trichloroethylene	<0.5	<0.5	0.002	0.88	100	86	88
Vinyl chloride	<0.2	<0.2	0.002	0.84	100	81	84

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21736 DP #1 S	Y21736 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.5	0.002	0.88	100	94	88
Carbon Tetrachloride	<0.5	<0.5	0.002	0.92	100	114	92
Chlorobenzene	<100.0	<100.0	0.002	0.99	100	108	99
Chloroform	<6.0	<6.0	0.02	0.96	100	97	96
1,2-Dichloroethane	<0.5	<0.5	0.002	0.85	100	100	85
1,1-Dichloroethylene	<0.7	<0.7	0.002	0.94	100	94	94
Methyl ethyl ketone	<200.0	<200.0	0.02	1.00	100	121	100
1,4-Dichlorobenzene	<7.5	<7.5	0.002	0.93	100	100	93
Tetrachloroethylene	<0.7	<0.7	0.002	0.98	100	102	98
Trichloroethylene	<0.5	<0.5	0.002	0.88	100	95	88
Vinyl chloride	<0.2	<0.2	0.002	0.84	100	88	84

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
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Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21737 DP #1M	Y21737 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.5	0.002	0.88	100	96	88
Carbon Tetrachloride	<0.5	<0.5	0.002	0.92	100	112	92
Chlorobenzene	<100.0	<100.0	0.002	0.99	100	107	99
Chloroform	<6.0	<6.0	0.02	0.96	100	97	96
1,2-Dichloroethane	<0.5	<0.5	0.002	0.85	100	104	85
1,1-Dichloroethylene	<0.7	<0.7	0.002	0.94	100	93	94
Methyl ethyl ketone	<200.0	<200.0	0.02	1.00	100	125	100
1,4-Dichlorobenzene	<7.5	<7.5	0.002	0.93	100	101	93
Tetrachloroethylene	<0.7	<0.7	0.002	0.98	100	100	98
Trichloroethylene	<0.5	<0.5	0.002	0.88	100	93	88
Vinyl chloride	<0.2	<0.2	0.002	0.84	100	88	84

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

BL

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Attention: Wayne Price
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Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21738 DP #1N	Y21738 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.5	0.002	0.88	100	97	88
Carbon Tetrachloride	<0.5	<0.5	0.002	0.92	100	112	92
Chlorobenzene	<100.0	<100.0	0.002	0.99	100	110	99
Chloroform	<6.0	<6.0	0.02	0.96	100	98	96
1,2-Dichloroethane	<0.5	<0.5	0.002	0.85	100	102	85
1,1-Dichloroethylene	<0.7	<0.7	0.002	0.94	100	94	94
Methyl ethyl ketone	<200.0	<200.0	0.02	1.00	100	123	100
1,4-Dichlorobenzene	<7.5	<7.5	0.002	0.93	100	104	93
Tetrachloroethylene	<0.7	<0.7	0.002	0.98	100	102	98
Trichloroethylene	<0.5	<0.5	0.002	0.88	100	95	88
Vinyl chloride	<0.2	<0.2	0.002	0.84	100	88	84

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

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UNICHEM INTERNATIONAL
Attention: Wayne Price
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Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21739 DP #2	Y21739 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.5	0.002	0.88	100	97	88
Carbon Tetrachloride	<0.5	<0.5	0.002	0.92	100	104	92
Chlorobenzene	<100.0	<100.0	0.002	0.99	100	110	99
Chloroform	<6.0	<6.0	0.02	0.96	100	98	96
1,2-Dichloroethane	<0.5	<0.5	0.002	0.85	100	102	85
1,1-Dichloroethylene	<0.7	<0.7	0.002	0.94	100	94	94
Methyl ethyl ketone	<200.0	<200.0	0.02	1.00	100	123	100
1,4-Dichlorobenzene	<7.5	<7.5	0.002	0.93	100	105	93
Tetrachloroethylene	<0.7	<0.7	0.002	0.98	100	101	98
Trichloroethylene	<0.5	<0.5	0.002	0.88	100	94	88
Vinyl chloride	<0.2	<0.2	0.002	0.84	100	89	84

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

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April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21740 DP #2M	Y21740 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.5	0.002	0.88	100	96	88
Carbon Tetrachloride	<0.5	<0.5	0.002	0.92	100	101	92
Chlorobenzene	<100.0	<100.0	0.002	0.99	100	109	99
Chloroform	<6.0	<6.0	0.02	0.96	100	97	96
1,2-Dichloroethane	<0.5	<0.5	0.002	0.85	100	101	85
1,1-Dichloroethylene	<0.7	<0.7	0.002	0.94	100	94	94
Methyl ethyl ketone	<200.0	<200.0	0.02	1.00	100	122	100
1,4-Dichlorobenzene	<7.5	<7.5	0.002	0.93	100	103	93
Tetrachloroethylene	<0.7	<0.7	0.002	0.98	100	100	98
Trichloroethylene	<0.5	<0.5	0.002	0.88	100	94	88
Vinyl chloride	<0.2	<0.2	0.002	0.84	100	89	84

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

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UNICHEM INTERNATIONAL
Attention: Wayne Price
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Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21741 DP #2N	Y21741 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.5	0.002	0.88	100	96	88
Carbon Tetrachloride	<0.5	<0.5	0.002	0.92	100	102	92
Chlorobenzene	<100.0	<100.0	0.002	0.99	100	109	99
Chloroform	<6.0	<6.0	0.02	0.96	100	97	96
1,2-Dichloroethane	<0.5	<0.5	0.002	0.85	100	102	85
1,1-Dichloroethylene	<0.7	<0.7	0.002	0.94	100	92	94
Methyl ethyl ketone	<200.0	<200.0	0.02	1.00	100	123	100
1,4-Dichlorobenzene	<7.5	<7.5	0.002	0.93	100	104	93
Tetrachloroethylene	<0.7	<0.7	0.002	0.98	100	101	98
Trichloroethylene	<0.5	<0.5	0.002	0.88	100	93	88
Vinyl chloride	<0.2	<0.2	0.002	0.84	100	84	84

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

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April 10, 1991
Receiving Date: 3/29/91
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Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP METALS (ppm)
(Actual Values)

LCUIWR #	Field Code	As	Se	Cr	Cd	Pb	Ba	Hg	Ag
Y21728	MI #1N	0.12	<0.2	<0.1	<0.1	<0.1	<1.0	<0.002	<0.01
Y21729	MI #1S	0.13	<0.2	<0.1	<0.1	<0.1	<1.0	0.012	<0.01
Y21730	MI #3S	<0.1	<0.2	<0.1	<0.1	<0.1	<1.0	0.016	<0.01
Y21731	MI #3M	0.16	<0.2	<0.1	<0.1	<0.1	<1.0	<0.002	<0.01
Y21732	MI #3N	<0.1	<0.2	<0.1	<0.1	<0.1	<1.0	<0.002	<0.01
Y21733	MI #4	0.12	<0.2	<0.1	<0.1	<0.1	<1.0	0.004	<0.01
Y21735	MI #SE 5E	<0.1	<0.2	<0.1	<0.1	<0.1	<1.0	<0.002	<0.01
Y21736	DP #1S	0.17	<0.2	<0.1	<0.1	<0.1	<1.0	<0.002	<0.01
Y21737	DP #1M	0.18	<0.2	<0.1	<0.1	<0.1	<1.0	<0.002	<0.01
Y21738	DP #1N	0.10	<0.2	<0.1	<0.1	<0.1	<1.0	0.009	<0.01
Y21739	DP #2S 2S	<0.1	<0.2	<0.1	<0.1	0.1	<1.0	<0.002	<0.01
Y21740	DP #2M	0.11	<0.2	<0.1	<0.1	0.2	<1.0	<0.002	<0.01
Y21741	DP #2N	<0.1	<0.2	<0.1	<0.1	0.3	<1.0	0.016	<0.01
QC	Quality Control	0.977	1.09	1.10	1.10	1.04	0.996	0.0104	0.821

METHODS: EPA SW 846-6010, 1311, 7471.
TCLP METALS QC: Blank Spiked with 1.00 ppm As, Se, Crd, Cd, Pb, Ba, Ag; 0.0100 ppm Hg.

