



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 668

Part II of II

STL - Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 10-AUG-2000 10:21
 End Cal Date : 10-AUG-2000 12:57
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 4.04
 Integrator : Falcon
 Method file : \\QPITPA02\D\chem\gc8.i\5100.b\PCBA.m
 Cal Date : 17-Aug-2000 13:30 eppingerd
 Curve Type : Average

Compound	0.00500	0.01000	0.02500	0.05000	0.10000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
33 Aroclor-1254(1)	+++++	+++++	193208	+++++	+++++	193208	0.000
(2)	+++++	+++++	234932	+++++	+++++	234932	0.000
(3)	+++++	+++++	177784	+++++	+++++	177784	0.000
(4)	+++++	+++++	357818	+++++	+++++	357818	0.000
(5)	+++++	+++++	238824	+++++	+++++	238824	0.000
36 Aroclor-1260(1)	281990	314425	284108	280398	272989	286782	5.583
(2)	295150	328065	298582	295300	284832	300386	5.431
(3)	289260	325790	296058	305978	296678	302753	4.685
(4)	431520	501125	464528	478360	474904	470087	5.396
(5)	217370	250605	232960	230775	232818	232906	5.076
\$ 1 Tetrachloro-m-xylene	8199600	8623500	7414600	7635640	7562500	7887168	6.439
\$ 34 Decachlorobiphenyl	3208400	3031600	2737120	2741960	2595910	2862998	8.724

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7E HP68908m
DB608Data File: \\qpitpa02\d\chem\gc8.i\5100.b\H-A50392.D
Report Date: 21-Aug-2000 11:58

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i Injection Date: 21-AUG-2000 11:01
 Lab File ID: H-A50392.D Init. Cal. Date(s): 10-AUG-2000 10-AUG-2000
 Analysis Type: Init. Cal. Times: 10:21 12:57
 Lab Sample ID: M1660 Quant Type: ESTD
 Method: \\qpitpa02\d\chem\gc8.i\5100.b\PCBA.m

COMPOUND	RRF	RFO	MIN	MAX
RRF	%D	%D		
20 Aroclor-1016(1)	117799	115542	0.010	-1.9 15.0
(2)	230571	219338	0.010	-4.9 15.0
(3)	382551	346322	0.010	-9.5 15.0
(4)	167604	160150	0.010	-4.4 15.0
(5)	234201	227102	0.010	-3.0 15.0
\$ 1 Tetrachloro-m-xylene	7887168	8050240	0.000	2 1 15.0
\$ 34 Decachlorobiphenyl	2862998	2532520	0.010	-11.5 15.0
36 Aroclor-1260(1)	286782	283664	0.010	-1 1 15.0
(2)	300386	298856	0.010	-0 5 15.0
(3)	302753	300184	0.010	-0.8 15.0
(4)	470087	462148	0.010	-1.7 15.0
(5)	232906	226168	0.010	-2 9 15.0

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i Injection Date: 21-AUG-2000 17:50
Lab File ID: H-A50413.D Init. Cal. Date(s): 10-AUG-2000 22-AUG-2000
Analysis Type: Init. Cal. Times: 10:21 03:35
Lab Sample ID: M1660 Quant Type: ESTD
Method: \\qpitpa02\d\chem\gc8.i\5100.b\PCBA.m

COMPOUND	RRF	RFO	MIN	MAX
20 Aroclor-1016(1)	117799	118396	0.010	0.5
(2)	230571	223716	0.010	-3.0
(3)	382551	362520	0.010	-5.2
(4)	167604	167880	0.010	0.2
(5)	234201	237040	0.010	1.2
\$ 1 Tetrachloro-m-xylene	7887168	7654440	0.000	-3.0
\$ 34 Decachlorobiphenyl	2862998	2677640	0.010	-6.5
36 Aroclor-1260(1)	286782	296640	0.010	3.4
(2)	300386	311908	0.010	3.8
(3)	302753	314604	0.010	3.9
(4)	470087	487004	0.010	3.6
(5)	232906	237572	0.010	2.0

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8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: _____ Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: C0H150146

GC Column: DB608 ID: 0.53 (mm) Init. Calib. Date(s): 08/10/00 08/22/00

Instrument ID: GC8

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION					
TCX: 1.73			DCB: 10.81		
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	M2154	08/10/00	1021	1.73	10.81
02	M1232	08/10/00	1041		
03	M1242	08/10/00	1100		
04	M1248	08/10/00	1120		
05	L1660	08/10/00	1139	1.73	10.81
06	ML1660	08/10/00	1159	1.73	10.81
07	M1660	08/10/00	1218	1.73	10.81
08	MH1660	08/10/00	1238	1.73	10.81
09	H1660	08/10/00	1257	1.73	10.81
10	2ND2154	08/10/00	1317	1.73	
11	2ND1232	08/10/00	1336		
12	2ND1242	08/10/00	1355		
13	2ND1248	08/10/00	1415		
14	2ND1660	08/10/00	1434	1.69	
15	M2154	08/21/00	0943	1.73	10.81
16	M1232	08/21/00	1002		
17	M1242	08/21/00	1022		
18	M1248	08/21/00	1041		
19	M1660	08/21/00	1101	1.73	10.81
20	DF/S1/0227/I DHV7M104	08/21/00	1120	1.72	10.81
21	PBLK DJ0KD101	08/21/00	1140	1.73	10.81
22	LCS DJ0KD102	08/21/00	1159	1.73	10.81
23	LCSD DJ0KD103	08/21/00	1219	1.73	10.81
24	M1660	08/21/00	1750	1.73	10.82
25					
26					
27					
28					
29					
30					
31					
32					

QC LIMITS

TCX = Tetrachloro-m-xylene (+/- 0.05 MINUTES)

DCB = Decachlorobiphenyl (+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Data File: \\QPITPA02\D\chem\gc8.i\5100.b\H-A50159.D
Report Date: 17-Aug-2000 13:24

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Data file : \\QPITPA02\D\chem\gc8.i\5100.b\H-A50159.D

Lab Smp Id: M2154

Inj Date : 10-AUG-2000 10:21

Operator : 010139

Inst ID: gc8.i

Smp Info : M2154,5100.b

Misc Info : 190-98-13

Comment :

Method : \\QPITPA02\D\chem\gc8.i\5100.b\PCBA.m

Meth Date : 17-Aug-2000 13:24 eppingerd Quant Type: ESTD

Cal Date : 10-AUG-2000 10:21 Cal File: H-A50159.D

Als bottle: 3 Calibration Sample, Level: 3

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 2-2154.sub

Target Version: 4.04

Sample Matrix: None

Processing Host: PITPC086

AMOUNTS

RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO
			RESPONSE (ng)	(ng)		
8						
Aroclor-1221					CAS #: 11104-28-2	
2.047	2.047	(0.000)	38446 0.50000	0.50000	0.00- 0.00	0.00
2.186	2.186	(0.000)	23847 0.50000	0.50000	116.57- 156.57	0.00
2.251	2.251	(0.000)	74516 0.50000	0.50000	66.04- 106.04	0.00
Average of Peak Amounts =				0.5		

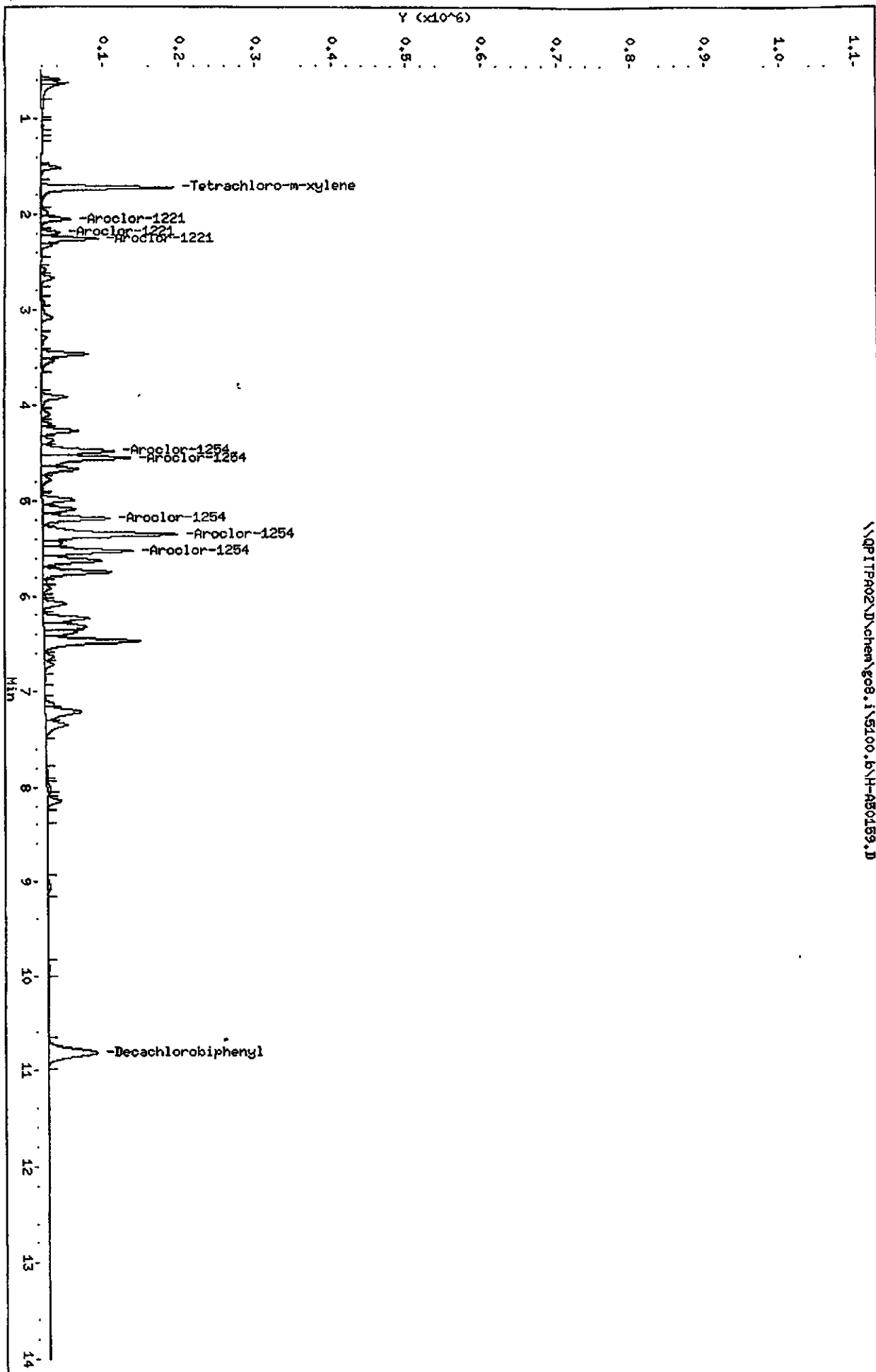
1						
Tetrachloro-m-xylene					CAS #: 877-09-8	
1.727	1.728	(-0.001)	174731 0.02500	0.025000		

34						
Decachlorobiphenyl					CAS #: 2051-24-3	
10.812	10.808	(0.004)	64179 0.02500	0.025000		

33						
Aroclor-1254					CAS #: 11097-69-1	
4.475	4.475	(0.000)	96604 0.50000	0.50000	0.00- 0.00	0.00
4.547	4.547	(0.000)	117466 0.50000	0.50000	92.23- 132.23	0.00
5.187	5.187	(0.000)	88892 0.50000	0.50000	77.40- 117.40	0.00
5.357	5.357	(0.000)	178909 0.50000	0.50000	51.09- 91.09	0.00
5.529	5.529	(0.000)	119412 0.50000	0.50000	65.01- 105.01	0.00
Average of Peak Amounts =				0.5		

Data File: \\QPITPA02\chem\g08.1\5100.b\H-AB01B9.D
Date: 10-AUG-2000 10:21
Client ID:
Sample Info: M2154, 5100.b
Column phase: DB608

Instrument: 606.1
Operator: 010139
Column diameter: 0.53



Data File: \\QPITPA02\D\chem\gc8.i\5100.b\H-A50160.D
 Report Date: 17-Aug-2000 13:25

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc8.i\5100.b\H-A50160.D
 Lab Smp Id: M1232
 Inj Date : 10-AUG-2000 10:41
 Operator : 010139
 Smp Info : M1232,5100.b
 Misc Info : 190-98-14
 Comment :
 Method : \\QPITPA02\D\chem\gc8.i\5100.b\PCBA.m
 Meth Date : 17-Aug-2000 13:25 eppingerd Quant Type: ESTD
 Cal Date : 10-AUG-2000 10:41 Cal File: H-A50160.D
 Als bottle: 4 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 3-1232.sub
 Target Version: 4.04 Sample Matrix: None
 Processing Host: PITPC086

		AMOUNTS							
RT	EXP RT	DLT RT	RESPONSE (	CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO		
14	Aroclor-1232					CAS # 11141-16-5			
2.673	2.673	(0.000)	47981	0.50000	0.50000	0.00- 0.00	0.00		
3.087	3.087	(0.000)	72106	0.50000	0.50000	146.26- 186.26	0.00		
3.463	3.463	(0.000)	47452	0.50000	0.50000	65.99- 105.99	0.00		
3.911	3.911	(0.000)	34487	0.50000	0.50000	74.18- 114.18	0.00		
Average of Peak Amounts =				0.5					

Data File: \\QPI\PA02\chem\608.1\5100.b\H-A50160.D

Date: 10-AUG-2000 10:41

Client ID:

Sample Info: H1232, 5100.b

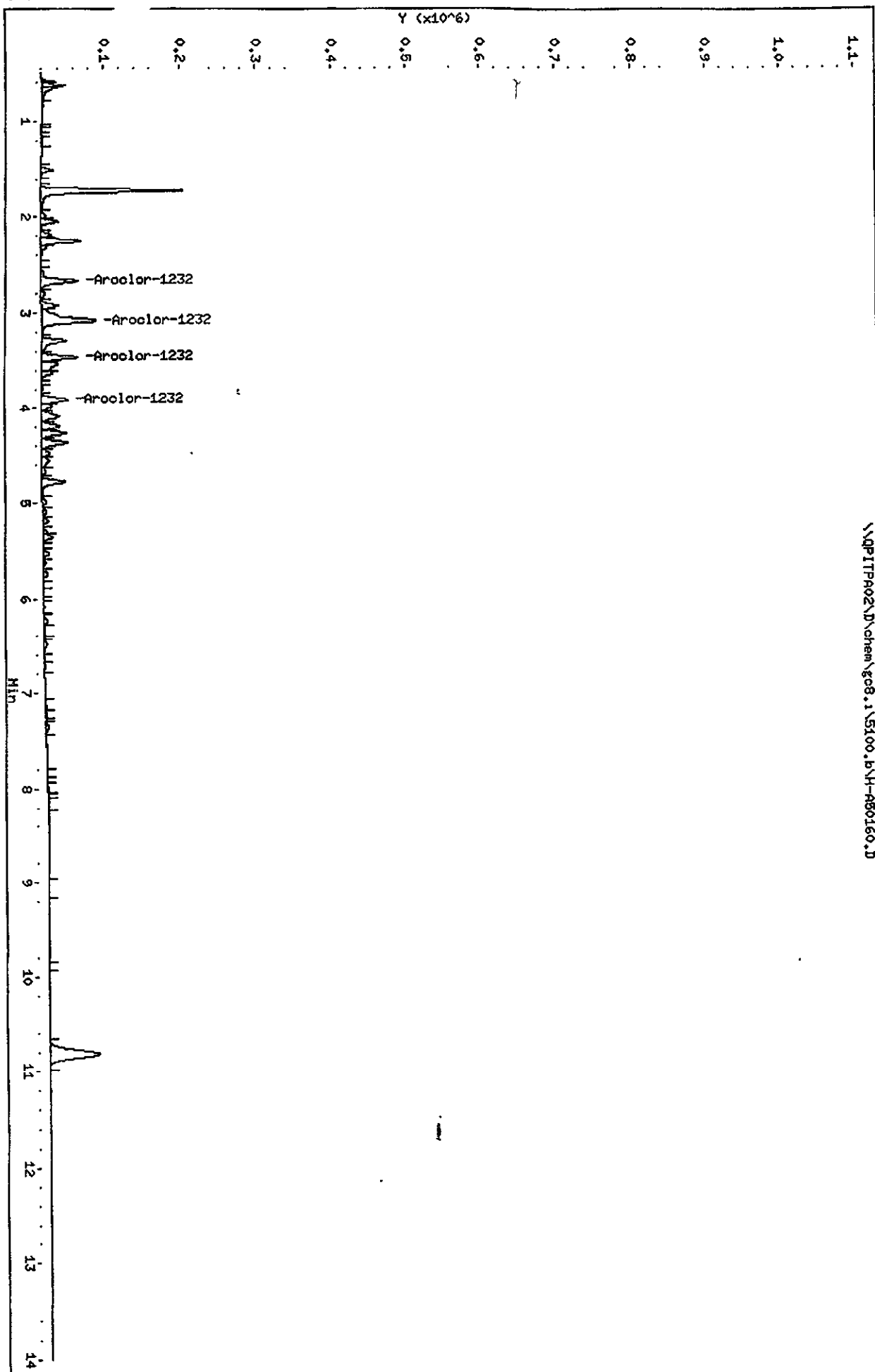
Column phase: DB608

Instrument: 608.1

Operator: 010139

Column diameter: 0.53

\\QPI\PA02\chem\608.1\5100.b\H-A50160.D



Data File: \\QPITPA02\D\chem\gc8.i\5100.b\H-A50161.D
 Report Date: 17-Aug-2000 13:26

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc8.i\5100.b\H-A50161.D

Lab Smp Id: M1242

Inj Date : 10-AUG-2000 11:00

Operator : 010139

Inst ID: gc8.i

Smp Info : M1242,5100.b

Misc Info : 190-99-1

Comment :

Method : \\QPITPA02\D\chem\gc8.i\5100.b\PCBA.m

Meth Date : 17-Aug-2000 13:26 eppingerd Quant Type: ESTD

Cal Date : 10-AUG-2000 11:00

Cal File: H-A50161.D

Als bottle: 5

Calibration Sample, Level: 3

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 4-1242.sub

Target Version: 4.04

Sample Matrix: None

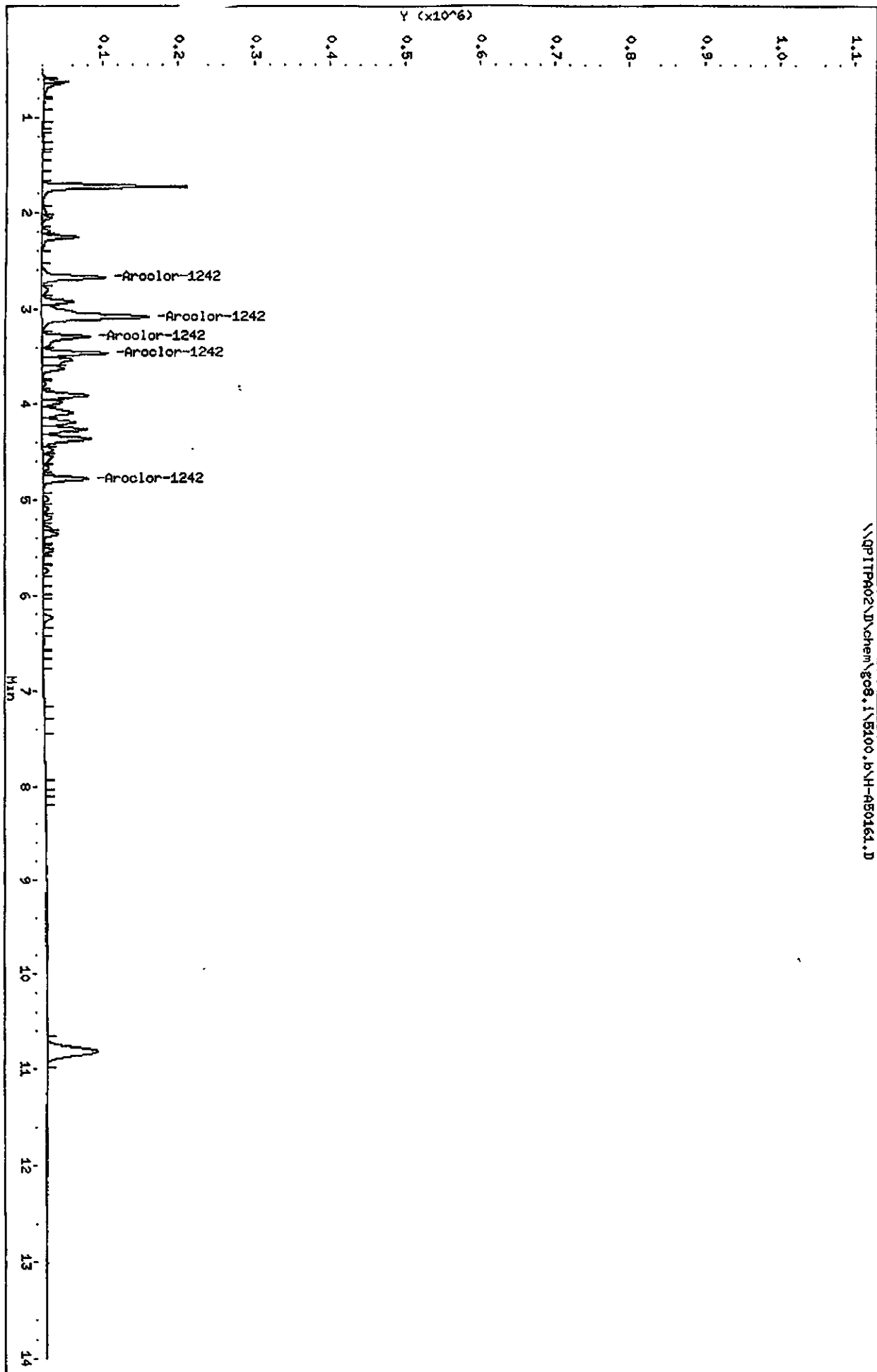
Processing Host: PITPC086

AMOUNTS

RT	EXP RT	DLT RT	RESPONSE (ng)	CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
15	Aroclor-1242					CAS # 53469-21-9	
2.674	2.674	(0.000)	85402	0.50000	0.50000	0.00- 0.00	0.00
3.084	3.084	(0.000)	142261	0.50000	0.50000	310.13- 350.13	0.00
3.292	3.292	(0.000)	64037	0.50000	0.50000	749.70- 789.70	0.00
3.464	3.464	(0.000)	87960	0.50000	0.50000	512.48- 552.48	0.00
4.783	4.783	(0.000)	59879	0.50000	0.50000	314.30- 354.30	0.00
Average of Peak Amounts =				0.5			

Data File: \\QPITPA02\chem\gc8.1\5100.b\H-A50161.D
Date: 10-AUG-2000 11:00
Client ID:
Sample Info: H1242, 5100.b
Column phase: DB608

Instrument: gc8.1
Operator: 010139
Column diameter: 0.53



Data File: \\QPITPA02\D\chem\gc8.i\5100.b\H-A50162.D
Report Date: 17-Aug-2000 13:27

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc8.i\5100.b\H-A50162.D
Lab Smp Id: M1248
Inj Date : 10-AUG-2000 11:20
Operator : 010139
Smp Info : M1248,5100.b
Misc Info : 190-99-2
Comment :
Method : \\QPITPA02\D\chem\gc8.i\5100.b\PCBA.m
Meth Date : 17-Aug-2000 13:26 eppingerd Quant Type: ESTD
Cal Date : 10-AUG-2000 11:20 Cal File: H-A50162.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 5-1248.sub
Target Version: 4.04 Sample Matrix: None
Processing Host: PITPC086

AMOUNTS						
RT	EXP RT	DLT RT	CAL-AMT	ON-COL	TARGET RANGE	RATIO
			RESPONSE (ng)	(ng)		
==	=====	=====	=====	=====	=====	=====
21 Aroclor-1248			CAS #: 12672-29-6			
3.464	3.464	(0.000)	95741 0.50000	0 50000	0.00- 0.00	0.00
3.913	3.913	(0.000)	89907 0.50000	0.50000	114 57- 154.57	0 00
4.261	4 261	(0.000)	108427 0.50000	0 50000	63.67- 103.67	0.00
4.362	4.362	(0.000)	101370 0.50000	0.50000	43.86- 83 86	0 00
4.782	4.782	(0.000)	108174 0.50000	0.50000	128 08- 168.08	0.00
Average of Peak Amounts =			0.5			

Data File: \AQIPPA02\chem\gc8.1\5100.b\H-A50162.D

Date: 10-AUG-2000 11:20

Client ID:

Sample Info: H1248, 5100.b

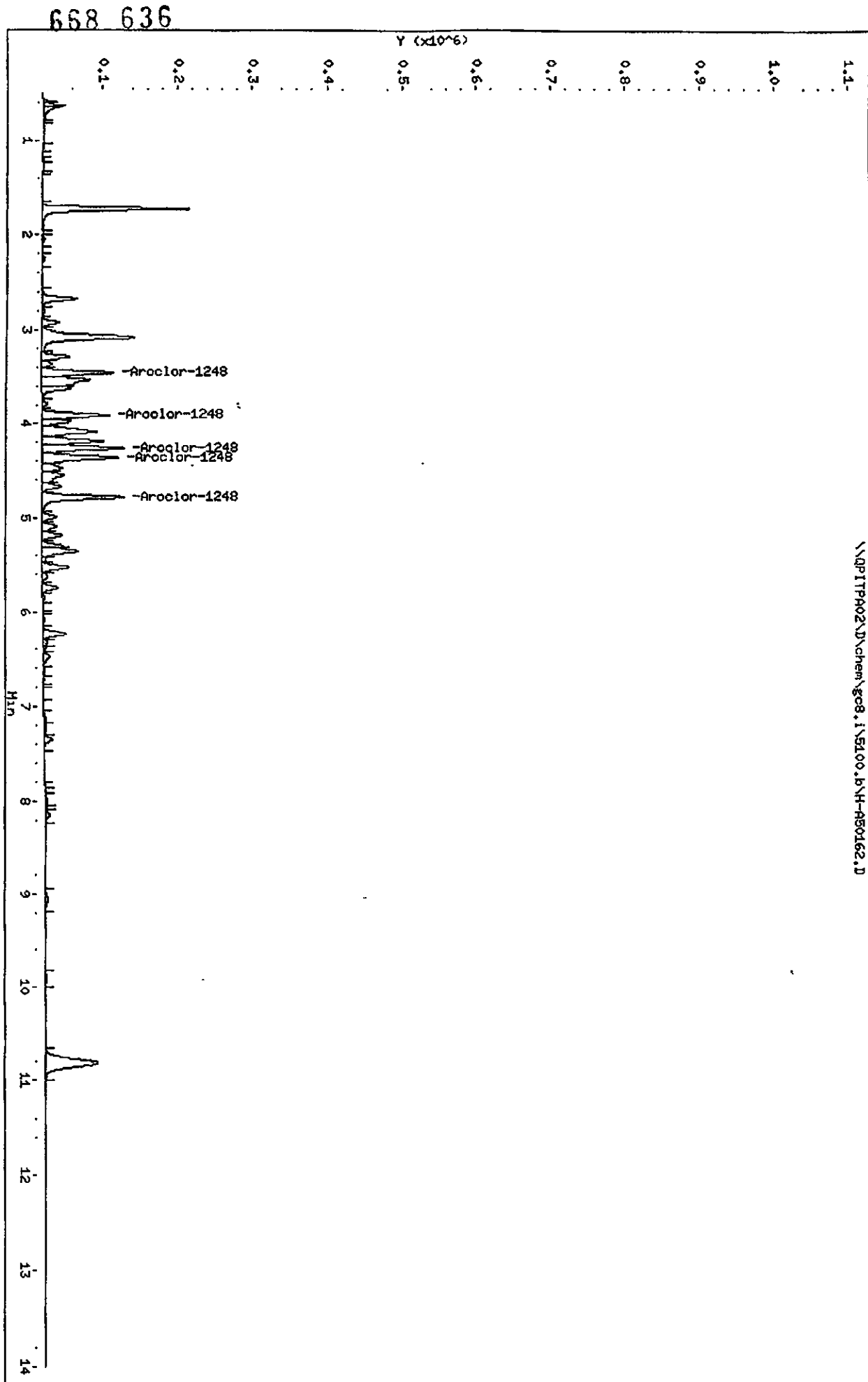
Column phase: DB608

Instrument: gc8.1

Operator: 010139

Column diameter: 0.53

\\AQIPPA02\chem\gc8.1\5100.b\H-A50162.D



STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc8.i\5100.b\H-A50163.D

Lab Smp Id: L1660

Inj Date : 10-AUG-2000 11:39

Operator : 010139

Inst ID: gc8.i

Smp Info : L1660,5100.b

Misc Info : 190-99-3

Comment :

Method : \\QPITPA02\D\chem\gc8.i\5100.b\PCBA.m

Meth Date : 17-Aug-2000 13:27 eppingerd Quant Type: ESTD

Cal Date : 10-AUG-2000 11:39 Cal File: H-A50163.D

Als bottle: 7 Calibration Sample, Level: 1

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 1-1660.sub

Target Version: 4.04

Sample Matrix: None

Processing Host: PITPC086

AMOUNTS						
			CAL-AMT	ON-COL		
RT	EXP RT	DLT RT	RESPONSE (ng)	(ng)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====
20 Aroclor-1016				CAS # 12674-11-2		
2.251	2.252	(-0.001)	11410 0 10000	0 10000	0.00- 0 00	0.00
2.674	2.673	(0.001)	23180 0.10000	0 10000	80.00- 120.00	0.00
3.081	3.085	(-0.004)	37285 0.10000	0.10000	416.04- 456.04	0.00
3.291	3.293	(-0.002)	16586 0 10000	0.10000	203.51- 243.51	0.00
3.462	3.463	(-0.001)	22972 0 10000	0 10000	297.56- 337.56	0.00
Average of Peak Amounts =				0.1		

\$ 1 Tetrachloro-m-xylene				CAS #. 877-09-8		
1.728	1.728	(0.000)	40998 0.00500	0.0053984		

\$ 34 Decachlorobiphenyl				CAS #: 2051-24-3		
10.807	10.808	(-0.001)	16042 0.00500	0.0055551		

36 Aroclor-1260				CAS #: 11096-82-5		
5.630	5.630	(0.000)	28199 0.10000	0.10000	0.00- 0.00	0.00(M)
5.751	5.753	(-0.002)	29515 0 10000	0.10000	95.86- 135.86	0.00
6.473	6.476	(-0.003)	28926 0 10000	0.10000	116.91- 156.91	0.00
7.350	7.348	(0.002)	43152 0 10000	0.10000	120.00- 160.00	0.00
8.150	8.150	(0.000)	21737 0.10000	0.10000	108.33- 148.33	0.00
Average of Peak Amounts =				0.1		

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Data File: \\QPITPA02\D\chem\gc8.i\5100.b\H-A50163.D

Report Date: 17-Aug-2000 13:27

Page 2

QC Flag Legend

M - Compound response manually integrated.

Data File: \\QPITPA02\chem\gc8.1\5100.b\H-850163.D

Date: 10-AUG-2000 11:39

Client ID:

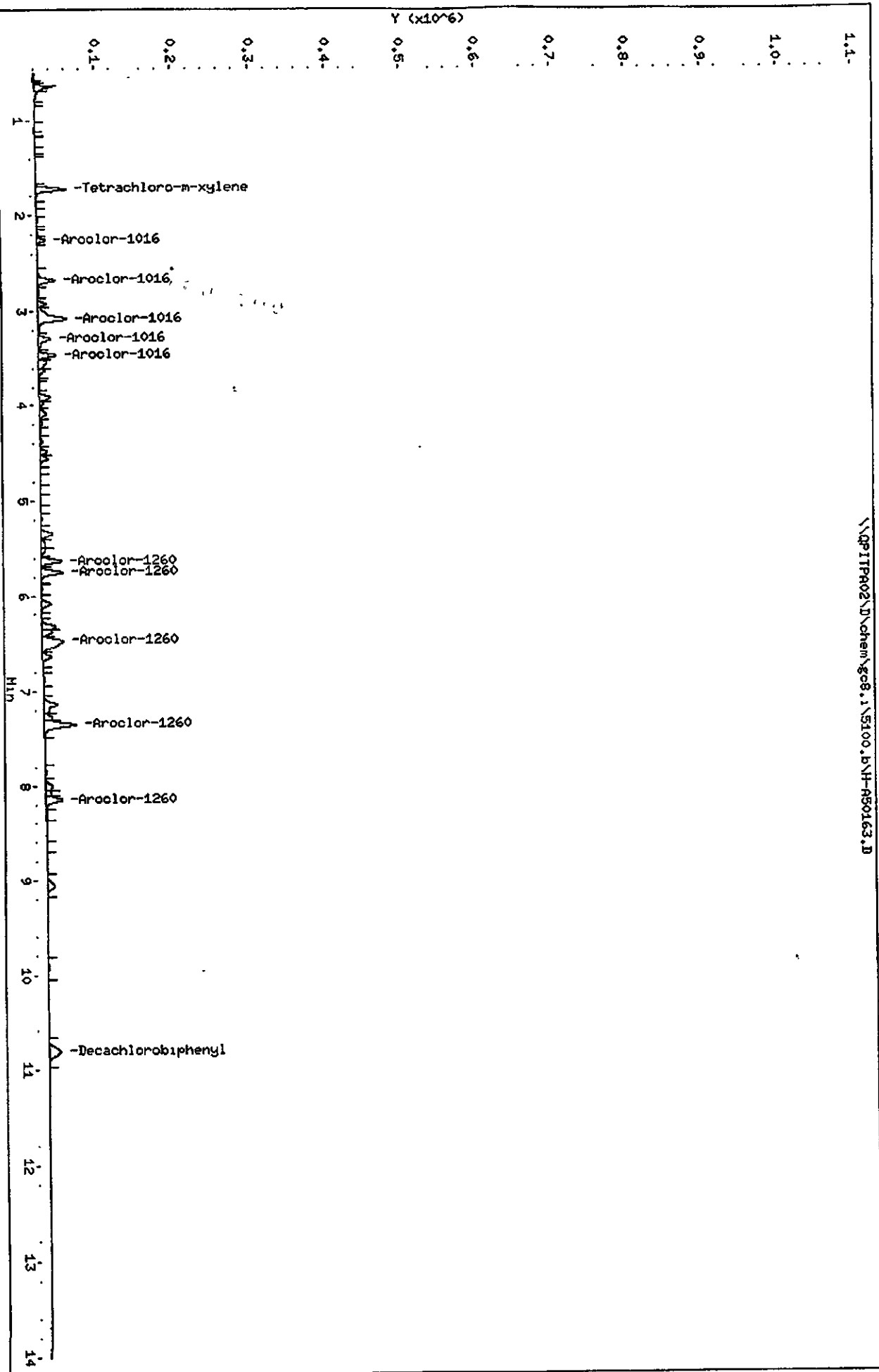
Sample Info: L1660, B100, b

Column phase: DB608

Instrument: gc8.1

Operator: 010139

Column diameter: 0.53



STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc8.i\5100.b\H-A50164.D
 Lab Smp Id: ML1660
 Inj Date : 10-AUG-2000 11:59
 Operator : 010139
 Smp Info : ML1660,5100.b
 Misc Info : 190-99-4
 Comment :
 Method : \\QPITPA02\D\chem\gc8.i\5100.b\PCBA.m
 Meth Date : 17-Aug-2000 13:28 eppingerd
 Cal Date : 10-AUG-2000 11:59
 Als bottle: 8
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC086

Inst ID: gc8.i
 Quant Type: ESTD
 Cal File: H-A50164.D
 Calibration Sample, Level: 2
 Compound Sublist: 1-1660.sub
 Sample Matrix: None

AMOUNTS							
RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
20	253	252	29415	0.20000	0.22525	0.00- 0 00	0 00
2	674	673	55327	0.20000	0.21764	80.00- 120 00	0 00
3.088	3.085	3.083	88391	0 20000	0.21696	416 04- 456.04	0.00
3.293	3.293	3.293	38568	0 20000	0.21504	203.51- 243.51	0.00
3.464	3.463	3.463	53567	0.20000	0.21532	297.56- 337 56	0.00
Average of Peak Amounts =					0.21804		

\$	1	1	86235	0 01000	0 010864	CAS # 877-09-8	
1.730	1.728	1.728					

\$	34	34	30316	0 01000	0.010326	CAS #: 2051-24-3	
10 809	10 808	10 808					

36	631	630	62885	0 20000	0 21088	0.00- 0.00	0.00
5.753	5.753	5.753	65613	0.20000	0 21056	95.86- 135.86	0.00
6.477	6.476	6.476	65158	0.20000	0.21188	116.91- 156.91	0.00
7.351	7.348	7.348	100225	0.20000	0 21493	120.00- 160 00	0.00
8.151	8.150	8.150	50121	0.20000	0 21420	108.33- 148.33	0.00
Average of Peak Amounts =					0.21249		

Data File: \\QPITPA02\chem\gc8.1\5100.b\4-850164.D

Date: 10-AUG-2000 11:59

Client ID:

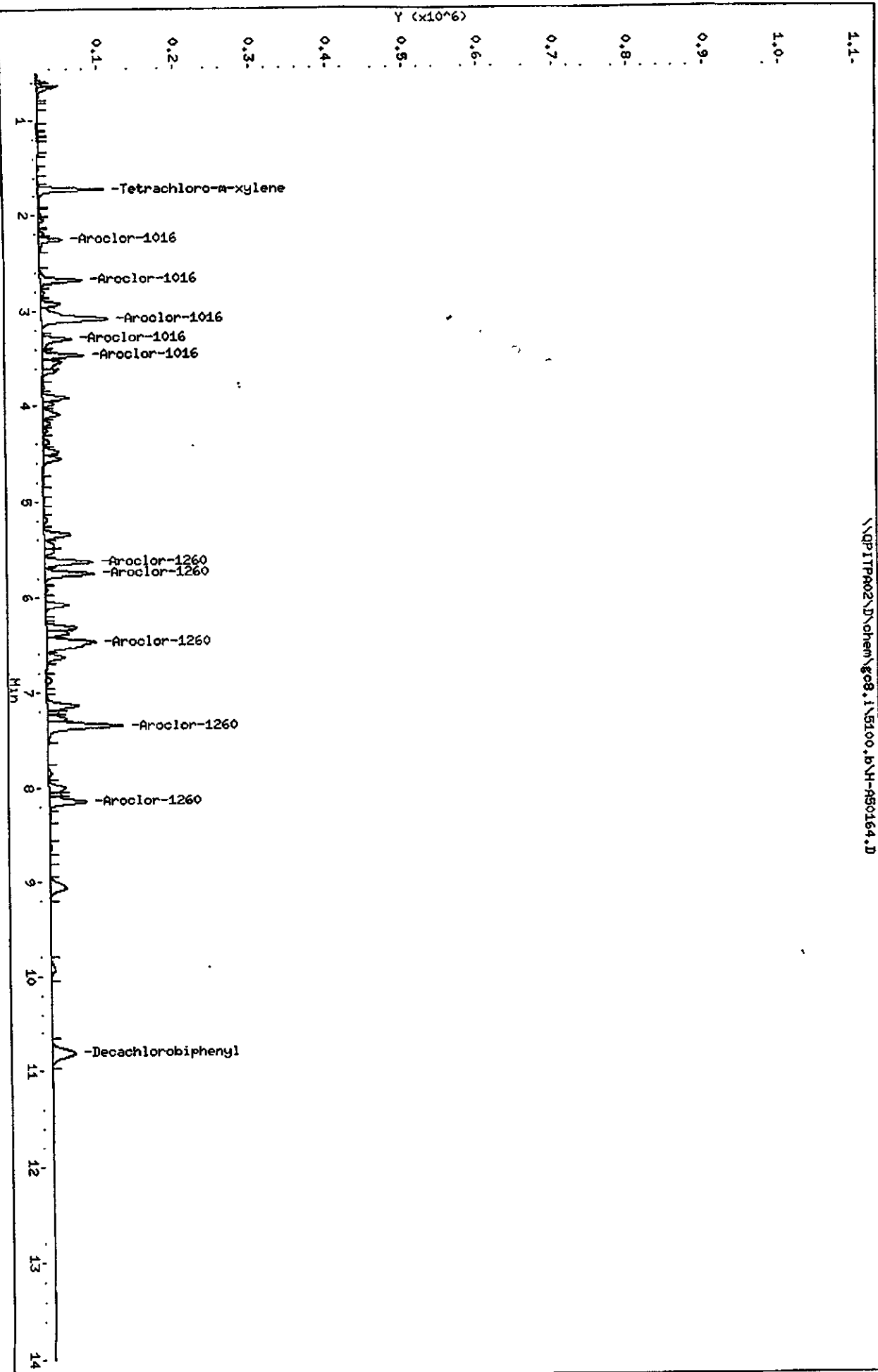
Sample Info: HL1660, 5100.b

Column phase: DB608

Instrument: gc8.1

Operator: 010139

Column diameter: 0.53



STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc8.i\5100.b\H-A50165.D
 Lab Smp Id: M1660
 Inj Date : 10-AUG-2000 12:18
 Operator : 010139
 Smp Info : M1660,5100.b
 Misc Info : 190-99-5
 Comment :
 Method : \\QPITPA02\D\chem\gc8.i\5100.b\PCBA.m
 Meth Date : 17-Aug-2000 13:29 eppingerd Quant Type: ESTD
 Cal Date : 10-AUG-2000 12:18 Cal File: H-A50165.D
 Als bottle: 9 Calibration Sample, Level: 3
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 1-1660.sub
 Target Version: 4.04 Sample Matrix: None
 Processing Host: PITPC086

AMOUNTS							
RT	EXP RT	DLT RT	RESPONSE (	CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
--	-----	-----	-----	-----	-----	-----	-----
20 Aroclor-1016					CAS #	12674-11-2	
2.252	2.252	(0.000)	58500	0.50000	0.46407	0.00- 0.00	0.00
2.673	2.673	(0.000)	111728	0.50000	0.45797	80.00- 120.00	0.00
3.085	3.085	(0.000)	187852	0.50000	0.47337	416.04- 456.04	0.00
3.293	3.293	(0.000)	82948	0.50000	0.47435	203.51- 243.51	0.00
3.463	3.463	(0.000)	117044	0.50000	0.47992	297.56- 337.56	0.00
Average of Peak Amounts =					0.46994		

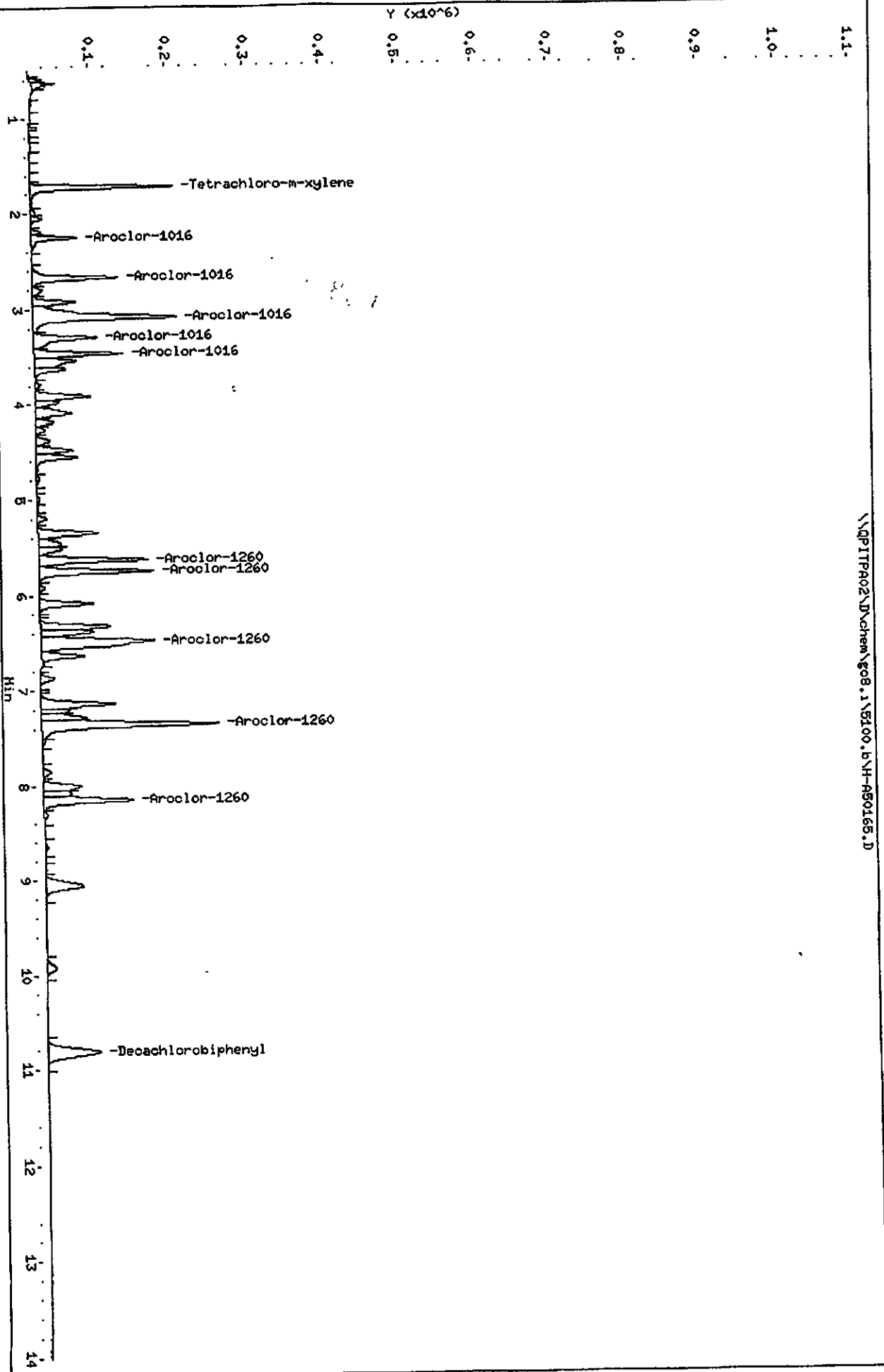
\$ 1 Tetrachloro-m-xylene					CAS #	877-09-8	
1.728	1.728	(0.000)	185365	0.02500	0.022943		

\$ 34 Decachlorobiphenyl					CAS #:	2051-24-3	
10.808	10.808	(0.000)	68428	0.02500	0.022867		

36 Aroclor-1260					CAS #	11096-82-5	
5.630	5.630	(0.000)	142054	0.50000	0.48399	0.00- 0.00	0.00
5.753	5.753	(0.000)	149291	0.50000	0.48587	95.86- 135.86	0.00
6.476	6.476	(0.000)	148029	0.50000	0.48741	116.91- 156.91	0.00
7.348	7.348	(0.000)	232264	0.50000	0.49872	120.00- 160.00	0.00
8.150	8.150	(0.000)	116480	0.50000	0.49853	108.33- 148.33	0.00
Average of Peak Amounts =					0.4909		

Data File: \\QPITPA02\DVchem\gc8.i\5100.b\H-A50165.D
Date: 10-AUG-2000 12:18
Client ID:
Sample Info: M1660,5100.b
Column phase: DB608

Instrument: gc8.i
Operator: 010139
Column diameter: 0.53



STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc8.i\5100.b\H-A50166.D

Lab Smp Id: MH1660

Inj Date : 10-AUG-2000 12:38

Operator : 010139

Inst ID: gc8.i

Smp Info : MH1660,5100.b

Misc Info : 190-99-6

Comment :

Method : \\QPITPA02\D\chem\gc8.i\5100.b\PCBA.m

Meth Date : 17-Aug-2000 13:30 eppingerd Quant Type: ESTD

Cal Date : 10-AUG-2000 12:38

Cal File: H-A50166.D

Als bottle: 10

Calibration Sample, Level: 4

Dil Factor: 1.00000

Integrator: Falcon

Compound Sublist: 1-1660.sub

Target Version: 4.04

Sample Matrix: None

Processing Host: PITPC086

AMOUNTS

				CAL-AMT		ON-COL			
RT	EXP RT	DLT RT		RESPONSE (	ng)	(	ng)	TARGET RANGE	RATIO
==	=====	=====		=====	=====	=====	=====	=====	=====
20 Aroclor-1016					CAS # 12674-11-2				
2.254	2.252	{0.002}		106161	1.00000	0.87675	0.00-	0.00	0.00
2.675	2.673	{0.002}		214240	1.00000	0.90575	80.00-	120.00	0.00
3.088	3.085	{0.003}		368834	1.00000	0.94613	416.04-	456.04	0.00
3.294	3.293	{0.001}		159843	1.00000	0.93415	203.51-	243.51	0.00
3.465	3.463	{0.002}		222855	1.00000	0.93392	297.56-	337.56	0.00
Average of Peak Amounts =					0.91934				

\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8				
1.730	1.728	{0.002}		381782	0.05000	0.047912			

\$ 34 Decachlorobiphenyl					CAS # 2051-24-3				
10.809	10.808	{0.001}		137098	0.05000	0.046795			

36 Aroclor-1260					CAS #: 11096-82-5				
5.629	5.630	{-0.001}		280398	1.00000	0.96612	0.00-	0.00	0.00
5.752	5.753	{-0.001}		295300	1.00000	0.97051	95.86-	135.86	0.00
6.479	6.476	{0.003}		305978	1.00000	1.0056	116.91-	156.91	0.00
7.350	7.348	{0.002}		478360	1.00000	1.0202	120.00-	160.00	0.00
8.152	8.150	{0.002}		230775	1.00000	0.99076	108.33-	148.33	0.00
Average of Peak Amounts =					0.99064				

Data File: \\NPITP002\\D\\chem\\gc8.1\\5100.b\\H-A50166.D
Date: 10-06-2000 12:38

Client ID:

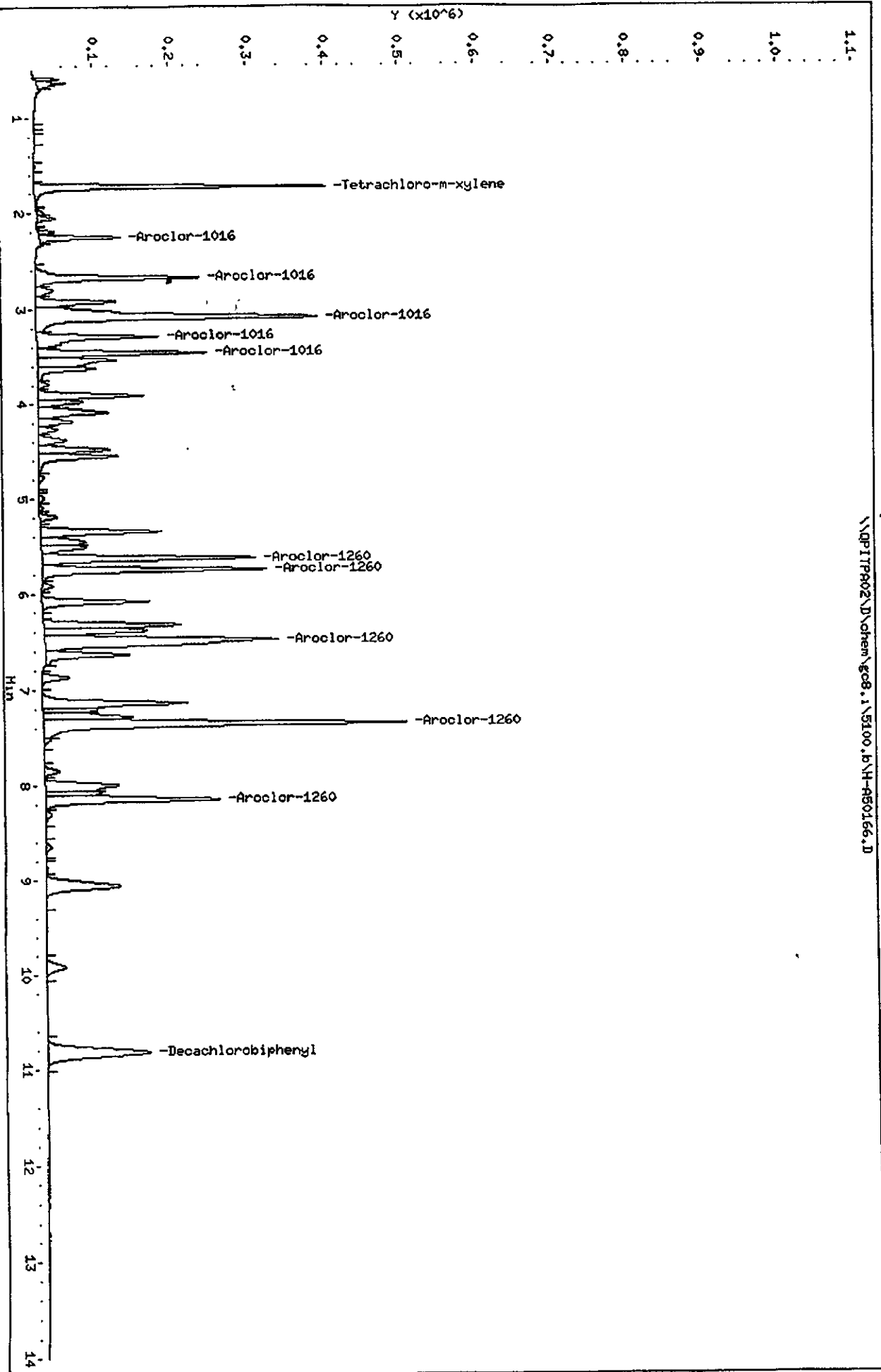
Sample Info: H41660, 5100.b

Column phase: DB608

Instrument: gc8.1

Operator: 010139

Column diameter: 0.53



668 646

Data File: \\QPITPA02\D\chem\gc8.i\5100.b\H-A50167.D
 Report Date: 17-Aug-2000 13:31

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STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc8.i\5100.b\H-A50167.D
 Lab Smp Id: H1660
 Inj Date : 10-AUG-2000 12:57
 Operator : 010139
 Smp Info : H1660,5100.b
 Misc Info : 190-99-7
 Comment :
 Method : \\QPITPA02\D\chem\gc8.i\5100.b\PCBA.m
 Meth Date : 17-Aug-2000 13:30 eppingerd Quant Type: ESTD
 Cal Date : 10-AUG-2000 12:57 Cal File: H-A50167.D
 Als bottle: 11 Calibration Sample, Level: 5
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 1-1660.sub
 Target Version: 4.04 Sample Matrix: None
 Processing Host: PITPC086

AMOUNTS							
RT	EXP RT	DLT RT	RESPONSE (	CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
**	*****	*****	*****	*****	*****	*****	*****
20 Aroclor-1016					CAS #	12674-11-2	
2 255	2 252	(0.003)	209322	2.00000	1.7769	0.00- 0.00	0.00
2 676	2 673	(0.003)	413450	2.00000	1.7932	80.00- 120.00	0.00
3 087	3.085	(0.002)	706826	2.00000	1.8477	416.04- 456.04	0.00
3.293	3.293	(0.000)	307157	2.00000	1.8326	203.51- 243.51	0.00
3 465	3 463	(0.002)	433018	2.00000	1.8489	297.56- 337.56	0.00
Average of Peak Amounts =					1.8199		

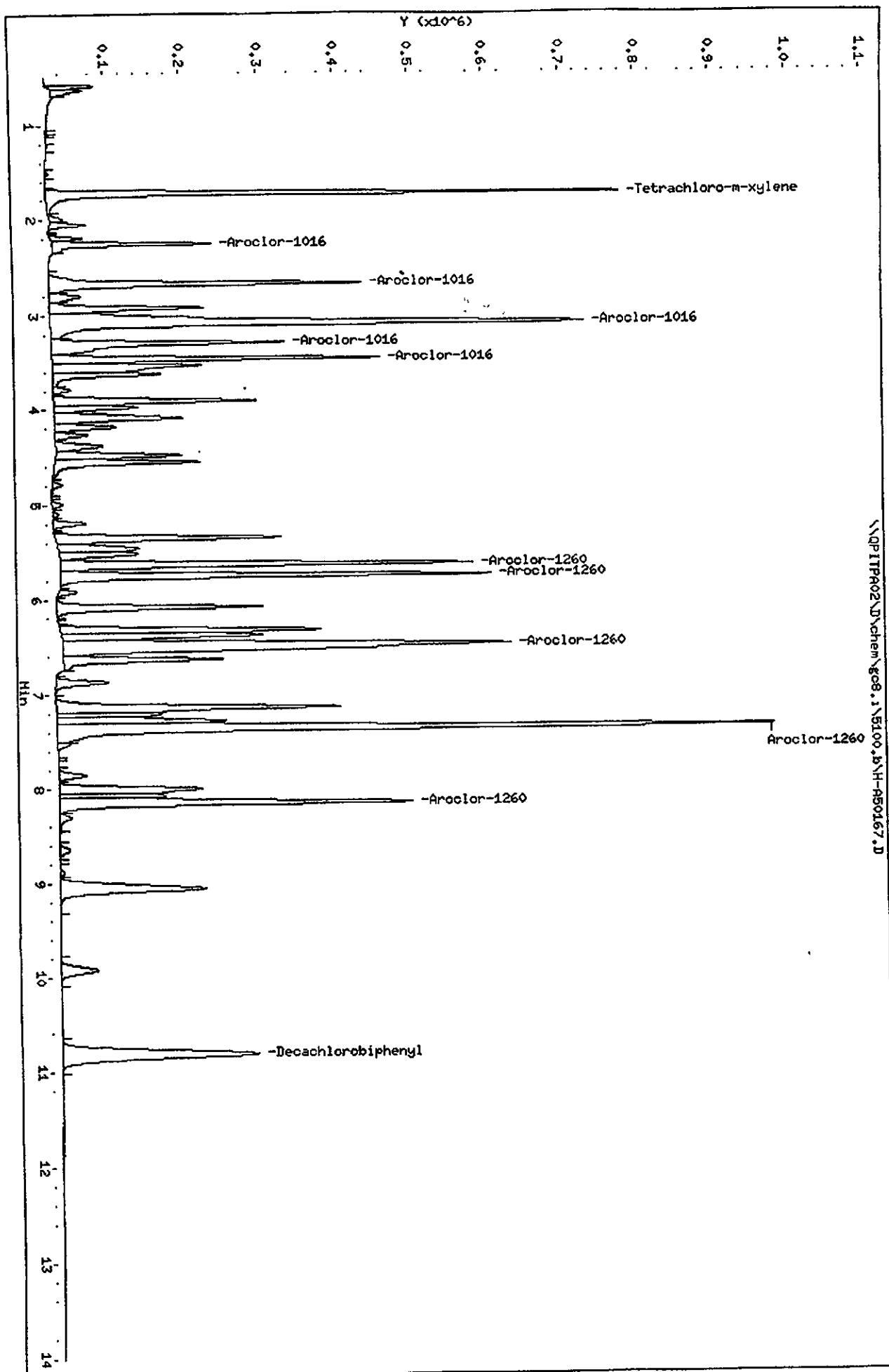
\$ 1 Tetrachloro-m-xylene					CAS #	877-09-8	
1.731	1.728	(0.003)	756250	0.10000	0.095884		

\$ 34 Decachlorobiphenyl					CAS #:	2051-24-3	
10 813	10 808	(0.005)	259591	0.10000	0.090671		

36 Aroclor-1260					CAS #:	11096-82-5	
5.630	5 630	(0.000)	545977	2.00000	1.9038	0.00- 0.00	0.00
5.752	5 753	(-0.001)	569663	2.00000	1.8964	95.86- 135.86	0.00
6.477	6.476	(0.001)	593355	2.00000	1.9599	116.91- 156.91	0.00
7.349	7.348	(0.001)	949807	2.00000	2.0205	120.00- 160.00	0.00
8.149	8 150	(-0.001)	465636	2.00000	1.9992	108.33- 148.33	0.00
Average of Peak Amounts =					1.956		

Data File: \\QPIPPA02\N\chem\g08.1\5100.b\H-A50167.D
Date: 10-AUG-2000 12:57
Client ID:
Sample Info: H1660, 5100.b
Column phase: DB608

Instrument: g08.1
Operator: 010139
Column diameter: 0.53



STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc8.i\5100.b\H-A50168.D
Lab Smp Id: 2ND2154
Inj Date : 10-AUG-2000 13:17
Operator : 010139
Smp Info : 2ND2154,5100.b
Misc Info : 190-92-1
Comment :
Method : \\QPITPA02\D\chem\gc8.i\5100.b\PCBA.m
Meth Date : 17-Aug-2000 13:38 eppingerd Quant Type: ESTD
Cal Date : 10-AUG-2000 12:57 Cal File: H-A50167.D
Als bottle: 12 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 2154.sub
Target Version: 4.04 Sample Matrix: None
Processing Host: PITPC086

AMOUNTS							
		CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RT	RESPONSE (	ng)	TARGET RANGE	RATIO
--	=====	=====		=====	=====	=====	=====
8 Aroclor-1221				CAS # 11104-28-2			
2.048	2.047	(0.001)		35821	0.50000	0.46586 0.00- 0.00	0.00
2.187	2.186	(0.001)		23245	0.50000	0.48738 116.57- 156.57	0.00
2.252	2.251	(0.001)		72590	0.50000	0.48708 66.04- 106.04	0.00
Average of Peak Amounts =				0.48011			

4.09-D

\$ 1 Tetrachloro-m-xylene CAS # 877-09-8
1.727 1.728 (-0.001) 7827 0.02500 0.00099237

\$ 34 Decachlorobiphenyl CAS #: 2051-24-3

Compound Not Detected

33 Aroclor-1254				CAS #: 11097-69-1			
4.477	4.475	(0.002)		93631	0.50000	0.48461 0.00- 0.00	0.00
4.550	4.547	(0.003)		113391	0.50000	0.48265 92.23- 132.23	0.00
5.190	5.187	(0.003)		85278	0.50000	0.47967 77.40- 117.40	0.00
5.358	5.357	(0.001)		167964	0.50000	0.46941 51.09- 91.09	0.00
5.532	5.529	(0.003)		115840	0.50000	0.48504 65.01- 105.01	0.00
Average of Peak Amounts =				0.48028			

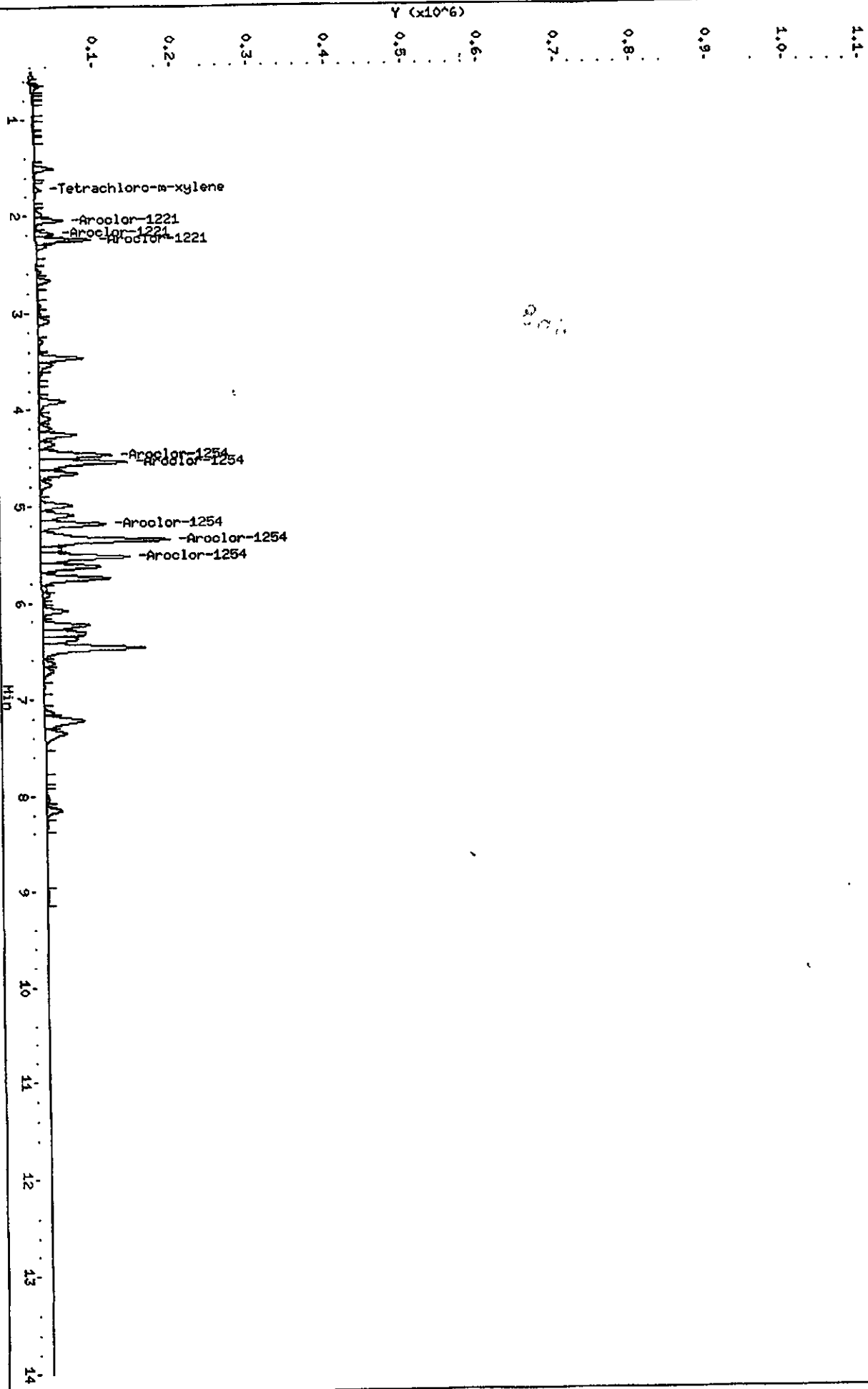
3.99-D

2nd
SOURCE

Data File: \\NPITPA02\N\chem\g08.1\5100.b\H-850168.D
 Date: 10-AUG-2000 13:17
 Client ID:
 Sample Info: 2ND2154,5100.b
 Column phase: DB608

Instrument: g08.i
 Operator: 010139
 Column diameter: 0.53

\\NPITPA02\N\chem\g08.1\5100.b\H-850168.D



668 650

Data File: \\QPITPA02\D\chem\gc8.i\5100.b\H-A50169.D
Report Date: 17-Aug-2000 13:42

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STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc8.i\5100.b\H-A50169.D
Lab Smp Id: 2ND1232
Inj Date : 10-AUG-2000 13:36
Operator : 010139
Smp Info : 2ND1232,5100.b
Misc Info : 190-92-2
Comment :
Method : \\QPITPA02\D\chem\gc8.i\5100.b\PCBA.m
Meth Date : 17-Aug-2000 13:38 eppingerd Quant Type: ESTD
Cal Date : 10-AUG-2000 12:57 Cal File: H-A50167.D
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC086

Inst ID: gc8.i
Compound Sublist: 1232.sub
Sample Matrix: None

AMOUNTS							
		CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE (	ng)	(	ng)	TARGET RANGE

14 Aroclor-1232			CAS #. 11141-16-5				
2.672	2.673	(-0.001)	50095	0.50000	0.52203	0.00-	0.00 0.00
3.086	3.087	(-0.001)	74325	0.50000	0.51539	146.26-	186.26 0.00
3.462	3.463	(-0.001)	45310	0.50000	0.47743	65.99-	105.99 0.00
3.909	3.911	(-0.002)	31464	0.50000	0.45617	74.18-	114.18 0.00
Average of Peak Amounts =			0.49275		1.49.D		

2nd
SOURCE

Data File: \\QPITPA02\Inchem\gc8.1\5100.b\H-450169.D

Date: 10-MIG-2000 13:36

Client ID:

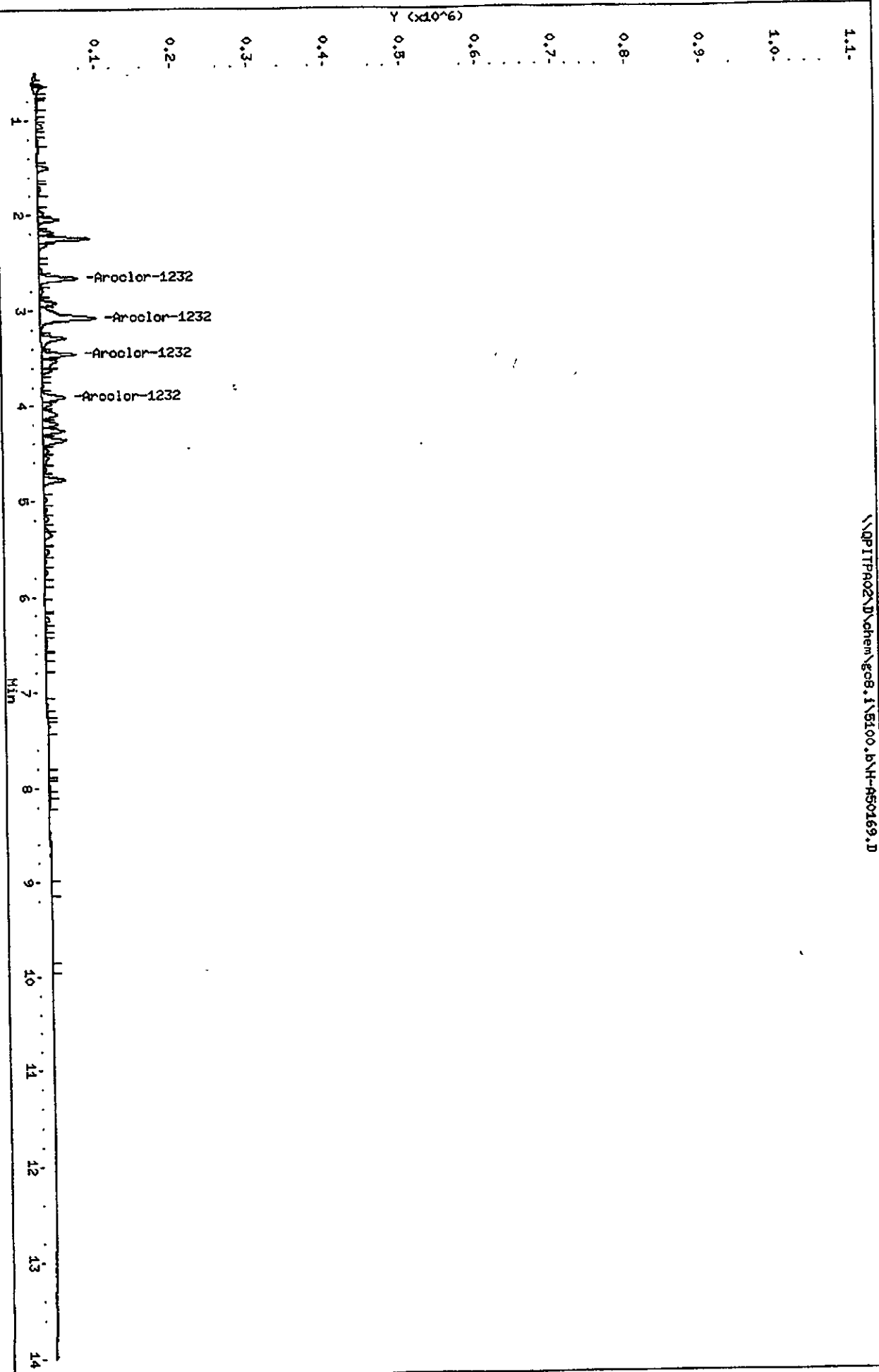
Sample Info: 2ND1232, 5100.b

Column phase: DB608

Instrument: gc8.i

Operator: 010139

Column diameter: 0.53



668 652

Data File: \\QPITPA02\D\chem\gc8.i\5100.b\H-A50170.D
Report Date: 17-Aug-2000 13:43

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STL - Pittsburgh

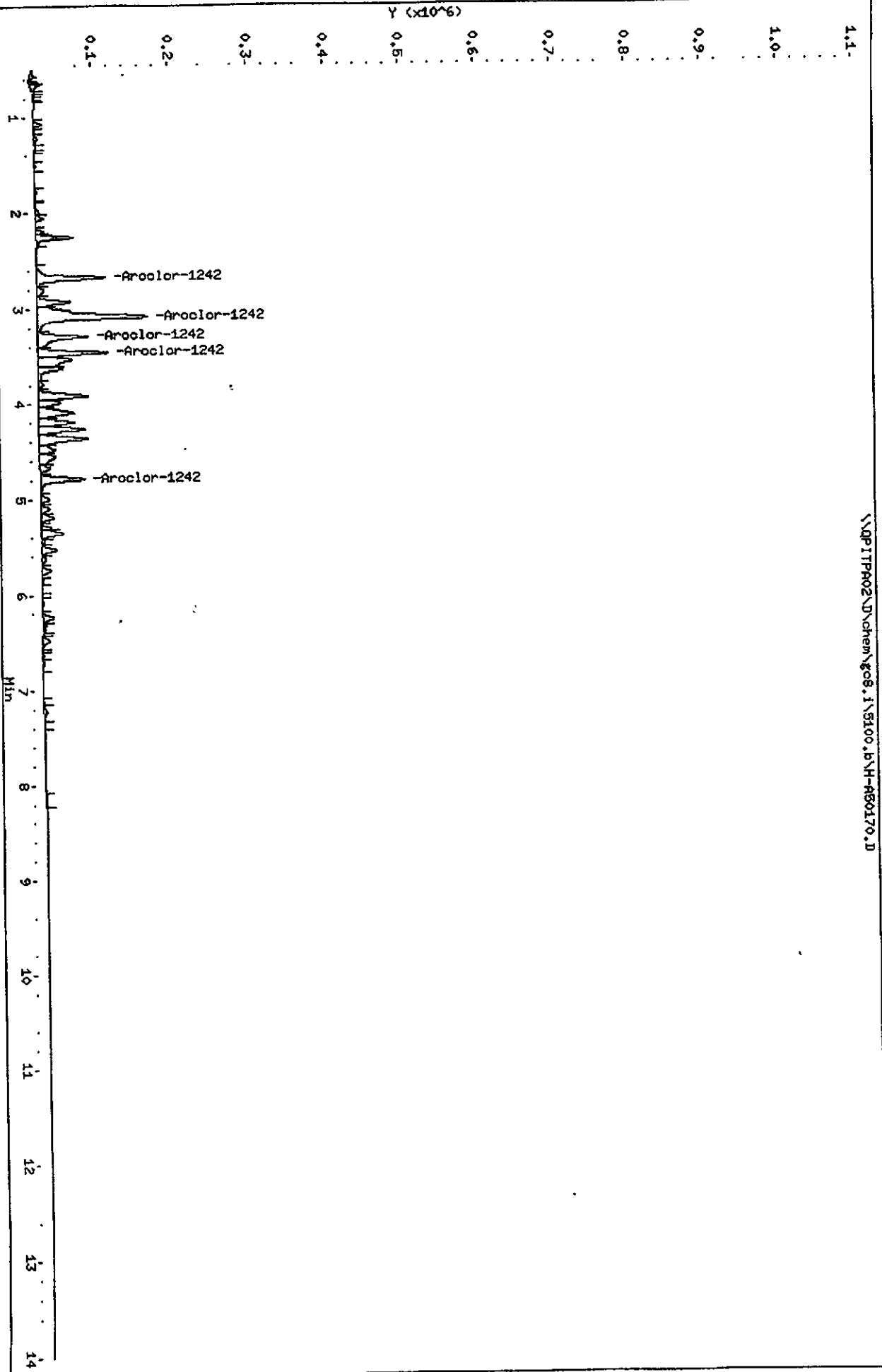
Data file : \\QPITPA02\D\chem\gc8.i\5100.b\H-A50170.D
 Lab Smp Id: 2ND1242
 Inj Date : 10-AUG-2000 13:55
 Operator : 010139
 Smp Info : 2ND1242,5100.b
 Misc Info : 190-92-3
 Comment :
 Method : \\QPITPA02\D\chem\gc8.i\5100.b\PCBA.m
 Meth Date : 17-Aug-2000 13:38 eppingerd Quant Type: ESTD
 Cal Date : 10-AUG-2000 12:57 Cal File: H-A50167.D
 Als bottle: 14 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 1242.sub
 Target Version: 4.04 Sample Matrix: None
 Processing Host: PITPC086

AMOUNTS							
		CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE (	ng)	(	ng)	TARGET RANGE
			ng)		ng)		
15	Aroclor-1242						CAS #: 53469-21-9
2.674	2.674	(0.000)	90013	0.50000	0.52700	0.00-	0.00
3.086	3.084	(0.002)	145749	0.50000	0.51226	310.13-	350.13
3.294	3.292	(0.002)	66022	0.50000	0.51550	749.70-	789.70
3.466	3.464	(0.002)	92313	0.50000	0.52474	512.48-	552.48
4.784	4.783	(0.001)	58381	0.50000	0.48749	314.30-	354.30
Average of Peak Amounts =			0.5134		2.77-D		

2nd
SOURCE

Data File: \\QPITPA02\chem\gc8.i\5100.b\H-A50170.D
 Date: 10-AUG-2000 13:55
 Client ID:
 Sample Info: 2ND1242,5100.b
 Column phase: DB608

Instrument: gc8.i
 Operator: 010139
 Column diameter: 0.53



668 654

Data File: \\QPITPA02\D\chem\gc8.i\5100.b\H-A50171.D
Report Date: 17-Aug-2000 13:43

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STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc8.i\5100.b\H-A50171.D
Lab Smp Id: 2ND1248
Inj Date : 10-AUG-2000 14:15
Operator : 010139
Smp Info : 2ND1248,5100.b
Misc Info : 190-92-4
Comment :
Method : \\QPITPA02\D\chem\gc8.i\5100.b\PCBA.m
Meth Date : 17-Aug-2000 13:38 eppingerd
Cal Date : 10-AUG-2000 12:57
Als bottle: 15
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC086

Inst ID: gc8.i
Quant Type: ESTD
Cal File: H-A50167.D
Continuing Calibration Sample
Compound Sublist: 1248.sub
Sample Matrix: None

AMOUNTS								
			CAL-AMT	ON-COL				
RT	EXP RT	DLT RT	RESPONSE (	ng)	(	ng)	TARGET RANGE	RATIO
--	-----	-----	-----	-----	-----	-----	-----	-----
21 Aroclor-1248			CAS #: 12672-29-6					
3.464	3.464	(0.000)	94479	0.50000	0.49341	0.00-	0.00	0.00
3.913	3.913	(0.000)	90010	0.50000	0.50057	114.57-	154.57	0.00
4.262	4.261	(0.001)	99725	0.50000	0.45987	63.67-	103.67	0.00
4.361	4.362	(-0.001)	95965	0.50000	0.47334	43.86-	83.86	0.00
4.782	4.782	(0.000)	85697	0.50000	0.39611	128.08-	168.08	0.00
Average of Peak Amounts =			0.46466		7.17-D			

