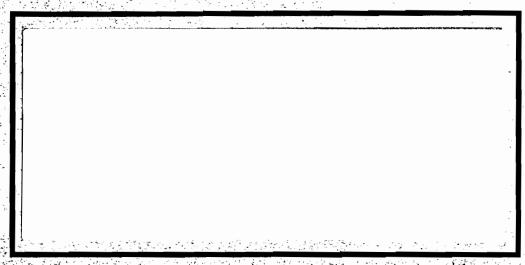
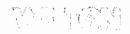
ROY F. WESTON, INC.



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FINAL SITE INSPECTION PRIORITIZATION REPORT SPECTRUM FINISHING CORPORATION BABYLON, SUFFOLK COUNTY, NEW YORK

CERCLIS I.D. No.: NYD044466910

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Volume 3 of 3

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Prepared by:

ROY F. WESTON, INC.

Raritan Plaza III, Suite 2B 101 Fieldcrest Avenue Edison, New Jersey 08837

W.O. No.: 04200-022-081-0132

BMM62

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4556.002 . Date Received: 04/09/98

Lab File ID: B6802 Date Analyzed: 04/09/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	CONCENTRATION (UG/L)	Q
74-87-3 74-83-9 75-01-4	-Bromomethane	1 1 1	U U

74-87-3Chloromethane	1 0	
74-83-9Bromomethane	ן זאר ן	
75-01-4Vinyl chloride	1 U	
75-00-3Chloroethane	1 U	
75-09-2Methylene chloride	2 U	
67-64-1Acetone	6 UJ*	
75-15-0Carbon disulfide	1 0	
75-35-41,1-Dichloroethene	1 1 1 1	
75-34-31,1-Dichloroethane	Q.8 J	
156-59-2cis-1,2-Dichloroethene	0.8 J 60.56 Z	
156-60-5trans-1,2-Dichloroethene	ן די	
67-66-3Chloroform	1 U 1 U	
107-06-21,2-Dichloroethane		
78-93-32-Butanone	1 U P	
74-97-5Bromochloromethane	1 0	
71-55-61,1,1-Trichloroethane	1 1	
56-23-5Carbon tetrachloride	1 0	
75-27-4Bromodichloromethane	1 U	
78-87-51,2-Dichloropropane	1 0	
10061-01-5cis-1,3-Dichloropropene	1 U	
79-01-6Trichloroethene	45 39 E	
124-48-1Dibromochloromethane	1 0	
79-00-51,1,2-Trichloroethane	1 U	
71-43-2Benzene	1 U	
10061-02-6trans-1,3-Dichloropropene	1 U	
75-25-2Bromoform	1 U	
108-10-14-Methyl- <u>2-pentanone</u>	1 U 5 U 5 Z	
591-78-62-Hexanone	5 25 P	
127-18-4Tetrachloroethene	200 Z	
79-34-51,1,2,2-Tetrachloroethane	1 U	
106-93-41,2-Dibromoethane	1 U	
108-88-3Toluene	1 U	
108-90-7Chlorobenzene	1 U	
100-41-4Ethylbenzene	1 U	
100-42-5Styrene	1 U	
1330-20-7Xylenes (total)	1 ប	
541-73-11,3-Dichlorobenzene	1 U	
106-46-71,4-Dichlorobenzene	1 U	
95-50-11,2-Dichlorobenzene	1 U	
96-12-81,2-Dibromo-3-chloropropane	1 U	
120-82-11,2,4-Trichlorobenzene	1 U	

*Reported from BHMG2DL FORM I LCV

OLC02.0

1LCE

EPA SAMPLE NO. 368

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

BMM62

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.:

SDG No.: BMM56

Lab Sumple ID: 4556.002

Date Received: 04/09/98

Lab File ID: B6802

Date Analyzed: 04/09/98

Purge Volume: 20 (mL)

Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (UG/L)	Q
1. 2. 3	UNKNOWN	10.28 13.34		NJ NO R
4. 5. 6.				
8				
11				
14				
17. 18.				
20				
23.				
26. 27.				
28. 29. 30.				

EPA SAMPLE NO. 369

BMM63

Q

CONCENTRATION

(UG/L)

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP SAS No.: Case No.: 26114 SDG No.: BMM56

Lab Sample ID: 4554.008 Date Received: 04/08/98

Lab File ID: B6788 Date Analyzed: 04/08/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

COMPOUND

CAS NO.

74-87-3	Chloromethane	1 U
	Bromomethane	וֹן ט
	Vinyl chloride	ilŭ
	Chloroethane	1 U
	Methylene chloride	2 ט
	Acetone	5 20
	Carbon disulfide	1 U
75-35-4	1,1-Dichloroethene	1 0
75-34-3	1,1-Dichloroethane	\ 1 U
	cis-1,2-Dichloroethene	26 31 8
	trans-1,2-Dichloroethene	1 U
67-66-3	Chloroform	וֹן ט
	1,2-Dichloroethane	1 0
	2-Butanone	5 20 2
	Bromochloromethane	
		1 0
	1,1,1-Trichloroethane	0.6 J
	Carbon tetrachloride	1 U
	Bromodichloromethane	1 U
	1,2-Dichloropropane	1 U
	cis-1,3-Dichloropropene	1 U
	Trichloroethene	16
	Dibromochloromethane	1 U
	1,1,2-Trichloroethane	1 U
	Benzene	1 U
10061-02-6-	trans-1,3-Dichloropropene	1 (U
	Bromoform	1 U
108-10-1	4-Methyl-2-pentanone	5 U _
591-78-6	2-Hexanone	*5 UR
	Tetrachloroethene	35 31 E
79-34-5	1,1,2,2-Tetrachloroethane	1 U
106-93-4	1,2-Dibromoethane	1 U
108-88-3	Toluene	1 U
108-90-7	Chlorobenzene	1 U
100-41-4	Ethylbenzene	1 U
	Styrene	1 U
	Xylenes (total)	1 U
	1,3-Dichlorobenzene	īlŪ
	1,4-Dichlorobenzene	וֹן ט
	1,2-Dichlorobenzene	ıÜ
06 10 0	1 0 D'1 2	

+ Roorten team BMM632L FORM I LCV

96-12-8-----1,2-Dibromo-3-chloropropane

120-82-1----1,2,4-Trichlorobenzene_

OLC02.0

1 U 1 | U

1LCE

EPA SAMPLE NO. 370

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4554.008 Date Received: 04/08/98

Lab File ID: B6788 Date Analyzed: 04/08/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (UG/L)	Q
1.	UNKNOWN	10.11	5	1
2. 3. 4.				
5. 6. 7.				
9				
10. 11. 12.				
14.				
15. 16. 17.				
19.				
20. 21. 22.				
24.				
26. 27.				
29.				
30.		_		

EPA SAMPLE NO. 371

BMM64

Q

CONCENTRATION

(UG/L)

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4554.013 Date Received: 04/08/98

Lab File ID: B6793 Date Analyzed: 04/09/98

Dilution Factor: 1.0 Purge Volume: 20 (mL)

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

COMPOUND

CAS NO.

74-87-3	Chloromethane	1 U
74-83-9	Bromomethane	ן דו דו דו
	Vinyl chloride	- ו' ט
	Chloroethane	- 1 U
75-09-2	Methylene chloride	2 0
	Acetone	5 8 E
	Carbon disulfide	- 1 ט
	1,1-Dichloroethene	-
	1,1-Dichloroethane	-
	cis-1,2-Dichloroethene	0.8 J
	trans-1,2-Dichloroethene	- 1 U
	Chloroform	- î ŭ
	1,2-Dichloroethane	- ז [๋] וֹטֹ
	2-Butanone	- 1 1 7
	Bromochloromethane	5 8 U
	1,1,1-Trichloroethane	- 2 0
	Carbon tetrachloride	-
	Bromodichloromethane	- : : ::
		-1
	1,2-Dichloropropane	-I I -
	cis-1,3-Dichloropropene	-1
	Trichloroethene	-
	Dibromochloromethane	1 0
	1,1,2-Trichloroethane	_ 1 U
	Benzene	1 0
	trans-1,3-Dichloropropene	1 U
	Bromoform_	1 1 0
	4-Methyl-2-pentanone	5 U R
	2-Hexanone	5 8 R
	Tetrachloroethene	8
79-34-5	1,1,2,2-Tetrachloroethane	1 0
	1,2-Dibromoethane	_ 1 U
	Toluene	1 U
	Chlorobenzene	בן בוע
	Ethylbenzene	1 1 0
	Styrene	1 0
1330-20-7	Xylenes (total)	_ 1 ប
	1,3-Dichlorobenzene	_ 1 บ
106-46-7	1,4-Dichlorobenzene	1 U

95-50-1-----1, 2-Dichlorobenzene

120-82-1-----1,2,4-Trichlorobenzene_

96-12-8-----1,2-Dibromo-3-chloropropane

1 | U

1 U

1 U

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

BMM64

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.:

SDG No.: BMM56

Lab Sample ID: 4554.013

Date Received: 04/08/98

Lab File ID: B6793

Date Analyzed: 04/09/98

Purge Volume: 20 (mL)

Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (UG/L)	Q
1				
2				
4.				
6				
8				
10.				
11.				
14.				
15		_		
17				
1 19.				
20.				
1 23.				
24.				
27.				
29.				
30		_		

B**MM**65

CONCENTRATION

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4554.005 Date Received: 04/08/98

Lab File ID: B6785 Date Analyzed: 04/08/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	(UG/L)	Q
74-87-3	Chloromethane		ı U
74-83-9	Bromomethane		ו ט
	Vinyl chloride		<u>ו</u> ט
	Chloroethane		<u>ו</u> ט
	Methylene chloride		Z Ü
67-64-1	Acetone		مان ا
	Carbon disulfide	5	֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓
	1,1-Dichloroethene	-	֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓
	1,1-Dichloroethane]	
	cis-1,2-Dichloroethene		
	trans-1,2-Dichloroethene]	וֹטֹ
67-66-3	Chloroform	Ī	
	1,2-Dichloroethane	-	ַ טוֹ
	2-Butanone]	JER
	Bromochloromethane	3	֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓
	1,1,1-Trichloroethane	0.8	
	Carbon tetrachloride	1	
	Bromodichloromethane	1	
	1,2-Dichloropropane	1	
	cis-1,3-Dichloropropene	1	ַ טוֹב
79-01-6	Trichloroethene	5	
	Dibromochloromethane	ĩ	
	1,1,2-Trichloroethane	1	
71-43-2		1	
	trans-1,3-Dichloropropene	1	
75-25-2	Bromoform	7	TT
108-10-1	4-Methyl-2-pentanone	5 0.9	ַ שׁנַי וּ
591-78-6	2-Hexanone	5	10R
127-18-4	Tetrachloroethene	0.9) [J']
	1,1,2,2-Tetrachloroethane	1	. ש .
	1,2-Dibromoethane	1	ן ש'.
108-88-3		1	
	Chlorobenzene	1	
100-41-4	Ethylbenzene	1	ן ש'.
100-42-5	Styrene	1	ן ש .
1330-20-7	Xylenes (total)	1	
541-73-1	1,3-Dichlorobenzene	1	
	1,4-Dichlorobenzene	1	
95-50-1	1,2-Dichlorobenzene	1	
96-12-8	1,2-Dibromo-3-chloropropane	1	ן טן.
120-82-1	1,2,4-Trichlorobenzene	1	. U

1LCE

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. 374

BMM65

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.:

SDG No.: BMM56

Lab Sample ID: 4554.005

Date Received: 04/08/98

Lab File ID: B6785

Date Analyzed: 04/08/98

Purge Volume: 20 (mL)

Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (UG/L)	Q
1				
4				
6				
10.				
11. 12. 13.				
14. 15. 16.				
18.				
20.				
23				
26.				
27. 28. 29.				
30				

BMM66

CONCENTRATION

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4556.004 Date Received: 04/08/98

Lab File ID: B6838 Date Analyzed: 04/13/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	(UG/L) Q
74-87-3	Chloromethane	1 U
	Bromomethane	-
75-01-4	Vinyl chloride	-
	Chloroethane]
	Methylene chloride	2 0
67-64-1		2 U 5 PR
	Carbon disulfide	וֹ דֹעוֹ וֹ בֹּי
	1,1-Dichloroethene	- <u>- </u>
	1,1-Dichloroethane]
	cis-1,2-Dichloroethene	2928 2
	trans-1,2-Dichloroethene	
	Chloroform	1 U
	1,2-Dichloroethane	T 1 1 1 1 1
	2-Butanone	5 × R
	Bromochloromethane	
	1,1,1-Trichloroethane	· 0.5 j
	Carbon tetrachloride	- "1 0
	Bromodichloromethane	· i ŭ
	1,2-Dichloropropane	· i ŭ
	cis-1,3-Dichloropropene	· i <mark>ŭ</mark>
79-01-6	Trichloroethene	· 15 °
	Dibromochloromethane	·
	1,1,2-Trichloroethane	. 1 U 1 U
71-43-2		. 1 U
71-43-2	trans-1,3-Dichloropropene	
75 25 2	Bromoform	· 1 8
100 10 1	4-Methyl-2-pentanone	
100-10-1	2-Hexanone	5 U R
127-18-4	Tetrachloroethene	24
	1,1,2,2-Tetrachloroethane	· 24 U
	1,2-Dibromoethane	· i ŭ
108-88-3		
	Chlorobenzene	· i ŭ
	Ethylbenzene	· i ŭ
100-41-4		· i ŭ
	Xylenes (total)	· i ŭ
541-73-1	1,3-Dichlorobenzene	
	1,4-Dichlorobenzene	· i u
	1,2-Dichlorobenzene	·
	1,2-Dibromo-3-chloropropane	·
120-12-0	1,2,4-Trichlorobenzene	
120-02-1	1,2,4-111C111O1ODe112e11e	·
		.

#Value transferred, BMH 66DEORM I LOV

OLC02.0

1LCE

EPA SAMPLE NO. 376

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.:

SDG No.: BMM56

Lab Sample ID: 4556.004

Date Received: 04/08/98

Lab File ID: B6838

Date Analyzed: 04/13/98

Purge Volume: 20 (mL)

Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (UG/L)	Q
1				
3 4				
1 0.				
7				
11.				
12				
14 15 16				
18.				
20.				
21.				
24				
27.				
28. 29. 30.				

BMM67

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

CONCENTRATION

Lab Code: PDP SAS No.: Case No.: 26114 SDG No.: BMM56

Lab Sample ID: 4554.009 Date Received: 04/08/98

Lab File ID: B6799 Date Analyzed: 04/09/98

Purge Volume: 20 Dilution Factor: 1.0 (mL)

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	(UG/L) Q
74-87-3	Chloromethane	1 U
	Bromomethane	_ 1 A
75-01-4	Vinyl chloride	_ 5
	Chloroethane	- 1 U
75-09-2	Methylene chloride	_ 2 û
67-64-1	Acetone	<u>-</u> 5 80
75-15-0	Carbon disulfide	ן דו דו די דו די דו די דו די די דו די
75-35-4	1,1-Dichloroethene	_ 0.6 J
75-34-3	1,1-Dichloroethane	_ 1 1 1 1 1 1 1 1 1
	cis-1,2-Dichloroethene	1300 1-000 B
156-60-5	trans-1,2-Dichloroethene	4
	Chloroform	- 1 U
107-06-2	1,2-Dichloroethane	- 1 U
	2-Butanone	5 26 R
	Bromochloromethane	- ז ט
71-55-6	1,1,1-Trichloroethane	- 1 U
	Carbon tetrachloride	- 1 0
	Bromodichloromethane	- 1 U
	1,2-Dichloropropane	- 1 0
	cis-1,3-Dichloropropene	- , 1 U
	Trichloroethene	2.50 × 360 E.
	Dibromochloromethane	_ 1 U
	1,1,2-Trichloroethane	- 1 U
71-43-2		- 1 U
	trans-1,3-Dichloropropene	- 1 U
	Bromoform	- 1 U
108-10-1	4-Methyl-2-pentanone	_ 5 U _
	2-Hexanone	[¥ 5 127 R
	Tetrachloroethene	[35∞°5 50 臣 ○
	1,1,2,2-Tetrachloroethane	1 0 1
	1,2-Dibromoethane	_ 1 U
108-88-3		_ 1 U
	Chlorobenzene	_ 1 U
	Ethylbenzene	_ 1 U
100-42-5		_ 1 U
1330-20-7	Xylenes (total)	_ 1 U
	1,3-Dichlorobenzene	_ 1 U
	1,4-Dichlorobenzene	_ 1 U
	1,2-Dichlorobenzene	_ 1 U
	1,2-Dibromo-3-chloropropane	_ 1 U
1 720 02 1	1 2 4 Twichlerehengene	

120-82-1----1,2,4-Trichlorobenzene

OLC02.0

0.9 J

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4554.009

· Date Received: 04/08/98

Lab File ID: B6799

Date Analyzed: 04/09/98

Purge Volume: 20 (mL)

Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (UG/L)	Q
1				
4				
5				
7 8 9				
11.				
12.				
14 15 16.				
16. 17. 18.				
20.				
21. 22. 23.				
24				
26. 27. 28.				
29.				

BMM68

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

SDG No.: BMM56

CONCENTRATION

Lab Code: PDP Case No.: 26114 SAS No.:

Lab Sample ID: 4554.014 Date Received: 04/08/98

Lab File ID: B6794 Date Analyzed: 04/09/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	(UG/L)	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane		Ū
75-01-4	Vinyl chloride	- 1	Ū
	Chloroethane	ī	Ū
	Methylene chloride	2	Ū
67-64-1		2 5	2P
	Carbon disulfide	ĺ	Ū.
	1,1-Dichloroethene	1	Ü
75-34-3	1,1-Dichloroethane	2	
	cis-1,2-Dichloroethene	4	
	trans-1,2-Dichloroethene	1	<u>u</u>
67-66-3		1	Ü
	1,2-Dichloroethane	1	Ŭ,
78-93-3		5	ER .
	Bromochloromethane	5	ſ .
		1	ן ט
	1,1,1-Trichloroethane	2	
	Carbon tetrachloride	1	Ŭ
	Bromodichloromethane	1	U
	1,2-Dichloropropane	1	U
	cis-1,3-Dichloropropene	1	ן ט
	Trichloroethene	6	
	Dibromochloromethane	1	Ū
	1,1,2-Trichloroethane	1	U
71-43-2		1	U
	trans-1,3-Dichloropropene	1	U
75-25-2		1	U
	4-Methyl-2-pentanone	5 5	Uη,
591-78-6			ع هر
	Tetrachloroethene	21	
	1,1,2,2-Tetrachloroethane	1	U
	1,2-Dibromoethane	1	U
108-88-3		1	U
	Chlorobenzene	1	U
	Ethylbenzene	1	U
100-42-5		1	U
1330-20-7	Xylenes (total)	1	U
541-73-1	1,3-Dichlorobenzene	1	U
	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	1	U
96-12-8	1,2-Dibromo-3-chloropropane	1	U
120-82-1	1,2,4-Trichlorobenzene	ī	Ū

1LCE

EPA SAMPLE NO. 380

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.:

SDG No.: BMM56

Lab Sample ID: 4554.014

Date Received: 04/08/98

Lab File ID: B6794

Date Analyzed: 04/09/98

Purge Volume: 20 (mL)

Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (UG/L)	Q
1				
4.				
5 6				
9.				
11				
14.				
16				
18				
21				
23. 24. 25.				
26				
28. 29. 30.				

Q

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

BMM69

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP

CAS NO.

Case No.: 26114 SAS No.: SDG No.: BMM56

CONCENTRATION

(UG/L)

Lab Sample ID: 4556.003 Date Received: 04/09/98

Lab File ID: B6804 Date Analyzed: 04/09/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

COMPOUND

74-87-3Chloromethane	1 U
74-83-9Bromomethane	1 U
75-01-4Vinyl chloride	1 U
75-00-3Chloroethane	1 U
75-09-2Methylene chloride	2 U
67-64-1Acetone	745
75-15-0Carbon disulfide	1 0
75-35-41,1-Dichloroethene	
75-34-31,1-Dichloroethane	* 0.8 J
156-59-2cis-1,2-Dichloroethene	69 5 7 12
156-60-5trans-1,2-Dichloroethene	1 U
67-66-3Chloroform	1 U
107-06-21,2-Dichloroethane	1 U .
78-93-32-Butanone	5 v R
74-97-5Bromochloromethane	1 0
71-55-61,1,1-Trichloroethane	1
56-23-5Carbon tetrachloride	1 U
75-27-4Bromodichloromethane	1 U
78-87-51,2-Dichloropropane	1 U
10061-01-5cis-1,3-Dichloropropene	• 1 U
79-01-6Trichloroethene	43 ⁺ 38 E
124-48-1Dibromochloromethane	1 U
79-00-51,1,2-Trichloroethane	1 U
71-43-2Benzene	1 U
10061-02-6trans-1,3-Dichloropropene	וֹם
75-25-2Bromoform	1 Ū
108-10-14-Methyl-2-pentanone	5 U
591-78-62-Hexanone	, 5 × (2)
127-18-4Tetrachloroethene	210' 190 E
79-34-51,1,2,2-Tetrachloroethane	1 U
106-93-41,2-Dibromoethane	1 U
108-88-3Toluene	1 U
108-90-7Chlorobenzene	1 U
100-41-4Ethylbenzene	1 U
100-42-5Styrene	1 U
1330-20-7Xylenes (total)	1 U
Eas En s	4 77

* TRANSFERED from BHH69 DEORM I LOV 1 TRANSFERED FROM BHH69DL2

541-73-1-----1,3-Dichlorobenzene

106-46-7----1,4-Dichlorobenzene 95-50-1----1,2-Dichlorobenzene

120-82-1----1,2,4-Trichlorobenzene

96-12-8-----1,2-Dibromo-3-chloropropane

1 U

1 | U

1 U

1 U

EPA SAMPLE NO.382

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

BMM69

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.:

SDG No.: BMM56

Lab Sample ID: 4556.003

Date Received: 04/09/98

Lab File ID: B6804

Date Analyzed: 04/09/98

Purge Volume: 20 (mL)

Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (UG/L)	Q
1. 2. 3.	UNKNOWN	10.27		NJR
4. 5. 6. 7.				
9				
12.				
16. 17.				
20				
23. 24. 25.				
26. 27. 28. 29.				
30				

1LCA

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET

BMM71

CONCENTRATION

(UG/L)

Q

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP

Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4554.012 Date Received: 04/08/98

Lab File ID: B6792 Date Analyzed: 04/09/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO. COMPOUND

CAD NO.	COM COME	(00) 11)	V
74-87-3	Chloromethane	1	U
	Bromomethane	ī	Ū
	Vinyl chloride	ī	Ū
	Chloroethane	ī	Ū
	Methylene chloride	0.6	
67-64-1		5	Je .
	Carbon disulfide	ĭ	ΰ'
	1,1-Dichloroethene	ī	Ū
	1,1-Dichloroethane	ī	Ū
	cis-1,2-Dichloroethene	ī	Ū
	trans-1,2-Dichloroethene	ī	ϋ
	Chloroform	5	~
	1,2-Dichloroethane	ĭ	<u> </u>
	2-Butanone	5	ER.
	Bromochloromethane	ĩ	U
	1,1,1-Trichloroethane	ī	บี
	Carbon tetrachloride	i	υ
	Bromodichloromethane	1	υ
	1,2-Dichloropropane	i	บี
	cis-1,3-Dichloropropene	i	υ
	Trichloroethene	i	ָ ^ט
	Dibromochloromethane	i	ט
	1,1,2-Trichloroethane	i	ט
		1	ט
71-43-2	trans-1,3-Dichloropropene	1	ט
	Bromoform	1	ט
100 10 1	4-Methyl-2-pentanone	Ţ.	ΰ
F01 70 6	2-Hexanone	5 5	ER.
	Tetrachloroethene	1	Ü,
79-24-5	1,1,2,2-Tetrachloroethane	i	บี
106-92-4	1,2-Dibromoethane	i	บี
108-93-4		i	บี
100-00-3	Chlorobenzene	i	บี
100-90-7	Ethylbenzene	i	บี
100-41-4		ī	Ü
	Xylenes (total)	i	υ
F41-72-1	1,3-Dichlorobenzene	i	บี
106 46 7	1,4-Dichlorobenzene	1	Ü
100-40+/	1,2-Dichlorobenzene	1	Ü
35-50-1	1,2-Dichiorobenzene	1	Ü
30-12-8	1,2-DIDIOIIIO-3-CIIIOIOPIOPAIIe_	1	ט
170-87-1	1,2,4-Trichlorobenzene	_	٥

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

BMM71

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4554.012 Date Received: 04/08/98

Lab File ID: B6792 Date Analyzed: 04/09/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

COMPOUND NAME	RT	EST.CONC. (UG/L)	Q
	=======	=========	=====
	l		
	————————————————————————————————————		·
-			
		·	
			COMPOUND NAME RT (UG/L)

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

BMM72

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4556.005 Date Received: 04/09/98

Lab File ID: B6803 Date Analyzed: 04/09/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO. COMPOUND CONCENTRATION (UG/L) Q

CAS NO.	COWLOUND	(UG/L)	Q
74-87-3	Chloromethane		1 U
	Bromomethane		1 U
	Vinyl chloride		์ บิ
	Chloroethane		
	Methylene chloride		1 U 2 U
67-64-1			9 J
	Carbon disulfide		1 0
	1,1-Dichloroethene		์ เป็บ
	1,1-Dichloroethane		īļŪ
	cis-1,2-Dichloroethene		์ โ
	trans-1,2-Dichloroethene		์ ไบ้
	Chloroform		īlŭ
	1,2-Dichloroethane		ī Ū
	2-Butanone		5 JOP
	Bromochloromethane		1 U
	1,1,1-Trichloroethane		1 0
	Carbon tetrachloride		וֹשׁ
	Bromodichloromethane		1 0
	1,2-Dichloropropane		וֹט
	cis-1,3-Dichloropropene		1 0
	Trichloroethene		1 0
	Dibromochloromethane		וֹט
	1,1,2-Trichloroethane		וֹט
71-43-2	Pongono		וֹט
	trans-1,3-Dichloropropene		וֹט
	Bromoform		וֹ ט
	4-Methyl-2-pentanone		5 U .
F01 70 6	2-Hexanone		5 U p
107 10 4	Tetrachloroethene		1 U
	1,1,2,2-Tetrachloroethane		וֹ טֹ
	1,2-Dibromoethane		וֹע
108-88-3			וֹע
	Chlorobenzene		וֹע
	Ethylbenzene		וֹט
100-42-5			וֹע
	Xylenes (total)		ilŭ
	1,3-Dichlorobenzene		וֹט
	1,4-Dichlorobenzene		וֹט
	1,2-Dichlorobenzene		וֹט
	1,2-Dichiolobenzene		וֹט
	1,2-Diblomo-3-chiolopiopane_ 1,2,4-Trichlorobenzene		וֹם וֹם
120-02-1	1, 2, 4-111CII1O1ODeII2eIle		+ 0

FORM I LCV

OLC02.0

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

BMM72

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.:

SDG No.: BMM56

Lab Sample ID: 4556.005

Date Received: 04/09/98

Lab File ID: B6803

Date Analyzed: 04/09/98

Purge Volume: 20 (mL)

Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (UG/L)	Q
1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16.	1		(UG/L)	
18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29.				

BMM74

CONCENTRATION

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4554.007 Date Received: 04/08/98

Lab File ID: B6787 Date Analyzed: 04/08/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	(UG/L)	Q
74-87-3	Chloromethane		1 U
	Bromomethane		ם ט
	Vinyl chloride		ī U
	Chloroethane		ī Ü
	Methylene chloride		
67-64-1			1 J
	Carbon disulfide		1 0
	1,1-Dichloroethene		า บั
	1,1-Dichloroethane		ī Ü
	cis-1,2-Dichloroethene		וֹ טֹ
	trans-1,2-Dichloroethene		iσ
	Chloroform		6
	1,2-Dichloroethane		1 0
	2-Butanone		5 00
	Bromochloromethane		
	1,1,1-Trichloroethane		1 U 1 U
	Carbon tetrachloride		וֹט
	Bromodichloromethane		1 0
	1,2-Dichloropropane		1 0
	cis-1,3-Dichloropropene		1 U
			1 U
	Dibromochloromethane		1 U
	1,1,2-Trichloroethane		1 U
71-43-2			1 0
	trans-1,3-Dichloropropene		1 U
	Bromoform		ט ד
	4-Methyl-2-pentanone		5 U 5 E R
	2-Hexanone Tetrachloroethene		- 1
	1,1,2,2-Tetrachloroethane		
	1,2-Dibromoethane		1 U 1 U
108-88-3	Chlorobenzene		
	Ethylbenzene		1 U 1 U
100-42-5			
	Xylenes (total)		1 U
	1,3-Dichlorobenzene		1 U
106-46-7	1,4-Dichlorobenzene		1 U
	1,2-Dichlorobenzene		1 U
96-12-8	1,2-Dibromo-3-chloropropane_		1 0
120-82-1	1,2,4-Trichlorobenzene		1 U

Lab Code: PDP Case No.: 26114 SAS No.:

TENTATIVELY IDENTIFIED COMPOUNDS

BMM74

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

SDG No.: BMM56

Lab Sample ID: 4554.007

Date Received: 04/08/98

Lab File ID: B6787

Date Analyzed: 04/08/98

Purge Volume: 20 (mL)

Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NUMBER	COMPOUND NAME	RT	EST.CONC. (UG/L)	Q
1. 2. 3.				
4.				
5. 6. 7.				
8. 9. 10.				
11				
13. 14. 15.				
16				
18. 19. 20.				
22.				
24				
27.				
28. 29. 30.				

BMM75

CONCENTRATION

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4556.001 Date Received: 04/09/98

Lab File ID: B6805 Date Analyzed: 04/09/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAS NO.	COMPOUND	(UG/L)	Q
74-87-3	Chloromethane		1 U
	Bromomethane		์ มี บั
	Vinyl chloride		וֹ טֹ
	Chloroethane		ī Ü
	Methylene chloride		2 0
67-64-1			2 U
	Carbon disulfide		1 0
	1,1-Dichloroethene		ī Ü
	1,1-Dichloroethane		iσ
	cis-1,2-Dichloroethene		า บั
	trans-1,2-Dichloroethene		า์ บั
	Chloroform		1 0
	1,2-Dichloroethane		1 0
	2-Butanone		
	Bromochloromethane		5 1 U
	1,1,1-Trichloroethane		ז ט
	Carbon tetrachloride		1 0
	Bromodichloromethane		1 U
	1,2-Dichloropropane		וֹט
	cis-1,3-Dichloropropene		1 0
	Trichloroethene		וֹ ט
	Dibromochloromethane		וֹ ט
71-43-2	1,1,2-Trichloroethane		
			1 U 1 U
75-25-2	trans-1,3-Dichloropropene		
	4-Methyl-2-pentanone		1 U
	2-Hexanone		5 U
	Tetrachloroethene		1 U 5 U 5 2 K
	1,1,2,2-Tetrachloroethane		1 0
	1,2-Dibromoethane		וֹט
108-88-3			וֹןט
	Chlorobenzene		וֹןט
	Ethylbenzene		וֹשׁ
100-42-5			זוֹט
	Xylenes (total)		וֹע
	1,3-Dichlorobenzene		וֹן טׁ
	1,4-Dichlorobenzene		וֹט
	1,2-Dichlorobenzene		זוֹט
	1,2-Dichiorobenzene		וֹט
120-92-1	1,2,4-Trichlorobenzene		ז ט
120-02-1	1,2,4-111CIIIOLODEIIZEIIE		10

LOW CONC. WATER VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

BMM75

Lab Name: PDP ANALYTICAL SERVICES Contract: 68-D7-0004

Lab Code: PDP Case No.: 26114 SAS No.: SDG No.: BMM56

Lab Sample ID: 4556.001 Date Received: 04/09/98

Lab File ID: B6805 Date Analyzed: 04/09/98

Purge Volume: 20 (mL) Dilution Factor: 1.0

GC Column: DB-624 ID: 0.53 (mm) Length: 60 (m)

CAC ATRONO	COMPOUND NAME	7.00	EST.CONC.	
CAS NUMBER	COMPOUND NAME	RT	(UG/L)	Q
1		=======	========	=====
1				
2				
J				
5				
6				
7 8				
9				
9				
11				
12.				
14				
15.				
16				
17				
18.				
19				
20				
21.				
22.				
23				
∠4.				
1 25.				
l 26.				
4/.				
20.				
29.				
30				

RECORD OF COMMUNICATION

TO:	YUNRU YANG.	
FROM:	JANET TROTTER Region II ESAT/RSCC	
DATE:	L 26/98	
SUBJECT:	QUALITY ASSURED DATA	
MESSAGE		
ING AND RET	PLEASE SIGN BELOW IN ACKNOWLEDGEMENT OF RECEIPT OF THE URN ONE COPY OF THIS RECORD OF COMMUNICATION TO THE RSCC-R	
Spectrum	Finishing 26/14 RATS INORG 18	1
`)	
	•	
DEDLY DY		
REPLY BY:		
	<u> </u>	
SIGNATURE:	: In Roll DATE: 6/29/90	<u></u>
DATE RECEIVE	ED BY RSCC: / /	
	· · · · · · · · · · · · · · · · · · ·	
	SK MONITOR MANAGER	

file

RECORD OF COMMUNICATION

REGIONAL SAMPLE CONTROL CENTER

RECEIVED

DATE:	JUNE	2,	1998
CIBIECT.	CI	Pή	ata Paci

CLP Data Package for Quality Assurance Review

FROM:

RSCC / ESAT

TO:

Hanif Sheikh, Hazardous Waste Support Section

JUN 2 5 1998

Attached is the foll	owing INORGANIC Da	ta Package to be review	ed for Quality Assurance
SITE SPECTRUM	1 FINISHING	CASE# 2-6//	4
CONTRACTOR	AWES	#SAMPLES	MATRIX
PHASE SSI	- 		WATER
LAB <i>AA75</i>		FRACTION 774	L& CN
TURN-AROUND-T	TME 35 DAYS		,
	REGION II RSCC I	OATA TRANSFER LO	G
Relinquis	hed By		Received By
Signature	Date/Time	Signature	Date/Time
		Q1. R. A.	1 512 00

John Baliety 6-2-98	VCS 6/10/98
UCS 6/23/98	John Bulicy 6/3/98
John Buley (DCR) 6/23/98	Hand Sheigh 6/23/9
Sch Child	
Harrief Shell 6/25/9	1 De Rybilia 6/25/98
	(over for instructions) revised 10/97

Page 1 of 10

Title: Evaluation of Metals Data for the

Contract Laboratory Program

Appendix A.2: Data Assessment Narrative

Date: Jan. 1992

Number: HW-2 Revision: 11

Case: # 26114 Site: SPECTRUM FINISHING Matrix: Soil: 18

SDG: # MBKL09, MBKL46 Lab: AMERICAN ANALYTICAL Water: 18

_ Contractor: AWES Reviewer: C. STANCA/ESAT Other:

A.2.1. Validation flags -The following flags have been applied in red by the data validator and must be considered by the data user.