BB

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Attention: Wayne Price
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April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21728 MI #1N	Y21728 Actual	Y21728 Corrected	Detection Limit	QC	%P	%EA	%LA
Chlordane	<0.03	<0.005	<0.005	0.005	10.0	100	NR	100
m-Cresol	<200.0	<0.01	<0.02	0.01	0.2	100	91	94
o-Cresol	<200.0	<0.01	<0.02	0.01	0.2	100	NR	90
p-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	91	94
Total Cresol	<200.0	<0.01	<0.01	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<0.01	<0.01	0.01	0.1	100	109	100
2,4-Dinitrotoluene	<0.13	<0.01	<0.02	0.01	0.1	100	69	116
Heptachlor (and its hydroxide)	<0.008	<0.0005	<0.0005	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.005	<0.006	0.005	0.2	100	86	100
Hexachlorobenzene	<0.13	<0.001	<0.002	0.001	0.1	100	84	88
Hexachlorooethane	<3.0	<0.01	<0.01	0.01	0.1	100	89	84
Nitrobenzene	<2.0	<0.05	<0.6	0.05	0.1	100	65	109
Pyridine	<5.0	<0.1	<0.01	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<0.1	<0.1	0.1	0.4	100	112	85
2,4,5-Trichlorophenol	<400.0	<0.01	<0.01	0.01	0.1	100	100	94
2,4,6-Trichlorophenol	<2.0	<0.05	<0.05	0.05	0.1	100	110	106
Endrin	<0.02	<0.005	<0.005	0.005	20.0	100	NR	99
Lindane	<0.4	<0.05	<0.05	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<1.0	<1.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<0.01	<0.01	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<0.02	<0.02	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.1	<0.1	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

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UNICHEM INTERNATIONAL
Attention: Wayne Price
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Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21729 MI #1S	Y21729 Actual	Y21729 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.005	<0.005	0.005	10.0	100	NR	100
m-Cresol	<200.0	<0.01	<0.02	0.01	0.2	100	86	94
o-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	NR	90
p-Cresol	<200.0	<0.01	<0.02	0.01	0.2	100	86	94
Total Cresol	<200.0	<0.01	<0.01	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<0.01	<0.02	0.01	0.1	100	50	100
2,4-Dinitrotoluene	<0.13	<0.01	<0.01	0.01	0.1	100	86	116
Heptachlor (and its hydroxide)	<0.008	<0.0005	<0.0005	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.005	<0.005	0.005	0.2	100	91	100
Hexachlorobenzene	<0.13	<0.001	<0.001	0.001	0.1	100	106	88
Hexachlorooethane	<3.0	<0.01	<0.01	0.01	0.1	100	111	84
Nitrobenzene	<2.0	<0.05	<0.05	0.05	0.1	100	150	109
Pyridine	<5.0	<0.1	<0.1	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<0.1	<0.1	0.1	0.4	100	123	85
2,4,5-Trichlorophenol	<400.0	<0.01	<0.01	0.01	0.1	100	81	94
2,4,6-Trichlorophenol	<2.0	<0.05	<0.05	0.05	0.1	100	98	106
Endrin	<0.02	<0.005	<0.005	0.005	20.0	100	NR	99
Lindane	<0.4	<0.05	<0.05	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<1.0	<1.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<0.01	<0.01	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<0.02	<0.02	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.1	<0.1	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

BB

4-10-91

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

Date

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407 • (806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21730 MI #3S	Y21730 Actual	Y21730 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.005	<0.005	0.005	10.0	100	NR	100
m-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	98	94
o-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	NR	90
p-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	98	94
Total Cresol	<200.0	<0.01	<0.01	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<0.01	<0.02	0.01	0.1	100	54	100
2,4-Dinitrotoluene	<0.13	<0.01	<0.01	0.01	0.1	100	95	116
Heptachlor (and its hydroxide)	<0.008	<0.0005	<0.005	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.005	<0.005	0.005	0.2	100	91	100
Hexachlorobenzene	<0.13	0.013	0.014	0.001	0.1	100	92	88
Hexachlorooethane	<3.0	<0.01	<0.01	0.01	0.1	100	93	84
Nitrobenzene	<2.0	<0.05	<0.05	0.05	0.1	100	144	109
Pyridine	<5.0	<0.1	<0.1	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<0.1	<0.1	0.1	0.4	100	77	85
2,4,5-Trichlorophenol	<400.0	<0.01	<0.01	0.01	0.1	100	125	94
2,4,6-Trichlorophenol	<2.0	<0.05	<0.05	0.05	0.1	100	125	106
Endrin	<0.02	<0.005	<0.005	0.005	20.0	100	NR	99
Lindane	<0.4	<0.05	<0.05	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<1.0	<1.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<0.01	<0.01	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<0.02	<0.02	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.1	<0.1	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-10-91
Date

Lubbock Christian University Institute of Water Research

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21731 MI #3M	Y21731 Actual	Y21731 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.005	<0.005	0.005	10.0	100	NR	100
m-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	93	94
o-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	NR	90
p-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	93	94
Total Cresol	<200.0	<0.01	<0.01	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<0.01	<0.01	0.01	0.1	100	79	100
2,4-Dinitrotoluene	<0.13	0.021	0.023	0.01	0.1	100	84	116
Heptachlor (and its hydroxide)	<0.008	<0.0005	<0.0005	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.005	<0.001	0.005	0.2	100	83	100
Hexachlorobenzene	<0.13	<0.001	<0.001	0.001	0.1	100	95	88
Hexachlorooethane	<3.0	<0.01	<0.01	0.01	0.1	100	93	84
Nitrobenzene	<2.0	<0.05	<0.05	0.05	0.1	100	81	109
Pyridine	<5.0	<0.1	<0.1	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<0.1	<0.1	0.1	0.4	100	94	85
2,4,5-Trichlorophenol	<400.0	<0.001	<0.001	0.01	0.1	100	73	94
2,4,6-Trichlorophenol	<2.0	<0.05	<0.05	0.05	0.1	100	81	106
Endrin	<0.02	<0.005	<0.005	0.005	20.0	100	NR	99
Lindane	<0.4	<0.05	<0.05	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<10.0	<10.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<10.0	<10.0	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<1.0	<1.0	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.5	<0.5	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-10-91
Date