2nd
SOURCE

Data File: \\QP1TPA02\\D\\chem\\gc8.1\\5100.b\\H-A50171.D

Date: 10-AUG-2000 14:15

Client ID:

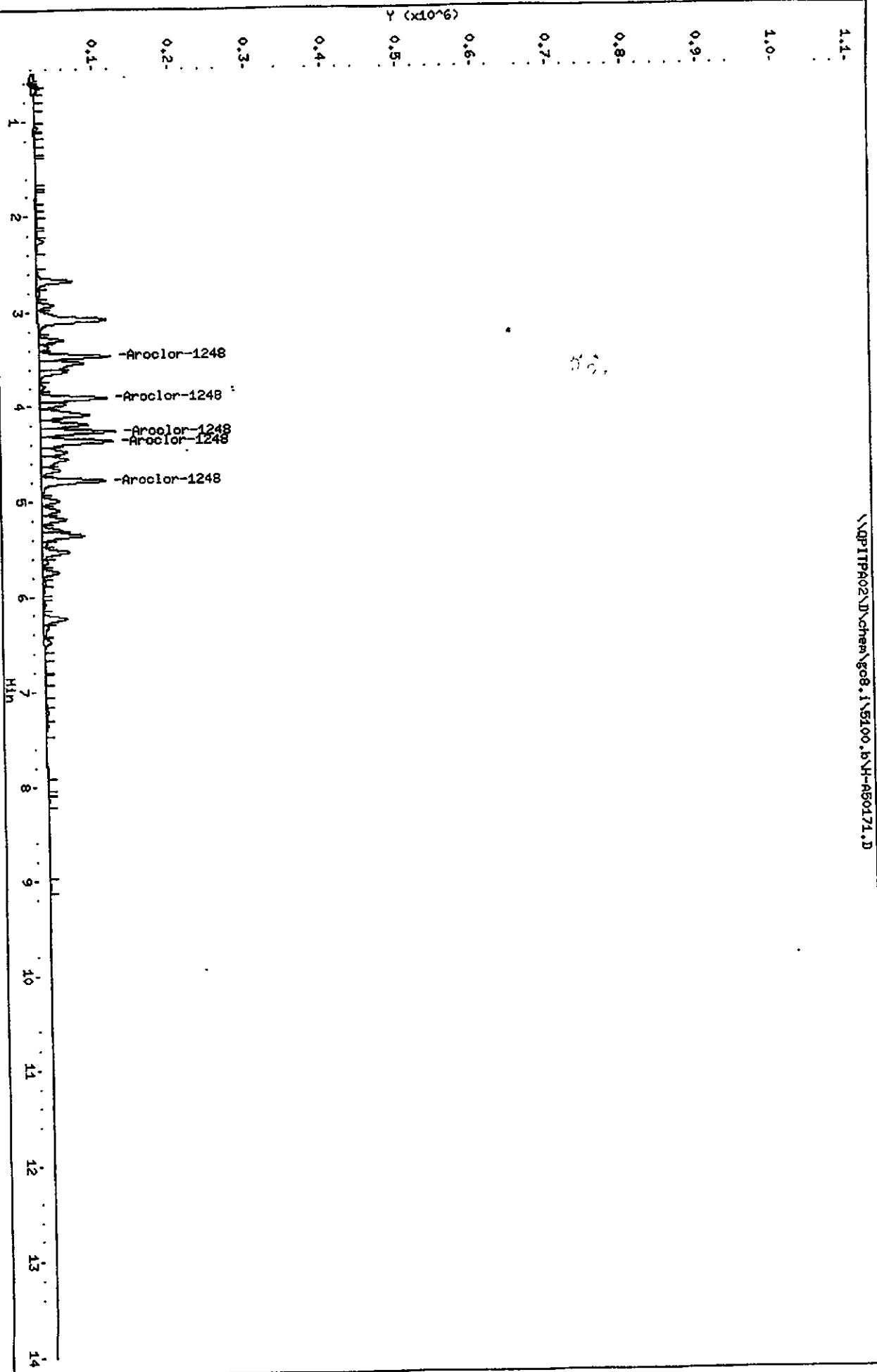
Sample Info: 2ND1248,5100.b

Column phase: DB608

Instrument: gc8.1

Operator: 010139

Column diameter: 0.53



668 656

Data File: \\QPITPA02\D\chem\gc8.i\5100.b\H-A50172.D
Report Date: 17-Aug-2000 13:43

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STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc8.i\5100.b\H-A50172.D
 Lab Smp Id: 2ND1660
 Inj Date : 10-AUG-2000 14:34
 Operator : 010139
 Smp Info : 2ND1660,5100.b
 Misc Info : 190-92-5
 Comment :
 Method : \\QPITPA02\D\chem\gc8.i\5100.b\PCBA.m
 Meth Date : 17-Aug-2000 13:38 eppingerd Quant Type: ESTD
 Cal Date : 10-AUG-2000 12:57 Cal File: H-A50167.D
 Als bottle: 16 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 1660.sub
 Target Version: 4.04 Sample Matrix: None
 Processing Host: PITPC086

AMOUNTS							
RT	EXP RT	DLT RT	RESPONSE (	CAL-AMT (ng)	ON-COL (ng)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
20 Aroclor-1016			CAS #: 12674-11-2				
2.253	2.252	(0.001)	59517 0	50000	0.50524	0 00- 0 00	0 00
2.676	2.673	(0.003)	107551	0.50000	0.46645	80 00- 120.00	0.00
3.087	3.085	(0 002)	178442	0.50000	0.46645	416 04- 456.04	0.00
3.293	3.293	(0 000)	80312	0 50000	0.47918	203.51- 243.51	0 00
3.465	3.463	(0.002)	110885	0.50000	0.47346	297.56- 337.56	0.00
Average of Peak Amounts =					0 47816	449-D	

\$ 1 Tetrachloro-m-xylene			CAS #: 877-09-8				
1.693	1.728	(-0.035)	243 0	02500	0.000030810		

\$ 34 Decachlorobiphenyl			CAS #: 2051-24-3				
Compound Not Detected							

36 Aroclor-1260			CAS #: 11096-82-5				
5.631	5.630	(0 001)	140343	0.50000	0.48937	0 00- 0 00	0.00(M)
5.755	5.753	(0 002)	148984	0 50000	0.49598	95 86- 135.86	0.00
6.478	6.476	(0.002)	137253	0 50000	0.45335	116.91- 156.91	0.00
7.351	7.348	(0.003)	268379	0 50000	0.57091	120 00- 160.00	0.00
8.147	8.150	(-0 003)	127105	0 50000	0.54574	108.33- 148 33	0.00
Average of Peak Amounts =					0.51107	7.79-D	

2nd
SOURCE

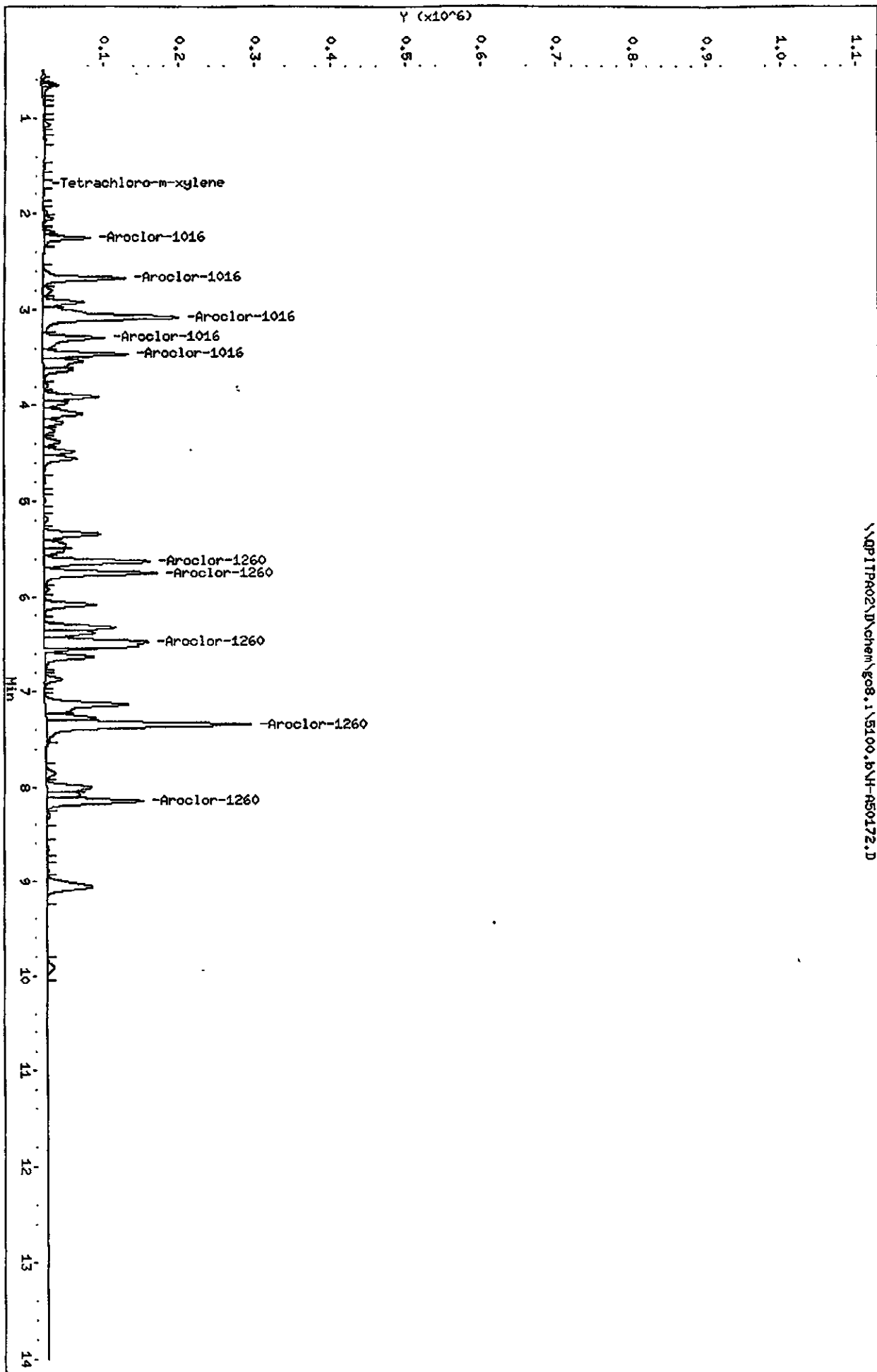
Data File: \\QPITPA02\D\chem\gc8.i\5100.b\H-A50172.D
Report Date: 17-Aug-2000 13:43

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NPITPA02\chem\608.i\5100.b\H-650172.D
Date: 10-AUG-2000 14:34
Client ID:
Sample Info: 2ND1660, 5100.b
Column Phase: DB608

Instrument: 609.i
Operator: 010139
Column diameter: 0.53



STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\5100.b\H-A50388.D
Lab Smp Id: M2154
Inj Date : 21-AUG-2000 09:43
Operator : 010139
Smp Info : M2154,5100.b
Misc Info : 190-98-13
Comment :
Method : \\qpitpa02\d\chem\gc8.i\5100.b\PCBA.m
Meth Date : 21-Aug-2000 11:58 EppingerD
Cal Date : 10-AUG-2000 12:57
Als bottle: 2
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC061
Inst ID: gc8.i
Quant Type: ESTD
Cal File: H-A50167.D
Continuing Calibration Sample
Compound Sublist: 2154.sub
Sample Matrix: None

AMOUNTS						
		CAL-AMT		ON-COL		
RT	EXP RT	DLT RT	RESPONSE (	ng)	TARGET RANGE	RATIO
RT	EXP RT	DLT RT	RESPONSE (	ng)	TARGET RANGE	RATIO
8 Aroclor-1221						
					CAS #: 11104-28-2	
2.047	2.047	(0.000)	41682	0.50000	0.54208 0.00- 0.00	0.00
2.186	2.186	(0.000)	25460	0.50000	0.53382 116.57- 156.57	0.00
2.250	2.251	(-0.001)	80094	0.50000	0.53743 66.04- 106.04	0.00
Average of Peak Amounts =				0.53778	767-D	

\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8	
1.727	1.728	(-0.001)	198330	0.02500	0.025146	

\$ 34 Decachlorobiphenyl					CAS #: 2051-24-3	
10.807	10.808	(-0.001)	58690	0.02500	0.020499	

33 Aroclor-1254					CAS #: 11097-69-1	
4.475	4.475	(0.000)	98001	0.50000	0.50723 0.00- 0.00	0.00
4.547	4.547	(0.000)	120995	0.50000	0.51502 92.23- 132.23	0.00
5.183	5.187	(-0.004)	89542	0.50000	0.50366 77.40- 117.40	0.00
5.353	5.357	(-0.004)	185030	0.50000	0.51711 51.09- 91.09	0.00
5.527	5.529	(-0.002)	123594	0.50000	0.51751 65.01- 105.01	0.00
Average of Peak Amounts =				0.51211	747-D	

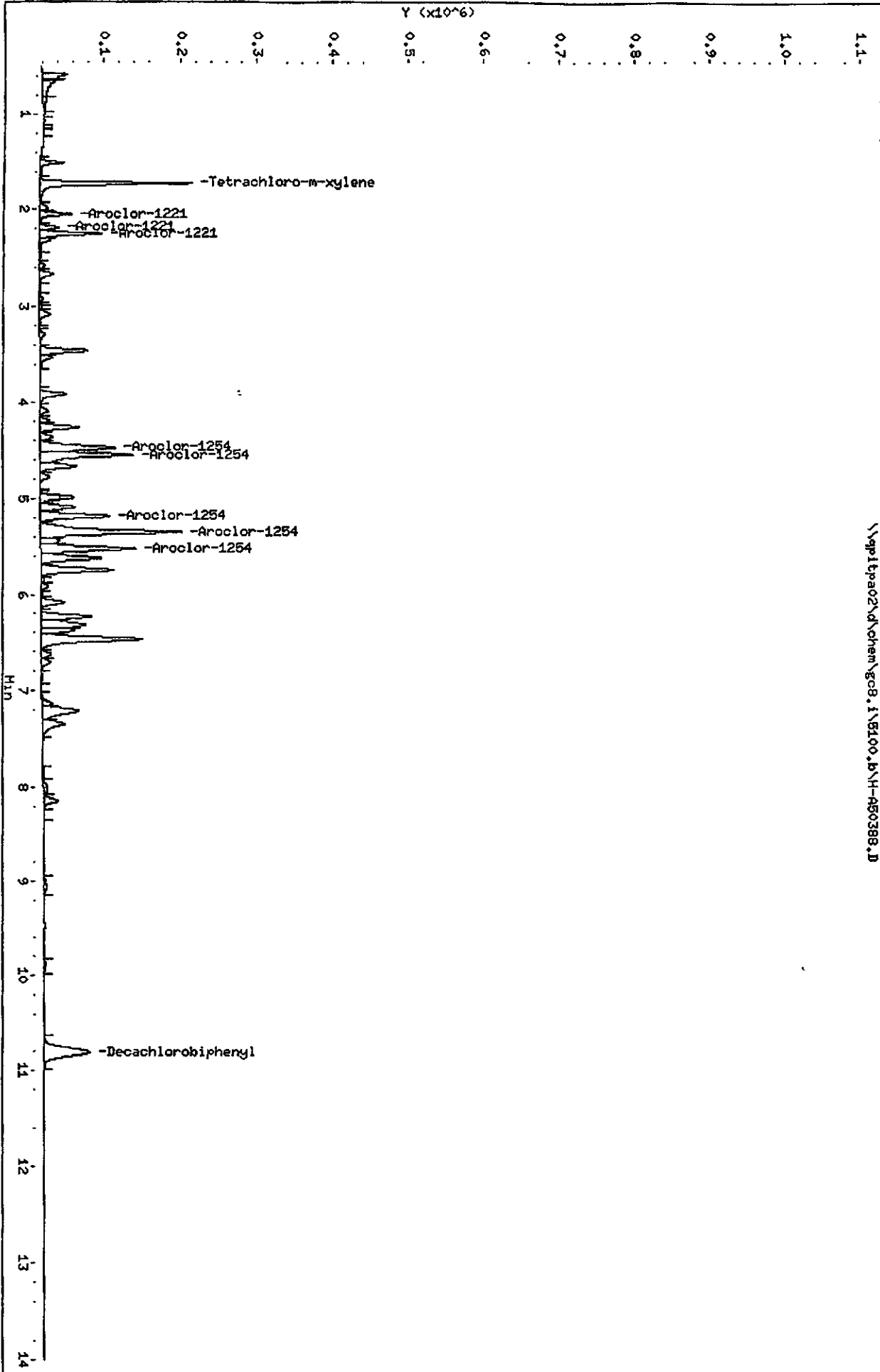
CCAL

668 660

Data File: \\qpltpa02\chem\gc8.1\B100.b\H-A50388.D
 Date : 21-AUG-2000 09:43
 Client ID:
 Sample Info: H2154, 5100.b
 Column phase: DB608

Instrument: GC8.1
 Operator: 010139
 Column diameter: 0.53

\\qpltpa02\chem\gc8.1\B100.b\H-A50388.D



STL - Pittsburgh

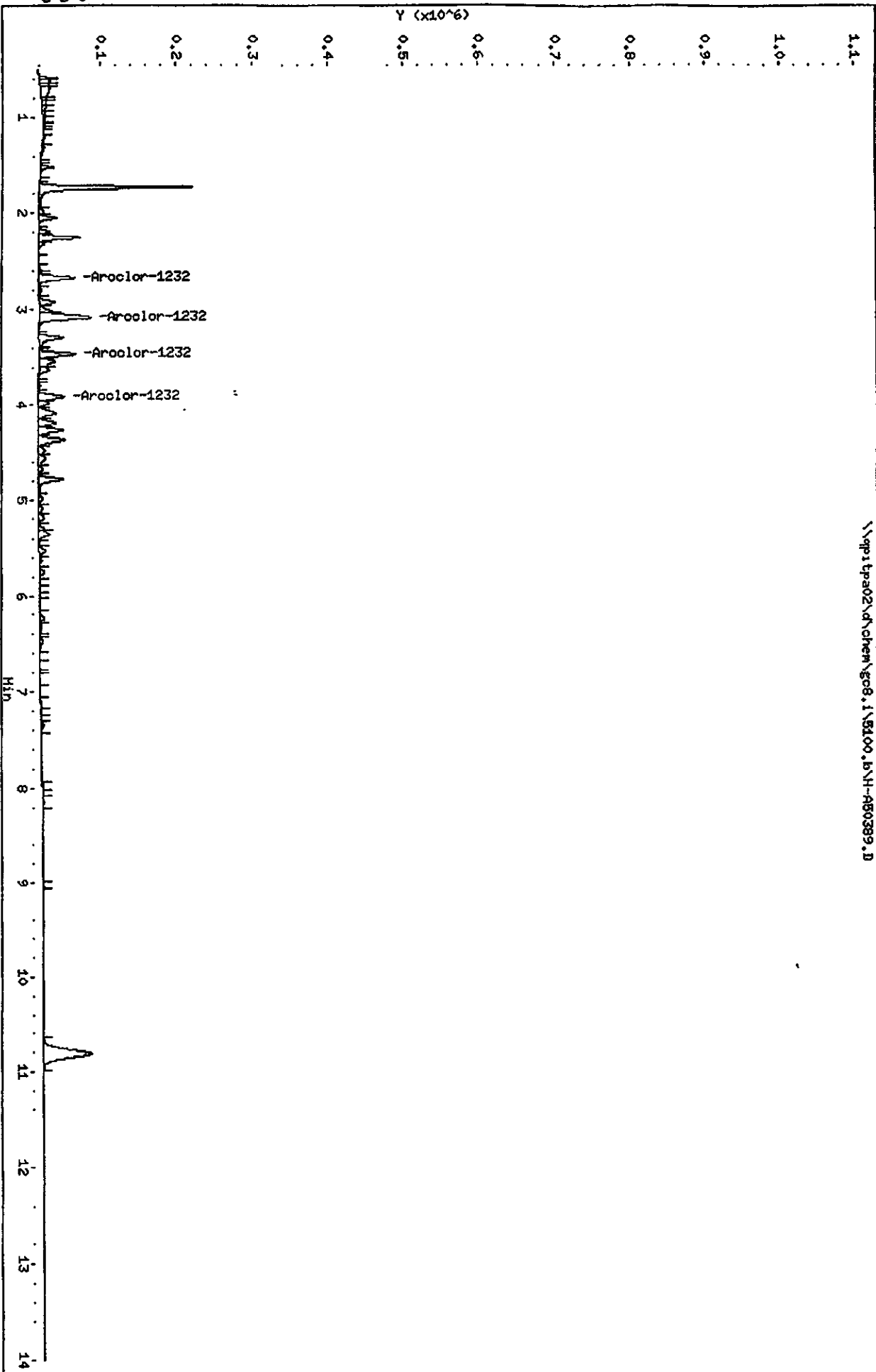
Data file : \\qpitpa02\d\chem\gc8.i\5100.b\H-A50389.D
Lab Smp Id: M1232
Inj Date : 21-AUG-2000 10:02
Operator : 010139
Smp Info : M1232,5100.b
Misc Info : 190-98-14
Comment :
Method : \\qpitpa02\d\chem\gc8.i\5100.b\PCBA.m
Meth Date : 21-Aug-2000 11:58 EppingerD
Cal Date : 10-AUG-2000 12:57
Als bottle: 3
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC061
Inst ID: gc8.i
Quant Type: ESTD
Cal File: H-A50167.D
Continuing Calibration Sample
Compound Sublist: 1232.sub
Sample Matrix: None

AMOUNTS							
		CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE (	ng)	(	TARGET RANGE	RATIO
ng)					ng)		
..							
14 Aroclor-1232				CAS #: 11141-16-5			
2 673	2.673	(0.000)	46947	0.50000	0.48922	0.00- 0.00	0.00
3.087	3.087	(0.000)	68535	0.50000	0.47524	146.26- 186.26	0.00
3 464	3.463	(0.001)	46907	0.50000	0.49426	65.99- 105 99	0.00
3.909	3.911	(-0.002)	34554	0.50000	0.50097	74.18- 114 18	0.00
Average of Peak Amounts =				0.48992	2.07-D		

CCAL

Data File: \\qpltpa02\chem\608.1\5100.b\H-A50389.D
Date: 21-AUG-2000 10:02
Client ID:
Sample Info: H1232, 5100.b
Column phase: DB608

Instrument: 608.1
Operator: 010139
Column diameter: 0.53



STL - Pittsburgh

Data file : \\gpitpa02\d\chem\gc8.i\5100.b\H-A50390.D
Lab Smp Id: M1242
Inj Date : 21-AUG-2000 10:22
Operator : 010139
Smp Info : M1242,5100.b
Misc Info : 190-99-1
Comment :
Method : \\gpitpa02\d\chem\gc8.i\5100.b\PCBA.m
Meth Date : 21-Aug-2000 11:58 EppingerD
Cal Date : 10-AUG-2000 12:57
Als bottle: 4
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC061
Inst ID: gc8.i
Quant Type: ESTD
Cal File: H-A50167.D
Continuing Calibration Sample
Compound Sublist: 1242.sub
Sample Matrix: None

AMOUNTS							
		CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE (	ng)	(	ng)	TARGET RANGE
---	-----	-----	-----	-----	-----	-----	-----
15 Aroclor-1242				CAS #: 53469-21-9			
2.674	2.674	(0.000)	85531	0.50000	0.50076	0.00-	0.00 0.00
3.089	3.084	(0.005)	136347	0.50000	0.47921	310.13-	350.13 0.00
3.293	3.292	(0.001)	63797	0.50000	0.49813	749.70-	789.70 0.00
3.465	3.464	(0.001)	88884	0.50000	0.50525	512.48-	552.48 0.00
4.781	4.783	(-0.002)	63287	0.50000	0.52846	314.30-	354.30 0.00
Average of Peak Amounts =				0.50236			

0.59-D

CCAL

Data File: \\ppltpa02\chem\gc8.1\B100.b\H-A50390.D

Date: 21-AUG-2000 10:22

Client ID:

Sample Info: H1242, B100.b

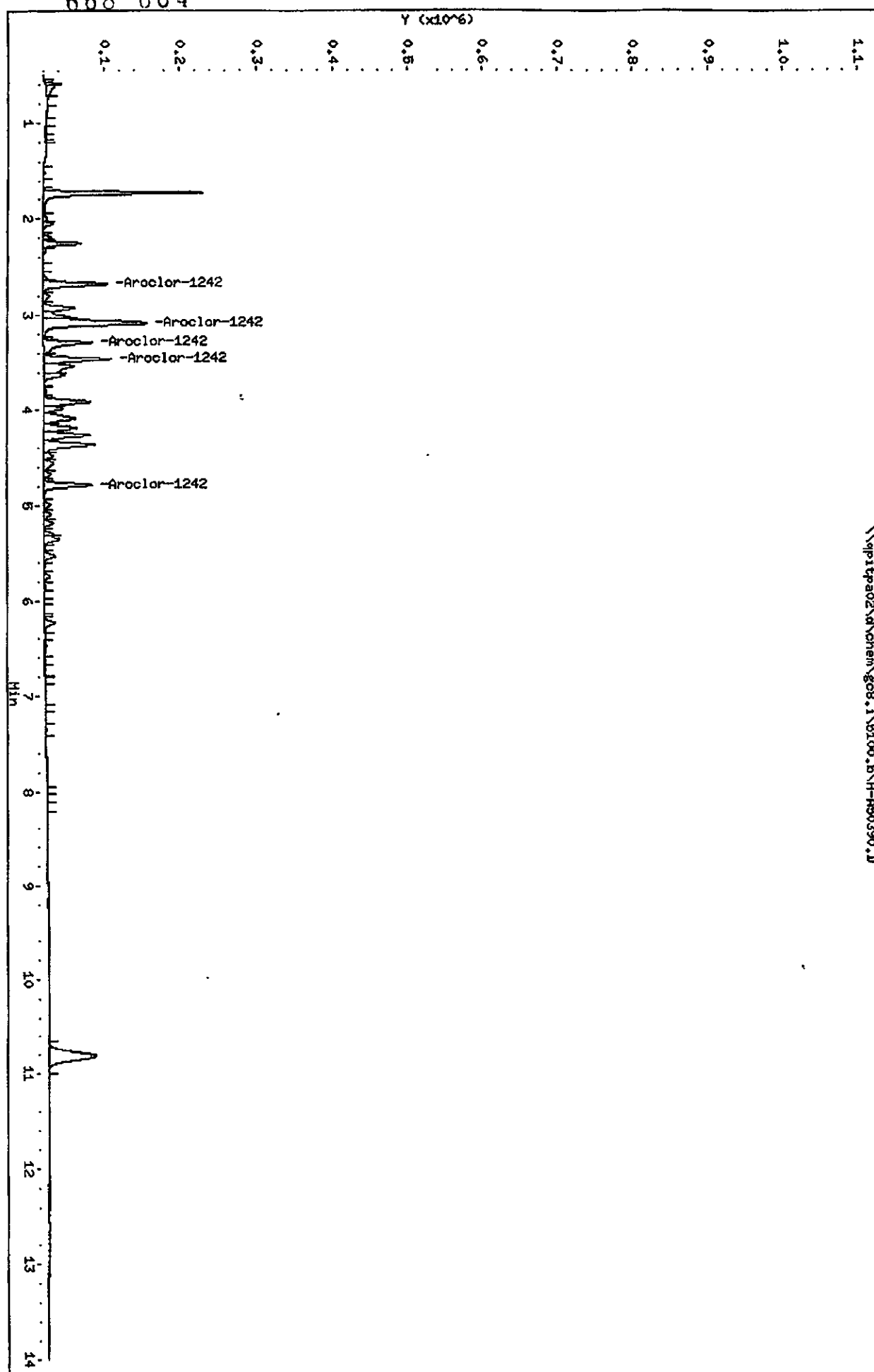
Column Phase: DB608

Instrument: GC8.1

Operator: 010139

Column diameter: 0.53

\\ppltpa02\chem\gc8.1\B100.b\H-A50390.D



Data File: \\qpitpa02\d\chem\gc8.i\5100.b\H-A50391.D
Report Date: 21-Aug-2000 11:59

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\5100.b\H-A50391.D
Lab Smp Id: M1248
Inj Date : 21-AUG-2000 10:41
Operator : 010139
Smp Info : M1248,5100.b
Misc Info : 190-99-2
Comment :
Method : \\qpitpa02\d\chem\gc8.i\5100.b\PCBA.m
Meth Date : 21-Aug-2000 11:58 EppingerD Quant Type: ESTD
Cal Date : 10-AUG-2000 12:57 Cal File: H-A50167.D
Als bottle: 5 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC061
Compound Sublist: 1248.sub
Sample Matrix: None

AMOUNTS								
			CAL-AMT	ON-COL				
RT	EXP RT	DLT RT	RESPONSE (	ng)	(	ng)	TARGET RANGE	RATIO
..								
21 Aroclor-1248				CAS #: 12672-29-6				
3.466	3.464	(0.002)	94154	0.50000	0.49171	0.00-	0.00	0.00
3.912	3.913	(-0.001)	87662	0.50000	0.48751	114.57-	154.57	0.00
4.263	4.261	(0.002)	107392	0.50000	0.49523	63.67-	103.67	0.00
4.364	4.362	(0.002)	100563	0.50000	0.49602	43.86-	83.86	0.00
4.783	4.782	(0.001)	107473	0.50000	0.49676	128.08-	168.08	0.00
Average of Peak Amounts =					0.49345	139.0		

1.39-D
CCAL

Data File: \\ppltpa02\chem\g08.1\5100.b\H-AB0391.D

Date: 21-AUG-2000 10:41

Client ID:

Sample Info: H1248,5100.b

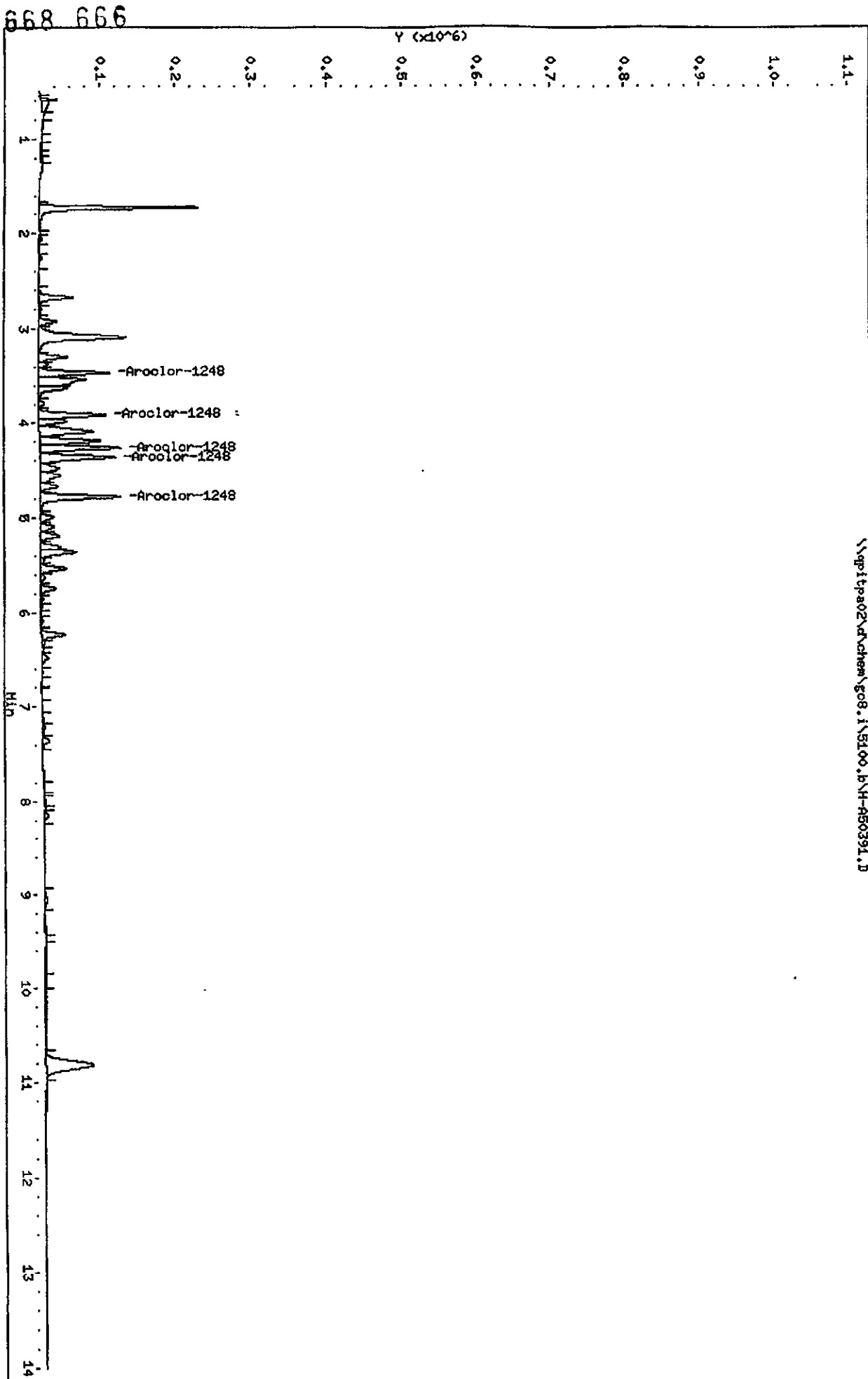
Column phase: DB608

Instrument: g08.1

Operator: Q10139

Column diameter: 0.53

\\ppltpa02\chem\g08.1\5100.b\H-AB0391.D



Data File: \\qpitpa02\d\chem\gc8.i\5100.b\H-A50392.D
Report Date: 21-Aug-2000 11:59

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\5100.b\H-A50392.D
Lab Smp Id: M1660
Inj Date : 21-AUG-2000 11:01
Operator : 010139
Smp Info : M1660,5100.b
Misc Info : 190-99-5
Comment :
Method : \\qpitpa02\d\chem\gc8.i\5100.b\PCBA.m
Meth Date : 21-Aug-2000 11:58 EppingerD Quant Type: ESTD
Cal Date : 10-AUG-2000 12:57 Cal File: H-A50167.D
Als bottle: 6 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.04 Sample Matrix: None
Processing Host: PITPC061

AMOUNTS								
		CAL-AMT		ON-COL				
RT	EXP RT	DLT RT	RESPONSE (	ng)	(	ng)	TARGET RANGE	RATIO
--	-----	-----	-----	-----	-----	-----	-----	-----
20 Aroclor-1016					CAS #: 12674-11-2			
2.254	2.252	(0.002)	57771	0.50000	0.49042	0.00-	0.00	0.00
2.675	2.673	(0.002)	109669	0.50000	0.47564	80.00-	120.00	0.00
3.090	3.085	(0.005)	173161	0.50000	0.45265	416.04-	456.04	0.00
3.293	3.293	(0.000)	80075	0.50000	0.47776	203.51-	243.51	0.00
3.466	3.463	(0.003)	113551	0.50000	0.48484	297.56-	337.56	0.00
Average of Peak Amounts =					0.47626			

\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
1.731	1.728	(0.003)	201256	0.02500	0.025517			

\$ 34 Decachlorobiphenyl					CAS #: 2051-24-3			
10.806	10.808	(-0.002)	63313	0.02500	0.022114			

36 Aroclor-1260					CAS #: 11096-82-5			
5.633	5.630	(0.003)	141832	0.50000	0.49456	0.00-	0.00	0.00
5.753	5.753	(0.000)	149428	0.50000	0.49745	95.86-	135.86	0.00
6.478	6.476	(0.002)	150092	0.50000	0.49576	116.91-	156.91	0.00
7.348	7.348	(0.000)	231074	0.50000	0.49156	120.00-	160.00	0.00
8.149	8.150	(-0.001)	113084	0.50000	0.48554	108.33-	148.33	0.00
Average of Peak Amounts =					0.49297			

Data File: \\ppltpa02\chem\ec8.1\5100.b\H-450392.D

Date: 21-AUG-2000 11:01

Client ID:

Sample Info: H1660,5100.b

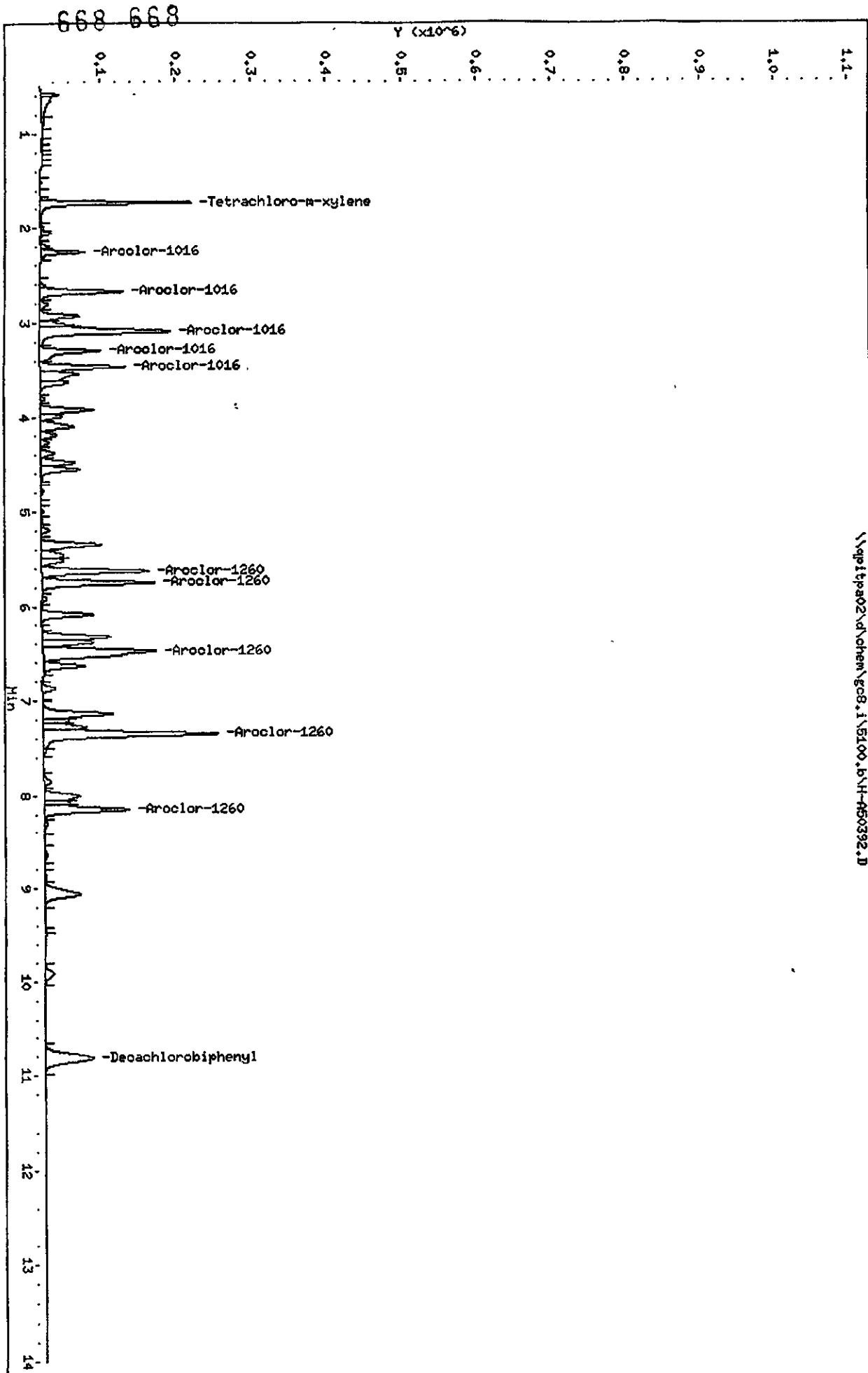
Column Phase: DB608

Instrument: 608.1

Operator: 010339

Column diameter: 0.53

\\ppltpa02\chem\ec8.1\5100.b\H-450392.D



STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\5100.b\H-A50413.D
Lab Smp Id: M1660
Inj Date : 21-AUG-2000 17:50
Operator : 010139
Smp Info : M1660,5100.b
Misc Info : 190-99-5
Comment :
Method : \\qpitpa02\d\chem\gc8.i\5100.b\PCBA.m
Meth Date : 22-Aug-2000 06:40 EppingerD Quant Type: ESTD
Cal Date : 22-AUG-2000 03:35 Cal File: H-A50443.D
Als bottle: 27 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.04 Sample Matrix: None
Processing Host: PITPC061

AMOUNTS								
			CAL-AMT		ON-COL			
RT	EXP RT	DLT RT	RESPONSE	(ng)	(ng)	TARGET RANGE	RATIO	
--	-----	-----	-----	-----	-----	-----	-----	
20 Aroclor-1016					CAS #: 12674-11-2			
2.254	2.252	(0.002)	59198	0.50000	0.50253	0.00- 0.00	0.00	
2.675	2.673	(0.002)	111858	0.50000	0.48513	80.00- 120.00	0.00	
3.089	3.085	(0.004)	181260	0.50000	0.47382	416.04- 456.04	0.00	
3.295	3.293	(0.002)	83940	0.50000	0.50082	203.51- 243.51	0.00	
3.466	3.463	(0.003)	118520	0.50000	0.50606	297.56- 337.56	0.00	
Average of Peak Amounts =					0.49367			

\$ 1 Tetrachloro-m-xylene					CAS #: 877-09-8			
1.729	1.728	(0.001)	191361	0.02500	0.024262			

\$ 34 Decachlorobiphenyl					CAS #: 2051-24-3			
10.815	10.808	(0.007)	66941	0.02500	0.023381			

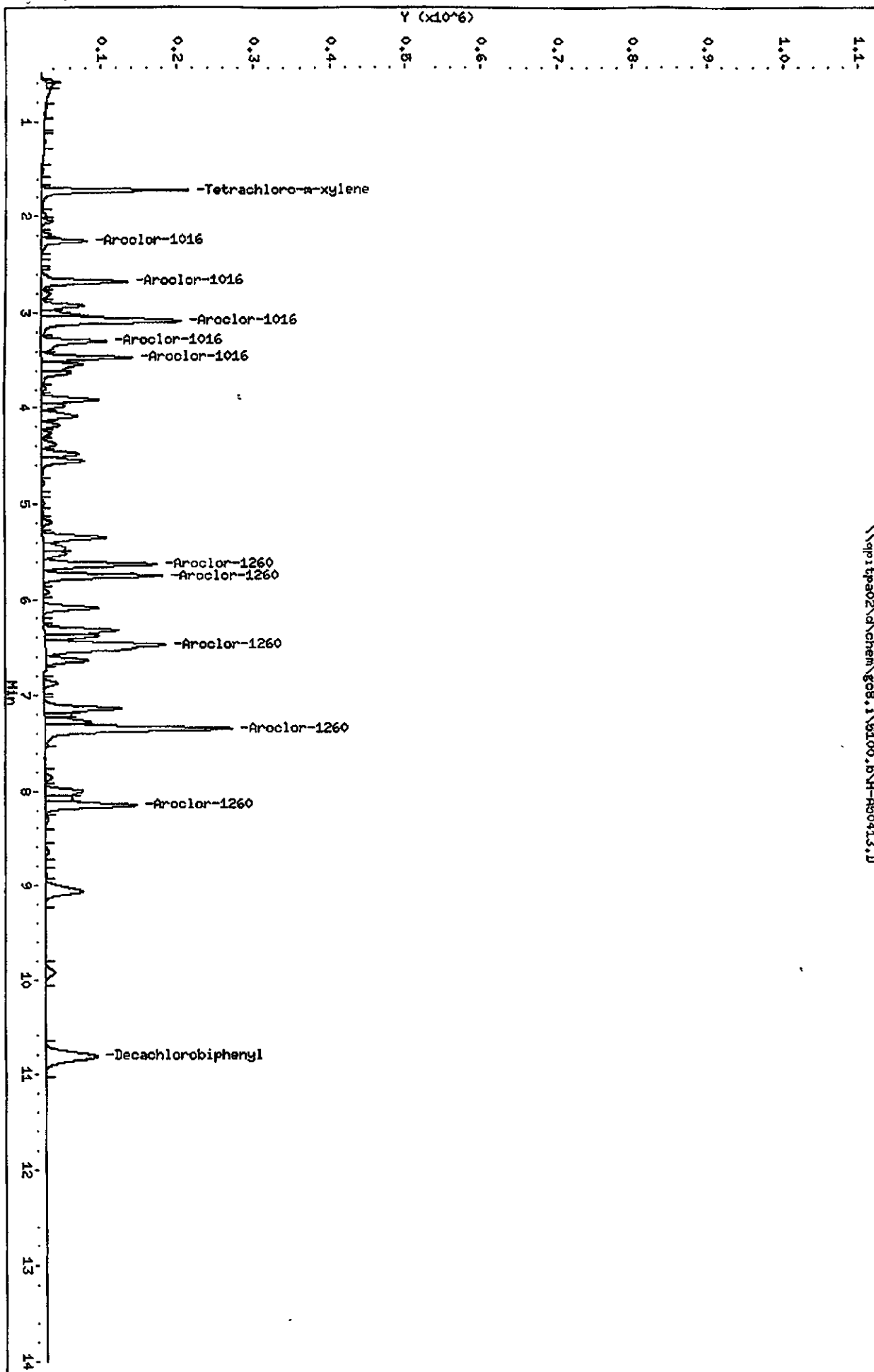
36 Aroclor-1260					CAS #: 11096-82-5			
5.634	5.630	(0.004)	148320	0.50000	0.51719	0.00- 0.00	0.00	
5.756	5.753	(0.003)	155954	0.50000	0.51918	95.86- 135.86	0.00	
6.479	6.476	(0.003)	157302	0.50000	0.51957	116.91- 156.91	0.00	
7.353	7.348	(0.005)	243502	0.50000	0.51799	120.00- 160.00	0.00	
8.149	8.150	(-0.001)	118786	0.50000	0.51002	108.33- 148.33	0.00	
Average of Peak Amounts =					0.51679			

Data File: \\qpltpa02\chem\g08.1\5100.b\H-A50413.D
 Date: 21-AUG-2000 17:50
 Client ID:
 Sample Info: H1660,5100.b

Column phase: DB608

Instrument: GC8.1
 Operator: Q10139
 Column diameter: 0.53

\\qpltpa02\chem\g08.1\5100.b\H-A50413.D



PCB
QC DATA

668 672

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc. SDG Number:

Matrix: (soil/water) WATER

Lab Sample ID: COH160000 481

Method: SW846 8082

PCBs (8082)

Sample WT/Vol: 1000 / mL

Date Received: 08/15/00

Work Order: DJOKD101

Date Extracted: 08/16/00

Dilution factor: 1

Date Analyzed: 08/21/00

Moisture %: NA

QC Batch: 0229481

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) ug/L	Q
12674-11-2	Aroclor 1016	1.0	U
11104-28-2	Aroclor 1221	1.0	U
11141-16-5	Aroclor 1232	1.0	U
53469-21-9	Aroclor 1242	1.0	U
12672-29-6	Aroclor 1248	1.0	U
11097-69-1	Aroclor 1254	1.0	U
11096-82-5	Aroclor 1260	1.0	U

FORM I

Data File: \\qpitpa02\d\chem\gc8.i\5100.b\H-A50394.D
Report Date: 21-Aug-2000 14:29

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\5100.b\H-A50394.D
Lab Smp Id: DJ0KD101 Client Smp ID: PBLK
Inj Date : 21-AUG-2000 11:40
Operator : 010139 Inst ID: gc8.i
Smp Info : DJ0KD101,5100.b
Misc Info : 150146BLK
Comment :
Method : \\qpitpa02\d\chem\gc8.i\5100.b\PCBA.m
Meth Date : 21-Aug-2000 11:58 EppingerD Quant Type: ESTD
Cal Date : 10-AUG-2000 12:57 Cal File: H-A50167.D
Als bottle: 8 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: PCB.sub
Target Version: 4.04 Sample Matrix: WATER
Processing Host: PITPC061

Concentration Formula: Amt * DF * Vt/Vo/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

		CONCENTRATIONS			
		ON-COL	FINAL		
RT	EXP RT	DLT RT	RESPONSE (ng)	(ug/L)	TARGET RANGE
==	=====	=====	=====	=====	=====
§ 1 Tetrachloro-m-xylene CAS #: 877-09-8					
1.730	1.728	(0.002)	138130	0.01751	0.17513

8 Aroclor-1221 CAS #: 11104-28-2

Peaks not detected for Quant. or Qual. signal(s).

14 Aroclor-1232 CAS # 11141-16-5

Peaks not detected for Quant. or Qual. signal(s).

668 674

Data File: \\gpitpa02\d\chem\gc8.i\5100.b\H-A50394.D
Report Date: 21-Aug-2000 14:29

Page 2

CONCENTRATIONS						
		ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE (	ng)	(ug/L)	TARGET RANGE
==	=====	=====	=====	=====	=====	=====
15 Aroclor-1242			CAS # 53469-21-9			
Peaks not detected for Quant. or Qual. signal(s).						

20 Aroclor-1016			CAS # 12674-11-2			
Peaks not detected for Quant. or Qual. signal(s).						

21 Aroclor-1248			CAS #: 12672-29-6			
Peaks not detected for Quant. or Qual. signal(s).						

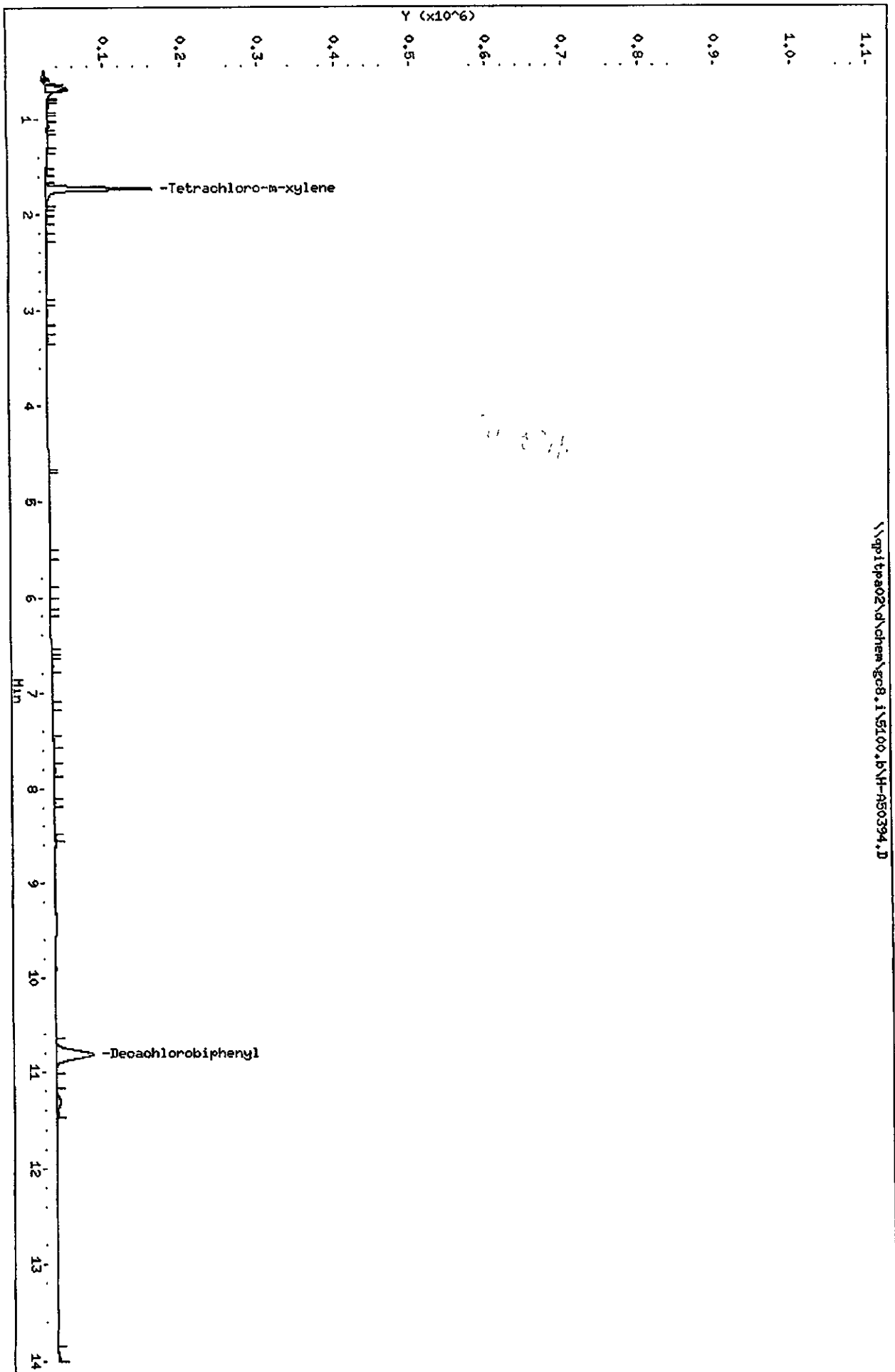
33 Aroclor-1254			CAS #: 11097-69-1			
Peaks not detected for Quant. or Qual. signal(s).						

\$	34 Decachlorobiphenyl		CAS #: 2051-24-3			
10.809	10.808	(0.001)	49241	0.01720	0.17199	

36 Aroclor-1260			CAS #: 11096-82-5			
Peaks not detected for Quant. or Qual. signal(s).						

Data File: \\qpitpa02\chem\gc8.i\5100.b\H-A50394.D
Date: 21-AUG-2000 11:40
Client ID: PBLK
Sample Info: D30KID01,5100.b
Volume Injected (uL): 1.0
Column phase: DB608

Instrument: gc8.i
Operator: 010139
Column diameter: 0.53



668 676

UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) WATER

Lab Sample ID: COH160000 481

Method: SW846 8082

PCBs (8082)

Sample WT/Vol: 1000 / mL

Date Received: 08/15/00

Work Order: DJOKD102

Date Extracted: 08/16/00

Dilution factor: 1

Date Analyzed: 08/21/00

Moisture %: NA

QC Batch: 0229481

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	ug/L
12674-11-2	Aroclor 1016	8.16	
11096-82-5	Aroclor 1260	9.19	

FORM I

Data File: \\qpitpa02\d\chem\gc8.i\5100.b\H-A50395.D
Report Date: 21-Aug-2000 14:29

Page 1

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\5100.b\H-A50395.D
Lab Smp Id: DJ0KD102 Client Smp ID: LCS
Inj Date : 21-AUG-2000 11:59
Operator : 010139 Inst ID: gc8.i
Smp Info : DJ0KD102,5100.b
Misc Info : 150146LCS
Comment :
Method : \\qpitpa02\d\chem\gc8.i\5100.b\PCBA.m
Meth Date : 21-Aug-2000 11:58 EppingerD Quant Type: ESTD
Cal Date : 10-AUG-2000 12:57 Cal File: H-A50167.D
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1660.sub
Target Version: 4.04 Sample Matrix: WATER
Processing Host: PITPC061

Concentration Formula: Amt * DF * Vt/Vo/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

CONCENTRATIONS						
RT	EXP RT	DLT RT	ON-COL	FINAL	TARGET RANGE	RATIO
==	=====	=====	RESPONSE (ng)	(ug/L)	=====	=====
20 Aroclor-1016			CAS # 12674-11-2			
2.253	2.252	(0.001)	93133 0.79061	7.9061	0.00- 0.00	0.00
2.674	2.673	(0.001)	182095 0.78976	7.8976	80.00- 120.00	0.00
3.086	3.085	(0.001)	320493 0.83778	8.3778	416.04- 456.04	0.00
3.294	3.293	(0.001)	140813 0.84016	8.4016	203.51- 243.51	0.00
3.463	3.463	(0.000)	192214 0.82072	8.2072	297.56- 337.56	0.00
Average of Peak Concentrations =				8.1581		

\$ 1 Tetrachloro-m-xylene			CAS #. 877-09-8			
1.729	1.728	(0.001)	128441 0.01628	0.16285		

\$ 34 Decachlorobiphenyl			CAS #: 2051-24-3			
10.807	10.808	(-0.001)	47908 0.01673	0.16734		

668 678

Data File: \\gpitpa02\d\chem\gc8.i\5100.b\H-A50395.D
Report Date: 21-Aug-2000 14:29

Page 2

CONCENTRATIONS							
		ON-COL		FINAL			
RT	EXP RT	DLT RT	RT	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO
==	=====	=====		=====	=====	=====	=====
36 Aroclor-1260				CAS # 11096-82-5			
5.630	5.630	(0.000)		247287 0.86228	8.6228	0.00- 0.00	0.00(M)
5.752	5.753	(-0.001)		272445 0.90698	9.0698	95.86- 135.86	0.00
6.477	6.476	(0.001)		258883 0.85510	8.5510	116.91- 156.91	0.00
7.350	7.348	(0.002)		482224 1.02582	10.258	120.00- 160.00	0.00
8.150	8.150	(0.000)		220494 0.94671	9.4671	108.33- 148.33	0.00
Average of Peak Concentrations =				9.1937			

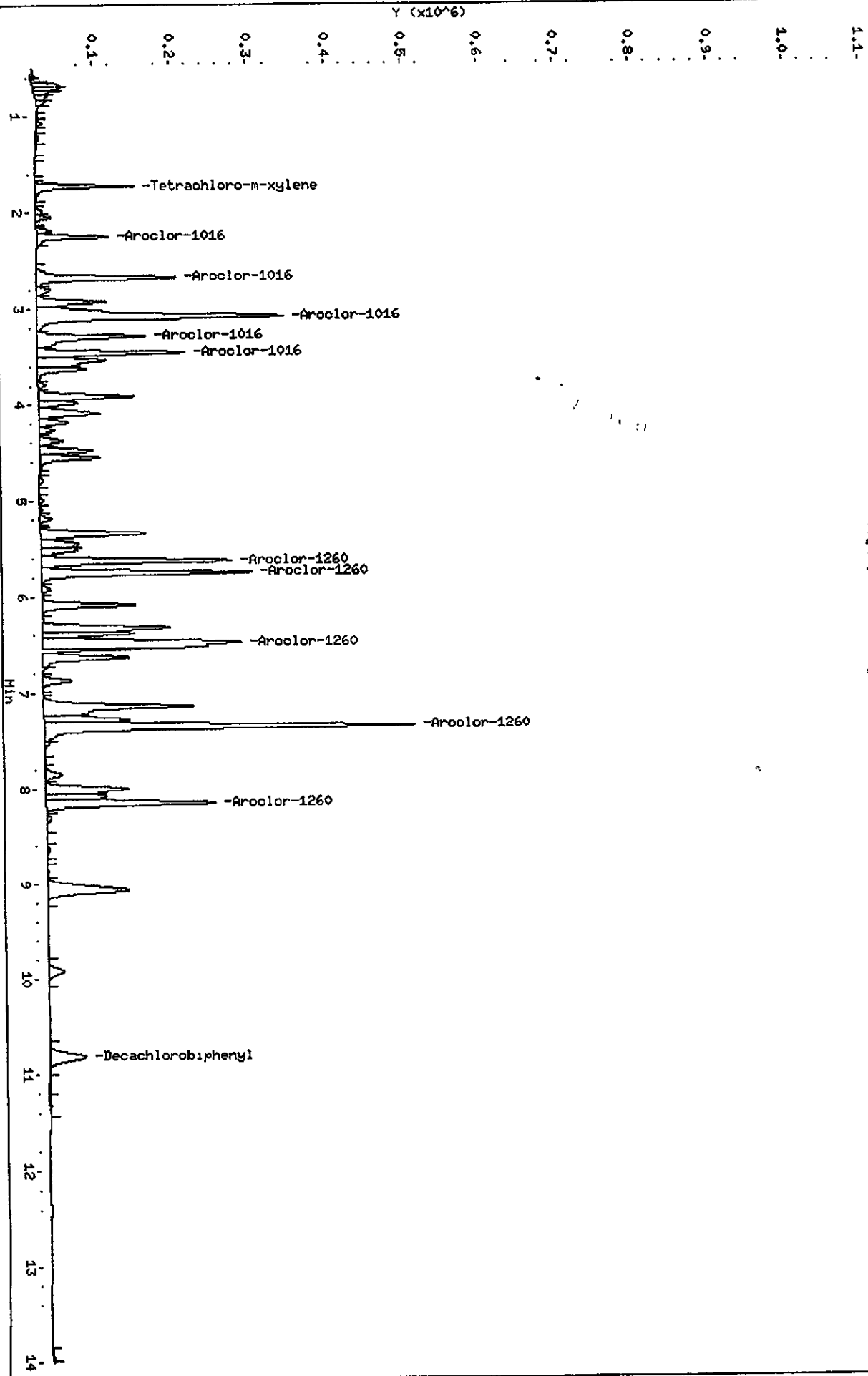
QC Flag Legend

M - Compound response manually integrated.

Data File: \\ppitpa02\chem\gc8.1\5100.b\H-A50395.D
Date: 21-AUG-2000 11:59
Client ID: LCS
Sample Info: D30K1102.5100.b
Volume Injected (uL): 1.0
Column phase: DB608

Instrument: gc8.1
Operator: 010139
Column diameter: 0.53

\\ppitpa02\chem\gc8.1\5100.b\H-A50395.D



668 680

UXB INTERNATIONAL
CHECK SAMPLE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) WATER

Lab Sample ID: COH160000 481

Method: SW846 8082

PCBs (8082)

Sample WT/Vol: 1000 / mL

Date Received: 08/15/00

Work Order: DJ0KD103

Date Extracted: 08/16/00

Dilution factor: 1

Date Analyzed: 08/21/00

Moisture %: NA

QC Batch: 0229481

Client Sample Id: DUPLICATE CHECK

CAS NO.	COMPOUND	CONCENTRATION UNITS:		
		(ug/L or ug/kg)	ug/L	Q
12674-11-2	Aroclor 1016		8.02	
11096-82-5	Aroclor 1260		8.99	

FORM I

Data File: \\qpitpa02\d\chem\gc8.i\5100.b\H-A50396.D
 Report Date: 21-Aug-2000 14:29

Page 1

STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc8.i\5100.b\H-A50396.D
 Lab Smp Id: DJ0KD103 Client Smp ID: LCSD
 Inj Date : 21-AUG-2000 12:19
 Operator : 010139 Inst ID: gc8.i
 Smp Info : DJ0KD103,5100.b
 Misc Info : 150146LCD
 Comment :
 Method : \\qpitpa02\d\chem\gc8.i\5100.b\PCBA.m
 Meth Date : 21-Aug-2000 11:58 EppingerD Quant Type: ESTD
 Cal Date : 10-AUG-2000 12:57 Cal File: H-A50167.D
 Als bottle: 10 QC Sample: LCSD
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: 1660.sub
 Target Version: 4.04 Sample Matrix: WATER
 Processing Host: PITPC061

Concentration Formula: Amt * DF * Vt/Vo/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

CONCENTRATIONS							
		ON-COL	FINAL				
RT	EXP RT	DLT RT	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO	
..							
20 Aroclor-1016				CAS #: 12674-11-2			
2.253	2.252	(0.001)	91129 0.77359	7.7359	0.00- 0.00	0.00	
2.675	2.673	(0.002)	180022 0.78077	7.8076	80.00- 120.00	0.00	
3.085	3.085	(0.000)	314676 0.82257	8.2257	416.04- 456.04	0.00	
3.294	3.293	(0.001)	137641 0.82123	8.2123	203.51- 243.51	0.00	
3.464	3.463	(0.001)	189903 0.81085	8.1085	297.56- 337.56	0.00	
Average of Peak Concentrations =				8.0180			

\$ 1 Tetrachloro-m-xylene				CAS #: 877-09-8			
1.729	1.728	(0.001)	125024 0.01585	0.15852			

\$ 34 Decachlorobiphenyl				CAS #: 2051-24-3			
10.810	10.808	(0.002)	47171 0.01648	0.16476			

668 682

Data File: \\qpitpa02\d\chem\gc8.i\5100.b\H-A50396.D
Report Date: 21-Aug-2000 14:29

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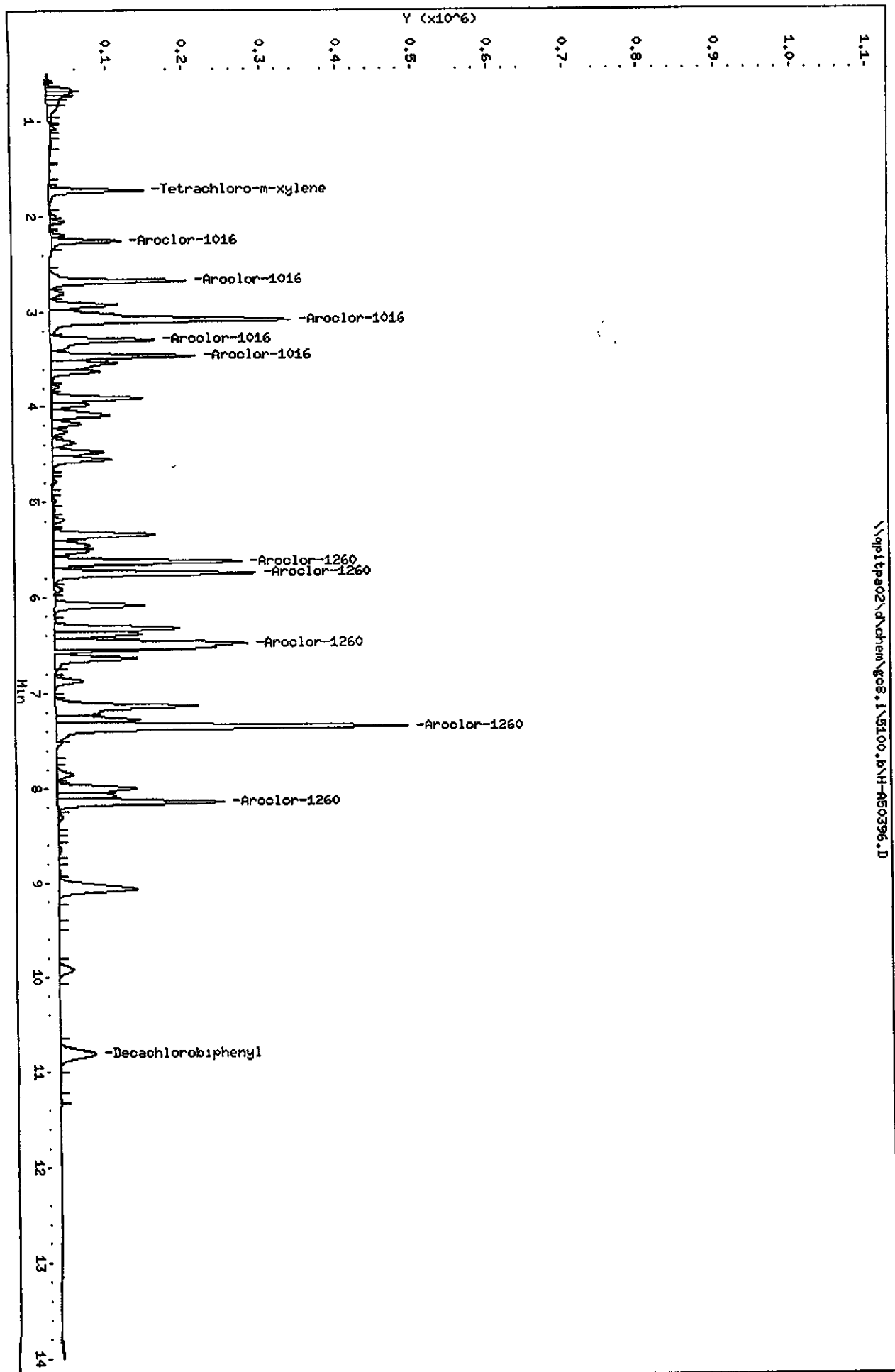
CONCENTRATIONS						
		ON-COL		FINAL		
RT	EXP RT	DLT RT	RESPONSE (	ng)	(ug/L)	TARGET RANGE
==	=====	=====	=====	=====	=====	=====
36 Aroclor-1260						
				CAS #	11096-82-5	
5 632	5 630	(0.002)	245853	0.85728	8.5728	0 00- 0 00
5 753	5.753	(0 000)	263162	0.87608	8 7608	95 86- 135.86
6 478	6 476	(0.002)	254659	0.84115	8 4114	116.91- 156.91
7.351	7.348	(0 003)	462899	0.98471	9.8471	120.00- 160.00
8.150	8 150	(0 000)	218083	0.93636	9.3636	108.33- 148.33
Average of Peak Concentrations =				8 9911		

QC Flag Legend

M - Compound response manually integrated.

Data File: \\gpi1p02\chem\g08.i\5100.b\H-A50396.D
Date: 21-AUG-2000 12:19
Client ID: LCSD
Sample Info: D30KID03.5100.b
Volume Injected (uL): 1.0
Column Phase: DB608

Instrument: g08.i
Operator: 010139
Column diameter: 0.53



668 684

**PCB
MISCELLANEOUS**

Separatory Funnel
Extraction Worksheet

Post 0229480
PCB 0229481

STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238
412-820-8380

8081A/8082

Hexane 703286

Page	Extraction Began	Date Completed	Lot Number	Sample ID	Payment	Client ID	Method	pH	Sample Volume (mL)	Final Volume (mL)	Surrogate Number	Surrogate Volume (mL)	Matrix Spike No.	Matrix Spike Volume (mL)	Clean up Method
1.	POH 150146	BLB		NA	5	1000	10.0	190-98-7	1.0	NA	NA	NA	NA	NA	NA
2.	LPS														
3.	LPS dup														
4.	LPS														
5.	LPS dup														
6.	001														
7.															
8.															
9.															
10.															
11.															
12.															
13.															
14.															
15.															
16.															
17.															
18.															
19.															
20.															
21.															
22.															
23.															
24.															
Analyst															
Extract(s)	py	py	py	py	py	py	py	py	py	py	py	py	py	py	py
Time	8-16-00	17:30	8-17-00	06:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00	08:00
Date	8-16-00	8-17-00	8-17-00	8-17-00	8-17-00	8-17-00	8-17-00	8-17-00	8-17-00	8-17-00	8-17-00	8-17-00	8-17-00	8-17-00	8-17-00
Location	STL	STL	STL	STL	STL	STL	STL	STL	STL	STL	STL	STL	STL	STL	STL
Analyst	STL	STL	STL	STL	STL	STL	STL	STL	STL	STL	STL	STL	STL	STL	STL
Extract(s) Relinquished															
Time															
Date															
Location															
Analyst															
Lot Number	123625														
Reviewed By	STL														
Date	8-17-00														

Created: DE 5-10-00

m

Sequence Table (Front Injector):

Vial Information Part:

Line Vial Vial Information

1	1	8082 ANALYSIS
2	2	RINSE
3	3	190-98-13 159
4	4	190-98-14
5	5	190-99-1
6	6	190-99-2
7	7	190-99-3
8	8	190-99-4
9	9	190-99-5 165
10	10	190-99-6
11	11	190-99-7
12	12	190-92-1
13	13	190-92-2
14	14	190-92-3 170
15	15	190-92-4
16	16	190-92-5
17	17	030147001
18	18	030147001S
19	19	030147001D 175
20	20	030147002
21	21	~~030147003~~ 20X
22	22	030147004
23	23	*030147005
24	24	*030147006 180
25	25	*030147007

Vial
used
8/11/00

Line	Vial	Vial Information
26	26	030147008
27	27	030147009
28	28	+ 030147010
29	29	030147011 185
30	30	+ 030147012
31	31	030147013
32	32	+ 030147014
33	33	030147015
34	34	+ 030147016 190
35	35	+ 030147BLK1
36	36	030147LCS1
37	37	190-99-5
38	38	030147017
39	39	~~030147018~~ 195 (5X)
40	40	030147020
41	41	030147021
42	42	030147021S
43	43	030147021D
44	44	030147022 200
45	45	030147023
46	46	030147024
47	47	030147025
48	48	030147026
49	49	030147027 205
50	50	030147028
51	51	030147029
52	52	030147030
53	53	030147031

Line	Vial	Vial Information
54	54	030147032 210
55	55	030147033
56	56	030147BLK2
57	57	030147LCS2
58	58	190-99-5
59	59	250266001 215
60	60	250266002
61	61	250266002S
62	62	250266002D
63	63	210212001
64	64	260147001 220
65	65	260183001
66	66	260183002
67	67	260183004
68	68	260183005
69	69	x260183006 225
70	70	260183007
71	71	260183008
72	72	260183009
73	73	250266BLK
74	74	250266LCS 230
75	75	270269BLK
76	76	270269LCS
77	77	270269LCE
78	78	190-99-5
79	79	270269001 X10 235
80	80	270274001 X10
81	81	280163001 X10

Line Vial Vial Information

Line	Vial	Vial Information
82	82	030142001 X10
83	83	030181002
84	84	040224002 240
85	85	040227002
86	86	030181BLK
87	87	030181LCS
88	88	030181LCD
89	89	210219002 245
90	90	250149002
91	91	~~260134002~~ 20X
92	92	260148002
93	93	270270002
94	94	270273002 250
95	95	270278002
96	96	210219BLK
97	97	210219LCS
98	98	210219LCD
99	99	190-99-5 255
100	1	280141002
101	2	280173002
102	3	030303001
103	4	030303002
104	5	030303003 260
105	6	030303003S
106	7	030303003D
107	8	030315001
108	9	030315002
109	10	040230001 265

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Line	Vial	Vial Information
110	11	030144001
111	12	030183001
112	13	030303BLK
113	14	030303LCS
114	15	310115001 <i>270</i>
115	16	310115002
116	17	310115BLK
117	18	310115LCS
118	19	310115LCD
119	20	190-99-5 <i>275</i>

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	HEXANE	PCB	1	Sample		
2	2	HEXANE	PCB	1	Sample		
3	3	M2154,5100.b	PCB	1	Sample		
4	4	M1232,5100.b	PCB	1	Sample		
5	5	M1242,5100.b	PCB	1	Sample		
6	6	M1248,5100.b	PCB	1	Sample		
7	7	L1660,5100.b	PCB	1	Sample		
8	8	ML1660,5100.b	PCB	1	Sample		
9	9	M1660,5100.b	PCB	1	Sample		
10	10	MH1660,5100.b	PCB	1	Sample		
11	11	H1660,5100.b	PCB	1	Sample		
12	12	2ND2154,5100.b	PCB	1	Sample		
13	13	2ND1232,5100.b	PCB	1	Sample		
14	14	2ND1242,5100.b	PCB	1	Sample		
15	15	2ND1248,5100.b	PCB	1	Sample		
16	16	2ND1660,5100.b	PCB	1	Sample		
17	17	DH977104,5100.b	PCB	1	Sample		
18	18	DH97712F,5100.b	PCB	1	Sample		
19	19	DH97712G,5100.b	PCB	1	Sample		
20	20	DH97F104,5100.b	PCB	1	Sample		
21	21	DH97L104,5100.b	PCB	1	Sample		
22	22	DH97R104,5100.b	PCB	1	Sample		
23	23	DH97V104,5100.b	PCB	1	Sample		
24	24	DH97X104,5100.b	PCB	1	Sample		
25	25	DH984104,5100.b	PCB	1	Sample		
26	26	DH985104,5100.b	PCB	1	Sample		
27	27	DH987104,5100.b	PCB	1	Sample		
28	28	DH988104,5100.b	PCB	1	Sample		
29	29	DH98A104,5100.b	PCB	1	Sample		
30	30	DH98D104,5100.b	PCB	1	Sample		
31	31	DH98F104,5100.b	PCB	1	Sample		

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	===	=====	=====	=====
32	32	DH98H104,5100.b	PCB	1	Sample		
33	33	DH98K104,5100.b	PCB	1	Sample		
34	34	DH98L104,5100.b	PCB	1	Sample		
35	35	DHFAH101,5100.b	PCB	1	Sample		
36	36	DHFAH102,5100.b	PCB	1	Sample		
37	37	M1660,5100.b	PCB	1	Sample		
38	38	DH98T104,5100.b	PCB	1	Sample		
39	39	DH98X104,5100.b	PCB	1	Sample		
40	40	DH995104,5100.b	PCB	1	Sample		
41	41	DH997104,5100.b	PCB	1	Sample		
42	42	DH997110,5100.b	PCB	1	Sample		
43	43	DH997111,5100.b	PCB	1	Sample		
44	44	DH998104,5100.b	PCB	1	Sample		
45	45	DH999104,5100.b	PCB	1	Sample		
46	46	DH99C104,5100.b	PCB	1	Sample		
47	47	DH99D104,5100.b	PCB	1	Sample		
48	48	DH99E104,5100.b	PCB	1	Sample		
49	49	DH99F104,5100.b	PCB	1	Sample		
50	50	DH99H104,5100.b	PCB	1	Sample		
51	51	DH99K104,5100.b	PCB	1	Sample		
52	52	DH99L104,5100.b	PCB	1	Sample		
53	53	DH99M104,5100.b	PCB	1	Sample		
54	54	DH99P104,5100.b	PCB	1	Sample		
55	55	DH99Q104,5100.b	PCB	1	Sample		
56	56	DHFAL101,5100.b	PCB	1	Sample		
57	57	DHFAL102,5100.b	PCB	1	Sample		
58	58	M1660,5100.b	PCB	1	Sample		
59	59	DGR3R105,5100.b	PCB	1	Sample		
60	60	DGR3T105,5100.b	PCB	1	Sample		
61	61	DGR3T10X,5100.b	PCB	1	Sample		
62	62	DGR3T110,5100.b	PCB	1	Sample		
63	63	DGLF4114,5100.b	PCB	1	Sample		
64	64	DGT8W114,5100.b	PCB	1	Sample		
65	65	DGTLP105,5100.b	PCB	1	Sample		
66	66	DGTLW105,5100.b	PCB	1	Sample		
67	67	DGTM3105,5100.b	PCB	1	Sample		
68	68	DGTMS105,5100.b	PCB	1	Sample		
69	69	DGTMA105,5100.b	PCB	1	Sample		
70	70	DGTMF105,5100.b	PCB	1	Sample		
71	71	DGTMN105,5100.b	PCB	1	Sample		
72	72	DGTN0105,5100.b	PCB	1	Sample		
73	73	DH4GT101,5100.b	PCB	1	Sample		
74	74	DH4GT102,5100.b	PCB	1	Sample		
75	75	DHEL5101,5100.b	PCB	1	Sample		
76	76	DHEL5102,5100.b	PCB	1	Sample		
77	77	DHEL5103,5100.b	PCB	1	Sample		
78	78	M1660,5100.b	PCB	1	Sample		
79	79	DGXDR114,5100.b	PCB	1	Sample		
80	80	DGXEW114,5100.b	PCB	1	Sample		
81	81	DH119114,5100.b	PCB	1	Sample		
82	82	DH96H114,5100.b	PCB	1	Sample		
83	83	DH9K3104,5100.b	PCB	1	Sample		
84	84	DHE1A104,5100.b	PCB	1	Sample		
85	85	DHE24104,5100.b	PCB	1	Sample		
86	86	DHHRP101,5100.b	PCB	1	Sample		
87	87	DHHRP102,5100.b	PCB	1	Sample		

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Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	===	=====	=====	=====
88	88	DHHRP103,5100.b	PCB	1	Sample		
89	89	DGLH4104,5100.b	PCB	1	Sample		
90	90	DGQ67104,5100.b	PCB	1	Sample		
91	91	DGT5C104,5100.b	PCB	1	Sample		
92	92	DGT9H104,5100.b	PCB	1	Sample		
93	93	DGXED104,5100.b	PCB	1	Sample		
94	94	DGXEV104,5100.b	PCB	1	Sample		
95	95	DGXFC104,5100.b	PCB	1	Sample		
96	96	DH6J4101,5100.b	PCB	1	Sample		
97	97	DH6J4102,5100.b	PCB	1	Sample		
98	98	DH6J4103,5100.b	PCB	1	Sample		
99	99	M1660,5100.b	PCB	1	Sample		
100	1	DH0Q9104,5100.b	PCB	1	Sample		
101	2	DH12K104,5100.b	PCB	1	Sample		
102	3	DHAMW104,5100.b	PCB	1	Sample		
103	4	DHANN104,5100.b	PCB	1	Sample		
104	5	DHANT10A,5100.b	PCB	1	Sample		
105	6	DHANT10C,5100.b	PCB	1	Sample		
106	7	DHANT10D,5100.b	PCB	1	Sample		
107	8	DHARW104,5100.b	PCB	1	Sample		
108	9	DHAV1104,5100.b	PCB	1	Sample		
109	10	DHE2810Q,5100.b	PCB	1	Sample		
110	11	DH96L10Q,5100.b	PCB	1	Sample		
111	12	DH9KD10Q,5100.b	PCB	1	Sample		
112	13	DHGWV101,5100.b	PCB	1	Sample		
113	14	DHGWV102,5100.b	PCB	1	Sample		
114	15	DH3P6104,5100.b	PCB	1	Sample		
115	16	DH3P9104,5100.b	PCB	1	Sample		
116	17	DH6JW101,5100.b	PCB	1	Sample		
117	18	DH6JW102,5100.b	PCB	1	Sample		
118	19	DH6JW103,5100.b	PCB	1	Sample		
119	20	M1660,5100.b	PCB	1	Sample		

Sequence Table (Back Injector):

No entries - empty table!

