APPENDIX F TABLE OF CONTENTS

FIGURES

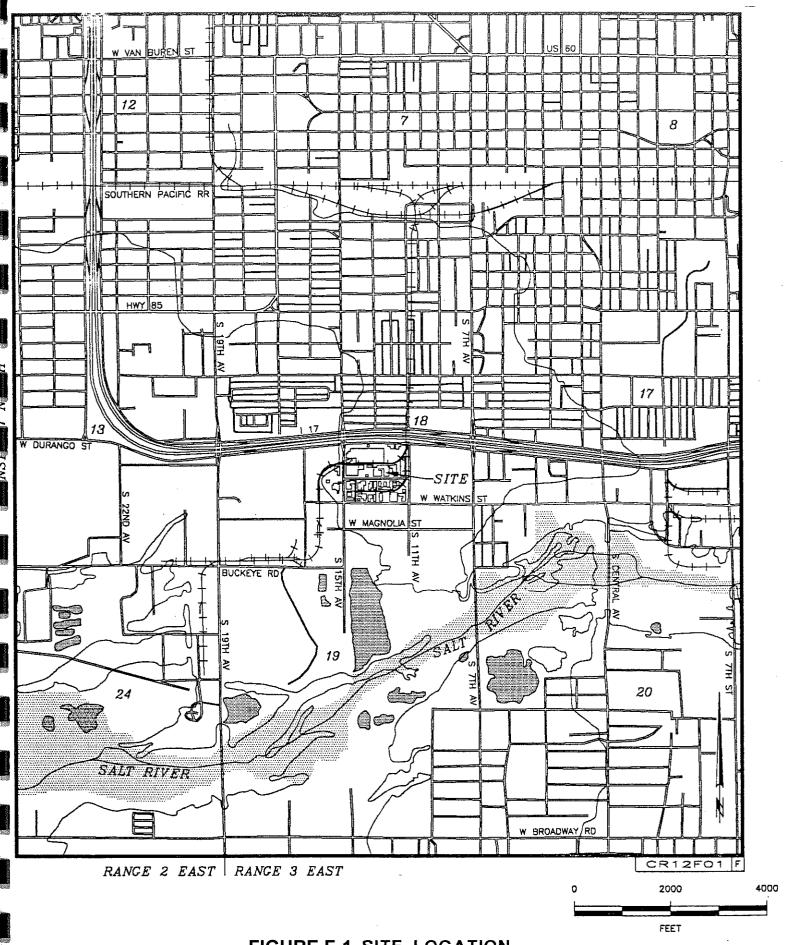
Figure F-1	Site Location
Figure F-2	Schematic Site Diagram
Figure F-3	Results For Tetrachloroethene
Figure F-4	Site Location – Detail
Figure F-5	Results of Initial Soil Sampling
Figure F-6	Soil Sampling Locations
Figure F-7	Monitor Well Locations

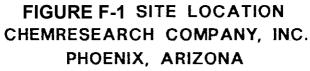
TABLES

Table F-1 ChemResearch Company Inc. Well Information

LABORATORY REPORTS

Hydro Geo Chem, Inc. Soil Gas Analyses Analytical Technologies, Inc. Soil Sample Analyses American Environmental Network (Arizona), Inc. Soil Sample Analyses







HARGIS+ASSOCIATES, INC

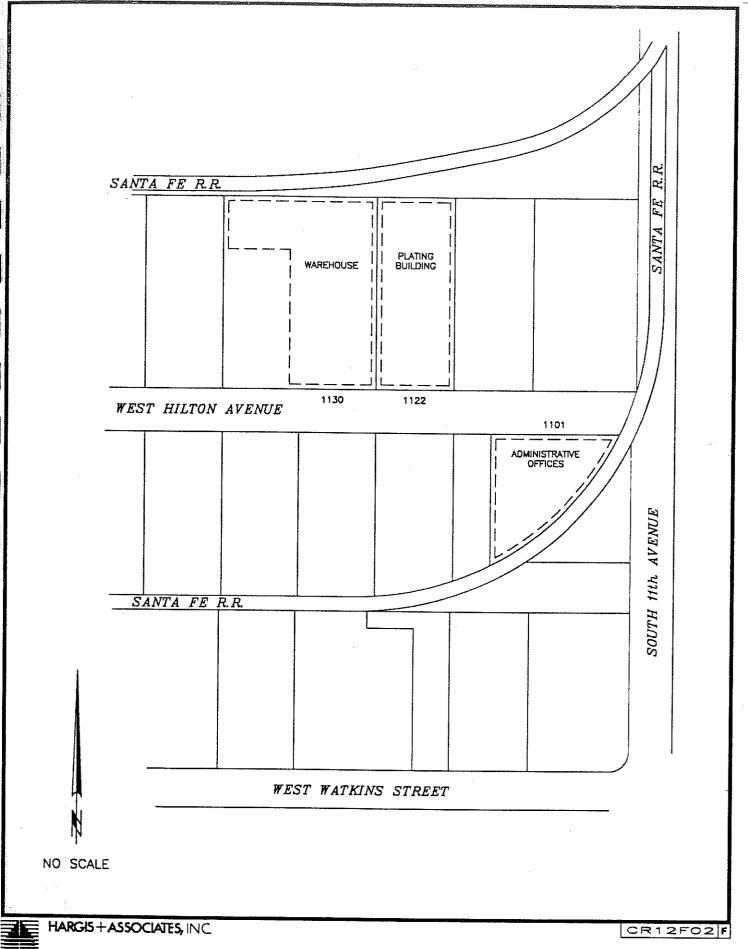
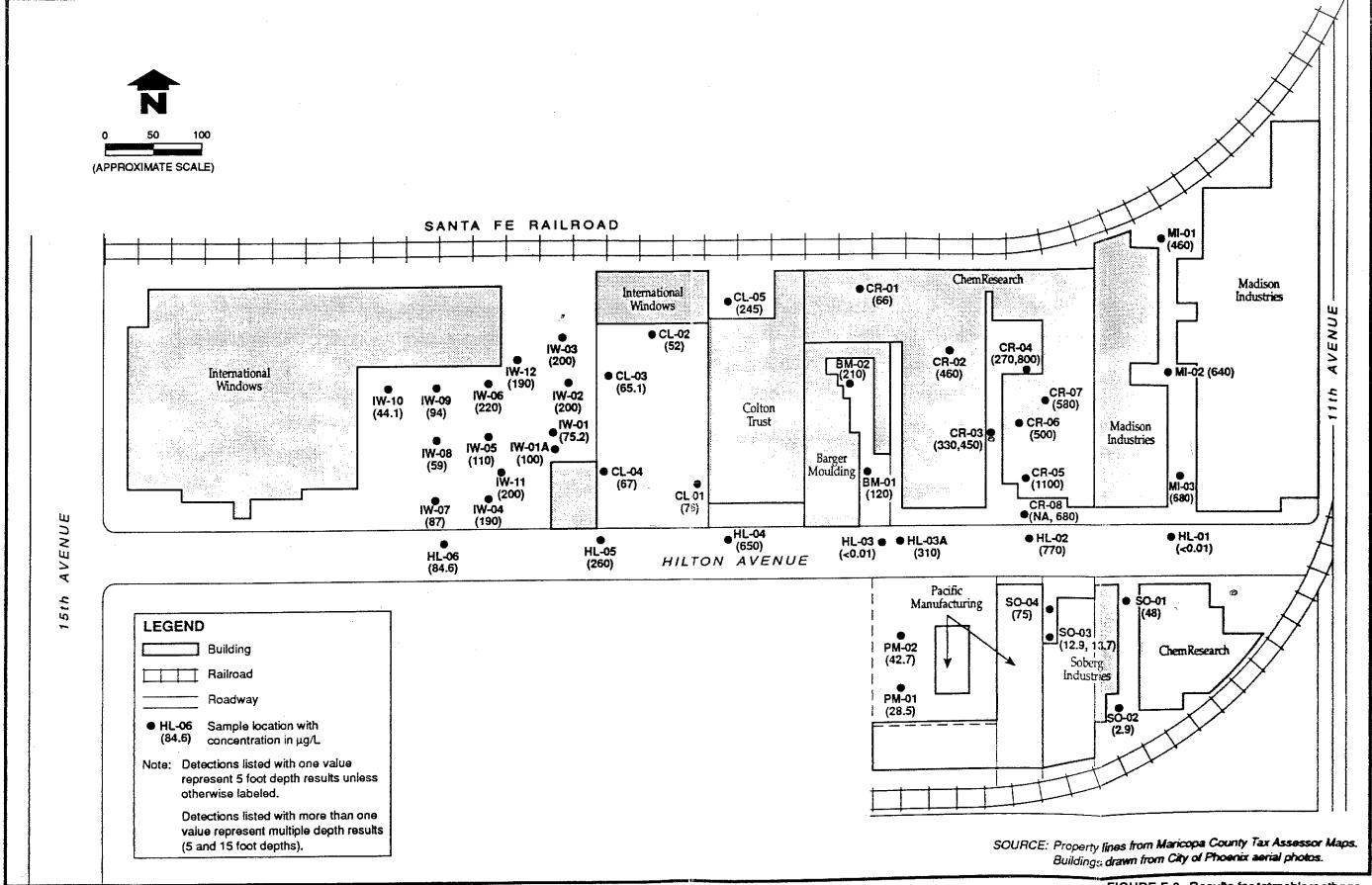
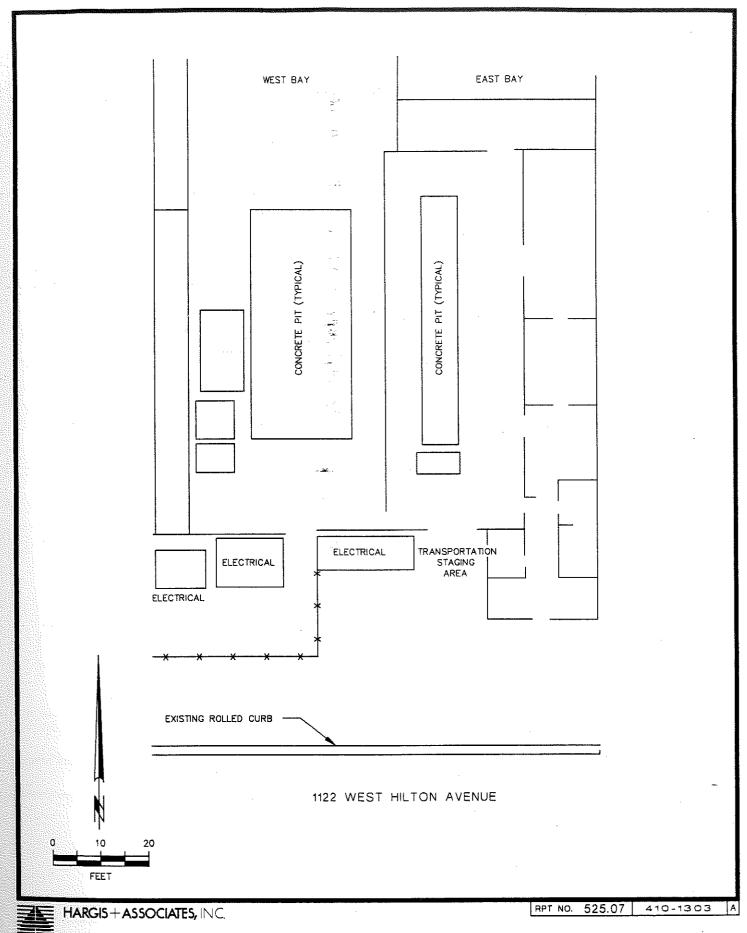


FIGURE F-2 SCHEMATIC SITE DIAGRAM



ADEQ/0304-02/12-17-92

FIGURE F-3 Results for tetrachioroethene (µg/L), Hilton Avenue Soil Gas Survey.



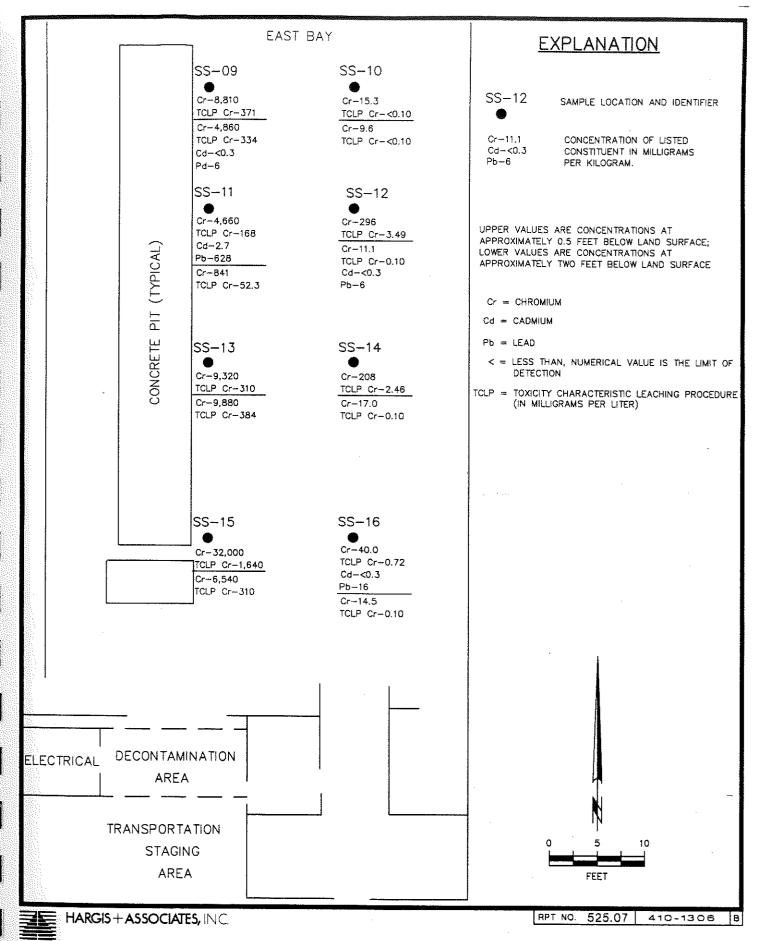


FIGURE F-5 RESULTS OF INITIAL SOIL SAMPLING

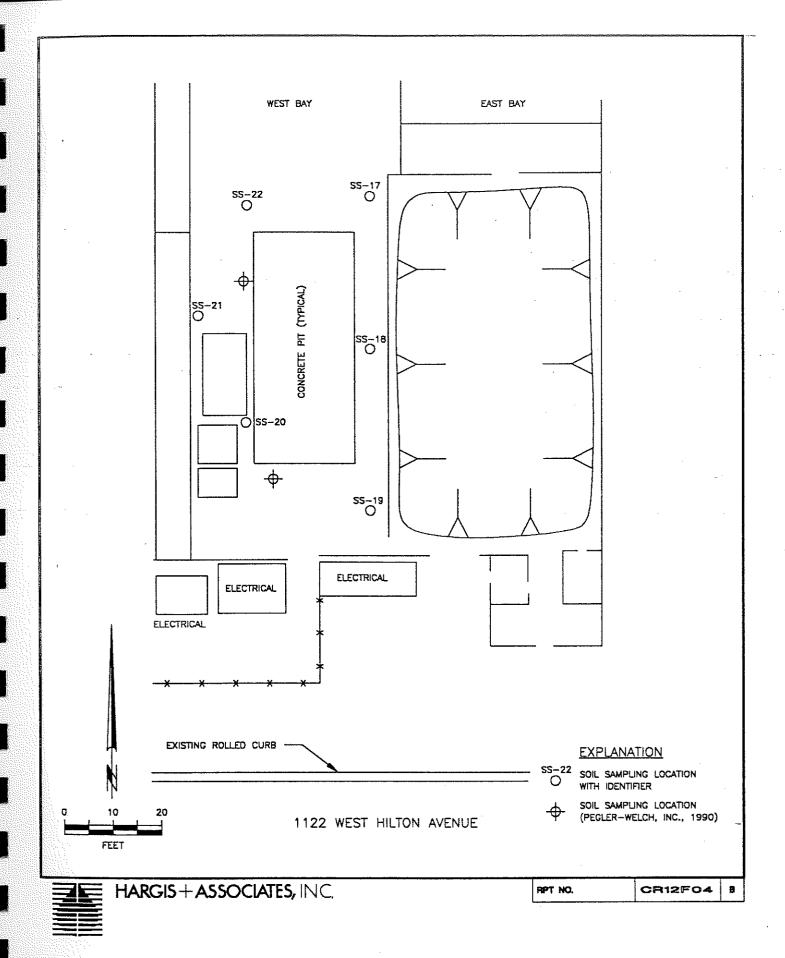
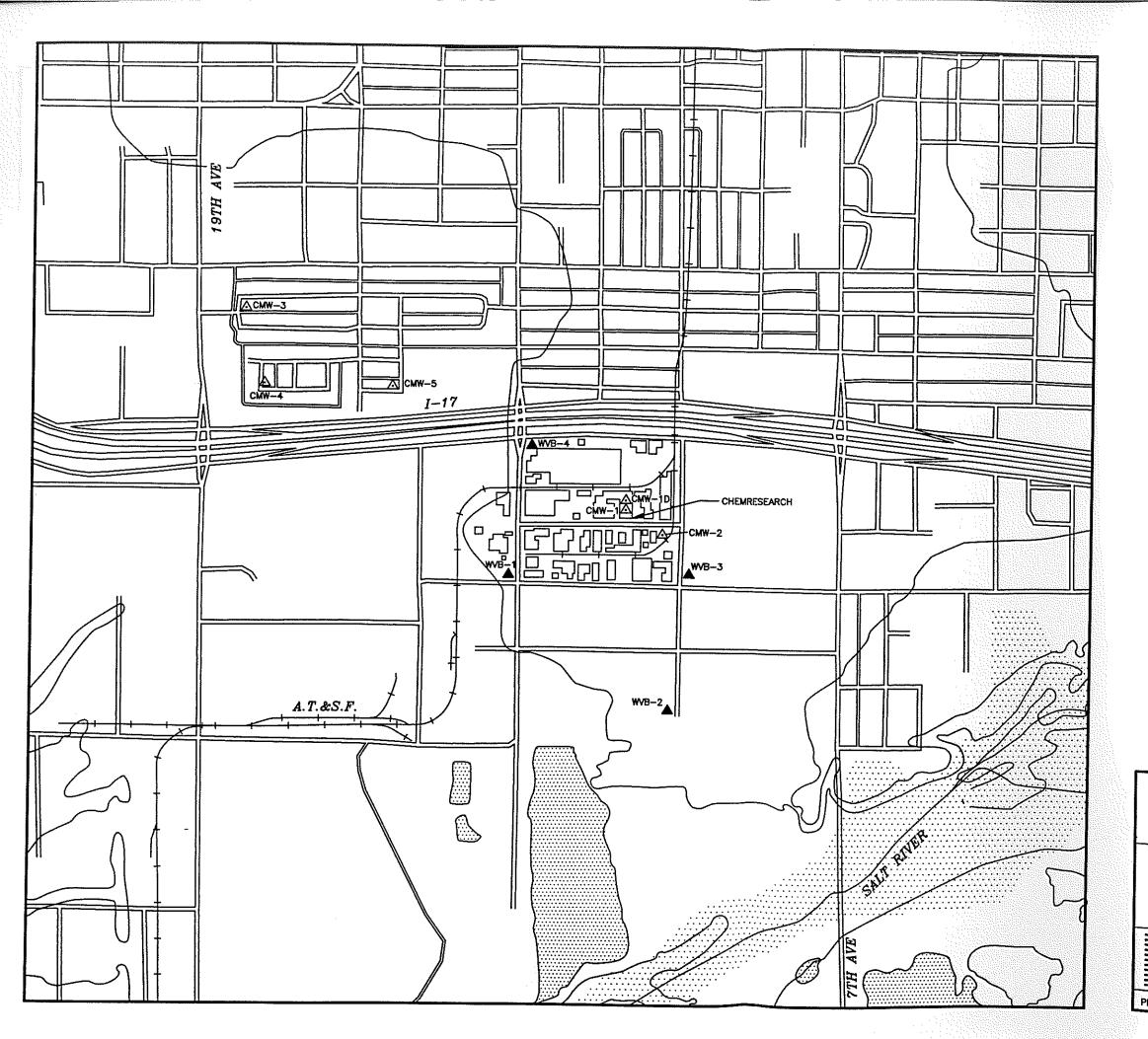