Lubbock Christian University Institute of Water Research

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21732 MI #3N	Y21732 Actual	Y21732 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.005	<0.005	0.005	10.0	100	NR	100
m-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	198	94
o-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	NR	90
p-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	198	94
Total Cresol	<200.0	<0.01	<0.01	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<0.01	<0.01	0.01	0.1	100	50	100
2,4-Dinitrotoluene	<0.13	0.016	0.016	0.01	0.1	100	109	116
Heptachlor (and its hydroxide)	<0.008	<0.0005	<0.0005	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.005	<0.005	0.005	0.2	100	189	100
Hexachlorobenzene	<0.13	<0.001	<0.001	0.001	0.1	100	146	88
Hexachlorooethane	<3.0	<0.01	<0.01	0.01	0.1	100	72	84
Nitrobenzene	<2.0	<0.05	<0.05	0.05	0.1	100	190	109
Pyridine	<5.0	<0.1	<0.1	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<0.1	<0.1	0.1	0.4	100	86	85
2,4,5-Trichlorophenol	<400.0	<0.01	<0.01	0.01	0.1	100	291	94
2,4,6-Trichlorophenol	<2.0	<0.05	<0.05	0.05	0.1	100	245	106
Endrin	<0.02	<0.005	<0.005	0.005	20.0	100	NR	99
Lindane	<0.4	<0.05	<0.05	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<1.0	<1.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<0.01	<0.01	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<0.02	<0.02	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.5	<0.5	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

BL

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-10-91

Date

Lubbock Christian University Institute of Water Research

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21733 MI #4	Y21733 Actual	Y21733 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.005	<0.005	0.005	10.0	100	NR	100
m-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	100	94
o-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	NR	90
p-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	100	94
Total Cresol	<200.0	<0.01	<0.01	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<0.01	<0.01	0.01	0.1	100	87	100
2,4-Dinitrotoluene	<0.13	<0.01	<0.01	0.01	0.1	100	81	116
Heptachlor (and its hydroxide)	<0.008	<0.0005	<0.0005	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.005	<0.005	0.005	0.2	100	NR	100
Hexachlorobenzene	<0.13	<0.001	<0.001	0.001	0.1	100	99	88
Hexachlorooethane	<3.0	<0.01	<0.01	0.01	0.1	100	128	84
Nitrobenzene	<2.0	<0.05	<0.05	0.05	0.1	100	136	109
Pyridine	<5.0	<0.1	<0.1	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<0.1	<0.1	0.1	0.4	100	NR	85
2,4,5-Trichlorophenol	<400.0	0.155	<0.155	0.01	0.1	100	140	94
2,4,6-Trichlorophenol	<2.0	<0.05	<0.05	0.05	0.1	100	120	106
Endrin	<0.02	<0.005	<0.005	0.005	20.0	100	NR	99
Lindane	<0.4	<0.05	<0.05	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<1.0	<1.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<0.01	<0.01	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<0.02	<0.02	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.1	<0.1	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-10-91
Date

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407 • (806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21735 MI #8E 5	Y21735 Actual	Y21735 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.005	<0.005	0.005	10.0	100	NR	100
m-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	90	94
o-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	NR	90
p-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	90	94
Total Cresol	<200.0	<0.01	<0.01	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<0.01	<0.01	0.01	0.1	100	194	100
2,4-Dinitrotoluene	<0.13	<0.01	<0.01	0.01	0.1	100	77	116
Heptachlor (and its hydroxide)	<0.008	<0.0005	<0.0005	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.005	<0.005	0.005	0.2	100	94	100
Hexachlorobenzene	<0.13	<0.001	<0.001	0.001	0.1	100	81	88
Hexachlorooethane	<3.0	<0.01	<0.01	0.01	0.1	100	92	84
Nitrobenzene	<2.0	<0.05	<0.05	0.05	0.1	100	98	109
Pyridine	<5.0	<0.1	<0.1	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<0.1	<0.5	0.1	0.4	100	19	85
2,4,5-Trichlorophenol	<400.0	<0.01	<0.01	0.01	0.1	100	104	94
2,4,6-Trichlorophenol	<2.0	<0.05	<0.05	0.05	0.1	100	153	106
Endrin	<0.02	<0.005	<0.005	0.005	20.0	100	NR	99
Lindane	<0.4	<0.05	<0.05	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<1.0	<1.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<0.01	<0.01	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<0.02	<0.02	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.1	<0.1	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-10-91
Date

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407 • (806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21736 DP #1,5,5	Y21736 Actual	Y21736 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.005	<0.005	0.005	10.0	100	NR	100
m-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	NR	94
o-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	NR	90
p-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	NR	94
Total Cresol	<200.0	<0.01	<0.01	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<0.01	<0.01	0.01	0.1	100	157	100
2,4-Dinitrotoluene	<0.13	<0.01	<0.01	0.01	0.1	100	95	116
Heptachlor (and its hydroxide)	<0.008	<0.0005	<0.0005	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.005	<0.005	0.005	0.2	100	96	100
Hexachlorobenzene	<0.13	<0.001	<0.001	0.001	0.1	100	101	88
Hexachlorooethane	<3.0	<0.01	<0.01	0.01	0.1	100	99	84
Nitrobenzene	<2.0	<0.05	<0.05	0.05	0.1	100	96	109
Pyridine	<5.0	<0.1	<0.1	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<0.1	<0.1	0.1	0.4	100	85	85
2,4,5-Trichlorophenol	<400.0	<0.01	<0.01	0.01	0.1	100	85	94
2,4,6-Trichlorophenol	<2.0	<0.05	<0.05	0.05	0.1	100	82	106
Endrin	<0.02	<0.005	<0.005	0.005	20.0	100	NR	99
Lindane	<0.4	<0.05	<0.05	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<1.0	<1.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<0.01	<0.01	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<0.02	<0.02	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.1	<0.1	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-10-91
Date

Lubbock Christian University Institute of Water Research

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21737 DP #1M	Y21737 Actual	Y21737 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.005	<0.005	0.005	10.0	100	NR	100
m-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	98	94
o-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	NR	90
p-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	98	94
Total Cresol	<200.0	<0.01	<0.01	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<0.01	<0.01	0.01	0.1	100	82	100
2,4-Dinitrotoluene	<0.13	<0.01	<0.01	0.01	0.1	100	84	116
Heptachlor (and its hydroxide)	<0.008	<0.0005	<0.0005	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.005	<0.005	0.005	0.2	100	93	100
Hexachlorobenzene	<0.13	<0.001	<0.001	0.001	0.1	100	89	88
Hexachlorooethane	<3.0	<0.01	<0.01	0.01	0.1	100	113	84
Nitrobenzene	<2.0	<0.05	<0.05	0.05	0.1	100	104	109
Pyridine	<5.0	<0.1	<0.1	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<0.1	<0.1	0.1	0.4	100	74	85
2,4,5-Trichlorophenol	<400.0	<0.01	<0.01	0.01	0.1	100	165	94
2,4,6-Trichlorophenol	<2.0	<0.05	<0.05	0.05	0.1	100	137	106
Endrin	<0.02	<0.005	<0.005	0.005	20.0	100	NR	99
Lindane	<0.4	<0.05	<0.05	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<1.0	<1.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<0.01	<0.01	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<0.02	<0.02	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.1	<0.1	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

