GW - 32

REPORTS

YEAR(S):

1991-EPARCRA PARÉI

RCRA FACILITY INVESTIGATION
PHASE I - FINAL REPORT
GIANT REFINING COMPANY
GALLUP, NEW MEXICO
APRIL 8, 1991
BOOK 2

Section 6.0 Soil Sampling Data



Route 3, Box 7 Gallup, New Mexico 87301

505 722-3833

June 15, 1990

Julie Essey Enseco 4955 Yarrow Street Arvada, CO 80002

RE: SAMPLE BOTTLE REQUEST

Dear Julie:

Giant Refining Co. requests that Enseco provide analytical support for Phase I of the RCRA Facility Investigation for its Ciniza Refinery. Invoices should reference RFE Number 997-9004-37. Review the following list and associated attachments for sample bottle shipment. The sample bottles must be received at Ciniza by June 21, 1990.

I. Solid Waste Management Unit #6

A. Number of sample containers for soil samples:

Soil samples: 60 Equipment Blanks: 2 Trip Blanks: 2 Field Duplicates: 5

B. Analytical Requirements

BTEX - 8020 Lead - 6010 Nickle - 6010

II. Solid Waste Management Unit #8

A. Number of sample containers for soil samples:

Soil Samples: 39
Equipment Blanks: 2
Trip Blanks: 2
Field Duplicates: 3

B. Analytical Requirements:
Skinner (Refinery) Volatiles (see attached) - 8240
Skinner (Refinery) Semi-Volatiles (see attached) - 8270
Background Metals - see attached

C. Number of sample containers for water samples:

Liquid samples: Equipment Blanks: C Trip Blanks: Field Duplicates: D. Analytical Requirements:

PH - 9040 TDS - 160.1 BTEX - 8020 TPH - GC/FID

III. Solid Waste Management Unit #9

A. Number of sample containers for soil samples:

Soil Samples: 28
Equipment Blanks: 1
Trip Blanks: 1
Field Duplicates: 3

B. Analytical Requirements:
Priority Pollutant Volatiles (see attached) - 8240
Priority Pollutant Semi-Volatiles (see attached)- 8270
Background Metals - see attached

IV. Solid Waste Management Unit #10

A. Number of sample containers for soil samples:

Soil Samples: 22 Equipment Blanks: 1 Trip Blanks: 1 Field Duplicates: 2

B. Analytical Requirements:
Priority Pollutant Volatiles (see attached) - 8240
Priority Pollutant Semi-Volatiles (see attached)- 8270
Background Metals - see attached

Submit one completed analytical report for each of the four individual solid waste management units. If you have any questions contact me at (505) 722-3833 ext. 217.

Sincerely,

Claud Rosendale

Environmental Manager

Ciniza Refinery .

CCR:ctf

Attachments

	Background Metals
	1
	Antimony
<u> </u>	Arsenic
	Barian
	Beryllium
5.	Cadmium
	Chromium
	Chromium
	20 bs/r
8.	Copper
	Lead
	Mercucy
(1.	Mercuer Nickle
_	Potassium
(3	
	1 Setenjum
14	Vanadium
	Schenium Vanadium Zinc
·	

Analytical Services

radian

Number 3 Revised, April 1990

GCMS TARGET LISTS NEW TOLD

To simplify project planning and See review, Tech Note 3 provides a gas object. gas chromatographic/mass spectrometric (GC/MS) volatile and semivolatile organic chemicals covered by EPA's major water and waste regulations. Pesticides normally analyzed by gas chromatographic methods have been omitted from the lists.

agera that the table of GC/MS Campounds can change as EPA egulations or promulgates es. Note, also, that there are two separate TCLP lists - Toxicity and Land ban - for solvent wastes (F001-F005) and those containing dioxins (F020-F023; F026-F028). Stay aware of changes in regulations by referring to appropriate technical or trade journals or to the Federal Register.

In addition, call us for an update from time to time - we will be happy to advise you on changes to Tech Note 3. And as always, Radian's Marketing Managers and Client Service Coordinators will actively help you identify the best analysis methods and the most appropriate compound lists for your monitoring needs when you schedule work with Radian's Analytical Services Laboratories.

VOLATILE COMPOUNDS*

TEST PARAMETERS BY REGULATIONS

1631 ENTARGETENS OF REGULATIONS								
	CWA			Я	CRA		SUPERFUND	
ANALYTE	NPDES*	824°	APPENDIX IX	3240°	SXINNER	TC	LP	CLP4
						Texicity	Land ban	·
A .			į		· · · · · · · · · · · · · · · · · · ·	! · · · · · · · · · · · · · · · · · · ·		
Acetone			v	v '			ν.	
Acetonitriie			y :		;	•		
Acrolein	V 1		V 1	v'		1		
Acrylonitrile	v'		٧	v				
Allyl chloride			Y			:		
8								
Benzene	√	√		✓	v'	4		v
Bromodichloromethane	ν'	Y	v ·	V '				γ'
Bromotorm	Y	v'	V	¥				Y
Bromomethane	V	v'	V	γ′ e				V
Butyl Alcohol							V	
C				 				
Carbon disulfide			 	✓′	V		V	V
Carbon tetrachioride		v'	V	V		V	V	∀′

[&]quot;This list of compounds, which is a comparison of lists and methods as performed at Radian, is current as of publication date. It should not be used as a substitute for consulting the most recent issue of 40 CFR or SW846 methods for any changes.

(cont ≥)

⁴⁴⁰ CFR. Pt. 122. Appendix D

^{*40} CFR. Pt. 136. Appendix A

SW846, 3rd Edition

⁴ CLP SOW 7/88

[·] Listed as methyl bromide

TEST PARAMETERS BY REGULATIONS

	CA	/A		A	ACRA				
AHALYTE	NPDES	624	APPENDIX IX	8240	SXINNER			SUPER	
						Toxicity	Land ban		
Chlorobenzene	v	V	V	v ′	v v	v'	v.	V	
Chlorodibromomethane	Vf.	V	VI	γ΄	;			*	
Chloroethane	V	V '	V	Y	i			V	
2-Chloroethyivinyl ether	V	y '		¥'			 		
Chloroform	V	V	V	y '	, v	¥'		· ·	
Chloromethane	·	v'	V	γ'	-			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
Chloropropene			1					 	
				-	:			 	
0					:				
1.2 Dichlorobenzene	v'	V'			!				
1.3 Dichlorobenzene	b '	٧.							
1.4 Dichlorobenzene	y '	٧.							
1,2-Dibromo-3-chioropropane			ν ;					1	
Dibromomethane			y i	Y			1	†	
1.2.Dibromoethane			V		y a			<u> </u>	
1.4-Dichioro-2-butane				V			ĺ	1	
trans-1,4-Dichloro-2-butene			<i>v</i> :	Y				:	
Dichlorodifluoromethane				V	1		!	-	
1.1-Dichioroethane	V	,	V	γ			!	V	
1.2-Dichloroethane	~	γ'	V	y	v v	У	:	V	
1.1-Dichloroethylene	V	ν'	y	γ'		Y	1	,	
trans-1,2-dichloroethylene	V	v'	V	v'				,	
1,2-Dichloropropane	V	v'	V	Ý	:		•	v'	
cis-1.3-Dichioropropene	V	V	V	Y'	i			V	
trans-1,3-Dichloropropene	V	V	V	V.	:			V	
1.4 Dioxane			V		, v		i .		
					:		1		
E Ethanol		:		v					
Ethyl acetate		<u> </u>			:		V	+	
Ethyl benzene	- V	V'	V	<i>V</i>	v	<u> </u>	<i>y</i>	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
Ethyl ether		•	+	<u> </u>			<i>V</i>	1	
Ethyl methacrylate				v'			 		
- myt memaci ylate								1	
H				, ,					
2-Hexanone	i i	I	√	v'	ı	!	1	V	

Listed as dibromochloromethane
Listed as methylene dibromide
Listed as ethylene dibromide
Listed as methyl iodide

(cont ►

TEST PARAMETERS BY REGULATIONS

\$ 824	V 1 V 2 V X V X V X V X V X V X V X V X V X	8248 V V V k	SKINNER	Toxicity	Land ban	CLP V
	V V V V V V V V V V V V V V V V V V V		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		V V V V V	Y Y
	V V V V V V V V V V V V V V V V V V V		V	V		Y
	V V V V V V V V V V V V V V V V V V V		V	V		Y
	V V V V V V V V V V V V V V V V V V V		V	V		Y
	V V V V V V V V V V V V V V V V V V V	V	V	V		Y
	V V V V V V V V V V V V V V V V V V V	V			v v	Y
	V V V V V V V V V V V V V V V V V V V	V	V	V	v v	Y
	V 1 V 1	V	V		v v	Y
	V 1 V 1	V	V	V	v v	Y
	y X		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	V	V	
	y X					
	V					
	, V					
)			
		······································	1	;	 	<u> </u>
- 	V	√	Ý			V
					:	
	V					
V	v'	V .				V
V	V 1	γ'		¥	V	V
V	V	V	· V		Ý	V
V	V	V ·		·	i V	V
¥	V	V				V
V	V I	✓		V	Y	Y
V	V	v'			V V	
	V	v'				
					ν'	
	+				 	
	V	✓_				1
v	V	V		V		V
1		.,				· ·
	V V V V V V V V V V V V V V V V V V V	V				

3

Listed as 2-butatone
*Listed as 4-methyl-2-pentanone

SEMIVOLATILE COMPOUNDS*

TEST PARAMETERS BY REGULATIONS

	CA	/A	ACRA					
ANALYTE	NPDES	625	APPENDIX IX	8270**	SKINNER		LP	Cr
						Toxicity	Land ban	
A								
Acenaphthene	V	v *	V	y '				V
Acenaphthylene	V	V	V	V.				V
Acetophenone			V	v.				
2-Acetylaminotluorene			V				:	
4-Aminobiphenyl			V	Y			1	
Aniline			V .	γ'				
Anthracene	V	V	V	γ'	v.			V
Aramite			v'					
					<u> </u>		<u> </u>	
Benzenethiol					V			
Benzidine	· ·			· · · · · · · · · · · · · · · · · · ·				
Benzoic acid			 	<u> </u>) 	 	7
Benzolajanthracene	V	v		V	V		<u> </u>	V
Benzo(b)fluoranthene	· ·	· · ·	V		V	<u> </u>		,
Benzo(k):fluoranthene		· ·	V .	<u> </u>	, , , , , , , , , , , , , , , , , , ,		 	, ,
Benzotg,n,:)perylene	· ·	· · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·	1		<u> </u>	
Benzo(a)pyrene		· ·	· ·		1 🗸		 	,
Benzyl aicohol		<u> </u>	V .					· ·
Bis(2-chloroethoxy)methane	V	V .	· ·	<u> </u>	<u></u>			· · ·
Bis(2-chloroethyl)ether	-	V	-				 	,
Bis(2-chloroisopropyl)ether	/n	r		√′ 0	 	<u>. </u>		, v
Bis(2-ethylhexyl)phthalate	V	V	V	V	γ.		<u> </u>	,
4-Bromophenyl phenyl ether	V	V'	v'	Y '				· ·
Buryl benzyl phthaiate	₹/₽	V	V	√	ν'			v
C								
4-Chloroaniline			y'q	√′				,
Chlorobenzilate	 		ν'			i		1
4-Chloro-3-methylphenol	Vr	V	y r	V	İ		i	V
1-Chloronaphthane	- 			V				
2-Chloronaphthane	V	V	V	V	1			,
2-Chlorophenol	V	V	V	r'				,
4-Chlorophenyl phenyl ether	V	V	V	V				

This list of compounds, which is a comparison of lists and methods as performed at Radian, is current as of publication date. It should not be used as a substitute for consulting the most recent issue of 40 CFR or methods for any changes. Chromatographicable pesticides are excluded from this list. 40 CFR, Pt. 136, Appendix A.

(cont F

[&]quot;SW-846, 3rd Edition
"Listed as 2,2'oxybis(1-chloropropane)

^{*}Listed as bis(2-chloro-1 methylethyl)ether

> Listed as benzyl butyl phthlate

Listed as p-chloraniline

Listed as p-chloro-m-cresol

TEST PARAMETERS BY REGULATIONS

	CA	VA		RCRA				SUPERFUNC
ANALYTE	NPDES	825	APPENDIX IX	8270	SKINNER	Ţ	CLPd	
والمالة المستعدي والمستعددين المستعددين المستعددين						Toxicity	Land ban	
Chrysene	y '	V	v'	V	V	1	1	V
Cresol						V	 	
Cyclohexanone							- V	
D						i		
Diallate	1		V		1	Ì	1	
Dibenzo(a,h)acridine	İ				Y Y	<u> </u>		
Dibenzo(a,j)acridine			i	v'	 		_ <u></u>	<u> </u>
Dibenzo(a.h)anthracene	V	V'	1		i v			Y
Dibenzofurans tetrachloro pentachloro hexachloro	,		V	V			•	·
1,2-Dibromo-3-chioropropane			r			<u>. </u>		
Di-n-butyionthalate	V	Y	V	+	<u>v.</u>	<u> </u>		
1,2-Dichioropenzene	V	1	V 1	<u> </u>	<u> </u>		- !	· ·
1.3-Dichlorobenzene	V V	V	V	· ·	1 1	 	: -	-
I,4-Dichlorobenzene	V	, v		<u>y</u>		!		-
3.3-Dichlorobenzidine	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1	VI	V	1	<u> </u>	1	-
2,4-Dichlorophenol	V	V	V	· ·		j	1	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
2.6-Dichlorophenol		ļ ·	1 1	V		i		V
Diethyl phthalate	V .	Y	V . !	· ·	Y		1	V
pt Dimethylamino)azobenzene			V	<i>y</i>	;			
7.12-Dimethylbenz(a)anthracene		i	. v ;	Y	Y Y			
3-3-Dimethylbenzidine		1	<i>v</i> :		!	i	1	i
α,α-Dimethylphenethylamine			v :	V			;	
2,4-Dimethylphenol	V	V	V 1	Y	V-	:	 	Y
Dimethyl phthalate	Y	V.	V	V.	V		<u> </u>	V
m-Dinitrobenzene			V		<u>. </u>	Ī	<u> </u>	
4,6-Dinitra-2-methylphenal	V	i v	V 5	V'3			j	V
2,4-Dinitrophenol	ν'	· ·	V i	Y	¥.	!		+
2.4-Dinitrotoluene	V	V	*	V_		i V	i	1
2.6-Dinitrotoluene	V	V	V	V'			1	V
Di-n-octyl phthaiate	V	V	V	v'	V.			V
Dioxins tetrachlorodibenzo-p- pentachlorodibenzo-p- hexachlorodibenzo-p-							•	
Diphenylamine			V	V '				
1.2-Dipnenylhydrazine	V			V			T	1

(cont ►)

Listed as 4.6-dinitro-o-cresol
 Dioxin Wastes (F020, 021, 022, 023, 026, 027, 028)

TEST PARAMETERS BY REGULATIONS

	CV	I A	RCRA					
ANALYTE	NPDES	625	APPENDIX IX	8270	SKINNER	TCLF	CLP	
					1	Toxicity Land han		
£		i						
Ethyl methanesulfonate		l	V	v'	!	i		
Dity's inculaires dioritic				·····	 			
F								
Fluoranthene	√	V	V	✓	V V		V	
Fluorene	<i>V</i>	V	•	v'			V	
Н				,				
Hexachlorobenzene	V	v'	V	V '	1	v	Y .	
Hexachloro-1,3-butadiene	V.	₹'	V	Ý		v	V	
Hexachlorocyclopentadiene	Y Y		V	V			V .	
Hexachloroethane	y'	V	V	✓		V	V	
Hexachlorophene		: 	V .			<u> </u>		
Hexachloropropene			<i>Y</i> :					
2-Нехапопе			V		!	!	-	
l								
Indene					v'	!		
Indenot1.2.3-cd)pyrene	v'	*	٧	ν,	1		1 ,	
Isodrin			V			<u> </u>		
Isophorone	V	V'	v	¥			Y	
Isosaírole			√					
M								
Methapyrilene	·		V					
3-Methylchoianthrene			V	v				
Methylchrysene					V.			
Methyl methanesulfonate			V	y ,				
1-Methylnaphthalene					V			
2-Methylnaphthalene			V	√			V	
2-Methylphenol			V t	✓	V~	V2 V2	V	
3-Methylphenol			v∕ t		V_	y't y't		
4-Methylphenol			√ t	✓	V	√t √t	V	
N								
Naphthalene	V	V	V	✓	b '		V	
1.4-Naphthoquinone		1	v		1	1	l	

^{*}Listed as o,m.p cresols

(œn: ►)

^{*}Listed as o.m.p nitroanilines
*Listed as o nitrophenol

TEST PARAMETERS BY REGULATIONS

	CA	/A		RCRA				
ANALYTE	NPDES	525	APPENDIX IX	8270	SKINNER	INNER TCLP		CLP
						Toxicity	Land ban	
1-Naphthylamine			V .	•∕	!	<u> </u>	<u>;</u>	
2-Naphthylamine			V	V				
2-Nitroaniline	- 		y' 2	v'	!	·	:	V.
3-Nitroaniline			L n	v	<u> </u>	<u> </u>	1	V
4-Nitroaniline			y'u	V	i		1	V
Nitrobenzene	V.	•	Y	Y		V	; Y	V
5-Nitro-o-toluidine			V			:	-	
2-Nitrophenal	Y	Y	V V	y'		1		V
4-Nitrophenol	y	· V	y w	v'	i v	·	i	\ v
4-Nitroquinoline-1-oxide	 	i	V 1	100	T	,	İ	
N-Nitrosodiethylamine		 I	1					
N-Nitrosodimethylamine	v		VI	v'	<u> </u>	:		
N-Nitroso-di-n-butylamine	<u> </u>		Y 1	ν'		1	ī	
N-Nitrosodi-n-propylamine	V .	· · · · · · · · · · · · · · · · · · ·	· · · ·	ν'			İ	1 7
N-Nitrosopiperidine			7	v		'	·	
N-Nitrosodiphenylamine	, v		v	- v	i		i	,
N-Nitrosomethylethylamine	1	i	V 1			·	1	
N-Nitresomorpholine		1	F					
N-Nitrosopyrrolidine			ν .			;	i	
P					İ	<u> </u>	1	<u> </u>
Pentachlorobenzene			γ.	<u>v</u>				
Pentachloroethane			b '				,	
Pentachloronitrobenzene		1	V	Y				{
Pentachlorophenol	V	V V	γ	v'_			i • .	V
Phenacetin		!	7	y .'			i	
Phenanthrene	V	y '	V	V	. y		i	٧
Phenol	Ý	V	v ' !	V	v v			y
p-Phenylenediamine			V'					
2-Picoline			V	V		!	1	
Polychlorinated dibenzofurans			γX					
Polychlorinated dioxins			y'x					
Pronamide			v'	v'_	l			
Pyrene	v'	V	V	V	y'	i		7
Pyridine			V		V	V	V	
Q								
Quinoline					. ✓			

^{*}Listed as p-nitrophenol

(cont ►)

^{*} Listed as polychlorinated dibenzo-p-dioxins and polychlorinated dibenzofurans by Method SW8280. SW-846. 3rd Edition * Dioxin Wastes (F020, 021, 022, 023, 026, 027, 028)

TEST PARAMETERS BY REGULATIONS

	CY	/A		SUPERFUND				
ANALYTE	NPDES"	625	APPENDIX IX	8270	SKINNER	TCLP		CLP
ANALI IE						Toxicity	Land ban	
\$			v.			I		
Safrole			•		 		! 	
		<u> </u>			<u>:</u>	<u>. </u>		
T		i					:	
1,2,4,5-Tetrachlorobenzene			V	<u>v</u>	<u> </u>	<u> </u>	:	
2,3,4,6-Tetrachlorophenol			V	γ.	<u> </u>	<u></u>	*	
o-Toluidine		<u> </u>	ν			<u> </u>	· · · · · · · · · · · · · · · · · · ·	1
1.2.4-Trichlorobenzene	y '	¥'	· 1	y'		 	- 	V
2,4,5-Trichlorophenoi		<u> </u>	V 1	<u> </u>	<u> </u>	V	*	
2.4.6-Trichlorophenol	Y	Y	V	ν΄	!	Y	! *	<i>V</i>
sym-Trinitrobenzene			ν' ;	<u> </u>		<u>i</u>	 	
0.0.0 Triethylphosphorothlate		1	b '		<u> </u>			

^{*} Dioxin Wastes (F020, 021, 022, 023, 026, 027, 028)

RADIAN

Return Address: P.O. Box 201088 Austin, Texas 78720-1088

Radian Laboratories:

AUSTIN 8501 Mo-Pac Blvd. P.O. Box 201088 Austin, TX 78720-1088 (512) 454-4797

MILWAUKEE 5103 West Beloit Rd. Milwaukee. WI 53214 (414)643-2701

PERIMETER PARK
PO. Box 13000
Research Triangle Park, NC 27709
(919)481-0212

SACRAMENTO 10395 Old Placerville Road Sacramento, CA 95827 (916) 362-5332

A company of The Harriord Steam Boiler Inspection and Insurance Co.

BULK RATE U.S. POSTAGE PO AUSTIN, TEXAS PERMIT NO 268

6/25/90

TABLE 2

Field Equipment Checklist Soil and Sludge Sampling

	ITEM	REMARKS
\	PID Meter Site Specific SWMU Work Plan Generic Sampling Plan	Calibrated
7	Site Map With Sample Locations Sample Bottles	
1	Ice Chests	
	Trip Blanks	
	Methanol	
	Deionized Water	
1/	Squeeze Bottles	
1//	Personal Protective Equipment	
	Chain of Custody and Sample Record Forms	
	Plastic Bags (to provide clean surfaces)	
	Disposable Gloves	
-	Paper Towels	
-i/	Tape (for labels and dispenser)	
$=$ \angle	Sharpie, Pens, Pencils	
	Blue Ice or Ice	
	Zip-Lock Bags, 1 gallon	

6/26/90

TABLE 2

Field Equipment Checklist Soil and Sludge Sampling

REMARKS ITEM 725 Calibrated PID Meter Site Specific SWMU Work Plan Generic Sampling Plan Site Map With Sample Locations Sample Bottles Ice Chests Trip Blanks Methanol Deionized Water Squeeze Bottles Personal Protective Equipment Chain of Custody and Sample Record Forms Plastic Bags (to provide clean surfaces) Disposable Gloves Paper Towels Tape (for labels and dispenser) Sharpie, Pens, Pencils Blue Ice or Ice Zip-Lock Bags, 1 gallon

5/27/90 .

TABLE 2

Field Equipment Checklist Soil and Sludge Sampling

	ITEM	REMARKS
V	PID Meter v	Calibrated
	Site Specific SWMU Work Plan	
V	Generic Sampling Plan	
V	Site Map With Sample Locations	
V	Sample Bottles	
V	Ice Chests	
<u> </u>	Trip Blanks	
v	Methanol	
	Deionized Water	
- <u>'</u>	Squeeze Bottles	
	Personal Protective Equipment	
t	Chain of Custody and Sample Record Forms	
	Plastic Bags (to provide clean surfaces)	
i	Disposable Gloves	
T.	Paper Towels	
-	Tape (for labels and dispenser)	
<u> </u>	Site Specific SWMU Work Plan Generic Sampling Plan Site Map With Sample Locations Sample Bottles Ice Chests Trip Blanks Methanol Deionized Water Squeeze Bottles Personal Protective Equipment Chain of Custody and Sample Record Forms Plastic Bags (to provide clean surfaces) Disposable Gloves Paper Towels Tape (for labels and dispenser) Sharpie, Pens, Pencils Blue Ice or Ice Zip-Lock Bags, 1 gallon	
ن	Blue Ice or Ice	
	Zip-Lock Bags, 1 gallon	

REMARKS

6-28-90

TABLE 2

Field Equipment Checklist Soil and Sludge Sampling

ITEM 195 Calibrated PID Meter Site Specific SWMU Work Plan Generic Sampling Plan Site Map With Sample Locations Sample Bottles Ice Chests Trip Blanks Methanol Deionized Water Squeeze Bottles Personal Protective Equipment Chain of Custody and Sample Record Forms Plastic Bags (to provide clean surfaces) Disposable Gloves Paper Towels Tape (for labels and dispenser) Sharpie, Pens, Pencils Blue Ice or Ice Zip-Lock Bags, 1 gallon

6-29-90

TABLE 2

Field Equipment Checklist Soil and Sludge Sampling

ITEM

REMARKS

PID Meter
Site Specific SWMU Work Plan
Generic Sampling Plan
Site Map With Sample Locations
Sample Bottles
Ice Chests
Trip Blanks
Methanol
Deionized Water
Squeeze Bottles
Personal Protective Equipment
Chain of Custody and Sample Record Forms
Plastic Bags (to provide clean surfaces)
Disposable Gloves
Paper Towels
Tape (for labels and dispenser)
Sharpie, Pens, Pencils
Blue Ice or Ice
Zip-Lock Bags, 1 gallon

7/2/90

TABLE 2

Field Equipment Checklist Soil and Sludge Sampling

ITEM

REMARKS

V	PID Meter	Calibrated
1/	Site Specific SWMU Work Plan	
	Generic Sampling Plan	
	Site Map With Sample Locations	
	Sample Bottles	
- V	Ice Chests	
~	Trip Blanks	
- J	Methanol	
:/	Deionized Water	
	Squeeze Bottles	
	Personal Protective Equipment	
	Chain of Custody and Sample Record Forms	
~	Plastic Bags (to provide clean surfaces)	
$\overline{}$	Disposable Gloves	
- ·	Paper Towels	
- J	Tape (for labels and dispenser)	
·/	Sharpie, Pens, Pencils	
$\overline{}$	Site Specific SWMU Work Plan Generic Sampling Plan Site Map With Sample Locations Sample Bottles Ice Chests Trip Blanks Methanol Deionized Water Squeeze Bottles Personal Protective Equipment Chain of Custody and Sample Record Forms Plastic Bags (to provide clean surfaces) Disposable Gloves Paper Towels Tape (for labels and dispenser) Sharpie, Pens, Pencils Blue Ice or Ice Zip-Lock Bags, 1 gallon	
	Zip-Lock Bags, 1 gallon	

7/5/90 =

TABLE 2

Field Equipment Checklist Soil and Sludge Sampling

	ITEM	REMARKS
\frac{\sqrt{\sq}\sqrt{\sq}}}}\sqrt{\sq}}}}}}}}}\sqit{\sqrt{\sqrt{\sqrt{\sq}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}	Site Specific SWMU Work Plan Generic Sampling Plan	Calibrated
	Site Map With Sample Locations	
	Tce Chests	
V	Trip Blanks	
~	Methanol	
	Deionized Water	
レ	Squeeze Bottles	
- J	Personal Protective Equipment	
ن	Chain of Custody and Sample Record Forms	
V	Plastic Bags (to provide clean surfaces)	
~	Disposable Gloves	
	Paper Towels	
~	Tape (for labels and dispenser)	
- V	Sharpie, Pens, Pencils	
~	Blue Ice or Ice	
	Zip-Lock Bags, 1 gallon	

RFI 0601 Angle

Personnel: Danny, Philbert, Mark, Corrie, Chris, Mike*

Weather:

Rainy

Windy 0-5 mph Temperature 70

Terrain:

Wet, some standing water around

Sampling:

07-05-90 Background PID 0.75

11:40 took sample at $0-\frac{1}{2}$, soil was light brown, sand and rock PID 0.75

took sample at $3\frac{1}{2}-4$, soil was brown and sandy clay 1:40

PID 0.75

1:55 took sample at $7-7\frac{1}{2}$, soil was rocky with granular

sand PID 0.75

Sampling Method:

The first sample was taken with an open end auger before lunch. After lunch the backhoe dug a $7\frac{1}{2}$ hole and set the culvert in it. The second sample was $3\frac{1}{2}$ down and $2\frac{1}{2}$ horizontally, with the closed end auger. Then it started raining on the last

sample interval which is $7\frac{1}{2}$ ' down and 5' horizontally. We used the open end auger.

^{*} Notes sample team leader

Personnel: Mark, Chris, Corrie, Danny, Philbert, Mike, Claud*

Weather: Clear

Wind 3-5 mph Temperature 94

Terrain: brown soil with some rock

Sampling: 06-29-90 Background PID 1.0

12:15 took sample at $0-\frac{1}{2}$, the soil looked dry rocky and

sandy PID 1.0

12:25 took sample at $3\frac{1}{2}-4$, the soil was dark brown and

moist with some rocks PID 1.0

1:00 took sample at $7-7\frac{1}{2}$, the soil looked brown, rocky

and sandy PID 1.0

Sampling Method:

The first sample was taken with the open end auger. Then the backhoe dug down to the next interval where the sample was taken with the closed end auger. Again the backhoe dug down to the last interval where the closed end auger was used.

RFI 0603 Angle

Personnel: Danny, Corrie, Mark, Chris, Mike*

Weather: Cloudy

Wind 4-8 mph Temperature 76

Terrain: brown soil with rocks

Sampling: 07-05-90 Background PID 1.0

10:30 took sample at $0-\frac{1}{2}$, the soil was brown, moist and rocky PID 1.0

11:30 took sample at $3\frac{1}{2}-4$, the soil was brown with sand

and rock PID 1.0

11:55 took sample at $7-7\frac{1}{2}$, the soil was very rocky with granular sand PID 1.0

Sampling Method:

The first sample was taken with an open end auger. Then the backhoe dug down to $7\frac{1}{2}$, and the culvert was set in. At $3\frac{1}{2}$ we augered $2\frac{1}{2}$ horizontally and took the sample. The last sample was at the $7\frac{1}{2}$ level and augered 5' horizontally.

Unusual Incidents:

During the last sample it was sprinkling down rain.

Personnel: Mark, Chris, Corrie, Philbert, Danny, Mike, Claud*

Weather:

Clear

Wind 3-5 mph Temperature 96

Terrain:

hard brown soil with rocks

Sampling:

06-29-90 Background PID 1.0

1:10 took sample at $0-\frac{1}{2}$, the soil was brown rocky and

sandy PID 1.0

1:15 took sample at $3\frac{1}{2}-4'$, the soil was brown rocky and

sandy PID 1.0

1:25 took sample at $7-7\frac{1}{2}$, the sample looked wet, brown,

rocky, sandy soil PID 1.0

Sampling Method:

The first sample was taken with the open end auger. Then the backhoe dug down to the next interval where the closed end auger was used. Again the backhoe dug down to the last interval where the closed end

auger was used to sample.

RFI 0605 Angle

Personnel: Danny, Philbert, Mark, Corrie, Chris, Mike*

Weather: Cloudy

Wind 4-8 mph Temperature 74

Terrain: brown soil with rocks

Sampling: 07-05-90 Background PID 0.75

8:18 took sample at $0-\frac{1}{2}$, soil was very moist and granular

PID 0.75

8:45 took sample at $3\frac{1}{2}-4$, soil was greyish rocky and

granular sand PID 250

10:20 took sample at $7-7\frac{1}{2}$, soil was rocky brown and

granular sand PID 100

Sampling Method:

The first sample was taken with an open end auger.

Then the backbox due down to $7\frac{1}{2}$, and the culvert

Then the backhoe dug down to $7\frac{1}{2}$ and the culvert

was set in. At the $3\frac{1}{2}$ level we augered $2\frac{1}{2}$

horizontally under the tank and took the sample with the closed end auger. For the 3rd sample at

 $7\frac{1}{2}$, we augered 5' horizontally under the tank to

get the next sample.

Unusual Incidents:

It had rained the night of 7-4-90.

Personnel: Mark, Chris, Corrie, Danny, Philbert, Mike, Claud*

Weather:

Clear Wind 0-5

Temperature 93

Terrain:

hard brown soil with a few rocks

Sampling: 06-29-90 Background PID 2.5 11:43 took sample at $0-\frac{1}{2}$, the soil was dry and sandy PID 2.5

11:50 took sample at $3\frac{1}{2}-4$, the soil was moist and very dark. PID 115

12:03 took sample at $7-7\frac{1}{2}$, the sample looked like dark, moist sandy soil PID 130

Sampling Method:

The first sample was collected with the closed end auger. Then the backhoe dug down to the next interval where the closed end auger was used to sample. The backhoe then dug to the final internal and the sample was collected with the closed end auger.

RFI 0607 Angle

Personnel: Andy Jaramillo, Brian Hitchcock, Claud*, (Jeff,

Jay) with PRC

Weather: Clear

Wind 0-5 mph Temperature

Terrain: dark brown soil and very hard no weeds or brush

Sampling: 06-27-90 at about 6:45

Vert. depth	depth at 50°	PID	Background PID
$0 - \frac{1}{2}$	0-0.65	1.0	1.0
$3\frac{1}{2}-4$	4.75-5.22	0.5	0.5
$\frac{1}{7} - 7\frac{1}{2}$	9.14-9.8	1.0	0.5

Lithology:

0-4' Hard compacted brown clay

 $4-8\frac{1}{2}$ ' Brown rocky, sand. $8\frac{1}{2}-10$ ' Hard brown clay

Sampling Method:

Used Rodgers & Co. drilling rig with a hollow stemmed

auger to collect the sample. Equipment was steam

cleaned before drilling.

Personnel: Mark, Chris, Corrie, Mike*, Danny, (Jeff and Jay)

with PRC

Weather: Clear

Wind 0-5 mph Temperature 84

Terrain: brown rocky soil around tank

Sampling: 06-27-90 Background PID 0.5

7:06 took sample $0-\frac{1}{2}$, the soil was brown, sandy and

rocky PID 0.5

8:06 took sample at $3\frac{1}{2}-4$, this sample was split with

PRC as a duplicate, the sample is rocky and sandy

PID 1.5

8:23 took sample at $7-7\frac{1}{2}$, the soil was still brown,

rocky and sandy PID 1.5

Sampling Method:

The first sample was taken with the open end auger. Then the backhoe dug down to the next interval where the closed end auger was used. Again the backhoe dug down to the last interval where the closed end

auger was used.

RFI 0609 Angle

Personnel: Andy Jaramillo, Brian Hitchcock, Claud*, (Jeff,

Jay) with PRC

Weather: Few scattered clouds

Wind 3-7 mph Temperature 96

Terrain: dark brown soil with some rocks

Sampling: 06-27-90 at about 1:25

Vert. depth	depth at 50°	PID	Background PID
$0 - \frac{1}{2}$	0-0.65	1.5	1.0
$3\frac{1}{2}-4$	4.75-5.22	0.75	0.75
$7 - 7\frac{1}{2}$	9.14-9.8	0.75	0.75

Lithology: 0-10 Brown sandy granular soil

Sampling Method:

Used Rodgers & Co. drilling rig with a hollow stemmed auger to take the sample with. The augers were steam cleaned and the core was wire brushed, rinsed with tap water, then distilled water.

Personnel: Mark, Chris, Danny, Corrie, Mike*

Weather: Scattered clouds
Wind 3-5 mph

Temperature 92

Terrain: brown soil with rocks

Sampling: 06-27-90 Background PID 1.5

12:00 took sample at $0-\frac{1}{2}$, soil was brown and sandy with rocks PID 1.5

12:29 took sample at $3\frac{1}{2}$ -4', soil was moist and dark PID 1.5

12:48 took sample at $7-7\frac{1}{2}$, soil was moist dark clay PID 55

Sampling Method:

The first sample was taken with an open end auger. Then the backhoe dug down to $3\frac{1}{2}$ ' where the closed end auger to take the sample. Again the backhoe dug down to the last interval and sampled with the closed end auger.

RFI 0611 Angle

Personnel: Andy Jaramillo, Brian Hitchcock, Claud*, (Jeff &

Jay) with PRC

Weather:

Clear

Wind 0-3 mph Temperature 95

Terrain:

rocky with hard dark brown soil

Sampling:

06-27-90 at about 12:25

Vert. depth	depth at 50°	PID	Background PID
$0 - \frac{1}{2}$	0-0.65	1.5	1.5
$3\frac{1}{2}-4$	4.75-5.22	25.0	1.0
$7-7\frac{1}{2}$	9.14-9.8	25.0	1.0

Lithology: 0-8 Brown sandy, rocky soil

8-10 Sandy compacted soil

Sampling Method:

Used Rodgers & Co. drilling rig with a hollow stemmed auger to sample with. The augers were steam cleaned and the core was wire brushed, rinsed with tap water,

then distilled water.

Mark, Chris, Corrie, Danny, Philbert, Claud*, Mike Personnel:

Clear Weather:

> Wind 0-5 mph Temperature 79

brown hard soil with a few rocks Terrain:

06-29-90 Background PID 1.0 Sampling:

> took sample $0-\frac{1}{2}$, the soil had some dry sand with 9:35

some black looking soil PID 1.0

took sample $3\frac{1}{2}$ -4, the soil was greyish-brown, sandy

and dry PID 100.0

took sample $7-7\frac{1}{2}$, the soil was damp light brown

granular clay PID 75.0

Sampling Method:

The first sample point was taken with the closed end hand auger. Then the backhoe dug down to the next interval where the next sample was extracted with the closed end auger. Again the backhoe dug down to the last interval where the final sample

was taken with the closed end auger.

Unusual Incidents:

Welding on the sample station on the tank was occurring approximately 30' around the side of the

tank during sampling.

RFI 0613 Angle

Personnel: Andy Jaramillo, Brian Hitchcock, Claud*, (Jeff,

Jay)

with PRC

Weather:

Clear

Wind 0-3 mph N.W. Temperature 90

Terrain:

rocky with hard dark brown soil

Sampling:

06-27-90 at about 11:05

Vert. depth	depth at 50°	PID	Background PID
$*0-\frac{1}{2}$	0-0.65	1.0	1.0
$3\frac{1}{2}-4$	4,75-5,22	1.5	1.0
$7 - 7\frac{1}{2}$	9.14-9.8	2.5	1.0

*got a duplicate for Giant

Lithology: 0-10 brown, sandy soil with some rocks

Sampling Method:

Used Rodgers & Co. drilling rig with a hollow stemmed auger to collect the sample. The augers were steam cleaned and the core was wire brushed, rinsed with

tap water then distilled water.

Personnel: Mark, Chris, Corrie, Philbert, Danny, Mike, Claud*

Weather: Clear

Wind 0-5 mph Temperature 87

Terrain: brown soil with a few rocks

Sampling: 06-29-90 Background PID 1.0

10:05 took sample at $0-\frac{1}{2}$, the soil looked like clean

dry sand PID 1.0

10:23 took sample at $3\frac{1}{2}-4$, the soil was moist light brown

granular sand PID 175

10:30 took sample at $7-7\frac{1}{2}$, the soil was grey-brown

granular and sandy PID 135

Sampling Method:

The first point was taken with open end auger, then the backhoe dug down to the next internal. At this internal the closed end auger was used. Again the backhoe was used to dig down to 7' where the last

sample was taken with a closed end auger.

RFI 0615 Angle

Personnel: Andy Jaramillo, Brian Hitchcock, Claud*, (Jeff,

Jay) with PRC

Weather: Clear

Wind 0-5 mph

Temperature: 80

Terrain:

Rocky and hard dark soil

Sampling:

06-27-90 at about 8:35

Vert, Depth	Depth at 50°	PID	Background PID
$0 - \frac{1}{2}$	0-0.65	0.5	0.5
$3\frac{1}{2}-4$	4.75-5.22	1.0	1.0
*7-7 3	9.14-9.8	1.0	1.0

*split a sample with PRC as a duplicate

Lithology:

 $0-3\frac{1}{2}$ sandy, brown rocky $3\frac{1}{2}-4.0$ compacted brown clay

5-10 sandy & rocky

Sampling Method:

Used Rodgers & Co. drilling rig equipped with a hollow stemmed auger to collect the sample. The augers were steam cleaned and the core was wire brushed, rinsed with tap water then distilled

water.

Personnel: Mark, Chris, Corrie, Danny, Mike*

Weather: Clear

Wind 0-5 mph Temperature 86

Terrain: hard brown rocky soil around tank

Sampling: 06-27-90 Background PID 0.5

8:37 took sample $0-\frac{1}{2}$, the soil was dry light brown sand

PID 0.5

9:09 took sample at $3\frac{1}{2}-4$, the soil was moist and brown

sand PID 8.0

9:30 took sample at $7-7\frac{1}{2}$, the soil was moist brown-

greyish sandy and rocky PID 78.0

Sampling Method:

The first sample was taken with an open end auger. The the backhoe dug down to $3\frac{1}{2}$ ' where the next sample was taken with the closed end auger. Again the backhoe dug down to the last interval, and the sample

was taken with the closed end auger.

Unusual Incidents:

When the backhoe dug down about $2\frac{1}{2}$, we found an electrical conduit. As a result, the backhoe dug a little closer to the tank.