I - This flag indicates the result qualified as estimated.

<u>Red-Line</u> - A red-line drawn through a sample result indicates unusable value. The red-lined data are known to contain significant errors based on documented information and must not be used by the data user.

_Fully Usable Data -The results that do not carry "J" or "red-line" are fully usable.

Contractual Qualifiers -The legend of contractual qualifiers applied by the lab on Form I's is found on page B-20 of SOW ILM01.0

- A.2.2. The data assessment is given below and on the attached sheets.
- This case consists of eighteen (18) aqueous and eighteen (18) soil samples collected at the Spectrum Finishing site on 04/07 04/08/98 for TAL Metals and cyanide analysis according to the USEPA CLP SOW No. ILM04.0. The following samples were identified as field blanks: MBKL46, -47, -48, -49. Samples MBKL18/30 and MBKL38/45 are the field duplicate pairs for this sampling event. Matrix spike, laboratory duplicate and serial dilution analyses were performed on MBKL30 and MBKL27 for soil matrix and MBKL37 and MBKL45 for aqueous matrix.

SDG MBKL09

CSF

- 1. Page 300A was inserted.
- 2. Page 352 is not legible.
- 3. Pages 91 -> 144 do not indicate where the originals were located.
- 4. Laboratory used blue ink to fill out DC-2 forms and also in other parts of the data package.
- _ 5. Pages 91 -> 144 and 256 -> 289 are two-sided copies.

Page 2 of 10

Title: Evaluation of Metals Data for the

Contract Laboratory Program

Appendix A.2: Data Assessment Narrative

Date: Jan. 1992 Number: HW-2 Revision: 11

A.2.2. (continuation)

CRDL STANDARD

The CRDL standard recoveries fell outside the control limits of 80 - 120% for Hg (%R = 75.0). All associated Hg results within the affected range of True Value \pm CRDL should be considered estimated and flagged "J".

The following action has been taken:

"J": Hg in MBKL09, -10, -11, -14 -> 18, -30, -32 -> 37, -39, -40, -41, -43, -44.

MATRIX SPIKE

- SOIL

The matrix spike recovery was outside the control limits of 75 - 125% when sample concentration was less than 4 X spike concentration for Sb (%R = 72.4). If the spike recovery is low the results in the associated samples are biased low and the true values may be greater than the values reported. All associated Sb results should be considered estimated and flagged "J". The following action has been taken:

"J": Sb in MBKL09, -10, -11, -14 --> 18, -30.

AQUEOUS

- The matrix spike recovery was outside the control limits of 75 125% when sample concentration was less than 4 X spike concentration for Al (%R = 156.6) and Hg (%R = 55.6). If the spike recovery is low the results in the associated samples are biased low and the true values may be greater than the values reported. If the
- spike recovery is high the results in the associated samples are biased high and the true values may be lower than the values reported. All associated positive Al results should be rejected and all associated Hg results should be considered estimated and flagged "J". The following action has been taken:

"R": Al in MBKL32 -> 37, -39, -40, -41, -43, -44.

Note: The Hg results were already qualified due to CRDL criteria.

LABORATORY DUPLICATE

SOIL

- The RPD between sample and duplicate results was greater than 100% for Pb (131.5%) when both sample and

Page 3 of 10

Title:

Evaluation of Metals Data for the

Contract Laboratory Program

Appendix A.2: Data Assessment Narrative

Date: Jan. 1992 Number: HW-2

Revision: 11

A.2.2. (continuation)

duplicate results were greater than 5 X CRDL. All associated sample results should be considered estimated and flagged "J". The following action has been taken:

"J": Pb in MBKL09, -10, -11, -14 --> 18, -30.

ICP SERIAL DILUTION

_ SOIL

The ICP serial dilution analysis yielded percent differences greater than 10 but less than 100 when the initial concentration was equal to or greater than 10 X IDL for Co (%D = 15.2). All associated sample results greater or equal to CRDL or 10 X IDL, whichever is greater, should be considered estimated and flagged "J". The tollowing action has been taken:

"J": Co in MBKL17.

AQUEOUS

The ICP serial dilution analysis yielded percent differences greater than 10 but less than 100 when the initial concentration was equal to or greater than 10 X IDL for Cu (%D = 13.4), K (%D = 44.3), and Zn (%D = 31.4). All associated sample results greater or equal to CRDL or 10 X IDL, whichever is greater, should be considered estimated and flagged "J". The following action has been taken:

"J": Cu in MBKL32, -34 -> 37, -39, -40, -44. Zn in MBKL32 -> 37, -39, -40, -41, -43, -44.

SDG MBKL46

CSF

- 1. Pages 120 -> 135, 137 -> 152, 191 -> 212, and 220 -> 241 are two-sided copies.
- 2. Laboratory used blue ink to fill out DC-2 forms and also in other parts of the data package.

CRDL STANDARD

The CRDL standard recoveries fell outside the control limits of 80 - 120% for Hg, run of 04/24/98 (%R = 75.0) and Pb, second run of 04/30/98 (% $R_{initial}$ = 77.8).

Page 4 of 10

Title: Evaluation of Metals Data for the

Contract Laboratory Program

Appendix A.2: Data Assessment Narrative

Date: Jan. 1992 Number: HW-2 Revision: 11

_ A.2.2. (continuation)

All associated Hg and Pb results not qualified due to other criteria within the affected range of True Value ± 2CRDL for ICP and True Value ± CRDL for AA should be considered estimated and flagged "J". The following action has been taken:

"J": Hg in MBKL12, -13, -19, -20, -25, -26, -28. Pb in MBKL12, -19.

MATRIX SPIKE

SOIL

- The matrix spike recovery was outside the control limits of 75 125% when sample concentration was less than 4 X spike concentration for Sb (%R = 74.4), As (%R = 172.0), and Cr (%R = 140.7). If the spike recovery is low the results in the associated samples are biased low and the true values may be greater than the values reported. If the spike recovery is high the results in the associated samples are biased high and the true values may be lower than the values reported. All associated positive As and Cr results and all associated Sb results should be considered estimated and flagged "J". The following action has been taken:
- "J": Sb, As, Cr in MBKL12, -13, -19, -20, -24 --> 28.

AQUEOUS

- The matrix spike recovery was outside the control limits of 75 125% when sample concentration was less than 4 X spike concentration for Al (%R = 172.3) and Hg (%R = 45.1). If the spike recovery is low the results in the associated samples are biased low and the true values may be greater than the values reported. If the spike recovery is high the results in the associated samples are biased high and the true values may be lower than the values reported. All associated positive Al results should be rejected and all associated Hg results should be considered estimated and flagged "J". The following action has been taken:
- **R**": Al in MBKL38, -42, -45, -47, -48, -49.
 - "J": Hg in MBKL38, -42, -45, -46, -47, -48, -49.

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Title: Evaluation of Metals Data for the

Contract Laboratory Program

Appendix A.2: Data Assessment Narrative

Date: Jan. 1992 Number: HW-2

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A.2.2. (continuation)

ICP SERIAL DILUTION

SOIL

The ICP serial dilution analysis yielded percent differences greater than 10 but less than 100 when the initial concentration was equal to or greater than 10 X IDL for Cu (%D = 16.5), Na (%D = 36.4) and Zn (%D = 21.3). All associated sample results greater or equal to CRDL or 10 X IDL, whichever is greater, should be considered estimated and flagged "J". The following action has been taken:

"J": Cu, Zn in MBKL12, -13, -19, -20, -24 --> 28. Na in MBKL13.

AQUEOUS

The ICP serial dilution analysis yielded percent differences greater than 10 but less than 100 when the initial concentration was equal to or greater than 10 X IDL for Cr (%D = 39.9), K (%D = 22.0), and Zn (%D = 17.5). All associated sample results greater or equal to CRDL or 10 X IDL, whichever is greater, should be considered estimated and flagged "J". The following action has been taken:

"J": Cr in MBKL38, -45. Zn in MBKL38, -42, -45, -48.

FIELD BLANK

The Fe and Zn results in some field blanks were greater than the CRDL indicating sample contamination due to poor decontamination procedures. However, the sequence of sampling in relation to rinsate blanks indicates that no samples could be associated with the contaminated blanks. (The field blanks were collected after the field samples). No action was required.

FIELD DUPLICATE

The absolute difference between sample (MBKL38) and duplicate (MBKL45) results was greater than CRDL for Ca when sample and/or duplicate results were less than 5 X CRDL. All associated sample results should be considered estimated and flagged "J". The following action has been taken:

"J": Ca in MBKL38, -45.

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Title:

Evaluation of Metals Data for the

Contract Laboratory Program

Appendix A.2: Data Assessment Narrative

Date: Jan. 1992 Number: HW-2

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A.2.3. Contract-Problems/Non-Compliance

1. The contractual holding time was not met for cyanide. However, the technical holding time was within the acceptable interval, therefore no action was taken.

2. The cooler temperature for sample MBKL11, as reported on the laboratory log-in sheets, was 14°C. Although the acceptable range, as stated in the current CLP SOW is 4°C ± 2°C, there are no data or guidelines available regarding the effect of elevated temperature on metals in water or soil samples. No action based on this criteria was taken. However, it is strongly recommended that all metals data for sample MBKL11, and especially Hg and CN data (Hg and CN being the least stable elements), be used with caution.

MMB Reviewer:		Date:
Contractor Reviewer:	Signature Signature	Date: 6/18/98
Verified by:		Date:
	Signature	

_	STANDARD CHERATIVE	FORTH	7 c: 10
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•	Appendix A.J: Contract Non-Compile		Revision: 11
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Page of of

Title: Evaluation of Metals Data for the Contract Laboratory Program

Appendix A.4: Malling List for Data Reviewers

Date Jan 195 Number: HW-Revision: 1

DPO MAILING LIST FOR DATA REVIEWERS

- 1 USEPA Region 1 (ESD)
 60 Westview Street
 Lexington, MA 02173
 Deb Szaro
 (617) \$61-4312
 CT, ME, MA, NH, RL VT
 CAA, Resource Analysts, York,
 EDL Scinner, TMA
- 1 USEPA Repos III (CRL)
 E19 Berepite Road
 Annapolis, MD 21401
 Chuch Sands
 (MI) 266-9180
 DE, MD, PA, VA, WV, DC
 Centee, Hitman, ITC, MACK, VERSAR,
 ITAS, Weston, MMES, EA Engineering,
 Subject Tech., KEYPA
- 5. USEPA Region V (ESD)
 536 South Cart Street
 Tenth Poor, CAL
 Chicago, IL 60605
 Pat Chunilla
 (312) 153-9087
 IL IN, MI, MN, OH, WI
 NLE TAI/ENG
- 7. USEPA Region VII Laboratory
 25 Punsion Road
 Kansas City, KS 66115
 Debra Morey
 (913) 226-2831
 10, KS, NB, MO
 Wilson, Kansas City Scientific
 Enterprises, Eagle Ficher
- 9. USEPA Region XI (ESD)

 QA Management Scricca

 215 Fremont Street

 Saa Francisco, CA M105

 Rent Kitchingman

 (415) 974-0974

 AZ, CA, HL, NV, American Samon,

 Guam Trust Territories of Pacific

 Islands, Wake Island

 ALL CAL Weston, S-Cabod, IT_CA,

 Vepus
- 11. Carla Dempary (OS-220)
 USEPA
 401 "M" Street S.W.
 Washington, DC 20440
 PTS 282-5746

- 2. USEPA Repos II ESD
 Woodbridge Avenue
 Edison, NJ 08537
 Lina Gation Vidulich
 (201) 321-6676
 NJ, NY, PR, VI
 Century, Chemisch, US Test, Nanco
 ETC, Gadson, EMS, Gaison, ICM
- 4. USEPA Repos IV (PSD)
 Analytical Support Branch
 College Station Road
 Athers, GA 20613
 Tom Benner, Ir.
 (404) 546-3112
 AL, PL, GA, XY, MS, NC, SC, TN
 CompuCom, EPS, ESE, PBS-21,
 Triangle Labs
- USEPA Repos VI (ESD)

 Monuny Park Para, Bidg, C

 6608 Horrecod Drive

 Housing, TX, TAPA

 David Socies

 (713) 553-343

 AR, LA, NM, TX, OK

 ANACON, RADIAN, SPECS, ES, Giocias

 Researd, Inc., SPL Inc., SWRL

 Allied, XEYTX, EIRA
- L USEA Region VIII Laboratory
 Box 2536
 Desver Federal Caster
 Lakewood, CO MIZE
 Box Hoffman
 (200) 236-7371
 CO, ND, SD, UT, WY, MT
 ACCU, CONRL RMAL, Data Chem., Cound
- 10. USEPA Region X Laboratory
 P.O. Box 549
 Manchester, WA 98353
 Gerald Muth
 (205) 462-0370
 AK, ID, OR, WA
 Lauchs Testing Labs, Century Testing
 Labs (For VOA Only), Weyerhauser Co.,
 Columbia Testing, Silver Valley
- 12 Edward Kantor
 USEPA
 EMSLALY
 944 E. Harmon Avenue
 Box 13478
 Las Veps, NV 19119

Title: Evaluation of Metals Data for the

Contract Laboratory Program

Appendix A.5: CLP Data Assessment

Summary Form (Inorganics)

Page 9 of 10 Date: Jan 92 Number: HW-2

Revision: 11

CLP DATA ASSESSMENT SUMMARY FORM

TYPE OF REVIEW: INORGANIC

DATE: 06/18/98

CASE #: 26114

SITE: SPECTRUM FINISHING

LAB NAME: AMERICAN ANALYTICAL

REVIEWER'S INITIALS: CS

NUMBER OF SAMPLES: 18 WATER 18 SOIL

ANALYTES REJECTED DUE TO EXCEEDING REVIEW CRITERIA: *

_		Holding Time	CREDIL	Field Block	inter- fements	Spike Recovery	Detection Limit	rcs	Social Dilation	AZM	Total Analytes	Rejections
	123.423 ·					17					792	17
	Fies AA											
	Female: AA											
_	Morcury										36	0
	C ,										36	0
-	Total					17					864	17

ANALYTES FLAGGED AS ESTIMATED (J) DUE TO EXCEEDING CRITERIA FOR:*

•		Holding Time	CREDIL	Prop Blank	Percent Solids	Panarwii ca	Spile: Resovery	Dup Lab	Dup Field	Dotection Limit	LCS	Social Dilution	AZM	Total Analytes	Estimati ca.
	KP.		2				36	9	2			45		792	94
-	F AA														
	Fernez AA									_					
-	Morcury		27				7							36	34
_	C , · ·													36	0
_	Total		29			_	43	9	2			45		864	128

Note: Asterisk (*) indicates additional exceedances of review criteria.

Title: Evaluation of Metals Data for the

Contract Laboratory Program

Appendix A.6: CLP Data Assessment

Inorganic Analysis

Page: 10 of 10 Date: Jan. 92 Number: HW-2 Revision: 11

Region II

INORGANIC REGIONAL DATA ASSESSMENT

CASE NO.: 26114

SITE: SPECTRUM FINISHING

LABORATORY: AMERICAN ANALYTICAL

<u>FYI</u>

NO. OF SAMPLES/MATRIX: 18 WATER, 18 SOIL

■ SDG#: MBKL09, -46

REVIEWER (IF NOT ESD):

SOW#: ILM04.0

REVIEWER'S NAME: C. STANCA

DPO: ACTION

COMPLETION DATE: 06/18/98

DATA ASSESSMENT SUMMARY

	ICP	AA	MERCURY	CYANIDE
Holding Times	0		0	0
Calibration	0		0	0
Blanks	0		0	0
ics	0		N/A	N/A
LCS	0		N/A	N/A
Duplicate Analysis	0	•	0	0
Matrix Spike	z		0	0
MSA	0		N/A	N/A
Serial Dilution	0		N/A	N/A
Sample Verification	0		0	0
other QC	o		0	0
Overall Assessment	M		0	0

O = Data has no problems/or qualified due to minor problems.

ACTION ITEMS:

- AREAS OF CONCERN:

NOTABLE PERFORMANCE:

M = Data qualified due to major problems.

Z = Data unacceptable.

X = Problems, but do not affect data.

U.S. EPA - CLP

EPA SAMPLE NO. | MBKL30D |

6

LAB DUPLICATES

■ Lab Name: AMERICAN ANALYTICAL Contract: 68-D5-0141

Lab Code: AATS Case No.: 26114 SDG No.: MBKL09

■ Matrix (Soil/Water): WATER Level (low/med.): Low

\$Solids Sample: 75.5
\$Solids Duplicate: 95.1

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Action Limit	Sample Concentration	С	Duplicate Concentration	С	RPD	Diff.	Q	М
Aluminum	100%	18919.3049		13932.2876		30.4		_	P
Antimony	100%	13.6836	В	54.2098	В	30.4		_	P
Arsenic	20	12.7837	15	17.7436	<u> </u>	_	5.0	<u> </u>	P
Barium	400	648.7360		377.6767			312.9		P
Beryllium	400	1.3458	В	1.1661	В		312.9		P
Cadmium	100%	1749.1089	-5-	1494.7494		15.7			P
Calcium	100%	67787.7833		129912.7368		62.8			P
Chromium	100%	5485.0750		6472.8087		16.5			P
Cobalt	1000	3.0015	В	24.8406	В	10.5			P
Copper	100%	2593.9516		3061.3321		16.5			P
Iron	100%	51048.9377		66102.9099		25.7			P
Lead	100%	1009.7098		4885.6409		131.5			P
Magnesium	100%	35166.9661		71880.8660		68.6			P
Manganese	100%	378.6895		511.8953		29.9			P
Mercury	100%	0.1027	В	0.0834	U	29.9			CV
Nickel	100%	5300.9048		4143.4962		24.5			P
Potassium	2000	1388.3895	В	825.5370	В	24.0			P
Selenium	10	6.1804		7.1030		_	0.9		P
Silver		2.6467	В	3.8467	В				P
Sodium		842.7008	В	1045.1612	В				P
Thallium		3.8833	U	4.2293	В				P
Vanadium	100	91.9348		82 .4622			9.5		P
Zinc	100%	4360.3020		4745.7341		8.5			P
Cyanide	100%	424.4565		399. 4418		6.1			CA

EPA SAMPLE NO.

MBKL38 MBKL45

6

FIELD DUPLICATES

Lab Name: AMERICAN ANALYTICAL Contract: 68-D5-0141

■ Lab Code: AATS Case No.: 26114 SDG No.: MBKL46

Matrix (Soil/Water): WATER Level (low/med.): Low

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Action	Sample	С	Duplicate	С	RPD	Diff.	Q	М
	Limit	Concentration		Concentration					
Aluminum	100%	2820.0000		2880.0000		2.1			P
Antimony		4.0000	U	4.0000	U				Р
Arsenic _		6.9000	В	5.3000	В				Р
Barium		56.3000	В	56.1000	В				P
Beryllium		1.0000	U	1.0000	U				P
Cadmium	5	13.8000		14.60000			0.8		P
Calcium	5000	24900.0000		18300.0000			(6600.0)		P
Chromium	10	11.8000		10.4000			1.4		P
Cobalt		2.9000	В	2.30000	В				Р
Copper	100%	241.0000		229.0000		5.1			P
Iron	100%	5070.0000		4800.0000		5.5			P
Lead	100%	132.0000		124.0000		6.2			P
Magnesium		4680.0000	В	4480.0000	В				Р
Manganese	15	85.8000		74.7000			11.1		P
Mercury		0.1000	ש	1.0000	U				CÁ
Nickel		9.50000	В	7.40000	В				P
Potassium		1790.0000	В	1770.0000	В				P
Selenium		5.0000	Ū	5.0000	U		_		Ρ
Silver		8.7000	В	5.5000	В				P
Sodium	5000	8780.0000		7270.0000			1510.0		Ρ
Thallium		4.0000	Ū	4.0000	U				P
Vanadium		6.3000	В	4.9000	В				P
Zinc	20	59.2000		44.7000			14.5		P
Cyanide		1.0000	U	1.0000	Ü				CA

EPA SAMPLE NO. | MBKL18 | MBKL30 |

6

FIELD DUPLICATES

Lab Name: AMERICAN ANALYTICAL Contract: 68-D5-0141

Lab Code: AATS Case No.: 26114 SDG No.: MBKL09

■ Matrix (Soil/Water): SOIL Level (low/med.): Low

\$Solids Sample: 72.4
\$Solids Duplicate: 75.5

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Action Limit	Sample Concentration	С	Duplicate Concentration	С	RPD	Diff.	Q	M
Aluminum	100%	20706.4000		18912.7500		9.0			P
Antimony	100%	13.0320	В	13.5900	В	7.0			P
Arsenic	20	15.2040		12.8350			2.4		P
Barium	400	342.4520		649.3000			306.8		P
Beryllium	400	1.3032	В	1.3590	В		300.0		P
Cadmium	100%	1900.5000	В .	1747.8250		8.4			P
Calcium	100%	52490.0000		67950.0000		25.7			P
						22.2	_		
Chromium	100%	6841.8000	_	5473.7500		22.2			P
Cobalt		3.6200	В	25.6700	В		-		P
Copper	100%	2765.6800		2593.4250		6.4			P
Iron	100%	64436.0000		50962.5000		25.4			P
Lead	100%	2363.8600		1007.9250		80.4			P
Magnesium	100%	27910.2000		35183.0000		23.0			P
Manganese	100%	434.4000	·	377.5000		14.0			P
Mercury		0.0869	U	0.1057	В				CV
Nickel	100%	3945.8000		5285.0000		29.0			P
Potassium		1133.0600	В	1389.2000	В				P
Selenium	10	7.9640		6.0400			1.9		Р
Silver		3.6200	В	2.6425	В				P
Sodium		872.4200	В	841.8250	В				P
Thallium		4.7060	В	3.7750	U				Р
Vanadium	100	85.0700		92.1100			7.0		Р
Zinc	100%	6371.200		4379.0000		37.0			P
Cyanide	100%	292.4960		424.3100		36.8			CA

CASE 26/14 406 SDG MBKL09 46

Evaluation of Metals Data for the Contract Laboratory Progres (CEP)

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9CF. 3/90

(SOP Revision XI)

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ही <i>ा</i> क अर	Kevin Kubik, Chief Toxic and Hazardous Waste Section	DATE: 1-3- 12
E CEVEN BY	Robert Rinyon, Chieft Monitoring Management Branch	DATE: 1/3:/42

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Title: Evaluation of Metals Data for the

Contract Laboratory Program

Number: HW-2 Revision: 11

2.1.5 <u>Data Review Log</u>: It is recommended that each data reviewer should maintain a log of the reviews completed to include: a. date of start of case review

- b. date of completion of case review
- c. site
- d. case number
- e. contract laboratory
- f. number of samples
- g. matrix
- h. hours worked
- i. reviewer's initials
- 2.1.6 Telephone Record Log the data reviewer should enter the bare facts of inquiry, before initiating any phone conversation with CLP laboratory. After the case review has been completed, mail white copy of Telephone Record Log to the laboratory and pink copy to SMO. File yellow copy in the Telephone Record Log folder, and attach a xerox copy of the Telephone Record Log to the completed Data Assessment Narrative (Appendix A.2).
 - 2.1.7 Forwarded Paperwork
 - 2.1.7.1 Upon completion of review, the following are to be forwarded to the Regional Sample Control Center (RSCC) located in the Surveillance and Monitoring Branch:
 - a. data package
 b. completed data assessment checklist (Appendix A.1, original)
 - c. SMD Contract Compliance Screening (CCS)
 - d. Record of Communication (copy)
 - e. CLP Reanalysis Request/Approval Record (original + 3 copies)
 - f. Appendix A.6 (original).
 - 2.1.7.2 Forward 2 copies of completed Data Assessment Narrative (Appendix A.2) along with 2 copies of the Inorganic Data Assessment Rorm (Appendix A.6) and Telephone Record Log, if any,: one each for appropriate Regional TRO, and the other one to EPA EMSL office in Las Vegas. The addresses of TROs and EPA office in Las Vegas are given in Appendix A-4.
 - 2.1.8 <u>Filed Paperwork</u> Upon completion of review, the following are to be filed within MMB files:
 - a. Two copies of completed Data Assessment Narrative (Appendix A.2) each carrying Appendix A.6.
 - b. Telephone Record Log (copy)
 - c. SMO Report (copy Appendix A-3)
 - d. CLP Reanalysis Request/Approval Record (copy)

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- Title: Evaluation of Metals Data for the

Contract Laboratory Program

Date: Jan. 1992 Number: HM-2 Revision: 11

- 2.0 <u>Pata Completeness</u>
 Each data package is checked by a Regional Sample Control Coordinator (RSSC) for completeness. A data package is assumed to be complete when all the deliverables required under the contract are present. If a data package is incomplete, the RSSC would call the laboratory for missing document(s). If the laboratory does not respond within a week, SMO and MMB coordinator of Region II will be notified.
- Analysis Data Sheet (Form I) must be lined over with a red pencil. As soon as any review criteria causes data to be rejected, that data can be eliminated from any further review or consideration.
- 5.0 <u>Acceptance Criteria</u> In order that reviews be consistent among reviewers, acceptance criteria as stated in Appendix A.l (pages 4-25) should be used.

 Additional guidance can be found in the National Inorganic Functional Guidelines of October 1, 1989.
- 6.0 SMO Contract Compliance Screening (CCS) This is intended to aid reviewer in locating any problems, both corrected and uncorrected. However, the validation should be carried out even if CCS is not present. Resubmittals received from laboratory in response to CCS must be used by the reviewer.
- 7.0 Request for Reanalysis Data reviewers must note all items of contract non-compliance within Data Assessment Narrative. If holding times and sample storage times have not been exceeded, TPO may request reanalysis if items of non-compliance are critical to data assessment. Requests are to be made on "CLP Re-Analysis Request/Approval Record".
- 8.0 Record of Communication Provided by the Regional Sample Control Center (RSCC) to indicate which data packages have been received and are ready to be reviewed.
- 9.0 Rounding off numbers The data reviewer will follow the standard practice.

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Title: Evaluation of Metals Data for the Date: Jan. 1992 Contract Laboratory Program Number: HM-2 Appendix A.1: Data Assessment - Contract Revision: 11 Compliance (Total Review) YES S N/A A.1.1 Contract Compliance Screening Report (CCS) - Present? MCTION: If no, contact RSCC. A.1.2 Record of Communication (from RSCC) - Present? **ACTION:** If no, request from RSCC. A.1.3 Trip Report - Present and complete? ACTION: If no, contact RSCC for trip report. A.1.4 Sample Traffic Report - Present? Legible? ACTION: If no, request from Regional Sample Control Center (RSCC). A.1.5 Cover Page - Present? Is cover page properly filled in and signed by the lab manager or the manager's designee? MCTION: If no, prepare Telephone Record Log, and contact laboratory. Do numbers of samples correspond to numbers on Record of Communication? Do sample numbers on cover page agree with sample numbers on: (a) Traffic Report Sheet? (b) Form I's?

<u>ACTION</u>: If no for any of the above, contact RSCC for clarification.

—		•	410
	STANDARD OPERATING PROCEDURE	Page	5 of 34
Title:	Evaluation of Metals Data for the Contract Laboratory Program Appendix A.1: Data Assessment - Contract Compliance (Total Review)	Numbe	Jan. 1992 r: HW-2 ion: 11
A.1.6	Form I to IX	<u>Yes</u>	No n/A
A.1.6.1	Are all the Form I through Form IX labeled with:		
	Laboratory name?	$[\underline{\hspace{1cm}}^{\hspace{1cm} V}]$	
•	Case/SAS number?		
	EPA sample No.?	<u>_</u>	
	SDG No.?	<u></u>	
	Contract No.?	[]	
	Correct units?	[<u> </u>	
	Matrix?	[_ <i>\big </i>	
	<u>NCTION</u> : If no for any of the above, note under Contract Problem/Non-Compliance section of the "Data Assessment Narrative".		
A.1.6.2	Do any computation/transcription errors exceed 10% of reported values on Forms I-IX for:		
	(NOTE: Check all forms against raw data.)		ب ک
	(a) all analytes analyzed by ICP?	<u></u> j	
	(b) all analytes analyzed by GFAA?		$\frac{\nu}{}$
	(c) all analytes analyzed by AA Flame?	\Box	
	(d) Mercury?		
	(e) Cyanide?	<u></u>	
	ACTION: If yes, prepare Telephone Log, contact laboratory for corrected data and correct errors with red pencil and initial.		

Title: Evaluation of Metals Data for the

Contract Laboratory Program

Number:

Date: Jan. 1992

HW-2

	Appendix A.1: Data Assessment - Contract Compliance (Total Review)	Revis	ion: 11	.2
1.1.7	Raw Data	YES	70	N/A
A.1.7.1	Digestion Log* for flame AA/ICP (Form XIII) presen	nt? []		
•	Digestion Log for furnace AA Form XIII present?	[]		V
	Distillation Log for mercury Form XIII present?	$\begin{bmatrix} V \\ V \end{bmatrix}$		
-	Distillation Log for cyanides Form XIII present?	<u>[_/</u>]		
•	Are pH values (pH<2 for all metals, pH>12 for cyan present?	iđe) 🕧		
	*Weights, dilutions and volumes used to obtain value	es.		
•	Percent solids calculation present for soils/sedime	ents? $\begin{bmatrix} \frac{1}{2} \end{bmatrix}$		
,	Are preparation dates present on sample preparation logs/bench sheets?	<u></u>		
A.1.7.2	Measurement read out record present? ICP	<u></u> 1		
	Flame AA	[_]	_	V 2.
	Furnace AA	[]		<u> </u>
•	Mercury	ر ٽ <u>ٺ</u>		
	Cyanides	ال		
A.1.7.3	Are all raw data to support all sample analyses and QC operations present?	ٽ		
	Legible?	ب		
	Properly Labeled?	$ ule{}$		
λ	CTION: If no for any of the above questions in sections A.1.7.1 through A.1.7.3,			

write Telephone Record Log and contact laboratory for resubmittals.