BL

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-10-91

Date

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21738 DP #1N	Y21738 Actual	Y21738 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.005	<0.005	0.005	10.0	100	NR	100
m-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	105	94
o-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	NR	90
p-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	105	94
Total Cresol	<200.0	<0.01	<0.01	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<0.01	<0.01	0.01	0.1	100	188	100
2,4-Dinitrotoluene	<0.13	<0.01	<0.01	0.01	0.1	100	90	116
Heptachlor (and its hydroxide)	<0.008	<0.0005	<0.0005	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.005	<0.005	0.005	0.2	100	102	100
Hexachlorobenzene	<0.13	<0.001	<0.001	0.001	0.1	100	84	88
Hexachlorooethane	<3.0	<0.01	<0.01	0.01	0.1	100	112	84
Nitrobenzene	<2.0	<0.05	<0.05	0.05	0.1	100	166	109
Pyridine	<5.0	<0.1	<0.1	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<0.1	<0.1	0.1	0.4	100	95	85
2,4,5-Trichlorophenol	<400.0	<0.01	<0.01	0.01	0.1	100	100	94
2,4,6-Trichlorophenol	<2.0	<0.05	<0.05	0.05	0.1	100	122	106
Endrin	<0.02	<0.005	<0.005	0.005	20.0	100	NR	99
Lindane	<0.4	<0.05	<0.05	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<1.0	<1.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<0.01	<0.01	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<0.02	<0.02	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.1	<0.1	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

BL

4-10-91

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

Date

Lubbock Christian University Institute of Water Research

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21739 DP #255	Y21739 Actual	Y21739 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.005	<0.005	0.005	10.0	100	NR	100
m-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	91	94
o-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	NR	90
p-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	91	94
Total Cresol	<200.0	<0.01	<0.01	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<0.01	<0.01	0.01	0.1	100	138	100
2,4-Dinitrotoluene	<0.13	<0.01	<0.01	0.01	0.1	100	79	116
Heptachlor (and its hydroxide)	<0.008	<0.0005	<0.0005	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.005	<0.005	0.005	0.2	100	84	100
Hexachlorobenzene	<0.13	<0.001	<0.001	0.001	0.1	100	89	88
Hexachlorooethane	<3.0	<0.01	<0.01	0.01	0.1	100	91	84
Nitrobenzene	<2.0	<0.05	<0.05	0.05	0.1	100	123	109
Pyridine	<5.0	<0.1	<0.1	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<0.1	<0.1	0.1	0.4	100	82	85
2,4,5-Trichlorophenol	<400.0	<0.01	<0.01	0.01	0.1	100	133	94
2,4,6-Trichlorophenol	<2.0	<0.05	<0.05	0.05	0.1	100	93	106
Endrin	<0.02	<0.005	<0.005	0.005	20.0	100	NR	99
Lindane	<0.4	<0.05	<0.05	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<1.0	<1.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<0.01	<0.01	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<0.02	<0.02	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.1	<0.1	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

BL

4-10-91

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

Date

Lubbock Christian University Institute of Water Research

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21740 DP #2M	Y21740 Actual	Y21740 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.005	<0.005	0.005	10.0	100	NR	100
m-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	90	94
o-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	NR	90
p-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	98	94
Total Cresol	<200.0	<0.01	<0.01	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<0.01	<0.01	0.01	0.1	100	137	100
2,4-Dinitrotoluene	<0.13	<0.01	<0.01	0.01	0.1	100	81	116
Heptachlor (and its hydroxide)	<0.008	<0.0005	<0.0005	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.005	<0.005	0.005	0.2	100	91	100
Hexachlorobenzene	<0.13	<0.001	<0.001	0.001	0.1	100	106	88
Hexachlorooethane	<3.0	<0.01	<0.01	0.01	0.1	100	119	84
Nitrobenzene	<2.0	<0.05	<0.05	0.05	0.1	100	164	109
Pyridine	<5.0	<0.1	<0.1	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<0.1	<0.1	0.1	0.4	100	90	85
2,4,5-Trichlorophenol	<400.0	<0.01	<0.01	0.01	0.1	100	111	94
2,4,6-Trichlorophenol	<2.0	<0.05	<0.05	0.05	0.1	100	88	106
Endrin	<0.02	<0.005	<0.005	0.005	20.0	100	NR	99
Lindane	<0.4	<0.05	<0.05	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<1.0	<1.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<0.01	<0.01	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<0.02	<0.02	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.1	<0.1	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-10-91
Date

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP SEMI-VOLATILES (ppm)	Y21741 DP #2N	Y21741 Actual	Y21741 Corrected	Detection Limit	QC	%P	%EA	%IA
Chlordane	<0.03	<0.005	<0.005	0.005	10.0	100	NR	100
m-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	97	94
o-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	NR	90
p-Cresol	<200.0	<0.01	<0.01	0.01	0.2	100	97	94
Total Cresol	<200.0	<0.01	<0.01	0.01	0.06	100	NR	93
1,4-Dichlorobenzene	<7.5	<0.01	<0.01	0.01	0.1	100	88	100
2,4-Dinitrotoluene	<0.13	<0.01	<0.01	0.01	0.1	100	93	116
Heptachlor (and its hydroxide)	<0.008	<0.0005	<0.0005	0.0005	20.0	100	NR	95
Hexachloro-1,3-butadiene	<0.5	<0.005	<0.005	0.005	0.2	100	90	100
Hexachlorobenzene	<0.13	<0.001	<0.001	0.001	0.1	100	103	88
Hexachlorooethane	<3.0	<0.01	<0.01	0.01	0.1	100	93	84
Nitrobenzene	<2.0	<0.05	<0.05	0.05	0.1	100	91	109
Pyridine	<5.0	<0.1	<0.1	0.1	0.1	100	NR	116
Pentachlorophenol	<100.0	<0.1	<0.1	0.1	0.4	100	151	85
2,4,5-Trichlorophenol	<400.0	<0.01	<0.01	0.01	0.1	100	120	94
2,4,6-Trichlorophenol	<2.0	<0.05	<0.05	0.05	0.1	100	146	106
Endrin	<0.02	<0.005	<0.005	0.005	20.0	100	NR	99
Lindane	<0.4	<0.05	<0.05	0.05	20.2	100	NR	100
Methoxychlor	<10.0	<1.0	<1.0	1.0	20.2	100	NR	100
2,4-D	<10.0	<0.01	<0.01	0.01	2.0	100	NR	100
2,4,5-T-P (Silvex)	<1.0	<0.02	<0.02	0.02	2.0	100	NR	100
Toxaphene	<0.5	<0.1	<0.1	0.1	2.0	100	NR	100

METHODS: EPA SW 846-8270, 1311.

BL

4-10-91

Director, Dr. Blair Leftwich

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Date

Lubbock Christian University Institute of Water Research

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21728 MI #1N	Y21728 Actual	Y21728 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.002	<0.5	0.002	0.84	100	97	84
Carbon Tetrachloride	<0.5	<0.002	<0.5	0.002	0.90	100	98	90
Chlorobenzene	<100.0	<0.002	<100.0	0.002	1.00	100	109	100
Chloroform	<6.0	<0.02	<6.0	0.02	0.87	100	93	87
1,2-Dichloroethane	<0.5	<0.002	<0.5	0.002	0.83	100	103	83
1,1-Dichloroethylene	<0.7	<0.002	<0.7	0.002	0.93	100	94	93
Methyl ethyl ketone	<200.0	<0.02	<200.0	0.02	1.00	100	124	100
1,4-Dichlorobenzene	<7.5	<0.002	<7.5	0.002	0.90	100	105	90
Tetrachloroethylene	<0.7	<0.002	<0.7	0.002	1.00	100	101	100
Trichloroethylene	<0.5	<0.002	<0.5	0.002	0.85	100	94	85
Vinyl chloride	<0.2	<0.002	<0.2	0.002	0.83	100	88	83