6.35

RFI 0617 Angle

Personnel: Andy Jaramillo, Brian Hitchcock, Claud*, (Jeff,

Jay) with PRC

Weather: Clear

Wind 0-5 mph Temperature 85°

Terrain: dark brown soil and rocky

Sampling: 06-27-90 at about 10:25

depth at 50°	PID	Background
0-0.65	1.5	1.5
4.75-5.22	1.0	1.0
9.14-9.8	1.0	1.0
	0-0.65 4.75-5.22	0-0.65 1.5 4.75-5.22 1.0

Lithology: 0-10' brown sand, rocky soil

Sampling Method:

Used Rodgers & Co. drilling rig equipped with a hollow stemmed auger to collect the samples. All equipment was steam cleaned. The core was also rinsed with distilled water.

RFI_0618.

Personnel: Mark, Chris, Corrie, Danny, Mike*

Weather: Clear

> Wind 0-5 mph Temperature 89

Terrain: brown soil with some rock

06-27-90 Background PID 1.0 Sampling:

took sample at $0-\frac{1}{2}$ ', soil looked like clean brown 9:49

rocky sand PID 1.0

10:00 took sample at $3\frac{1}{2}-4$, soil was brown with sand and

rocks and a little grey color PID 75 11:05 took sample at $7-7\frac{1}{2}$, soil looks grey rocky and

granular sand PID 50

Sampling Method:

The first sample was taken with an open end auger. Then the backhoe dug down to the next interval where the closed end auger took the sample. Again the backhoe dug to the last interval and sampled with

the closed end auger.

RFI 0619 Angle

Personnel: Andy Jaramillo, Brian Hitchcock, Claud*, (Jeff,

Jay) with PRC

Weather: Clear

Wind 0-5 mph Temperature 72

Terrain: dark brown soil and rocky

Sampling: 06-27-90 at about 7:45

Vert. depth	depth at 50°	PID	Background PID
$0 - \frac{1}{2}$	0-0.65	1.0	1.0
$3\frac{1}{2}-4$	4.75-5.22	0	0
$7 - 7 \frac{1}{2}$	9.14-9.8	0	0

Lithology:

0-2' sandy, rocky brown

2-5' clay 5-7 sandy 7-10 clay

Sampling Method:

Used Rodgers & Co. drilling rig equipped with a hollow stemmed auger to collect the sample. The augers were steam cleaned and the core was wire brushed, rinsed with tap water then distilled

Mark, Chris, Corrie, Danny, Mike* Personnel:

Weather:

Clear

Wind 0-5 mph Temperature

Terrain:

hard light brown soil with rock

Sampling:

06-27-90 Background PID 1.0

1:00

took sample $0-\frac{1}{2}$, soil was light colored and rocky

PID 1.0

1:15

took sample $3\frac{1}{2}-4$, soil was greyish and sandy

PID 20.0

1:20

took sample at $7-7\frac{1}{2}$ ', soil was greyish and sandy

and rocky PID 110

Sampling Method:

The first sample was taken with an open end auger. Then the backhoe dug down to the next interval and sampled with the closed end auger. Again the backhoe

to the last interval and sampled with the closed

end auger.

RFI 0801 ANGLE

Personnel: Andy Jaramillo, Brian Hitchcock, Claud*

Weather: Clear

Wind 3-5 mph West Temperature 92

Terrain:

Medium height weeds & bushes with spots of bare

ground

Sampling: 06-26-90 started at 11:45

Vertical	Angle	Background	PID
5-5½	6.53-7.18	2.0	3.0
$8 - 8\frac{1}{2}$	10.4-11.10	2.0	2.6
$10^{\frac{1}{2}} - 11$	13.7-14.36	2.0	2.0

Lithology:

 $0-8\frac{1}{2}$ fine dry brown soil

 $8\frac{1}{2}$ -10 damp chunky soil with some black

Sampling Method:

Used Rodgers & Co. drilling rig with a hollow stemmed auger. 0-5' was drilled with a plug and no core. The core was inserted for the 5-15' sampling. The auger was steam cleaned with the core being cleaned

with a wire brush, rinsed with tap water and

distilled water.

RFI 0802 ANGLE

Personnel: Andy Jaramillo, Brian Hitchcock, Claud*, (Jeff &

Barry) with PRC

Weather: Clear

Wind 0-5 mph Temperature 80

Terrain: Medium height weeds & bushes with spots of bare

ground

Sampling: 06-26-90 started at 10:00 finished at 11:15

Vertical	Angle	Background	PTD
	•		
$5-5\frac{1}{2}$	6.53-7.18	1.5	2.0
$8-8\frac{1}{2}$	10.4-11.10	1.5	2.0
$10\frac{1}{2} - 11$	13.7-14.36	1.5	3.0

Lithology:

0-8' Dry fine brown soil 9-10' Damp chunky brown soil

10-15' Damp chunky brown with black material

interspersed

Sampling Method:

Used Rodgers & Co. drilling rig with a hollow stemmed auger. 0-5' was drilled with a plug and no core. The core was inserted for the 5-15' sampling. The auger was steam cleaned with the core being cleaned with a wire brush, rinsed with tap water and distilled water.

Unusual Incidents:

Inside slope of dike appears to have chunks of asphalt on surface. PRC collected an equipment rinse of the hollow stem core before the 10-15' sample was collected and there was sediment in the sample. PRC also collected a split on the 8' sample.

RFI 0803 ANGLE

Personnel: Andy Jaramillo, Brian Hitchcock, Claud*, (Jeff &

Barry) with PRC

Weather: Clear

No Wind

Temperature 70

Terrain: Mo

Medium height weeds and bushes with spots of bare

ground

Sampling: 06-26-90 started at 7:45 finished at 9:50

Vertical	Angle 50°	Background	PID
5-5½	6.53-7.18	1.0	2.0
$8 - 8\frac{1}{2}$	10.4-11.10	1.0	1.0
$10\frac{1}{2} - 11$	13.7-14.36	1.0	1.0

Lithology:

 $0-8\frac{1}{2}$ ' dry fine soil, light brown

 $8\frac{1}{2}-13\frac{1}{2}$ damp chunky soil $13\frac{1}{2}-15$ brown granular sand

Sampling Method:

Used Rodgers & Co. rig with a hollow stemmed auger. 0-5' was drilled with a plug and no core. The core was inserted for the 5-15' sampling. The auger was steam cleaned with the core being cleaned with a wire brush, rinsed with tap water and distilled

water.

Personnel: Danny, Philbert, Mark, Corrie, Mike, Claud*, (Jeff

& Barry) with PRC

Weather: Partly cloudy

Wind 0-5 mph SW Temperature 70

Terrain: Medium sized bushes and weeds

Sampling: 06-25-90 Background PID 2.0

9:40 took sample at $10\frac{1}{2}$ -11', the soil was light colored

brown and dry PID $7\frac{1}{2}$

10:00 took sample at $8-8\frac{1}{2}$ ', the soil was light colored dry and brown PID 2.5

10:30 took sample at $5-5\frac{1}{2}$, the soil was light colored

brown PID 3.0

Sampling Method:

First of all the backhoe dug a hole to 8' and set the culvert in. Then we augered down from $8-10\frac{1}{2}$ with the open end auger and sampled with the closed end auger. On the $8-8\frac{1}{2}$ ' and $5-5\frac{1}{2}$ ' sample we used

the probes to collect the samples.

Unusual Incidents:

Between 8:30-9:30, Billy was scraping off weeds with the scraper approximately 100 yds. to the west.

To the second

Personnel: Danny, Philbert, Mark, Corrie, Mike, Claud*, (Jeff

& Barry) with PRC

Weather: Cloudy, with some sprinkles

Wind 10-15 mph Temperature 87

Terrain: Medium sized bushes and weeds

Sampling: 06-25-90 Background PID 3.0

1:00 took sample at $10\frac{1}{2}$ -11', the soil was light brown

and dry PID 4.0

1:15 took sample at $8-8\frac{1}{2}$, the soil was light brown and

dry PID 2.5

1:20 took sample at $5-5\frac{1}{2}$, the soil was light brown and

dry PID 5.5

Sampling Method:

First the backhoe dug an 8^{\prime} hole and set the culvert in it. Then we augered down from 8^{\prime} to $10\frac{1}{2}^{\prime}$ where we took the first sample with the closed end auger. At the 8^{\prime} and 5^{\prime} level we used the hand held probes

to take samples.

Unusual Incidents:

Before the culvert was set in this hole it was taken to the shop to have the 3" holes made into 5" holes.

Personnel: Danny, Mark, Chris, Mike, Philbert, Corrie, Claud*,

(Jeff & Barry) with PRC

Weather: Clear

No Wind

Temperature 84

Terrain: Medium sized bushes and weeds

Sampling: 06-26-90 Background PID 1.0

7:30 took sample at $8-8\frac{1}{2}$, we split this sample with

PRC, the soil was dark moist clay PID 1.0

8:15 took sample at $10\frac{1}{2}$ -11', the soil was moist and very

hard dark clay PID 1.0

9:00 took sample at $5-5\frac{1}{2}$, the soil was a moist thick

dark clay PID 1.0

Sampling Method:

We sampled the 8' level first so we could split it with PRC. The sample was collected with a closed end auger. After that we augered on down from 8' to $10\frac{1}{2}$ ', and sampled with the closed end auger. Then the last sample was taken at the 5' level with

the closed end auger.

Unusual Incidents:

The hole for the culvert was dug the day before

to speed up sampling.

Personnel: Danny, Mark, Chris, Mike*, Philbert, Corrie

Weather: Clear

Wind 0-5 mph Temperature 92

Terrain: Medium sized bushes $2-2\frac{1}{2}$ ' tall

Sampling: 06-26-90 Background PID 1.5

9:45 took sample at $0-\frac{1}{2}$, the soil had moist clay and

sand PID 1.5

10:05 took sample at $2-2\frac{1}{2}$, the soil was a moist clay

PID 1.5

10:30 took sample at $4\frac{1}{2}$ -5', the soil was a brown moist

clay PID 1.5

Sampling Method:

First we sampled the top six inches then we augered down to 2' where the next internal is. At that internal we took our sample with the closed end auger. Then we augered down to $4\frac{1}{2}$ ' where the last sample was extracted with the closed end auger.

Unusual Incidents:

At about 10:53, Mark cut his hand and went to First Aid. Also about 10:31, after filling a 4 oz. VOA bottle it fell on the ground with the lid off. What we did was with a spoon, scrape off $\frac{1}{2}$ " of soil off the top and replaced it with new soil.

Personnel: Danny, Mark, Chris, Mike*, Philbert, Corrie

Weather: Clear

Wind 0-5 mph Temperature 93

Terrain: Medium sized bushes $2-2\frac{1}{2}$ ' tall

Sampling: 06-26-90 Background PID 1.0

12:00 took sample at $0-\frac{1}{2}$, the soil was sandy with some

clay PID 1.0

12:23 took sample at $2-2\frac{1}{2}$, the soil was a moist clay

PID 1.0

12:50 took sample at $4\frac{1}{2}$ -5', the soil was a dark moist

clay PID 1.0

Sampling Method:

First we sampled the top six inches then augered down to 2'. At this level we took a sample and when we cleaned the auger there seemed to be a film left on the inside of the closed end auger, so we cleaned it again as best as we could. Then we augered on down to $4\frac{1}{2}$ ' and took the next sample

with the closed end auger.

Personnel: Danny, Mark, Chris, Mike*, Philbert, Corrie

Weather: Cloudy

Wind 0-5 mph Temperature 85

Terrain: A few scattered bushes about 2' high

Sampling: 06-26-90 Background PID 1.0

1:05 took sample at $0-\frac{1}{2}$, the soil was sandy with some

clay PID 0.0

1:20 took sample at $2-2\frac{1}{2}$, the soil was a moist clay

PID 1.5

1:35 took sample at $4\frac{1}{2}$ -5', the soil was a dark moist

clay PID 1.0

Sampling Method:

First we sampled the top six inches then augered down to 2' level. At that 2' level we took our sample with the closed end auger. Then we augered down to $4\frac{1}{2}$ ' and took the last sample with a closed

end auger.

Personnel: Mark, Chris, Corrie, Philbert, Claud*, Danny, Mike

Weather: High thin scattered clouds

No wind

Temperature 72

Terrain: A few taller dead sunflowers but vegetation is

minimal.

Sampling: 06-29-90 Background PID 0.75

7:10 took sample at $0-\frac{1}{2}$, the soil was brown sandy and

dry PID 0.75

7:11 took sample $2-2\frac{1}{2}$, the soil was brown damp sticky

soil PID 0.50

7:29 took sample $4\frac{1}{2}$ -5.0', the soil was dark brown and

like clay PID 5.5

Sampling Method:

The first sample was taken with the open end auger. Then the backhoe dug down to 2' where the next sample was taken with the closed end auger. The backhoe then dug to $4\frac{1}{2}$ ' and the final sample was collected

with the closed end auger.

Personnel: Mark, Chris, Corrie, Philbert, Claud*, Danny, Mike

Weather: High thin clouds

No wind

Temperature 80

Terrain: A few taller dead sunflowers but vegetation is

minimal.

Sampling: 06-29-90 Background PID 0.75

8:10 took sample at $0-\frac{1}{2}$ ' and took duplicate of sample,

the soil was dry and sandy PID 0.75

8:15 took sample at $2-2\frac{1}{2}$, the soil was dark brown damp

and sticky PID 30

8:20 took sample at $4\frac{1}{2}-5$, the soil was dry and sandy

PID 11

Sampling Method:

The first sample was taken with an open end auger. Then the backhoe dug down 2' and we sampled with the closed end auger. Again the backhoe dug down to 5' where we sampled with an open end auger.

Personnel: Mark. Chris, Corrie, Philbert, Claud*, Danny, Mike

Weather: High thin clouds

No wind

Temperature 82

Terrain: A few taller dead sunflowers but vegetation is

minimal.

Sampling: 06-29-90 Background PID 1.5

8:30 took sample at $0-\frac{1}{2}$, the soil was dry brown and

sandy PID 1.5

8:38 took sample at $2-2\frac{1}{2}$, the soil was brown damp and

sticky PID 18

8:43 took sample at $4\frac{1}{2}$ -5', the soil was dark moist sticky

clay PID 1.5

Sampling Method:

The first sample was taken with an open ended auger. Then the backhoe dug down to 2' and we took the

Then the backhoe dug down to 2' and we took the sample with the closed end auger. The backhoe dug to 5' and the sample was collected with the closed

end auger.

Unusual Incidents:

On the first sample the lid on the organics bottle was dropped. The lid was wiped off and dusted and

put back on the bottle.

Personnel: Mark, Chris, Corrie, Philbert, Claud*, Danny, Mike

Weather: High clouds thinning

No wind

Temperature 75

Terrain: A few taller dead sunflowers but vegetation is

minimal.

Sampling: 06-29-90 Background PID 0.75

7:35 took sample at $0-\frac{1}{2}$, the soil was light brown and

sandy PID 0.75

7:49 took sample at $2-2\frac{1}{2}$, the soil was brown moist and

a little sticky PID 0.75

7:52 took sample and a duplicate at $4\frac{1}{2}$ -5', the soil was

brown and clay like. PID 0.75

Sampling Method:

The first sample was taken with the open end auger. The backhoe dug down to the 2' sample point and we used the closed end auger. Then the backhoe dug down to $4\frac{1}{2}$ ' and at the last sample point we

used the open end auger.

Personnel: Chris, Philbert, Mark, Corrie, Danny, Claud, Mike*

Weather: High thin clouds

Wind 0-5 mph Temperature 75

Terrain: A few small bushes and weeds

Sampling: 07-02-90 Background PID 0.75

7:53 took sample at $0-\frac{1}{2}$, soil was very sandy and dry PID 0.75

7:54 took sample at $3-3\frac{1}{2}$, soil was still sandy and brown PID 0.75

7:56 sample of the rinse water was taken

8:03 took sample at $5-5\frac{1}{2}$, soil was like clay PID 0.75

8:10 sample of the rinse water was taken

8:17 took sample at $7-7\frac{1}{2}$, soil was a moist clay PID 0.75

Sampling Method:

The first sample was taken with an open end auger. The backhoe dug down to 3' where we took the next sample with the closed end auger. Then the backhoe dug to 5' where we sampled with an open end auger. Again the backhoe dug down to 7' where we took a sample with open end auger.

Danny, Chris, Mark, Corrie, Philbert, Mike* Personnel:

Weather: High thin clouds

Wind 0-5 mph Temperature 82

Terrain: A few small weeds

07-02-90 Background PID 0.75 Sampling:

> 9:10 took sample $0-\frac{1}{2}$, the soil was like clean sand

> > PID 0.75

9:20 took sample at $3-3\frac{1}{2}$, the soil was brown and moist

PID 0.75

took sample at $5-5\frac{1}{2}$, the soil was clay PID 0.75 took sample at $7-7\frac{1}{2}$, the soil was a hard clay 9:28

9:43

PID 0.75

Sampling Method:

The first sample was taken with an open end auger. Then the backhoe dug down to 3' where the 2nd sample was taken with a closed end auger. The 3rd sample was dug down to 5' with the backhoe and sampled with an open end auger. The 4th sample point was dug down to 7' with the backhoe and extracted with the closed end auger.

Personnel: Mark, Danny, Corrie, Chris, Mike*, Philbert

Weather: High thin clouds

Wind 0-5 mph Temperature 85

Terrain: A few small weeds and bushes

Sampling: 07-02-90 Background PID 0.5

10:29 took sample at $0-\frac{1}{2}$, the sample was dry and sandy PID 0.5

10:38 took sample at $3-3\frac{1}{2}$, the sample was clay like and dry PID 0.5

10:50 took sample at $5-5\frac{1}{2}$, the soil was dry clay

PID 0.5 11:00 took sample at $7-7\frac{1}{2}$, the soil was dry clay PID 0.5

Sampling Method:

The first sample was taken with the open end auger. The backhoe dug down to 3' where the closed end auger was used to sample. Then the backhoe dug down to 5' and the sample was collected with the open end auger. The last sample was dug down to 7' with the backhoe then sampled with the closed end auger.

Personnel: Danny, Chris, Mark, Corrie, Philbert, Mike*

Weather: High thin clouds

Wind 0-5 mph Temperature 78

Terrain: A few small weeds

Sampling: 07-02-90 Background PID 0.75

8:25 took sample at $0-\frac{1}{2}$, the soil was dark brown sand

with black asphalt chunks PID 0.75

8:40 took sample at $3-3\frac{1}{2}$, the soil was moist and

like soft clay PID 0.75

8:52 took sample at $5-5\frac{1}{2}$, the soil was like clean hard

clay PID 1.5

9:03 took sample at $7-7\frac{1}{2}$, the soil was like hard clay

PID 0.75

Sampling Method:

Then the backhoe dug down to 3' where the 2nd sample was taken with a closed end auger. The 3rd sample was dug down to 5' with the backhoe and sampled with an open end auger. The 4th sample point was dug down to 7' with the backhoe and extracted with

the closed end auger.

Personnel: Mark, Danny, Corrie, Chris, Mike*, Philbert

Weather: High thin clouds

Wind 0-5 mph Temperature 83

07-02-90 Background PID 0.75 Terrain:

took sample at $0-\frac{1}{2}$, the soil was dark brown with a touch of black PID 0.75 9:50

took sample at $3-3\frac{1}{2}$, the soil was clean and dry

PID 0.75

10:05 took sample at $5-5\frac{1}{2}$, the soil was clean dry clay

PID 0.75

10:05 took duplicate of sample at $5-5\frac{1}{2}$ '

10:13 took sample at $7-7\frac{1}{2}$, the soil was like clay

PID 0.75

Sampling Method:

The first sample was taken with the open end auger. Then the backhoe dug down to 3' where the 2nd sample was taken with the closed end auger. The 3rd sample was dug down to 5' with the backhoe then sampled with closed end auger. Then the backhoe dug down to 7' where we sampled with the closed end auger.

Personnel: Mark, Danny, Corrie, Philbert, Chris, Mike*

Weather: Very few high clouds

Wind 0-5 mph Temperature 90

Terrain: A few small scattered weeds and bushes

Sampling: 07-02-90 Background PID 0.5

12:03 took sample at $0-\frac{1}{2}$, the soil was dark brown and black looking sand

12:06 took sample at $3-3\frac{1}{2}$ ' and split it into two samples one as a duplicate. Soil was brown and sandy PID 0.5

12:13 took sample at $5-5\frac{1}{2}$, the soil was dark brown and sandy PID 0.5

12:18 took sample at $7-7\frac{1}{2}$, the soil was a dry clay PID 0.5

Sampling Method:

The first sample was taken with an open end auger. The backhoe then dug down 3' for the next sample with the closed end auger. The 3rd sample was dug down to 5' with the backhoe then sampled with the open end auger. The last sample was dug down to 7' with the backhoe then sampled with the closed end auger.

Personnel: Philbert, Danny, Chris, Mike*, Mark, Corrie

Weather: Clear

Wind 0-5 mph Temperature 92

Terrain: A few scattered weeds and bushes

Sampling: 07-02-90 Background PID 1.0

12:22 took sample at $0-\frac{1}{2}$, the soil looked brown and dry

PID 3.5

12:42 took sample at $3-3\frac{1}{2}$, the soil was sandy and dry

PID 1.0

12:46 took sample at $5-5\frac{1}{2}$, the soil was sandy and dry

PID 1.0

12:58 took sample at $7-7\frac{1}{2}$, the soil was a dry clay

PID 1.0

Sampling Method:

The first sample was taken with an open end auger. The backhoe then dug down to the 3' level for the next sample with the closed end auger. After the backhoe dug down again to 5' the sample was taken with an open end auger. The last sample was dug down to 7' with the backhoe then sampled with the closed end auger.

Personnel: Mark, Chris, Corrie, Danny, Mike, Claud*, (Jeff,

Jay) PRC

Weather: Clear

No Wind Temp 73°

Terrain: A few scattered weeds less than a foot high. The

sample was collected on level ground near an overflow

pipe outlet from a 4-5' high bank.

Sampling: 06-28-90

Background PID 4.0

7:16 took first sample $0-\frac{1}{2}$ and split it with EPA as

a duplicate. PID 4.0. The soil was brown, dry

and granular.

7:21 Started augering down to $3-3\frac{1}{2}$ '

7:30 took sample at $3-3\frac{1}{2}$ ' PID 5.0 we took our sample,

the soil was brown and very moist.

7:39 filled the hole.

Sampling Method:

The first sample was taken with the closed split spoon auger. The open end split spoon auger was used to auger down to the $3-3\frac{1}{2}$ ' interval. The second

sample was then taken with the closed split spoon

auger.

Personnel: Mark, Chris, Danny, Mike*, Jeff, Jay

Weather:

Clear

Wind 0-5 mph Temperature 87

Terrain:

A few scattered bushes about a foot in height on

level ground

Sampling:

6-28-90

Background 1.0

11:50 took top sample at $0-\frac{1}{2}$, the soil was dry and brown.

PID 1.0

11:58 took second sample $3-3\frac{1}{2}$, the soil was brown with

traces of black lines. PID 5.0 12:03 took third sample $6-6\frac{1}{2}$, the soil is dark brown and a little moist. PID 3.0

12:13 took fourth sample $9-9\frac{1}{2}$, the soil is dark brown

and moist. PID 1.0

12:35 took last sample at $12\frac{1}{2}-13'$, the soil is brown damp

clay. PID 0.5

Sampling Method:

The first sample was collected in an open end auger, then the backhoe dug down to 3' where the next sample was collected with the open end auger. The backhoe proceeded down to 6' level where the third sample was collected with a closed end auger. The backhoe again dug down to the next interval $9-9\frac{1}{2}$ and the sample was collected with the closed end auger. The backhoe dug down to 12' and the open end auger was used to go down 6 more inches, here the closed auger was used to collect the $12\frac{1}{2}-13$ ' sample.

Unusual Incidents:

At about $4\frac{1}{2}$ ' there was a 4-6" wide darker brown,

almost black layer.

Personnel: Mark, Chris, Corrie, Danny, Claud*, Mike, (Jeff, Jay) with PRC

Weather:

Clear

No Wind

Temperature 73

Terrain:

A few scattered weeds about a foot in height on

level ground.

Sampling:

06-28-90

Background PID 1.5

8:00 took first sample at $12\frac{1}{2}-13$ ' interval and split it with PRC for a duplicate, and took another sample for a replicate for PRC. The soil was dark brown and a little moist. PID 1.5

8:21 took the second sample at $9-9\frac{1}{2}$ ' interval, the soil was moist and dark brown. PID 10

8:35 took sample at $6-6\frac{1}{2}$ ' interval, another background PID was taken at 8:30, it read 1.0 and the sample read 4.0. The soil was moist and dark brown.

8:43 took sample at $3-3\frac{1}{2}$ interval, the soil was dark brown. PID 2.0

8:46 took sample at $0-\frac{1}{2}$ ' interval, the soil was brown and dry. PID 1.0

Sampling Method:

The backhoe first dug down to 10', then we set a 4' diameter culvert, with precut holes for sampling, in the hole. The open end auger was used to auger from 10' to $12\frac{1}{2}'$ then the closed end auger was used to take the sample. Next we used the closed end auger to take the $9-9\frac{1}{2}'$ sample through one of the precut port holes. The third sample was done the same way at the $6-6\frac{1}{2}'$ interval, and again at $3-3\frac{1}{2}'$. At $0-\frac{1}{2}'$ the open end auger was used to collect the sample.

Personnel: Mark, Chris, Corrie, Danny, Philbert, Claud*, Mike,

(Jeff, Jay) with PRC.

Weather: Clear

No Wind

Temperature 75°

Terrain: A few scattered small bushes about a foot high on

level ground.

Sampling: 06-28-90

Background 1.0

8:53 took sample at $0-\frac{1}{2}$, the soil was brown and a little

moist. PID 1.0

9:01 took second sample at $3-3\frac{1}{2}$, the soil looked dark

like oily sludge and moist. PID 38

9:07 took sample at $6-6\frac{1}{2}$, the soil looked like dark

sticky sludge, the sample was split with PRC as

a duplicate. PID 50

9:32 took sample at $9-9\frac{1}{2}$, the soil looked like sludge

but last few inches of the sample was clearing up.

PID 150

9:45 took sample at $12\frac{1}{2}$ -13', the soil looked dark brown

but clean. PID 20

Sampling Method:

The first sample was taken with an open end auger, then the backhoe dug down to $3-3\frac{1}{2}$ ' and the closed end auger was used to sample. The backhoe dug down to the next depth of $6-6\frac{1}{2}$ ' where the third sample was taken with the closed end auger. Then the backhoe dug down as far as it could to about 12', where we augered down 6" with open end auger and then took our sample with the closed end auger.

Personnel: Corrie, Claud*, Philbert, Jeff, Jay

Weather:

Clear

Wind 0-5 mph Temperature 83

Terrain:

A few scattered bushes about a foot in height on

level ground.

Sampling:

06-28-90

Background PID 3.0

10:29 took $0-\frac{1}{2}$ ' sample, the soil was dry and brown PID

3.0

10:48 took sample at $3-3\frac{1}{2}$, the soil was dark brown and little moist, another background PID was taken with

a reading of 1.5 and the sample also read 1.5. 11:01 took sample at $6-6\frac{1}{2}$, the soil was like black sludge

PID 42

11:15 took sample at $9-9\frac{1}{2}$, the soil was clean and brown

PID 2.5

11:30 took last sample at $12\frac{1}{2}-13$, the soil was clean

sticky brown clay. PID 3.5

Sampling Method:

The top sample was taken with the open end auger, then the backhoe dug down 3' where another sample was taken. At the 3' level, the closed end auger was used, and we split the sample with PRC as a duplicate. The backhoe then dug down to the 6' level, black sludge was very apparent from about 5'9" tp 7'10", where the sample was taken. Then the backhoe dug down to the 9' level and another sample was taken with closed end auger. On the final sample there was clean brown clay, but from about 10' to 11' was more black sludge.

Section 6.4 Calculation for Verticle Depth of Angle Samples

The angle bores were drilled at a fifty degree (50°) angle from verticle. The formula for angle depth is:

Angle Depth = $\frac{\text{Verticle depth}}{\text{Sin } 50^{\circ}}$

 $Sin 50^{\circ} = 0.766$

<u>Verticle Depths = Angle Depths</u>

0.0' to 0.5' = 0.0' to 0.7' 3.5' to 4.0' = 4.6' to 5.2' 5.0' to 5.5' = 6.5' to 7.2' 7.0' to 7.5' = 9.1' to 9.8' 8.0' to 8.5' = 10.4'to 11.1' 10.5'to 11.0' = 13.7'to 14.4'

SECTION 7.0 Statistical Information for Soil Samples

SECTION 7.1

GENERAL REVIEW

This section includes the collection of information required, the methodology for statistical calculations and the actual statistical comparisons of background values to each individual sample.

Background samples were collected on April 28, 1987 and April 4 and 5, 1988. The analysis for each sampling event is listed on TABLE 7-1 and TABLE 7-2 respectively. All background samples were collected from a background plot which is specified in FIGURE 7-1. The exact location of each sample point is specifically listed on FIGURE 7-2 and FIGURE 7-3. The background plot and sample collection locations were approved by the New Mexico Environmental Improvement Division in a Land Treatment Demonstration Permit that was issued to Giant Refining Company on December 22, 1986.

It was Giant's plan to use equivalent vertical depths for background and sample comparisons. However, many of the individual sample points (1-2 foot, 2-3 foot, 3-4 foot, and 4-5 foot) for background collection was composited into one (1) sample for each of the two (2) sampling events. This allowed only two (2) samples to be used for calculating averages and tolerance limits. It is generally understood that a minimum of four (4) sets of analysis should be used to calculate background averages.

To achieve this goal, Giant combined the background analytical for each metal from all samples ranging in vertical depths of zero (0) to five (5) feet. These background averages were then compared to the results of all samples collected for the RFI samples that were in the zero (0) to five (5) foot interval range. Averages and tolerance limits were calculated on the background samples from the five (5) to six (6) foot intervals. These averages were used for statistical comparisons of all remaining RFI samples greater than five (5) feet in depth.

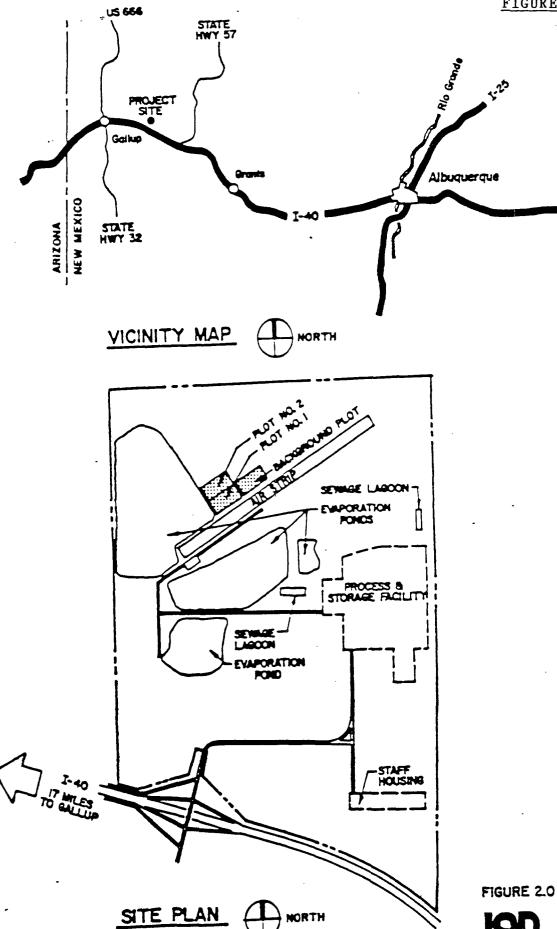
There were no background calculations computed for antimony, cadmium, mercury and selenium as all the original data was below the detection limits for each of these metals. However, there were some analytical results above detection limits for these metals. Section 7.3 lists all results that are greater than detection limits for each of these four (4) metals.

The background data for beryllium at the zero (0) to five (5) foot level is somewhat different as all analytical parameters equaled one (1). As a result, the upper tolerance limit is one (1) and there is no coefficient of variance.

The background values for lead at the five (5) to six (6) foot level was calculated from the results of the April 28, 1987

SECTION 7.1 (con't)

sampling event. All lead analysis from this sample depth for the April 4 and 5, 1988 sampling event was reported as non detectable at a detection limit of $10~\rm mg/kg$.



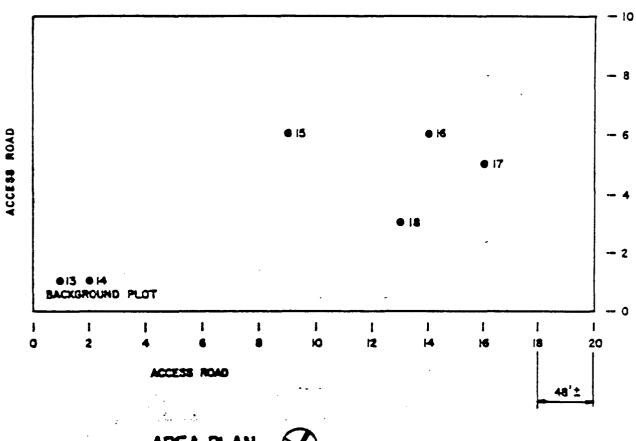
GIANT REFINING COMPANY - GALLUP, NM LAND TREATMENT DEMONSTRATION VICINITY & SITE PLAN



7.4

Lockwood, Andrews & Newnam, Inc.

FIGURE 7-2



AREA PLAN



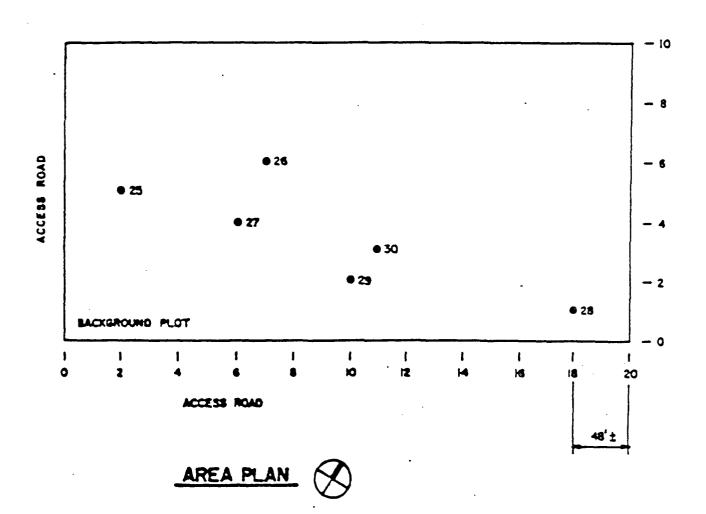
FIGURE 3.2



Lockwood, Andrews & Newnam, Inc.

GIANT REFINING COMPANY-GALLUP, NM
LAND TREATMENT DEMONSTRATION 7.5
SAMPLE LOCATIONS-PRE DEMO EVENT, APR'87

FIGURE 7-3 ·



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7.6



FIGURE 3.7

Lockwood, Andrews & Newnam, Inc.

Background Plot Data		•	•	•	- 1		•	•	•	•	•	•	,
HETALS	eanor O elqmes	0745	0-1 0925	0750	2-3 0755 13-10	0800	902	810 130	0820 14	0300 15	5-6 0940	5-6 1035	5-6 1130
TOTAL HETALS, mg/kg	comp notes				01-61	81.61	BT-57				01		
ANTIMONY		Ę	pu					Pu V	nd	nd	Pg.	pu '	nd
ARSENIC		9.E	4.4	280	230	300	370	180	2.6 280	250	170	320	7.2
BERYLLIUM		7	-			•		1.3	1.2	1.3	-	8.0	1.3
CADMIUM		pu	pu	,	,	•	,	pu Pu	nd	nd	o. s	nd n	nd
CHROMIUM		-	~	•	vn	'n	•	٠,	- ,	- (m (m (S,
COBALT		5. 7.	۲.					→ ſ	2.1	- "	2.5	0.0	5.6
COPPER		-	<u>.</u> :	•	:	٠	:		٠. -		-		e (
LEAD		710	1 pu	•	-	n	7	7 Pu	T pu	yr pu	n pu	nd h	7
NICKET.			•					10	7	10	S	7	on.
POTASSIUM		2100	2900					1700	1600	1700	1000	100	1500
SELENIUM		멀	pu					nd n	pd	nd	멸	P	nd.
VANADIUM		13	15					16	13	15	11	8.7	13
ZINC		18	15	•	12	12	13	1.	12	15	œ	.	13

Fifth sampling trip after application 4-5-88 and 4-6-88

									,	,	,	,	١
	Rone	0-1	0-1	1-2	2-3	7- 0	4-5	9-6	2-6	2-6	9-6	, ,	9-6
METALS	eample #	3701	3801	3912	4023	4134	4245	4356	4456	4556	4656	4756	4856
	comp holes	25-27	28-30	25-30	25-30	25-30	25-30	25	76	7.7	28	59	30
TOTAL HETALS, mg/kg	•	1											-
ANTIHONY		Pu	pu					pu	pu	nd	nd	pu	pu
ARSENIC		0.5	0.4					9.0	Pu	힏	9.0	1.1	pg -
BARIUH		300	300	280	300	380	290	270	330	270	7 60	220	270
BERYLLIUM		-						1.1	1.2	1.2	1.3	1.2	0.8
CADHIUM		힏	þ					nd	멸	멸	pq	nd	nd
CHROMIUM		•	•	-	-	~	~	•	sc	~	~	m	₹
COBALT		•	~					7	e	m	m	e	7
COPPER		•	•					•	9	S	S	S	4
LEAD		12	10	==	12	-	01	pu	멸	헏	pq	D	pu
MERCURY		pu	nd					nd	둳	헏	nd	ם	pu
NICKEL		•	1					7	•	œ	8	7	9
POTASSIUM		1400	1400				•	1300	1300	1300	1400	1100	1300
SELENIUM		pu	P					nd	멸	nd D	pq	nd	pu
VANADIUM		13	11					13	12	11	13	12	13
CALC		3.6	12	11	11	10	==	10	12	11	11	10	

Statistical Analysis.

The statistical analysis is concerned with the problem of comparing observations of the concentrations of metals from <u>compliance</u> data with observations of concentrations from <u>background</u> data in order to determine if the concentrations of metals from the compliance data exceed, in a statistically significant fashion, the concentrations from the background data. The primary method used is that of the construction of a tolerance interval and the use of the resulting upper tolerance limit. The analysis was carried out in the following way:

- 1. The background data consisted, for each of the eleven metals analyzed, of from four to twelve values at each of two depths.
- 2. For each metal, at each of the two depths, the (one-sided) tolerance interval was constructed using the following technique:
 - a) Calculate the mean, \overline{X} , and the standard deviation, SD, from the background data.
 - b) Construct the one-sided upper tolerance limit as $TL = \overline{X} + KS$, where K is the one-sided normal tolerance factor found in Table 1.
 - c) The tolerance interval is the interval [0, TL]. This interval will contain, with 95% confidence, 95% of random observations from the same distribution as the background data.
- 3. The observations forming the compliance data (for the same metal at the same depth) are now compared, one by one, with the upper tolerance limit, TL, found above. If an observation exceeds TL, this is interpreted as statistically significant evidence that the observation is from a distribution with a higher concentration of the metal and that, therefore, contamination has occured.

SECTION 7.3

CONDENSED ANALYTICAL AND DISCUSSIONS FOR ANTIMONY, CADMIUM, MERCURY AND SELENIUM

As indicated in Section 7.1 there was no background calculation or statistical comparisons computed for antimony, cadmium, mercury or selenium. This was a result of the background analytical being non-detectable (less than detection limits) for each of these metals. However, some of the samples did indicate analytical results at levels greater than detection limits. The following tables lists all samples with analytical results which exceeds the detection limits of the background samples.

RFIO6 TANK FARM

No Analytical Applicable

RF108-RAILROAD RACK LAGOON

Sample #	Metal	Units	Result	Sample De	tection Lim	it
05V5.0 07V4.5	Cadmium Cadmium	mg/kg mg/kg	0.70 0.99	0. 0.		

Antimony, mercury and selenium was not detected in any of the samples for this SWMU. The results for cadmium are very low and do not indicate any potential contamination.

RFIO9 INACTIVE LAND TREATMENT AREA AND DRAINAGE DITCH

No Analytical Applicable

RFI10-TWO SLUDGE PITS

Sample #	Metal	Units	Result	Sample	Detection	Limit
01V3.0 03V12.5 04V3.0 04V6.0 05V6.0 05V6.0	Cadmium Cadmium Cadmium Mercury Cadmium Mercury	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.70 0.73 0.56 1.30 1.50 2.90		0.50 0.50 0.50 0.10 0.50 0.69	

Antimony and selenium was not detected in any of the samples for this SWMU. Cadmium and mercury was detected at various levels in several of the samples however, it appears the six (6) foot sample depths of samples 04 and 05 are the only areas of concern for these four metals.

Notes on the Statistical Analysis.