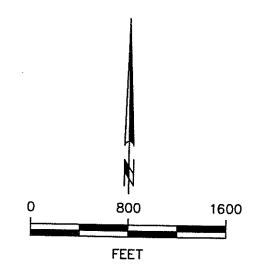
FIGURE F-6 SOIL SAMPLING LOCATIONS



EXPLANATION

MONITOR WELL LOCATION WITH IDENTIFIER
(INSTALLED BY THE ARIZONA DEPARTMENT
OF ENVIRONMENTAL QUALITY)

MONITOR WELL LOCATION WITH IDENTIFIER
(INSTALLED BY CHEMRESEARCH COMPANY, INC.)



CHEMRESEARCH COMPANY, INC. PHOENIX, ARIZONA

FIGURE F-7
MONITOR WELL LOCATIONS

3/99

HARGIS+ASSOCIATES, INC.

REPARED BY REVIEWED BY CR22F03

Table F-1 ChemResearch Company, Inc. Well Information West Van Buren WQARF Site

WVBA WELL ID	OWNER/FACILITY NAME	FACILITY WELL ID	ADWR #	TOTAL DEPTH (FT BTOC)	CASING DIAMETER (INCHES)	PERFORATED INTERVAL (FT BGS)	MEASURING POINT ELEVATION (FT AMSL)
CMW-1	ChemResearch	CMW-1	55-550295	91	4	61-91	1,064.13
CMW-1D	ChemResearch	CMW-1D	55-566844	234	4	194-234	1,064.64
CMW-2	ChemResearch	CMW-2	55-550296	91	4	61-91	1,064.51
CMW-3	ChemResearch	CMW-3	55-562041	130	4	70-130	1,057.54
CMW-4	ChemResearch	CMW-4	55-570659	90	4	60-90	1057.65
CMW-5	ChemResearch	CMW-5	55-568583	90	4	60-90	1061.31

Notes: FT BTOC - Feet Below Top Of Casing

FT BGS - Feet Below Ground Surface FT AMSL - Feet Above Mean Sea Level

Sample # ER	103967	Date/Time Wash	92/10:30 Data Base File 5130weston
	ription LAB	-	42/10.50 Data base Fire 3130 Weston
			ilwater soil-62s FB
•		1	
	, ,	_	rface Conditions As Mall
			e (ml) A= ZOO B=
		•	the Volume (ml) 900 ml
			tes Purge Vacuum
•			cuum ("Hg) A= 4 B=
Notes Fulc		Ville 2 guilte 4 g C	$\frac{\text{defit} \left(\text{ ng} \right)_{R} = 1}{\text{b}} = \frac{1}{\text{b}}$
Lab Receipt:		m. Cours	Date/Time_16/78/92_10:37
cab necespe.	Jighacure	//// Care = 1	
Compound	Concontrati	ion (ug/1)	AIP
Compound	A	An	AIR OBIENT 10/25/92
Vinyl Chlorid		<u>-</u> 50-01	<u>Notes</u>
1,1-DCE	(0.01	<0.01	
1,2-TDCE	(0.01	<u> </u>	
1,1-DCA	CD. 01	10.01	
1,2-CDCE	<u> </u>	<u>co.01</u> .	
Chloroform	.<0.01	<u> </u>	
1.1.1-TCA	20.01	LO. J	
	(0.01	<u> </u>	
TCE	Z0.01	20.01	
1,1,2-TCA	. 40,01	LD:01	
PCE .	_ <0.01	(0.01	
%Surr Rec.	/00	81	•

	•		
		4	· · · · · · · · · · · · · · · · · · ·
	-		
	-		
***************************************	-		·

```
ANALYST (MC ) AN="
INJECTIONS/SAMPLE [0=254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 199) CI=
CONC UNITS (ug/L ) CU="
SAM IX NAME
                    SAM AMT
                              SCALE
                               XF = 1
      SN=" FB102892 SA= 0.2
SI= 1
S1=
END OF DIALOG
7.B/
SAMPLE TABLE . . .
ANALYST (MC ) AN="
INJECTIONS/SAMPLE [0-254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 100) CI=
CONC UNITS (ug/L ) CU="
                    SAM AMT
                              SCALE
SAM IX NAME
                             XF = 1
       SN=" FB102892 SA= 0.2
SI= 1
S1=
END OF DIALOG
CHANNEL A | INJECT | 10/28/92 | 11:03:16 | STORED TO BIN # | 45
    AZ 1 PM 1
                                                                 14.66
             15.00
DATA SAVED TO BIN # 45
                           10/28/92 11:03:16 CH= "A" PS= 1.
HECD/WESTON
FILE 1. METHOD 5. RUN 54 INDEX 1
                                                       BIN 45
ANALYST: MC
                      BIN 45 NAME ARUN0046
SAMPLE 1 FB102892
   SA
           13
                  XF
   Ø.2
           ⊌.
                    1 .
                         RT AREA BO RE
MAME
                 ug/L
```

4 978 14.66 6832394 026862989 100

SAMPLE TABLE . .

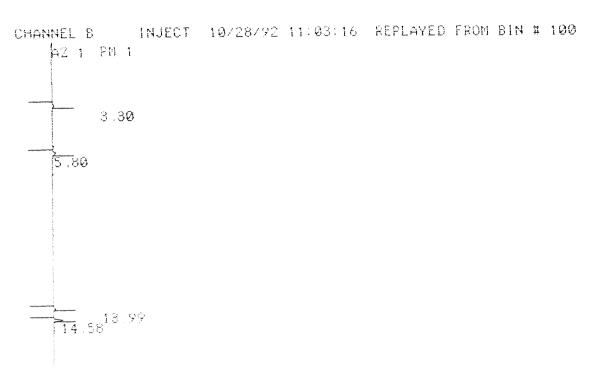
BCP

 HEATTE WOLF IN PUBL
 15.273
 15.399900 021611636.162

 PUL
 N
 0.836
 15.27
 156682 03 937126.096

TOTALS

7.027 7379976



DATA SAVED TO BIN # 100

PID/WESTON

10/28/92 11:03:16 CH= "B" PS= 1.

FILE 1. METHOD 5. RUN 36 INDEX 1

BIN 100

ANALYST: MC

SAMPLE 1 FB102892 BIN 100 NAME BRUN0035

SA 1S XF 0,2 0, 1.

NAME	ug/L	RT	AREA	96	RF	
DCE++ not on Nall DCE++ 11 BCP	0.106 0.047 0. 4.505	3,3 5,8 13,99 14,58	18546 9565	011 01	460391.6 972233.3 44041.	
TOTALS	4 .658		77540			

FW 116/1/2/2

```
SAMPLE TABLE...

ANALYST (MC ) AN="
INJECTIONS/SAMPLE [0-254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 100) CI=
CONC UNITS (ug/L ) CU="
SAM IX NAME SAM AMT SCALE
SI= 1 SN=" FB102892 SA= 0.2 XF= 1
SI=
END OF DIALOG
LOW BATTERY
```

CHANNEL A INJECT 10/28/92 11:03:17 STORED TO BIN # 45
AZ 1 PM 1

DATA SAVED TO BIN # 45

FID/WESTON 10/28/92 11:03.17 CH= "A" PS= 1.

FILE 1. METHOD 5. RUN 48 INDEX 1 BIN 45

ANALYST: MC

SAMPLE 1 FB102892 BIN 45 NAME ARUN0045

SA IS XF 0.2 0. 1.

NAME ug/L RT AREA BC RF
BCP 4.654 12.6 812842 01 873321 . 93
TOTALS 4.654 812842

```
SAMPLE TABLE . . .
                                                        (MORNING)
ANALYST (MC ) AN="
INJECTIONS/SAMPLE [0-254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 100) CI=
CONC UNITS (ug/L ) CU="
SAM IX NAME
                    SAM AMI
                            SCALE
SI= 1 SN=" AIRA102892SA= 2.7 XF= 1
S1=
END OF DIALOG
7.A7
SAMPLE TABLE ...
ANALYST (MC ) AN="
INJECTIONS/SAMPLE [0-254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 199) CI=
CONC UNITS (ug/L ) CU="
                             SCALE
SAM IX NAME
             SAM AMT
      SN=" AIRA102892SA= 2.7 XF= 1
S1= 1
S1=
END OF DIALOG
CHANNEL A INJECT 10/28/92 19:13:19 STORED TO BIN # 59
   AZ 1 PM 1
                                                              14.62
        ER 0
DATA SAVED TO BIN # 59
                         HECD/WESTON
                                                    BIN 59
FILE 1, METHOD 5, RUN 68 INDEX 1
ANALYST: MC
SAMPLE 1 AIRA102892 BIN 59 NAME ARUN0059
```

XF

1

18

⊍ ,

SA

2.7

NAME ug/L RT AREA BC RF

BCP 0.299 14.62 5531569 016862089. St

TOTALS 0.299 5531569

WARNING - MEMORY AT 1. K - UNPROTECTED CHROMATOGRAMS WILL BE REPLACED

CHANNEL B INJECT 10/28/92 19:13:19 REPLAYED FROM BIN # 114

AZ 1 PM 1

2.16

5.78

6.92

8.62

9.95

13.89

15.124.54

17.37.34

17.37.34

17.99

25.18.933

28.39

DATA SAVED TO BIN # 114

PID/WESTON 10/28/92 19:13:19 CH= "B" PS= 1.

FILE 1, METHOD 5. RUN 50 INDEX 1 BIN 114

ANALYST: MC

SAMPLE 1 AIRA102892 BIN 114 NAME BRUN0049

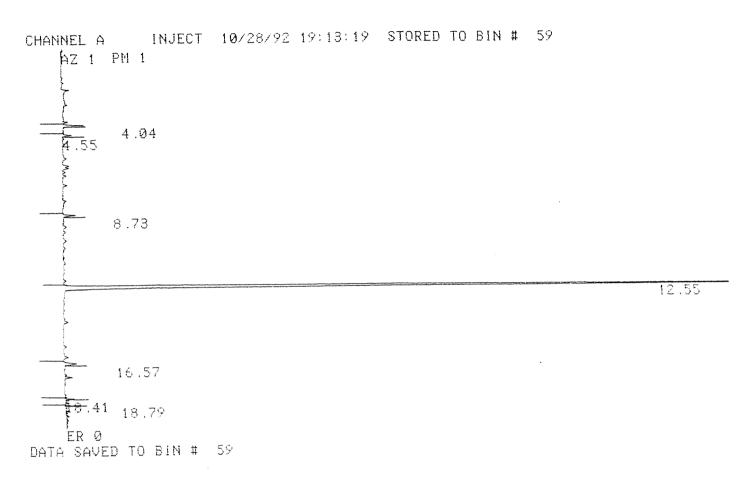
SA 1S XF 2.7 0, 1,

NAME RT AREA BC RF ug/L 2.16 0. 20944 01 DEET hoton Idell 5.78 23800 011972233.332 0.001 ì, 9.199213700 014085144.441 TUCE 6.92 CDCE 0 001-8.62 6457 012061118,461 1, 5 7.95 22700 01 Ø. 13.89 220656 01 6

БСР	Ø.322	14.54	38348	Ø1 44041.	87
PCE N	9 .915	15.12		012043163.813	Ο,
9	Ø .	17.34	23557	02	
10	Ø .	17.51	124182	03	
11	Ø.	17.99	45197	01	
12	Ø,	18.75	4762	92	
13	Ø.	18.83	35078	02	
14	9 ,	18.89	19722	0 3	
15	Ø .	19.04	6276	01	
16.	Ø,	19.17	40157	81	
17	9 .	19.36	3223	9 2	
18	Ø.	19.46	7566	ଥ 3	
19	0.	19.6	6527	92	
20	Ø.	19.65	6562	03	
21	Ø.,	19,84	3548	91	
TOTALS	0.344		756194		

WARNING - MEMORY AT 1. K - UNPROTECTED CHROMATOGRAMS WILL BE REPLACED

```
SAMPLE TABLE . . .
ANALYST (MC ) AN="
INJECTIONS/SAMPLE [0-254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 100) C1=
CONC UNITS (ug/L ) CU="
                     SAM AMT
                               SCALE
SAM IX NAME
                                 XF = 1
       SN=" AIRA102892SA= 2.7
S1= 1
S1=
END OF DIALOG
LOW BATTERY
```



FID/WESTON		10/28/92 19:13:19 CH= "A"	PS= 1.
FILE 1.	METHOD 5.	RUN 62 INDEX 1	BIN 59
ANALYST: MC			
SAMPLE 1	AIRA102892	BIN 59 NAME ARUN0059	
SA 2.7	IS XF 0. 1.		

NAME	ug/L	RT	AREA	ВC	RF
1 DCE11 DCA12 BCF 5 6	0. 0.017 0.042 0.35 0.	4.04 4.55 8.73 12.55 16.57 18.41	9669	01 01 01 01	103520.962 86289.583 873321. 4 5

7

0. 18.79 4389 01

TOTALS

0.409

877361

WARNING - MEMORY AT 2. K - UNPROTECTED CHROMATOGRAMS WILL BE REPLACED

Sample # CR	-03 -05	Date/Time <u>10/28/92/</u>	21.35 Data Base File 5130westor
		way of CIR -	
_	۱۱ ۸	(watersuil Gas_X
Weather Day	ex 1	Air Temp.(°F)_70	<u>0°.</u> Soil Temp.(°F)
•		•	ce Conditions Coved Contrete
Cartridge # A	= : B=	Sample Size (r	m1)_A= /00 B= 25
Adapter #	Probe Dept	h <u>5</u> Probe Vo	olume (ml) 900
Purge Rate_F	ull Purge Time	e <u> </u>	Purge VacuumZ*Hg
Sample Flow R	ate <u> CO</u> m]/	min Sample Vacuum	("Hg) $A = \angle 2B = 2$
Notes			
Lab Receipt:	Signature	n. Clark	Date/Time ¹⁰ 28/52 21:45
Compound	<u>Concentration</u>	on (µg/L)	
	A, W	B	<u>Notes</u>
Vinyl Chlorid		(0.0)	
1,1-DCE	a.1A*	0.21*	- from PID.
1,2-TDCE	<0/1	(0.01	
1,1-DCA	<u><0\01</u>	<0.01	
1,2-CDCE	<0/01	20.01	
Chloroform	<u>cp.dl</u>	(0.01	-
1.1.1-TCA	90,0	<u> </u>	
1,2-DCA	10.01	20.01	
TCE /	1.804	0.78 =	From PID
1,1,2-TCA	20.01	<0,0	
PCE -	450	330	
%Surr Rec.	88.	98	
•			· .
	-		·
	• • •		

```
SAMPLE TABLE . . .
ANALYST (MC ) AN="
INJECTIONS/SAMPLE [0-254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 199) CI=
CONC UNITS (ug/L ) CU="
SAM IX NAME
                      SAM AMT SCALE
11
        SN=" CR0305B SA= 0.025 XF= 1
S1=
END OF DIALOG
7.B/
SAMPLE TABLE . . .
ANALYST (MC ) AN="
INJECTIONS/SAMPLE [0-254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 100) CI=
CONC UNITS (ug/L ) CU="
                                 SCALE
SAM IX NAME
                      SAM AMT
SI = 1 SN = "CR0305B SA = 0.025 XF = 1
S!=
END OF DIALOG
```

```
CHANNEL A INJECT 10/28/92 22:18:37 STORED TO BIN # 66

AZ 1 PN 1

AT 512

AL 256

AL 1024

15.31
```

DATA SAVED TO BIN # 66

HECD/WESTON 10/28/92 22:18:37 CH= "A" PS= 1.