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

BL

Director, Dr. Blair Leftwich

4-10-91

Asst. Dir., Dr. Bruce McDonell Date

Lubbock Christian University Institute of Water Research

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21729 MI #1S	Y21729 Actual	Y21729 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.002	<0.5	0.002	0.84	100	101	84
Carbon Tetrachloride	<0.5	<0.002	<0.5	0.002	0.90	100	113	90
Chlorobenzene	<100.0	<0.002	<100.0	0.002	1.00	100	114	100
Chloroform	<6.0	<0.02	<6.0	0.02	0.87	100	102	87
1,2-Dichloroethane	<0.5	<0.002	<0.5	0.002	0.83	100	103	83
1,1-Dichloroethylene	<0.7	<0.002	<0.7	0.002	0.93	100	96	93
Methyl ethyl ketone	<200.0	<0.02	<200.0	0.02	1.00	100	125	100
1,4-Dichlorobenzene	<7.5	<0.002	<7.5	0.002	0.90	100	111	90
Tetrachloroethylene	<0.7	<0.002	<0.7	0.002	1.00	100	106	100
Trichloroethylene	<0.5	<0.002	<0.5	0.002	0.85	100	98	85
Vinyl chloride	<0.2	<0.002	<0.2	0.002	0.83	100	90	83

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

BL

Director, Dr. Blair Leftwich

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Asst. Dir., Dr. Bruce McDonell Date

Lubbock Christian University Institute of Water Research

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21730 MI #3S	Y21730 Actual	Y21730 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.002	<0.5	0.002	0.84	100	98	84
Carbon Tetrachloride	<0.5	<0.002	<0.5	0.002	0.90	100	111	90
Chlorobenzene	<100.0	<0.002	<100.0	0.002	1.00	100	110	100
Chloroform	<6.0	<0.02	<6.0	0.02	0.87	100	98	87
1,2-Dichloroethane	<0.5	<0.002	<0.5	0.002	0.83	100	102	83
1,1-Dichloroethylene	<0.7	<0.002	<0.7	0.002	0.93	100	93	93
Methyl ethyl ketone	<200.0	<0.02	<200.0	0.02	1.00	100	123	100
1,4-Dichlorobenzene	<7.5	<0.002	<7.5	0.002	0.90	100	104	90
Tetrachloroethylene	<0.7	<0.002	<0.7	0.002	1.00	100	101	100
Trichloroethylene	<0.5	<0.002	<0.5	0.002	0.85	100	95	85
Vinyl chloride	<0.2	<0.002	<0.2	0.002	0.83	100	86	83

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

BB

Director, Dr. Blair Leftwich

4-10-91

Asst. Dir., Dr. Bruce McDonell Date

Lubbock Christian University Institute of Water Research

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21731 MI #3M	Y21731 Actual	Y21731 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.002	<0.5	0.002	0.84	100	98	84
Carbon Tetrachloride	<0.5	<0.002	<0.5	0.002	0.90	100	112	90
Chlorobenzene	<100.0	<0.002	<100.0	0.002	1.00	100	111	100
Chloroform	<6.0	<0.02	<6.0	0.02	0.87	100	100	87
1,2-Dichloroethane	<0.5	<0.002	<0.5	0.002	0.83	100	104	83
1,1-Dichloroethylene	<0.7	<0.002	<0.7	0.002	0.93	100	94	93
Methyl ethyl ketone	<200.0	<0.02	<200.0	0.02	1.00	100	125	100
1,4-Dichlorobenzene	<7.5	<0.002	<7.5	0.002	0.90	100	107	90
Tetrachloroethylene	<0.7	<0.002	<0.7	0.002	1.00	100	104	100
Trichloroethylene	<0.5	<0.002	<0.5	0.002	0.85	100	96	85
Vinyl chloride	<0.2	<0.002	<0.2	0.002	0.83	100	90	83

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

BL

Director, Dr. Blair Leftwich

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4-10-91

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21732 MI #3N	Y21732 Actual	Y21732 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.002	<0.5	0.002	0.84	100	91	84
Carbon Tetrachloride	<0.5	<0.002	<0.5	0.002	0.90	100	106	90
Chlorobenzene	<100.0	<0.002	<100.0	0.002	1.00	100	102	100
Chloroform	<6.0	<0.02	<6.0	0.02	0.87	100	93	87
1,2-Dichloroethane	<0.5	<0.002	<0.5	0.002	0.83	100	101	83
1,1-Dichloroethylene	<0.7	<0.002	<0.7	0.002	0.93	100	89	93
Methyl ethyl ketone	<200.0	<0.02	<200.0	0.02	1.00	100	122	100
1,4-Dichlorobenzene	<7.5	<0.002	<7.5	0.002	0.90	100	100	90
Tetrachloroethylene	<0.7	<0.002	<0.7	0.002	1.00	100	95	100
Trichloroethylene	<0.5	<0.002	<0.5	0.002	0.85	100	88	85
Vinyl chloride	<0.2	<0.002	<0.2	0.002	0.83	100	86	83

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

4-10-91

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Date

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21733 MI #4	Y21733 Actual	Y21733 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.002	<0.5	0.002	0.84	100	98	84
Carbon Tetrachloride	<0.5	<0.002	<0.5	0.002	0.90	100	113	90
Chlorobenzene	<100.0	<0.002	<100.0	0.002	1.00	100	110	100
Chloroform	<6.0	<0.02	<6.0	0.02	0.87	100	98	87
1,2-Dichloroethane	<0.5	<0.002	<0.5	0.002	0.83	100	101	83
1,1-Dichloroethylene	<0.7	<0.002	<0.7	0.002	0.93	100	93	93
Methyl ethyl ketone	<200.0	<0.02	<200.0	0.02	1.00	100	122	100
1,4-Dichlorobenzene	<7.5	<0.002	<7.5	0.002	0.90	100	107	90
Tetrachloroethylene	<0.7	<0.002	<0.7	0.002	1.00	100	102	100
Trichloroethylene	<0.5	<0.002	<0.5	0.002	0.85	100	95	85
Vinyl chloride	<0.2	<0.002	<0.2	0.002	0.83	100	85	83

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

BL

4-10-91

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21735 MI #5E	Y21735 Actual	Y21735 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.002	<0.5	0.002	0.88	100	87	88
Carbon Tetrachloride	<0.5	<0.002	<0.5	0.002	0.92	100	106	92
Chlorobenzene	<100.0	<0.002	<100.0	0.002	0.99	100	98	99
Chloroform	<6.0	<0.02	<6.0	0.02	0.96	100	88	96
1,2-Dichloroethane	<0.5	<0.002	<0.5	0.002	0.85	100	98	85
1,1-Dichloroethylene	<0.7	<0.002	<0.7	0.002	0.94	100	84	94
Methyl ethyl ketone	<200.0	<0.02	<200.0	0.02	1.00	100	118	100
1,4-Dichlorobenzene	<7.5	<0.002	<7.5	0.002	0.93	100	93	93
Tetrachloroethylene	<0.7	<0.002	<0.7	0.002	0.98	100	93	98
Trichloroethylene	<0.5	<0.002	<0.5	0.002	0.88	100	86	88
Vinyl chloride	<0.2	<0.002	<0.2	0.002	0.84	100	81	84