- 1. In order to construct the upper tolerance limit, the backgound data is assumed to be approximately normally distributed. This assumption was checked by calculating the coefficient of variation (CV) for each of the background data sets. If this value exceeds 1, then that fact indicates non-normality. In none of the data sets analyzed did the coefficient of variation exceed 1. It was therefore assumed that the values observed in the background wells were normally distributed. No other tests of normality were carried out.
- 2. If the standard deviation for the backgound data is zero, (i.e., all values are the same), then the tolerance interval approach is not particulary useful. In that case the upper tolerance limit is identical to the common value of the background data values and any observation coming from the compliance wells which exceeds that upper tolerance limit must be taken as evidence of contamination. This was the situation for beryllium at the shallow depth; the background data consisted of four values, all equal to 1 mg/kg. For this one data set an analysis of variance was also carried out; this test indicated no statistically significant difference in the concentrations of beryllium in the background data and the compliance data, even though many of the individual values from the compliance wells indicated contamination using the tolerance interval approach.
- 3. No detectable amounts of arsenic, cadmium, mercury or selenium were found in the background. Therefore, no tests were carried out for these elements.
- 4. The analytical results reported under the sample data column is reported in mg/kg.

Mean:

SD:

1.14

0.18

The Upper Tolerance Limit = 1.62 The Coefficient of Variance = 0.15

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BACKGROUND DATA Background Data for Arsenic: 0-5 foot level Data: 3.8, 4.4, 0.5, 0.4 Mean: 2.27 SD: 1.84 The Upper Tolerance Limit = 11.73 The Coefficient of Variance = 0.81 Background Data for Arsenic: 5-6 foot level Data: 6.2, 5.8, 7, 6, 2.8, 7.2, 0.6, 0.6, 1.1 4.14 Mean: SD: 2.67 The Upper Tolerance Limit = 12.23 The Coefficient of Variance = 0.64 Background Data for Barium: 0-5 foot level 300, 250, 280, 230, 300, 370, 300, 300, 280, 300, 380, 290 Data: Mean: 298.33 SD: 40.38 The Upper Tolerance Limit = 408.81 The Coefficient of Variance = 0.14 Background Data for Barium: 5-6 foot level Data: 180, 280, 250, 170, 320, 280, 270, 330, 270, 260, 220, 270 Mean: 258.33 SD: 46.34 The Upper Tolerance Limit = 385.11 The Coefficient of Variance = 0.18 Background Data for Beryllium: 0-5 foot level Data: 1, 1, 1, 1 Mean: 1.00 SD: 0.00 The Upper Tolerance Limit = 1.00 The Coefficient of Variance = 0.00 Background Data for Beryllium: 5-6 foot level Data: 1.3, 1.2, 1.3, 1, 0.8, 1.3, 1.1, 1.2, 1.2, 1.3, 1.2, 0.8

7.12

Background Data for Chromium: 0-5 foot level

Data: 7, 7, 3, 5, 5, 6, 6, 5, 4, 4, 4, 4

Mean: 5.00 SD: 1.22

The Upper Tolerance Limit = 8.35
The Coefficient of Variance = 0.24

Background Data for Chromium: 5-6 foot level

Data: 7, 4, 7, 3, 3, 5, 4, 5, 4, 4, 3, 4

Mean: 4.42 SD: 1.32

The Upper Tolerance Limit = 8.03 The Coefficient of Variance = 0.30

Background Data for Cobalt: 0-5 foot level

Data: 2.9, 3.7, 3, 2

Mean: 2.90 SD: 0.60

The Upper Tolerance Limit = 6.01
The Coefficient of Variance = 0.21

Background Data for Cobalt: 5-6 foot level

Data: 4, 2.1, 3.7, 2.2, 0.5, 2.6, 2, 3, 3, 3, 3, 2

Mean: 2.59 SD: 0.88

The Upper Tolerance Limit = 5.01
The Coefficient of Variance = 0.34

Background Data for Copper: 0-5 foot level

Data: 4.4, 4.1, 4, 3

Mean: 3.88 SD: 0.53

The Upper Tolerance Limit = 6.58
The Coefficient of Variance = 0.14

Background Data for Copper: 5-6 foot level

Data: 5.7, 4.6, 5.5, 4.7, 2.9, 5.4, 4, 6, 5, 5, 5, 4

Mean: 4.82 SD: 0.82

The Upper Tolerance Limit = 7.07
The Coefficient of Variance = 0.17

RFI REPORT BACKGROUND DATA

Background Data for Lead: 0-5 foot level

Data: 12, 13, 9, 11, 9, 11, 12, 10, 11, 12, 1, 10

Mean: 10.08 SD: 2.98

The Upper Tolerance Limit = 18.25
The Coefficient of Variance = 0.30

Background Data for Lead: 5-6 foot level

Data: 12, 11, 12, 9, 9, 10

Mean: 10.50 SD: 1.26

The Upper Tolerance Limit = 15.16
The Coefficient of Variance = 0.12

Background Data for Nickel: 0-5 foot level

Data: 9, 9, 8, 7

Mean: 8.25 SD: 0.83

The Upper Tolerance Limit = 12.52
The Coefficient of Variance = 0.10

Background Data for Nickel: 5-6 foot level

Data: 10, 7, 10, 5, 7, 9, 7, 9, 8, 8, 7, 6

Mean: 7.75 SD: 1.48

The Upper Tolerance Limit = 11.80
The Coefficient of Variance = 0.19

Background Data for Potassium: 0-5 foot level

Data: 2100, 2900, 1400, 1400

Mean: 1950.00 SD: 618.47

The Upper Tolerance Limit = 5132.01
The Coefficient of Variance = 0.32

Background Data for Potassium: 5-6 foot level

Data: 1700, 1600, 1700, 1000, 700, 1500, 1300, 1300, 1300, 1400

1100, 1300

Mean: 1325.00 SD: 280.25

The Upper Tolerance Limit = 2091.77
The Coefficient of Variance = 0.21

RFI REPORT BACKGROUND DATA

Background Data for Vanadium: 0-5 foot level

Data: 10 15 10 11

Data: 13, 15, 13, 11

Mean: 13.00 SD: 1.41

The Upper Tolerance Limit = 20.28
The Coefficient of Variance = 0.11

Background Data for Vanadium: 5-6 foot level

Data: 16, 13, 15, 11, 8.7, 13, 13, 12, 11, 11, 10, 9

Mean: 11.89 SD: 2.14

The Upper Tolerance Limit = 17.74
The Coefficient of Variance = 0.18

Background Data for Zinc: 0-5 foot level

Data: 18, 15, 9, 12, 12, 13, 16, 12, 11, 11, 10, 11

Mean: 12.50 SD: 2.50

The Upper Tolerance Limit = 19.34
The Coefficient of Variance = 0.20

Background Data for Zinc: 5-6 foot level

Data: 14, 12, 15, 9, 8, 13, 10, 12, 11, 11, 10, 9

Mean: 11.17 SD: 2.03

The Upper Tolerance Limit = 16.73
The Coefficient of Variance = 0.18

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Analysis of Variance for Beryllium (0 - 5 feet)

Background Data:

1.0 1.0 1.0 1.0

Data from Railroad Rack Lagoon:

1.0 1.0 3.0 8.0 0.9 0.6 1.0 0.8 0.9 1.1 1.1 1.0 1.2 0.9 1.1 8.0 0.9 0.8 0.9

Data from Inactive Land Treatment Area and Drainage Ditch:

1.0 0.9 1.3 1.2 0.7 1.0 0.9 1.3 0.9 0.9 0.7

Data from Sludge Pits:

1.2 8.0 8.0 1.1 1.1 0.6 1.0 0.7 0.7 1.0 1.1 1.0 0.9 1.0 0.9 8.0 0.9 0.9 0.7

----- Statistical Results Follow ------

SS_Wells = 0.20 SS_Total = 5.60 SS_Error = 5.40

 $MS_Wells = 0.07$

MS_Error = 0.11

Degrees of freedom: v1 = 3, v2 = 49The calculated F-value is: F = 0.62

The tabulated F critical value is 2.800

Since 0.62 < 2.800 the test indicates no statistically significant difference among the wells.

RFI#	METAL	SAMPLE DATA	NOTE .
RFI0601a0.0	Lead Nickel	14.6 5.3	Within the tolerance limit. Within the tolerance limit.
RFI0601a3.5	Lead Nickel	16.6 6.6	Within the tolerance limit. Within the tolerance limit.
RFI0601a7.0	Lead Nickel	13.0 nd	Within the tolerance limit. Within the tolerance limit.
RFI0602v0.0	Lead Nickel	nd nd	Within the tolerance limit. Within the tolerance limit.
RFI0602v3.5	Lead Nickel	9.5 4.6	Within the tolerance limit. Within the tolerance limit.
RFI0602v7.0	Lead Nickel	nd nd	Within the tolerance limit. Within the tolerance limit.
RFI0603a0.0	Lead Nickel	27.7 nd	Exceeds the tolerance limit by 51.8%. Within the tolerance limit.
RFI0603a3.5	Lead Nickel	6.5 nd	Within the tolerance limit. Within the tolerance limit.
RFI0604v0.0	Lead Nickel	nd nd	Within the tolerance limit. Within the tolerance limit.
RFI0604v3.5	Lead Nickel	nd nd	Within the tolerance limit. Within the tolerance limit.
RFI0604v7.0	Lead Nickel	nd nd	Within the tolerance limit. Within the tolerance limit.
RFI0605a0.0	Lead Nickel	138 nd	Exceeds the tolerance limit by 656.2%. Within the tolerance limit.
RFI0605a3.5	Lead Nickel	nd nd	Within the tolerance limit. Within the tolerance limit.
RFI0605a7.0	Lead Nickel	nd nd	Within the tolerance limit. Within the tolerance limit.
RFI0606v0.0	Lead Nickel	28.5 nd	Exceeds the tolerance limit by 56.2%. Within the tolerance limit.
RFI0606v3.5	Lead Nickel	nd nd	Within the tolerance limit. Within the tolerance limit.

RFI#	METAL	SAMPLE DATA	NOTE:
RFI0606V7.0	Lead Nickel	7.0 nd	Within the tolerance limit. Within the tolerance limit.
RFI0607a0.0	Lead Nickel	nd nd	Within the tolerance limit. Within the tolerance limit.
RFI0607a3.5	Lead Nickel	nď nd	Within the tolerance limit. Within the tolerance limit.
RFI0607a7.0	Lead Nickel	7.0 6.0	Within the tolerance limit. Within the tolerance limit.
RFI0608v0.0	Lead Nickel		Exceeds the tolerance limit by 26.6%. Within the tolerance limit.
RFI0608v3.5	Lead Nickel	5.3 nd	Within the tolerance limit. Within the tolerance limit.
RFI0608v7.0	Lead Nickel	14.2 9.7	Within the tolerance limit. Within the tolerance limit.
RFI0609a0.0	Lead Nickel	10.6 4.5	Within the tolerance limit. Within the tolerance limit.
RFI0609a3.5	Lead Nickel	8.0 6.3	Within the tolerance limit. Within the tolerance limit.
RFI0609a7.0	Lead Nickel	8.3 4.3	Within the tolerance limit. Within the tolerance limit.
RFI0610v0.0	Lead Nickel	129 15.2	Exceeds the tolerance limit by 606.8%. Exceeds the tolerance limit by 21.4%.
RFI0610v3.5	Lead Nickel	nd nd	Within the tolerance limit. Within the tolerance limit.
RFI0610v7.0	Lead Nickel	10.3 5.1	Within the tolerance limit. Within the tolerance limit.
RFI0611a0.0	Lead Nickel	44.6 nd	Exceeds the tolerance limit by 144.4%. Within the tolerance limit.
RFI0611a3.5	Lead Nickel	21.4 6.2	Exceeds the tolerance limit by 17.3%. Within the tolerance limit
RFI0611a7.0	Lead Nickel	23.9 5.5	Exceeds the tolerance limit by 57.6%. Within the tolerance limit.

RFI#	METAL	SAMPLE DATA	NOTE
RFI0612v0.0	Lead Nickel	736 41.3	
RFI0612v3.5	Lead Nickel	11 4.4	Within the tolerance limit. Within the tolerance limit.
RFI0612v7.0	Lead Nickel	9.4 nd	Within the tolerance limit. Within the tolerance limit.
RFI0613a0.0	Lead Nickel	nd nd	Within the tolerance limit. Within the tolerance limit.
RFI0613d0.0	Lead Nickel	nd nd	Within the tolerance limit. Within the tolerance limit.
RFI0613a3.5	Lead Nickel	nd nd	Within the tolerance limit. Within the tolerance limit.
RFI0613a7.0	Lead Nickel	5.2 nd	Within the tolerance limit. Within the tolerance limit.
RFI0614v0.0	Lead Nickel	57.4 10.3	Exceeds the tolerance limit by 214.5%. Within the tolerance limit.
RFI0614v3.5	Lead Nickel	9.0 5	Within the tolerance limit. Within the tolerance limit.
RFI0614v7.0	Lead Nickel	12 7.3	Within the tolerance limit. Within the tolerance limit.
RFI0615a0.0	Lead Nickel	17 nd	Within the tolerance limit. Within the tolerance limit.
RFI0615a3.5	Lead Nickel	6.7 6.1	Within the tolerance limit. Within the tolerance limit.
RFI0615a7.0	Lead Nickel	nd nd	Within the tolerance limit. Within the tolerance limit.
RFI0616v0.0	Lead Nickel	238 32.9	Exceeds the tolerance limit by 1204.1%. Exceeds the tolerance limit by 162.9%.
RFI0616v3.5	Lead Nickel	301 58.2	Exceeds the tolerance limit by 1549.3%. Exceeds the tolerance limit by 365.0%.
RFI0616v7.0	Lead Nickel	55. 3 6. 5	Exceeds the tolerance limit by 264.7%. Within the tolerance limit.

RFI#	METAL	SAMPLE DATA	NOTE .
RFI0617a0.0	Lead Nickel	nd nd	Within the tolerance limit. Within the tolerance limit.
RFI0617a3.5	Lead Nickel	nd nd	Within the tolerance limit. Within the tolerance limit.
RFI0617a7.0	Lead Nickel	nd nd	Within the tolerance limit. Within the tolerance limit.
RFI0618v0.0	Lead Nickel	14.8 7.1	Within the tolerance limit. Within the tolerance limit.
RFI0618v3.5	Lead Nickel	12.3 nd	Within the tolerance limit. Within the tolerance limit.
RFI0618v7.0	Lead Nickel	21.2 nd	Exceeds the tolerance limit by 39.8%. Within the tolerance limit.
RFI0619a0.0	Lead Nickel	19.1 9.6	Exceeds the tolerance limit by 4.7%. Within the tolerance limit.
RFI0619a3.5	Lead Nickel	nd nd	Within the tolerance limit. Within the tolerance limit.
RFI0619a7.0	Lead Nickel	8 7.1	Within the tolerance limit. Within the tolerance limit.
RFI0820v0.0	Lead Nickel	21.6 49.8	Exceeds the tolerance limit by 18.4%. Exceeds the tolerance limit by 297.9%.
RFI0820v3.5	Lead Nickel	9.9 4.9	Within the tolerance limit. Within the tolerance limit.
RFI0820v7.0	Lead Nickel	7.8 6.8	Within the tolerance limit. Within the tolerance limit.

RFI#	METAL	SAMPLE DATA	NOTE .
RFI0801a5.0	Arsenic	nd	Within the tolerance limit.
	Barium	275	Within the tolerance limit.
	Beryllium	. 9 7	Within the tolerance limit.
	Chromium	7.9	Within the tolerance limit.
	Cobalt	2.7	Within the tolerance limit.
	Copper	4.5	Within the tolerance limit.
	Lead	7.1	Within the tolerance limit.
	Nickel	8.5	Within the tolerance limit.
	Potassium	1440	Within the tolerance limit.
	Vanadium 7:	13.9	Within the tolerance limit.
	Zinc	12.6	Within the tolerance limit.
RFI0801a8.0	Arsenic	nd	Within the tolerance limit.
	Barium	432	Exceeds the tolerance limit by 12.2%.
	Beryllium	1.1	Within the tolerance limit.
	Chromium	10.9	Exceeds the tolerance limit by 35.8%.
	Cobalt	2.5	Within the tolerance limit.
	Copper	5.9	Within the tolerance limit.
	Lead	7.2	Within the tolerance limit.
	Nickel	10.1	Within the tolerance limit.
	Potassium	2480	Exceeds the tolerance limit by 18.6%.
	Vanadium	16.9	Within the tolerance limit.
	Zinc	16.4	Within the tolerance limit.
RFI0801a10.5	Arsenic	nd	Within the tolerance limit.
	Barium	308	Within the tolerance limit.
	Beryllium	1.1	Within the tolerance limit.
	Chromium	6.2	Within the tolerance limit.
	Cobalt	2.2	Within the tolerance limit.
	Copper	7	Within the tolerance limit.
	Lead	8.6	Within the tolerance limit.
	Nickel	7.3	Within the tolerance limit.
	Potassium	960	Within the tolerance limit.
	Vanadium	13.5	Within the tolerance limit. Within the tolerance limit.
	Zinc	11.2	Within the tolerance limit.
RFI0802a5.0	Arsenic	nd	Within the tolerance limit.
	Barium	232	Within the tolerance limit.
	Beryllium	1.1	Within the tolerance limit.
	Chromium	7.5	Within the tolerance limit.
	Cobalt	3.4	Within the tolerance limit.
	Copper	5.7	Within the tolerance limit.
	Lead	11.7	Within the tolerance limit.
	Nickel	8.8	Within the tolerance limit. Within the tolerance limit.
	Potassium	1400	Within the tolerance limit.
	Vanadium Zinc	15.0 13.1	Within the tolerance limit.
	ZINC	13.1	MICHIEL CHO COTOL SINCE TIBLE.

		SAMPLE	
RFI#	METAL	DATA	NOTE
RF10802d5.0	Arsenic	nd	Within the tolerance limit.
	Barium	25 9	Within the tolerance limit.
	Beryllium	1.1	Within the tolerance limit.
	Chromium	8.7	Exceeds the tolerance limit by 8.4%.
	Cobalt	3.5	Within the tolerance limit.
	Copper	5.3	Within the tolerance limit.
	Lead	10.8	Within the tolerance limit.
	Nickel	9.7	Within the tolerance limit.
	Potassium Vanadium	1610 15.9	Within the tolerance limit. Within the tolerance limit.
	Zinc	14.5	Within the tolerance limit.
	ZINC	14.5	within the tolerance limit.
RFI0802a8.0	Arsenic	nd	Within the tolerance limit.
	Barium	230	Within the tolerance limit.
	Beryllium	1.1	Within the tolerance limit.
	Chromium	9.5	Exceeds the tolerance limit by 18.3%.
	Cobalt	3	Within the tolerance limit.
	Copper	5.8	Within the tolerance limit.
	Lead	6.9	Within the tolerance limit.
	Nickel	9.2	Within the tolerance limit.
	Potassium	2390	Exceeds the tolerance limit by 14.3%.
	Vanadium	17.1	Within the tolerance limit.
,	Zinc	16.9	Exceeds the tolerance limit by 1.0%.
RFI0802a10.5	Arsenic	nd	Within the tolerance limit.
	Barium	276	Within the tolerance limit.
	Beryllium	1.2	Within the tolerance limit.
	Chromium	8.4	Exceeds the tolerance limit by 4.6%.
	Cobalt	3.3	Within the tolerance limit.
•	Copper	6.7	Within the tolerance limit.
	Lead	8.5	Within the tolerance limit.
	Nickel	9.3	Within the tolerance limit. Within the tolerance limit.
	Potassium	1350	· · · · · · · · · · · · · · · · · · ·
	Vanadium	15.8	Within the tolerance limit.
	Zinc	13.9	Within the tolerance limit.
RFI0803a5.0	Arsenic	nd	Within the tolerance limit.
	Barium	223	Within the tolerance limit.
	Beryllium	.9	Within the tolerance limit.
	Chromium	5.6	Within the tolerance limit.
	Cobalt	2.2	Within the tolerance limit.
	Copper	5.1	Within the tolerance limit.
	Lead	12.5	Within the tolerance limit.
	Nickel	6.7	Within the tolerance limit.
	Potassium	1320	Within the tolerance limit.
	Vanadium Zina	14	Within the tolerance limit. Within the tolerance limit.
	Zinc	11.4	MALITALI CHE COLETANCE LIMIL.

RFI#	METAL	SAMPLE DATA	NOTE
RFI0803a8.0	Arsenic	nd	Within the tolerance limit.
	Barium	242	Within the tolerance limit.
	Beryllium	1.2	Within the tolerance limit.
	Chromium	10.4	Exceeds the tolerance limit by 29.5%.
	Cobalt	3.6	Within the tolerance limit.
	Copper	8.9	Exceeds the tolerance limit by 25.8%.
	Lead	5.4	Within the tolerance limit.
	Nickel	9.7	Within the tolerance limit.
	Potassium	2820	Exceeds the tolerance limit by 34.8%.
	Vanadium Zinc	17.6 17.3	Within the tolerance limit. Exceeds the tolerance limit by 3.4%.
		17.3	•
RFI0803a10.5	Arsenic	nd	Within the tolerance limit.
	Barium	277	Within the tolerance limit.
	Beryllium	.67	Within the tolerance limit.
	Chromium	1.3	Within the tolerance limit.
	Cobalt	1.5	Within the tolerance limit.
	Copper	3.6	Within the tolerance limit.
	Lead	5.6	Within the tolerance limit.
	Nickel	4.7	Within the tolerance limit.
	Potassium Vanadium	665 13.1	Within the tolerance limit. Within the tolerance limit.
	Zinc	8.3	Within the tolerance limit.
	_	_	
RFI0804v5.0	Arsenic	nd	Within the tolerance limit.
	Barium	291	Within the tolerance limit.
	Beryllium	.95	Within the tolerance limit.
	Chromium	6.4	Within the tolerance limit.
	Cobalt	2	Within the tolerance limit. Within the tolerance limit.
	Copper	4.8 13.3	Within the tolerance limit.
	Lead Nickel	7.6	Within the tolerance limit.
	Potassium	980	Within the tolerance limit.
	Vanadium	15	Within the tolerance limit.
	Zinc	11.1	Within the tolerance limit.
RFI0804v8.0	Arsenic	nd	Within the tolerance limit.
	Barium	276	Within the tolerance limit.
	Beryllium	.95	Within the tolerance limit.
	Chromium Cobalt	6.7 2.5	Within the tolerance limit. Within the tolerance limit.
	Copper	4.6	Within the tolerance limit.
	Lead	4.0 9.6	Within the tolerance limit.
	Nickel	7.5	Within the tolerance limit.
	Potassium	1030	Within the tolerance limit.
	Vanadium	15.5	Within the tolerance limit.
	Zinc	10.9	Within the tolerance limit.
			······································

		SAMPLE	
RFI#	METAL	DATA	NOTE .
RFI0804v10.5	Arsenic	nd	Within the tolerance limit.
	Barium	216	Within the tolerance limit.
	Beryllium	1.1	Within the tolerance limit.
	Chromium	5.9	Within the tolerance limit.
	Cobalt	2.6	Within the tolerance limit.
	Copper	5.5	Within the tolerance limit.
	Lead	9.5	Within the tolerance limit.
	Nickel	6.8	Within the tolerance limit.
	Potassium	500	Within the tolerance limit.
	Vanadium 	15.8	Within the tolerance limit.
	Zinc	11.4	Within the tolerance limit.
RFI0805v5.0	Arsenic	nd	Within the tolerance limit.
	Barium	302	Within the tolerance limit.
	Beryllium	.93	Within the tolerance limit.
	Chromium	6.2	Within the tolerance limit.
	Cobalt	2.1	Within the tolerance limit.
	Copper	4.7	Within the tolerance limit.
	Lead	9.3	Within the tolerance limit.
	Nickel	6.6	Within the tolerance limit.
	Potassium	60	Within the tolerance limit.
	Vanadium	14.8	Within the tolerance limit.
	Zinc	10.5	Within the tolerance limit.
RFI0805v8.0	Arsenic	nd	Within the tolerance limit.
	Barium	300	Within the tolerance limit.
	Beryllium	1.1	Within the tolerance limit.
	Chromium	8.3	Exceeds the tolerance limit by 3.4%.
	Cobalt	3.1	Within the tolerance limit.
	Copper	5.7	Within the tolerance limit.
	Lead	10.1	Within the tolerance limit.
	Nickel	9.1	Within the tolerance limit.
•	Potassium	2110	Exceeds the tolerance limit by 0.9%.
	Vanadium	16.9	Within the tolerance limit.
	Zinc	15	Within the tolerance limit.
RFI0805v10.5	Arsenic	nd	Within the tolerance limit.
	Barium	226	Within the tolerance limit.
	Beryllium	.61	Within the tolerance limit.
	Chromium	3.8	Within the tolerance limit.
	Cobalt	1.5	Within the tolerance limit.
	Copper	3.8	Within the tolerance limit.
	Lead	6.1	Within the tolerance limit.
	Nickel	4.3	Within the tolerance limit.
	Potassium	610	Within the tolerance limit.
	Vanadium _:	11.5	Within the tolerance limit.
	Zinc	7.5	Within the tolerance limit.

		SAMPLE			
RFI#	METAL	DATA	NOTE		
RFI0806v5.0	Arsenic	nd	Within the	tolerance	limit.
	Barium	264	Within the	tolerance	limit.
	Beryllium	.77	Within the	tolerance	limit.
	Chromium	5.1	Within the	tolerance	limit.
	Cobalt	1.6	Within the	tolerance	limit.
	Copper	4.4		tolerance	
	Lead	7.6		tolerance	limit.
	Nickel	5.7		tolerance	
	Potassium	1140		tolerance	
	Vanadium	13.2		tolerance	
	Zinc	10	Within the	tolerance	limit.
RFI0806v8.0	Arsenic	nd	Within the	tolerance	limit.
	Barium	281	Within the	tolerance	limit.
	Beryllium	.99	Within the	tolerance	limit.
	Chromium	7.3	Within the	tolerance	limit.
	Cobalt	2.7	Within the	tolerance	limit.
	Copper	5.1	Within the	tolerance	limit.
	Lead	8.9		tolerance	
	Nickel	8.5		tolerance	
	Potassium	1830		tolerance	
	Vanadium	15		tolerance	
	Zinc	13.5	Within the	tolerance	limit.
RFI0806v10.5	Arsenic	nd		tolerance	
	Barium	203		tolerance	
	Beryllium	1.2	Within the	tolerance	
	Chromium	7		tolerance	limit.
	Cobalt	3.5		tolerance	limit.
	Copper	6.3		tolerance	
	Lead	10.8		tolerance	limit.
	Nickel	9.3		tolerance	limit.
	Potassium	12 9 0	Within the	tolerance	limit.
	Vanadium	13.8		tolerance	
	Zinc	13.2	Within the	tolerance	limit.
RFI0807v0.5	Arsenic	nd		tolerance	
	Barium	258		tolerance	
	Beryllium	1		tolerance	
	Chromium	7.2		tolerance	
	Cobalt	3.1		tolerance	
	Copper	5.7		tolerance	
	Lead	11.5		tolerance	
	Nickel	9.3		tolerance	
	Potassium	1370		tolerance	
	Vanadium	14.7		tolerance	
	Zinc	14.8	Within the	tolerance	limit.

		SAMPLE	
RFI#	METAL	DATA	NOTE .
RFI0807v2.5	Arsenic Barium	nd ' 257	Within the tolerance limit. Within the tolerance limit.
	Beryllium	.98	Within the tolerance limit.
	Chromium Cobalt	7.2 2.9	Within the tolerance limit. Within the tolerance limit.
	Copper	5	Within the tolerance limit.
	Lead	9.9	Within the tolerance limit.
	Nickel	8.3	Within the tolerance limit.
	Potassium	1190	Within the tolerance limit.
	Vanadium	15	Within the tolerance limit.
	Zinc	12.5	Within the tolerance limit.
RFI0807v4.5	Arsenic	nd	Within the tolerance limit.
	Barium	604	Exceeds the tolerance limit by 47.7%.
	Beryllium	3	Exceeds the tolerance limit by 200.0%.
	Chromium	18	Exceeds the tolerance limit by 115.5%.
	Cobalt	7.8	Exceeds the tolerance limit by 29.8%.
	Copper Lead	13.6 27.6	Exceeds the tolerance limit by 106.6%. Exceeds the tolerance limit by 51.2%.
	Nickel	20.9	Exceeds the tolerance limit by 67.0%.
	Potassium	3210	Within the tolerance limit.
	Vanadium	11.1	Within the tolerance limit.
	Zinc	30.3	Exceeds the tolerance limit by 56.7%.
RFI0808v0.5	Arsenic	nd	Within the tolerance limit.
	Barium	206	Within the tolerance limit.
	Beryllium	.83	Within the tolerance limit.
	Chromium	6.6	Within the tolerance limit.
	Cobalt	3.1	Within the tolerance limit.
	Copper	4.7	Within the tolerance limit.
	Lead Nickel	12.6	Within the tolerance limit. Within the tolerance limit.
	Potassium	8 1470	Within the tolerance limit.
•	Vanadium	13.2	Within the tolerance limit.
	Zinc	15.7	Within the tolerance limit.
RFI0808v2.5	Arsenic	nd	Within the tolerance limit.
	Barium	246	Within the tolerance limit.
	Beryllium	.91	Within the tolerance limit.
	Chromium	6.5	Within the tolerance limit.
	Cobalt	2.5	Within the tolerance limit.
	Copper	5.1	Within the tolerance limit.
	Lead	8.6	Within the tolerance limit.
	Nickel	7.4	Within the tolerance limit.
	Potassium	1060	Within the tolerance limit.
	Vanadium Zinc	14.1	Within the tolerance limit.
	LING	11.7	Within the tolerance limit.

	MET A1	SAMPLE	NOTE
RFI#	METAL	DATA	NOTE
RFI0808v4.5	Arsenic	nd	Within the tolerance limit.
	Barium	210	Within the tolerance limit.
	Beryllium	.62	Within the tolerance limit.
	Chromium	4.5	Within the tolerance limit.
	Cobalt	1.5	Within the tolerance limit.
	Copper	3.3	Within the tolerance limit.
	Lead	8.6	Within the tolerance limit.
	Nickel	4.7	Within the tolerance limit.
	Potassium	704	Within the tolerance limit.
	Vanadium	12	Within the tolerance limit.
	Zinc	7.9	Within the tolerance limit.
RFI0809v0.5	Arsenic	nd	Within the tolerance limit.
	Barium	293	Within the tolerance limit.
	Beryllium	1	Within the tolerance limit.
	Chromium	8.5	Exceeds the tolerance limit by 1.8%.
	Cobalt	2.6	Within the tolerance limit.
	Copper	5.7	Within the tolerance limit.
	Lead	11.7	Within the tolerance limit.
	Nickel	8.4	Within the tolerance limit.
	Potassium	1580	Within the tolerance limit.
	Vanadium	16.2	Within the tolerance limit.
	Zinc	17.2	Within the tolerance limit.
RFI0809v2.5	Arsenic	nd	Within the tolerance limit.
	Barium	242	Within the tolerance limit.
	Beryllium	.83	Within the tolerance limit.
	Chromium	5.7	Within the tolerance limit.
	Cobalt	2.5	Within the tolerance limit.
	Copper	4.2	Within the tolerance limit.
	Lead	8.2	Within the tolerance limit.
	Nickel	7	Within the tolerance limit.
	Potassium	1050	Within the tolerance limit.
	Vanadium	13.3	Within the tolerance limit.
	Zinc	11	Within the tolerance limit.
RFI0809v4.5	Arsenic	nd	Within the tolerance limit.
	Barium	197	Within the tolerance limit.
	Beryllium	.86	Within the tolerance limit.
	Chromium	4.7	Within the tolerance limit.
	Cobalt	2.2	Within the tolerance limit.
	Copper	4.8	Within the tolerance limit.
	Lead	8.5	Within the tolerance limit.
	Nickel	3.3	Within the tolerance limit.
	Potassium	951	Within the tolerance limit.
	Vanadium	12.8	Within the tolerance limit.
	Zinc	8.9	Within the tolerance limit.

RFI#	METAL	SAMPLE DATA	NOTE .
KLT#	ME I AL	DATA	NOTE .
RFI0810v0.5	Arsenic	.51	Within the tolerance limit.
	Barium	277	Within the tolerance limit.
	Beryllium Chromium	1.1 5.5	Exceeds the tolerance limit by 10.0%. Within the tolerance limit.
	Cobalt	2.1	Within the tolerance limit.
	Copper	5.4	Within the tolerance limit.
	Lead	10.1	Within the tolerance limit.
	Nickel	7.1	Within the tolerance limit.
	Potassium	980	Within the tolerance limit.
	Vanadium	11.8	Within the tolerance limit.
	Zinc	9.8	Within the tolerance limit.
RFI0810v2.5	Arsenic	nd	Within the tolerance limit.
	Barium	280	Within the tolerance limit.
	Beryllium	1.1	Exceeds the tolerance limit by 10.0%.
	Chromium	5.6	Within the tolerance limit.
	Cobalt	2.3	Within the tolerance limit. Within the tolerance limit.
	Copper	6	Within the tolerance limit.
	Lead Nickel	10.2 7.8	Within the tolerance limit.
	Potassium	1000	Within the tolerance limit.
	Vanadium	11.7	Within the tolerance limit.
	Zinc	12	Within the tolerance limit.
			WZGNZN GNG GGZGNGNG ZZMZG
RFI0810v4.5	Arsenic	nd	Within the tolerance limit.
	Barium	266	Within the tolerance limit.
	Beryllium	1	Within the tolerance limit.
	Chromium	3.8	Within the tolerance limit.
	Cobalt	1.4	Within the tolerance limit. Within the tolerance limit.
	Copper	5.2 7.7	Within the tolerance limit.
	Lead Nickel	4.7	Within the tolerance limit.
	Potassium	837	Within the tolerance limit.
•	Vanadium	10	Within the tolerance limit.
	Zinc	8.5	Within the tolerance limit.
RFI0811v0.5	Arsenic	.57	Within the tolerance limit.
	Barium	262	Within the tolerance limit.
	Beryllium	1.2	Exceeds the tolerance limit by 20.0%.
	Chromium	5.8	Within the tolerance limit.
	Cobalt	2.5	Within the tolerance limit.
	Copper	6.5	Within the tolerance limit.
	Lead	9.5	Within the tolerance limit. Within the tolerance limit.
	Nickel Potassium	7.7 1550	Within the tolerance limit.
	Vanadium	12.8	Within the tolerance limit.
	Zinc	13.2	Within the tolerance limit.
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	9	SAMPLE	
RFI#	METAL	DATA	NOTE
RFI0811d0.5	Arsenic	nd	Within the tolerance limit.
	Barium	176	Within the tolerance limit.
	Beryllium	.85	Within the tolerance limit.
	Chromium	4.8	Within the tolerance limit.
	Cobalt	2	Within the tolerance limit.
	Copper	4.4	Within the tolerance limit.
	Lead	6.4	Within the tolerance limit.
	Nickel	5.8	Within the tolerance limit.
	Potassium Vanadium	831 10	Within the tolerance limit. Within the tolerance limit.
	Zinc	9.5	Within the tolerance limit.
	LINC	7.5	WICHIN CHE COLETANCE ITHIC.
RFI0811v2.5	Arsenic	nd	Within the tolerance limit.
	Barium	206	Within the tolerance limit.
	Beryllium	1.1	Exceeds the tolerance limit by 10.0%.
	Chromium	7.1	Within the tolerance limit.
	Cobalt	2.9	Within the tolerance limit.
	Copper	5.1	Within the tolerance limit.
	Lead	7.8	Within the tolerance limit.
	Nickel	8.2	Within the tolerance limit.
	Potassium	1310	Within the tolerance limit.
	Vanadium	13.1	Within the tolerance limit.
	Zinc	12.6	Within the tolerance limit.
RFI0811v4.5	Arsenic	nd	Within the tolerance limit.
	Barium	213	Within the tolerance limit.
	Beryllium	75	Within the tolerance limit.
	Chromium	3.9	Within the tolerance limit.
	Cobalt	1.4	Within the tolerance limit.
	Copper	3.5	Within the tolerance limit.
	Lead	7	Within the tolerance limit.
	Nickel	4.4	Within the tolerance limit.
	Potassium	551	Within the tolerance limit.
	Vanadium 	10	Within the tolerance limit.
	Zinc	7	Within the tolerance limit.
RFI0812v0.5	Arsenic	.53	Within the tolerance limit.
	Barium	244	Within the tolerance limit.
	Beryllium	.85	Within the tolerance limit.
	Chromium	6.1	Within the tolerance limit.
	Cobalt	1.9	Within the tolerance limit.
	Copper	4	Within the tolerance limit.
	Lead	15.6	Within the tolerance limit.
	Nickel	5.9	Within the tolerance limit.
	Potassium	747	Within the tolerance limit.
	Vanadium	12.5	Within the tolerance limit.
	Zinc	9.5	Within the tolerance limit.

	•	SAMPLE	
RFI#	METAL	DATA	NOTE
RFI0812v2.5	Arsenic	nd	Within the tolerance limit.
	Barium	159	Within the tolerance limit.
	Beryllium	.82	Within the tolerance limit.
	Chromium	4.5	Within the tolerance limit.
	Cobalt	1.9	Within the tolerance limit.
	Copper	4.4	Within the tolerance limit.
	Lead	7.8	Within the tolerance limit.
	Nickel	5.1	Within the tolerance limit.
	Potassium	728	Within the tolerance limit.
	Vanadium	8.9	Within the tolerance limit.
	Zinc	7.4	Within the tolerance limit.
RFI0812v4.5	Arsenic	nd	Within the tolerance limit.
	Barium	27 9	Within the tolerance limit.
	Beryllium	.92	Within the tolerance limit.
	Chromium	3.9	Within the tolerance limit.
	Cobalt	1.4	Within the tolerance limit.
	Copper	4.5	Within the tolerance limit.
	Lead	7.6	Within the tolerance limit.
	Nickel	5.2	Within the tolerance limit.
	Potassium	620	Within the tolerance limit.
	Vanadium	9.9	Within the tolerance limit.
	Zinc	7.8	Within the tolerance limit.
RFI0813v0.5	Arsenic	nd	Within the tolerance limit.
	Barium	260	Within the tolerance limit.
	Beryllium	1.1	Exceeds the tolerance limit by 10.0%.
	Chromium	6.8	Within the tolerance limit.
	Cobalt	2.7	Within the tolerance limit.
	Copper	5.3	Within the tolerance limit.
	Lead	11.5	Within the tolerance limit.
	Nickel	8	Within the tolerance limit.
•	Potassium	1040	Within the tolerance limit.
	Vanadium	14.2	Within the tolerance limit.
	Zinc	12.3	Within the tolerance limit.
RFI0813v2.5	Arsenic	nd	Within the tolerance limit.
	Barium	237	Within the tolerance limit.
	Beryllium	.87	Within the tolerance limit.
	Chromium	5.7	Within the tolerance limit.
	Cobalt	2.1	Within the tolerance limit.
	Copper	4.2	Within the tolerance limit.
	Lead	8.	Within the tolerance limit.
	Nickel	6.2	Within the tolerance limit.
	Potassium	793	Within the tolerance limit.
	Vanadium	11.9	Within the tolerance limit.
	Zinc	9.5	Within the tolerance limit.

		SAMPLE	
RFI#	METAL	DATA	NOTE
RFI0813v4.5	Arsenic	nd	Within the tolerance limit.
	Barium	183	Within the tolerance limit.
	Beryllium	.95	Within the tolerance limit.
	Chromium	5.1	Within the tolerance limit.
	Cobalt	2.2	Within the tolerance limit.
	Copper	4.9	Within the tolerance limit.
	Lead	7.6	Within the tolerance limit.
	Nickel	5.7	Within the tolerance limit.
	Potassium	1160	Within the tolerance limit.
	Vanadium	10.9	Within the tolerance limit.
	Zinc	9.3	Within the tolerance limit.
RFI0813d4.5	Arsenic	nd	Within the tolerance limit.
	Barium	218	Within the tolerance limit.
	Beryllium	.99	Within the tolerance limit.
	Chromium	5.9	Within the tolerance limit.
	Cobalt	2.2	Within the tolerance limit.
	Copper	5	Within the tolerance limit.
	Lead	7.1	Within the tolerance limit.
	Nickel	6.3	Within the tolerance limit.
	Potassium	1080	Within the tolerance limit.
	Vanadium	11.6	Within the tolerance limit.
	Zinc	9.8	Within the tolerance limit.
RFI0901v0.0	Arsenic	.86	Within the tolerance limit.
	Barium	316	Within the tolerance limit.
	Beryllium	.95	Within the tolerance limit.
	Chromium	13.9	Exceeds the tolerance limit by 66.4%.
	Cobalt	3.2	Within the tolerance limit.
	Copper	7.4	Exceeds the tolerance limit by 12.4%.
	Lead	13.4	Within the tolerance limit.
	Nickel	6.3	Within the tolerance limit.
	Potassium	1210	Within the tolerance limit.
	Vanadium	12.9	Within the tolerance limit.
	Zinc	19.7	Exceeds the tolerance limit by 1.9%.
RFI0901v3.0	Arsenic	nd	Within the tolerance limit.
	Barium	330	Within the tolerance limit.
	Beryllium	.88	Within the tolerance limit.
	Chromium	4.8	Within the tolerance limit.
	Cobalt	2.8	Within the tolerance limit.
	Copper	3.6	Within the tolerance limit.
	Lead	11.4	Within the tolerance limit.
	Nickel	5.2	Within the tolerance limit.
	Potassium	712 12 9	Within the tolerance limit. Within the tolerance limit.
	Vanadium Zino	12.9	Within the tolerance limit. Within the tolerance limit.
	Zinc	6.9	MICHIEL CHE COTELUICE TIBIL.