			1. —
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		Vec	
A.1.8	Bolding Times - (aqueous and soil samples)	YES	NO N/
	(Examine sample traffic reports and digestion/distillat	ian læs	.)
•	Mercury analysis (28 days) exceeded?	_	<u></u>
	Cyanide distillation (14 days) exceeded?		<u> </u>
	Other Metals analysis (6 months) exceeded?		<u> [Vi</u>
	NOIS: Prepare a list of all samples and analytes for which holding times have been exceeded. Specithe number of days from date of collection to of preparation (from raw data). Attach to che	ify the date	
	ACTION: If yes, reject (red-line) values less than Instrument Detection Limit (IDL) and flag as estimated (J) the values above IDL even though sample(s) was preserved properly.		
A.1.8.2	Is pH of aqueous samples for: Metals Analysis >2?		<u></u>
	Cyanides Analysis <12?		
•	<u>Action</u> : If yes, flag the associated metals and cyanides data as estimated.	:	
A.1.9	Form I (Final Data)		
A.1.9.1	Are all Form I's present and complete?	1	
	ACTION: If no, prepare telephone record log and contact laboratory for submittal.		
λ.1.9.2	Are correct units (ug/l for waters and mg/kg for soils) indicated on Form I's?	ك	
	Are soil sample results for each parameter corrected for percent solids?	3	· _
	Are all "less than IDL" values properly coded with "U"? !	V1	

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Date: Jan. 1992

Contract Laboratory Program Number: HW-2 Appendix A.1: Data Assessment - Contract Revision: 11 Compliance (Total Review) YES NO N/A Are the correct concentration qualifiers used with final data? If no for any of the above, prepare Telephone Record Log, and contact laboratory for corrected Are EPA sample # s and corresponding laboratory sample A.1.9.3 ID # s the same as on the Cover Page, Form I's and in the raw data? Was a brief physical description of samples given on Form I's? Was the dilution of any sample diluted beyond the requirements of the contract noted on Form I or Form XIV? ACTION: If no for any of the above, note under Contract-Problem/Non-Compliance of the "Data Assessment Narrative". A.1.10 Calibration A.1.10.1 Is record of at least 2 point calibration present for ICP analysis? Is record of 5 point calibration present for Hg analysis? Is record of 4 point calibration present for: Flame AA? Furnace AA? Cyanides? Is one calibration standard at the CROL level for all AA (except Hg) and cyanides analyses?

If no for any of the above, write in the

the "Data Assessment Narrative".

Contract Problem/Non-Compliance section of

ACTION:

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A.1.10.2 Is correlation coefficient less than 0.995 for:	XEC.	NO	N/X
Mercury Analysis?		[]	_
Cyanide Analysis?		<u>/</u> j	
Atomic Absorption Analysis?		[]	$\overline{\nu}$
ACTION: If yes, flag the associated data as estimated.			
NOTE: The data validator shall calculate the correlat coefficient using concentrations of the standar and the corresponding instrument response (e.g. absorbance, peak area, peak height, etc.)	ds		
A.1.10.3 In the instance where less than 4 standards are measured in absorbance (or peak area, peak height mode, are the remaining standards analyzed in concentration mode immediately after calibration within ±10% of the true values?	-		<u> </u>
ACTION: If no, flag the associated data as estimated if standards are not within ±10% of true values Do not flag the data as estimated in linear ranging indicated by good recovery of standard(s).			رث
A.1.11 Form II A (Initial and Continuing Calibration Verification	<u>z) -</u>		
A.1.11.1 Present and complete for every metal and cyanide?	ٽ		
Present and complete for AA and ICP when both are used for the same analyte?	<u> </u>		
ACTION: If no for any of the above, prepare Telephone Record Log and contact laboratory.			
A.1.11.2 Circle on each Form IIA all percent recoveries that are outside the contract windows. Are all calibration standards (initial and continuing) within control limits:			
Metals- 90-110tR?	ٺ		
Hg - 80-120\frac{1}{4}R?	ر1		
Cyanides- 85-115%R?	رس ا		

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ACTION: Flag as estimated (J) all positive data (not

flagged with a "U") analyzed between a calibration standard with *R between 75-89* (65-79* for Hg; 70-84* for CN) or 111-125* (121-135* for Hg; 116-130* for CN) recovery and nearest good calibration standard. Qualify results <IDL as estimated (UU) if the ICV or CCV *R is 75-89* (CN, 70-84*; HG, 65-79*). Reject (red-line) as unacceptable data if recovery of the ICV or CCV is outside the range 75-125* (CN, 70-130*; Hg, 65-135*). Qualify five samples on either side of verification standard out of control limits.

.1.11.3 Was continuing calibration performed every 10 samples or every 2 hours?

Was ICV for cyanides distilled?

ACTION: If no for any of the above, write in the Contract-Problem/Non-Compliance section of the

"Data Assessment Narrative".

.1.12 Form II B (CRUL Standards for M and ICP) -

A.1.12.1 Was a CROL standard (CRA) analyzed after initial calibration for all AA metals (except Hz)?

Was a mid-range calib. verification standard distilled and analyzed for cyanide analysis?

Was a 2xCRDL (or 2xDL when IDLxCRDL) analyzed (CRI) for each ICP run?

(Note: CRI for AL, Ba, Ca, Fe, Mg, Na, or K is not required.)

MCTION: If no for any of the above, flag as estimated all data falling within the affected ranges.

The affected ranges are:

AA Analysis - **True Value + CROL ICP Analysis - **True Value + 2CROL

ON Analysis - **True Value + 0.5 x True Value.

^{**}True value of CRA, CRI or mid-range standard. Substitute IDL for CROL when IDL > CROL. Empute the concentration of the missing mid-range standard from the calibration range.

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•	Bvaluation of Metals Data for the Contract Laboratory Program Appendix A.1: Data Assessment - Contract Compliance (Total Review)	Minber	Jan. 1992 : HW-2 On: 11	
A.1.12.2	Was CRI analyzed after ICV/ICB and before the final CCV/CCB, and twice every eight hours of ICP run?	()	<u>~~</u>	<u>N//</u>
	ACTION: If no, write in Contract Problem/Non-Complia Section of the "Data Assessment Narrative".	nce		
A.1.12.3	Circle on each Form IIB all the percent recoveries the are outside the acceptance windows.	at		
	Are CRA and CRI standards within control limits:			
	Metals 80 - 120%R?	u		
	Is mid-range standard within control limits:			
	Cyanide 80 - 1201R?	(<u>'</u>)		
	ACTION: Flag as estimated all sample results within the affected range if the recovery of the standard is between 50-79%; flag only positive data within the affected range if the recovery is between 121-150%; reject all data within the affected range if the recovery is less than 50 reject only positive data within the affected if the recovery is greater than 150%. Qualify the samples on either side of CRI standard out the control limits. Note: Flag or reject the final results only when sam raw data are within the affected ranges and the standards are outside the acceptance windows.	e A; range 50% of side	ُ آ	
λ .1.13	Form III (Initial and Continuing Calibration Blanks)			
λ .1.13.1	Present and complete?	\bigcup_{i}		_
	For both AA and ICP when both are used for the same analyte?	ٹ		
	Was an initial calibration blank analyzed?	ٺ		
	Was a continuing calibration blank analyzed after every 10 samples or every 2 hours (which ever is more frequent)?	[1/]		

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Title:	Evaluation of Metals Data for the Contract Laboratory Program Appendix A.1: Data Assessment - Contract Compliance (Total Review)	Date: Number: Revisio	H	W-2
-	ACTION: If no, prepare Telephone Record Log, contact laboratory and write in the Contract-Problems/ Non-Compliance section of the "Data Assessment N	YES arrative	<u>NO</u>	N/
A.1.13.2	Circle on each Form III all calibration blank values that are above CRDL (or 2 x IDL when IDL > CRDL).			
•	Are all calibration blanks (when IDL_CROL) less than or equal to the Contract Required Detection Limits (CROLs)?	$\stackrel{\checkmark}{\bigsqcup}$		
	Are all calibration blanks less than two times Instrument Detection Limit (when IDL-CROL)?			
	MCTION: If no for any of the above, flag as estimated (J) positive sample results when raw sample value is less than or equal to calibration blank value analyzed between calibration blank with value over CROL (or 2xIDL) and nearest good calibration blank. Flag five samples on either side of the calibration blank outside the control limits.			
A.1.14	FORM III (Preparation Blank) - (Note: The preparation blank for mercury is the same as the calibration blank.)			ر. ت
A.1.14.1	Was one prep. blank analyzed for:			
	each Sample Delivery Group (SDG)? [<u></u>		_
	each batch of digested samples?	. رُ		
	each matrix type?	<u>.</u>		
	both AA and ICP when both are used for the same analyte?	_ ر		. <u>V</u>
	ACTION: If no for any of the above, flag as estimated (J) all the associated positive data <10 x IDLs for which prep. blank was not analyzed.			
	NOTE: If only one blank was analyzed for more than 20 samples, then first 20 samples analyzed do not have to be flagged as estimated (J).			

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A.1.14.	Is concentration of prep. blank value greater than the CRDL when IDL is less than or equal to CRDL?	XEZ	[] 	N/A
•	If yes, is the concentration of the sample with the least concentrated analyte less than 10 times the prep.blank?			<u>ý</u>
-	ACTION: If yes, reject (red-line) all associated data greater than CROL concentration but less than ten times the prep. blank value.			
1.1.14.3	Is concentration of prep. blank value (Form III) less than two times IDL, when IDL is greater than CRDL?			<u> </u>
•	ACTION: If no, reject (red-line) all positive sample results when sample raw data are less than 10 times the prep. blank value.			
).1.14.4	Is concentration of prep. blank below the negative CRDL?		ئ	
1	ACTION: If yes, reject (red-line) all associated sample results less than 10xCOL.	e		يات د
4.1.15	Forms IV (ICP Interference Check Sample)			
1.1.15.1	Present and complete?	6		_
	(NOTE: Not required for furnace AA, flame AA, mercury, cyanide and Ca, Mg, K and Na.)			
	Was ICS analyzed at beginning and end of run (or at least twice every 8 hours)?	<u>√</u> j		
	MCTION: If no, flag as estimated (J) all the samples for which AL, Ca, Fe, or Mg is higher than in ICS.	r		
1.15.2	Circle all values on each Form IV that are more than \pm 20% of true or established mean value.			
	Are all Interference Check Sample results inside the control limits (± 20%)?	ٺ		
·.	If no, is concentration of Al, Ca, Fe, or Mg lower than the respective concentration in ICS?	1		<u>.</u>

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Compliance (Total Review) YES N/A ACTION: If no, flag as estimated (J) those positive results for which ICS recovery is between 121-150%; flag all sample results as estimated if ICS recovery falls within 50-79%; reject (red-line) those sample results for which ICS recovery is less than 50%; if ICS recovery is above 150%, reject positive results only (not flagged with a *U*). Form V A (Spiked Sample Recovery - Pre-Digestion/Pre-Distillation) -A.1.16 (Note: Not required for Ca, Mg, K, and Na (both matrices), Al, and Pe (soil only.) A.1.16.1 Present and complete for: each SUS? each matrix type? each conc. range (i.e. low, med., high)? For both AA and ICP when both are used for the same analyte? ACTION: If no for any of the above, flag as estimated (J) all the positive data less than four times the spiking levels specified in SOW for which spiked sample was not analyzed. NOTE: If one spiked sample was analyzed for more than 20 samples, then first 20 samples analyzed do not have to be flagged as estimated (1). Was field blank used for spiked sample? **A.1.16.2** ACTION: If yes, flag all positive data less than 4 x spike added as estimated (J) for which field blank was used as spiked sample.

A.1.16.3 Circle on each Form VA all spike recoveries that are outside control limits (75% to 125%).

Are all recoveries within control limits?

If no, is sample concentration greater than or equal to four times spike concentration?

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Title:	Evaluation of Metals Data for the Contract Laboratory Program Appendix A.1: Data Assessment - Contract Compliance (Total Review)	Date: Jan. 1992 Mumber: HW-2 Revision: 11
		YES NO N/
•	ACTION: If yes, disregard spike recoveries for ana whose concentrations are greater than or e to four times spike added. If no, circle analytes on Form V for which sample concentrations is less than four times the spike concentrations.	qual those tration
	Are results outside the control limits (75-125%) flagged with "N" on Form I's and Form VA?	<u></u>
	ACTION: If no, write in the Contract - Problem/Non - Compliance section of "Data Assessment Narra	tive".
λ.1.16.4	Are any spike recoveries: (a) less than 301?	
-	(b) between 30-74%?	
	(c) between 126-150%?	
	(d) greater than 150%?	<u> </u>
	<u>NCTION</u> : If less than 30%, reject all associated aqueous data; if between 30-74%, flag all associated aqueous data as estimated (J); if between 126-150%, flag as estimated (J) all associated aqueous data not flagged with a "U"; if greater than 150%, reject (red-line) all associated aqueous data not flagged with a "U"	i
A .1.16.5	Soil/Sediment Are any spike recoveries: (a) less than 101?	(¹ / ₂)
	(b) between 10-74%?	
	(c) between 126-200%?	\angle \Box \Box
	(d) greater than 2001?	(2)

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•	ACTION:	between 10-74%, flag if between 126-200%, data was not flagged	ect all associated data all associated data as flag as estimated all a with a "U"; if greater data not flagged with	estimated; associated than 2001,	ЯĎ	N/A
A.1.17	Form VI	(Lab Duplicates)				
4.1.17.1	Present	and complete for:	each SDG?	(<u> </u>		
'			each matrix type?	[<u>\bullet</u>]		
y	each cor	ncentration range (i.e.	low, med., high)?	[<u> </u>		
1	both AA analyte?	and ICP when both are	used for the same	[]		v
		(J) all the data CRD sample was not analyze If one diplicate samples, more than 20 samples, have to be flagged as If percent solids for differ by more than 15 diplicate pair, report	le was analyzed for then first 20 samples o	plicate each		ر. ک
A. 1.17.2	Was fi	eld blank used for dupl	icate analysis?		\bigcup	
	ACTION	: If yes, flag all dat (J) for which field	a ≥CROL* as estimated blank was used as dupli	cate.		
A.1.17.3		l values within control ence < ±000L)?	limits (RPD 20% or	ψ		
	If no, flagge	are all results outsid d with an * on Form I's	e the control limits and VI?			V
	ACTION		Contract - Problems/Non- f "Data Assessment Narra		•,	
* Sub	stitute III	L for ORDL when IDL > C	ROL.			

N/A

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X = X

NOTE: 1. RPD is not calculable for an analyte of the sample - duplicate pair when both values are less than IDL.

 If the result of lab duplicate analyzed by GFAA is rejectable due to coefficient of correlation of MSA, analytical spike recovery, or duplicate injections criteria, do not apply precision criteria to metals analyzed by GFAA.

A.1.17.4 Aqueous

Circle on each Form VI all values that are:

RPD > 50%, or Difference > CXXII*

Is any RPD greater than 50% where sample and duplicate are both greater than or equal to 5 times *CROL?

Is any difference** between sample and diplicate greater than *CRDL where sample and/or diplicate is less than 5 times *CRDL?

ACTION: If yes, flag the associated data as estimated.

A.1.17.5 Soil/Sediment

Circle on each Form VI all values that are:

RPD > 100%, or

Difference > 2 x COL+

Is any RPD (where sample and duplicate are both greater than or equal to 5 times *CRDL):

> 10017

Is any **difference between sample and duplicate (where sample and/or duplicate is less than 5x*CRDL) :

> 2000012

* Substitute IDL for CROL when IDL > CROL.

^{**} Use absolute values of sample and duplicate to calculate the difference.

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YES NO N/A

ACTION: If yes, flag the associated data as estimated.

A.1.18 Field Duplicates

A.1.18.1 Were field duplicates analyzed?

ACTION: If yes, prepare a Form VI for each aqueous field duplicate pair. Prepare a Form VI for each soil duplicate pair, if percent solids for sample and its duplicate differ by more than 1%; report concentrations of soils in ug/l on wet weight basis and calculate RPDs or Difference for each

analyte.

NOTE: 1. Do not calculate RPD when both values are less than IDL.

Flag all associated data only for field duplicate pair.

λ.1.18.2 <u>λουεουs</u>

Circle all values on self prepared Form VI for field duplicates that are:

RPD > 50%, or Difference > CROL*

Is any RPD greater than 50% where sample and duplicate are both greater than or equal to 5 times *CROIL?

Is any **difference between sample and duplicate greater than *CRDL where sample and/or duplicate is less than 5 times *CRDL?

MCTION: If yes, flag the associated data as estimated.

^{*} Substitute IDL for CROL when IDL > CROL.

^{**} Use absolute values of sample and duplicate to calculate the difference.

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YES ∞ N/A

A.1.18.3 Soil/Sediment

Circle all values on self prepared Form VI for field duplicates that are:

RPD >100%, or

Difference > 2 x CRDL*

Is any RPD (where sample and duplicate are both greater than 5 times *CRDL) :

>1001?

Is any **difference between sample and duplicate (where sample and/or duplicate is less than 5x *CRUL):

>2x *CRDL?

ACTION: If yes, flag the associated data as estimated.

- A.1.19 Form VII (Laboratory Control Sample) (Note: LCS - not required for aqueous Hg and cyanide analyses.)
- A.1.19.1 Was one LCS prepared and analyzed for:

each SDG?

each batch samples digested/distilled?

both AA and ICP when both are used for the same analyte?

MCTION: If no for any of the above, prepare Telephone

Record Log and contact laboratory for submittal of results of ICS. Flag as estimated (J) all

the data for which LCS was not analyzed.

If only one ICS was analyzed for more than 20

samples, then first 20 samples close to ICS do not have to be flagged as estimated.

^{*} Substitute IDL for CROL when IDL > CROL.

^{**} Use absolute values of sample and duplicate to calculate the difference.

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YES NO N/A

A.1.19.2 Aqueous ICS

Circle on each Form VII the LCS percent recoveries outside control limits (80 - 120%) except for aqueous Ag and Sb.

Is any LCS recovery:

less than 50%?

ڻ

between 50% and 79%?

between 121% and 150%?

greater than 150%?

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<u>MCTION</u>: Less than 50%, reject (red-line) all data; between 50% and 79%, flag all associated data as estimated (J); between 121% and 150%, flag all positive (not flagged with a "U") results as estimated; greater than 150%, reject all positive results.

λ.1.19.3 <u>Solid LCS</u>

NOTE: 1. If "Found" value of LCS is rejectable due to duplicate injections or <u>analytical</u> spike recovery criteria, regardless of LCS recovery, flag the associated data as estimated (J).

2. If IDL of an analyte is equal to or greater than true value of ICS, disregard the "Action" below even though ICS is out of control limits.

Is ICS "Found" value higher than the control limits on Form VII?

__ <u>__</u> _____

<u>MCTION</u>: If yes, qualify all associated positive data as estimated.

Is ICS "Found" value lower than the Control limits on Form VII?

MCTION: If yes, qualify all associated data as estimated.

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-		YES	ĸ	N/A
A.1.20	Form IX (ICP Serial Dilution) -			
-	NOTE: Serial dilution analysis is required only for initial concentrations equal to or greater than 10 x IDL.			
A.1.20.1	Was Serial Dilution analysis performed for: each SDG?	[
	each matrix type?	[]		_
	each concentration range (i.e. low, med.)?	<u>[_V]</u>		
•	ACTION: If no for any of the above, flag as estimated all the positive data ≥ 10xIDLs or ≥ CROL when 10xIDL ≤ CROL for which Serial Dilution Analys was not performed.	1	_	
A .1.20.2	Was field blank(s) used for Serial Dilution Analysis?		ٺ	
	ACTION: If yes, flag all associated data ≥ 10 x IDL as estimated (J). If 10xIDL ≤ CXOL, flag all data ≥ CXOL.			رثے ،
A. 1.20.3	Are results outside control limit flagged with an "E" on Form I's and Form IX when initial concentration on Form IX is equal to 50 times IDL or greater.	$\overset{\vee}{\cup}$		
	ACTION: If no, write in the Contract-Problem/Non- Compliance section of the "Data Assessment Narrative".			
A.1.20.4	Circle on each Form IX all percent difference that are outside the control limits for initial concentrations equal to or greater than 10 x IDLs only.			
	Are any & difference values:			
	> 101?	. · ·	ں	
	> 100%?			

YES

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 ∞

N/A

ACTION: Flag as estimated (J) all the associated sample data > 10xIDLs (or > CRDL when 10xIDL < CRDL) for which percent difference is greater than 10% but less than 100%. Reject (red-line) all the associated sample results equal to or greater than 10xIDLs (or > CRDL when 10xIDL < CRDL) for which PD is greater than or equal to 100%.

Note: Flag or reject on Form I's only the sample results

whose associated raw data are ≥ 10xIDL (or ≥ ORDL

when 10xIDIA CROL)

A.1.21 Furnace Atomic Absorbtion (AA) OC Analysis

A.1.21.1 Are duplicate injections present in furnace raw data (except during full Method of Standard Addition) for each sample analyzed by GFAA?

<u>ACTION</u>: If no, <u>reject</u> the data on Form I's for which duplicate injections were not performed.

A.1.21.2 Do the diplicate injection readings agree within 20% Relative Standard Deviation (RSD) or Coefficient of Variation (CV) for concentration greater than CRIL?

Was a dilution analyzed for sample with analytical spike recovery less than 40%?

<u>ACTION</u>: If no for any of the above, flag all the associated data as estimated.

A.1.21.3 Is *analytical spike recovery outside the control limits (85-115%) for any sample?

MCTION: If yes, flag as estimated the affected sample results if the recovery is between 10-84%; if the recovery is between 115-200%, flag the associated positive sample results as estimated; reject the associated sample results if the recovery is less than 10%; reject positive sample results if the recovery is greater than 200%.

^{*} Analytical spike is not required on the pre-digestion spiked sample.

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YES ∞ N/ANOTE: Reject or flag the data only when the affected

sample(s) was not subsequently analyzed by Method of Standard Addition.

A.1.22 Form VIII	(Method of Standard	Addition Results
------------------	---------------------	------------------

_	A.1.22.1	riesent?	[]		$\underline{}$
		If no, is any Form I result coded with "S" or a "+"?			
		ACTION: If yes, write request on Telephone Record Log and contact laboratory for submittal of Form V	III.		
	A.1.22.2	Is coefficient of correlation for MSA less than 0.990 any sample?	for —		
•		ACTION: If yes, reject (red-line) the affected data.			
ı	A .1.22.3	Was *MSA required for any sample but not performed?		[]	_/
		Is coefficient of correlation for MSA less than 0.995?		<u></u>)	
		Are MSA calculations outside the linear range of the calibration curve generated at the beginning of the analytical run?			<u>\b'</u>
		ACTION: If yes for any of the above, flag all the associated data as estimated (J).			
	A.1.22.4	Was proper quantitation procedure followed correctly			

as outlined in the SOW on page B-23?

MCTION: If no, note exception under Contract Problem/ Non-Compliance section of the "Data Assessment Narrative*, and prepare a separate list.

^{*} MSA is not required on LCS and prep. blank.

1:1.

STANDARD OPERATING PROCEDURE Page 24 of 34 Title: Evaluation of Metals Data for the Date: Jan. 1992 Contract Laboratory Program Number: HW-2 Appendix A.1: Data Assessment - Contract Revision: 11 Compliance (Total Review) YES ∞ N/A A.1.23 Dissolved/Total or Inorganic/Total Analytes -A.1.23.1 Were any analyses performed for dissolved as well as total analytes on the same sample(s). Were any analyses performed for inorganic as well as total (organic + inorganic) analytes on the same sample(s)? NOTE: 1. If yes, prepare a list comparing differences between all dissolved (or inorganic) and total analytes. Compute the differences as a percent of the total analyte only when dissolved concentration is greater than CRIL as well as total concentration. 2. Apply the following questions only if inorganic (or dissolved) results are (i) above ORDL, and (ii) greater than total constituents. 3. At least one preparation blank, ICS, and ICS should be analyzed in each analytical nm. A.1.23.2 Is the concentration of any dissolved (or inorganic) analyte greater than its total concentration by more than 10%? **A.1.23.3** Is the concentration of any dissolved (or inorganic) analyte greater than its total concentration by more than 50%? ACTION: If more than 10%, flag both dissolved (or inorganic) and total values as estimated (J); if more than 50%, reject (red-line) the data for both values. A.1.24 Form I (Field Blank) -(Note: Designate "Field Blank" as such on Form I.) λ.1.24.1 Circle all field blank values on Form I that are greater than CROL, (or 2 x IDL when IDL > CROL). Is field blank concentration less than COL

(or 2 x IDL when IDL > CROL) for all parameters

of associated aqueous and soil samples?

If yes, is the concentration on Form I of the sample analyzed on the instrument whose IDL exceeds CRDL,

greater than 5×10 L.

- id -) '

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-	STANDARD OPERA	TING PROCEDURE	F	Page 26	of :	4
Contra Appen	ation of Metals Data for act Laboratory Program dix A.l: Data Assessment iance (Total Review)			Date: 3 Number: Revision	HW-	
 ■ <u>}c</u>	tion: If no, flag as es than five times I IDL exceeds CRDL.	DL of the instrumen		YES	1 20	N/A
A.1.25.3 <u>Por</u>	m XI (Linear Ranges)					
	any sample result higher ICP.	r than high linear :	range _	[υ,	
	any sample result higher ibration standard for nor			[<i>U</i>]	
	yes for any of the above, ple diluted to obtain the		[_		<u>·</u>	V
<u>NCT</u>	ION: If no, flag the restance as estimated (J).	ult reported on For	m I			
A.1.26 Per	cent Solids of Sediments					۔ ت
A.1.26.1 Are	percent solids in sedimer	nt(s): < 50%?	(<u> </u>		
		< 101?	L	_ ك	_	
ACTION:	If yes, qualify as estimeresults of a sample that solids between 10%-50% (content between 50%-90%) the results of a sample solids less than 10% (i.greater than 90%).	it has per cent i.e. moisture . Reject all that has per cent				

NOTE: Reject or flag(J) only the sample results that were not previously rejected or flaged due to other QC criteria.

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SOUTHWEST LABORATORY OF OKLAHOMA, INC.

1700 West Albany / Broken Arrow, Oklahoma 74012 / Office (918) 251-2858 / Fax (918) 251-2599

SDG NARRATIVE

CONTRACT:68-D5-0141 CASE:26114 SDG:MBKL09 DATE:05/11/98 SOW NO.:ILM04.0 EPISODE NO.:33553

INORGANIC METAL FRACTION:

Nine soil/eleven water samples plus two MS/DUP's, one LCSS/LCSW were submitted for ICP, CN and Hg analysis. No major problems occurred during the digestion or analysis of these samples. Please see the DC-1 (Sample Log-In Sheet) for sample conditions and cooler temperatures at receipt. The sample's analyses were completed according to the following:

SWL SOP #	Method SOP is based
SWL-IN-200	ILM04.0 (digestion for ICP analysis)
SWL-IN-203	ILM04.0 (analysis by ICP)
SWL-IN-202	ILM04.0 (analysis of Hg by cold vapor)
SWL-IN-303	ILM04.0 (Cyanide)

Initial and Continuing Calibration Checks: No problems.

Initial and Continuing Calibration Blanks: The following elements showed low level concentrations below the Contract Required Detection Limit in the Calibration Blanks: K, Ag, Na, CN, Fe, Mg, Hg, Sb, Ca, Zn, Al. No action required.

Linearity near the CRDL (CRA & CRI): No problems.

Preparation Blanks: The following elements showed low level concentrations below the Contract Required Detection Limit in the Preparation Blank: PBS = Na, Zn; / PBW = Ca, Ag, Zn, CN. No action required.

Lab Control Spikes: No problems.

Matrix Spikes: The following elements were outside the control limits of 75-125% recovery: MBKL30S = Sb; MBKL37S = Al, Hg. All associated samples were flagged with a "N" on Form I's. No action required.

Duplicate (LCSD and MSD): The following elements were outside the control limits of 0-20% RPD: MBLK30S = Al, Ba, Ca, Fe, Pb, Mg, Mn, Ni; MBKL37L = no problems. All associated samples were flagged with a "*" on Form I's. No action required.

Serial Dilution (ICP): The soil/water serial dilution were outside the control limits of 10% for the following elements: MBKL30L = no problems; MBKL37L = Zn. All associated samples were flagged with an "E" on Form I's. No action required.

Sincerely,

Deboráh J. Inman for...

Jason D. Ruckman

Inorganic Program Manager

SOUTHWEST LABORATORY OF OKLAHOMA, INC. AMERICAN ANALYTICAL & TECHNICAL SERVICES, INC.

1700 West Albany / Broken Arrow, Oklahoma 74012 / Office (918) 251-2858 / Fax (918) 251-2599

SAMPLE DELIVERY GROUP (SDG) TRAFFIC REPORT (TR) COVER SHEET

LAE	NAME:	American Analytica	al & Technicai	Services, Inc.	
LAE	S CODE:	<u>AATS</u>	CON	NTRACT No.:	68-D5-0141
SA	IPLE ANALYS	SIS PRICE:			
SDO	3	1 of 2		RAS No.:	26114
SDC	3 No. / First Sa	mple in SDG:		MBKL09	
	(Lowest EPA	Sample Number			
in first shipment of samples)		ent of samples)	REC	EIPT DATE:	08-Apr-98
Last	Sample in SDC	G:		MBKL14	
	(Highest EPA	Sample Number			
in last shipment of samples)		nt of samples)	RECE	EIPT DATE:	10-Apr-98
EPA	Smaple Numb	pers in the SDG (listed	d in alphanum	eric order by R	ec'd date)
1.	MBKL09	33553.01	11.	MBKL34	33553.12
2.	MBKL10	33553.02	12.	MBKL35	33553.13
3.	MBKL11	33553.03	13.	MBKL36	33553.14
4.	MBKL15	33553.05	14.	MBKL37	33553.15
5	MBKL16	33553.06	15.	MBKL39	33553.16
6.	MBKL17	33553.07	16.	MBKL40	33553.17
7.	MBKL18	33553.08	17.	MBKL41	33553.18
8.	MBKL30	33553.09	18.	MBKL43	33553.19
9.	MBKL32	33553.10	19.	MBKL44	33553.20
10.	MBKL33	33553.11	20	MBKL14	33553.04
		a maximun of 20 field	· ·	er listed on this	form)
سئر مسئر ماجيان	MAN SON	Una,		April 17 Date	′, 1998
	orah J. Imman ranic Superviso	nr	ı	Jaic	
THOU	norganic Supervisor				

SOUTHWEST LABORATORY OF OKLAHOMA, INC. AMERICAN ANALYTICAL & TECHNICAL SERVICES, INC.

1700 West Albany / Broken Arrow, Oklahoma 74012 / Office (918) 251-2858 / Fax (918) 251-2599

34,

SAMPLE DELIVERY GROUP (SDG) SAMPLE TAG SUMMARY

LAB CODE:	AATS	CONTRACT No.:	68-D5-0141
	, , , ,	001111010111011	00 00 0111

SDG 1 of 2 MBKL09 **RAS No.:** _____26114

1.	MBKL09	<u> </u>
2.	MBKL10	387
3.	MBKL11	367
4.	MBKL14	360
5.	MBKL15	370
6.	MBKL16	371
7.	MBKL17	370
8.	MBKL18	6/1
9.	MBKL30	57:
10.	MBKL32	4 P.
11.	MBKL33	373
12.	MBKL34	5 C
13.	MBKL35	373
14.	MBKL36	570
15.	MBKL37	350
16.	MBKL39	<u> </u>
17.	MBKL40	<u> </u>
18.	MBKL41	<u> 383 </u>
19.	MBKL43	331
20.	MBKL44	<u>ئ</u> خ كې

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COVER PAGE - INORGANIC ANALYSES DATA PACKAGE MAI 1 2 1998

Name:	AMERICAN_ANALYTICAL	_ Contract:	68-D5-014:	1	435
Lab Code:	AATS Case No.: 2613	14 SAS No.:		SDG No.:M	BKL09
SOW No.: I	LM04				
were ICD in	EPA Sample No. _MBKL09 _MBKL10 _MBKL11 _MBKL14 _MBKL15 _MBKL16 _MBKL17 _MBKL18 _MBKL30 _MBKL30D _MBKL30S _MBKL32 _MBKL32 _MBKL33 _MBKL34 _MBKL35 _MBKL35 _MBKL37 _MBKL37 _MBKL37D _MBKL37D _MBKL37S _MBKL39 aterelement corrections a	Lab Samp33553.033553.033553.033553.033553.033553.033553.033553.133553.133553.133553.133553.133553.133553.133553.1	01 02 03 04 05 06 07 08 09 09 09 09 09 09 00 01 01 02 03 04 05 06 07 08 09 09 09 09 09 09 09 00 00 00	Yes/No	YES
-				Yes/No	
Were ICP background corrections applied ? If yes - were raw data generated before application of background corrections ?				Yes/No	NO
Comments:					
conditions other than	that this data package is of the contract, both te the conditions detailed doopy data package and is lisked to be a verified by May 11, 1998	chnically and above. Relean the compute zed by the Lathe following Name:	for comple se of the d	teness, for a contain data submit nager or the man for	ined itted ihe

U.S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

- Name: AME	RICAN_ANALYTICAL	Contrac	t: 68-D5-0141	436
Lab Code: AAT	'S Case No.: 26	114 SAS No.	:	SDG No.:MBKL09
SOW No.: ILMO	4			
-	EPA Sample No. _MBKL40 _MBKL41 _MBKL43 _MBKL44	_3355 _3355 _3355	ample ID 3.17 3.18 3.19 3.20	
~;·				
-				
ere ICP inte	relement corrections	applied ?		Yes/No YES
Were ICP background corrections applied ? If yes - were raw data generated before				Yes/No YES
	ion of background co			Yes/No NO_
Comments:				
conditions of other than the in this harded on floppy dist	t this data package the contract, both to conditions detailed by data package and kette has been authorignee, as verified by MAY 11, 1998	technically a d above. Rel in the compu rized by the y the follows Name:	and for comple lease of the d lter-readable Laboratory Ma	teness, for ata contained data submitted nager or the man for

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ILM02.1

		_
EPA	SAMPLE	NO.