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

BL

4-10-91

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

Date

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407 • (806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21736 DP #1 5	Y21736 Actual	Y21736 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.002	<0.5	0.002	0.88	100	94	88
Carbon Tetrachloride	<0.5	<0.002	<0.5	0.002	0.92	100	114	92
Chlorobenzene	<100.0	<0.002	<100.0	0.002	0.99	100	108	99
Chloroform	<6.0	<0.02	<6.0	0.02	0.96	100	97	96
1,2-Dichloroethane	<0.5	<0.002	<0.5	0.002	0.85	100	100	85
1,1-Dichloroethylene	<0.7	<0.002	<0.7	0.002	0.94	100	94	94
Methyl ethyl ketone	<200.0	<0.02	<200.0	0.02	1.00	100	121	100
1,4-Dichlorobenzene	<7.5	<0.002	<7.5	0.002	0.93	100	100	93
Tetrachloroethylene	<0.7	<0.002	<0.7	0.002	0.98	100	102	98
Trichloroethylene	<0.5	<0.002	<0.5	0.002	0.88	100	95	88
Vinyl chloride	<0.2	<0.002	<0.2	0.002	0.84	100	88	84

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-10-91
Date

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407 • (806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21737 DP #1M	Y21737 Actual	Y21737 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.002	<0.5	0.002	0.88	100	96	88
Carbon Tetrachloride	<0.5	<0.002	<0.5	0.002	0.92	100	112	92
Chlorobenzene	<100.0	<0.002	<100.0	0.002	0.99	100	107	99
Chloroform	<6.0	<0.02	<6.0	0.02	0.96	100	97	96
1,2-Dichloroethane	<0.5	<0.002	<0.5	0.002	0.85	100	104	85
1,1-Dichloroethylene	<0.7	<0.002	<0.7	0.002	0.94	100	93	94
Methyl ethyl ketone	<200.0	<0.02	<200.0	0.02	1.00	100	125	100
1,4-Dichlorobenzene	<7.5	<0.002	<7.5	0.002	0.93	100	101	93
Tetrachloroethylene	<0.7	<0.002	<0.7	0.002	0.98	100	100	98
Trichloroethylene	<0.5	<0.002	<0.5	0.002	0.88	100	93	88
Vinyl chloride	<0.2	<0.002	<0.2	0.002	0.84	100	88	84

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

BL

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-10-91

Date

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407 • (806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21738 DP #1N	Y21738 Actual	Y21738 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.002	<0.5	0.002	0.88	100	97	88
Carbon Tetrachloride	<0.5	<0.002	<0.5	0.002	0.92	100	112	92
Chlorobenzene	<100.0	<0.002	<100.0	0.002	0.99	100	110	99
Chloroform	<6.0	<0.02	<6.0	0.02	0.96	100	98	96
1,2-Dichloroethane	<0.5	<0.002	<0.5	0.002	0.85	100	102	85
1,1-Dichloroethylene	<0.7	<0.002	<0.7	0.002	0.94	100	94	94
Methyl ethyl ketone	<200.0	<0.02	<200.0	0.02	1.00	100	123	100
1,4-Dichlorobenzene	<7.5	<0.002	<7.5	0.002	0.93	100	104	93
Tetrachloroethylene	<0.7	<0.002	<0.7	0.002	0.98	100	102	98
Trichloroethylene	<0.5	<0.002	<0.5	0.002	0.88	100	95	88
Vinyl chloride	<0.2	<0.002	<0.2	0.002	0.84	100	88	84

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-10-91
Date

Lubbock Christian University Institute of Water Research
5601 West 19th Street • Lubbock, Texas 79407 • (806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21739 DP #25 5	Y21739 Actual	Y21739 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.002	<0.5	0.002	0.88	100	97	88
Carbon Tetrachloride	<0.5	<0.002	<0.5	0.002	0.92	100	104	92
Chlorobenzene	<100.0	<0.002	<100.0	0.002	0.99	100	110	99
Chloroform	<6.0	<0.02	<6.0	0.02	0.96	100	98	96
1,2-Dichloroethane	<0.5	<0.002	<0.5	0.002	0.85	100	102	85
1,1-Dichloroethylene	<0.7	<0.002	<0.7	0.002	0.94	100	94	94
Methyl ethyl ketone	<200.0	<0.02	<200.0	0.02	1.00	100	123	100
1,4-Dichlorobenzene	<7.5	<0.002	<7.5	0.002	0.93	100	105	93
Tetrachloroethylene	<0.7	<0.002	<0.7	0.002	0.98	100	101	98
Trichloroethylene	<0.5	<0.002	<0.5	0.002	0.88	100	94	88
Vinyl chloride	<0.2	<0.002	<0.2	0.002	0.84	100	89	84

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

BLF 4-10-91

Director, Dr. Blair Leftwich — Asst. Dir., Dr. Bruce McDonell — Date

Lubbock Christian University Institute of Water Research

5601 West 19th Street • Lubbock, Texas 79407 • (806) 796-8900

ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21740 DP #2M	Y21740 Actual	Y21740 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.002	<0.5	0.002	0.88	100	96	88
Carbon Tetrachloride	<0.5	<0.002	<0.5	0.002	0.92	100	101	92
Chlorobenzene	<100.0	<0.002	<100.0	0.002	0.99	100	109	99
Chloroform	<6.0	<0.02	<6.0	0.02	0.96	100	97	96
1,2-Dichloroethane	<0.5	<0.002	<0.5	0.002	0.85	100	101	85
1,1-Dichloroethylene	<0.7	<0.002	<0.7	0.002	0.94	100	94	94
Methyl ethyl ketone	<200.0	<0.02	<200.0	0.02	1.00	100	122	100
1,4-Dichlorobenzene	<7.5	<0.002	<7.5	0.002	0.93	100	103	93
Tetrachloroethylene	<0.7	<0.002	<0.7	0.002	0.98	100	100	98
Trichloroethylene	<0.5	<0.002	<0.5	0.002	0.88	100	94	88
Vinyl chloride	<0.2	<0.002	<0.2	0.002	0.84	100	89	84

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

BL

4-10-91

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

Date

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ANALYTICAL RESULTS FOR
UNICHEM INTERNATIONAL
Attention: Wayne Price
P. O. Box 1499
Hobbs, NM 88240

April 10, 1991
Receiving Date: 3/29/91
Sample Type: Soil
Project No: MI-91
Project Location: Hobbs, NM

Sampling Date: NA
Sample Condition: Intact & Cool
Sample Received by: BL
Project Name: Proposed Methanol/IPA

TCLP VOLATILES (ppm)	Y21741 DP #2N	Y21741 Actual	Y21741 Corrected	Detection Limit	QC	%P	%EA	%IA
Benzene	<0.5	<0.002	<0.5	0.002	0.88	100	96	88
Carbon Tetrachloride	<0.5	<0.002	<0.5	0.002	0.92	100	102	92
Chlorobenzene	<100.0	<0.002	<100.0	0.002	0.99	100	109	99
Chloroform	<6.0	<0.02	<6.0	0.02	0.96	100	97	96
1,2-Dichloroethane	<0.5	<0.002	<0.5	0.002	0.85	100	102	85
1,1-Dichloroethylene	<0.7	<0.002	<0.7	0.002	0.94	100	92	94
Methyl ethyl ketone	<200.0	<0.02	<200.0	0.02	1.00	100	123	100
1,4-Dichlorobenzene	<7.5	<0.002	<7.5	0.002	0.93	100	104	93
Tetrachloroethylene	<0.7	<0.002	<0.7	0.002	0.98	100	101	98
Trichloroethylene	<0.5	<0.002	<0.5	0.002	0.88	100	93	88
Vinyl chloride	<0.2	<0.002	<0.2	0.002	0.84	100	84	84

METHODS: EPA SW 846-3810 USING AUTOMATED HEAD SPACE; EPA SW 846-8020, 1311.