FILE 1. METHOD 5. RUN 75 INDEX 1 BIN 66

ANALYST: MC

SAMPLE 1 CR0305B BIN 66 NAME ARUN0066

SA IS XF
0.025 0. 1.

NAME ug/L RT AREA BC RF

BCP PCE

TOTALS

363.342 13718694

WARNING - MEMORY AT 3. K - UNPROTECTED CHROMATOGRAMS WILL BE REPLACED

CHANNEL B INJECT 10/28/92 22:18:37 REPLAYED FROM BIN # 121 AZ 1 PM 1 Б.54 AT 1024 11.45

DATA SAVED TO BIN # 121

INPUT OVERRANGE AT RT= 15.27

10/28/92 22:18:37 CH= "B" PS= 1. PID/WESTON

FILE 1. METHOD 5. RUN 57 INDEX 1 BIN 121

ANALYST: MC

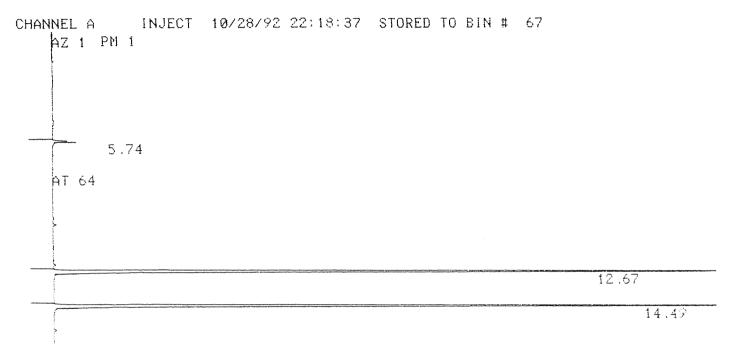
SAMPLE 1 CR0305B BIN 121 NAME BRUN0056

is XF 0.025 0.

ug/L RT AREA BC RF NAME 5.54 10548 011972233.332 0.214 DCE11 11.45 47721 012459757.926 0.776 TCE 15668 01 14.06 Ø. 3 31797 01 44041, 72 28,879 14.65 BCP 385,036 15.2 19667273 012043163.813 PCE 19773007 414.905 TOTALS

```
SAMPLE TABLE...

ANALYST (MC ) AN="
INJECTIONS/SAMPLE [0-254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 100) CI=
CONC UNITS (ug/L ) CU="
SAM IX NAME SAM AMT SCALE
SI= 1 SN=" CR0305B SA= 0.025 XF= 1
SI=
END OF DIALOG
LOW BATTERY
```



DATA SAVED TO BIN # 67

FID/WESTON 10/28/92 22:18:37 CH= "A" PS= 1.

FILE 1. METHOD 5. RUN 69 INDEX 1 BIN 67

ANALYST: MC

SAMPLE 1 CR0305B BIN 67 NAME ARUN0064

SA IS XF 0.025 0. 1.

NAME ug/L RT AREA BC RF TICE N-PropyL 4.791 5.74 11022 01 92029.167 750619 01 873321. 86 12.67 BCP 34.38 PCE 14.49 751720 01 53015.789 567.167 TOTALS 606.338 1513361



			^ /		
Sample # <u>CR</u> -	05-05)ate/Time <u>lo/28</u> /	12/24:00 Dat	ta Base File <u>513</u> 0	weston'
	ription Fuside				
Sampler's Sig	nature M . (ach Soi	lwater	soil Gas_X_	
Weather M.	dwight - DAME!	_Air Temp.(°F)_	70° Soil T	emp.(°F)	
Wind Directio	n & Speed	Sur	face Condition	ns Cared Concret	E
	= : B=				
Adapter #	Probe Depth	<u>5ff</u> Probe	Volume (ml)_	900	
Purge Rate F	<u>ll</u> Purge Time		s Purge Vacuu	m <u> </u>	
	ate <u>100</u> ml/m				
Notes HAND	Drivery with	Relativi esse	-		
Lab Receipt:	Signature <u> ///</u> ı	Clark.	Date/T	ime 10/29/92 24	:19
				•	,
Compound	Concentration	n (µg/L)			
	A	<u> </u>	elo KD	<u>Notes</u>	
Vinyl Chlorid	le (0.0)	(0.0)	0	A 15 Ran	et di Herent
1,1-DCE	(0.01	(0,01	D	t	then B
1,2-TDCE	40,01	20,01	o		
1,1-DCA	(0.0)	۷٥،٥١	٥		
1,2-CDCE	<u></u>	<0.0).	0		
Chloroform	<u> </u>	20.01	0		
1.1.1-TCA	20,01	20.01	D		
	· LO.01	60.01	•		.••
TCE	13.2	12.03*	- 9 From F	?ID	
1,1,2-TCA	· Ko· 01	<0.01	0	-	
PCE -	1100	1100	. 0		•
<u>%Surr Rec.</u>	9D.	105	•		
			•		
			-		
	*		**************************************	-	

```
SAMPLE TABLE . . .
                                                               HED Range = 1000
PID Range = 10
FID Kange = 10
ANALYST (MC ) AN="
INJECTIONS/SAMPLE [0-254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 199) CI=
CONC UNITS (ug/L ) CU="
                      SAM AHT
                                  SCALE
SAM IX NAME
                                  XF = 10
       SN=" CR0505A SA= 0.1
S1= 1
SI =
END OF DIALOG
SAMPLE TABLE . . .
ANALYST (MC ) AN="
        FAULT 100: AT 9437
. Ĥ
7.B/
SAMPLE TABLE . . .
ANALYST (MC ) AN="
INJECTIONS/SAMPLE [0-254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 100) CI=
CONC UNITS (ug/L ) CU="
                      SAM AMT
                                   SCALE
SAM IX
       NAME
11
         SN=" CR0505A SA= 0.1 XF= 10
31=
END OF DIALOG
CHANNEL A INJECT 10/29/92 00:47:50 STORED TO BIN # 70
    AZ 1 PM 1
          ER Ø
DATA SAVED TO BIN # 70
                              10/29/92 00:47:50 CH= "A" PS= 1.
HECD/WESTON
```

FILE 1. METHOD 5. RUN 79 INDEX 1 BIN 70
ANALYST: MC
SAMPLE 1 CR0505A BIN 70 NAME ARUN0070

SA 1S XF 0.1 0. 10 Ø.1 10.

NAME

ug/L RT AREA BC RF

BCP FCA112 electrical noise 1.687

14.73 617522 026862089. 9*Q* 14.98 26411 031611636.162

1069 172 15.63 10019491 01 937126 096

TOTALS

1079.81

10663424

WARNING - MEMORY AT 8. K - UNPROTECTED CHROMATOGRAMS WILL BE REPLACED

CHANNEL B INJECT 10/29/92 00:47:49 REPLAYED FROM BIN # 125 A2 1 PM 1 11.35 H.87_{12.21} TT.02 15.29 15.63

ER Ø DATA SAVED TO BIN # 125

PID/WESTON

10/29/92 00:47:49 CH= "B" PS= 1.

FILE 1. METHOD 5. RUN 61 INDEX 1

BIN 125

ANALYST: NC

SAMPLE 1 CR0505A BIN 125 NAME BRUN0060

\$A IS XF 0.1 0. 10.

MAME

ug/L RT AREA BC RF

TOF	13.218	11.35	325119	W12459757.926
2	Ø.		109809	
3	Ø.		8497	= -
BCP	943 999 -			91 44941.
PCE	538.266			022043163.813
6	Ø .	15.03	2344686	V3
TOTALS	1495.483	1	4201508	

WARNING - MEMORY AT 8, K - UNPROTECTED CHROMATOGRAMS WILL BE REPLACED

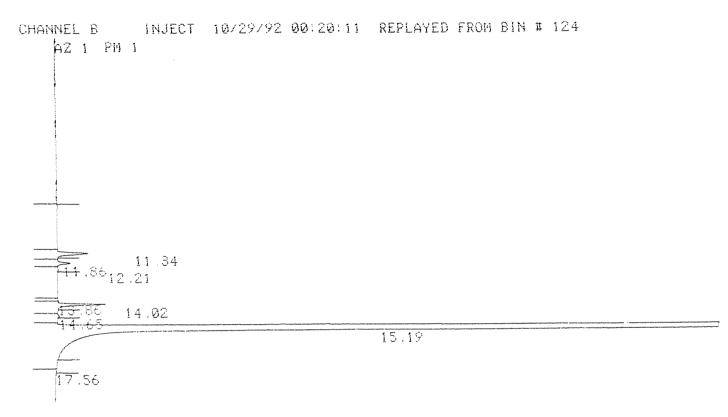
```
SAMPLE TABLE . . .
ANALYST (MC ) AN="
INJECTIONS/SAMPLE [0-254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 100) CI=
CONC UNITS (ug/L ) CU="
                                                      Maybe overlange
will check
SAM IX NAME
                      SAM AMT
                                 SCALE
11
        SN=" CR0505B SA= 0.025 XF= 1
S I =
END OF DIALOG
7.A/
SAMPLE TABLE ...
ANALYST (MC ) AN="
INJECTIONS/SAMPLE [0-254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 199) CI=
CONC UNITS (ug/L ) CU="
                      SAM AMT
SAM IX NAME
                                 SCALE
                     SA= 0.025 XF= 1
SI = 1
        SN=" CR0505B
SI=
END OF DIALOG
CHANNEL A INJECT 10/29/92 00:20:11 STORED TO BIN # 69
    AZ 1 PM 1
                                      15.43
      16.18 16.10
DATA SAVED TO BIN # 69
HECD/WESTON
                             10/29/92 00:20:11 CH= "A" PS= 1.
                          RUN 78 INDEX 1
                                                          BIN 69
             METHOD 5.
ANALYST: MC
SAMPLE 1 CR0505B BIN 69 NAME
                                         ARUN0069
           18
   SA
```

Ø.025

❷.

MAME	ug/L	RT	AREA	BC	RF	
BCP PCE 3 4	41.834 1152.102 0. 0.		7176635 26991643 764 474	08 9 05	662089 , 10 <i>5</i> 237126 ,096	-
TOTALS	1193.936		34169516			

WARNING - MEMORY AT 5. K - UNPROTECTED CHROMATOGRAMS WILL BE REPLACED



DATA SAVED TO BIN # 124

INPUT OVERRANGE AT RT= 15.42

PID/WESTON 10/29/92 00:20:11 CH= "B" PS= 1.

FILE 1. METHOD 5. RUN 60 INDEX 1 BIN 124

ANALYST: MC

SAMPLE 1 CR0505B BIN 124 NAME BRUN0059

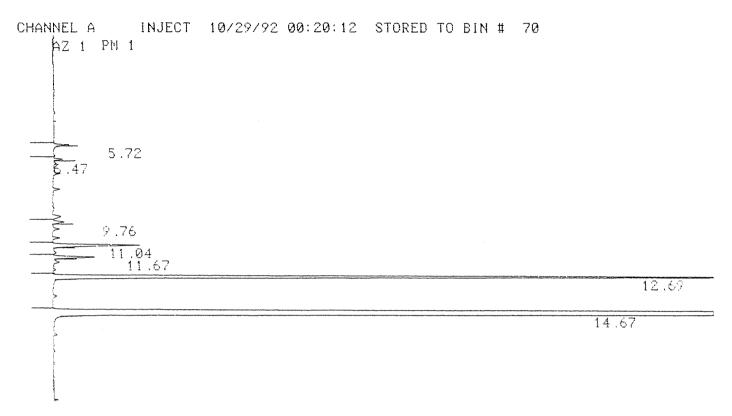
SA IS XF 0,025 0. 1.

NAME ug/L RT AREA BC RF

TCE	12.03	11.34	739796	012459757.926	114/200-000
2	Ø.	11.86	248853	02	
3	Ø.	12.21	19604	0 3	
4	Ø .	13.86	13328	02	
5	Ø.	14.02	843365	93	
BCP .	35 .525	14.65	39114	01 44041.	
PCE	895.322	15.19	45732201	012043163.813	
8	Ø.	17.56	7221	01	
TOTALS	942 877		47643482		

WARNING - MEMORY AT 5. K - UNPROTECTED CHROMATOGRAMS WILL BE REPLACED

```
SAMPLE TABLE . . .
ANALYST (MC ) AN="
INJECTIONS/SAMPLE [0-254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 100) CI=
CONC UNITS (ug/L ) CU="
SAM IX NAME
                     SAM AMT SCALE
SI = 1
       SN=" CR0505B SA= 0.025 XF= 1
S1=
END OF DIALOG
LOW BATTERY
```



DATA SAVED TO BIN # 70

FID/WESTON

FILE 1. METHOD 5. RUN 72 INDEX 1

BIN 70

ANALYST: MC

SAMPLE 1 CR0505B BIN 70 NAME ARUN0069

SA IS XF 0.025 Ø. 1.

NAME	ug/L	RT	AREA	BC	EF
THEE N- PROPY	5. -	5.72	11504	01	92029 .167
CDCE	2.887	6.47	6857	01	95005.128
TCE	7.408	9 .76	12857	01	69427.832
4	0.	11.04	106541	01	
ICATTE Wrong PLT BCP	3 4 .34 - 43 .561	11.67	43109		70842.767
BCP O	43.561	12.69	951070	01	873321. \09
PCE 4	1352.71	14.67	5769059	01	53015.789

WARNING - MEMORY AT 6. K - UNPROTECTED CHROMATOGRAMS WILL BE REPLACED

```
ANALYST (MC ) AN="
INJECTIONS/SAMPLE [0-254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 100) CI=
CONC UNITS (ug/L ) CU="
                              SCALE
SAM IX NAME
                    SAM AMT
       SN=" CR0505A SA= 0.1
SI = 1
                               XF = 10
S1=
END OF DIALOG
LOW BATTERY
CHANNEL A INJECT 10/29/92 00:47:51 STORED TO BIN # 71
   AZ 1 PN 1
           11.03
    11.67
               12.68
             14.90
        ER Ø
DATA SAVED TO BIN # 71
                           10/29/92 00:47:51 CH= "A" PS= 1.
FID/WESTON
FILE 1. METHOD 5. RUN 73 INDEX 1
                                                       BIN 71
ANALYST: MC
SAMPLE 1 CR0505A BIN 71 NAME ARUN0070
   SA
          IS
                  ΧF
   0.1
                  10.
           Ø.
NAME
                ug/L RT AREA BC RF
TCE
                60.313
                        11.03 41874 01 69427.832
11.67 18087 01 70842.767
FEATTZ Wrong RT 25.531
                         12.68 119449 01 873321. 137
BCP
                13.678
                        14.9 2406981 01 53015.789
PCE
               4540.121
```

2586391

4639.643

TOTALS

SAMPLE TABLE . . .



HYDRO GEO CHEM, INC.

	10 A 92	ľ			
Sample # TB	10/29/92 D	ate/Time/0/2492/	01:30 Dat	a Base File	5130weston'
Location Descri		1			
Sampler's Signa	iture M. May	Soil_	water	suil-tia s_	Teip Beanc
Weather		_Air Temp.(°F)	Soil Te	emp.(°F)	•
Wind Direction		Surfac	•		
Cartridge # A=	; B=	Sample Size (ml) <u>A=</u>	B= -	•
Adapter #	Probe Depth	nProbe Ve	olume (ml)_	-	·········
Purge Rate	urge RatePurge TimeMinutes Purge Vacuum				_"Hg
•		nin Sample Vacuum	A contract of the contract of		
Notes Trip	BLANK SOr	- 102892 till	01:30	10/29/92	
Lab Receipt: S	ignature <u>///</u>	Clark.	Date/T	ime <u>10/29/92</u>	14:10
				*	•
Compound	<u>Concentratio</u>	u (hd/r)			
	A	<u> </u>		<u>Notes</u>	
Vinyl Chloride	<0.01				
1,1-DCE	<u>Co.ol</u>			-	
	(0.01		<u> </u>		
1,1-DCA	۷٥.٥١		Co. Santa and Co.		
1,2-CDCE	٥.0١	•			·
Chloroform	(0,0)		•••		
1.1.1-TCA	20.01	•		•	
	. (0.01	•			
TCE	(0.0)		>		
1,1,2-TCA	<u> </u>	_		•	
PCE			-		
ZSurr Rec.	NIA				
-			***************************************		
		•	***************************************		
-	*****			-	,

All the state of t	•				**************************************

```
used for
HECD/SYSBIK
SAMPLE TABLE . . .
ANALYST (' ) AN="
INJECTIONS/SAMPLE [0-254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 199) CI=
CONC UNITS (ug/L ) CU="
SAM IX NAME SAM AMI SCALE
xF = 1
SI =
END OF DIALOG
7.B/
SAMPLE TABLE . . .
ANALYST (MC ) AN="
INJECTIONS/SAMPLE [0-254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 100) CI=
CONC UNITS (ug/L ) CU="
SAM IX NAME SAM AMT
                            SCALE
SI = 1
      SN=" TB102892 SA= 1
                             XF = 1
S1=
FND OF DIALOG
CHANNEL A INJECT 10/29/92 11:25:29 STORED TO BIN # 73
   AZ 1 PN 1
        AT 128
    AT 256
         ER Ø
DATA SAVED TO BIN # 73
                       10/29/92 11:25:29 CH= "A" PS= 1.
HECD/WESTON
                                                   BIN 73
FILE 1, METHOD 5. RUN 82 INDEX 1
ANALYST: '
SAMPLE 1 TB102892 BIN 73 NAME ARUN0073
                 ХF
   SA IS
          Ø. 1.
   ī.
```

ug/L RT AREA BC RF NAME

TOTALS

Ø.