RFI#	METAL	SAMPLE DATA	NOTE
RFI0901v5.0	Arsenic	nd	Within the tolerance limit.
	Barium	332	Within the tolerance limit.
	Beryllium	1.1	Within the tolerance limit.
	Chromium	5.1	Within the tolerance limit.
	Cobalt	3.8	Within the tolerance limit.
	Copper	5.3	Within the tolerance limit.
	Lead	9.8	Within the tolerance limit.
	Nickel	5.7	Within the tolerance limit.
	Potassium	1400	Within the tolerance limit.
	Vanadium	14.1	Within the tolerance limit.
	Zinc	9.3	Within the tolerance limit.
RFI0901v7.0	Arsenic	nd	Within the tolerance limit.
	Barium	309	Within the tolerance limit.
	Beryllium	1.2	Within the tolerance limit.
	Chromium	5.4	Within the tolerance limit.
	Cobalt	4	Within the tolerance limit.
	Copper	5.7	Within the tolerance limit.
	Lead	13.2	Within the tolerance limit.
	Nickel	6.7	Within the tolerance limit.
	Potassium	963_	Within the tolerance limit.
	Vanadium 	14.7	Within the tolerance limit.
	Zinc	9.2	Within the tolerance limit.
RFI0902v0.0	Arsenic	nd	Within the tolerance limit.
	Barium	302	Within the tolerance limit.
	Beryllium	1.3	Exceeds the tolerance limit by 30.0%.
	Chromium	11.8	Exceeds the tolerance limit by 41.3%.
	Cobalt	5.8	Within the tolerance limit.
	Copper	8.1	Exceeds the tolerance limit by 23.1%.
	Lead	16.1	Within the tolerance limit.
	Nickel	11.4	Within the tolerance limit.
	Potassium	2110	Within the tolerance limit.
	Vanadium	20.1	Within the tolerance limit.
	Zinc	18.4	Within the tolerance limit.
RFI0902v3.0	Arsenic	nd	Within the tolerance limit.
	Barium	318	Within the tolerance limit.
	Beryllium	1.2	Exceeds the tolerance limit by 20.0%.
	Chromium	6.3	Within the tolerance limit.
	Cobalt	3.7	Within the tolerance limit.
	Copper	5.6	Within the tolerance limit.
	Lead	13.9	Within the tolerance limit.
	Nickel	6.8	Within the tolerance limit.
	Potassium	1220	Within the tolerance limit.
	Vanadium	16	Within the tolerance limit.
	Zinc	12.0	Within the tolerance limit.

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RFI#	METAL [PATA	NOTE			
RFI0902v5.0	Arsenic	nd	Within	the	tolerance	limit.
	Barium	237	Within	the	tolerance	limit.
	Beryllium	1.2	Within	the	tolerance	limit.
	Chromium	7.2	Within	the	tolerance	limit.
	Cobalt	4.4	Within	the	tolerance	limit.
	Copper	5.7			tolerance	
	Lead	13.4			tolerance	
	Nickel	8.2			tolerance	
	Potassium	1640			tolerance	
	Vanadium	15.9			tolerance	
	Zinc	12.3	Within	the	tolerance	limit.
RFI0902v7.0	Arsenic	nd			tolerance	
	Barium	262	Within	the	tolerance	limit.
	Beryllium	.59			tolerance	
	Chromium	2.3	Within	the	tolerance	limit.
	Cobalt	2	Within	the	tolerance	limit.
	Copper	nd	Within	the	tolerance	limit.
	Lead	11.9			tolerance	
	Nickel	nd			tolerance	
	Potassium	nd	•		tolerance	
	Vanadiu m	9.5			tolerance	
	Zinc	5.7	Within	the	tolerance	limit.
RFI0903v0.0	Arsenic	nd	Within	the	tolerance	limit.
	Barium	214	Within	the	tolerance	limit.
	Beryllium	.73	Within	the	tolerance	limit.
	Chromium	4.9	Within	the	tolerance	limit.
	Cobalt	1.6			tolerance	
	Copper	4.5			tolerance	
	Lead	6			tolerance	
	Nickel	5.1			tolerance	
	Potassium	991			tolerance	
	Vanadium	10.1			tolerance	
	Zinc	8.7	Within	the	tolerance	limit.
RFI0903v3.0	Arsenic	nd	Within	the	tolerance	limit.
	Barium	307	Within	the	tolerance	limit.
	Beryllium	1	Within	the	tolerance	limit.
	Chromium	6.1	-		tolerance	
	Cobalt	2.1			tolerance	
	Copper	4.8			tolerance	
	Lead	8			tolerance	
	Nickel	6.7			tolerance	
	Potassium	955			tolerance	
	Vanadium	13.1			tolerance	
	Zinc	9.6	Within	the	tolerance	limit.

RFI#	METAL	SAMPLE DATA	NOTE .
RFI0903v5.0	Arsenic	nd	Within the tolerance limit.
KL1030303.0	Barium	334	Within the tolerance limit.
	Beryllium	1.2	Within the tolerance limit.
	Chromium	7.6	Within the tolerance limit.
	Cobalt	3.4	Within the tolerance limit.
	Copper	8.6	Exceeds the tolerance limit by 21.6%.
	Lead	9.9	Within the tolerance limit.
	Nickel	9.1	Within the tolerance limit.
	Potassium	1300	Within the tolerance limit.
	Vanadium	16.1	Within the tolerance limit.
	Zinc	13.4	Within the tolerance limit.
RFI0903v7.0	Arsenic	.58	Within the tolerance limit.
	Barium	224	Within the tolerance limit.
	Beryllium	1.1	Within the tolerance limit.
	Chromium	7.6	Within the tolerance limit.
	Cobalt	3.2	Within the tolerance limit.
	Copper	5.8	Within the tolerance limit.
	Lead	7.3	Within the tolerance limit.
	Nickel	8.2	Within the tolerance limit.
	Potassium	1860	Within the tolerance limit.
	Vanadium	14.9	Within the tolerance limit.
	Zinc	13.3	Within the tolerance limit.
RFI0904v0.0	Arsenic	2.1	Within the tolerance limit.
	Barium	406	Within the tolerance limit.
	Beryllium	.91	Within the tolerance limit.
	Chromium	42.3	Exceeds the tolerance limit by 406.5%.
•	Cobalt	4.4	Within the tolerance limit.
	Copper	13.9	Exceeds the tolerance limit by 111.2%.
	Lead	29.7	Exceeds the tolerance limit by 62.7%.
	Nickel	10	Within the tolerance limit.
•	Potassium	1250	Within the tolerance limit.
	Vanadium	16.4	Within the tolerance limit.
	Zinc	69.6	Exceeds the tolerance limit by 259.9%.
RFI0904v3.0	Arsenic	nd	Within the tolerance limit.
	Barium	275	Within the tolerance limit.
	Beryllium	1.3	Exceeds the tolerance limit by 30.0%.
	Chromium	6.7	Within the tolerance limit.
	Cobalt	4.1	Within the tolerance limit.
	Copper	6.5	Within the tolerance limit.
	Lead	13.8	Within the tolerance limit.
	Nickel	7.4	Within the tolerance limit.
	Potassium	1180	Within the tolerance limit.
	Vanadium 	16.4	Within the tolerance limit.
	Zinc	11.1	Within the tolerance limit.

		SAMPLE	
RFI#	METAL	. DATA	NOTE
RFI0904v5.0	Arsenic	nd	Within the tolerance limit.
	Barium	309	Within the tolerance limit.
	Beryllium	1.1	Within the tolerance limit.
	Chromium	5.2	Within the tolerance limit.
	Cobalt	3.4	Within the tolerance limit.
	Copper	5.2	Within the tolerance limit.
	Lead	12.4	Within the tolerance limit.
	Nickel	5.1	Within the tolerance limit.
	Potassium	983	Within the tolerance limit.
	Vanadium -:	12.8	Within the tolerance limit.
	Zinc	9.1	Within the tolerance limit.
RFI0904v7.0	Arsenic	nd	Within the tolerance limit.
	Barium	239	Within the tolerance limit.
	Beryllium	1.4	Within the tolerance limit.
	Chromium	8.1	Exceeds the tolerance limit by 0.9%.
	Cobalt	4.8	Within the tolerance limit.
	Copper	7.2	Exceeds the tolerance limit by 1.8%.
	Lead	16.4	Exceeds the tolerance limit by 8.1%.
	Nickel	7.8	Within the tolerance limit.
	Potassium	1560	Within the tolerance limit.
	Vanadium	18.1	Exceeds the tolerance limit by 2.1%.
	Zinc	14	Within the tolerance limit.
RFI0905v0.0	Arsenic	nd	Within the tolerance limit.
	Barium	285	Within the tolerance limit.
	Beryllium	1.2	Exceeds the tolerance limit by 20.0%.
	Chromium	8.1	Within the tolerance limit.
•	Cobalt	4.6	Within the tolerance limit.
	Copper	5.5	Within the tolerance limit.
	Lead	14.9	Within the tolerance limit.
	Nickel	9.1	Within the tolerance limit.
	Potassium	1160	Within the tolerance limit.
	Vanadium	17.9	Within the tolerance limit.
	Zinc	12.1	Within the tolerance limit.
RFI0905v3.0	Arsenic	nd	Within the tolerance limit.
	Barium	418	Exceeds the tolerance limit by 2.2%.
	Beryllium	.77	Within the tolerance limit.
	Chromium	32.2	Exceeds the tolerance limit by 285.6%.
	Cobalt	5	Within the tolerance limit.
	Copper	11.9	Exceeds the tolerance limit by 80.8%.
	Lead	31	Exceeds the tolerance limit by 69.9%.
	Nickel	8.7	Within the tolerance limit.
	Potassium	1100	Within the tolerance limit.
	Vanadium	16.9	Within the tolerance limit.
	Zinc	55.6	Exceeds the tolerance limit by 187.5%.

0574		AMPLE	NOTE
RFI#	METAL	DATA	NOTE -
RFI0905v5.0	Arsenic	nd	Within the tolerance limit.
	Barium	333	Within the tolerance limit.
	Beryllium	.94	Within the tolerance limit.
	Chromium	6.1	Within the tolerance limit.
	Cobalt	3.5	Within the tolerance limit.
	Copper	3.5	Within the tolerance limit.
	Lead	13.7	Within the tolerance limit.
	Nickel	5.5	Within the tolerance limit.
	Potassium	825	Within the tolerance limit.
	Vanadium	15.5	Within the tolerance limit.
	Zinc	8.4	Within the tolerance limit.
RFI0905d5.0	Arsenic	nd	Within the tolerance limit.
	Barium	375	Within the tolerance limit.
	Beryllium	.91	Within the tolerance limit.
	Chromium	6.8	Within the tolerance limit.
	Cobalt	3.9	Within the tolerance limit.
	Copper	4.2	Within the tolerance limit.
	Lead	14.4	Within the tolerance limit.
	Nickel	6.9	Within the tolerance limit.
	Potassium	936	Within the tolerance limit.
	Vanadium	16.4	Within the tolerance limit.
	Zinc	10.1	Within the tolerance limit.
RFI0905v7.0	Arsenic	nd	Within the tolerance limit.
	Barium	313	Within the tolerance limit.
	Beryllium	1.3	Within the tolerance limit.
	Chromium	8.5	Exceeds the tolerance limit by 5.9%.
	Cobalt	4.5	Within the tolerance limit.
	Copper	6.4	Within the tolerance limit.
	Lead	12.8	Within the tolerance limit.
	Nickel	9.2	Within the tolerance limit.
	Potassium	1590	Within the tolerance limit.
	Vanadium	18.5	Exceeds the tolerance limit by 4.3%.
	Zinc	13.3	Within the tolerance limit.
RFI0906v0.0	Arsenic	1.7	Within the tolerance limit.
	Barium	289	Within the tolerance limit.
	Beryllium	.79	Within the tolerance limit.
	Chromium	7.8	Within the tolerance limit.
	Cobalt	2.3	Within the tolerance limit.
	Copper	14.3	Exceeds the tolerance limit by 117.3%.
	Lead	28.1	Exceeds the tolerance limit by 54.0%.
	Nickel	11.4	Within the tolerance limit.
	Potassium	989	Within the tolerance limit.
	Vanadium	14.5	Within the tolerance limit.
	Zinc	22.8	Exceeds the tolerance limit by 17.9%.

RFI#	METAL .	SAMPLE DATA	NOTE
RFI0906v3.0	Arsenic	1.2	Within the tolerance limit.
	Barium	243	Within the tolerance limit.
	Beryllium	1.1	Exceeds the tolerance limit by 10.0%.
	Chromium	6.3	Within the tolerance limit.
	Cobalt	2.6	Within the tolerance limit.
	Copper	5.1	Within the tolerance limit.
	Lead	9.2	Within the tolerance limit.
	Nickel	7	Within the tolerance limit.
	Potassium	1110	Within the tolerance limit.
	Vanadium	14.5	Within the tolerance limit.
	Zinc	10.6	Within the tolerance limit.
RFI0906d3.0	Arsenic	nd	Within the tolerance limit.
	Barium	226	Within the tolerance limit.
	Beryllium	1.1	Exceeds the tolerance limit by 10.0%.
	Chromium	6.3	Within the tolerance limit.
	Cobalt	2.6	Within the tolerance limit.
	Copper	5.4	Within the tolerance limit.
	Lead	8.1	Within the tolerance limit.
	Nickel	7.2	Within the tolerance limit.
	Potassium	1120	Within the tolerance limit.
	Vanadium	14.2	Within the tolerance limit.
	Zinc	10.4	Within the tolerance limit.
RFI0906d5.0	Arsenic	nd	Within the tolerance limit.
	Barium	241	Within the tolerance limit.
	Beryllium	.97	Within the tolerance limit.
	Chromium	5.1	Within the tolerance limit.
	Cobalt	1.9	Within the tolerance limit.
	Copper	4.5	Within the tolerance limit.
	Lead	7.5	Within the tolerance limit.
	Nickel	5.3	Within the tolerance limit.
	Potassium	897	Within the tolerance limit.
	Vanadium	12.6	Within the tolerance limit.
	Zinc	8.4	Within the tolerance limit.
RFI0906d7.0	Arsenic	.53	Within the tolerance limit.
	Barium	319	Within the tolerance limit.
	Beryllium	. 97	Within the tolerance limit.
	Chromium	4.1	Within the tolerance limit.
	Cobalt	1.7	Within the tolerance limit.
	Copper	4.9	Within the tolerance limit.
	Lead	8.1	Within the tolerance limit.
	Nickel	5	Within the tolerance limit.
	Potassium	838	Within the tolerance limit.
	Vanadium	13	Within the tolerance limit.
	Zinc	7.8	Within the tolerance limit.

RFI#	METAL	SAMPLE DATA	NOTE.
RFI0907v0.0	Arsenic Barium	1.4 447	Within the tolerance limit. Exceeds the tolerance limit by 9.3%.
	Beryllium Chromium Cobalt	.59 102 1.2	Within the tolerance limit. Exceeds the tolerance limit by 1121.4%. Within the tolerance limit.
	Copper Lead	10.5 14	Exceeds the tolerance limit by 59.5%. Within the tolerance limit.
	Nickel Potassium	6 853	Within the tolerance limit. Within the tolerance limit.
	Vanadium Zinc	14.6 157	Within the tolerance limit. Exceeds the tolerance limit by 711.8%.
RFI0907v3.0	Arsenic Barium	.66 234	Within the tolerance limit. Within the tolerance limit.
	Beryllium Chromium	.97 8.6	Within the tolerance limit. Exceeds the tolerance limit by 3.0%.
	Cobalt Copper Lead	2.9 5.5 9.1	Within the tolerance limit. Within the tolerance limit. Within the tolerance limit.
	Nickel Potassium	7.7 1030	Within the tolerance limit. Within the tolerance limit.
	Vanadium Zinc	13.1 14.3	Within the tolerance limit. Within the tolerance limit.
RFI0907v5.0	Arsenic Barium	.61 208	Within the tolerance limit. Within the tolerance limit.
	Beryllium Chromium	.66 16.2	Within the tolerance limit. Exceeds the tolerance limit by 101.8%.
	Cobalt Copper	1.5 4.1	Within the tolerance limit. Within the tolerance limit.
	Lead Nickel Potassium	7.2 4.7 776	Within the tolerance limit. Within the tolerance limit. Within the tolerance limit.
	Vanadium Zinc	10.3 23.8	Within the tolerance limit. Exceeds the tolerance limit by 42.2%.
RFI0907v7.0	Arsenic Barium	.58 240	Within the tolerance limit. Within the tolerance limit.
	Beryllium Chromium	1 7.6	Within the tolerance limit. Within the tolerance limit.
	Cobalt Copper	2.5 5.1	Within the tolerance limit. Within the tolerance limit.
	Lead Nickel	7.5 6.8	Within the tolerance limit. Within the tolerance limit.
	Potassium Vanadium Zinc	1390 12.7 13.4	Within the tolerance limit. Within the tolerance limit. Within the tolerance limit.

-		SAMPLE	
RFI#	METAL.	DATA	NOTE
RFI1001v0.0	Arsenic	.97	Within the tolerance limit.
	Barium	392	Within the tolerance limit.
	Beryllium	.7	Within the tolerance limit.
	Chromium	60.1	Exceeds the tolerance limit by 619.7%.
-	Cobalt	2	Within the tolerance limit.
	Copper	10.3	Exceeds the tolerance limit by 56.5%.
	Lead	11.1	Within the tolerance limit.
	Nickel	7	Within the tolerance limit.
	Potassium Vanadium	972	Within the tolerance limit. Within the tolerance limit.
	Zinc	16.3 81.3	Exceeds the tolerance limit by 320.4%.
	ZIIK	61.5	Exceeds the tolerance limit by 320.44.
RFI1001v3.0	Arsenic	nd	Within the tolerance limit.
	Barium	107	Within the tolerance limit.
	Beryllium	1	Within the tolerance limit.
	Chromium	6.1	Within the tolerance limit.
	Cobalt	3.6	Within the tolerance limit.
	Copper	5.9	Within the tolerance limit.
	Lead	5.5	Within the tolerance limit.
	Nickel	6.7	Within the tolerance limit.
	Potassium	1310	Within the tolerance limit.
	Vanadium	14	Within the tolerance limit.
	Zinc	14.7	Within the tolerance limit.
RFI1001d3.0	Arsenic	nd	Within the tolerance limit.
	Barium	105	Within the tolerance limit.
	Beryllium	1.1	Exceeds the tolerance limit by 10.0%.
	Chromium	7.8	Within the tolerance limit.
	Cobalt	4.6	Within the tolerance limit.
	Copper	7.1	Exceeds the tolerance limit by 7.9%.
	Lead	6.3	Within the tolerance limit.
	Nickel	9.1	Within the tolerance limit.
	Potassium	1660	Within the tolerance limit.
	Vanadium	16.3	Within the tolerance limit.
	Zinc	17.7	Within the tolerance limit.
RFI1002v0.0	Arsenic	.52	Within the tolerance limit.
	Barium	188	Within the tolerance limit.
	Beryllium	1	Within the tolerance limit.
	Chromium	7	Within the tolerance limit.
	Cobalt	4.3	Within the tolerance limit.
	Copper	6.4	Within the tolerance limit.
	Lead	13.8	Within the tolerance limit.
	Nickel	6.4	Within the tolerance limit.
	Potassium	806	Within the tolerance limit.
	Vanadium	15.4	Within the tolerance limit.
	Zinc	13.4	Within the tolerance limit.

RFI#	_	AMPLE.	NOTE
RF1#	l'Hà i Pha	חוח	HOTE
RFI1002v3.0	Arsenic	.7 9	Within the tolerance limit.
	Barium	231	Within the tolerance limit.
	Beryllium	.9	Within the tolerance limit.
	Chromium	117	Exceeds the tolerance limit by 1301.0%.
	Cobalt	4.4	Within the tolerance limit.
	Copper	16.5	Exceeds the tolerance limit by 150.7%. Exceeds the tolerance limit by 5.8%.
	Lead Nickel	19.3 9.2	Within the tolerance limit.
	Potassium	1310	Within the tolerance limit.
	Vanadium	18.2	Within the tolerance limit.
	Zinc	228	Exceeds the tolerance limit by 1078.9%.
RFI1002v6.0	Arsenic	.58	Within the tolerance limit.
	Barium	332	Within the tolerance limit.
	Beryllium	.9	Within the tolerance limit.
	Chromium	6.7	Within the tolerance limit.
	Cobalt	3.9	Within the tolerance limit.
	Copper	5.2	Within the tolerance limit.
	Lead	13.5	Within the tolerance limit.
	Nickel	6.5	Within the tolerance limit.
	Potassium	841	Within the tolerance limit.
	Vanadium 	18.3	Exceeds the tolerance limit by 3.2%.
	Zinc	11.2	Within the tolerance limit.
RFI1002v9.0	Arsenic	nd	Within the tolerance limit.
	Barium	201	Within the tolerance limit.
	Beryllium	1.4	Within the tolerance limit.
	Chromium	8	Within the tolerance limit.
	Cobalt	6	Exceeds the tolerance limit by 19.8%.
	Copper	7.7	Exceeds the tolerance limit by 8.9%.
	Lead	14.9	Within the tolerance limit.
	Nickel	9.5	Within the tolerance limit.
	Potassium	1380	Within the tolerance limit.
	Vanadium	16.5	Within the tolerance limit.
	Zinc	15.2	Within the tolerance limit.
RFI1002v12.5	Arsenic	nd	Within the tolerance limit.
	Barium	171	Within the tolerance limit.
	Beryllium Chromium	.87 6.4	Within the tolerance limit. Within the tolerance limit.
	Cobalt	5.4 5.4	Exceeds the tolerance limit by 7.9%.
	Copper	7.7	Exceeds the tolerance limit by 7.94.
	Lead	11.9	Within the tolerance limit.
	Nickel	8.5	Within the tolerance limit.
	Potassium	1410	Within the tolerance limit.
	Vanadium	18	Exceeds the tolerance limit by 1.5%.
	Zinc	15	Within the tolerance limit.
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		SAMPLE	
RFI#	METAL	DATA	NOTE
RFI1002d12.5	Arsenic	nd	Within the tolerance limit.
	Barium	124	Within the tolerance limit.
	Beryllium	1.1	Within the tolerance limit.
	Chromium	6.1	Within the tolerance limit.
	Cobalt	3.9	Within the tolerance limit.
	Copper	7.8	Exceeds the tolerance limit by 10.3%.
	Lead	16	Exceeds the tolerance limit by 5.5%.
	Nickel	6.9	Within the tolerance limit.
	Potassium	1010	Within the tolerance limit.
	Vanadium 	14	Within the tolerance limit.
	Zinc	12.4	Within the tolerance limit.
RFI1003v0.0	Arsenic	.65	Within the tolerance limit.
	Barium	317	Within the tolerance limit.
	Beryllium	.96	Within the tolerance limit.
	Chromium	9.5	Exceeds the tolerance limit by 13.8%.
	Cobalt	2.6	Within the tolerance limit.
	Copper	7.4	Exceeds the tolerance limit by 12.4%.
	Lead	8.4	Within the tolerance limit.
	Nickel	6.5	Within the tolerance limit.
	Potassium	1020	Within the tolerance limit.
	Vanadium 	15.7	Within the tolerance limit.
	Zinc	16.4	Within the tolerance limit.
RFI1003v3.0	Arsenic	.9	Within the tolerance limit.
	Barium	292	Within the tolerance limit.
	Beryllium	.65	Within the tolerance limit.
	Chromium	6.1	Within the tolerance limit.
	Cobalt	2	Within the tolerance limit.
	Copper	4.3	Within the tolerance limit.
	Lead	5.5	Within the tolerance limit.
	Nickel	5.4	Within the tolerance limit.
	Potassium	856	Within the tolerance limit.
	Vanadium 	15.2	Within the tolerance limit.
	Zinc	12.9	Within the tolerance limit.
RFI1003v6.0	Arsenic	.58	Within the tolerance limit.
	Barium	178	Within the tolerance limit.
	Beryllium	1.	Within the tolerance limit.
	Chromium	6.5	Within the tolerance limit.
	Cobalt	2.8	Within the tolerance limit.
	Copper	6.1	Within the tolerance limit.
	Lead	6.5	Within the tolerance limit.
	Nickel	6.5	Within the tolerance limit.
	Potassium	1070	Within the tolerance limit.
	Vanadium	12.9	Within the tolerance limit.
	Zinc	13	Within the tolerance limit.

RFI#	METAL	SAMPLE: DATA	NOTE
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RFI1003v9.0	Arsenic	.52	Within the tolerance limit.
	Barium	152	Within the tolerance limit.
	Beryllium	1	Within the tolerance limit.
	Chromium	5.9	Within the tolerance limit.
	Cobalt	3.4	Within the tolerance limit.
	Copper	5.6	Within the tolerance limit.
	Lead	8.1	Within the tolerance limit.
	Nickel	6.8	Within the tolerance limit.
	Potassium	1340	Within the tolerance limit.
	Vanadium	14.3	Within the tolerance limit.
	Zinc	13.9	Within the tolerance limit.
RFI1003v12.5	Arsenic	nd	Within the tolerance limit.
	Barium	392	Exceeds the tolerance limit by 1.8%.
	Beryllium	1.1	Within the tolerance limit.
	Chromium	7.5	Within the tolerance limit.
	Cobalt	3.2	Within the tolerance limit.
	Copper	7	Within the tolerance limit.
	Lead	7.8	Within the tolerance limit.
	Nickel	8.5	Within the tolerance limit.
	Potassium	1410	Within the tolerance limit.
	Vanadium	17.5	Within the tolerance limit.
	Zinc	16.1	Within the tolerance limit.
RFI1004v0.0	Arsenic	.6	Within the tolerance limit.
	Barium	280	Within the tolerance limit.
	Beryllium	.93	Within the tolerance limit.
	Chromium	5.6	Within the tolerance limit.
	Cobalt	2.8	Within the tolerance limit.
	Copper	5.7	Within the tolerance limit.
	Lead	8.2	Within the tolerance limit.
	Nickel	6.1	Within the tolerance limit.
	Potassium	853	Within the tolerance limit.
	Vanadium	15.5	Within the tolerance limit.
	Zinc	14	Within the tolerance limit.
RFI1004v3.0	Arsenic	.64	Within the tolerance limit.
	Barium	195	Within the tolerance limit.
	Beryllium	. 79	Within the tolerance limit.
	Chromium	11.6	Exceeds the tolerance limit by 38.9%.
	Cobalt	2.2	Within the tolerance limit.
	Copper	4.1	Within the tolerance limit.
	Lead	7	Within the tolerance limit.
	Nickel	5.3	Within the tolerance limit.
	Potassium	783	Within the tolerance limit.
	Vanadium	14.4	Within the tolerance limit.
	Zinc	15.2	Within the tolerance limit.

RFI#	METAL	SAMPLE DATA	NOTE
RFI1004v6.0	Arsenic	2.4	Within the tolerance limit.
	Barium	422	Exceeds the tolerance limit by 9.6%.
	Beryllium	.8	Within the tolerance limit.
	Chromium	398	Exceeds the tolerance limit by 4857.1%.
	Cobalt	4.8	Within the tolerance limit.
	Copper	29	Exceeds the tolerance limit by 310.0%.
	Lead Nickel	50	Exceeds the tolerance limit by 229.7%.
	Nickel Potassium	9	Within the tolerance limit.
	Vanadium	2320 18.6	Exceeds the tolerance limit by 10.9%. Exceeds the tolerance limit by 4.9%.
	Zinc	81.2	Exceeds the tolerance limit by 385.3%.
RFI1004v9.0	Arsenic	.56	Within the tolerance limit.
	Barium	213	Within the tolerance limit.
	Beryllium	1	Within the tolerance limit.
	Chromium	21.7	Exceeds the tolerance limit by 170.3%.
	Cobalt	3.8	Within the tolerance limit.
	Copper	6.2	Within the tolerance limit.
	Lead	12.5	Within the tolerance limit.
	Nickel	7.9	Within the tolerance limit.
	Potassium	1200	Within the tolerance limit.
	Vanadium	13.9	Within the tolerance limit.
	Zinc	12.5	Within the tolerance limit.
RFI1004v12.5	Arsenic	nd	Within the tolerance limit.
	Barium	164	Within the tolerance limit.
	Beryllium	1.1	Within the tolerance limit.
	Chromium	7.2	Within the tolerance limit.
	Cobalt	4.4	Within the tolerance limit.
	Copper	6.9	Within the tolerance limit.
	Lead	13.3	Within the tolerance limit.
	Nickel	8	Within the tolerance limit.
	Potassium	1210	Within the tolerance limit.
	Vanadium	13.7	Within the tolerance limit.
•	Zinc	12.5	Within the tolerance limit.
RFI1005v0.0	Arsenic	nd	Within the tolerance limit.
	Barium	315	Within the tolerance limit.
	Beryllium	.88	Within the tolerance limit.
	Chromium	6.8	Within the tolerance limit.
	Cobalt	4	Within the tolerance limit.
	Copper	9.2	Exceeds the tolerance limit by 39.8%.
	Lead	13.2	Within the tolerance limit.
	Nickel	5.8	Within the tolerance limit.
	Potassium	850	Within the tolerance limit.
	Vanadium	14.5	Within the tolerance limit.
	Zinc	11.8	Within the tolerance limit.

RFI#	METAL	SAMPLE. DATA	NOTE
RFI1005v3.0	Arsenic	.52	Within the tolerance limit.
	Barium	321	Within the tolerance limit.
	Beryllium	.85	Within the tolerance limit.
	Chromium	6.3	Within the tolerance limit.
	Cobalt	4.4	Within the tolerance limit.
	Copper	4.6	Within the tolerance limit.
	Lead	11.8	Within the tolerance limit.
	Nickel	6.8	Within the tolerance limit.
	Potassium	834	Within the tolerance limit.
	Vanadium	14.1	Within the tolerance limit.
	Zinc	13.1	Within the tolerance limit.
RFI1005d3.0	Arsenic	.61	Within the tolerance limit.
	Barium	251	Within the tolerance limit.
	Beryllium	.68	Within the tolerance limit.
	Chromium	5.8	Within the tolerance limit.
	Cobalt	2.8	Within the tolerance limit.
	Copper	9.1	Exceeds the tolerance limit by 38.3%.
	Lead	11.1	Within the tolerance limit.
	Nickel	4.2	Within the tolerance limit.
	Potassium	531	Within the tolerance limit.
	Vanadium	13.3	Within the tolerance limit.
	Zinc	8.2	Within the tolerance limit.
RFI1005v6.0	Arsenic	27.9	Exceeds the tolerance limit by 128.1%.
	Barium	700	Exceeds the tolerance limit by 81.8%.
	Beryllium	.76	Within the tolerance limit.
	Chromium	4020	Exceeds the tolerance limit by 49969.3%
	Cobalt	8.4	Exceeds the tolerance limit by 67.8%.
	Copper	215	Exceeds the tolerance limit by 2940.0%.
	Lead	337	Exceeds the tolerance limit by 2122.3%.
	Nickel	19.2	Exceeds the tolerance limit by 62.8%.
	Potassium	3920	Exceeds the tolerance limit by 87.4%.
	Vanadium	24.2	Exceeds the tolerance limit by 36.4%.
	Zinc	538	Exceeds the tolerance limit by 3115.2%.
RFI1005v9.0	Arsenic	.58	Within the tolerance limit.
	Barium	48.7	Within the tolerance limit.
	Beryllium	1.4	Within the tolerance limit.
	Chromium	11.6	Exceeds the tolerance limit by 44.5%.
	Cobalt	5.7	Exceeds the tolerance limit by 13.8%.
	Copper	11.8	Exceeds the tolerance limit by 66.8%.
	Lead	16.1	Exceeds the tolerance limit by 6.2%.
	Nickel	11.3	Within the tolerance limit.
	Potassium	1450	Within the tolerance limit.
	Vanadium	18.7	Exceeds the tolerance limit by 5.4%.
	Zinc	17.9	Exceeds the tolerance limit by 7.0%.

RFI#	METAL	SAMPLE DATA	NOTE
RFI1005v12.5	Arsenic	nd	Within the tolerance limit.
	Barium	187	Within the tolerance limit.
	Beryllium	1.2	Within the tolerance limit.
	Chromium	8.9	Exceeds the tolerance limit by 10.9%.
	Cobalt	5.1	Exceeds the tolerance limit by 1.9%.
•	Copper	7.2	Exceeds the tolerance limit by 1.8%.
	Lead	14.2	Within the tolerance limit.
	Nickel	9.3	
	Potassium	1250	Within the tolerance limit.
	Vanadium	16.2	Within the tolerance limit.
	Zinc	14.3	Within the tolerance limit.
RFI1005d12.5	Arsenic	nd	Within the tolerance limit.
	Barium	124	Within the tolerance limit.
	Beryllium	1.1	Within the tolerance limit.
	Chromium	6.1	Within the tolerance limit.
	Cobalt	3.9	Within the tolerance limit.
	Copper	7.8	Exceeds the tolerance limit by 10.3%.
	Lead	16	Exceeds the tolerance limit by 5.5%.
	Nickel	6.9	Within the tolerance limit.
	Potassium	1010	Within the tolerance limit.
	Vanadium	14	Within the tolerance limit.
	Zinc	12.4	Within the tolerance limit.

Section 8.0

Tabulated Analytical Summary for Soil Samples

An explanation of the sample number designation method on the computer printouts is as follows:

$$\frac{1}{\text{RFI}} \frac{2}{06} - \frac{3}{\text{Tank Farm}}$$

Sample Point # 01 [4] Depth of Sample A.3.5 [5+6]

#1=Sampling event
#2=SWMU number
#3=SWMU title
#4=specific sample bore number in each SWMU
#5=Type sample
 V=Verticle
 A=Angle
 D=Duplicate
 E=Equipment rinse
#6=Beginning depth of sample interval

RFI06 -	Tank	Farm
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Sample point # Derth of sample		01 00.0	01 A3.5	01 07.0	02 V0.0	02 V3.5	02 V7.0	03 A 0.0	03 A3.5	03 A7.0
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result
Senzene Tolucne Ethylbonzene Xylenes (total)	ua/ka ua/ka ua/ka	ND ND ND ND	ND ND 640	ND 1509 2100 25000	ND ND ND	ND ND ND	ND ND ND ND	ON D D ON ON	ND ND ND	ND ND ND
Lead Nickel	ma\ka ma\ka	14.9 5.3	16.6 6.5	13.0 ND	ND ND	9.5 4.6	ND ND	27.7 ND	6.5 ND	MD MD
Sample roint # Dopth of sample		04 V0.0	04 V3.5	04 V7.0	05 ^0.0	05 A3.5	05 A7.0	06 V0. 0	06 V3.5	06 V7.0
Paramoter	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result
Benzenc Toluenc Ethylbenzene Xylenes (total)	ua/ka uo/ka ua/ka	ND ND ND	ND ND ND ND	ND 750 ND 1700	ND ND ND ND	ND 11000 10000 98000	ND ND ND 260	ND 150 ND 220	ND 1200 ND 6400	ND 4600 6500 43000
Lead Nickel	ma/ka	ND ND	ND ND	ND ND	ND ND	ND ND	ND	ND ND	ND	ND
Sample point # Depth of sample		07 A0.0	07 A3.5	07 A7.0	08 V0.0	08 V3.5	08 47.0	09 A0.0	09 N3.5	09 A7.0
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result
Benzene Toluene Ethylbenzene Xylenes (total)	ua/ka ua/ka ua/ka	MD MD MD	MD MD MD	00 04 00 00 00	MD MD MD	ND ND ND	1000 2000 2300 45000	ND ND ND ND	MD MD MD MD	ND ND ND
Lead Nickel	ms/ks ms/ks	תא מא	nd ND	7.0 6.0	23.1 ND	5.3 ND	14.2 9.7	10.6 4.5	8.0 6.3	8.3 4.3

RFI06	_	Tank	Farm

Sample roint # Derth of sample		10 VO.0	10 V3. 5	10 V7.0	11 80.0	11 A3.5	11 A7.0	12 Y0. 0	12 V3.5	12 97.0	
Parameter .	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	
Benzene Toluene Ethylbenzene Xylenes (total)	ua/ka ua/ka ua/ka	ND ND ND ND	ND 600 83 2000	ND 1600 360 2700	MD MD MD	ND 73000 16000 180000	7400 84000 17000 140000	ND 1700 280 2900	17000 500000 150000 1000000	ND 46000 14000 100000	
Lead Nickel	m9/k9 m9/k9	129 15.2	ND ND	10.3 5.4	44.6 ND	21.4 6.2	23.9 5.5	736 41.3	11.0	9.4 ND	
Sample Point # Derth of sample		13 90.0	13 B0.0	13 A3.5	13 A7.0	14 70. 0	14 V3.5	16 V7.0	15 A0.9	15 A3.5	15 A7.0
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result
Benzene Toluene Ethylbenzene Xylenes (total)	ua/ka ua/ka ua/ka	ND ND ND ND	ND ND ND	ND ND ND ND	ND ND ND ND	ND 1000 ND 580	ND ND ND 29000	ND 75000 55000 330000	ND ND ND	63 63 63 63	MD MD MD
Lead Nickel	mo/ks ea/ke	D D	ND ND	ND ND	5.2 ND	57.4 10.3	9.0 5.0	12.0 7.3	17.0 ND	5.7 6.1	KD 034
Sample point # Derth of sample		16 70.0	16 V3.5	16 \7.0	17 A0.0	17 13. 5	17 A7.0	18 VO.0	18 V3.5	18 V7.0	
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result	
Benzene Toluene Ethylbenzene Xylenes (total)	ua/ka ua/ka ua/ka ua/ka	ND 260 ND 210	900 2700 5800 32000	ND 1500 2400 20000	10 10 10 10	ND ND ND	ND ND ND	MD MD MD	MD ND 3600 110000	MD 650 2000 21000	
Lead Nickel	ma/ka	239 32.9	301 58.2	55.3 6.5	ND DN	םא פא	HD ND	14.8 7.1	12.3 ND	21.2 ND	

RFION - Tank Farm

Sample point # Dorth of sample		19 A0.0	19 ^3. 5	19 ^7.0	20 V0.0	20 V3.5	20 77.0	TRIP BLANK	TRIP BL/NK
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result
Benzene	us/ks	ND	ND	160	ND	ND	ND	ND	ND
Toluene	us/ks	DM	ND	ND	MD	4500	ND	ND	ND
Ethylbenzene	us/ks	ND	ND	73	ND	5100	ND	ND	ND
Xylenes (total)	ua/ka	180000	ND	190	ND	95000	10000	ND	מא
Lead	mg/kg	19.1	ND	8.0	21.6	9.9	7.8		
Nickel	ma/ka	9.6	MD	7.1	49.9	4.9	6.8		