Lab Name: AMERICAN ANALYTICAL Contract: 68-D5-0141 Lab Code: AATS Case No.: SDG No.: MBKL0

Matrix (soil/water): SOIL Lab Sample ID: 33553.01

SDG No.: MBKL09

Matrix (soil/water): SOIL Level (low/med): LOW -

Date Received: 04/08/98

% Solids:

92.7

CAS No. Analyte Concentration C Q M 7429-90-5 Aluminum 3760 — * P 7440-36-0 Antimony 3.1 B N P 7440-38-2 Arsenic 2.3 B N P 7440-41-7 Beryllium 0.21 U P 7440-43-9 Cadmium 26.0 P 7440-70-2 Calcium 5490 * P 7440-47-3 Chromium 114 P P 7440-50-8 Copper 190 * P 7439-89-6 Iron 9590 * P 7439-95-4 Magnesium 3250 * P 7440-02-0 Nickel 85.6 P 7440-09-7 Potassium 261 B P 7440-22-4 Silver 0.21 U P 7440-23-5 Sodium 149 B P 7440-22-2	- 1				$\overline{}$		1
7440-36-0 Antimony 3.1 B N J P 7440-38-2 Arsenic 2.3 P 7440-39-3 Barium 21.6 B * P 7440-41-7 Beryllium 0.21 U P 7440-43-9 Cadmium 26.0 P P 7440-47-3 Chromium 5490		CAS No.	Analyte	Concentration	С	Q	M
		7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-95-4 7439-95-4 7439-96-5 7440-02-0 7440-02-0 7440-23-5 7440-28-0 7440-62-2	Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_	3760 3.1 2.3 21.6 0.21 26.0 5490 114 2.6 190 9590 47.1 3250 117 0.05 85.6 261 0.84 0.21 149 0.82 9.1 388	UBUBB U B UB B	*	

Color Color		BROWNYELLOW		Before: After:	CLEAR_	Texture: Artifacts:	MEDIUM
Commen	ts:						
\ _ : =			EOD	4 T TN			402 1

EPA	SAMPLE	MO

MBKL10

Lab Name: AMERICAN_ANALYTICAL___ Contract: 68-D5-0141
Lab Code: AATS__ Case No.: 26114 SAS No.: _____

SDG No.: MBKL09

Matrix (soil/water): SOIL_ Level (low/med): LOW

Lab Sample ID: 33553.02

% Solids:

_89.2

Date Received: 04/08/98

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-92-1 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-22-4 7440-23-5 7440-28-0 7440-66-6	Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_ Cyanide_ ———————————————————————————————————	2210 6.2 1.8 28.7 0.27 281 4300 129 7.5 109 7300 66.4 1910 82.7 0.06 82.9 139 0.67 2.5 224 0.90 7.7 144 5.2		*	

Color Befor Color After	 Clarity Before Clarity After	: CLEAR_	Texture: Artifacts:	MEDIUM
Comments:		_		
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ELW SWILLE MA	EPA	SAMPLE	NC
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MBKL11

SDG No.: MBKL09

Matrix (soil/water): SOIL_ Level (low/med): LOW -

% Solids:

_89.8

Date Received: 04/08/98

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-92-1 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-02-0 7440-22-4 7440-23-5 7440-66-6	Aluminum_Antimony_Arsenic_Barium_Beryllium Cadmium_Calcium_Chromium_Cobalt_Copper_Iron_Lead_Magnesium Manganese Mercury_Nickel_Potassium Selenium_Silver_Sodium_Thallium_Vanadium_Zinc_Cyanide	1940 1.9 1.9 14.7 0.22 34.1 4440 30.5 1.6 17.1 3850 18.9 2500 79.6 0.06 15.1 146 0.66 0.22 196 0.98 4.5 58.3 0.90		*	

	or After:	Clarity After:	Artifacts:	
Comm	ents:			
_ _ _				
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EPA SAMPLE NO.

MBKL14

Lab Name: AMERICAN_ANALYTICAL____ Contract: 68-D5-0141 Lab Code: AATS___ Case No.: 26114 SAS No.: _____

SDG No.: MBKL09

Matrix (soil/water): SOIL_ Level (low/med): LOW_

Lab Sample ID: 33553.04

Solids:

_85.2

Date Received: 04/08/98

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	С	Q	M
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-92-1 7439-95-4 7439-95-4 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-23-5 7440-28-0 7440-66-6	Aluminum_ Antimony_ Arsenic_ Barium Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_ Cyanide	1460 3.7 2.3 16.4 0.22 291 9650 81.9 1.6 83.7 3990 112 5880 28.9 0.05 44.5 114 0.67 0.33 197 0.89 12.6 133 2.9	- I I I I I I I I I I I I I I I I I I I	*	

Color Before: Color After:	BROWN	Clarity Before: CLEAR_	Texture: MEDIUM Artifacts:
Comments:			
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FORM I - IN

	SAMPLE	(1)	141
EPA	SAMPLE	NO.	771

MBKL15

Lab Name: AMERICAN_ANALYTICAL____ Contract: 68-D5-0141

SDG No.: MBKL09

Lab Code: AATS Matrix (soil/water): SOIL

Case No.: 26114 SAS No.:

Lab Sample ID: 33553.05

Level (low/med):

LOW

Date Received: 04/08/98

% Solids:

_73<u>.8</u>

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-92-1 7439-95-4 7439-95-4 7439-97-6 7440-02-0 7440-02-0 7440-23-5 7440-28-0 7440-66-6	Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc Cyanide_ ———————————————————————————————————	7280		*	

	or Before: or After:	BROWN	Clarity Clarity	Before: After:	CLEAR_	Texture: Artifacts:	MEDIUM
Comm	ments:						
<u> </u>	`	_					
·		<u>-</u>	FORM	NI - IN		IL	<u>M02.</u> 1

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

•				MBKL16	
¹₁ab	Name:	AMERICAN_ANALYTICAL Con	ntract: 68-D5-0141		
Jab	Code:	AATS Case No.: 26114	SAS No.:	SDG No.:	MBKL09

Matrix (soil/water): SOIL_ Level (low/med): LOW__ Lab Sample ID: 33553.06 Date Received: 04/08/98

is Solids: _63.4

I			$\overline{}$	T	
CAS No.	Analyte	Concentration	С	Q	M
7429-90-5 7440-36-0 7440-38-2 7440-39-3	Aluminum_ Antimony_ Arsenic_ Barium	4310 48.5 6.5 108	_ _ _		P P P
7440-41-7 7440-43-9 7440-70-2	Beryllium Cadmium Calcium	0.32 357 10800	U	*	P_ P_ P_
7440-47-3 7440-48-4 7440-50-8 7439-89-6	Chromium_ Cobalt Copper Iron	4340 7.5 472 12900	B	*	
7439-92-1 7439-95-4 7439-96-5 7439-97-6	Lead Magnesium Manganese Mercury	309 6290 93.6 0.07	_ _ _ _	* - * - *	12 1 1 1 CV
7440-02-0 7440-09-7 7782-49-2	Nickel Potassium Selenium	363 274 0.95	B U		P
7440-28-0	Silver Sodium Thallium_ Vanadium	1.3 359 1.5 28.2	B B B		
7440-66-6	Zinc Cyanide	608	- - -		P_CA
			_ _ _		
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	Beiore: After:	YELLOW		Before: After:	CLEAR_	Texture: Artifacts:	MEDIU
Comme	nts:						
_							
·			FORM	M I - IN		ILì	<u>M02.</u> 1

EPA SAMPLE NO.

MBKL17

Lab Name: AMERICAN_ANALYTICAL____ Contract: 68-D5-0141 |
Lab Code: AATS___ Case No.: 26114 SAS No.: SDG No.: MBKLC
Matrix (soil/water): SOIL Lab Sample ID: 33553.07

SDG No.: MBKL09

Matrix (soil/water): SOIL_ Level (low/med): LOW -

Date Received: 04/08/98

73.6 % Solids:

					T	Ţ J
CAS No.		Analyte	Concentration	С	Q	M
7429-90 7440-36 7440-39 7440-41 7440-43 7440-47 7440-47 7440-48 7440-50 7439-95 7439-95 7439-97 7440-09 7782-49 7440-22 7440-23 7440-66	3792348614560724502	Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_ Cyanide_ ————————————————————————————————————	6710 278 16.4 609 0.35 306 8520 2790 13.7 408 75400 563 5530 456 0.06 640 232 5.3 0.42 246 3.8 98.8 1020 9.3		*	

	or Before: or After:	BROWN YELLOW	Clarity Clarity	Before: After:	CLEAR_	Texture: Artifacts:	MEDIUM
Com	ments:						
ξ.			FORM	N T - TN		7T.T	<u>M02</u> 1

EPA SAMPLE NO.

Texture: MEDIUM

MBKL18

Lab Name: AMERICAN_ANALYTICAL____ Contract: 68-D5-0141 | Lab Code: AATS____ Case No.: 26114 SAS No.: SDG No.: MBKL0 Matrix (soil/water): SOIL Lab Sample ID: 33553.08

SDG No.: MBKL09

Matrix (soil/water): SOIL_ Level (low/med): LOW -

Date Received: 04/08/98

% Solids:

72.4

			_		
CAS No.	Analyte	Concentration	С	Q	М
CAS No. 7429-90-5 7440-36-0 7440-38-2 7440-43-9 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-92-1 7439-95-4 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-02-0 7440-23-5 7440-23-5 7440-28-0 7440-66-6	Analyte Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide	Concentration		Q	X P P P P P P P P P P P P P P P P P P
7782-49-2 7440-22-4 7440-23-5 7440-28-0 7440-62-2	Selenium_ Silver Sodium Thallium_ Vanadium_ Zinc	2.2 1.0 241 1.3 23.5 1760	<u>в</u> В		P P P P P P
			- - - -		

	or Before: or After:	BROWN YELLOW	Clarity Before Clarity After:	: CLEAR_	Texture: MEI Artifacts:)]
C Om	ments:					
						_
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EPA SAMPLE NO.4

MBKL30

Lab Name: AMERICAN_ANALYTICAL___ Contract: 68-D5-0141
Lab Code: AATS__ Case No.: 26114 SAS No.: _____

Matrix (soil/water): SOIL_

SDG No.: MBKL09 Lab Sample ID: 33553.09

Level (low/med): LOW

% Solids:

75.5

Date Received: 04/08/98

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-92-1 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-02-0 7440-22-4 7440-23-5 7440-28-0	Aluminum Antimony Arsenic Barium Beryllium Cadmium Calcium Chromium Cobalt Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium	5010 3.6 3.4 172 0.36 463 18000 1450 6.8 687 13500 267 9320 100 0.07 1400 368 1.6 0.70 223 1.0		Q	

Color Before: Color After:	BROWN YELLOW	Clarity Before: CLEAR_	Texture: MEDIUM Artifacts:
Comments:			
.		FORM I - IN	ILMO2.1

EPA SAMPLE NO.

MB	KΤ	٦,	2

Lab Name: AMERICAN_ANALYTICAL____ Contract: 68-D5-0141
Lab Code: AATS___ Case No.: 26114 SAS No.: _____

SDG No.: MBKL09 Lab Sample ID: 33553.10

Matrix (soil/water): WATER Level (low/med): LOW

Date Received: 04/08/98

__0.0 & Solids:

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No. Analyte Concentration C Q M 7429-90-5 Aluminum ————————————————————————————————————
7440-36-0 Antimony 3.0 U P 7440-38-2 Arsenic 3.0 U P 7440-39-3 Barium 20.5 B P 7440-41-7 Beryllium 1.0 U P 7440-43-9 Cadmium 41.4 P 7440-47-3 Chromium 29.4 P 7440-48-4 Cobalt 1.4 B P 7439-89-6 Iron 1080 P 7439-92-1 Lead 30.5 P 7439-95-4 Magnesium 3400 B P 7440-02-0 Nickel 48.2 P 7440-02-0 Nickel 48.2 P 7440-09-7 Potassium 207 B P 7440-22-4 Silver 1.0 B P 7440-23-5 Sodium 930 B P 7440-28-0 Thallium 4.0 U P 7440-66-6 Zinc Zon E P

		COLORLESS	Clarity	After:	Artifacts: _	
Commer	nts:					
<u> </u>						

FORM I - IN

EPA SAMPLE NO.

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¹_ab	Name:	AMERICAN	ANALYTIC	CAL	
					=

Lab Code: AATS__ Case No.: 26114 SAS No.:

Contract: 68-D5-0141

SDG No.: MBKL09 Lab Sample ID: 33553.11

Matrix (soil/water): WATER Level (low/med):

LOW

Date Received: 04/08/98

& Solids:

0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	М
7782-49-2 7440-22-4 7440-23-5 7440-28-0 7440-62-2	Aluminum_Antimony_Arsenic_Barium_Beryllium_Cadmium_Calcium_Chromium_Cobalt_Copper_Iron_Lead_Magnesium_Manganese_Mercury_Nickel_Potassium_Selenium_Silver_Sodium_Thallium_Vanadium_Zinc_Cyanide	-122 3.0 3.0 10.4 1.0 27.0 3450 9.0 1.0 20.7 216 4.3 733 13.4 0.10 27.5 176 3.0 1.0 776 4.0 2.4 153 3.8		N N T	

	COLORLESS COLORLESS	Clarity Before: Clarity After:	Texture: Artifacts:	
Comments:			 	

FORM I - IN

EPA SAMPLE	NO
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MBKL34	

ab Name: AMERICAN_ANALYTICAL____ Contract: 68-D5-0141 _ab Code: AATS__ Case No.: 26114 SAS No.: ____

SDG No.: MBKL09 Lab Sample ID: 33553.12

Matrix (soil/water): WATER Level (low/med): LOW__

Date Received: 04/08/98

: Solids:

___0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	С	Q	М	
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-92-1 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-02-7 7782-49-2 7440-23-5 7440-28-0 7440-66-6	Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_ Cyanide_	-212 -3.0 -3.0 -11.0 -1.0 -1.8 -3770 -61.9 -1.1 -81.4 -417 -20.4 -1100 -37.8 -0.10 -193 -176 -3.0 -1.0 -1390 -4.0 -2.6 -128 -18.4		N		

			Before: After:	Texture: Artifacts:	
Commer.	nts:	<u>-</u>	 	 	

FORM I - IN

<u>ILM02.</u>1

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1 INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

							MBKL35	
Lab	Name:	AMERICAN	ANALYTICAL	C	Contract: 68-D5	-0141		
Lab	Code:	AATS	Case No.:	26114	SAS No.:		SDG No.:	MBKL09

Matrix (soil/water): WATER
Level (low/med): LOW
% Solids: 0.0

Color Before: COLORLESS

Lab Sample ID: 33553.13
Date Received: 04/08/98

Concentration Units (ug/L or mg/kg dry weight): UG/L_{-}

CAS No. 7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-92-1 7439-95-4	Analyte Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium	Concentration	_	QN	M 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
7439-96-5 7439-97-6 7440-02-0 7440-09-7	Magnesium Manganese Mercury Nickel Potassium Selenium Silver Sodium Thallium Vanadium Zinc Cyanide	561 14.7 0.10 38.0 176 3.0 1.2 654 4.0 2.8 301 5.3			P

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Com	ments:				
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				_	
COT	or After:	COLORLESS	Clarity After:	CLEAR	Artifacts:

FORM I - IN

Clarity Before: CLEAR_

ILM02.1

Texture:

EPA SAMPLE NO.

						MRKL3	6
Lab Name:		ANALYTICAL	Con	tract:	68-D5-0141		
Jah Code	פדעע		· 26114	SAS NO	•	SDG NO	· MRKI.09

Matrix (soil/water): WATER Level (low/med): LOW ___0.0 & Solids:

Lab Sample ID: 33553.14

Date Received: 04/08/98

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-92-1 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-23-5 7440-28-0	Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_ Cyanide	-70.1 3.0 3.0 10.9 1.0 22.4 2560 7.4 1.0 33.9 319 3.3 616 11.5 0.10 26.5 176 3.0 1.1 831 4.0 2.6 144 1.4			

	or Before: or After:	COLORLESS COLORLESS	Clarity Bef Clarity Aft	Texture: Artifacts:	
" Com	ments:				
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FORM I - IN

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EPA SAMPLE NO.

${\sf MB}$	KL	3	7	

SDG No.: MBKL09

Matrix (soil/water): WATER Level (low/med): LOW

% Solids:

0.0

Date Received: 04/08/98

Concentration Units (ug/L or mg/kg dry weight): $UG/L_{_}$

					I
CAS No.	Analyte	Concentration	С	Q	M
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-95-4 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-09-7 7782-49-2 7440-23-5 7440-28-0 7440-66-6	Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_ Cyanide_ ———————————————————————————————————	-7580 3.0 3.0 5.7 52.1 1.0 3.0 29700 7.0 6.6 36.7 6410 11.6 2940 525 0.10 8.1 2460 3.0 1.0 14000 4.0 8.5 135 1.0			

Color Before: Color After:	COLORLESS COLORLESS	Clarity Before: Clarity After:	Texture: Artifacts:	
Comments:			,	_

FORM I - IN

EPA SAMPLE NO

INORGANIC ANALYSES DATA SHEET

		MBKL39
 ~ -	~ -	 MBKESS

Level (low/med): LOW s Solids:

0.0

Date Received: 04/08/98

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-92-1 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-02-0 7440-23-5 7440-22-4 7440-23-5 7440-66-6	Aluminum_Antimony_Arsenic_Barium_Beryllium Cadmium_Calcium_Chromium_Cobalt_Copper_Iron_Lead_Magnesium Manganese Mercury_Nickel_Potassium Selenium_Silver_Sodium_Thallium_Vanadium_Zinc_Cyanide				

		COLORLESS	Clarity	Before:	CLEAR_	Texture:	
Color	After:	COLORLESS	Clarity	After:	CLEAR_	Artifacts	:
Commer	nts:						
¹ , _ ; · —			FORM	MI - IN		Ī	<u>LM02.</u> 1

EPA SAMPLE NO	EPA	SAMPLE	NO
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INORGANIC	ANALYSES	DATA	SHEET	
				MIDIET 40

Lab Name: AMERICAN_ANALYTICAL_____ Contract: 68-D5-0141 | Lab Code: AATS_____ Case No.: 26114 SAS No.: SDG No.: MBKL(Matrix (soil/water): WATER Lab Sample ID: 33553.17

SDG No.: MBKL09

Matrix (soil/water): WATER Level (low/med): LOW

Date Received: 04/08/98

__0.0 å Solids:

			7	1	
CAS No.	Analyte	Concentration	С	Q	M
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-92-1 7439-95-4 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-02-0 7440-23-5 7440-28-0 7440-66-6	Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_ Cyanide_ ————————————————————————————————————	-477 -3.0 -3.0 -3.0 -3.5.5 -1.0 -13.2 -10600 -38.8 -3.8 -103 -782 -4.8 -2380 -39.7 -0.10 -141 -1180 -3.0 -1.0 -35500 -4.0 -1.8 -89.1 -12.6			

		COLORLESS COLORLESS	Clarity Clarity	Before: After:	CLEAR_ CLEAR_	Texture: Artifacts	:
Commer	nts:						
			FORM	4 T - IN		ī	<u></u> <u>LM02.</u> 1

ΕPA	SAMPLE	NO

Lab Sample ID: 33553.18

Date Received: 04/08/98

Texture:

-				MBKL41
Lab Name:	AMERICAN	ANALYTICAL	Contract: 68-D5-0141	
Lab Code:	AATS	Case No. ·	26114 SAS No.:	SDG No · MBKI.09

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-96-5 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-02-0 7440-23-5 7440-28-0 7440-66-6	Aluminum_Antimony_Arsenic_Barium_Beryllium_Cadmium_Calcium_Chromium_Cobalt_Copper_Iron_Lead_Magnesium_Manganese_Mercury_Nickel_Potassium_Selenium_Silver_Sodium_Thallium_Vanadium_Zinc_Cyanide	-443 -3.0 -3.0 -45.8 -1.0 -1.4 -12600 -1.2 -1.0 -15.7 -266 -8.2 -3010 -55.2 -0.10 -1.0 -1.0 -1.0 -1.0 -1.0 -1.1.0 -1.0 -			

Color After:	COLORLESS	Clarity After:	CLEAR_	Artifacts:
Comments:				
<u></u>				
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Color Before: COLORLESS Clarity Before: CLEAR_

EPA	SAMPLE	NΟ
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•		MBKL43
Lab Name: AMERICAN_ANALYTICAL	Contract: 68-D5-0141	

Lab Code: AATS___ Case No.: 26114 SAS No.: SDG No.: MBKL09
Matrix (soil/water): WATER Lab Sample ID: 33553.19
Level (low/med): LOW__ Date Received: 04/08/98

\$ Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	C	Q	M
7440-22-4 7440-23-5 7440-28-0 7440-62-2	Aluminum_Antimony_Arsenic_Barium Beryllium Cadmium_Calcium_Chromium_Cobalt_Copper_Iron_Lead_Magnesium Manganese Mercury_Nickel_Potassium Selenium_Silver_Sodium_Thallium_Vanadium_Zinc_Cyanide	-189 -3.0 -3.0 -60.2 -1.0 -1.0 -1.0 -1.0 -1.0 -2.7 -192 -2.4 -3370 -247 -0.10 -1.2 -2270 -3.0 -1.0 -20100 -4.0 -1.0 -34.9 -1.0			

Color Before: Color After:	Clarity Before: CLEAR_ Clarity After: CLEAR_	Texture:
Comments:	 	
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FORM I - IN

EPA SAMPLE NO.

MBKL44

Lab	Name:	AMERICAN	ANALYTICAL		Contract:	68-D5-0141	l		
inh	Codo.	א א ידי כ	Case No	. 26114	ו פאפ אז	O .	<u>2DG</u>	MO	 MR

Lab Code: AATS___ Case Matrix (soil/water): WATER

SDG No.: MBKL09 Lab Sample ID: 33553.20

Level (low/med): % Solids:

LOW __0.0

Date Received: 04/08/98

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	С	Q	M
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-47-3 7440-48-4 7440-50-8 7439-92-1 7439-95-4 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-02-0 7440-23-5 7440-22-4 7440-23-5 7440-66-6	Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_ Cyanide_	-190 -3.0 -3.0 -3.0 -3.5 -1.0 -3.5 -1.0 -3.5 -1.0 -3.1 -204 -2.8 -3260 -42.4 -0.10 -3.5 -2210 -3.0 -1.4 -12800 -4.0 -1.0 -38.9 -26.2		N F	

	COLORLESS COLORLESS	Clarity Before: Clarity After:	CLEAR_ CLEAR_	Texture: Artifacts:
Comments:				

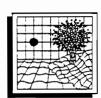
FORM I - IN

Contract Laboratory Analytical Services Support (GLASS): Record of Communication

Name: Nicole (Coene			Contact Recy'd Via:	×	Phone	•	Fax	
Date/Time of Co	ntact: 4/8/98	4:30 PM		7000 7 00 7 100	Γ	Vmail	_	Memo	Other
Contact/Org./Ph	Technic	cal Services, Inc.	•	Initiated By:	×	EPA Lab SCC	Γ.	CLASS Region Other	Engr. Contr.
Type of Inqu	iry: Shippin	g issue							
Section of the sectio	Contract #	: 68-D5-0141	Case #: 26	114 SD	G:			Region:	2
SOW:	Affec	eted Samples: M	BKL14, MBKL16	and MBKL37		Invoic	e #:		
Discussion/Issue:									
listed on the TR/C	OC. They did	receive sample N	CLASS to report th MBKL16 which wa le volume was ship	as not listed on th					eventhough it was ople number MBKL37
4/9/98 9:00 AM	CLASS called	Jennifer Feranda	, RSCC, to relay th	ne above issues.					
Resolution:									
	Sample MBKL	.16 is listed on pa	ige 2 of 3 of the TF						should check with copy of the TR/COC
4·9·98 10:30 AM	CLASS called	d John Troost, A	ATSLA. and asked	if the lab had in	adv	ertently re	eceiv	ed sample	MBKL14.
4/9/98 4:10 PM J number.	ohn Troost fou	und sample MBK	L14 and is going t	o Fed Ex the san	nple	to AATS	usin	g the samp	olers Fed-Ex account
4′9′98 4:20 PM (CLASS called	Deborah Inman a	nd relayed the abo	ve resolutions.					
•									
CLPAS Notificat	ion: Yes	Completed De	te/Time: 4/15/98	0.16 AM					
•	Relate	d ROCs:		Date/		e: Assign.	Man		W. A .#: ST&R

CLASS is operated by DynCorp under Contract #68-D4-0104 to the U.S. Environmental Protection Agency

REC#: 9259



SOUTHWEST LABORATORY OF OKLAHOMA, INC. AMERICAN ANALYTICAL & TECHNICAL SERVICES, INC.

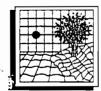
458

1700 West Albany / Broken Arrow, Oklahoma 74012 / Office (918) 251-2858 / Fax (918) 251-2599

CLIENT/LABORATORY COMMUNICATION SYSTEM Telephone Record Log

•	SWL/ AAT 💢	In reference to Case / Contract / Proposal
1	Date of Call:	4-8-98
	Laboratory Contact:	Deborah Inman
	Client Name:	DYWORP
1	Client Contact:	Nirole Coene 1.703-264-9280
	Call Initiated By:	Laboratory Region
. خ.ب	In reference to data for the fo	ollowing sample number(s): 14 , MBKL16 , MB KL3 7
	Summary of Questions/Issue MBKL/4 MBKL/6 MBKL/3 7 -	is Discussed: This sample is missing from the cooler but is on TR We have this sample but it is not listed on the TR We have triple volume of this sample. It is not listed os DAICX but we wanted to sop it it should no used as one
		shipped in BKLIU. MBKLIU is neally MBKLIU - It is shipped in BKLIU. MBKLIU is listed on page 2 of TR's. MBKLIU is be used as DAJOC
l 4	Signature: ()	1 Suy Date: 4-10-90
r Co	Distribution: (1) Lab Copy, (2)	Region Copy, (3) CLASS Copy
	COLIT	THATEST LABORATORY OF OVER A HOMA INC

1700 W. ALBANY• BROKEN ARROW, OK 74012 •OFFICE (918) 251-2858 •FAX (918) 251-2599



SOUTHWEST LABORATORY OF OKLAHOMA, INC. AMERICAN ANALYTICAL & TECHNICAL SERVICES, INC.

459

1700 West Albany / Broken Arrow, Oklahoma 74012 / Office (918) 251-2858 / Fax (918) 251-2599___

CLIENT/LABORATORY COMMUNICATION SYSTEM
Telephone Record Log

SWL X / AAT X	In reference to Case / Contract / Proposal
Date of Call:	4-22-96
Laboratory Contact:	Jeborah Inman
Client Name:	DINORP
Client Contact:	ED DAW D
Call Initiated By:	LaboratoryX Region
In reference to data for the fo	Illowing sample number(s): 16 MBKL17 MBKL35 MBKL35 MBKL36
Summary of Questions/Issue	
	se simples do 15th affeter to the 125.
Summary of Resolution:	
I was	alle to show ENDOUGH Whome MBKL3S YMRKL3
I wars	(3) But as copy of the TR was so had that MBKL
I was	(3) But as copy of the TR was so had that MBKL
I was upper (on TR 201 4 17 were 1271 odd	3) But as copy of the TR was so had that MRKL a to lorde as ar my princes convergation with Riedo
I was upper (on TR 2 of 17 ingre 17 of odd col was pring to his supportion as	3) But an copy of the TR was so had that MBKL a to lorde as as my specials convergation with Windo of the distribution on the original of talk to the brown to provided.
I was upper (on TR 2 of 117 were 1271 odd Ed was pring to his superdistr as 423-98 Ed colled back	3) But as copy of the TR was so had that MRKL e to lorde as as my specials convergation with Riedo of the district on the original of talk to to brow to proceed.
I was LEAR (ON TR 2 of LIT WAR 1751 of Ed was roing to his supervised as 423-98 Ed colled back From our The US a copy of	3) But as copy of the TR was so had that Miske to lorde as her my previous convergation with Window find at it looke two when on the original at talk to brow to provided. To let us know that the two ramples still missing
I was upper (on TR 2 of I IT were 17-1 of Ed was raine to his superhirdr as 423-98 Ed colled back from our The us a copy of the restrictive	But as copy of the TR was so had that MRKLE to lorde as as my specials convergetion with Richards that at I the form the proposal. I bet us know that the two pamples still missing the granges of the original of 338341. It will fair the granges to get in our case. Note this in
LEAR CON TR 201 LIPE CON TR 201 LIPE LONG TO THE SUPERING TO A 23-98 Ed colleged back From our The US a copy of The Axitative Signature:	But as copy of the TR was so had that Miske to lorde as as my serious convergation with Nicho that at the true on the original of talk to brow to provide. The test us know that the two somples still missing the continue to put in our case. Note this in the true that the continue to put in our case. Note this in the true that the true true that the true true true true true true true tru
Just Just 171 and 171	But as copy of the TR was so had that Miske to lorde as as my serious convergation with Nicho that at the true on the original of talk to brow to provide. The test us know that the two somples still missing the continue to put in our case. Note this in the true that the continue to put in our case. Note this in the true that the true true that the true true true true true true true tru

SOUTHWEST LABORATORY OF OKLAHOMA, INC.

1700 West Albany / Broken Arrow, Oklahoma 74012 / Office (918) 251-2858 / Fax (918) 251-2599

SDG NARRATIVE

CONTRACT: 68-D5-0141

DATE: 05/11/98 SOW NO.: ILM04.0

CASE: 26114 SDG: MBKL46

EPISODE NO.: 33542, 33553

INORGANIC METAL FRACTION:

Nine soil/seven water samples plus one LCSW and LCSS, and two DUPS and two MS's were submitted for ICP, CN and Hg analysis. No major problems occurred during the digestion or analyses of these samples. Please see the DC-1 (Sample Log-In Sheet) for sample conditions and cooler temperatures at receipt. The samples' analyses were completed according to the following:

SWL SOP#	Method SOP is based
SWL-IN-200	ILM03.0/04.0 (digestion for ICP analysis)
SWL-IN-203	ILM03.0/04.0 (analysis by ICP)
SWL-IN-202	ILM03.0/04.0 (analysis of Hg by cold vapor)
SWL-IN-303	ILM03.0/04.0 (Cyanide)

Initial and Continuing Calibration Checks: No problems.

Initial and Continuing Calibration Blanks: The following elements showed low level concentrations below the Contract Required Detection Limit in the Calibration Blanks: CN, k, Fe, Na, Hg, Sb, Ca, Mg, Al, Zn. No action required.

Linearity near the CRDL (CRA & CRI): No problems.

Preparation Blanks: The following elements showed low level concentrations below the Contract Required Detection Limit in the Preparation Blanks: PBS/Al, Ca, Mg, Zn, Hg; PBW/Cd, Fe, K, Na, Zn, Cn. No action required.

Lab Control Spikes: No problems.

Matrix Spikes: The following elements were outside the control limits of 75-125% recovery: MBKL27S/Sb, As, Cr; MBKL45S/Al. All associated samples were flagged with a "N" on Form I's. No action required.

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Duplicates: No problems.

Serial Dilution (ICP): The serial dilutions were outside the control limits of 10% for the following elements: MBKL27L/Zn; MBKL45L/K. All associated samples were flagged with an "E" on Form I's. No action required.