WARNING - MEMORY AT 8. K - UNPROTECTED CHROMATOGRAMS WILL BE REPLACED

CHANNEL B INJECT 10/29/92 11:25:29 REPLAYED FROM BIN # 128

AZ 1 Pin 1

ER Ø DATA SAVED TO BIN # 128

PID/WESTON

10/29/92 11:25:29 CH= 18" PS= 1.

FILE 1. METHOD 5. RUN 64 INDEX 1

BIN 128

ANALYST: MC

SAMPLE 1 TB102892 BIN 128 NAME BRUN0063

SA

18 ΧF

∅.

4 <u>i</u> ,

NAME

ug/L RT AREA BC RF

TOTALS

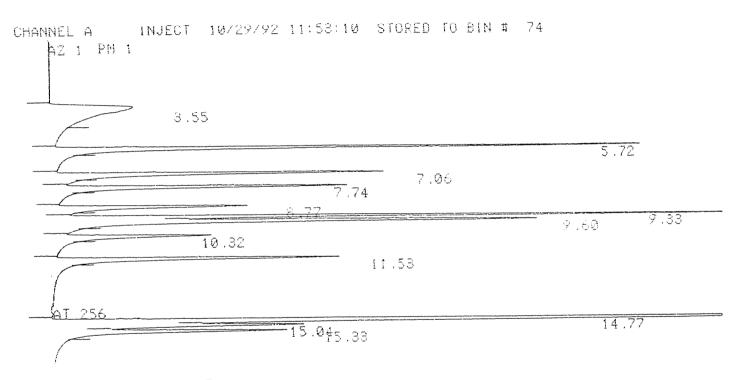
Ø.

WARNING - MEMORY AT 8. K - UNPROTECTED CHROMATOGRAMS WILL BE REPLACED

```
ANALYST (MC ) AN="
INJECTIONS/SAMPLE [0-254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 100) CI=
CONC UNITS (ug/L ) CU="
SAM IX NAME
                 SAM AMT SCALE
11
      SN=" TB102892 SA= 1 XF= 1
S [ =
END OF DIALOG
LOW BATTERY
CHANNEL A INJECT 10/29/92 11:25:30 STORED TO BIN # 74
   AZ 1 PM 1
       AT 64
   ER Ø
DATA SAVED TO BIN # 74
                       10/29/92 11:25:36 CH= 'A" PS= 1.
FID/WESTON
FILE 1. METHOD 5. RUN 76 IMDEX 1
                                                BIN 74
ANALYST: NC
SAMPLE 1 TB102892 BIN 74 NAME ARUND073
  SA IS
               ΧF
         Ø.
                 1.
  1.
               ug/L RT AREA BO RE
NAME
TOTALS
               Ø.
```

SAMPLE TABLE . . .

```
SAMPLE TABLE . . .
ANALYST (MC ) AN="
INJECTIONS/SAMPLE [0-254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 100) CI=
CONC UNITS (ug/L ) CU="
                                SCALE
                     SAM AMT
SAM IX NAME
                                XF = 1
S1= 1
       SN=" STDCAL
                     SA= 1
$1=
END OF DIALOG
7.A7
SAMPLE TABLE . . .
ANALYST (' ) AN="
INJECTIONS/SAMPLE [0-254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 199) CI=
CONC UNITS (ug/L ) CU="
               SAM AMT
                                SCALE
SAM IX NAME
                                 XF = 1
        SN=" STDCAL SA= 1
S1= 1
S1=
END OF DIALOG
```



DATA SAVED TO BIN # 74

HECD/WESTON			10	/29/92	11:53:10		CH= "A"	PS=	1.
FILE 1.	METHOD	5 .	RUN	83	INDEX	1	CALIB	BIN	74
ANALYST: '									

NAME	ug/L	RT	AREA	BC RF
VCL	1.75	3.55	1000199	01 571542.286
DCE11	0.97	5.72	1610893	011660714.432
TDCE	Ø.96	7.06	983624	011024608.333
DCA11	0.68	7.74	825684	011214241.177
CDCE	Ø.65	8.77	610151	01 938693.847
CHLOROFORM	1.29	9.33	1897283	021470762.016

```
I W/DIXIHLE1
                           9.6 1579869 031579869.
TCA111
                  1.
DCA12
                  8,6
                          10.32
                                467687 01 584608.75
                  1.03
                                 883226 01 857500 971
TCE
                          11.53
                          14.77 6975216 026975216.
BCP
                 i .
                          15.04 1687014 021591522.642
                 1.06
TCA112
                          15.33 1596694 031050456.579
                 1.52
PCE
                                20117540
TOTALS
                 12.71
NEW FILE:
          RF
                       RT
NAME
                       3.51
VCL
         571542.286
                       5.69
DCE11
         ****
TDCE
         ****
                       7.02
                       7.7
DCA11
         *****
                       8.73
CDCE
         938693,847
                       9.29
CHLOROFORM*******
                       9.56
TCA111
         *****
DCA12
         584608.75
                       10.28
         857500.971
                       11.49
TCE
                       14.72
BCP
         ****
                       14.99
TCA112
         ****
                       15.28
PCE
         *****
CHANNEL B INJECT 10/29/92 11:53:10 REPLAYED FROM BIN # 1
    AZ 1 PH 1
         AT 128
    AT 256
             3.45
                                                             5.65
                                                              6.98
                                   8.69
                                                                   11.45
                                                           15.26
DATA SAVED TO BIN # 1
                            10/29/92 11:53.10 CH= "B"
PID/WESTON
                                                         PS=1.
```

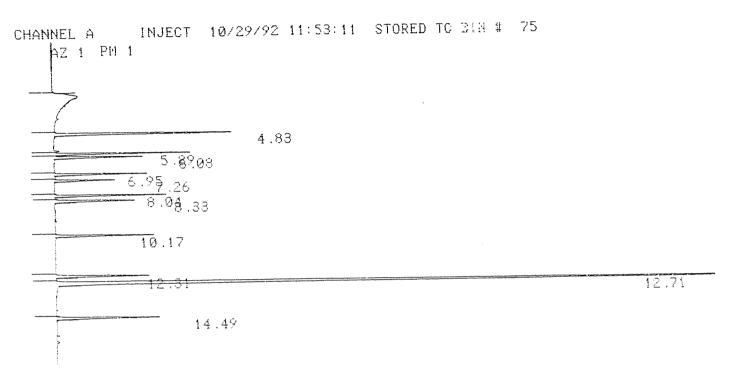
FILE 1. METHOD 5. RUN 65 INDEX 1 CALIB BIN 1 ANALYST: MC

NAME	ug/L	RI	ARLA	BC RF
VCL DCE11 TDCE CDCE TCE BCP PCE	1.75 0.97 0.96 0.65 1.03 1.	3.45 5.65 6.98 8.69 11.45 14.7 15.26	2853479 4285366 1463736 2793862 45766	01 498428.571 012941730.926 014463922.914 012251901.539 012712487.379 01 45766. 012291826.316
TOTALS	7.88		15798035	

NAME	RF	RT
VCL DCE11 TDCE CDCE TCE	498428,571 ******* ******* *******	3 .41 5 .62 6 .94 8 .65 11 .41 14 .65
BCP PCE	45766 ; *******	15.21

```
SAMPLE TABLE...

ANALYST (MC ) AN="
INJECTIONS/SAMPLE [0-254] ( 1. ) RA=
SAMPLES BETWEEN CALIB [0-254] ( 100) CI=
CONC UNITS (ug/L ) CU="
SAM IX NAME SAM AMT SCALE
SI= 1 SN=" STDCAL SA= 1 XF= 1
SI=
END OF DIALOG
LOW BATTERY
```

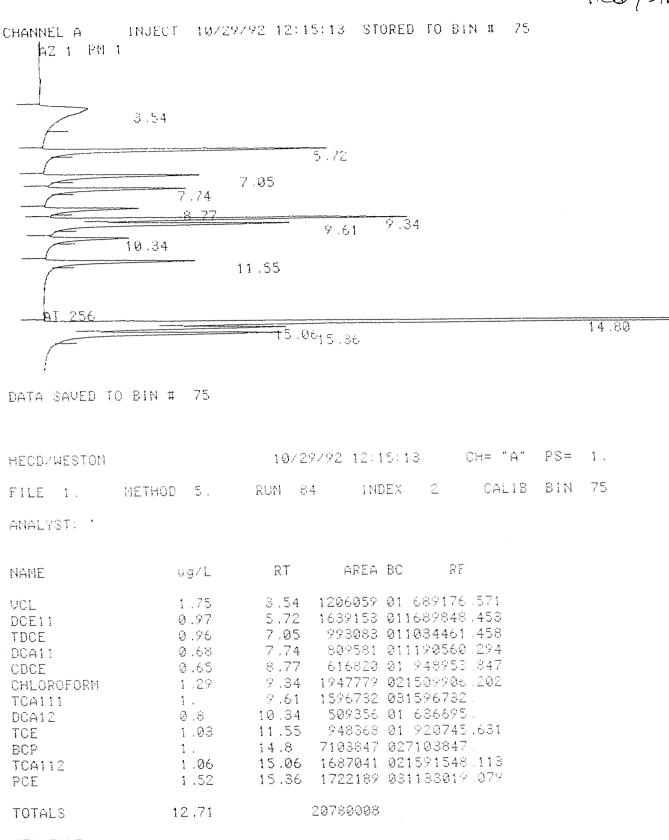


DATA SAVED TO BIN # 75

FID/WESTON			10	/29/92	11:53:11		CH= "A"	PS=	1.
FILE 1.	METHOD	5.	RUN	77	INCEX	i.	CALIB	BIN	75
ANALYST: MC									

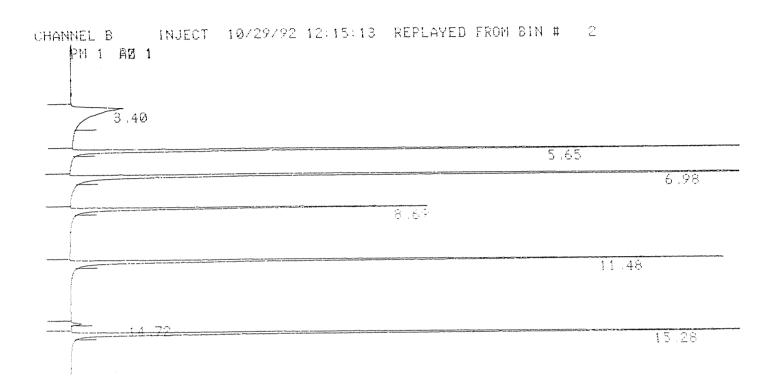
NAME	ug/L	RT	AREA BC	<u> </u>
DCE11 TDCE DCA11 CDCE CHLOROFORM	0.97 0.96 0.68 0.65 1.29	4.83 5.89 6.08 6.95 7.26	145047 01 93314 01 66849 01 65273 01 42831 01	149332.29 97292.083 98307.353 100420. 33202.326
TCA111 DCA12 TCE TCA112 BCP PCE	1. 0.8 1.03 1.06 1.	8 .04 8 .33 10 .17 12 .31 12 .71 14 .49	79576 01 69154 01 75958 01 80104 01 856321 01 85877 01	856321.
TOTALS	10.96		1660304	

NAME	RF	RT
VCL	Ø .	2.73
DCE11	149532.99	4.8
TDCE	97 202 .0 83	5.85
DCA11	98 307 .353	6.04
CDCE	100420.	6 .91
CHLOROFOR	M 332 0 2.326	7.22
TCA111	79576.	8.
DCA12	86442.5	8.28
TCE	73745 .631	10.13
TCA112	75569.811	12.26
BCP	856321.	12.66
PCE	56498.026	14.43



NAME	RF	RT
VCL	630359,428	3.53
DCE11	******	5.71
TDCE	*******	7.04
DCA11	********	7.72
CDCF	943823.847	8.75

```
9.32
CHLOROFORM********
                      9.59
TCA111
       *****
                      10.31
         610651.875
DCA12
                      11.52
         889123.301
TCE
                      14.76
BCP
                      15.03
TCA112
         *****
                      15.32
PCE
         *****
```



DATA SAVED TO BIN # 2

P1D/WESTON

10/29/92 12:15:13 CH= "B" PS= 1.

FILE 1. METHOD 5. RUN 66 INDEX 2 CALIB BIN 2

ANALYST: NC

NAME	ug/L	RT	AREA	BC RF
VCL DCE11 TDCE CDCE TCE BCP PCE	1.75 0.97 0.96 0.65 1.03 1.	3.4 5.65 6.98 8.69 11.48 14.72 15.28	2755430 4107209 1408100 2666281 44850	01 528599.428 012840649.484 014278342.707 012166307.693 012588622.33 01 44850. 012135863.816
TOTALS	7.88		15153432	

MEW FILE:

NAME

RF

RT

VCL

513514.

3.41

DCE11	******	5.64
TDCE	****	6.96
CDCE	*****	8.67
TCF	*****	11.45
BCP	45308.	14.69
PCE	****	15.25
トレレ		

CHANNEL A INJECT 10/29/92 12:15:15 STORED TO BIN # 76

AZ 1 PM 1

4.84

5.8908

6.95.27

8.058.34

10.18

12.71

DATA SAVED TO BIN # 76

FID/WESTON 10/29/92 12:15:15 SH= "A" PS= 1.

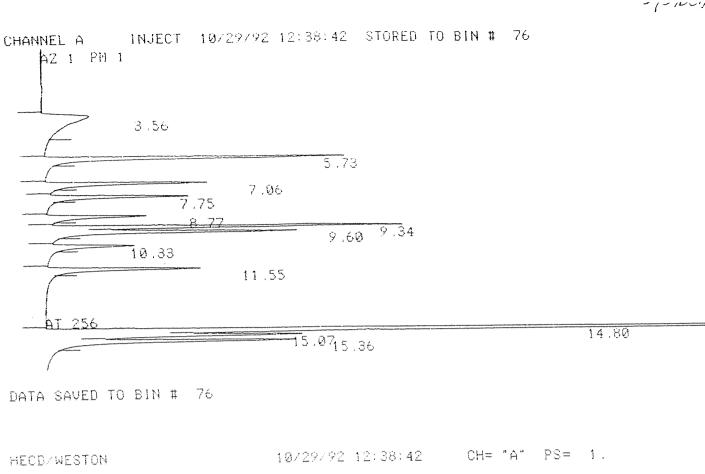
FILE 1. METHOD 5. RUN 78 INDEX 2 CALIB BIN 76

ANALYST: MC

NAME	ug/L	RT	AREA	BC	RF
DCE11 TDCE DCA11 CDCE CHLOROFORM TCA111 DCA12 TCE TCA112 BCP PCE	0:97 0:96 0:68 0:65 1:29 1: 0:8 1:06 1:06	4,84 5,89 6,08 6,95 7,27 8,05 8,34 10,18 12,33 12,71 14,49	139134 88740 63926 62294 40573 76157 66545 72117 73292 847596 80215	01 01 01 01 01 01 01 01	143437.113 92437.5 94008.824 95836.923 31451.938 76157. 83181.25 70016.505 69143.396 847596. 52773.026
TOTALS	10.96		1610589		

NAME	RF	RT
VCL DCE11 TDCE DCA11	0. 146485.051 94819.792 96158.088	2.73 4.82 5.87 6.06
CDCE	98128.462	6.93

CHLOROFORM	32327.132	7.25
TCA111	77866 .5	8.03
DCA12	84811.875	8.31
TCE	71881.068	10.16
TCA112	72356 .604	12.3
BCP	851958.5	12.69
PCE	54635 .526	14.46



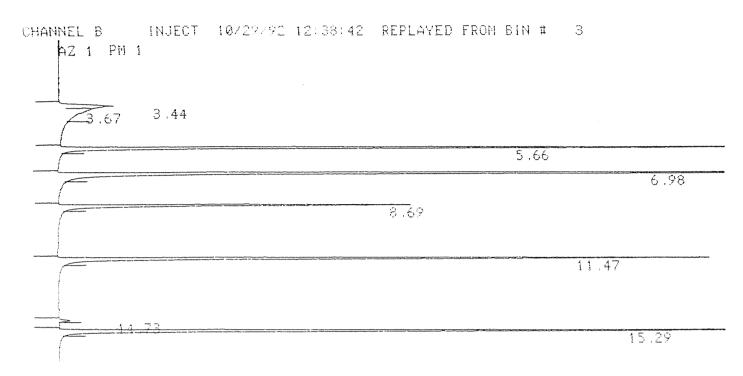
HECD/WESTON			10	729792	12:38:42		CH= "A"	PS=	1.
FILE 1.	METHOD	5.	RUN	85	INDEX	3	CALIB	MIG	76
1-: : : : : : : : : : : : : : : : : :									

AMALYST: '

NAME	ug/L	RT	AREA	BC	RF	
NAME VCL DCE11 TDCE DCA11 CDCE CHLOROFORM TCA111 DCA12 TCF	09/L 1.75 0.97 0.96 0.68 0.65 1.29 1.	3.56 5.73 7.06 7.75 8.77 9.34 9.6	1208468 1715372 989291 821030 634836 1932755 1600026 533960	01 69 01176 01103 01120 01 97 02149 03160 01 66	20553.143 28424.742 30511.458 37397.059 76670.77 28259.69	
BCP TCA112 PCE	1. 1.06 1.52	14.8 15.07 15.36	7313270 1779061	02731 02167 03117		
TOTALS	12.71		Z1Z70000			

NAME	RF	RT
VCL	650423.999	3.55
DCE11	********	5.72
TDCE	***	7.05
DCA11	**********	7.74
CDCE	954772 :82	8.76
CHLORGE	38M******	9.33

TCA111	******	9.6
DCA12	629584.583	10.32
TCE	909470.227	11.54
BCP	*****	14.78
TCA112	***	15.05
PCE	** * *****	15.34



DATA SAVED TO BIN # 3

PID/WESTON

10/29/92 12:38:42 CH= "B" PS= 1.