Created: DE 8-21-00

Sequence Table (Front Injector):

Vial Information Part:

Line Vial Vial Information

1	1	8082 ANALYSIS
2	2	190-98-13 388
3	3	190-98-14
4	4	190-99-1 390
5	5	190-99-2 7
6	6	190-99-5
7	7	150146001 X10
8	8	150146BLK
9	9	150146LCS 345
10	10	150146LCD
11	11	180213001
12	12	180213BLK
13	13	180213LCS
14	14	180213LCD 400
15	15	100270001
16	16	100270002
17	17	100270003
18	18	100270004
19	19	100270005 405
20	<u>20</u>	100270006
21	21	100270007
22	<u>22</u>	100270008
23	23	100270009
24	24	100270BLK 410
25	25	100270LCS

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8/23/00

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Line	Vial	Vial Information
====	====	=====
26	26	100270LCD
27	27	190-99-5
28	28	100270010
29	29	140112001 415
30	30	140112001S
31	31	140112001D
32	32	140112002
33	33	140112004
34	34	140112004S 420
35	35	140112004D
36	36	140112006
37	37	140112BLK
38	38	140112LCS
39	39	100186001 X10 425
40	40	100186002 X20
41	41	100186003 X200
42	42	100186004 X5
43	43	100186005 X5
44	44	100186005S X5 430
45	45	100186005D X5
46	46	100186007 X20
47	47	100186008 X20
48	48	190-99-5
49	49	100186009 X10 435
50	50	100186012 X5
51	51	100186013 X5
52	52	190-99-5
53	53	190-90-2

Line	Vial	Vial Information
54	54	190-90-3 440
55	55	190-90-4
56	56	190-90-5
57	57	190-90-6
58	58	270114BLK
59	59	270114015 445
60	60	270114015 X5
61	61	270114015 X10
62	62	270114015 X20
63	63	270113BLK
64	64	270113003 450
65	<u>65</u>	270113003 X5
66	66	270113003 X10
67	<u>67</u>	270113003 X20
68	68	190-90-4 454

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	HEXANE	PCB	1	Sample		
2	2	M2154,5100.b	PCB	1	Sample		
3	3	M1232,5100.b	PCB	1	Sample		
4	4	M1242,5100.b	PCB	1	Sample		
5	5	M1248,5100.b	PCB	1	Sample		
6	6	M1660,5100.b	PCB	1	Sample		
7	7	DHV7M104,5100.b	PCB	1	Sample		
8	8	DJ0KD101,5100.b	PCB	1	Sample		
9	9	DJ0KD102,5100.b	PCB	1	Sample		
10	10	DJ0KD103,5100.b	PCB	1	Sample		
11	11	DJ401104,5100.b	PCB	1	Sample		
12	12	DJ52E101,5100.b	PCB	1	Sample		
13	13	DJ52E102,5100.b	PCB	1	Sample		
14	14	DJ52E103,5100.b	PCB	1	Sample		
15	15	DHN8010C,5100.b	PCB	1	Sample		
16	16	DHN8810C,5100.b	PCB	1	Sample		
17	17	DHN8910C,5100.b	PCB	1	Sample		
18	18	DHN8C10C,5100.b	PCB	1	Sample		
19	19	DHN8H10C,5100.b	PCB	1	Sample		
20	20	DHN8P10C,5100.b	PCB	1	Sample		
21	21	DHN8V10C,5100.b	PCB	1	Sample		

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Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	===	=====	=====	=====
22	22	DHN9010C,5100.b	PCB	1	Sample		
23	23	DHN9310C,5100.b	PCB	1	Sample		
24	24	DHQ98101,5100.b	PCB	1	Sample		
25	25	DHQ98102,5100.b	PCB	1	Sample		
26	26	DHQ98103,5100.b	PCB	1	Sample		
27	27	M1660,5100.b	PCB	1	Sample		
28	28	DHN9410C,5100.b	PCB	1	Sample		
29	29	DHRPW105,5100.b	PCB	1	Sample		
30	30	DHRPW117,5100.b	PCB	1	Sample		
31	31	DHRPW118,5100.b	PCB	1	Sample		
32	32	DHRQ4105,5100.b	PCB	1	Sample		
33	33	DHRQA105,5100.b	PCB	1	Sample		
34	34	DHRQA117,5100.b	PCB	1	Sample		
35	35	DHRQA118,5100.b	PCB	1	Sample		
36	36	DHRQE105,5100.b	PCB	1	Sample		
37	37	DHV6V101,5100.b	PCB	1	Sample		
38	38	DHV6V102,5100.b	PCB	1	Sample		
39	39	DHMH1102,5100.b	PCB	1	Sample		
40	40	DHMH102,5100.b	PCB	1	Sample		
41	41	DHMHJ102,5100.b	PCB	1	Sample		
42	42	DHMHM102,5100.b	PCB	1	Sample		
43	43	DHMJ6102,5100.b	PCB	1	Sample		
44	44	DHMJ6106,5100.b	PCB	1	Sample		
45	45	DHMJ6107,5100.b	PCB	1	Sample		
46	46	DHMJC102,5100.b	PCB	1	Sample		
47	47	DHMJG102,5100.b	PCB	1	Sample		
48	48	M1660,5100.b	PCB	1	Sample		
49	49	DHJM102,5100.b	PCB	1	Sample		
50	50	DHMKH102,5100.b	PCB	1	Sample		
51	51	DHMKK102,5100.b	PCB	1	Sample		
52	52	M1660,5100.b	PCB	1	Sample		
53	53	LCHLOR,5100.b	PCB	1	Sample		
54	54	MLCHLOR,5100.b	PCB	1	Sample		
55	55	MCHLOR,5100.b	PCB	1	Sample		
56	56	MHCHLOR,5100.b	PCB	1	Sample		
57	57	HCHLOR,5100.b	PCB	1	Sample		
58	58	DH83L101,5100.b	PCB	1	Sample		
59	59	DGW1M101,5100.b	PCB	1	Sample		
60	60	DGW1M101,5100.b	PCB	1	Sample		
61	61	DGW1M101,5100.b	PCB	1	Sample		
62	62	DGW1M101,5100.b	PCB	1	Sample		
63	63	DH7GX101,5100.b	PCB	1	Sample		
64	64	DGW0R101,5100.b	PCB	1	Sample		
65	65	DGW0R101,5100.b	PCB	1	Sample		
66	66	DGW0R101,5100.b	PCB	1	Sample		
67	67	DGW0R101,5100.b	PCB	1	Sample		
68	68	MCHLOR,5100.b	PCB	1	Sample		

Sequence Table (Back Injector):

No entries - empty table!

PSR024 8/16/00 13:41:37 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: YUSHINSC

METHOD: QH PCBs (8082)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
22D CLP1	DHV7M-1-04	— — —	259566	399411	1-09-QH	COH150146	001		WATER	0	12 1

RELINQUISHED BY

P. Yushinski
P. Yushinski

RECEIVED BY

P. Yushinski
P. Yushinski

DATE/TIME

8-16-00 1545
8-16-00 2350

***** END OF REPORT *****

668 698

HERBICIDE DATA

**HERBICIDE
QC SUMMARY**

668 700

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name:

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C0H150146

GC Column(1): DB608

ID: 0.53 (mm)

GC Column(2): DB1701

ID: 0.53 (mm)

	EPA SAMPLE NO.	S1 1 %REC #	S1 2 %REC #	S2 1 %REC #	S2 2 %REC #	S3 1 %REC #	S3 2 %REC #	TOT OUT
01	DF/S1/0227/I	0D	77D					De 8200 10
02	LCS		95					0
03	LCSD		95					0
04	PBLK	80	88					0
05								
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

ADVISORY
QC LIMITS
(53-119)

S1 = DCAA

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0H160000

WO #: DJ0KL102

BATCH: 0229485

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
2,4-D	16.0	12.9	81	46 - 124	
2,4,5-TP (Silvex)	4.00	3.13	78	53 - 127	
2,4,5-T	4.00	3.14	78	40 - 126	
Pentachlorophenol	2.00	1.64	82	30 - 125	

NOTES(S):

* Values outside of QC limits

Spike Recovery: 0 out of 4 outside limits

COMMENTS:

FORM III

668 702

SW846 8151A CHECK SAMPLE DUPLICATE RECOVERY

Lab Name: Severn Trent Laboratories, Inc.

Client: UXB INTERNATIONAL

Lab Code: QESPIT

SDG No:

Lot #: C0H160000

WO #: DJ0KL103

BATCH: 0229485

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENT. (ug/L)	% REC	QC LIMITS REC	QUAL
=====	=====	=====	=====	=====	=====
2,4-D	16.0	12.3	77	46 - 124	
2,4,5-TP (Silvex)	4.00	3.18	80	53 - 127	
2,4,5-T	4.00	3.10	78	40 - 126	
Pentachlorophenol	2.00	1.72	86	30 - 125	

NOTES(S) :

* Values outside of QC limits

Spike Recovery: 0 out of 4 outside limits

COMMENTS:

FORM III

4C
PESTICIDE METHOD BLANK SUMMARY

668 703 EPA SAMPLE NO.

PBLK

Lab Name: Contract: Lab Code: Case No.: SAS No.: SDG No.: C0H150146
 Lab Sample ID: DJ0KL101 Lab File ID: A-A50327
 Matrix (soil/water) WATER Extraction: (SepF/Cont/Sonc) SW846 8151A
 Sulfur Cleanup (Y/N) N Date Extracted: 08/16/00
 Date Analyzed (1): 08/24/00 Date Analyzed (2): 08/24/00
 Time Analyzed (1): 1625 Time Analyzed (2): 1654
 Instrument ID (1): GC1 Instrument ID (2): GC1
 GC Column (1): DB608 ID: 0.53 (mm) GC Column (2): DB1701 ID: 0.53 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	DF/S1/0227/I	DHV7M112	08/24/00	08/24/00
02	LCS	DJ0KL102		08/24/00
03	LCSD	DJ0KL103		08/24/00
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS: _____

668 704

**HERBICIDE
SAMPLE DATA**

UXB INTERNATIONAL

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) WATER

Lab Sample ID: C0H150146 001

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 1000 / mL

Date Received: 08/15/00

Work Order: DHV7M112

Date Extracted: 08/16/00

Dilution factor: 10

Date Analyzed: 08/24/00

Moisture %: NA

QC Batch: 0229485

Client Sample Id: DF/S1/0227/IDW/003

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/kg)	ug/L
94-75-7	2,4-D	40	U
93-72-1	2,4,5-TP (Silvex)	10	U

668 706

Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50226.D
 Report Date: 24-Aug-2000 15:49

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50226.D
 Lab Smp Id: DHV7M112 Client Smp ID: DF/S1/0227/IDW/003
 Inj Date : 24-AUG-2000 14:29
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DHV7M112,5240A.b
 Misc Info : 150146001 10XDL
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
 Meth Date : 24-Aug-2000 14:28 colussyj Quant Type: ESTD
 Cal Date : 24-AUG-2000 09:39 Cal File: A-B50216.D
 Als bottle: 16
 Dil Factor: 10.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

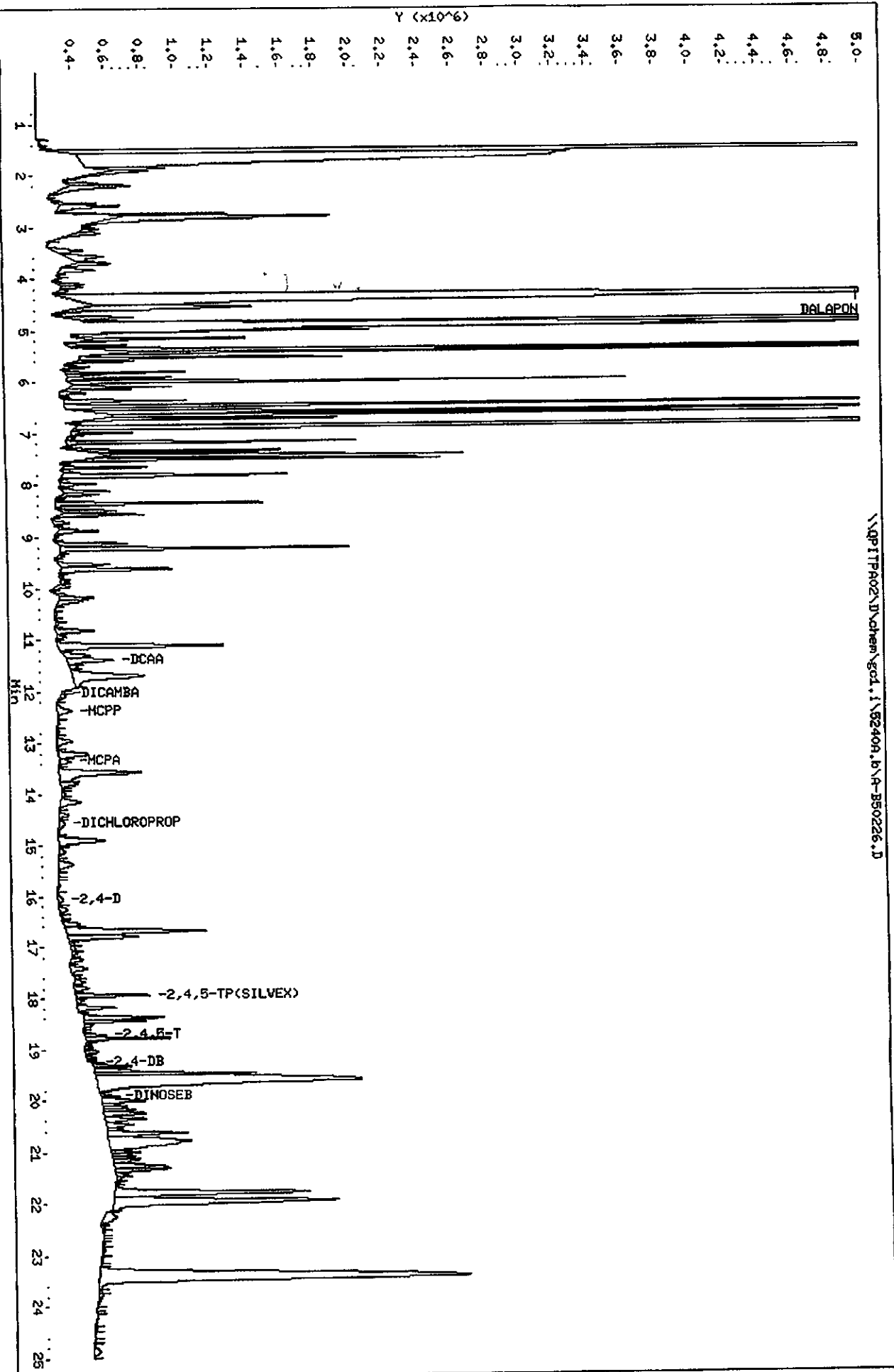
Concentration Formula: Amt * DF * 20*Vt/Vo/Vi

Name	Value	Description
DF	10.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON	4.341	4.342	-0.001	44294716	3.09715	6194
2 DCAA	11.390	11.352	0.038	1237864	0.03830	7.660
3 DICAMBA	12.024	11.971	0.053	16140	<0.0	1.293
4 MCPP	12.367	12.420	-0.053	86299	4.66479	9330
5 MCPA	13.346	13.327	0.019	67384	2.44521	4890
6 DICHLOROPROP	14.551	14.507	0.044	33537	0.00659	13.17
7 2,4-D	16.053	16.039	0.014	29888	0.00581	11.61
8 PENTACHLOROPHENOL	Compound Not Detected.					
9 2,4,5-TP(SILVEX)	17.936	17.951	-0.015	432905	0.00723	14.46
10 2,4,5-T	18.725	18.688	0.037	120984	0.00186	3.716
11 2,4-DB	19.251	19.247	0.004	31173	0.00334	6.688
12 DINOSEB	19.927	19.945	-0.018	93974	0.00156	3.115

Data File: \\QP1TP402\U\chem\ec1.1\52408.b\A-B50226.D
Date: 24-JUL-2000 14:29
Client ID: DF/S1/0227/IDW/003
Sample Info: DHV7M112,52408.b
Volume Injected (uL): 1.0
Column phases: DB1701

Instrument: ec1.1
Operator: 01797
Column diameter: 0.53



Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50322.D
Report Date: 24-Aug-2000 16:22

```
Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50322.D
Lab Smp Id: DHV7M112                               Client Smp ID: DF/S1/0227/IDW/003
Inj Date  : 24-AUG-2000 14:00
Operator   : 01797                                   Inst ID: gc1.i
Smp Info   : DHV7M112,5240.b
Misc Info  : 150146001 10XDL
Comment    :
Method     : \\QPITPA02\D\chem\gc1.i\5240.b\LONGH.m
Meth Date  : 24-Aug-2000 16:21 colussyj             Quant Type: ESTD
Cal Date   : 24-AUG-2000 09:10                     Cal File: A-A50312.D
Als bottle: 16
Dil Factor: 10.00000
Integrator: Falcon                                  Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC085
```

Name	Value	Description
DF	10.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

L on B
~~not sent~~

Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50322.D
Report Date: 24-Aug-2000 16:22

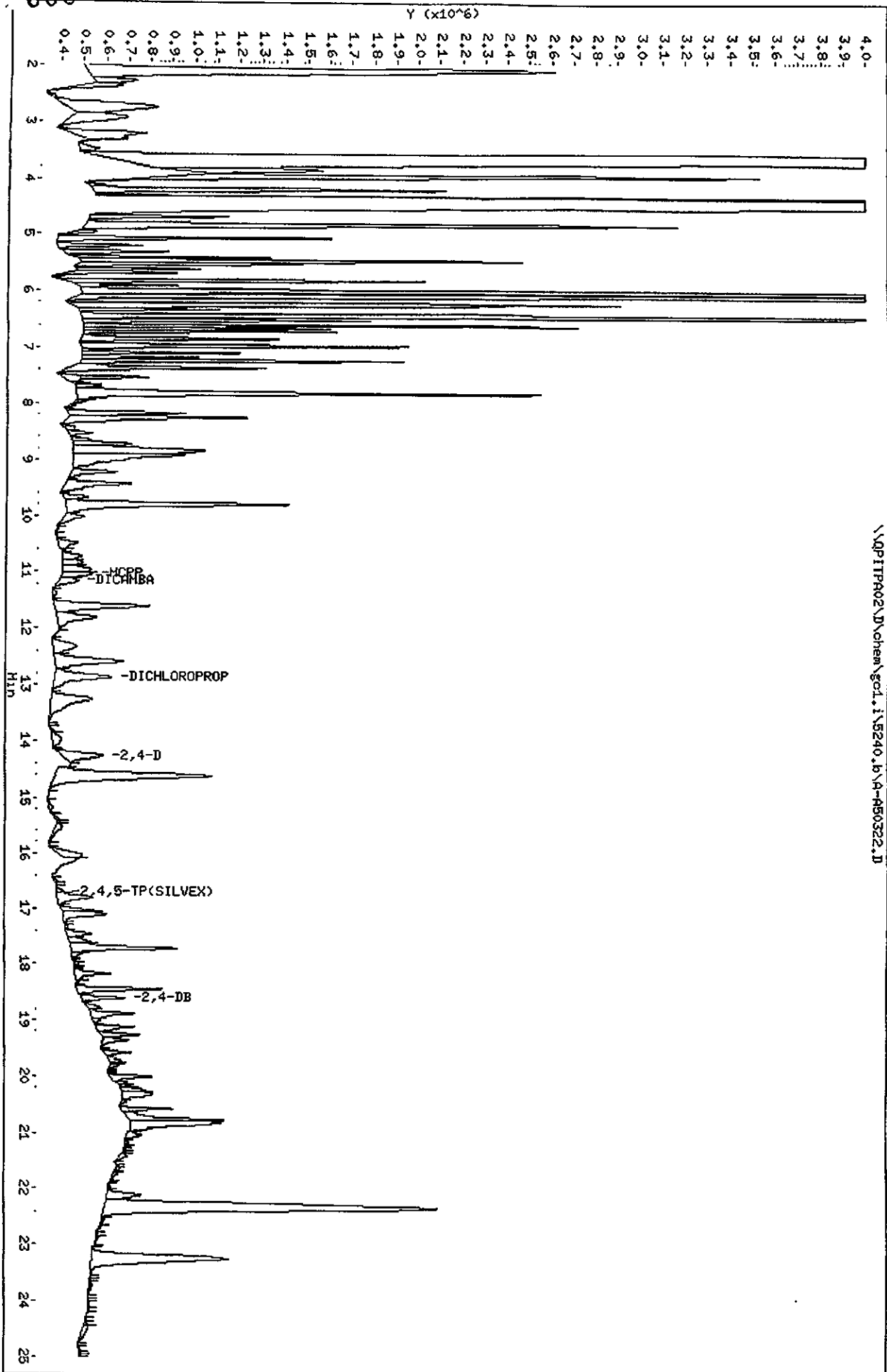
QC Flag Legend

M - Compound response manually integrated.

668 710

Data File: \NPITPA02\Nchem\gol.i\5240.b\A-450322.D
Date: 24-AUG-2000 14:00
Client ID: DF/SILVEX/TPM/003
Sample Info: DHV7M12,5240.b
Volume Injected (uL): 1.0
Column Phase: DB608

Instrument: gol.i
Operator: 01/97
Column diameter: 0.53



**HERBICIDE
CALIBRATION DATA**

668 712

Report Date : 24-Aug-2000 14:20

STL - Pittsburgh

COMPOUND LISTING

Method file : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
 Quant Method : ESTD Target Version : 4.04
 Last Update : 24-Aug-2000 14:19 Number of Cpnds : 12
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events	Values
Initial:Start Threshold	449.000000
Initial:End Threshold	224.500000
Initial:Area Threshold	4490.000000
Initial:P-P Resolution	1.000000
Initial:Bunch Factor	8.000000
Initial:Negative Peaks	ON
Initial:Tension	0.200000

Compound	RT	RT Window	RF
1 DALAPON	4.342	4.272-4.412	1.43e+007
\$ 2 DCAA	11.352	11.282-11.422	3.23e+007
3 DICAMBA	11.971	11.901-12.041	2.50e+007
4 MCPP	12.421	12.351-12.491	1.85e+004
5 MCPA	13.327	13.257-13.397	2.76e+004
6 DICHLOROPROP	14.507	14.437-14.577	5.09e+006
7 2,4-D	16.040	15.970-16.110	5.15e+006
8 PENTACHLOROPHENOL	16.427	16.357-16.497	8.12e+007
9 2,4,5-TP (SILVEX)	17.951	17.881-18.021	5.99e+007
10 2,4,5-T	18.688	18.618-18.758	6.51e+007
11 2,4-DB	19.247	19.177-19.317	9.32e+006
12 DINOSEB	19.946	19.876-20.016	6.03e+007

Report Date : 24-Aug-2000 14:20

668 713

62
68901B
DB/70/

STL - Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 24-AUG-2000 07:43
End Cal Date : 24-AUG-2000 09:39
Quant Method : ESTD
Origin : Disabled
Target Version : 4.04
Integrator : Falcon
Method file : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
Cal Date : 24-Aug-2000 14:19 colussyj
Curve Type : Average

Calibration File Names:

Level 1: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50212.D
Level 2: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50213.D
Level 3: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50214.D
Level 4: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50215.D
Level 5: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50216.D

Compound	0.00500	0.01000	0.02500	0.05000	0.10000	RRF	% RSD
Level 1	Level 2	Level 3	Level 4	Level 5			
1 DALAFON	16396455	15106000	14329021	12910159	12767199	14301767	10.677
3 DICAMBA	28908585	26215305	24941200	22620094	22137829	24964603	11.080
4 MCPP	21349	20178	19061	16626	15286	18500	13.537
5 MCPA	33948	30941	27487	23448	21963	27558	18.187
6 DICHLOROPROP	5770660	5505778	5164080	4599176	4423171	5092573	11.311
7 2,4-D	5441611	5393224	5263831	4863718	4771024	5146681	6.010
8 PENTACHLOROPHENOL	84363008	82470113	81541353	78102303	79708155	81234986	2.983
9 2,4,5-TP(SILVEX)	62250476	61462762	60697536	57452304	57571393	59886894	3.735
10 2,4,5-T	64259772	65590857	66095498	63703081	65948649	65119571	1.648
11 2,4-DB	9447441	9411635	9316994	8931935	9501962	9321993	2.448
12 DINOSEB	59660883	60804409	61311654	59453268	60414035	60328850	1.287
\$ 2 DCAA	38637559	34304306	35066545	28398029	25201600	32321608	16.765

668,714

Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50232.D
 Report Date: 25-Aug-2000 07:36

7E
 689613
 101701

STL - Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 24-AUG-2000 17:23
 Lab File ID: A-B50232.D Init. Cal. Date(s): 24-AUG-2000 24-AUG-2000
 Analysis Type: Init. Cal. Times: 07:43 09:39
 Lab Sample ID: MHERB Quant Type: ESTD
 Method: \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m

COMPOUND	RRF	RPO	MIN	MAX
RRF	RPO	RRF	%D	%D
1 DALAPON	14301767	14747927	0.010	3 1 15.0
2 DCAA	32321608	30260799	0.010	-6 4 15.0
3 DICAMBA	24964603	25134518	0.010	0 7 15.0
4 MCPP	18500	19249	0.010	4.0 15.0
5 MCPA	27558	28160	0.010	2.2 15.0
6 DICHLOROPROP	5092573	5396450	0.010	6.0 15.0
7 2,4-D	5146681	5664324	0.010	10.1 15.0
8 PENTACHLOROPHENOL	81234986	84037312	0.010	3.4 15.0
9 2,4,5-TP(SILVEX)	59886894	62756777	0.010	4.8 15.0
10 2,4,5-T	65119571	69177583	0.010	6.2 15.0
11 2,4-DB	9321993	9847598	0.010	5.6 15.0
12 DINOSEB	60328850	61427559	0.010	1.8 15.0

Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50235.D
 Report Date: 25-Aug-2000 07:36

1E
 68901B 668 715
 DB1701

STL - Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 24-AUG-2000 18:50
 Lab File ID: A-B50235.D Init. Cal. Date(s): 24-AUG-2000 24-AUG-2000
 Analysis Type: Init. Cal. Times: 07:43 09:39
 Lab Sample ID: MHERB Quant Type: ESTD
 Method: \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m

COMPOUND	RRF	RFO	MIN	MAX
1 DALAPON	14301767	14375421	0.010	0.5
2 DCAA	32321608	30139471	0.010	-6.8
3 DICAMBA	24964603	24768447	0.010	-0.8
4 MCPP	18500	18874	0.010	2.0
5 MCPA	27558	27643	0.010	0.3
6 DICHLOROPROP	5092573	5311592	0.010	4.3
7 2,4-D	5146681	5544900	0.010	7.7
8 PENTACHLOROPHENOL	81234986	82566165	0.010	1.6
9 2,4,5-TP(SILVEX)	59886894	61629384	0.010	2.9
10 2,4,5-T	65119571	68630142	0.010	5.4
11 2,4-DB	9321993	9696071	0.010	4.0
12 DINOSB	60328850	61360866	0.010	1.7

668 716

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name:

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C0H150146

GC Column: DB1701 ID: 0.53 (mm) Init. Calib. Date(s): 08/24/00 08/24/00

Instrument ID: GC1

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION S1 : 11.35					
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	LHERB	08/24/00	0743	11.36	
02	MLHERB	08/24/00	0812	11.36	
03	MHERB	08/24/00	0841	11.35	
04	MHHERB	08/24/00	0910	11.36	
05	HHERB	08/24/00	0939	11.35	
06	DF/S1/0227/I	08/24/00	1429	11.39	
07	LCS	08/24/00	1556	11.36	
08	LCSD	08/24/00	1625	11.35	
09	~~ZZZZZ~~ <i>PBLK</i>	08/24/00	1654	11.36	
10	<i>DE</i> <i>8/24/00</i> ~~ZZZZZ~~ <i>DJOKL101</i>	08/24/00	1850	11.36	
11	MHERB				
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					

S1 = DCAA

QC LIMITS
(+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50212.D
Report Date: 24-Aug-2000 14:29

668-717

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50212.D

Lab Smp Id: Lherb

Inj Date : 24-AUG-2000 07:43

Operator : 01797

Inst ID: gc1.i

Smp Info : Lherb,5240A.b

Misc Info : 190-94-1

Comment :

Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m

Meth Date : 24-Aug-2000 14:28 colussyj Quant Type: ESTD

Cal Date : 24-AUG-2000 07:43 Cal File: A-B50212.D

Als bottle: 2 Calibration Sample, Level: 1

Dil Factor: 1.00000

Compound Sublist: 1-all.sub

Integrator: Falcon

Target Version: 4.04

Processing Host: PITPC085

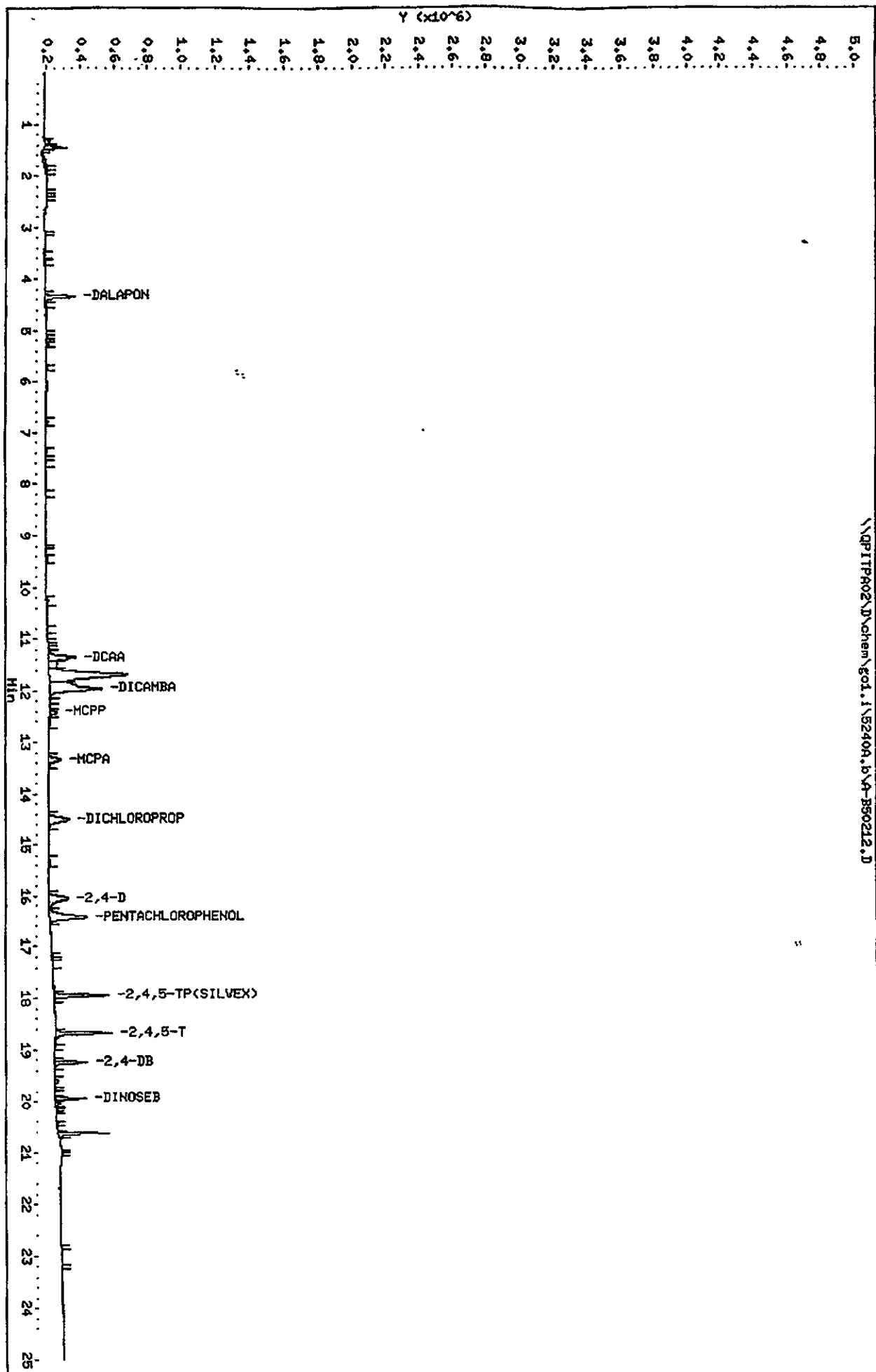
AMOUNTS

CAL-AMT ON-COL
(ng) (ng)

Compounds	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
8 PENTACHLOROPHENOL	16.424	16.427	-0.003	224379	0.00266	0.0004368
1 DALAPON	4.340	4.342	-0.002	180361	0.01100	0.002058
\$ 2 DCAA	11.356	11.352	0.004	822980	0 02130	0.004274
3 DICAMBA	11.966	11.971	-0.005	306431	0 01060	0.002006
4 MCPP	12.419	12.420	-0 001	45259	2.12000	0.3983
5 MCPA	13.330	13.327	0.003	72649	2.14000	0.4399
6 DICHLOROPROP	14.507	14.507	0.000	122338	0.02120	0.003913
7 2,4-D	16 046	16.039	0.007	114818	0 02110	0.003566
9 2,4,5-TP(SILVEX)	17.950	17.951	-0.001	326815	0.00525	0.0008648
10 2,4,5-T	18.688	18.688	0.000	338649	0.00527	0.0008132
11 2,4-DB	19.250	19.247	0.003	199341	0.02110	0 003353
12 DINOSEB	19.945	19.945	0.000	189125	0.00317	0.0004906

Date File: \\QPIF002\\chem\\col.1\\B2400.b\\A-B50212.D
Date: 24-AUG-2000 07:43
Client ID:
Sample Info: Lherb, B2400.b
Column Phase: DB1701

Instrument: GC4.1
Operator: 01797
Column diameter: 0.53



Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50213.D
 Report Date: 24-Aug-2000 14:29

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50213.D
 Lab Smp Id: MLherb
 Inj Date : 24-AUG-2000 08:12
 Operator : 01797
 Smp Info : MLherb,5240A.b
 Misc Info : 190-94-2
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
 Meth Date : 24-Aug-2000 14:28 colussyj
 Cal Date : 24-AUG-2000 07:43
 Als bottle: 3
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC085

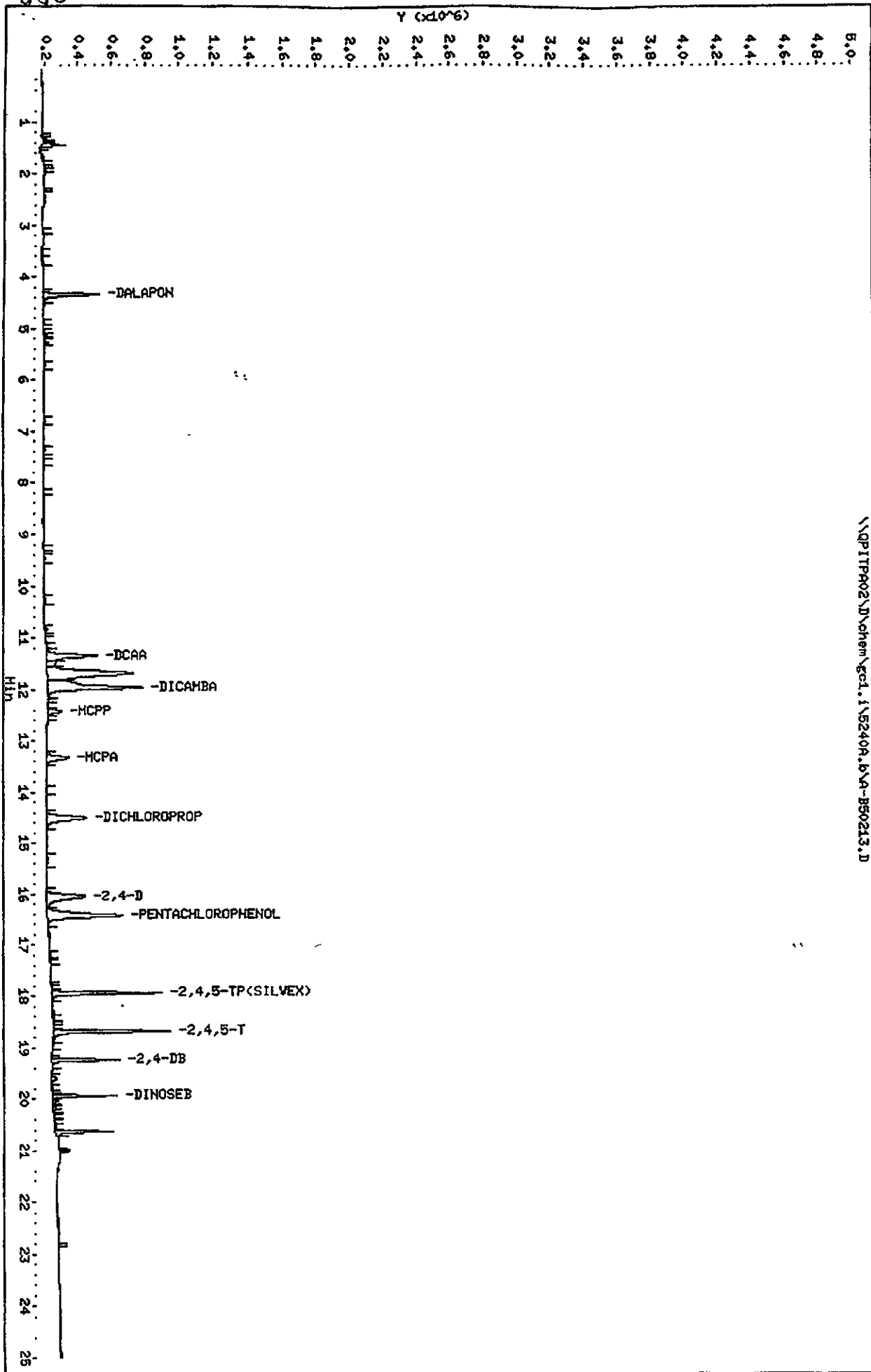
Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-B50212.D
 Calibration Sample, Level: 2
 Compound Sublist: 1-all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
8 PENTACHLOROPHENOL	16.432	16.427	0.005	438741	0.00532	0.001201
1 DALAPON	4.341	4.342	-0.001	332332	0.02200	0.005491
\$ 2 DCAA	11.357	11.352	0.005	1457933	0.04250	0.01131
3 DICAMBA	11.973	11.971	0.002	558386	0.02130	0.005291
4 MCPP	12.426	12.420	0.006	85960	4.26000	1.132
5 MCPA	13.332	13.327	0.005	132428	4.28000	1.211
6 DICHLOROPROP	14.507	14.507	0.000	233445	0.04240	0.01094
7 2,4-D	16.052	16.039	0.013	229212	0.04250	0.01019
9 2,4,5-TP(SILVEX)	17.952	17.951	0.001	645359	0.01050	0.002418
10 2,4,5-T	18.689	18.688	0.001	688704	0.01050	0.002306
11 2,4-DB	19.250	19.247	0.003	397171	0.04220	0.009344
12 DINOSEB	19.947	19.945	0.002	386108	0.00635	0.001399

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Data File: \\QPI1P002\\chem\\col.1\\B240A.b\\A-B50213.D
 Date: 24-AUG-2000 08:12
 Client: iij
 Sample Info: HLherb, B240A.b
 Column phase: DB1701

Injection: 6.0
 Operator: 01797
 Column diameter: 0.53



Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50214.D
 Report Date: 24-Aug-2000 14:29

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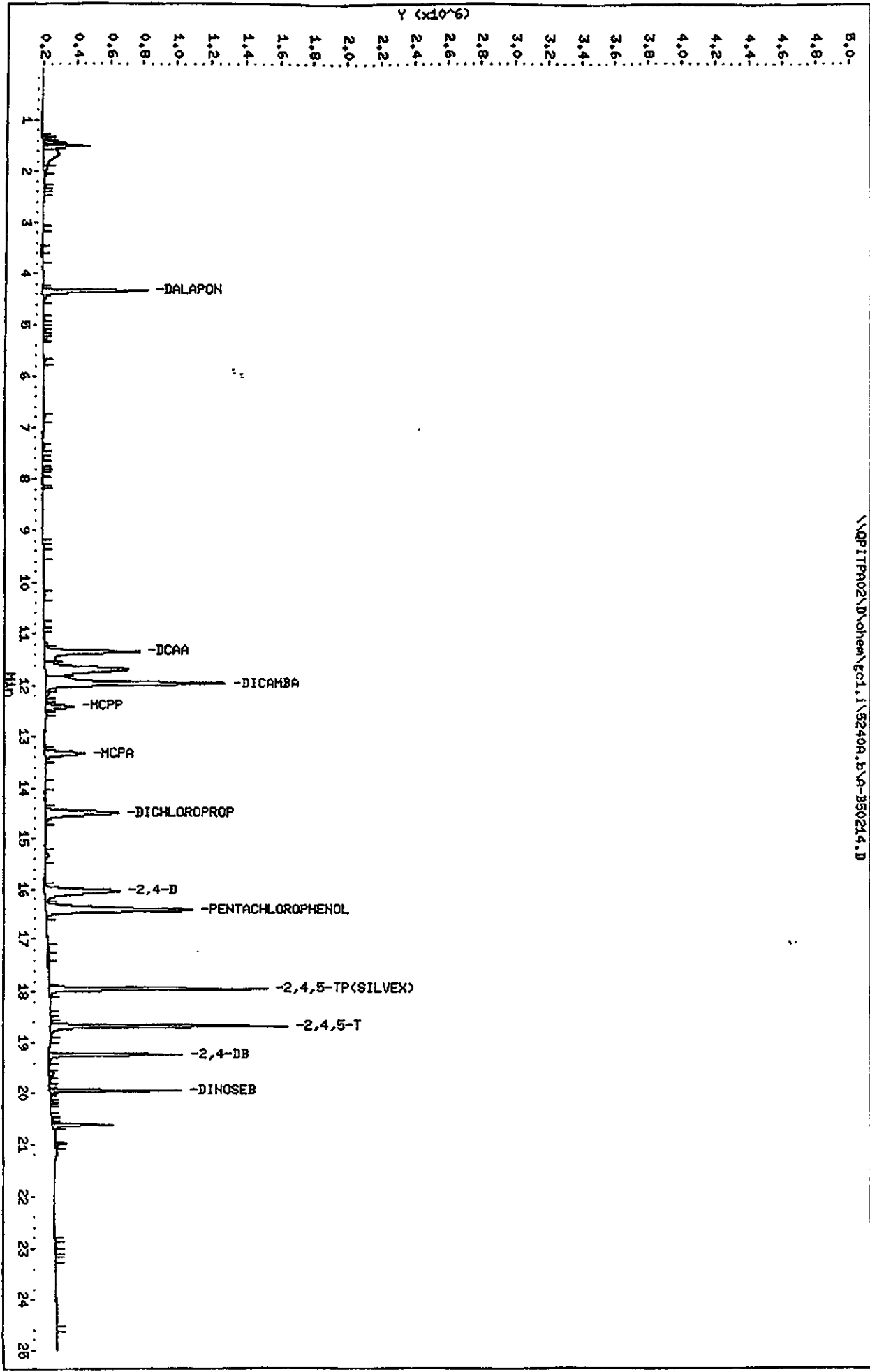
Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50214.D
 Lab Smp Id: Mherb
 Inj Date : 24-AUG-2000 08:41
 Operator : 01797
 Smp Info : Mherb,5240A.b
 Misc Info : 190-94-3
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
 Meth Date : 24-Aug-2000 14:28 colussyj
 Cal Date : 24-AUG-2000 09:39
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC085

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-B50216.D
 Calibration Sample, Level: 3
 Compound Sublist: 1-all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
8 PENTACHLOROPHENOL	16.427	16.427	0.000	867600	0.01064	0.001303
1 DALAPON	4.342	4.342	0.000	629044	0.04390	0.005369
2 DCAA	11.352	11.352	0.000	2984163	0.08510	0.01104
3 DICAMBA	11.971	11.971	0.000	1060001	0.04250	0.005114
4 MCPP	12.420	12.420	0.000	162401	8.52000	1.021
5 MCPA	13.327	13.327	0.000	235291	8.56000	1.040
6 DICHLOROPROP	14.507	14.507	0.000	437914	0.08480	0.01050
7 2,4-D	16.039	16.039	0.000	447952	0.08510	0.01066
9 2,4,5-TP(SILVEX)	17.951	17.951	0.000	1280718	0.02110	0.002614
10 2,4,5-T	18.688	18.688	0.000	1394615	0.02110	0.002621
11 2,4-DB	19.247	19.247	0.000	787286	0.08450	0.01030
12 DINOSEB	19.945	19.945	0.000	778658	0.01270	0.001580

Data File: \NPITPA02\Nchem\gc1.1\5240A.b\A-B50214.D
 Date: 24-AUG-2000 08:41
 Client: IUI
 Sample Info: Herb, 5240A.b
 Column Phase: DB1.701

Instrument: gc1.1
 Operator: 01797
 Column diameter: 0.53



Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50215.D
 Report Date: 24-Aug-2000 14:29

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Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50215.D
 Lab Smp Id: MHherb
 Inj Date : 24-AUG-2000 09:10
 Operator : 01797
 Smp Info : MHherb, 5240A.b
 Misc Info : 190-94-4
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
 Meth Date : 24-Aug-2000 14:28 colussyj
 Cal Date : 24-AUG-2000 07:43
 Als bottle: 5
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC085

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-B50212.D
 Calibration Sample, Level: 4
 Compound Sublist: 1-all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
8 PENTACHLOROPHENOL	16.431	16.427	0.004	1662017	0.02128	0.007396
1 DALAPON	4.343	4.342	0.001	1133512	0.08780	0.03040
2 DCAA	11.356	11.352	0.004	4827665	0.17000	0.06214
3 DICAMBA	11.973	11.971	0.002	1924970	0.08510	0.02970
4 MCPP	12.427	12.420	0.007	282643	17.0000	6.142
5 MCPA	13.332	13.327	0.005	400969	17.1000	5.976
6 DICHLOROPROP	14.508	14.507	0.001	781860	0.17000	0.05989
7 2,4-D	16.038	16.039	-0.001	826832	0.17000	0.06020
9 2,4,5-TP(SILVEX)	17.952	17.951	0.001	2418742	0.04210	0.01479
10 2,4,5-T	18.687	18.688	-0.001	2688270	0.04220	0.01462
11 2,4-DB	19.247	19.247	0.000	1509497	0.16900	0.05712
12 DINOSEB	19.947	19.945	0.002	1510113	0.02540	0.008932

Data File: \\NPITPA02\Nchem\gc1.1\B240A.b\A-B50215.D

Date: 24-AUG-2000 09:10

Client ID:

Sample Info: HHerb.B240A.b

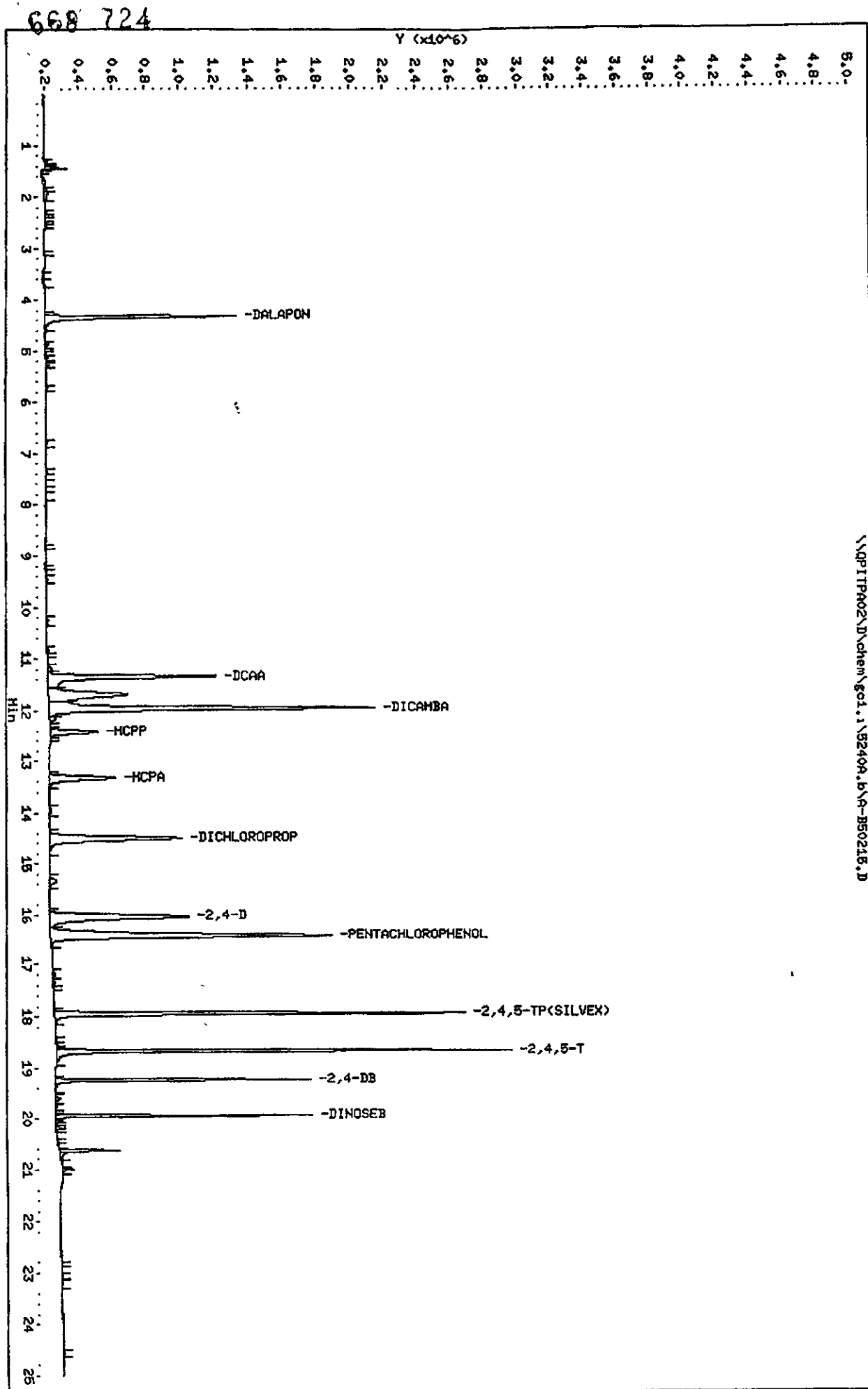
Column phase: DB1701

Instrument: gc1.1

Operator: 01797

Column diameter: 0.53

\\NPITPA02\Nchem\gc1.1\B240A.b\A-B50215.D



Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50216.D
 Report Date: 24-Aug-2000 14:30

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Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50216.D
 Lab Smp Id: Hherb
 Inj Date : 24-AUG-2000 09:39
 Operator : 01797
 Smp Info : Hherb,5240A.b
 Misc Info : 190-94-5
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
 Meth Date : 24-Aug-2000 14:28 colussyj
 Cal Date : 24-AUG-2000 09:39
 Als bottle: 6
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC085

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-B50216.D
 Calibration Sample, Level: 5
 Compound Sublist: 1-all.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
8 PENTACHLOROPHENOL	16.430	16.427	0.003	3391582	0.04255	0.04175
1 DALAPON	4.342	4.342	0.000	2247027	0.17600	0.1571
2 DCAA	11.353	11.352	0.001	8568544	0.34000	0.2651
3 DICAMBA	11.971	11.971	0.000	3763431	0.17000	0.1508
4 MCPP	12.426	12.420	0.006	521263	34.1000	28.18
5 MCPA	13.330	13.327	0.003	746732	34.0000	27.10
6 DICHLOROPROP	14.505	14.507	-0.002	1499455	0.33900	0.2944
7 2,4-D	16.034	16.039	-0.005	1622148	0.34000	0.3152
9 2,4,5-TP(SILVEX)	17.952	17.951	0.001	4835997	0.08400	0.08075
10 2,4,5-T	18.685	18.688	-0.003	5566066	0.08440	0.08547
11 2,4-DB	19.246	19.247	-0.001	3211663	0.33800	0.3445
12 DINOSEB	19.946	19.945	0.001	3069033	0.05080	0.05087

Data File: \\NPITPA02\chem\col.1\5240A.b\A-B50216.D

Date: 24-AUG-2000 09:39

Client ID:

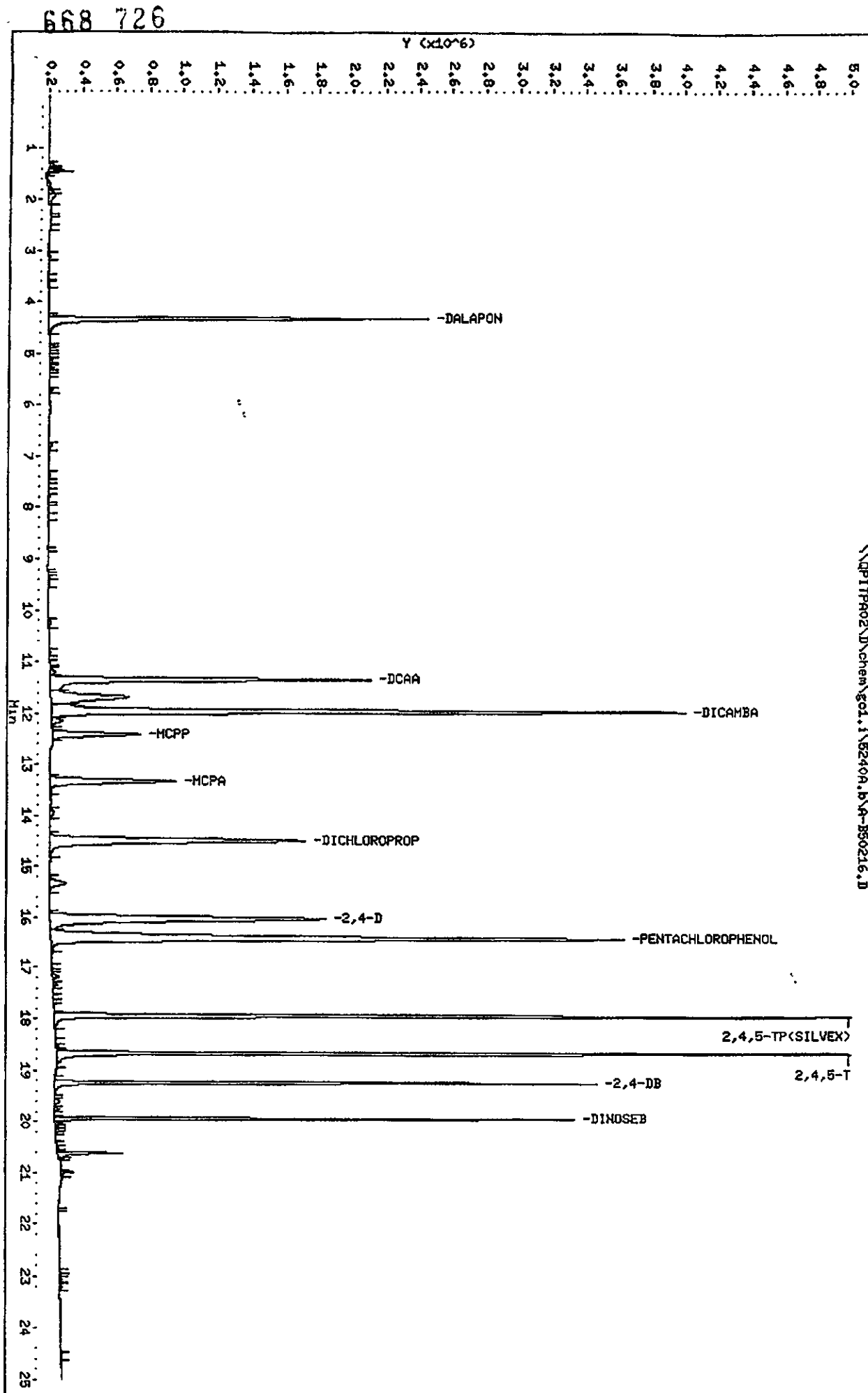
Sample Info: Herb, 5240A.b

Column phase: DB1701

Instrument: col.1

Operator: 01797

Column diameter: 0.53



Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50232.D
 Report Date: 25-Aug-2000 07:36

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Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50232.D
 Lab Smp Id: MHERB
 Inj Date : 24-AUG-2000 17:23
 Operator : 01797
 Smp Info : MHERB,5240A.b
 Misc Info: 190-94-3
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
 Meth Date : 25-Aug-2000 07:33 colussyj
 Cal Date : 24-AUG-2000 09:39
 Als bottle: 22
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC085

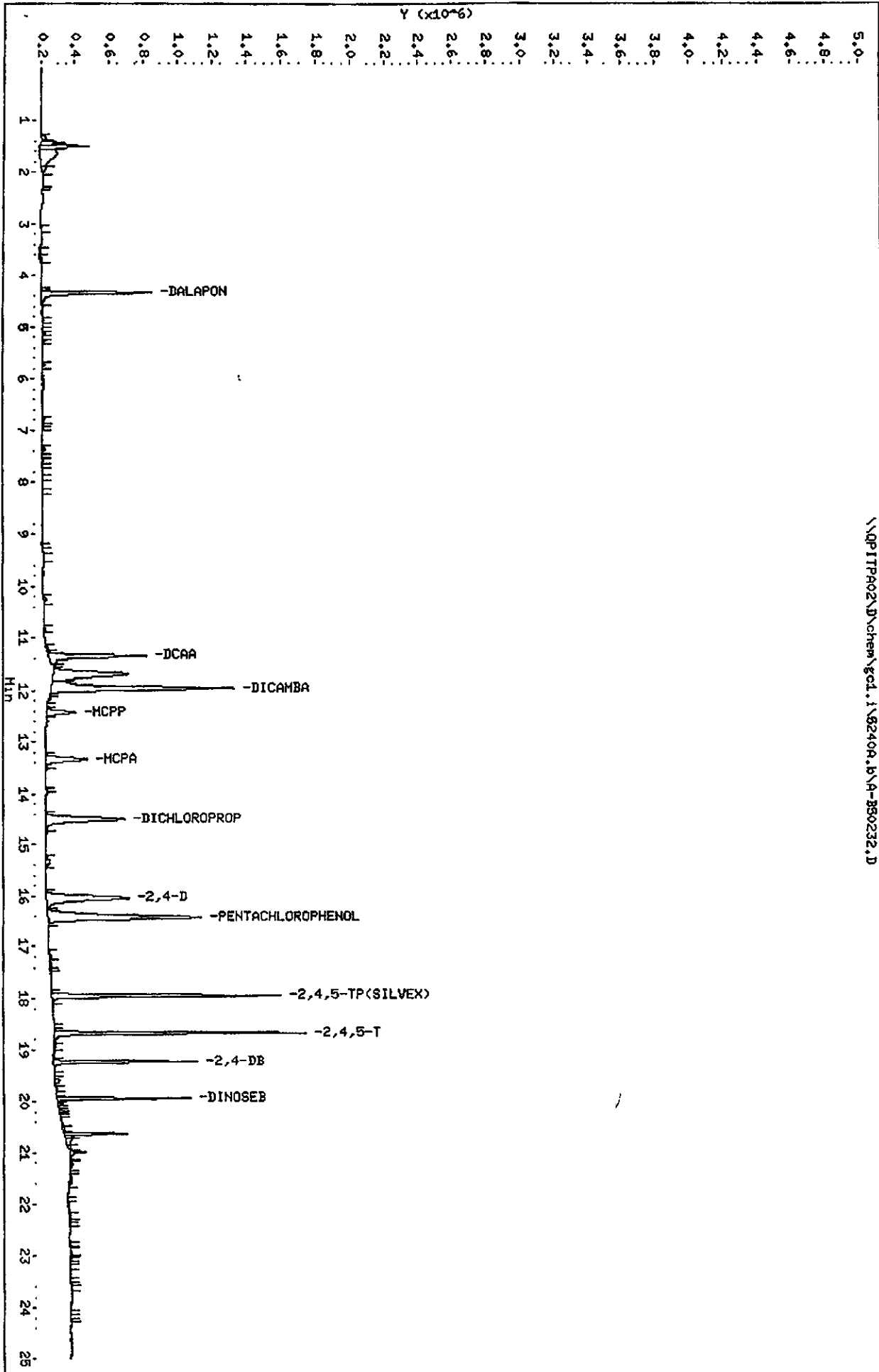
Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-B50216.D
 Continuing Calibration Sample
 Compound Sublist: all.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
*****	..	*****	*****	*****	*****	*****
1 DALAPON	4.343	4.342	0.001	647434	0.04390	0.04527
5 2 DCAA	11.355	11.352	0.003	2575194	0.08510	0.07967
3 DICAMBA	11.972	11.971	0.001	1068217	0.04250	0.04279
4 MCPP	12.424	12.420	0.004	163999	8.52000	8.865
5 MCPA	13.331	13.327	0.004	241052	8.56000	8.747
6 DICHLOROPROP	14.505	14.507	-0.002	457619	0.08480	0.08986
7 2,4-D	16.034	16.039	-0.005	482034	0.08510	0.09366
8 PENTACHLOROPHENOL	16.429	16.427	0.002	894157	0.01064	0.01101
9 2,4,5-TP(SILVEX)	17.950	17.951	-0.001	1324168	0.02110	0.02211
10 2,4,5-T	18.685	18.688	-0.003	1459647	0.02110	0.02241
11 2,4-DB	19.246	19.247	-0.001	832122	0.08450	0.08926
12 DINOSEB	19.946	19.945	0.001	780130	0.01270	0.01293

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Data File: \\QIPITPA02\chem\col.1\5240A.b\A-B50232.D
 Date: 24-AUG-2000 17:23
 Client ID:
 Sample Info: MHERB, 5240A.b
 Column phase: DB1701

instrument: col.i
 Operator: 01797
 Column diameter: 0.53



Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50235.D
 Report Date: 25-Aug-2000 07:36

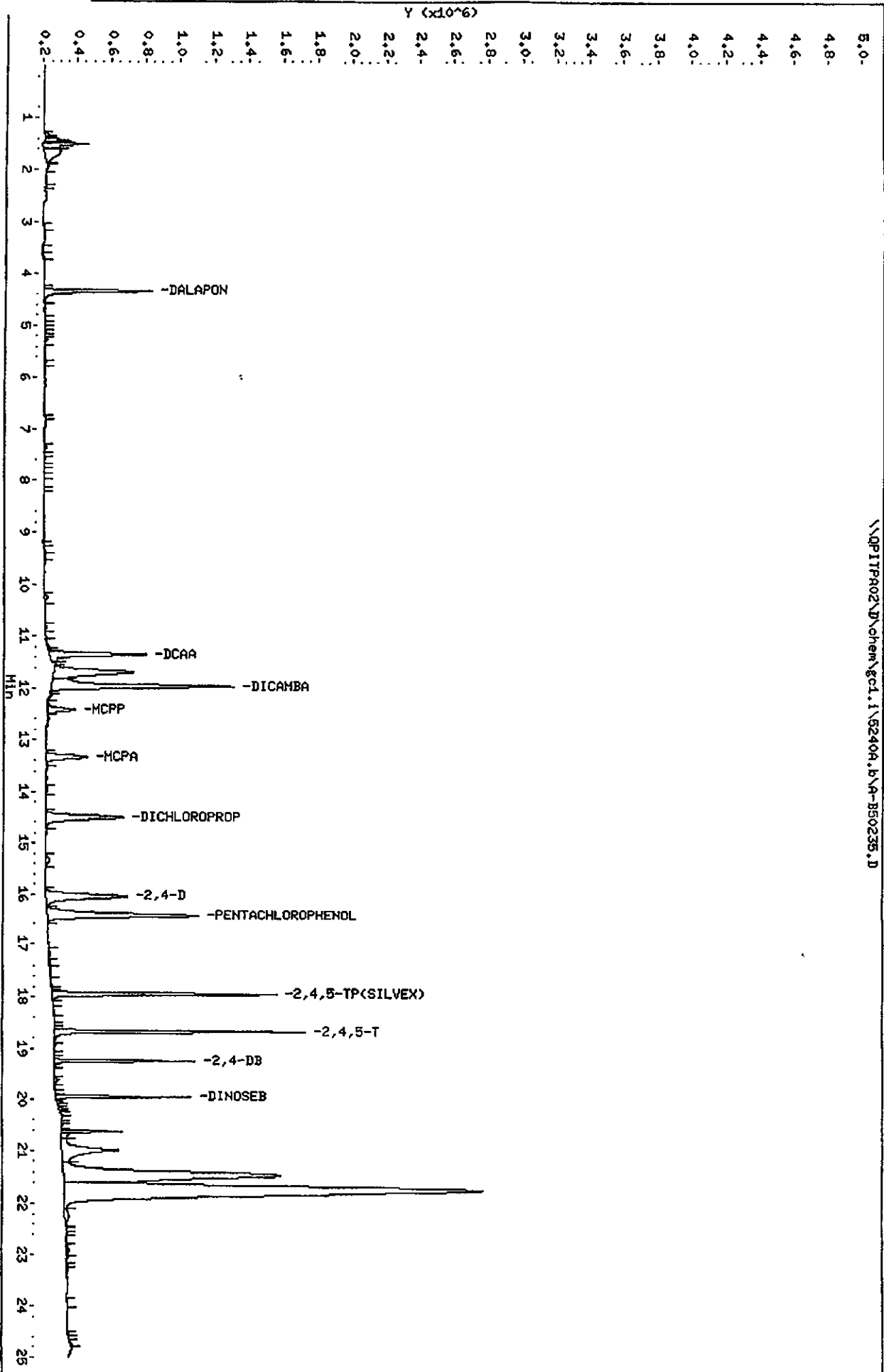
STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50235.D
 Lab Smp Id: MHERB
 Inj Date : 24-AUG-2000 18:50
 Operator : 01797
 Smp Info : MHERB,5240A.b
 Misc Info : 190-94-3
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
 Meth Date : 25-Aug-2000 07:33 colussyj Quant Type: ESTD
 Cal Date : 24-AUG-2000 09:39 Cal File: A-B50216.D
 Als bottle: 25 Continuing Calibration Sample
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
*****	==	=====	=====	=====	=====	=====
1 DALAPON	4.343	4.342	0.001	631081	0.04390	0.04413
\$ 2 DCAA	11.357	11.352	0.005	2564869	0.08510	0.07935
3 DICAMBA	11.972	11.971	0.001	1052659	0.04250	0.04217
4 MCPP	12.425	12.420	0.005	160804	8.52000	8.692
5 MCPA	13.329	13.327	0.002	236620	8.56000	8.586
6 DICHLOROPROP	14.506	14.507	-0.001	450423	0.08480	0.08845
7 2,4-D	16.036	16.039	-0.003	471871	0.08510	0.09168
8 PENTACHLOROPHENOL	16.427	16.427	0.000	878504	0.01064	0.01081
9 2,4,5-TP(SILVEX)	17.950	17.951	-0.001	1300380	0.02110	0.02171
10 2,4,5-T	18.685	18.688	-0.003	1448096	0.02110	0.02224
11 2,4-DB	19.246	19.247	-0.001	819318	0.08450	0.08789
12 DINOSEB	19.945	19.945	0.000	779283	0.01270	0.01292

Data File: \\QPI7P02\chem\gcl.i\5240a.b\A-B50235.D
Date: 24-AUG-2000 18:50
Client ID:
Sample Info: MHERB,5240a.b
Column phase: DB1701

Instrument: gcl.i
Operator: 01797
Column diameter: 0.53



Report Date : 24-Aug-2000 14:35

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DB608

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COMPOUND LISTING

Method file : \\qpitpa02\d\chem\gc1.i\5240.b\LONGH.m
 Quant Method : ESTD Target Version : 4.04
 Last Update : 24-Aug-2000 14:34 Number of Cpnds : 12
 Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events Values

 Initial:Start Threshold 376.000000
 Initial:End Threshold 188.000000
 Initial:Area Threshold 3760.000000
 Initial:P-P Resolution 1.000000
 Initial:Bunch Factor 9.000000
 Initial:Negative Peaks ON
 Initial:Tension 0.200000

Compound	RT	RT Window	RF
1 DALAPON	3.732	3.662-3.802	9.61e+006
\$ 2 DCAA	10.576	10.506-10.646	3.18e+007
3 MCPP	11.016	10.946-11.086	4.82e+004
4 DICAMBA	11.189	11.119-11.259	2.17e+007
5 MCPA	11.977	11.907-12.047	5.32e+004
6 DICHLOROPROP	12.808	12.738-12.878	4.46e+006
7 2,4-D	14.315	14.245-14.385	3.81e+006
8 PENTACHLOROPHENOL	15.536	15.466-15.606	5.32e+007
9 2,4,5-TP (SILVEX)	16.755	16.685-16.825	1.77e+008
10 2,4,5-T	17.890	17.820-17.960	1.14e+008
11 DINOSEB	18.065	17.995-18.135	1.59e+008
12 2,4-DB	18.567	18.497-18.637	1.36e+007

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Report Date : 24-Aug-2000 14:35

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INITIAL CALIBRATION DATA

Start Cal Date : 24-AUG-2000 07:14
 End Cal Date : 24-AUG-2000 09:10
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 4.04
 Integrator : Falcon
 Method file : \\qpitpa02\d\chem\gc1.i\5240.b\LONGH.m
 Cal Date : 24-Aug-2000 14:34 gc
 Curve Type : Average

Calibration File Names:

Level 1: \\qpitpa02\d\chem\gc1.i\5240.b\A-A50308.D
 Level 2: \\qpitpa02\d\chem\gc1.i\5240.b\A-A50309.D
 Level 3: \\qpitpa02\d\chem\gc1.i\5240.b\A-A50310.D
 Level 4: \\qpitpa02\d\chem\gc1.i\5240.b\A-A50311.D
 Level 5: \\qpitpa02\d\chem\gc1.i\5240.b\A-A50312.D

Compound	0.00500	0.01000	0.02500	0.05000	0.10000	RRF	% RSD
-----	-----	-----	-----	-----	-----	-----	-----
1 DALAPON	10507000	10144273	9662779	8981185	8768824	9612812	7.708
3 MCPP	60855	60905	51317	38760	29206	48209	28.988
4 DICAMBA	19703019	21195070	22430329	22312585	22877459	21703693	5.891
5 MCPA	66843	66168	56547	42890	33763	53242	27.372
6 DICHLOROPROP	4031038	4468160	4686050	4573912	4538761	4459584	5.654
7 2,4-D	3234739	3679741	3959330	4009324	4147626	3806152	9.508
8 PENTACHLOROPHENOL	43901128	49021053	54577820	56904840	61608790	53202726	12.963
9 2,4,5-TP(SILVEX)	176310857	177345619	180678199	174235107	178195393	177353035	1.339
10 2,4,5-T	103483302	112905143	113286635	115619692	126644704	114387895	7.236
11 DINOSEB	164995268	156852598	166286063	152838150	153477874	158889991	4.006
12 2,4-DB	10894171	13972820	14292509	13497722	15522456	13635935	12.510
-----	-----	-----	-----	-----	-----	-----	-----
\$ 2 DCAA	33862535	34516259	32770740	29724782	28063179	31787499	8.736
-----	-----	-----	-----	-----	-----	-----	-----

10.999%
RSD

Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50328.D
Report Date: 25-Aug-2000 07:53

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 24-AUG-2000 16:54
Lab File ID: A-A50328.D Init. Cal. Date(s): 24-AUG-2000 24-AUG-2000
Analysis Type: Init. Cal. Times: 07:14 09:10
Lab Sample ID: MHERB Quant Type: ESTD
Method: \\QPITPA02\D\chem\gc1.i\5240.b\LONGH.m

COMPOUND	RRF	RFO	MIN	MAX
1 DALAPON	9612812	9964624	0.010	3.7 15.0
2 DCAA	31787499	34225394	0.010	7.7 15.0
3 MCPP	48209	52808	0.010	9.5 15.0
4 DICAMBA	21703693	23990047	0.010	10.5 15.0
5 MCPA	53242	58517	0.010	9.9 15.0
6 DICHLOROPROP	4459584	5113255	0.010	14.7 15.0
7 2,4-D	3806152	4434759	0.010	16.5 15.0
8 PENTACHLOROPHENOL	53202726	57401880	0.010	7.9 15.0
9 2,4,5-TP(SILVEX)	177353035	189548720	0.010	6.9 15.0
10 2,4,5-T	114387895	131838294	0.010	15.3 15.0
11 DINOSEB	158889991	163210472	0.010	2.7 15.0
12 2,4-DB	13635935	16566805	0.010	21.5 15.0

10.57%
RSD

668 734

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name:

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C0H150146

GC Column: DB608

ID: 0.53

(mm)

Init. Calib. Date(s): 08/24/00 08/24/00

Instrument ID: GC1

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS,
SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION S1 : 10.57							
EPA SAMPLE NO.		LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #	
01		LHERB	08/24/00	0714	10.58		
02		MLHERB	08/24/00	0743	10.58		
03		MHERB	08/24/00	0812	10.58		
04		MHHERB	08/24/00	0841	10.57		
05		HHERB	08/24/00	0910	10.57		
06	DF/S1/0227/I	DHV7M112	08/24/00	1400			
07	PBLK	DJOKL101	08/24/00	1625	10.59		
08		MHERB	08/24/00	1654	10.58		
09							
10							
11							
12							
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31							
32							

S1 = DCAA

QC LIMITS
(+/- 0.07 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50308.D
 Report Date: 24-Aug-2000 15:00

STL - Pittsburgh

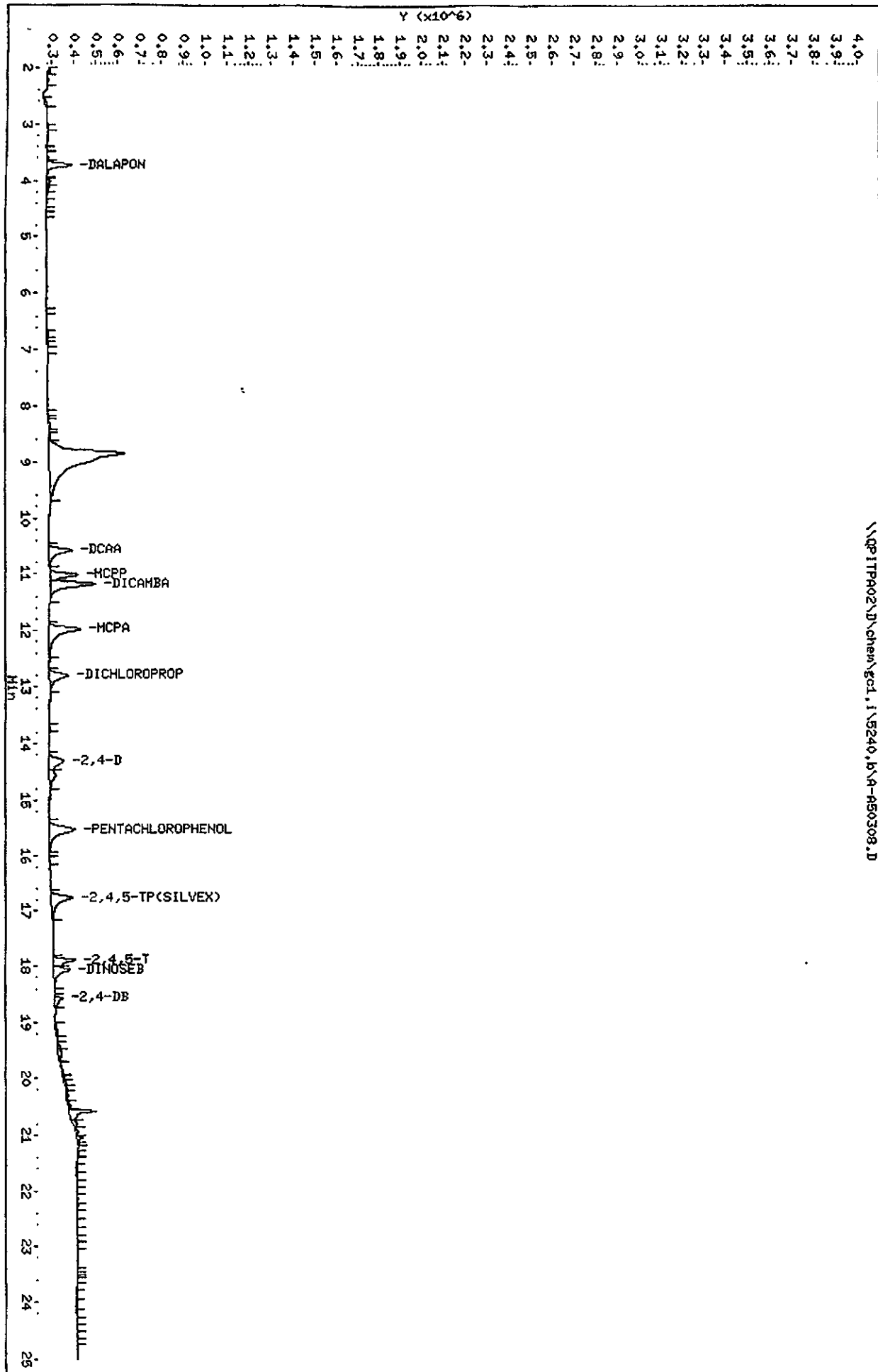
Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50308.D
 Lab Smp Id: Lherb
 Inj Date : 24-AUG-2000 07:14
 Operator : 01797
 Smp Info : Lherb,5240.b
 Misc Info : 190-94-1
 Comment :
 Method : \\qpitpa02\d\chem\gc1.i\5240.b\LONGH.m
 Meth Date : 24-Aug-2000 14:35 gc
 Cal Date : 24-AUG-2000 07:14
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC043

