

1R - 265

REPORTS

DATE:

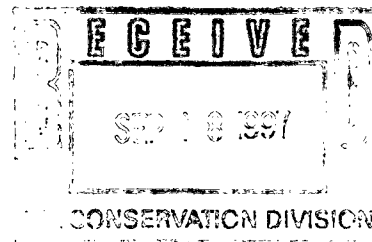
9/15/1997

American Environmental Network, Inc.

AEN I.D. 709315

September 15, 1997

NMED-OCD
2040 S. PACHEO
SANTA FE, NM 87505



Project Name TIPPERARY PIT CLOSURE PROJECT
Project Number (none)

Attention: BILL OLSON

On 9/9/97 American Environmental Network (NM), Inc. (ADHS License No. AZ0015), received a request to analyze aqueous samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

Chloride analyses not performed due to lack of sample.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

A handwritten signature in black ink, appearing to read "Kim McNeill".

Kimberly D. McNeill
Project Manager

A handwritten signature in black ink, appearing to read "H. Mitchell Rubenstein".

H. Mitchell Rubenstein, Ph. D.
General Manager

MR: mt

Enclosure

American Environmental Network, Inc.

CLIENT	: NMED- OCD	AEN I.D.	: 709315
PROJECT #	: (none)	DATE RECEIVED	: 9/9/97
PROJECT NAME	: TIPPERARY PIT CLOSURE PROJECT	REPORT DATE	: 9/15/97

AEN ID. #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	IVA COM #1 WM 9709051420	AQ	9/5/97
02	IVA COM#1 MW#1 9709051440	AQ	9/5/97
03	MABLECOM MW#1 9709051600	AQ	9/5/97
04	VERACOM MW#1 9709051649	AQ	9/5/97

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX, MTBE (EPA 8020)
CLIENT : NMED-OCD
PROJECT # : (none)
PROJECT NAME : TIPPERARY PIT CLOSURE PROJECT

AEN I.D.: 709315

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
01	IVA COM #1 WM 9709051420	AQUEOUS	9/5/97	NA	9/10/97	20
02	IVA COM#1 MW#1 9709051440	AQUEOUS	9/5/97	NA	9/10/97	1
03	MABLECOM MW#1 9709051600	AQUEOUS	9/5/97	NA	9/9/97	1

PARAMETER	DET. LIMIT	UNITS	01	02	03
BENZENE	0.5	UG/L	2200	< 0.5	2.9
TOLUENE	0.5	UG/L	1800	< 0.5	3.5
ETHYLBENZENE	0.5	UG/L	170	< 0.5	21
TOTAL XYLENES	0.5	UG/L	1700	2.0	110
METHYL-t-BUTYL ETHER	2.5	UG/L	< 50	< 2.5	< 2.5

SURROGATE:

BROMOFLUOROBENZENE (%) 99 96 **

SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:

** =SURROGATE NOT RECOVERED DUE TO MATRIX INTERFERENCE

GAS CHROMATOGRAPHY RESULTS

TEST : BTEX, MTBE (EPA 8020)

CLIENT : NMED-OCD

AEN I.D.: 709315

PROJECT # : (none)

PROJECT NAME : TIPPERARY PIT CLOSURE PROJECT

SAMPLE ID. #	CLIENT I.D.	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
04	VERACOM MW#1 9709051649	AQUEOUS	9/5/97	NA	9/9/97	1

PARAMETER	DET. LIMIT	UNITS	04
BENZENE	0.5	UG/L	< 0.5
TOLUENE	0.5	UG/L	1.1
ETHYLBENZENE	0.5	UG/L	4.2
TOTAL XYLENES	0.5	UG/L	47
METHYL-t-BUTYL ETHER	2.5	UG/L	< 2.5

SURROGATE:

BROMOFLUOROBENZENE (%)

106

SURROGATE LIMITS (80 - 120)

CHEMIST NOTES:

N/A

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: BTEX, MTBE (EPA 8020)	AEN I.D.	: 709315
BLANK I. D.	: 091097	DATE EXTRACTED	: NA
CLIENT	: NMED-OCD	DATE ANALYZED	: 9/10/97
PROJECT #	: (none)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: TIPPERARY PIT CLOSURE PROJECT		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
METHYL-t-BUTYL ETHER	UG/L	<2.5

SURROGATE:
BROMOFLUOROBENZENE (%) 104
SURROGATE LIMITS: (80 - 120)
CHEMIST NOTES:
N/A

GAS CHROMATOGRAPHY RESULTS
REAGENT BLANK

TEST	: BTEX, MTBE (EPA 8020)	AEN I.D.	: 709315
BLANK I. D.	: 090997	DATE EXTRACTED	: NA
CLIENT	: NMED-OCD	DATE ANALYZED	: 9/9/97
PROJECT #	: (none)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: TIPPERARY PIT CLOSURE PROJECT		