Sincerely,

Deborah J. Inman for... Jason D. Ruckman

Inorganic Program Manager

SOUTHWEST LABORATORY OF OKLAHOMA, INC. AMERICAN ANALYTICAL & TECHNICAL SERVICES, INC.

1700 West Albany / Broken Arrow, Oklahoma 74012 / Office (918) 251-2858 / Fax (918) 251-2599

SAMPLE DELIVERY GROUP (SDG) TRAFFIC REPORT (TR) COVER SHEET

LAI	B NAME:	American Analytical	lytical & Technical Services. Inc.					
LAI	B CODE:	AATS	COI	NTRACT No.:	68-D5-0141			
SAI	MPLE ANALYS	SIS						
SD	G	2 of 2		RAS No.:	26114			
SDO	G No. / First Sa	mple in SDG:		MBKL46				
	(Lowest EPA	Sample Number						
	in first shipme	ent of samples)	REC	EIPT DATE:	08-Apr-98			
Las	tSample in SD0	3 :		MBKL49				
	(Highest EPA	Sample Number			9			
	in last shipme	nt of samples)	RECE	EIPT DATE:	<u>10</u> -Apr-98			
					D4.22.98			
EPA	Smaple Numb	ers in the SDG (listed	in alphanum	eric order by R	ec'd date)			
1.	MBKL46	33553.21	11	MBKL28	33542.09			
2.	MBKL47	33553.22	12	MBKL38	33542.10			
3.	MBKL12	33542.01	13.	MBKL42	33542.11			
4.	MBKL13	33542.02	14	MBKL45	33542.12			
5	MBKL19	33542.03	15	MBKL48	33542.13			
6.	MBKL20	33542.04	16	MBKL49	33542.14			
7.	MBKL24	33542.05	17					
8.	MBKL25	33542.06	18					
9.	MBKL26	33542.07	19					
10.	MBKL27	33542.08	20					
		n maximun of 20 field so	•	er listed on this	form)			
Dah	WYUZ V	Mine		April 17	, 1998			
Deb	orah X. Inman Janic Supervise	N.F.	L	Date				

SOUTHWEST LABORATORY OF OKLAHOMA, INC. AMERICAN ANALYTICAL & TECHNICAL SERVICES, INC.

270 462

1700 West Albany / Broken Arrow, Oklahoma 74012 / Office (918) 251-2858 / Fax (918) 251-2599

SAMPLE DELIVERY GROUP (SDG) SAMPLE TAG SUMMARY

LAB CODE:	AATS	CONTRACT No.:	68-D5-0141
SDG 2 of 2	MBKL46	RAS No.:	26114
1.	MBKL46	271	
2.	MBKL47	272	
3.	MBKL12	273	
4.	MBKL13	274	
5.	MBKL19	275	
6.	MBKL20	276	
7.	MBKL24	277	
8.	MBKL25	278	

9.

10.

11.

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20.

MBKL26

MBKL27

MBKL28

MBKL38

MBKL42

MBKL45

MBKL48

MBKL49

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	SAMPLE		46	7
EPA	SAMPLE	NO	10	•

				MBKL12
Lab	Name:	AMERICAN_ANALYTICAL	Contract: 68-D5-0141	
.ah	Code ·	AATS Case No	· 26114 SAS NO ·	SDG NO · MRKIAG

Lab Code: AATS___ Case ■Matrix (soil/water): SOIL_ Lab Sample ID: 33542.01 Level (low/med): 3 Solids: LOW___97.5 Date Received: 04/09/98

CAS No.	Analyte	Concentration	С	Q	M
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-95-4 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-02-0 7440-22-4 7440-23-5 7440-28-0 7440-66-6	Aluminum_ Antimony_ Arsenic_ Barium Beryllium Cadmium_ Calcium_ Chromium Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_ Cyanide	1740 0.59 3.0 4.8 0.20 797 929 30.3 0.92 118 3390 1.4 285 128 0.05 14.5 303 0.59 0.20 850 0.79 2.8 56.1 140			

		BROWN YELLOW	Clarity Clarity	Before: After:	 Texture: Artifacts:	MEDIUM
-Comr	ments:					
- - -			•			
V -		-	FOR	M I - IN	ILi	<u>M02.</u> 1

EPA	SAMPLE	NO.

,					
,					MBKL13
ab	Name:	AMERICAN	ANALYTICAL	Contract: 68-D5-0141	
ab	Code:	AATS	Case No.:	26114 SAS No.:	SDG No · MBKI.46

Matrix (soil/water): SOIL_ Level (low/med): LOW_ } Solids: $_{94.1}$

Lab Sample ID: 33542.02 Date Received: 04/09/98

Concentration Units (ug/L or mg/kg dry weight): MG/KG

• (•	
Cor	mments:				
	lor Before: Lor After:	BROWN	Clarity Before:	Texture: Artifacts:	MEDIUM

FORM I - IN

EPA SAMPLE NO	EPA	SAMPLE	NO
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MBKL19

Tab Name: AMERICAN_ANALYTICAL____ Contract: 68-D5-0141
ab Code: AATS___ Case No.: 26114 SAS No.: _____

SDG No.: MBKL46 Lab Sample ID: 33542.03 Date Received: 04/09/98

Matrix (soil/water): SOIL_ Level (low/med): LOW_ _96.9 : Solids:

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-92-1 7439-95-4 7439-95-4 7439-97-6 7440-02-0 7440-02-0 7440-23-5 7440-23-5 7440-28-0 7440-66-6	Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_ Cyanide_ ———————————————————————————————————	2120 0.62 1.5 8.4 0.21 1.1 441 7.0 5.0 6.1 3930 2.0 527 94.7 0.05 10.1 259 0.62 0.21 234 0.83 4.6 11.1 0.05			

	Before: After:	BROWN	Clarity Clarity	Before: After:		Texture: Artifacts:	MEDIUM
Commer	nts:						
_							
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U.S. EPA - CLP

1 INORGANIC ANALYSES DATA SHEET

		-
EPA	SAMPLE	NO

Date Received: 04/09/98

								MBKL20	
7	Э	Name:	AMERICAN	ANALYTICAL		Contract: 68	-D5-0141	11211220	
			AATS	Case No.:	26114	SAS No.:		SDG No.:	MBKL46
•	:. ← 1	civ (e/	oil/w at er	I. COTT			I ah Campa	TD. 35E/	3 04

Matrix (soil/water): SOIL_ Level (low/med): LOW__ Solids: __94.5

Concentration Units (ug/L or mg/kg dry weight): MG/KG

			_		
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7440-50-8 7439-92-1 7439-95-4 7439-95-4 7439-95-4 7439-97-6 7440-02-0 7440-22-4 7440-23-5 7440-23-5 7440-66-6	Aluminum_ Antimony_ Arsenic_ Barium Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_ Cyanide	409			

Color B		Clarity		 Artifacts:	
Comment	s:				
		 77077	T TNT		402 1

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			46
\mathtt{EPA}	SAMPLE	NO.	

MBKL24	

Name: AMERICAN_ANALYTICAL____ Contract: 68-D5-0141
Lab Code: AATS___ Case No.: 26114 SAS No.: _____

SDG No.: MBKL46

Texture: MEDIUM

♥atrix (soil/water): SOIL_ Level (low/med): LOW_

∵ Solids:

95<u>.5</u>

Lab Sample ID: 33542.05

Date Received: 04/09/98

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	С	Q	M
	Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_ Cyanide	2270 0.63 1.7 9.7 0.21 0.86 2460 4.9 53.0 6.4 4460 2.8 575 100 0.34 4.4 308 0.63 1.5 202 0.84 4.9 12.8 0.07		N	

Color After:	YELLOW	Clarity After:	Artifacts:	_
*Comments:				
		FORM I - IN	 ILM02.1	

Color Before: BROWN Clarity Before:

EPA SAMPLE NO. 468

MBKL25

D Name: AMERICAN ANALYTICAL Contract: 68-D5-0141

ab Code: AATS Case No.: 26114 SAS No.: SDG No.: MBKL4

watrix (soil/water): SOIL Lab Sample ID: 33542.06

SDG No.: MBKL46

₩atrix (soil/water): SOIL Level (low/med): LOW 3 Solids: _95.6

Date Received: 04/09/98

			_		$\overline{}$
CAS No.	Analyte	Concentration	C	Q	М
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-95-4 7439-95-4 7439-95-7 7782-49-2 7440-22-4 7440-23-5 7440-28-0 7440-66-6	Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_ Cyanide	2050 0.63 1.6 8.9 0.21 0.21 1400 3.0 13.9 5.8 4860 2.4 495 139 0.15 2.9 322 0.63 0.47 203 0.84 4.6 11.0 0.05			

	r Before: r After:	BROWN YELLOW	Clarity Clarity	Before: After:	 Texture: Artifacts:	MEDIUM
Comm	ents:					
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EPA	SAMPLE	NO.

MBKL26

Description of the property of

SDG No.: MBKL46

Matrix (soil/water): SOIL_ Level (low/med): LOW

Lab Sample ID: 33542.07 Date Received: 04/09/98

Solids:

_93.1

CAC No	Analista	Congontration	<u>_</u>		м
CAS NO.	Analyte	Concentration		\ \ \	141
CAS No. 7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-92-1 7439-95-4 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-02-0 7440-02-0 7440-23-5 7440-28-0 7440-66-6	Analyte Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_ Cyanide_ ————————————————————————————————————	Concentration 5350 0.64 1.8 14.4 0.21 40.6 1310 357 12.8 79.8 6920 6.9 711 220 0.05 1630 367 0.64 0.60 585 0.86 8.8 150 2.3		QN	
	Cyanide	2.3			CA

	Before: After:	BROWN	Clarity Before: Clarity After:		Texture: Artifacts:	MEDIUM
Comme	nts:					
`\			FORM T - TN	T	- тт.	<u>MO2</u> 1

EPA	SAMPLE	NO	47	7
	~~	110.	1 (•

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				MRKI.27	

Matrix (soil/water): SOIL_ Level (low/med): LOW

% Solids: 89.3 Date Received: 04/09/98

CAS No.	Analyte	Concentration	С	Q	M
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-95-4 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-02-0 7440-23-5 7440-28-0 7440-66-6	Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_ Cyanide_ ———————————————————————————————————	6150 0.65 2.3 17.0 0.22 1.7 2430 11.0 1.4 7.5 6580 22.6 1300 59.9 0.06 4.7 325 0.65 0.22 167 0.86 12.0 32.1 0.07			

	or After:	YELLOW	Clarity	After:	Artifacts:	
Com	ments:					
<u> </u>			FORM	1 T - IN	IL	M02.1

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EPA	SAMPLE	NO.	TI

	1		
INORGANIC	ANALYSES	DATA	SHEET

MBKL28

Lab Name: AMERICAN_ANALYTICAL____ Contract: 68-D5-0141
Lab Code: AATS__ Case No.: 26114 SAS No.:

No.: SDG No.: MBKL46

Matrix (soil/water): SOIL_ Level (low/med): LOW_ % Solids: __89.0

Lab Sample ID: 33542.09 Date Received: 04/09/98

7429-90-5 Aluminum 9240 F 7440-36-0 Antimony 0.90 B N 7 7440-38-2 Arsenic 4.2 N 7 F 7440-39-3 Barium 19.2 B F F 7440-41-7 Beryllium 0.22 U F 7440-43-9 Cadmium 0.50 B F 7440-47-3 Chromium 10.5 N F 7440-48-4 Cobalt 2.0 B F 7439-89-6 Iron 10300 P 7439-92-1 Lead 20.3 P 7439-95-4 Magnesium 918 B P 7439-97-6 Mercury 0.07 B D C 7440-02-0 Nickel 5.4 B P 7440-09-7 Potassium 208 B P 7782-49-2 Selenium 0.65 U P	1						
7440-36-0 Antimony 0.90 B N 7 7440-38-2 Arsenic 4.2 N 7 7440-39-3 Barium 19.2 B F 7440-41-7 Beryllium 0.22 U F 7440-43-9 Cadmium 0.50 B F 7440-47-3 Chromium 1180 P 7440-48-4 Cobalt 2.0 B F 7439-89-6 Iron 10300 P 7439-92-1 Lead 20.3 P 7439-95-4 Magnesium 918 B P 7439-97-6 Mercury 0.07 B D C 7440-02-0 Nickel 5.4 B P 7440-09-7 Potassium 208 B P 7782-49-2 Selenium 0.65 U P	CAS	No.	Analyte	Concentration	С	Q	М
7440-23-5 Sodium 112 B P 7440-28-0 Thallium 0.86 U P 7440-62-2 Vanadium 17.0 P 7440-66-6 Zinc 32.6 E P	744 744 744 744 744 744 744 744 743 743	9-90-5 0-36-0 0-38-2 0-39-3 0-41-7 0-43-9 0-47-3 0-48-8 9-92-1 9-95-4 9-95-4 9-95-6 0-02-0 0-09-7 2-49-2 0-23-5 0-28-0 0-62-2	Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc	9240 0.90 4.2 19.2 0.22 0.50 1180 10.5 2.0 8.1 10300 20.3 918 77.2 0.07 5.4 208 0.65 0.22 112 0.86 17.0 32.6			X -1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1

	r Before: r After:	BROWN	Clarity B Clarity A	efore:	Texture: Artifacts:	MEDIUM
Comm	ents:					
- - -						
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1 INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

					MBKL38	
Lab Name	: AMERICAN	ANALYTICAL		Contract: 68-D5-0141		
Lab Code	: AATS	Case No.:	26114	SAS No.:	SDG No.: N	1BKL46

Lab Sample ID: 33542.10 Date Received: 04/09/98

Texture:

Concentration Units (ug/L or mg/kg dry weight): $UG/L_{\underline{\ }}$

7440-36-0 Antimony 4.0	CAS No.	Analyte	Concentration	С	Q	М
7439-89-6 Iron 5070 P 7439-92-1 Lead 132 P 7439-95-4 Magnesium 4860 B P 7439-96-5 Manganese 85.8 P 7440-02-0 Nickel 9.5 B P 7440-09-7 Potassium 1790 B E P 7782-49-2 Selenium 5.0 U P 7440-22-4 Silver 8.7 B P 7440-23-5 Sodium 8780 P 7440-28-0 Thallium 4.0 U P 7440-66-6 Zinc 59.2 P	7429-90- 7440-36- 7440-38- 7440-39- 7440-41- 7440-43- 7440-47- 7440-48- 7440-50-8 7439-95- 7439-95- 7439-96- 7439-97-6 7440-02-0 7440-22-4 7440-23-5 7440-28-0 7440-62-2	Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_				M P P P P P P P P P

Color After:	COLORLESS	Clarity After:	CLEAR_	Artifacts:
Comments:				
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Clarity Before: CLEAR_

COLORLESS

Color Before:

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MBKL42

Lab Name: AMERICAN_ANALYTICAL____ Contract: 68-D5-0141 Lab Code: AATS

Case No.: 26114 SAS No.:

SDG No.: MBKL46

■ Matrix (soil/water): WATER Level (low/med): LOW_

Lab Sample ID: 33542.11

% Solids:

0.0

Date Received: 04/09/98

Concentration Units (ug/L or mg/kg dry weight): UG/L_

	M
7440-38-2 Arsenic 4.0 U 7440-39-3 Barium 49.5 B 7440-41-7 Beryllium 1.0 U 7440-43-9 Cadmium 6.7	M

Color Before:		Clarity Before:		Texture:
Color After:	COLORLESS	Clarity After:	CLEAR_	Artifacts:
Comments:				

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EPA SAMPLE NO.

INORGANIC ANALYSES DATA SHEET

MBKL45	_
.1211213	

Lab Name: AMERICAN_ANALYTICAL____ Contract: 68-D5-0141 | Lab Code: AATS___ Case No.: 26114 SAS No.: _____

SDG No.: MBKL46 Lab Sample ID: 33542.12

Matrix (soil/water): WATER Level (low/med): LOW

Date Received: 04/09/98

__0.0 % Solids:

Concentration Units (ug/L or mg/kg dry weight): UG/L_

	COLORLESS COLORLESS	Clarity Before: Clarity After:	Texture: Artifacts:	
Comments:	·			

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

Jab Name: AMERICAN_		Contract: 68-D5-0141	MBKL46
.ab Code: AATS		26114 SAS No.:	SDG No.: MBKL46
Matrix (soil/water)	: WATER	Lab Sample	ID: 33553.21
Level (low/med):	LOW		ved: 04/08/98

Level (low/med): LOW__ ___0.0 Solids:

Concentration Units (ug/L or mg/kg dry weight): UG/L_

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-92-1 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-02-0 7440-23-5 7440-23-5 7440-28-0 7440-66-6	Aluminum_Antimony_Arsenic_Barium_Beryllium Cadmium_Calcium_Chromium_Cobalt_Copper_Iron_Lead_Magnesium Manganese Mercury_Nickel_Potassium Selenium_Silver_Sodium_Thallium_Vanadium_Zinc_Cyanide		וווווו ששממשממשממשממן מממשו מממממן		

Color	Before:	COLORLESS	Clarity	Before:	CLEAR_	Texture:	
Color	After:	COLORLESS	Clarity	After:	CLEAR_	Artifacts:	
Commer	nts:						
			_				
<u> </u>		-	FORM	MI - IN		IL	M02.1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

Date Received: 04/08/98

Level (low/med): LOW_ % Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L_

			$\overline{}$		_
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-95-4 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-02-0 7440-23-5 7440-22-4 7440-23-5 7440-22-4 7440-66-6	Analyte Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_ Cyanide_ ———————————————————————————————————	Concentration			X a a a a a a a a a a a a a a a a a a a

Color Before: Color After:	COLORLESS COLORLESS	Clarity Before: CLEAR_ Texture: Clarity After: CLEAR_ Artifacts:	
Comments:			_
			<u>-</u>

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1 INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

•			MBKL48
Lab Name: AMERICAN_AN	JALYTICAL	Contract: 68-D5-0141	5 20 0 19. Par
Jab Code: AATS	Case No.: 26114		SDG No.: MBKL46
Matrix (soil/water):	WATER	Lab Samp	le ID: 33542.13
Level (low/med):	LOW	Date Rece	eived: 04/09/98

Level (low/med): LOW_____0.0

Concentration Units (ug/L or mg/kg dry weight): $UG/L_{\underline{}}$

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-89-6 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-02-0 7440-23-5 7440-22-4 7440-23-5 7440-66-6	Aluminum_ Antimony_ Arsenic_ Barium_ Beryllium Cadmium_ Calcium_ Chromium_ Cobalt_ Copper_ Iron_ Lead_ Magnesium Manganese Mercury_ Nickel_ Potassium Selenium_ Silver_ Sodium_ Thallium_ Vanadium_ Zinc_ Cyanide	-48.3 -4.0 -4.0 -1.7 -1.0 -3.2 -540 -1.0 -2.0 -2.0 -1.5 -0.10 -2.2 -65.8 -5.0 -3.0 -2.88 -4.0 -1.0 -49.9 -1.9		N	

Color Before:		Clarity Before: CLEAR_	Texture:
Color After:	COLORLESS	Clarity After: CLEAR_	Artifacts:
Comments:			
` 		FORM T - TN	TT.M02 1

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1 INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

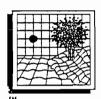
•]	MBKL49	
Lab Name: AMERICAN_A	NALYTICAL		Contract:	68-D5-	0141		pri 💉 jum
_ab Code: AATS		26114	SAS No	o.:	· ·	SDG No.:	MBKL46
Matrix (soil/water):	WATER			Lab	Sample	D: 335	42.14
Level (low/med):	LOW			Date	Recei	ved: 04/	09/98
ត់ Solids:	0.0					·	•

Concentration Units (ug/L or mg/kg dry weight): $UG/L_{\underline{\ }}$

CAS No.	Analyte	Concentration	С	Q	M
7429-90-5 7440-36-0 7440-38-2 7440-39-3 7440-41-7 7440-43-9 7440-47-3 7440-48-4 7440-50-8 7439-92-1 7439-95-4 7439-95-4 7439-96-5 7439-97-6 7440-02-0 7440-02-0 7440-22-4 7440-23-5 7440-28-0 7440-66-6	Aluminum Antimony_ Arsenic_ Barium Beryllium Cadmium Calcium Chromium Cobalt_ Copper Iron Lead Magnesium Manganese Mercury Nickel Potassium Selenium Silver_ Sodium Thallium Vanadium Zinc Cyanide	-29.3 4.0 4.0 1.1 1.0 3.0 157 1.0 2.0 2.0 (135) 2.0 91.0 1.1 -0.10 1.0 58.4 5.0 3.0 377 4.0 1.0 12.5 1.0			

Color After:	COLORLESS	Clarity After:	CLEAR_	Artifacts:
Comments:				
<u> </u>		FORM I - IN	I	ILM02.1

Color Before: COLORLESS Clarity Before: CLEAR Texture:



SOUTHWEST LABORATORY OF OKLAHOMA, INC. AMERICAN ANALYTICAL & TECHNICAL SERVICES, INC.

260 479

1700 West Albany / Broken Arrow, Oklahoma 74012 / Office (918) 251-2858 / Fax (918) 251-2599

CLIENT/LABORATORY COMMUNICATION SYSTEM Telephone Record Log

SWL/ AAT	In reference to Case)/ Contract / Propos	sal 2014
Date of Call:	4.72-93	
Laboratory Contact:	Donal Tomas	
Client Name:	IYUMPP	
Client Contact:	ED JAVIO	
Call Initiated By:	Laboratory Region	
In reference to data for the following	ng sample number(s): MBKL49	
Summary of Questions/Issues Dis		Late as have the
Summary of Resolution: ———————————————————————————————————	usos rorrèged - la roll :	5 ES
Signature:	<i>Ruon</i> Date: _	425-96
Distribution: (1) Lab Copy (2) Region	on Copy, (3) CLASS Copy	
SOUTHW	EST LABORATORY OF OKLAHOMA,	INC.

1700 W. ALBANY• BROKEN ARROW, OK 74012 •OFFICE (918) 251-2858 •FAX (918) 251-2599



Shu	Hinge	
•	Originator	

PHONE CONVERSATION RECORD

Conversation with:	Date <u>10 / 5 / 98</u>
Name Richard Gabonow	TimeAM)PM
Company NYSDEC	
Address	☑ Originator Placed Call
	☐ Originator Received Call
Phone 518-457-1708	W.O. No. <u>04200-022-081-013</u> 2
Subject Spectrum Finishing - NYSDE	
Notes: Pending results of the U.	S. EPA/WESTON sampling event
conducted in April 1998, NYSDEC	
whether to do a remedial investi	
☐ Tickle File/	Follow-Up-Action:
☐ Follow-Up By:	Tollow op Actions
☐ Copy/Route To:	
	Originator's Initials

911-03

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. HEADING

Date: December 19, 1997

From: Jeff M. Bechtel, OSC

Response and Prevention Branch

To: B. Sprague, 2ERR-RPB

B. Bellow, 2CD

R. Cahill, 2CD-PAT

E. Schaaf, 20RC-NYCSFB

M. Emile, EPA

M. O'Toole, NYSDEC

R. Gaborow, NYSDEC

K. Murphy, NYSDEC

J. Daloia, 2ERR-RPB

T. Johnson, 5202G

R. Byrnes, EPA, 20IG

J. LaPadula, 2ERRD-NYRB

L. Davis, 20RC

T. Vickerson, NYSDEC

J. Ascher, NYSDEC

START

Subject: - Spectrum Finishing Site

West Babylon, Suffolk County, NY

POLREP NO.: Three (3)

II. BACKGROUND

Site No: JQ

Delivery Order No: 2101-02-010

Response Authority: CERCLA

NPL Status: N/A
State Notification: NYSDEC

Action Memorandum Status: August 28, 1997

Start Date: November 4, 1997

Completion Date: Pending

RCRA ID: NYD044466910

III. SITE INFORMATION

The Spectrum Finishing Company electroplated aerospace components and operated until 1993 when it filed for Chapter 11 bankruptcy. Subsequently, the company filed for Chapter 7.

The Site is located at 50 Dale Street, West Babylon, Suffolk County, New York. The Site occupies one acre and is situated in an industrial/commercial area.

Within one mile of the Site are residential areas, light industry, commercial properties, public cemeteries and major arterials.

A preliminary assessment of the Site determined that eighteen vats of electroplating wastes, approximately two hundred drums, 10,200 gallons of bulk waste in aboveground storage tanks and some smaller containers of waste chemicals are present on the Site. There are approximately thirty (30) one cubic yard boxes of sludges from the wastewater treatment system. There are also sumps with electroplating wastes located within the building. The floor is covered with spilled material which was tested and found to be either acidic or caustic. The vats and drums are unlabeled.

Two portions of the building have been partitioned off and are leased to local businesses. The Site is not fenced. The utilities are turned off. The building has no functional fire suppression systems.

IV. RESPONSE INFORMATION

A. Situation

1. Current situation

Neither the PRP nor the state or local agencies have the ability to perform a mitigation. EPA has initiated a CERCLA Removal Action.

Removal activities to date

During the week of 12/15/97.

Forty-nine cubic yards of waste corrosive solids containing cyanide were shipped via Environmental Transport Group, Inc. to Envotech Management Services, Inc. In Belleville, Michigan for disposal.

Thirteen un-opened 5 gallon pails of flammable rosin flux were returned to the manufacturer, Alpha Metals in Atlanta, Georgia, for recycling.

T&D bids and waste profiles for the bulk liquids were generated.

The 425 drums were categorized into seventeen waste streams according to the hazcat results. Composite samples of these waste streams were shipped to Accredited Laboratories, Inc. in Carteret, New Jersey for analysis.

The site was secured and demobed until January 12, 1998, while the drum waste streams were analyzed.

Twenty-four hour security remained in place.

3. Enforcement

EPA ORC will pursue negotiations with the PRP for cost recovery.

B. Planned removal activities

Identification, sampling, and disposal of all containerized materials and decontamination of the building.

C. Next Steps

Bids and profiles for the T&D of the drums bulk liquids will be sent out.

Bulk liquids and drums will be shipped off-site for disposal.

D. Key Issues

None

V. COST INFORMATION

The following table contains information on estimated costs for the removal action as of December 19, 1997.

	Amount Budgeted	Cost to Date	Remaining
<i>2</i> -			Project Funds
ERCS	\$ 200,000 \$	180,734	\$ 19,266
START	\$ 40,000 \$	8,397	\$ 31,603
EPA	\$ 105,000 \$	25,600	\$ 79,400
TOTAL	\$ 345,000 \$	214,731	\$ 130,269

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure, which the EPA may include in any claims for cost recovery.

Final Polrep: ___ Further Polreps Forthcoming: X_

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. HEADING

Date: January 19, 1998

Jeff M. Bechtel, OSC From:

Response and Prevention Branch

To: B. Sprague, 2ERR-RPB

J. Daloia, 2ERR-RPB B. Bellow, 2CD T. Johnson, 5202G R. Cahill, 2CD-PAT R. Byrnes, EPA, 20IG E. Schaaf, 20RC-NYCSFB J. LaPadula, 2ERRD-NYRB

1/M. ME

M. Emile, EPA L. Davis, 20RC

M. O'Toole, NYSDEC T. Vickerson, NYSDEC R. Gaborow, NYSDEC J. Ascher, NYSDEC

K. Murphy, NYSDEC START

Subject: Spectrum Finishing Site

West Babylon, Suffolk County, NY

POLREP NO.: Four (4)

II. BACKGROUND

Site No: JQ

Delivery Order No: 2101-02-015

Response Authority: CERCLA NPL Status: N/A State Notification: NYSDEC

Action Memorandum Status: August 28, 1997

Start Date: November 4, 1997

Completion Date: Pending RCRA ID: NYD044466910

III. SITE INFORMATION

See Polrep #1.

IV. RESPONSE INFORMATION

Α. Situation

Current situation

Neither the PRP nor the state or local agencies have the ability to perform a mitigation. EPA has initiated a CERCLA Removal Action.

2. Removal activities to date

During the week of 1/12/98:

The site was remobed on January 12, 1998.

Waste profiles for the bulk liquids were sent to the selected TSDs for approval. A compliance check was conducted on the two TSDs, Norlite and Dupont, which certified that they were in compliance and eligible to receive this waste.

The analytical data for the seventeen waste streams comprising the 425 drums was received and reviewed.

A delivery order modification was issued to Earth Tech on January 13, 1998, to increase the mitigation ceiling from \$200,000 to \$350,000. This is the total mitigation ceiling authorized under the current action memorandum approved on August 28, 1997.

Site activities consisted of the decontamination of twenty-two steel and eight poly vats using a pressure washer. The PRP made arrangements for the recycling of the steel vats with a local scrap metal dealer, Martin Demasco Company of West Hempstead, NY. Two rolloffs transported thirteen of the vats offsite.

One rolloff of debris was loaded out to the Alder Street Recycling Center in West Babylon, NY.

3. Enforcement

EPA ORC will pursue negotiations with the PRP for cost recovery.

B. Planned removal activities

Identification, sampling, and disposal of all containerized materials and decontamination of the building.

C. Next Steps

Bids and profiles for the T&D of the drums will be sent out.

Bulk liquids and drums will be shipped off-site for disposal.

D. Key Issues

None

V. COST INFORMATION

The following table contains information on estimated costs for the removal action as of January 16, 1998.

	Amount Budgete	<u>d</u>	Cost to Date	Remaining Project Funds
ERCS START EPA TOTAL	\$ 350,000* \$ 40,000 \$ 105,000 \$ 495,000	\$ \$	235,258 9,800 31,500 276,558	\$ 114,742 \$ 30,200 \$ 73,500 \$ 218,442

^{*} This figure reflects the \$150,000 increase committed on January 8, 1998.

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure, which the EPA may include in any claims for cost recovery.

Final Polrep: ___ Further Polreps Forthcoming: X

9711-03

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. HEADING

Date: January 30, 1998

Jeff M. Bechtel, OSC From:

Mm. Wh Response and Prevention Branch

B. Sprague, 2ERR-RPB To:

> B. Bellow, 2CD R. Cahill, 2CD-PAT E. Schaaf, 20RC-NYCSFB

M. Emile, EPA M. O'Toole, NYSDEC

R. Gaborow, NYSDEC

K. Murphy, NYSDEC

J. Daloia, 2ERR-RPB

T. Johnson, 5202G

R. Byrnes, EPA, 20IG J. LaPadula, 2ERRD-NYRB

L. Davis, 20RC

T. Vickerson, NYSDEC

J. Ascher, NYSDEC START

Spectrum Finishing Site Subject:

West Babylon, Suffolk County, NY

POLREP NO.: Five (5)

II. BACKGROUND

Site No: JO

2101-02-015 Delivery Order No: Response Authority: CERCLA NPL Status: N/A

State Notification: NYSDEC

Action Memorandum Status: August 28, 1997 Start Date: November 4, 1997

Pending Completion Date:

NYD044466910 RCRA ID:

III. SITE INFORMATION

See Polrep #1.

RESPONSE INFORMATION IV.

Α. Situation

Current situation

Neither the PRP nor the state or local agencies have the ability to perform a mitigation. EPA has initiated a CERCLA Removal Action.

Removal activities to date

During the weeks of 1/19 and 1/26/98:

Due to high levels of hexavalent chrome in the bulk liquid waste streams, waste profiles were sent to two alternate TSDs for approval. A compliance check was conducted on the two TSDs, Envotech and Envirite, which certified that they were in compliance and eligible to receive this waste.

The requests for disposal bids for the seventeen drum waste streams were sent to TSD facilities.

Site activities continued with the decontamination of three steel and four poly vats using a pressure washer. Tenty-five steel and 12 poly vats have been cleaned to date. Two rolloffs transported ten of the vats and one lead liner offsite to the Martin Demasco Company in West Hempstead, NY.

One rolloff of debris was loaded out to the Alder Street Recycling Center in West Babylon, NY for a total of four to date.

Fifty-nine drums were overpacked and the contents of forty-one 5 gallon pails were consolidated into four drums. The contents of vat #28 were transferred into five drums. The drums were staged in preparation for shipment.

A mixer was installed on tank #67 to slurry the contents for removal via a vac truck.

Bids were obtained for the replacement of one of the building's overhead garage doors which was damaged when it fell off its tracks.

3. Enforcement

EPA ORC will pursue negotiations with the PRP for cost recovery.

B. Planned removal activities

Identification, sampling, and disposal of all containerized materials and decontamination of the building.

C. Next Steps

Bids and profiles for the T&D of the drums will be sent out.

Bulk liquids and drums will be shipped off-site for disposal.

D. Key Issues

None

V. COST INFORMATION

The following table contains information on estimated costs for the removal action as of January 30, 1998.