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-A50308.D
 Calibration Sample, Level: 1
 Compound Sublist: 1-all.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	3.729	3.732	-0.003	115577	0.01100	0.001930
\$ 2 DCAA	10.576	10.576	0.000	721272	0.02130	0.003672
3 MCPP	11.014	11.016	-0.002	129012	2.12000	0.4630
4 DICAMBA	11.187	11.188	-0.001	208852	0.01060	0.001482
5 MCPA	11.975	11.977	-0.002	143045	2.14000	0.4608
6 DICHLOROPROP	12.803	12.807	-0.004	85458	0.02120	0.002957
7 2,4-D	14.323	14.315	0.008	68253	0.02110	0.002717
8 PENTACHLOROPHENOL	15.538	15.536	0.002	116777	0.00266	0.0003290
9 2,4,5-TP(SILVEX)	16.769	16.754	0.015	925632	0.00525	0.0008279
10 2,4,5-T	17.886	17.890	-0.004	545357	0.00527	0.0007215
11 DINOSEB	18.066	18.065	0.001	523035	0.00317	0.0005199
12 2,4-DB	18.566	18.567	-0.001	229867	0.02110	0.002463

Data File: \\QPI7PA02\\D\\chem\\col.1\\5240.b\\A-850308.D
Date: 24-AUG-2000 07:14
Client ID:
Sample Info: Lherb,5240.b
Column phase: DB608

Instrument: col.1
Operator: 01797
Column diameter: 0.53



Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50309.D
 Report Date: 24-Aug-2000 15:00

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50309.D
 Lab Smp Id: MLherb
 Inj Date : 24-AUG-2000 07:43
 Operator : 01797
 Smp Info : MLherb,5240.b
 Misc Info : 190-94-2
 Comment :
 Method : \\qpitpa02\d\chem\gc1.i\5240.b\LONGH.m
 Meth Date : 24-Aug-2000 14:35 gc
 Cal Date : 24-AUG-2000 07:14
 Als bottle: 3
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC043

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-A50308.D
 Calibration Sample, Level: 2
 Compound Sublist: 1-all.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	3.728	3.732	-0.004	223174	0.02200	0.005373
\$ 2 DCAA	10.575	10.576	-0.001	1466941	0.04250	0.01080
3 MCPP	11.011	11.016	-0.005	259456	4.26000	1.521
4 DICAMBA	11.184	11.188	-0.004	451455	0.02130	0.004381
5 MCPA	11.975	11.977	-0.002	283197	4.28000	1.480
6 DICHLOROPROP	12.804	12.807	-0.003	189450	0.04240	0.009083
7 2,4-D	14.315	14.315	0.000	156389	0.04250	0.008454
8 PENTACHLOROPHENOL	15.535	15.536	-0.001	260792	0.00532	0.0009779
9 2,4,5-TP(SILVEX)	16.766	16.754	0.012	1862129	0.01050	0.002302
10 2,4,5-T	17.895	17.890	0.005	1185504	0.01050	0.002147
11 DINOSEB	18.064	18.065	-0.001	996014	0.00635	0.001379
12 2,4-DB	18.567	18.567	0.000	589653	0.04230	0.008583

Data File: \\QIPITA02\chem\gc1.1\5240.6\A-AB0309.D

Date: 24-AUG-2000 07:43

Client ID:

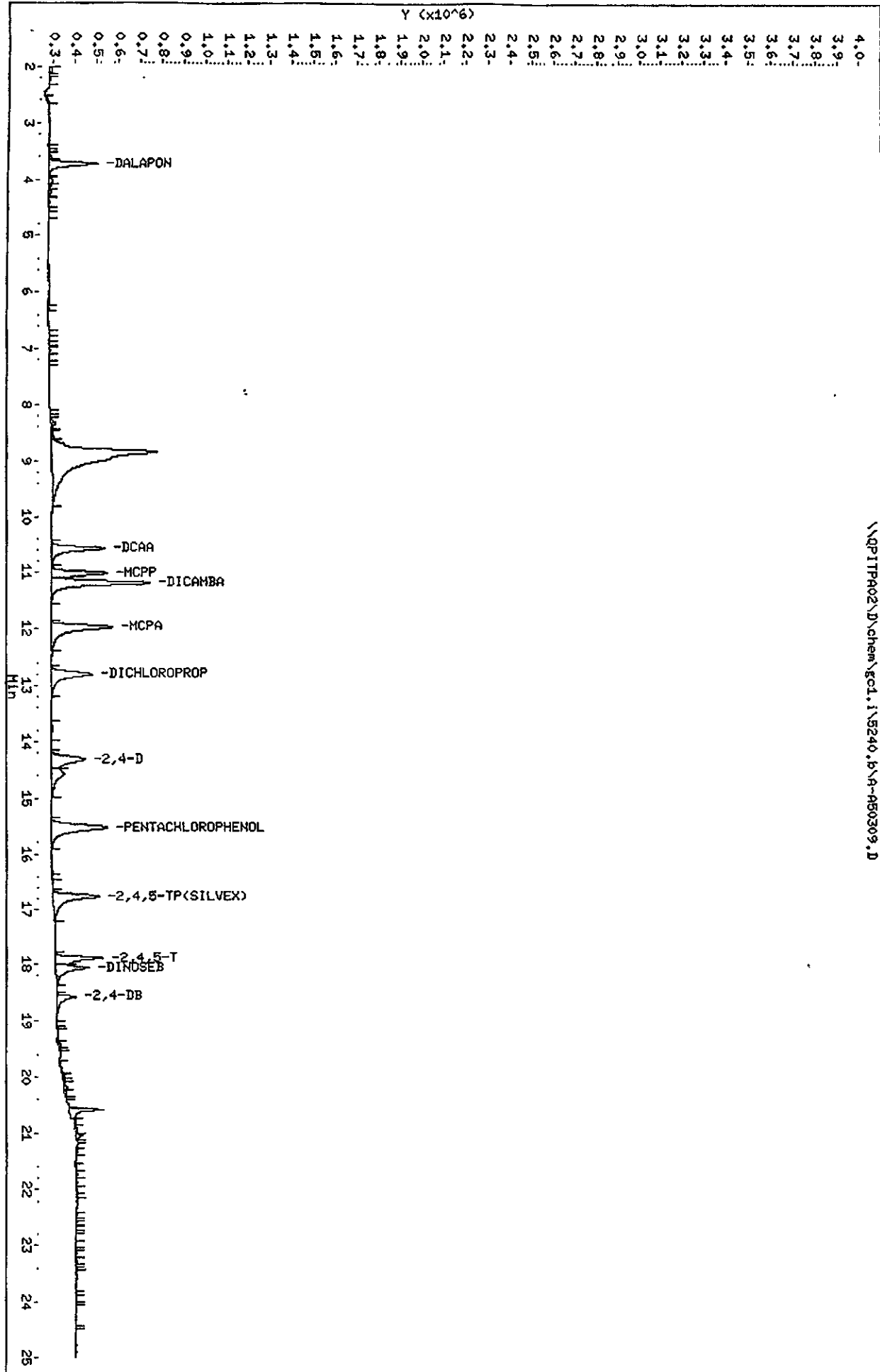
Sample Info: HHerb.5240.b

Column phase: DB608

Instrument: gc1.1

Operator: 01797

Column diameter: 0.53



Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50310.D
 Report Date: 24-Aug-2000 15:00

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50310.D
 Lab Smp Id: Mherb
 Inj Date : 24-AUG-2000 08:12
 Operator : 01797
 Smp Info : Mherb,5240.b
 Misc Info : 190-94-3
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240.b\LONGH.m
 Meth Date : 24-Aug-2000 14:35 gc
 Cal Date : 24-AUG-2000 09:10
 Als bottle: 4
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC085

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-A50312.D
 Calibration Sample, Level: 3
 Compound Sublist: 1-all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	3.732	3.732	0.000	424196	0.04390	0.005369
\$ 2 DCAA	10.576	10.576	0.000	2788790	0.08510	0.01083
3 MCPP	11.016	11.016	0.000	437225	8.52000	1.128
4 DICAMBA	11.188	11.188	0.000	953289	0.04250	0.005408
5 MCPA	11.977	11.977	0.000	484040	8.56000	1.124
6 DICHLOROPROP	12.807	12.807	0.000	397377	0.08480	0.01099
7 2,4-D	14.315	14.315	0.000	336939	0.08510	0.01089
8 PENTACHLOROPHENOL	15.536	15.536	0.000	580708	0.01064	0.001338
9 2,4,5-TP(SILVEX)	16.754	16.754	0.000	3812310	0.02110	0.002669
10 2,4,5-T	17.890	17.890	0.000	2390348	0.02110	0.002540
11 DINOSEB	18.065	18.065	0.000	2111833	0.01270	0.001640
12 2,4-DB	18.567	18.567	0.000	1207717	0.08450	0.01050

Data File: \\NPITPA02\Nchem\col.1\5240.b\A-A50310.D

Date : 24-AUG-2000 08:12

Client ID:

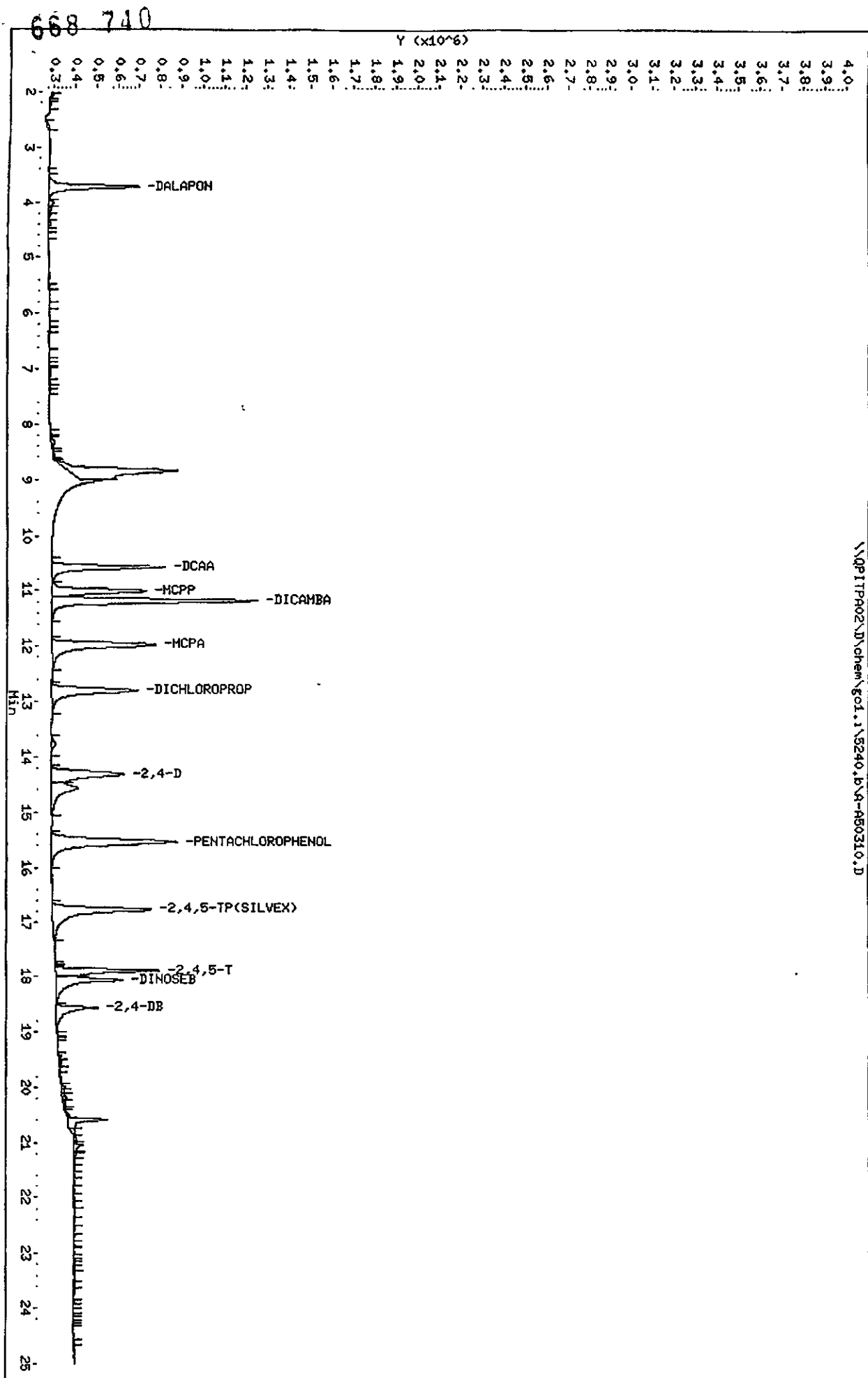
Sample Info: Herb,5240.b

Column phase: DB608

Instrument: 604.1

Operator: 01797

Column diameter: 0.53



STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50311.D
Lab Smp Id: MHherb
Inj Date : 24-AUG-2000 08:41
Operator : 01797
Smp Info : MHherb,5240.b
Misc Info : 190-94-4
Comment :
Method : \\qpitpa02\d\chem\gc1.i\5240.b\LONGH.m
Meth Date : 24-Aug-2000 14:35 gc
Cal Date : 24-AUG-2000 07:14
Als bottle: 5
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC043

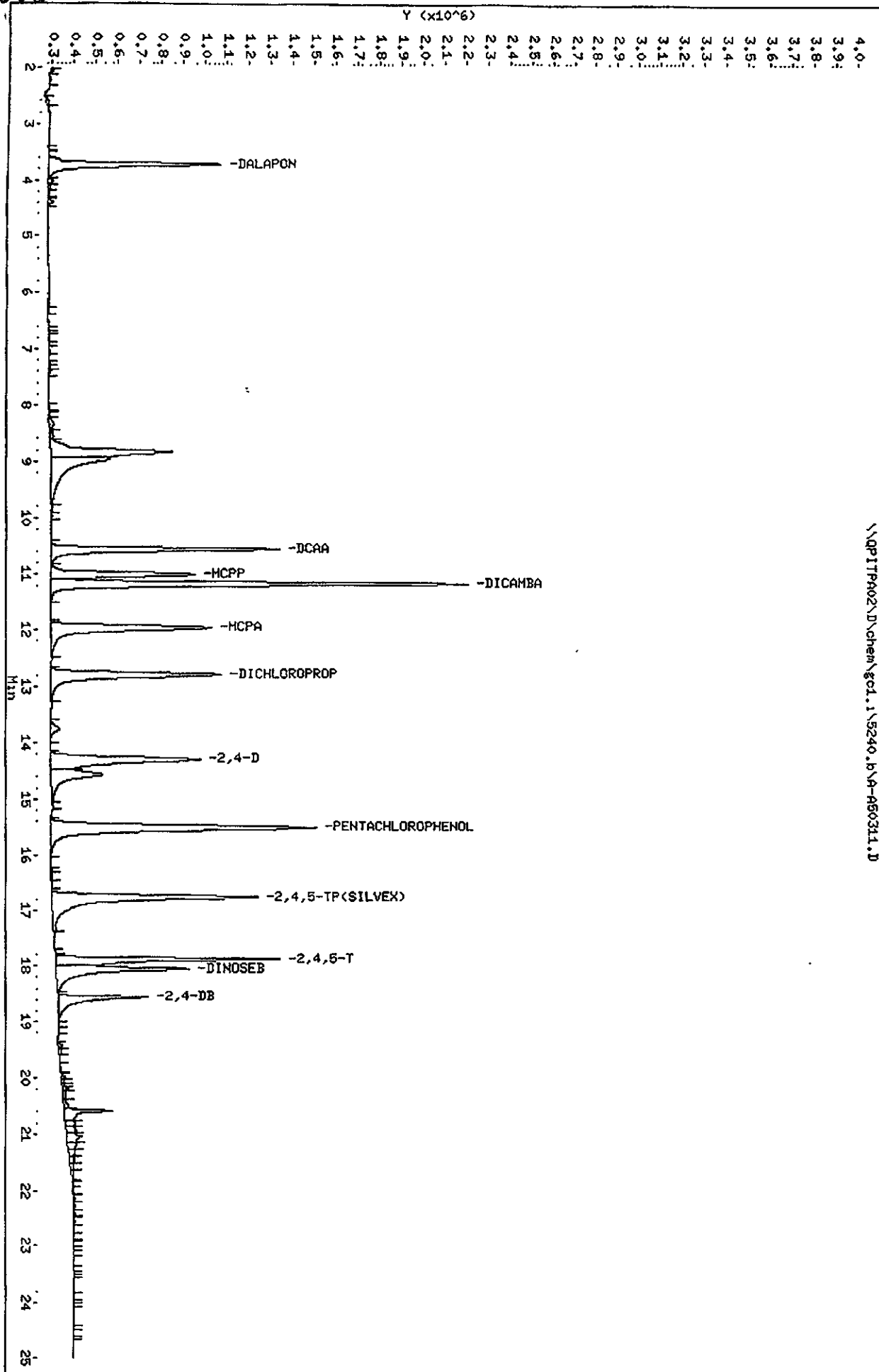
Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-A50308.D
Calibration Sample, Level: 4
Compound Sublist: 1-all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	3.731	3.732	-0.001	788548	0.08780	0.03109
\$ 2 DCAA	10.570	10.576	-0.006	5053213	0.17000	0.06140
3 MCPP	11.013	11.016	-0.003	658915	17.0000	6.538
4 DICAMBA	11.184	11.188	-0.004	1898801	0.08510	0.03020
5 MCPA	11.973	11.977	-0.004	733427	17.1000	6.431
6 DICHLOROPROP	12.803	12.807	-0.004	777565	0.17000	0.06158
7 2,4-D	14.303	14.315	-0.012	681585	0.17000	0.06042
8 PENTACHLOROPHENOL	15.528	15.536	-0.008	1210935	0.02128	0.007372
9 2,4,5-TP(SILVEX)	16.759	16.754	0.005	7335298	0.04210	0.01466
10 2,4,5-T	17.887	17.890	-0.003	4879151	0.04220	0.01424
11 DINOSBB	18.063	18.065	-0.002	3882089	0.02540	0.008895
12 2,4-DB	18.564	18.567	-0.003	2281115	0.16900	0.05450

668 742

Data File: \\GPITPA02\chem\gc1.1\5240.b\A-A60311.D
Date: 24-AUG-2000 08:41
Client ID:
Sample Info: MHerb, 5240.b
Column phase: DB608

Instrument: GC1.1
Operator: 01797
Column diameter: 0.53



Data File: \\QPITPA02\D\chem\gc1.i\5240.b\A-A50312.D
Report Date: 24-Aug-2000 15:00

668 743

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50312.D
Lab Smp Id: Hherb
Inj Date : 24-AUG-2000 09:10
Operator : 01797
Smp Info : Hherb,5240.b
Misc Info : 190-94-5
Comment :
Method : \\qpitpa02\d\chem\gc1.i\5240.b\LONGH.m
Meth Date : 24-Aug-2000 14:35 gc
Cal Date : 24-AUG-2000 09:10
Als bottle: 6
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC043

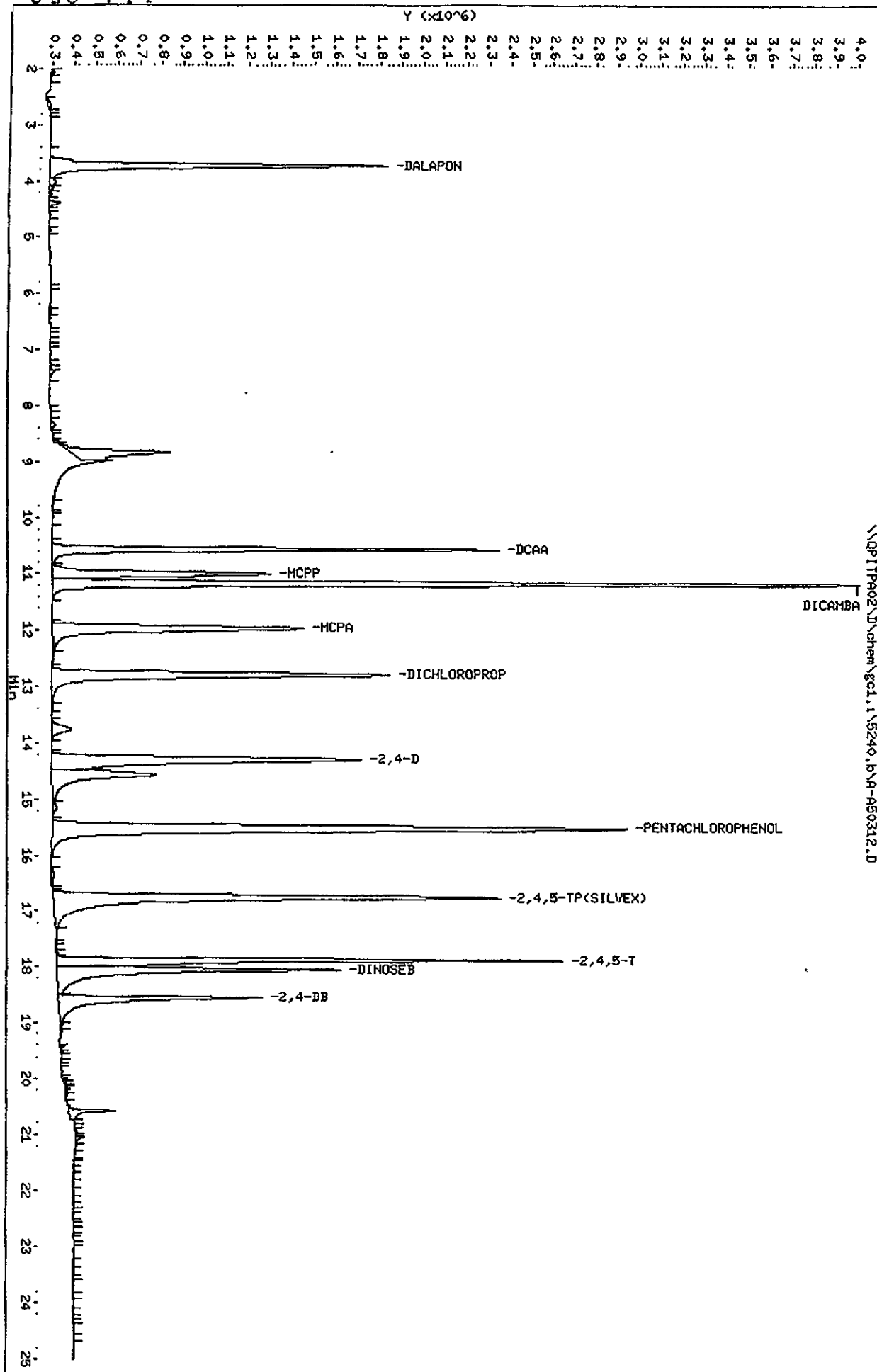
Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-A50312.D
Calibration Sample, Level: 5
Compound Sublist: 1-all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	3.732	3.732	0.000	1543313	0.17600	0.1605
2 DCAA	10.573	10.576	-0.003	9541481	0.34000	0.3002
3 MCPP	11.011	11.016	-0.005	995927	34.1000	20.66
4 DICAMBA	11.185	11.188	-0.003	3889168	0.17000	0.1792
5 MCPA	11.970	11.977	-0.007	1147958	34.0000	21.56
6 DICHLOROPROP	12.797	12.807	-0.010	1538640	0.33900	0.3450
7 2,4-D	14.305	14.315	-0.010	1410193	0.34000	0.3705
8 PENTACHLOROPHENOL	15.530	15.536	-0.006	2621454	0.04255	0.04927
9 2,4,5-TP (SILVEX)	16.762	16.754	0.008	14968413	0.08400	0.08440
10 2,4,5-T	17.887	17.890	-0.003	10688813	0.08440	0.09344
11 DINOSEB	18.061	18.065	-0.004	7796676	0.05080	0.04907
12 2,4-DB	18.561	18.567	-0.006	5246590	0.33800	0.3848

658 744

Data File: \\QPI7PA02\\chem\\gcl.1\\5240.b\\A-850312.D
Date: 24-AUG-2000 09:10
Client ID:
Sample Info: Herb, 5240.b
Column phase: DB608

Instrument: gcl.1
Operator: 01797
Column diameter: 0.53



STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240.b\A-A50328.D
Lab Smp Id: MHERB
Inj Date : 24-AUG-2000 16:54
Operator : 01797
Smp Info : MHERB,5240.b
Misc Info : 190-94-3
Comment :
Method : \\QPITPA02\D\chem\gc1.i\5240.b\LONGH.m
Meth Date : 25-Aug-2000 07:52 colussyj
Cal Date : 24-AUG-2000 09:10
Als bottle: 22
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC085

Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-A50312.D
Continuing Calibration Sample
Compound Sublist: all.sub

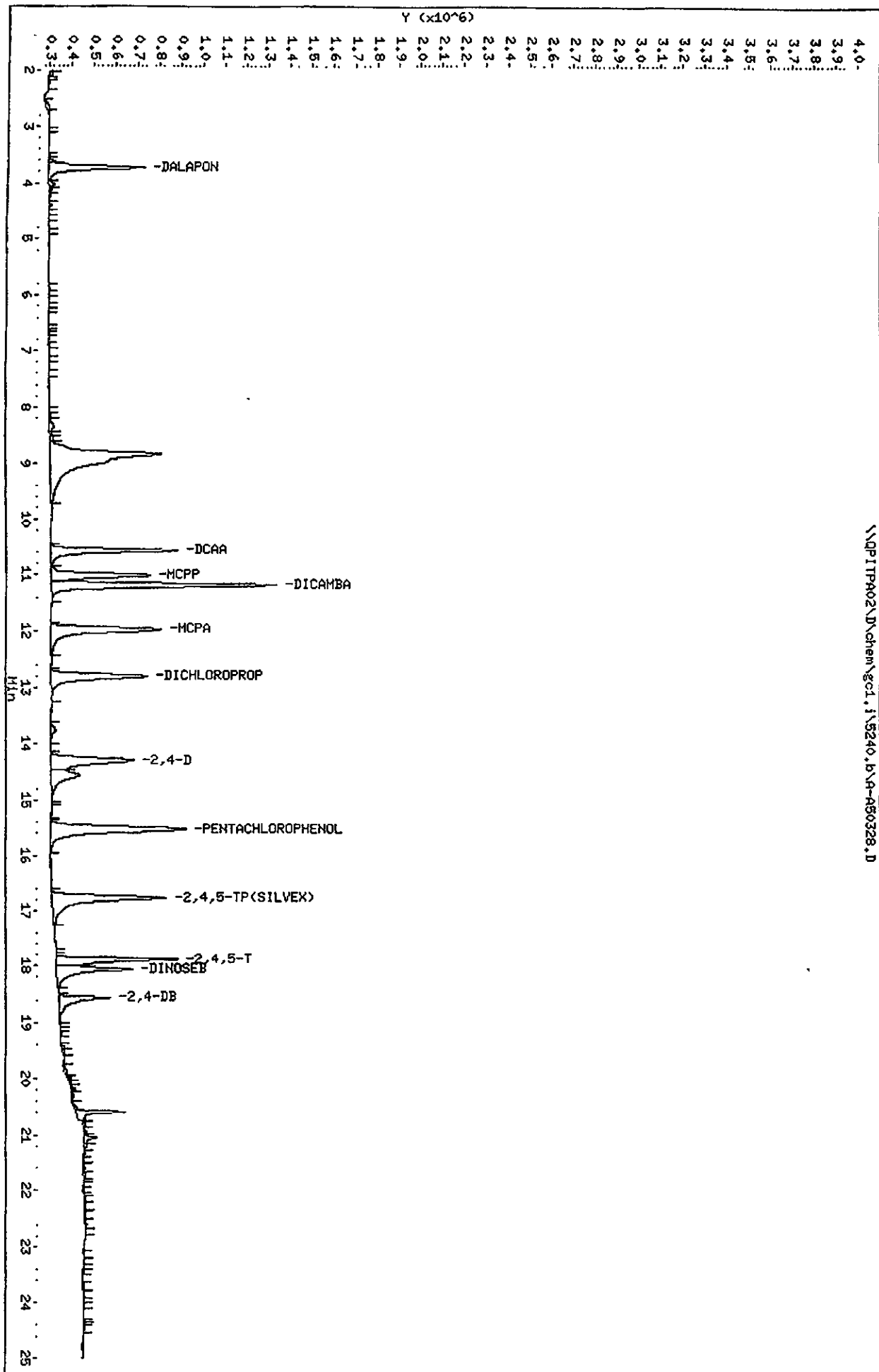
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	3.730	3.732	-0.002	437447	0.04390	0.04551
\$ 2 DCAA	10.576	10.576	0.000	2912581	0.08510	0.09163
3 MCPP	11.014	11.016	-0.002	449923	8.52000	9.333
4 DICAMBA	11.186	11.188	-0.002	1019577	0.04250	0.04698
5 MCPA	11.972	11.977	-0.005	500904	8.56000	9.408
6 DICHLOROPROP	12.802	12.807	-0.005	433604	0.08480	0.09723
7 2,4-D	14.313	14.315	-0.002	377398	0.08510	0.09915
8 PENTACHLOROPHENOL	15.534	15.536	-0.002	610756	0.01064	0.01148
9 2,4,5-TP(SILVEX)	16.763	16.754	0.009	3999478	0.02110	0.02255
10 2,4,5-T	17.885	17.890	-0.005	2781788	0.02110	0.02432
11 DINOSEB	18.061	18.065	-0.004	2072773	0.01270	0.01304
12 2,4-DB	18.565	18.567	-0.002	1399895	0.08450	0.1027

Data File: \\NPITPA02\N\chem\gc1.i\5240.b\A-A50328.D
Date: 24-JUL-2000 16:54

Client ID:
Sample Info: HHERB,5240.b

Column phase: DB608

Instrument: gc1.i
Operator: 04797
Column diameter: 0.53



**HERBICIDE
QC DATA**

668 748

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) WATER

Lab Sample ID: COH160000 485

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 1000 / mL

Date Received: 08/15/00

Work Order: DJOKL101

Date Extracted: 08/16/00

Dilution factor: 1

Date Analyzed: 08/24/00

Moisture %: NA

QC Batch: 0229485

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS:		
		(ug/L or ug/kg)	ug/L	Q
94-75-7	2,4-D		4.0	U
93-72-1	2,4,5-TP (Silvex)		1.0	U

FORM I

Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50231.D
 Report Date: 24-Aug-2000 17:33

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50231.D
 Lab Smp Id: DJ0KL101 Client Smp ID: BLK
 Inj Date : 24-AUG-2000 16:54
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DJ0KL101,5240A.b
 Misc Info : 150146BLK
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
 Meth Date : 24-Aug-2000 14:28 colussyj Quant Type: ESTD
 Cal Date : 24-AUG-2000 09:39 Cal File: A-B50216.D
 Als bottle: 21 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

Concentration Formula: Amt * DF * 20*Vt/Vo/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

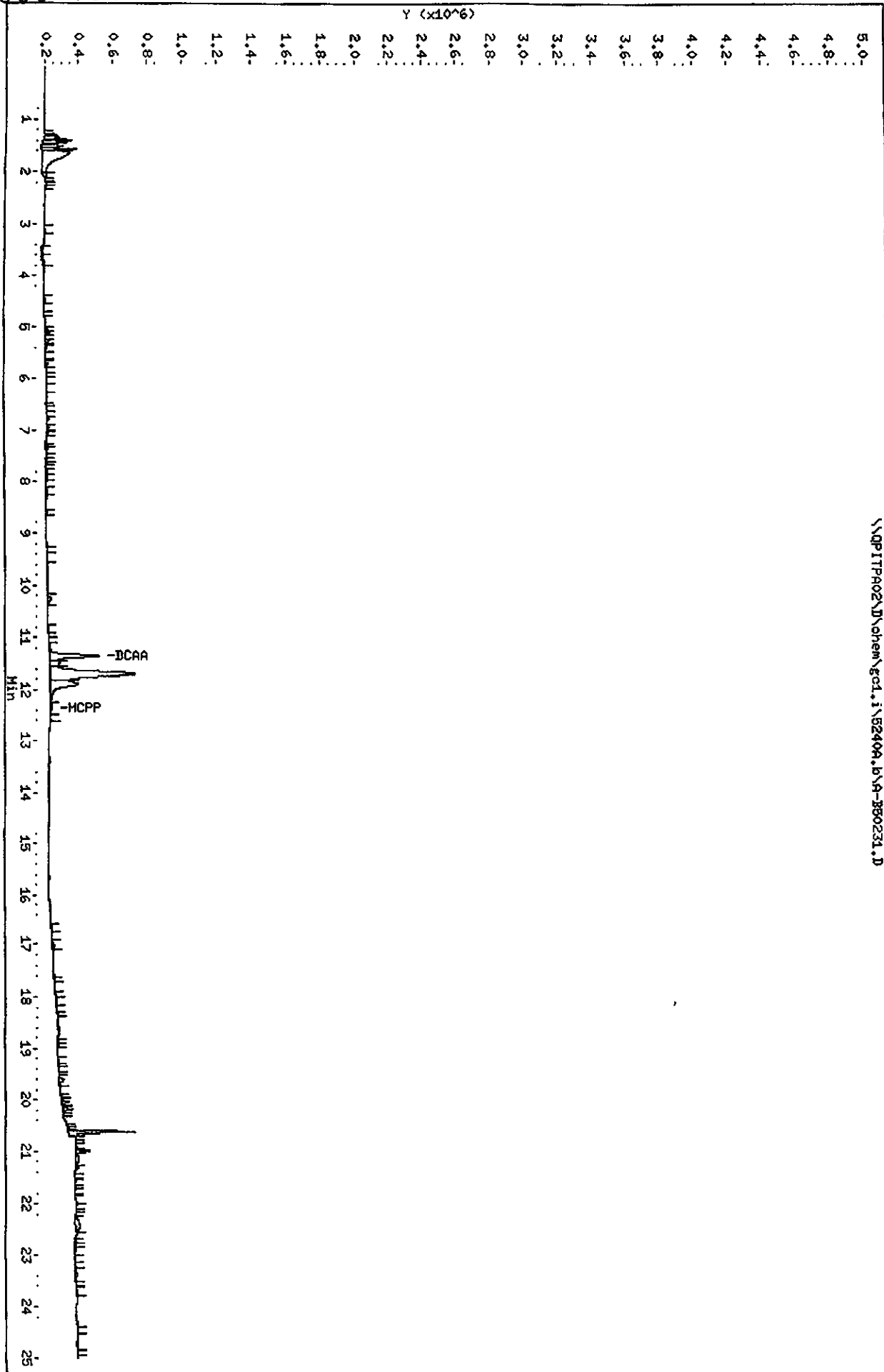
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON						
2 DCAA	11.357	11.352	0.005	1428652	0.04420	8.840
3 DICAMBA						
4 MCPP	12.369	12.420	-0.051	9245	0.49973	99.94
5 MCPA						
6 DICHLOROPROP						
7 2,4-D						
8 PENTACHLOROPHENOL						
9 2,4,5-TP(SILVEX)						
10 2,4,5-T						
11 2,4-DB						
12 DINOSEB						

Data File: \\QPITPA02\chem\ecol.1\52406.b\A-B50231.D
 Date: 24-AUG-2000 16:54
 Client: TM-MLK
 Sample Info: D30KL101, 52406.b
 Volume Injected (uL): 1.0
 Column phase: DB1701

Instrument: ecol.1
 Operator: 01797
 Column diameter: 0.53

\\QPITPA02\chem\ecol.1\52406.b\A-B50231.D

668 750



STL - Pittsburgh

Data file : \\qpitpa02\d\chem\gc1.i\5240.b\A-A50327.D
 Lab Smp Id: DJ0KL101. Client Smp ID: PBLK
 Inj Date : 24-AUG-2000 16:25
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DJ0KL101,5240.b
 Misc Info : 150146BLK
 Comment :
 Method : \\qpitpa02\d\chem\gc1.i\5240.b\LONGH.m
 Meth Date : 28-Aug-2000 17:09 colussyj Quant Type: ESTD
 Cal Date : 24-AUG-2000 09:10 Cal File: A-A50312.D
 Als bottle: 21 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC061

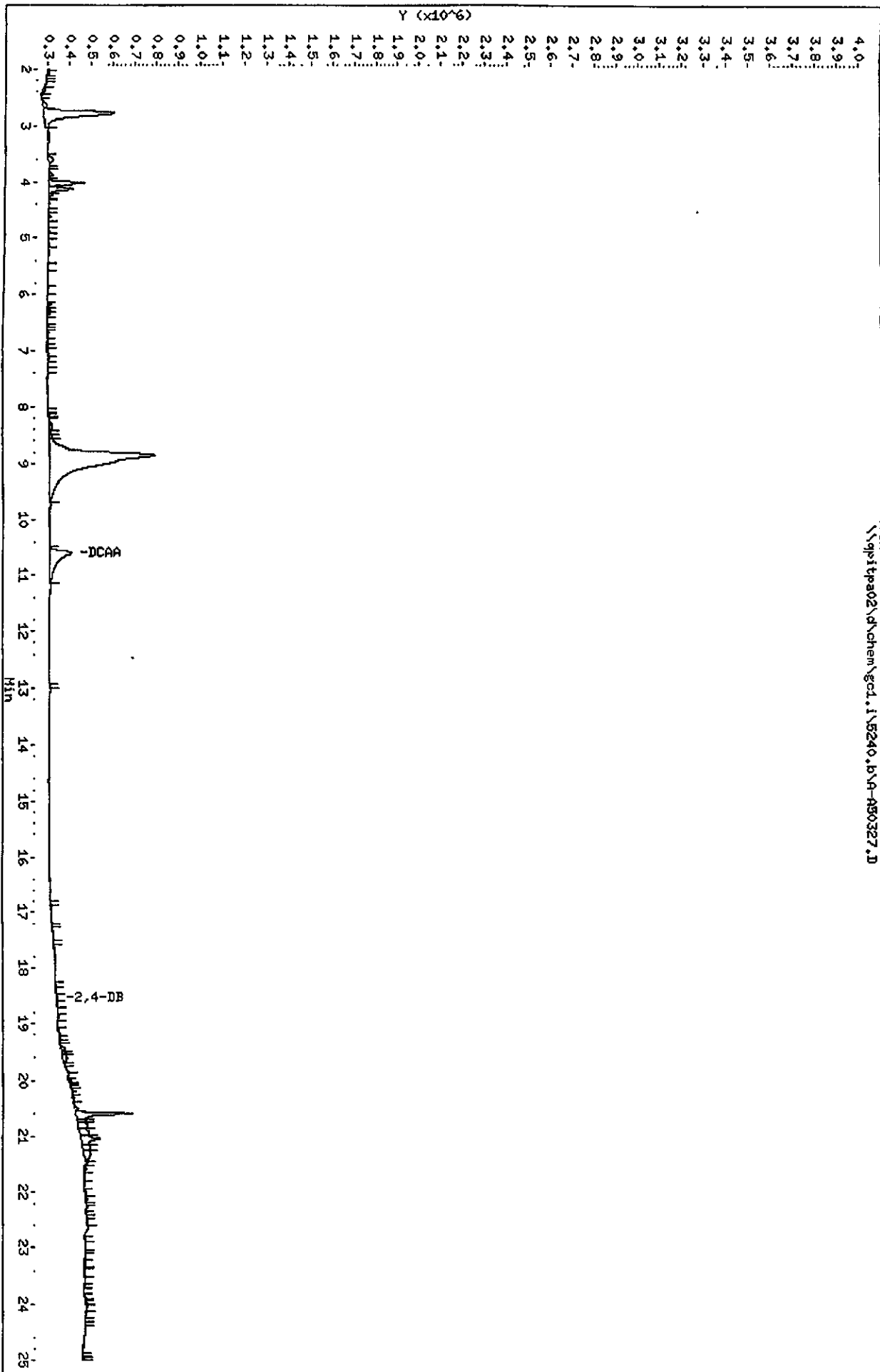
Concentration Formula: Amt * DF * 20*Vt/Vo/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON						
\$ 2 DCAA	10.587	10.570	0.017	1268911	0.03992	7.984
3 MCPP						
4 DICAMBA						
5 MCPA						
6 DICHLOROPROP						
7 2,4-D						
8 PENTACHLOROPHENOL						
9 2,4,5-TP(SILVEX)						
10 2,4,5-T						
11 DINOSEB						
12 2,4-DE	18.527	18.562	-0.035	29846	0.00219	0.4378

Data File: \\pittpa02\chem\gc1.1\5240.b\A-A50327.D
Date: 24-AUG-2000 16:25
Client ID: PMK
Sample Info: D30K101.5240.b
Volume injected (ul): 1.0
Column phase: DB608

Instrument: GC1.1
Operator: 01797
Column diameter: 0.53



UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) WATER

Lab Sample ID: C0H160000 485

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 1000 / mL

Date Received: 08/15/00

Work Order: DJ0KL102

Date Extracted: 08/16/00

Dilution factor: 1

Date Analyzed: 08/24/00

Moisture %: NA

QC Batch: 0229485

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg)	ug/L
94-75-7	2,4-D	12.9	
93-72-1	2,4,5-TP (Silvex)	3.13	
93-76-5	2,4,5-T	3.14	
87-86-5	Pentachlorophenol	1.64	

668 754

Data File: \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50229.D
 Report Date: 24-Aug-2000 16:53

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50229.D
 Lab Smp Id: DJ0KL102 Client Smp ID: LCS
 Inj Date : 24-AUG-2000 15:56
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DJ0KL102,5240A.b
 Misc Info : 150146LCS
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
 Meth Date : 24-Aug-2000 14:28 colussyj Quant Type: ESTD
 Cal Date : 24-AUG-2000 09:39 Cal File: A-B50216.D
 Als bottle: 19 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

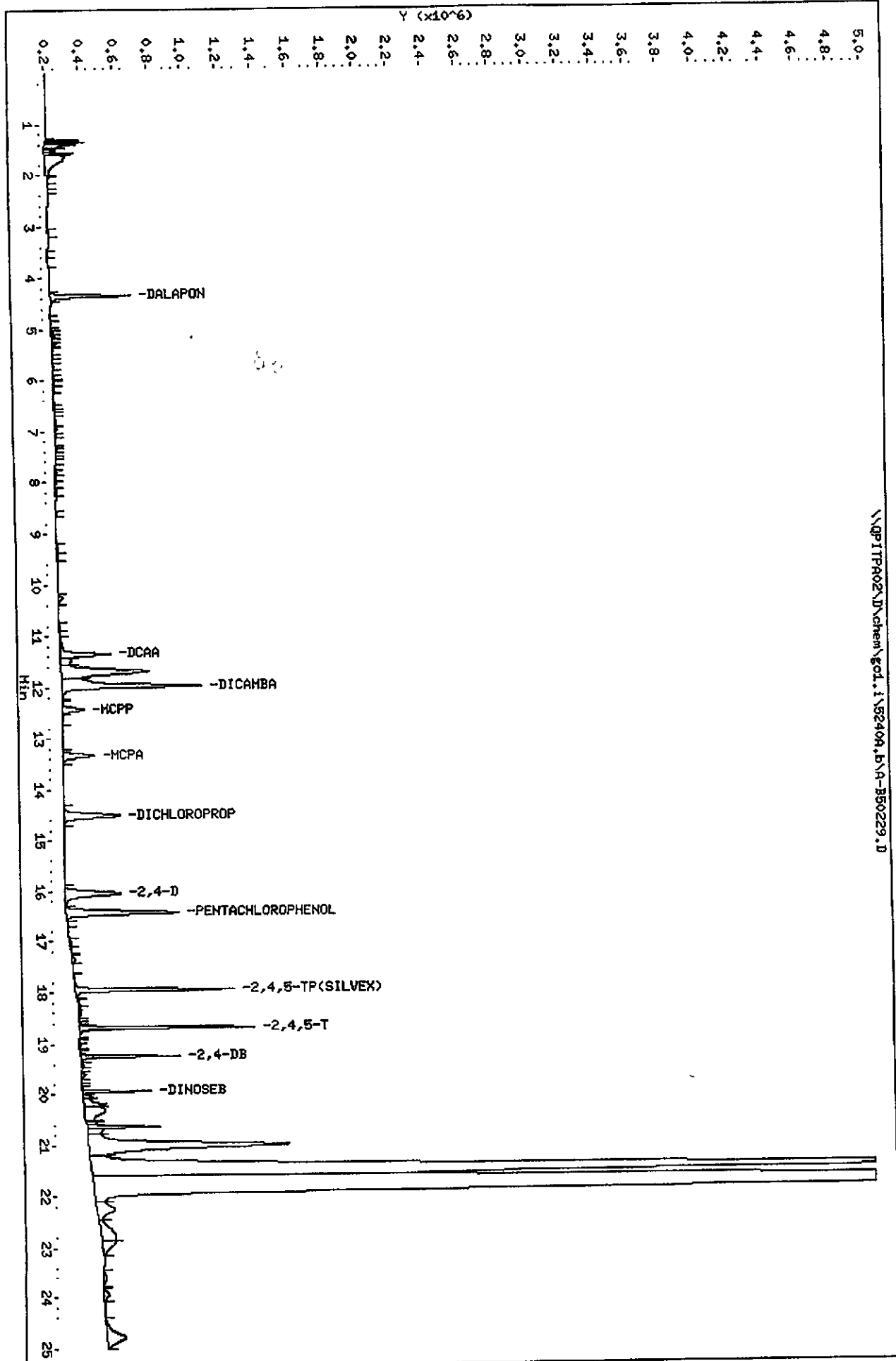
Concentration Formula: Amt * DF * 20*Vt/Vo/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON	4.344	4.342	0.002	472084	0.03301	6.602
\$ 2 DCAA	11.355	11.352	0.003	1531756	0.04739	9.478
3 DICAMBA	11.971	11.971	0.000	821294	0.03290	6.580
4 MCPP	12.426	12.420	0.006	128631	6.95299	1390
5 MCPA	13.331	13.327	0.004	185971	6.74846	1350
6 DICHLOROPROP	14.506	14.507	-0.001	335902	0.06596	13.19
7 2,4-D	16.036	16.039	-0.003	332835	0.06467	12.93
8 PENTACHLOROPHENOL	16.430	16.427	0.003	665330	0.00819	1.638
9 2,4,5-TP(SILVEX)	17.951	17.951	0.000	937626	0.01566	3.131
10 2,4,5-T	18.685	18.688	-0.003	1021324	0.01568	3.137
11 2,4-DB	19.246	19.247	-0.001	589429	0.06323	12.64
12 DINOSEB	19.946	19.945	0.001	402779	0.00668	1.335

Data File: \\GPITPA02\chem\gcl.1\52409.b\A-B50229.D
Date: 24-AUG-2000 15:56
Client ID: LCS
Sample Info: DJOKL102,52409.b
Volume Injected (uL): 1.0
Column phase: DB1704

Instrument: gcl.1
Operator: 01797
Column diameter: 0.53



668 756

UXB INTERNATIONAL
CHECK SAMPLE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) WATER

Lab Sample ID: COH160000 485

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 1000 / mL

Date Received: 08/15/00

Work Order: DJOKL103

Date Extracted: 08/16/00

Dilution factor: 1

Date Analyzed: 08/24/00

Moisture %: NA

QC Batch: 0229485

Client Sample Id: DUPLICATE CHECK

		CONCENTRATION UNITS:	
CAS NO.	COMPOUND	(ug/L or ug/kg) ug/L	Q
94-75-7	2,4-D	12.3	
93-72-1	2,4,5-TP (Silvex)	3.18	
93-76-5	2,4,5-T	3.10	
87-86-5	Pentachlorophenol	1.72	

FORM I

STL - Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5240A.b\A-B50230.D
 Lab Smp Id: DJ0KL103 Client Smp ID: LCSD
 Inj Date : 24-AUG-2000 16:25
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DJ0KL103,5240A.b
 Misc Info : 150146LCSD
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5240A.b\LONGHB.m
 Meth Date : 24-Aug-2000 14:28 colussyj Quant Type: ESTD
 Cal Date : 24-AUG-2000 09:39 Cal File: A-B50216.D
 Als bottle: 20 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC085

Concentration Formula: Amt * DF * 20*Vt/Vo/Vi

Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON	4.342	4.342	0.000	479817	0.03355	6.710
\$ 2 DCAA	11.354	11.352	0.002	1540108	0.04765	9.530
3 DICAMBA	11.972	11.971	0.001	847068	0.03393	6.786
4 MCPP	12.427	12.420	0.007	131137	7.08845	1418
5 MCPA	13.330	13.327	0.003	185466	6.73014	1346
6 DICHLOROPROP	14.503	14.507	-0.004	339080	0.06658	13.32
7 2,4-D	16.041	16.039	0.002	315464	0.06129	12.26
8 PENTACHLOROPHENOL	16.432	16.427	0.005	698107	0.00859	1.719
9 2,4,5-TP(SILVEX)	17.950	17.951	-0.001	953400	0.01592	3.184
10 2,4,5-T	18.685	18.688	-0.003	1009451	0.01550	3.100
11 2,4-DB	19.246	19.247	-0.001	600848	0.06445	12.89
12 DINOSEB	19.947	19.945	0.002	883370	0.01464	2.928

Data File: \\QPI1TP02\N\chem\gc1.i\5240A.b\A-B50230.D

Date: 24-AUG-2000 16:25

Client ID: LCSD

Sample Info: D30KL103,5240A.b

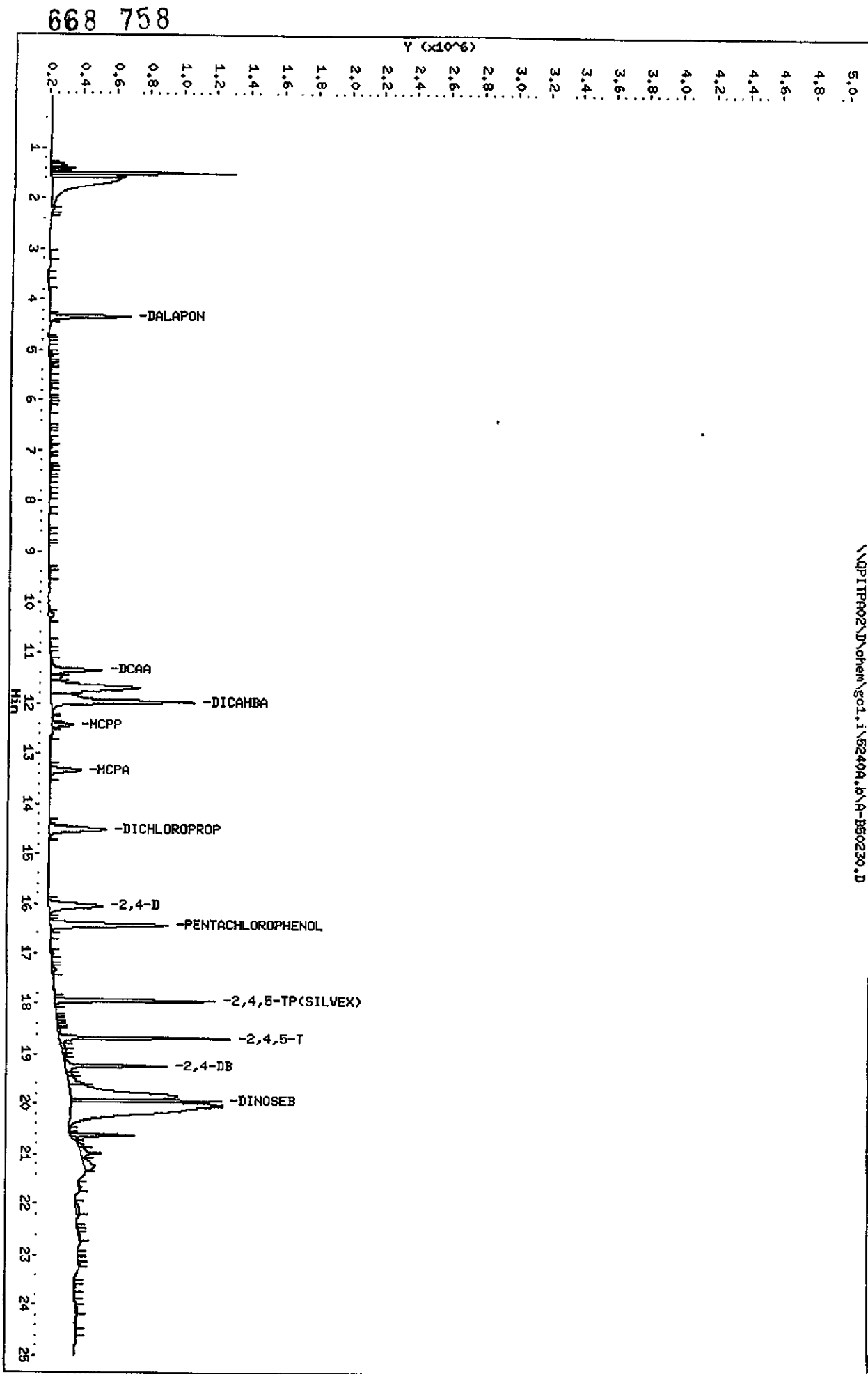
Volume Injected (uL): 1.0

Column phase: DB1701

Instrument: GC1.i

Operator: 04797

Column diameter: 0.53



**HERBICIDE
MISCELLANEOUS**

6#0229485

STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238
412-820-8380

HEXANE, 703268

Dr. Geraldine
8-16-06

Line	Vial	Vial Information

26	26	09013306 20XDL

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	HEXANE	HERB	1	Sample		
2	2	Lherb,5240.b	HERB	1	Sample		
3	3	MLherb,5240.b	HERB	1	Sample		
4	4	Mherb,5240.b	HERB	1	Sample		
5	5	MHherb,5240.b	HERB	1	Sample		
6	6	Hherb,5240.b	HERB	1	Sample		
7	7	DJ7CX103,5240.b	HERB	1	Sample		
8	8	DJ7D2103,5240.b	HERB	1	Sample		
9	9	DJ7D2105,5240.b	HERB	1	Sample		
10	10	DJ7D2106,5240.b	HERB	1	Sample		
11	11	DJ7CM102,5240.b	HERB	1	Sample		
12	12	DJ831101,5240.b	HERB	1	Sample		
13	13	DJ831102,5240.b	HERB	1	Sample		
14	14	DHK3611D,5240.b	HERBA	1	Sample		
15	15	DH96H11D,5240.b	HERBA	1	Sample		
16	16	DHV7M112,5240.b	HERBA	1	Sample		
17	17	DHK1C101,5240.b	HERBA	1	Sample		
18	18	DHK1E101,5240.b	HERBA	1	Sample		
19	19	DJ0KL102,5240.b	HERBA	1	Sample		
20	20	DJ0KL103,5240.b	HERBA	1	Sample		
21	21	DJ0KL101,5240.b	HERBA	1	Sample		
22	22	MHERB,5240.b	HERBA	1	Sample		
23	23	DHK1C101,5240.b	HERB	1	Sample		
24	24	DHK1E101,5240.b	HERB	1	Sample		
25	25	MHERB,5240.b	HERB	1	Sample		
26	26	RINSE	HERB	1	Sample		

Sequence Table (Back Injector):

Vial Information Part:

Line	Vial	Vial Information

1	100	8151 HERB ANALYSIS
2	1	RINSE
3	2	190-94-1 212
4	3	190-94-2 213
5	4	190-94-3 214
6	5	190-94-4 215
7	6	190-94-5 216

created: wwm 8-24-00

B

✓ DE 82500

Line	Vial	Vial Information	
====	====	=====	=====
8	7	220143001	217 ✓
9	8	220143002	218 ✓
10	9	220143002S	219 ✓
11	10	220143002D	220 ✓
12	11	220142001	221 ✓
13	12	220143BLK	222 ✓
14	13	220143LCS	223 ✓
~~15~~	~~14~~	~~09014201~~	224
~~16~~	~~15~~	~~03014201 10XDL~~	225
17	16	15014601 10XDL	226 A+B
~~18~~	~~17~~	~~09013304 4XDL~~	227
~~19~~	~~18~~	~~09013306 10XDL~~	228
20	19	150146LCS	229 ✓
21	20	150146LCSD	230 ✓
22	21	150146BLK	231 ✓
23	22	190-94-3 ~~150146BLK~~ W.M. 8-15-00	232 ✓
24	23	09013304 10XDL	233 A+B (b)
25	24	09013306 20XDL	234 A+B
26	25	190-94-3 ~~09013304 10XDL~~	235

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	==	=====	=====	=====
1	100	HEXANE	HERBA	1	Sample		
2	1	HEXANE	HERBA	1	Sample		
3	2	Lherb,5240A.b	HERBA	1	Sample		
4	3	MLherb,5240A.b	HERBA	1	Sample		
5	4	Mherb,5240A.b	HERBA	1	Sample		
6	5	MHherb,5240A.b	HERBA	1	Sample		
7	6	Hherb,5240A.b	HERBA	1	Sample		
8	7	DJ7CX103,5240A.b	HERBA	1	Sample		
9	8	DJ7D2103,5240A.b	HERBA	1	Sample		
10	9	DJ7D2105,5240A.b	HERBA	1	Sample		
11	10	DJ7D2106,5240A.b	HERBA	1	Sample		
12	11	DJ7CM102,5240A.b	HERBA	1	Sample		
13	12	DJ831101,5240A.b	HERBA	1	Sample		

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	===	=====	=====	=====
14	13	DJ831102,5240A.b	HERBA	1	Sample		
15	14	DHK3611D,5240A.b	HERBA	1	Sample		
16	15	DH96H11D,5240A.b	HERBA	1	Sample		
17	16	DHV7M112,5240A.b	HERBA	1	Sample		
18	17	DHK1C101,5240A.b	HERBA	1	Sample		
19	18	DHK1E101,5240A.b	HERBA	1	Sample		
20	19	DJ0KL102,5240A.b	HERBA	1	Sample		
21	20	DJ0KL103,5240A.b	HERBA	1	Sample		
22	21	DJ0KL101,5240A.b	HERBA	1	Sample		
23	22	MHERB,5240A.b	HERBA	1	Sample		
24	23	DHK1C101,5240A.b	HERBA	1	Sample		
25	24	DHK1E101,5240A.b	HERBA	1	Sample		
26	25	MHERB,5240A.b	HERBA	1	Sample		

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Sequence Table (Front Injector):

Vial Information Part:

Line Vial Vial Information

====	====	=====	=====
1	1	8151 HERB ANALYSIS	
2	2	190-94-1	308
3	3	190-94-2	309
4	4	190-94-3	310
5	5	190-94-4	311
6	6	190-94-5	312
~~7~~	~~7~~	~~220143001~~	313
~~8~~	~~8~~	~~220143002~~	314
~~9~~	~~9~~	~~220143002S~~	315
~~10~~	~~10~~	~~220143002D~~	316
~~11~~	~~11~~	~~220142001~~	317
~~12~~	~~12~~	~~220143BLK~~	318
~~13~~	~~13~~	~~220143LCS~~	319
14	14	09014201	320 ✓
15	15	03014201 10XDL	321 ✓
16	16	15014601 10XDL	322 A+B
~~17~~	~~17~~	~~09013304 4XDL~~	~~323~~
~~18~~	~~18~~	~~09013306 10XDL~~	~~324~~
~~19~~	~~19~~	~~150146LCS~~	325
~~20~~	~~20~~	~~150146LCSD~~	326
~~21~~	~~21~~	~~150146BLK~~ USE	327
22	22	190-94-3	328 ✓
23	23	09013304 10XDL	329 A+B
24	24	09013306 20XDL	330 A+B (A)
25	25	~~190-94-3~~ ~~09013306 20XDL~~ unn 8-25-00	331

Created: unun 8-24-00

A

✓ DE
8-25-00

Line Vial Vial Information

=====

26 26 ~~09013306-20XDL~~ ^{Rinse} 3
 ~~num 8-25-00~~

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	HEXANE	HERB	1	Sample		
2	2	Lherb,5240.b	HERB	1	Sample		
3	3	MLherb,5240.b	HERB	1	Sample		
4	4	Mherb,5240.b	HERB	1	Sample		
5	5	MHherb,5240.b	HERB	1	Sample		
6	6	Hherb,5240.b	HERB	1	Sample		
7	7	DJ7CX103,5240.b	HERB	1	Sample		
8	8	DJ7D2103,5240.b	HERB	1	Sample		
9	9	DJ7D2105,5240.b	HERB	1	Sample		
10	10	DJ7D2106,5240.b	HERB	1	Sample		
11	11	DJ7CM102,5240.b	HERB	1	Sample		
12	12	DJ831101,5240.b	HERB	1	Sample		
13	13	DJ831102,5240.b	HERB	1	Sample		
14	14	DHK3611D,5240.b	HERBA	1	Sample		
15	15	DH96H11D,5240.b	HERBA	1	Sample		
16	16	DHV7M112,5240.b	HERBA	1	Sample		
17	17	DHK1C101,5240.b	HERBA	1	Sample		
18	18	DHK1E101,5240.b	HERBA	1	Sample		
19	19	DJ0KL102,5240.b	HERBA	1	Sample		
20	20	DJ0KL103,5240.b	HERBA	1	Sample		
21	21	DJ0KL101,5240.b	HERBA	1	Sample		
22	22	MHERB,5240.b	HERBA	1	Sample		
23	23	DHK1C101,5240.b	HERB	1	Sample		
24	24	DHK1E101,5240.b	HERB	1	Sample		
25	25	MHERB,5240.b	HERB	1	Sample		
26	26	RINSE	HERB	1	Sample		

Sequence Table (Back Injector):

Vial Information Part:

Line	Vial	Vial Information
1	100	8151 HERB ANALYSIS
2	1	RINSE
3	2	190-94-1
4	3	190-94-2
5	4	190-94-3
6	5	190-94-4
7	6	190-94-5

668 766

Line	Vial	Vial Information
26	26	09013306 20XDL

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	HEXANE	HERB	1	Sample		
2	2	Lherb,5240.b	HERB	1	Sample		
3	3	MLherb,5240.b	HERB	1	Sample		
4	4	Mherb,5240.b	HERB	1	Sample		
5	5	MHherb,5240.b	HERB	1	Sample		
6	6	Hherb,5240.b	HERB	1	Sample		
7	7	DJ7CX103,5240.b	HERB	1	Sample		
8	8	DJ7D2103,5240.b	HERB	1	Sample		
9	9	DJ7D2105,5240.b	HERB	1	Sample		
10	10	DJ7D2106,5240.b	HERB	1	Sample		
11	11	DJ7CM102,5240.b	HERB	1	Sample		
12	12	DJ831101,5240.b	HERB	1	Sample		
13	13	DJ831102,5240.b	HERB	1	Sample		
14	14	DHK3611D,5240.b	HERBA	1	Sample		
15	15	DH96H11D,5240.b	HERBA	1	Sample		
16	16	DHV7M112,5240.b	HERBA	1	Sample		
17	17	DHK1C101,5240.b	HERBA	1	Sample		
18	18	DHK1E101,5240.b	HERBA	1	Sample		
19	19	DJ0KL102,5240.b	HERBA	1	Sample		
20	20	DJ0KL103,5240.b	HERBA	1	Sample		
21	21	DJ0KL101,5240.b	HERBA	1	Sample		
22	22	MHERB,5240.b	HERBA	1	Sample		
23	23	DHK1C101,5240.b	HERB	1	Sample		
24	24	DHK1E101,5240.b	HERB	1	Sample		
25	25	MHERB,5240.b	HERB	1	Sample		
26	26	RINSE	HERB	1	Sample		

Sequence Table (Back Injector):

Vial Information Part:

Line	Vial	Vial Information
1	100	8151 HERB ANALYSIS
2	1	RINSE
3	2	190-94-1 212
4	3	190-94-2 213
5	4	190-94-3 214
6	5	190-94-4 215
7	6	190-94-5 216

created: wwm 8-24-00

REQUESTED BY: YUSHINSC

METHOD: QS Herbicides (8151A)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
22D CLP1	DHV7M-1-12	___	259563	399411	I-0A-QS	COH150146	001		WATER	0	12 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<i>P. Yushinski</i>	<i>P. Yushinski</i>	<i>8-16-00 154</i>
<i>P. Yushinski</i>	<i>P. Yushinski</i>	<i>8-16-00 235</i>

***** END OF REPORT *****

668 768

METALS DATA

STL-Pittsburgh**Cover Page - Inorganic Analysis Data Package**

Client ID	Lab Sample ID:
DF/S1/0227/IDW/003	DHV7M
DF/S1/0227/IDW/003D	DHV7MD
DF/S1/0227/IDW/003S	DHV7MS

Comments: UXB DUNN FIELD
COH150146
6010B, 7470A

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than conditions detailed above. Release of the data combined in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____
Date: _____ Title: _____

REVIEWED BY: PMG
DATE: 8-21-00

668 770

**METALS
RESULTS**

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DHV7M Client ID: DF/S1/0227/IDW/003
Matrix: Water Units: ug/L Prep Date: 8/16/00 Prep Batch: 0229093
Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.045	0.20	0.46		1	CVAA	8/16/00	11:05

Comments: Lot #: C0H150146 Sample #: 1

Version 4.10.2

U Result is less than the MDL
B Result is between MDL and RL

Form 1 Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DHV7M Client ID: DF/S1/0227/IDW/003
 Matrix: Water Units: ug/L Prep Date: 8/16/00 Prep Batch: 0229140
 Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.22	12.7	200	1120		1	ICP	8/18/00	11:20
Antimony	220.35	1.5	60.0	10.2	B	1	ICPST	8/18/00	10:28
Arsenic	189.04	2.6	10.0	6.4	B	1	ICPST	8/18/00	10:28
Barium	493.41	0.41	200	176	B	1	ICP	8/18/00	11:20
Beryllium	313.04	0.071	5.0	0.090	B	1	ICP	8/18/00	11:20
Cadmium	226.50	0.49	5.0	0.66	B	1	ICPST	8/18/00	10:28
Calcium	317.93	37.9	5000	42900		1	ICP	8/18/00	11:20
Chromium	267.72	1.0	10.0	52.4		1	ICPST	8/18/00	10:28
Cobalt	228.62	3.2	50.0	3.2	U	1	ICP	8/18/00	11:20
Copper	324.75	2.2	25.0	30.1		1	ICP	8/18/00	11:20
Iron	259.94	8.8	100	1410		1	ICP	8/18/00	11:20
Lead	220.35	1.9	3.0	12.4		1	ICPST	8/18/00	10:28
Magnesium	279.08	19.9	5000	12500		1	ICP	8/18/00	11:20
Manganese	257.61	0.87	15.0	169		1	ICP	8/18/00	11:20
Nickel	231.60	6.1	40.0	8.7	B	1	ICP	8/18/00	11:20
Potassium	766.49	496	5000	4070	B	1	ICP	8/18/00	11:20
Selenium	220.35	2.1	5.0	2.1	U	1	ICPST	8/18/00	10:28
Silver	328.07	0.94	10.0	1.4	B	1	ICPST	8/18/00	10:28
Sodium	589	72.5	25000	1020000		5	ICP	8/18/00	11:41
Thallium	190.86	3.9	10.0	5.6	B	1	ICPST	8/18/00	10:28
Vanadium	292.40	1.8	50.0	2.8	B	1	ICP	8/18/00	11:20
Zinc	213.86	3.1	20.0	188		1	ICP	8/18/00	11:20

Comments: Lot #: C0H150146 Sample #: 1

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

Initial Calibration Verification Standard

Instrument: CVAAUnits: ug/LChart Number: 0816HGA.PRNAcceptable Range: 80% - 120%Standard Source: UltraStandard ID: 0057-026-14

			ICV5-1 8/16/00 9:47 AM							
	WL/ Mass	True Conc	% Found Rec		% Found Rec		% Found Rec		% Found Rec	
Element			Found	Rec	Found	Rec	Found	Rec	Found	Rec
Mercury	253.7	2.5	2.57	102.8						

STL-Pittsburgh

Metals Data Reporting Form

668 774

Initial Calibration Verification Standard

Instrument: ICP

Units: ug/L

Chart Number: J00818A.ARC

Acceptable Range: 90% - 110%

Standard Source: Inorganic Ventures

Standard ID: 0057-005-2

Element	WL/ Mass	True Conc	ICV2-1 8/18/00 6:23 AM		Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
			Found	% Rec								
Aluminum	308.215	25000.0	25268.59	101.1								
Barium	493.409	1000.0	1002.67	100.3								
Beryllium	313.042	1000.0	983.85	98.4								
Calcium	317.933	25000.0	25538.04	102.2								
Cobalt	228.616	1000.0	1005.56	100.6								
Copper	324.754	1000.0	996.66	99.7								
Iron	259.94	25000.0	26165.48	104.7								
Magnesium	279.079	25000.0	25384.57	101.5								
Manganese	257.61	1000.0	1008.66	100.9								
Nickel	231.604	1000.0	1005.17	100.5								
Potassium	766.491	25000.0	24585.93	98.3								
Sodium	588.995	25000.0	24901.62	99.6								
Vanadium	292.402	1000.0	994.69	99.5								
Zinc	213.856	1000.0	1013.66	101.4								

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPSTUnits: ug/LChart Number: T00818A.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0057-022-8

Element	WL/ Mass	True Conc	ICV3-1 8/18/00 7:30 AM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	220.353	250.0	257.50	103.0								
Arsenic	189.042	250.0	258.15	103.3								
Cadmium	226.502	250.0	250.72	100.3								
Chromium	267.716	1000.0	1001.11	100.1								
Lead	220.353	250.0	258.07	103.2								
Selenium	220.353	250.0	258.84	103.5								
Silver	328.068	500.0	515.32	103.1								
Thallium	190.864	500.0	529.80	106.0								

668 776

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAAUnits: ug/LChart Number: 0816HGA.PRNAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0057-026-15

Element	WL/ Mass	True Conc	CCV5-1 8/16/00 9:50 AM		CCV5-2 8/16/00 10:10 AM		CCV5-3 8/16/00 10:31 AM		CCV5-4 8/16/00 10:52 AM		CCV5-5 8/16/00 11:13 AM	
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	5.0	5.07	101.4	5.12	102.4	5.02	100.4	4.97	99.4	4.93	98.6

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPUnits: ug/LChart Number: J00818A.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0057-025-5

Element	WL/ Mass	True Conc	CCV2-1 8/18/00 7:02 AM		CCV2-2 8/18/00 7:40 AM		CCV2-3 8/18/00 8:08 AM		CCV2-4 8/18/00 8:46 AM		CCV2-5 8/18/00 9:25 AM	
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	50000.0	50228.21	100.5	49760.46	99.5	50108.88	100.2	50346.27	100.7	50276.55	100.6
Barium	493.409	5000.0	4986.65	99.7	4929.40	98.6	4968.22	99.4	4996.43	99.9	4986.55	99.7
Beryllium	313.042	5000.0	4957.72	99.2	4937.05	98.7	4992.36	99.8	5042.23	100.8	5048.75	101.0
Calcium	317.933	50000.0	51147.15	102.3	51531.84	103.1	52170.70	104.3	52923.26	105.8	53100.18	106.2
Cobalt	228.616	5000.0	5022.87	100.5	5025.82	100.5	5080.51	101.6	5135.11	102.7	5149.10	103.0
Copper	324.754	5000.0	4974.91	99.5	4899.20	98.0	4935.52	98.7	4949.31	99.0	4933.53	98.7
Iron	259.94	50000.0	51921.63	103.8	51858.31	103.7	52381.37	104.8	52791.19	105.6	52820.49	105.6
Magnesium	279.079	50000.0	50295.82	100.6	49842.57	99.7	50340.11	100.7	50641.13	101.3	50587.16	101.2
Manganese	257.61	5000.0	4997.63	100.0	5001.28	100.0	5056.99	101.1	5113.46	102.3	5115.81	102.3
Nickel	231.604	5000.0	5012.88	100.3	5038.98	100.8	5098.37	102.0	5203.60	104.1	5187.02	103.7
Potassium	766.491	50000.0	49715.49	99.4	49260.71	98.5	49256.47	98.5	49463.77	98.9	49199.36	98.4
Sodium	588.995	50000.0	50192.93	100.4	49450.28	98.9	49808.10	99.6	50039.60	100.1	49894.58	99.8
Vanadium	292.402	5000.0	4999.21	100.0	4987.24	99.7	5034.05	100.7	5080.59	101.6	5082.62	101.7
Zinc	213.856	5000.0	5022.86	100.5	5010.52	100.2	5047.93	101.0	5096.74	101.9	5101.93	102.0

668 778

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPUnits: ug/LChart Number: J00818A.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0057-025-5

Element	WL/ Mass	True Conc	CCV2-6 8/18/00 10:03 AM		CCV2-7 8/18/00 10:25 AM		CCV2-8 8/18/00 11:05 AM		CCV2-9 8/18/00 11:33 AM		CCV2-10 8/18/00 11:54 AM	
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	50000.0	50037.21	100.1	49940.73	99.9	50345.76	100.7	49766.67	99.5		
Barium	493.409	5000.0	4988.75	99.8	4980.82	99.6	5029.70	100.6	4970.18	99.4		
Beryllium	313.042	5000.0	5049.79	101.0	5025.39	100.5	5093.81	101.9	5036.43	100.7		
Calcium	317.933	50000.0	52510.73	105.0	52199.42	104.4	52937.67	105.9	52086.36	104.2		
Cobalt	228.616	5000.0	5114.11	102.3	5083.42	101.7	5145.07	102.9	5078.60	101.6		
Copper	324.754	5000.0	4939.29	98.8	4932.98	98.7	4970.24	99.4	4925.53	98.5		
Iron	259.94	50000.0	52631.30	105.3	52444.39	104.9	53072.48	106.1	52387.53	104.8		
Magnesium	279.079	50000.0	50405.16	100.8	50234.24	100.5	50753.93	101.5	50116.60	100.2		
Manganese	257.61	5000.0	5079.76	101.6	5058.84	101.2	5115.89	102.3	5044.22	100.9		
Nickel	231.604	5000.0	5163.89	103.3	5139.71	102.8	5199.78	104.0	5143.87	102.9		
Potassium	766.491	50000.0	49061.87	98.1	49290.32	98.6	49884.71	99.8	49066.10	98.1		
Sodium	588.995	50000.0	49580.06	99.2	49520.60	99.0	50026.67	100.1	49739.51	99.5	48694.47	97.4
Vanadium	292.402	5000.0	5050.07	101.0	5034.52	100.7	5099.20	102.0	5026.12	100.5		
Zinc	213.856	5000.0	5054.16	101.1	5023.17	100.5	5073.47	101.5	5014.31	100.3		

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPSTUnits: ug/LChart Number: T00818A.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0057-023-9

Element	WL/ Mass	True Conc	CCV3-1 8/18/00 8:22 AM		CCV3-2 8/18/00 9:12 AM		CCV3-3 8/18/00 9:49 AM		CCV3-4 8/18/00 10:45 AM			
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	220.353	500.0	524.29	104.9	517.48	103.5	505.16	101.0	521.76	104.4		
Arsenic	189.042	500.0	528.51	105.7	519.06	103.8	504.55	100.9	520.96	104.2		
Cadmium	226.502	500.0	508.04	101.6	501.07	100.2	488.51	97.7	502.74	100.5		
Chromium	267.716	2000.0	2049.34	102.5	2021.47	101.1	1970.18	98.5	2021.85	101.1		
Lead	220.353	500.0	526.61	105.3	521.68	104.3	508.37	101.7	521.65	104.3		
Selenium	220.353	500.0	532.54	106.5	527.21	105.4	512.15	102.4	527.05	105.4		
Silver	328.068	1000.0	1070.80	107.1	1056.07	105.6	1031.59	103.2	1058.14	105.8		
Thallium	190.864	1000.0	1071.20	107.1	1051.05	105.1	1031.29	103.1	1056.83	105.7		

668 780

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0816HGA.PRN

Standard Source: _____

Standard ID: _____

			ICB1 8/16/00 9:49 AM							
Element	WL/ Mass	Report Limit	Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.0	U						

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00818A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 8/18/00 6:26 AM		Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
			Found	Q										
Aluminum	308.215	200	12.7	U										
Barium	493.409	200	0.4	U										
Beryllium	313.042	5	0.1	U										
Calcium	317.933	5000	89.8	B										
Cobalt	228.616	50	3.2	U										
Copper	324.754	25	2.2	U										
Iron	259.94	100	8.8	U										
Magnesium	279.079	5000	19.9	U										
Manganese	257.61	15	0.9	U										
Nickel	231.604	40	6.1	U										
Potassium	766.491	5000	496.0	U										
Sodium	588.995	5000	14.5	U										
Vanadium	292.402	50	1.8	U										
Zinc	213.856	20	4.8	B										

668 732

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T00818A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 8/18/00 7:34 AM							
			Found	Q	Found	Q	Found	Q	Found	Q
Antimony	220.353	60	1.5	U						
Arsenic	189.042	10	2.6	U						
Cadmium	226.502	5	0.5	U						
Chromium	267.716	10	1.0	U						
Lead	220.353	3	1.9	U						
Selenium	220.353	5	2.1	U						
Silver	328.068	10	0.9	U						
Thallium	190.864	10	3.9	U						

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0816HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 8/16/00 9:52 AM	CCB2 8/16/00 10:12 AM	CCB3 8/16/00 10:33 AM	CCB4 8/16/00 10:54 AM	CCB5 8/16/00 11:14 AM
			Found Q	Found Q	Found Q	Found Q	Found Q
Mercury	253.7	0.2	0.0 U	0.0 U	0.0 U	0.0 U	0.0 B