Sample roint number		01	01	01	02	02	02	02
Depth of sample		A05.0	0.800	A10.5	M95.0	D05.0	A08.0	N10.5
Parameter	Units	Result	Result	Result	Result	Result	Result	Result
Method 8240								
Benzene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	ug/ko	ND	MD	ND	MD	ND	ND	ND
Chlorobenzene	ua/ks	MD	ND	ND	ND	ND	ND	MD
Chloroform	uo/ka	ND	DM	ND	DM	ND	MD	ND
EDB (1.2-Dibromoethane)	us/ka	MD	MD	ND	ИD	ND	ND	ND
1,2-Dichloroethanc	uo/ka	ND	סא	ND	MD	MD	ND	MD
1,4-Dioxane	ug/kg	ND	ND	ND	ND	ND	MD.	ND
Ethylbenzene	us/ko	570	ND	MD	ND	ND	MD	590
2-Butanone (MEK)	ug/kg	ND	ND	ND	ND	ND	ND	ND
Styrene	ug/kg	מא	ND	MD	СИ	MD	ND	MD
Toluene	ub/ka	ND	ND	ND	ND	ND	ND	ND
Xylenes (Total)	ug/kg	5200	ND	ND	MD	ND	500	ND
Method 8270								
Anthracene	ey/ke	ND	ND	ND	ND	ND	ND ·	ND
Benzo(a)anthracene	03/K3	DM	ND	מא	ND	מא	ND	MD
Bonzo(b)fluoranthene	บ9/kg	ND	ND	ND	ND	ND	КD	ND
Benzo(k)fluoranthene	up/kg	ND	ND	ND	ND	ND	MD	HD
Benzo(a)pyrene	us/ks	ND	ND	OM	ND	ND	ND	ND
bis(2-Ethylhexyl)								
phthalate	ug/kg	MD	ND	ND	MD	ND	ND	MD
Butyl benzyl Phthalate	us/kg	ND	MD	ND	МÐ	ND	ND	MD
Chrysene	ua/ka	ND	ND	ND	ND	ND	KD.	ND
Dibenz(a,h)anthracene	ub/ke	ND	ND	ND	MD	ND	MD	D
Ni-n-butyl phthalate	up/kg	MD	ND	ND	HO	ND	ND	ND
1.2-Dichlorobenzene	us/ks	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ua/ka	ND	ND	ND	ND	ND	ND	MD.
1,4-Dichlorobenzene	us/ks.	ND	ND	ND.	MD	ND	MD	ND
Diethyl phthalatc	uc/ks	ND	ND	ND	ND	ND	MD	ND
7,12-Dimethylbenz(a)-								
anthracenc	u9/ks	ND	ND	ND	MD,	ИD	ND	ND
Dimethyl phthalate	us/ko	ND	MD	MD	ND	ND	MD	ND
Di-n-octyl phthalate	u9/k9	ND	ND	ND	MD	ND	ND	ND
Fluoranthene	us/ks	מא	NO	MD	ND.	ND	ND	ND
Indene	ua/ka	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	uo/ka	19000	ND	MD	MD	ND	ND	MD
Narhthalene	us/ks	7400	ND	ND	ND	ND	ND	ND
Phenanthrene	49/kg	17000	ND	MD	ND	ND	ND	ND
Pyrenc	us/ks	MD	ND	ND	ND	ND	ND	ND
Pyridine	ua/ka	ND	HD	MD	ND	ND	ND	ND
Quinoline	us/ks	ND	ND	ПM	MD	ND	ND	מא
Benzenethiol	ua/ka	MD	ND	MD	ND	ND	ND	ND

Sample roint number Depth of sample		01 A05.0	01 008.0	01 A10.5	02 A05.0	02 205.0	02 A08.0	02 A10.5
Parameter	Units	Result	Result	Result	Result	Result	Result	Result
Method 8270 (con/t)						٠		
Dibenz(a,h)acridine	ua/ks	MD	HD	ND	ND	MD	ND	MD
o-Cresol	ua/ka	ND	ND	ND	MD	ND	MD	ND
m & p-Cresol(s)	us/ka	MD	ND	ND	HD	ND	MD	ND
2,d-Dimethylrhenol	us/ks	МD	ND	ND	DM	MD	ND	MD
2.4-Dinitrophenol	ua/ka	ИD	ND	HD	ND	MD	HD	ND
4-Nitrorhenol	uo/ka	MD	MD	ND	MD	ИD	MD	ND
Phenol	ug/kg	ND	ND	ND	ND	MD	ND	ND
Total Metals								
Antimony	ma/ka	ND	ND	ND	ND	ND	ND	ND
Arsenic	mo/ks	ND	MD	MD	ND	ΝD	ND	ND
Barium	mo/ka	275	432	308	232	259	330	27£
Beryllium	ma/ko	0.97	1.1	1.1	1.1	1.1	1.1	1.2
Cadmium	mg/kg	ND	ND	ND -	ND	MD	ИD	ND
Chromium	ms/ks	7.9	10.9	6.2	7.5	9.7	9.5	3.4
Cobalt	os/ks	2.7	2.5	2.2	3.4	3.5	3.0	3.3
Conper	mg/kg	4.5	5.9	7.0	5.7	5.3	5.8	5.7
Lead	ma/ka	7.1	7.2	8.6	11.7	10.8	6.9	8.5
Mencury	ವಾ/ಸಂ	DM	מא	MD	ND	ND	MD	ND
Nickel	ma/ka	8.5	10.1	7.3	8.8	9.7	9.2	9.3
Potassium	#9/k9	1440	2430	960	1400	1610	2390	1350
Selenium	mg/kg	ND	ND	ND	ND	ND	ND	ND
Vanadium	ao/ks	13.9	16.9	13.5	15.0	15.9	17.1	15.8
Zinc	ma/ka	12.6	16.4	11.2	13.1	14.5	16.9	13.9

Sample point number Dorth of sample		03 A05.0	03 A08.0	03 A10.5	04 V05.0	04 V09.0	04 V10.5	05 V05.0	05 V09.0	· 05 V10.5
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result
Method 8240										
Benzene	us/ks	ND	ND	MD	ND	ND	ND	ND	ND	ND
Carbon disulfide	na\ka	ND ND	ND QN	MD	ND ND	MD	ND	ND	ND	ND
Chlorobenzene Chloroform	us/ks us/ks	ND ND	MD	ND ND	MD MD	ND	ND ND	ND ND	ND ND	ND ND
EDB (1,2-Bibromocthane)	na\ka na\ka	MD	ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	nd Nd
1.2-Dichloroothane	uo/ka	MD QM	MD	MD	MD	ND	ND ND		ND	ND ND
1,4-Dioxane	na\ka	ND ND	ND	MD MD	ND ND	ND	עא ND	ND ND	MD	ND ND
Ethylbenzene	us/ks	ND	MD	ND DA	MD	290 40	MD MD	ND ND		
2-Butanone (MEK)	us/ka	ND	ND	ND:	ND	ND ND	ND:	ND ND	ND ND	ND ND
Styrene	us/ks	םא פא	ND	MD	MD	ND	ND CDM	ND OM	תא מא	MD
Toluene	ua/ks	ND	ND	מא	ND	ND	ND:	ND	ND	MD MD
Xylenes (Total)	us/ks	6500	ND	MD	MD	4800	ND ND	MD MD	ND	ND ND
ATTERES TRUCKTY	427 83	9900	M	140	AB	1000	NU	THE STATE	ពប	NU
Method 8270										
Anthracene	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ua/ka	ND	מא	ND	ND	ND	ND	MD	ND	ND
Henzo(b)fluoranthene	ua/ka	ND	MD	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	us/ks	סא	ND	ND	ND	ND	MD	MD	ND	ND
Benzo(a)pyrene	u9/ko	ND	ND	ND	ND	ND	ND	MD	ND	ND
bis(2-Ethylhexyl)										
phthalate	ug/ks	ND	ND	ND	ND	ND	ND	ND	'ND	ND
Butyl benzyl phthalate	นว/ka	MD	MD	MD	ND	MD	ND	ND	ND	ND
Chrysenc	ug/kg	NU	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a.h)anthracene	ua/ka	ND	MD -	ND	MD	ND	ND	ND	ND	DM
Di-n-butyl phthalate	us/ka	ND	ND	ND	ND	ND	ND	ND	ND.	ND
1,2-Dichlorobenzene	uo/ko	MD	ND	MD	MD	ND ·	MD	ND	ND	ND
1.3-Dichlorobenzene	น9/k9	ND	MD	ND	ND	MD	ND	ND	ND	ND
1,4-Dichlorobenzene	ug/kg	ND	MD	מא	ND	ND	ND	ND	ND	ND
Diethyl phthalate	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND	ND
7,12-Dimethylbenz(a)-										
anthracene	uo/ka	ND	ND	ND	MD	ND	ND	ND	ND	ND
Dimethyl phthalate	ug/kg	ND	ND	ND	ND	ND	MD	MD	ND	ND
Di-n-octyl phthalate	us/ks	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	us/ks	ND	MD	MD	MD	ND	ND	MD	ND	ND
Indene	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	us/ko	18000	ND	ND	ND	37000	ND	ND	ND	ND
Naphthalene	ua/ka	5600	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	us/ks	14000	ДИ	MD	ND	27000	ND	MD	ND	MD
Pyrene	ey/eu	ND	ND	ND	ND ND	ND	ND	ND	ND	ND
Pyridine	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND	MD
Quinoline	u9/k9	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzenethiol	ua/ka	Œ	ND	ND	ND	ND	HD	ND	MD	ND

Sample roint number Depth of sample		03 A05.0	03 A09.0	03 010.5	04 905.0	01 V08.0	04 V10.5	05 · V05.0	05 0.30v	05 V10.5
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result
Method 8270 (con't)										
Dibenz(a,h)acridine	ug/ks	ND	ND	ND	HD.	ND	ND	ND	ND	ND
o-Cresol	us/ks	ND	ND	MD	ND	ND	ND	ND	ND	MD
m & r-Cresel(s)	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
2.4-Dimethylphenol	ua/ka	MD	ND	ND	MD	ND	ND	ND	ND	ND
2.4-Dinitrophenol	us/ks	ND	ND	ND	MD	ND	ND	ND	ND	ND
4-Nitrophenol	ua/ka	ND	ND	MD	ND	MD	ND	В	ND	ND
Phono!	ug/kg	ND	ND	ND	ND	MD	ND	MD	ND	ND
Total Metals										
Antimony	ma/ka	ND	ND	ND	ND	ND	ND	ďЯ	КD	ND
Ansenic	mg/kg	MD	ND	ND	ND	ND	MD	מא	ND	ND
Barium	ma/ka	223	242	277	291	276	216	302	300	225
Beryllium	as/ko	0.90	1.2	0.57	0.95	0.95	1.1	0.93	1.1	0.61
Cadmium	ma/ka	ND	МD	ND	ND	ND	МD	0.70	ND	ND
Chromium	ms/ks	5.6	10.4	4.3	5.4	6.7	5.9	6.2	3.3	3.8
Cobalt	mg/kg	2.2	3.6	1.5	2.0	2.5	2.5	2.1	3.1	1.5
Copper	mg/kg	5.1	9.9	3.6	4.8	4.6	5.5	4.7	5.7	3.3
Lead	mg/kg	12.5	5.4	5.6	13.3	۶.٤	9.5	9.3	10.1	£.1
Mercury	as/ko	ND	ND	ND	ND	ND	MD	CIA	ND	MD
Nickel	ms/ks	6.7	9.7	4.7	7.6	7.5	6.8	6.6	9.1	4.3
Potassium	ลร/ks	1320	2820	555	990	1030	1500	1050	2110	510
Selenium	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	mo/ko	14.0	17.6	13.1	15.9	15.5	15.8	14.8	15.9	11.5
Zinc	ne/ka	11.4	17.3	8.3	11.1	10.9	11.4	10.5	15.0	7.5

Sample point number Depth of sample		06 905.0	06 909.0	06 V10.5	· 07 V0.5	07 92.5	07 94.5	08 V0.5	08 V2.5	08 94.5
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result
Method 8240			•							
Benzene	ua/ko	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	us/ks	MD	MD	ND	ND	ND	ND	D	ND	ND
Chlorobenzene	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	ca/גנט	ND	ND	СN	פא	מא	ND	ND	ИD	ND
EDB (1,2-Dibromoethane)	us/k9	ND	ND	ND	ND	MD	ND	ND	NID	ND
1,2-Dichloroethane	up/ka	ND	ND	ND	ND	ND	ND	ND	ND	ND
1.4-Dioxanc	uc/ka	ND	ND	OM.	ND	ND	ND	ND	ND	ND
Ethylbenzene	na\ka	מא	ND	ND	ND	ND	מא	ND	מא	ND
2-Butanone (MEK)	uc/ka	ND	ND	ND	KD	ND	ND	ND	ND	ND
Styrene	ua/ko	ND	MD	MD	ND	ND	MD	מא	ND	מא
Toluene	us/ka	ND	ND	EN.	ND	MD.	ND	ND	ND	ND
Xylones (Total)	ua/ka	MD	MD	ND	MD	ND	ND	ND	MD	ND
Method 8270										
Anthracene	us/ks	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	ug/kg	ND	MD	ND	MD	ND	MD	ND	ND	MD
Henzo(b)fluoranthene	ue/ks	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	us/ko	ND	MD	ND	ND	ND	ND	ND	MD	ND
Benzo(a)pyrene	us/ks	MD	ND	ND	ND	ND	ND	ND	MD	ND
bis(2-Ethylhexyl)										
phthalate	ug/kg	ND	ND	HD	MD	ND	ND	ND	ND	MD COM
Butyl benzyl phthalate	ug/kg	ND	MD	ND	MD	MD	MD	ŒM	ND	ИD
Chrysone	us/ks	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a.h)anthracene	us/ko	ND	ND	MD	ND	ND	ND	ND	MD	CM
Di-n-butyl phthalate	u9/ks	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	us/ks	ND	ND	ND	ND	ND	ND	ND.	ND	MD
1.3-Dichlorobenzene	ua/kc	ND	ND	ND	ND	ND	ND	ND	ND	ND
1.4-Dichlorobenzena	us/ks	ND	מא	ND	ND	ND	MD	ND	MD	HD
Diethyl phthalate	ี ขอ/ka	ND CA	ND	ND	ND	ND	ND	ND	ND	ND
7,12-Dimethylbenz(a)-										
anthracene	us/ka	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	כא/פט	СИ	ND	ND	מא	ND	ND	ND	ND	MD
Di-n-octyl phthalate	ua/ka	MD	HD	ND	ND	ND	ND	ND	ND	КD
Fluoranthene	us/ks	ND	ND	MD	ND	ND	ND	מא	פא	ND
Indene	ua/ka	MD	ИD	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	us/ko	ND	MD	ND	ND	25000	ND	ND	35000	ND
Naphthalene	ua/ka	ND	ND	ND	ND	14000	ND	ND	20000	ND
Phenanthrene	us/ks	ND	MD	ND	ND	11000	ND	מא	19000	ND
Pyrene	ua/ka	MB	ND	ND	ND	ND	ND	ND	ND	ND
Pyridine	ua/ka	MD	מא	MD	ND	ND	ND	מא	ND	Œ
Quinoline	ua/ka	ND	ND	ND	ND	MD	ND	ND	ND	ND
Benzenethial	uo/ka	ND	ND	MD	MD	ND	ND	ND	D	ND

Sample roint number Depth of sample		06 V05.0	. 80V 0.80V	06 V10.5	07 V0.5	07 V2.5	07 V4.5	08 V0.5	03 V2.5	08 V4.5
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result
Method 8270 (con/t)										
Dibenz(a,h)acridine	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Cresol	us/ks	MD	ND	MD	ND	MD	ND	MD	ND	ND
m & P-Cresol(s)	us/ks	ND	ND	MD	ND	ND	ND	ND	ND	MD
2.4-Dimethylphenol	us/ks	扣	MD	ND	ND	ND	ND	ND	ND	MD
2.4-Dinitrophenol	us/ka	ND	ND	ИD	ND	MD	MD	ND	МD	ND
1-Nitrophenol	ue/ko	ND	MD	ND	MD	MD	ND	ND	ND	CM
Phenol	es/ke	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Metals										
Antimony	ma/ka	ND	ND	ND	ND	ND	ND	ND	ND	HD
Arsenic	ms/ko	מא	В	מא	ND	Œ	ND	ND	ND	ND
Barium	ma/ka	264	291	203	258	257	604	206	246	210
Beryllium	mg/kg	0.77	0.99	1.2	1.0	0.98	3.0	0.83	0.91	0.52
Cadmium	mo/ko	MD	МD	ND	ND	MD	0.99	ND	ND	ND
Chromium	ao/ks	5.1	7.3	7.0	7.2	7.2	18.0	5.6	5.5	4.5
Cobalt	ms/ka	1.6	2.7	3.5	3.1	2.9	7.8	3.1	2.5	1.5
Copper	mo/ko	4.4	5.1	6.3	5.7	5.9	13.6	4.7	5.1	3.3
Lead	m 9/k9	7.6	8.9	10.9	11.5	9.9	27. <i>t</i>	12.5	8.6	8.6
Hencury	ma/ka	MD	ND	MD	ND	ND	ND	ND	ND	MD
Mickel	mo/ko	5.7	8.5	9.3	9.3	8.3	20.9	8.0	7.4	4.7
Potassium	ma/ka	1140	1930	1290	1370	1190	3210	1470	1050	704
Selonium	m 9/ka	ND	ND	ND	ND	ND	ND	KD	ND	ND
Vanadium	mg/kg	13.2	15.0	13.8	14.7	15.0	11.1	13.2	14.1	12.0
Zinc	ma/ks	10.0	13.5	13.2	14.8	12.5	30.3	15.7	11.7	7.9

RFI08	-	Rai	froad	Rack	Lagoon
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Sample point number 09 09 09		10	10
Derth of sample V0.5 V2.5 V4.5	V0.5	V2.5	V4. 5
Parameter Units Result Result Result	Result	Result	Result
Method 8240			
Benzene ug/kg ND ND ND	ND	ND	MD
Carbon disulfide us/ks ND ND ND	MD	ND	ND
Chlorobenzene ug/kg ND ND ND ND	ND	ND	ND
Chloroform ug/kg ND ND ND	ND	ND	MD
EDB (1,2-Dibromoethane) us/ks ND ND ND	ND	ND	ND
1.2-Dichlorosthane us/ko ND ND ND	ND	ND	ND
1,4-Dioxane ug/kg ND ND ND	ND	ND	ND
Ethylbenzene ug/kg ND ND ND	ND	ND	ND
2-Butanone (MEK) us/ks ND ND ND ND	ND	ND	ΝĎ
Styrene ug/kg ND ND ND	ND	ND	סא
Tolucne ug/kg MD MD MD	ND	ND	ND
Xxlenes (Total) ua/ka MD MD MD	ND	ND	ND
Method 8270			
Anthracenc us/ks ND ND ND	ND	ND	ND
Banzo(a)anthracene us/ks ND ND ND	ND	ND	ND
Benzo(b)fluoranthone us/kg ND ND ND	ND	ND	ND
Benzo(k)fluoranthene us/ks ND ND ND	ND	ND	ND
Henzo(a)pyrene ug/kg ND ND ND	100	ND	ND
bis(2-Ethylhexyl)			
phthalate us/ks ND ND ND	ND	MD	ND
Butyl benzyl rhthalate us/ks ND ND ND	ND	MD	MD
Chrysene ua/ka ND ND ND	ND	ND	ND
Dibenz(a,h)anthracene us/ks ND ND ND	ND	MD	ŒК
Di-n-butyl phthalate ua/ka ND ND ND	ND	ND	ND -
1,2-Dichlorobenzene ua/ka ND ND ND	ND	ND	ND
1.3-Dichlorobenzene us/ks ND ND ND	MD	ND	ND
1.4-Dichlorobenzene us/ks ND ND ND	ND	MD	ND
Diethyl phthalate us/ks ND ND ND	ND	ND	ND
7,12-Dimethylbenz(a)-			
anthracene us/ko ND ND ND	ND	ND	ND
Dimethyl rhthalate us/ks MD MD ND	ND	ND	ND
Di-n-octyl phthalate us/ks ND ND ND	ND	MD	ND
Fluoranthene us/ks ND ND ND	MD	MD	ND
Indene us/ks ND ND ND	HD	ND	ND
1-Methylnaphthalene us/ks ND 57000 ND	MD	ND	MD
Naphthalene us/ks ND 24000 6700	ND	ND	ND
Phenanthrene us/ko MD 25000 MD	ND	ND	ND
Pyrene ua/ka ND ND ND	ND	ND	ND
Pyridine us/ks ND ND ND	ND	ND	ND
Quinoline ua/ka ND ND ND	ND	ND	ND
Benzenethiol us/ks ND ND ND	ND	ND	ND

Sample roint number		09	09 -	09	10	10	10
Dorth of sample		VO.5	V2.5	V4.5	V0.5	V2.5	V4.5
Parameter	Units	Result	Result	Result	Result	Result	Result
Method 8270 (con/t)							
Dibenz(a,h)acridine	us/ks	ND	ND	ND	MD	ND	ND
o-Cresol	us/ks	ND	ND	MD	MD	ND	ND
m & r-Cresol(s)	ug/kg	ND	ND	ND	ND	ND	ND
2,1-Dimethylphenol	up/kg	מא	MD	ND	MD	ND	MD
2,4-Dinitrophenol	ua/ks	ND	ND	ND	MD	ND	ND
4-Nitrophenol	us/ks	ND	ND	ND	MD	ND	ND
Phenol	ug/kg	ND	ND	ND	ND	ND	ND
Total Metals							
Antimony	mg/kg	Œ	MD	MD	ND	MD	ND
Arsenic	mo/ka	ND	ND	ND	0.51	ND	ND
Barium	mg/kg	293	242	197	277	280	265
Beryllium	≘s/ks	1.0	0.83	0.36	1.1	1.1	1.0
Cadmium	as/ks	MD	ND	ND	ND	ND	ND
Chromium	2 9/k9	8.5	5.7	4.7	5.5	5.6	3.8
Cobalt	mg/kg	2.6	2.5	2.2	2.1	2.3	1.4
Copper	ms/ks	5.7	4.2	4.3	5.4	5.0	5.2
Lead	ma/ka	11.7	8.2	8.5	10.1	10.2	7.7
Mercury	as/ks	MD	ND	MD	ND	CIA	ND
Nickel	ms/ks	8.4	7.0	3.3	7.1	7.8	4.7
Potassium	me/ko	1580	1050	951	980	1000	937
Selenium	me/ke	ND	HD	ND	ND	ND	ND
Vanadium	mo/ko	16.2	13.3	12.8	11.9	11.7	10.0
Zinc	mg/kg	17.2	11.0	8.9	9.8	12.0	8.5

Sample roint number Depth of sample		11 V0.5	11 DO.5	11 ··· V2.5	11 V4.5	12 V0.5	12 V2.5	12 V4.5
Parameter	Units	Result	Result	Result	Result	Result	Result	Result
Method 8240		-						
Benzene	us/ks	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	ua/ka	ND	MD	ND	MD	ND	ND	ND
Chlorobenzene	ug/kg	ND	ND	ND	ND	ND	MD	MD
Chloroform Chloroform	ua/ka	ND	MD	ND	ND	עא	ND	ND
EDB (1,2-Dibromoethane)	ua/ks	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	us/ke	פא	MD	ND	ND	ND	מא	ND
1.4-Dioxane	us/kg	ND	ND	MD	ND	ND	ND	ND
Ethylbenzono	up/ka	ИD	ND	ND	ND	DM	ND	ND
2-Butanone (MEK)	u9/k9	ND	ND	ND	ND	ND	NU	ND
Styrene	นย/ko	MD	ND	DM	ND	ND	ND	מא
Toluene	ua/kc	ND	ND	ND	ND	ND	ND	ND
Xylenes (Total)	us/ks	ND	ND	ND	ND	מא	ND	AD.
Method 8270								
Anthracene	us/ks	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	us/ko	ND	MD	ND	CM	ND	ND	ND
Benzo(b)fluoranthene	ua/ka	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ua/ka	ND	ND	ND	MD	ND	ND	ND
Benzo(a) pyrene	u9/ks	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl)								
Phthalate	ua/ka	ND	HD	ND	ND	ND	ND	ND
Butyl benzyl rhthalate	us/ks	ND	MD	MD	CIA CIA	מא	ND	MD
Chrysene	us/ks	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	ub/ka	ND	MD	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ua/ka	ND	ND	ND	ND	MD	ND	ND
1,2-Dichlorobenzene	us/ks	ND	ND	MD	MD	ND	מא	ND
1.3-Dichlorobenzene	us/ks	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	us/ks	מא	ND	ND	ND	ND	ND	ND
Diethyl phthalate	บอ/ka	ND.	ND	ND	ND	ND	ND	ND
7,12-Dimethylbenz(a)-							•	
anthracene	ua/ka	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	uo/ko	ND	ND	MD	ND	MD	MD	MD
Di-n-octyl rhthalate	us/ks	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Indene	us/ks	ND	ND	ND	^ ND	ND	ND	ND
1-Methylnarhthalene	ua/ka	ND	MD	ND	71000	ND	ND	ND
Naphthalene	us/ks	ND	NLI	ND	27000	ND	ND	ND
Phenanthrene	uo/ks	ND	ND	ND	33000	ND	ND	ND
Pyrene	ug/kg	ND	ND	ND	ND	ND	ND	ND
Pyridine	ua/ka	ND	ND	ND	ND	ND	ND	ND
Quinoline	us/ka	ND	ND	ND	ND	ND	ND	ND
Benzenethiol	us/ks	ND	MD.	ND	םא	MD	ND	ND

DO.5	V2.5	11 V4.5	12 V0.5	12 72.5	12 74.5
Result	Result	Result	Result	Result	Result
ND	ND	ND	HD	ND	ND
MD	ND	ND	ND	ND	ND
ΝD	MD	ND	ND	ND	ND
MD	ND	MD	ND	ND	ND
ND	ND	ND	ND	ND	ND
ND	ND	ND	ND	EM	מא
ND	ND	ND	ND	ND	MD
ND	ND	ND	ND	ND	ND
57 ND	MD	ND	0.53	ND	ND
176	205	213	244	159	279
0.85	1.1	0.75	0.85	0.32	0.92
ND	ND	ND	ND	ND	ND
3 4.8	7.1	3.9	6.1	4.5	3.9
2.0	2.9	1.4	1.9	1,9	1.4
5 4.4	5.1	3.5	4.0	9.0	4.5
5 6.4	7.8	7.0	15.6	7.8	7.6
ND	ND	ND.	ND	MD	ND
7 5.8	8.2	4.4	5.9	5.1	5.2
831	1310	551	747	729	620
ND	ND	ND	ND	ND	ND
3 10.0	13.1	10.0	12.5	8.9	9.9
2 9.5	12.6	7.0	9.5	7.4	7.8
	Result ND ND ND ND ND ND ND ND ND ND ND ND ND	Result Result ND ND ND ND ND ND ND ND ND ND ND ND ND N	Result Result Result ND ND ND ND ND ND ND ND ND ND ND ND ND N	Result Result Result Result ND ND ND ND ND ND ND ND ND ND ND ND ND N	Result Result Result Result Result ND ND ND ND ND ND ND ND ND ND ND ND ND N

Sample roint number		13	13	13.	13		07 50.5	TRIP
Depth of sample		V0.5	V2.5	V4.5	D4.5		E2.5	BLVWK
Parameter	Units	Result	Result	Result	Result	Units	Result	Result
Method 8240		-						
Benzene	us/ko	ND	ND	ND	ND	ua/L	KD	ND
Carbon disulfide	us/ks	ND	ND	ND	ND	us/L	7.8	ND
Chlorobenzene	ua/ka	ND	ND	MD	ND	us/L	ND	ND
Chloroform	us/ks	DM	ND	ND	ND	ua/L	MD	ND
EDB (1,2-Dibromoethane)	us/ka	ND	ND	ND	ND	ug/L	ND	ND
1.2-Dichloroethane	up/ka	OM	ND	ND	MD	us/L	MD	MD
1.4-Dioxane	ug/kg	ND	ND	ND	ND	ua/L	ND	ND
Ethylbenzene	ua/ko	ND	HD	MD	ND	us/L	מא	MD
2-Butanone (MEK)	ua/ko	ND	MD	מא	MD	us/L	ND	ND
Styrene	us/ko	MD	MD	MD	MD	us/L	MD	DK
Toluene	ua/ks	ND	ND	950	ND	ua/L	ND	ND
Xylencs (Total)	us/ks	MD	HD	1800	MD	ua/L	ND	ND
Method 8270								
Anthracene	ug/kg	ND	ND	ND	ND	ua/L	ND	
Benzo(a)anthracene	us/ko	DM	MD	ND	מא	ug/L	MD	
Benzo(b)fluoranthcne	ua/ka	ND	ND	ND	ND	us/L	ND	
Benzo(k)fluoranthenc	us/ks	מא	MD	ND	ND	us/L	ND	
Benzo(a)pyrene	ua/ka	ND	ND	ND	ND	ug/L	ND	
bis(2-Ethylhexyl)								
phthalate	ua/ka	ND	ND .	ND	ND	us/L	ND	
Butyl benzyl phthalate	ua/ka	MD	פא	ND	СM	us/L	ND	
Chrysche	บ9/ko	MD	ND	MD	ND	ua/L	ND	
Dibenz(a,h)anthracene	up/ke	ND	MD	ND	MD	ขว/L	MD	
Di-n-butyl phthalate	ug/kg	ND	ND	ND	ND	ug/L	ND	
1,2-Dichlorobenzene	us/ks	MD	ND	ND	ND	us/L	MD	
1,3-Dichlorobenzene	u9/k9	ND	ND	MD	ND	us/L	ND	
1,4-Dichlorobenzene	u9/kg	HD	ND	ND	ND	ש/גנו	MD	
Diethyl phthalate	ua/ka	עא	ND	ND	ND	us/L	MD	
7.12-Dimethylbenz(a)-							٠	
anthracene	us/ks	ND	ND	ND	ND	u9/L	ND	
Dimethyl phthalate	us/ko	MD	ND	ND	MD	us/L	ND	
Di-n-octyl phthalate	us/ks	ND	ND	ND	ND	us/L	ND	
Fluoranthene	น3/k9	ND	ND	MD	MD	us/L	MD	
Indene	us/ka	ND	ND	ND	ND	ug/L	ND	
1-Mothylnarhthalene	us/ks	ND	ND	ND	ND	uo/L	ND	
Naphthalene	u9/k9	ND	ND	ND	MD	us/L	ND	
Phenanthrene	ug/kg	MD	ND	ND	ND	us/L	MD	
Pyrene	u9/k9	ND	MD	ND	ND	us/L	ND	
Pyridine	ua/ka	MD	ND	ND	ND	us/L	ND	
Quinoline	ua/kc	ND	ND	ND	ND	us/L	ND	
Benzenethiol	uo/ka	MD	ND	ďΚ	ND	us/L	ND	

Sample point number		13	- 13	13	13		07
Derth of sammle		VO.5	V2. 5	V4.5	D4.5		E2.5
Parameter	Units	Result	Result	Result	Result	Units	Result
Method 8270 (con't)							
Dibenz(a,h)acridine	us/ko	HD	ND	HD	ND	us/L	ND
o-Creso!	up/ks	ND	ND	ND	ND	ua/L	ND:
m & r-Cresol(s)	ua/ka	ND	ND	ND	MD	บ9/L	ND
2,4-Dimethylrhenol	us/ks	ND	ND	MD	ШA	us/L	ND
2,4-Dinitrophenol	us/ks	ND	HD	ND	ND	ขอ/L	ND
1-Nitrophenol	us/ks	ND	D	ND	ND	us/L	MD
Phenol	ud/ks	ND	ND	MD	ND	ua/L	ND
Total Metals							
Antimony	mg/kg	ND	ND	ND	ND	m9/L	ND
Arsenic	as/ks	ND	ND	ND	ND	as/L	ND
Barium	æ9/k9	260	237	183	218	ms/L	ND
Beryllium	mg/kg	1.1	0.97	0.95	0.99	m3/L	ND
Cadmium	ms/ks	ND	ND	ND	ND	ms/L	0.0055
Chromium	mg/kg	6.8	5.7	5.1	5.9	as/L	ND
Cobalt	ma/ka	2.7	2.1	2.2	2.2	ms/L	ND
Corper	mg/ko	5.3	4.2	4.9	5.0	mo/L	ND
Lead	mo/kg	11.5	8.0	7.6	7.1	ms/L	ND
Mercury	ag/kg	MD	ND	MD	ND	ma/L	ND
Nickel	m9/ks	8.0	6.2	5.7	6.3	ms/L	ND
Potassium	me/ke	1040	793	1160	1080	ms/L	ND
Selenium	ma/ka	ND	ND	ND	ΝĐ	mg/L	MD
Vanadium	ma/ko	14.2	11.9	10.9	11.5	ms/L	ND
Zinc	ms/ka	12.3	9.5	9.3	9.8	m9/L	ND

		RFI09 -	Inactive	Land Tr	eatment	Area and	Drainas	e Ditch	
		01	01	01	01	02	02	02	02
		VO.0	V3.0	V5.0	V7.0	VO.0	V3.0	V5.0	V7.0
	Units	Result	Result	Result	Result	Result	Result	Result	Resul
	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND
	us/ks	ND	MD	СИ	ND	ND	ND	MD	MD
	u9/k9	ND	סא	ND	ND	ND	ND	ND	ND
	us/ks	ND	ND	ND	ND	ND	ND	ND	ND
	ua/ka	ND	ND	MD	ND	ND	ND	МD	ND
	ua/ka	MD	ND	ND	MD	MD	MD	MD	ND
	us/ks	ND	ND	MD	ND	ND	ND	ND	ND
)	ua/ka	MD	ND	ND	DA	MD	MD	MD	MD
	us/ka	ND	ЮD	ND	ND	ND	ND	ND	ND
	us/ko	ND	MD	MD	MD	ND	MD	ND	MD
	u9/kc	ND	ND	ND	ND	ND	ND	ND	ND
	ca/eu	ND	ND	MD	ND	ND	MD	מא	ND
	ey/cu	ND	ND	ND	ND	ND	ND.	ND	ND
	uo/ke	ND	ND	מא	ND	ND	MD	ND	MD
	us/ks	ND	ND	ND	ND	ND	ND.	ND	ND
	uo/ks	ND	MD	ND	ND	МD	מא	ND	ND
	us/ko	ND	ND	MD	ND	ND	ND.	MD	CM CM
	ua/ka	ND	ND	ND ND	- ND	ND	ND	ND ND	ND
	u9/k9	ND	MD	MD	ND	ND	ND	ND	MD CM
	us/ks	ND	ND	MD	ND	ND	ND	ND	ND
	u9/k9	ND ND	, ND	ND ND	ND ND	ND ND	ND	ND ND	ND
	us/ks	ND	MD	ND	MD	MD	ND	ND ND	MD
	uc/ka	MD	MD MD	ND ND	ND ND	ND	ND	ND ND	ND
	ua/ka	ND	MD	ND	ND	ND	MD	ND	MD

Sample roint number Denth of sample

Method 8240

1,2-Dichloroethene (cis/trans)

Parameter

Chloromethane Bromomethane Vinyl chloride Chloroethane Methylene chloride 1,1-Dichloroethenc 1,1-Dichloroethane

Chloroform

1,2-Dichlorocthane 1,1,1-Trichlorocthane Carbon tetrachloride **Hromodichloromethane** 1,2-Dichloropropane trans-1,3-Dichloropropene

Trichloroethene Dibromochloromethane 1.1.2-Trichloroethene

cis-1,3-Dichloropropene 2-Chloroethyl vinyl ether

1,1,2,2-Tetrach!orocthane,

trans-1,4-Dichloro-2-butene

4-Mcthyl-2-rentanone (MIBK)

Trichlorofluoromethane

1.2.3-Trichloropropane

Dichlorodifluoromethane

trans-1,2-Dichloroethene

Tetrachloroethene

Chlorobenzene

Ethylbenzene

Acrylonitrile

Carbon disulfide

Dibromomethane

Benzene

Broadform

Toluene

Acetone

Acrolein

Ethanol

Styrene

Iodomethane

2-Butanone (MEK)

Vinyl acetate

Xylenes (total)

2-Hexanone

Ethyl methacrylate

t

		RF109 -	Inactive	Land Tr	eatment	Area and	Draina	se Ditch	1
Sample point number		01	01	01	. 01	02	02	02	02
Depth of sample		. VO.0	V3.0	V5.0	V7.0	V0.0	V3.0	V5.0	V7.0
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result
Method 8270									
Acenarthene	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND
Acenarhthylene	no/ka	ND	MD	ND	ND	ND	ND	MD	MD
Acetophenone	us/ks	ND	ND	ND	ND	MD	ND	ND	ND
4-Aminobiphenyl	us/ks	OK OK	ND	ND	MD	ND	ND	ND	ПK
Aniline	up/kg	MD	ND	ND	ND	ND	ND	ND	ND
Anthracene	ug/kg	ND ND	ND	ND ND	ND	ND	ND	ND	ND
Benzo(a)anthracene Benzo(b)fluoranthene	us/ka	an D	ON DA	ND ND	ND ND	ND ND	ND	ND	ND
Benzo(k)fluoranthene	us/ks us/ks	ND	ND ND	ND	ND ND	ND ND	ND ND	ND ND	םא מא
Benzo(5,h,i)perylene	ua/ka	, ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrenc	uc/ka	תה. כמ	MD MD	ND	ND	HD	ND	ND ND	ND
Benzyl alcohol	ug/kg	ND	ND ND	מא	HD	ND	ND	מא	ND
bis(2-Chloroethoxy)-methane	na/ka	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chlorocthyl) other	ua/ko	ND	ND	HD	ND	AD D	ND	MD	ND
bis(2-Chloroisopropyl)-ether	u3/k9	ND	ND	ND	ND	ND	ND	ND D	ND
bis(2-Ethylhexyl) phthalate	ug/kg	MD	ND	MD	מא	ND	ND	ND	MD
1-Bromorhenyl rhenyl ether	ug/kg	ND	NED DA	ND	ND	MD	ND	ND	ND
Butyl benzyl phthalate	up/ks	MD	NED	ND	ND	ND	ND	ND	ND
4-Chloroaniline	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
1-Chloro-3-methylphenol	up/ks	MD	ND	MD	ND	ND	ND	MD	ND
2-Chloromaphthalene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	up/ks	ND	ND	ND	MD	מא	ND	ND	מא
1-Chlorophenyl phenyl ether	ug/kg	ND	ND	ND	ND	KD	ND	ND	ND
o-Cresol	us/ks	מא	MD	ND	MD	ND	MD	ND	ND.
a & r-Cresol(s)	us/ks	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	us/ks	CM	MD	MD	מא	ND	ND	MD	ND
Dibenz(a,h)anthracene	ug/kg	ND	ND	МD	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ug/kg	HD	MD	' ND	ND	MD	MD	ND	ND
1,2-Dichlorobenzene	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Bichlorobenzene	us/ks	HD	ND	MD	MD	MD	MD	DM	ND
1,4-Bichlorobenzene	ua/ka	ND	ND	· ND	, ND	ND	MD	ND	ND
3,3-Dichlorobenzene	uo/kg	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	ua/ko	ND	ND	MD	ND	ND	ND	ND	ND
2,6-Dichlorophenol	ขอ/ka	ND	ND	ND	ND	ND)	שא	מא	ND
Diethyl rhthalate	ua/ka	ND	ND	ND	ND	ND	ND	DM	ND
p-Dimethylaminoazobenzene	ua/ka	MD	מא	MD	ND	DM	ND	מא	ND
7,12-Dimethylbenz(a)-	ua/ks	ND	ND	ND	ND	ND	ND	ND	ND
anthracene	ua/ko	MD	ND	ND	HD	MD	ND	ND	ND
a.a-Dimethylrhenethyl-amine	ua/ka	MD	ND	ND	ND	ND	ND	ND	ND
2,1-Dimethylphenol	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	ua/ka	ND	ND	MD	ND	ND	ND	ND	ИD
1.3-Dinitrobenzene	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-o-cresol	ug/kg	MD	ND	ND	ND	MD	MD	ND	ND
2.4-Dinitrophenol	us/ks	ND	ND	MD	ND	פא	ND.	ND	ND
2.4-Dinitrotoluene	us/ka	ND		ND	ND	ND	MD	ND ·	ND
2.6-Dinitrotoluene	us/ks	ND oru	ND ND	ND ND	ND ND	MD MD	ND ND	OM OM	MD
Di-n-octyl phthalate Dirhenylamine	ua/ka ua/ka	ND ND	ND ND	ND DN	ND ND	ND ND	ND ND	MD ND	ND ND
Diritent (dathe	מא זעט	FÜ	IAT	MD	מה	III	TU.	IIU	MD