	Amount Budgeted	Cost to Date	Remaining Project Funds
ERCS	\$ 350 , 000*	\$ 299,440	\$ 50 , 560
START	\$ 40,000	\$ 14,172	\$ 25,828
EPA	\$ 105,000	\$ 43,300	\$ 61,700
TOTAL	\$ 495,000	\$ 356,912	\$ 138,088

^{*} This figure reflects the \$150,000 increase committed on January 8, 1998.

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure, which the EPA may include in any claims for cost recovery.

Final Polrep: ___ Further Polreps Forthcoming: X

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. HEADING

Date:

February 13, 1998

From:

Jeff M. Bechtel, OSC

Response and Prevention Branch

To:

B. Sprague, 2ERR-RPB

B. Bellow, 2CD

R. Cahill, 2CD-PAT

M. Emile, EPA

M. O'Toole, NYSDEC

R. Gaborow, NYSDEC

K. Murphy, NYSDEC

J. Daloia, 2ERR-RPB

T. Johnson, 5202G

R. Byrnes, EPA, 20IG

E. Schaaf, 20RC-NYCSFB J. LaPadula, 2ERRD-NYRB

L. Davis, 20RC

T. Vickerson, NYSDEC

J. Ascher, NYSDEC

START

Subject: Spectrum Finishing Site

West Babylon, Suffolk County, NY

POLREP NO.: Six (6)

II. BACKGROUND

Site No:

JO

2101-02-015

Delivery Order No: Response Authority:

CERCLA

NPL Status:

N/A

State Notification:

NYSDEC

Action Memorandum Status:

Start Date:

August 28, 1997

November 4, 1997

Completion Date:

Pending

RCRA ID:

NYD044466910

III. SITE INFORMATION

See Polrep #1.

IV. RESPONSE INFORMATION

Α. Situation

Current situation

Neither the PRP nor the state or local agencies have the ability to perform a mitigation. EPA has initiated a CERCLA Removal Action.

2. Removal activities to date

During the weeks of 2/2 and 2/9/98:

The bids for the seventeen drum waste streams were received. Waste profiles were sent to the TSD for approval.

On 2/3/98, 3000 gallons of waste cyanide liquid was shipped via Environmental Transport Group, Inc. to Michigan Recovery Systems in Romulus, MI and on 2/5/98, 2000 gallons of acid liquid was transported via Freehold Cartage to CyanoKem in Detroit, MI for disposal.

Site activities continued with the decontamination of nine steel and four poly vats using a pressure washer. Thirty-four steel and 12 poly vats have been cleaned to date. One rolloff transported nine of the vats offsite to the Martin Demasco Company in West Hempstead, NY for recycling.

The building's overhead garage door which was damaged when it fell off its tracks was replaced.

Funds were transferred as follows: \$78,000 from contingency funding, \$44,000 from intramural funds and \$20,000 from START funds for a total of \$142,000 Which was committed to ERCS on February 11, 1998 under delivery order modification #2.

The emptied Baker tanks were demobed and the wooden platform was cut up for disposal. A Bobcat with a hoe attachment was used to remove and solidify the sludge from Vat #67. Sixteen cubic yards of solids were generated from the solidification of vat residues for a total of 24 to date.

3. Enforcement

EPA ORC will pursue negotiations with the PRP for cost recovery.

B. Planned removal activities

Identification, sampling, and disposal of all containerized materials and decontamination of the building.

C. Next Steps

Bids and profiles for the T&D of the drums will be sent out.

Bulk solids and drums will be shipped off-site for disposal.

D. Key Issues

None

V. COST INFORMATION

The following table contains information on estimated costs for the removal action as of February 13, 1998.

	Amount Budgeted	Cost to Date	Remaining Project Funds
ERCS	\$ 492,000*	\$ 372,811	\$ 119,189
START	\$ 20,000	\$ 18,239	\$' 1,761
EPA	\$ 61,000	\$ 51,900	\$ 9,100
TOTAL	\$ 573,000**	\$ 442,950	\$ 130,050

^{*} This figure reflects the \$78,000 contingency funding, \$44,000 from intramural funds and \$20,000 from START funds for a total of \$142,000 increase committed to ERCS on February 11, 1998.

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The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure, which the EPA may include in any claims for cost recovery.

Final Polrep: ___ Further Polreps Forthcoming: X

^{**} This figure represents the total project ceiling.

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. HEADING

Date: February 20, 1998

From: Jeff M. Bechtel, OSC

Response and Prevention Branch

To: B. Sprague, 2ERR-RPB

B. Bellow, 2CD

R. Cahill, 2CD-PAT

E. Schaaf, 20RC-NYCSFB

M. Emile, EPA

M. O'Toole, NYSDEC

R. Gaborow, NYSDEC

K. Murphy, NYSDEC

J. Daloia, 2ERR-RPB

T. Johnson, 5202G

Im. In

R. Byrnes, EPA, 20IG

J. LaPadula, 2ERRD-NYRB

L. Davis, 20RC

T. Vickerson, NYSDEC

J. Ascher, NYSDEC

START

Subject: Spectrum Finishing Site

West Babylon, Suffolk County, NY

POLREP NO.: Seven (7)

II. BACKGROUND

Site No: JQ

Delivery Order No: 2101-02-015

Response Authority: CERCLA NPL Status: N/A

State Notification: NYSDEC

Action Memorandum Status: August 28, 1997 Start Date: November 4, 1997

Completion Date: Pending

RCRA ID: NYD044466910

III. SITE INFORMATION

See Polrep #1.

IV. RESPONSE INFORMATION

A. Situation

1. Current situation

Neither the PRP nor the state or local agencies have the ability to perform a mitigation. EPA has initiated a CERCLA Removal Action.

2. Removal activities to date

During the week of 2/16/98:

The following materials were shipped offsite for disposal: 237 drums were shipped to City Environmental in Detroit, MI, 128 drums went to CycleChem in Elizabeth, NJ, three containers of Thorium 232 were shipped via Radiac Research Corp. to the Chem Nuclear facility in Barnwell, SC, and twenty-six cubic yards of corrosive solids were shipped to Envotech Management Services in Bellville, MI.

The last of the vat solids were solidified and placed into cubic yard boxes. Twenty-three cubic yard boxes containing contaminated debris and corrosive solids remain staged on site.

The foreman injured his right foot on the evening of 2/17, when he stepped into a sump located in the building. The sump had previously been surrounded by drums and the incident occurred during the loadout of the drums. He was taken to the emergency room on 2/18 and xrays revealed a fractured bone in his foot. A cast was placed on the foot. He was placed on inactive status and demobed on 2/20. The sump has been covered with wood to prevent any similar incidents.

The administrative record was placed in the West Babylon Public Library located at 211 Route 109, West Babylon, NY. The public notice of availability was posted in the 2/17/98 edition of Newsday.

Enforcement

EPA ORC will pursue negotiations with the PRP for cost recovery.

B. Planned removal activities

Identification, sampling, and disposal of all containerized materials and decontamination of the building.

C. Next Steps

Lab packs will be shipped off-site for disposal.

Building decon will commence.

D. Key Issues

None

V. COST INFORMATION

The following table contains information on estimated costs for the removal action as of February 20, 1998.

	Amount Budgeted	Cost to Date	Remaining Project Funds
ERCS.	\$ 492,000*	\$ 447,685	\$ 44,315
START	\$ 20,000	\$ 19,666	\$ 334
EPA	\$ 61,000	\$ 57,000	\$ 4,000
TOTAL	\$ 573,000**	\$ 524,351	\$ 48,649

^{*} This figure reflects the \$78,000 contingency funding, \$44,000 from intramural funds and \$20,000 from START funds for a total of \$142,000 increase committed to ERCS on February 11, 1998.

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure, which the EPA may include in any claims for cost recovery.

Final Polrep:	Further	Polreps	Forthcoming: X
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^{**} This figure represents the total, project ceiling.

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

I. HEADING

Date:

March 6, 1998

From:

Jeff M. Bechtel, OSC

Response and Prevention Branch

To:

B. Sprague, 2ERR-RPB

B. Bellow, 2CD

R. Cahill, 2CD-PAT

M. Emile, EPA

K. Guarino, EPA CID

T. Vickerson, NYSDEC

J. Ascher, NYSDEC

START

J. Daloia, 2ERR-RPB

T. Johnson, 5202G

R. Byrnes, EPA, 20IG

E. Schaaf, 20RC-NYCSFB J. LaPadula, 2ERRD-NYRB

L. Davis, 20RC

M. O'Toole, NYSDEC

R. Gaborow, NYSDEC

K. Murphy, NYSDEC

Subject: Spectrum Finishing Site

West Babylon, Suffolk County, NY

POLREP NO.:

Eight (8)

II. BACKGROUND

Site No:

JO

Delivery Order No:

Response Authority:

NPL Status:

State Notification:

Action Memorandum Status:

Start Date:

Completion Date: RCRA ID:

2101-02-015

CERCLA

N/A

NYSDEC

August 28, 1997

November 4, 1997

Pending

NYD044466910

III. SITE INFORMATION

See Polrep #1.

IV. RESPONSE INFORMATION

Α. Situation

1. Current situation

Neither the PRP nor the state or local agencies have the ability to perform a mitigation. EPA has initiated a CERCLA Removal Action.

Removal activities to date

During the weeks of 2/23 and 3/2/98:

One rolloff of scrap steel was sent to the local scrap metal dealer, Martin Demasco Company of West Hempstead, NY.

The floors were scraped and swept to remove the deposits of solids. The interior walls and floors of the boiler room, wastewater treatment room, garage, storage room, and both process rooms including the paint booths were pressure washed. The removal of gross contamination from the building surfaces has been completed. Twenty-three hundred gallons of wastewater remain staged on site in two vats awaiting disposal.

Samples of the wastewater were sent out for disposal analysis.

A representative from the NYSDEC was given a site tour and updated on the removal progress.

The following materials were shipped offsite for disposal: spent ppe, twenty-six cubic yards of corrosive solids were shipped to Envotech in Belleville, MI. Eight lab packs were prepared by RemTech Environmental and sent to their facility in Lewisberry, PA.

A ceiling increase action memorandum was signed by the Regional Administrator on March 5, 1998 authorizing a mitigation ceiling increase of \$100,000. The total for mitigation is now \$592,000 and the total project ceiling is \$705,000.

Wipe and chip samples were collected from floor and wall locations throughout the building and sent out for analysis to document the extent of any remaining contamination of the building interior.

The PRP was notified of the demobe on March 5, 1998. Building keys were issued to the PRP.

Site security was discontinued on 3/6/98, utilities were discontinued and all equipment and personnel were demobed.

3. Enforcement

EPA ORC will pursue negotiations with the PRP for cost recovery.

B. Planned removal activities

Identification, sampling, and disposal of all containerized materials and decontamination of the building.

C. Next Steps

The decon water will be shipped off-site for disposal pending receipt of the disposal analysis.

D. Key Issues

None

V. COST INFORMATION

The following table contains information on estimated costs for the removal action as of March 6, 1998.

	Amount Budgeted	Cost to Date	Remaining Project Funds
ERCS	\$ 592,000*	\$ 495,666	\$ 96,334
START	\$ 30,000	\$ 22,166	\$ 7,834
EPA	\$ 61,000	\$ 60,000	\$ 1,000
TOTAL	\$ 705,000	\$ 577,832	\$ 127,168

* A ceiling increase was approved on March 5, 1998, adding \$100,000 to the mitigation ceiling and \$10,000 to START, raising the total project ceiling to \$705,000.

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure, which the EPA may include in any claims for cost recovery.

Final Polrep: ___ Further Polreps Forthcoming: X__

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION REPORT

If M. Hou

J. Daloia, 2ERR-RPB

R. Byrnes, EPA, 201G

J. LaPadula, 2ERRD-NYRB

T. Johnson, 5202G

M. O'Toole, NYSDEC

R. Gaborow, NYSDEC

K. Murphy, NYSDEC

L. Davis, 20RC

١.

I. HEADING

Date: June 6, 1998

From: Jeff M. Bechtel, OSC

Response and Prevention Branch

To:

B. Sprague, 2ERR-RPB

B. Bellow, 2CD

R. Cahill, 2CD-PAT

E. Schaaf, 2ORC-NYCSFB

M. Emile, EPA

K. Guarino, EPA CID
T. Vickerson, NYSDEC

J. Ascher, NYSDEC

START

Subject: Spectrum Finishing Site

West Babylon, Suffolk County, NY

POLREP NO.: Nine (9) and Final

II. BACKGROUND

Site No: JQ

Delivery Order No: 2101-02-015

Response Authority: CERCLA
NPL Status: N/A
State Notification: NYSDEC

State Notification: NYSDEC

Action Memorandum Status: August 28, 1997 Start Date: November 4, 1997

Completion Date: May 13, 1998 RCRA ID: NYD044466910

III. SITE INFORMATION

See Polrep #1.

IV. RESPONSE INFORMATION

A. Situation

}

1. Current situation

Neither the PRP nor the state or local agencies had the ability to perform a mitigation. EPA has completed a CERCLA Removal Action.

2. Removal activities to date

Samples of the wastewater were sent out for disposal analysis.

Representatives from the NYSDEC was given a site tour on March 12, 1998, and updated on the status of the removal action.

Wipe and chip sample data of the interior building surfaces was received and reviewed. The data will be forwarded to the NYSDEC for further consideration.

On April 23, 1998, 2050 gallons of wastewater were shipped to Michigan Recovery Systems in Romulus, Michigan for disposal.

On May 11, 1998, two drums of waste corrosive solids were shipped to Envotech Management Services in Belleville, Michigan for disposal.

This concludes the on-site activities associated with the completion of this removal action.

3. Enforcement

EPA ORC will pursue negotiations with the PRP for cost recovery.

B. Planned removal activities

Identification, sampling, and disposal of all containerized materials and decontamination of the building.

C. Next Steps

The site will be referred back to the NYSDEC to investigate any soil or groundwater contamination.

D. Key Issues

None

V. COST INFORMATION

The following table contains information on estimated costs for the removal action as of June 6, 1998.

	Amount Budgeted	<u>Co</u>	st to Date	<u>Remai</u>	ning Project	Funds
ERCS START EPA TOTAL	\$ 592,000 \$ 30,000 \$ 61,000 \$ 705,000	\$ \$ \$ \$ \$	519,358 28,166 61,000 608,524	\$ \$ \$ \$	72,642 1,834 0 74,476	

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure, which the EPA may include in any claims for cost recovery.

Final Polrep: X Further Polreps Forthcoming:____

		SPECTRUM FINISHING WASTE TABLE	10 Amm - 22
DATE	MANIFEST	QUANTITY/MATERIAL	DESTINATION
02-03-98	MI 4370081	1 Tank, 3000 Gallons, RQ Hazardous Waste Liquids	Michigan Recovery Systems Inc., Romulus, MI
02-05-98	MI 4370087	I Tank, 2,067 Gallons, RQ Waste Corrosive Liquids	CyanoKEM, Inc., Detroit, MI
02-17-98	MI 4370105	26 Cubic Yard Boxes, RQ Waste Corrosive Solids	Envotech Mgmt. Services Inc., Belleville, MI
12-17-97	MI 4371321	25 Cubic Yard Boxes, RQ Waste Corrosive Solids	Envotech Mgmt. Services Inc., Belleville, MI
02-18-98	# 64145	1 Containers Radioactive Material	Radiac, Brooklyn, New York
02-18-98	MI 4556366	3 Drums, Hazardous Waste Liquid / Waste Corrosive Liquids	City Environmental Inc., Detroit, MI
02-18-98	MI 4556367	71 Drums, RQ Waste Corrosive Liquids / Sulfuric Acid	City Environmental Inc., Detroit, MI
02-18-98	MI 4556369	20 Drums, RQ Waste Corrosive Liquids / Hazardous Waste Liquids	City Environmental Inc., Detroit, MI
02-18-98	MI 4556376	66 Drums, Waste Corrosive Liquids, Hazardous Waste Liquids, Waste Oxidizing Solids, and Waste Potassium Permanganate	City Environmental Inc., Detroit, MI
02-19-98	NJA 2785657	34 Drums, Hazardous Waste Liquid/Solid, Waste Corrosive Solid and Flammable Liquid	Cycle Chem Inc., Elizabeth, NJ
02-19-98	NJA 2785658	21 Drums, RQ Waste Corrosive Liquid, Hazardous Waste Liquid, and Waste Corrosive Solid	Cycle Chem Inc., Elizabeth, NJ
02-19-98	NJA 2785660	73 Drums, Hazardous Waste Liquid n.o.s.	Cycle Chem Inc., Elizabeth, NJ
02-19-98	MI 4556368	63 Drums, Hazardous Waste Liquid/Solid, Waste Corrosive Liquid/Solid	City Environmental Inc., Detroit, MI
02-19-98	MI 4556371	12 Drums, Waste Nitric Acid, Hazardous Waste Liquid, and Waste Corrosive Liquid	City Environmental Inc., Detroit, MI
03-03-98	MI 4370111	25 Cu. Yd. Boxes, RQ Waste Corrosive Solids	Envotech Mgmt. Services Inc., Belleville, Ml
03-03-98	MI 4370122	3 Drums (1 Cu. Yd), RQ Waste Corrosive Solids	Envotech Mgmt. Services Inc., Belleville, MI
03-05-98	PAE 8978782	4 Drums, Waste Aerosols, Waste Caustic Alkali Liquid, Waste Corrosive Liquid, and RQ Waste Toxic Solids	Remtech Environmental Inc., Lewisberry, PA
03-05-98	PAE 8978793	4 Drums, Waste Flammable Liquid, Waste Oxidizing Substances (Solid), and Non DOT/RPA Regulated Liquids	Remtech Environmental Inc., Lewisberry, PA
04-23-98	MI 7131182	1 Tank, 2050 Gallons, RQ Hazardous Waste Liquids	Michigan Recovery Systems Inc., Romulus, MI
05-11-98	MI 7131206	2 Drums, Waste Corrosive Solids	Envotech Mgmt. Services Inc., Belleville, MI

REFERENCE NO. 51

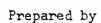


REPORT

Prepared for

SPECTRUM METAL FINISHING CORPORATION

50 Dale Street Pinelawn, N.Y.



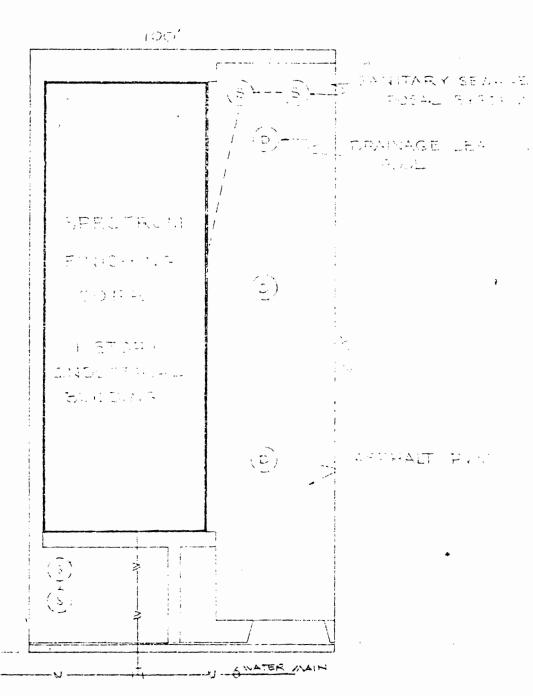
JOHN A. JACOBSEN, ASSOCIATES

1 Shore Lane Bay Shore, New York

April, 1971

June, 1972

August, 1972



DALE ST

EDISON

STE PLAN SCALE "= 30"

THE REPORT ON METAL FINISHING FACILITIES

SPECTRUM FINISHING CORPORATION 50 DALE STREET PINELAWN, NEW YORK

The Spectrum Finishing Corporation is located at 50 Dale Street, some 378' north of Edison Street in Pinelawn, New York. It is a diverse job shop for metal finishing primarily involved in the aerospace field. All parts are generally small in size.

The domestic, storm and industrial liquid waste are discharged to subsurface drainage structures which in turn percolate the liquid into the ground water via subsurface sand and gravel. Ground water is about 30 feet below grade and flows in a southerly direction. The ground waters are classified 'GA'.

The plant has presently some 40 employees overall operating two shifts. The first shift is from 9 A.M. to 4:30 P.M., involving 25 people in general operation, plus six in the metal finishing area, or a total of 31 during this time period. The second shift runs from 5:30 P.M. to 1:30 A.M., with five people in the general operational areas and four in the metal finishing section, totaling nine for the night shift.

The Suffolk County Water Authority has public water mains in the roadway supplying domestic water to the buildings.

Three basic materials are processed in the metal finishing section.

Steel may be put through one or more operations involving cadmium plating, chromate conversion, nickel plating, copper plating and manganese phosphate immersion coating. Aluminum parts can go through chromate conversion coating,

Sulfuric acid anodizing or chromic acid anodizing. Titanium parts will be subjected to nitric acid decontamination.

The rinse water waste falls into two basic classifications:

1) Acid wastes; 2) Caustic and cyanide wastes. The rinse tanks and piping have been so arranged that the caustic and cyanide rinse waters are directly piped to a receiving pit, while other rinse waters go to a wet floor drain system to a separate receiving tank. Process flow patterns are shown in the appendix for all individual metal finishing processes. Also included, is a listing of the contents and dimensions of all tanks, as well as a schematic collection sketch.

Management has estimated the new fog spray and static rinse system has drastically reduced the overall output of rinse waters from previous usage. It is their present estimate that each process line will produce approximately 500 gallons per week, or a total industrial waste output of 1,000 gallons per week. These rinse waters have been previously processed through ion exchange columns. It is herein proposed that batch collection and treatment be used in the future.

ACID WASTE TREATMENT"

The acid waste has the potential of containing the following: Iron, Manganese, Chromium, Nichel, Nitrate, Sulfates and excess hydrogen. It is proposed to collect these wastes via the previously described method and pump them to a concrete treatment tank.

When a proper volume is established, sulfuric acid will be added to

reduce the batch to a pH 2.5. Reduction of the hexavalent chromium will be accomplished by addition of sodium metabisulfite. Air agitation will be used for mixing and the reduction completion will be controlled by a negative diphenylcarbazide reaction. This will indicate all hexavalent chromium has been converted to the trivalent state. Addition of caustic will then be undertaken to raise the batch to pH 8.5. After adequate mixing, the batch will then be allowed to settle. Preparatory to decanting the supernatent, the batch will be tested for chromium, iron, manganese, nickel and pH. If the batch is found to be within discharge standards, the supernatent will be decanted to the leaching facility.

Sludge produced will be recycled with subsequent batches until such time that it is determined to be excessive. At this time, it will be removed from the treatment tank by scavenger service.

An alternate hexavalent chromium reduction procedure will be used on occasions of unavailability of excess sulfuric acid. This process will involve the use of sodium hydrosulfite. This compound has been demonstrated to effectively reduce hexavalent to trivalent chromium without the depression to pH 2.5. All other items of the process will remain the same as previously described.

CYANIDE WASTES

The cyanide and alkaline wastes will be collected separately and pumped to a separate 2,500 gallon concrete treatment tank. When an adequate

batch is collected, caustic soda will be added to maintain the system at pH 11. Sodium hypochlorite will then be added with agitation until a free chlorine residual is maintained for a minimum of 60 minutes. This will completely oxidize the eyanide. The control for this phase of treatment will be the use of the orthotolidine test to demonstrate free residual chlorine.

The system will then be adjusted to pH 8.5 to allow for precipitation of the metals copper and cadmium. Agitation will be maintained in order to insure complete mixing and then the system brought to quiescence to allow sedimentation to occur. The supernatent will then be tested for cadmium and copper. When the batch meets discharge requirements, the supernatent will be decanted to the existing leaching facility.

Sludge will be recycled in the system in subsequent batches until it is determined to be too high a volume, at which time it will be removed by scavenger service for disposal.

APPENDIX: Pages 6-15

TANK INFORMATION

NO.	DEMENSIONS	NAME	***	CONTENTS	
1	3' x 4' x 8'	Cadmium Plating Bath	•	Cd: 2.6-4.5 oz/gal; NaCn:11.7-20.2 oz Na OH:1.9-3.4 oz/gal	r/gal;
2 .	3' x 4' x 6'	Water Rinse		Water	
3	3' x 4' x 6'	Cadmium Plating Bath	S. Br	Cd:2.6-4.5 oz/gal; CaCN:11.7-20.2 oz/ NaOH:1.9-3.4 oz/gal	'gal ;
4	2' x 2' x 2'	Nickel Strike	, 16. 3. 1.1	Ni cl ₂ :30-34 oz/gal Hcl 14-18 oz/gal	Adding the Sales
5	3' x 3' x 3'	Nickel Plate		ToT Ni: 9-15 oz/gal; H3B03:4-6 oz/gal	1; pH 2.8-4.5
6.	3' x 4' x 6'	Alkaline Cyanide Cleaner		Enthone No 114:10-25 oz/gal; NaCN 8-3	l6 oz/gal
7	3' x 4' x 6'	Water Rinse		Water	
8	3' x 4' x 6'	Copper Plate	1 27	ToT Cu: 2-4 oz/gal;NaCN:5-2.0 oz/gal; 4-12 oz/gal NaOH:3-5 oz/gal; pH 12.2-	
9	2' x 2' x 2 1/2'	Copper Strip		NaCN:10-14 oz/gal	1
10	2' x 2' x 2 1/2'	Nickel Acetate Seal	٠.	Ni (CH ₃ Coo) ₂ : .47 oz/gal pH 5.3-5.9	5
11	2' x 2' x 2 1/2'	Dow 7 (Chromate Coating for M	lagnesium)	Na ₂ Cr ₂ O ₇ :1-1.5 lbs/gal pH 4.1-5.5	
12	2 1/2' x 3' x 3'	Black Oxide on Steel		NaOH: 4 1bs/gal	(7. (i)
13	4' dia x 7'	Chromic Acid Anodize		ToT Cr 03:6-14.4 oz/gal; PH .39; Na NaOH:1.3-1.6 oz/gal	₂ Co ₅ :6-7 oz/gal
14	2 1/2' x 3' x 3'	Bronze Plating Tank		Tot Cu:3.2 - 3.7 oz/gal; Sn:1.6-1.9 (NaCh) 1.9-2.9 oz/gal; Rochelle Salt:6.	oz/gal; 7-9.3 oz/gal
15	2 1/2' x 3' x 3'	Phosphate Coating on Steel		ToT: H ₃ PO ₄ : 3%	
16	3' x 3' x 2 1/2'	Hydrochloric Acid		H C1: 3-6 normal	
17	3' x 4' x 3'	Chromate Coating for Cadmium		Na ₂ Cr ₂ O ₇ :1-4 oz/gal;H ₂ SO ₄ :.5%	

NO.	DEMENSIONS	NAME	CONTENTS	
18	3' x 4' x 8'	Water Rinse	Water	
19	4' x 3' x 3'	Nitric Acid	HN03:40-55%	· · · · · · · · · · · · · · · · · · ·
20	2 1/2' x 5' x 4'	Vapor Degreaser	T.C. ETHyLENE; pH:7.0	
21	3' x 4' x 3'	Hot Water Rinse	Hot Water	
22	3' x 4' x 6'	Hot Water Seal	Hot Water	
23	4' x 4' x 14'	Chromaic Actd Anodize	ToT. Cr036-14.4 oz/gal pH:.39	
24	8' x 3' x 3'	Cadmium Plating Bath	Na ₂ CO ₃ :5.0 oz/gal:Fe:100 ppm max; N	aCN:13-17 oz/ga
25	3' x 4' x 3'	Water Rinse -		ppm Water
26	3' x 3' x 3'	Hot Water Rinse	Hot Water	•.
27 ^{1,1}	5' x 3' x 3'	Flourboric Acid	H BF ₄ 2.7-5.4 oz/gal	
28	3' x 5' x 3'	Water Rinse	Water	
2 9	4' x 4' x 18'	Sulfuric Acid Anodize	Free H ₂ SO ₄ :22 -2 6.6 oz/gal	
30	3' x 4' x 4'	Sodium Dichromate Seal	Na ₂ Cr ₂ 0;6.7-8.7 oz/gal;pH:5.0-6.5	
31	3' x 6' x 4'	Chromate Coating on Aluminum	Alodine 1200: 1-3 oz/gal pH 1.5-2.0	(i)
32	1 1/2' x 3 1/2' x 4'	Black Dye	Sandoz: Aluminum Black: 10 gm/lb; p	- 1
33	2' x 2' x 2 1/2'	Red Dye	SanDoz: Aluminum Bordeauz 2R:2gm/lb	; pH: 6.0-7.0
34	3 3/4' x 3 3/4' dia.	Electroless Nickel	ToT Ni: 1.1-1.4 dz/gal;pH:4.5-4.8	
35	2' x 2' x 2'	Gold Dye	Sandoz: Aluminum gold: 2 gm/lb;pH:6	.0-7.0

NO.	DEMENSIONS	NAME	CONTENTS
36	3' x 4' x 6 1/2'	Non Etch Cleaner	Ridoline No. 53: 1-3 oz/gal
37	2' x 3' x 2 1/2'	Water Rinse	Water
3 8	3' x 4' x 6'	Deoxidizer	Deoxidizer 4-14:25-35 oz/gal; HNO3:7-13%
3 9	2' x 2' x 2 1/2'	Water Rinse	Water
40	3' x 4' x 2 1/2'	Caustic Etch	NaOH: 6 oz/gal
41	2 1/2' x 2 1/2' x 2 1/2'	Zincate	Enthone Alumon-D:32-42 Be ²
42	2' x 3' x 3' Cadmium	n Strip	NH4NO3:10-20 oz/gal
43	2' x 3' x 2' Alodino	e 600 ~	Alodine 600: 1-1.5 oz/gal;pH:1/3-1.8

REFERENCE NO. 52

Handbook of Environmental Contaminants:

A Guide for Site Assessment

Chris L. Shineldecker



Library of Congress Cataloging-in-Publication Data

Shineldecker, Chris L.

Handbook of environmental contaminants: A guide for site assessment / Chris L. Shineldecker.