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00818A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 8/18/00 7:06 AM		CCB2 8/18/00 7:43 AM		CCB3 8/18/00 8:11 AM		CCB4 8/18/00 8:49 AM		CCB5 8/18/00 9:28 AM	
			Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	308.215	200	12.7	U	12.7	U	12.7	U	12.7	U	12.7	U
Barium	493.409	200	0.4	U	0.4	U	0.4	U	0.4	U	0.4	U
Beryllium	313.042	5	0.2	B	0.2	B	0.3	B	0.2	B	0.2	B
Calcium	317.933	5000	37.9	U	37.9	U	37.9	U	37.9	U	37.9	U
Cobalt	228.616	50	3.2	U	3.2	U	3.2	U	3.2	U	3.2	U
Copper	324.754	25	2.2	U	2.2	U	2.2	U	2.2	U	2.2	U
Iron	259.94	100	8.8	U	8.8	U	8.8	U	8.8	U	8.8	U
Magnesium	279.079	5000	19.9	U	19.9	U	19.9	U	19.9	U	19.9	U
Manganese	257.61	15	0.9	U	0.9	U	0.9	U	0.9	U	0.9	U
Nickel	231.604	40	-7.1	B	6.1	U	6.1	U	6.1	U	6.1	U
Potassium	766.491	5000	496.0	U	496.0	U	496.0	U	496.0	U	496.0	U
Sodium	588.995	5000	14.5	U	14.5	U	14.5	U	14.5	U	14.5	U
Vanadium	292.402	50	1.8	U	-2.5	B	-2.4	B	-2.5	B	-2.5	B
Zinc	213.856	20	3.1	U	3.1	U	4.6	B	3.1	U	3.1	U

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00818A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB6 8/18/00 10:06 AM	CCB7 8/18/00 10:28 AM	CCB8 8/18/00 11:08 AM	CCB9 8/18/00 11:36 AM	CCB10 8/18/00 11:57 AM
			Found Q	Found Q	Found Q	Found Q	Found Q
Aluminum	308.215	200	12.7 U	12.7 U	12.7 U	12.7 U	
Barium	493.409	200	0.4 U	0.4 U	0.4 U	0.4 U	
Beryllium	313.042	5	0.4 B	0.2 B	0.2 B	0.2 B	
Calcium	317.933	5000	37.9 U	37.9 U	37.9 U	37.9 U	
Cobalt	228.616	50	3.2 U	3.2 U	3.2 U	3.2 U	
Copper	324.754	25	2.2 U	2.2 U	2.2 U	2.2 U	
Iron	259.94	100	8.8 U	8.8 U	8.8 U	8.8 U	
Magnesium	279.079	5000	19.9 U	19.9 U	19.9 U	19.9 U	
Manganese	257.61	15	0.9 U	0.9 U	0.9 U	0.9 U	
Nickel	231.604	40	6.1 U	6.1 U	6.1 U	6.1 U	
Potassium	766.491	5000	496.0 U	496.0 U	496.0 U	496.0 U	
Sodium	588.995	5000	24.6 B	14.5 U	14.5 U	14.5 U	14.5 U
Vanadium	292.402	50	1.8 U	-2.5 B	-2.4 B	-2.5 B	
Zinc	213.856	20	3.1 U	3.1 U	3.1 U	3.1 U	

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T00818A.ARC

Standard Source: _____

Standard ID: _____

			CCB1 8/18/00 8:26 AM		CCB2 8/18/00 9:16 AM		CCB3 8/18/00 9:53 AM		CCB4 8/18/00 10:49 AM			
Element	WL/ Mass	Report Limit	Found	Q	Found	Q	Found	Q	Found	Q	Found	Q
Antimony	220.353	60	1.5	U	1.5	U	1.5	U	1.5	U		
Arsenic	189.042	10	2.6	U	2.6	U	2.6	U	2.6	U		
Cadmium	226.502	5	0.5	U	0.5	U	0.5	U	0.5	U		
Chromium	267.716	10	1.0	U	1.0	U	1.0	U	1.0	B		
Lead	220.353	3	1.9	U	1.9	U	1.9	U	1.9	U		
Selenium	220.353	5	2.1	U	2.1	U	2.1	U	2.1	U		
Silver	328.068	10	0.9	U	0.9	U	0.9	U	0.9	U		
Thallium	190.864	10	4.7	B	3.9	U	3.9	U	3.9	U		

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank Results**Lab Sample ID:** DHWJ2B**Matrix:** Water **Units:** ug/L **Prep Date:** 8/16/00 **Prep Batch:** 0229093**Weight:** NA **Volume:** 100 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.045	0.20	0.063	B	1	CVAA	8/16/00	11:02

Comments: Lot #: C0H150146

Version 4.10.2

U Result is less than the MDL
B Result is between MDL and RL*Form 3 Equivalent*

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DHWLVBMatrix: Water Units: ug/L Prep Date: 8/16/00 Prep Batch: 0229140Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Aluminum	308.215	12.7	200	12.7	U	1	ICP	8/18/00	11:14
Antimony	220.353	1.5	60.0	1.5	U	1	ICPST	8/18/00	10:20
Arsenic	189.042	2.6	10.0	2.6	U	1	ICPST	8/18/00	10:20
Barium	493.409	0.41	200	0.41	U	1	ICP	8/18/00	11:14
Beryllium	313.042	0.071	5.0	0.10	B	1	ICP	8/18/00	11:14
Cadmium	226.502	0.49	5.0	0.49	U	1	ICPST	8/18/00	10:20
Calcium	317.933	37.9	5000	37.9	U	1	ICP	8/18/00	11:14
Chromium	267.716	1.0	10.0	1.0	U	1	ICPST	8/18/00	10:20
Cobalt	228.616	3.2	50.0	3.2	U	1	ICP	8/18/00	11:14
Copper	324.754	2.2	25.0	2.2	U	1	ICP	8/18/00	11:14
Iron	259.94	8.8	100	20.1	B	1	ICP	8/18/00	11:14
Lead	220.353	1.9	3.0	1.9	U	1	ICPST	8/18/00	10:20
Magnesium	279.079	19.9	5000	19.9	U	1	ICP	8/18/00	11:14
Manganese	257.61	0.87	15.0	0.87	U	1	ICP	8/18/00	11:14
Nickel	231.604	6.1	40.0	-7.1	B	1	ICP	8/18/00	11:14
Potassium	766.491	496	5000	496	U	1	ICP	8/18/00	11:14
Selenium	220.353	2.1	5.0	2.1	U	1	ICPST	8/18/00	10:20
Silver	328.068	0.94	10.0	0.94	U	1	ICPST	8/18/00	10:20
Sodium	588.995	14.5	5000	14.5	U	1	ICP	8/18/00	11:14
Thallium	190.864	3.9	10.0	3.9	U	1	ICPST	8/18/00	10:20
Vanadium	292.402	1.8	50.0	-2.6	B	1	ICP	8/18/00	11:14
Zinc	213.856	3.1	20.0	3.1	U	1	ICP	8/18/00	11:14

Comments: Lot #: C0H150146

Version 4.10.2

U Result is less than the MDL

Form 3 Equivalent

B Result is between MDL and RL

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPUnits: ug/LChart Number: J00818A.ARCAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0057-011-1

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 8/18/00 6:29 AM	Found	Found	Found	Found
				Found				
Aluminum	308.215		500000	491000				
Barium	493.409	200		1				
Beryllium	313.042	5		0				
Calcium	317.933		500000	483000				
Cobalt	228.616	50		13				
Copper	324.754	25		-8				
Iron	259.94		200000	185000				
Magnesium	279.079		500000	484000				
Manganese	257.61	15		3				
Nickel	231.604	40		-19				
Potassium	766.491	5000		-320				
Sodium	588.995	5000		5				
Vanadium	292.402	50		3				
Zinc	213.856	20		1				

STL-Pittsburgh

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Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPST

Units: ug/L

Chart Number: T00818A.ARC

Acceptable Range: 0% - 0%

Standard Source: Inorganic Ventures

Standard ID: 0057-011-1

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 8/18/00 7:38 AM	Found	Found	Found	Found	Found
				Found					
Antimony	220.353	60		0					
Arsenic	189.042	10		0					
Cadmium	226.502	5		0					
Chromium	267.716	10		3					
Lead	220.353	3		5					
Selenium	220.353	5		-9					
Silver	328.068	10		0					
Thallium	190.864	10		6					

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPUnits: ug/LChart Number: J00818A.ARCAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0014-187-1

Element	WL/ Mass	True Conc	ICSAB 8/18/00 6:32 AM		Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
			Found	% Rec								
Aluminum	308.215	500000	485402.6	97.1								
Barium	493.409	500	463.4	92.7								
Beryllium	313.042	500	453.1	90.6								
Calcium	317.933	500000	477908.0	95.6								
Cobalt	228.616	500	455.9	91.2								
Copper	324.754	500	473.2	94.6								
Iron	259.94	200000	183369.2	91.7								
Magnesium	279.079	500000	477929.4	95.6								
Manganese	257.61	500	451.3	90.3								
Nickel	231.604	1000	898.6	89.9								
Potassium	766.491	10000	9506.1	95.1								
Sodium	588.995	10000	9921.3	99.2								
Vanadium	292.402	500	457.8	91.5								
Zinc	213.856	1000	932.5	93.3								

STL-Pittsburgh

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Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPST

Units: ug/L

Chart Number: T00818A.ARC

Acceptable Range: 80% - 120%

Standard Source: Inorganic Ventures

Standard ID: 0014-197-7

Element	WL/ Mass	True Conc	ICSAB 8/18/00 7:42 AM		Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
			Found	% Rec								
Antimony	220.353	1000	1079.6	108.0								
Arsenic	189.042	1000	1048.1	104.8								
Cadmium	226.502	1000	955.0	95.5								
Chromium	267.716	500	512.4	102.5								
Lead	220.353	1000	1056.3	105.6								
Selenium	220.353	1000	1054.5	105.4								
Silver	328.068	1000	1153.4	115.3								
Thallium	190.864	1000	1110.0	111.0								

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DHV7MS

Original Sample ID: DHV7M Client ID: DF/S1/0227/IDW/003S

Matrix: Water Units: ug/L Prep Date: 8/16/00 Prep Batch: 0229093

Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Mercury	253.7	0.46		1.5		1	102.2	1	1	CVAA	8/16/00	11:05	8/16/00	11:07

Comments: Lot #: C0H150146 Sample #: 1

Version 4.10.2

U Result is less than the MDL
 B Result is between MDL and RL
 N Spike recovery failed
 NC Percent recovery was not calculated
 * Duplicate analysis RPD was not within limits

Form 5A Equivalent

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DHV7MSOriginal Sample ID: DHV7MClient ID: DF/S1/0227/IDW/003SMatrix: WaterUnits: ug/LPrep Date: 8/16/00Prep Batch: 0229140Weight: NAVolume: 50Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MS Conc	Q	Spike Level	% Rec	OS DF	MS DF	Instr	OS Anal Date	OS Anal Time	MS Anal Date	MS Anal Time
Aluminum	308.2	1120		3300		2000	108.9	1	1	ICP	8/18/00	11:20	8/18/00	11:27
Antimony	220.4	10.2	B	544		500	106.8	1	1	ICPST	8/18/00	10:28	8/18/00	10:37
Arsenic	189.0	6.4	B	2070		2000	103.1	1	1	ICPST	8/18/00	10:28	8/18/00	10:37
Barium	493.4	176	B	2030		2000	92.5	1	1	ICP	8/18/00	11:20	8/18/00	11:27
Beryllium	313.0	0.090	B	48.0		50	95.8	1	1	ICP	8/18/00	11:20	8/18/00	11:27
Cadmium	226.5	0.66	B	47.3		50	93.2	1	1	ICPST	8/18/00	10:28	8/18/00	10:37
Calcium	317.9	42900		96200		50000	106.7	1	1	ICP	8/18/00	11:20	8/18/00	11:27
Chromium	267.7	52.4		257		200	102.1	1	1	ICPST	8/18/00	10:28	8/18/00	10:37
Cobalt	228.6	3.2	U	474		500	94.7	1	1	ICP	8/18/00	11:20	8/18/00	11:27
Copper	324.8	30.1		268		250	95.3	1	1	ICP	8/18/00	11:20	8/18/00	11:27
Iron	259.9	1410		2460		1000	105.7	1	1	ICP	8/18/00	11:20	8/18/00	11:27
Lead	220.4	12.4		544		500	106.3	1	1	ICPST	8/18/00	10:28	8/18/00	10:37
Magnesium	279.1	12500		60900		50000	96.8	1	1	ICP	8/18/00	11:20	8/18/00	11:27
Manganese	257.6	169		651		500	96.3	1	1	ICP	8/18/00	11:20	8/18/00	11:27
Nickel	231.6	8.7	B	481		500	94.4	1	1	ICP	8/18/00	11:20	8/18/00	11:27
Potassium	766.5	4070	B	54000		50000	99.9	1	1	ICP	8/18/00	11:20	8/18/00	11:27
Selenium	220.4	2.1	U	2130		2000	106.7	1	1	ICPST	8/18/00	10:28	8/18/00	10:37
Silver	328.1	1.4	B	56.3		50	109.8	1	1	ICPST	8/18/00	10:28	8/18/00	10:37
Sodium	589	1020000		1150000	NC	50000		5	5	ICP	8/18/00	11:41	8/18/00	11:47
Thallium	190.9	5.6	B	2300		2000	114.6	1	1	ICPST	8/18/00	10:28	8/18/00	10:37
Vanadium	292.4	2.8	B	474		500	94.3	1	1	ICP	8/18/00	11:20	8/18/00	11:27
Zinc	213.9	188		681		500	98.6	1	1	ICP	8/18/00	11:20	8/18/00	11:27

Comments: Lot #: C0H150146 Sample #: 1

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 5A Equivalent

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DHV7MDOriginal Sample ID: DHV7MClient ID: DF/S1/0227/IDW/003DMatrix: Water Units: ug/L Prep Date: 8/16/00 Prep Batch: 0229093Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	0.46		1.5		1	104.2	1	1	CVAA	8/16/00	11:05	8/16/00	11:09

Comments: Lot #: C0H150146 Sample #: 1

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 5A Equivalent

Metals Data Reporting Form

Matrix Spike Duplicate Sample Results

Spike Sample ID: DHV7MDOriginal Sample ID: DHV7M Client ID: DF/S1/0227/IDW/003DMatrix: Water Units: ug/L Prep Date: 8/16/00 Prep Batch: 0229140Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	MSD Conc	Q	Spike Level	% Rec	OS DF	MSD DF	Instr	OS Anal Date	OS Anal Time	MSD Anal Date	MSD Anal Time
Aluminum	308.2	1120		3170		2000	102.5	1	1	ICP	8/18/00	11:20	8/18/00	11:30
Antimony	220.4	10.2	B	524		500	102.8	1	1	ICPST	8/18/00	10:28	8/18/00	10:41
Arsenic	189.0	6.4	B	1930		2000	96.3	1	1	ICPST	8/18/00	10:28	8/18/00	10:41
Barium	493.4	176	B	1930		2000	87.5	1	1	ICP	8/18/00	11:20	8/18/00	11:30
Beryllium	313.0	0.090	B	45.2		50	90.3	1	1	ICP	8/18/00	11:20	8/18/00	11:30
Cadmium	226.5	0.66	B	44.6		50	87.9	1	1	ICPST	8/18/00	10:28	8/18/00	10:41
Calcium	317.9	42900		93300		50000	100.9	1	1	ICP	8/18/00	11:20	8/18/00	11:30
Chromium	267.7	52.4		241		200	94.5	1	1	ICPST	8/18/00	10:28	8/18/00	10:41
Cobalt	228.6	3.2	U	452		500	90.5	1	1	ICP	8/18/00	11:20	8/18/00	11:30
Copper	324.8	30.1		278		250	99.1	1	1	ICP	8/18/00	11:20	8/18/00	11:30
Iron	259.9	1410		2400		1000	99.1	1	1	ICP	8/18/00	11:20	8/18/00	11:30
Lead	220.4	12.4		511		500	99.7	1	1	ICPST	8/18/00	10:28	8/18/00	10:41
Magnesium	279.1	12500		58800		50000	92.6	1	1	ICP	8/18/00	11:20	8/18/00	11:30
Manganese	257.6	169		623		500	90.8	1	1	ICP	8/18/00	11:20	8/18/00	11:30
Nickel	231.6	8.7	B	462		500	90.6	1	1	ICP	8/18/00	11:20	8/18/00	11:30
Potassium	766.5	4070	B	52100		50000	96.0	1	1	ICP	8/18/00	11:20	8/18/00	11:30
Selenium	220.4	2.1	U	1990		2000	99.6	1	1	ICPST	8/18/00	10:28	8/18/00	10:41
Silver	328.1	1.4	B	52.4		50	101.9	1	1	ICPST	8/18/00	10:28	8/18/00	10:41
Sodium	589	1020000		1100000	NC	50000		5	5	ICP	8/18/00	11:41	8/18/00	11:51
Thallium	190.9	5.6	B	2150		2000	107.3	1	1	ICPST	8/18/00	10:28	8/18/00	10:41
Vanadium	292.4	2.8	B	457		500	90.9	1	1	ICP	8/18/00	11:20	8/18/00	11:30
Zinc	213.9	188		654		500	93.2	1	1	ICP	8/18/00	11:20	8/18/00	11:30

Comments: Lot #: C0H150146 Sample #: 1

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

Form 5A Equivalent

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DHV7MDMatrix Spike Sample ID: DHV7MS Client ID: DF/S1/0227/IDW/003DMatrix: Water Units: ug/L Prep Date: 8/16/00 Prep Batch: 0229093Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Mercury	253.7	1.5		1.5		1.9 %	1	1	CVAA	8/16/00	11:07	8/16/00	11:09

Comments: Lot #: C0H150146 Sample #: 1

Version 4.10.2

U Result is less than the MDL
 B Result is between MDL and RL
 N Spike recovery failed
 NC Percent recovery was not calculated
 * Duplicate analysis RPD was not within limits

Form 6 Equivalent

668 798

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DHV7MDMatrix Spike Sample ID: DHV7MS Client ID: DF/S1/0227/IDW/003DMatrix: Water Units: ug/L Prep Date: 8/16/00 Prep Batch: 0229140Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MS Conc	Q	MSD Conc	Q	RPD	MS DF	MSD DF	Instr	MS Anal Date	MS Anal Time	MSD Anal Date	MSD Anal Time
Aluminum	308.215	3300		3170		6.1 %	1	1	ICP	8/18/00	11:27	8/18/00	11:30
Antimony	220.353	544		524		3.9 %	1	1	ICPST	8/18/00	10:37	8/18/00	10:41
Arsenic	189.042	2070		1930		6.8 %	1	1	ICPST	8/18/00	10:37	8/18/00	10:41
Barium	493.409	2030		1930		5.5 %	1	1	ICP	8/18/00	11:27	8/18/00	11:30
Beryllium	313.042	48.0		45.2		5.9 %	1	1	ICP	8/18/00	11:27	8/18/00	11:30
Cadmium	226.502	47.3		44.6		5.9 %	1	1	ICPST	8/18/00	10:37	8/18/00	10:41
Calcium	317.933	96200		93300		5.5 %	1	1	ICP	8/18/00	11:27	8/18/00	11:30
Chromium	267.716	257		241		7.8 %	1	1	ICPST	8/18/00	10:37	8/18/00	10:41
Cobalt	228.616	474		452		4.6 %	1	1	ICP	8/18/00	11:27	8/18/00	11:30
Copper	324.754	268		278		3.9 %	1	1	ICP	8/18/00	11:27	8/18/00	11:30
Iron	259.94	2460		2400		6.4 %	1	1	ICP	8/18/00	11:27	8/18/00	11:30
Lead	220.353	544		511		6.4 %	1	1	ICPST	8/18/00	10:37	8/18/00	10:41
Magnesium	279.079	60900		58800		4.5 %	1	1	ICP	8/18/00	11:27	8/18/00	11:30
Manganese	257.61	651		623		5.9 %	1	1	ICP	8/18/00	11:27	8/18/00	11:30
Nickel	231.604	481		462		4.1 %	1	1	ICP	8/18/00	11:27	8/18/00	11:30
Potassium	766.491	54000		52100		3.9 %	1	1	ICP	8/18/00	11:27	8/18/00	11:30
Selenium	220.353	2130		1990		6.9 %	1	1	ICPST	8/18/00	10:37	8/18/00	10:41
Silver	328.068	56.3		52.4		7.4 %	1	1	ICPST	8/18/00	10:37	8/18/00	10:41
Sodium	588.995	1150000	NC	1100000	NC		5	5	ICP	8/18/00	11:47	8/18/00	11:51
Thallium	190.864	2300		2150		6.6 %	1	1	ICPST	8/18/00	10:37	8/18/00	10:41
Vanadium	292.402	474		457		3.7 %	1	1	ICP	8/18/00	11:27	8/18/00	11:30
Zinc	213.856	681		654		5.6 %	1	1	ICP	8/18/00	11:27	8/18/00	11:30

Comments: Lot #: C0H150146 Sample #: 1

Version 4.10.2

U Result is less than the MDL

Form 6 Equivalent

B Result is between MDL and RL

N Spike recovery failed

NC Percent recovery was not calculated

* Duplicate analysis RPD was not within limits

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DHWJ2CMatrix: Water Units: ug/L Prep Date: 8/16/00 Prep Batch: 0229093Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Mercury	253.7	2.5	2.4	96.4		80-120	1	CVAA	8/16/00	11:03

Comments: Lot #: C0H150146

668 800

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DHWLVCMatrix: Water Units: ug/L Prep Date: 8/16/00 Prep Batch: 0229140Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Aluminum	308.215	2000	1930	96.3		80-120	1	ICP	8/18/00	11:17
Antimony	220.353	500	512	102.4		80-120	1	ICPST	8/18/00	10:24
Arsenic	189.042	2000	2020	100.8		80-120	1	ICPST	8/18/00	10:24
Barium	493.409	2000	1940	97.2		80-120	1	ICP	8/18/00	11:17
Beryllium	313.042	50.0	49.4	98.8		80-120	1	ICP	8/18/00	11:17
Cadmium	226.502	50.0	48.6	97.3		80-120	1	ICPST	8/18/00	10:24
Calcium	317.933	50000	52100	104.1		80-120	1	ICP	8/18/00	11:17
Chromium	267.716	200	201	100.3		80-120	1	ICPST	8/18/00	10:24
Cobalt	228.616	500	491	98.2		80-120	1	ICP	8/18/00	11:17
Copper	324.754	250	239	95.5		80-120	1	ICP	8/18/00	11:17
Iron	259.94	1000	1040	104.4		80-120	1	ICP	8/18/00	11:17
Lead	220.353	500	514	102.8		80-120	1	ICPST	8/18/00	10:24
Magnesium	279.079	50000	49900	99.8		80-120	1	ICP	8/18/00	11:17
Manganese	257.61	500	492	98.4		80-120	1	ICP	8/18/00	11:17
Nickel	231.604	500	494	98.8		80-120	1	ICP	8/18/00	11:17
Potassium	766.491	50000	48400	96.8		80-120	1	ICP	8/18/00	11:17
Selenium	220.353	2000	2030	101.5		80-120	1	ICPST	8/18/00	10:24
Silver	328.068	50.0	51.4	102.8		80-120	1	ICPST	8/18/00	10:24
Sodium	588.995	50000	49100	98.2		80-120	1	ICP	8/18/00	11:17
Thallium	190.864	2000	2130	106.5		80-120	1	ICPST	8/18/00	10:24
Vanadium	292.402	500	486	97.3		80-120	1	ICP	8/18/00	11:17
Zinc	213.856	500	487	97.4		80-120	1	ICP	8/18/00	11:17

Comments: Lot #: C0H150146

Version 4.10.2

U Result is less than the MDL

Form 7 Equivalent

B Result is between MDL and RL

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: DHV7MPOriginal Sample ID: DHV7M Client ID: DF/S1/0227/IDW/003Matrix: Water Units: ug/L Prep Date: 8/16/00 Prep Batch: 0229140Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	OS Conc	Q	Serial Dilution Conc	Q	Percent Diff	OS DF	Ser Dil DF	Instr	OS Anal Date	OS Anal Time	Ser Dil Anal Date	Ser Dil Anal Time
Aluminum	308.215	1120		1160		3.0 %	1	5	ICP	8/18/00	11:20	8/18/00	11:24
Antimony	220.353	10.2	B	7.9	B		1	5	ICPST	8/18/00	10:28	8/18/00	10:33
Arsenic	189.042	6.4	B	12.8	U		1	5	ICPST	8/18/00	10:28	8/18/00	10:33
Barium	493.409	176	B	183	B	4.2 %	1	5	ICP	8/18/00	11:20	8/18/00	11:24
Beryllium	313.042	0.090	B	0.36	U		1	5	ICP	8/18/00	11:20	8/18/00	11:24
Cadmium	226.502	0.66	B	2.5	U		1	5	ICPST	8/18/00	10:28	8/18/00	10:33
Calcium	317.933	42900		43900		2.5 %	1	5	ICP	8/18/00	11:20	8/18/00	11:24
Chromium	267.716	52.4		54.9		4.7 %	1	5	ICPST	8/18/00	10:28	8/18/00	10:33
Cobalt	228.616	3.2	U	16.1	U		1	5	ICP	8/18/00	11:20	8/18/00	11:24
Copper	324.754	30.1		29.2	B		1	5	ICP	8/18/00	11:20	8/18/00	11:24
Iron	259.94	1410		1460		3.5 %	1	5	ICP	8/18/00	11:20	8/18/00	11:24
Lead	220.353	12.4		11.9	B		1	5	ICPST	8/18/00	10:28	8/18/00	10:33
Magnesium	279.079	12500		13000	B	3.6 %	1	5	ICP	8/18/00	11:20	8/18/00	11:24
Manganese	257.61	169		173		1.8 %	1	5	ICP	8/18/00	11:20	8/18/00	11:24
Nickel	231.604	8.7	B	30.7	U		1	5	ICP	8/18/00	11:20	8/18/00	11:24
Potassium	766.491	4070	B	4870	B		1	5	ICP	8/18/00	11:20	8/18/00	11:24
Selenium	220.353	2.1	U	10.5	U		1	5	ICPST	8/18/00	10:28	8/18/00	10:33
Silver	328.068	1.4	B	4.7	U		1	5	ICPST	8/18/00	10:28	8/18/00	10:33
Sodium	588.995	1020000		1020000		0.3 %	5	25	ICP	8/18/00	11:41	8/18/00	11:44
Thallium	190.864	5.6	B	24.3	B		1	5	ICPST	8/18/00	10:28	8/18/00	10:33
Vanadium	292.402	2.8	B	8.9	U		1	5	ICP	8/18/00	11:20	8/18/00	11:24
Zinc	213.856	188		199		5.7 %	1	5	ICP	8/18/00	11:20	8/18/00	11:24

Comments: _____

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

E Serial dilution percent difference not within limits

Form 9 Equivalent

668 802

STL-Pittsburgh
Metals Data Reporting Form

Instrument Detection Limits

Instrument: CVAA

Units: ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Mercury	253.70	0.2	0.045	~~7/15/00~~

3/20/00

2uF
8-21-00

STL-Pittsburgh
Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICP

Units: ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Aluminum	308.21	200	12.7	4/1/00
Barium	493.41	200	0.41	4/1/00
Beryllium	313.04	5	0.071	4/1/00
Calcium	317.93	5000	37.9	4/1/00
Cobalt	228.62	50	3.2	4/1/00
Copper	324.75	25	2.2	4/1/00
Iron	259.94	100	8.8	4/1/00
Magnesium	279.08	5000	19.9	4/1/00
Manganese	257.61	15	0.87	4/1/00
Nickel	231.60	40	6.1	4/1/00
Potassium	766.49	5000	496	4/1/00
Sodium	589.00	5000	14.5	4/1/00
Vanadium	292.40	50	1.8	4/1/00
Zinc	213.86	20	3.1	4/1/00

668 804

STL-Pittsburgh
Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPSTUnits: ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Antimony	220.35	60	1.5	4/1/00
Arsenic	189.04	10	2.6	4/1/00
Cadmium	226.50	5	0.49	4/1/00
Chromium	267.72	10	1.0	4/1/00
Lead	220.35	3	1.9	4/1/00
Selenium	220.35	5	2.1	4/1/00
Silver	328.07	10	0.94	4/1/00
Thallium	190.86	10	3.9	4/1/00

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICPDate of IEC's: 6/22/00

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	As(0.008043), Mn(0.00002), Pb(0.000607)
Antimony	206.838	Ni(-0.000449), Pb(-0.001338), Sn(-0.004668)
Arsenic	193.696	Cd(0.011196)
Barium	493.409	Co(0.000506)
Beryllium	313.042	Cd(0.008625)
Cadmium	228.802	Co(0.002633)
Chromium	267.716	Pb(-0.000686), Sb(0.008213), V(-0.001979)
Cobalt	228.616	Al(-0.014067), B(0.00201), Cd(-0.004523), Cu(-0.00091), Pb(-0.027395), Sb(-0.003935), Tl(0.007862)
Copper	324.754	Zn(0.00466)
Iron	259.94	Ag(-0.000239), As(0.001198), B(-0.001921), Cd(-0.000034), Cu(-0.00008), Mn(-0.000288), Mo(-0.00015), Pb(0.000239), Se(-0.002635), Sn(-0.00019), Tl(0.010326), Zn(0.000098)
Manganese	257.61	Ag(0.000201), Tl(-0.005634)
Molybdenum	202.03	Al(0.008699), Cr(-0.000292), Mn(-0.00033), Sb(0.005808), V(-0.019318)
Nickel	231.604	Cd(-0.000409), Sb(-0.009092), Zn(0.003263)
Tin	189.989	Sb(0.002262)
Titanium	334.941	Co(0.001637), Fe(-0.003475), Sb(0.001696), Sn(0.003624)
Vanadium	292.402	Ag(-0.005069), Al(0.012877), As(0.017242), Be(0.00265), Cd(0.000094), Cr(0.000568), Sb(-0.003793), Si(-0.012762), Tl(0.007148), Zn(-0.004494)

668 806

STL-Pittsburgh

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICPST

Date of IEC's: 8/1/00

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	Pb(0.00055), Se(0.00001), Tl(-0.00002)
Aluminum	308.215	Pb(-0.000197), Se(0.000011)
Chromium	267.716	Sb(0.007006)
Chromium	267.716	As(-0.002615), Sb(0.012173)
Cobalt	228.616	Se(-0.000381)
Cobalt	228.616	Cd(-0.00009), Fe(0.089705), Ni(-0.00066), Pb(0.000077), Se(0.000351), Tl(0.002179)
Iron	271.441	Cd(0.000088), Pb(0.000086), Sb(0.000019), Se(-0.000016), Tl(-0.000034), V(-0.000349), Zn(0.000127)
Iron	271.441	Pb(0.000047), Sb(0.000021), Se(-0.00029)
Magnesium	279.078	Fe(-0.000306)
Manganese	257.61	Se(0.000579), Tl(-0.004577)
Molybdenum	202.03	Pb(-0.00087), Sb(-0.010184)
Molybdenum	202.03	Al(0.011136), As(-0.000847), Cr(-0.000312), Pb(-0.000331), Sb(-0.003352)
Nickel	231.604	Pb(0.000274), Sb(-0.000886), Zn(0.004694)
Nickel	231.604	Pb(0.000086)
Vanadium	292.402	Al(0.019591), Be(-0.00787), Cr(-0.000183), Fe(0.007812), Sb(-0.008005), Se(0.000216), Tl(0.001386)
Vanadium	292.402	Pb(-0.000428), Se(0.000099)

STL-Pittsburgh
Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: CVAA

Units: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Mercury	253.70	10	7/15/00

668 808

STL-Pittsburgh

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPUnits: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Aluminum	308.21	600000	7/8/00
Barium	493.41	100000	7/8/00
Beryllium	313.04	15000	7/8/00
Calcium	317.93	600000	7/8/00
Cobalt	228.62	100000	7/8/00
Copper	324.75	100000	7/8/00
Iron	259.94	400000	7/8/00
Magnesium	279.08	600000	7/8/00
Manganese	257.61	100000	7/8/00
Nickel	231.60	100000	7/8/00
Potassium	766.49	1000000	7/8/00
Sodium	589.00	400000	7/8/00
Vanadium	292.40	100000	7/8/00
Zinc	213.86	100000	7/8/00

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPSTUnits: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Antimony	220.35	10000	6/15/00
Arsenic	189.04	10000	6/15/00
Cadmium	226.50	5000	6/15/00
Chromium	267.72	20000	6/15/00
Lead	220.35	5000	6/15/00
Selenium	220.35	10000	6/15/00
Silver	328.07	2000	6/15/00
Thallium	190.86	10000	6/15/00

STL-Pittsburgh

668 810

Metals Data Reporting Form**Preparation Log**

Preparation Batch: 0229093 **Instrument:** CVAA **Matrix:** Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DHWJ2B	8/16/00	NA	100	NA
DHWJ2C	8/16/00	NA	100	NA
DHV7M	8/16/00	NA	100	NA
DHV7MD	8/16/00	NA	100	NA
DHV7MS	8/16/00	NA	100	NA

Metals Data Reporting Form

Preparation LogPreparation Batch: 0229140 Instrument: ICP Matrix: Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DHWLVB	8/16/00	NA	50	NA
DHWLVC	8/16/00	NA	50	NA
DHV7M	8/16/00	NA	50	NA
DHV7MD	8/16/00	NA	50	NA
DHV7MS	8/16/00	NA	50	NA

STL-Pittsburgh

668 812

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAA

Chart Number: 0816HGA.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Std1Rep1		8/16/00	9:35
Std2Rep1		8/16/00	9:36
Std3Rep1		8/16/00	9:38
Std4Rep1		8/16/00	9:41
Std5Rep1		8/16/00	9:43
Std6Rep1		8/16/00	9:44
ICV5-1		8/16/00	9:47
ICB1		8/16/00	9:49
CCV5-1		8/16/00	9:50
CCB1		8/16/00	9:52
ZZZZZZ		8/16/00	9:54
ZZZZZZ		8/16/00	9:55
ZZZZZZ		8/16/00	9:57
ZZZZZZ		8/16/00	9:59
ZZZZZZ		8/16/00	10:00
ZZZZZZ		8/16/00	10:02
ZZZZZZ		8/16/00	10:04
ZZZZZZ		8/16/00	10:05
ZZZZZZ		8/16/00	10:07
ZZZZZZ		8/16/00	10:09
CCV5-2		8/16/00	10:10
CCB2		8/16/00	10:12
ZZZZZZ		8/16/00	10:14
ZZZZZZ		8/16/00	10:15
ZZZZZZ		8/16/00	10:18
ZZZZZZ		8/16/00	10:20
ZZZZZZ		8/16/00	10:22
ZZZZZZ		8/16/00	10:23
ZZZZZZ		8/16/00	10:25
ZZZZZZ		8/16/00	10:26
ZZZZZZ		8/16/00	10:28
ZZZZZZ		8/16/00	10:30
CCV5-3		8/16/00	10:31
CCB3		8/16/00	10:33
ZZZZZZ		8/16/00	10:35
ZZZZZZ		8/16/00	10:36
ZZZZZZ		8/16/00	10:38
ZZZZZZ		8/16/00	10:40
ZZZZZZ		8/16/00	10:41

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAAChart Number: 0816HGA.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/16/00	10:43
ZZZZZZ		8/16/00	10:44
ZZZZZZ		8/16/00	10:46
ZZZZZZ		8/16/00	10:49
ZZZZZZ		8/16/00	10:50
CCV5-4		8/16/00	10:52
CCB4		8/16/00	10:54
ZZZZZZ		8/16/00	10:56
ZZZZZZ		8/16/00	10:57
ZZZZZZ		8/16/00	10:59
ZZZZZZ		8/16/00	11:00
DHWJ2B		8/16/00	11:02
DHWJ2C		8/16/00	11:03
DHV7M	DF/S1/0227/IDW/003	8/16/00	11:05
DHV7MS	DF/S1/0227/IDW/003S	8/16/00	11:07
DHV7MD	DF/S1/0227/IDW/003D	8/16/00	11:09
ZZZZZZ		8/16/00	11:11
CCV5-5		8/16/00	11:13
CCB5		8/16/00	11:14
ZZZZZZ		8/16/00	11:16
ZZZZZZ		8/16/00	11:19
ZZZZZZ		8/16/00	11:21
ZZZZZZ		8/16/00	11:23
ZZZZZZ		8/16/00	11:24
ZZZZZZ		8/16/00	11:26
ZZZZZZ		8/16/00	11:31
ZZZZZZ		8/16/00	11:32
ZZZZZZ		8/16/00	11:34
ZZZZZZ		8/16/00	11:36
ZZZZZZ		8/16/00	11:39

STL-Pittsburgh

668 814

Metals Data Reporting Form

Instrument Runlog

Instrument: ICP

Chart Number: J00818A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
STD1		8/18/00	6:13
STD5A		8/18/00	6:16
STD5B		8/18/00	6:19
ICV2-1		8/18/00	6:23
ICB1		8/18/00	6:26
ICSA		8/18/00	6:29
ICSAB		8/18/00	6:32
ZZZZZZ		8/18/00	6:37
ZZZZZZ		8/18/00	6:41
ZZZZZZ		8/18/00	6:44
ZZZZZZ		8/18/00	6:47
ZZZZZZ		8/18/00	6:50
ZZZZZZ		8/18/00	6:53
ZZZZZZ		8/18/00	6:56
ZZZZZZ		8/18/00	6:59
CCV2-1		8/18/00	7:02
CCB1		8/18/00	7:06
ZZZZZZ		8/18/00	7:09
ZZZZZZ		8/18/00	7:12
ZZZZZZ		8/18/00	7:15
ZZZZZZ		8/18/00	7:18
ZZZZZZ		8/18/00	7:21
ZZZZZZ		8/18/00	7:24
ZZZZZZ		8/18/00	7:28
ZZZZZZ		8/18/00	7:31
ZZZZZZ		8/18/00	7:34
ZZZZZZ		8/18/00	7:37
CCV2-2		8/18/00	7:40
CCB2		8/18/00	7:43
ZZZZZZ		8/18/00	7:46
ZZZZZZ		8/18/00	7:49
ZZZZZZ		8/18/00	7:53
ZZZZZZ		8/18/00	7:56
ZZZZZZ		8/18/00	7:59
ZZZZZZ		8/18/00	8:02
ZZZZZZ		8/18/00	8:05
CCV2-3		8/18/00	8:08
CCB3		8/18/00	8:11
ZZZZZZ		8/18/00	8:15

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPChart Number: J00818A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/18/00	8:18
ZZZZZZ		8/18/00	8:21
ZZZZZZ		8/18/00	8:24
ZZZZZZ		8/18/00	8:27
ZZZZZZ		8/18/00	8:30
ZZZZZZ		8/18/00	8:33
ZZZZZZ		8/18/00	8:36
ZZZZZZ		8/18/00	8:40
ZZZZZZ		8/18/00	8:43
CCV2-4		8/18/00	8:46
CCB4		8/18/00	8:49
ZZZZZZ		8/18/00	8:54
ZZZZZZ		8/18/00	8:57
ZZZZZZ		8/18/00	9:00
ZZZZZZ		8/18/00	9:03
ZZZZZZ		8/18/00	9:06
ZZZZZZ		8/18/00	9:09
ZZZZZZ		8/18/00	9:12
ZZZZZZ		8/18/00	9:16
ZZZZZZ		8/18/00	9:19
ZZZZZZ		8/18/00	9:22
CCV2-5		8/18/00	9:25
CCB5		8/18/00	9:28
ZZZZZZ		8/18/00	9:31
ZZZZZZ		8/18/00	9:34
ZZZZZZ		8/18/00	9:37
ZZZZZZ		8/18/00	9:41
ZZZZZZ		8/18/00	9:44
ZZZZZZ		8/18/00	9:47
ZZZZZZ		8/18/00	9:50
ZZZZZZ		8/18/00	9:53
ZZZZZZ		8/18/00	9:56
ZZZZZZ		8/18/00	9:59
CCV2-6		8/18/00	10:03
CCB6		8/18/00	10:06
ZZZZZZ		8/18/00	10:09
ZZZZZZ		8/18/00	10:12
ZZZZZZ		8/18/00	10:15
ZZZZZZ		8/18/00	10:18

STL-Pittsburgh

668 816

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPChart Number: J00818A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/18/00	10:21
CCV2-7		8/18/00	10:25
CCB7		8/18/00	10:28
ZZZZZZ		8/18/00	10:33
ZZZZZZ		8/18/00	10:36
ZZZZZZ		8/18/00	10:40
ZZZZZZ		8/18/00	10:43
ZZZZZZ		8/18/00	10:46
ZZZZZZ		8/18/00	10:49
ZZZZZZ		8/18/00	10:52
ZZZZZZ		8/18/00	10:55
ZZZZZZ		8/18/00	10:58
ZZZZZZ		8/18/00	11:02
CCV2-8		8/18/00	11:05
CCB8		8/18/00	11:08
ZZZZZZ		8/18/00	11:11
DHWLVB		8/18/00	11:14
DHWLVC		8/18/00	11:17
DHV7M	DF/S1/0227/IDW/003	8/18/00	11:20
DHV7MP	DF/S1/0227/IDW/003	8/18/00	11:24
DHV7MS	DF/S1/0227/IDW/003S	8/18/00	11:27
DHV7MD	DF/S1/0227/IDW/003D	8/18/00	11:30
CCV2-9		8/18/00	11:33
CCB9		8/18/00	11:36
DHV7M	DF/S1/0227/IDW/003	8/18/00	11:41
DHV7MP	DF/S1/0227/IDW/003	8/18/00	11:44
DHV7MS	DF/S1/0227/IDW/003S	8/18/00	11:47
DHV7MD	DF/S1/0227/IDW/003D	8/18/00	11:51
CCV2-10		8/18/00	11:54
CCB10		8/18/00	11:57

STL-Pittsburgh
Metals Data Reporting Form

668 817

Instrument Runlog

Instrument: ICPST

Chart Number: T00818A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
STD1		8/18/00	7:17
STD6		8/18/00	7:22
STD7		8/18/00	7:26
ICV3-1		8/18/00	7:30
ICB1		8/18/00	7:34
ICSA		8/18/00	7:38
ICSAB		8/18/00	7:42
ZZZZZZ		8/18/00	7:48
ZZZZZZ		8/18/00	7:53
ZZZZZZ		8/18/00	7:57
ZZZZZZ		8/18/00	8:01
ZZZZZZ		8/18/00	8:05
ZZZZZZ		8/18/00	8:09
ZZZZZZ		8/18/00	8:13
ZZZZZZ		8/18/00	8:17
CCV3-1		8/18/00	8:22
CCB1		8/18/00	8:26
ZZZZZZ		8/18/00	8:30
ZZZZZZ		8/18/00	8:34
ZZZZZZ		8/18/00	8:38
ZZZZZZ		8/18/00	8:42
ZZZZZZ		8/18/00	8:47
ZZZZZZ		8/18/00	8:51
ZZZZZZ		8/18/00	8:55
ZZZZZZ		8/18/00	8:59
ZZZZZZ		8/18/00	9:03
ZZZZZZ		8/18/00	9:07
CCV3-2		8/18/00	9:12
CCB2		8/18/00	9:16
ZZZZZZ		8/18/00	9:20
ZZZZZZ		8/18/00	9:24
ZZZZZZ		8/18/00	9:28
ZZZZZZ		8/18/00	9:32
ZZZZZZ		8/18/00	9:36
ZZZZZZ		8/18/00	9:41
ZZZZZZ		8/18/00	9:45
CCV3-3		8/18/00	9:49
CCB3		8/18/00	9:53
ZZZZZZ		8/18/00	10:04

STL-Pittsburgh

668 818

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPSTChart Number: T00818A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/18/00	10:08
ZZZZZZ		8/18/00	10:12
ZZZZZZ		8/18/00	10:16
DHWLVB		8/18/00	10:20
DHWLVC		8/18/00	10:24
DHV7M	DF/S1/0227/IDW/003	8/18/00	10:28
DHV7MP	DF/S1/0227/IDW/003	8/18/00	10:33
DHV7MS	DF/S1/0227/IDW/003S	8/18/00	10:37
DHV7MD	DF/S1/0227/IDW/003D	8/18/00	10:41
CCV3-4		8/18/00	10:45
CCB4		8/18/00	10:49
ZZZZZZ		8/18/00	10:53
ZZZZZZ		8/18/00	10:58
ZZZZZZ		8/18/00	11:02
ZZZZZZ		8/18/00	11:06
ZZZZZZ		8/18/00	11:10
ZZZZZZ		8/18/00	11:14
ZZZZZZ		8/18/00	11:18
ZZZZZZ		8/18/00	11:23
ZZZZZZ		8/18/00	11:27
ZZZZZZ		8/18/00	11:31
ZZZZZZ		8/18/00	11:35
ZZZZZZ		8/18/00	11:39
ZZZZZZ		8/18/00	11:43
ZZZZZZ		8/18/00	11:47
ZZZZZZ		8/18/00	11:52
ZZZZZZ		8/18/00	11:59
ZZZZZZ		8/18/00	12:04
ZZZZZZ		8/18/00	12:08
ZZZZZZ		8/18/00	12:12
ZZZZZZ		8/18/00	12:16
ZZZZZZ		8/18/00	12:20
ZZZZZZ		8/18/00	12:24
ZZZZZZ		8/18/00	12:29
ZZZZZZ		8/18/00	12:33
ZZZZZZ		8/18/00	12:37
ZZZZZZ		8/18/00	12:41
ZZZZZZ		8/18/00	12:45
ZZZZZZ		8/18/00	12:49

STL-Pittsburgh
Metals Data Reporting Form

668 819

Instrument Runlog

Instrument: ICPST

Chart Number: T00818A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/18/00	12:54
ZZZZZZ		8/18/00	12:58
ZZZZZZ		8/18/00	13:02
ZZZZZZ		8/18/00	13:06
ZZZZZZ		8/18/00	13:10
ZZZZZZ		8/18/00	13:14
ZZZZZZ		8/18/00	13:19
ZZZZZZ		8/18/00	13:23
ZZZZZZ		8/18/00	13:27
ZZZZZZ		8/18/00	13:31
ZZZZZZ		8/18/00	13:38
ZZZZZZ		8/18/00	13:42
ZZZZZZ		8/18/00	13:46
ZZZZZZ		8/18/00	13:50
ZZZZZZ		8/18/00	13:54
ZZZZZZ		8/18/00	13:59
ZZZZZZ		8/18/00	14:03
ZZZZZZ		8/18/00	14:07
ZZZZZZ		8/18/00	14:11

668 820

**METALS
RAW DATA**

Remarked 81800

#	Sample Name	AL	BA	BE	CA	CO	CU
1	STD1	.00805	.00004	.00224	.0017	-.00009	.00024
2	STD5A		3.80953	14.7529		1.3549	2.15145
3	STD5B	10.8636			23.6774		
4	ICV2-1 0057-005-2	25.269	1.0027	.98385	25.538	1.0056	.99666
5	ICB1	.00646	-.00010	.00006	.08984	.00038	-.00046
6	ICSA 0057-011-1	490.96	.00138	.00006	482.75	.01265	-.00748
7	ICSAB 0014-187-1	485.40	.46336	.45305	477.91	.45592	.47324
8	DJ0MXB	-.00319	.00015	.00004	.05714	.00112	-.00023
9	DJ0MXC	1.9561	1.9735	.04911	48.987	.48227	.25526
10	DHGDF	.11189	.01963	-.00004	190.83	.00149	.00889
11	DHGDH	-.00320	.00159	-.00002	1.0071	.00001	.00418
12	DHGDHP5	-.00599	-.00010	.00000	.20972	.00111	.00046
13	DHGDHS	1.9241	1.9365	.04835	49.049	.47607	.25549
14	DHGDHD	1.9554	1.9525	.04893	48.216	.47232	.24573
15	DHGDK	-.00090	.00152	.00010	1.4256	.00075	.00372
16	CCV2-1 0057-025-5	50.228	4.9867	4.9577	51.147	5.0229	4.9749
17	CCB1	-.00325	.00005	.00023	.00337	.00186	-.00069
18	DHGDM	.10314	.02032	.00006	128.04	.00148	.00839
19	DHGDP	.08434	.01616	.00000	120.53	.00186	.00678
20	DHGDY	.02490	.02381	.00009	293.49	.00187	.00652
21	DHGE3	.02122	.01842	.00010	176.24	.00038	.00674
22	DHGE5	.02122	.02533	.00006	146.70	.00223	.00769
23	DHGE7	.01567	.01961	.00006	134.07	.00112	.02185
24	DHGEC	.03679	.03037	.00006	221.31	-.00109	.02300
25	DHGEE	.01848	.01517	.00003	113.34	.00223	.01719
26	DHGEG	.02303	.04000	.00006	246.31	-.00183	.00976
27	DHGEH	.04236	.06773	.00009	274.93	.00259	.00770
28	CCV2-2	49.760	4.9294	4.9371	51.532	5.0258	4.8992
29	CCB2	-.00049	.00002	.00024	.00299	-.00036	.00023
30	DHGEM	1.0473	.02336	.00028	64.309	.00662	.01439
31	DHGEP	.01842	.02262	.00013	135.35	.00371	.01072
32	DHGET	.08011	.09579	.00012	329.35	.00258	.00771
33	DHGEW	.02945	.03607	.00009	98.034	.00074	.01027
34	DHGF9	.00140	.00157	.00004	1.4249	.00000	.00418
35	DHGFH	.00875	.00131	.00004	1.3551	-.00110	.00766
36	DHXCX	.10682	.01968	.00009	193.19	.00112	.01280
37	CCV2-3	50.109	4.9682	4.9924	52.171	5.0805	4.9355
38	CCB3	.00599	.00028	.00031	.00331	.00296	.00139
39	DHP13B	.00096	.00015	.00010	.55796	.00222	-.00046
40	DHP13C	1.9006	1.9378	.05013	48.724	.47418	.23807
41	DHLX6	98.630	.66676	.00721	17.861	.07592	.55520
42	DHLX6P5	20.680	.13877	.00151	3.8518	.01833	.11485
43	DHLX6S	116.67	2.5133	.05349	67.460	.51630	.73018
44	DHLX6D	111.54	2.5186	.05399	64.613	.50905	.76213
45	DHLXR	50.512	.48879	.00421	8.6052	.04032	.43096
46	DHLXT	88.156	.65733	.00607	12.322	.05755	.58806
47	DHLXW	90.151	.75885	.00991	13.260	.08319	.66981
48	DHM03	65.374	.52255	.00545	11.577	.06831	.37290
49	CCV2-4	50.346	4.9964	5.0422	52.923	5.1351	4.9493
50	CCB4	.00320	.00013	.00024	.00356	.00075	-.00116
51	DHM06	75.341	.60289	.00628	17.856	.08149	.49905
52	DHM07	60.727	.51509	.00539	11.837	.06838	.39532
53	DHM0A	71.558	.66673	.00810	15.347	.08277	.61817

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#	Sample Name	AL	BA	BE	CA	CO	CU
54	DHM0E	43.534	.27998	.00343	10.580	.05396	.11008
55	DHM0F	47.949	.30321	.00381	12.021	.06172	.12159
56	DHM0K	94.979	1.9030	.00530	24.166	.08962	1.8319
57	DHM0M	95.740	.81818	.00761	13.735	.09680	.29526
58	DHM0N	84.567	1.7638	.00545	21.447	.09042	1.7007
59	DHM0R	102.15	.87100	.01050	16.328	.09909	.69027
60	DHP13B Rerun	.00192	-.00005	.00001	.57124	.00148	-.00046
61	CCV2-5	50.277	4.9866	5.0487	53.100	5.1491	4.9335
62	CCB5	.00230	-.00007	.00017	-.00130	.00111	-.00023
63	DJ0RNB	.00142	-.00018	.00004	.04432	.00149	-.00139
64	DJ0RNC	1.8177	1.8874	.04743	L.04739	.47833	.23064
65	DHVT A	.05936	.00322	.00000	33.622	.00595	.00347
66	DHVTAP5	.01891	.00065	.00004	6.9749	.00408	.00097
67	DHVTAS	1.9406	1.8521	.04729	33.610	.48206	.23945
68	DHVTAD	1.8789	1.7971	.04627	32.930	.46726	.23177
69	DHVTG	.02947	.00189	.00004	31.583	.00556	.00336
70	DHVTJ	.02529	.00120	.00006	31.873	.00631	.00336
71	DHVTM	.06043	.00125	.00003	32.286	.02300	.00045
72	DHVTN	.01658	.00083	.00005	30.323	.02041	.00095
73	CCV2-6	50.037	4.9887	5.0498	52.511	5.1141	4.9393
74	CCB6	.00874	.00026	.00044	.00301	.00000	-.00069
75	DHVTQ	.02495	.00060	.00009	31.275	.02262	.00120
76	DHVTR	.03257	.00060	.00009	31.536	.00373	.04041
77	DHVTW	.02348	.00115	.00006	28.199	.00705	.00558
78	DHXRF	.02750	-.00005	-.00002	.45833	.00409	.01649
79	DHXRG	.02559	.00013	.00006	.24768	.00408	.00372
80	CCV2-7	49.941	4.9808	5.0254	52.199	5.0834	4.9330
81	CCB7	-.00459	-.00010	.00024	.00048	.00112	-.00069
82	DJ0RHB	.00696	-.00013	.00007	.02998	.00074	.00069
83	DJ0RHC	1.7548	1.7918	.04476	50.376	.44940	.21993
84	DHX4C	6.6984	.10198	.00032	22.035	.00564	.00723
85	DHX4D	.75491	.06743	.00013	20.817	.00105	.00982
86	DHX4E	5.6886	.07268	.00040	121.06	.01512	.04950
87	DHX4EP5	1.1626	.01496	.00013	24.957	.00362	.00962
88	DHX4ES	8.3572	1.9216	.04637	169.68	.46705	.27732
89	DHX4ED	8.4510	1.8892	.04574	172.22	.46185	.27477
90	DHX4H	1.6995	.05785	.00026	115.03	.01441	.04292
91	DHX4J	1.3694	.08187	.00016	21.614	.00391	.00231
92	CCV2-8	50.346	5.0297	5.0938	52.938	5.1451	4.9702
93	CCB8	.00596	-.00010	.00024	.01339	.00074	-.00046
94	DHX4K	.46522	.07996	.00013	22.019	.00513	.00576
95	DHWLVB	.00419	-.00010	.00010	.00218	.00186	-.00022
96	DHWLVC	1.9269	1.9437	.04941	52.071	.49116	.23878
97	DHV7M	1.1220	.17599	.00009	42.848	.00246	.03007
98	DHV7MP5	.23122	.03667	.00006	8.7832	.00257	.00583
99	DHV7MS	3.3002	2.0259	.04798	96.179	.47372	.26837
100	DHV7MD	3.1717	1.9264	.04524	93.304	.45231	.27787
101	CCV2-9	49.767	4.9702	5.0364	52.086	5.0786	4.9255
102	CCB9	.00600	.00013	.00021	.00141	.00148	-.00023
103	DHV7M/5 Na	.22525	.03622	.00013	8.7372	.00035	.00559
104	DHV7MP25 Na	.04289	.00782	.00007	1.8744	.00037	.00046
105	DHV7MS/5 Na	.66575	.42762	.01010	19.821	.10028	.05516
106	DHV7MD/5 Na	.64601	.40536	.00964	19.200	.09585	.05609
107	CCV2-10	48.990	4.8770	4.9596	51.919	5.0302	4.8240

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#	Sample Name	AL	BA	BE	CA	CO	CU
108	CCB10	.00273	-.00007	.00016	.00188	.00149	-.00069
#	Sample Name	FE	K	MG	MN	NA	NI
1	STD1	.0006	-.04634	.00075	.00009	.0592	.00053
2	STD5A				1.91645		1.60951
3	STD5B	28.1503	2.31739	7.2262		43.3636	
4	ICV2-1 0057-005-2	26.165	24.586	25.385	1.0087	24.902	1.0052
5	ICB1	.00053	.17345	-.00484	.00052	.00427	-.00506
6	ICSA 0057-011-1	184.98	-.31940	484.23	.00275	.00496	-.01939
7	ICSAB 0014-187-1	183.37	9.5061	477.93	.45131	9.9213	.89864
8	DJ0MXB	.00195	-.00423	-.01037	.00026	.00865	-.00295
9	DJ0MXC	1.0291	48.036	48.445	.48362	48.891	.47648
10	DHGDF	.83924	23.640	5.2772	.04718	11.975	-.00437
11	DHGDH	.02983	33.051	2.0947	.00079	5.3348	-.00361
12	DHGDHP5	.00514	6.6653	.42973	-.00025	1.0801	-.00346
13	DHGDHS	1.0836	81.457	49.348	.47789	53.339	.47689
14	DHGDHD	1.0452	81.161	48.924	.47319	53.435	.46593
15	DHGDK	.05328	35.315	2.6289	.00105	6.1353	-.00255
16	CCV2-1 0057-025-5	51.922	49.715	50.296	4.9976	50.193	5.0129
17	CCB1	-.00124	.16922	-.01176	.00026	-.00265	-.00710
18	DHGDM	.45842	24.848	4.1727	.04994	12.283	-.00471
19	DHGDP	.57405	26.323	4.1077	.07919	12.108	-.00715
20	DHGDY	.21858	23.666	6.9103	.06005	12.779	.00073
21	DHGE3	.18220	23.886	4.7201	.07125	10.535	-.00656
22	DHGE5	.32448	24.624	4.5402	.03686	9.7430	-.00291
23	DHGE7	.32413	24.907	4.2544	.02669	11.411	-.00167
24	DHGE8	.15910	26.612	5.5851	.03942	11.335	-.00673
25	DHGE9	.14811	26.001	3.9568	.02742	7.2658	.00053
26	DHGE10	.21025	26.306	5.6592	.08300	10.074	-.00300
27	DHGE11	.43813	21.534	6.8017	.10236	12.184	-.00427
28	CCV2-2	51.858	49.261	49.843	5.0013	49.450	5.0390
29	CCB2	.00159	.21787	.00000	-.00025	.00450	-.00188
30	DHGEM	8.6318	26.593	3.1818	.05124	10.448	-.00251
31	DHGEP	.51418	23.452	3.8904	.04475	12.354	-.00006
32	DHGET	.60064	25.062	7.5165	.18457	13.530	-.00168
33	DHGEW	.76961	24.552	3.6060	.03517	11.600	.00073
34	DHGF9	.03694	37.521	2.8413	.00131	5.6203	.00007
35	DHGFH	.05115	38.646	2.7929	.00288	6.2659	.00019
36	DHXCX	.36160	24.618	5.4668	.03792	12.179	-.00408
37	CCV2-3	52.381	49.256	50.340	5.0570	49.808	5.0984
38	CCB3	.00266	.06134	.00207	-.00051	.00357	-.00586
39	DHP13B	.00212	.37228	-.01176	.00026	.02159	-.00537
40	DHP13C	1.0118	47.164	47.369	.47344	48.051	.48299
41	DHLX6	181.69	13.254	25.993	1.7890	1.4680	.18315
42	DHLX6P5	39.220	2.7626	5.5208	.38021	.32802	.03218
43	DHLX6S	195.62	60.861	72.959	2.2345	48.445	.61254
44	DHLX6D	165.50	60.025	72.144	2.0168	48.912	.61008
45	DHLXR	103.66	6.4389	14.221	.89322	.84818	.10020
46	DHLXT	157.19	11.431	22.154	1.1938	1.1742	.14484
47	DHLXW	212.27	11.501	26.648	1.8035	1.2048	.17877
48	DHM03	143.89	8.7382	19.916	1.2149	1.6383	.14894
49	CCV2-4	52.791	49.464	50.641	5.1135	50.040	5.2036

#	Sample Name	FE	K_	MG	MN	NA	NI
50	CCB4	.00319	-.12268	-.00761	.00000	.00854	-.00520
51	DHM06	182.19	11.222	23.901	2.2140	1.2956	.17701
52	DHM07	131.04	7.4437	17.874	1.7076	1.5594	.15442
53	DHM0A	187.95	8.9857	23.983	2.6049	2.2501	.16771
54	DHM0E	98.261	7.5579	19.182	5.2732	1.9334	.08440
55	DHM0F	111.37	8.4506	22.802	6.6274	2.2859	.09476
56	DHM0K	163.50	6.9762	22.061	3.2920	1.2458	.42933
57	DHM0M	146.43	8.7488	26.070	1.6185	1.4893	.16243
58	DHM0N	146.82	6.3987	20.849	2.9094	1.2170	.48406
59	DHM0R	218.14	11.767	31.211	1.9437	2.3862	.23592
60	DHP13B Rerun	.00585	-.04865	-.00553	.00000	.01847	-.01156
61	CCV2-5	52.820	49.199	50.587	5.1158	49.895	5.1870
62	CCB5	-.00053	.08461	-.00691	.00000	.00611	-.00370
63	DJ0RNB	.00799	-.10153	-.01107	-.00051	.00889	.00085
64	DJ0RNC	1.0208	L.18826	L-.00415	.47835	L.02493	.48775
65	DHVT A	2.7503	7.7314	60.747	1.1383	S3673.9	.16222
66	DHVTAP5	.57655	1.9714	12.654	.23751	221.42	.03441
67	DHVTAS	3.7359	7.9260	60.494	1.6083	S3674.0	.64510
68	DHVTAD	3.6604	7.5981	59.723	1.5775	S3674.4	.61801
69	DHVTG	1.4204	7.5854	58.542	1.0140	S3674.6	.15210
70	DHVTJ	1.3355	7.7800	58.657	1.0098	S3674.7	.15981
71	DHVTM	2.4700	11.898	158.11	1.9674	S-.13670	.30218
72	DHVTN	.10780	11.640	155.46	1.7069	S-.13670	.28363
73	CCV2-6	52.631	49.062	50.405	5.0798	49.580	5.1639
74	CCB6	.00408	-.01692	-.00415	.00026	.02459	-.00468
75	DHVTQ	.33569	12.396	159.90	1.7763	S-.13670	.29907
76	DHVTR	.04439	14.373	159.09	.99089	S-.13670	.33026
77	DHVTW	.05221	12.457	146.42	.89282	S917.07	.05222
78	DHXRF	.04085	11.901	33.270	.01123	S-.13670	.06530
79	DHXRG	.04848	11.670	31.110	.00602	S-.13670	.06557
80	CCV2-7	52.444	49.290	50.234	5.0588	49.521	5.1397
81	CCB7	.00052	.05922	-.01522	-.00052	.00427	-.00140
82	DJ0RHB	.01811	.31940	-.00553	-.00051	.00935	.00164
83	DJ0RHC	.95464	46.868	48.353	.45178	47.433	.45264
84	DHX4C	6.1841	6.5658	4.1603	.74500	101.85	-.00012
85	DHX4D	.82706	4.7848	2.8960	.59960	89.701	.00036
86	DHX4E	6.1796	10.777	6.0384	2.8288	45.859	.00903
87	DHX4EP5	1.2972	2.2168	1.2345	.59399	9.3100	.00649
88	DHX4ES	7.0509	59.213	55.076	3.2177	95.242	.46246
89	DHX4ED	7.1575	60.184	55.692	3.2565	96.620	.46349
90	DHX4H	2.3310	9.3009	5.1353	2.7192	44.933	.00906
91	DHX4J	2.7809	6.1766	3.5631	.92775	115.23	-.00182
92	CCV2-8	53.072	49.885	50.754	5.1159	50.027	5.1998
93	CCB8	.00301	.09307	-.01660	-.00051	.01004	-.00500
94	DHX4K	2.3434	5.8762	3.3659	.91356	114.61	.00628
95	DHWLVB	.02006	.04865	-.00691	-.00051	.00669	-.00708
96	DHWLVC	1.0437	48.377	49.903	.49198	49.075	.49403
97	DHV7M	1.4078	4.0719	12.509	.16940	S3675.2	.00874
98	DHV7MP5	.29149	.97303	2.5915	.03450	204.69	-.00359
99	DHV7MS	2.4643	54.022	60.931	.65093	S3673.2	.48090
100	DHV7MD	2.3983	52.093	58.809	.62327	S3673.9	.46197
101	CCV2-9	52.388	49.066	50.117	5.0442	49.740	5.1439
102	CCB9	.00212	.16287	-.00553	-.00025	.00831	-.00178
103	DHV7M/5 Na	.29930	.86726	2.5735	.03424	203.75	-.00182

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#	Sample Name	FE	K_	MG	MN	NA	NI
104	DHV7MP25 Na	.06074	.38286	.52315	.00784	40.624	-.00443
105	DHV7MS/5 Na	.52201	10.621	12.734	.13661	229.98	.10151
106	DHV7MD/5 Na	.50476	10.312	12.238	.13087	220.02	.09908
107	CCV2-10	51.861	48.235	49.409	4.9979	48.694	5.0952
108	CCB10	.00070	.11422	-.01245	-.00025	.01177	-.00295

#	Sample Name	V_	ZN
1	STD1	.00039	.00021
2	STD5A	1.51845	1.46427
3	STD5B		
4	ICV2-1 0057-005-2	.99469	1.0137
5	ICB1	-.00002	.00481
6	ICSA 0057-011-1	.00265	.00095
7	ICSAB 0014-187-1	.45775	.93254
8	DJOMXB	-.00253	.00425
9	DJOMXC	.48701	.48757
10	DHGDF	.00260	.27880
11	DHGDH	-.00255	.05488
12	DHGDHP5	.00036	.01206
13	DHGDHS	.47752	.56553
14	DHGDHD	.47504	.53091
15	DHGDK	-.00126	.04624
16	CCV2-1 0057-025-5	4.9992	5.0229
17	CCB1	.00012	.00133
18	DHGDM	.00166	.26437
19	DHGDP	-.00131	.18457
20	DHGDH	.00124	.78835
21	DHGE3	-.00007	1.1952
22	DHGE5	-.00002	.21172
23	DHGE7	.00000	.28686
24	DHGEC	.00258	.46578
25	DHGEE	.00119	.17867
26	DHGEG	.00119	.43546
27	DHGEH	.00260	.49186
28	CCV2-2	4.9872	5.0105
29	CCB2	-.00245	.00082
30	DHGEM	.00784	.16382
31	DHGEP	.00136	.18066
32	DHGET	.00266	.35224
33	DHGEW	.00258	.19618
34	DHGF9	-.00255	.05199
35	DHGFH	-.00255	.05683
36	DHXCX	.00137	.23125
37	CCV2-3	5.0341	5.0479
38	CCB3	-.00242	.00459
39	DHP13B	-.00252	H.02633
40	DHP13C	.47383	.49011
41	DHLX6	.52132	1.6401
42	DHLX6P5	.10735	.35805
43	DHLX6S	.96227	1.9424
44	DHLX6D	.95416	2.2893
45	DHLXR	.34727	.70524

#	Sample Name	V__	ZN
46	DHLXT	.56923	.92286
47	DHLXW	.60659	1.7624
48	DHM03	.43027	1.1975
49	CCV2-4	5.0806	5.0967
50	CCB4	-.00245	.00057
51	DHM06	.41269	1.6423
52	DHM07	.33636	1.5462
53	DHM0A	.49440	1.9269
54	DHM0E	.15452	.68607
55	DHM0F	.17581	.77035
56	DHM0K	.80714	3.3191
57	DHM0M	.22867	1.4273
58	DHM0N	.89075	4.9780
59	DHM0R	.66396	2.1367
60	DHP13B Rerun	-.00389	H.02586
61	CCV2-5	5.0826	5.1019
62	CCB5	-.00248	.00111
63	DJ0RNB	-.00255	.00388
64	DJ0RNC	.46591	.46864
65	DHVT A	-.00124	.04989
66	DHVTAP5	-.00244	.01120
67	DHVTAS	.46883	.54331
68	DHVTAD	.45327	.51668
69	DHVTG	-.00228	.02790
70	DHVTJ	.00031	.03160
71	DHVTM	.00065	.00552
72	DHVTN	.00327	.00739
73	CCV2-6	5.0501	5.0542
74	CCB6	-.00156	-.00004
75	DHVTQ	.00223	-.00320
76	DHVTR	.00301	.00551
77	DHVTW	.00033	.01126
78	DHXRF	-.00195	.00794
79	DHXRG	-.00056	.01646
80	CCV2-7	5.0345	5.0232
81	CCB7	-.00250	.00054
82	DJ0RHB	-.00260	.00094
83	DJ0RHC	.44711	.44494
84	DHX4C	.00644	.05518
85	DHX4D	-.00123	.12837
86	DHX4E	.01228	.04765
87	DHX4EP5	-.00085	.00953
88	DHX4ES	.46832	.49678
89	DHX4ED	.46085	.48838
90	DHX4H	.00315	.05190
91	DHX4J	.00256	.01858
92	CCV2-8	5.0992	5.0735
93	CCB8	-.00243	.00186
94	DHX4K	-.00019	.03584
95	DHWLVB	-.00255	.00095
96	DHWLVC	.48638	.48698
97	DHV7M	.00278	.18778
98	DHV7MP5	.00133	.03971
99	DHV7MS	.47416	.68071

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#	Sample Name	V_	ZN
100	DHV7MD	.45720	.65373
101	CCV2-9	5.0261	5.0143
102	CCB9	-.00250	.00047
103	DHV7M/5 Na	-.00127	.04568
104	DHV7MP25 Na	-.00262	.01033
105	DHV7MS/5 Na	.09693	.14003
106	DHV7MD/5 Na	.09415	.13474
107	CCV2-10	4.9693	4.9655
108	CCB10	.00009	.00047

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	J00818A	QUANMET	08/18/00	06:13		X	IR
2	STD5A	J00818A	QUANMET	08/18/00	06:16		X	IR
3	STD5B	J00818A	QUANMET	08/18/00	06:19		X	IR
4	ICV2-1 0057-005-2	J00818A	QUANMET	08/18/00	06:23	RJG	S	CONC
5	ICB1	J00818A	QUANMET	08/18/00	06:26	RJG	S	CONC
6	ICSA 0057-011-1	J00818A	QUANMET	08/18/00	06:29	RJG	Q	CONC
7	ICSAB 0014-187-1	J00818A	QUANMET	08/18/00	06:32	RJG	Q	CONC
8	DJ0MXB	J00818A	QUANMET	08/18/00	06:37	RJG	S	CONC
9	DJ0MXC	J00818A	QUANMET	08/18/00	06:41	RJG	S	CONC
10	DHGDF	J00818A	QUANMET	08/18/00	06:44	RJG	S	CONC
11	DHGDH	J00818A	QUANMET	08/18/00	06:47	RJG	S	CONC
12	DHGDHP5	J00818A	QUANMET	08/18/00	06:50	RJG	S	CONC
13	DHGDHS	J00818A	QUANMET	08/18/00	06:53	RJG	S	CONC
14	DHGDHD	J00818A	QUANMET	08/18/00	06:56	RJG	S	CONC
15	DHGDK	J00818A	QUANMET	08/18/00	06:59	RJG	S	CONC
16	CCV2-1 0057-025-5	J00818A	QUANMET	08/18/00	07:02	RJG	S	CONC
17	CCB1	J00818A	QUANMET	08/18/00	07:06	RJG	S	CONC
18	DHGDM	J00818A	QUANMET	08/18/00	07:09	RJG	S	CONC
19	DHGDP	J00818A	QUANMET	08/18/00	07:12	RJG	S	CONC
20	DHGDY	J00818A	QUANMET	08/18/00	07:15	RJG	S	CONC
21	DHGE3	J00818A	QUANMET	08/18/00	07:18	RJG	S	CONC
22	DHGE5	J00818A	QUANMET	08/18/00	07:21	RJG	S	CONC
23	DHGE7	J00818A	QUANMET	08/18/00	07:24	RJG	S	CONC
24	DHGEC	J00818A	QUANMET	08/18/00	07:28	RJG	S	CONC
25	DHGE8	J00818A	QUANMET	08/18/00	07:31	RJG	S	CONC
26	DHGE9	J00818A	QUANMET	08/18/00	07:34	RJG	S	CONC
27	DHGEH	J00818A	QUANMET	08/18/00	07:37	RJG	S	CONC
28	CCV2-2	J00818A	QUANMET	08/18/00	07:40	RJG	S	CONC
29	CCB2	J00818A	QUANMET	08/18/00	07:43	RJG	S	CONC
30	DHGEM	J00818A	QUANMET	08/18/00	07:46	RJG	S	CONC
31	DHGEP	J00818A	QUANMET	08/18/00	07:49	RJG	S	CONC
32	DHGET	J00818A	QUANMET	08/18/00	07:53	RJG	S	CONC
33	DHGEW	J00818A	QUANMET	08/18/00	07:56	RJG	S	CONC
34	DHGF9	J00818A	QUANMET	08/18/00	07:59	RJG	S	CONC
35	DHGFH	J00818A	QUANMET	08/18/00	08:02	RJG	S	CONC
36	DHXCX	J00818A	QUANMET	08/18/00	08:05	RJG	S	CONC
37	CCV2-3	J00818A	QUANMET	08/18/00	08:08	RJG	S	CONC
38	CCB3	J00818A	QUANMET	08/18/00	08:11	RJG	S	CONC
39	DHP13B	J00818A	QUANMET	08/18/00	08:15	RJG	S	CONC
40	DHP13C	J00818A	QUANMET	08/18/00	08:18	RJG	S	CONC
41	DHLX6	J00818A	QUANMET	08/18/00	08:21	RJG	S	CONC
42	DHLX6P5	J00818A	QUANMET	08/18/00	08:24	RJG	S	CONC
43	DHLX6S	J00818A	QUANMET	08/18/00	08:27	RJG	S	CONC
44	DHLX6D	J00818A	QUANMET	08/18/00	08:30	RJG	S	CONC
45	DHLXR	J00818A	QUANMET	08/18/00	08:33	RJG	S	CONC
46	DHLXT	J00818A	QUANMET	08/18/00	08:36	RJG	S	CONC
47	DHLXW	J00818A	QUANMET	08/18/00	08:40	RJG	S	CONC
48	DHM03	J00818A	QUANMET	08/18/00	08:43	RJG	S	CONC
49	CCV2-4	J00818A	QUANMET	08/18/00	08:46	RJG	S	CONC
50	CCB4	J00818A	QUANMET	08/18/00	08:49	RJG	S	CONC
51	DHM06	J00818A	QUANMET	08/18/00	08:54	RJG	S	CONC
52	DHM07	J00818A	QUANMET	08/18/00	08:57	RJG	S	CONC
53	DHM0A	J00818A	QUANMET	08/18/00	09:00	RJG	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	DHM0E	J00818A	QUANMET	08/18/00	09:03	RJG	S	CONC
55	DHM0F	J00818A	QUANMET	08/18/00	09:06	RJG	S	CONC
56	DHM0K	J00818A	QUANMET	08/18/00	09:09	RJG	S	CONC
57	DHM0M	J00818A	QUANMET	08/18/00	09:12	RJG	S	CONC
58	DHM0N	J00818A	QUANMET	08/18/00	09:16	RJG	S	CONC
59	DHM0R	J00818A	QUANMET	08/18/00	09:19	RJG	S	CONC
60	DHP13B Rerun	J00818A	QUANMET	08/18/00	09:22	RJG	S	CONC
61	CCV2-5	J00818A	QUANMET	08/18/00	09:25	RJG	S	CONC
62	CCB5	J00818A	QUANMET	08/18/00	09:28	RJG	S	CONC
63	DJ0RNB	J00818A	QUANMET	08/18/00	09:31	RJG	S	CONC
64	DJ0RNC	J00818A	QUANMET	08/18/00	09:34	RJG	S	CONC
65	DHVT A	J00818A	QUANMET	08/18/00	09:37	RJG	S	CONC
66	DHVTAP5	J00818A	QUANMET	08/18/00	09:41	RJG	S	CONC
67	DHVTAS	J00818A	QUANMET	08/18/00	09:44	RJG	S	CONC
68	DHVTAD	J00818A	QUANMET	08/18/00	09:47	RJG	S	CONC
69	DHVTG	J00818A	QUANMET	08/18/00	09:50	RJG	S	CONC
70	DHVTJ	J00818A	QUANMET	08/18/00	09:53	RJG	S	CONC
71	DHVTM	J00818A	QUANMET	08/18/00	09:56	RJG	S	CONC
72	DHVTN	J00818A	QUANMET	08/18/00	09:59	RJG	S	CONC
73	CCV2-6	J00818A	QUANMET	08/18/00	10:03	RJG	S	CONC
74	CCB6	J00818A	QUANMET	08/18/00	10:06	RJG	S	CONC
75	DHVTQ	J00818A	QUANMET	08/18/00	10:09	RJG	S	CONC
76	DHVTR	J00818A	QUANMET	08/18/00	10:12	RJG	S	CONC
77	DHVTW	J00818A	QUANMET	08/18/00	10:15	RJG	S	CONC
78	DHXRF	J00818A	QUANMET	08/18/00	10:18	RJG	S	CONC
79	DHXRG	J00818A	QUANMET	08/18/00	10:21	RJG	S	CONC
80	CCV2-7	J00818A	QUANMET	08/18/00	10:25	RJG	S	CONC
81	CCB7	J00818A	QUANMET	08/18/00	10:28	RJG	S	CONC
82	DJ0RHB	J00818A	QUANMET	08/18/00	10:33	RJG	S	CONC
83	DJ0RHC	J00818A	QUANMET	08/18/00	10:36	RJG	S	CONC
84	DHX4C	J00818A	QUANMET	08/18/00	10:40	RJG	S	CONC
85	DHX4D	J00818A	QUANMET	08/18/00	10:43	RJG	S	CONC
86	DHX4E	J00818A	QUANMET	08/18/00	10:46	RJG	S	CONC
87	DHX4EP5	J00818A	QUANMET	08/18/00	10:49	RJG	S	CONC
88	DHX4ES	J00818A	QUANMET	08/18/00	10:52	RJG	S	CONC
89	DHX4ED	J00818A	QUANMET	08/18/00	10:55	RJG	S	CONC
90	DHX4H	J00818A	QUANMET	08/18/00	10:58	RJG	S	CONC
91	DHX4J	J00818A	QUANMET	08/18/00	11:02	RJG	S	CONC
92	CCV2-8	J00818A	QUANMET	08/18/00	11:05	RJG	S	CONC
93	CCB8	J00818A	QUANMET	08/18/00	11:08	RJG	S	CONC
94	DHX4K	J00818A	QUANMET	08/18/00	11:11	RJG	S	CONC
95	DHWLVB	J00818A	QUANMET	08/18/00	11:14	RJG	S	CONC
96	DHWLVC	J00818A	QUANMET	08/18/00	11:17	RJG	S	CONC
97	DHV7M	J00818A	QUANMET	08/18/00	11:20	RJG	S	CONC
98	DHV7MP5	J00818A	QUANMET	08/18/00	11:24	RJG	S	CONC
99	DHV7MS	J00818A	QUANMET	08/18/00	11:27	RJG	S	CONC
100	DHV7MD	J00818A	QUANMET	08/18/00	11:30	RJG	S	CONC
101	CCV2-9	J00818A	QUANMET	08/18/00	11:33	RJG	S	CONC
102	CCB9	J00818A	QUANMET	08/18/00	11:36	RJG	S	CONC
103	DHV7M/5 Na	J00818A	QUANMET	08/18/00	11:41	RJG	S	CONC
104	DHV7MP25 Na	J00818A	QUANMET	08/18/00	11:44	RJG	S	CONC
105	DHV7MS/5 Na	J00818A	QUANMET	08/18/00	11:47	RJG	S	CONC
106	DHV7MD/5 Na	J00818A	QUANMET	08/18/00	11:51	RJG	S	CONC
107	CCV2-10	J00818A	QUANMET	08/18/00	11:54	RJG	S	CONC