		RF109 -	Inactive	Land Tr	catment	Area and	Draina	se Ditch	ı
Sample point number		01	01	01	01	02	02	02	02
North of sample		VO.0	V3.0	V5.0	V7.0	VO.0	V3.0	V5.0	V7.0
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result
Method 8270 (con't)									
Ethyl methanesulfonate	uo/ka	MD	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	פא/פט	ND	MD	MD	ND	MD	מא	ND	MD
Fluorene	u9/kg	ND	ND	ND	ND	ND	MD	ND	ND
Hexachlorobenzone	ua/ka	ND	ND	ND	ND	MD	מא	ND	ND
Hexachlorobutadiene	us/ka	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclorentadiene	uo/ka	MD	ND	ND	ND	ND	מא	ND	ND
Hexachloroethane	ua/ks	ND	ND	ND	ДM	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	us/ks	MD	ND	ND	ND	ND	MD	ND	מא
Isorhorone	u9/k9	ND	ND	ND	ND	ND	ИD	ND	ND
3-Methylcholanthrene	us/ks	מא	MD	MD	ND	CM	ND	MD	MD
Methyl methanesulfonate	ua/ko	ND	ND	ND	ND	CM	ND	ND	MD
2-Methylnarhthalene	us/ks	ND	ND	ND	ND	MD	ND	ND	מא
Naphthalene	ua/ka	ND	MD	ND	ND	ND	ND	ND	ND
1-Naphthylamine	ua/ka	ND	· ND	ND	ND	ND	MD	MD	ND
2-Narhthylamine	us/ko	MD	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ug/kg	ND	ND	ND	ND	ND	MD	ND	ND
3-Nitroaniline	ua/ka	ND	ИD	ND	ND	MD	ND	ND	ND
1-Nitroaniline	us/ks	ND	ND	ND	MD	ND	ND	ND	HD
Nitrobenzene	ua/ka	MD	ND	ND	ND	KD	ND	ND	ND
2-Nitrophenol	uo/ka	ND	ND:	ND	OK	OM	ND	ND	ND
1-Nitrophenol	ua/ka	ND	MD	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-butylamine	ug/kg	MD	ND	ND	MD	מא	MD	MD	MD
N-Nitrosodimethylamine	us/ks	ND	ND	ND	ND	ND	ND	KD	MD
N-Nitrosodiphenylamine	uo/ke	ND	MD	ND	ФM	מא	ND	ND	MD
N-Nitroso-di-n-propylamine	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosopiperidine	us/ks	ND	פא	ND .	ND	ND	ND	ND	ND
Pentachlorobenzene	ua/ks	ND	ND	ND	ND	ND	ND	ND	ND
Pentachloronitrobenzene	ug/kg	ND	MD	MD	MD	ND	ND	MD	ND
Pentachlorophenol	ua/ka	ND	ND	ND	ND	MD	ND	ND	ND
Phenacetin	ug/kg	ND	ND	MD	MD	Œĸ	MD	ND	ND .
Phenanthrene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	ua/ka	ND	ND	ND	ND	ND	MD	ND	ND
2-Picoline	us/ks	ND	ND	ND	ND	ND	ND	ND	ND
Pronamide	us/ks	ND	ND	ND	MD	ND	ND	MD	ND
Pyrene	us/ks	ND	ND	ND	ND	· ND	ND	ND	ΝĐ
1,2,4,5-Tetrachloro-benzene	ua/ka	ND	MD	ND	ND	ND	ND	MD	ND
2,3,4,6-Tetrachlororhenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	uo/ks	ND	MD	ND	MD	ND	ND	MD	ND
2,4,5-Trichlorophenol	us/ka	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	uo/ka		ND	מא	ND	MD	MD	MD	ND
Benzidine	ua/ka		ND	ND	ND	ND	ND	ND	ND
Benzoic acid	ug/kg		MD	ND	ND	ND	ND	ND	ND
1-Chloronaphthalene	ua/ka		ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazinc	us/ks		ND	ND	ND	ND	מא	ND	ND
							· · -	. =	

RFI09 - Inactive Land	Troatment Area and	Meainage Nitch
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Sample maint number									••
Sample point number Userth of sample		01 V0.0	01 V3.0	01 V5.0	01 V7.0	02 V0. 0	02 V3.0	02 95.0	02 V7.0
Parameter Total Metals	Units	Result	Result	Result	Result	Result	Result	Result	Result
Antimony Arsenic Barium Beryllium Cadmium Chromium Cobalt Copper Lead Mercury Nickel Potassium Selenium Vanadium Zinc	mo/ks mo/ks mo/ks mo/ks mo/ks mo/ks mo/ks mo/ks mo/ks mo/ks mo/ks	ND 0.36 316 0.95 ND 13.9 3.2 7.4 13.4 ND 6.3 1210 ND 12.9 19.7	ND 320 0.88 ND 4.9 2.9 3.5 11.4 ND 5.2 712 MD 12.9 6.9	ND ND 332 1.1 ND 5.4 3.8 5.3 9.8 ND 5.7 1400 ND 14.1 9.3	ND ND 309 1.2 ND 5.4 4.0 5.7 13.2 MD 6.7 963 MD 14.7 9.2	ND ND 302 1.3 ND 11.8 5.8 9.1 16.1 ND 11.4 2110 NB 20.4 12.4	ND ND 318 1.2 ND 6.3 3.7 5.6 13.9 ND 6.8 1220 ND 12.0	ND MD 237 1.2 ND 7.2 4.4 5.7 13.4 ND 8.2 1640 ND 15.9 12.3	ND ND 262 0.59 ND 2.3 2.0 ND 11.9 ND ND ND ND ND ND ND ND ND ND ND ND ND

		RFI09 -	Inactive	Land Tr	eatment	Area and	Draina	se Ditch	
Samrle roint number		03	03	03	03	04	04	04	04
Derth of sample		VO.0	V3.0	V5.0	V7.0	V0.0	V3.0	V5.0	V7.0
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result
Method 8240									
Chloromethane	us/ks	ND	ND	ND	ND	ND	MD	ND	MD
Bromomethane	us/ks	ND	MD	ND	ND	ND	ND	ND	MD
Vinyl chloride	na\ka	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	ua/ka	ND	ND	ND	ND	MD	ND	ND	ND
Methylene chloride	ug/kg	ND	ДИ	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	us/ks	ND	ND	ND	MD	MD	ND	MD	MD
1.1-Dichloroethane	u9/k9	ND	ND ND	MD	ND	ND	ND	ND	ND
1,2-Dichloroethene (cis/trans) Chloroform	uo/ka ua/ka	CA CDA	ND ND	ND ND	ND ND	ND ND	ND	ND DA	ND NE
1,2-Dichloroethane	us/ks	ND	ND ND	MD MD	ND CDA	ND ND	ND CN	עא סא	ND ND
1.1.1-Trichloroethane	us/ks	ND ND	MD	ND ND	ND ND	ND	ND DN	ND	ND
Carbon tetrachloride	03/kg	DH. DH	MD	ND	ND	ND CIN	ND	תא מא	ND ND
Bromodichloromethane	us/ks	ND	ND	ND	ND	ND	MD	ND	ND ND
1,2-Dichlororrorane	us/ks	ND	ND	D	MD	MD	מא	ND	ND ND
trans-1,3-Dichlororropene	us/ks	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	uo/ks	MD	MD	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ug/kg	MD	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethene	uo/ko	ND	ND	מא	ND	ND	ND	MD	ND
Benzene	us/ks	ND	ND	NU	ND	ND	ND	ND	ND
cis-1,3-Dichloropropena	us/ks	ND	MD	ND	ND	MD	ND	ND	מא
2-Chloroethyl vinyl ether	ua/ka	ND	ЮD	ND	ND .	ND	ND	ND	ND
Bromoform	us/ko	ND	MD	ND	MD	ND	MD	ND	MD
1,1,2,2-Tetrachloroethane	ua/ka	ND	HD	ND	ND	ND	MD	ND	ND
Tetrachloroethene	ua/ka	ND	ND	ND	MD	ND	מא	מא	ND
Toluene	u9/ks	ND	MD	ND	ND	ND	ND	ND	ND
Chlorobenzene	ua/ka	MD	ND	ND	ND	ND	ND	MD	MD
Ethylbenzene	u9/k9	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	ua/ka	ND	ND	ND	ND	ND	MD	ND	ND
Acrolein	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	us/ks	ND	MD	ND	DN.	ND	MD	ND	ND
Carbon disulfide	us/ks	ND	ND	МD	ND	ND	MD	ND	ND
Dibromomethane trans-1,4-Dichloro-2-butene	u9/k3	MD	MD	MD	ND	ND	ND	ND	ND
Dichlorodifluoromethane	us/ks cs/eu	ND ND	ND ND	DA מא	ND ND	ND ND	ND ND	HD ND	ND
trans-1,2-Dichloroethene	us/ko	ND	ND	ND	CM CM	ND ND	תה מא	ND ND	ND ND
Ethanol	us/ks	ND	ND	ND D	MD MD	ND	20000	22000	12000
Iodomethane	nc\ka	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	us/ko	ND	ND	ND	ND	ND	מא	ND	םא מא
1-Methyl-2-pentanone (MIBK)	u9/kg	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	us/ks	ND	ND	ND	ND	MD	ND	ND	ND
Trichlorofluoromethane	u9/k9	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	us/ks	ND	ND	ND	ND	ND	ND	ND	מא
Vinyl acctate	us/kg	ND	ND	ND	ND	ND	ND	ND	ND
Ethyl methacrylate	us/ks	ND	ND	ND	ND	СИ	ND	ND	ND
Xylenes (total)	u9/k9	ND	MD	ND	ND	ND	ND	ND	ND
2-Hovanon	un/kn	ND	MD	Mn	MD	MD	MD	MD	MD

ND

ND

ND

ND

MD

ND

บ9/k9

ND

2-Hexanone

MD

DETAG -	Inactive 1	and Tro	atment Are	hac c	Mesinogo	Ditch
NF1U7 -	INGLLIVE I	_amu ii'o	alment me	unn	DIGINGSE	DITCH

Sample point number Depth of sample		03 V0.0	03 V3.0	03 V5.0	03 77.0	04 VO.0	04 V3.0	04 V5.0	04 V7.0
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result
Method 8270									
Acenarthene	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	us/ks	ND	ND	ND	ND	ND	ND	ND	ND
Acetophenone	บร/ko	MD	ND	ND	ND	ND	ND	ND	ND
4-Aminobirhenyl	ขร/ks	MD	MD	ND	MD	MD	ND	MD	ND
Aniline	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	us/ks	ND	ND	ND	ND	ND	MD	MD	ND
Benzo(a)anthracene	uo/ks	ND	ND	ND	ND	ND	ND	HD	MD
Benzo(b)fluoranthene	us/ks	D	HD	ND	ND	ND	ND	MD	MD
Benzo(k)fluoranthene	u9/kg	ND	ND	MD	ND	ND	ND	ND	ND
Benzo(s,h,i)perylone	ug/kg	ND	ND	ND	ND	MD	ND	ND	ND
Benzo(a)ryrene	us/ks	ND	MD	ND	ND	ND	ND	ND	ND
Benzyl alcohol	ua/ka	П	מא	MD	MD	MD	MD	MD	MD
bis(2-Chloroethoxy)-methane	u9/kg	MD	ND	ND	ND	ND	ND	MD	ND
bis(2-Chlorocthyl) ether	ua/ko	ND	MD	MD	ND	ND	ND	ND	MD
bis(2-Chloroisopropy1)-ether	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl) rhthalate	uo/ka	MD	MD	ДŊ	ND	MD	ND	HD	ND
4-Bromophenyl rhenyl other	ua/ks	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	ua/ka	ND	ND	MD	ND	MD	ND	ND	ND
4-Chloroaniline	u9/k9	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	us/ks	ND	MD	MD	ND	ND	ND	MD	ND
2-Chloromaphthalene	ua/ks	ND	ND	ND	ND	ND	ND	ND T	МD
2-Chlorophenol	ขอ\ka	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl rhenyl ether	us/ks	ND	ND	ND	ND	ND	ND	ND ND	ND
o-Cresol	ug/ko	ND	ND	ND	ND	ND	ND	ND	MD
m & p-Cresol(s)	u9/k9	ND	ND	MD	ND	ND	ND	ND	ND
Chrysenc	ug/kg	ND ND	MD	MD	MD	ND ND	ND	MD	MD
Dibenz(a,h)anthracene Di-n-butyl phthalate	us/ks us/ks	ND ND	ND ND	MD.	ND	MD	ND ND	ND	ND
1.2-Bichlorobenzene	ua/ka	ND ND	ND ND	ND ND	ND ND	ND No.	MD	ND	ND
1,3-Dichlorobenzene	ua/ka ua/ka	ND	MD	ND D	ND DN	NU ND	ND ND	ND ND	ND ND
1,4-Dichlorobenzene	u9/kg	ND ND	ND	ND	ND	ND ND	ND D	ND ND	ND ND
3,3-Dichlorobenzene	uo/ko	ND	ND	MD	ND	ND	ND	MD	ND
2,4-Dichlororhenol	ua/ka	ND	ND ND	ND	ND	ND	ND	ND	ND
2,6-Dichlorophenol	uo/ka	MD	ND	ND	ND	MD	ND	ND	ND
Dicthyl phthalate	us/ks	ND	תא	ND	EN CEN	ND	ND	ND	ND
r-Dimethylaminoazobenzens	us/ks	ND	ND	ND	ND	MD	ND	HD	ND
7,12-Dimethylbenz(a)-	uo/ka	ND	ND	ND	ND	ND	ND	ND	ND
anthracene	us/ks	MD	MD	ND	AD OTHER	MD	ND	MD	ND
a,a-Dimethylrhenethyl-amine	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND
2,1-Dimethylahenol	up/kp	ND	ND	ND	ND	ND	ND	MD	ND
Dimethyl rhthalate	us/ko	ND	ND	ND	ND	ND	ND	ND	NED
1,3-Dinitrobenzene	uo/ks	ND	MD	ND	ND	MD	ND	ND	ND
4.6-Dinitro-o-cresol	us/ks	ND	ND	ND	ND	ND	ND	ND	ND
2.4-Dinitrophenol	us/ks	ND	ND	MD	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	ua/ks	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotolucne	uo/ks	CM	ND	MD	ND	ND	מא	ND	ND
Di-n-octyl rhthalate	ua/ka	ND	ND	ND	ND	ND	ND.	ND	ND
Dishenvlamine	uo/ko	ND	ND	ND	ND	ND	ND	מא	MD

		RF109 -	Inactive	Land Tr	eatment	Area and	Braina	se Ditch	ı
Sample point number		03	03	03	03	04	04	04	04
Derth of sammle		V0.0	V3.0	V5.0	V7.0	Y0.0	V3.0	V5.0	V7.0
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result
Method 9270 (con't)									
Ethyl methanesulfonate	us/ka	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ua/ka	MD	MD	ND	ND	ND	ND	ND	ND
Fluorene	ua/ka	ND	ND	ND	ND	ND	MD	ND	ND
Hexachlorobenzene	ug/kg	ND	MD	CI4	מא	HD	ND	ND	DM
Hexachlorobutadiene	u9/k9	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclorentadiene	כא/פט	ND	ND	ND	ND	MD	ND	ND	ND
Hexachloroethane	uo/ka	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ug/kg	MD	ND	ON	MD	ND	ND	ND	ND
Isophorone	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND
3-Methylcholanthrene	us/ko	ND	מא	ND	מא	CM	MD	םא	ND
Methyl methanesulfonate	us/ka	ND	ND	ND	ND	ND	ΝD	ND	ND
2-Methylnaphthalene	us/ks	ND	MD	ND	ND	ND	DM	MD	ND
Narhthalene	u9/k9	ND	ND	ND	ND	ND	ND	ND	ND
1-Narhthylamine	us/ks	ND	ND	ND	MD	ND	ND	מא	ND
2-Narhthylamine	ua/ka	ND	ND	ND	ND	MD	ND	ND	ND
2-Nitroaniline	ug/kg	D	ND	MD	ND	DM	MD	ND	ND
3-Nitroaniline	us/ks	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	น3/k3	HD	MD	ND	ND	ND	OM	MD	MD
Nitrobenzene	u9/k9	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	ua/ka	MD	MD	OM	מא	ND	ND	DM	ND
4-Nitrophenol	us/ks	MD	ND	ND	ND	ND	ND	ND	ND
N-Nitroso-di-n-butylamine	ua/ka	MD	ND	ND	MD	D	ND	MD	ND
N-Nitrosodimethylamine	ua/kc	ND	ND	ND	ND	ND	ND :	ND	ND
N-Nitrosodiphenylamine	u9/kg	MD	ND	ND	מא	ND	MD	ND	ND
N-Nitroso-di-n-propylamine	ua/ka	ND	ND	ND	ND	ND	ND	КD	ND
N-Nitrosopiperidine	ua/ka	DIA	MD	ND	MD	ND	ND	MD	ND
Pentachlorobenzene	na\ka	ND	ND	ND	ND	ND	ND	ND	ND
Pentachloronitrobenzene	us/k3	ND	ND	ND	ND	ND	MD	מא	ND
Pentachlorophenol	ขอ/ka	ND	ND	ND	ND	ND	ND	ND	ND
Phenacetin	ua/ka	ND	ND	ND	ND:	ND	ND	ND	ND
Phenanthrene	us/ks	ND	ND	ND	ND	ND	ND	ND	ND
Phenol	uo/ka	ND	מא	ND	מא	MD	ND	ND	ND
2-Picoline	u9/k9	ND	ND	ND	ND	ND	ND	ΝĐ	ND
Pronamide	ขว/kg	ND	ND	ND	ND	MD	ND	ND	ND
Pyrene	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4,5-Tetrachloro-benzene	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND
2.3.4.6-Tetrachlorophenol	us/ko	ND	ND	ND	ND	ND	ND	ND	МD
1,2,4-Trichlorobenzene	กล\หล	ND	ND	ND	ND	MD	ND	ND	ND
2,4,5-Trichlorophenol	มล\หล	ND	ND	ND	ND	ND	ND	ND	ND
2.4.6-Trichlorophenol	ขอ/kg	ND	ND	ND	MD	ND	ПH	ND	ND
Benzidine	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic acid	ขว/ka	MD	ND	ND	ND	ND	HD	OM.	ND
1-Chloronarhthalene	na\ka	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dirhenylhydrazine	ua/ka	ND	ND	MD	MD	ND	ND	ND	MD

		RF109 -	Inactive	Land Tr	catment	Area and	Draina	se Ditch	:
Sample roint number Depth of sample		03 V0.0	73.0 03	03 V5.0	03 97.0	04 V0.0	04 V3.0	04 95.0	04 V7.0
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result
Total Metals									
Antimony	ma/ka	MD	ND	HD	ND	ND	ND	ND	ND
Arsenic	ma/ka	ND	ND	מא	9.58	2.1	ND	ND	ND
Barium	ma/kg	214	307	334	224	406	275	309	239
Beryllium	ma/ka	0.73	1.0	1.2	1.1	0.91	1.3	1.1	1.4
Cadmium	ms/ka	MD	ΝD	HD	ND	ND	MD	ND	ND
Chromium	mo/ko	4.9	5.1	7.5	7.6	42.3	6.7	5.2	8.1
Cobalt	ma/ka	1.6	2.1	3.4	3.2	4.4	4.1	3.4	4.8
Correr	ma/ko	1.5	4.8	8.5	5.8	13.9	5.5	5.2	7.2
Load	na/ka	6.0	8.0	9.9	7.3	29.7	13.9	12.4	16.4
Mercury	ma/ka	DM	ND	ND	ND	ND	ND	מא	ND
Nickel	ma/ka	5. i	6.7	9.1	8.2	10.0	7.4	5.1	7.9
Potassium	ma/ka	991	955	1300	1860	1250	1130	993	1560
Sclenium	ms/ko	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	mg/kg	10.1	13.1	15.1	14.9	15.4	16.4	12.8	18.1

8.7 9.6 13.4

ma/ka

Zinc

13.3

69.6

11.1

9.1

14.0

RFI09 -	Inactive	Land	Treatment	Area	and	Drainage	Ditch

Sample point number		05	05	05	05	05
Derth of sample		V0.9	V3.0	V5.0	D5.0	V7.0
Parameter	Units	Result	Result	Result	Result	Result
W 11 1 0020						
Method 3240						
Chloromethane	ua/ka	ND	ND	ND	ND	ND:
Bromomethane	us/ks	ND	MD	מא	ND	MD
Vinyl chloride	ug/kg	HD	ND	ND	ND	ND
Chloroethane	uo/ko	ND	מא	ND	MD	ΉĐ
Methylenc chloride	ug/kg	ND	ND	MD	MD	ND
1,1-Dichloroethene	ug/kg	МÐ	MD	ND	MD	MD
1,1-Dichlorocthane	ua/ka	ND	ND	ND	MD	ND
1,2-Dichloroethene (cis/trans)	up/ks	ND	ND	MD	ND	MD
Chloroform	us/ks	ND	ND	ND	ND	ND
1,2-Dichloroethane	นย/kg	ND	ND	ND	ND	MD
1,1,1-Trichlorocthane	ua/ka	ND	ND	MD	ND	ND
Carbon tetrachloride	ug/ko	ND	ND	ND	MD	ND
Bromodichloromethane	ug/kg	ND	MD	ND	ND	MD
1,2-Dichloropropane	up/ks	םא	ND	MD	ND	MD
trans-1,3-Dichloroprorene	us/ks	ND	ND	ND	ND	ND
Trichloroethene	up/kg	ND	MD	ND	ND	MD
Dibromochloromethane	us/ks	ND	ND	ND	ND	ND
1,1,2-Trichloroethene	us/ks	ND	MD	ND	MD	MD
Renzene	ขอ/kg	MD.	ND	ND	ND	MD
cis-1,3-Dichloropropens	us/ko	ND	ND	MD	MD	ND
2-Chloroethyl vinyl ether	ug/kg	ND	ND	ND	ND	ND
Bromoform	ขอ/ka	HD	ND	ND	ND	MD
1,1,2,2-Tetrachloroethane	us/ks	ND	ND	ND	ND	ND
Tetrachloroethene	uo/ka	מא	ND	MD	ND	ND
Toluene	us/ks	ND	ND	ND	ND	ND
Chlorobenzone	นว/ks	ND	ND	ND	ND	MD
Ethylbenzene	บ9/k9	ND	MD	ND	ND	ND
Acetone	uo/ks	ND	ND	ND	ND	ND
Acrolein	us/ks	ND	ND	ND	ND	ND
Acrylonitrile	us/ks	ND	ND	ND	MD	MD
Carbon disulfide	us/ks	ND	ND	ND	ND	ND
Dibromomethane	ua/ka	ND	ND	MD	ND	ND
trans-1,4-Dichloro-2-butene	ug/kg	ND	ND	ND	ND	ND
Dichlorodifluoromethane	u3/ks	MD	ND	ND	ND	ND
trans-1,2-Dichloroethene	u9/k9	ND	ND	ND	MD	ND
Ethanol	ua/ko	ND	ND	ND	ND	ND
Iodomethane	ua/ka	ND	ND	ND	ND	ND
2-Butanone (MEK)	ua/ko	ND	ND	ND	MD	ND
4-Methyl-2-pentanone (MIBK)	ua/ka	ND	ND	ND	MD	ND
Styrene	us/ks	ND	ND	ND	ND	ND
Trichlorofluoromethane	us/ks	ND	ND	MD	ND	ND
1,2,3-Trichlorograms	uɔ/kə	ND	MD	ND	ND	ND
Vinyl acetate	u9/ks	ND	ND	ND	ND	ND
Ethyl methacrylate	uo/ks	ND	ND	ND	ND	ND
Xylencs (total)	us/ks	ND	HD	ND	ND	ND
2-Hexanone	uo/ka	MD.	ND	ND	ND	ND
			-			

RFI09 - Inactive Land Treatment Area and Drainage Ditch

Sample point number Derth of sample		05 V0.0	05 73.0	05 V5.0	05 05.0	05 97.0
Parameter	Units	Result	Result	Result	Result	Result
Method 8270						
Acenarthene	ua/ka	ND	ND	ND	ND	ND
Acenaphthylene	us/ks	ND	MD	MD	ND	ND
Acetophenone	ua/ka	ND	ND	ND	ND	ND
4-AminobiPhenyl	ขว/ka	CM	ND	ND	ND	ND
Aniline	ua/ka	MD	ND	ND	ND	ND
Anthracene	แล/ka	ND	ND	ND	MD	ND
Benzo(a)anthracene	u9/k9	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	פא/כט	MD	ND	MD	ND	MD
Benzo(k)fluoranthene	na\ka	ND	ND	ND	ND	ND
Benzo(9,h,i)perylene	ua/ka	מא	ND	MD	ND	ND
Benzo(a)ryrenc	na\ka	ND	ND	ND	ND	ND
Benzyl alcohol	na\ka	ND	ND	ND	ND	ND
bis(2-Chloroethoxy)-methane	119/kg	ND	ND	ND	ND	ND
bis(2-Chloroethyl) ether	ua/ko	D	ND	ND	ND	ND
bis(2-Chloroisopropyl)-ether	บ9/kg	ND	ND	ND	ND	ND
bis(2-Ethylhexyl) phthalate	na\ka	ND	MD	MD	MD	ND
1-Bromophenyl phenyl ether	us/ks	ND	КD	ND	ИD	ND
Butyl benzyl phthalate	na\ka.	MD	ND	ND	ND	ND
4-Chloroaniline	ua/ka	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	na\ka	ND	ND	ND	MD	ND
2-Chloromaphthalene	ua/ks	ND	ND	ND	МD	ND CM
2-Chlorophenol	uo/ka	ON	ND	ND	MD	ND
1-Chlorophenyl phenyl ether	us/ks	ND	ND	ND NO	ND	ND
o-Cresol	119/K9	ND	ND	MD	ND	מא
m & p-Cresol(s)	u9/ks	ND	ND	ND	ND	ND
Chrysene	ua/ka	MD	ND	ND	ND	ND ND
Bibonz(a,h)anthracene	na\ka	ND	ND	ND	ND	ND
Di-n-butyl phthalate	นจ/ko	ND	ND	ND	MD	ND
1.2-Dichlorobenzene	us/ks	ND	ND 1	ND	ИD	ND
1.3-Dichlorobenzene	ca/eu	ND	ND	ND	ND	ND
1,4-Dichlorobenzenc	ug/kg	ND	ND.	ND	ND	ND
3,3-Dichlorobenzene	ua/ko	MD	MD	ND	ND	MD
2,4-Bichlorophenol	บ9/kg	ND	ND	ND	ND	ND
2,6-Dichlorophenol	ua/ka	ND	MD	ND	ND	ND
Diethyl phthalate	ua/ka 	ND	ND	ND	ND	ND
p-Dimethylaminoazobenzene	us/ks	ND	ND	MD	ND	ND
7,12-Dimethylbenz(a)-	us/ks	MD TO	ND	ND	ND	ND
anthracene	us/ks	ND	ND	ND	ND	ND
a,a-Dimethylphenethyl-amine	ua/ka	ND	ND	ND	ND	ND
2,4-Dimethylphenol	us/ks	ND	ND	MD	ND	ИD
Dimethyl Phthalate	ug/kg	ND	ND	ND	ND	ND
1,3-Dinitrobenzene	us/ko	MD	ND	ND ND	ND	ND
4.6-Dinitro-o-cresol	us/ka	ND	ND	ND	ND	ND
2,4-Dinitrophenol	uo/ka	MD	ND ND	ND ND	MD	MD
2.4-Dinitrotoluene	us/ks	ND ND	ND ND	ND ND	ND ON	ND
2.6-Dinitrotoluene Di-n-octyl phthalate	ug/kg	ND ND	MD MD	ND MD	ND ND	ND ND
	us/ks	ND	ND	ND ND	ND ND	ND
Dirhenylamine	ug/kg	ND	ND	ND	ND	MD

RFI09 - Inactive Land Treatment Area and Drainage Ditch

Sample roint number		05	05	05	05	95
Derth of sample		V0.0	V3.0	V5.0	D5.0	V7.0
Parameter	Units	Result	Result	Result	Result	Result
Method 8270 (con't)						
Ethyl methancsulfonate	ua/ka	ND	ND	ND	ND	ND
Fluoranthene	us/ks	ND	MD	DM	ND	ND
Fluorene	ua/ka	ND	ND	MD	ND	ND
Hexachlorobenzene	บ9/kg	ND	MD	ИD	ND	ND
Hexachlorobutadiene	ug/kg	ИD	ND	ND	ND	ND
Hexachlorocyclopentadiene	na\ka	ND	פא	מא	MD	MD
Hexachloroethane	us/ka	MD	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ua/ka	MD	MD	ND	ND	MD
Isorhorone	us/ka	MD	ND	ND	ND	ND
3-Methylcholanthrene	ub/ka	ND	ND	ND	ND	ND
Methyl methanesulfonate	uc/ka	ND	ND	ND	ND	ND
2-Methylnaphthalene	ug/kg	ND	ND	ND	ND	ND
Narhthalene	uc/ka	ND	ND	ND	ND	ND
1-Narhthylamine	ua/ka	ND	ND	ND	ND	ND
2-Naphthylamine	บย/ka	ND	ND	МD	ND	ND
2-Nitroaniline	ub/ks	ND	ND	םא	ND	ND
3-Nitroaniline	ua/ka	ND	ND	ND	ND	ND
4-Nitroaniline	ug/kg	ND	ND	ND	ND	ND
Nitrobenzene	us/ks	ND	ND	ND	ND	ND
2-Nitrorhenol	ug/kg	ND	ND	ND	ND	ND
4-Nitrorhenol	ug/kg	ND	ND	ND	ND	ND
N-Nitroso-di-n-butylamine	ug/kg	ND ND	MD	ND ND	ND	ND
N-Nitrosodimethylaminc	us/ka	ND ND	MD	ND	ND	MD
N-Mitrosodiphenylamine	ua/ka	nd Nd	MD	MD MD	MD	ND ND
N-Nitroso-di-n-propylamine N-Nitrosoriperidine	us/ks us/ks	ND	an Con	ND DN	ND ND	ND ND
Pentachlorobenzene	na\ka	ND	MD	ND	ND	ND
Pentachloronitrobenzene	us/ko	אם מא	ND ND	ND ND	ND	ND
Pentachlorophenol	ug/kg	ND DA	ND	ND	ND	ND
Phenacetin	U9/K9	MD	ND	שה	ND	ND.
Phenanthrene	ua/ka	ND	ND	ND	ND	ND
Phenol	us/ks	ND	ND	ND	ND	MD
2-Picoline	ug/kg	ND	ND	ND	ND	ND
Pronamide	ug/kg	HD	ND	ND	ND	ND
Pyrene	u9/k9	ND	ND	ND	ND	ND
1,2,1,5-Tetrachloro-benzene	ua/ka	ND	מא	סא	ND	ND
2,3,4,6-Tetrachlororhenol	ug/kg	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	us/ks	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	us/ks	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	ua/ka	MD	ND	MD	ND	ND
Bonzidine	us/kc	ND	ND	ND	מא	ND
Benzoic acid	us/ks	ND	MD	MD	ND	MD
1-Chloronaphthalene	ua/ka	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine	ua/ka	ND	ND	ND	ND	ND
•			_	_	_	

- אמנימי	Inactive	Land	Treatment	Area	and	Drainage	Ditch
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Parameter Units Result
Antimony Arsenic ms/ks ND ND ND ND ND ND Barium ms/ks 285 418 333 375 313 Beryllium ms/ks 1.2 0.77 0.94 0.91 1.3 Cadmium ms/ks MD ND ND ND ND ND Chromium ms/ks MD ND ND ND ND ND Cobalt ms/ks 4.6 5.0 3.5 3.9 4.5 Correr ms/ks 5.5 11.9 3.5 4.2 6.4 Morcury ms/ks ND ND ND ND ND Morcury Nickel ms/ks ND ND ND ND ND Nickel ms/ks 9.1 9.7 5.5 6.9 9.2 Selenium ms/ks 1160 1100 825 935 1590
Vanadium

RFI09 - Inactive Land Treatment Area and Drainage Ditch

Parameter	Sample point number Derth of sample		06 V0. 0	06 V3.0	06 B3.0	05 V5. 0	06 V7.0
Chloromethane	Parameter	Units	Result	Result	Result	Result	Result
Promomethane	Method 8240						
Promomethane	Chloromethano	us/ks	ND	ND	ND	MD	ND
Chlorocthane	Bromomethane	us/ks	ND	MD	ND	ND	ND
Methylene chloride	Vinyl chloride	uo/ko	ND	ND	MD	ND	MD
1.1-Dichlorocthene	Chloroethane	us/ks	ND	MD	ND	CM	DM
1.1-Dichlorocthane 1.2-Dichlorocthane 1.2-Dichlorocthane 1.2-Dichlorocthane 1.2-Dichlorocthane 1.2-Dichlorocthane 1.2-Dichlorocthane 1.3-Dichlorocthane 1.3-Dichloroc	Methylene chloride	ua/ka	ND	מא	ND	ND	ND
1.2-Dichlorosthene (cis/trans) us/ks	1,1-Dichloroethene	ub/ka	ND	MD	DM	פא	MD
Chloroform	1.1-Dichloroethane	ua/ka	МD	ND	ND	MD	ND
1.2-Dichloroethane 1.1.1-Trichloroethane 1.2-Dichloroethane 1.3-Indichloroethane 1.3-Indichloroethane 1.3-Indichloroethane 1.3-Dichloroethane 1.3-	1.2-Dichlorosthene (cis/trans)	ua/kg	ND	ND	ND	ND	מא
1.1.1-Trichloroethane	Chloroform	us/ka	ND	ND	ND	ND	ND
Carbon tetrachloride	1,2-Dichloroethane	ua/ka	ND	MD	ND	ND	MD
Rromodichloromethane	1,1,1-Trichloroethane	ug/kg	ND	ND	ND	ND	ND:
1.2-Dichloropropage	Carbon tetrachloride	ua/ka	ND	ND	ND	ND	ND
trans-1,2-Dichloropropene us/ks ND <	Bromodichloromethane	us/ks	ND	ND	ND	ND	ND
Trichlorocthene	1.2-Dichloropropane	us/ks	ND	CM	ND	ND	MD
Dibromochloromethane	trans-1,3-Dichloropropene	us/ks	ND	ND	ND	ND	ND
1.1.2-Trichloroethene	Trichloroethene	ug/kg	ND	ND	ND	MD	MD
Benzene	Dibromochloromethane	us/ko	ND	ND	ND	ND	מוא
Cis-1,3-Dichlororropene	1.1.2-Trichloroethene	us/ks	ND	ND	MD	ND	ND
2-Chloroethyl vinyl ether ug/kg ND <	Benzene	ua/ka	ND	ND	ND	ND	ND
### Bromoform	cis-1,3-Dichlororropene	up/ka	MD	ND	ND	OM	MD
1.1.2.2—Tetrachloroethane	2-Chloroethyl vinyl ether	ua/ka	ND	ND	ND	ND	ND
Tetrachloroethene	Bromoform	us/ko	DM	MD	ND CM	ND	ND
Toluene	1.1.2.2-Tetrachloroethane	us/ka	ND	ND	ND	ND	ND
Chlorobenzene u3/k3 ND	Tetrachloroethene	up/ka	ND	ND	MD	MD	ND
Ethylbenzene ug/kg ND	Toluene	us/ks	ND	ND	ND	MD	ND
Acrolein	Chlorobenzene	us/ko	ND	ND	ND	ND	MD
Acrolein	Ethylbenzene	ug/kg	ND	ND	ND	ND	ND
Acrylonitrile ug/kg ND	Acetone	ขอ/ka	MD	ND	MD	ND	MD
Carbon disulfide ug/kg ND ND <td>Acrolein</td> <td>us/ks</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND</td> <td>ND</td>	Acrolein	us/ks	ND	ND	ND	ND	ND
Carbon disulfide ug/kg ND ND <td>Acrylonitrile</td> <td>us/ks</td> <td>ND</td> <td>MD</td> <td>ND</td> <td>HD</td> <td>ND</td>	Acrylonitrile	us/ks	ND	MD	ND	HD	ND
trans-1.4-Dichloro-2-butene ug/kg ND	Carbon disulfide	ua/ks	ND	ND	ND		
Dichlorodifluoromethane us/ks ND ND <th< td=""><td>Dibromomethane</td><td>ขอ/ks</td><td>MD</td><td>MD</td><td>ND</td><td>ND</td><td>ND</td></th<>	Dibromomethane	ขอ/ks	MD	MD	ND	ND	ND
trans-1.2-Dichloroethene us/ks ND ND <t< td=""><td>trans-1.6-Dichloro-2-butene</td><td>us/ko</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td><td>ND</td></t<>	trans-1.6-Dichloro-2-butene	us/ko	ND	ND	ND	ND	ND
Ethanol	Dichlorodifluoromethane	ug/kg	ND	MD	ND	MD	ND
Todomethane	trans-1,2-Bichloroethene	us/ks	ND	ND	ND	ND	ND
2-Butanone (MEK)	Ethanol	us/ks	ND	MD	ND	ND	ND
1-Methyl-2-rentanone (MIBK) ua/ka ND	Iodomethane	us/ks	ND	ND	ND	NED	ND
Striene ua/ka ND	2-Butanone (MEK)	uo/ks	MD	MD	ND	ND	ND
Trichlorofluoromethane us/ks ND ND ND ND 1.2.3-Trichloromomene us/ks ND ND <td< td=""><td>1-Methyl-2-rentanone (MIBK)</td><td>ug/kg</td><td>ND</td><td>МD</td><td>ND</td><td>ND</td><td>ND</td></td<>	1-Methyl-2-rentanone (MIBK)	ug/kg	ND	МD	ND	ND	ND
1.2.3-Trichlorograme us/ks MD	Styrene	us/ks	ND	ND	MD		
1.2.3-Trichloropropane ug/kg ND	Trichlorofluoromethane	us/ks	ND	ND	ND		
Vinyl acetate ug/kg ND	1.2.3-Trichloropropane	us/ks	HD	MD	ND		
Ethyl methacrylate ua/ka ND ND ND ND ND ND ND ND	Vinyl acetate	ua/ka	ND	ND	ND		
	Ethyl methacrylate	ua/ka	ND	ND	MD	ND	ND
2-Hexanone naka ND ND ND ND ND		ua/ka	ND	ND	ND	ND	ND
	2-Hexanone	ua/ka	ND	ND	ND	NĐ	ND

RFIO9 - Inactive Land Treatment Area and Drainase Ditch

Sample point number Depth of sample		06 70.0	06 V 3.0	06 D3.0	06 V5.0	06 77.0
Parameter	Units	Result	Result	Result	Result	Result
Method 8270						
Acenapthene	ug/kg	MI)	ND	ND	ND	ND
Acenaphthylene	uo/ka	MD	ND	ND	ND	ND
Acetophenone	u9/k9	ND	ND	ND	ND	ND
4—AminobiPhenyl	na\ka	ND	ND	ND	MD	MD
Aniline	ua/ka	ND	MD	ND	מא	ND
Anthracene	ua/ka	ND	ND	D	MD	ND
Benzo(a)anthracene	ug/kg	ND .	ND	ΩM	ND	ND
Benzo(b)fluoranthene Benzo(k)fluoranthene	ug/kg	MD DA	ND ND	ND ND	AD AD	ND OIL
	us/ks			ND		ND
Benzo(b,h,i)perylane Henzo(a)pyrane	ua/ka	ND ND	ND ND	ND DN	ND ND	D ND
Benzyl alcohol	us/ks	ND ND	MD	MD	ND	ND DN
his(2-Chloroothoxy)-methane	us/ks	ND	ND	ND	ND	ND
bis(2-Chlorocthyl) ether	us/ks	ND	ND	ND	ND	ND
bis(2-Chloroisopropy1)-ether	uo/ko	ND	ND	ND	ND	ND
bis(2-Ethylhoxyl) rhthalate	uo/ko	MD	ND	ND	ND	ND
4-Bromorhenyl phenyl ether	us/ks	ND	ND	ND	ND	ND
Butyl benzyl phthalate	u9/k3	ND	ND	MD	ND	ND
1-Chloroaniline	us/ks	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	us/ks	MD	ND	ND	MD	Œ
2-Chloromaphthalens	ua/ka	ND	ND	ND	ND	ND
2-Chlorophenol	นว/ka	ND	ND	ND	MD	ND
1-Chlorophenyl phenyl ether	ua/ks	ND	ND	ND	HD	ND
o-Cresol	ua/ka	סא	MD	ND	ND	DM
m & p-Cresol(s)	ug/kg	ND	ОM	ND	ND	ND
Chrysene	na/ka	26000	מא	מא	MD	מא
Dibenz(a,h)anthracene	ua/ka	ND	ND	ND	ND	ND -
Di-n-butyl shthalate	u9/k9	ND	MD	ND	MD	MD
1,2-Dichlorobenzene	us/ks	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	na\ko	ND	ND	ND	ND	ND
3.3-Dichlorobenzene	uo/ka	ND	MD	MD	ND	ND
2,4-Dichlorophenol	us/ka	ND	ND	MD	ND	ND
2,6-Dichlorophenol Dicthyl phthalate	uo/ka	OM	ND	ND	ND ND	MD
p-Dimethylaminoazobenzene	ua/ka ua/ka	ND ND	ND ND	ND ND	ND ND	ND ND
7,12-Dimethylbenz(a)-	ug/kg	ND	ND	ND	ND	ND
anthracene	us/ks	ND	ND	ND	ND	ND
a,a-Dimethylphenethyl-amine	us/ka	ND	ND	ND	ND	ND
2,4-Dimethylphenol	us/ks	ND	פא	MD	ND	ND
Dimethyl phthalatc	ua/ka	ND	ND	ND	ND	ND
1,3-Dinitrobenzene	ua/ko	ND	ND	ND	HD	ND
4.6-Dinitro-o-cresol	ug/kg	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ua/ka	ND	MD	ND	ND	ND
2,4-Dinitrotoluene	ug/kg	ND	ND	ND	ND	ND
2,5-Dinitrotoluene	ug/kg	ND	ND	מא	ND	ND
Bi-n-octyl phthalate	ug/kg	ND	ND	ND	HD	ND
Diphenylamine	ua/ka	ND	MD	ND	מא	ND