BLF

Director, Dr. Blair Leftwich

Asst. Dir., Dr. Bruce McDonell

4-10-91

Date

IV. Site Pictures

1. Picture looking west - Abbott Bros Drilling rig drilling test hole MI-(1 & 2) - Wayne Price and Ed Nelson collecting soil samples. 2/7/91 - 11:35 a.m.

2. Picture looking south at area A; old concrete pad has been removed, Wayne Price is checking surface and test holes with FIUU - 2/7/91 - 12:01 p.m. - background shows existing concrete empty drum storage pad.

3. Ed Nelson taking composite concrete and soil samples from dirt pile #1 located on railroad loading area. This sample is DP#1 (south)

4. Dirt pile #1 (DP#1) located on Unichem's railroad lease - picture taken looking southeast - taking composite samples for DP-1N by Ed Nelson using 3' Long split floor tier. Background shows DP#2.

5. Picture looking south at Area's A&B, backhoe digging test hole for sample MI-1S (south) 15' deep, foreground shows test hole for MI-1N (north).

6. Picture looking north, shows area A & B background is a hot house and oil side chemical tank farm. Also shows part of DP#2.

7. Picture looking north shows eastern part of Area "C" and existing quonset building - trench dug to locate where previous UST's were removed - a plastic liner was placed in hole during backfill in 1987 for locating tanks.

8. Soil sample taken from MI#4 6' below bottom of where UST's were located.

9. Soil sample taken for MI-3S (south).

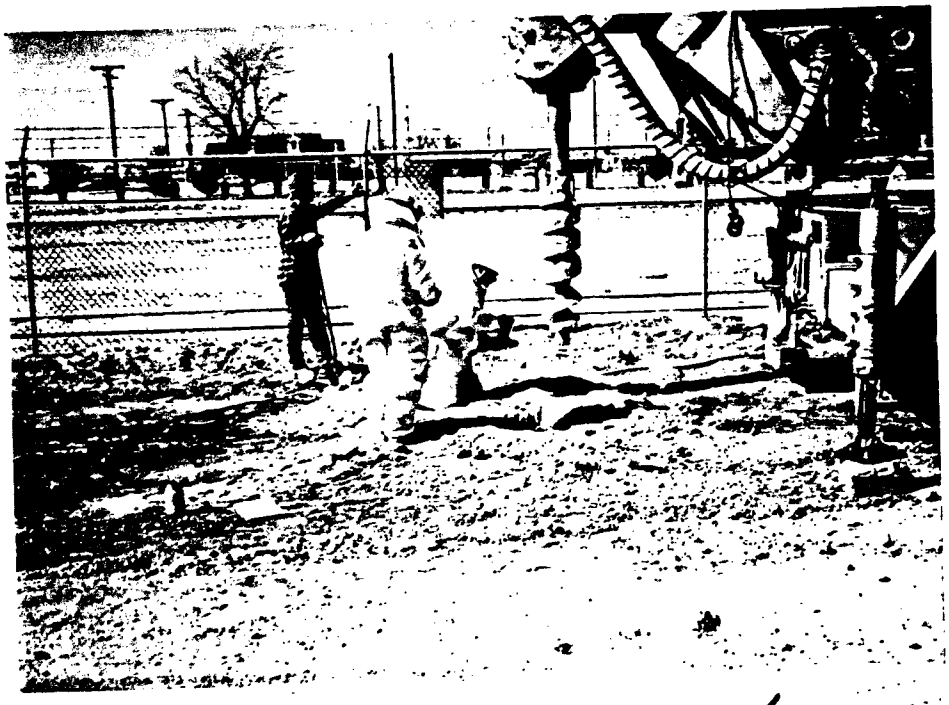
10. Soil sample taken for MI-3M.

11. Soil sample taken from east wall MI-5E.

12. Soil sample taken from south wall MI-5S (south).

13. Dirt pile #2 - composite samples being taken using 3' long split flour tier - sample #DP-2N - picture looking to N.E.

14. Dirt pile #2 - DP-2 - picture looking to southwest.

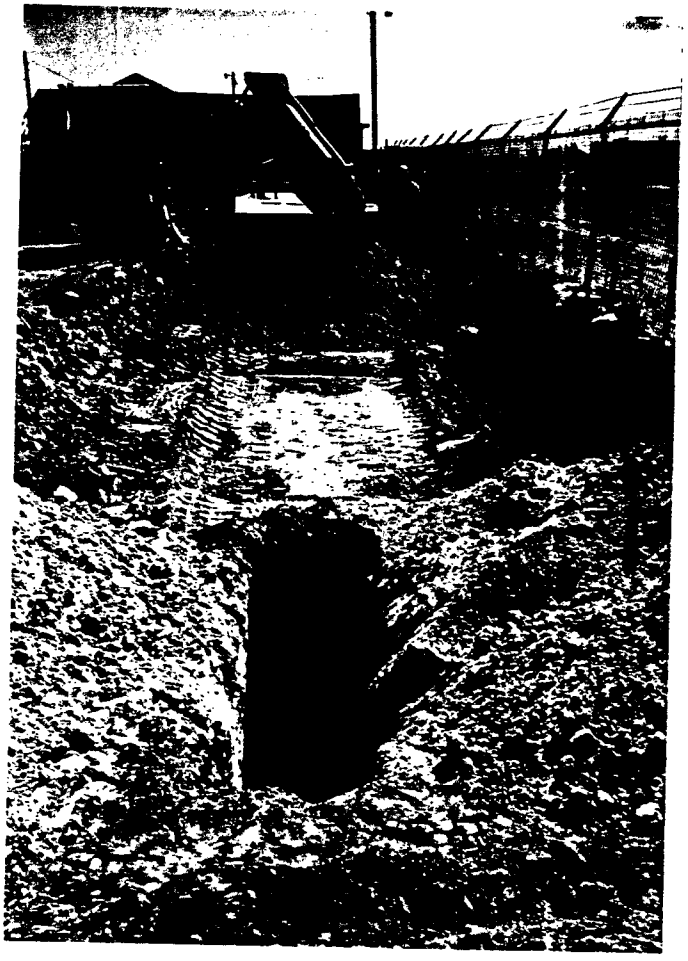


1. Picture looking west - Abbott Bros Drlg rig drlg tst hole MI-(1 & 2) - Wayne Price & Ed Nelson collecting soil samples. 2/7/91 - 11:35 a.m.