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Analysis Report

Summary

08/18/00 12:01:59 PM

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
108	CCB10	J00818A	QUANMET	08/18/00	11:57	RJG	S	CONC

Method: QUANMET Standard: STD1

Run Time: 08/18/00 06:13:37

Elem	AG	AL	AS	B	BA	BE	CA
Avge	-.00075	.00805	-.00120	-.00096	.00004	.00225	.00171
SDev	.00034	.00130	.00099	.00132	.00005	.00010	.00058
%RSD	45.542	16.149	82.776	137.93	115.47	4.4444	33.983
#1	-.00120	.00620	-.00180	-.00192	.00000	.00220	.00085
#2	-.00060	.00920	.00000	-.00180	.00008	.00220	.00195
#3	-.00080	.00820	-.00080	-.00106	.00000	.00240	.00191
#4	-.00040	.00860	-.00220	.00094	.00008	.00220	.00212
Elem	CD	CO	CR	CU	FE	K	LI
Avge	.00018	-.00010	.00075	.00025	.00060	-.04635	.00026
SDev	.00011	.00026	.00062	.00010	.00054	.00674	.00038
%RSD	58.252	258.20	82.552	40.000	90.267	14.532	148.73
#1	.00020	-.00040	.00080	.00020	-.00020	-.05460	-.00020
#2	.00008	.00020	.00020	.00040	.00100	-.04000	.00055
#3	.00012	.00000	.00160	.00020	.00080	-.04180	.00060
#4	.00032	-.00020	.00040	.00020	.00080	-.04900	.00008
Elem	MG	MN	MO	NA	NI	PB	SB
Avge	.00075	.00010	.00005	.05920	.00053	.00050	-.00015
SDev	.00025	.00020	.00010	.00226	.00085	.00053	.00044
%RSD	33.555	200.00	200.00	3.8122	160.53	105.83	295.65
#1	.00040	-.00020	.00000	.05600	-.00067	-.00020	.00000
#2	.00100	.00020	.00000	.05940	.00088	.00080	-.00080
#3	.00080	.00020	.00000	.06120	.00060	.00100	.00020
#4	.00080	.00020	.00020	.06020	.00132	.00040	.00000
Elem	SE	SI	SN	SR	TI	TL	V
Avge	.00115	.00010	.00110	.00014	.00255	.00015	.00040
SDev	.00148	.00012	.00104	.00004	.00019	.00066	.00046
%RSD	128.88	115.47	94.475	29.787	7.5092	440.54	115.47
#1	.00320	.00000	.00180	.00020	.00240	-.00060	.00000
#2	-.00020	.00020	.00180	.00012	.00280	.00000	.00080
#3	.00040	.00000	-.00040	.00012	.00240	.00100	.00080
#4	.00120	.00020	.00120	.00012	.00260	.00020	.00000
Elem	ZN						
Avge	.00022						
SDev	.00012						
%RSD	53.054						
#1	.00012						
#2	.00032						
#3	.00012						
#4	.00032						

Method: QUANMET Standard: STD5A
Run Time: 08/18/00 06:16:48

004155-1

Elem	AG	AS	B	BA	BE	CD	CO
Avge	.26170	.50060	.55210	3.8095	14.753	.87855	1.3549
SDev	.00050	.00393	.00120	.0125	.036	.00296	.0025
%RSD	.19233	.78425	.21704	.32857	.24395	.33645	.18845

#1	.26180	.50560	.55380	3.8153	14.803	.87692	1.3533
#2	.26180	.50040	.55100	3.7916	14.737	.87971	1.3544
#3	.26100	.50040	.55192	3.8111	14.720	.87547	1.3523
#4	.26220	.49600	.55168	3.8201	14.752	.88212	1.3585

Elem	CR	CU	LI	MN	MO	NI	PB
Avge	3.5525	2.1515	4.3089	1.9165	.38395	1.6095	.24185
SDev	.0133	.0055	.0224	.0058	.00160	.0077	.00123
%RSD	.37408	.25383	.52093	.30311	.41754	.47642	.52897

#1	3.5506	2.1568	4.3179	1.9150	.38300	1.6106	.24260
#2	3.5534	2.1442	4.2793	1.9164	.38440	1.6188	.24280
#3	3.5368	2.1542	4.3323	1.9102	.38240	1.6002	.24000
#4	3.5692	2.1506	4.3060	1.9242	.38600	1.6085	.24200

Elem	SB	SE	SI	SN	SR	TI	TL
Avge	.18125	.49205	.32830	.91460	7.3125	5.7849	.32535
SDev	.00158	.00628	.00139	.00514	.0199	.0126	.00329
%RSD	.87061	1.2752	.42353	.56207	.27222	.21781	1.0106

#1	.18260	.49620	.32640	.91480	7.3240	5.7886	.32360
#2	.18200	.49200	.32820	.92180	7.2846	5.7736	.32780
#3	.17900	.48320	.32900	.91100	7.3122	5.7762	.32160
#4	.18140	.49680	.32960	.91080	7.3291	5.8010	.32840

Elem	V	ZN
Avge	1.5185	1.4643
SDev	.0044	.0049
%RSD	.29143	.33268

#1	1.5188	1.4625
#2	1.5166	1.4623
#3	1.5140	1.4608
#4	1.5244	1.4715

Method: QUANMET Standard: STD5B
Run Time: 08/18/00 06:19:57

0014155-2

Elem	AL	CA	FE	K	MG	NA
Avge	10.864	23.677	28.150	2.3174	7.2262	43.364
SDev	.024	.185	.102	.0074	.0218	.221
%RSD	.21767	.78233	.36235	.31851	.30218	.50977
#1	10.838	23.794	28.148	2.3100	7.2094	43.090
#2	10.889	23.668	28.182	2.3276	7.2484	43.524
#3	10.878	23.828	28.258	2.3154	7.2414	43.279
#4	10.850	23.419	28.014	2.3166	7.2056	43.561

Method: QUANMET

Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD5A	STD1	7.43503	.005576	08/18/00 06:19:57
AL	308.215	STD5B	STD1	9.21183	-.074155	08/18/00 06:19:57
AS	193.696	STD5A	STD1	20.2719	.024326	08/18/00 06:19:57
B	249.600	STD5A	STD1	18.1176	.017372	08/18/00 06:19:57
B $\bar{A}$	493.409	STD5A	STD1	2.62502	-.000108	08/18/00 06:19:57
BE	313.042	STD5A	STD1	.679731	-.001529	08/18/00 06:19:57
CA	317.933	STD5B	STD1	4.22375	-.007205	08/18/00 06:19:57
CD	228.802	STD5A	STD1	11.5553	-.002073	08/18/00 06:19:57
CO	228.616	STD5A	STD1	7.41532	.000742	08/18/00 06:19:57
CR	267.716	STD5A	STD1	2.81629	-.002112	08/18/00 06:19:57
CU	324.754	STD5A	STD1	4.64434	-.001161	08/18/00 06:19:57
FE	259.940	STD5B	STD1	3.55243	-.002131	08/18/00 06:19:57
K	766.491	STD5B	STD1	42.3057	1.96087	08/18/00 06:19:57
L $\bar{I}$	670.789	STD5A	STD1	2.32092	-.000601	08/18/00 06:19:57
MG	279.079	STD5B	STD1	13.8400	-.010380	08/18/00 06:19:57
MN	257.610	STD5A	STD1	5.21653	-.000522	08/18/00 06:19:57
MO	202.030	STD5A	STD1	26.0485	-.001302	08/18/00 06:19:57
NA	588.995	STD5B	STD1	2.30923	-.136707	08/18/00 06:19:57
NI	231.604	STD5A	STD1	6.21232	-.003307	08/18/00 06:19:57
PB	220.353	STD5A	STD1	40.2147	-.020107	08/18/00 06:19:57
SB	206.838	STD5A	STD1	55.1907	.008279	08/18/00 06:19:57
SE	196.026	STD5A	STD1	20.3707	-.023426	08/18/00 06:19:57
SI	288.158	STD5A	STD1	30.0804	-.003008	08/18/00 06:19:57
SN	189.989	STD5A	STD1	10.9355	-.012029	08/18/00 06:19:57
SR	409.552	STD5A	STD1	1.36755	-.000189	08/18/00 06:19:57
TI	334.941	STD5A	STD1	1.72942	-.004410	08/18/00 06:19:57
TL	190.864	STD5A	STD1	61.7889	-.009268	08/18/00 06:19:57
V	292.402	STD5A	STD1	6.44711	-.002579	08/18/00 06:19:57
Z $\bar{N}$	213.856	STD5A	STD1	6.85375	-.001492	08/18/00 06:19:57

Analysis Report

08/18/00 06:26:13 AM

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Method: QUANMET Sample Name: ICV2-1 0057-005-2 Operator: RJG
 Run Time: 08/18/00 06:23:07
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50700	25.269	1.0335	1.0223	1.0027	.98386	25.538
SDev	.00143	.107	.0764	.0015	.0072	.00422	.110
%RSD	.28260	.42223	7.3878	.15072	.72124	.42931	.43239

#1	.50586	25.242	1.0176	1.0230	1.0047	.98729	25.386
#2	.50587	25.163	.94116	1.0200	.99561	.97846	25.558
#3	.50741	25.417	H1.1254	1.0232	1.0119	.98714	25.558
#4	.50885	25.253	1.0499	1.0231	.99845	.98254	25.650

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55000	27.500	1.1000	1.1000	1.1000	1.1000	27.500
Low	.45000	22.500	.90000	.90000	.90000	.90000	22.500

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0056	1.0056	1.0132	.99666	26.165	24.586	1.0115
SDev	.0123	.0044	.0037	.00766	.061	.259	.0120
%RSD	1.2232	.44169	.36036	.76899	.23441	1.0521	1.1889

#1	1.0077	1.0015	1.0098	1.0013	26.118	24.916	1.0206
#2	1.0017	1.0045	1.0104	.99016	26.129	24.341	1.0012
#3	.99185	1.0119	1.0154	1.0050	26.253	24.662	1.0231
#4	1.0213	1.0044	1.0171	.99016	26.162	24.425	1.0010

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	1.1000	1.1000	1.1000	27.500	27.500	1.1000
Low	.90000	.90000	.90000	.90000	22.500	22.500	.90000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.385	1.0087	.99245	24.902	1.0052	1.0154	1.0281
SDev	.112	.0022	.01346	.224	.0164	.0368	.0211
%RSD	.43965	.21473	1.3561	.90071	1.6318	3.6216	2.0525

#1	25.347	1.0063	.97682	25.032	1.0123	1.0253	1.0007
#2	25.278	1.0074	.99766	24.667	1.0029	1.0577	1.0446
#3	25.541	1.0105	1.0081	25.145	.98352	.96921	1.0223
#4	25.372	1.0105	.98724	24.762	1.0220	1.0094	1.0449

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	27.500	1.1000	1.1000	27.500	1.1000	1.1000	1.1000
Low	22.500	.90000	.90000	22.500	.90000	.90000	.90000

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0101	1.0414	1.0095	.99655	.98983	4.9416	.99469
SDev	.0498	.0078	.0185	.00613	.00429	.1558	.00279
%RSD	4.9352	.74502	1.8285	.61473	.43317	3.1537	.28030

#1	1.0802	1.0324	.99134	.99754	.98827	4.7661	.99309
#2	.97432	1.0444	1.0265	.99048	.98585	5.0255	.99350

#3	.97465	1.0385	1.0242	1.0047	.99588	4.8634	.99887
#4	1.0111	1.0504	.99592	.99353	.98931	5.1116	.99331

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	1.1000	1.1000	1.1000	1.1000	5.5000	1.1000
Low	.90000	.90000	.90000	.90000	.90000	4.5000	.90000

Elem ZN
Units ppm
Avge 1.0137
SDev .0051
%RSD .50799

#1	1.0066
#2	1.0130
#3	1.0179
#4	1.0171

Errors	LC Pass
High	1.1000
Low	.90000

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Method: QUANMET Sample Name: ICB1

Operator: RJG

Run Time: 08/18/00 06:26:15

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00037	.00647	-.00917	.04029	-.00011	.00007	.08984
SDev	.00084	.00506	.02395	.01481	.00000	.00012	.00316
%RSD	226.89	78.202	261.02	36.757	.00000	180.73	3.5219
#1	-.00036	.00139	.02022	.03655	-.00011	.00023	.08641
#2	.00110	.01249	-.00006	.02099	-.00011	-.00003	.08920
#3	.00110	.00333	-.03242	.05361	-.00011	-.00003	.08969
#4	-.00036	.00865	-.02444	.04999	-.00011	.00009	.09407
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00404	.00038	-.00127	-.00046	.00053	.17345	.00100
SDev	.00199	.00186	.00134	.00046	.00107	.15079	.00069
%RSD	49.164	487.75	105.83	99.856	200.54	86.931	69.075
#1	-.00460	.00224	-.00211	-.00116	-.00071	.32787	.00041
#2	-.00343	.00075	.00014	-.00023	-.00000	.27710	.00199
#3	-.00171	.00075	-.00268	-.00023	.00142	.03173	.00079
#4	L-.00644	-.00221	-.00042	-.00023	.00142	.05711	.00079
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00484	.00052	-.00130	.00427	-.00507	.00205	.02761
SDev	.00505	.00000	.00425	.00551	.00691	.02734	.02273
%RSD	104.33	.26750	326.62	128.94	136.43	1331.7	82.345
#1	-.01038	.00052	-.00130	-.00092	.00284	-.02004	.00840
#2	-.00761	.00052	-.00130	.01201	-.00138	-.02002	.05252
#3	.00069	.00052	-.00651	.00369	-.01054	.03622	.00825
#4	-.00208	.00052	.00391	.00231	-.01118	.01205	.04126
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02546	-.00301	-.01682	.00003	-.00035	.01544	-.00003
SDev	.02117	.00004	.02237	.00032	.00017	.01428	.00304
%RSD	83.139	1.2881	133.02	1145.2	50.000	92.457	10975.
#1	-.01935	-.00298	-.02292	-.00019	-.00061	.00306	.00255
#2	-.01935	-.00304	-.04459	-.00030	-.00026	.02782	-.00260

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#3	-.05602	-.00304	-.00762	.00036	-.00026	.00309	-.00271
#4	-.00713	-.00297	.00785	.00025	-.00026	.02779	.00265

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00482
SDev	.00058
%RSD	12.069

#1	.00481
#2	.00455
#3	.00563
#4	.00428

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: ICSA 0057-011-1 Operator: RJG
 Run Time: 08/18/00 06:29:24
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00269	490.96	-.10105	.00627	.00139	.00006	482.75
SDev	.00071	1.95	.21793	.00854	.00015	.00007	3.90
%RSD	26.421	.39794	215.68	136.20	11.111	111.88	.80757
#1	-.00256	488.62	.06596	.00577	.00116	-.00004	479.26
#2	-.00247	490.24	.02004	.01567	.00147	.00009	479.84
#3	-.00370	491.87	-.41602	.00857	.00147	.00010	484.45
#4	-.00204	493.11	-.07416	-.00491	.00147	.00010	487.44
Errors	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass
Value		500.00					500.00
Range		20.000					20.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00640	.01266	-.00338	-.00748	184.98	-.31941	.00198
SDev	.00838	.00384	.00288	.00053	1.01	.20789	.00144
%RSD	130.97	30.370	85.345	7.1002	.54452	65.085	72.642
#1	-.01303	.01119	-.00662	-.00780	183.97	-.49286	.00145
#2	-.01249	.01712	-.00493	-.00776	184.36	-.47594	.00218
#3	.00491	.00818	-.00155	-.00768	185.42	-.25595	.00385
#4	-.00499	.01414	-.00042	-.00669	186.18	-.05288	.00044
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK
Value					200.00		
Range					20.000		
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	484.23	.00276	.00422	.00496	-.01939	.09249	-.01106
SDev	2.14	.00038	.00485	.00332	.01394	.02096	.01888
%RSD	.44138	13.664	114.99	66.811	71.907	22.657	170.64
#1	481.71	.00304	.01058	.00693	-.00397	.12225	-.01372
#2	483.48	.00311	.00543	.00647	-.03724	.07306	-.03596
#3	484.98	.00234	.00038	-.00000	-.01470	.08771	.00831
#4	486.73	.00254	.00049	.00647	-.02165	.08693	-.00288
Errors	QC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value	500.00						
Range	20.000						
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.12272	.09177	-.02333	.01343	-.02144	.72818	.00265
SDev	.14069	.01139	.02875	.00016	.00017	.11369	.00009
%RSD	114.64	12.408	123.23	1.2236	.80645	15.613	3.3238
#1	.28200	.07523	-.01424	.01347	-.02136	.69849	.00277
#2	.07117	.09929	-.05801	.01320	-.02136	.60792	.00267

#3	-.04418	.09929	-.03136	.01358	-.02170	.88122	.00258
#4	.18190	.09328	.01029	.01347	-.02136	.72507	.00259

Errors NOCHECK NOCHECK NOCHECK NOCHECK NOCHECK NOCHECK NOCHECK
Value
Range

Elem ZN
Units ppm
Avge .00095
SDev .00273
%RSD 287.32

#1 .00376
#2 -.00278
#3 .00115
#4 .00166

Errors NOCHECK
Value
Range

Method: QUANMET Sample Name: ICSAB 0014-187-1 Operator: RJG
 Run Time: 08/18/00 06:32:32
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.94487	485.40	.90064	.93710	.46336	.45305	477.91
SDev	.00138	1.26	.12975	.00259	.00163	.00132	1.86
%RSD	.14604	.25994	14.407	.27596	.35227	.29160	.39021

#1	.94370	484.09	Q.78477	.93384	.46205	.45227	479.39
#2	.94662	484.96	.81860	.93656	.46310	.45214	476.00
#3	.94383	487.09	.92623	.93997	.46572	.45498	476.62
#4	.94534	485.47	1.0730	.93803	.46257	.45281	479.62

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	500.00	1.0000	1.0000	.50000	.50000	500.00
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.95460	.45593	.44146	.47325	183.37	9.5061	.99700
SDev	.00721	.00532	.00324	.00235	.38	.3553	.00707
%RSD	.75510	1.1666	.73281	.49709	.20921	3.7372	.70871

#1	.96417	.45924	.44399	.46998	183.12	9.4574	.99382
#2	.95136	.44889	.44061	.47367	182.97	9.5674	.99521
#3	.94732	.45483	.43723	.47559	183.64	9.0682	1.0074
#4	.95554	.46074	.44399	.47375	183.75	9.9313	.99161

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	.50000	.50000	.50000	200.00	10.000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	477.93	.45132	.88962	9.9213	.89864	1.0128	.91845
SDev	.85	.00138	.00783	.0566	.02176	.0549	.07344
%RSD	.17834	.30631	.88007	.57055	2.4219	5.4248	7.9967

#1	477.38	.45284	.89610	9.8692	.90416	.94328	.87987
#2	477.18	.44964	.88045	9.9232	.88244	.99877	.85765
#3	479.06	.45084	.89618	9.9994	.88084	1.0379	1.0232
#4	478.10	.45195	.88577	9.8932	.92712	1.0711	.91309

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.00	.50000	1.0000	10.000	1.0000	1.0000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0627	1.0827	.83312	.92977	.88425	9.5888	.45775
SDev	.1018	.0060	.03650	.00285	.00134	.1525	.00270
%RSD	9.5798	.55469	4.3812	.30656	.15107	1.5902	.58977

#1	1.1068	1.0857	.81321	.92738	.88278	9.4400	.45917
#2	.91086	1.0857	.81527	.92831	.88347	9.7629	.45370

#3	1.1041	1.0857	.81616	.93383	.88520	9.4840	.45916
#4	1.1288	1.0737	.88784	.92957	.88555	9.6683	.45897
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	1.0000	1.0000	1.0000	1.0000	10.000	.50000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem ZN
Units ppm
Avge .93254
SDev .00492
%RSD .52778

#1 .93064
#2 .93068
#3 .92902
#4 .93984

Errors QC Pass
Value 1.0000
Range 20.000

Method: QUANMET Sample Name: DJ0MXB

Operator: RJG

Run Time: 08/18/00 06:37:56

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00150	-.00320	.00615	.02888	.00015	.00004	.05714
SDev	.00223	.00968	.01941	.000814	.00030	.00008	.00292
%RSD	148.76	302.80	315.62	28.170	196.30	192.68	5.1105
#1	.00110	.00508	.00811	.01738	.00042	.00011	.05913
#2	-.00038	-.00227	-.01210	.03080	-.00011	-.00003	.05511
#3	-.00336	-.01701	-.00388	.03080	-.00011	-.00003	.05421
#4	-.00336	.00141	.03246	.03655	.00042	.00011	.06013
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00482	.00113	-.00084	-.00023	.00195	-.00423	-.00036
SDev	.00146	.00142	.00125	.00076	.00121	.36006	.00076
%RSD	30.194	126.35	148.24	328.74	62.223	8510.8	211.44
#1	L-.00638	.00076	.00071	-.00023	.00355	.52247	-.00022
#2	-.00289	-.00073	-.00155	-.00116	.00142	-.27287	-.00142
#3	L-.00528	.00224	-.00211	.00070	.00071	-.18826	-.00022
#4	-.00474	.00224	-.00042	-.00023	.00213	-.07827	.00041
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01038	.00026	.00261	.00866	-.00295	-.02206	.01647
SDev	.00391	.00052	.00261	.00739	.00577	.01661	.01887
%RSD	37.712	198.78	99.991	85.375	195.39	75.281	114.54
#1	-.01038	.00052	.00391	.01801	-.00175	-.00395	.04131
#2	-.00484	.00052	-.00130	.01062	.00262	-.04423	.01934
#3	-.01315	-.00052	.00391	.00092	-.00163	-.02004	-.00282
#4	-.01315	.00052	.00391	.00508	-.01105	-.02004	.00806
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00509	.04358	.01922	-.00008	-.00052	-.02473	-.00253
SDev	.01578	.02707	.01795	.00030	.00052	.04553	.00005
%RSD	310.20	62.116	93.393	369.28	100.00	184.15	2.0276
#1	.01732	.05712	.01222	-.00019	-.00026	-.02165	-.00250
#2	-.01935	.00297	.00337	-.00030	-.00026	-.08340	-.00261

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#3	-.00713	.05712	.01639	.00036	-.00130	-.02164	-.00251
#4	-.01120	.05712	.04487	-.00019	-.00026	.02779	-.00250
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00425
SDev	.00157
%RSD	36.999

#1	.00262
#2	.00478
#3	.00342
#4	.00619

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DJ0MXC

Operator: RJG

Run Time: 08/18/00 06:41:04

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04388	1.9561	1.9603	.96838	1.9735	.04911	48.987
SDev	.00210	.0091	.0374	.01948	.0099	.00025	.358
%RSD	4.7785	.46345	1.9098	2.0121	.50057	.50040	.73122
#1	.04685	1.9651	1.9531	.95196	1.9609	.04884	48.916
#2	.04239	1.9612	1.9734	.98373	1.9850	.04939	48.821
#3	.04387	1.9445	1.9127	.98671	1.9742	.04898	48.703
#4	.04242	1.9537	2.0018	.95112	1.9737	.04924	49.508
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04498	.48227	.19152	.25526	1.0291	48.036	1.0006
SDev	.00433	.00548	.00227	.00053	.0053	.174	.0088
%RSD	9.6293	1.1367	1.1866	.20952	.51188	.36227	.87475
#1	.05022	.48895	.19053	.25481	1.0321	47.786	.99103
#2	.04015	.47708	.18884	.25572	1.0250	48.167	1.0084
#3	.04641	.47856	.19279	.25479	1.0243	48.049	1.0076
#4	.04313	.48449	.19392	.25573	1.0350	48.142	.99524
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	48.445	.48363	.96134	48.891	.47649	.47906	.49434
SDev	.225	.00200	.01074	.351	.01075	.01664	.03183
%RSD	.46409	.41358	1.1172	.71696	2.2558	3.4737	6.4388
#1	48.131	.48206	.95223	48.492	.47323	.47527	.53295
#2	48.540	.48414	.95222	49.310	.47291	.48289	.45580
#3	48.457	.48206	.96785	49.010	.46766	.49907	.48868
#4	48.654	.48624	.97306	48.753	.49215	.45902	.49992
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9277	3.8445	1.9581	.98839	.96164	1.8601	.48701
SDev	.0522	.0115	.0297	.00486	.00424	.0785	.00274
%RSD	2.7092	.30012	1.5160	.49195	.44051	4.2193	.56196
#1	1.9878	3.8294	1.9949	.98177	.95680	1.7921	.48554
#2	1.9023	3.8535	1.9224	.99349	.96406	1.9282	.48554

#3	1.8697	3.8414	1.9554	.98916	.95957	1.7922	.48585
#4	1.9512	3.8535	1.9598	.98916	.96614	1.9280	.49111
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass
High	2.4000					2.4000	.60000
Low	1.6000					1.6000	.40000

Elem ZN
 Units ppm
 Avge .48757
 SDev .00331
 %RSD .67881

#1 .48697
 #2 .48560
 #3 .48530
 #4 .49242

Errors LC Pass
 High .60000
 Low .40000

Analysis Report

08/18/00 06:47:17 AM

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page 1

Method: QUANMET Sample Name: DHGDF

Operator: RJG

Run Time: 08/18/00 06:44:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00389	.11190	.10346	.02063	.01963	-.00004	190.83
SDev	.00192	.01006	.04605	.00367	.00026	.00011	1.12
%RSD	49.419	8.9883	44.504	17.778	1.3058	271.90	.58592
#1	-.00166	.11562	.04262	.02260	.01984	.00010	192.32
#2	-.00463	.11004	.11969	.02474	.01953	-.00004	190.59
#3	-.00314	.12289	.09932	.01834	.01984	-.00018	190.78
#4	-.00612	.09904	.15223	.01685	.01932	-.00004	189.62
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00378	.00149	.00127	.00889	.83924	23.640	.00076
SDev	.00243	.00148	.00159	.00117	.00286	.137	.00077
%RSD	64.433	99.123	125.79	13.140	.34108	.57887	100.64
#1	-.00156	.00222	.00352	.01005	.84049	23.841	.00164
#2	L-.00569	.00224	.00127	.00727	.84261	23.579	.00106
#3	-.00179	.00223	.00014	.00913	.83764	23.604	.00052
#4	L-.00606	-.00073	.00014	.00912	.83622	23.537	-.00016
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.2772	.04719	.00143	11.975	-.00438	.00181	.02204
SDev	.0283	.00104	.00673	.099	.00784	.02013	.02275
%RSD	.53556	2.2101	471.02	.82583	179.11	1110.1	103.22
#1	5.2571	.04875	-.00118	11.829	-.00577	.02801	.05238
#2	5.2488	.04667	.00403	12.033	-.01485	-.02029	.01921
#3	5.2986	.04667	.00924	11.998	.00049	-.00424	-.00281
#4	5.3042	.04666	-.00639	12.039	.00262	.00377	.01939
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02529	.18954	.00028	.20634	-.00571	-.02079	.00261
SDev	.01940	.00000	.01075	.00077	.00114	.03250	.00013
%RSD	76.713	.00087	3799.4	.37491	20.024	156.35	4.9596
#1	.00323	.18954	.00151	.20525	-.00441	-.05478	.00256
#2	-.02935	.18954	-.01394	.20689	-.00718	.00697	.00266

#3	-.03752	.18954	.01220	.20634	-.00579	-.04241	.00276
#4	-.03752	.18954	.00136	.20689	-.00545	.00706	.00246
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .27881
SDev .00119
%RSD .42812

#1 .27724
#2 .27946
#3 .27996
#4 .27858

Errors LC Pass
High 100.00
Low -.02000

Analysis Report

08/18/00 06:50:25 AM

668 849.
page 1

Method: QUANMET Sample Name: DHGDH

Operator: RJG

Run Time: 08/18/00 06:47:19

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00112	-.00320	.13991	.02894	.00160	-.00003	1.0071
SDev	.00192	.01210	.02107	.02199	.00032	.00000	.0129
%RSD	171.21	377.72	15.059	75.971	19.793	.56918	1.2814
#1	-.00335	-.01890	.15422	.05004	.00125	-.00003	.99243
#2	-.00038	.00328	.15405	.03085	.00168	-.00003	1.0020
#3	-.00187	-.00595	.10953	-.00175	.00147	-.00003	1.0112
#4	.00111	.00876	.14184	.03661	.00199	-.00003	1.0226
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00398	.00001	.00141	.00418	.02984	33.051	.00061
SDev	.00157	.00085	.00116	.00046	.00082	.178	.00040
%RSD	39.512	8242.3	82.363	11.095	2.7494	.53881	65.888
#1	-.00244	-.00073	.00240	.00441	.03055	32.929	.00060
#2	-.00284	.00075	.00239	.00349	.02913	33.030	.00005
#3	L-.00562	-.00073	.00014	.00441	.02913	32.937	.00079
#4	L-.00502	.00075	.00071	.00442	.03055	33.309	.00098
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0947	.00079	.00131	5.3348	-.00362	-.01206	.00269
SDev	.0170	.00052	.00301	.0221	.00759	.00655	.03316
%RSD	.81101	65.801	230.16	.41477	209.81	54.326	1232.9
#1	2.0933	.00053	.00391	5.3408	-.00478	-.01210	-.01390
#2	2.1154	.00157	-.00130	5.3607	.00563	-.01198	.05244
#3	2.0739	.00053	-.00130	5.3302	-.01281	-.00406	-.01392
#4	2.0961	.00053	.00391	5.3075	-.00251	-.02012	-.01386
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03251	.07517	.00385	.00160	-.00043	-.00337	-.00255
SDev	.03479	.01098	.00590	.00029	.00045	.03111	.00006
%RSD	106.99	14.613	153.30	18.004	103.28	921.71	2.2924
#1	-.08446	.06915	.00322	.00134	-.00061	-.00956	-.00250
#2	-.01113	.06314	.01228	.00145	.00009	.03988	-.00260

#3	-.01520	.08118	-.00115	.00161	-.00095	-.00954	-.00260
#4	-.01927	.08720	.00104	.00200	-.00026	-.03428	-.00250
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .05489
SDev .00106
%RSD 1.9333

#1 .05356
#2 .05466
#3 .05609
#4 .05525

Errors LC Pass
High 100.00
Low -.02000

Analysis Report

08/18/00 06:53:32 AM

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page 1

Method: QUANMET Sample Name: DHGDHP5

Operator: RJG

Run Time: 08/18/00 06:50:27

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00223	-.00600	.03551	.02553	-.00011	-.00000	.20972
SDev	.00074	.00772	.02207	.01631	.00000	.00008	.00061
%RSD	33.053	128.68	62.159	63.876	.00000	8192.5	.29051
#1	-.00184	-.00782	.01218	.01737	-.00011	-.00004	.20930
#2	-.00184	-.00423	.03647	.01738	-.00011	-.00004	.20970
#3	-.00189	.00331	.06495	.05000	-.00011	.00012	.20930
#4	-.00333	-.01526	.02845	.01738	-.00011	-.00004	.21059

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00243	.00112	-.00197	.00047	.00515	6.6653	.00041
SDev	.00105	.00142	.00218	.00046	.00158	.0721	.00035
%RSD	43.253	126.98	110.45	99.525	30.597	1.0821	85.549
#1	-.00261	.00223	-.00437	.00070	.00355	6.5637	.00079
#2	-.00383	.00224	-.00324	-.00023	.00710	6.7329	-.00005
#3	-.00185	-.00074	.00014	.00070	.00568	6.6737	.00041
#4	-.00144	.00075	-.00042	.00070	.00426	6.6906	.00049

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.42973	-.00026	.00261	1.0801	-.00347	-.02409	.00549
SDev	.01794	.00052	.00499	.0047	.00353	.00801	.01386
%RSD	4.1744	201.57	191.43	.43095	101.88	33.259	252.52
#1	.44080	-.00052	-.00130	1.0849	-.00390	-.02006	-.01379
#2	.41312	-.00052	.00912	1.0803	-.00776	-.03611	.01926
#3	.44911	.00052	-.00130	1.0816	-.00308	-.02012	.00826
#4	.41589	-.00052	.00391	1.0738	.00086	-.02007	.00823

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02443	.01204	.00222	.00033	-.00061	-.00624	.00037
SDev	.03180	.03010	.01579	.00006	.00000	.05745	.00456
%RSD	130.16	250.07	712.67	17.073	.00000	919.95	1236.8
#1	-.06416	-.00298	.00978	.00036	-.00061	-.05877	.00255
#2	-.01933	.05719	-.00975	.00025	-.00061	-.04646	.00275
#3	.01326	-.00309	-.01199	.00036	-.00061	.06487	-.00647
#4	-.02749	-.00297	.02082	.00036	-.00061	.01538	.00265

Elem	ZN
Units	ppm
Avge	.01206
SDev	.00139
%RSD	11.499
#1	.01111
#2	.01387
#3	.01243

#4 .01085

Analysis Report

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page 1

Method: QUANMET Sample Name: DHGDHS

Operator: RJG

Run Time: 08/18/00 06:53:35

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04310	1.9241	2.0184	.96200	1.9365	.04835	49.049
SDev	.00086	.0113	.1256	.01557	.0058	.00017	.169
%RSD	1.9920	.58813	6.2234	1.6181	.30143	.35034	.34477
#1	.04386	1.9244	1.9373	.95421	1.9407	.04818	49.101
#2	.04235	1.9376	2.0021	.95422	1.9355	.04833	48.922
#3	.04383	1.9099	1.9334	.98535	1.9286	.04833	48.906
#4	.04237	1.9246	2.2008	.95421	1.9411	.04859	49.265
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04206	.47607	.19053	.25549	1.0836	81.457	.97892
SDev	.00141	.00559	.00264	.00206	.0036	.428	.00392
%RSD	3.3472	1.1743	1.3877	.80647	.32826	.52517	.40047
#1	.04057	.47719	.19335	.25851	1.0831	82.071	.98238
#2	.04390	.47422	.18715	.25387	1.0810	81.377	.97487
#3	.04152	.46978	.18997	.25479	1.0817	81.081	.97626
#4	.04227	.48311	.19166	.25480	1.0888	81.301	.98219
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.348	.47790	.93791	53.339	.47690	.49495	.47299
SDev	.111	.00256	.01370	.142	.01325	.02398	.01912
%RSD	.22429	.53578	1.4609	.26714	2.7781	4.8442	4.0420
#1	49.462	.47894	.95223	53.430	.48497	.50704	.46755
#2	49.232	.47580	.92618	53.282	.47094	.50695	.46745
#3	49.277	.47580	.92618	53.165	.46129	.50683	.45638
#4	49.420	.48103	.94702	53.478	.49039	.45899	.50057
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0206	2.9705	1.7105	.97265	.91382	1.9585	.47753
SDev	.0592	.0090	.0421	.00330	.00325	.0687	.00324
%RSD	2.9312	.30405	2.4587	.33941	.35557	3.5101	.67934
#1	1.9432	2.9630	1.6645	.97576	.91460	2.0265	.48039
#2	2.0858	2.9630	1.7302	.97138	.91183	1.9524	.47472

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Analysis Report

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#3	2.0165	2.9750	1.6886	.96860	.91080	1.8659	.47472
#4	2.0369	2.9811	1.7587	.97489	.91806	1.9893	.43029
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.56553
SDev	.00366
%RSD	.64699

#1	.56559
#2	.56563
#3	.56098
#4	.56994

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

08/18/00 06:59:48 AM

668 855
page 1

Method: QUANMET Sample Name: DHGDHD

Operator: RJG

Run Time: 08/18/00 06:56:42

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1.

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04197	1.9554	2.0081	1.0069	1.9525	.04894	48.216
SDev	.00074	.0110	.0604	.0093	.0129	.00017	.085
%RSD	1.7726	.56238	3.0063	.92858	.65985	.35814	.17544
#1	.04234	1.9412	1.9332	.99315	1.9439	.04887	48.167
#2	.04085	1.9521	1.9980	1.0142	1.9399	.04874	48.137
#3	.04234	1.9650	2.0222	1.0100	1.9675	.04901	48.328
#4	.04234	1.9631	2.0790	1.0100	1.9588	.04914	48.233
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04253	.47233	.18871	.24573	1.0452	81.161	.99125
SDev	.00294	.00074	.00186	.00139	.0043	.494	.00849
%RSD	6.9203	.15704	.98451	.56703	.40750	.60887	.85660
#1	.04289	.47271	.19110	.24457	1.0434	81.098	.98582
#2	.04081	.47272	.18829	.24457	1.0405	80.489	.98246
#3	.04652	.47267	.18885	.24736	1.0505	81.580	1.0004
#4	.03989	.47122	.18660	.24643	1.0462	81.479	.99633
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.924	.47319	.94311	53.435	.46593	.48075	.46157
SDev	.162	.00061	.01155	.350	.00605	.02012	.01920
%RSD	.33159	.12801	1.2249	.65563	1.2980	4.1855	4.1587
#1	48.831	.47266	.92618	53.140	.46159	.47476	.47817
#2	48.756	.47267	.94702	53.137	.46808	.50688	.44500
#3	49.119	.47372	.94702	53.823	.47350	.48279	.47821
#4	48.989	.47372	.95223	53.640	.46055	.45857	.44489
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0347	5.5078	1.8055	.97834	.93103	1.9651	.47505
SDev	.0405	.0361	.0162	.00580	.00481	.1185	.00022
%RSD	1.9926	.65539	.89501	.59256	.51611	6.0308	.04625
#1	2.0694	5.4897	1.8067	.97411	.92705	2.0516	.47473
#2	1.9838	5.4897	1.8131	.97286	.92705	1.9034	.47512

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Analysis Report

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#3	2.0653	5.5619	1.7826	.98489	.93674	2.0763	.47512
#4	2.0205	5.4897	1.8197	.98150	.93328	1.8292	.47522
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.53092
SDev	.00457
%RSD	.85998

#1	.52757
#2	.52674
#3	.53300
#4	.53635

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

08/18/00 07:02:56 AM

668 857
page 1

Method: QUANMET Sample Name: DHGDK

Operator: RJG

Run Time: 08/18/00 06:59:50

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00185	-.00091	.09524	.02355	.00152	.00011	1.4256
SDev	.00210	.00632	.03710	.00785	.00011	.00001	.0072
%RSD	113.52	697.73	38.953	33.322	7.1066	6.4141	.50470
#1	-.00183	.00139	.06880	.01598	.00147	.00010	1.4290
#2	-.00483	-.00971	.07709	.02110	.00147	.00011	1.4152
#3	-.00037	-.00048	.14999	.02259	.00147	.00011	1.4315
#4	-.00037	.00517	.08508	.03453	.00168	.00011	1.4267
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00497	.00076	-.00141	.00372	.05328	35.315	.00030
SDev	.00148	.00209	.00245	.00159	.00209	.244	.00076
%RSD	29.849	277.19	174.09	42.686	3.9280	.69220	253.03
#1	-.00419	.00224	-.00099	.00535	.05542	35.585	-.00005
#2	L-.00662	-.00221	-.00493	.00163	.05044	35.315	-.00060
#3	-.00333	.00223	.00071	.00349	.05328	35.365	.00087
#4	L-.00574	.00076	-.00042	.00442	.05399	34.993	.00098
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.6289	.00106	.00131	6.1353	-.00256	-.03618	.00548
SDev	.0238	.00060	.00673	.0563	.00970	.02542	.01380
%RSD	.90370	.56.999	513.25	.91832	379.52	70.265	251.86
#1	2.6109	.00158	-.00129	6.0793	.00510	-.06831	.00838
#2	2.6635	.00054	.00391	6.2123	-.01638	-.02015	.01910
#3	2.6164	.00158	.00912	6.1139	-.00206	-.01200	.00818
#4	2.6248	.00053	-.00650	6.1356	.00312	-.04425	-.01375
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02532	.09323	.00933	.00324	-.00078	-.02835	-.00127
SDev	.03727	.00003	.01532	.00034	.00045	.04094	.00255
%RSD	147.18	.03489	164.18	10.326	57.378	144.43	201.20
#1	.00116	.09328	-.00760	.00287	-.00026	.01485	.00255
#2	-.08033	.09322	.02963	.00309	-.00130	-.08390	-.00251

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#3	-.00699	.09322	.00771	.00337	-.00061	-.02217	-.00240
#4	-.01514	.09321	.00760	.00364	-.00095	-.02217	-.00271

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.04624
SDev	.00167
%RSD	3.6205

#1	.04806
#2	.04458
#3	.04509
#4	.04724

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-1 0057-025-5 Operator: RJG
Run Time: 08/18/00 07:02:58
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0085	50.228	5.0882	5.0345	4.9867	4.9577	51.147
SDev	.0034	.097	.0770	.0277	.0154	.0129	.312
%RSD	.33769	.19303	1.5127	.55079	.30811	.26016	.61092
#1	1.0119	50.237	5.1233	5.0036	4.9771	4.9535	51.523
#2	1.0042	50.090	5.0323	5.0337	4.9773	4.9415	50.786
#3	1.0104	50.309	5.0175	5.0709	4.9828	4.9698	51.242
#4	1.0074	50.277	5.1799	5.0296	5.0094	4.9661	51.038
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0731	5.0229	4.9857	4.9749	51.922	49.715	5.0260
SDev	.0063	.0158	.0228	.0157	.183	.084	.0283
%RSD	.12408	.31473	.45792	.31626	.35183	.16848	.56299
#1	5.0654	5.0385	5.0089	4.9585	52.036	49.783	4.9905
#2	5.0793	5.0014	4.9543	4.9686	51.649	49.656	5.0458
#3	5.0770	5.0295	4.9915	4.9770	52.010	49.792	5.0161
#4	5.0706	5.0221	4.9881	4.9956	51.992	49.631	5.0515
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.296	4.9976	4.9856	50.193	5.0129	5.0855	5.0914
SDev	.086	.0194	.0089	.216	.0077	.0341	.0393
%RSD	.17149	.38721	.17857	.43114	.15458	.66964	.77212
#1	50.298	5.0136	4.9765	49.939	5.0129	5.1201	5.0581
#2	50.184	4.9697	4.9817	50.183	5.0019	5.0388	5.0917
#3	50.306	5.0063	4.9869	50.182	5.0188	5.0877	5.1465
#4	50.395	5.0011	4.9974	50.468	5.0179	5.0955	5.0693
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0573	5.1248	5.0613	4.9696	4.9679	10.060	4.9992
SDev	.1308	.0402	.0772	.0127	.0119	.092	.0158
%RSD	2.5871	.78483	1.5244	.25470	.23966	.91074	.31658
#1	5.0026	5.1566	5.1213	4.9642	4.9708	10.133	5.0123
#2	4.8998	5.0659	4.9508	4.9576	4.9504	10.125	4.9762

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#3	5.1859	5.1384	5.1063	4.9695	4.9746	9.9354	5.0047
#4	5.1411	5.1384	5.0666	4.9872	4.9760	10.047	5.0036
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	5.0229
SDev	.0086
%RSD	.17080

#1	5.0329
#2	5.0131
#3	5.0193
#4	5.0261

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB1

Operator: RJG

Run Time: 08/18/00 07:06:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00186	-.00326	.03043	.03340	.00005	.00024	.00338
SDev	.00271	.00884	.05955	.01596	.00011	.00012	.00191
%RSD	145.83	271.62	195.68	47.776	200.00	49.176	56.587
#1	-.00482	-.00978	.04463	.01737	-.00011	.00009	.00114
#2	-.00036	.00132	.08914	.03804	.00011	.00023	.00557
#3	-.00336	-.01149	-.05257	.02461	.00011	.00024	.00263
#4	.00110	.00692	.04053	.05361	.00011	.00038	.00417
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00299	.00186	-.00056	-.00070	-.00125	.16922	.00053
SDev	.00318	.00142	.00116	.00054	.00107	.51418	.00073
%RSD	106.55	76.138	206.68	77.322	85.582	303.85	137.13
#1	-.00257	.00075	.00014	-.00116	-.00213	-.46748	.00106
#2	-.00442	.00372	.00071	-.00023	-.00071	.38710	.00126
#3	.00124	.00222	-.00155	-.00023	-.00213	.73400	-.00005
#4	L-.00620	.00076	-.00155	-.00116	-.00000	.02327	-.00014
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SE
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01176	.00026	.00651	-.00266	-.00710	.00409	.00822
SDev	.01365	.00052	.00301	.00319	.00624	.01465	.02389
%RSD	116.07	198.83	46.189	119.97	87.833	358.65	290.68
#1	-.02976	.00052	.00912	-.00416	-.00235	-.01203	.00826
#2	-.01038	.00052	.00912	-.00185	-.00153	-.00386	.04139
#3	.00346	-.00052	.00391	-.00600	-.01003	.01213	-.00286
#4	-.01038	.00052	.00391	.00139	-.01450	.02010	-.01391
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03158	-.00301	-.01308	.00014	-.00078	-.00927	.00012
SDev	.02181	.00004	.00949	.00020	.00020	.08257	.00304
%RSD	69.080	1.2896	72.550	143.24	25.660	890.80	2436.7
#1	-.02751	-.00297	-.01855	-.00003	-.00095	-.05870	.00276
#2	-.06010	-.00297	-.01840	.00025	-.00061	.10191	.00276

#3	-.03158	-.00304	.00108	-.00003	-.00095	.00311	-.00251
#4	-.00713	-.00304	-.01647	.00036	-.00061	-.08340	-.00251
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem ZN
Units ppm
Avge .00134
SDev .00187
%RSD 139.73

#1	.00071
#2	-.00091
#3	.00345
#4	.00210

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHGDM

Operator: RJG

Run Time: 08/18/00 07:09:14

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00249	.10315	.11313	.02912	.02032	.00006	128.04
SDev	.00150	.00711	.03075	.00645	.00022	.00007	.71
%RSD	60.006	6.8904	27.177	22.152	1.0710	109.98	.55539
#1	-.00175	.10636	.13640	.02549	.02037	.00009	127.21
#2	-.00175	.09346	.07163	.03487	.02006	.00009	127.67
#3	-.00474	.10275	.13649	.03424	.02027	.00011	128.63
#4	-.00175	.11002	.10798	.02188	.02058	-.00004	128.63
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00274	.00149	.00056	.00840	.45843	24.848	.00030
SDev	.00373	.00085	.00085	.00046	.00330	.276	.00110
%RSD	136.10	56.960	149.99	5.5259	.71964	1.1111	367.55
#1	.00105	.00222	.00127	.00817	.45541	24.721	-.00134
#2	-.00054	.00222	.00014	.00817	.45612	24.907	.00079
#3	L- .00726	.00076	-.00042	.00909	.45967	24.561	.00068
#4	-.00422	.00075	.00127	.00817	.46251	25.204	.00106
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.1728	.04995	.00267	12.283	-.00471	-.04034	.00546
SDev	.0127	.00052	.00261	.042	.00847	.03381	.00557
%RSD	.30338	.1.0463	97.431	.34515	179.79	83.818	101.94
#1	4.1582	.04969	.00398	12.263	.00488	-.06042	.00827
#2	4.1748	.04969	.00398	12.278	-.00674	-.02020	.00820
#3	4.1887	.04969	-.00123	12.344	-.01522	-.07656	-.00289
#4	4.1693	.05073	.00398	12.248	-.00177	-.00417	.00828
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01713	.18953	.00505	.17458	-.00363	-.02301	.00166
SDev	.03913	.00003	.01292	.00095	.00065	.06723	.00199
%RSD	228.47	.01328	256.07	.54265	18.028	292.15	119.30
#1	.02259	.18954	.01873	.17368	-.00268	.07278	.00266
#2	-.05074	.18954	.00998	.17466	-.00372	-.06317	.00266

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#3	.01038	.18949	.00337	.17587	-.00406	-.02609	-.00131
#4	-.05073	.18954	-.01189	.17412	-.00406	-.07557	.00266

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.26437
SDev	.00297
%RSD	1.1236

#1	.26435
#2	.26576
#3	.26713
#4	.26026

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHGDP

Operator: RJG

Run Time: 08/18/00 07:12:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00286	.08434	.10002	.02087	.01617	.00000	120.53
SDev	.00224	.00624	.05558	.00556	.00000	.00006	.72
%RSD	78.366	7.4046	55.575	26.669	.00000	1758.9	.59633

#1	-.00473	.08246	.09600	.01485	.01617	-.00003	120.81
#2	-.00472	.08623	.14462	.02358	.01617	-.00003	120.28
#3	-.00024	.07693	.02298	.02720	.01617	.00010	119.68
#4	-.00175	.09175	.13646	.01784	.01617	-.00003	121.36

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00269	.00186	.00070	.00678	.57406	26.323	.00038
SDev	.00174	.00281	.00166	.00120	.00442	.274	.00034
%RSD	64.699	151.03	235.38	17.646	.76958	1.0391	89.540

#1	-.00083	-.00222	.00127	.00817	.57050	26.650	.00025
#2	-.00230	.00371	.00239	.00539	.57335	26.033	.00014
#3	L-.00503	.00224	.00070	.00725	.57193	26.430	.00087
#4	-.00261	.00371	-.00155	.00632	.58045	26.177	.00025

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.1077	.07919	-.00122	12.108	-.00715	-.01820	.02755
SDev	.0112	.00100	.00000	.060	.00848	.00777	.02083
%RSD	.27164	1.2617	.05430	.49953	118.60	42.717	75.781

#1	4.1084	.07998	-.00122	12.107	.00255	-.02836	.03041
#2	4.0918	.07789	-.00122	12.058	-.00826	-.01210	.04132
#3	4.1139	.07893	-.00122	12.073	-.01791	-.01213	.04129
#4	4.1167	.07998	-.00122	12.193	-.00499	-.02021	-.00230

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02191	.56249	-.00576	.14032	-.00467	-.03638	-.00131
SDev	.02422	.01388	.01522	.00061	.00017	.04769	.00258
%RSD	110.51	2.4667	264.30	.43221	3.7037	131.08	196.63

#1	.01067	.57450	-.02051	.14052	-.00476	-.06410	-.00260
#2	-.04229	.55044	-.00296	.13998	-.00476	-.08891	-.00260

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#3	-.03822	.55050	-.01390	.13970	-.00441	-.00241	.00256
#4	-.01782	.57450	.01433	.14107	-.00476	.00989	-.00261

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.18458
SDev	.00136
%RSD	.73513

#1	.18482
#2	.18293
#3	.18435
#4	.18622

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHGDX

Operator: RJG

Run Time: 08/18/00 07:15:30

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00367	.02490	.07452	.02035	.02381	.00010	293.49
SDev	.00074	.00487	.05998	.00320	.00032	.00001	1.60
%RSD	20.148	19.558	80.484	15.740	1.3248	13.155	.54565
#1	-.00478	.01795	-.00045	.01928	.02426	.00010	294.46
#2	-.00332	.02728	.14146	.01929	.02373	.00011	293.96
#3	-.00332	.02536	.06040	.02503	.02352	.00011	291.12
#4	-.00327	.02903	.09668	.01778	.02373	.00008	294.44
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00208	.00188	.00169	.00652	.21859	23.666	.00042
SDev	.00076	.00142	.00133	.00047	.00255	.124	.00059
%RSD	36.453	75.685	78.626	7.1237	1.1678	.52332	142.60
#1	-.00206	.00076	.00183	.00629	.21735	23.689	.00041
#2	-.00174	.00077	.00070	.00629	.22232	23.723	.00005
#3	-.00137	.00225	.00071	.00722	.21663	23.765	-.00005
#4	-.00313	.00373	.00351	.00629	.21806	23.486	.00126
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.9103	.06005	-.00257	12.779	.00073	-.00604	.00829
SDev	.0247	.00000	.00499	.047	.00805	.01654	.02386
%RSD	.35734	.00213	193.91	.37086	1096.2	274.04	287.77
#1	6.9234	.06005	-.00127	12.801	-.01039	.01203	.00821
#2	6.9262	.06005	-.00648	12.828	.00765	.00397	-.00270
#3	6.9179	.06005	.00394	12.770	.00019	-.02013	-.01379
#4	6.8736	.06005	-.00648	12.717	.00548	-.02002	.04145
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02081	.09928	.01710	.29609	-.01850	.01350	.00124
SDev	.04639	.00488	.01742	.00113	.00033	.02015	.00490
%RSD	222.88	4.9204	101.90	.38086	1.7896	149.23	394.00
#1	-.05137	.09328	.00561	.29678	-.01825	-.01120	.00256
#2	-.06358	.10525	.02962	.29732	-.01894	.01350	-.00270

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#3	.03826	.09923	-.00105	.29514	-.01859	.01355	-.00250
#4	-.00656	.09936	.03420	.29514	-.01825	.03817	.00762
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .78835
SDev .00852
%RSD 1.0806

#1 .79354
#2 .79128
#3 .77566
#4 .79294

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHGE3

Operator: RJG

Run Time: 08/18/00 07:18:38

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00406	.02123	.08273	.02156	.01843	.00010	176.24
SDev	.00086	.00662	.03987	.00244	.00011	.00001	1.09
%RSD	21.143	31.169	48.196	11.331	.58651	7.5775	.61766
#1	-.00333	.01796	.10510	.01922	.01848	.00011	174.74
#2	-.00482	.01986	.09292	.02497	.01848	.00011	177.28
#3	-.00330	.03090	.02382	.02070	.01827	.00010	176.70
#4	-.00479	.01620	.10908	.02134	.01848	.00010	176.24
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00323	.00039	-.00014	.00675	.18220	23.886	.00081
SDev	.00280	.00306	.00134	.00120	.00148	.374	.00120
%RSD	86.616	787.18	944.02	17.797	.81184	1.5646	147.48
#1	L-.00557	-.00368	-.00211	.00535	.18042	23.376	-.00068
#2	-.00175	.00075	.00071	.00814	.18398	23.977	.00199
#3	-.00002	.00075	.00070	.00629	.18255	24.273	.00153
#4	L-.00559	.00373	.00014	.00722	.18185	23.918	.00041
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.7201	.07126	-.00388	10.535	-.00657	.00199	.01927
SDev	.0177	.00052	.00301	.053	.00223	.04849	.02385
%RSD	.37396	.73169	77.521	.50294	33.981	2435.9	123.80
#1	4.7035	.07047	-.00128	10.609	-.00484	-.04438	.00822
#2	4.7450	.07152	-.00127	10.532	-.00972	-.02007	.05236
#3	4.7146	.07152	-.00648	10.486	-.00659	.00401	.01935
#4	4.7174	.07152	-.00648	10.513	-.00514	.06841	-.00286
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.06063	.09325	.01547	.20071	-.01115	-.03238	-.00008
SDev	.01803	.00004	.03067	.00044	.00045	.06645	.00292
%RSD	29.737	.03997	198.21	.22070	4.0031	205.24	3882.5
#1	-.07999	.09322	.01652	.20098	-.01133	-.01069	-.00261
#2	-.07183	.09322	-.00077	.20115	-.01098	-.09726	-.00260

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#3	-.04332	.09328	-.01186	.20016	-.01167	-.07256	.00245
#4	-.04739	.09328	.05802	.20055	-.01064	.05100	.00245
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge 1.1952
SDev .0059
%RSD .48992

#1 1.1957
#2 1.2017
#3 1.1957
#4 1.1875

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHGES

Operator: RJG

Run Time: 08/18/00 07:21:46

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00216	.02123	.11499	.03883	.02533	.00007	146.70
SDev	.00223	.00484	.02757	.00218	.00043	.00006	.63
%RSD	103.35	22.799	23.978	5.6235	1.7021	93.693	.46563
#1	-.00032	.01433	.11307	.04122	.02478	-.00003	145.94
#2	-.00326	.02166	.08859	.03611	.02531	.00010	146.32
#3	-.00478	.02357	.10488	.03974	.02583	.00011	147.15
#4	-.00029	.02536	.15343	.03823	.02540	.00010	147.39
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00310	.00223	.00056	.00769	.32449	24.624	.00072
SDev	.00221	.00121	.00107	.00120	.00196	.168	.00071
%RSD	71.330	54.248	189.55	15.605	.60271	.68407	98.772
#1	-.00101	.00074	.00071	.00630	.32253	24.577	.00022
#2	-.00441	.00224	-.00099	.00816	.32538	24.518	.00071
#3	L-.00554	.00224	.00127	.00723	.32680	24.527	.00022
#4	-.00146	.00371	.00127	.00909	.32325	24.874	.00172
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.5402	.03687	-.00125	9.7430	-.00292	-.00806	.01097
SDev	.0272	.00052	.00000	.0543	.00555	.03506	.00553
%RSD	.59942	1.4156	.02332	.55725	190.31	435.10	50.351
#1	4.5236	.03609	-.00125	9.7362	-.00126	-.02820	.00818
#2	4.5153	.03713	-.00125	9.6965	-.00739	-.02816	.01926
#3	4.5457	.03713	-.00125	9.8207	.00422	.04422	.00831
#4	4.5762	.03713	-.00125	9.7186	-.00725	-.02009	.00813
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02257	.18499	.02802	.14434	-.00735	-.02788	-.00002
SDev	.02156	.00575	.02038	.00074	.00045	.04979	.00298
%RSD	95.514	3.1075	72.716	.51549	6.0753	178.61	12882.
#1	-.02665	.18346	.04059	.14424	-.00752	-.08653	-.00260
#2	-.05109	.17751	.01658	.14353	-.00718	.02462	.00255

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#3	-.00219	.18947	.00560	.14533	-.00787	-.00007	-.00260
#4	-.01035	.18954	.04933	.14424	-.00683	-.04952	.00256

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.21172
SDev	.00064
%RSD	.30096

#1	.21171
#2	.21175
#3	.21250
#4	.21094

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHGE7

Operator: RJG

Run Time: 08/18/00 07:24:54

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00216	.01568	.10490	.02108	.01961	.00007	134.07
SDev	.00188	.00380	.06495	.00367	.00015	.00013	.49
%RSD	87.191	24.267	61.915	17.394	.78740	195.39	.36750
#1	-.00180	.01613	.08061	.01800	.01953	-.00003	133.87
#2	-.00177	.01062	.02786	.02523	.01984	.00010	133.72
#3	-.00029	.01608	.13323	.01799	.01953	-.00004	133.91
#4	-.00477	.01986	.17789	.02310	.01953	.00024	134.80
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00232	.00112	-.00056	.02186	.32413	24.907	.00055
SDev	.00189	.00254	.00186	.00117	.00196	.553	.00073
%RSD	81.852	226.31	330.34	5.3543	.60394	2.2188	140.57
#1	.00028	-.00222	-.00155	.02023	.32609	24.298	-.00050
#2	-.00331	.00372	.00127	.02209	.32324	25.161	.00105
#3	-.00218	.00223	-.00268	.02209	.32538	24.628	.00079
#4	-.00405	.00076	.00071	.02302	.32182	25.542	.00095
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.2544	.02670	.00005	11.411	-.00168	-.00407	.00824
SDev	.0239	.00000	.00261	.038	.00855	.01135	.00906
%RSD	.56063	.00455	5374.4	.33325	510.03	279.16	109.94
#1	4.2191	.02670	-.00125	11.398	-.01398	.00387	-.00291
#2	4.2689	.02670	-.00125	11.416	.00466	-.00399	.00825
#3	4.2689	.02670	.00396	11.368	.00357	.00400	.00832
#4	4.2606	.02670	-.00125	11.459	-.00096	-.02015	.01928
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.05517	.15792	.02091	.12951	-.00761	-.04646	-.00000
SDev	.02023	.00577	.01647	.00047	.00033	.03087	.00301
%RSD	36.679	3.6545	78.769	.36066	4.3519	66.442	1687500.
#1	-.07961	.15338	.01429	.12904	-.00718	-.08660	-.00261
#2	-.05109	.16547	.04496	.12958	-.00787	-.01250	.00256

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#3	-.03072	.15344	.00778	.12931	-.00752	-.03723	.00265
#4	-.05925	.15939	.01658	.13013	-.00787	-.04950	-.00260

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .28686
SDev .00271
%RSD .94404

#1	.29039
#2	.28461
#3	.28486
#4	.28759

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHGEC

Operator: RJG

Run Time: 08/18/00 07:28:01

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00293	.03680	.08157	.01933	.03037	.00006	221.31
SDev	.00074	.00226	.02507	.00529	.00037	.00013	1.17
%RSD	25.346	6.1300	30.733	27.359	1.2201	212.75	.52830
#1	-.00182	.03642	.11300	.01192	.03056	-.00004	221.37
#2	-.00330	.03991	.08458	.02281	.02982	-.00004	221.82
#3	-.00330	.03635	.07650	.02344	.03056	.00010	222.37
#4	-.00330	.03451	.05220	.01916	.03056	.00023	219.66
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00404	-.00110	.00267	.02300	.15910	26.612	-.00055
SDev	.00118	.00390	.00098	.00000	.00184	.222	.00010
%RSD	29.285	355.86	36.500	.01510	1.1534	.83496	17.284
#1	-.00238	.00075	.00183	.02300	.15839	26.380	-.00060
#2	-.00495	-.00666	.00183	.02300	.15982	26.879	-.00060
#3	-.00484	-.00072	.00352	.02300	.16123	26.701	-.00060
#4	-.00401	.00224	.00352	.02300	.15697	26.490	-.00041
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SE
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.5851	.03943	.00002	11.335	-.00673	-.01213	.01920
SDev	.0179	.00052	.00499	.027	.00677	.01614	.01563
%RSD	.31991	1.3190	20964.	.23990	100.59	133.08	81.380
#1	5.5920	.04021	-.00649	11.361	-.01118	-.02009	.04134
#2	5.5782	.03917	.00393	11.322	.00298	-.02034	.00818
#3	5.6059	.03917	-.00128	11.353	-.01156	-.02016	.01911
#4	5.5644	.03917	.00393	11.302	-.00718	.01208	.00819
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00365	.19706	.02532	.22554	-.01306	-.00452	.00258
SDev	.05242	.00301	.02277	.00084	.00028	.04101	.00010
%RSD	1434.2	1.5268	89.935	.37228	2.1629	907.19	3.7513
#1	.01366	.19555	.00574	.22576	-.01306	-.01070	.00246
#2	-.03930	.20157	.04276	.22576	-.01271	.05112	.00266

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#3	-.05152	.19556	.04719	.22631	-.01306	-.01073	.00256
#4	.06254	.19556	.00558	.22435	-.01340	-.04778	.00266
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN,
Units	ppm
Avge	.46578
SDev	.00477
%RSD	1.0246

#1	.47054
#2	.46251
#3	.46917
#4	.46093

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHGEE

Operator: RJG

Run Time: 08/18/00 07:31:09

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00108	.01848	.10608	.02644	.01517	.00003	113.34
SDev	.00191	.00911	.07090	.00710	.00011	.00008	.45
%RSD	176.92	49.307	66.840	26.866	.71247	267.73	.39331
#1	-.00330	.01063	.08484	.02490	.01512	-.00004	113.93
#2	-.00182	.02727	.19822	.02554	.01512	.00010	112.87
#3	.00113	.02543	.02804	.03619	.01533	.00011	113.38
#4	-.00033	.01061	.11322	.01915	.01512	-.00004	113.19
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00335	.00224	.00155	.01720	.14811	26.001	.00031
SDev	.00295	.00271	.00117	.00047	.00123	.119	.00039
%RSD	88.018	121.30	75.827	2.7111	.83023	.45819	126.41
#1	.00025	.00075	.00014	.01743	.14775	25.990	-.00022
#2	L-.00657	.00521	.00295	.01743	.14989	25.838	.00060
#3	-.00468	.00372	.00183	.01743	.14705	26.109	.00025
#4	-.00239	-.00073	.00126	.01650	.14776	26.067	.00060
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.9568	.02743	-.00519	7.2658	.00053	-.01807	.01105
SDev	.0168	.00052	.00260	.0642	.00792	.01527	.02281
%RSD	.42504	1.9022	50.211	.88304	1479.9	84.504	206.42
#1	3.9700	.02769	-.00649	7.3203	.00818	-.02813	.03044
#2	3.9423	.02664	-.00649	7.1993	.00290	.00410	-.01381
#3	3.9423	.02769	-.00128	7.2224	.00160	-.02001	.03038
#4	3.9728	.02769	-.00649	7.3212	-.01054	-.02822	-.00283
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01692	.10830	.01651	.12658	-.00700	-.00140	.00119
SDev	.06838	.02624	.01875	.00118	.00060	.02923	.00253
%RSD	404.00	24.224	113.59	.93353	8.5533	2086.1	212.05
#1	-.09637	.09328	.02097	.12762	-.00752	-.02302	.00245
#2	.03808	.14743	.04045	.12521	-.00718	-.02308	.00246

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#3	.04215	.09322	-.00309	.12598	-.00614	.03879	-.00260
#4	-.05156	.09930	.00770	.12751	-.00718	.00171	.00246
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.17867
SDev	.00207
%RSD	1.1566

#1	.17934
#2	.17742
#3	.18127
#4	.17666

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHGEG

Operator: RJG

Run Time: 08/18/00 07:34:17

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00182	.02303	.12726	.03590	.04001	.00006	246.31
SDev	.00121	.00476	.02329	.00122	.00037	.00013	1.79
%RSD	66.707	20.659	18.301	3.4034	.93269	195.48	.72665
#1	-.00184	.01625	.12130	.03440	.04053	-.00003	243.65
#2	-.00330	.02712	.09679	.03739	.03970	-.00004	247.05
#3	-.00033	.02350	.14548	.03589	.04001	.00023	247.03
#4	-.00181	.02526	.14546	.03590	.03979	.00010	247.51
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00364	-.00184	.00056	.00977	.21025	26.306	-.00060
SDev	.00095	.00142	.00116	.00046	.00209	.187	.00000
%RSD	26.195	77.237	206.91	4.7476	.99521	.71073	.00000
#1	-.00247	-.00073	-.00042	.00907	.21025	26.041	-.00060
#2	-.00411	-.00221	-.00042	.01000	.21309	26.473	-.00060
#3	-.00465	-.00072	.00126	.01000	.20954	26.388	-.00060
#4	-.00330	-.00369	.00183	.01000	.20812	26.320	-.00060
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.6592	.08300	-.00518	10.074	-.00301	-.00411	.01932
SDev	.0180	.00085	.00499	.033	.00478	.01138	.02380
%RSD	.31792	1.0270	96.325	.32957	159.15	276.89	123.22
#1	5.6502	.08196	-.01169	10.123	.00065	.00397	.01931
#2	5.6834	.08300	-.00127	10.064	-.00935	-.00409	.04134
#3	5.6419	.08404	-.00648	10.054	-.00404	-.02021	-.01374
#4	5.6612	.08300	-.00127	10.054	.00073	.00390	.03036
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.06056	.11883	.00893	.26080	-.01539	-.00479	.00119
SDev	.06893	.00302	.02416	.00043	.00052	.04993	.00266
%RSD	113.82	2.5412	270.43	.16461	3.3708	1043.0	223.81
#1	-.07176	.11728	.04284	.26100	-.01582	-.03567	-.00281
#2	-.14509	.12336	.00138	.26132	-.01479	.00136	.00255

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#3	.02194	.11734	-.01418	.26045	-.01582	.06318	.00246
#4	-.04732	.11735	.00570	.26045	-.01513	-.04801	.00256
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .43546
SDev .00478
%RSD 1.0968

#1 .43022
#2 .43438
#3 .43549
#4 .44177

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHGEH

Operator: RJG

Run Time: 08/18/00 07:37:24

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00399	.04237	.12376	.02077	.06773	.00010	274.93
SDev	.00149	.00412	.02930	.00173	.00050	.00000	1.38
%RSD	37.238	9.7270	23.675	8.3359	.73742	.27707	.50367
#1	-.00474	.03999	.09641	.02183	.06700	.00009	273.14
#2	-.00474	.04747	.14906	.01821	.06805	.00010	275.27
#3	-.00176	.04379	.10044	.02183	.06783	.00010	274.80
#4	-.00474	.03822	.14913	.02120	.06805	.00010	276.49
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00160	.00259	.00225	.00770	.43813	21.534	.00253
SDev	.00105	.00142	.00133	.00093	.00196	.350	.00167
%RSD	65.379	54.702	59.069	12.072	.44645	1.6272	65.873
#1	-.00218	.00222	.00127	.00724	.43689	21.447	.00404
#2	-.00004	.00370	.00408	.00909	.43902	21.946	.00218
#3	-.00222	.00371	.00239	.00724	.43618	21.108	.00033
#4	-.00196	.00074	.00127	.00723	.44044	21.633	.00358
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.8017	.10237	.00137	12.184	-.00427	.00196	.00270
SDev	.0568	.00060	.00521	.062	.00535	.02112	.01426
%RSD	.83468	.58929	380.83	.50818	125.07	1079.4	528.39
#1	6.7435	.10289	.00918	12.092	-.01054	.02004	-.00299
#2	6.8570	.10289	-.00124	12.227	.00093	-.01211	-.01380
#3	6.7629	.10185	-.00124	12.211	-.00681	-.02011	.01924
#4	6.8432	.10185	-.00124	12.205	-.00067	.02001	.00836
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.04061	.09930	.01929	.64641	-.01695	.01455	.00261
SDev	.02316	.00491	.03062	.00327	.00017	.04082	.00010
%RSD	57.046	4.9458	158.71	.50604	1.0204	280.52	3.8075
#1	-.01413	.09328	.05371	.64151	-.01686	-.02559	.00276
#2	-.03042	.10531	.01867	.64791	-.01686	.03616	.00256

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#3	-.05080	.09930	.02539	.64830	-.01686	-.01325	.00256
#4	-.06708	.09930	-.02059	.64791	-.01721	.06088	.00256
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.49186
SDev	.00148
%RSD	.30008

#1	.49114
#2	.49408
#3	.49113
#4	.49111

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-2

Operator: RJG

Run Time: 08/18/00 07:40:32

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0065	49.760	5.0305	4.9980	4.9294	4.9371	51.532
SDev	.0040	.147	.0771	.0305	.0253	.0194	.307
%RSD	.39797	.29609	1.5332	.61107	.51273	.39216	.59473

#1	1.0102	49.567	5.1254	4.9723	4.8939	4.9125	51.809
#2	1.0058	49.819	4.9368	5.0278	4.9471	4.9395	51.363
#3	1.0089	49.915	5.0246	5.0210	4.9480	4.9597	51.769
#4	1.0012	49.741	5.0351	4.9711	4.9286	4.9365	51.186

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1054	5.0258	4.9919	4.8992	51.858	49.261	4.9046
SDev	.0265	.0240	.0194	.0277	.164	.142	.0430
%RSD	.51952	.47735	.38916	.56534	.31704	.28856	.87663

#1	5.1143	5.0295	5.0039	4.8581	51.814	49.309	4.8423
#2	5.1267	5.0191	4.9870	4.9166	51.832	49.081	4.9407
#3	5.1141	5.0562	5.0101	4.9148	52.089	49.233	4.9143
#4	5.0666	4.9985	4.9667	4.9073	51.699	49.419	4.9211

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.843	5.0013	4.9830	49.450	5.0390	5.1100	5.0722
SDev	.183	.0151	.0108	.352	.0362	.0761	.0394
%RSD	.36632	.30246	.21591	.71123	.71868	1.4901	.77593

#1	49.670	5.0021	4.9713	48.928	5.0912	5.2167	5.0148
#2	49.938	4.9979	4.9817	49.664	5.0249	5.0797	5.0914
#3	50.052	5.0209	4.9974	49.652	5.0318	5.1047	5.1024
#4	49.711	4.9843	4.9817	49.558	5.0081	5.0389	5.0803

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9726	5.1292	5.0875	4.9213	4.9436	10.061	4.9872
SDev	.0858	.0079	.0236	.0209	.0145	.072	.0146
%RSD	1.7262	.15469	.46308	.42514	.29311	.71500	.29188

#1	5.0591	5.1321	5.0818	4.8933	4.9275	9.9623	4.9838
#2	5.0143	5.1262	5.1171	4.9345	4.9493	10.135	4.9879

#3	4.8602	5.1384	5.0909	4.9398	4.9607	10.070	5.0063
#4	4.9569	5.1200	5.0602	4.9176	4.9369	10.075	4.9711
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem ZN
Units ppm
Avge 5.0105
SDev .0139
%RSD .27783

#1 5.0182
#2 5.0050
#3 5.0251
#4 4.9938

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB2

Operator: RJG

Run Time: 08/18/00 07:43:40

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00150	-.00049	.00207	.04530	.00002	.00024	.00299
SDev	.00187	.00401	.01702	.01180	.00026	.00000	.00271
%RSD	124.82	817.36	821.67	26.047	1133.4	.06165	90.466
#1	-.00187	-.00605	-.01613	.03442	-.00011	.00024	.00263
#2	-.00336	-.00056	.00410	.03592	-.00011	.00024	-.00040
#3	.00110	.00143	.02435	.05723	.00042	.00024	.00616
#4	-.00187	.00321	-.00404	.05362	-.00011	.00024	.00358
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00061	-.00037	-.00126	.00023	.00160	.21787	.00069
SDev	.00194	.00306	.00134	.00161	.00196	.49784	.00055
%RSD	319.94	830.49	106.04	694.43	122.65	228.50	79.955
#1	.00177	-.00074	-.00154	-.00116	-.00071	.25172	.00060
#2	.00017	-.00371	-.00211	-.00024	.00071	-.35748	-.00005
#3	-.00233	.00371	.00071	.00256	.00284	.85246	.00115
#4	-.00203	-.00074	-.00211	-.00023	.00355	.12480	.00106
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00000	-.00026	.00651	.00450	-.00189	-.02611	.03031
SDev	.02309	.00052	.00301	.00532	.00720	.00767	.01803
%RSD	.00000	201.89	46.182	118.25	381.55	29.381	59.501
#1	-.01315	-.00052	.00912	-.00139	-.00657	-.02005	.05232
#2	-.01592	-.00052	.00912	.00600	-.00805	-.02020	.00815
#3	.03391	.00052	.00391	.01108	.00782	-.02801	.03041
#4	-.00484	-.00052	.00391	.00231	-.00074	-.03618	.03037
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00203	.03757	-.00478	.00008	-.00052	.00618	-.00246
SDev	.02290	.02707	.00785	.00028	.00077	.01851	.00006
%RSD	1126.3	72.059	164.36	343.07	147.82	299.52	2.3156
#1	.01731	.05111	-.00085	-.00030	-.00095	.01547	-.00241
#2	-.01528	-.00304	.00114	.00013	-.00130	-.02159	-.00241

#3	-.02749	.05110	-.00314	.00036	.00043	.01541	-.00250
#4	.01732	.05110	-.01626	.00013	-.00026	.01543	-.00251
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00082
SDev	.00082
%RSD	100.46

#1	.00014
#2	.00070
#3	.00201
#4	.00044

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHGEM

Operator: RJG

Run Time: 08/18/00 07:46:48

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00051	1.0473	.07536	.02850	.02336	.00029	64.309
SDev	.00148	.0028	.02051	.00520	.00031	.00008	.303
%RSD	288.67	.26409	27.220	18.232	1.3130	27.584	.47165
#1	.00023	1.0496	.09868	.02537	.02373	.00022	63.989
#2	-.00274	1.0460	.08243	.02547	.02330	.00022	64.659
#3	.00023	1.0497	.04999	.02694	.02342	.00035	64.135
#4	.00022	1.0441	.07035	.03622	.02299	.00035	64.452
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00215	.00663	.00408	.01440	8.6318	26.593	.00158
SDev	.00349	.00419	.00092	.00000	.0281	.232	.00022
%RSD	162.00	63.243	22.540	.02012	.32563	.87419	13.952
#1	.00219	.00958	.00296	.01440	8.6133	26.295	.00145
#2	L-.00593	.00664	.00408	.01440	8.6630	26.625	.00180
#3	-.00370	.00070	.00408	.01439	8.6474	26.591	.00172
#4	-.00117	.00959	.00521	.01440	8.6034	26.862	.00134
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.1818	.05124	.00520	10.448	-.00251	.01561	.02473
SDev	.0186	.00052	.00737	.070	.00287	.01380	.01102
%RSD	.58303	1.0134	141.69	.67232	114.14	88.407	44.575
#1	3.1673	.05202	.01040	10.452	-.00228	.01770	.01920
#2	3.2060	.05099	.00520	10.450	.00087	.00152	.01930
#3	3.1673	.05098	-.00522	10.531	-.00614	.00943	.04126
#4	3.1867	.05097	.01040	10.359	-.00249	.03379	.01915
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02106	1.0529	.01424	.15702	.02542	.01609	.00785
SDev	.02233	.0078	.01708	.00065	.00114	.02725	.00014
%RSD	106.07	.73764	119.97	.41464	4.4953	169.36	1.8137
#1	-.00888	1.0559	.01585	.15661	.02534	-.02390	.00794
#2	-.03320	1.0439	-.01038	.15771	.02395	.03739	.00785

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#3	.00343	1.0619	.02470	.15743	.02672	.02524	.00764
#4	-.04558	1.0499	.02678	.15634	.02568	.02563	.00795
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.16383
SDev	.00324
%RSD	1.9765

#1	.16350
#2	.16099
#3	.16843
#4	.16238

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHGEP

Operator: RJG

Run Time: 08/18/00 07:49:56

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00248	.01842	.11780	.04015	.02263	.00013	135.35
SDev	.00085	.00489	.03612	.00288	.00011	.00006	.77
%RSD	34.289	26.534	30.666	7.1769	.47765	43.036	.56967
#1	-.00176	.01804	.06416	.04158	.02268	.00011	134.47
#2	-.00173	.01424	.13707	.04159	.02247	.00009	136.20
#3	-.00319	.01604	.12886	.04159	.02268	.00022	135.74
#4	-.00324	.02538	.14112	.03582	.02268	.00011	134.99
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00312	.00372	.00056	.01073	.51419	23.452	.00026
SDev	.00266	.00210	.00054	.00047	.00242	.228	.00050
%RSD	85.166	56.542	95.180	4.3399	.47031	.97121	193.43
#1	.00049	.00223	.00014	.01003	.51081	23.215	-.00030
#2	-.00358	.00224	.00070	.01096	.51649	23.630	.00087
#3	-.00348	.00372	.00126	.01096	.51507	23.300	.00005
#4	L-.00591	.00669	.00014	.01096	.51436	23.664	.00041
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.8904	.04475	.00398	12.354	-.00007	.01004	.01376
SDev	.0211	.00052	.00425	.054	.01198	.03034	.02294
%RSD	.54302	1.1662	106.77	.43555	17900.	302.16	166.73
#1	3.9091	.04449	-.00123	12.412	-.00944	.03615	.01927
#2	3.9036	.04449	.00398	12.295	-.00716	.03618	.04127
#3	3.8620	.04553	.00398	12.324	-.00068	-.01211	-.01385
#4	3.8870	.04449	.00919	12.385	.01701	-.02005	.00834
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.05466	.13989	.01988	.21898	-.00830	-.03290	.00137
SDev	.02640	.02711	.01823	.00030	.00033	.05570	.00494
%RSD	48.300	19.377	91.731	.13566	3.9893	169.30	361.23
#1	-.03838	.09923	-.00744	.21942	-.00856	-.06372	-.00260
#2	-.02614	.15344	.02766	.21888	-.00856	.04740	.00266