RFI09 - Inactive Land Treatment Area and Drainage Ditch

Sample point number		06	06	90	06	06
Dorth of sample		VO.0	V3.0	D3.0	V5.0	V7.0
Parameter	Units	Result	Result	Result	Result	Result
Method 8270 (con't)						
nethod 6270 (Coll 17						
Ethyl methanesulfonate	ua/ka	ND	ND	ND	ND	ND
Fluoranthene	ug/kg	ND	ND	ND	ND	MD
Fluorene	ug/kg	ND	ND	ND	ND	ND
Hexach1orobenzene	ug/kg	ND	MD	ND	ND.	ND
Hexachlorobutadiene	us/ks	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	ua/ka	MD	ND	ND	ND	ND
Hexachlorocthane	ug/kg	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	ue/ke	ИD	МÐ	MD	MD	MD
Isophorone	u9/kg	ND	ND	ND	ND	ND
3-Methylcholanthrene	ua/ka	MD	ND	ND	ND	MD
Mothyl methanesulfonate	ua/ka	ND	ND	ND	ND	ND
2-Methylnaphthalene	u9/k9	DM	ND	ND	DM	MD
Naphthalene	ug/kg	ND	ND	ND	ND	ND
1-Narhthylamine	ug/kg	ND	MD	ND	ND	ND
2-Narhthylamine	na\ka	ND	מא	ND	ND	ND
2-Nitroaniline	ua/ka	ND	ND	מא	ND	ND
3-Nitroaniline	ug/kg	NI	ND	ND	ND	MD
<pre>9-Nitroaniline</pre>	na/ko	ND	MD	ND	סא	ND
Nitrobenzene	ua/ka	ND	ND	ND	ND	ND
2-Nitrophenol	us/ks	MD	MD	MD	ND	ND
4-Nitrorhenol	ug/kg	ND	ND	MD	ND	ND
N-Nitroso-di-n-butylamine	ua/ka	מא	ND	פא	מא	MD
N-Nitrosodimethylamine	ua/ka	ND	ND	ND	ND	ND
N-Nitrosodirhenylamine	ua/ka	ND	ND	ND	ND	MD
N-Nitroso-di-n-rrorylamine	u9/k9	MD	ND	ND	ND	ND
N-Mitrosopiperidine	up/ka	ND	MD	ND	ND	מא
Pentachlorobenzene	uc/ka	ND	ND	ND	ND	ND
Pentachloronitrobenzene	ua/ko	ND	ND	ND	ND	MD
Pentachlororhenol	us/ka	ND	ND	ND	ND	ND
Phenacetin	ua/ka	MD	ND	ND	ND	MD
Phenanthrene	u9/k9	ND	מא	ND	ND	ND
Phenol	ua/ka	ND	ND	ND '	ND	ND
2-Picoline	us/ks	ND	КD	ND	ND	ND
Pronamide	ua/ka	MD	ND	ND	ND	ND
Pyrene	ua/ka	20000	ND	ND	ND	ND
1,2,4,5-Tetrachloro-benzene	uo/ka	מא	HD	ND	MD	ND
2,3,4,6-Tetrachlorophenol	ua/ka	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	ua/ka	ND	ND	ND	MD	ND
2.4.5-Trichlorophenol	ua/ka	ND	ND	ND	ND	ND
2.4.5-Trichlorophenol	us/ks	ND	ND	ND	MD	MD
Benzidine	u9/k9	ND	ND	MD	ND	ND
Benzoic acid	ua/ka	D	MD	ND	ND	ND
1-Chloronarhthalene 1,2-Dirhenylhydrazine	u9/k9	ND ND	ND	ND	ND	MD MD
117_DithentinialsTUG	ขว/ka	MD	ND	ND	AD	ND

RFI09 -	Inactive	Land	Treatment	Area	and	Drainage	Ditch
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Sample point number		05	05	٥٤	05	05
Derth of sample		VO. 0	V3.0	D3.0	V5.0	V7.0
Parameter	Units	Result	Result	Result	Result	Result
Total Motals						
Antimony	ma/ka	MD	ND	MD	ND	ND
Arsenic	ma/ka	1.7	1.2	ND	ND	0.53
Barium	ma/ka	250	243	225	241	319
Boryllium	ms/ks	0.79	1.1	1.1	0.27	0.97
Cadmium	ms/kg	ND	MD	ND	ND	ND
Chromium	mo/ka	7.8	6.3	5.3	5.1	4.1
Cobalt	ma/ka	2.3	2.5	2.5	1.9	1.7
Correr	mg/kg	14.3	5.4	5.4	4.5	4.9
Lead	mg/kg	28.1	9.2	8.1	7.5	9.1
Mercury	mg/kg	ND	ND	ND	ND	ND
Nickel	ms/ks	11.4	7.0	7.2	5.3	5.0
Potassium	ms/ks	939	1110	1120	397	328
Selonium	mo/ka	ND	КD	ND	ND	MD
Vanadium	mg/kg	14.5	14.5	14.2	12.5	13.0
linc	ma/ks	22.8	10.5	10.4	8.4	7.8

RFI09 - Inactive Land Treatment Area and Drainage Ditch

Samrle point number		07	07	07	07		01
Derth of sample		V0.0	V3.0	V5.0	V7.0		E5.0
Parameter	Units	Result	Result	Result	Result	Units	Result
Method 8240							
Chloromethane	ua/ks	ND	MD	NIT)	MT	/1	MD
Bromomethane	ua/ka ua/ka	ND UN	ND ND	ND ND	MD	ua/L	ND ND
Vinyl chloride	us/ks	ND	ND	ND ND	DA CM		MD MD
Chloroethane	uo/ko	MD	ND	ND	ND CM	ua/L	MD
Mothylene chloride	us/ka	ND	ND	ND			ON.
1.1-Dichloroothene	us/ks	ND	ND CM	ND	ND ND	us/L /1	ND ND
1.1-Dichloroethanc	ua/ka	ND ND	ND ND	ND ND	ND ND	us/L	ND ND
1.2-Dichloroethene (cis/trans)		ND CM	ND	תה מא	ND ND	u9/L	ND ND
Chloroform	us/ks	MD	ND DN			uɔ/L	ND ND
1,2-Dichloroethane	us/ks	ND	ND	ON ON	ND ND	u9/L	CN CN
					MD	u3/L	ND
1,1,1-Trichloroethane Carbon tetrachloride	uo/ka	ND ND	ND	ND	ND	us/L	ND ND
Bromodichloromethane	uo/ke	ND ND	ND ND	CM	ND ND	us/L	ND ND
	u9/kg			ND	ND	uo/L	MD
1,2-Dichlororrorane	ua/ka	EN CM	MD	ND	MD	up/L	D.
trans-1,3-Dichloroprorene Trichloroethene	uo/ka	MD	ND	ND	CN CN	us/L	ND
Dibromochloromethane	u9/k9	MD	ND	ND	MD	u9/L	ND NE
	us/ks	ND	ND	ND	ND	ua/L	ND
1,1,2-Trichloroethene	us/ks	ND	ND	ND	ND	na\F	ND
Benzenc	ua/ka	ND	ND	ND	ND	na/F	ND
cis-1,3-Dichlorarrarene	us/ko	ND	ND	ND	ND	ub/L	ND
2-Chloroethyl vinyl ether	ug/kg	ND	ND	ND	ND	113/L	ND
Bromoform	na/ka	ND	ND	ND	ND	ua/L	MD
1,1,2,2-Tetrachloroethane	ua/ka	ND	MD CH	ND	ND	ua/L	ND
Tetrachloroethene	ua/ka	ND	מא	ND	ND	us/L	MD
Toluene	ua/ka	ND	ND	MD	ND	u9/L	ND
Chlorobenzene	ua/ka	D	ND	ND	ND	us/L	ND
Ethylbonzene	ua/ka	MD	ND	ND	ND ·	u9/L	ND
Acctone	ug/kg	ND	ND	MD	ND	ug/L	12
Acrolein	ua/ko	ND	ND	ND	ND	us/L	ND
Acrylonitrile	ua/ka	ND	ND	ND	ND	us/L	ND
Carbon disulfide	us/ka	ΝD	ND	ND	ND	ม9/L	ND
Dibromomethane	ua/ka	MD	В	ND	ND	ua/L	מא
trans-1,4-Dichloro-2-butene	ug/kg	ND	ND	ND	ND	us/L	ND
Dichlorodifluoromethane	na\ka	ND	MD	ND	ND	us/L	ND
trans-1,2-Dichloroethene	us/ks	ND	ND	ND	ND	us/L	ND
Ethanol	uo/ks	ND	ND	ND	ND	us/L	MD
Iodomethane	ua/ka	MD	ND	ND	МD	us/L	ND
2-Butanone (MEK)	ua/ko	D	ND	ND	ND	u9/L	ND
4-Methyl-2-rentanone (MIRK)	บอ/kอ	ND	ND	ND	ND	ua/L	ND
Styrens	ug/kg	ND	ND	ND	ND	ub/L	MD
Trichlorofluoromethane	ua/ka	ND	ND	ND	ND	ua/L	ND
1.2.3-Trichloropropane	us/ks	סא	ND	ND	OM.	us/L	ND
Vinyl acetate	u9/k9	ND	NU	ND	ND	u9/L	ND
Ethyl methacrylate	ua/ka	ND	ND	ND	MD	u∍/L	MD
Xylenes (total)	u9/k3	MD	ND	ND	ND		
2-Hexanone	ua/ko	MD	MD	ND	ND	us/L	ND

RFIO9 - Inactive Land Treatment Area and Drainage Ditch

Sammle point number Depth of sammle		07 V0.0	07 V3. 0	07 V5.0	07 V 7.0		01 E5.0
Parameter	Units	Result	Result	Result	Result	Units	Result
Method 8270							
Acenarthene	us/ka	ND	ND	ND	ND	us/L	ND
Acenaphthylene	us/ks	ND	ND	ND	ND	up/L	ND
Acetorhenone	ug/kg	ND	ND	ND	MD	ua/L	ND
1-Aminobipheny1	ua/ka	ND	ND	ND	ND	us/L	MD
Aniline	us/ka	ND	ND	MD	ND	na/F	ND
Anthracene	ua/ka	MD	ND	ND	ND	us/L	ND
Benzo(a)anthracene	ua/ko	ND	ND	ND	ND	ua/L	ND
Benzo(b)fluoranthene	ua/ka	ND	ND	ND	ND	ua/L	ND
Benzo(k)fluoranthene	us/ka	ND	ND	ND	ND	u3/L	ND
Benzo(s,h,i)perylene	ug/kg	MD	ND	ND	ND	119/L	ND
Benzo(a)pyrene Benzyl alcohol	ua/ka ua/ka	ND ND	ND	ND ND	ND	บ9/L	ND
bis(2-Chloroethoxy)-methane	ua/ks	ND	ND ND	ND ND	ND ND	u9/L	ND
bis(2-Chloroethyl) ether	ua/ka	ND ND	MD	ND	טא סא	ua/L	ND ND
bis(2-Chloroisopropyl)-ether	ug/kg	ND	ND	ND	ND	us/L	ND
bis(2-Ethylhexyl) shthalate	us/ks	MD	ND	ND	ND	03/L	ND
4-Bromorhenyl phenyl ether	us/ks	ND	ND	ND	ND	us/L	ND:
Butyl benzyl phthalate	ua/ka	ND	ND CM	ND	ND	ชว/L	ND
4-Chloroaniline	ug/kg	ND	ND	- ND	ND	us/L	ND
4-Chloro-3-methylphenol	us/ks	ND	ND	ND	ND	us/L	ND
2-Chloromarhthalene	us/ka	ND.	ND	ND	ND	us/L	ND
2-Chlorophenol	ug/kg	MD	ND	ND	ND	us/L	ND
1-Chlorophenyl phenyl other	ug/kg	ND	ND	ND	ND	ua/L	ND
o-Cresol	up/ke	ND	MD	ND	ND	up/L	ND
m & r-Cresol(s)	u9/k9	ND	ND	ND	ND	us/L	ND
Chrysene	na\Ka	ND	ND	ND	ND	us/L	ND
Dibenz(a,h)anthracenc	ug/kg	ND	ND	ND	ND	us/L	ND
Di-n-butyl phthalate	us/ks	ND	ND	ND	ND	us/L	מא
1,2-Dichlorobenzene	us/ka	ND	MD	ND	ND	us/L	ND
1.3-Dichlorobenzene	us/ks	ND	ND	ND	M	ua/L	ND
1,4-Dichlorobenzane	ug/kg	ND	DM	ND	ND	u9/L	ND
3,3-Dichlorobenzene	u9/kg	ND	ND	MD	MD	us/L	MD
2,4-Dichlorophenol	u9/kg	ND	ND	ND	MD	u9/L	ND
2.6-Dichlorophenol	ua/ka	HD	ND	ND	ND	us/L	ND
Digthyl phthalate	us/ks	ND	ND	ND	ND	ua/L	ND
r-Dimethylaminoazobenzene	ug/kg	ND	ND	ND	ND	นว/โ	ND
7,12-Dimethylbenz(a)-	u9/k9	ND	ND	ND	ND	na\F	ND
anthracene	นว/k3	ND	ND	ND	ND	na\F	D.C
a,a-Dimethylrhenethyl-amine	uo/ka	ND	ND	ND	ND	us/L	ND
2,4-Dimethylphenol	uo/ke	ND	ND	ND	ND	us/L	ND
Dimethyl phthalate 1,3-Dinitrobenzone	us/ks	ND DN	ND ND	ND ND	ND ND	ua/L	ND ND
1,3-Dinitrocenzene 1,6-Dinitro-o-cresol	uo/ka ea/eu	עא עא	nd Nd	ND ND	ND DN	us/L	ND DO
2,4-Dinitro-o-cresor	ua/ka	שא DND	עא DN	ND ND	ND MD	us/L	ND UM
2,4-Dinitrotoluene	ua/ka	ND ND	ND ND	ND	ND ND	na\F	ND
2,5-Binitrotoluene	ua/ka	ND	ND	ND	ND	ua/L	MD
Di-n-octyl phthalate	us/ks	ND D	ND	עא	ND	us/L	ND
Diphonylamine	us/ks	ND	ND	ND	ND	na/F	ND

RFI09 - Inactive Land Treatment Area and Drainage Ditch

Sample roint number		07	07	07	07		01
Derth of sample		VO.0	V3.0	75. 0	V7.0		E5.0
Danasha	lla i ka	D14	D 1 k	D 14	D 1 &	11-24-	M14
Parameter	Units	Result	Result	Result	Result	Units	Result
Method 8270 (con/t)							
Ethyl methanesulfonate	ua/ka	ND	ND	ND	ND	υ9/L	ND
Fluoranthene	ug/kg	MD	MD	ND	ND	us/L	ND
Fluorene	ua/ka	ND	ND	ND	ND	na\Γ	ND
Hexachlorobenzene	ua/ka	ND	ND	ND	MD	us/L	ND
Hexachlorobutadiene	ug/kg	ND	ND	ND	ND	us/L	ND
Hexachlorocyclorentadiene	ua/ka	מא	CM	MD	ND	u9/L	MD
Hexachloroethane	ug/kg	ND	ND	ND	ND	u9/L	ND
Indeno(1,2,3-cd)Pyrene	ขอ/ks	ND	ND	ND	ND	ua/L	ND
Isophorone	u9/k9	ND	ND	ND	ND	υ9/L	ND
3-Methylcholanthrene	ug/kg	ND	ND	ND	ND	up/L	ND
Methyl methanesulfonate	us/ks	ND	ND	ND	ND	u9/L	ND
2-Methylnaphthalene	us/ks	ND	ND	ND	מא	ug/L	ND
Narhthalene	us/ks	ND	ND	ND	ND	us/L	ND
1-Narhthylamine	ua/ka	MD	CM	ND	MD	ua/L	ND
2-Narhthylamine	u9/kg	ND	ND	ND	ND	u9/L	ND
2-Nitroaniline	ua/ka	ND	MD	ND	ND	ug/L	NID
3-Nitroaniline	us/ka	ND	ND	ND	ND	u9/L	ND
4-Nitroaniline	ug/kg	ND	ND	ND	ND	us/L	ND
Nitrobenzene	us/ks	ND	ND	ND	ND	ua/L	ND
2-Nitrophenol	ug/kg	ND	D	ND	ND	na/F	ND
4-Nitrophenol	ug/ks	ND	MD	ND	ND	ua/L	ND
N-Nitroso-di-n-butylamine	uo/ka	ND	ND	ND	מא	us/L	MD
*H-Nitrosodimethylamine	us/ks	ND	KD	ND	ND	ראכט	ND
N-Nitrosodirhenylamine	ug/kg	ND	ND	ND	ND	u9/L	ND
N-Nitroso-di-n-rropylamine	us/ks	ND	ND	ND	ND	u9/L	ND
N-Nitrosopiperidine	ua/ka	ND	ND	ND	ND	us/L	ND
Pentachlorobenzene	ua/ko	ND	ND	ND	ND	us/L	ND
Pentachloronitrobenzene	ua/ka	ND	ND	ND	ND ·	uo/L	NED
Pentachlorophenol	ua/ka	ND	ND	ND	ND	na\F	ND
Phenacetin	us/ks	ND	ДN	ND	MD	นอ/L	ND
Phenanthrene	us/ks	ND	ND	ND	ND	u9/L	ND
Phenol	ua/ka	ND	מא	ND	ND	uo/L	ND
2-Picoline	us/ks.	ND	MD	ND	ND	ua/L	ND
Pronamide	us/ks	ND	ND	ND	MD	us/L	ND
Pyrene	us/ks	ND ND	ND	ND	ND	u9/L	ND NE
1,2,4,5-Tetrachlore-benzene	us/ks	ND	ND	ND	ND	ua/L	ND
2.3.4.6-Tetrachlorophenol	us/ks	ND	ND	ND	ND ND	uc/L	ND ND
1,2,4-Trichlorobenzene	u9/k3	ND ND	MD	ND	ND ND	us/L	ND ND
2.4.5-Trichlorophenol	us/ks	ND ND	ND	ND	ND ND	us/L	ND ND
2,4,5-Trichlorophenol	uo/ka	ND ND	MD	ND	MD	us/L	ND ND
Benzidine Banada and	u3/k3	ND .	ND ND	ND	ND ND	u3/L	ND No
Benzoic acid	uo/ka	ND ND	MD	ND	ND ND	U3/L	ND ND
1-Chloronaphthalene 1,2-Diphenylhydrazine	ua/ka ua/ka	ND DN	ND DND	ND ND	ND ND	us/L	nd Nd
112 Dirugui infuldzing	U3/ KY	MU	14U	IND	IIU	us/L	HD

DE106 -	Inactive	Land	Treatment	Area	and	Drainag

Sample point number Derth of sample		07 VO.0	07 73.0	07 V5.0	07 V7.0		01 E5.0
Parameter	Units	Result	Result	Result	Result	Units	Result
Total Metals							
Antimony	ag/ka	ND	ND	ND	MD	ms/L	ND
Arsenic	as/ko	1.4	0.55	0.61	0.58	mo/L	ND
Barium	no/ka	447	234	208	240	ms/L	HD
Beryllium	ma/ke	0.59	0.97	0.66	1.0	ns/L	ND
Cadmium	ma/ko	ND	ND	ND	ND	mg/L	ND
Chromium	mo/ke	102	8.5	16.2	7.5	ms/L	ND
Cobalt	æg/kg	1.2	2.9	1.5	2.5	ns/L	ND
Correr	mo/ko	10.5	5.5	4.1	5.1	mo/L	ND
!.ead	mg/kg	14.0	9.1	7.2	7.5	#9/L	ND
Mercury	as/ks	ND	DM	ND	ND	mo/L	ND
Nickel	ms/ks	5.0	7.7	4.7	5.8	mg/L	ND
Potassium	ms/ko	95 3	1030	775	1390	mg/L	מא
Selenium	ms/ko	ND	. ND	MD	ND	m9/L	ND
Vanadium	ma/ko	14.5	13.1	10.3	12.7	m3/L	ND
Zinc	ma/ko	157	14.3	23.8	13.4	ma/L	DM

Sample point number Depth of sample		01 V0.0	01 73.0	01 D3.0	02 V0.0	02 V3.0	02 V&.0	02 V9.0	02 V12.5	02 D12.5
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result
Method 8240										
Chloromethane	us/ks	ND	ND	ПH	ND	ND	ND	ND	ND	ND
Bromomethane	ua/ka	ND	ND	ND	ND	CM	ND	ND	ND	CM
Vinyl chloride	u9/ks	MD	ND	ND	ND	ND	ND	MD	ND	ND
Chloroethane	ua/ka	ND	ND	MD	ND	ND	ND	ND	MD	ND
Methylene chlorida	u9/kg	ND	ND	ND	MD	HD	ND	ND	ND	ND
1,1-Dichloroethans	us/ko	ND	ND	ND	MD	ND	MD	ND	ND	MD
1,1-Dichloroethane	us/ka	ND	ND	ND	ND	ND	MD	ND	ND	ND
1.2-Dichloroothene (cis/trans)	ua/ka	ND	ND	ND	ND	מא	MD	ND	ND	ND
Chloroform	na\ka	ND	ИD	ND	ND	ND	ND	MD	ND	ND
1.2-Dichloroethane	uo/ke	ND	MD	MD	ND	MD	ND	ND	ND	ND
1.1.1-Trichloroethane	us/ka	ND	ND	MD	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	na\ka	MD	ND	ND	ND	ND	MD	MD	ND	ND ·
Bromodichloromethane	ua/ka	ND	ND	ND	ND	ND	MD	ND	ND	ND
1.2-Dichloropromane	u9/ko	ND	ND	MD	DM	ND	ND	ND	ND	ND
trans-1,3-Dichloropropens	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ua/ka	ND	ND	ND	מא	ND	ND	ND	ND	DK
Dibromochloromethane	ua/ka	ND	ND	ND	MD	MD	ND	ND	ND	ND
1,1,2-Trichloraethene	ua/ko	MD	ND	MD	CM	ND	ND	ND	MD	МD
Benzene	us/ka	MD	ND	MD						
cis-1,3-Dichloropropene	ua/ka	מא	MD	MD	MD	ND	MD	ND	ND	ND
2-Chloroethyl vinyl ether	ua/ko	ND	DH	ND	מא	ND	ND	ND	NĐ	ND
Bromoform	ขอ/ko	ND	ND	ND	מא	ND	מא	מא	ND	ND
1,1,2,2-Tetrachloroethane	ub/ka	ND	MD	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ua/ka	ND	HD	DH	ND	ND	ND	MD	מא	ND
Toluene	us/ka	ND	ND	ND	ND	ND	ND	ΝĐ	ND	680
Chlorobenzene	ua/ko	ND.	EM	ND	MD	מא	MD	ND	ND	ND
Ethylbenzene	na\ka	MD	ND	ND	ND	ND	MD	ND	ND	ND
Acetone	u3/k9	ND	ND	ND	· ND	ND	ND	ND	ND	ND
Acrolein	ua/ka	ND	ND	ND	NID	ND	MD	MD	MD	ND
Acrylonitrile	us/ks	ND	ND	ND	MD	ND	ND	ND	MD	ND
Carbon disulfide	ua/ka	ND	ND	ND	ND	Œ	ND	DM	ND	ND
Dibromomethane	us/ko	ND	ND	ND	MD	ND	ND	ND	ND	ND
trans-1,4-Dichloro-2-butene	ug/kg	ND	ND	ND	ND	ND	ND	ND	MD	ND
Dichlorodifluoromethane	ua/ka	ND	MD	MD	ND	ND	ND	ND	ND	MD
trans-1,2-Bichloroethene	us/ka	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethanol	ug/kg	ND	ND	ND	MD	ND	ND	ND	ND	ND
Iodomethane	us/ks	ND	ND	ND	ND	ND	ND	ND	ND	MD
2-Butanone (MEK)	ua/ko	ND	ND	M	ND	ND	MD	ND	MD	ND
4-Methyl-2-pentanone (MIBK)	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND	ďЯ
Styrenc	ua/ka	MD	MD	ND	ND	ND	ND	ND	ND	ND
Trichloroflucromethane	us/ka	ŒИ	ND	ND	ND	ND	СИ	ND	ND	ND
1,2,3-Trichlororrorane	up/ks	ND	ND	ND	MD	ND	MD	ND	ND	MD
Vinyl acctate	ua/ka	MD	ND	ND						
Xylenes (total)	uo/ka	ND	MD	MD	ND	ND	ND	ND	ND	980
2-Hexanone	ua/ka	ND	MD	ND	ND	ND	ND	MD	ND	ND
Ethyl methacrylate	ua/ka	ND	ND	ND	ND	D	DM	. ND	מא	ND

Sammle roint number Depth of sample		01 VO.0	01 V3.0	01 D3.0	02 V0.0	02 V3.0	02 96.0	02 V9. 0	02 V12.5	02 B12.5
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result
Method 8270										
Acenarthens	us/ks	ND	ND	ND	ND	ИD	ND	ND	ND	ND
Acenarhthylene	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND	MD
Acetorhenone	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Aminobiphenyl	ua/ka	ND	ND	ND	ND	МD	MD	ND	ND	פא
Aniline	ua/ka	ND	ИD	ND	ND	ND	ND	MD	ND	ND
Anthracene	up/ka	מא	ND	ND	מא	ND	DM	ND	ND	ND
Benzo(a)anthracene	ua/ka	ND	ND	ND	ND	ND	ИD	MD	ND	ND
Benzo(b)fluoranthene	ub/ks	ND	ND	MD	ND	ND	ND	םא	ND	ND
Benzo(k)fluoranthene	u9/ks	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(s,h,i)perylene	ua/ka	MD	ND	ND	מא	ND	ND	ND	MD	MD
Benzo(a)pyrene	ug/kg	MD	ND	ND	ND	ND	ND	ND	ND	MD
Benzyl alcohol	up/ka	ND	ND	MD	ND	ND	ND	מא	ND	ND
bis(2-Chloroethoxy)-methane	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Chloroethyl) ether	ua/ka	ND	MD	ND	MD	ND	ND	ND	ND	ND
bis(2-Chloroisopropyl)-ether	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl) phthalate	ug/kg	MD	ND	ΝD	ND	ND	ND	ND	ND	MD
4-Bromorhenyl phonyl ether	ua/ks	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl rhthalate	ug/kg	MD	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	ua/ka	ND	ND	מא	CK	ND	ND	ND	סא	ND
2-Chloromarhthalene	ua/ka	ND:	MD	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	us/ko	ND	MD	ND	MD	מא	ND	פא	MD	ND
4-Chlorophenyl phenyl ether	u9/k9	ND	ND	ND	ND	ND	ND	NU	ND	ND
o-Cresol	ua/ka	DM	ND	ND	MD	מא	MD	מא	ND	16000
m & r-Cresol(s)	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND	28000
Chrysene	us/ks	ND	MD	ND	MD	ND	ND	ND	מא	MD
Dibenz(a,h)anthracene	u9/k9	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	us/ks	MD	ND	ND	DM	ND	ND	ND	MD	MD
1,2-Dichlorobenzene	us/ka	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Bichlorobenzone	us/ks	DM	MD	ND	ND	ND	MD	ND	MD	ND
1,4-Dichlorobenzene	na\ka	ND:	ND	ND	ND:	ND	מא	ND	ND	ND
3,3-Dichlorobenzene	us/ks	מא	ND	ND	MD	ND	ND	ND	ND	MD
2,4-Dichlorophenol	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND	ND
2.6-Bichlorophenol	ua/ka	ND	ND	ND	ND	D	MD	ND	ND	MD
Diethyl phthalate	ug/kg	ND	ND	MD	ND	ND	ND	ND	MD	ND
p-Dimethylaminoazobenzene	ua/ka	ND	ND	ND	MD	ND	ND	ND	ND	ND
7,12-Dimethylbenz(a)-	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
anthracene	us/ks	ND	MD	ND	DM	ND	MD	ND	ND	MD
a,a-Dimethylphenethyl-amine	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	us/ks	ND	MD	ND	MD	CM	ND	ND	HD	5300
Dimethyl phthalate	u9/k9	ND	ND	ND	ND	ND	ND	ND	ND	MD
1,3-Dinitrobenzene	uo/ka	ND	ND	ND	ND	ND	ПM	MD	ND	MD
4,6-Dinitro-o-cresol	ua/ka	MD	ND	ND	ND	ND	ND	ND	ND.	ND
2.4-Dinitrophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluenc	ua/ks	MD	МD	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluenc	ua/ka	ND	ND	ND	MD	ND	ND	ND	סא	MD
Di-n-octyl phthalate	ug/kg	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diphenylamine	us/ko	ND	ND	מא	ND	ND	ND	סא	HU	ALD:

Sample point number		01	01	01	02	02	02	02 ·	02	02
Dorth of sample		V0.0	v3.0	D3.0	VO.0	V3.0	V6.0	V9.0	V12.5	D12.5
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result
Method 8270 (con't)										
Ethyl methanesulfonate	us/ks	ND	MD	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	ug/kg	ND	ND	ND	מא	מא	ND .	MD	ND	MD
Fluorene	u9/kg	MD	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	ua/ka	ND	ND	ND	ИD	ND	מא	ND	מא	ND
Hexachlorobutadione	us/ks	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclorentadiene	ub/ka	ND	ND	MD	ND	ND	ND	MD	ND	ИD
Hexach1oroethane	ug/kg	ND	ND	ND	ND	ND	ND	MD	ND	ND
Indeno(1,2,3-cd)pyrene	us/ks	מא	MD	ND	פא	ND	MD	HD	ND	ND
Isophorone	ua/ka	ND	עא	ND	ND	ND	ND	ND	ИÙ	ND
3-Methylcholanthrene	ua/ka	ND	םא	ND	מא	ND	ND CM	ND	ND	MD
Methyl methanesulfonate	ua/ka	ND	ND	ND	ND	ND	ND	ИD	ND	ND
2-Methylnaphthalene	up/ka	ND	ND	MD	ND	56000	MD	מא	NO	ND
Narhthalene	u9/k9	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Marhthylamine	ua/ka	פא	ND	ND ND	ND	MD	MD	ND	ND	MD
2-Naphthylamine	ua/ka	ND	MD CM	MD	ND	ND	NED	ND	ND	ND
2-Nitroaniline	us/ks	ND	ND	ND	מא	ND	ND	ND CM	MD	ND ND
3-Nitroaniline	ua/ka	ND	ND	ND	ND	ND	MD	ND	ND	ND
1-Mitroaniline	us/ks	מא	ND	ND	MD	ND	ND	NO	ND	סא
Nitrobenzene	us/ks	ND	ND	MD	ND	םא מא	ND ND	ND ND	ND	ND ND
2-Mitrophenol	uo/ka	MD	ND	MD	nd Nd		ND	MD	ND	MD
1-Nitrophenal	us/ks	ND ON	ND DM	ND ND	יטה מא	DA Cin	ND ND	יםא פא	ND	ND ND
N-Nitroso-di-n-butylamine N-Nitrosodimethylamine	ua/ka ua/ka	ND ND	MD	עה ND	ND ND	ND	ND ND	ND ND	ND	ND ND
N-Mitrosodirhonylamine	ua/ka	עה מא		ND ND	ND ND			ND ND	ND ND	
N-Mitrosodirnenviamine N-Nitroso-di-n-rrepylamine	us/ks	עא ND	DM DM	ИD	עא ND	ND ND	ND ND	ND ND	ND ND	ND ND
N-Nitrosoriperidine	us/ko	ND ND	מה מא	MD	טא DN	ND ND	MD	עה מא	ND	ND ND
Pentachlorobenzene	ea/ke	ND	ND	ND	ND	ND	ND	ND		ND
Pentachloronitrobenzene	ua/ka	תא פא	MD CM	ND DN	MD MD	MD	עה מא	ND ON	MD	MD
Pentachlorophenol	ua/ka	ND ND	ND ND	טא MD	ND ND	MD	ND ND	ND ND	ND ND	HD
Phenacetin	119/kg	מא מא	ND D	ND ND	ND ND	ND ND	MD MD	MD MD	עא MD	עה סא
Phonanthrene	ug/kg	ND	ND	ND	ND	28000	ND ND	ND ND	ND	ND
Phenol	ua/ka	ND	ND	ND	ND	ND	ND CM	ND	D	23000
2-Picoline	ua/ka	ND	ND Th	ND	ND	ND	ND	ND ND	ND	ND
Pronamide	ua/ka	ND	ND	ND	ND	ND DM	ND	ND	ND	מא
Pyrene	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4,5-Tetrachloro-benzene	ug/kg	ND	ND	ND	ND	מא	ND	MD	ND	ND
2,3,4,6-Tetrachlorophenol	us/ks	ND	ND	ND	ND	ND	ND	ND	ND	ND
1.2,4-Trichlorobenzene	us/ks	ND	OM	ND	ND	ND	MD	ND	ND	MD
2,4,5-Trichlorophenol	us/ks	ND	ND	ND	ND	ND	NO	ND	ND	ND
2,4,6-Trichlorophenol	uo/kg	ND	ND	ND	ND	ND	ND	ND	ND	OM OM
Benziding	us/ko	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzoic acid	us/ks	ND	ND	ND	ND	מא	D	D	ND	מא
1-Chloronaphthalene	ua/ka	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine	ua/ko	ND	CD4	DM	MD	ND	מא	OH.	MD	ND
	N#			• • •	• • • • •					-

Sample point number Berth of sample		01 VO.0	01 V3.0	01 13.0	02 V9.0	02 V3.0	02 96.0	02 V9.0	02 V12.5	02 D12.5
Parameter	Units	Result	Result	Result	Result	Result	Result	Result	Result	Result
Total Metals										
Antimony	mg/kg	MD	ND	ND	MD	ND	ND	ND	HD	ND
Arsenic	ms/ks	0.97	ND	ND	0.52	0.79	0.58	ND	MD	MD
Barium	ms/ka	392	197	105	198	231	332	201	171	124
Benyllium	ac/ks	0.70	1.0	1.1	1.0	0.90	9.90	1.4	0.37	1.1
Cadmium	m9/k9	MD	0.70	ND	MD	ND	ND	ND	ND	HD
Chromium	mo∕ks	50.1	6.1	7.3	7.0	117	6.7	3.0	5.4	5.1
Cobalt	ma/ko	2.0	3.5	4.6	4.3	4.4	3.9	6.0	5.4	3.9
Copper	ma/ko	10.3	5.9	7.1	6.4	15,5	5.2	7.7	7.7	7.8
Lead	ma/ko	11.1	5.5	6.3	13.8	19.3	13.5	14.9	11.9	16.0
Monouny	#3/k3	MD	ND	ND	CK	ND	MD	ND	ND	ND
Nickel	ma/ka	7.0	6.7	9.1	6.4	9.2	6.5	9.5	8.5	6.9
Potassium	aa/ko	972	1310	1660	906	1310	811	1380	1410	1010
Selonium	ma/ko	MD	ND	МD	MD	HD	ND	ND	ND	ND
Vanadium	ag/kg	15.3	14.0	15.3	15.4	18.2	13.3	16.5	19.0	14.0
Zinc	mo∕ko	81.3	14.7	17.7	13.4	228	11.2	15.2	15.0	12.4

Samrle point number		03	03	03	03	03
Derth of sample		VO.0	V3.0	V6.0	V9.0	V12.5
Parameter	Units	Result	Result	Result	Result	Result
Method 8240						
Chloromethane	ua/ka	MD	ND	ND	ND	ND
Bromomethane	us/ka	ND	MD	CM	ND	MD
Vinyl chloride	us/ka	ND	Œ	ND	ND	ND
Chloroethane	ud/kg	מא	ND	ND	ИD	ND
Methylane chloride	us/ks	ND	ND	ND	ND	ND
1.1-Dichloroothene	ug/kg	MD	ND	ИD	פא	MD
1.1-Bichloroethane	ua/ka	ND	ND	ND	ND	ND
1,2-Dichloroethene (cis/trans)	ua/ka	ND	MD	MD	ND	ND
Chloroform	us/ka	ND	ND	ND	ND	ND
1,2-Dichloroethane	ua/ko	ďΝ	СИ	ND	ND	MD
1.1.1-Trichloroethanc	ug/kg	ND	ND	MD	ND	ND
Carbon tetrachloride	us/ks	MD	ND	ND	MD	HD
Bromodichloromethane	ug/kg	ND	ND	ND	ND	NU
1,2-Dichloroprorane	up/kg	ND	ND	ND	MD	ND
trans-1.3-Dichloropropene	us/ks	ND	MD	ND	ND	ND
Trichloroethene	us/ko	ND	ND	ND	ND	MD
Dibromochloromethane	ua/ko	ND	ND	ND	ND:	ND
1,1,2-Trichloroethene	up/kp	ND	ND	В	ND	MD
Benzene	ua/ka	ND	ND	ND	ND	ND
cis-1.3-Dichloropropens	ug/ko	MD	ND	MD	Ю	ND
2-Chloroethyl vinyl other	ug/kg	ND	ND	ND	ND	ND
Bromoform	ug/kg	ND	ND	ND	ND	MD
1.1,2,2-Tetrachlorosthane	ua/ks	ND	ND	ND	ND	MD
Tetrachloroethene	us/ks	ND	ND	ND	ND	ND
Toluene	ua/ka	MD	ND	ND	ND	MD
Chlorobenzene	ug/kg	ND	ND	ND	HD	MD
Ethylbenzenc	ua/ka	ND	ND	ND	ND	ND
Acctone	uo/ks	ND	ND	ND	DH	MD
Acrolein	us/ks	ND	ND	ND	ND	ND
Acrylonitrile	ub/ka	ND	ND	ND	ND	MD
Carbon disulfide	ua/ka	ND	ND	ND	ND	ND
Dibromomethane	up/ks	ND	ND	ND ·	ND	MD
trans-1,4-Dichloro-2-butene	ua/ka	ND	ND	MD	ND	MD
Dichlorodifluoromethane	up/kp	DM	ND	MD	ND	ND
trans-1.2-Dichlorocthene	ua/ka	ND	Œ	ND	ND	ND
Ethanol	ug/ko	MD	ND	ND	ND	MD
Iodomethane	us/ks	ND	ND)	ND	ND	ND
2-Butanone (MEK)	ua/ka	ND	ND	ND	ND	ND
4-Mothyl-2-pentanone (MIBK)	ug/ks	ND	ND	ND	ND	ND
Styrene	us/ks	CM	ND	ND	MD	MD
Trichlorofluoromethane	ขอ/ko	ND	ND	ND	ND	HD
1,2,3-Trichlorerrepane	ua/ka	ND	MD	eи	ND	MD
Vinyl acetate	u9/ks	ND	ND	ND	ND	ND
Xylenes (total)	us/ks	ND	ND	CM	ND	ND
2-Hexanone	ua/ka	ND	ND	ND	ND	ND
Ethyl methacrylate	นร/kg	ND	ND	MD	פא	ND
	•					

Sample roint number Derth of sample		03 VO.0	V3.0	03 V6.0	03 V9. 0	03 V12.5
Parameter	Units	Result	Result	Result	Result	Result
Methed 8270						
Acenarthene	ua/ka	MD	ND	ND	ND	ND
Acenarhthylene	ug/kg	ND	ND	ND	ND	DI
Acetophenone	us/ka	DM	ND	ND	ND	ND
d-Aminobirhenγl	ua/ka	MD	MD	MD	ND	MD
Aniline	ua/ks	ND	ND	ND	MD	ND
Anthracene	ug/kg	MD	ND	ND	מא	ND
Benzo(a)anthracene	ua/ka	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	na\ka	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	na\ka	ND	ND	ND	ND	ND
Benzo(s.h.i)rerylenc	ua/ka	ND ND	ND	ND	ND	ND
Henzo(a) pyrene	ug/kg	ND	ND	ND	ND	ND
Benzyl alcohol	ug/kg	MD	ND ND	ND	ND	ND
bis(2-Chloroethoxy)-methane bis(2-Chloroethyl) ether	ua/kc	ND ND	ND ND	ND	nd Nd	ND ND
bis(2-Chloroisorropy1)-other	ua/ko ea/eu	MD	ND ND	MD DM	ND ND	ND CO
bis(2-Ethylhoxyl) phthalate	ua/ka	ND ND	ND ND	MD	ND ND	ND ND
4-Bromophenyl phenyl ether	us/ka	MD MD	MD MD	ND	ND ND	ND
Butyl benzyl shthalate	us/ks	ND	פא	ND	ND	ND
4-Chloroaniline	us/ks	ND	ND	ND	ND	ND
4-Chloro-3-mothylphenol	ua/ka	ND	ND	ND	ND	MD
2-Chloromaphthalana	ug/kg	ND	ND	ND	ND	ND
2-Chlorophenol	es/ke	MD	ND	פא	ND	ND
4-Chlorophenyl phenyl ether	ua/ka	ND	ND	ND	ND	ND ·
o-Cresol	up/ks	ND	ND	ND	ND	ND
m & r−Cresol(s)	ua/ka	ND	ND	ND	ND	ND
Chryseno	na/ka	ND	MD	ND	ND	ND
Dibenz(a,h)anthracenc	ua/ka	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ua/ko	ND	ND	ND	ND	ND
1.2-Dichlorobenzene	ua/ka	ND	DM	ND	ND	ND
1.3-Dichlorobenzene	ua/ko	ND	MD	ND	ND	ND
1.4-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND
3.3-Bichlorobenzene	us/ko	מא	MD	ND	MD	ND
2.4-Dichlorophenol	up/ka	ND	ND	ND	ND	ND
2.5-Dichlororhenol	us/ko	ND	ND	ND	ND	ND
Diethyl phthalate	ua/ka	ND	ND	ND	ND	ND
r-Dimethylaminoarobenzene	us/ks	ND	D	ND	ND	ND
7,12-Dimethylbenz(a)-	ug/kg	ND	ND	ND ND	ND ND	ND
anthracene	ua/ka ua/ka	nd Nd	nd Nd	ND ND	ND ND	ND ND
a.a-Dimethylphenethyl-amine		MD			ND ND	ND ND
2.4-Dimethylphenol Dimethyl phthalate	ug/kg ug/kg	ND	ND ND	ND ND	ND	ND ND
1.3-Dinitrobenzene	ug/kg	ND	MD	םא מא	עא סא	ND
1.6-Dinitro-o-cresol	ua/ka	ND	ND	ND	ND	ND
2.4-Dinitrophenol	ug/ko	ND	ND	MD	ND	ND
2.4-Dinitrotoluene	us/ka	ND	ND	ND	ND	ND
2.6-Dinitrotoluene	us/ko	ND	ND	ND	ND	NO
Di-n-octyl phthalate	us/ks	ND	ND	ND	ND	ND
Dirhenylamine	us/ks	ND	MD	ND	ND	ND