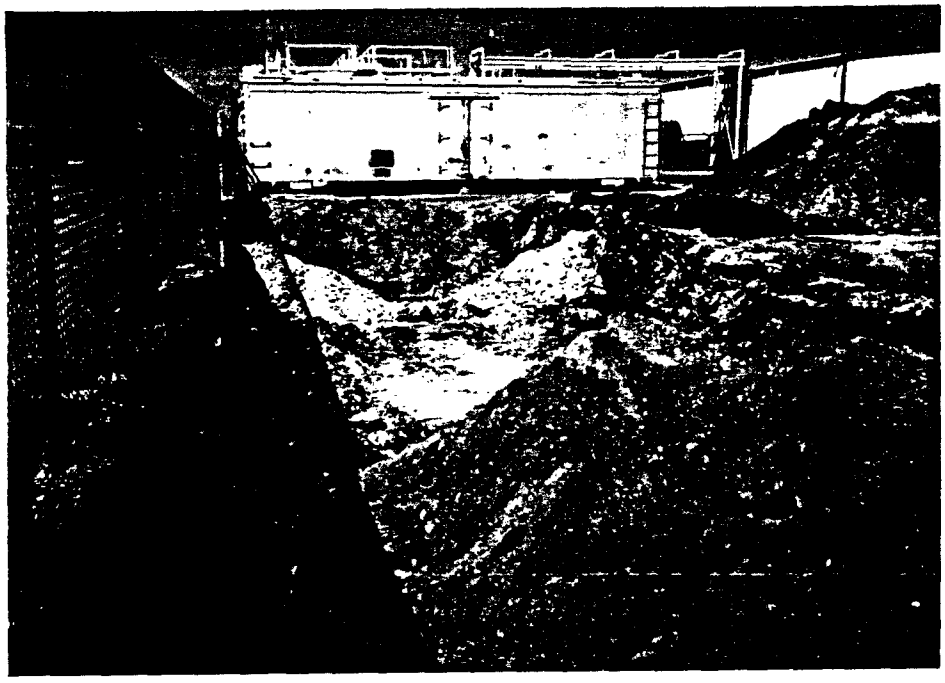
2. Picture looking south at area A; old concrete pad has been removed, Wayne Price is checking surface and test holes w/FIU 2/7/91 - 12:01 p.m. background shows existing concrete empty drum storage pad.

3. Ed Nelson taking composite concrete & soil samples from dirt pile #1 located on railroad loading area. This sample is DP#1 (south).

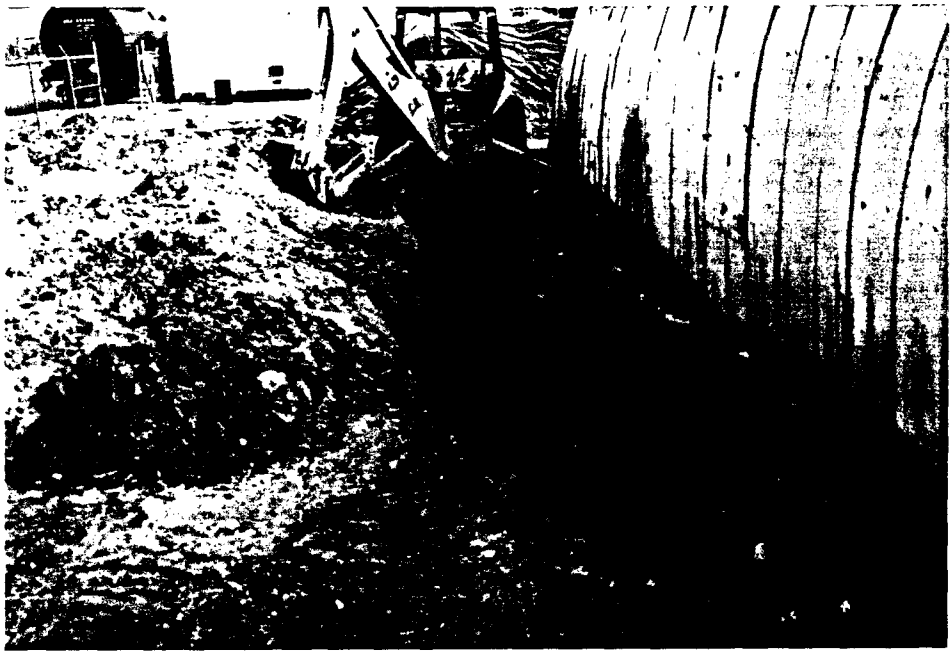
4. Dirt pile #1 (DP#1) located on Unichem's railroad lease - picture taken lookin. southeast - taking composite samples for DP-1N by Ed Nelson using 3' long split floor tier. Backgrour shows DP#2.



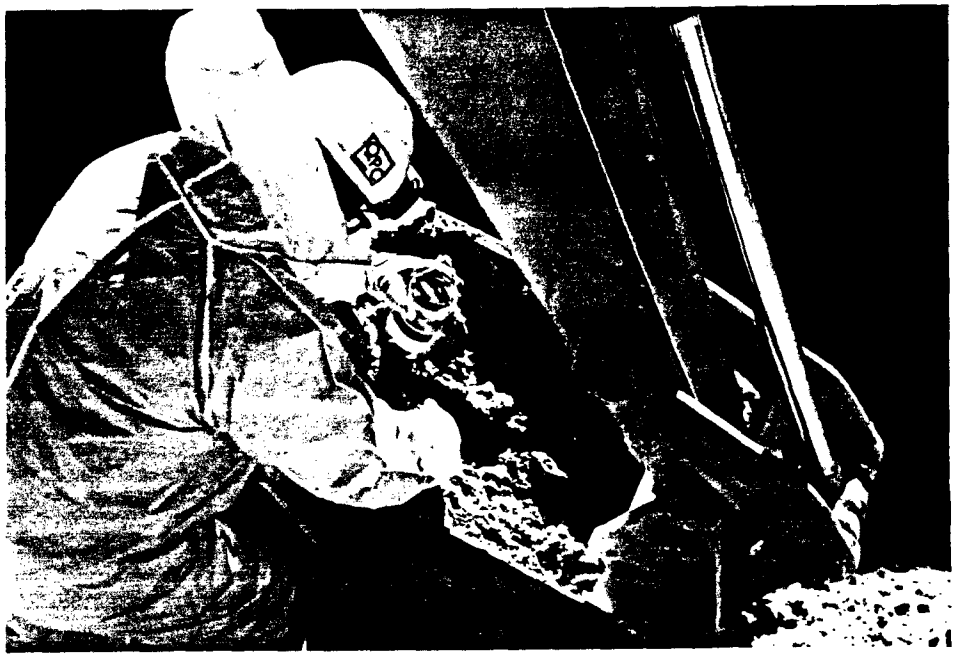
5. Picture looking south at Area's A&B, back-hoe digging test hole for sample MI-1S (south) 15' deep, foreground shows test hole for MI-1N (north).



6. Picture looking north, shows area A&B background is a hot house and oil side chemical tank farm. Also shows part of DP#2.



7. Picture looking north shows eastern part of Area C and existing quonset building - trench dugto locate where previous UST's were removed - a plastic liner was placed in hole during backfill in 1987 for locating tanks.



8. Soil sample taken from MI#4 6' below bottom of where UST's were located

9. Soil sample taken for MI-3S (south).

10. Soil sample taken for MI-3M.

11. Soil sample taken from east wall MI-5E.

12. Soil sample taken from south wall MI-5S (south.

13. Dirt pile #2 - composite samples being taken using 3' long split flour tier - sample #DP-2: picutre looking to N.E.

14. Dirt pile #2 - DP-2 picture looking to southwest.

V. NMOCD Site Inspection

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

BRUCE KING
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

March 27 1991

UNICHEM INTERNATIONAL
P. O. BOX 1458
HOBBS, NM 88240

RE: INSPECTION OF PIT/UNICHEM YARD

ATTN: Mr. Wayne Price

Dear Sir;

On March 26, 1991, District I Supervisor, Jerry Sexton, of the Oil Conservation Division performed a thorough inspection of the pit located at the Unichem yard.

As result of this inspection the stained dirt that had been surfacing at the pit was removed and appeared to be in proper condition.

Sincerely,

JERRY SEXTON
District I Supervisor

jj/sad

cc: Dave Boyer-Santa F...