#3	-.07503	.15351	.02959	.21888	-.00821	-.03913	.00782
#4	-.07911	.15338	.02969	.21876	-.00787	-.07615	-.00240
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.18066
SDev	.00254
%RSD	1.4058

#1	.17856
#2	.18349
#3	.18212
#4	.17847

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHGET
Run Time: 08/18/00 07:53:04
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Operator: RJG

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00434	.08011	.13238	.01905	.09579	.00013	329.35
SDev	.00074	.00787	.03450	.00106	.00026	.00007	1.51
%RSD	17.123	9.8235	26.058	5.5852	.27404	52.742	.45924
#1	-.00471	.07695	.10404	.02065	.09566	.00010	328.32
#2	-.00471	.08243	.13237	.01852	.09566	.00023	327.87
#3	-.00323	.07131	.11219	.01851	.09566	.00009	330.12
#4	-.00471	.08975	.18095	.01853	.09618	.00009	331.08
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00261	.00259	.00352	.00771	.60064	25.062	.00037
SDev	.00110	.00142	.00122	.00093	.00470	.196	.00074
%RSD	42.051	54.784	34.580	12.051	.78165	.78375	201.73
#1	-.00417	.00074	.00352	.00725	.59745	24.941	.00060
#2	-.00257	.00370	.00239	.00911	.60029	25.280	.00049
#3	-.00194	.00222	.00296	.00725	.59745	24.857	-.00068
#4	-.00175	.00370	.00521	.00725	.60739	25.170	.00106
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.5165	.18458	.00400	13.530	-.00169	-.00008	.02756
SDev	.0042	.00052	.00737	.029	.00255	.03509	.01051
%RSD	.05524	.28388	184.33	.21076	150.91	42630.	38.150
#1	7.5186	.18431	-.00642	13.515	.00021	-.02828	.03039
#2	7.5103	.18432	.00400	13.547	-.00118	.01200	.01934
#3	7.5186	.18432	.00921	13.499	-.00038	-.02825	.01925
#4	7.5186	.18536	.00921	13.561	-.00541	.04420	.04124
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01166	.18804	.01235	.61506	-.02067	.00407	.00266
SDev	.02872	.00301	.01726	.00186	.00000	.06265	.00014
%RSD	246.38	1.5992	139.78	.30252	.00000	1540.6	5.3654
#1	-.04222	.18954	.01017	.61405	-.02067	.02265	.00246
#2	-.01777	.18954	-.00956	.61476	-.02067	.04731	.00266

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#3	-.01370	.18954	.01668	.61366	-.02067	.03499	.00276
#4	.02706	.18353	.03210	.61776	-.02067	-.08869	.00277
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.35225
SDev	.00596
%RSD	1.6907

#1	.35184
#2	.34442
#3	.35402
#4	.35871

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHGEW

Operator: RJG

Run Time: 08/18/00 07:56:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00130	.02945	.10826	.02540	.03607	.00010	98.034
SDev	.00187	.00631	.06744	.00176	.00030	.00000	.398
%RSD	144.19	21.415	62.291	6.9314	.84032	.13994	.40581
#1	-.00316	.02898	.03529	.02396	.03581	.00010	97.736
#2	-.00167	.02714	.07179	.02398	.03633	.00010	98.615
#3	.00130	.03826	.14064	.02757	.03581	.00010	97.828
#4	-.00167	.02343	.18534	.02610	.03633	.00009	97.959
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00383	.00074	.00084	.01028	.76961	24.552	.00033
SDev	.00339	.00209	.00148	.00047	.00536	.127	.00064
%RSD	88.459	281.88	175.62	4.5327	.69628	.51655	195.67
#1	L-.00843	-.00073	.00014	.01005	.76588	24.501	.00014
#2	-.00055	-.00075	-.00042	.01005	.77583	24.408	-.00022
#3	-.00225	.00370	.00296	.01098	.76447	24.594	.00126
#4	-.00412	.00074	.00070	.01005	.77228	24.704	.00014
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SE
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.6060	.03517	.00012	11.600	.00074	-.00218	.01103
SDev	.0270	.00000	.00261	.100	.00600	.01663	.00553
%RSD	.74817	.00599	2263.6	.85942	815.51	763.88	50.129
#1	3.5880	.03517	-.00119	11.540	.00159	-.01227	.00833
#2	3.6461	.03517	-.00119	11.687	-.00601	-.02032	.00821
#3	3.5963	.03517	-.00119	11.492	-.00104	.01197	.00826
#4	3.5935	.03517	.00402	11.682	.00840	.01191	.01932
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.04177	.10080	.01279	.14849	-.00579	-.00468	.00258
SDev	.02957	.00576	.01489	.00117	.00049	.01428	.00005
%RSD	70.793	5.7140	116.39	.78737	8.4431	304.94	1.9447
#1	-.02956	.09328	-.00745	.14786	-.00579	.00772	.00256
#2	-.00916	.10531	.01880	.14977	-.00614	-.01709	.00256

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#3	-.04993	.10531	.01223	.14720	-.00510	-.01701	.00256
#4	-.07843	.09930	.02760	.14911	-.00614	.00765	.00266
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.19619
SDev	.00344
%RSD	1.7514

#1	.19110
#2	.19798
#3	.19853
#4	.19713

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHGF9

Operator: RJG

Run Time: 08/18/00 07:59:20

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00186	.00140	.11858	.02922	.00158	.00004	1.4249
SDev	.00121	.00922	.06032	.01971	.00022	.00008	.0111
%RSD	65.165	656.72	50.865	67.439	13.725	193.30	.77633
#1	-.00038	.00692	.19861	.01383	.00147	.00011	1.4232
#2	-.00186	-.00229	.05273	.01744	.00147	-.00003	1.4154
#3	-.00186	.01072	.11749	.02831	.00190	.00011	1.4407
#4	-.00335	-.00973	.10549	.05730	.00147	-.00003	1.4201
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00340	.00001	-.00112	.00418	.03694	37.521	.00030
SDev	.00173	.00191	.00186	.00046	.00225	.292	.00049
%RSD	50.821	19710.	165.39	11.069	6.0842	.77777	162.96
#1	-.00199	-.00222	.00127	.00441	.03907	37.684	.00033
#2	-.00402	.00075	-.00098	.00442	.03623	37.506	-.00005
#3	-.00202	.00223	-.00155	.00349	.03836	37.777	.00098
#4	L-.00557	-.00073	-.00323	.00441	.03410	37.117	-.00005
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.8413	.00132	.00131	5.6203	.00007	.00803	-.00556
SDev	.0159	.00052	.00673	.0227	.00463	.02496	.01665
%RSD	.55892	39.564	514.19	.40349	6554.0	310.96	299.41
#1	2.8545	.00158	-.00130	5.5985	.00386	.02809	.00833
#2	2.8185	.00158	.00391	5.6258	-.00405	.01204	-.02501
#3	2.8490	.00157	-.00651	5.6498	-.00382	-.02809	.00828
#4	2.8434	.00053	.00912	5.6073	.00429	.02006	-.01383
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00907	.09021	.01529	.00436	-.00095	-.00345	-.00256
SDev	.04494	.00347	.02897	.00019	.00049	.06576	.00013
%RSD	495.55	3.8488	189.45	4.4240	51.426	1908.8	5.0118
#1	.01742	.09322	-.01635	.00446	-.00061	.06452	-.00260
#2	.00926	.08720	.05348	.00407	-.00164	-.07141	-.00251

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#3	.01334	.09321	.00770	.00446	-.00061	.03978	-.00271
#4	-.07630	.08720	.01635	.00446	-.00095	-.04667	-.00241
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.05199
SDev	.00174
%RSD	3.3506

#1	.05248
#2	.05412
#3	.05001
#4	.05135

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHGFH

Operator: RJG

Run Time: 08/18/00 08:02:28

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00074	.00876	.13168	.01747	.00131	.00004	1.3551
SDev	.00074	.00618	.05012	.00122	.00018	.00008	.0063
%RSD	99.831	70.604	38.059	6.9859	13.585	192.94	.46832
#1	-.00186	.00505	.07698	.01747	.00116	-.00003	1.3481
#2	-.00037	.00505	.10130	.01747	.00147	.00011	1.3516
#3	-.00037	.01793	.17417	.01897	.00147	-.00003	1.3618
#4	-.00037	.00699	.17427	.01598	.00116	.00011	1.3590
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00240	-.00111	-.00070	.00767	.05115	38.646	-.00020
SDev	.00305	.00074	.00218	.00093	.00101	.180	.00053
%RSD	127.46	67.065	310.70	12.109	1.9654	.46560	258.66
#1	L-.00661	-.00072	-.00324	.00720	.05044	38.386	.00052
#2	.00005	-.00074	.00183	.00720	.05044	38.665	-.00060
#3	-.00267	-.00222	.00014	.00906	.05258	38.767	-.00014
#4	-.00036	-.00074	-.00155	.00720	.05115	38.767	-.00060
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.7929	.00288	.00131	6.2659	.00020	-.00206	-.00282
SDev	.0099	.00052	.00521	.0505	.00358	.02114	.02020
%RSD	.35619	18.104	397.66	.80625	1793.3	1024.8	716.29
#1	2.7798	.00367	.00391	6.1989	-.00096	-.02012	.01926
#2	2.7908	.00262	.00391	6.2548	.00056	.02005	-.01391
#3	2.7991	.00262	.00392	6.3037	.00488	.01199	.00831
#4	2.8019	.00262	-.00650	6.3061	-.00368	-.02018	-.02494
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03450	.09322	.02078	.00215	-.00061	.00569	-.00255
SDev	.04614	.00000	.02648	.00025	.00040	.07302	.00010
%RSD	133.75	.00139	127.45	11.643	65.983	1282.5	3.9861
#1	-.06811	.09322	.01869	.00200	-.00026	-.04682	-.00251
#2	.02152	.09322	.02947	.00243	-.00095	.11383	-.00250

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#3	-.07625	.09322	-.01417	.00227	-.00026	-.02212	-.00250
#4	-.01514	.09321	.04911	.00189	-.00095	-.02211	-.00271
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.05683
SDev	.00064
%RSD	1.1327

#1	.05684
#2	.05683
#3	.05762
#4	.05604

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHXCX

Operator: RJG

Run Time: 08/18/00 08:05:36

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00326	.10682	.13045	.03384	.01969	.00010	193.19
SDev	.00120	.00910	.02428	.00171	.00033	.00001	.74
%RSD	36.914	8.5142	18.609	5.0587	1.6650	7.1428	.38427
#1	-.00325	.10809	.10407	.03256	.01932	.00009	192.69
#2	-.00179	.10645	.13660	.03256	.01984	.00011	192.53
#3	-.00474	.09528	.16093	.03404	.02006	.00009	193.39
#4	-.00325	.11746	.12021	.03618	.01953	.00010	194.15
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00168	.00112	.00310	.01280	.36160	24.618	.00071
SDev	.00156	.00254	.00133	.00076	.00209	.284	.00094
%RSD	92.924	225.78	42.933	5.9318	.57843	1.1517	132.60
#1	-.00093	-.00222	.00296	.01280	.36018	24.484	.00153
#2	.00008	.00075	.00127	.01187	.36373	24.307	-.00050
#3	-.00344	.00372	.00408	.01373	.35947	24.958	.00068
#4	-.00245	.00224	.00408	.01280	.36302	24.721	.00123
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.4668	.03792	.00396	12.179	-.00408	.00193	.02471
SDev	.0329	.00052	.00602	.060	.00454	.01372	.03657
%RSD	.60248	1.3733	151.85	.49555	111.17	712.70	147.98
#1	5.4177	.03714	.00917	12.123	-.00746	.00385	.03013
#2	5.4786	.03818	-.00125	12.154	-.00701	-.00407	.06331
#3	5.4869	.03819	.00917	12.263	.00238	.02003	-.02490
#4	5.4841	.03818	-.00125	12.176	-.00424	-.01212	.03030
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01229	.24066	.02865	.20935	-.00994	.01500	.00137
SDev	.04815	.03047	.01662	.00100	.00000	.04207	.00265
%RSD	391.86	12.662	58.004	.47705	.00000	280.50	193.14
#1	-.05100	.25572	.04289	.20826	-.00994	-.00042	.00276
#2	-.01025	.24963	.04305	.20880	-.00994	.04899	-.00260

#3	-.04285	.19556	.01639	.21045	-.00994	.04897	.00276
#4	.05494	.26173	.01228	.20990	-.00994	-.03755	.00256
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.23126
SDev	.00135
%RSD	.58417

#1	.22930
#2	.23202
#3	.23144
#4	.23227

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-3 Operator: RJG
Run Time: 08/18/00 08:08:44
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0110	50.109	5.0840	5.0371	4.9682	4.9924	52.171
SDev	.0055	.221	.1046	.0304	.0157	.0267	.374
%RSD	.54699	.44200	2.0577	.60360	.31553	.53385	.71642
#1	1.0152	50.248	5.1948	5.0284	4.9819	5.0116	52.496
#2	1.0121	50.220	4.9441	5.0804	4.9756	5.0064	52.136
#3	1.0137	50.189	5.0819	5.0091	4.9693	4.9982	52.390
#4	1.0029	49.779	5.1151	5.0306	4.9460	4.9532	51.658
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1409	5.0805	5.0420	4.9355	52.381	49.256	4.9259
SDev	.0249	.0275	.0319	.0149	.269	.400	.0150
%RSD	.48464	.54067	.63352	.30157	.51297	.81196	.30421
#1	5.1361	5.1079	5.0737	4.9456	52.598	49.284	4.9283
#2	5.1619	5.0723	5.0461	4.9483	52.416	49.614	4.9444
#3	5.1578	5.0960	5.0506	4.9325	52.517	49.436	4.9081
#4	5.1076	5.0458	4.9977	4.9157	51.994	48.692	4.9230
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.340	5.0570	5.0313	49.808	5.0984	5.1374	5.1274
SDev	.215	.0283	.0368	.147	.0403	.0274	.0705
%RSD	.42775	.56048	.73047	.29551	.78984	.53344	1.3748
#1	50.514	5.0805	5.0443	49.890	5.1447	5.1461	5.1579
#2	50.447	5.0586	5.0547	49.941	5.0774	5.1051	5.2126
#3	50.370	5.0722	5.0495	49.794	5.1170	5.1699	5.0694
#4	50.029	5.0167	4.9765	49.607	5.0544	5.1286	5.0695
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0168	5.1629	5.1779	4.9642	4.9852	10.073	5.0341
SDev	.0715	.0003	.0426	.0175	.0227	.113	.0253
%RSD	1.4259	.00625	.82314	.35178	.45597	1.1251	.50246
#1	5.0693	5.1631	5.2048	4.9788	5.0054	10.176	5.0498
#2	5.0851	5.1629	5.1307	4.9697	4.9884	9.9309	5.0397

#3	4.9387	5.1631	5.2219	4.9697	4.9943	10.152	5.0499
#4	4.9740	5.1624	5.1542	4.9389	4.9528	10.034	4.9968
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem ZN
Units ppm
Avge 5.0479
SDev .0265
%RSD .52407

#1 5.0710
#2 5.0592
#3 5.0515
#4 5.0101

Errors LC Pass
High 5.5000
Low 4.5000

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Method: QUANMET Sample Name: CCB3
Run Time: 08/18/00 08:11:52
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Operator: RJG

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00038	.00599	.02330	.02797	.00029	.00031	.00332
SDev	.00172	.00969	.02186	.00900	.00050	.00014	.00469
%RSD	447.96	161.66	93.815	32.178	175.96	43.570	141.30
#1	-.00187	.01421	-.00413	.02824	.00042	.00024	.00288
#2	-.00187	-.00785	.04470	.04017	-.00011	.00024	-.00094
#3	.00110	.01062	.03644	.02462	-.00011	.00024	.00139
#4	.00110	.00698	.01620	.01887	.00094	.00052	.00994
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00107	.00297	-.00042	.00140	.00266	.06134	.00042
SDev	.00187	.00148	.00138	.00089	.00293	.23937	.00137
%RSD	175.06	49.964	329.45	63.793	109.83	390.21	323.07
#1	-.00297	.00223	-.00098	.00163	.00213	.03173	-.00115
#2	.00110	.00222	.00071	.00070	-.00071	-.01058	.00022
#3	-.00017	.00223	-.00211	.00070	.00284	-.17134	.00044
#4	-.00223	.00519	.00071	.00256	.00640	.39556	.00218
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00208	-.00052	.00781	.00358	-.00587	-.02205	-.00283
SDev	.01590	.00000	.00499	.00756	.00886	.00404	.00904
%RSD	765.94	.25521	63.822	211.33	151.02	18.317	319.05
#1	-.00208	-.00052	.01433	-.00139	.00086	-.02005	.00818
#2	-.00761	-.00052	.00912	-.00277	-.01391	-.02006	-.01397
#3	-.00761	-.00052	.00391	.01386	-.01310	-.02810	-.00286
#4	.02560	-.00052	.00391	.00462	.00268	-.01997	-.00269
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03360	.04058	-.00767	.00038	-.00017	-.02475	-.00243
SDev	.03712	.02922	.01823	.00022	.00103	.06567	.00010
%RSD	110.47	72.001	237.76	58.897	597.21	265.32	3.9689
#1	.00102	.05712	.01425	.00036	.00009	.05249	-.00230
#2	-.08454	.05111	-.00334	.00013	-.00130	-.05869	-.00240

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#3	-.03564	-.00304	-.01204	.00036	-.00061	-.09580	-.00251
#4	-.01526	.05712	-.02954	.00068	.00112	.00300	-.00250
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00460
SDev	.00116
%RSD	25.224

#1	.00478
#2	.00402
#3	.00345
#4	.00614

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHP13B

Operator: RJG

Run Time: 08/18/00 08:15:00

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00150	.00096	.01017	.03639	.00015	.00011	.55797
SDev	.00187	.00316	.03824	.01502	.00039	.00011	.00214
%RSD	124.83	328.44	375.98	41.260	255.34	102.04	.38259
#1	-.00187	-.00041	-.04455	.01737	-.00011	.00024	.55739
#2	-.00187	-.00229	.02033	.03443	.00073	.00011	.55952
#3	.00110	.00512	.04460	.05361	-.00011	.00011	.55977
#4	-.00336	.00144	.02031	.04018	.00011	-.00003	.55520
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00079	.00223	.00014	-.00046	.00213	.37229	.00007
SDev	.00228	.00171	.00284	.00117	.00174	.43157	.00084
%RSD	290.20	76.817	1982.8	252.95	81.834	115.92	1224.8
#1	-.00292	.00372	.00071	-.00023	.00213	.46325	.00033
#2	.00001	.00074	.00296	.00070	.00213	.77631	.00052
#3	.00206	.00370	.00071	-.00023	.00426	.48863	.00060
#4	-.00230	.00075	-.00380	-.00209	-.00001	-.23903	-.00117
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01176	.00026	.00261	.02159	-.00537	.00006	-.00009
SDev	.01438	.00052	.00261	.00372	.00394	.01674	.03173
%RSD	122.26	198.78	99.996	17.234	73.293	27934.	34703.
#1	-.00761	-.00052	.00391	.02217	-.01055	.00409	-.02503
#2	.00069	.00052	.00391	.02402	-.00227	.02019	.04131
#3	-.00761	.00052	.00391	.02402	-.00235	-.02000	.00823
#4	-.03252	.00052	-.00130	.01616	-.00631	-.00404	-.02488
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.04481	.09622	.01203	.00033	-.00104	-.00929	-.00253
SDev	.03232	.00347	.01463	.00006	.00044	.03191	.00006
%RSD	72.122	3.6101	121.62	17.073	41.944	343.55	2.1978
#1	-.03564	.09923	.03379	.00036	-.00095	-.04638	-.00250
#2	-.08861	.09322	.00348	.00036	-.00061	.02780	-.00250

#3	-.01119	.09923	.00332	.00036	-.00095	.00304	-.00250
#4	-.04380	.09322	.00754	.00025	-.00164	-.02161	-.00261

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem ZN
Units ppm
Avge H.02633
SDev .00158
%RSD 5.9834

#1 H.02595
#2 H.02535
#3 H.02866
#4 H.02538

Errors LC High
High .02000
Low -.02000

Method: QUANMET Sample Name: DHP13C
Run Time: 08/18/00 08:18:08
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Operator: RJG

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04381	1.9006	1.8860	.95296	1.9378	.05013	48.724
SDev	.00121	.0130	.0458	.00283	.0064	.00017	.335
%RSD	2.7706	.68173	2.4279	.29702	.32860	.33150	.68980
#1	.04379	1.8859	1.9257	.95621	1.9352	.04997	48.284
#2	.04382	1.9024	1.8444	.95408	1.9344	.05009	48.713
#3	.04531	1.8968	1.9255	.94961	1.9342	.05009	49.097
#4	.04233	1.9171	1.8483	.95195	1.9473	.05037	48.804
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.03904	.47418	.18758	.23807	1.0118	47.164	.96994
SDev	.00377	.00208	.00303	.00076	.0051	.360	.00496
%RSD	9.6611	.43923	1.6145	.31941	.50253	.76372	.51161
#1	L.03467	.47124	.18660	.23714	1.0043	47.109	.96766
#2	L.03927	.47419	.18378	.23807	1.0129	46.813	.96812
#3	L.03837	.47567	.19054	.23807	1.0150	47.067	.96665
#4	.04384	.47564	.18940	.23900	1.0150	47.668	.97733
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	47.369	.47344	.94701	48.051	.48299	.49089	.45881
SDev	.153	.00215	.00951	.243	.01084	.01965	.03170
%RSD	.32335	.45502	1.0044	.50481	2.2440	4.0026	6.9098
#1	47.173	.47057	.93659	48.009	.47779	.50687	.43387
#2	47.389	.47370	.94180	47.932	.49599	.48281	.43419
#3	47.369	.47579	.95222	47.859	.48703	.46686	.50032
#4	47.547	.47371	.95743	48.403	.47116	.50702	.46686
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9246	8.4812	1.8623	.96999	.93907	1.8480	.47383
SDev	.0466	.0800	.0431	.00343	.00372	.0409	.00272
%RSD	2.4228	.94386	2.3169	.35397	.39598	2.2151	.57351
#1	1.9348	8.3774	1.9071	.96787	.93501	1.8173	.46976
#2	1.9063	8.4737	1.8480	.96760	.93743	1.8171	.47501

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#3	1.9837	8.5038	1.8089	.96951	.94020	1.8542	.47523
#4	1.8737	8.5700	1.8853	.97498	.94366	1.9036	.47533
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass
High	2.4000					2.4000	.60000
Low	1.6000					1.6000	.40000

Elem	ZN
Units	ppm
Avge	.49011
SDev	.00343
%RSD	.69923

#1	.48504
#2	.49185
#3	.49245
#4	.49112

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DHLX6

Operator: RJG

Run Time: 08/18/00 08:21:16

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01143	98.630	.16694	.10239	.66676	.00722	17.861
SDev	.00194	.264	.02551	.00622	.00192	.00007	.120
%RSD	16.932	.26752	15.285	6.0774	.28792	1.0355	.67101
#1	.00948	98.662	.19650	.10164	.66881	.00715	17.740
#2	.01088	98.323	.17534	.09731	.66492	.00729	17.777
#3	.01410	98.574	.15993	.09928	.66535	.00715	17.948
#4	.01125	98.962	.13596	.11134	.66798	.00727	17.979
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00621	.07593	.70054	.55520	181.69	13.254	.14538
SDev	.00106	.00255	.00654	.00193	.64	.258	.00036
%RSD	17.097	3.3591	.93278	.34688	.35356	1.9498	.24934
#1	.00700	.07370	.69210	.55680	181.35	12.910	.14592
#2	.00723	.07374	.69998	.55399	180.98	13.536	.14515
#3	.00516	.07816	.70223	.55314	182.01	13.273	.14526
#4	.00544	.07811	.70786	.55689	182.41	13.299	.14518
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.993	1.7890	.01545	1.4680	.18315	1.2284	.03044
SDev	.086	.0089	.00421	.0066	.01491	.0102	.01049
%RSD	.33148	.50028	27.281	.45265	8.1436	.83046	34.462
#1	25.995	1.7837	.02061	1.4770	.16474	1.2143	.03862
#2	25.934	1.7794	.01534	1.4687	.17753	1.2387	.03868
#3	25.928	1.7943	.01029	1.4617	.19324	1.2304	.02772
#4	26.114	1.7986	.01556	1.4645	.19711	1.2300	.01673
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08654	5.7174	.08310	.15332	6.8531	.29229	.52132
SDev	.05637	.0418	.02598	.00052	.0200	.08503	.00259
%RSD	65.138	.73063	31.260	.33737	.29154	29.091	.49700
#1	.05509	5.6948	.06119	.15310	6.8545	.24946	.52012
#2	.16413	5.7069	.09183	.15315	6.8292	.20376	.52003

#3	.03646	5.7791	.11596	.15294	6.8506	.31679	.51994
#4	.09048	5.6889	.06339	.15409	6.8780	.39915	.52521
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge 1.6401
SDev .0061
%RSD .37316

#1 1.6310
#2 1.6426
#3 1.6446
#4 1.6421

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHLX6P5

Operator: RJG

Run Time: 08/18/00 08:24:24

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00053	20.680	.03315	.02445	.13877	.00152	3.8513
SDev	.00119	.080	.02864	.00036	.00093	.00014	.0293
%RSD	223.35	.38567	86.392	1.4621	.66936	9.1282	.76030

#1	.00200	20.576	.00879	.02411	.13757	.00144	3.8325
#2	.00049	20.661	.06896	.02421	.13862	.00145	3.8243
#3	.00054	20.740	.01131	.02462	.13914	.00145	3.8616
#4	-.00091	20.745	.04353	.02488	.13976	.00172	3.8885

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00237	.01834	.14948	.11485	39.220	2.7626	.02943
SDev	.00115	.00192	.00125	.00094	.186	.2177	.00035
%RSD	48.278	10.447	.83521	.81578	.47461	7.8818	1.1770

#1	.00347	.02057	.14878	.11345	39.045	2.6716	.02941
#2	.00278	.01612	.14822	.11530	39.090	2.5193	.02941
#3	.00248	.01759	.15103	.11532	39.305	3.0270	.02987
#4	.00077	.01907	.14991	.11533	39.442	2.8324	.02903

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.5208	.38021	.00196	.32803	.03218	.25014	.01914
SDev	.0339	.00186	.00520	.00596	.00612	.03432	.00541
%RSD	.61457	.48803	265.46	1.8154	19.025	13.722	28.285

#1	5.4841	.37860	-.00067	.33022	.03478	.22417	.01648
#2	5.5007	.37861	.00975	.32468	.03931	.29637	.01651
#3	5.5422	.38180	-.00063	.32191	.02535	.25611	.02727
#4	5.5561	.38184	-.00061	.33530	.02930	.22393	.01632

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01472	1.2286	.01492	.03162	1.4334	.05348	.10736
SDev	.04091	.0115	.03580	.00006	.0062	.01990	.00255
%RSD	277.95	.93534	239.92	.17807	.43255	37.209	2.3713

#1	.00204	1.2137	.00779	.03165	1.4269	.05832	.11117
#2	.04697	1.2377	-.03153	.03165	1.4296	.03322	.10621
#3	.04753	1.2377	.05160	.03165	1.4372	.04337	.10602
#4	-.03766	1.2256	.03188	.03154	1.4400	.07901	.10602

Elem	ZN
Units	ppm
Avg	.35805
SDev	.00337
%RSD	.94246

#1	.35837
#2	.35364
#3	.35834

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#4 .36186

Method: QUANMET Sample Name: DHLX6S Operator: RJG
Run Time: 08/18/00 08:27:32
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05296	116.67	1.8889	.95277	2.5133	.05349	67.460
SDev	.00064	.83	.0415	.01767	.0228	.00035	.456
%RSD	1.2089	.70974	2.1976	1.8544	.90784	.64808	.67629
#1	.05372	116.47	1.8489	.96982	2.5098	.05343	67.686
#2	.05325	115.60	1.8906	.92796	2.4832	.05304	66.865
#3	.05247	117.18	1.8703	.95666	2.5241	.05382	67.920
#4	.05239	117.45	1.9456	.95664	2.5362	.05369	67.367
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04198	.51631	.81222	.73019	195.62	60.861	1.0720
SDev	.00066	.00520	.00330	.00517	1.22	.316	.0110
%RSD	1.5627	1.0068	.40564	.70870	.62505	.51985	1.0238
#1	.04214	.51929	.81095	.72741	195.70	60.833	1.0674
#2	.04102	.50903	.81039	.72447	193.87	60.529	1.0598
#3	.04233	.51623	.81715	.73305	196.61	60.791	1.0753
#4	.04244	.52068	.81039	.73582	196.27	61.290	1.0855
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	72.959	2.2345	.92011	48.445	.61254	1.5765	.30227
SDev	.436	.0149	.00996	.486	.01997	.0355	.02899
%RSD	.59736	.66681	1.0823	1.0037	3.2593	2.2538	9.5921
#1	72.954	2.2385	.91361	48.188	.61318	1.6149	.34357
#2	72.345	2.2129	.91334	47.930	.58999	1.5512	.29957
#3	73.297	2.2471	.91896	48.631	.63845	1.5980	.28861
#4	73.239	2.2397	.93453	49.032	.60855	1.5417	.27732
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.8965	8.7702	1.8224	1.0788	7.6373	2.1463	.96227
SDev	.0492	.0427	.0597	.0084	.0528	.1150	.00500
%RSD	2.5926	.48698	3.2750	.77640	.69078	5.3589	.51943
#1	1.8326	8.7747	1.8997	1.0773	7.6265	2.1238	.96182
#2	1.8970	8.7084	1.7550	1.0677	7.5670	2.2539	.95537

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#3	1.9042	8.7988	1.8251	1.0840	7.6787	2.2133	.96580
#4	1.9522	8.7988	1.8097	1.0864	7.6770	1.9943	.96609
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge 1.9424
SDev .0154
%RSD .79231

#1 1.9389
#2 1.9241
#3 1.9612
#4 1.9452

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHLX6D

Operator: RJG

Run Time: 08/18/00 08:30:40

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04986	111.54	1.8772	.94631	2.5186	.05399	64.613
SDev	.00169	.46	.0923	.01667	.0068	.00018	.672
%RSD	3.3889	.41042	4.9166	1.7613	.27182	.33075	1.0403

#1	.04767	111.07	1.9059	.93319	2.5131	.05388	63.775
#2	.04939	111.26	1.7452	.93804	2.5142	.05385	64.375
#3	.05121	112.04	1.9603	.97050	2.5281	.05424	65.055
#4	.05118	111.81	1.8973	.94350	2.5190	.05399	65.243

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04879	.50906	.82053	.76214	165.50	60.025	1.0710
SDev	.00342	.00669	.00514	.00277	1.01	.275	.0043
%RSD	7.0040	1.3141	.62668	.36370	.60742	.45872	.39912

#1	.05148	.50022	.81490	.76203	164.29	59.759	1.0727
#2	.05184	.50760	.81771	.75931	165.05	60.165	1.0732
#3	.04489	.51494	.82336	.76592	166.31	60.343	1.0736
#4	.04696	.51347	.82616	.76128	166.34	59.835	1.0646

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	72.144	2.0168	.91691	48.912	.61008	1.6328	.28025
SDev	.380	.0142	.02280	.130	.02447	.0269	.02277
%RSD	.52729	.70478	2.4868	.26490	4.0100	1.6472	8.1240

#1	71.695	1.9990	.90370	48.928	.59546	1.6251	.25548
#2	71.963	2.0117	.90382	48.822	.58603	1.6169	.26633
#3	72.486	2.0277	.95089	49.089	.61813	1.6727	.29936
#4	72.431	2.0288	.90922	48.808	.64072	1.6165	.29981

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8773	12.847	1.8246	1.0650	7.5249	1.9928	.95417
SDev	.0597	.089	.0261	.0033	.0361	.0337	.00681
%RSD	3.1800	.68987	1.4294	.30915	.47968	1.6913	.71409

#1	1.8598	12.739	1.7867	1.0620	7.4843	2.0146	.94487
#2	1.8618	12.811	1.8393	1.0628	7.5051	1.9449	.95520

#3	1.8244	12.926	1.8439	1.0691	7.5601	1.9937	.96128
#4	1.9630	12.914	1.8286	1.0663	7.5500	2.0181	.95532
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge 2.2893
SDev .0133
%RSD .58176

#1 2.2755
#2 2.2837
#3 2.3068
#4 2.2913

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHLKR Operator: RJG
 Run Time: 08/18/00 08:33:48
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00587	50.512	.11223	.04587	.48879	.00421	8.6052
SDev	.00188	.128	.00583	.00035	.00250	.00011	.0159
%RSD	32.096	.25371	5.1975	.76089	.51079	2.5352	.18468
#1	.00516	50.583	.11149	.04607	.49071	.00421	8.5966
#2	.00806	50.497	.10441	.04566	.48830	.00422	8.5974
#3	.00658	50.338	.11787	.04550	.48546	.00434	8.6290
#4	.00367	50.630	.11514	.04624	.49071	.00408	8.5978
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00208	.04032	.40014	.43096	103.66	6.4389	.06954
SDev	.00080	.00282	.00296	.00141	.18	.1511	.00053
%RSD	38.353	7.0021	.74009	.32627	.17345	2.3467	.76029
#1	.00094	.03994	.40211	.43167	103.77	6.4199	.07009
#2	.00236	.03848	.39761	.42979	103.55	6.3184	.06889
#3	.00223	.04443	.40324	.42979	103.47	6.6568	.06935
#4	.00280	.03845	.39761	.43260	103.86	6.3607	.06982
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.221	.89322	.01420	.84818	.10021	.87489	.01149
SDev	.037	.00089	.00424	.01007	.00782	.01851	.04121
%RSD	.25694	.10011	29.827	1.1876	7.8000	2.1160	358.65
#1	14.250	.89325	.01422	.85442	.10787	.89090	.01150
#2	14.231	.89319	.01939	.85349	.09682	.89095	.00041
#3	14.167	.89213	.01417	.83317	.09086	.85915	.06658
#4	14.234	.89432	.00902	.85165	.10528	.85858	-.03252
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05006	10.760	.04471	.08243	3.9762	.13669	.34728
SDev	.06272	.045	.02442	.00040	.0123	.08267	.00224
%RSD	125.29	.41920	54.626	.47926	.30996	60.478	.64516
#1	.00959	10.782	.06110	.08275	3.9850	.21900	.34921
#2	.01717	10.782	.04356	.08231	3.9712	.18420	.34544

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#3	.14326	10.692	.06357	.08193	3.9611	.11079	.34922
#4	.03020	10.782	.01060	.08275	3.9874	.03277	.34524
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .70525
SDev .00424
%RSD .60175

#1 .69957
#2 .70543
#3 .70982
#4 .70616

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHLAT
Run Time: 08/18/00 08:36:56
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Operator: RJG

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01041	88.156	.18949	.06338	.65734	.00607	12.322
SDev	.00258	.337	.03296	.02035	.00342	.00001	.025
%RSD	24.764	.38218	17.395	32.117	.52031	.22602	.20062

#1	.00990	87.679	.15550	.05384	.65306	.00608	12.294
#2	.01312	88.430	.21723	.04899	.66072	.00605	12.327
#3	.01154	88.349	.21826	.05719	.65936	.00608	12.313
#4	.00708	88.167	.16699	.09349	.65621	.00608	12.353

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00026	.05756	.64814	.58806	157.19	11.431	.11903
SDev	.00307	.00140	.00189	.00309	.36	.216	.00073
%RSD	1170.0	2.4264	.29228	.52593	.22845	1.8885	.61394

#1	.00000	.05575	.64589	.58453	156.66	11.666	.11873
#2	.00030	.05715	.64870	.59110	157.47	11.361	.11990
#3	-.00338	.05867	.64758	.59016	157.30	11.167	.11823
#4	.00413	.05866	.65039	.58645	157.33	11.530	.11943

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.154	1.1938	.03132	1.1742	.14484	1.3788	.05118
SDev	.087	.0026	.00655	.0056	.00693	.0163	.01551
%RSD	.39397	.21888	20.909	.47687	4.7862	1.1850	30.310

#1	22.045	1.1915	.03254	1.1726	.14158	1.4033	.06218
#2	22.247	1.1949	.03266	1.1726	.14822	1.3705	.05114
#3	22.194	1.1917	.03785	1.1823	.13697	1.3707	.06216
#4	22.128	1.1969	.02222	1.1694	.15260	1.3707	.02926

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06987	4.1298	.07368	.11022	6.0822	.14933	.56923
SDev	.04874	.0271	.03035	.00058	.0203	.07118	.00518
%RSD	69.753	.65607	41.197	.52997	.33455	47.664	.90950

#1	.01043	4.0891	.09888	.10983	6.0534	.06829	.56667
#2	.08588	4.1434	.10100	.11092	6.1008	.20821	.57700

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#3	.12618	4.1433	.04638	.11049	6.0901	.20999	.56678
#4	.05700	4.1433	.04844	.10967	6.0845	.11082	.56648

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .92287
SDev .00475
%RSD .51522

#1	.92082
#2	.92485
#3	.91744
#4	.92837

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHLXW
Run Time: 08/18/00 08:40:04
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Operator: RJG

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01247	90.151	.28419	.08205	.75885	.00991	13.260
SDev	.00260	.515	.04290	.00477	.00335	.00002	.148
%RSD	20.852	.57177	15.096	5.8165	.44121	.17064	1.1147

#1	.00938	89.556	.24168	.07667	.75639	.00994	13.058
#2	.01125	89.903	.25732	.07939	.75565	.00991	13.248
#3	.01461	90.685	.30175	.08614	.76248	.00991	13.339
#4	.01462	90.461	.33600	.08599	.76090	.00990	13.396

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00234	.08320	.89200	.66982	212.27	11.501	.13020
SDev	.00319	.00186	.00789	.00371	1.45	.300	.00073
%RSD	135.95	2.2387	.88506	.55439	.68234	2.6084	.60039

#1	.00207	.08291	.88131	.66874	210.42	11.082	.12937
#2	.00656	.08285	.89088	.66514	211.83	11.488	.13030
#3	.00191	.08127	.89707	.67363	213.46	11.691	.13123
#4	-.00117	.08575	.89876	.67177	213.39	11.742	.12992

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	26.648	1.8035	.02132	1.2048	.17878	1.6810	.05543
SDev	.192	.0145	.00490	.0094	.01264	.0276	.01051
%RSD	.71880	.80481	22.973	.77704	7.0697	1.6439	18.962

#1	26.416	1.7839	.02495	1.2100	.17402	1.6395	.04728
#2	26.609	1.8010	.01996	1.1911	.16314	1.6953	.05810
#3	26.878	1.8140	.02541	1.2114	.19040	1.6944	.06918
#4	26.690	1.8150	.01498	1.2068	.18754	1.6947	.04714

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.14472	10.877	.10546	.12806	7.5986	.28479	.60659
SDev	.01463	.074	.01987	.00072	.0453	.10140	.00638
%RSD	10.110	.68301	18.840	.56171	.59588	35.604	1.0523

#1	.14797	10.779	.07956	.12744	7.5459	.19581	.59794
#2	.13134	10.882	.10602	.12744	7.5763	.41599	.60689

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#3	.13562	10.960	.10833	.12881	7.6413	.31277	.60829
#4	.16395	10.888	.12793	.12854	7.6310	.21459	.61325
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	1.7624
SDev	.0155
%RSD	.87860

#1	1.7407
#2	1.7618
#3	1.7735
#4	1.7736

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM03

Operator: RJG

Run Time: 08/18/00 08:43:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00653	65.374	.11842	.06472	.52256	.00545	11.577
SDev	.00341	.265	.05231	.00726	.00138	.00006	.089
%RSD	52.290	.40465	44.177	11.212	.26423	1.1400	.76534

#1	.00152	65.254	.08272	.06364	.52243	.00536	11.464
#2	.00919	65.401	.19390	.07409	.52190	.00548	11.631
#3	.00753	65.112	.08357	.06472	.52138	.00550	11.551
#4	.00786	65.729	.11348	.05642	.52453	.00547	11.662

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00091	.06831	.49303	.37290	143.89	8.7382	.08714
SDev	.00239	.00141	.00323	.00180	.66	.4012	.00065
%RSD	263.67	2.0609	.65591	.48156	.45892	4.5916	.76000

#1	.00097	.06648	.48881	.37262	143.24	8.1798	.08699
#2	-.00215	.06794	.49556	.37176	144.14	8.9498	.08664
#3	.00371	.06945	.49219	.37171	143.48	8.7298	.08683
#4	.00110	.06939	.49557	.37552	144.70	9.0936	.08811

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.916	1.2149	.01240	1.6383	.14894	.95963	.01258
SDev	.082	.0078	.00998	.0071	.01175	.02377	.01048
%RSD	.41087	.64433	80.449	.43331	7.8883	2.4769	83.265

#1	19.850	1.2069	.00449	1.6317	.14959	.93766	-.00105
#2	19.955	1.2186	.00462	1.6451	.13257	.95352	.02076
#3	19.847	1.2101	.02536	1.6437	.16013	.95389	.02086
#4	20.013	1.2240	.01513	1.6326	.15347	.99343	.00976

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05724	8.0339	.07384	.10047	4.9885	.13322	.43027
SDev	.07091	.0497	.02837	.00040	.0173	.05305	.00438
%RSD	123.88	.61819	38.416	.40098	.34647	39.822	1.0169

#1	.12989	7.9918	.03870	.10014	4.9777	.12135	.42656
#2	.05076	8.0640	.06297	.10064	4.9936	.21100	.43174

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#3	.08569	7.9918	.09573	.10014	4.9722	.10657	.42697
#4	-.03738	8.0882	.09796	.10096	5.0105	.09395	.43581
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	1.1975
SDev	.0073
%RSD	.61065

#1	1.1908
#2	1.1996
#3	1.1927
#4	1.2069

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV?-4

Operator: RJG

Run Time: 08/18/00 08:46:20

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0213	50.346	5.2156	5.0612	4.9964	5.0422	52.923
SDev	.0022	.208	.0631	.0496	.0230	.0237	.297
%RSD	.21876	.41304	1.2105	.97907	.45960	.46994	.56054

#1	1.0245	50.596	5.2878	5.1164	5.0243	5.0746	53.271
#2	1.0197	50.165	5.1671	5.0128	4.9850	5.0292	52.553
#3	1.0213	50.185	5.1584	5.0264	4.9718	5.0207	52.983
#4	1.0199	50.439	5.2491	5.0889	5.0046	5.0444	52.881

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2285	5.1351	5.0993	4.9493	52.791	49.464	4.9236
SDev	.0285	.0278	.0221	.0229	.223	.161	.0269
%RSD	.54452	.54121	.43374	.46176	.42314	.32497	.54571

#1	5.2643	5.1683	5.1255	4.9763	53.090	49.352	4.9535
#2	5.2033	5.1004	5.0720	4.9483	52.566	49.521	4.9260
#3	5.2383	5.1344	5.1041	4.9205	52.696	49.318	4.8882
#4	5.2080	5.1374	5.0957	4.9521	52.813	49.665	4.9263

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.641	5.1135	5.0821	50.040	5.2036	5.2132	5.1804
SDev	.240	.0231	.0206	.254	.0096	.0428	.0469
%RSD	.47420	.45217	.40529	.50762	.18380	.82106	.90451

#1	50.998	5.1443	5.1069	50.349	5.2107	5.2361	5.2244
#2	50.483	5.0889	5.0652	49.990	5.1896	5.1540	5.1252
#3	50.522	5.1067	5.0652	49.734	5.2054	5.2515	5.1582
#4	50.561	5.1140	5.0913	50.086	5.2088	5.2112	5.2137

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0576	5.2342	5.1782	4.9986	4.9987	10.056	5.0806
SDev	.1110	.0127	.0455	.0245	.0189	.127	.0236
%RSD	2.1954	.24240	.87853	.48939	.37892	1.2631	.46373

#1	5.0951	5.2480	5.1811	5.0311	5.0244	10.183	5.1079
#2	5.1833	5.2173	5.1763	4.9849	4.9836	9.9045	5.0528

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#3	5.0329	5.2355	5.2333	4.9755	4.9853	10.002	5.0722
#4	4.9191	5.2358	5.1220	5.0031	5.0016	10.136	5.0895
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem ZN
Units ppm
Avge 5.0967
SDev .0220
%RSD .43130

#1	5.1172
#2	5.0662
#3	5.0970
#4	5.1065

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB4

Operator: RJG

Run Time: 08/18/00 08:49:28

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00076	.00321	.01623	.02814	.00013	.00024	.00357
SDev	.00074	.00867	.02311	.01045	.00039	.00016	.00257
%RSD	98.445	270.15	142.38	37.126	299.71	64.285	72.136
#1	-.00038	-.00048	.01626	.02249	.00011	.00011	.00248
#2	-.00187	-.00050	-.00401	.04380	-.00042	.00011	.00050
#3	-.00038	.01615	.04856	.02313	.00042	.00038	.00507
#4	-.00038	-.00234	.00411	.02314	.00042	.00038	.00621
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00419	.00075	-.00197	-.00116	.00320	-.12269	.00051
SDev	.00285	.00209	.00208	.00076	.00188	.23237	.00043
%RSD	67.995	278.05	105.45	65.424	58.827	189.40	84.145
#1	-.00130	.00223	-.00211	-.00116	.00142	-.34902	.00060
#2	L-.00801	.00076	-.00436	-.00209	.00213	-.19672	.00005
#3	-.00302	.00223	.00071	-.00023	.00355	.20095	.00033
#4	-.00444	-.00221	-.00211	-.00116	.00568	-.14595	.00106
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00761	.00000	.00651	.00854	-.00520	-.00802	.00547
SDev	.00932	.00060	.00301	.00208	.00395	.02669	.02613
%RSD	122.42	20052.	46.181	24.374	75.856	332.82	477.50
#1	-.01315	.00053	.00912	.01016	-.00456	-.01202	-.01383
#2	-.01315	-.00052	.00912	.00970	-.00199	-.01204	.00830
#3	.00623	-.00052	.00391	.00554	-.01091	.02818	-.01397
#4	-.01038	.00052	.00391	.00878	-.00336	-.03620	.04139
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03666	.05712	-.01255	.00019	-.00043	-.00311	-.00246
SDev	.01071	.00000	.02234	.00036	.00035	.07170	.00006
%RSD	29.216	.00123	178.02	190.75	80.000	2304.8	2.2501
#1	-.02750	.05712	-.02084	.00013	-.00061	-.00928	-.00241
#2	-.02749	.05712	-.02730	-.00019	-.00061	-.09579	-.00241

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#3	-.04379	.05712	.02071	.00013	.00009	.01541	-.00250
#4	-.04786	.05712	-.02277	.00068	-.00061	.07722	-.00251

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00058
SDev	.00092
%RSD	159.95

#1	.00045
#2	-.00068
#3	.00127
#4	.00125

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHM06

Operator: RJG

Run Time: 08/18/00 08:54:05

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00831	75.341	.14470	.09024	.60289	.00628	17.856
SDev	.00114	.489	.03712	.00964	.00419	.00007	.150
%RSD	13.668	.64919	25.648	10.680	.69434	1.1880	.84193

#1	.00716	74.628	.16160	.08189	.59667	.00622	17.702
#2	.00751	75.426	.16965	.08256	.60423	.00622	17.764
#3	.00923	75.710	.15806	.10154	.60559	.00635	17.925
#4	.00934	75.599	.08951	.09497	.60507	.00634	18.031

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00444	.08150	.57838	.49905	182.19	11.222	.10885
SDev	.00279	.00187	.00712	.00368	1.26	.419	.00143
%RSD	62.747	2.2991	1.2317	.73775	.69142	3.7319	1.3115

#1	.00457	.08195	.57162	.49358	180.51	10.913	.10772
#2	.00235	.08186	.57387	.50020	181.96	10.854	.10802
#3	.00251	.07887	.58063	.50120	182.96	11.378	.11089
#4	.00834	.08330	.58739	.50124	183.32	11.742	.10884

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	23.901	2.2140	.01162	1.2956	.17702	1.1338	.00297
SDev	.163	.0146	.00511	.0121	.00610	.0265	.03425
%RSD	.68309	.65896	43.962	.93383	3.4452	2.3363	1154.5

#1	23.662	2.1960	.00485	1.2793	.17296	1.1326	-.04653
#2	23.936	2.2090	.01549	1.2936	.17182	1.1157	.00850
#3	23.988	2.2218	.01564	1.3061	.17811	1.1153	.03045
#4	24.019	2.2292	.01048	1.3033	.18520	1.1717	.01955

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00231	4.7504	.07097	.13648	5.5114	.19753	.41269
SDev	.05542	.0680	.02642	.00103	.0353	.05891	.00253
%RSD	2399.1	1.4304	37.221	.75540	.64130	29.823	.62472

#1	-.03675	4.6587	.10287	.13499	5.4599	.24879	.41126
#2	.05264	4.7850	.04415	.13663	5.5169	.14731	.41147

#3	.04713	4.8151	.08155	.13702	5.5356	.24830	.41149
#4	-.05378	4.7430	.05533	.13729	5.5332	.14572	.41656
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge 1.6423
SDev .0111
%RSD .67559

#1 1.6290
#2 1.6376
#3 1.6528
#4 1.6500

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHM07

Operator: RJG

Run Time: 08/18/00 08:57:14

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00697	60.727	.10591	.05970	.51510	.00540	11.837
SDev	.00211	.189	.01689	.00349	.00142	.00008	.036
%RSD	30.230	.31128	15.947	5.8439	.27624	1.4562	.30693
#1	.00686	60.498	.11742	.05923	.51350	.00534	11.789
#2	.00548	60.737	.12305	.05797	.51486	.00547	11.859
#3	.00999	60.713	.09467	.06473	.51508	.00546	11.870
#4	.00556	60.960	.08849	.05687	.51696	.00532	11.830
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00640	.06839	.43803	.39533	131.04	7.4437	.08431
SDev	.00067	.00328	.00313	.00056	.29	.0832	.00088
%RSD	10.483	4.7919	.71463	.14035	.21975	1.1176	1.0398
#1	.00613	.06508	.43479	.39483	130.62	7.3675	.08347
#2	.00611	.06950	.43592	.39487	131.08	7.4268	.08394
#3	.00739	.07246	.44042	.39581	131.16	7.5621	.08432
#4	.00595	.06652	.44098	.39581	131.28	7.4183	.08552
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	17.874	1.7076	.01308	1.5594	.15442	.87702	.01441
SDev	.054	.0048	.00603	.0113	.00549	.01674	.01059
%RSD	.30011	.27946	46.093	.72566	3.5566	1.9093	73.486
#1	17.816	1.7010	.00781	1.5634	.14747	.89524	.00057
#2	17.871	1.7074	.01830	1.5426	.16078	.87905	.02275
#3	17.865	1.7116	.01831	1.5666	.15560	.87913	.02267
#4	17.946	1.7106	.00791	1.5652	.15384	.85464	.01167
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02542	5.3932	.04536	.09505	4.0296	.07473	.33637
SDev	.04126	.0030	.01385	.00026	.0118	.09674	.00299
%RSD	162.32	.05535	30.534	.27375	.29310	129.46	.88795
#1	.04368	5.3977	.06386	.09467	4.0134	-.00441	.33368
#2	.04896	5.3917	.03994	.09510	4.0289	.20096	.33389

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#3	-.03638	5.3917	.04649	.09522	4.0359	.00234	.33905
#4	.04542	5.3917	.03113	.09522	4.0403	.10002	.33885
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	1.5462
SDev	.0071
%RSD	.46088

#1	1.5395
#2	1.5432
#3	1.5462
#4	1.5561

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM0A

Operator: RJG

Run Time: 08/18/00 09:00:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01225	71.558	.23170	.05914	.66673	.00810	15.347
SDev	.00187	.344	.05558	.01696	.00471	.00007	.140
%RSD	15.238	.48036	23.987	28.678	.70608	.87068	.91287
#1	.01048	71.303	.21990	.06623	.66597	.00805	15.187
#2	.01080	71.740	.19460	.03375	.66964	.00817	15.273
#3	.01400	71.950	.31340	.06891	.67091	.00816	15.450
#4	.01372	71.237	.19889	.06768	.66041	.00804	15.478
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00840	.08278	.77266	.61818	187.95	8.9857	.10480
SDev	.00344	.00489	.00569	.00448	.85	.3989	.00120
%RSD	40.907	5.9069	.73610	.72438	.45259	4.4389	1.1411
#1	.01019	.07576	.76421	.61762	186.88	8.5352	.10420
#2	.00962	.08608	.77435	.62237	188.08	8.8482	.10493
#3	.00328	.08309	.77604	.62058	188.95	9.0767	.10641
#4	.01052	.08616	.77603	.61214	187.87	9.4828	.10365
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SE
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	23.983	2.6049	.01638	2.2501	.16772	1.5753	.03848
SDev	.109	.0144	.00960	.0200	.01148	.0276	.03490
%RSD	.45518	.55273	58.620	.88949	6.8424	1.7516	90.686
#1	23.913	2.5871	.01101	2.2520	.15055	1.5513	.00537
#2	24.021	2.6031	.02161	2.2561	.17460	1.5672	.01636
#3	24.118	2.6221	.02695	2.2700	.17301	1.6151	.08257
#4	23.877	2.6072	.00595	2.2224	.17271	1.5676	.04964
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06840	12.630	.08062	.13469	6.5154	.16133	.49440
SDev	.07067	.046	.02269	.00093	.0330	.10465	.00435
%RSD	103.32	.36603	28.141	.69360	.50694	64.866	.87955
#1	.13079	12.595	.05246	.13428	6.4940	.18466	.48913
#2	.12171	12.619	.10291	.13483	6.5297	.06109	.49451

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#3	.03846	12.697	.07268	.13592	6.5549	.10154	.49977
#4	-.01735	12.607	.09445	.13373	6.4830	.29803	.49421
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	1.9269
SDev	.0065
%RSD	.33793

#1	1.9182
#2	1.9260
#3	1.9303
#4	1.9332

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM0E Operator: RJG
Run Time: 08/18/00 09:03:29
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00049	43.534	.03625	.07314	.27998	.00343	10.580
SDev	.00129	.200	.03538	.00396	.00080	.00008	.077
%RSD	264.70	.45868	97.602	5.4170	.28544	2.2583	.72703
#1	-.00114	43.274	.05530	.07270	.27901	.00351	10.515
#2	.00044	43.561	.00790	.06773	.28089	.00337	10.518
#3	.00202	43.539	.07657	.07552	.27975	.00349	10.617
#4	.00065	43.760	.00522	.07660	.28027	.00336	10.671
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00132	.05396	.16157	.11009	98.261	7.5579	.07093
SDev	.00294	.00084	.00180	.00047	.526	.2869	.00014
%RSD	223.04	1.5536	1.1160	.42911	.53517	3.7959	.19972
#1	-.00046	.05323	.16227	.10981	97.673	7.7990	.07083
#2	L-.00536	.05324	.15889	.10984	98.080	7.2322	.07113
#3	-.00108	.05469	.16284	.11079	98.366	7.7990	.07094
#4	.00164	.05468	.16227	.10991	98.925	7.4014	.07083
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.182	5.2732	.00037	1.9334	.08440	.17889	.01560
SDev	.076	.0312	.00522	.0128	.00316	.01891	.01568
%RSD	.39476	.59073	1422.3	.66153	3.7425	10.569	100.48
#1	19.116	5.2381	-.00233	1.9236	.08806	.16509	.01562
#2	19.164	5.2632	-.00226	1.9508	.08265	.16483	.02659
#3	19.155	5.2789	.00820	1.9241	.08103	.20499	-.00657
#4	19.291	5.3125	-.00214	1.9351	.08587	.18064	.02678
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03277	10.517	.03068	.09404	2.2888	.03615	.15452
SDev	.07937	.055	.03799	.00033	.0106	.11101	.00284
%RSD	242.23	.52516	123.82	.34949	.46382	307.10	1.8392
#1	-.07165	10.455	.04866	.09358	2.2757	-.07536	.15215
#2	.05572	10.539	.05749	.09412	2.2881	.00709	.15214

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#3	.02795	10.491	.04207	.09435	2.2898	.18954	.15779
#4	.11905	10.581	-.02551	.09412	2.3016	.02332	.15601
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.68607
SDev	.00224
%RSD	.32651

#1	.68440
#2	.68905
#3	.68655
#4	.68430

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMCF
Run Time: 08/18/00 09:06:37
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Operator: RJG

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00234	47.949	.10021	.06809	.30321	.00382	12.021
SDev	.00179	.277	.04301	.00226	.00202	.00006	.103
%RSD	76.449	.57682	42.924	3.3122	.66671	1.6602	.89739
#1	.00190	47.778	.06341	.06960	.30233	.00384	12.019
#2	.00477	47.684	.16201	.07037	.30106	.00386	11.915
#3	.00048	48.034	.09343	.06670	.30368	.00372	11.981
#4	.00220	48.300	.08200	.06567	.30578	.00384	12.170
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00056	.06173	.18113	.12159	111.37	8.4506	.08100
SDev	.00159	.00269	.00310	.00098	.71	.2204	.00080
%RSD	284.56	4.3568	1.7117	.80798	.64014	2.6084	.98876
#1	-.00087	.06323	.18254	.12110	111.05	8.3744	.08041
#2	-.00064	.06028	.17804	.12107	110.67	8.4590	.08025
#3	.00246	.05876	.17916	.12113	111.42	8.2221	.08191
#4	.00128	.06465	.18479	.12306	112.34	8.7467	.08142
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	22.802	6.6274	.00493	2.2859	.09476	.19743	.01528
SDev	.149	.0452	.00421	.0117	.00761	.01804	.01563
%RSD	.65361	.68203	85.336	.51285	8.0321	9.1390	102.29
#1	22.709	6.6117	.00488	2.2778	.09983	.19162	.01539
#2	22.668	6.5855	.01004	2.2746	.10268	.22387	.02638
#3	22.831	6.6212	-.00027	2.2917	.08746	.18317	-.00686
#4	23.000	6.6913	.00508	2.2995	.08909	.19105	.02620
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01638	9.9273	.01486	.11769	2.5121	.08430	.17582
SDev	.03611	.0563	.01455	.00093	.0185	.01884	.00299
%RSD	220.45	.56730	97.923	.79121	.73670	22.354	1.6982
#1	.04914	9.8837	-.00650	.11787	2.5053	.07823	.17840
#2	-.01296	9.9077	.02414	.11662	2.4942	.10674	.17333

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#3	.04606	9.9077	.02407	.11744	2.5112	.06213	.17313
#4	-.01673	10.010	.01774	.11885	2.5378	.09009	.17840
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .77035
SDev .00213
%RSD .27662

#1	.76948
#2	.77142
#3	.76784
#4	.77268

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMCK

Operator: RJG

Run Time: 08/18/00 09:09:45

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01195	94.979	.16552	.09914	1.9030	.00530	24.165
SDev	.00219	.383	.04296	.00090	.0115	.00001	.143
%RSD	18.330	.40352	25.954	.91311	.60215	.12839	.59213
#1	.01361	94.445	.20324	.10038	1.8926	.00531	24.095
#2	.00940	95.353	.17848	.09860	1.9185	.00530	24.048
#3	.01086	95.095	.17666	.09835	1.9044	.00530	24.151
#4	.01394	95.024	.10370	.09924	1.8965	.00530	24.371
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01581	.08962	.42340	1.8319	163.50	6.9762	.06313
SDev	.00445	.00353	.00420	.0117	.55	.3340	.00052
%RSD	28.128	3.9345	.99130	.63753	.33565	4.7877	.81914
#1	.01150	.09227	.42270	1.8204	162.73	7.1814	.06294
#2	.01329	.08923	.42157	1.8475	163.69	7.0037	.06387
#3	.02158	.08478	.41988	1.8335	163.55	6.4960	.06266
#4	.01688	.09221	.42945	1.8261	164.02	7.2237	.06305
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	22.061	3.2920	.02184	1.2458	.42934	1.8625	.02788
SDev	.094	.0127	.00886	.0116	.01478	.0309	.03251
%RSD	.42455	.38507	40.581	.93270	3.4421	1.6585	116.62
#1	21.929	3.2766	.02303	1.2285	.43317	1.8489	.00583
#2	22.109	3.2894	.01797	1.2507	.41394	1.9044	-.00532
#3	22.142	3.2946	.03357	1.2507	.42216	1.8321	.06080
#4	22.064	3.3072	.01281	1.2535	.44810	1.8644	.05020
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04575	8.2388	.26475	.15440	3.2976	.19292	.80715
SDev	.06631	.0435	.02714	.00073	.0148	.15118	.00257
%RSD	144.93	.52789	10.253	.47176	.44735	78.365	.31837
#1	.04678	8.2252	.28043	.15359	3.2759	.08955	.80330
#2	.10227	8.2132	.24982	.15534	3.3092	.24038	.80836

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#3	.08155	8.2132	.29387	.15447	3.3019	.05645	.80866
#4	-.04759	8.3035	.23486	.15420	3.3033	.38528	.80828
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	3.3191
SDev	.0106
%RSD	.31981

#1	3.3074
#2	3.3199
#3	3.3161
#4	3.3330

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMOM

Operator: RJG

Run Time: 08/18/00 09:12:54

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00231	95.740	.14725	.05969	.81818	.00762	13.735
SDev	.00142	.318	.05810	.00121	.00374	.00006	.099
%RSD	61.584	.33174	39.456	2.0318	.45747	.82650	.72141
#1	.00405	95.525	.08671	.05882	.81729	.00766	13.667
#2	.00289	96.094	.21838	.06127	.82338	.00765	13.865
#3	.00106	95.424	.11602	.05867	.81445	.00752	13.650
#4	.00125	95.915	.16791	.06000	.81760	.00765	13.759
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00103	.09681	.60383	.29627	146.43	8.7488	.14033
SDev	.00311	.00119	.00264	.00056	.63	.1121	.00065
%RSD	302.35	1.2309	.43752	.18751	.43193	1.2815	.47059
#1	-.00168	.09534	.60552	.29669	145.98	8.6705	.14117
#2	.00110	.09826	.60664	.29680	147.26	8.6367	.13997
#3	L-.00515	.09684	.60158	.29576	145.90	8.8652	.13966
#4	.00163	.09680	.60157	.29582	146.59	8.8228	.14051
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	26.070	1.6185	.01148	1.4893	.16244	.59565	.04395
SDev	.074	.0077	.00256	.0068	.02493	.02001	.02383
%RSD	.28296	.47350	22.310	.45812	15.345	3.3588	54.221
#1	26.045	1.6108	.01532	1.4890	.19806	.59784	.03319
#2	26.180	1.6279	.01030	1.4816	.15796	.62146	.07702
#3	26.028	1.6139	.01010	1.4885	.15356	.58993	.04388
#4	26.028	1.6214	.01020	1.4982	.14017	.57335	.02172
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00996	8.3156	.05171	.09437	3.5750	.11045	.22868
SDev	.03386	.0379	.01035	.00057	.0121	.07247	.00264
%RSD	340.01	.45547	20.021	.60218	.33752	65.619	1.1550
#1	.02709	8.3081	.05542	.09412	3.5689	.04717	.22714
#2	.02232	8.3683	.04047	.09522	3.5917	.12047	.23092

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#3	.03097	8.2780	.06422	.09412	3.5641	.20861	.22574
#4	-.04055	8.3081	.04671	.09401	3.5751	.06554	.23090
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge 1.4273
SDev .0093
%RSD .64832

#1 1.4213
#2 1.4344
#3 1.4175
#4 1.4359

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHMON

Operator: RJG

Run Time: 08/18/00 09:16:01

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00959	84.567	.31342	.10483	1.7638	.00546	21.447
SDev	.00257	.521	.06536	.00416	.0126	.00005	.131
%RSD	26.794	.61660	20.854	3.9650	.71232	.93963	.61293
#1	.00731	84.537	.29263	.09989	1.7680	.00549	21.363
#2	.00862	84.173	.31259	.10975	1.7559	.00538	21.313
#3	.01326	84.246	.24629	.10356	1.7517	.00549	21.516
#4	.00917	85.313	.40217	.10611	1.7795	.00546	21.596
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02040	.09042	.40786	1.7007	146.82	6.3987	.06102
SDev	.00090	.00253	.00222	.0121	.80	.2269	.00091
%RSD	4.4298	2.8013	.54476	.71145	.54621	3.5457	1.4892
#1	.01919	.08968	.40518	1.7040	146.61	6.1660	.06007
#2	.02126	.08971	.40688	1.6974	146.08	6.2422	.06155
#3	.02025	.08822	.40969	1.6863	146.63	6.5891	.06045
#4	.02089	.09407	.40968	1.7152	147.96	6.5976	.06201
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.849	2.9094	.01284	1.2170	.48406	2.0397	.02926
SDev	.087	.0158	.00519	.0052	.01154	.0245	.02019
%RSD	.41821	.54451	40.444	.43048	2.3831	1.1988	69.006
#1	20.844	2.9028	.01020	1.2123	.48719	2.0196	.04039
#2	20.769	2.8943	.01012	1.2230	.46760	2.0682	.01810
#3	20.810	2.9091	.02062	1.2128	.49456	2.0519	.00720
#4	20.971	2.9314	.01040	1.2197	.48690	2.0190	.05134
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04051	13.563	.26349	.13702	3.0733	.12451	.89076
SDev	.06517	.076	.01346	.00077	.0194	.12404	.00843
%RSD	160.87	.55834	5.1075	.56460	.63059	99.625	.94612
#1	-.04459	13.539	.24984	.13702	3.0715	.29041	.89070
#2	.05180	13.484	.25406	.13647	3.0570	.08579	.88039

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#3	.04103	13.563	.27596	.13647	3.0636	-.00636	.89091
#4	.11379	13.665	.27410	.13811	3.1009	.12819	.90103

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	4.9780
SDev	.0249
%RSD	.50070

#1	4.9678
#2	4.9589
#3	4.9706
#4	5.0146

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMCR Operator: RJG
Run Time: 08/18/00 09:19:10
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01413	102.15	.19689	.06312	.87100	.01051	16.323
SDev	.00282	.67	.06401	.00299	.00717	.00007	.085
%RSD	19.978	.65345	32.508	4.7332	.82266	.63912	.52384
#1	.01719	101.22	.12262	.06098	.86056	.01045	16.389
#2	.01436	102.13	.27676	.06214	.87294	.01045	16.205
#3	.01035	102.75	.18035	.06755	.87683	.01056	16.383
#4	.01461	102.49	.20785	.06183	.87368	.01057	16.337
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00541	.09909	.97731	.69027	218.14	11.767	.14956
SDev	.00315	.00442	.00683	.00688	1.02	.200	.00146
%RSD	58.179	4.4627	.69843	.99621	.46782	1.6965	.97574
#1	.00645	.10105	.97534	.68043	217.03	11.987	.14786
#2	.00608	.09798	.97027	.69162	217.63	11.539	.15037
#3	.00820	.10382	.98660	.69641	219.34	11.869	.15111
#4	.00090	.09351	.97702	.69263	218.57	11.674	.14889
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	31.211	1.9437	.02871	2.3862	.23593	2.0327	.04056
SDev	.169	.0077	.00660	.0235	.01623	.0269	.02922
%RSD	.54065	.39434	22.999	.98542	6.8789	1.3254	72.021
#1	30.988	1.9379	.03636	2.3531	.23353	2.0417	.07927
#2	31.215	1.9370	.03124	2.3901	.21597	1.9925	.02382
#3	31.398	1.9531	.02629	2.4085	.23885	2.0483	.04602
#4	31.240	1.9467	.02096	2.3933	.25536	2.0483	.01314
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.13574	8.4701	.09861	.16242	8.2681	.20284	.66396
SDev	.04118	.0371	.01077	.00128	.0468	.06736	.00487
%RSD	30.335	.43842	10.918	.79079	.56555	33.207	.73302
#1	.16947	8.4760	.08733	.16065	8.2044	.16488	.66024
#2	.15068	8.4219	.11320	.16240	8.2660	.22051	.66013

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#3	.14704	8.5123	.09596	.16366	8.3141	.28931	.67038
#4	.07576	8.4701	.09795	.16295	8.2878	.13665	.66510

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	2.1367
SDev	.0177
%RSD	.82696

#1	2.1367
#2	2.1127
#3	2.1546
#4	2.1429

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP13B Rerun Operator: RJG
Run Time: 08/18/00 09:22:18
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00113	.00192	.02234	.02713	-.00005	.00001	.57125
SDev	.00192	.00318	.02251	.01157	.00011	.00006	.00775
%RSD	169.70	165.13	100.76	42.654	200.00	551.75	1.3569

#1	-.00041	.00521	.00009	.01739	-.00011	-.00001	.56399
#2	-.00338	.00152	.01228	.03357	-.00011	-.00001	.56921
#3	-.00184	-.00227	.05268	.04018	-.00011	.00010	.56956
#4	.00110	.00323	.02433	.01738	.00011	-.00003	.58223

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00212	.00149	-.00127	-.00046	.00586	-.04865	-.00014
SDev	.00187	.00192	.00175	.00089	.00147	.16091	.00044
%RSD	88.496	128.58	138.28	192.30	25.021	330.74	322.03

#1	-.00208	-.00074	-.00211	-.00116	.00710	-.22210	-.00060
#2	.00052	.00222	-.00323	-.00116	.00426	-.06134	.00033
#3	-.00360	.00372	-.00042	-.00023	.00497	-.07827	.00014
#4	-.00330	.00075	.00071	.00070	.00711	.16711	-.00041

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00554	.00000	-.00130	.01847	-.01157	-.02007	-.00288
SDev	.00969	.00060	.00425	.00445	.00355	.03288	.00899
%RSD	175.00	49331.	326.82	24.066	30.673	163.80	311.52

#1	-.00208	.00052	-.00651	.01986	-.01515	-.06035	-.00290
#2	-.01038	-.00052	-.00130	.01986	-.01047	-.02004	.00816
#3	-.01592	.00052	-.00130	.01201	-.00711	.02019	-.01385
#4	.00623	-.00052	.00391	.02217	-.01354	-.02009	-.00295

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00715	.09320	.01311	.00059	-.00061	-.00004	-.00390
SDev	.03433	.00006	.00286	.00031	.00049	.04083	.00498
%RSD	480.42	.06814	21.834	53.190	80.812	92048.	127.73

#1	.01733	.09315	.01202	.00079	-.00061	-.04635	-.00787
#2	.02547	.09315	.01645	.00041	-.00095	.02780	-.00777

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#3	.02955	.09328	.00978	.00025	-.00095	-.02172	.00255
#4	-.04378	.09322	.01420	.00090	.00009	.04010	-.00250
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	H.02586
SDev	.00092
%RSD	3.5685

#1	H.02594
#2	H.02617
#3	H.02676
#4	H.02458

Errors	LC High
High	.02000
Low	-.02000

Method: QUANMET Sample Name: CCV2-5 Operator: RJG
Run Time: 08/18/00 09:25:26
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0199	50.277	5.1684	5.0601	4.9866	5.0488	53.100
SDev	.0080	.179	.1098	.0538	.0272	.0256	.452
%RSD	.78102	.35597	2.1251	1.0625	.54455	.50639	.85194
#1	1.0273	50.235	5.0157	5.0154	4.9713	5.0411	53.369
#2	1.0244	50.220	5.2224	5.0155	4.9602	5.0331	53.445
#3	1.0185	50.533	5.2681	5.1233	5.0218	5.0867	53.136
#4	1.0093	50.117	5.1676	5.0862	4.9929	5.0341	52.451
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2710	5.1491	5.1117	4.9335	52.820	49.199	4.8947
SDev	.0411	.0337	.0307	.0306	.225	.439	.0487
%RSD	.77941	.65487	.60039	.62115	.42667	.89306	.99419
#1	5.2940	5.1698	5.1266	4.9141	52.858	49.682	4.8643
#2	5.3143	5.1609	5.1300	4.9048	52.906	48.616	4.8423
#3	5.2532	5.1669	5.1244	4.9726	53.020	49.267	4.9336
#4	5.2225	5.0988	5.0658	4.9428	52.498	49.233	4.9385
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.587	5.1158	5.0691	49.895	5.1870	5.2216	5.1610
SDev	.232	.0266	.0372	.326	.0255	.0625	.0595
%RSD	.45818	.51933	.73399	.65282	.49107	1.1965	1.1522
#1	50.478	5.1276	5.0808	49.684	5.1501	5.3007	5.2238
#2	50.572	5.1255	5.0704	49.567	5.2061	5.1959	5.1801
#3	50.915	5.1339	5.1069	50.267	5.2016	5.2360	5.1583
#4	50.384	5.0763	5.0183	50.061	5.1903	5.1539	5.0817
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1198	5.1921	5.1644	4.9957	4.9947	10.164	5.0825
SDev	.0609	.0622	.1266	.0239	.0174	.106	.0203
%RSD	1.1902	1.1982	2.4515	.47819	.34820	1.0473	.40835
#1	5.1026	5.1996	5.2533	4.9841	4.9946	10.259	5.0829
#2	5.1964	5.2598	5.2903	4.9758	4.9884	10.246	5.0891

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#3	5.0501	5.1999	5.0824	5.0299	5.0185	10.109	5.1040
#4	5.1302	5.1090	5.0318	4.9930	4.9773	10.041	5.0545
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	5.1019
SDev	.0250
%RSD	.49045

#1	5.1108
#2	5.1040
#3	5.1260
#4	5.0670

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB5 Operator: RJG
Run Time: 08/18/00 09:28:34
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00001	.00231	-.00099	.02211	-.00008	.00018	-.00130
SDev	.00142	.00700	.02982	.00411	.00025	.00008	.00367
%RSD	11207.	303.75	3015.6	18.570	321.66	44.508	281.48

#1	-.00187	-.00787	-.03638	.02675	.00011	.00011	-.00407
#2	-.00038	.00694	.03648	.01736	-.00042	.00011	-.00442
#3	.00110	.00692	-.00407	.02036	.00011	.00024	-.00005
#4	.00110	.00323	.00002	.02398	-.00011	.00024	.00333

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00182	.00112	-.00126	-.00023	-.00053	.08461	.00034
SDev	.00149	.00075	.00142	.00107	.00107	.23319	.00135
%RSD	81.886	66.679	112.12	463.69	199.46	275.61	396.92

#1	-.00071	.00074	-.00098	-.00116	-.00142	-.10365	-.00098
#2	-.00383	.00224	-.00324	-.00116	-.00142	-.12903	-.00052
#3	-.00067	.00074	-.00098	.00070	.00071	.31095	.00199
#4	-.00208	.00075	.00014	.00070	-.00000	.26018	.00087

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00692	.00000	.00521	.00612	-.00371	-.00801	-.00003
SDev	.01620	.00060	.00261	.00157	.00377	.01390	.01833
%RSD	234.09	39636.	49.999	25.686	101.69	173.49	55233.