FILE 1. METHOD 5. RUN 67 INDEX 3 CALIB BIN 3

ANALYST: MC

NAME	ug/L	RT	AREA	BC RF
				439603.429
VCL	1.75	3,44	428339	02 244763.143
VCL 2	Ø .	3.67	340967	0 3
DCE11	0.97	5.66	2756145	0 12841386.598
TDCE	Ø.96	6.98	4113192	014284575.
CDCE	0.65	8.69	1407802	012165849.232
TCE	1.03	11.47	2674673	012596769.904
BCP	1 .	14.73	45503	01 45503.
PCE	1.52	15.29	3250160	012138263.158
TOTALS	7.88		15016781	

NEW FILE:

NAME

RF

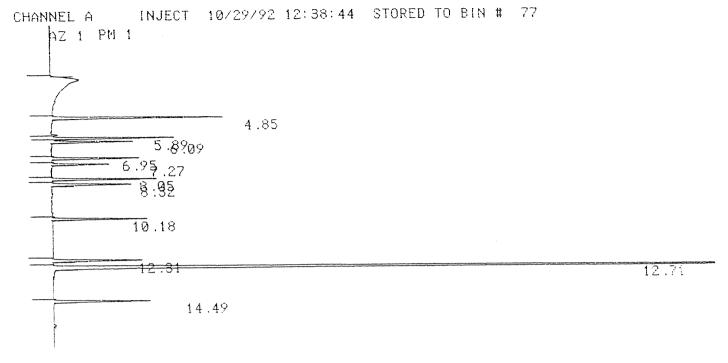
RT

VCL DCE11 423931.047 *****

3.43 5.65

FDCE	*****	6.97
CDCE	****	8.68
TCE	****	11.46
BCP	45373.	14.71
PCE	****	15.27

Vinyl chloride collection for PLD RSAUG = 476558.714



DATA SAVED TO BIN # 77

FID/WESTON

10/29/92 12:38:44 CH= "A" PS= 1.

FILE 1. METHOD 5. RUN 79 INDEX 3 CALLE BIN 77

ANALYST: MC

NAME	ug/L	RT	AREA	ВС	RF
DCE11 TDCE DCA11 CDCE CHLOROFORM TCA111 DCA12 TCE TCA112 BCP PCE	0.97 0.96 0.68 0.65 1.29 1. 0.8 1.03 1.06	4.85 5.89 6.09 6.95 7.27 8.05 8.32 10.18 12.31 12.71 14.49	137812 87901 63765 61864 40956 76544 70375 72281 76665 859456 80192	01 01 01 01 01 01 01	142074.227 91563.542 93772.059 95175.385 31748.837 76544. 87968.75 70175.728 72325.472 859456. 52757.895
TOTALS	10.96		1627811		

NAME	RF	RT
VCL	0.	2.73
DCE11	145014.776	4.84
TDCE	93734.375	5.88
DCA11	95362.745	6.08
CDCE	97144.103	6.94
CHIOROFOR	RM 32134.367	7.26

TCA111	77425.667	8.04
DCA12	85864 .167	8.32
TCE	71312.621	10.17
TCA112	72346 .226	12.31
BCP	854457.666	12.7
PCE	54009.649	14.48



ATI I.D. 505785

June 6, 1995

Hargis & Associates 1400 E. Southern Avenue Suite 600 Tempe, AZ 85282



Project Name/Number: ChemResearch/525_03

Attention: Brian Waggle

On **05/16/95**, Analytical Technologies, Inc., received a request to analyze **soil** sample(s). The sample(s) were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

EPA method 8010/8020 analysis was performed by ATI, 2709-D Pan American Freeway, NE, Albuquerque, NM 87107 (See Attachment 1).

Per your request, EPA Method 8010/8020 analysis of samples SS-10-2.0 and SS-15-2.0 was performed at ATI-Albuquerque. The samples were extracted at ATI-Phoenix and the extracts were sent to ATI-Albuquerque. Because these samples were extracted with other samples, the extraction blank could not be sent to ATI-Albuquerque for analysis with these samples.

The sample containers used for EPA Method 8010/8020 were incorrect. ATI received the samples in 80z. glass jars instead of brass sleeves.

Low matrix spike recovery of chromium was confirmed by re-digestion and re-analysis.

Page 2

Hargis & Associates ATI I.D. 505785

If you have any questions or comments, please do not hesitate to contact us at (602) 496-4400.

Julianne J. Hrubant Project Manager

Project Manager

JJH/jmf Enclosure

ADHS License No. AZ0061 Elizabeth Proffitt, Laboratory Manager



CLIENT : HARGIS & ASSOCIATES DATE RECEIVED : 05/16/95

PROJECT # : 525.03

PROJECT NAME: ChemResearch REPORT DATE: 06/02/95

ATI I.D.: 505785

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	SS-09-0.5	SOIL	05/16/95
02	SS-09-2.0	SOIL	05/16/95
03	SS-10-0.5	SOIL	05/16/95
04	SS-10-2.0	SOIL	05/16/95
05	SS-11-0.5	SOIL	05/16/95
06	SS-11-2.0	SOIL	05/16/95
07	SS-12-0.5	SOIL	05/16/95
08	SS-12-2.0	SOIL	05/16/95
09	SS-13-0.5	SOIL	05/16/95
10	SS-13-2.0	SOIL	05/16/95
11	SS-13-2.0D	SOIL	05/16/95
12	SS-14-0.5	SOIL	05/16/95
13	SS-14-0.5D	SOIL	05/16/95
14	SS-14-2.0	SOIL	05/16/95
15	SS-15-0.5	SOIL	05/16/95
16	SS-15-2.0	SOIL	05/16/95
17	SS-16-0.5	SOIL	05/16/95
18	SS-16-2.0	SOIL	05/16/95
19	RB-03	AQUEOUS	05/16/95

---- TOTALS ----

MATRIX # SAMPLES
SOIL 18
AQUEOUS 1

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.



ATI I.D.: 505785

: HARGIS & ASSOCIATES DATE RECEIVED: 05/16/95

CLIENT PROJECT # : 525.03

PROJECT NAME : ChemResearch				REPORT 1	DATE :	06/02/95
PARAMETER	UNITS	01	02	03	04	05
CADMIUM (EPA 6010) CHROMIUM (EPA 6010) CHROMIUM (TCLP 1311/6010) LEAD (EPA 6010)	MG/KG MG/KG MG/L MG/KG	8810 371	<0.3 4860 334 6	15.3 <0.10	9.6 <0.10	2.7 4660 168 628



ATI I.D. : 505785

CLIENT : HARGIS & ASSOCIATES DATE RECEIVED : 05/16/95
PROJECT # : 525.03
PROJECT NAME : ChemResearch REPORT DATE : 06/02/95

							_
PARAMETER	UNITS	06	07	08	09	10	
CADMIUM (EPA 6010) CHROMIUM (EPA 6010) CHROMIUM (TCLP 1311/6010)	MG/KG MG/KG MG/L	- 841 52.3	296 3.49	<0.3 11.1 0.10	9320 310	9880 384	•
LEAD (EPA 6010)	MG/KG	-	-	6	-		



ATI I.D.: 505785

CLIENT : HARGIS & ASSOCIATES DATE RECEIVED : 05/16/95
PROJECT # : 525.03
PROJECT NAME : ChemResearch REPORT DATE : 06/02/95

PARAMETER UNITS 11 12 13 14 15

CHROMIUM (EPA 6010) MG/KG 9290 208 143 17.0 32000
CHROMIUM (TCLP 1311/6010) MG/L 388 2.46 1.59 0.10 1640

20 Apr.



ATI I.D. : 505785

: HARGIS & ASSOCIATES CLIENT DATE RECEIVED: 05/16/95

PROJECT # : 525.03
PROJECT NAME : ChemResearch REPORT DATE : 06/02/95

PRODUCT HELL . CHOLLED GUICH		-		REPORT DATE	: 00/02/35
PARAMETER	UNITS	16	17	18	
CADMIUM (EPA 6010) CHROMIUM (EPA 6010) CHROMIUM (TCLP 1311/6010) LEAD (EPA 6010)	MG/KG MG/KG MG/L MG/KG	- 6540 310	<0.3 40.0 0.72 16	14.5 0.10	



ATI I.D.: 505785

CLIENT : HARGIS & ASSOCIATES PROJECT # : 525.03 DATE RECEIVED : 05/16/95

PROJECT NAME : ChemResearch **REPORT DATE** : 06/02/95

PARAMETER

CHROMIUM (EPA 200.7/6010) MG/L <0.010



METALS - QUALITY CONTROL

CLIENT : HARGIS & ASSOCIATES

PROJECT # : 525.03

PROJECT NAME : ChemResearch ATI I.D. : 505785

PARAMETER	UNITS	ATI I.D.	SAMPLE RESULT	DUP. RESULT	RPD	SPIKED SAMPLE		% REC
CADMIUM	MG/KG	50578505	2.7	2.6	4	49.7	50.0	94
CHROMIUM	MG/L	50578101	0.039	0.040	3	0.937	1.00	90
CHROMIUM	MG/KG	50578501	8810	10600	18	34100	25000	101
CHROMIUM	MG/KG	50578504	9.6	9.3	3	46.4	50.0	74*
CHROMIUM	MG/KG	50578505	4660	4670	0.2	9560	5000	98
CHROMIUM	MG/KG	50578516	6540	6460	1	32200	25000	103
CHROMIUM	MG/L	50578503	<0.10	<0.10	NA	4.30	5.00	86
CHROMIUM	MG/L	50583502	0.58	0.58	0	1.50	1.00	92
CHROMIUM	MG/L	50578517	0.72	0.74	3	1.70	1.00	98
LEAD	MG/KG	50578505	628	638	2	1160	500	106

% Recovery = (Spike Sample Result - Sample Result)
----- X 100
Spike Concentration

RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)
----- X 100
Average Result

* Result out of limits due to sample matrix interference



DATES OF ANALYSIS

ACCESSION #:

SAMPLE ID	TEST AND METHOD NUMBER	DATE OF ANALYSIS	ANALYST
50578502	CADMIUM (EPA 6010)	5/30/95	KJ
50578505	CADMIUM (EPA 6010)	5/30/95	KJ
50578508	CADMIUM (EPA 6010)	5/30/95	KJ
50578517	CADMIUM (EPA 6010)	5/30/95	KJ
50578519	CHROMIUM (EPA 200.7/6010)	5/26/95	KJ
50578501-18	CHROMIUM (TCLP 1311/6010)	5/24/95	KJ
50578501-18	CHROMIUM (EPA 6010)	5/30/95	KJ
50578502	LEAD (EPA 6010)	5/30/95	KJ
50578505	LEAD (EPA 6010)	5/30/95	KJ
50578508	LEAD (EPA 6010)	5/30/95	KJ
50578517	LEAD (EPA 6010)	5/30/95	KJ

REFERENCES: Methods For Chemical Analysis of Water and Wastes, March 1983, EPA-600 4-79-020

Standard Methods for the Examination of Water and Wastewater, 1989, 17th Ed.

Arizona Department of Health Services (ADHS), Division of Laboratory Services Method Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW 846, 3rd Ed.)

PH 505785 Celivery BR Wagge LABORATORY INFORMATION 1400 EAST SOUTHERN AVENUE, SUITE 600 TEMPE, AZ 85282 (602) 345-0888 -REMARKS 610 NOHTH HOLLYWOOD WAY, SUITE 201 BURBANK, CA 91505 (818) 563-4569 Send invoice to La Jolla, CA Business Office Altn. Kim Sturek 2223 AVENIDA DE LA PLAYA, SUITE 300 LA JOLLA, CA 92037 (619) 454-0165 Total No. of Containers: 1820 EAST RIVER HOAD, SUITE 100 TUCSON, AZ 85718 (602) 881-7300 Shipment Method: Hand PAGE Send Results to: HANDLING SPECIAL DATEOS X ESTIMATED CONCENTRATION HANGE (ppb) FOR VOA S HARGIS +ASSOCIATES, INC. CHAIN-OF-CUSTODY RECORD AND ANALYSIS REQUEST FORM O No. of containers correct. Or received good condition/cold El conforms to COC document Indicate number of sample containers in analysis request (lab use only); sign only after verified for completeness. Complete in ballpoint pen. Draw one line through errors, 5. Consult project QA documents for specific instructions. and deviations from typical environmental samples. 4. Note applicable preservatives, special instructions, 1. Fill out form completely except for shaded areas 0108 VZ3 テフロス ANALYSES REQUESTED 0109 ₩J3 space; indicate choice with / or x. 0109 initial and date correction. SAMPLE Custody seals secure zog 55470 Sample Receipt: INSTRUCTIONS FAX NO. 602) 730-0508 SAMPLER (PRINTED) Phone No. 602 34 5-0888 **9 9** 1 VATION BRIAN R WAGGLE PRESER-PROJECT No./TASK No. *052H HOEN ci 525.03 EONH Dielect 145 HC Dale Time Date ᆵ MATRIX Suriace Telaw Dayo12 1105 000 0707 0756 0745 6490 0630 1490 4490 0635 0638 0740 0738 0651 0821 COLLECTION Time SAMPLE Received by Received by Laboratory Total number of Containers per analysis: Company 55-09-0.5 05-16-25 PROJECT MANAGER T.M. TURNEY (STrong Date CHENKESEARCH Dale Time Time SAMPLE 55-09-2.0 55-13-0.5 55-13-2.0 SS-13-ZOD 55-14-0,50 55-14-2.0 5.0-11-0.5 55-14-05 58-10-0.5 55-10-2.0 55-12-05 55-11-2.0 58-/2-2.0 T.M. SAMPLER (SIGNATURE) Junka PROJECT NAME OA MANAGER Relinquished by Religquished by: n 9 ત LAB Γ 3 و (C) ゴ Min Сотрапу Company 4

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ATI I.D. 506626

June 28, 1995

Hargis & Associates 1400 E. Southern Avenue Suite 600 Tempe, AZ 85282



Project Name/Number: ChemResearch/525.03

Attention: Brian Waggle

On 06/07/95, Analytical Technologies, Inc., received a request to analyze soil sample(s). The sample(s) were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

C indicates that the two compounds coelute. Any peaks seen at that retention time will be reported for both compounds.

If you have any questions or comments, please do not hesitate to contact us at (602) 496-4400.

Claudia S. Blankon Project Manager

CSB/paw

Enclosure

ADHS License No. AZ0061 Elizabeth Proffitt, Laboratory Manager



CLIENT : HARGIS & ASSOCIATES

PROJECT # : 525.03

PROJECT NAME : ChemResearch

ATI I.D. : 506626

DATE RECEIVED: 06/07/95

REPORT DATE : 06/26/95

::::::::::::::::::::::::::::::::::::::			
ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	RBSS-58	SOIL	06/07/95
02	RBSS-60	SOIL	06/07/95
03	RBSS-61	SOIL	06/07/95
04	RBSS-62	SOIL	06/07/95
05	RBSS-63	SOIL	06/07/95

---- TOTALS ----

MATRIX # SAMPLES
SOIL 5

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.