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LEWIS PUBLISHERS, INC. 121 South Main Street, Chelsea, Michigan 48118

PRINTED IN THE UNITED STATES OF AMERICA 3 4 5 6 7 8 9 0

Printed on acid-free paper

TO MY WIFE JANICE, FOR SHARING HER DREAMS WITH ME

Electrodes

Raw Materials, Intermediate Products, Final Products, and Waste Products Generated During Manufacture and Use:

- Graphite
- Selenium
- Titanium

Electroluminescent Coatings

Raw Materials, Intermediate Products, Final Products, and Waste Products Generated During Manufacture and Use:

Phosphorus

Electroplating

General Types of Associated Materials:

- Abrasives
- Acids
- Alkalis
- · Chlorinated waxes
- Degreasers
- Detergents
- Gasoline
- Lubricants
- Metal cleaners
- Naphtha
- Petroleum fuels
- Soaps
- Soluble oils
- Solvents
- · Waste oils

Raw Materials, Intermediate Products, Final Products, and Waste Products Generated During Manufacture and Use:

- Aluminum
- Ammonia
- Arsenic
- Arsine
- Asbestos
- Boron
- Chlorides
- · Chromic acid
- Chromium
- Cobalt
- Copper
- Cyanides
- Dichloroethane
- Formic acid
- Germanium
- Heavy metals
- · Hydrochloric acid
- Hydrogen cyanide
- Iron
- Lead
- Mercury
- Molybdenum
- Nickel
- Nitrates
- Nitrogen
- Phosphoric acid
- Platinum
- Potassium hydroxide
- Silver
- Sulfate
- Sulfuric acid
- Triethanolamine
- Zinc

- Ammonia
- Benzene
- Carbon disulfide
- Chloroform
- Chromic acid
- Dichloroethene
- Ethyl benzene
- Hexane
- Hydrogen chloride
- Perchloroethene
- Polychlorinated biphenyls
- Tetrachloroethene
- Toluene
- Trichloroethane
- Trichloroethene
- Xylenes

Elemi

General Types of Associated Materials:

Acetates

Embalming

General Types of Associated Materials:

- Acids
- Alkalis
- Oil of cinnamon
- Oil of clove

Site-Specific Contaminants

139

Raw Materials, Intermediate Products, Final Products, and Waste Products Generated During Manufacture and Use:

- Antimony
- Arsenic
- Bacteria
- Barium
- Cadmium
- Chromium
- Cobalt
- Formaldehyde
- Lead
- Mercury
- Methyl alcohol
- Nickel
- Phenols
- Thymol
- Zinc

Emulsifying Agents

Raw Materials, Intermediate Products, Final Products, and Waste Products Generated During Manufacture and Use:

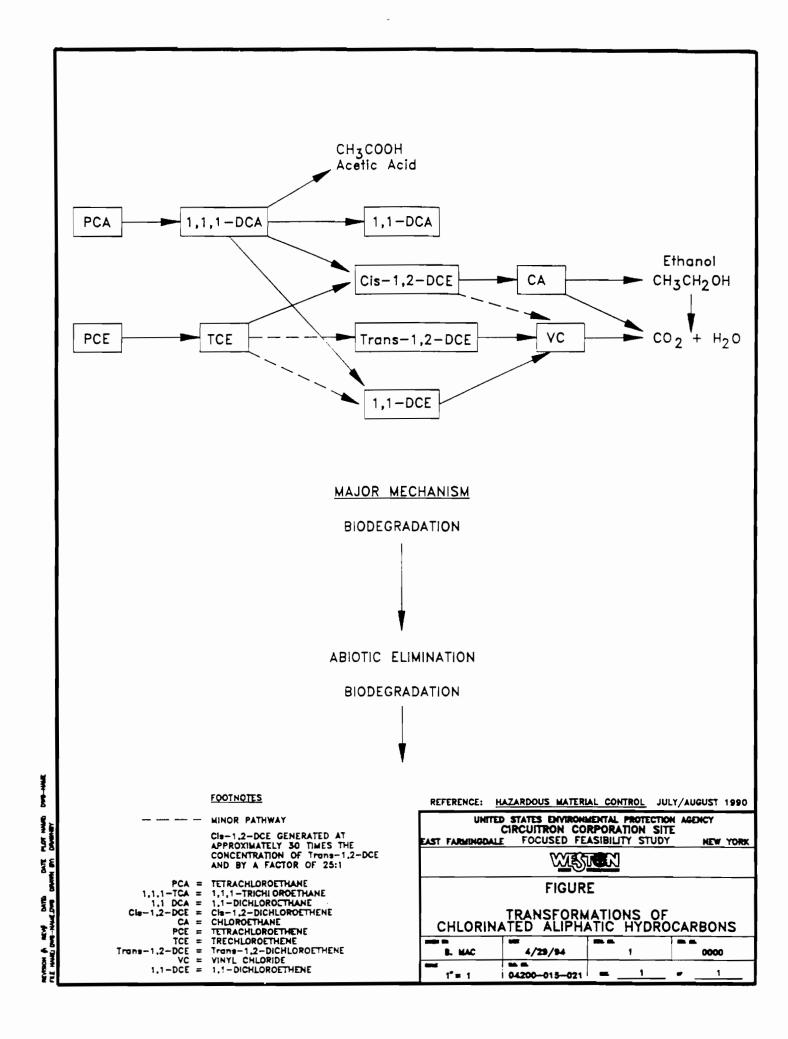
- Dioxane
- Ethanolamines
- Ethyl benzene
- Ethylenediamine
- n-Butylamine

Enamels

General Types of Associated Materials:

- Pigments
- Solvents

REFERENCE NO. 53



REFERENCE NO. 54

Application No.

/NY 008 5561

SPDES File Region 1 - Ref. #47-0692 Suffolk Co. Dept. Env. Control.

Mr. Quinn - BIP

Name of Permittee :

SPECTRUM FINISHING CORP.

Effective Date

August 8, 1975

Expiration Date

August 8, 1980

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) DISCHARGE PERMIT

Special Conditions
(Part I)

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the provisions of the Federal Water Pollution Control Act, as amended by the Federal Water Pollution Control Act Amendments of 1972, P. L. 92-500, October 18, 1972 (33 U.S.C. § 1251 et. seq.) (hereinafter referred to as "the Act").

Spectrum Finishing Corp.

(Full Name of Permittee)

is authorized by George K. Hansen, P.E., Chief, PDES Permit Section

(Designated Representative of Commissioner of the Department of Environmental Conservation)

to discharge from

50 Dale Street

(Street Address of Discharging Facility)
Babylon, (Babylon-T)

New York 11702 (Suffolk -C)

to Ground Water - Class GA

(Name of Receiving Waters)

in accordance with the following special and general conditions:

The specific effluent limitations and other pollution controls applicable to the discharge permitted herein are set forth in the special conditions. Also set forth are self-monitoring and reporting requirements. Unless otherwise specified, the permittee shall submit original copies of all reports to the Central Office and the appropriate Regional Office of the Department of Environmental Conservation and the EPA Region II Regional Administrator. Except for data determined to be confidential under Section 17-0805 of the Environmental Conservation Law or Section 308 of the Act, all such reports shall be available for public inspection at the offices of the Department of Environmental Conservation and the Regional Administrator of EPA Region II. Knowlingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 71-1933 of the Environmental Conservation Law or Section 309 of the Act.

	luent Limit	ations			
Du	ring the per	iod begini	ning EDP		and lasting
				(Give Date) charges from outfal	ls001,002
shall be limit	ed and mon	itored by	the permitt	ee as specified below	(Specify Outfall Number
(a) specified:	The follow	ving shall	be limited	and monitored by the	e permittee as
	fluent acteristic	in kg/day Daily	e Limitation y (lbs./day) Daily Maximum	n Other Limitations (Specify Units) Average Maximum	Monitoring Requirements Measurement Sample Frequency Type
01) Sani 02)	tary Waste			ring required. low 1000 gpd.	
b) No Co sc	discharge ntents to	e to surf be remov nly. Was	ace or gr wd by app te remova	olding Tanks - ound allowed at a roved industrial l records must be	waste
Permitte	e also sub	oject to	attached	schedule A.	
total discharg	e by weight	during a	calendar m	, the daily average on the divided by the mal facility was opera	umber of days
				, the daily maximum y calendar day.	n discharge
(b) The pH shall				nor greater t	han

Monitoring Locations

Permittee shall take samples and measurements to meet the monitoring requirements at the location indicated below: (Show locations of outfalls with ... T.M. Coordinates and sketch or flow diagram as appropriate). Sanitary Waste Only Above Ground 001 Industrial Waste Holding Tanks STREET 50 SPECTRUM FINISHING CORPORATION 002 Sanitary Waste Only

EDISON STREET

August 8, 1980	authorization to discharge shall expire on midnight . Permittee shall not discharge after the above
date of expiration, the permitt	receive authorization to discharge beyond the above ee shall submit such information, forms, and fees nent of Environmental Conservation no later than
180 days prior to the above dat	e of expiration.
By Authority of George K. Han	sen, P.E., Chief, PDES Permit Section
Desig	gnated Represenative of Commissioner of the
De	partment of Environmental Conservation
	<i>5</i>)
August 8, 1975	Den gek defantation. Signature
Date	Signature

Attachments:

General Conditions Schedule "A" REFERENCE NO. 55



PROJECT NOTE

TO: Spectrum Project !	-ile	DATE: 6 October 1998
FROM: John Hinge		W.O. NO.: <u>54200-322-081-0132</u>
A	epartment of Health S	Services (SCDHS) Inspections and 3 and 1984.
Sampling at Spec	trun Site During 198'	3 and 1984.
Attached are various	records of inspiritions	and sampling by SCDHS at the
Spectrum site during 198	3 ava 1984,	
· · ·		



PETER F. COHALAN SUFFOLK COUNTY EXECUTIVE

DEPARTMENT	OF HEALTH	SERVICES
DEPARIMENT	UF MEALIM	コピペッ にこコ

Spectrum Finishing Corp. 50 Dale Street West Babylon, NY 11704

Date 5-9-83	
SPDES NO.	
Lab. No. 3-83-97 '	
Field No. 4 DO 3-9	

Gentlemen:

5.

On 9 March 1983 samples of industrial waste were taken from your storm drain, opposite paint storage room.

Upon analysis, the following parameters were found in concentrations above the maximum allowed in your SPDES Permit or in groundwater effluent standards:

	1. Hexavalent chromium	1.2 mg/l	6.
	2.		7.
	3.		8.
_	4.		9 .

Please be advised that these unsatisfactory conditions constitute violations of the N.Y.S. Environmental Conservation Law and/or the Suffolk County Sanitary Code. Please be further advised that the discharge of any water from an industrial process to the groundwater of Suffolk County without having first obtained a State Pollutant Discharge Elimination System (SPDES) Permit for that discharge is also a violation of the N.Y.S. E.C.L. and/or the Suffolk County Sanitary Code, Article 12.

10.

If you do not already possess a valid SPDES Permit for the above discharge, then you should apply immediately through this office for said permit.

Since the above-noted violations may subject you to legal action, it is expected that these violations cease immediately. Violations of the Suffolk County Sanitary Code are subject to the imposition of a civil penalty of up to Five Hundred (\$500) dollars per violation. E.C.L. violations are also subject to a civil penalty. A reinspection in the near future will determine your compliance in this matter.

Very truly yours,

John H. Finkenberg, Sr. Sanitarian Environmental Pollution Control

5 Horseblock Pl. (SEE REVERSE SIDE FOR STANDARDS) rmingville, NY 11738

516) 451-4628



PETER F. COHALAN SUFFOLK COUNTY EXECUTIVE

000		OF HEAL	TU CEE	ハハケモロ
	RIMENI	UF BEAL		

Spectrum Finishing Corp.
50 Dale Street
West Babylon, New York 11704

Date	May	23,	198	33	
SPDES	NO.				
Lab.					
Field	No.	5	DO	3-9	

Gentlemen:

On 9 March 1983 samples of industrial waste were taken from your sanitary pool, north side of building.

Upon analysis, the following parameters were found in concentrations above the maximum allowed in your SPDES Permit or in groundwater effluent standards:

- 1. toluene 93.0ppb
- 2 2 ...
- 2. 2-Butanone 500ppb
- 3.
 - ۷.
 - 5.

8. 9.

6.

7.

10.

Please be advised that these unsatisfactory conditions constitute violations of the N.Y.S. Environmental Conservation Law and/or the Suffolk County Sanitary Code. Please be further advised that the discharge of any water from an industrial process to the groundwater of Suffolk County without having first obtained a State Pollutant Discharge Elimination System (SPDES) Permit for that discharge is also a violation of the N.Y.S. E.C.L. and/or the Suffolk County Sanitary Code, Article 12.

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Very truly yours,

John H. Finkenberg, Sr. Sanitarian Environmental Pollution Control

15 Horseblock Pl. (SEE REVERSE SIDE FOR STANDARDS) Farmingville, NY 11738

(516) 451-4628





PETER F. COHALAN SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF HEALTH SERVICES

David Harris, M.D., M.P.H. Commissioner

November 3, 1983

Mr. William DeChirico Spectrum Finishing Corp.

50 Dale Street W. Babylon, NY 11704

Re: SPDES Effluent Limit Violations

Dear Sir:

Attached is a copy of a summary of your wastewater discharge indicating effluent limitation violations. These violations were determined by a review of your discharge monitoring report(s) by the New York State Department of Environmental Conservation.

This department requests that you review the attached summary and notify us, in writing, as to the cause of the violations and the corrective action that will be implemented.

If the violation is the result of a major problem with the treatment facility, again, contact this office so that we may discuss a schedule of compliance for repair or upgrading of your wastewater unit.

Very truly yours,

Gordon J Watt

Wastewater Management Section

GJW:he

cc: J. Finkenberg X

J. Gladysz

D. Gobbi

SUFFOLK CONTY HEALTH SERVICES BORATORY

MILE	5
_	

DATE - TIME TO DATE - TIME

CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE DATE FIELD NO. 10 0010-19 LAB NO. 10-83-222 COMPLETED NAME OR FIRM ADDRESS OR LOCATION Word, Worth, was BLD. POINT OF COLLECTION REMARKS/INSTRUCTIONS Stark TEST RESULTS TEST RESULTS TEST RESULTS Mg/ DH(LAB) TOTAL SOLIDS .04 COPPER Ma/I SUSPENDED CHLORIDE IRON SOLIDS DISSOLVED CYANIDE MANGANESE SOLIDS MBAS CHROMIUM-TOT COD NICKEL TOC ZINC LEAD •2 CADMIUM .07 SILVER NITRATE-N CHROMIUM-+6 NITRITE C.02 AMMONIA-N ph36 TKN pH (FIELD) TEMP. (FIELD) METHOD OF PRESERVATION > HNO3TO pH <2 □ COOL 4° C CUSTODY OF SAMPLE DURING TRANSPORT OF THE SAMPLE FROM SAMPLING SITE TO LABORATORY, THE CHAIN OF CUSTODY MUST BE UNBROKEN. GENERALLY THIS WILL REQUIRE THAT THE SAMPLE BE DELIVERED BY THE SAMPLE COLLECTOR OR HIS DESIGNATED REPRESEN-TATIVE WHO WILL SIGN FOR THE RECEIPT, INTEGRITY AND TRANSFER OF THE SAMPLE DURING SHIPMENT. AFFILIATION NAME 1. COLLECTED BY 2. POSSESSION BY DATE - TIME TO DATE - TIME . POSSESSION BY DATE - TIME TO DATE - TIME 10/19 PM 4. RECEIVED LAB BY 5. POSSESSION BY DATE - TIME TO DATE - TIME

6. POSSESSION BY

SUFFOLK (CATY HEALTH SERVICES . JORATORY

CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE						
- -		DO 10-19	LAB NO. 10/83	-22/ c	DATE COMPLETED	S. 10/28/83.
_						
1	NAME OR FI	RM	Spartour	. Frushice	× .	
I	ADDRESS OF	R LOCATION	Cabot 9	54- W. @	30bi	
1	POINT OF CO	OLLECTION	Sauz poul	North SU	de BLQ, M	idellas
' •_	REMARKS/IN	ISTRUCTIONS	BLD, fullte	s grader		
Γ	TEST	RESULTS	TEST	RESULTS	TEST	RESULTS
7	pH(LAB)		TOTAL SOLIDS	мд/І	X COPPER	•/8 Mg/I
	CHLORIDE	Mg/i	SUSPENDED		IRON	,,,
- 1	CYANIDE		DISSOLVED SOLIDS		MANGANESE	
H	MBAS		1002.20		X CHROMIUM-TOT	1.2
1	COD				X NICKEL	
 	тос				ZINC	
					X LEAD	< 2
	-				X CADMIUM (02)	1.2
-	NITRATE-N				SILVER	
-	NITRITE				CHROMIUM-+6	.2.02
	AMMONIA-N					· .
-	TKN		pH (FIELD)	gh=6	1, 11, 14,	
1			TEMP. (FIELD)	19	10 mg 10 10 10	
	METHOD OF PRESERVATION MHNO3TO pH <2 □COOL 4°C					
_			SERVATION W			
1		,	CUSTODY OF			
DURING TRANSPORT OF THE SAMPLE FROM SAMPLING SITE TO LABORATORY, THE						
CHAIN OF CUSTODY MUST BE UNBROKEN. GENERALLY THIS WILL REQUIRE THAT THE SAMPLE BE DELIVERED BY THE SAMPLE COLLECTOR OR HIS DESIGNATED REPRESEN-						
TATIVE WHO WILL SIGN FOR THE RECEIPT, INTEGRITY AND TRANSFER OF THE SAMPLE						
DURING SHIPMENT. NAME AFFILIATION						
	1. COLLECTED	BY DAVID	Obrig _	SCOH5	Oct 17 83	1/ Am
<u>ر</u> :	2. POSSESSION	1 BY			DATE TIME T	TIME
POSSESSION BY						
1	4. RECEIVED LAB BY FIME TO DATE - TIME - TI					
5. POSSESSION BY DATE - TIME TO DATE - TIME						
ϵ	6. POSSESSION BY DATE - TIME TO DATE - TIME					

SUFFOLK C. JNTY HEALTH SERVICES LABORATORY

CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE

<u></u>	IELD NO	<u> </u>	LAB NO. 10-8	3-222 (сć	DATE MPLETED	10/25/33
NAME OR FIRM Spectrum Frushing 15-marks							
	ADDRESS OF	R LOCATION	Cabot SI	, WiBab	<u>کر</u>	,	·
	POINT OF CO	OLLECTION	Storm du	Hode win	ڪد	Lo BLO.	
	REMARKS/IN	STRUCTIONS		samp 2410			
-	TEST	RESULTS	TEST	RESULTS		TEST	RESULTS
	pH(LAB)	than to	TOTAL SOLIDS	Mg/1,	K.	COPPER ON	·04 Mg/1
_	CHLORIDE	Mg/I	SUSPENDED SOLIDS			IRON	
-	CYANIDE		CISSOLVED SOLIDS			MANGANESE	
-	MBAS		Salar Sa	· · · · · ·	X	CHROMIUM-TOT	.3
	COD		1.17			NICKEL	
-	тос .					ZINC	
,				-	\times	LEAD	<·2
_					X	CADMIUM	<.02
	NITRATE-N					SILVER	
_	NITRITE		: .	: .		CHROMIUM-+6	
	AMMONIA-N					1. <u>1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1</u>	
	TKN		pH (FIELD)	ph=6		e e e	
-	1 9		TEMP. (FIELD)				
-	MET	THOD OF PRES	SERVATION 💆	HNO ₃ TO pH <	<2	COOL 4°	C ·
	CUSTODY OF SAMPLE DURING TRANSPORT OF THE SAMPLE FROM SAMPLING SITE TO LABORATORY, THE						
			UNBROKEN. GEN				
S	SAMPLE BE DELIVERED BY THE SAMPLE COLLECTOR OR HIS DESIGNATED REPRESEN -						
TATIVE WHO WILL SIGN FOR THE RECEIPT, INTEGRITY AND TRANSFER OF THE SAMPLE DURING SHIPMENT.							
1. COLLECTED BY DAVIS Obra SCOAS 0+1983 1/AM							
2. POSSESSION BY							
_	POSSESSION BY DATE - TIME TO DATE - TIME						
4. RECEIVED LAB BY 10/19 PM TIME							
5	5 POSSESSION RY						

SUFFOLK C. NTY HEALTH SERVICES CABORATOR

CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE

FIELD NO. 10 202-8 LAB NO. 2/24-95 COMPLETED Spectrum Finishing NAME OR FIRM Cabot St. W. Bab. ADDRESS OR LOCATION stawless steel rectangular box operation POINT OF COLLECTION REMARKS/INSTRUCTIONS V- bottem, stored outside, were garagedown; TEST RESULTS TEST RESULTS TEST RESULTS Mg/I COPPER 6800 6.8x10 Mg/1 pH(LAB) TOTAL SOLIDS Mg/I SUSPENDED CHLORIDE IRON SOLIDS DISSOLVED CYANIDE MANGANESE SOLIDS CHROMIUM-TOT MBAS 1×10 COD NICKEL 2.4×10 240 TOC 2.6 × 10 ZINC 26.0 LEAD SILVER NITRATE-N CHROMIUM-+6 NITRITE AMMONIA-N Dh=12 TKN pH (FIELD) TEMP. (FIELD) MHNO3TO pH <2 □ COOL 4°C METHOD OF PRESERVATION CUSTODY OF SAMPLE DURING TRANSPORT OF THE SAMPLE FROM SAMPLING SITE TO LABORATORY, THE CHAIN OF CUSTODY MUST BE UNBROKEN. GENERALLY THIS WILL REQUIRE THAT THE SAMPLE BE DELIVERED BY THE SAMPLE COLLECTOR OR HIS DESIGNATED REPRESEN-TATIVE WHO WILL SIGN FOR THE RECEIPT, INTEGRITY AND TRANSFER OF THE SAMPLE DURING SHIPMENT. AFFILIATION NAME SCOHS1. COLLECTED BY 2. POSSESSION BY 3. POSSESSION BY 4. RECEIVED LAB BY 5. POSSESSION BY 6. POSSESSION BY DATE - TIME

SUFFOLK COUNTY HEALTH SERVICES LABORATORY CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE

_		
	18.247	2/8

FIELD NO. 10 202-8 LAB NO. 2/84-95 COMPLETED 2										
NAME OR FIRM Spectrum Finishing										
	ADDRESS OF	R LOCATION	Cabot	St. W.Bab.						
	POINT OF CO	DLLECTION	Staw less	steel , rectang	ul	ar box open.	top			
REMARKS/INSTRUCTIONS V- bottem, stored outside, now garagedour, Dale St, side.										
	TEST	RESULTS	TEST	RESULTS		TEST	RESULTS			
	pH(LAB)		TOTAL SOLIE		X	COPPER 680.0	6.8x12 MO/1			
	CHLORIDE	Mg/I	SUSPENDED SOLIDS	Jalin prise		IRON	The second of th			
	CYANIDE		DISSOLVED SOLIDS	allight		MANGANESE	Series -			
	MBAS		,	It si	X	CHROMIUM-TOT	1×10'			
	COD		J.	S CONTRACTOR OF STREET	×	NICKEL 24,0	2.4×10			
	тос		ن معرد	,10	K	ZINC 260	2.6×10			
	-		2 2		×	LEAD //2	(1·Z)			
			Dar-John M.		Χ	CADMIUM4000.	(4x103)			
	NITRATE-N		The word			SILVER	10 M Th == 1			
-	NITRITE		\lambda		-	CHROMIUM-+6	1 1 1 1			
	AMMONIA-N	·					ggi Tabi gy ⁱ			
	TKN		pH (FIELD)	ph=12						
			TEMP. (FIELD)						
	ME.	THOD OF PRE	SERVATION	Жнио₃то рн	<2	COOL 4°	С			
		: 1	CUSTODY O	E SAMPLE						
•	DUDING TRANS	PORT OF THE	:	SAMPLE SAMPLING SITE	т (O LABORATOR	Y. THE			
				ENERALLY THIS			· .			
•				LLECTOR OR HIS						
			-	INTEGRITY AND	TR	ANSFER OF T	HE SAMPLE			
•	DURING SHIPME	~ ·	NAME	AFFILIATION			- 4.5			
	1. COLLECTED	BY DAVID	Obra .	SCO45	_	Feb. 8,1984	345Pm			
•	2. POSSESSIOI	N BY LAUND	Obry	SCDHS	_	TebB, 3 Pm	TO DATE - TIME			
`.	3. POSSESSIO	N BY			_	DATE	TO DATE - TIME			
	4. RECEIVED L	AB BY	0-12		_	2/9/84 DATE	TIME			
	5. POSSESSION	N BY			_	DATE - TIME	TO DATE - TIME			
	6. POSSESSION	N BY				DATE - TIME	TO DATE - TIME			



PETER F. COHALAN SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF HEALTH SERVICES

David Harris, M.D., M.P.H. Commissioner

March 8, 1984

Spectrum Finishing
51 Cabot Street
W. Babylon. New York 11703

Gentlemen:

An inspection of your plant was conducted by a representative of this Department on 2/8/84, 3:45 PM . This inspection revealed that material was being stored outside in a stainless steel, opentop container. Sample analysis of this material shows the following parameters: Copper 1200.0 Mg/l; Iron 1.6 Mg/l; total Chromium 8.0 Mg/l; Nickel 50.0 Mg/l, Zinc 20.0 Mg/l, Lead 1.2 Mg/l, Cadmium 8000.0 Mg/l; and pH = 12.

- This waste is not to be discharged to the ground and may be transported and disposed of only by an approved industrial waste scavenger. A listing of these scavengers may be obtained from Mr. Ted Sanford at the New York State Department of Environmental Conservation in Stony Brook, phone 751-7900.
- In addition, Article 12 of the Suffolk County Sanitary Code gives specific guidelines for storage of toxic and hazardous materials. Please contact Mr. Peter Akras of this office at 451-4649 for information and guidance in meeting these storage standards.
- A reinspection of your facility has been scheduled to determine your compliance in this matter. If I can be of further assistance, please call me at 451-4630.

Very truly yours,

John H. Finkenberg

Environmental Pollution Control

DATE - TIME TO DATE - TIME

SUFFOLK COUNTY HEALTH SERVICES LABORATORY CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE

				H, SEW AGE, IN	DOSTRIAL W	ASTE 18-247: 2/8					
5	FIELD NO. 8	3 DO2-8	LAB NO. 2 /84	- 93 c	DATE OMPLETED 4						
1	NAME OR FIRM Spectrum Fruishing ADDRESS OR LOCATION (abot St. WiBab. POINT OF COLLECTION Stawless steel, rectangular box, open top.										
	· .		V-patter 18tac		The second of the second experience of the second experience of the second experience of the second experience	4 100					
_	TEST	RESULTS	TEST	RESULTS	TEST	RESULTS					
Ī	pH(LAB)		TOTAL SOLIDS	Mg/I	COPPER/200	(1.2 ×10 3 Mg/1					
`-	CHLORIDE	Mg/I	SUSPENDED SOLIDS	×	IRON 16	(7.6)					
Ī	CYANIDE		DISSOLVED SOLIDS		MANGANESE						
_	MBAS			٧ كلتم عنهما	CHROMIUM-TOT	#8 .					
T	COD		2	1 - 1 - X	NICKEL 50.0	5×10'					
	тос		1	A Sold Start of the	ZINC 2010	2×10')					
Ţ			1. vier.	1 x	LEAD //L	(12)					
			and for the	Λ. ×	CADMIUM800.0	(8×10 ³)					
1	NITRATE-N		in The	13.	SILVER (40)						
	NITRITE		er		CHROMIUM-+6						
Ī	AMMONIA-N		1	-!	1 Stanton						
_	TKN .		pH (FIELD)	ph=12							
T			TEMP. (FIELD)								
= L	ME.	THOD OF PRE	SERVATION 🛛	HNO3TO pH <2	2 COOL 4°	C					
	CUSTODY OF SAMPLE DURING TRANSPORT OF THE SAMPLE FROM SAMPLING SITE TO LABORATORY, THE CHAIN OF CUSTODY MUST BE UNBROKEN. GENERALLY THIS WILL REQUIRE THAT THE SAMPLE BE DELIVERED BY THE SAMPLE COLLECTOR OR HIS DESIGNATED REPRESEN— TATIVE WHO WILL SIGN FOR THE RECEIPT, INTEGRITY AND TRANSFER OF THE SAMPLE DURING SHIPMENT. NAME AFFILIATION 1. COLLECTED BY AUGUSTOM AFFILIATION SCOTT DATE TIME TO DATE TIME TO DATE TIME APPL DATE TIME TO DATE TIME DATE TIME TO DATE TIME TO DATE TIME TO DATE TIME TO DATE THE										
T	. RECEIVED L	·.			DATE	70 77 TIME					
4	5. POSSESSION BY DATE - TIME TO DATE - TIME										

6. POSSESSION BY

DATE - TIME TO DATE - TIME

SUFFOLK C. JNTY HEALTH SERVICES LABORATORY

_	CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE									
(FIELD NO8	DO2-8	LAB NO. 2/84	- 93 co	DATE OMPLETED 4					
	· · · · · · · · · · · · · · · · · · ·	RMR	Spectrum Cabot Sd	Franslinany						
	1000	OLLECTION			Jec Lex Jose					
	1		V-bottem 15tac							
-	TEST	RESULTS	TEST	RESULTS	TEST	RESULTS				
	pH(LAB)		TOTAL SOLIDS	Mg/I 😾	COPPER	1-2×10 Mg/1				
-	CHLORIDE	Mg/!	SUSPENDED SOLIDS	X	IRON	1.6				
Γ	CYANIDE		DISSOLVED SOLIDS		MANGANESE	A1.				
7	MBAS			٧ كلترغنهما	CHROMIUM-TOT	18.				
	COD			× رة حق پدل ر	NICKEL 50,0	5×10'				
	тос		<i>k</i>	Result of the	1	2×10'				
اِ			la vier.	1 a X	LEAD	1.2				
			gange Juntin	1, 1. ×	CADMIUM 8000	8×103				
	NITRATE-N		in The	,	SILVER					
1	NITRITE		er	X	CHROMIUM-+6	orterpitation				
	AMMONIA-N		7			pr-adjustment				
	TKN		pH (FIELD)	ph= 12		4/14				
	-		TEMP. (FIELD)							
	MET	THOD OF PRE	SERVATION 🛛	нио _з то рн <	2 COOL 4°	С				
-			CUSTODY OF	SAMPLE						
	DURING TRANS	PORT OF THE S	SAMPLE FROM SA	MPLING SITE T	O LABORATOR	Y, THE				
			UNBROKEN. GEN			•				
1			E SAMPLE COLLE THE RECEIPT, IN 1							
'	DURING SHIPME	- A1 -		AFFILIATION						
	1. COLLECTED	\bar{D}		SCDHS	Fcb. 8,84	3 45 PM				
	2. POSSESSION	5	Oprin	SCDHS	Tebes, 345	Tolly 9 mm				
7	3. POSSESSION	· .	8		DATE - TIME T	O DATE' - TIME				
_	4. RECEIVED L		a j'a		2/9/84	O DATE - TIME				
7	5. POSSESSION		· 		DATE /	TIME				

6. POSSESSION BY

. . COUNTY OF SUFFOLK 9 . . .



PETER F. COHALAN SUFFOLK COUNTY EXECUTIVE

DEPARTMENT OF HEALTH SERVICE	
	=

Spectrum Finishing Corp., Inc. 51 Cabot St. West Babylon, New York 11704

Date	May	8,	1984	
SPDES	-			
Lab.	No.	2-84	1-161	
Field	No.	2-1	00-2-21	

Gentlemen:

- On 2/21/84 samples of industrial waste were taken from your storm drain, approx.20-25' East of stainless steel tank leaking liquid. Upon analysis, the following parameters were found in concentrations above the maximum allowed in your SPDES Permit or in groundwater effluent standards:
 - 1. Hexavalent Chromium 0.64 Mg/l 6
 - 2. 7.
- **.** 3. 8.
 - 4. '9.
- ⁻ 5. 10.
- Please be advised that these unsatisfactory conditions constitute violations of the N.Y.S. Environmental Conservation Law and/or the Suffolk County Sanitary Code. Please be further advised that the discharge of any water from an industrial process to the groundwater of Suffolk County without having first obtained a State Pollutant Discharge Elimination System (SPDES) Permit for that discharge is also a violation of the N.Y.C.
- without having first obtained a State Pollutant Discharge Elimination System (SPDES) Permit for that discharge is also a violation of the N.Y.S. E.C.L. and/or the Suffolk County Sanitary Code, Article 12.
- If you do not already possess a valid SPDES Permit for the above discharge, then you should apply immediately through this office for said permit.
- Since the above-noted violations may subject you to legal action, it is expected that these violations cease immediately. Violations of the Suffolk County Sanitary Code are subject to the imposition of a civil
- penalty of up to Five Hundred (\$500) dollars per violation. E.C.L. violations are also subject to a civil penalty. A reinspection in the near future will determine your compliance in this matter.

Very truly yours,

John H. Finkenberg, Sr. Sanitarian Environmental Pollution Control

Horseblock Pl. (SEE REVERSE SIDE FOR STANDARDS)

_5) 451-4628

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES INDUSTRIAL WASTE AND HAZARDOUS MATERIALS CONTROL 15 HORSEBLOCK PLACE, FARMINGVILLE, N.Y. 11738 (516) 451-4633

10 MM

4				
	NAME OF FACILITY	OWNER/ OFFICER	PAGE I OF	
-	NAME Spectrum Turshing Corp.	CONTACT Wr. Gene Pappalando	S TEL.	
		stiBab. TOWN Bab.	ZIP	
	MAILING ADDRESS			
	DATE TEB21,84 TIME 130 M ORIG. PERIODIC (RE.) W	VASTE WASTE HBH	SEWAGE SYSTEM	PUBLIC PRIVATE
Ţ	NOUSTRY plating 8hop.	· · · · · · · · · · · · · · · · · · ·		
	SPDES OR NO PERMIT NO.	360 PERMIT? YES NO	PERMIT NO	
	SCAVENGER	TE	EL.	
	GCAVENGER APPROVED YES NO AVAILABLE YES NO	RECORDS CONSISTENT WITH EXPECTED WASTE GENERATION	YES NO	
Ī	HEATING SYSTEM-MFG. NAME		FUEL TYPE	FIRING RATE
_				
	NCIN.		WASTE BURNED	RATE
Ī		TYPE OF		
-	NUMBER OF TANKS STORAGE TANKS (YES) NO (ABOVEGROUND) UNDERGROUND	,	www.	
Γ	DPEN	MATERIAL STORED WASTE RA		
-	0 (1 -1 -1)		L. I.	
۲	located on the North side is	60-1 1 1	hickers !	
*	5-10	1 11 - 1 - 2	located arms	
-	doors. There was a constant	\cdot	, ,	
Ī	the widdle of the track the	despen land had	I grown	1
' <u>-</u>	approx. 3-57+. North of the	touk. There was	house	<u> </u>
	evidence of dried liquid in the o	, , , , ,	solid.	
-	The white sold was in evide	, , , , ,		
	draw, which is located 20-25to			
- -			·	
т.	PERMISSION IS GRANTED BY THIS FACILITY TO THE SUFFOLK COUNTY DE		UCT ROUTINE S	AMPLING OF
		RRECT UNSATISFACTORY CONDITIONS BY RED DAULD OBBI		ATE MAY
Ţ	SIGN. OF PERSON REC. REPORT TITLE	INSPECTOR	29	,
_	3-155: 9/82		\longrightarrow	/81 T.IK

[- - -		JSTRIAL WASTE PROCESS	· — · — · — ·]
NO.	PROCESS	CHEMICALS USED AND APPROXIMATE QUANTITY	DISCHARGE DISCHARGE TO	E ,
	(2) I issued a violation protice	to a representative of Spectry	u", Wr. Geore	_
	Pappalardo, Mus was became	e is other higher representative	was and site.	
	(3) While I was removed same	es Wr. Pappalardo and another we	an from	
	"Spectrum started clemens up	the spell.		
	0 1	<u> </u>		
	4) The field shot the sp	Hed liquid was appax, 12. The	spill	
'	was appar. 5x5x1".	, ω		
 				

M	~~~~	MAHR PO	OLKOFIE	UN SOURCES		\sim	18159-
NO.	Dale St. PROCESS	CONTROL TYPE	EP'S	CHEMICALS OR PRODUCTS USED	AMOUNT CONSUM.	HOURS OF OPERA.	TYPE OF EMISSION
	Storm chain	,					
	white sold						
	Spectrum Spectrum						
	-tout						
	NAT						
		-					
					· ·		
	'	-					ົກ
	· Cabat St.						