		18 44	n - pina	ge bits			
Sample point number Depth of sample		03 Vo.		- ·)3 5.0	03 /9.0	03 V12.5
Parameter	Unit	s Resu	lt Rosy			sult	
Method 8270 (con't)					21 t 45	7102	Resul
Ethyl methanesulfonate	um (1).						٠
Fluoranthene	ua/k: ua/k:		ND	NI)	ND	ND
Fluorene	us/ks		מא	NI) }	VD	MD
Hexachlorobenzene	us/ks		ND	HU	•	(D	ND
Hexachlorobutadiene	υ9/kg		ND	ND		ID	ND
Hexachlorocyclopentadiene	43/kg		ND	ND	N	D	ND
Hexachloroethane	u9/k9		ND	ND	N	D	ND
Indeno(1,2,3-cd)Pyrene	u3/kg		ND	MD	H	D	ND
Isophorone	ua/kg	ND ND	ND	MD	N	0	MD
3-Methylcholanthrene	uo/ka	ND ND	ND	ND	M		ND:
Methyl methanesulfonate	us/ks	ND	ND	ND	MI	}	MD
2-Methylnarhthalene	u9/kg	ND ND	ND	ND	NI)	ND
Maphthalene	U9/kg	ND ND	ND	שא	NE	1	MD
1-Marhthylamine	ua/kg	טא מא	ND	ND	ND	ł	ND
2-Narhthylamine	ug/kg		ND	ND	MD		MD
2-Nitroaniline	uo/kg	ND DN	ND ND	ND	ND		ND
3-Nitroaniline	us/ks	ינה פא	MD	MD	ND		MD
4-Nitroaniline	ua/kg		ND	ND	ND		ND
Mitrobenzene	ua/ko	ND	ND	MD	ND		MD
2-Nitrophenol	09/kg	ND ND	MD	ND	ND		ND
4-Nitrophenol	ug/kg	ND ND	MD	MD	ND		MD
N-Nitroso-di-n-butylamine	u9/kg	ND ND	MD	MD	ND		ND
N-Nitrosodimethylamino	ug/kg	ND	MD	ND	ND	į	MD
N-Nitrosodiphenylamine	-ug/kg	MD CM	ND	ND	ND	!	ND.
N-Nitroso-di-n-rropylamine	us/ks	ND	ND ND	MD	MD	P	(D
N-Nitrosopireridine	ua/ka	ND	ND ND	מא	ND	N	!D
Pentachlorobenzene	ua/ka	ND	ND ND	MD	ND	ŀ	D
Pentachloronitrobenzene	ug/kg	MD	MD MD	MD.	ND	N	D
Pentachlorophenol	us/ks	ND	NB	ND	ND	N	D
Phenacetin	ua/ka	ND	ND	ND	ND	N	D
Phenanthrene	u9/kg	ND	ND	MD	ND	N	3
Phenol	us/kg	MD	ND ND	ND	ND	M)
2-Picoline	us/kg	ND	ND ND	MD	MD	N!)
Pronamide	ug/kg	ND	ND ND	ND .	HD	NI	}
Pyrene	ua/ka	ND ND	ODA COM	ND	ND.	MD	
1, 2, 4, 5-Tetrachloro-benzene	ug/kg	ND		ND NO	ND	ND	
2.3.4.6-Tetrachlorophenol	ug/kg	ND	nd Nd	ND	CM	MD	
1,2,4-Trichlorobenzene	uo/ka			ND	ND	ND	
2.4.5-Trichlorophenol	us/ks		MD MD	MD	MD	ND	
2,4,5-Trichlorophenol	ug/kg		ND ND	ND ND	ND	ND	
Benzidine				MD	ND	ND	
Benzeic acid	••			מא	ND	ND	
1-Chloronarhthalenc		`		MD	ND	ND	
1,2-Diphenylhydrazine	4-	· ·		ND ND	ND ND	ND	
				MD	ND	ND	

Sample point number Derth of sample		03 VO.0	03 V3.0	03 75.0	03 V9.0	03 V12.5
Parameter	Units	Result	Result	Result	Result	Result
Total Metals						
Antimony	ma/ka	ND	ND	ND	ND	ND
Arsenic	mg/kg	0.65	0.90	0.53	0.52	ND
Barium	m9/ks	317	292	178	152	392
Beryllium	ms/ko	0.95	0.65	1.0	1.0	1.1
Cadmium	ma/ks	ND	ND	ND	MD	0.73
Chromium	mo/ko	9.5	5.1	5.5	5.9	7.5
Cobalt	ma/ko	2.6	2.0	2.8	3.4	3.2
Corper	mg/ko	7.4	4.3	5.1	5.5	7.0
Lead	as/ks	8.4	5.5	6.5	8.1	7.8
Hencury	ms/ks	ND	ND	ND	ND	ND
Nickel	as/ks	6.5	-5.4	€.5	6.8	8.5
Potassium	mo/ko	1020	855	1070	1340	1410
Selonium	æg/kg	ND	ND	ND	MD	ND
Vanadium	ma/ka	15.7	15.2	12.9	14.3	17.5
linc	ag/kg	15.4	12.9	13.0	13.9	16.1

Sample roint number Derth of sample		04 V0.0	04 V3.0	04 V6.0	01 V9.0	04 V12.5
Parameter	Units	Result	Result	Result	Result	Result
Method 8240						
Chloromethane	ua/ks	ND	ND	ND	ND	ND
Bromomethane	ua/ka	ND	ND	פא	ND	MD
Vinyl chloride	u9/k9	ND	ND	ND	ND	МD
Chloroethane	ua/ka	ND	MD	ND	ND	ND
Methylene chloride	ug/kg	MD	MD	ND	מא	ND
1.1-Dichloroethene	ua/ka	ND	MD	ND	ND	ND
1,1-Dichloroethane	ug/kg	ND	MD	ND	ND	ND
1,2-Dichloroethene (cis/trans)	ub/ka	ND	MD	ND	ND	НD
Chloroform	us/ks	ND	MD.	ND	ND	ND
1.2-Dichloroethane	us/ks	ND	MD	פא	ND	ND
1,1,1-Trichloroethane	ua/ko	ND	MD	MD	ND	ND
Carbon tetrachloride	da/ka	ND	DN	ND	ND	MD
Bromodichloremethane	ua/ks	ND	ND	ND	ND	ND
1,2-Bichlororrepane	ug/kg	ND	ND	ND	CM	ND
trans-1,3-Dichloropropene	ug/kg	ND	ND	ND	ND	ND
Trichloroethene	ug/ko	ND	ND	ND	ND	ND
Dibromochloromethanc	ug/kg	ND	ND	ND	ND	ND
1,1,2-Trichloroethene	03/KB	ND	DM	MD	MD	ND
Benzene	ug/kg	ND	1700	ND	14000	ND
cis-1,3-Dichloropropene	иа/ка	ND	ND	ND	MD	ND
2-Chlorocthyl vinyl ether	ua/ka	ND	ND	ND	ND	ND
Bromoform	uo/ka	ND	DM	ND	MD	ND
1,1,2,2-Tetrachloroethanc	ua/ka	NΠ	ND	ND	ND	ND
Totrachloroothene	uo/ka	ND	ND	ND	ND	ND
Toluene	ua/ka	ND	14000	220000	120000	ND
Chlorobenzone	us/ks	ND	NO	ND	סא	MD
Ethylbenzene	ua/ks	ND	5600	81900	13000	ND
Acetone	na\ka	ND	ND	DM	ND	מא
Acrolein	ua/ka	ND	ND	ND	ND	Щ
Acrylonitrile	us/ks	ND	ND	ND	ND	ИD
Carbon disulfide	na\ka	ND	ND	ND	ND	ND
Dibromomethane	ug/kg	ND	MD	ND	ND	ND
trans-1,4-Dichloro-2-butene	ua/ko	OM CM	ND	ND	ND	ND
Dichlorodifluoromethane	us/ks	ND	ND	ND	ND ND	ND
trans-1,2-Dichloroethene	us/ka !\-	ND	ND	MD	ND	ND ND
Ethanol	us/ks	ND	MD	ND	ND	MD
Iodomethane	ua/ka	ND ND	ND	ND	ND	ND
2-Butanone (MEK) 4-Methyl-2-pentanone (MIBK)	u9/k3	ND	MD	ND	ND	ND
Styrene	ua/ka ua/ka	ND	ND CM	ND ND	ND HD	nd Nd
Trichlorofluoromethane		ND ND		MD		
	u9/k9		ND ND		ND CM	ND ND
1,2,3-Trichlororrorane Vinyl acetate	us/ks us/ks	nd Nd	ND ND	ND ND	ND UN	OM CM
Yinyi acetate Xylenes (total)	us/ka	ND GN	עא 54000	470000	310000	עא MD
2-Hexanone	na/ka	ND	J4000 ND	ND	ND	ND
Ethyl methacrylate	ua/ka	ND ND	ND ND	עא חא	ND ND	ND ND
Centra meender tidee	03/165	140	1417	1410	140	ıw

Sample roint number Dorth of sample		04 V0.0	04 V3.0	04 V6.0	04 V9.0	04 V12.5
Parameter	Units	Result	Result	Result	Result	Result
Method 8270						
Acenarthene	ua/ka	MD	ND	ND	ND	ND
Acenaphthylene	ug/kg	ND	MD	ND	ND	ND
Acetophenone	ug/kg	ND	ND	ND	ND	ND
d-AminobiPhenyl	ug/ko	ND	ND	D	MD	ND
Aniline	ug/kg	ND	ND	ND	ND	ND
Anthracene	na\ko	ND	MD	MD	ND	ND
Benzo(a)anthracene	na\ka	П	ИD	ND	ND:	ND
Benzo(b)fluoranthene	ug/ko	MD	ND	MD	NO	ND
Benzo(k)fluoranthene	ug/kg	ND	ND	MD	ND	ND
Benzo(s,h,i)perylene	us/ko	ND	CN CN	ND	ND	ND
Benzo(a) pyrene	ug/ko	ND ND	ND ON	מא	ND ND	ND ND
Benzyl alcohol	ug/kg	ND ND	ND	MD	MD	ND
bis(2-Chloroethoxy)-methane	us/ka	ND	ND	ND	ND	ND
bis(2-Chlorosthyl) ether	ug/kg	ND	ND ND	DK OM	ND ND	ND ND
bis(2-Chloroisopropyl)-ether bis(2-Ethylhexyl) phthalate	ua/ka ua/ka	ND ND	עוא DN	ND ND	ND ND	מא מא
4-Bromophenyl phenyl ether	מא/פט פא/פט	ND	MD	ND	ND ND	ND
Putyl benzyl phthalate	us/ka	ND ND	MD	MD	MD	MD
4-Chloroaniline	us/ks	ND	ND	ND	ND	HD
4-Chloro-3-methylphenol	us/ks	ND	MD	ND	פא	ND
2-Chloromarhthalene	us/ks	ND	ND.	ND ND	MD	ND
2-Chlorophenol	us/ko	ND	ND	ND	פא	ND
4-Chlorophonyl chenyl ather	us/ka	ND	ND	ND	ND	· ND
c-Cresol	us/ks	ND	ND	16000	ND	ND
m & p-Cresol(s)	ua/ka	ND	ND	26000	ND	ND
Chrysene	ug/kg	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	us/ks	ND	ND	ND	ND	ND
Di-n-butyl phthalate	ug/kg	MD	ND	MD	MD	ND
1,2-Dichlorobenzene	us/ks	ND	MD	ND	ND	ND
1,3-Dichlorobenzene	ug/kg	ND	MD	ND	ND	MD
1,4-Dichlorobenzene	ua/ka	ND	ND	ND	ND	ND
3,3-Dichlorobenzene	ua/ka	ND	ND	ND	ND	ND
2.4-Dichlorophenol	ug/kg	В	ND	ND	MD	ND
2,6-Dichlorophenol	ug/kg	ND	פא	ND	ND	ND
Diethyl phthalate	ua/ka	ND	ND	ND	ND	ND
p-Dimethylaminoazobenzene	ug/kg	MD	DM	ND	ND	ND
7,12-Dimethylbenz(a)-	ua/ka	ND	ND	ND	ND	ND
anthracene	us/ks	ND	ND	ND	MD	ND
a.a-Dimethylphenethyl-amine	ug/kg	ND	ND	ND	ND	ND
2.4-Dimethylphenol	us/ks	MD	ND	27000	MD	ND
Dimethyl phthalate	us/ks	ND	ND	ND	ND	ND
1.3-Dinitrobenzena	ug/ko	ND	מא	ND	MD	ND
4.6-Dinitro-o-cresol	ua/ka	ND	ND	ND	ND	ND
2,4-Dinitrophenol	ขอ/ks	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	up/ka	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	up/ka	MD	ND	ND	MD	MD
Di-n-octyl phthalate	y9/k9	ND	ND	ND	ND	CN
Diphenylamine :	na\ka	ND	מא	MD	MD	ND
				•		

Sample point number North of sample		01 VO.0	04 V3.0	04 V6.0	04 V9.0	04 V12.5
Paramoter	Units	Result	Result	Result	Result	Result
Methed 8270 (con't)						
Ethyl methanesulfonate	ua/ks	ND	ND	ND	ND	ND
Fluoranthene	uo/ka	ND	ND	ND	ND	ND
Fluorene	us/ka	ND	ND	13000	ND	ND
Hexachlorobenzene	us/ko	MD	ND	ND	ND	ND
Hexachlorobutadiene	ua/ka	ND	ND	ND	ND	ND
Hexachlorocyclorentadiene	ua/ka	MD	MD	ND	סא	ND
Hexachloroethane	ua/ka	ND	ND	ND	ИD	ND
Indeno(1,2,3-cd)pyrene	ua/ko	MD	ND	ND	ND	ND
Isophorone	u9/kg	ND	ND	ND	ND	ND
3-Methylcholanthrene	ua/ka	ND	MD	ND	MD	שא
Methyl mcthanesulfonate	us/ks	ND	MI)	ND	ND	ND
2-Methylnaphthalene	ua/ko	פא	ND	290000	ND	5000
Marhthalene	ug/kg	ND	ND	54000	ND	ND
1-Narhthylamine	ca/ko	MD	MD	MD	ND	ND
2-Nashthylamine	ua/ka	ND	ND	ND	ND	ND
2-Nitroaniline	ug/kg	ND	ND	ND	D	MD
3-Nitroaniline	ug/kg	ND	מא	ND	ND	ND
d-Nitroaniline	ug/kg	ND	ND	ND	ND	ND
Nitrobenzene	ug/kg	ND	MD	ND	ND	ND
2-Nitrophenol	ua/ke	ND	ND	ND	ND	ND
<pre>1-Nitrophenol</pre>	ug/kg	ND	ND	ND	ND	ND
N-Nitroso-di-n-butylamine	ug/kg	ND	ND	MD	ND	D
N-Nitrosodimethylamine	ua/ko	ND	ND	ND	ND	ND
N-Mitrosodiphenylamine	ug/kg	ND	MD	ND	ND	פא
N-Nitroso-di-n-propylamine	ug/kg	ND	ND	ND	ND	ND
N-Nitrosopiperidine	ua/ka	מא	ND	MD	ND	ND
Pentachlorobenzene	us/ks	ND	MD	ND	ND	ND
Pentachloronitrobenzene	us/ks	ND	מא	MD	ND	ND
Pentachlorophenol	ua/ka	מא	ND	מא	MD	ND
Phenacetin	us/ko	ND	מא	MD	ND	MD
Phenanthrene	ug/kg	ND	ND	23000	ND	ND
Phenol	ua/ka	ND	ND	ND	MD	ND
2-Picoline	us/ka	ND	ND	ND	ND	ND
Pronamide	ua/ka	ND	DM	מא	ND	ND
Pyrene	us/ks	ND	ND	ND	ND	ND
1,2,4,5-Tetrachloro-benzens	ua/ka	ND	ND	ND	ND	ND
2.3.4.6-Tetrachlorophenol	ug/kg	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	us/ks	ND	ND	ND	ND	ND
2.4.5-Trichlorophenol	us/ks	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	us/ks	ND	ND	ND	ND	MD
Benzidine	us/ka	ND	ND	ND	ND	ND
Benzoic acid	uo/ka	ND	ND	ND	ND	ND
1-Chloronarhthalene	ua/ka	ND	NO	ND	ND	ND
1,2-Diphenylhydrazine	ua/ko	ND	ND	ND	ND	ND

Sample roint number Depth of sample		04 VO.0	04 V3.0	04 0.3V	04 V9.0	04 V12.5
Parameter	Units	Result	Result	Result	Result	Result
Total Metals						
Antimony	mo/ks	ND	ND	ND	ND	ND
Arsenic	as/ks	0.50	0.54	2.4	0.55	ND
Barium	mo/ka	280	195	422	213	164
Beryllium	ao/ks	0.93	0.79	0.80	1.0	1.1
Cadmium	ma/ka	MD	0.56	ND	MD	ND
Chromium	E9/k3	5.5	11.6	398 -	21.7	7.2
Cobalt	as/ka	2.8	2.2	4.8	3.8	4.4
Correr	ms/ks	5.7	4.1	29.0	5.2	5.9
Lead	ag/kg	8.2	7.0	50.0	12.5	13.3
Mercury	as/ko	ND	ND	1.3	MD	ND
Nickel	mg/kg	5.1	5.3	9.0	7.9	8.0
Potassium	ao/ka	853	793	2320	1200	1210
Scienium	mg/kg	ND	MD	ND	MD	ND
Vanadium	mg/kg	15.5	14.4	13.6	13.9	13.7
Zinc	± 9/k9	14.0	15.2	91.2	12.5	12.5

Sample roint number		05	05	05	05	05	05	05
Depth of sample		V0.0	V3.0	D3.0	V6.0	V9.0	V12.5	D12.5
Parameter	Units	Result	Result	Result	Result	Result	Result	Result
Method 8240								
Chloromethane	us/kg	ND	ND	ND	ND	ND	HD	ND
Bromomethane	ua/ka	ND	ND	MD	ND	ND	ND	ND
Vinyl chloride	ua/ka	ND	ND	ND	ND	ND	ND	ND
Chloroethanc	up/ka	ND	ND	HD	ND	ND	MD	ND
Methylene chloride	uo/ko	ND	ND	ND	MD	ND	ND	עא
1,1-Bichloroethene	uo/ka	ND	ND	ND	ND	ND	ND	ND
1.1-Bichloroethane	ug/kg	ND	ND	ND	ND	ND:	ND	ND
1.2-Dichloroethana (cis/trans)	ug/kg	ND	ИD	ND	ND	ND	ND	MD
Chloroform	ug/kg	ND	NΩ	ND	MD	ND	ND	ND
1,2-Bichloroethane	us/ko	ND	ND	ND	ND	ND	ND	MD
1.1.1-Trichloroethane	us/ks	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ua/ka	ND	ND.	ND	ND	ND	ND	ND
Bromodichloromethane	น9/kg	ND	ND	ND	ND	ND:	ND	ИU
1.2-Bichlororrorane	uo/ka	ND	ND	MD	MD	ИD	ND	ND
trans-1,3-Dichloropropene	us/ks	MD	ND	ND	ND	Œſ	ND	ND
Trichloroethene	ug/kg	ND	ND	MD	ЮK	CM	MD	ND
Dibromochloromethane	ua/ka	ND	ND	МD	ND	ND	ND	DM
1,1,2-Trichloroothene	up/kp	ND	ND	ND	מא	ND	ND	ND
Benzene	ua/ka	ND	ND	ND	37000	ND	MD	ND
cis-1,3-Dichlororrorene	ua/ka	ND	MD	ND	MD	MD	MD	מא
2-Chloroethyl vinyl ether	ua/ka	ND	ND	HD	ND	ND	ND	ND
Bromoform	uo/ka	ND	ND	ND	ND	מא	ND	ND
1,1,2,2-Tetrachloroethane	us/ka	MD	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ug/kg	ND	MD	MD	ND	ND	ND	ND
Toluene	ug/kg	MD	ND	ND	290000	2600	980	680
Chlorobenzene	ua/ko	MD	ND	MD	ND	ND	ND	ND
Ethylbenzenc	ug/kg	ND	ND	ND	76900	1200	ND	MD
Acetono	uo/ke	ND	ND	ND	ND	MD	ND	MD
Acrolein	ua/ks	MD	ND 1	ND	ND	ND	ND	ND
Acrylonitrile	us/ks	ND	ND	ND	ND	MD	ND	ND
Carbon disulfide	u9/kg	ND	ND	ND	ND	ND	ND	ND
Dibromomothane	ug/kg	MD	MD	ND	MD	ND	פא	ND
trans-1,4-Dichloro-2-butene	us/ko	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	ua/ka	MD	ND	ND	MD	ND	ND	ND
trans-1,2-Dichloroethene	ug/ks	MD	ND	ND	ND	HD	ND	ND
Ethanol	us/ks	ND	ND	ND	ND	ND	ND	MD
Iodomethane	us/ks	ND	ND	ND	ND	ND	ND	ND
2-Butanone (HEK)	us/ks	MD	ND	ND	HD	ND	DM	ND
4-Mcthyl-2-rentanone (MIBK)	us/ka	ND	ND	ND	ND	ND	ND	ND
Styrene	ug/ko	ND	MD	ND	MD	ND	MD	ND
Trichlorofluoromethane	ua/ka	ND	ND	ND	ND	ND	МD	ND
1,2,3-Trichloropropane	ua/ko	ND	ND	ND	מא	ND	MD	ND
Vinyl acctate	u9/k9	MD	ND	ND	ND	ND	ND	ND
Xylenes (total)	ua/ka	ND	ND	ND	540000	9700	1700	990
2-Hexanone	u9/kg	ND	ND	ND	מא	ND	ND	ND
Ethyl methacrylate	ua/ka	MD	ND	ND	ND	ND	MD	ND

RFI10 - Sludge Pits

Sample point number		05	95	05	05	05	05	05
Depth of sample	•	V0.0	V3. 0	D3.0	V6.0	V9. 0	V12.5	D12.5
Parameter	Units	Result	Result	Result	Result	Result	Result	Result
Method 8270								
Acemarthene	ua/ko	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	ua/ka	ND	MD	ND	MD	ND	ND	ND
Acetophenonc	ug/kg	ND	ND	ND	ND	ND	ND	ND
1-Aminobirhenyl	us/ks	ND	CM	ND	MD	ND	ND	ND
Aniline	ua/ka	ND	ND	ND	ND	ND	ND	ND
Anthracene	ua/ka	ND	ND	MD	ND	MD	ND	ND
Benzo(a)anthracene	us/ka	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	us/ks	ND	D	ND	ПD	ND	MD	ND
Benzo(k)fluoranthene	us/kg	ND	ND	ND	ND	ND	ND	ND
Benzo(a,h,i)rerylene	us/ks	ND	ND	ND	ND	MD	ND	ND
Benzo(a)pyrenc	us/ks	NLI	ND	ND	ND	ND	ND	ND
Benzyl alcohol	us/ks	ND	ND	ND	MD	ND	MD	MD
bis(2-Chloroethoxy)-methane	ua/ka	ND.	ND	ND	ND	ND	ND	ND
bis(2—Chloroethyl) ether	ua/ka	ND	MD	ND	ND	MD	ND	MD
bis(2-Chloroisoprorγl)-εther	u9/k9	ND	ND	ND	ND	ND	ND	ND
bis(2-Ethylhexyl) rhthalate	up/ks	ND	MD	ND	MD	ND	פא	MD
4-Bromorhenyl rhenyl ether	us/ka	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	us/ks	ND	MD	מא	ND	ND	ND	ND
4-Chloroaniline	ua/ka	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	uo/ks	ND	מא	ND	ND	ND	ND	ND
2-Chloromarhthalene	us/ks	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	ua/ka	ИD	ND	MD	MD	ND	ND	ND
4-Chlorophenyl phenyl ether	us/ks	ND	ND	ND	ND	ND	ND	MD
o-Cresol	u3/ka	ND	MD	HD	ND	34000	19000	16000
m & r-Cresol(s)	us/ka	ND	ND	ND	120000	68000	34000	28000
Chrysene	ua/ko	ND	ND	MD	ND	MD	ND	MD
Dibenz(a,h)anthracene	ug/ks	ND	MD	ND	ND	ND	ND	MD
Di-n-butyl phthalate	us/ko	MD	ND	MD	ND	ND	MD	ND
1.2-Dichlorobenzene	ug/kg	ND	ND	ND	ND	ND	ND	ND
1.3-Dichlorobenzene	ub/ke	ND	MD	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	us/ka	ND	ND	ND	ND	ND	מא	ND
3.3-Bichlorobenzene	ug/kg	MD	ND	ND	MD	ND	ND	ND
2.4-Dichlorophenol	us/ks	ND	מא	ND	ND	ND	ND	ND
2.5-Dichlorophenol	us/ks	ПH	ND	MD	ND	ND	ND	ND
Diethyl phthalate	ua/ka	ND	ND	ND	ND	ND	Œ	ND
r-Dimethylaminoazobenzene	ug/kg	MD	MD	ND	ND	ND	ND	ND
7,12-Bimethylbenz(a)-	ua/ka	ND	ND	ND	ND	ND	מא	ND
anthracene	us/ko	ND	ND	MD	ND	MD	MD	ND
a.a-Dimethylphenethyl-amine	uo/ko	ND	ND	ND	ND	ND	ND	ND
2.4-Dimethylphenol	ug/ko	מא	MD	MD	ND	12000	7900	5300
Dimethyl phthalatc	us/ks	ND	ND	ND	ND	ND	ND	ND
1,3-Dinitrobenzeno	us/ko	ND	ND	ND	ND	ND	ND	MD
4.6-Dinitro-o-cresol	us/ks	ND	MD	ND	ND	ND	ND	ND
2.4-Dinitrophenol	us/ks	מא	MD	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	u9/k9	ND	ND	ND	ND	ND	ИN	ПИ
2.6-Dinitrotoluenc	us/ks	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	us/ka	ND	ND	ND	ND	ND	ND	ND

Sample point number Depth of sample		05 V0.0	05 V3.0	05 D3.0	05 V6.0	05 V9.0	05 V12.5	05 D12.5
Parameter	Units	Result	Result	Result	Result	Result	Result	Result
Method 8270 (con/t)								
Ethyl methanesulfonate	ua/ka	ND	MD	ND	ND	ND	ND	ND
Fluoranthene	ug/kg	CM	ND	ND	מא	MD	ND	ND
Fluorene	ug/kg	MD	ND	ND	100000	ND	ND	ND
Hexachlorobonzene	us/ko	ND	ND	MD	ND	ND	ND	ND
Hexachlorobutadiene	us/ke	ND	ND	ND	ND	ИD	ND	ND
Hexachlorocyclorentadione	ua/ka	ND	ND	ND	MD	ND	ND	ND
Hexachloroethane	u9/ko	ND	ND	MD	ND	ND	ND	ND
Indeno(1,2,3-cd)ryrene	ug/kg	ND	MD	ND	ND	ND	ND	ND
Isophorone	ug/kg	ND	ND	ND	ND	ND	ND	ND
3-Methylcholanthrene	ug/ko	ND	ND	ND	ND	ND	ND	ND
Methyl methanesulfonate	us/ks	ND	ND	MD	ND	ND	ND	ND
2-Mothylnarhthalene	ua/ko	ND	מא	ND	1400000	ND	מא	ND
Naphthalene	us/ks	ND	ND	ND	34000	ND	ND	ND
1-Naphthylamine	ug/kg	MD	ND	ND	ND	ND	ND	ND
2-Narhthylamine	ug/kg	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	ug/kg	ИD	ND	ND	ND	ND	ND	ND
3-Nitroaniline	ua/ka	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	из/кз	ND	ND	ND	פא	ND	D.	MD
Nitrobenzene	uo/ka	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	us/ks	ND	ND	ND	MD	ND	ND	MD
4-Nitrophenol	ua/ka	ND	ND	MD	ND	ND	MD	ND
N-Nitroso-di-n-butylamine	up/ks	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	บ១/ks	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodirhenylamine	us/ks	ND	ND	ND	ND	ND	סא	ND
N-Nitrosc-di-n-propylamine	ua/ka	ND	ND	ND	ND	ND	ND	ND
N-Nitrosopireridine	us/ks	ND	ND	MD	ND	MD	ND	ND
Pentachlorobenzene	u9/k9	ND	ND	ND	ND	ND	ND	ND
Pentachloronitrobenzene	นว/k១	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
Phenacetin	ug/ko	ND	- ND	ND	ND	ND	ND	ND
Phenanthrene	ug/kg	ND	ND	ND	250000	ND	ND	ND
Phenol	ug/kg	ND	ND	ND	ND	71000	32000	28000
2-Picoline	ua/ka	ND	ND	ND	ND	ND	ND	ND
Pronamide	119/kg	ND	ND	ND	ND	ND	םא מא	ND
Pyrene	us/ks	ND	ND	ND	ND	ND	ND	ND
1.2.4.5-Tetrachloro-benzene	ua/ka	ND	ND	ND	ND	ND	ND	ND
2.3.4.6-Tetrachlorophenol	us/ks	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	us/ks	ND	ND	ND	ND	ND	ND	ND
2.4.5-Trichlorophenol	ug/kg	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	us/ks	ND	ND	ND	MD	ND	ND	ND
Benzidine Benzidine	us/ks	ND	ND	ND	ND	טיו עא	ND	ND
Benzoic acid	us/ks	MD	ND	ON	MD	ND	ND	ND
1-Chloronarhthalene	us/ks	ND ND	ND	ND	HD HD	ND	ND	תא מא
1,2-Diphenylhydrazine	na\ka	MD	ND D	MD	ND	ND	םא מא	מא תא
TIL DIFFERENTIALULATUR	421 KA	140	INU	1417	INU	IND	NU	KU

Sample point number Depth of sample		05 V0.0	05 V3.0	05 D3.0	05 V6.0	05 V9.0	05 V12.5	05 D12.5
Parameter	Units	Result	Result	Result	Result	Result	Result	Result
Total Metals								
Antimony	ma/ka	MD	ND	ND	ND	ND	ND	MD
Arsenic	mo/ko	MD	0.52	0.61	27.9	0.58	ΝD	ND
Barium	me/ka	315	321	251	709	48.7	187	124
Beryllium	ma/ka	0.33	0.85	0.59	9.75	1.4	1.2	1.1
Cadmium	ms/ka	ND	ND	ND	1.5	ND	ND	MD
Chromium	ms/ks	5.8	5.3	5.8	4020	11.6	9.9	5.1
Cobalt	ma/ko	4.0	4.4	2.3	9.4	5.7	5.1	3.9
Corpor	ms/ko	9.2	4.5	9.1	215	11.8	7.2	7.8
Lead	mg/ko	13.2	11.8	11.1	337	16.1	14.2	16.0
Mercury	mo/ke	ŒИ	ND	ND	2.9	ND	ND	ND
Nickel	ma/ka	5.8	6.8	4.2	19.2	11.3	9.3	5.9
Potassium	ms/ks	950	634	531	3920	1450	1250	1010
Selonium	æ9/k9	ND	ND	ND	ND	HD	ND	MD
Vanadium	mo/ko	14.5	14.1	13.3	24.2	18.7	16.2	14.0
Zinc	20/kg	11.9	13.1	8.2	538	17.9	14.3	12.4

Sample roint number Depth of sample		02 E3.0	TRIP BLANK
Paramoter	Units	Result	Result
Method 8240			
Chloromethane	u9/L	ND	ND -
Bromomethane	us/L	ND	ND
Vinyl chloride	ua/L	ND	ND
Chloroethane	us/L	ND	MD
Methylenc chloride	ua/L	ND	ND
1.1-Dichlorocthene	us/L	ND	ND
1.1-Dichloroethane	ug/L	ND	ND
1.2-Dichloroethene (cis/trans)	us/L	ND	ND
Chloroform	א/פני	ND	ND
1,2-Dichloroethane	ua/L	ИD	MD
1.1.1-Trichloroethane	ug/L	ND	ND:
Carbon tetrachloride	u9/L	DM	ND
Bromodichloromethano	ua/L	MD	ND
1,2-Bichloropropane	บ9/L	ND	ND
trans-1,3-Dichloropropene	υ9/L	DM	MD
Trichloroethene	ua/L	מא	MD
Dibromochloromethane	ש/L	MD	ND
1.1.2-Trichlorsethene	us/L	מא	ND
Benzene	u9/L	ND	ИD
cis-1,3-Dichlororrorene	up/L	ПN	ND
2-Chloroethyl vinyl ether	ua/L	ND	ND
Bromoform	üs/L	פא	ND
1,1,2,2-Tetrachloroethane	u9/L	ND	MD
Totrachloroethene	118/F	ND	MD
Toluene	ua/L	ND	ND
Chlorobenzene	na\F	MD	MD
Ethylbonzene	ua/L	ND	ND
Acetone	ua/L	12	ND
Acrolein	us/L	MD	ND
Acrylonitrile	ua/L	MD	MD
Carbon disulfide	us/L	ND	ND
Dibromomethane	ua/L	ND	MD
trans-1,4-Dichloro-2-butene	us/L	ND	ND
Dichlorodifluoromethane	ug/L	CM	MD
trans-1,2-Dichloroethene	ua/L	ND	ND
Ethanol Iodomethane	us/L	ŒΛ	MD
2-Butanone (MEK)	u9/L	ND	ND ND
	us/L	ND	ND
4-Methyl-2-rentanone (MIEK) Styrene	u9/L	ND ND	ND ND
Styrene Trichlorofluoromethane	ug/L ug/L	ON ON	ND ND
1,2,3-Trichloromethane	03/L 08/L	MD MD	ND ND
Vinyl acetate	us/L	MD	HD HD
Xylenes (total)	ua/L	MD	MD
2-Hexanone	us/L	ND	ND
Ethyl methacrylate	u9/L	ND ND	ND
wester meanight than	45/6	115	,,,,

Sample point number Depth of sample		02 E3.0	TRIP BLANK
Parameter	Units	Result	Result
Method 9270			
Acenarthene	ua/L	ND	
Acenaphthylene	ug/L	ND	
Acetorhenone	u9/L	ND	
4-Aminobirhenyl	us/L	ND	
Aniline	u9/L	ND	
Anthracene	ua/L	ND	
Benzo(a)anthracene	u9/L	ND	
Benzo(b)fluoranthene	us/L	ND	
Benzo(k)fluoranthene	u9/L	ND	
Benzo(g,h,i)rerylene	ນວ/L /\	ND	
Henzo(a)ryrene Benzyl alcohol	u9/L	ND ND	
bis(2-Chloroethoxy)-methane	us/L us/L	ND ND	
bis(2-Chloroethyl) ether	ug/L	MD	
bis(2-Chloroisorropy))-ether	us/L	ND	
bis(2-Ethylhexyl) phthalate	ug/L	ND	
4-Bromorhenyl phenyl other	us/L	ND	
Butyl benzyl chthalate	us/L	MD	
1-Chloroaniline	ug/L	ND	
4-Chloro-3-methylphenol	ug/L	ND	
2-Chloromarhthalene	ug/L	ND	
2-Chlorophenol	us/L	OM.	
4-Chlorophenyl phenyl ethor	u9/L	ND	
o-Cresol	up/L	ND	
≋ & p−Cresol(s)	us/L	ND	
Chrysene	us/L	מא	
Dibenz(a,h)anthracene	ug/L	ND	
Di-n-butyl phthalate	ua/L	ND	
1.2-Dichlorobenzene	us/L	ND	
1.3-Bichlorobenzene	ua/L	MD	
1.4-Dichlorobenzene	u9/L	ND	
3,3-Dichlorobenzene	ua/L	MD	
2.4-Dichlorophenol	ua/L	MD	
2,6-Dichlorophenol	ua/L	ND	
Diethyl phthalate	us/L	ND	
P-Dimethylaminoazobenzene	us/L	ND	
7,12-Dimethylbenz(a)-	u9/L	ND ND	
anthracene	u9/L	ND	
a,a-Dimethylphenethyl-amine	us/L	ND	
2.4-Dimethylrhenol Dimethyl phthalate	u9/L	ND	
1.3-Dinitrobenzone	us/L us/L	ND ND	
4.6-Dinitro-o-cresol	us/L	ND	
2,4-Dinitrophenol	us/L	MD	
2,4-Dinitrotoluene	us/L	ND	
2,6-Dinitrotoluene	us/L	ND	
Di-n-octyl phthalate	up/L	ND	
Dirhonylamine	09/L	CM	
	-2016	112	

Sample point number Derth of sample	٠	02 E3.0	TRIP Blank
Parameter	Units	Result	Result
Method 8270 (con't)			
Ethyl methanesulfonate	א/כנו	ND	
Fluoranthene	us/L	ND	
Fluorene	us/L	ND	
Hexachlorobenzene	us/L	ND	
Hexachlorobutadiens	ua/L	ND	
Hexachlorocyclopentadicne	us/L	ND	
Hexachloroethane	ua/L	ND	
Indeno(1,2,3-cd)ryrene	ug/L	ND	
Isorhorone	up/L	ND	
3-Methylcholanthrenc	u9/L	ND	
Methyl mothanesulfonate	us/L	MD	
2-Methylnarhthalene	us/L	ND	
Narhthalene	J\eu	MD	
1-Narhthylamine	u9/L	ND	
2-Naphthylamine	ug/L	MD	
2-Nitroaniline	u9/L	ND	
3-Nitroaniline	us/L	ND	
4-Nitroaniline	ug/L	MD	
Nitrobenzone	U9/ L	MD	
2-Nitrophenol	us/L	ND	
4-Nitrorhenol	up/L	MD	
N-Nitroso-di-n-butylamine	us/L	ND	
N-Nitrosodimethylamine	u9/L	MD	
N-Nitrosodirhenylamine	ug/L	ND	
N-Nitroso-di-n-rrorriamine	us/L	ND	
N-Nitrosopireridine	U3/L	ND	
Pentachlorobenzone	us/L	ND	
Pentachloronitrobenzenc	ug/L	ND	
Pentachlorophenol	ua/L	ND	
Phonacetin	u9/L	ND	
Phenanthrene	uo/L	ND	
Phenol	us/L	ND	
2-Piceline	us/E	MD	
Pronamide	us/L	ND	
Pyrene	u3/L	ND	
1,2,4,5-Tetrachloro-benzene	u9/L	ND	
2,3,4,6-Tetrachlorophenol	us/L	ND	
1,2,4-Trichlorobenzene	us/L	ND	
2.4.5-Trichlorophenol	us/L	ND	
2,4,6-Trichlorophenol	u9/L	ND	
Benzidine	uo/L	ND	
Benzoic acid	us/L	Œ	
1-Chloronaphthalene	us/L	ND	
1,2-Diphenylhydrazine	u9/L	ND	

	02 E3.0	TRIP BLANK
Units	Result	Result
ms/L	MD	
39/L	ND	
mg/L	MD	
mo/L	ND	
ma/L	MD	
mg/L	ND	
mg/L	ND	
ms/L	ND	
mg/L	MD	
ma/L	ND	
mg/L	ND	
mg/L	ND	
ms/L	ND	
29/L	ND	
ms/L	MD	
	ms/L ms/L ms/L ms/L ms/L ms/L ms/L ms/L	E3.0 Units Result ms/L ND