PARAMETER	UNITS	
BENZENE	UG/L	<0.5
TOLUENE	UG/L	<0.5
ETHYLBENZENE	UG/L	<0.5
TOTAL XYLENES	UG/L	<0.5
METHYL-t-BUTYL ETHER	UG/L	<2.5

SURROGATE:
BROMOFLUOROBENZENE (%) 104
SURROGATE LIMITS: (80 - 120)
CHEMIST NOTES:
N/A

GAS CHROMATOGRAPHY QUALITY CONTROL
MSMSD

TEST	: BTEX, MTBE (EPA 8020)	AEN I.D.	: 709315
MSMSD #	: 091097	DATE EXTRACTED	: NA
CLIENT	: NMED-OCD	DATE ANALYZED	: 9/10/97
PROJECT #	: (none)	SAMPLE MATRIX	: AQUEOUS
PROJECT NAME	: TIPPERARY PIT CLOSURE PROJECT	UNITS	: UG/L

PARAMETER	SAMPLE RESULT	CONC SPIKE	SPIKED SAMPLE	% REC	DUP SPIKE	DUP % REC	RPD	REC LIMITS	RPD LIMITS
BENZENE	<0.5	10.0	9.0	90	9.1	91	1	(80 - 120)	20
TOLUENE	<0.5	10.0	8.6	86	8.8	88	2	(80 - 120)	20
ETHYLBENZENE	<0.5	10.0	9.3	93	9.4	94	1	(80 - 120)	20
TOTAL XYLENES	<0.5	30.0	28.7	96	28.9	96	1	(80 - 120)	20
METHYL-t-BUTYL ETHER	<2.5	20.0	19.2	96	19.2	96	0	(70 - 133)	20

CHEMIST NOTES:
N/A

$$\% \text{ Recovery} = \frac{(\text{Spike Sample Result} - \text{Sample Result})}{\text{Spike Concentration}} \times 100$$

$$\text{RPD (Relative Percent Difference)} = \frac{(\text{Sample Result} - \text{Duplicate Result})}{\text{Average Result}} \times 100$$

PLEASE FILL THIS FORM IN COMPLETELY.

SHADED AREAS ARE FOR

PROJECT MANAGER: BILL OLSON					
COMPANY: UNOCO					
ADDRESS: 8040 S PACHECO					
PHONE: SANTA FE NM 87505					
FAX: 505-827-7154					
BILL TO: " - 8177					
COMPANY: S.A.B.					
ADDRESS: SHAWNEE BY W. PRICE - UNOCO					
SAMPLE ID	DATE	TIME	MATRIX	LAB ID	
IUA COM #1 WM	9/5/97	2:29 PM	WATER	-B1	Petroleum Hydrocarbons (418.1) TRPH
9709051420					(MOD.8015) Diesel/Direct/Inject
					(M8015) Gas/Purge & Trap
					Gasoline/BTEX & MTBE (M8015/8020)
					BTXE/MTBE (8020)
					BTEX & Chlorinated Aromatics (602/8020)
					BTEX/MTBE/EDC & EDB (8020/8010/Short)
					Chlorinated Hydrocarbons (601/8010)
					504 EDB / DBCP
					Polynuclear Aromatics (610/8310)
					Volatile Organics (624/8240) GC/MS
					Volatile Organics (8260) GC/MS
					Pesticides/PCB (608/8080)
					Herbicides (615/8150)
					Base/Neutral/Acid Compounds GC/MS (625/8270)
					General Chemistry:
					CHLORIDES *(SEE NOTE)
					Priority Pollutant Metals (13)
					Target Analyte List Metals (23)
					RCRA Metals (8)
					RCRA Metals by TCLP (Method 1311)
					Metals:
					NUMBER OF CONTAINERS

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT INFORMATION		PRIORITY AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS	
PROJ. NO.:	(RUSH) ☐ 24hr ☐ 48hr ☐ 72hr ☐ 1 WEEK (NORMAL)	SIGNATURE:	TIME:
PROJ. NAME:	CERTIFICATION REQUIRED: ☐ NM ☐ SDWA ☐ OTHER	PRINTED NAME:	DATE:
SHIPMENT VIA:	METHANOL PRESERVATION ☐	COMPANY:	
SAMPLE RECEIPT	COMMENTS: FIXED FEE ☐	RECEIVED BY:	1.
NO. CONTAINERS	* - RUN CHLORIDES ONLY IF ENOUGH SAMPLE.	SIGNATURE:	TIME:
CUSTODY SEALS	ALL NEW'S PURGED 5 SAT CASING VOLUMES BEFORE SAMPLING. SAMPLES TAKEN USING 3' x 1" PE BAILER.	PRINTED NAME:	DATE:
RECEIVED IN TAG		COMPANY:	
BLUE SLIP		RECEIVED BY: (LAB)	2.
		SIGNATURE:	TIME:
		PRINTED NAME:	DATE:
		COMPANY:	