TH SERVICES LABORATORY

CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE

18-247: <u>2/82</u> LAB NO. 2-84-162 FIELD NO. 3DO2-21 COMPLETED NAME OR FIRM ADDRESS OR LOCATION POINT OF COLLECTION REMARKS/INSTRUCTIONS TEST RESULTS RESULTS TEST TEST RESULTS Mg/ COPPER 500 pH(LAB) TOTAL SOLIDS 5×10 SUSPENDED Ma/I CHLORIDE IRON SOLIDS DISSOLVED MANGANESE CYANIDE SOLIDS CHROMIUM-TOT MBAS 4×10 COD 4×10 40.0 TOC ZINC 6×10 60.0 LEAD CADMIUM SILVER NITRATE-N CHROMIUM-+6 NITRITE oh 11 dol AMMONIA-N pH (FIELD) TKN TEMP. (FIELD) \square HNO₃TO pH <2 COOL 4° METHOD OF PRESERVATION CUSTODY OF SAMPLE DURING TRANSPORT OF THE SAMPLE FROM SAMPLING SITE TO LABORATORY, THE CHAIN OF CUSTODY MUST BE UNBROKEN. GENERALLY THIS WILL REQUIRE THAT THE SAMPLE BE DELIVERED BY THE SAMPLE COLLECTOR OR HIS DESIGNATED REPRESEN-TATIVE WHO WILL SIGN FOR THE RECEIPT, INTEGRITY AND TRANSFER OF THE SAMPLE DURING SHIPMENT. AFFILIATION 1. COLLECTED BY 2. POSSESSION BY TO DATE - TIME . POSSESSION BY DATE - TIME 4. RECEIVED LAB BY TIME 5. POSSESSION BY DATE - TIME DATE - TIME 6. POSSESSION BY

TO DATE - TIME

DATE - TIME

SUFFOLK C JNTY HEALTH SERVICES _ABO

CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE

Г			<u>_</u>		—		18-247: 2/82
	FIELD NO.	3DO 2-21 1	LAB NO. 2-8	4-162	э с —	DATE MPLETED	3/15/84 21
•	NAME OR FI	RM	Spectrum -	tinishing	<u></u>	agp.	(10). (2).
	ADDRESS OF	R LOCATION	Cabon St	1. WiBab	٠	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
	POINT OF CO	OLLECTION	spll po	iddle from	: <u>ځځ</u>	leal P	ram
•	REMARKS/IN	NSTRUCTIONS	_ standors s	ted touk to	يص	thook would	sa BO.
	TEST	RESULTS	TEST	RESULTS		TEST	RESULTS
	pH(LAB)		TOTAL SOLIDS	Mg/I	X	COPPER	5×102-Mg/1
	CHLORIDE	Mg/I	SUSPENDED SOLIDS		-	IRON	
	CYANIDE		DISSOLVED SOLIDS			MANGANESE	4.50
	MBAS				X	CHROMIUM-TOT	4×10'
	COD		·		K	NICKEL -	4x10'
	тос				K	ZINC 2	6x10'
ľ				٠.,	K	LEAD 1	1.6
<u></u>	-				X	CADMIUM	6×10,3
*	NITRATE-N			•		SILVER	<u>.</u>
	NITRITE					CHROMIUM-+6	er er
+	A M M O N I A - N	The.	Lab	ph II			
-	TKN	in the interpret	pH (FIELD)	Ph= 12			
*		Satisfy 15	TEMP. (FIELD)			1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
ŗ	M.E.	THOD OF PRE	SERVATION []	UNO TO BH	<u></u>		
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		· 1986年 - 1986年 - 1987年 - 19874 - 1987年 - 19874 - 1987年 - 19874 - 1987年 - 19874 - 1987年 - 19874 - 198	CUSTODY OF S				
			AMPLE FROM SA			and the second s	3
		•	UNBROKEN. GEN E Sample Colle				# * X *
			HE RECEIPT, INT	•			**************************************
1	DURING SHIPME	ENT	IAME	AFFILIATION			24.
	1. COLLECTED	BY Havid	Obry 9	SCDAS	_	Teh 71,84	PM
Ì	2. POSSESSION	N BY	<u> </u>		_	DATE - TIME T	TIME
Ç	POSSESSION . ب	N BY	· · · · · · · · · · · · · · · · · · ·		_	·:	O DATE - TIME
ı	4. RECEIVED L	AB BY	Jashen _	name of the state of the		2/21/84 Pm	O DATE - TIME
7	5. POSSESSION	1 BY	and the second second		; ·	DATE - TIME -T	TIME
ł	6. POSSESSION	1 BY		10000000000000000000000000000000000000	<u> </u>	DATE - TIME	O DATE - TIME

SUFFOLK COUNTY HEALTH SERVICES LABORATORY

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\sim \sim \sim \sim \sim \sim \sim	EXAMINATION	\triangle	WATED		INDUSTRIAL	•••
CHEMICAL	EXAMINATION	UF	WAIFR	SEWAGE	INDIESTRIAL	WASTE
•		• •	*** /* * = *** ;	,	INDUCINIAL	WASIE

18-247: 2/82

(FIELD NO. 2002-21 LAB NO. 2-84-161 COMPLETED 184									
NAME OR FIRM Spectrum Trousling Corp. ADDRESS OR LOCATION POINT OF COLLECTION S.D Storm draw japprox. 20-25fd. Sand REMARKS/INSTRUCTIONS S. Storm draw japprox. 20-25fd. Sand REMARKS/INSTRUCTIONS S. Storm draw japprox. 20-25fd. Sand Remarks/Instructions										
										TEST
	pH(LAB)		TOTAL SOLIDS	Mg/I X	COPPER	2 Mg/I				
	CHLORIDE	Mg/I	SUSPENDED SOLIDS		IRON	्राह्मी अस्ति।				
	CYANIDE		DISSOLVED SOLIDS	1 11 14 1	MANGANESE					
	MBAS			, A	CHROMIUM-TOT	謝/-/ (注)				
	COD		884 St. 102	* , % ** . · · . *	NICKEL 3 1	7				
	тос	11.1	No. of the	7/19/5	ZINC ANA	M·3 443				
-		, :		×	LEAD A A	₹·2				
1				×	CADMIUM	3				
	NITRATE-N				SILVER -					
	NITRITE				CHROMIUM-+6					
	AMMONIA-N	to the second second	Lab	ph 7.0	Continue to the second	有关于 有关的是主				
_	TKN	. That the gift	pH (FIELD)							
		三等性 的现在分词	TEMP. (FIELD)	<u>्रिक्षण्यास्त्री</u> स						
	MET	THOD OF PRES	SERVATION []	нио ₃ то рн <2	2 GOOL 4°	C				
7	DURING TRANS		CUSTODY OF S		O LABORATOR	Y, THE				
		and the second s	UNBROKEN. GEN			· · · · · · · · · · · · · · · · · · ·				
7			E SAMPLE COLLE			サル (17mm) 1 1 1 2 2 2 3 3 3 3 3 4 4 4 元 2 3 4 5 1				
-	TATIVE WHO W DURING SHIPME		HE RECEIPT, INT	AFFILIATION	ANSFER OF	HE SAMPLE				
	1. COLLECTED	BY David	Obry S	COTO	Teb.21,84	Soph				
	2. POSSESSION	N BY	<u> </u>		DATE	TIME				
	؛ Possession .ر	N BY			DATE - TIME T	O DATE TIME				
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7	5. POSSESSION	I BY								
' (6. POSSESSION	l BY			DATE	The state of the s				

SUFFOLK COUNTY HEALTH SERVICES LABORATORY

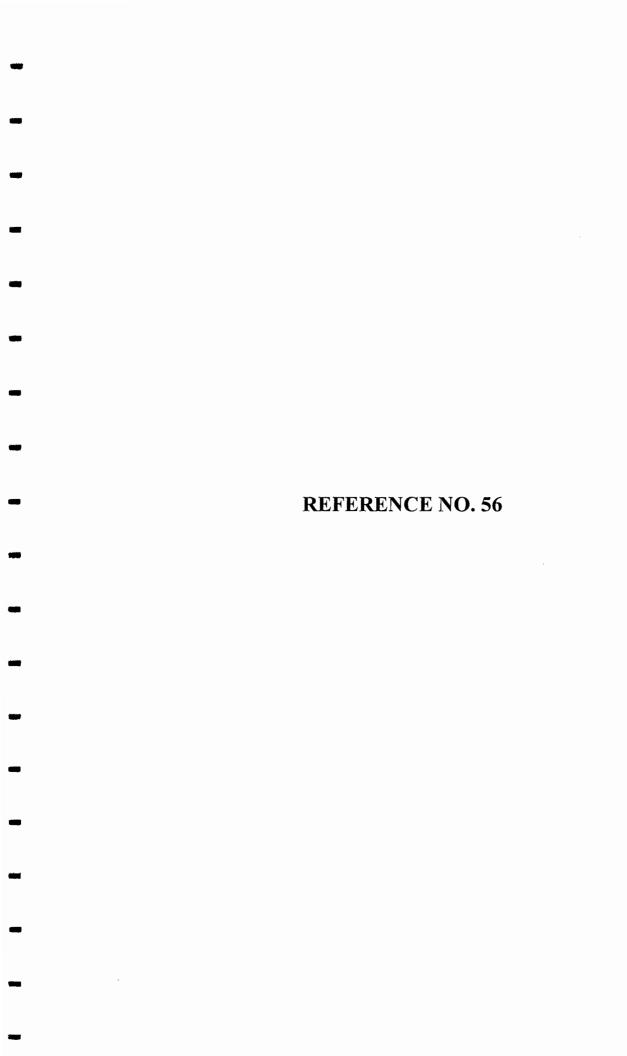
CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE

	FIELD NO.	DO 2-21	LAB NO. 2-8	4-160 c	DATE COMPLETED	3/1/8/2
•	NAME OR FI	RM	Spectrum Ti	inistray Cax	₹.	:
	ADDRESS O	R LOCATION		56. W.B.	<u> </u>	<u> </u>
	POINT OF C	OLLECTION	tank, st	auless 34	need touck lea	iking
•	REMARKS/IN	NSTRUCTIONS	3 liquid conto	surface of	ger !	
	TEST	RESULTS	TEST	RESULTS	TEST	RESULTS
	pH(LAB)		TOTAL SOLIDS	Mg/I	COPPER3500	3.5×102-Mg/1
	CHLORIDE	Mg/!	SUSPENDED SOLIDS		IRON	
•	CYANIDE	· ·	DISSOLVED SOLIDS		MANGANESE	py 3
	MBAS				CHROMIUM-TOT	2.8×10'
	COD				× NICKEL 24,0	2.4×10
	тос				× ZINC 2500	2.5×102
•		7			LEAD	1.6
		4.			× CADMIUM	4 × 103
	NITRATE-N			•	SILVER	
	NITRITE	·			CHROMIUM-+6	prediptation
	AMMONIA-N	<u> </u>	Lab	ph 11.5		pH-alinstand
	TKN	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	pH (FIELD) (Ph212)	\	+124
	<u>.</u>	the"	TEMP. (FIELD)			
	M E	THOD OF PRE	SERVATION [HNO ₃ TO pH <	<2 □ COOL 4°	С
	_	: : ::	CUSTODY OF	SAMPLE		
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	DURING SHIPME	ENT.	NAME	AFFILIATION		
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7	. POSSESSIOI					TO DATE - TIME
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	5. POSSESSION	/ BY			DATE - TIME	TIME
	6. POSSESSION	N BY			DATE - TIME	

HEALTH SERVICES LABORATORY

CHEMICAL EXAMINATION OF WATER, SEWAGE, INDUSTRIAL WASTE

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-		TEST	RESULTS		TEST	RESULTS		TEST	RESULTS
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_		NITRATE-N	* 5 12		· · · · · · · · · · · · · · · · · · ·	* ***		SILVER	
		NITRITE	1 3 5 5					CHROMIUM-+6	Talking men
		A M M O N I A ~ N			Lab	ph llis			William March Marc
		TKN	· 图1/2/19 1/2019		pH (FIELD)	ph212/	7	网络温泉	海路多岭岭 500
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SUFFU COUNTY DEPARTMENT OF HEALTH SERVICE INDUSTRIAL WASTE AND HAZARDOUS MATERIALS CONTROL 15 HORSEBLOCK PLACE, FARMINGVILLE, N.Y. 11738 (516) 451-4633

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ESS 50 DACE ST. VILLAGE W. BABYLON TOWN		ZIP 1170	54
LING			
PERIODIC RE. WASTE WASTE	H&H SYST		PUBLIC
TRY PLATING			
OR ES PERMIT? YES NO PERMIT NO. 360 PERMIT? YES	NO PE	RMIT NO.	
NGER	TEL.		
7ENGER PICK UP RECORDS RECORDS CONSISTENT WITH EXPECTED WASTE GENERATE	ION YES	s no	
NG SYSTEM-MFG NAME	FUE	L TYPE F	IRING RATE
٧. F		RNED	RATE
NUMBER STORED TYPE OF A STORAGE YES NO INDOORS OUTDOORS MATERIAL STORED WASTE	RAW		
NUMBER OF TANKS TYPE OF GE TANKS YES NO ABOVEGROUND UNDERGROUND MATERIAL STORED WASTE	RAW		
ANY ART.	KII _) NO	
RTICLE XII VIOLATIONS			
(1) BUILDING LEAKS TOXICS ONTO GROUN	2		
(2) PUDDLE OF AMBER UQUID (pH 211) ON	400	md (pa	externy lot
Grom leaks + CLFANID-UP during	2 250	ection)	0 /
3 PLATING ALGOR - NOT ART X	i À	PROVE	0
YET - PLAWS HAVE BEEN SUBMITTE	=0 +	50m5	
CONSTRUCTION STARTED			
(4) CENTRAL DRAIN SUND NOA +		arosn	<i>/<u>S</u>)</i>
PIDING NOT NOT APROV		->-	
(5) OILY WATER + STAPES IN OROUND (00+45	de)	
(6) GOLTEGION DOWN IN ACCESSIBLE FOR	AMACIO	UC-C	40,195, 05
OLS, STORMORAINS, AND OTHER DISCHARGE POINTS AT THE FACILITY.			
TECTION SCHEDULED ON OR AFTER	ONS BY REINS	PECTION DAT	E MAY
F PERSON TITLE INSPECTOR	Las A	aud.	al
9/82	11 - 11 98	5/8	TJK



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SUFI COUNTY DEPARTMENT OF HEALTH SERVI INDUSTRIAL WASTE AND HAZARDOUS MATERIALS CONTROL 15 HORSEBLOCK PLACE, FARMINGVILLE, N.Y. 11738 (516) 451-4633

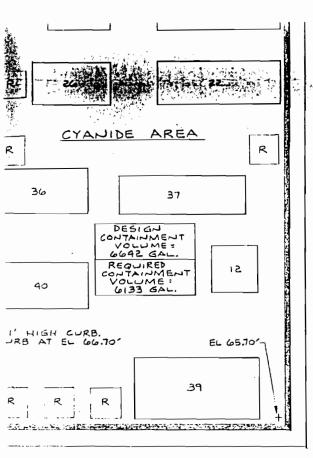


5/81

TJK

	(5/0) 45/	1000			
NAME OF Spectrum		OWNER/ OFFICER		PAGE I OF	=
OMPANY AME		CONTACT		TEL.	
PLANT ADDRESS	VILLAGE	TOWN		ZIP	
AILING DDRESS	-			_	
0-0-86	RIG. PERIODIC RE. WA	NO STE WAS		SEWAGE SYSTEM	PUBLIC PRIVATE
DUSTRY	DES OR DES PERMIT? YES NO PERMIT NO. 360 PERMIT? YES NO PERMIT NO TEL. AVENGER PROVED YES NO AVAILABLE YES NO EXPECTED WASTE GENERATION YES NO				
SPDES OR "DES PERMIT? YES NO PER	RMIT NO.	360 PERMIT?	YES NO	PERMIT NO	
SCAVENGER			Ţ	EL.	_
				YES NO	
EATING SYSTEM-MFG. NAME					FIRING RATE
	.				
**					
CIN.				WASTE BURNED	RATE
NUMBER		YPE OF			
TRUM STORAGE YES NO INDOOR NUMBER	R OF TANKS	TYPE OF	WASTE R	<u> </u>	
STORAGE TANKS YES NO ABOVED OPEN	GROUND UNDERGROUND	MATERIAL STORED	WASTE R	AW	
ROCESS TANKS YES NO NUM	BER OF OPEN PROCESS TANKS		VIOLATIONS	YES NO	
VIOLATIONS	(cop't)				
(7) metal	Stedge in	Dungster	7 -/4ega	2 DISP	OSAC.
(8) metal	studge in 1	Deun o	Adoars_		
(9) UWKNOW		0F 01	x m-	47 FRCA	<u> </u>
+ C19UIV	5 570PRD	OUTTOOK	5	SHOULD	BR
mo van	MODORS		- /- /-		
(19) solid cover	markle on no	Ahside -	dry-but appel	metal slu us +0 be	lge it.
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PCDASK CALL	- WHEN FO	DUND F	200	rR	
INSPORTION	1 TO 150	Con/c	RIVED		
ERMISSION IS GRANTED BY THIS FACILIT			SERVICES TO CON	DUCT ROUTINE S	SAMPLING OF
REINSPECTION SCHEDULED ON OR AFTER			RY CONDITIONS BY F	REINSPECTION D	ATE MAY
ESULT IN A HEARING AND/OR FINE.			9,	1	
SIGN. OF PERSON REC. REPORT	TITLE		INSPECTOR	1	

REFERENCE NO. 57



48 275 Themplie Acid Paint Strip
49 325 Alodine
50 325 Alodine
51 200 Shriatia Acid
52 150 Original Bright Cleanor

EXTERIOR —

LEGEND:

PROPOSED CURB, CANT OR RAMP.

PROPOSED FLOOR SLAB COATING (SEE NOTE 3)

R: RECTIFIERS (NOT TO SCALE)

NOTES:

- 1. PLATING SHOP AND PLATING TANKS ARE DRAWN TO SCALE. PLATING TANK LOCATIONS AND DOOR OPENINGS ARE APPROXIMATE.
- 2. DESIGN CONTAINMENT VOLUMES ARE CONSERVATIVE. VOLUME CALCULATIONS BASED ON LEVEL FLOOR AT EL 65.70'
- 3. ALL SURFACES OF CONCRETE FLOOR SLAB, CURBS, CANTS, RAMPS (WALLS IN PLTG. SHOP BELOW EL. 66.70' TO BE COATED WITH AN IMPERVIOUS CORROSION RESISTANT EPOXY COATING.
- 4. ALL FINAL CONSTRUCTION SHALL BE IN STRICT COMPLIANCE WITH OSHA, NFPA, NEC, SULFOLK COUNTY SANITARY CODE, FACTORY MUTUAL CONSTRUCTION GUIDELINES, LOCAL ZONING AND FIRE CODES, NEW YORK STATE BUILDING CODE AND ALL OTHER APPLICABLE CODES.

SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES HAZARDOUS MATERIALS N. NAGEMENT SECTION

APPROVAL TO CONSTRUCT SCOUR HOS HO. HAS Y-8

These plans and specifications have been reviewed any round to be in compliance with Suffolk County Sanitary Gode requirements based upon information aubmitted by the applicant. This approval to construct expires and the data of approval.

NI

1/17/85 DATE

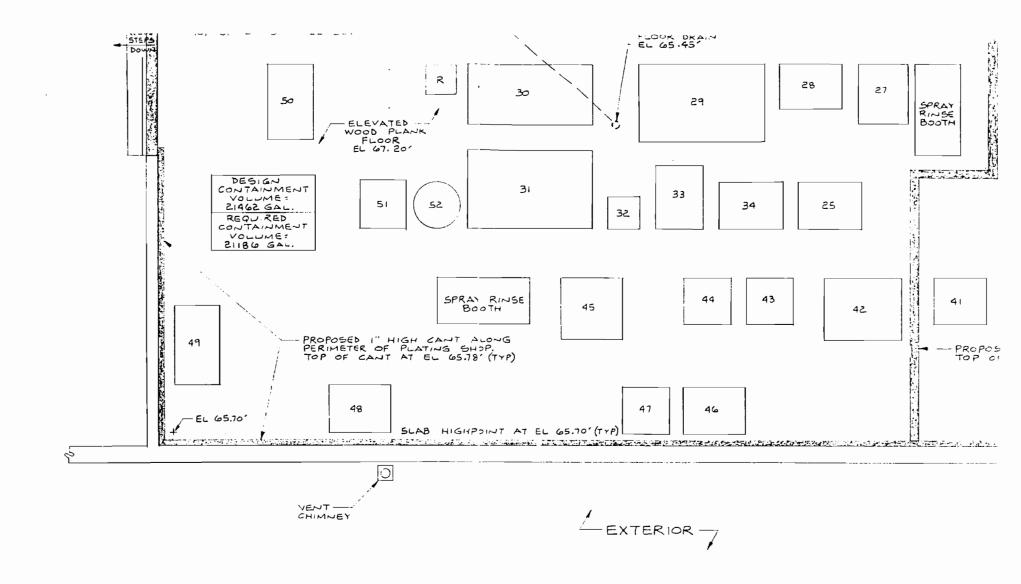
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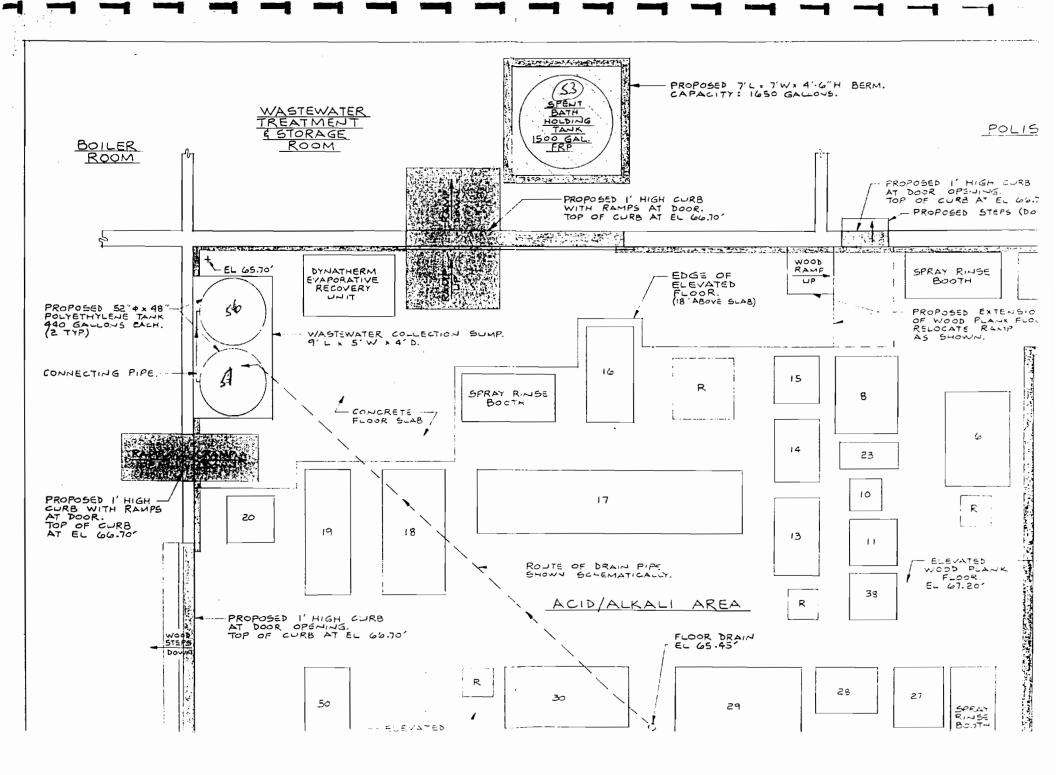
	CHANGED OVERFLOW" FIPE TO	MC	7/13/84
10	REVISION TITLE	BY	DATE
TiTL	FOR S.C.S.C. ARTIC	IK I	TUOYA
	SPECTRUM FINISH	Ne	CORP.
. BY ;	DONNELLY		
	ST JAMES COMPA		YORK
DATE	OCT 7,1983 SCALE 1/4".110"	SH	1. or 1
DR. BY	1:M. GAPOTOSTO DWG. SF	C - 0	24 . ATY.

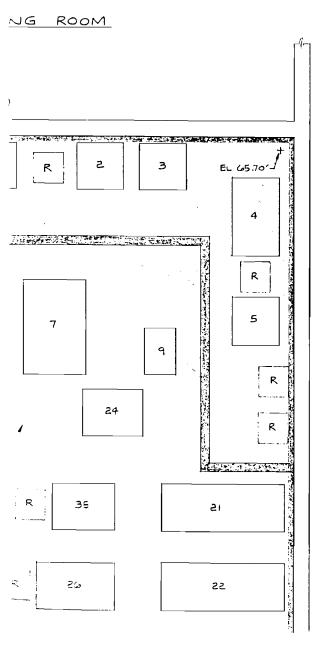
The original of this desiming is the cartistive property of the constitute property Company. The exceptions of this wild constitutes an agreement that if should be treated as a strictly confidental operands to be used for no purpose other than in aid in the assembly or convition of units furnished by the Donnelly Engineering Company or as otherwise expressly such original to the becomes formed to the strictly of the Connelly Engineering Company and that it is not to be communicated, or disclosed as expressly authorized in priting by the Donnelly Engineering Company.

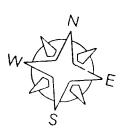


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	IANK S	SCHEDULE	
Tark	Tank Volume	· ·	
No.	(Gallons)	Description	
1	275	Chrome Rinse (Static)	
2	175	Copper Cyanide	
3	200	Decorative Chrone	
4	675	Dow 17	
5	275	Dow 17 Pickle	
6	725	Bright Nickel	
7	725	Copper	
8	475	Not Alkaline Scap Cleaner	
9	175	Zircate	
10	65	Mariatic Acid	
11	260	Nitric Acid	
3.2	200	Copper Strike	
13	350	Ammonium Fluoride	
14	375	Pow 7	
15	275	Dow 9	
16	550	Caustic Etch	
: 7	2050	Sulfuric Acid Anodize	
ìà	975	Dichromate Seal	
19	725	Deoxidizer	
20	275	Black Dye	
21	550	High Density Cadmium	
22	550	Bright Cadmum	
د 2	175	Nickel Strike	
24	275	Decorative Brass	
25	375	Sulfamate Nickel	
21	350	Tin Electroplate	
27	2700	Reverse Sulfuric	
20	275	Hot Soap Cleaner	
29	900	Hot Water Seal for Arcdize	
30	1400	Chromic Anodize	
31	900	Hot Water	
3%	85	Nitric Acid	
33	270	Not In Use - Empty Tank	
24	275	Iridite	i
35	350	Cyanide Rinse (Static)	i
36	550	Copper	
37	450	Cyanide Rinse (Static)	
36	200	Titanium-Cadmium Pickle	
39	725	Titanium—Cadmium	i
40	400	Alkaline Electro Cleaner	
41	275	Copper Nickel Strip	!
42	270	Not In Use - Empty Tank	
43 44	200	Cadmium Strip	
-	275	Manganese Phosphate	
45 46	475	Electroless Nickel	5
45	275 .	Black Oxide	i
43	275	Black Oxide Rirse	
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	325	Alcdine	
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REFERENCE NO. 58

STATE OF NEW YORK: DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of Alleged Violations of Article 27, Title 9 of the Environmental Conservation Law and Parts 360 and 373 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York by

ORDER ON CONSENT Index # WP-114-84

SPECTRUM FINISHING CORP.

WHEREAS:

- 1. The New York State Department of Environmental
 Conservation (the "Department") is responsible for the regulation
 and management of the generation and disposal of hazardous wastes
 in New York State pursuant to Article 27 Title 9 of Environmental
 Conservation Law (the "ECL").
- 2. Pursuant to such statutory authority, the Department promulgated Parts 360 and 373 of 6 NYCRR governing the generation and disposal of industrial and hazardous wastes.
- 3. The Respondent, Spectrum Finishing Corp. located at 50 Dale Street, West Babylon, County of Suffolk, State of New York is a corporation created under the laws of the State of New York and is a generator of hazardous waste as defined by 6 NYCRR Part 360 and 373.

- 4. Over the course of years, Respondent negligently disposed of industrial and hazardous wastes at the site.
- 5. Respondent having hereby admitted the violation set forth in this Order and having affirmatively waived its right to a hearing herein as provided by law, and having consented to the issuing and entering of this Order pursuant to the provisions of Article 27 and 71 of the ECL Parts 360 and 373 of 6 NYCRR, agrees to be bound by the provisions, terms and conditions contained herein.

N O W, having considered this matter and being duly advised, IT IS ORDERED THAT:

- I. Respondent will pay to the Department a civil penalty in the sum of ten thousand dollars (\$10,000) in settlement of any claims the Department might have against Respondent for any acts or omissions of the Respondent with reference to the negligent disposal of industrial and hazardous wastes at the site except for any actions claims, rights, or interests the Department may have with respect to any field investigations and/or remediation of the site pursuant to the ECL Article 27 Titles 9 and 13, C.E.R.C.L.A. and R.C.R.A.
- II. Responent shall pay the civil penalty in two parts: five thousand (\$5,000) dollars upon the execution of this Order and

five thousand (\$5,000) dollars three (3) months from the date of execution of this Order by the Commissioner.

DATED: Doclube (C), 1985

HENRY G. WILLIAMS

Commissioner, NYS Department of Environmental Conservation

Kung A. Willeaun

CONSENT BY RESPONDENT

Respondent hereby consents to the issuing and entering of the foregoing Order, waives its right to a hearing as provided by law, and agrees to be bound by the provisions, terms, and conditions contained herein.

tle: Vice Vice

Date: 1//2/85

REFERENCE NO. 59

SUFF K C JNTY DEPT. OF HEALTH SER, JES UNIFORM COMPLAINT FIELD REPORT
Air Pollution
Complaint Against Spectium Finishms
Address 50 Cahof St (F.V.H.) Babylon Phone
Nature of Request <u>Caller indicated</u> that a drum of what he believed to be in Trichloroethance was punctured by a forklift and the resulting spill was directed to a nearby storm diain/fluer diain. Accident accused indoors RCV'D by <u>G. Todzia</u> Assigned to <u>B. Serparth</u> Date <u>4-13-88</u>
Information Obtained from Interviewed Individuals:
D STO PARKLIKT DE PRINCIPIE DEUM CV- III-TRICHLORATUM THAT HAS PURCHASTOS FROM FAIRCHILD. FLIPPED DEUM OURCE SO IT LINUX NOT CAME PROGRAMICO COST ABOUT 10 CALCONS ONTO INDOOR LOADING ARLAS SOME WANT THROUGH AIRCES INTO OFFICE ARLAS NO INDOOR FLOOR DAWS IN THE MIRA, STATED NO CICUDD WANT TO STORM DEAM. CLEANED IT UP AS SOON AS IT OCCURAD WITH SPRENY DE

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Name of Responsible Individuals	Address	Tel. No.
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spector's Recommendation to Persons Concerned	d NO FLOOR DRAINS MARIAN TO	SHAVE BLEN EHR
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formation Related by Inspector to Complainant _	CR STORM BRAINS	THUR BLAN RAIL
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