ATI I.D. : 50662601

TEST: VOLATILE HALOCARBON/AROMATIC (EPA 8010/8020)

CLIENT		:	HARGIS & ASSOCIATES	DATE	SAM	PLED	:	06/07/95
PROJECT	! #	:	525.03	DATE	REC			06/07/95
PROJECT	NAME	:	ChemResearch	DATE	EXT	RACTED	:	06/09/95
CLIENT	I.D.	:	RBSS-58	DATE	ANA	LYZED	:	06/18/95
SAMPLE	MATRIX	:	SOIL	UNIT	3		:	MG/KG
				DILU	CION	FACTOR	. :	1

COMPOUNDS	RESULTS	**************************************
BENZENE	<0.025	
BROMODICHLOROMETHANE	<0.025	
BROMOFORM	<0.025	:
BROMOMETHANE	<0.1	
CARBON TETRACHLORIDE	<0.025	
CHLOROBENZENE	<0.025	
CHLOROETHANE	<0.025	';
CHLOROFORM	<0.025	
CHLOROMETHANE	<0.025	
DIBROMOCHLOROMETHANE	<0.025	
2-CHLOROETHYL VINYL ETHER	<0.025	•
1,3-DICHLOROBENZENE	<0.025	
1,4-DICHLOROBENZENE	<0.025	:
1,2-DICHLOROBENZENE	<0.025	
DICHLORODIFLUOROMETHANE	<0.025	
1,1-DICHLOROETHANE	<0.025	
1,2-DICHLOROETHANE	<0.025	
1,1-DICHLOROETHENE	<0.025	
CIS-1,2-DICHLOROETHENE	<0.025	
1,2-DICHLOROPROPANE	<0.025	*
CIS-1,3-DICHLOROPROPENE	<0.025	
TRANS-1, 3-DICHLOROPROPENE	<0.025	
ETHYLBENZENE	<0.025	
METHYLENE CHLORIDE	<0.10	
1,1,2,2-TETRACHLOROETHANE	<0.025	:
TETRACHLOROETHENE	0.03	£.
TOLUENE	<0.025	
1,1,1-TRICHLOROETHANE	<0.025	•
1,1,2-TRICHLOROETHANE	<0.025	
TRICHLOROETHENE	<0.025	
TRICHLOROTRIFLUOROETHANE	<0.10	
VINYL CHLORIDE	<0.025	
TOTAL XYLENES	<0.025	
TRICHLOROFLUOROMETHANE	<0.025	
TRANS-1,2-DICHLOROETHENE	<0.025	
METHYL ETHYL KETONE	<1.25	2.0 La

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE	(%)	107
BROMOFLUOROBENZENE	(%)	98
TIME EXT		15:30



ATI I.D. : 50662602

TEST : VOLATILE HALOCARBON/AROMATIC (EPA 8010/8020)

. !	CLIENT : HARGIS & ASSOCIATES	DATE SAMPLED : 06/07/95
	PROJECT # : 525.03	DATE RECEIVED . 06/07/95
	PROJECT NAME : ChemResearch	DATE RECEIVED : 06/07/95 DATE EXTRACTED : 06/09/95 DATE ANALYZED : 06/18/95
	CLIENT I.D. : RBSS-60	DATE ANALYZED . 06/18/95
	SAMPLE MATRIX : SOIL	UNITS : MG/KG
8		DILUTION FACTOR: 1
		DILUTION FACTOR : 1
	COMPOUNDS	RESULTS
1		
	BENZENE	<0.025
	BROMODICHLOROMETHANE	<0.025
	BROMOFORM	<0.025
	BROMOMETHANE	<0.1
	CARBON TETRACHLORIDE	<0.025
		<0.025
Baru.	CHLOROFORM	<0.025
	CHLOROMETHANE	<0.025 <0.025 <0.025
	DIBROMOCHLOROMETHANE	<0.025
ıs.	2-CHLOROETHYL VINYL ETHER	<0.025
	1,3-DICHLOROBENZENE	<0.025
	1,4-DICHLOROBENZENE	<0.025
	1,2-DICHLOROBENZENE	<0.025
Barro)	DICHLORODIFLUOROMETHANE	<0.025
	1,1-DICHLOROETHANE	<0.025
	1,2-DICHLOROETHANE	<0.025
	1,1-DICHLOROETHENE	<0.025
	CIS-1,2-DICHLOROETHENE	<0.025
	1,2-DICHLOROPROPANE	<0.025
	CIS-1,3-DICHLOROPROPENE	<0.025
	TRANS-I, 3-DICHLOROPROPENE	<0.025
	ETHYLBENZENE	<0.025
	METHYLENE CHLORIDE	<0.10
	1,1,2,2-TETRACHLOROETHANE	<0.025
ace of		0.57
	TOLUENE	<0.025
	1,1,1-TRICHLOROETHANE	<0.025
	1,1,2-TRICHLOROETHANE	<0.025
	TRICHLOROETHENE	<0.025
	TRICHLOROTRIFLUOROETHANE	<0.10
	VINYL CHLORIDE	<0.025
است	TOTAL XYLENES	<0.025
	TRICHLOROFLUOROMETHANE	<0.025
	TRANS-1,2-DICHLOROETHENE	<0.025
	METHYL ETHYL KETONE	<1.25
	SURROGATE PERCENT RECOVERIES	
T ₀		
	BROMOCHLOROMETHANE (%)	106
	BROMOFLUOROBENZENE (%) TIME EXT	99
	ATM DVT	15:32
3		



ATI I.D. : 50662603

TEST : VOLATILE HALOCARBON/AROMATIC (EPA 8010/8020)

CLIENT	: HARGIS & ASSOCIATES	DATE SAMPLED : 06/07/95
PROJECT #	: 525.03	DATE RECEIVED : 06/07/95
PROJECT NAME	: ChemResearch	DATE EXTRACTED : 06/09/95
CLIENT I.D.	: RBSS-61	DATE ANALYZED : 06/18/95
SAMPLE MATRIX	: SOIL	UNITS : MG/KG
		DILUTION FACTOR: 1

COMPOUNDS	RESULTS	
BENZENE	<0.025	
BROMODICHLOROMETHANE	<0.025	
BROMOFORM	<0.025	
BROMOMETHANE	<0.1	
CARBON TETRACHLORIDE	<0.025	
CHLOROBENZENE	<0.025	-
CHLOROETHANE	<0.025	
CHLOROFORM	<0.025	
CHLOROMETHANE	<0.025	
DIBROMOCHLOROMETHANE	<0.025	
2-CHLOROETHYL VINYL ETHER	<0.025	-
1,3-DICHLOROBENZENE	<0.025	
1,4-DICHLOROBENZENE	<0.025	2
1,2-DICHLOROBENZENE	<0.025	5
DICHLORODIFLUOROMETHANE	<0.025	· ·
1,1-DICHLOROETHANE	<0.025	•
1,2-DICHLOROETHANE	<0.025	
1,1-DICHLOROETHENE	<0.025	
CIS-1,2-DICHLOROETHENE	<0.025	
1,2-DICHLOROPROPANE	<0.025	
CIS-1,3-DICHLOROPROPENE	<0.025	
TRANS-1,3-DICHLOROPROPENE	<0.025	6
ETHYLBENZENE	<0.025	
METHYLENE CHLORIDE	<0.10	i.
1,1,2,2-TETRACHLOROETHANE	<0.025	*
TETRACHLOROETHENE	1.6	•
TOLUENE	<0.025	
1,1,1-TRICHLOROETHANE	<0.025	
1,1,2-TRICHLOROETHANE	<0.025	
TRICHLOROETHENE	<0.025	
TRICHLOROTRIFLUOROETHANE	<0.10	
VINYL CHLORIDE	<0.025	•
TOTAL XYLENES	0.025	1
TRICHLOROFLUOROMETHANE	<0.025	-
TRANS-1,2-DICHLOROETHENE	<0.025	\$
METHYL ETHYL KETONE	<1.25	40 20 21
		2

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE	(%)	105
BROMOFLUOROBENZENE	(%)	105
_TIME EXT	• - •	15:35



BROMOCHLOROMETHANE (%)

BROMOFLUOROBENZENE (%)

TIME EXT

GAS CHROMATOGRAPHY - RESULTS

ATI I.D. : 50662604

TEST : VOLATILE HALOCARBON/AROMATIC (EPA 8010/8020)

CLIENT : HARGIS & ASSOCIATES PROJECT # : 525.03 PROJECT NAME : ChemResearch CLIENT I.D. : RBSS-62 SAMPLE MATRIX : SOIL	DATE SAMPLED . 06/07/95
PROJECT # : 525.03	DATE RECEIVED : 06/07/95
PROJECT NAME : ChemResearch	DATE EXTRACTED : 06/09/95
CLIENT I.D. : RBSS-62	DATE ANALYZED : 06/18/95
SAMPLE MATRIX : SOIL	UNITS : MG/KG
	DILUTION FACTOR: 1
COMPOUNDS	RESULTS
BENZENE	<0.025
BROMODICHLOROMETHANE	<0.025 <0.025
	<0.025 <0.1
BROMOMETHANE	<0.1
CARBON TETRACHLORIDE	<0.025
CHLOROBENZENE	<0.025
CHLOROBENZENE CHLOROETHANE	<0.025
CILIOROFORM	<0.025
CHLOROMETHANE	<0.025 <0.025
DIBROMOCHLOROMETHANE	<0.025
2-CHLOROETHYL VINYL ETHER	<0.025
1,3-DICHLOROBENZENE	<0.025
1,4-DICHLOROBENZENE	<0.025
1,2-DICHLOROBENZENE DICHLORODIFLUOROMETHANE	<0.025
1,1-DICHLOROETHANE	<0.025
10 1 DICTIONOLITAND	<0.025
1 1 1 DICTIONOSITANS	<0.025 <0.025
1,2-DICHLOROETHANE 1,1-DICHLOROETHENE CIS-1,2-DICHLOROETHENE	<0.025
1,2-DICHLOROPROPANE	<0.025
CIS-1,3-DICHLOROPROPENE	·
TRANS-1,3-DICHLOROPROPENE	<0.025 <0.025
ETHYLBENZENE	<0.025
METHYLENE CHLORIDE	<0.10
1,1,2,2-TETRACHLOROETHANE	<0.025
TETRACHLOROETHENE	0.78
TOLUENE	<0.025
1,1,1-TRICHLOROETHANE	<0.025
1,1,2-TRICHLOROETHANE	<0.025
TRICHLOROETHENE	<0.025
TRICHLOROTRIFLUOROETHANE	<0.10
VINYL CHLORIDE	<0.025
TOTAL XYLENES	0.07
TRICHLOROFLUOROMETHANE	<0.025
TRANS-1,2-DICHLOROETHENE	<0.025
METHYL ETHYL KETONE	<1.25
SURROGATE PERCENT RECOVERIES	·
	·

105

116

15:37



ATI I.D. : 50662605

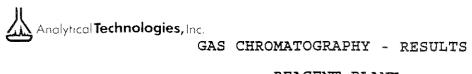
TEST : VOLATILE HALOCARBON/AROMATIC (EPA 8010/8020)

CLIENT	:	HARGIS & ASSOCIATES	DATE SAMPLED	:	06/07/95
PROJECT #	:	525.03			06/07/95
PROJECT NAME	:	ChemResearch	DATE EXTRACTED	:	06/09/95
CLIENT I.D.	-	RBSS-63	DATE ANALYZED	:	06/18/95
SAMPLE MATRI	Х:	SOIL	UNITS	:	MG/KG
			DILUTION FACTOR	:	1

COMPOUNDS	RESULTS	
BENZENE	<0.025	
BROMODICHLOROMETHANE	<0.025	
BROMOFORM	<0.025	
BROMOMETHANE	<0.1	
CARBON TETRACHLORIDE	<0.025	•
CHLOROBENZENE	<0.025	√*
CHLOROETHANE	<0.025	
CHLOROFORM	<0.025	
CHLOROMETHANE	<0.025	
DIBROMOCHLOROMETHANE	<0.025	:
2-CHLOROETHYL VINYL ETHER	<0.025	÷ 3:
1,3-DICHLOROBENZENE	<0.025	
1,4-DICHLOROBENZENE	<0.025	A :
1,2-DICHLOROBENZENE	<0.025	3.
DICHLORODIFLUOROMETHANE	<0.025	. •
1,1-DICHLOROETHANE	<0.025	
1,2-DICHLOROETHANE	<0.025	
1,1-DICHLOROETHENE	0.05 C	
CIS-1,2-DICHLOROETHENE	<0.025	•
1,2-DICHLOROPROPANE	<0.025	er e
CIS-1,3-DICHLOROPROPENE	<0.025	
TRANS-1,3-DICHLOROPROPENE	<0.025	21 - 2 21 - 2
ETHYLBENZENE	<0.025	
METHYLENE CHLORIDE	<0.10	
1,1,2,2-TETRACHLOROETHANE	<0.025	<u>.</u>
TETRACHLOROETHENE	0.08	į.
TOLUENE	<0.025	
1,1,1-TRICHLOROETHANE	<0.025	
1,1,2-TRICHLOROETHANE	<0.025	
TRICHLOROETHENE	<0.025	
TRICHLOROTRIFLUOROETHANE	0.05 C	
VINYL CHLORIDE	<0.025	:
TOTAL XYLENES	<0.025	410
TRICHLOROFLUOROMETHANE	<0.025	=
TRANS-1, 2-DICHLOROETHENE	<0.025	35 t M
METHYL ETHYL KETONE	<1.25	
		Li.

SURROGATE PERCENT RECOVERIES

- ROMOCHLOROMETHANE	(%)	97
BROMOFLUOROBENZENE	(%)	102
TIME EXT		15:40



REAGENT BLANK

TEST :	VOLATILE	HALOCARBON	AROMATIC	(EPA	8010/8020)

\$ \$ 4 × 4 £	: HARGIS & ASSOCIATES : 525.03 : ChemResearch : REAGENT BLANK	DATE EXTRACTED	: 06/10/95 : MG/KG	
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	COMPOUNDS	RESULTS
	BENZENE	<0.025
	BROMODICHLOROMETHANE	<0.025
	BROMOFORM	<0.025
	BROMOMETHANE	<0.1
	CARBON TETRACHLORIDE	<0.025
	CHLOROBENZENE	<0.025
	CHLOROETHANE	<0.025
	CHLOROFORM	<0.025
	CHLOROMETHANE	<0.025
	DIBROMOCHLOROMETHANE	<0.025
	2-CHLOROETHYL VINYL ETHER	<0.025
	1,3-DICHLOROBENZENE	<0.025
	1,4-DICHLOROBENZENE	<0.025
	1,2-DICHLOROBENZENE	<0.025
	DICHLORODIFLUOROMETHANE	<0.025
	1,1-DICHLOROETHANE	<0.025
	1,2-DICHLOROETHANE	<0.025
	1,1-DICHLOROETHENE	<0.025
	CIS-1,2-DICHLOROETHENE	<0.025
	1,2-DICHLOROPROPANE	<0.025
	CIS-1,3-DICHLOROPROPENE	<0.025
	TRANS-1,3-DICHLOROPROPENE	<0.025
	ETHYLBENZENE	<0.025
	METHYLENE CHLORIDE	<0.10
	1,1,2,2-TETRACHLOROETHANE	<0.025
	TETRACHLOROETHENE	<0.025
	TOLUENE	<0.025
	1,1,1-TRICHLOROETHANE	<0.025
	1,1,2-TRICHLOROETHANE	<0.025
	TRICHLOROETHENE	<0.025
	TRICHLOROTRIFLUOROETHANE	<0.10
	VINYL CHLORIDE	<0.025
	TOTAL XYLENES	<0.025
	TRICHLOROFLUOROMETHANE	<0.025
	TRANS-1,2-DICHLOROETHENE	<0.025
Š	METHYL ETHYL KETONE	<1.25
		-

SURROGATE PERCENT RECOVERIES

BROMOCHLOROMETHANE	(%)	103
BROMOFLUOROBENZENE	(%)	104



QUALITY CONTROL DATA

ATI I.D.

: 506626

14

EST : VOLATILE HALOCARBON/AROMATIC (EPA 8010/8020)

: HARGIS & ASSOCIATES CLIENT

: 50649933

: 525.03 PROJECT # ROJECT NAME : ChemResearch

REF I.D.

DATE ANALYZED: 06/13/95

SAMPLE MATRIX : NON-AQUEOUS

UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT	CONC. SPIKED	SPIKED SAMPLE	% REC.	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
,1-DICHLOROETHENE TRICHLOROETHENE TETRACHLOROETHENE ENZENE	<0.025 <0.025 <0.025 <0.025 <0.025	1.0	0.67 0.90 0.94 0.87	67 90 94 87	0.60 0.89 0.90 0.93	60 89 90 93	11 1 4
ROMODICHLOROMETHANE CHLOROFORM L,1,1-TRICHLOROETHANE	<0.025 <0.025 <0.025 <0.025	1.0	0.87 0.87 0.83	87 87 83	0.93 0.86 0.91 0.86	86 91 86	1 4 4
OLUENE CHLOROBENZENE O-XYLENE	<0.025 <0.025 <0.025	1.0	0.86 0.85 0.95	86 85 95	0.94 0.80 1.0	94 80 100	9 6 5

Recovery = (Spike Sample Result - Sample Result) 100 Spike Concentration

RPD (Relative % Difference) = (Spiked Sample - Duplicate Spike) Result Sample Result

Average of Spiked Sample

100

A TIMES t) connas # LABORATORY INFORMATION ATT PHIX 1400 EAST SOUTHERN AVENUE, SUITE 6/00 TEMPE, AZ 85282 (602) 345-0888 HEMARKS 610 NORTH HOLLYWOOD WAY, SUITE 201 BURBANK, CA 91505 (818) 563-1569 Send invoice to La Jolla, CA Business Office Alth Kim Sturek 2223 AVENIDA DE LA PLAYA, SUITE 300 LA JOLLA, CA 92037 (619) 454-0165 Total No. of Containers: 1820 EAST RIVER ROAD, SUITE 100 TUCSON, AZ 85718 (602) 881-7300 PINK: FIELD/TASK MANAGER Shipment Method: based Send Results to: B. R. HANDLING SPECIAL \mathbf{X} ESTIMATED CONCENTRATION RANGE (ppb) FOR VOA S A No. of containers correct. A received good condition/cold Conforms to COC document Indicate number of sample containers in analysis request (lab use only); sign only after verified for completeness. 2. Complete in ballpoint pen. Draw one line through errors, 5. Consult project QA documents for specific instructions. YELLOW: QA MANAGER and deviations from typical environmental samples. 4. Note applicable preservatives, special instructions, 1. Fill out form completely except for shaded areas ANALYSES REQUESTED space; indicate choice with / or x. MEK BOIO/8020 EU WUMOY X initial and date correction. CONTAINERS ORIGINAL: LABORATORY SAMPLE Custody seals secure 1.5'2 Sample Receipt: INSTRUCTIONS Phone No (602) 345-0888 FAX NO. (1002) 730-0508 SAMPLEH (PRINTED) Paul M. Salc, de ... PRESER-PROJECT No./TASK No. VATION POSTH HOEN EONH 19/1/9 ЮН Time Date Date Time 525.03 MATRIX Ground Water Surface Telaw MUDINI MENCHAN lios 0959 6-7-950900 1143 COLLECTION 1031 1223 amiT PROJECT MANAGER TERM M. TURKER SAMPLE Maggle Received by: Received by: Laboratory Total number of Contelners per analysis: MT Сотрапу Date HARGIS +ASSOCIATES, IIVC. aek/ M. Saled Dale OA MANAGEH BRIAM B. Time Time SAMPLE RB55-58 Chm Rescarch RBSS-40 RBSS- 62 RBS5-63 RBSS - (41 SAMPLEH, (SIGNATURE) PROJECT NAME Relinquished by. Religquished by LAB ID Company Company 3 J



AEN I.D. 606729

July 01, 1996

Hargis & Associates 1400 E. Southern Avenue Suite 600 Tempe, AZ 85282

Project Name/Number: CRC/525.12

Attention: Brian Waggle

On 06/17/96, American Environmental Network (Arizona), Inc., received a request to analyze soil sample(s). The sample(s) were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

AEN (Arizona) is in the process of converting all references from Analytical Technologies Inc. (ATI) to American Environmental Network (Arizona), Inc. Any designation found in this document or data reports should be considered equivalent.

If you have any questions or comments, please do not hesitate to contact us at (602) 496-4400.

Ken Baker

Project Manager

KB/jk

Enclosure

ADHS License No. AZ0061 Sherman McCutcheon, General Manager CLIENT: HARGIS & ASSOCIATES DATE RECEIVED: 06/17/96

PROJECT # : 525.12

PROJECT NAME : CRC REPORT DATE : 07/01/96

ATI I.D.: 606729

ATI #	CLIENT DESCRIPTION	MATRIX	DATE COLLECTED
01	SS-19(0-5)	SOIL	06/17/96
02	SS-19(5.0)	SOIL	06/17/96
03	SS-19(9.5)	SOIL	06/17/96
04	SS-19 (5-10)	SOIL	06/17/96
05	SS-20(5.5)	SOIL	06/17/96
06	SS-20 (0-5)	SOIL	06/17/96
07	SS-20(0-5)a	SOIL	06/17/96
08	SS-20(6.5)	SOIL	06/17/96
09	SS-20(5-6.5)	SOIL	06/17/96
10	SS-21(5.0)	SOIL	06/17/96
11	SS-21 (0-5)	SOIL	06/17/96
12	SS-21(9.5)	SOIL	06/17/96
13	SS-22(5.0)	SOIL	06/17/96
14	SS-22(0-5)	SOIL	06/17/96
15	SS-21(5-9.5)	SOIL	06/17/96
16	SS-22(9.5)	SOIL	06/17/96
17	SS-22(5-10)	SOIL	06/17/96
18	SS-17(0-5)	SOIL	06/17/96
19	SS-17(5.0)	SOIL	06/17/96
20	SS-17(9.5)	SOIL	06/17/96
21	SS-17(5-9.5)	SOIL	06/17/96
22	SS-18(5.0)	SOIL	06/17/96
23	SS-18(0-5)	SOIL	06/17/96
24	SS-18(9.5)	SOIL	06/17/96
25	SS-18(5-9.5)	SOIL	06/17/96
26	MB-2	SOIL	06/17/96

---- TOTALS ----

MATRIX # SAMPLES
SOIL 26

ATI STANDARD DISPOSAL PRACTICE

The samples from this project will be disposed of in thirty (30) days from the date of this report. If an extended storage period is required, please contact our sample control department before the scheduled disposal date.

METALS RESULTS

ATI I.D. : 606729

CLIENT : HARGIS & ASSO PROJECT # : 525.12 PROJECT NAME : CRC	CIATES					06/17/96
PARAMETER	UNITS	01(4)	04	06 (ಭಿ)	07(z ^a)	09/ ₁ 0\
CHROMIUM (EPA 6010) CHROMIUM (TCLP 1311/6010)	MG/KG MG/L	40.2 1.45	36.6 1.06	293 <0.10	300 <0.10	302 <0.10

talling was

METALS RESULTS

ATI I.D.: 606729

CLIENT : HARGIS & ASSO PROJECT # : 525.12 PROJECT NAME : CRC	CIATES			DATE REC		06/17/96 07/01/96
PARAMETER	UNITS	11 (1)	14 (15 (1)	17 🕡	18 🔊
CHROMIUM (EPA 6010) CHROMIUM (TCLP 1311/6010)	MG/KG MG/L	15.3 <0.10	14.4 <0.10	14.4 <0.10	9.4 <0.10	663 7.81

METALS RESULTS

ATI I.D.: 606729

CLIENT: HARGIS & ASSOCIATES DATE RECEIVED: 06/17/96

PROJECT # : 525.12

PROJECT NAME : CRC REPORT DATE : 07/01/96

PARAMETER	UNITS	21 (%)	23	25 \ 180 \
CHROMIUM (EPA 6010)	MG/KG	33.4	183	8.5
CHROMIUM (TCLP 1311/6010)	MG/L	0.65	1.49	<0.10

METALS - QUALITY CONTROL

CLIENT : HARGIS & ASSOCIATES

PROJECT # : 525.12

PROJECT NAME : CRC ATI I.D. : 606729

PARAMETER	UNITS	SAMPLE ATI I.D. RESULT	DUP. RESULT RPD	SPIKED SAMPLE		% REC
CHROMIUM CHROMIUM CHROMIUM CHROMIUM CHROMIUM CHROMIUM	MG/KG MG/KG MG/KG MG/L MG/L	60672901 40.2 60672918 663 60649927 9.9 60672909 <0.10 60665801 <0.10	40.1 0.2 1030 43* 10.6 7 <0.10 NA <0.10 NA	882	50.0 250 50.0 5.00	100 87 76* 81 82

% Recovery = (Spike Sample Result - Sample Result)

Spike Concentration

RPD (Relative Percent Difference) = (Sample Result - Duplicate Result)

The sample Result - Duplicate Result - X 100

* Result out of limits due to sample matrix interference

ATI I.D. : 60672902

TEST • VO	TATTTE	HALOCARBON	AROMATIC	(EPA	8010	/8020)
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PROJECT NAME CLIENT I.D.			: 06/17/96 : 06/17/96 : 06/21/96 • MG/KG
COMPOUNDS		RESULTS	
1,3-DICHLOROB: 1,4-DICHLOROB: 1,2-DICHLOROB: 1,1-DICHLOROE: 1,2-DICHLOROE: 1,1-DICHLOROE: 1,2-DICHLOROE: 1,2-DICHLOROP: CIS-1,3-DICHL TRANS-1,3-DICHL TRANS-1,3-DICHL TRANS-1,3-DICHL 1,1,2,2-TETRA TETRACHLOROET TOLUENE 1,1,1-TRICHLO 1,1,2-TRICHLO TRICHLOROETHE VINYL CHLORID TOTAL XYLENES TRICHLOROFLUO TRANS-1,2-DICHLOROSID	METHANE METHANE VINYL ETHER ENZENE ENZENE ENZENE OROMETHANE THANE THANE THENE OROFTHENE OROPROPENE HLOROPROPENE HLOROETHANE HENE ROETHANE ROETHANE HENE	<0.025 <0.025 <0.025	
SURRO	GATE PERCENT RECOVERIES	•	
	UOROBENZENE (PID) (%) NZENE (HALL) (%)	99 98	

ATI I.D. : 60672903

INDI . VODILITED INTROCURDORY ARROY.	
CLIENT : HARGIS & ASSOCI PROJECT # : 525.12 PROJECT NAME : CRC CLIENT I.D. : SS-19(9.5) SAMPLE MATRIX : SOIL	DATE SAMPLED : 06/17/96 DATE RECEIVED : 06/17/96 DATE EXTRACTED : 06/17/96 DATE ANALYZED : 06/25/96 UNITS : MG/KG DILUTION FACTOR : 1
COMPOUNDS	DECITE DO
BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROFTHANE CHLOROFORM CHLOROMETHANE DIBROMOCHLOROMETHANE 2-CHLOROETHYL VINYL ETHER 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE 1,2-DICHLOROBENZENE DICHLORODIFLUOROMETHANE 1,1-DICHLOROETHANE 1,1-DICHLOROETHANE 1,1-DICHLOROETHENE CIS-1,2-DICHLOROFOPENE TRANS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE METHYLENE CHLORIDE 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHENE TOLUENE 1,1,1-TRICHLOROETHANE 1,1,1-TRICHLOROETHANE TRICHLOROETHENE VINYL CHLORIDE TOTAL XYLENES TRICHLOROFLUOROMETHANE TRANS-1,2-DICHLOROETHENE	<pre><0.025 <0.025 <0.025 <0.10 <0.025 <0.02</pre>
SURROGATE PERCENT RECOV	VERIES
1-CHLORO-2-FLUOROBENZENE (PID) BROMOFLUOROBENZENE (HALL) (%)	(%) 99 93

ATI I.D.: 60672905

TEST: VOLATILE HALOCARBON/AROMATIC (EPA 80)

	DATE EXTRACTED : 06/17/96 DATE ANALYZED : 06/21/96 UNITS : MG/KG DILUTION FACTOR : 4000
COMPOUNDS	RESULTS
BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROFORM CHLOROMETHANE CHLOROMETHANE DIBROMOCHLOROMETHANE 2-CHLOROETHYL VINYL ETHER 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE 1,2-DICHLOROBENZENE DICHLORODIFLUOROMETHANE 1,1-DICHLOROETHANE 1,1-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROFOPENE CIS-1,2-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE METHYLENE CHLORIDE 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHENE TOLUENE 1,1,1-TRICHLOROETHANE TICHLOROETHENE VINYL CHLORIDE TOTAL XYLENES TRICHLOROFLUOROMETHANE TRANS-1,2-DICHLOROETHENE	<100.0 <100.0 <100.0 <100.0 <400 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0 <100.0
SURROGATE PERCENT RECOVER	RIES
1-CHLORO-2-FLUOROBENZENE (PID) (%BROMOFLUOROBENZENE (HALL) (%)	100 95

ATI I.D. : 60672908

CLIENT : HARGIS & ASSOCIATES	DATE SAMPLED : 06/17/96
CLIENT : HARGIS & ASSOCIATES PROJECT # : 525.12	DATE RECEIVED : 06/17/96
PROJECT NAME : CRC	DATE EXTRACTED : 06/17/96
	DATE ANALYZED : 06/21/96
SAMPLE MATRIX : SOIL	UNITS : MG/KG
DAMI DE MAIKIA . DOID	DILUTION FACTOR: 100
COMPOUNDS	RESULTS
BENZENE	<2.50
BROMODICHLOROMETHANE	<2.50
BROMOFORM	<2.50
BROMOMETHANE	<10.0
CARBON TETRACHLORIDE	<2.50
CHLOROBENZENE	<2.50
CHLOROETHANE	<2.50
CHLOROFORM	<2.50
CHLOROMETHANE	<2.50
DIBROMOCHLOROMETHANE	<2.50
2-CHLOROETHYL VINYL ETHER	<25.0
1,3-DICHLOROBENZENE	<2.50
1,4-DICHLOROBENZENE	<2.50
1,2-DICHLOROBENZENE	<2.50
DICHLORODIFLUOROMETHANE	<2.50
1,1-DICHLOROETHANE	<2.50
1,2-DICHLOROETHANE	<2.50
1,1-DICHLOROETHENE	<2.50
CIS-1,2-DICHLOROETHENE	<2.50
1,2-DICHLOROPROPANE	<2.50
CIS-1,3-DICHLOROPROPENE	<2.50
TRANS-1,3-DICHLOROPROPENE	<2.50
ETHYLBENZENE	<2.50
METHYLENE CHLORIDE	<10.0
1,1,2,2-TETRACHLOROETHANE	<5.0
TETRACHLOROETHENE	180
TOLUENE	<2.50
1,1,1-TRICHLOROETHANE	<2.50
1,1,2-TRICHLOROETHANE	<2.50
TRICHLOROETHENE	<2.50
VINYL CHLORIDE	<2.50
TOTAL XYLENES	<2.50
TRICHLOROFLUOROMETHANE	<2.50
TRANS-1,2-DICHLOROETHENE	<2.50
SURROGATE PERCENT RECOVERIES	
1-CHLORO-2-FLUOROBENZENE (PID) (%)	101
BROMOFLUOROBENZENE (HALL) (%)	91
DAOMOT HOOKODENAENE (MAHIL) (8)) ±

ATI I.D. : 60672910

TEST: VOLATILE HALOCARB	ONZAROMATIC CEPA 8010	780201

and to tonizand immodification, into the terms of the ter	020)
CLIENT : HARGIS & ASSOCIATES PROJECT # : 525.12 PROJECT NAME : CRC CLIENT I.D. : SS-21(5.0) SAMPLE MATRIX : SOIL	DATE SAMPLED : 06/17/96 DATE RECEIVED : 06/17/96 DATE EXTRACTED : 06/17/96 DATE ANALYZED : 06/21/96 UNITS : MG/KG DILUTION FACTOR : 1
COMPOUNDS	
BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROBENZENE CHLOROFORM CHLOROMETHANE DIBROMOCHLOROMETHANE 2-CHLOROETHYL VINYL ETHER 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE 1,2-DICHLOROBENZENE 1,1-DICHLOROETHANE 1,1-DICHLOROETHANE 1,1-DICHLOROETHANE 1,2-DICHLOROETHENE CIS-1,2-DICHLOROPROPANE CIS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE METHYLENE CHLORIDE 1,1,2,2-TETRACHLOROETHANE 1,1,1-TRICHLOROETHANE 1,1,1-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE TICHLOROETHENE VINYL CHLORIDE TOAL XYLENES TRICHLOROFLUOROMETHANE TRANS-1,2-DICHLOROETHANE TRANS-1,2-DICHLOROETHANE TRICHLOROFTUOROMETHANE TRICHLOROFTUOROMETHANE TRANS-1,2-DICHLOROETHENE VINYL CHLORIDE TOTAL XYLENES TRICHLOROFTUOROMETHANE TRANS-1,2-DICHLOROETHENE	<pre><0.025 <0.025 <0.025 <0.10 <0.025 <0.02</pre>
1-CHLORO-2-FLUOROBENZENE (PID) (%) BROMOFLUOROBENZENE (HALL) (%)	102 92

ATI I.D. : 60672912

TEST	:	VOLATILE	HALOCARBON	/AROMATIC	(FPA	8010/8020	١.
TEIDT	ē	AANWITTHE	TAUCCARDON.	/ AKUMATIC	LLFA	0010/0020	J

and to tourname ammooning of the territory of	040)
SAMPLE MATRIX : SOIL	DATE SAMPLED : 06/17/96 DATE RECEIVED : 06/17/96 DATE EXTRACTED : 06/17/96 DATE ANALYZED : 06/21/96 UNITS : MG/KG DILUTION FACTOR : 1
COMPOUNDS	
BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROETHANE CHLOROFORM CHLOROMETHANE DIBROMOCHLOROMETHANE 2-CHLOROETHYL VINYL ETHER 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE 1,2-DICHLOROBENZENE DICHLORODIFLUOROMETHANE 1,1-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHENE CIS-1,2-DICHLOROFOPENE TRANS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE METHYLENE CHLORIDE 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHENE TOLUENE 1,1,1-TRICHLOROETHANE	<0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025
1-CHLORO-2-FLUOROBENZENE (PID) (%) BROMOFLUOROBENZENE (HALL) (%)	100 99

ATI I.D.: 60672913

TEST	:	VOLATILE	HALOCARBON	/AROMATIC	(EPA	8010	/8020)	
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	LO (BIII OULO) COMO)
CLIENT : HARGIS & ASSOCIATION PROJECT # : 525.12 PROJECT NAME : CRC CLIENT I.D. : SS-22(5.0) SAMPLE MATRIX : SOIL	DATE EXTRACTED : 06/17/96 DATE ANALYZED : 06/21/96 UNITS : MG/KG
COMPOUNDS	RESULTS
BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROFORM CHLOROMETHANE CHLOROMETHANE DIBROMOCHLOROMETHANE 2-CHLOROETHYL VINYL ETHER 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE 1,2-DICHLOROBENZENE DICHLORODIFLUOROMETHANE 1,1-DICHLOROETHANE 1,1-DICHLOROETHANE 1,1-DICHLOROETHENE CIS-1,2-DICHLOROETHENE CIS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE METHYLENE CHLORIDE 1,1,2,2-TETRACHLOROETHANE TOLUENE 1,1,1-TRICHLOROETHANE 1,1,1-TRICHLOROETHANE TRICHLOROETHENE VINYL CHLORIDE TRICHLOROETHENE VINYL CHLORIDE TOTAL XYLENES TRICHLOROFLUOROMETHANE	<pre><0.025 <0.025 <0.025 <0.10 <0.025 <0.02</pre>
TRANS-1,2-DICHLOROETHENE	<0.025
SURROGATE PERCENT RECOVER	
1-CHLORO-2-FLUOROBENZENE (PID) (% BROMOFLUOROBENZENE (HALL) (%)) 101 99

ATI I.D.: 60672916

	DATE SAMPLED : 06/17/96 DATE RECEIVED : 06/17/96 DATE EXTRACTED : 06/18/96 DATE ANALYZED : 06/22/96 UNITS : MG/KG DILUTION FACTOR : 1
COMPOUNDS	RESULTS
BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROETHANE CHLOROFORM CHLOROMETHANE DIBROMOCHLOROMETHANE 2-CHLOROETHYL VINYL ETHER 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE 1,2-DICHLOROBENZENE 1,2-DICHLOROBENZENE 1,1-DICHLOROETHANE 1,1-DICHLOROETHANE 1,2-DICHLOROETHENE 1,2-DICHLOROETHENE 1,2-DICHLOROFROPANE CIS-1,3-DICHLOROFROPENE TRANS-1,3-DICHLOROFROPENE ETHYLBENZENE METHYLENE CHLORIDE 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHENE 1,1,1-TRICHLOROETHANE 1,1,1-TRICHLOROETHANE TICHLOROETHENE VINYL CHLORIDE VINYL CHLORIDE TOTAL XYLENES TRICHLOROFLUOROMETHANE TRANS-1,2-DICHLOROETHENE	<pre><0.025 <0.025 <0.0</pre>
SURROGATE PERCENT RECOVERIES	
1-CHLORO-2-FLUOROBENZENE (PID) (%) BROMOFLUOROBENZENE (HALL) (%)	101 99

ATI I.D.: 60672919

TEST: VOLATILE HALOCARBON/AROMATIC (EPA 8010/80	′8020	10/802	8010/	EPA 801	(EPA	/AROMATIC	HALOCARBON.	JOLATILE	•	\mathtt{TEST}
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CLIENT : HARGIS & ASSOCIATES PROJECT # : 525.12 PROJECT NAME : CRC CLIENT I.D. : SS-17(5.0) SAMPLE MATRIX : SOIL	DATE SAMPLED : 06/17/96 DATE RECEIVED : 06/17/96 DATE EXTRACTED : 06/18/96 DATE ANALYZED : 06/22/96 UNITS : MG/KG DILUTION FACTOR : 1
COMPOUNDS	RESULTS
BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROFORM CHLOROMETHANE DIBROMOCHLOROMETHANE 2-CHLOROETHYL VINYL ETHER 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE 1,2-DICHLOROBENZENE DICHLORODIFLUOROMETHANE 1,1-DICHLOROETHANE 1,1-DICHLOROETHANE 1,2-DICHLOROETHANE 1,2-DICHLOROETHENE CIS-1,2-DICHLOROETHENE CIS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE METHYLENE CHLORIDE 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHENE TOLUENE	<pre><0.025 <0.025 <0.0</pre>
SURROGATE PERCENT RECOVERIES	
1-CHLORO-2-FLUOROBENZENE (PID) (%) BROMOFLUOROBENZENE (HALL) (%)	101 99

ATI I.D.: 60672920

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CLIENT : HARGIS & ASSOCIATES PROJECT # : 525.12 PROJECT NAME : CRC	DATE SAMPLED : 06/17/96
PROJECT # : 525.12	DATE RECEIVED : 06/17/96
PROJECT NAME : CRC	DATE RECEIVED : 06/17/96 DATE EXTRACTED : 06/18/96
CLIENT I.D. : SS-17(9.5)	DATE ANALYZED : 06/22/96
SAMPLE MATRIX : SOIL	UNITS : MG/KG
DANIE MAIRIA . DOIL	DILUTION FACTOR: 1
~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	
COMPOUNDS	RESULTS
BENZENE	<0.025
BROMODICHLOROMETHANE	<0.025
BROMOFORM	<0.025
BROMOFORM BROMOMETHANE	<0.10
CARBON TETRACHLORIDE	<0.025
CHLOROBENZENE	<0.025
CHLOROETHANE	<0.025
CHLOROFORM	<0.025
CHLOROMETHANE	<0.025
	<0.025
2-CHLOROETHYL VINYL ETHER	<0.25
1,3-DICHLOROBENZENE	<0.025
1,4-DICHLOROBENZENE	<0.025
1,2-DICHLOROBENZENE	<0.025
DICHLORODIFLUOROMETHANE	<0.025
1,1-DICHLOROETHANE	<0.025
1,2-DICHLOROETHANE	<0.025
1,1-DICHLOROETHENE	<0.025
CIS-1,2-DICHLOROETHENE	<0.025
1,2-DICHLOROPROPANE	<0.025
CIS-1,3-DICHLOROPROPENE	<0.025
TRANS-1,3-DICHLOROPROPENE	<0.025
	<0.025
	<0.10
1,1,2,2-TETRACHLOROETHANE	<0.05
TETRACHLOROETHENE	0.15
TOLUENE	<0.025
1,1,1-TRICHLOROETHANE	<0.025
1,1,2-TRICHLOROETHANE	<0.025
TRICHLOROETHENE	<0.025
VINYL CHLORIDE	<0.025
TOTAL XYLENES	<0.025
TRICHLOROFLUOROMETHANE	<0.025
TRANS-1,2-DICHLOROETHENE	<0.025
TIGHT - TIV-DICTHOUGHTHING	
SURROGATE PERCENT RECOVERIES	
1-CHLORO-2-FLUOROBENZENE (PID) (%)	100
BROMOFLUOROBENZENE (HALL) (%)	105
Promot HOOKODBHUDHE (THULL) ('0)	± • • • • • • • • • • • • • • • • • • •

ATI I.D. : 60672922

CLIENT : HARGIS & ASSOCIATES PROJECT # : 525.12 PROJECT NAME : CRC CLIENT I.D. : SS-18(5.0) SAMPLE MATRIX : SOIL	DATE SAMPLED : 06/17/96 DATE RECEIVED : 06/17/96 DATE EXTRACTED : 06/18/96 DATE ANALYZED : 06/22/96 UNITS : MG/KG DILUTION FACTOR : 1
·	RESULTS
BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROFORM CHLOROMETHANE CHLOROMETHANE CHLOROMETHANE DIBROMOCHLOROMETHANE 2-CHLOROETHYL VINYL ETHER 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE 1,2-DICHLOROBENZENE 1,1-DICHLOROETHANE 1,1-DICHLOROETHANE 1,1-DICHLOROETHENE CIS-1,2-DICHLOROETHENE CIS-1,3-DICHLOROFOPENE TRANS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROETHANE 1,1,2-Z-TETRACHLOROETHANE 1,1,2-Z-TETRACHLOROETHANE 1,1,1-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE TICHLOROETHENE VINYL CHLORIDE VINYL CHLORIDE TOTAL XYLENES TRICHLOROFLUOROMETHANE TRANS-1,2-DICHLOROMETHANE TRANS-1,2-DICHLOROMETHENE	<0.025 <0.025 <0.025 <0.10 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025
SURROGATE PERCENT RECOVERIES	
1-CHLORO-2-FLUOROBENZENE (PID) (%) BROMOFLUOROBENZENE (HALL) (%)	99 99

ATI I.D.: 60672924

CLIENT : HARGIS & ASSOCIATES PROJECT # : 525.12 PROJECT NAME : CRC CLIENT I.D. : SS-18(9.5) SAMPLE MATRIX : SOIL	DATE SAMPLED : 06/17/96 DATE RECEIVED : 06/17/96 DATE EXTRACTED : 06/18/96 DATE ANALYZED : 06/22/96 UNITS : MG/KG DILUTION FACTOR : 1
COMPOUNDS	
BENZENE BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROETHANE CHLOROMETHANE CHLOROMETHANE DIBROMOCHLOROMETHANE 2-CHLOROETHYL VINYL ETHER 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE DICHLORODIFLUOROMETHANE 1,1-DICHLOROETHANE 1,1-DICHLOROETHANE 1,1-DICHLOROETHENE CIS-1,2-DICHLOROETHENE CIS-1,2-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE METHYLENE CHLORIDE 1,1,2,2-TETRACHLOROETHANE TETRACHLOROETHENE TOLUENE	<0.025 <0.025 <0.025 <0.10 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025
1-CHLORO-2-FLUOROBENZENE (PID) (%) BROMOFLUOROBENZENE (HALL) (%)	100

BROMOFLUOROBENZENE (HALL) (%)

GAS CHROMATOGRAPHY - RESULTS

ATI I.D.: 60672926

TEST	:	VOLATILE	HALOCARBON	/AROMATIC	(EPA	8010	/8020)	
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1221 . / 1221	,
CLIENT : HARGIS & ASSOCIATES PROJECT # : 525.12 PROJECT NAME : CRC CLIENT I.D. : MB-2 SAMPLE MATRIX : SOIL	DATE SAMPLED : 06/17/96 DATE RECEIVED : 06/17/96 DATE EXTRACTED : 06/18/96 DATE ANALYZED : 06/22/96 UNITS : MG/KG DILUTION FACTOR : 1
COMPOUNDS	RESULTS
BROMODICHLOROMETHANE BROMOFORM BROMOMETHANE CARBON TETRACHLORIDE CHLOROBENZENE CHLOROETHANE CHLOROFORM CHLOROMETHANE DIBROMOCHLOROMETHANE 2-CHLOROETHYL VINYL ETHER 1,3-DICHLOROBENZENE 1,4-DICHLOROBENZENE 1,2-DICHLOROBENZENE DICHLORODIFLUOROMETHANE 1,1-DICHLOROETHANE 1,2-DICHLOROETHANE 1,1-DICHLOROETHENE CIS-1,2-DICHLOROPROPANE CIS-1,3-DICHLOROPROPENE TRANS-1,3-DICHLOROPROPENE ETHYLBENZENE METHYLENE CHLORIDE 1,1,2,2-TETRACHLOROETHANE 1,1,1-TRICHLOROETHANE 1,1,1-TRICHLOROETHANE 1,1,1-TRICHLOROETHANE 1,1,2-TRICHLOROETHANE TRICHLOROETHENE VINYL CHLORIDE TOTAL XYLENES TRICHLOROFLUOROMETHANE	<pre><0.025 <0.025 <0.025 <0.10 <0.025 <0.02</pre>
SURROGATE PERCENT RECOVERIES	
1-CHLORO-2-FLUOROBENZENE (PID) (%)	98

100

1-CHLORO-2-FLUOROBENZENE (PID) (%) BROMOFLUOROBENZENE (HALL) (%)

GAS CHROMATOGRAPHY - RESULTS

REAGENT BLANK

TEST: VOLATILE HALOCARBON/AROMATIC (EPA 8010/8	020)
CLIENT : HARGIS & ASSOCIATES PROJECT # : 525.12 PROJECT NAME : CRC	ATI I.D. : 606729 DATE EXTRACTED : 06/22/96 DATE ANALYZED : 06/22/96
PROJECT # : 525.12	DATE ANALYZED : 06/22/96
PROJECT NAME : CRC	TENTETO . MATERIAL
CLIENT I.D. : REAGENT BLANK	DILUTION FACTOR : N/A
COMPOUNDS	RESULTS
BENZENE	<0.025
BROMODICHLOROMETHANE	<0.025
BROMOFORM	<0.025
BROMOMETHANE	<0.10
CARBON TETRACHLORIDE	<0.025 <0.025
CHLOROBENZENE CHLOROETHANE	<0.025
CHLOROFORM	<0.025
CHLOROMETHANE	<0.025
DIBROMOCHLOROMETHANE	<0.025
2-CHLOROETHYL VINYL ETHER	<0.25
1,3-DICHLOROBENZENE	<0.025
1,4-DICHLOROBENZENE	<0.025
1,2-DICHLOROBENZENE	<0.025
DICHLORODIFLUOROMETHANE	<0.025
1,1-DICHLOROETHANE	<0.025
1,2-DICHLOROETHANE	<0.025
1,1-DICHLOROETHENE	<0.025
CIS-1,2-DICHLOROETHENE	<0.025
	<0.025
TRANS-1,3-DICHLOROPROPENE	<0.025 <0.025
ETHYLBENZENE	<0.025
METHYLENE CHLORIDE	<0.10
1,1,2,2-TETRACHLOROETHANE	<0.05
TETRACHLOROETHENE	<0.025
TOLUENE	<0.025
1,1,1-TRICHLOROETHANE	<0.025
1,1,2-TRICHLOROETHANE	<0.025
IRICHLOROEIHENE	<0.025
	<0.025
TOTAL XYLENES	<0.025
TRICHLOROFLUOROMETHANE	<0.025
TRANS-1,2-DICHLOROETHENE	<0.025
SURROGATE PERCENT RECOVERIES	

98 100

QUALITY CONTROL DATA

ATI I.D. : 606729

TEST: VOLATILE HALOCARBON/AROMATIC (EPA 8010/8020)

CLIENT : HARGIS & ASSOCIATES

PROJECT # : 525.12 DATE ANALYZED : 06/24/96

PROJECT NAME : CRC SAMPLE MATRIX : NON-AQUEOUS

REF I.D. : 60649929 UNITS : MG/KG

COMPOUNDS	SAMPLE RESULT		SPIKED SAMPLE	•	DUP. SPIKED SAMPLE	DUP. % REC.	RPD
1,1-DICHLOROETHENE TRICHLOROETHENE TETRACHLOROETHENE BENZENE BROMODICHLOROMETHANE CHLOROFORM 1,1,1-TRICHLOROETHANE TOLUENE CHLOROBENZENE O-XYLENE	<0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025 <0.025	1.0 1.0 1.0 1.0 1.0 1.0	0.99 1.0 1.1 0.97 0.84 1.0 0.97 0.98 0.98	110 97 84 100	0.96 0.98 1.0 0.96 0.82 1.0 0.97 0.96	96 98 100 96 82 100 97 96 100	3 2 10 1 2 0 3 1 2 2

DATES OF ANALYSIS

ACCESSION #: 606729

SAMPLE ID	TEST AND METHOD NUMBER	DATE OF ANALYSIS	ANALYST
60672901	CHROMIUM (EPA 6010)	6/27/96	AF
60672904	CHROMIUM (EPA 6010)	6/20/96	AF
60672906	CHROMIUM (EPA 6010)	6/20/96	AF
60672907	CHROMIUM (EPA 6010)	6/20/96	AF
60672909	CHROMIUM (EPA 6010)	6/20/96	AF
60672911	CHROMIUM (EPA 6010)	6/27/96	AF
60672914	CHROMIUM (EPA 6010)	6/27/96	AF
60672915	CHROMIUM (EPA 6010)	6/20/96	AF
60672917	CHROMIUM (EPA 6010)	6/20/96	AF
60672918	CHROMIUM (EPA 6010)	6/20/96	AF
60672921	CHROMIUM (EPA 6010)	6/20/96	AF
60672923	CHROMIUM (EPA 6010)	6/20/96	AF
60672925	CHROMIUM (EPA 6010)	6/20/96	AF
60672901	CHROMIUM (TCLP 1311/6010)	6/26/96	AF
60672904	CHROMIUM (TCLP 1311/6010)	6/26/96	AF
60672906	CHROMIUM (TCLP 1311/6010)	6/26/96	AF
60672907	CHROMIUM (TCLP 1311/6010)	6/26/96	AF
60672909	CHROMIUM (TCLP 1311/6010)	6/26/96	AF
60672911	CHROMIUM (TCLP 1311/6010)	6/26/96	AF
60672914	CHROMIUM (TCLP 1311/6010)	6/26/96	AF
60672915	CHROMIUM (TCLP 1311/6010)	6/26/96	AF
60672917	CHROMIUM (TCLP 1311/6010)	6/26/96	AF
60672918	CHROMIUM (TCLP 1311/6010)	6/27/96	AF
60672921	CHROMIUM (TCLP 1311/6010)	6/27/96	AF
60672923	CHROMIUM (TCLP 1311/6010)	6/27/96	AF
60672925	CHROMIUM (TCLP 1311/6010)	6/27/96	AF

REFERENCES: Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW 846, 3rd Ed.)

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PROJECT NAME			Р	PROJECT NO./TASK 525.12	CT NO./TAS 525.12	K No.	SA	SAMPLE CONTAINERS	ANALYSES REQUESTED		ESTIMATED CONCENTRATION RANGE (ppb) FOR VOAS	SPECIAL HANDLING	LABORATORY INFORMATION
PROJECT MANAGER B. D. 11	1GEH B. D. WA	syste ale	Pho FA	ne No. 60 X No. 60	72-70	Phone No. 607-345-0988 FAX No. 607-730 .0508		ىر		071 Jai			AEN Phoenix
	IRE)		SAS C	SAMPLER (R (PRINTED)	SAMPLER (PRINTED)	vol'	क् <i>∱ऽऽ</i> ^	1 0109	as as			
VS.	SAMPIF	SAMPLE	LE	MATRIX	CL.	PRESER. VATION	न (वर २	9) 6 7	743) 19/118 1971m 1772				h7.4.909
	OI	916Q	əmiT nez	- bnuold maler easista saista	HCI	H0¢N +025H +01	-206-	8w09	15457 - 4 A93] 71				REMARKS
P1-55	(0-5)	6/17/96	0745	\ \		X			X				
-SS, -			0750	.7		X)	X	`			
1	(6.5)	٧	0810	,		X	Z)	X				
7- 4SS-	(01-5)61-55	٦ -	0820			X	/		X				
- 55 -	55-20 (5.5)	3	0060 X			Ź		/					
-55- d	55-20(0-5)	4	0900 X			X			X			-	
,	SS-20/0-5/a	4	0901			×			X				
9 55.	(59)02-55	3	0915 X			Ź	X	7	X				
	55-20(5-6.5)	3	0350 X			Z 			X				
\$5-210	21(5.0)	3	X 800)			X	X	1	X				
12-55	(5-0)12	ų	X 1001			X			X				
)12-55	2((4.5))	/	X 510,			Ź	X	,	X				
3 \55-	55-22(5.0)	3	(0)]]			Ź	V)	X				
-551 7	(5-0)22-55	Ļ	X ///			X			X			┥	
Total number of Co	Containers per	er analysis:	.				17	1				Total No. of	Containers: Fige C
Relinquished by:	Date	leceiv	by:		Date	INSTRUCTIONS	ONS			v.*	<u>เร</u>	Shipment Method:	Thosa (1/2my
MARRA	P/11/0/	Tage of the second	Mah / (Javetra)		chnle.	1. Fill ou	form co	ompletely	Fill out form completely except for shaded areas	f areas		Send Results to: 多.几	B.R. Wagill
) 1	Time	=	N-PX		Time	2. Compl	se only), lete in ba	algal ollay	Complete in ballpoint pen. Draw one line through errors	rough error	,s,	225 SOUTH LAKE	225 SOUTH LAKE AVENUE, SUITE 403
ر احرا	至	14 Callon	* ((de	here	1/1		and date	initial and date correction.	on.			בעפעקרוואי בעפ	
	: 	ပီ			1491	3. Indica	te numbe indicate	or of sam	Indicate number of sample containers in analysis request space: indicate choice with J or ${\bf x}_{\rm c}$	nalysis requ		1 2223 AVENIDA DE LA LA JOLLA, CA 92037	2223 AVENIDA DE LA PLAYA, SUITE 300 LA JOLLA, CA 92037 (619) 454-0165
Relinquished by.	Date	Received by:	þý:		Date	4. Note a	applicable eviations	e preserv Irom typ	Note applicable preservatives, special instructions, and deviations from typical environmental samples	ructions, samples.			1400 EAST SOUTHERN AVENUE, SUITE 600 TEMPE, AZ 85282 (602) 345-0888
						5. Consu	5. Consult project OA	1 OA doc	documents for specific instructions.	c instruction	Js.	1820 EAST RIVE	
	Time	-			Time	Sample Receipt:	celpt: containe	mple Receipt: No. of containers correct	15 Tecelved good condition/cold	od condition	ploa/	TUCSON, AZ 85/18	020) 881-1300
					_				>				