#1	-.02699	-.00052	.00912	.00462	-.00301	-.02006	.01923
#2	-.01315	-.00052	.00391	.00600	-.00521	-.02006	-.00272
#3	.00623	.00052	.00391	.00554	.00114	.00400	-.02485
#4	.00623	.00052	.00391	.00831	-.00776	.00405	.00815

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.03361	.05863	-.01039	-.00005	-.00061	.02782	-.00248
SDev	.05390	.00576	.02006	.00038	.00040	.06220	.00005
%RSD	160.34	9.8249	193.09	725.31	65.983	223.60	2.0465

#1	-.04788	.05712	-.01631	-.00051	-.00095	.04019	-.00240
#2	-.06010	.06314	-.03610	-.00019	-.00095	.04017	-.00251

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#3	-.07231	.05110	.00317	.00036	-.00026	-.05869	-.00251
#4	.04583	.06314	.00769	.00013	-.00026	.08961	-.00250
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem ZN
Units ppm
Avge .00111
SDev .00150
%RSD 134.99

#1	.00206
#2	.00045
#3	.00260
#4	-.00067

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DJORNB

Operator: RJG

Run Time: 08/18/00 09:31:42

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00150	.00142	.01827	.03124	-.00019	.00004	.04432
SDev	.00142	.00541	.02211	.00980	.00015	.00008	.00373
%RSD	95.016	380.00	121.05	31.363	83.333	192.57	8.4058
#1	-.00038	.00879	-.00003	.03231	-.00011	.00011	.04596
#2	-.00038	-.00045	.04464	.01738	-.00042	-.00003	.03876
#3	-.00187	-.00407	.02845	.03508	-.00011	-.00003	.04666
#4	-.00336	.00143	.00002	.04019	-.00011	.00011	.04591
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00380	.00149	-.00093	-.00139	.00799	-.10153	.00014
SDev	.00158	.00192	.00122	.00047	.00146	.10733	.00028
%RSD	41.514	128.21	123.63	33.420	18.330	105.71	198.79
#1	-.00208	-.00073	-.00155	-.00116	.00710	-.07827	.00005
#2	-.00447	.00075	-.00211	-.00209	.00639	-.19672	-.00022
#3	L-.00565	.00224	.00071	-.00116	.00923	-.17134	.00033
#4	-.00300	.00372	-.00093	-.00116	.00923	.04019	.00041
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01107	-.00052	.00130	.00889	.00086	-.01204	-.00824
SDev	.01204	.00000	.00301	.00859	.00747	.03153	.01432
%RSD	108.73	.20576	230.73	96.664	873.79	261.89	173.81
#1	-.00484	-.00052	-.00130	.01386	.00042	-.02014	-.00278
#2	-.02699	-.00052	.00391	-.00277	.00195	-.05228	-.01375
#3	-.01315	-.00052	-.00130	.01663	-.00858	.02014	-.02487
#4	.00069	-.00052	.00391	.00785	.00963	.00413	.00844
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03359	.04810	-.01534	-.00015	-.00078	.00919	-.00256
SDev	.03682	.03421	.02175	.00030	.00020	.05194	.00006
%RSD	109.62	71.125	141.76	197.94	25.660	565.25	2.2247
#1	-.01526	.06314	.01421	-.00041	-.00095	.01540	-.00261
#2	-.08860	-.00304	-.01865	.00008	-.00061	-.00933	-.00251

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#3	-.01933	.06314	-.01870	-.00041	-.00061	.07714	-.00260
#4	-.01118	.06915	-.03823	.00013	-.00095	-.04645	-.00251
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00388
SDev	.00107
%RSD	27.618

#1	.00422
#2	.00422
#3	.00232
#4	.00476

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DJ0FNC

Operator: RJG

Run Time: 08/18/00 09:34:50

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04266	1.8177	1.8928	.94423	1.8874	.04743	L.04739
SDev	.00075	.0127	.0662	.00650	.0031	.00013	.00338
%RSD	1.7537	.69963	3.4948	.68839	.16437	.28233	7.1289

#1	.04229	1.8075	1.8371	.94749	1.8844	.04726	L.04532
#2	.04227	1.8095	1.8413	.93448	1.8918	.04755	L.04527
#3	.04229	1.8354	1.9180	.94747	1.8865	.04753	L.04661
#4	.04378	1.8186	1.9749	.94749	1.8870	.04740	L.05237

Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Low
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04329	.47833	.19110	.23064	1.0208	L.18826	.90218
SDev	.00363	.00573	.00142	.00076	.0027	.15579	.00685
%RSD	8.3950	1.1974	.74078	.32764	.26286	82.750	.75875

#1	.04494	.47277	.19138	.23064	1.0181	L.09096	.90155
#2	.04491	.47573	.18913	.23064	1.0188	L.11634	.91204
#3	.04545	.48611	.19251	.22972	1.0231	L.12480	.89710
#4	L.03785	.47872	.19138	.23157	1.0231	L.42094	.89803

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.00415	.47835	.00276	L.02494	.48776	.47235	L.00099
SDev	.01344	.00215	.00261	.00643	.01012	.02123	.01048
%RSD	323.75	.44968	94.456	25.793	2.0738	4.4935	1062.4

#1	L-.00761	.47653	.00406	L.02540	.47687	.48227	L.01466
#2	L-.02145	.47653	.00406	L.01663	.50120	.44211	L-.00721
#3	L.00346	.47966	-.00115	L.03233	.48797	.49063	L-.00723
#4	L.00900	.48070	.00406	L.02540	.48498	.47437	L.00373

Errors	LC Low	LC Pass	NOCHECK	LC Low	LC Pass	LC Pass	LC Low
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8432	.07513	-.00253	.94821	-.00069	1.8295	.46591
SDev	.0236	.00003	.00721	.00106	.00059	.0727	.00257
%RSD	1.2829	.04357	284.75	.11140	85.391	3.9742	.55056

#1	1.8248	.07515	-.00301	.94718	-.00130	1.7554	.46723
#2	1.8208	.07508	.00782	.94964	-.00061	1.8295	.46207

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#3	1.8615	.07515	-.00749	.94773	-.00095	1.9282	.46713
#4	1.8656	.07515	-.00744	.94828	.00009	1.8047	.46723
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass
High	2.4000					2.4000	.60000
Low	1.6000					1.6000	.40000

Elem	ZN
Units	ppm
Avge	.46865
SDev	.00092
%RSD	.19704

#1	.46780
#2	.46826
#3	.46858
#4	.46995

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DHVTA
Run Time: 08/18/00 09:37:58
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Operator: RJG

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00144	.05937	.53953	.89229	.00323	.00000	33.622
SDev	.00272	.01466	.05919	.00001	.00041	.00013	.152
%RSD	189.25	24.700	10.970	.00135	12.719	3880.8	.45329
#1	-.00293	.04366	.50724	.89230	.00283	-.00003	33.525
#2	.00155	.07877	.47851	.89228	.00378	.00010	33.759
#3	-.00442	.05478	.55985	.89229	.00326	.00011	33.745
#4	.00004	.06024	.61253	.89227	.00304	-.00016	33.459
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.00646	.00595	.01789	.00348	2.7503	7.7314	.09704
SDev	.00166	.00256	.00218	.00159	.0069	.1529	.00128
%RSD	25.645	43.095	12.183	45.695	.25038	1.9780	1.3156
#1	L-.00716	.00373	.01705	.00278	2.7553	7.5875	.09797
#2	-.00451	.00817	.02042	.00557	2.7510	7.9090	.09518
#3	L-.00583	.00817	.01874	.00371	2.7545	7.8075	.09778
#4	L-.00835	.00373	.01536	.00185	2.7403	7.6214	.09723
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	60.747	1.1383	.01734	S3673.9	.16222	.00353	.02057
SDev	.269	.0034	.00521	.2	.00699	.01736	.02993
%RSD	.44201	.30301	30.039	.00500	4.3111	491.92	145.51
#1	61.021	1.1385	.01995	S3674.0	.16472	.02759	.00968
#2	60.492	1.1375	.00953	S3673.7	.17096	.00364	.06476
#3	60.933	1.1427	.01995	S3674.0	.15734	-.00446	.00939
#4	60.542	1.1343	.01995	S3673.7	.15587	-.01265	-.00157
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02738	H45.366	.00008	.04940	-.00164	.03050	-.00124
SDev	.03039	.184	.04657	.00013	.00102	.05888	.00184
%RSD	110.97	.40545	59923.	.26192	61.977	193.06	147.97
#1	-.03246	H45.569	-.06394	.04949	-.00268	-.03132	-.00216
#2	-.02025	H45.190	.03473	.04922	-.00061	.06752	.00151

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#3	.00828	H45.472	.03448	.04949	-.00233	-.00661	-.00216
#4	-.06510	H45.232	-.00495	.04938	-.00095	.09239	-.00216

Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.04990
SDev	.00296
%RSD	5.9364

#1	.05065
#2	.05282
#3	.05035
#4	.04577

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHVAP5 Operator: RJG
Run Time: 08/18/00 09:41:06
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00008	.01892	.13198	.19496	.00066	.00004	6.9749
SDev	.00307	.01215	.03463	.00124	.00022	.00008	.0302
%RSD	3961.8	64.229	26.240	.63578	32.913	194.34	.43254

#1	.00417	.03466	.10449	.19603	.00063	.00011	6.9933
#2	-.00029	.02167	.16946	.19388	.00063	.00011	6.9315
#3	-.00030	.01251	.15332	.19388	.00094	-.00003	6.9974
#4	-.00327	.00682	.10065	.19604	.00042	-.00003	6.9774

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00224	.00408	.00352	.00098	.57656	1.9714	.02002
SDev	.00249	.00223	.00121	.00047	.00331	.1229	.00099
%RSD	110.94	54.555	34.487	47.510	.57351	6.2330	4.9227

#1	-.00087	.00519	.00465	.00075	.57905	2.1386	.01947
#2	-.00487	.00520	.00409	.00168	.57407	1.8509	.02021
#3	-.00373	.00520	.00352	.00075	.57336	1.9778	.02133
#4	.00051	.00074	.00184	.00074	.57975	1.9186	.01909

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.654	.23752	.00660	221.42	.03441	.02411	.01130
SDev	.038	.00085	.00673	.87	.00308	.02970	.02614
%RSD	.29906	.35835	101.93	.39358	8.9594	123.21	231.40
#1	12.648	.23752	-.00122	220.72	.03829	.03622	.03070
#2	12.603	.23648	.00920	220.80	.03404	-.02010	.00853
#3	12.689	.23856	.00399	221.55	.03076	.03623	.03061
#4	12.675	.23752	.01441	222.60	.03454	.04408	-.02466

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03311	9.1715	-.00202	.01027	-.00052	-.01081	-.00244
SDev	.04226	.0246	.01083	.00014	.00059	.06088	.00013
%RSD	127.62	.26779	535.08	1.3312	113.85	563.22	5.2333
#1	-.02190	9.1655	-.00740	.01020	.00009	-.10044	-.00259
#2	-.08710	9.1534	-.00751	.01048	-.00026	.03554	-.00239
#3	.01475	9.1594	-.00740	.01020	-.00061	.01085	-.00249
#4	-.03820	9.2076	.01422	.01020	-.00130	.01081	-.00230

Elem	ZN
Units	ppm
Avge	.01121
SDev	.00195
%RSD	17.425

#1	.01339
#2	.00929
#3	.01229

#4 .00986

Method: QUANMET Sample Name: DHVTAS Operator: RJG
Run Time: 08/18/00 09:44:14
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04384	1.9406	2.4906	1.8076	1.8521	.04729	33.610
SDev	.00144	.0151	.0285	.0216	.0106	.00023	.234
%RSD	3.2777	.77712	1.1454	1.1965	.57429	.48070	.69613

#1	.04271	1.9291	2.5181	1.7754	1.8375	.04699	33.540
#2	.04272	1.9476	2.4774	1.8144	1.8534	.04726	33.532
#3	.04420	1.9272	2.5100	1.8215	1.8629	.04740	33.417
#4	.04572	1.9585	2.4569	1.8190	1.8548	.04752	33.951

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04231	.48206	.20998	.23946	3.7359	7.9260	1.0353
SDev	.00342	.00586	.00166	.00140	.0153	.2358	.0103
%RSD	8.0720	1.2155	.78955	.58334	.41041	2.9750	1.0413

#1	.04116	.47725	.20828	.23736	3.7244	7.6975	1.0224
#2	.03936	.48912	.20998	.24016	3.7315	8.2559	1.0402
#3	.04724	.47723	.20941	.24015	3.7293	7.8583	1.0477
#4	.04148	.48466	.21223	.24016	3.7585	7.8921	1.0331

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	60.494	1.6083	.01879	S3674.0	.64510	.48987	.02700
SDev	.245	.0086	.00656	.1	.01251	.01137	.01566
%RSD	.40483	.53787	34.887	.00365	1.9389	2.3207	58.007

#1	60.177	1.6009	.00967	S3674.1	.62794	.48973	.01589
#2	60.465	1.6051	.02530	S3674.1	.64403	.49813	.04912
#3	60.570	1.6062	.02009	S3674.0	.65228	.49777	.01592
#4	60.764	1.6208	.02010	S3673.8	.65616	.47384	.02705

Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9491	H45.191	.01287	.98345	-.00138	1.9066	.46884
SDev	.0663	.209	.03155	.00509	.00082	.0827	.00260
%RSD	3.4022	.46153	245.14	.51708	59.073	4.3355	.55493

#1	1.9012	H44.985	-.00687	.97617	-.00130	1.8449	.46737
#2	1.9053	H45.184	-.01983	.98383	-.00199	1.9437	.46768

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#3	2.0438	H45.118	.04781	.98750	-.00199	2.0056	.46757
#4	1.9461	H45.479	.03037	.98629	-.00026	1.8322	.47274
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.54331
SDev	.00467
%RSD	.85982

#1	.53894
#2	.54791
#3	.53965
#4	.54676

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHVTAD

Operator: RJG

Run Time: 08/18/00 09:47:23

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04114	1.8789	2.4337	1.7898	1.7971	.04628	32.930
SDev	.00172	.0111	.0492	.0071	.0074	.00017	.182
%RSD	4.1937	.59035	2.0219	.39549	.41035	.36779	.55231
#1	.03965	1.8683	2.4419	1.7951	1.7955	.04621	32.890
#2	.04265	1.8941	2.3848	1.7952	1.8033	.04647	33.187
#3	.03965	1.8794	2.4094	1.7802	1.8023	.04635	32.758
#4	.04262	1.8739	2.4986	1.7887	1.7874	.04608	32.884
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03999	.46727	.20210	.23177	3.6604	7.5981	1.0074
SDev	.00247	.00222	.00287	.00076	.0134	.4675	.0063
%RSD	6.1746	.47472	1.4213	.32828	.36660	6.1529	.62507
#1	.03693	.46542	.20492	.23177	3.6540	7.8244	1.0073
#2	.04167	.46985	.20210	.23271	3.6803	7.6044	1.0069
#3	.03906	.46541	.19816	.23084	3.6562	6.9445	1.0154
#4	.04229	.46838	.20322	.23177	3.6512	8.0190	.99996
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	59.723	1.5775	.01487	S3674.4	.61802	.49150	.00742
SDev	.225	.0054	.00425	.1	.00733	.05230	.01659
%RSD	.37603	.34392	28.599	.00405	1.1867	10.641	223.48
#1	59.648	1.5759	.02008	S3674.4	.62546	.49751	.02679
#2	59.980	1.5853	.01488	S3674.2	.61712	.46543	.01571
#3	59.809	1.5759	.01487	S3674.5	.62121	.44116	-.00636
#4	59.454	1.5728	.00966	S3674.4	.60827	.56189	-.00644
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8685	H44.532	.00402	.95508	-.00156	1.8271	.45327
SDev	.0303	.148	.01541	.00379	.00059	.0576	.00258
%RSD	1.6227	.33141	383.69	.39713	37.952	3.1502	.56924
#1	1.8277	H44.522	-.01558	.95368	-.00164	1.9075	.45209
#2	1.8848	H44.714	.00843	.95828	-.00095	1.8084	.45714

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#3	1.8970	H44.540	.02145	.95801	-.00233	1.8210	.45198
#4	1.8644	H44.353	.00176	.95035	-.00130	1.7716	.45189
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.51669
SDev	.00413
%RSD	.79965

#1	.51254
#2	.52138
#3	.51885
#4	.51397

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHVING

Operator: RJG

Run Time: 08/18/00 09:50:31

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00062	.02947	.46739	.87071	.00189	.00004	31.583
SDev	.00254	.00851	.07776	.00456	.00050	.00008	.113
%RSD	409.39	28.892	16.636	.52384	26.406	196.18	.35843

#1	-.00173	.02893	.57788	.86437	.00199	-.00003	31.473
#2	-.00025	.03820	.39941	.87525	.00221	.00011	31.720
#3	.00272	.03270	.43190	.87162	.00221	.00011	31.630
#4	-.00322	.01805	.46040	.87160	.00116	-.00003	31.510

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00197	.00557	.01831	.00337	1.4204	7.5854	.09409
SDev	.00406	.00282	.00096	.00139	.0033	.2011	.00070
%RSD	206.02	50.614	5.2460	41.348	.22888	2.6512	.73985

#1	-.00053	.00371	.01705	.00267	1.4195	7.4606	.09306
#2	.00052	.00519	.01817	.00546	1.4252	7.8837	.09453
#3	.00016	.00371	.01873	.00267	1.4188	7.4691	.09445
#4	L-.00802	.00967	.01930	.00268	1.4181	7.5283	.09434

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	58.542	1.0140	.01324	S3674.6	.15211	.02398	.03434
SDev	.049	.0034	.00499	.3	.00820	.01397	.01391
%RSD	.08410	.33603	37.684	.00716	5.3883	58.256	40.507

#1	58.602	1.0098	.01975	S3674.7	.15121	.02793	.02055
#2	58.533	1.0182	.01454	S3674.4	.14156	.00385	.03143
#3	58.552	1.0140	.00933	S3674.3	.16130	.02795	.03167
#4	58.483	1.0140	.00933	S3674.8	.15436	.03619	.05370

Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03802	H43.848	-.02253	.04350	-.00199	.02191	-.00229
SDev	.05511	.081	.01815	.00023	.00085	.03251	.00009
%RSD	144.96	.18510	80.585	.52950	42.600	148.36	4.1331

#1	.01291	H43.788	-.04665	.04341	-.00233	-.00589	-.00216
#2	-.07264	H43.932	-.00286	.04352	-.00130	.04352	-.00226

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#3	-.09710	H43.902	-.02254	.04380	-.00130	.05593	-.00236
#4	.00475	H43.770	-.01806	.04325	-.00303	-.00590	-.00236
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.02790
SDev	.00126
%RSD	4.5174

#1	.02777
#2	.02972
#3	.02717
#4	.02695

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHVTTJ

Operator: RJG

Run Time: 08/18/00 09:53:39

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B__	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00174	.02529	.51512	.87236	.00120	.00007	31.873
SDev	.00211	.00497	.06129	.00346	.00030	.00012	.152
%RSD	121.42	19.657	11.898	.39677	25.167	176.86	.47596

#1	-.00027	.02897	.56176	.87146	.00094	-.00003	31.906
#2	-.00022	.02706	.46835	.86783	.00147	.00022	31.920
#3	-.00473	.01795	.45643	.87508	.00094	-.00003	32.011
#4	-.00176	.02718	.57396	.87506	.00147	.00011	31.657

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K__	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00461	.00632	.01817	.00336	1.3355	7.7800	.09294
SDev	.00251	.00425	.00184	.00139	.0083	.4161	.00120
%RSD	54.568	67.327	10.109	41.383	.61928	5.3481	1.2921

#1	-.00321	.00372	.01592	.00174	1.3378	7.2998	.09128
#2	-.00351	.00520	.02042	.00452	1.3378	8.3152	.09292
#3	-.00334	.01261	.01817	.00267	1.3428	7.7314	.09349
#4	L-.00838	.00373	.01817	.00452	1.3236	7.7737	.09407

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	58.657	1.0098	.01453	S3674.7	.15982	.01996	-.00150
SDev	.293	.0051	.00737	.1	.01104	.02853	.01564
%RSD	.49886	.50660	50.725	.00150	6.9076	142.98	1045.9

#1	58.632	1.0098	.01453	S3674.7	.15076	.04401	-.00165
#2	58.499	1.0098	.00932	S3674.8	.17174	.03603	.00971
#3	59.075	1.0161	.02495	S3674.7	.16668	-.02011	-.02356
#4	58.419	1.0035	.00931	S3674.6	.15010	.01990	.00952

Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V__
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01278	H43.854	-.00631	.04323	-.00242	.07217	.00032
SDev	.01071	.246	.02500	.00013	.00071	.06009	.00509
%RSD	83.800	.56127	396.49	.29925	29.451	83.263	1609.5

#1	-.01990	H43.824	.02541	.04325	-.00233	.10617	-.00227
#2	-.02398	H43.818	-.01610	.04314	-.00233	-.00513	.00795

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#3	-.00359	H44.185	-.00094	.04341	-.00337	.05665	-.00206
#4	-.00364	H43.589	-.03360	.04314	-.00164	.13100	-.00236

Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.03161
SDev	.00254
%RSD	8.0474

#1	.03028
#2	.02888
#3	.03264
#4	.03463

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHV™ Operator: RJG
Run Time: 08/18/00 09:56:47
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00278	.06043	.31583	.97958	.00126	.00003	32.286
SDev	.00075	.01263	.03521	.02015	.00026	.00013	.166
%RSD	27.101	20.894	11.148	2.0575	20.372	407.80	.51359
#1	-.00314	.05858	.34115	.98591	.00147	.00009	32.081
#2	-.00316	.05130	.32507	.94969	.00094	.00011	32.347
#3	-.00165	.07879	.26394	.98953	.00147	.00009	32.244
#4	-.00316	.05306	.33314	.99321	.00116	-.00016	32.473
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.00659	.02301	.08436	.00045	2.4700	11.898	.13562
SDev	.00610	.00319	.00134	.00120	.0123	.445	.00038
%RSD	92.529	13.884	1.5883	266.41	.49958	3.7397	.28110
#1	-.00328	.02152	.08520	.00091	2.4583	12.055	.13568
#2	-.00309	.02300	.08464	-.00001	2.4675	11.810	.13560
#3	-.00429	.02745	.08520	.00185	2.4668	12.393	.13513
#4	L-.01570	.02007	.08238	-.00094	2.4874	11.336	.13606
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	158.11	1.9674	.02512	S-.13671	.30218	.02824	.02412
SDev	.88	.0077	.00737	.00000	.01172	.00928	.02099
%RSD	.55664	.39349	29.336	.00000	3.8778	32.868	87.023
#1	157.48	1.9585	.01990	S-.13671	.28699	.03623	.01012
#2	157.84	1.9679	.01991	S-.13671	.31121	.03633	.05463
#3	157.72	1.9658	.03553	S-.13671	.31162	.02029	.01048
#4	159.41	1.9773	.02512	S-.13671	.29891	.02011	.02125
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02507	H82.544	-.01584	.04690	-.00277	.12133	.00065
SDev	.06423	.431	.04397	.00056	.00033	.07092	.00304
%RSD	256.25	.52216	278.08	1.1922	11.968	58.451	466.29
#1	-.07399	H82.098	.02568	.04697	-.00268	.12448	.00313
#2	.01974	H82.495	-.04194	.04610	-.00303	.11211	-.00203

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#3	.04011	H82.447	-.06399	.04735	-.00233	.21089	.00343
#4	-.08613	H83.133	.01699	.04719	-.00303	.03783	-.00193

Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00553
SDev	.00248
%RSD	44.864

#1	.00274
#2	.00571
#3	.00492
#4	.00874

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHVTN
Run Time: 08/18/00 09:59:55
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Operator: RJG

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	- .00253	.01659	.34126	.95528	.00083	.00006	30.323
SDev	.00074	.00442	.07144	.01648	.00013	.00007	.100
%RSD	29.373	26.621	20.936	1.7255	14.968	115.08	.32926

#1	- .00365	.01986	.27535	.94879	.00073	.00009	30.297
#2	- .00216	.01050	.44165	.97991	.00073	- .00004	30.245
#3	- .00216	.01985	.31184	.94515	.00094	.00009	30.282
#4	- .00216	.01615	.33620	.94729	.00094	.00009	30.470

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	- .01000	- .20000	- .30000	- .20000	- .20000	- .00500	- 5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	L- .00680	.02041	.08351	.00096	.10781	11.640	.13239
SDev	.00369	.00280	.00065	.00089	.00089	.181	.00036
%RSD	54.199	13.727	.78076	92.910	.83008	1.5533	.26813

#1	L- .00781	.01856	.08294	.00165	.10799	11.733	.13188
#2	L- .00546	.01856	.08407	.00165	.10869	11.827	.13254
#3	- .00262	.02448	.08407	.00073	.10656	11.590	.13243
#4	L- .01133	.02005	.08295	- .00021	.10799	11.412	.13270

Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	- .00500	- .05000	- .01000	- .02500	- .10000	- 5.0000	- .05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	155.46	1.7069	.02737	S- .13671	.28363	.04885	.01011
SDev	.87	.0050	.00673	.00000	.01350	.02419	.02848
%RSD	.55649	.29318	24.576	.00000	4.7611	49.526	281.81

#1	154.87	1.7043	.01955	S- .13671	.28708	.06895	.04336
#2	156.57	1.7105	.03518	S- .13671	.27515	.02064	- .00120
#3	154.68	1.7012	.02997	S- .13671	.27114	.06908	.02103
#4	155.71	1.7116	.02476	S- .13671	.30116	.03673	- .02277

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	- 5.0000	- .01500	- .04000	- 5.0000	- .04000	- .10000	- .06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	- .08018	H81.509	.00172	.03583	- .00277	.07320	.00327
SDev	.05446	.374	.04122	.00006	.00052	.10290	.00013
%RSD	67.918	.45861	2399.2	.15716	18.750	140.58	4.0053

#1	- .05574	H81.202	- .02711	.03580	- .00233	- .05038	.00312
#2	- .05573	H81.906	.06017	.03580	- .00303	.04851	.00342

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#3	-.04759	H81.178	.00122	.03580	-.00337	.09786	.00332
#4	-.16166	H81.749	-.02742	.03591	-.00233	.19680	.00322
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00740
SDev	.00240
%RSD	32.406

#1	.00902
#2	.00607
#3	.00472
#4	.00979

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-6

Operator: RJG

Run Time: 08/18/00 10:03:04

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0108	50.037	5.1894	5.0634	4.9888	5.0498	52.511
SDev	.0061	.306	.0607	.0268	.0276	.0291	.409
%RSD	.59919	.61057	1.1695	.52971	.55343	.57657	.77943
#1	1.0046	49.836	5.1177	5.0538	4.9728	5.0349	52.117
#2	1.0123	50.106	5.1755	5.0770	4.9943	5.0599	52.566
#3	1.0185	50.440	5.2001	5.0921	5.0252	5.0854	53.059
#4	1.0076	49.767	5.2643	5.0309	4.9628	5.0190	52.301
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1881	5.1141	5.0664	4.9393	52.631	49.062	4.9077
SDev	.0630	.0415	.0348	.0272	.328	.625	.0236
%RSD	1.2145	.81110	.68671	.55086	.62406	1.2735	.48135
#1	5.1469	5.0813	5.0337	4.9269	52.356	48.370	4.9027
#2	5.1674	5.1138	5.0765	4.9465	52.701	49.445	4.9154
#3	5.2818	5.1727	5.1109	4.9735	53.067	49.715	4.9345
#4	5.1564	5.0887	5.0444	4.9102	52.401	48.717	4.8782
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.405	5.0798	5.0404	49.580	5.1639	5.1927	5.1527
SDev	.372	.0340	.0439	.224	.0449	.0692	.0193
%RSD	.73731	.66950	.87131	.45208	.86861	1.3336	.37417
#1	50.129	5.0512	4.9870	49.428	5.1362	5.0894	5.1474
#2	50.547	5.0900	5.0548	49.604	5.1554	5.2268	5.1469
#3	50.865	5.1235	5.0913	49.888	5.2296	5.2362	5.1805
#4	50.079	5.0544	5.0287	49.400	5.1344	5.2183	5.1360
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.0663	5.2007	5.1906	4.9948	4.9897	10.046	5.0501
SDev	.0288	.0471	.0247	.0298	.0321	.210	.0335
%RSD	.56802	.90601	.47497	.59744	.64322	2.0857	.66382
#1	5.0320	5.1628	5.1568	4.9773	4.9639	9.8203	5.0280
#2	5.1022	5.2173	5.1939	5.0017	4.9950	10.002	5.0539

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#3	5.0624	5.2599	5.2158	5.0337	5.0330	10.035	5.0959
#4	5.0688	5.1627	5.1961	4.9664	4.9670	10.326	5.0224

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	5.0542
SDev	.0296
%RSD	.58569

#1	5.0395
#2	5.0586
#3	5.0935
#4	5.0250

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB6

Operator: RJG

Run Time: 08/18/00 10:06:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00001	.00875	.00603	.03139	.00026	.00045	.00302
SDev	.00143	.00456	.02700	.00831	.00046	.00036	.00274
%RSD	20383.	52.158	447.47	26.460	176.86	81.393	90.634

#1	-.00038	.01247	-.00817	.02675	.00042	.00024	.00139
#2	.00112	.00680	-.01630	.02824	-.00042	.00010	.00199
#3	.00110	.01251	.04453	.04381	.00042	.00052	.00711
#4	-.00187	.00321	.00406	.02677	.00063	.00092	.00159

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00249	.00001	-.00141	-.00070	.00408	-.01692	.00040
SDev	.00183	.00148	.00125	.00120	.00404	.20890	.00040
%RSD	73.657	20855.	88.800	172.24	98.832	1234.5	100.16

#1	-.00335	-.00073	-.00098	-.00116	.00142	.20095	.00005
#2	-.00285	-.00073	.00014	.00070	-.00000	.04865	.00098
#3	-.00393	.00223	-.00267	-.00023	.00639	-.01904	.00033
#4	.00018	-.00074	-.00211	-.00209	.00852	-.29825	.00025

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00415	.00026	.00261	.02459	-.00469	-.02210	.01931
SDev	.00827	.00052	.00499	.02147	.00128	.00768	.00901
%RSD	199.07	199.12	191.43	87.297	27.369	34.730	46.649

#1	-.00761	-.00052	-.00130	.00970	-.00549	-.02010	.03036
#2	.00623	.00052	.00912	.00831	-.00293	-.02815	.01927
#3	-.00208	.00052	-.00130	.02586	-.00578	-.02807	.01932
#4	-.01315	.00053	.00391	.05450	-.00455	-.01208	.00829

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02036	.04660	-.01959	.00052	-.00043	.01542	-.00156
SDev	.00391	.03346	.00886	.00050	.00045	.07882	.00202
%RSD	19.200	71.795	45.225	96.107	103.28	511.23	129.17

#1	-.02342	.06915	-.02063	.00013	-.00061	.01545	-.00261
#2	-.02343	.06319	-.01194	.00013	-.00095	.07724	.00147

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#3	-.01526	-.00304	-.01413	.00063	.00009	.06482	-.00261
#4	-.01933	.05712	-.03167	.00118	-.00026	-.09583	-.00251

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000*	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	-.00005
SDev	.00091
%RSD	1852.6

#1	-.00011
#2	.00126
#3	-.00068
#4	-.00067

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHVTQ

Operator: RJG

Run Time: 08/18/00 10:09:20

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00064	.02496	.31155	1.0014	.00060	.00010	31.275
SDev	.00122	.00777	.05172	.0034	.00025	.00001	.199
%RSD	191.50	31.147	16.601	.34388	41.239	5.1027	.63628

#1	-.00063	.02728	.36016	1.0036	.00094	.00009	31.182
#2	-.00063	.02545	.23854	.99633	.00042	.00009	31.492
#3	-.00214	.01429	.32790	1.0036	.00042	.00010	31.047
#4	.00085	.03281	.31957	1.0021	.00063	.00009	31.380

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00444	.02263	.08661	.00121	.33570	12.396	.13655
SDev	.00378	.00306	.00098	.00093	.00235	.390	.00155
%RSD	85.107	13.522	1.1286	76.879	.70162	3.1490	1.1336

#1	L-.00952	.02598	.08576	.00075	.33392	12.072	.13652
#2	-.00138	.02299	.08632	.00074	.33889	12.639	.13792
#3	L-.00513	.01856	.08802	.00074	.33392	12.055	.13737
#4	-.00174	.02299	.08632	.00260	.33605	12.816	.13439

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	159.90	1.7763	.02349	S-.13671	.29908	.03882	.02684
SDev	.45	.0069	.00499	.00000	.01342	.00762	.03193
%RSD	.27890	.38956	21.230	.00000	4.4869	19.636	118.96

#1	159.63	1.7711	.02480	S-.13671	.31718	.02885	.02146
#2	160.41	1.7857	.01959	S-.13671	.29789	.04487	.03240
#3	160.13	1.7711	.03001	S-.13671	.28479	.04470	-.01197
#4	159.44	1.7774	.01959	S-.13671	.29645	.03687	.06546

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03171	H84.088	-.01347	.03790	-.00216	.13301	.00224
SDev	.04614	.306	.01405	.00026	.00045	.13345	.00185
%RSD	145.50	.36445	104.27	.69099	20.656	100.33	82.656

#1	.03449	H83.873	.00345	.03756	-.00164	.19476	.00323
#2	-.03883	H84.517	-.02493	.03810	-.00268	.13303	.00313

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#3	-.07144	H84.102	-.02514	.03783	-.00233	-.05231	-.00054
#4	-.05106	H83.861	-.00728	.03810	-.00199	.25659	.00313
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	-.00320
SDev	.00271
%RSD	84.763

#1	-.00456
#2	.00042
#3	-.00585
#4	-.00281

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHVTR

Operator: RJG

Run Time: 08/18/00 10:12:28

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00166	.03258	.25709	.94864	.00060	.00009	31.535
SDev	.00142	.00758	.01940	.00331	.00025	.00000	.154
%RSD	85.732	23.273	7.5480	.34938	41.239	.27276	.48961
#1	-.00352	.02704	.25510	.94720	.00042	.00009	31.540
#2	-.00203	.03067	.26724	.94658	.00094	.00009	31.520
#3	-.00054	.02888	.23076	.95359	.00063	.00009	31.354
#4	-.00055	.04373	.27524	.94720	.00042	.00009	31.731
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.00782	.00373	.06562	.04041	.04440	14.373	.17980
SDev	.00181	.00402	.00197	.00047	.00041	.295	.00071
%RSD	23.122	107.56	3.0043	1.1581	.92709	2.0544	.39687
#1	L-.00613	.00521	.06774	.04065	.04404	14.543	.17926
#2	L-.00915	-.00220	.06661	.03971	.04475	14.314	.18084
#3	L-.00641	.00521	.06323	.04065	.04404	13.984	.17964
#4	L-.00961	.00670	.06492	.04065	.04475	14.653	.17945
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	159.09	.99090	.01564	S-.13671	.33026	.03432	.01627
SDev	.45	.00311	.00499	.00000	.01043	.03030	.02928
%RSD	.28370	.31428	31.900	.00000	3.1565	88.301	180.01
#1	159.16	.99168	.01954	S-.13671	.32624	-.00384	.01065
#2	159.24	.99168	.01433	S-.13671	.34116	.06836	.03295
#3	158.45	.98646	.01954	S-.13671	.31768	.02828	-.02244
#4	159.50	.99376	.00912	S-.13671	.33598	.04449	.04391
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01211	H83.744	-.02943	.05983	-.00268	.12556	.00301
SDev	.08365	.320	.02215	.00045	.00056	.07716	.00010
%RSD	691.02	.38242	75.246	.75438	21.071	61.448	3.2127
#1	.02965	H83.861	-.01633	.05977	-.00337	.21824	.00309
#2	.00114	H83.927	-.05122	.05977	-.00268	.03293	.00299

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#3	.05410	H83.266	-.04492	.05934	-.00268	.10699	.00308
#4	-.13331	H83.921	-.00525	.06043	-.00199	.14409	.00288
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00552
SDev	.00195
%RSD	35.316

#1	.00347
#2	.00423
#3	.00705
#4	.00731

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHVTW

Operator: RJG

Run Time: 08/18/00 10:15:37

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00165	.02348	.21665	.92131	.00115	.00007	28.199
SDev	.00144	.00344	.00699	.02040	.00026	.00006	.177
%RSD	86.942	14.633	3.2262	2.2146	22.286	94.813	.62717

#1	-.00352	.01979	.20659	.93997	.00094	-.00003	28.084
#2	-.00052	.02726	.21860	.90585	.00125	.00009	28.182
#3	-.00053	.02538	.21863	.90160	.00094	.00009	28.455
#4	-.00203	.02151	.22279	.93783	.00147	.00011	28.077

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00220	.00705	.05731	.00558	.05221	12.457	.16631
SDev	.00392	.00504	.00270	.00140	.00236	.416	.00130
%RSD	178.18	71.450	4.7139	25.005	4.5143	3.3412	.78405

#1	-.00163	.00223	.05703	.00349	.05186	11.945	.16820
#2	.00291	.01408	.05365	.00629	.05541	12.571	.16577
#3	L-.00638	.00521	.05984	.00628	.04973	12.943	.16607
#4	-.00371	.00669	.05873	.00628	.05186	12.368	.16522

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	146.42	.89283	.01173	S917.07	.05223	.03039	.01381
SDev	.61	.00299	.01311	1834.4	.01071	.00778	.02768
%RSD	.41952	.33515	111.78	200.03	20.509	25.592	200.38

#1	147.02	.89257	.00912	S3668.7	.05963	.02021	.01933
#2	146.11	.89257	.00913	S-.13671	.05902	.03655	-.02472
#3	146.83	.89674	-.00129	S-.13671	.05356	.03638	.01941
#4	145.71	.88944	.02996	S-.13671	.03669	.02840	.04124

Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04875	H78.611	-.02124	.03680	-.00233	.06004	.00034
SDev	.02907	.261	.03091	.00026	.00028	.09265	.00281
%RSD	59.626	.33157	145.51	.71153	12.096	154.30	825.94

#1	-.06403	H78.784	.00339	.03701	-.00268	.11880	-.00229
#2	-.07217	H78.483	-.00119	.03673	-.00199	.15571	.00286

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#3	-.05181	H78.868	-.02286	.03701	-.00233	.00757	.00267
#4	-.00699	H78.308	-.06431	.03646	-.00233	-.04191	-.00188

Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01127
SDev	.00187
%RSD	16.639

#1	.01215
#2	.01160
#3	.00855
#4	.01278

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHXFF

Operator: RJG

Run Time: 08/18/00 10:18:45

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00037	.02750	.34540	1.0120	-.00005	-.00003	.45834
SDev	.00121	.00231	.04507	.0015	.00011	.00000	.00160
%RSD	324.60	8.3864	13.048	.15029	200.00	1.0542	.34889
#1	-.00038	.02713	.37683	1.0103	-.00011	-.00003	.45939
#2	-.00186	.02713	.38088	1.0133	-.00011	-.00003	.45855
#3	-.00037	.03065	.34030	1.0133	.00011	-.00003	.45602
#4	.00111	.02511	.28359	1.0111	-.00011	-.00003	.45939
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00440	.00409	.07549	.01649	.04085	11.901	.12893
SDev	.00247	.00305	.00125	.00000	.00188	.063	.00143
%RSD	56.188	74.571	1.6532	.01655	4.6031	.53324	1.1116
#1	-.00202	.00668	.07731	.01650	.03836	11.937	.12702
#2	-.00261	.00668	.07506	.01650	.04192	11.818	.12934
#3	L-.00584	.00224	.07506	.01649	.04263	11.962	.13046
#4	L-.00712	.00076	.07450	.01649	.04049	11.886	.12888
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	33.270	.01123	.02475	S-.13671	.06531	-.00587	.01638
SDev	.103	.00052	.00602	.00000	.00822	.01781	.02447
%RSD	.31066	4.6348	24.304	.00000	12.586	303.30	149.35
#1	33.120	.01097	.01954	S-.13671	.06291	-.01989	.00809
#2	33.355	.01202	.01954	S-.13671	.05591	-.01182	.03017
#3	33.294	.01098	.02996	S-.13671	.06680	.02025	.04123
#4	33.311	.01098	.02996	S-.13671	.07562	-.01204	-.01396
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02659	H81.429	.00555	.00079	-.00078	.11393	-.00195
SDev	.01642	.306	.01596	.00013	.00020	.03494	.00011
%RSD	61.773	.37626	287.32	16.412	25.660	30.668	5.8740
#1	.02556	H80.979	.01208	.00090	-.00095	.08922	-.00205
#2	.01335	H81.635	-.00750	.00090	-.00061	.16334	-.00205

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#3	.05002	H81.611	-.00745	.00068	-.00061	.08921	-.00185
#4	.01742	H81.491	.02510	.00068	-.00095	.11396	-.00185

Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00794
SDev	.00056
%RSD	7.0264

#1	.00829
#2	.00727
#3	.00772
#4	.00849

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHXFG

Operator: RJG

Run Time: 08/18/00 10:21:53

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00036	.02560	.34639	1.0058	.00013	.00007	.24769
SDev	.00121	.00411	.04370	.0104	.00022	.00007	.00186
%RSD	333.38	16.068	12.615	1.0341	164.57	95.098	.75004
#1	-.00186	.03068	.38489	.99219	.00011	.00011	.25005
#2	.00112	.02328	.29576	1.0031	.00011	-.00003	.24821
#3	-.00034	.02141	.38082	1.0139	-.00011	.00009	.24667
#4	-.00037	.02702	.32411	1.0139	.00042	.00011	.24582
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00417	.00409	.07520	.00372	.04849	11.670	.12185
SDev	.00209	.00474	.00192	.00089	.00121	.207	.00242
%RSD	50.202	115.98	2.5494	23.859	2.5030	1.7735	1.9825
#1	L-.00635	.00076	.07450	.00442	.04973	11.801	.12052
#2	L-.00534	.00224	.07788	.00442	.04831	11.598	.12110
#3	-.00164	.01113	.07337	.00350	.04689	11.869	.12033
#4	-.00336	.00223	.07506	.00256	.04902	11.412	.12544
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	31.110	.00602	.02996	S-.13671	.06658	.00621	.02742
SDev	.168	.00052	.00737	.00000	.01410	.00776	.01046
%RSD	.53989	8.6444	24.588	.00000	21.186	125.07	38.161
#1	31.024	.00576	.02475	S-.13671	.07527	.01213	.01931
#2	31.268	.00576	.02996	S-.13671	.08112	.00415	.03027
#3	30.916	.00576	.04038	S-.13671	.05050	.01245	.04101
#4	31.232	.00680	.02475	S-.13671	.05941	-.00391	.01907
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02941	H79.642	.00342	.00074	-.00035	.08601	-.00056
SDev	.03800	.367	.02535	.00011	.00033	.02550	.00271
%RSD	129.22	.46138	741.40	15.301	95.743	29.650	482.57
#1	.00115	H79.331	-.03161	.00090	-.00061	.11384	-.00195
#2	.00522	H79.927	.00343	.00068	-.00026	.10148	-.00195

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#3	-.06812	H79.319	.02754	.00068	-.00061	.06431	.00350
#4	-.05589	H79.993	.01431	.00068	.00009	.06441	-.00195

Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01647
SDev	.00397
%RSD	24.091

#1	.01758
#2	.01401
#3	.02156
#4	.01272

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-7

Operator: RJG

Run Time: 08/18/00 10:25:01

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0062	49.941	5.1968	5.0811	4.9808	5.0254	52.199
SDev	.0053	.068	.0955	.0119	.0072	.0060	.185
%RSD	.52911	.13526	1.8368	.23465	.14471	.11917	.35478
#1	1.0106	49.907	5.2873	5.0838	4.9704	5.0200	52.323
#2	1.0031	49.876	5.2635	5.0924	4.9817	5.0206	51.990
#3	1.0002	49.948	5.0842	5.0838	4.9845	5.0290	52.101
#4	1.0107	50.032	5.1521	5.0642	4.9866	5.0320	52.383
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1676	5.0834	5.0423	4.9330	52.444	49.290	4.8994
SDev	.0120	.0106	.0105	.0100	.097	.093	.0175
%RSD	.23297	.20772	.20770	.20255	.18497	.18928	.35627
#1	5.1700	5.0871	5.0416	4.9204	52.437	49.394	4.8779
#2	5.1522	5.0679	5.0320	4.9316	52.342	49.199	4.9090
#3	5.1814	5.0871	5.0388	4.9446	52.423	49.225	4.9173
#4	5.1668	5.0916	5.0568	4.9353	52.576	49.343	4.8933
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.234	5.0588	5.0391	49.521	5.1397	5.1717	5.1168
SDev	.037	.0088	.0276	.081	.0391	.0397	.0775
%RSD	.07296	.17350	.54733	.16325	.76046	.76712	1.5144
#1	50.190	5.0617	5.0235	49.402	5.1850	5.1778	5.0150
#2	50.254	5.0471	5.0130	49.551	5.0919	5.1694	5.1360
#3	50.220	5.0586	5.0443	49.583	5.1301	5.1216	5.1139
#4	50.273	5.0680	5.0756	49.546	5.1520	5.2183	5.2021
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9905	5.1599	5.1478	4.9844	4.9728	10.067	5.0345
SDev	.0580	.0061	.0648	.0063	.0062	.048	.0110
%RSD	1.1622	.11736	1.2592	.12578	.12532	.47208	.21925
#1	4.9467	5.1508	5.2086	4.9773	4.9718	10.079	5.0300
#2	5.0360	5.1627	5.0561	4.9815	4.9677	10.043	5.0221

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#3	4.9344	5.1629	5.1610	4.9876	4.9701	10.017	5.0382
#4	5.0448	5.1630	5.1657	4.9914	4.9818	10.127	5.0478

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	5.0232
SDev	.0144
%RSD	.28575

#1	5.0153
#2	5.0294
#3	5.0400
#4	5.0080

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB7

Operator: RJG

Run Time: 08/18/00 10:28:09

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00261	-.00459	.02136	.03224	-.00011	.00024	.00048
SDev	.00192	.00919	.05740	.01149	.00000	.00000	.00189
%RSD	73.459	200.10	268.66	35.627	.00000	.15398	389.68

#1	-.00485	-.01335	-.01201	.04379	-.00011	.00024	-.00114
#2	-.00187	.00514	.09731	.04018	-.00011	.00024	.00234
#3	-.00038	.00130	.03246	.02036	-.00011	.00024	.00189
#4	-.00336	-.01146	-.03230	.02462	-.00011	.00024	-.00114

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00404	.00112	-.00056	-.00070	.00053	.05923	.00002
SDev	.00142	.00074	.00096	.00093	.00268	.30860	.00064
%RSD	35.027	65.963	171.51	133.64	507.17	521.04	3110.3

#1	-.00194	.00075	-.00155	-.00116	-.00285	-.33210	-.00079
#2	-.00451	.00224	.00071	.00070	.00142	.42094	.00033
#3	-.00475	.00075	-.00042	-.00116	.00355	.09942	-.00014
#4	-.00497	.00076	-.00098	-.00116	-.00001	.04865	.00063

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01522	-.00052	.00391	.00427	-.00140	-.01202	.00553
SDev	.00614	.00000	.00737	.00459	.00765	.01312	.01664
%RSD	40.316	.54336	188.56	107.52	544.68	109.15	300.85

#1	-.02145	-.00052	.00391	-.00231	-.00096	-.01201	.01929
#2	-.00761	-.00052	-.00130	.00785	.00671	-.01198	.01947
#3	-.01315	-.00052	.01433	.00462	-.01172	.00402	-.01394
#4	-.01868	-.00052	-.00130	.00693	.00035	-.02813	-.00259

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01426	.02403	-.01965	.00005	-.00104	.00000	-.00250
SDev	.02338	.03126	.01719	.00033	.00071	.03403	.00014
%RSD	163.96	130.08	87.440	628.57	68.718	5094000.	5.6732

#1	-.04380	-.00304	.00338	.00036	-.00164	-.02159	-.00251
#2	-.01527	.05110	-.03818	-.00041	-.00061	-.03400	-.00250

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#3	-.01119	.05111	-.02084	.00013	-.00026	.01542	-.00230
#4	.01324	-.00304	-.02297	.00013	-.00164	.04017	-.00261

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00054
SDev	.00073
%RSD	135.28

#1	.00012
#2	.00065
#3	.00152
#4	-.00013

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DJORHB

Operator: RJG

Run Time: 08/18/00 10:33:50

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00001	.00696	.00706	.03925	-.00013	.00007	.02999
SDev	.00076	.00751	.03506	.01048	.00022	.00012	.00186
%RSD	8686.4	107.86	496.42	26.692	164.57	161.18	6.2095
#1	-.00038	.00503	-.01624	.03872	.00011	.00011	.03086
#2	.00113	.01801	.01600	.03594	-.00011	.00023	.03220
#3	-.00041	.00337	-.02424	.05364	-.00042	-.00001	.02852
#4	-.00038	.00144	.05272	.02871	-.00011	-.00003	.02837
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00239	.00075	.00071	.00070	.01811	.31941	.00047
SDev	.00121	.00363	.00178	.00132	.00169	.49312	.00036
%RSD	50.855	484.95	252.61	188.46	9.3415	154.39	77.107
#1	-.00190	-.00222	.00296	-.00023	.01776	.56478	.00060
#2	-.00128	.00519	.00127	.00256	.02060	.87784	.00033
#3	-.00410	.00224	-.00042	.00070	.01705	.04865	.00005
#4	-.00227	-.00222	-.00099	-.00023	.01705	-.21364	.00090
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00554	-.00052	-.00130	.00935	.00165	.00606	.00828
SDev	.01382	.00000	.00425	.00819	.00381	.02567	.00898
%RSD	249.58	.28927	327.28	87.541	231.29	423.82	108.44
#1	-.00761	-.00052	.00391	.00139	-.00009	.02810	.00817
#2	.01453	-.00052	-.00130	.01986	.00539	-.01998	-.00267
#3	-.01315	-.00052	-.00130	.01155	.00415	-.01200	.00829
#4	-.01592	-.00052	-.00651	.00462	-.00286	.02811	.01934
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00199	.04058	.00278	-.00003	-.00069	.01836	-.00260
SDev	.01864	.02922	.01280	.00028	.00033	.05379	.00421
%RSD	936.76	72.017	460.69	997.42	47.871	293.00	161.90
#1	-.02745	.05712	.01864	-.00014	-.00095	-.02178	-.00250
#2	.01737	.05719	-.00766	.00036	-.00026	-.03426	.00256

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#3	.00106	.05104	.00770	-.00003	-.00095	.06474	-.00776
#4	.00106	-.00304	-.00756	-.00030	-.00061	.06474	-.00271
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem ZN
Units ppm
Avge .00095
SDev .00125
%RSD 132.19

#1 -.00013
#2 -.00014
#3 .00200
#4 .00205

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: DJ0RHC Operator: RJG
 Run Time: 08/18/00 10:36:59
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04107	1.7548	1.8299	.89349	1.7918	.04476	50.376
SDev	.00142	.0148	.0491	.00212	.0116	.00013	.235
%RSD	3.4534	.84306	2.6859	.23685	.64542	.28614	.46570
#1	.04068	1.7438	1.8341	.89306	1.7798	.04460	50.367
#2	L.03922	1.7602	1.7771	.89392	1.8058	.04472	50.517
#3	.04219	1.7733	1.8946	.89604	1.7853	.04486	50.572
#4	.04217	1.7420	1.8138	.89093	1.7963	.04487	50.049
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	L.03762	.44940	.17816	.21993	.95465	46.868	.87767
SDev	.00177	.00253	.00145	.00120	.00302	.275	.00993
%RSD	4.7141	.56272	.81599	.54590	.31691	.58693	1.1313
#1	L.03794	.44904	.17985	.21854	.95251	46.703	.86778
#2	L.03994	.45049	.17760	.22132	.95822	47.279	.88738
#3	L.03674	.45200	.17872	.22040	.95607	46.720	.87056
#4	L.03584	.44607	.17647	.21946	.95180	46.771	.88495
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	48.353	.45179	.96654	47.433	.45264	.46421	.49111
SDev	.183	.00085	.00782	.289	.00973	.03043	.01661
%RSD	.37890	.18861	.80854	.60927	2.1497	6.5541	3.3812
#1	48.106	.45179	.96263	47.118	.45347	.44206	.46620
#2	48.549	.45179	.97826	47.713	.44194	.49039	.49922
#3	48.377	.45283	.96263	47.260	.46533	.49042	.49959
#4	48.380	.45074	.96263	47.639	.44983	.43398	.49942
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.7442	9.6209	1.9893	.90168	.95196	1.7995	.44711
SDev	.1015	.0528	.0270	.00490	.00347	.0960	.00307
%RSD	5.8169	.54872	1.3595	.54308	.36455	5.3337	.68605
#1	1.7758	9.5442	2.0253	.89618	.94884	1.9169	.44446
#2	1.6536	9.6525	1.9948	.90762	.95680	1.7932	.44992

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#3	1.6739	9.6585	1.9664	.89969	.95196	1.8056	.44962
#4	1.8736	9.6284	1.9707	.90324	.95023	1.6821	.44445
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass
High	2.4000					2.4000	.60000
Low	1.6000					1.6000	.40000
Elem	ZN						
Units	ppm						
Avge	.44495						
SDev	.00402						
%RSD	.90448						
#1	.43905						
#2	.44596						
#3	.44806						
#4	.44672						
Errors	LC Pass						
High	.60000						
Low	.40000						

Method: QUANMET Sample Name: DHX4C

Operator: RJG

Run Time: 08/18/00 10:40:08

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00162	6.6984	-.00666	.07325	.10199	.00032	22.035
SDev	.00144	.0377	.04463	.00215	.00073	.00007	.214
%RSD	89.178	.56226	669.68	2.9402	.71869	21.915	.97079
#1	-.00199	6.6651	-.04083	.07136	.10113	.00022	21.856
#2	-.00350	6.6948	-.03695	.07141	.10248	.00037	21.851
#3	-.00049	6.6818	-.00454	.07508	.10165	.00035	22.161
#4	-.00048	6.7519	.05567	.07516	.10270	.00035	22.271
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00136	.00564	.00450	.00723	6.1841	6.5658	.00432
SDev	.00143	.00305	.00116	.00093	.0403	.2888	.00053
%RSD	105.55	54.122	25.788	12.894	.65128	4.3983	12.236
#1	-.00248	.00305	.00464	.00583	6.1399	6.2676	.00377
#2	-.00103	.00305	.00295	.00769	6.1676	6.3691	.00404
#3	.00054	.00898	.00577	.00770	6.1946	6.8176	.00497
#4	-.00245	.00750	.00464	.00770	6.2344	6.8091	.00451
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.1603	.74500	-.00038	101.85	-.00013	-.00739	.00492
SDev	.0365	.00572	.00601	.71	.00483	.02658	.01058
%RSD	.87827	.76836	1592.1	.69737	3839.7	359.62	214.87
#1	4.1139	.73873	.00483	101.37	.00467	.00666	.01872
#2	4.1499	.74291	-.00559	102.55	.00042	-.03361	-.00333
#3	4.1804	.74605	.00483	101.11	-.00682	-.02540	-.00342
#4	4.1970	.75232	-.00558	102.36	.00123	.02278	.00772
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02445	14.628	-.01164	.12801	.37329	.02058	.00645
SDev	.05021	.103	.00748	.00079	.00147	.07538	.00265
%RSD	205.37	.70513	64.309	.61370	.39311	366.34	41.089
#1	-.08466	14.478	-.00556	.12739	.37191	-.06859	.00784
#2	.02949	14.658	-.01442	.12822	.37399	.01769	.00248

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#3	-.04377	14.664	-.02097	.12739	.37226	.01735	.00784
#4	.00115	14.712	-.00561	.12904	.37502	.11585	.00764

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	+.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.05519
SDev	.00184
%RSD	3.3323

#1	.05684
#2	.05489
#3	.05630
#4	.05272

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHX4D

Operator: RJG

Run Time: 08/18/00 10:43:16

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00142	.75492	.02843	.03889	.06744	.00014	20.817
SDev	.00074	.00261	.04997	.00202	.00016	.00007	.042
%RSD	52.199	.34563	175.75	5.1847	.23161	50.752	.20147
#1	-.00179	.75297	-.00703	.03645	.06731	.00011	20.763
#2	-.00180	.75505	.05380	.03919	.06762	.00024	20.865
#3	-.00177	.75856	.08611	.04135	.06731	.00010	20.824
#4	-.00031	.75310	-.01917	.03857	.06752	.00011	20.815
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00154	.00106	.00099	.00982	.82706	4.7848	.00066
SDev	.00269	.00443	.00198	.00192	.00246	.3852	.00054
%RSD	174.42	420.17	200.40	19.536	.29775	8.0512	82.846
#1	-.00103	-.00376	-.00098	.00819	.82777	4.5754	.00145
#2	-.00493	.00663	.00239	.01191	.82351	5.3622	.00022
#3	.00161	-.00081	-.00042	.00819	.82920	4.5923	.00044
#4	-.00182	.00217	.00296	.01098	.82778	4.6092	.00052
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.8960	.59960	.00273	89.701	.00037	.00542	.00831
SDev	.0229	.00000	.00499	.234	.00532	.02749	.00897
%RSD	.79202	.00033	182.81	.26117	1440.0	507.42	107.99
#1	2.9015	.59961	.00924	89.874	.00123	-.02086	.00833
#2	2.9209	.59960	-.00113	89.717	.00385	.04376	-.00271
#3	2.8656	.59960	-.00113	89.365	.00379	-.00469	.00835
#4	2.8960	.59960	.00403	89.846	-.00739	.00345	.01927
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02328	4.6369	-.03540	.11217	.01652	.00102	-.00123
SDev	.02753	.0091	.01981	.00060	.00060	.03087	.00253
%RSD	118.23	.19516	55.959	.53145	3.6273	3033.7	204.73
#1	-.01717	4.6414	-.06001	.11235	.01600	-.03911	-.00240
#2	-.01718	4.6293	-.01632	.11267	.01600	.01029	-.00260

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#3	-.06198	4.6475	-.02283	.11131	.01703	.03497	.00256
#4	.00320	4.6293	-.04246	.11235	.01703	-.00208	-.00250
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.12837
SDev	.00158
%RSD	1.2331

#1	.12747
#2	.12663
#3	.12998
#4	.12942

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHX4E

Operator: RJG

Run Time: 08/18/00 10:46:24

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00126	5.6886	.01657	.07775	.07269	.00041	121.06
SDev	.00141	.0279	.05350	.00178	.00016	.00007	.49
%RSD	111.54	.49099	322.93	2.2840	.21489	18.192	.40188
#1	.00057	5.6610	.04832	.07860	.07277	.00035	120.67
#2	-.00237	5.6867	.07228	.07509	.07256	.00034	121.60
#3	-.00088	5.7272	-.00913	.07869	.07287	.00047	121.34
#4	-.00237	5.6793	-.04520	.07863	.07256	.00047	120.63
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00184	.01512	.01507	.04951	6.1796	10.777	.00448
SDev	.00246	.00242	.00073	.00000	.0263	.152	.00051
%RSD	133.29	16.001	4.8227	.00396	.42551	1.4088	11.309
#1	-.00370	.01513	.01591	.04950	6.1487	10.659	.00404
#2	-.00356	.01216	.01479	.04951	6.2048	10.676	.00486
#3	.00157	.01511	.01535	.04951	6.1977	10.786	.00404
#4	-.00168	.01809	.01423	.04951	6.1672	10.989	.00497
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	6.0384	2.8288	.03348	45.859	.00903	.01563	.01880
SDev	.0321	.0113	.00673	.210	.00733	.03831	.01266
%RSD	.53113	.39789	20.089	.45898	81.123	245.16	67.331
#1	6.0183	2.8202	.02567	45.601	-.00132	.05588	.02971
#2	6.0155	2.8400	.03088	46.031	.01336	-.02469	.00781
#3	6.0847	2.8369	.03609	46.030	.01497	.03971	.00787
#4	6.0349	2.8181	.04130	45.772	.00913	-.00840	.02981
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.02039	9.7582	-.02044	.33640	.25440	-.02027	.01228
SDev	.02498	.0493	.02162	.00120	.00118	.06775	.00268
%RSD	122.54	.50482	105.78	.35543	.46274	334.14	21.819
#1	-.01945	9.7191	.00367	.33557	.25431	.01710	.00826
#2	.00922	9.8094	-.01829	.33737	.25327	-.09460	.01352

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#3	-.05191	9.7913	-.04892	.33748	.25604	.05372	.01362
#4	-.01940	9.7131	-.01820	.33518	.25396	-.05731	.01372
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avg	.04765
SDev	.00104
%RSD	2.1839

#1	.04707
#2	.04841
#3	.04864
#4	.04649

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHX4EP5 Operator: RJG
 Run Time: 08/18/00 10:49:33
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00093	1.1626	.02560	.02875	.01496	.00014	24.957
SDev	.00149	.0084	.00811	.00629	.00018	.00007	.131
%RSD	160.10	.72409	31.671	21.862	1.1916	51.567	.52634

#1	-.00316	1.1529	.02163	.02347	.01512	.00010	24.833
#2	-.00020	1.1676	.03776	.02346	.01512	.00011	24.864
#3	-.00017	1.1713	.02140	.03223	.01481	.00009	25.112
#4	-.00019	1.1585	.02160	.03586	.01481	.00024	25.018

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00243	.00362	.00240	.00963	1.2972	2.2168	.00048
SDev	.00235	.00121	.00145	.00093	.0088	.3878	.00032
%RSD	96.663	33.323	60.680	9.6532	.67890	17.495	66.401

#1	.00006	.00362	.00183	.01009	1.2918	2.1216	.00033
#2	-.00107	.00510	.00296	.01009	1.2876	2.4347	.00060
#3	-.00510	.00363	.00408	.01009	1.3053	2.5955	.00087
#4	-.00362	.00214	.00071	.00823	1.3039	1.7155	.00014

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.2345	.59399	.00540	9.3100	.00649	-.00894	.01376
SDev	.0061	.00248	.00499	.0350	.00443	.01040	.01417
%RSD	.49716	.41827	92.285	.37587	68.219	116.31	102.97

#1	1.2324	.59138	.00931	9.2780	.00138	-.02098	.03020
#2	1.2269	.59243	.00931	9.3094	.00693	.00317	.01929
#3	1.2408	.59660	.00410	9.2937	.01212	-.00493	.00827
#4	1.2380	.59556	-.00111	9.3589	.00554	-.01302	-.00271

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02103	2.0274	-.01464	.06968	.05162	-.04096	-.00086
SDev	.02730	.0078	.02383	.00044	.00141	.02551	.00244
%RSD	129.84	.38320	162.76	.63363	2.7353	62.264	284.46

#1	-.02410	2.0184	.01005	.06907	.04989	-.06873	-.00111
#2	-.01189	2.0364	-.03157	.06962	.05335	-.00689	-.00239
#3	.00853	2.0305	.00119	.07001	.05162	-.04415	.00267
#4	-.05666	2.0244	-.03823	.07001	.05162	-.04409	-.00260

Elem	ZN
Units	ppm
Avge	.00954
SDev	.00081
%RSD	8.4544

#1	.00929
#2	.01064
#3	.00951

#4 .00871

Method: QUANMET Sample Name: DHX4ES Operator: RJG
Run Time: 08/18/00 10:52:41
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04058	8.3572	1.9272	.98989	1.9216	.04637	169.68
SDev	.00188	.0291	.0355	.00598	.0096	.00017	.61
%RSD	4.6393	.34780	1.8414	.60461	.49913	.37011	.36121
#1	.04023	8.3704	1.8825	.99640	1.9296	.04657	169.52
#2	.04320	8.3613	1.9150	.98189	1.9220	.04630	170.04
#3	.04020	8.3816	1.9554	.99069	1.9269	.04645	170.28
#4	.03871	8.3154	1.9560	.99056	1.9080	.04618	168.90
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03718	.46705	.19421	.27733	7.0509	59.213	.93126
SDev	.00103	.00191	.00098	.00206	.0291	.465	.00431
%RSD	2.7831	.40981	.50366	.74317	.41308	.78600	.46265
#1	.03631	.46481	.19505	.27942	7.0566	59.310	.93465
#2	.03868	.46927	.19336	.27663	7.0530	59.607	.92891
#3	.03687	.46779	.19506	.27849	7.0821	59.395	.93511
#4	.03685	.46633	.19336	.27477	7.0118	58.540	.92637
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	55.076	3.2177	.99480	95.242	.46246	.48741	.50730
SDev	.245	.0129	.00951	.527	.01220	.01212	.02100
%RSD	.44444	.40224	.95645	.55309	2.6384	2.4872	4.1391
#1	55.253	3.2192	1.0052	95.688	.47718	.47731	.52126
#2	55.048	3.2224	.98959	95.138	.45364	.50156	.52107
#3	55.264	3.2297	1.0000	95.604	.46773	.47732	.47679
#4	54.741	3.1994	.98438	94.541	.45130	.49346	.51006
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8346	H21.276	1.9184	1.2596	1.2287	1.7951	.46832
SDev	.0656	.117	.0477	.0063	.0080	.1559	.00304
%RSD	3.5775	.55222	2.4881	.50253	.64890	8.6831	.64935
#1	1.8774	H21.324	1.8704	1.2636	1.2366	1.9680	.47110
#2	1.7389	H21.264	1.9163	1.2601	1.2300	1.6344	.47080

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#3	1.8449	H21.396	1.9839	1.2642	1.2304	1.8813	.46584
#4	1.8773	H21.119	1.9032	1.2505	1.2176	1.6965	.46554
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.49678
SDev	.00197
%RSD	.39662

#1	.49635
#2	.49943
#3	.49467
#4	.49668

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHX4ED

Operator: RJG

Run Time: 08/18/00 10:55:49

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04094	8.4510	1.8474	.96101	1.8892	.04575	172.22
SDev	.00285	.0209	.0776	.01687	.0108	.00026	.36
%RSD	6.9527	.24699	4.2006	1.7552	.57000	.56267	.20882

#1	.03722	8.4422	1.8536	.95781	1.8952	.04578	171.72
#2	.04317	8.4681	1.9547	.97125	1.8928	.04592	172.58
#3	.04020	8.4681	1.7844	.97638	1.8957	.04592	172.28
#4	.04316	8.4256	1.7970	.93860	1.8732	.04537	172.31

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03680	.46186	.19126	.27478	7.1575	60.184	.91317
SDev	.00717	.00436	.00202	.00228	.0164	.163	.00881
%RSD	19.479	.94492	1.0586	.82992	.22981	.27125	.96437

#1	.04587	.46035	.18943	.27478	7.1554	60.030	.91857
#2	.03781	.46185	.18999	.27478	7.1610	60.182	.91570
#3	.02859	.46780	.19168	.27757	7.1767	60.410	.91832
#4	.03494	.45743	.19393	.27198	7.1369	60.114	.90011

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	55.692	3.2566	1.0091	96.620	.46349	.48922	.52080
SDev	.179	.0042	.0026	.653	.01299	.02754	.03263
%RSD	.32127	.12926	.25809	.67592	2.8026	5.6292	6.2661

#1	55.729	3.2547	1.0104	96.969	.46322	.49322	.53181
#2	55.820	3.2589	1.0052	96.760	.47237	.47718	.55398
#3	55.790	3.2610	1.0105	97.089	.44522	.52550	.47639
#4	55.430	3.2516	1.0104	95.662	.47316	.46097	.52103

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8298	H21.564	1.9945	1.2477	1.2417	1.7665	.46086
SDev	.0898	.122	.0537	.0066	.0058	.0446	.00005
%RSD	4.9051	.56535	2.6900	.52744	.46963	2.5226	.01131

#1	1.8329	H21.504	2.0104	1.2508	1.2404	1.7572	.46088
#2	1.9021	H21.528	2.0127	1.2499	1.2446	1.7325	.46078

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#3	1.8818	H21.745	2.0385	1.2521	1.2477	1.7446	.46088
#4	1.7024	H21.480	1.9163	1.2379	1.2342	1.8316	.46089
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.48838
SDev	.00423
%RSD	.86602

#1	.48209
#2	.49109
#3	.49060
#4	.48974

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHX4H
Run Time: 08/18/00 10:58:58
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Operator: RJG

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00258	1.6995	.03518	.07457	.05786	.00026	115.03
SDev	.00192	.0092	.04710	.00588	.00043	.00013	.32
%RSD	74.501	.54166	133.90	7.8850	.74088	49.370	.28017
#1	-.00183	1.7000	.01997	.07618	.05786	.00037	115.22
#2	-.00481	1.6871	.07683	.07980	.05838	.00023	115.11
#3	-.00035	1.7092	.06854	.07618	.05786	.00037	115.24
#4	-.00332	1.7018	-.02463	.06613	.05733	.00009	114.56
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00184	.01442	.01845	.04293	2.3310	9.3009	.00044
SDev	.00080	.00253	.00056	.00047	.0083	.3241	.00060
%RSD	43.628	17.569	3.0498	1.0865	.35493	3.4843	138.16
#1	-.00122	.01108	.01873	.04269	2.3333	9.6097	-.00014
#2	-.00142	.01553	.01761	.04270	2.3333	9.1274	.00049
#3	-.00173	.01701	.01874	.04363	2.3383	9.5336	.00126
#4	-.00301	.01405	.01873	.04269	2.3191	8.9328	.00014
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1353	2.7192	.02770	44.933	.00906	-.02129	-.00018
SDev	.0244	.0078	.00301	.221	.00307	.03943	.01881
%RSD	.47605	.28786	10.862	.49280	33.883	185.22	10607.
#1	5.1270	2.7232	.02509	44.947	.00766	-.02137	.00803
#2	5.1658	2.7232	.03030	45.235	.00584	.02703	.01911
#3	5.1409	2.7232	.03031	44.829	.00976	-.02126	-.02497
#4	5.1076	2.7075	.02509	44.721	.01299	-.06956	-.00288
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.05599	3.5059	-.00234	.32081	.01254	-.06141	.00315
SDev	.03095	.0349	.0174	.00148	.00056	.02140	.00006
%RSD	55.273	.99443	744.75	.45996	4.5048	34.844	1.8247
#1	-.03765	3.4984	.02121	.32139	.01254	-.05520	.00310
#2	-.09469	3.5044	-.00279	.32249	.01185	-.09231	.00320

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#3	-.02541	3.5525	-.02050	.32030	.01323	-.04294	.00320
#4	-.06621	3.4683	-.00727	.31904	.01254	-.05517	.00310
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.05191
SDev	.00120
%RSD	2.3139

#1	.05040
#2	.05154
#3	.05257
#4	.05313

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHX4J

Operator: RJG

Run Time: 08/18/00 11:02:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00012	1.3694	-.00527	.08095	.08188	.00016	21.614
SDev	.00210	.0064	.02020	.00237	.00050	.00008	.066
%RSD	1781.0	.46908	383.48	2.9301	.61391	48.107	.30412
#1	-.00137	1.3648	-.00624	.08216	.08148	.00023	21.551
#2	.00309	1.3758	.02205	.08365	.08201	.00023	21.670
#3	.00012	1.3630	-.02650	.07855	.08148	.00010	21.672
#4	-.00137	1.3740	-.01039	.07942	.08253	.00009	21.563
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00065	.00391	.00197	.00232	2.7809	6.1766	.00188
SDev	.00324	.00075	.00218	.00120	.0086	.3996	.00096
%RSD	502.33	19.084	110.46	51.754	.30745	6.4692	51.307
#1	.00273	.00353	.00352	.00278	2.7754	6.7245	.00126
#2	.00146	.00354	.00408	.00371	2.7747	6.2168	.00330
#3	-.00398	.00355	-.00043	.00092	2.7804	5.9291	.00134
#4	-.00280	.00503	.00070	.00185	2.7932	5.8361	.00161
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.5631	.92775	-.00089	115.23	-.00182	-.00941	.01366
SDev	.0137	.00170	.00602	.80	.00885	.01036	.02628
%RSD	.38583	.18371	678.59	.69554	486.22	110.05	192.40
#1	3.5548	.92566	-.00610	115.07	.00728	.00261	-.01385
#2	3.5686	.92775	.00432	114.38	.00387	-.01341	.04127
#3	3.5493	.92984	-.00610	115.16	-.00695	-.02146	.03024
#4	3.5797	.92776	.00432	116.31	-.01149	-.00539	-.00302
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.04258	7.4479	.00195	.13217	.07687	.01662	.00257
SDev	.03942	.0418	.00974	.00048	.00098	.03908	.00012
%RSD	92.565	.56157	498.32	.36239	1.2726	235.04	4.5705
#1	-.01204	7.4088	.01003	.13204	.07687	-.00804	.00247
#2	-.06093	7.4148	-.00284	.13200	.07756	.06612	.00267

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#3	-.00795	7.4870	-.00945	.13177	.07756	-.02043	.00246
#4	-.08940	7.4810	.01008	.13287	.07549	.02885	.00266
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01858
SDev	.00055
%RSD	2.9569

#1	.01901
#2	.01797
#3	.01826
#4	.01908

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-8

Operator: RJG

Run Time: 08/18/00 11:05:15

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0178	50.346	5.1683	5.0954	5.0297	5.0938	52.938
SDev	.0091	.496	.0917	.0651	.0623	.0572	.291
%RSD	.89060	.98543	1.7737	1.2785	1.2384	1.1231	.54906

#1	1.0232	50.623	5.1694	5.1413	5.0565	5.1348	53.017
#2	1.0187	50.693	5.2907	5.1254	5.0838	5.1367	52.794
#3	1.0246	50.448	5.1428	5.1160	5.0379	5.0892	53.305
#4	1.0047	49.618	5.0704	4.9990	4.9406	5.0146	52.635

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2240	5.1451	5.1018	4.9702	53.072	49.885	4.9131
SDev	.0205	.0314	.0333	.0637	.348	.312	.0862
%RSD	.39300	.60999	.65324	1.2821	.65509	.62520	1.7555

#1	5.2323	5.1669	5.1182	5.0051	53.255	50.265	4.9566
#2	5.2044	5.1521	5.1041	5.0283	53.207	49.961	4.9998
#3	5.2490	5.1624	5.1306	4.9642	53.275	49.792	4.8950
#4	5.2105	5.0989	5.0546	4.8833	52.553	49.521	4.8009

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.754	5.1159	5.0770	50.027	5.1998	5.2053	5.1638
SDev	.516	.0356	.0137	.711	.0438	.0401	.0562
%RSD	1.0172	.69588	.27051	1.4216	.84260	.77054	1.0875

#1	51.095	5.1339	5.0757	50.459	5.1904	5.2440	5.2022
#2	51.078	5.1287	5.0705	50.666	5.2394	5.1711	5.1809
#3	50.843	5.1381	5.0965	49.907	5.2274	5.2359	5.1913
#4	49.999	5.0628	5.0652	49.074	5.1420	5.1703	5.0805

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.0400	5.2254	5.2136	5.0345	5.0309	10.106	5.0992
SDev	.1037	.0434	.0487	.0581	.0460	.048	.0412
%RSD	2.0584	.83042	.93339	1.1534	.91455	.47731	.80870

#1	5.1159	5.2303	5.2509	5.0623	5.0566	10.107	5.1292
#2	5.1280	5.2482	5.1436	5.0808	5.0593	10.120	5.1200

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#3	5.0100	5.2601	5.2181	5.0448	5.0451	10.156	5.1090
#4	4.9062	5.1629	5.2418	4.9502	4.9625	10.041	5.0386
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	5.0735
SDev	.0251
%RSD	.49408

#1	5.0884
#2	5.0893
#3	5.0799
#4	5.0364

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB8

Operator: RJG

Run Time: 08/18/00 11:08:23

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00038	.00596	.01418	.02889	-.00011	.00024	.01339
SDev	.00122	.00643	.02664	.00658	.00000	.00011	.00509
%RSD	317.07	107.77	187.85	22.764	.00000	45.468	38.047

#1	.00110	.01044	-.00005	.02825	-.00011	.00024	.01575
#2	-.00187	-.00043	.04870	.02675	-.00011	.00024	.00974
#3	-.00038	.00139	.02030	.03805	-.00011	.00011	.00865
#4	-.00038	.01244	-.01223	.02250	-.00011	.00038	.01943

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00186	.00075	-.00197	-.00046	.00302	.09307	.00033
SDev	.00146	.00210	.00174	.00047	.00178	.22046	.00018
%RSD	78.292	280.78	88.647	100.42	58.875	236.87	55.695

#1	-.00344	-.00073	-.00042	-.00023	.00284	.15018	.00044
#2	-.00031	-.00074	-.00211	-.00116	.00071	-.04442	.00041
#3	-.00269	.00372	-.00436	-.00023	.00355	-.11211	.00005
#4	-.00099	.00075	-.00098	-.00023	.00497	.37864	.00041

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01661	-.00052	.00781	.01005	-.00501	-.01607	.00271
SDev	.00795	.00000	.00890	.00508	.00333	.01914	.02623
%RSD	47.871	.58584	113.85	50.557	66.479	119.12	967.69

#1	-.01038	-.00051	.01954	.01201	-.00951	.01208	.03021
#2	-.01868	-.00052	-.00130	.00323	-.00147	-.02010	.01930
#3	-.02699	-.00052	.00912	.00970	-.00449	-.02809	-.02484
#4	-.01038	-.00052	.00391	.01524	-.00456	-.02816	-.01383

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00407	.05411	-.01365	.00007	-.00061	.01851	-.00243
SDev	.02628	.00347	.01521	.00034	.00049	.03090	.00017
%RSD	646.22	6.4208	111.41	498.39	80.812	166.91	7.1075

#1	-.01120	.05712	-.02720	.00025	.00009	.06487	-.00220
#2	-.02750	.05110	.00775	-.00041	-.00095	.00310	-.00261

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#3	-.01119	.05111	-.02089	.00008	-.00095	.00304	-.00241
#4	.03362	.05712	-.01428	.00036	-.00061	.00305	-.00251

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00186
SDev	.00040
%RSD	21.771

#1	.00208
#2	.00205
#3	.00206
#4	.00125

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHX4K

Operator: RJG

Run Time: 08/18/00 11:11:31

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00074	.46523	.02893	.07952	.07996	.00014	22.019
SDev	.00086	.01266	.01557	.00211	.00055	.00006	.189
%RSD	116.31	2.7203	53.833	2.6546	.68754	47.850	.85674
#1	-.00148	.44721	.01387	.07765	.07917	.00023	21.736
#2	-.00001	.46569	.03808	.08135	.08012	.00011	22.117
#3	-.00149	.47312	.01774	.08135	.08043	.00011	22.120
#4	.00002	.47490	.04602	.07773	.08012	.00009	22.101
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00355	.00514	.00803	.00577	2.3434	5.8763	.00054
SDev	.00178	.00209	.00221	.00089	.0184	.3105	.00012
%RSD	50.141	40.717	27.473	15.440	.78424	5.2831	22.022
#1	-.00348	.00514	.01028	.00646	2.3162	6.0730	.00049
#2	L-.00608	.00218	.00521	.00460	2.3482	5.4469	.00052
#3	-.00216	.00662	.00916	.00554	2.3539	6.1322	.00044
#4	-.00247	.00662	.00746	.00646	2.3553	5.8530	.00071
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.3659	.91356	.00556	114.61	.00629	-.00673	-.00003
SDev	.0199	.00594	.00260	.44	.00879	.00771	.01887
%RSD	.59064	.64984	46.800	.38550	139.88	114.52	66877.
#1	3.3417	.90469	.00946	113.95	.01394	-.00470	-.00277
#2	3.3583	.91617	.00426	114.86	-.00344	-.01282	.01923
#3	3.3859	.91617	.00426	114.79	.00114	.00333	-.02491
#4	3.3776	.91721	.00426	114.85	.01351	-.01272	.00834
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04068	5.7574	-.00616	.13079	.01211	.01489	-.00020
SDev	.02140	.0507	.00805	.00084	.00077	.04569	.00268
%RSD	52.600	.88030	130.69	.63856	6.3353	306.75	1346.5
#1	-.04584	5.6822	.00367	.12958	.01115	.03365	.00149
#2	-.00909	5.7844	-.01591	.13122	.01254	-.01600	-.00249

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#3	-.05389	5.7724	-.00737	.13145	.01185	-.02845	-.00248
#4	-.05389	5.7905	-.00503	.13090	.01288	.07037	.00268
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.03585
SDev	.00077
%RSD	2.1526

#1	.03522
#2	.03527
#3	.03686
#4	.03603

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHWLVB

Operator: RJG

Run Time: 08/18/00 11:14:40

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00187	.00419	.02127	.02487	-.00011	.00011	.00219
SDev	.00121	.00489	.02576	.00879	.00000	.00000	.00409
%RSD	65.064	116.52	121.10	35.331	.00000	.14962	187.06
#1	-.00335	-.00225	.05680	.01890	-.00011	.00011	-.00353
#2	-.00187	.00700	.02023	.02656	-.00011	.00011	.00472
#3	-.00187	.00321	.01216	.03659	-.00011	.00011	.00552
#4	-.00038	.00881	-.00411	.01741	-.00011	.00011	.00204
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00210	.00186	-.00070	-.00023	.02007	.04865	.00046
SDev	.00208	.00329	.00213	.00132	.00235	.39312	.00046
%RSD	98.907	176.93	303.76	574.47	11.715	808.03	100.66
#1	-.00230	.00075	-.00380	-.00209	.01776	-.43363	-.00005
#2	-.00458	.00669	.00071	.00070	.02131	.51401	.00106
#3	.00050	-.00074	.00071	-.00023	.01847	.14172	.00041
#4	-.00203	.00075	-.00042	.00070	.02274	-.02750	.00041
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00692	-.00052	.00131	.00670	-.00709	-.02408	.00270
SDev	.00762	.00000	.00301	.00466	.00722	.01043	.02628
%RSD	110.15	.20982	230.41	69.538	101.89	43.324	971.47
#1	-.01592	-.00052	-.00130	.00600	-.01440	-.02809	.03030
#2	.00069	-.00051	.00391	.01108	.00268	-.01995	-.01376
#3	-.00208	-.00052	.00391	.00046	-.00982	-.03625	-.02496
#4	-.01038	-.00052	-.00130	.00924	-.00681	-.01203	.01925
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00300	.06614	-.00545	-.00029	-.00095	.01524	-.00256
SDev	.01939	.00347	.00959	.00015	.00102	.06768	.00006
%RSD	645.91	5.2512	176.00	50.180	107.05	444.08	2.4025
#1	-.01523	.06915	-.01625	-.00014	-.00199	.00292	-.00261
#2	-.01522	.06915	-.00990	-.00041	-.00026	-.03424	-.00250

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#3	.02551	.06314	-.00120	-.00041	-.00164	-.02180	-.00250
#4	-.00707	.06314	.00556	-.00019	.00009	.11408	-.00260

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00096
SDev	.00147
%RSD	153.23

#1	-.00121
#2	.00147
#3	.00151
#4	.00206

Errors	LC Pass
High	.02000
Low	-.02000

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Method: QUANMET Sample Name: DHWLV

Operator: RJG

Run Time: 08/18/00 11:17:48

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04648	1.9269	1.9696	.98677	1.9437	.04942	52.071
SDev	.00142	.0105	.0516	.00316	.0091	.00028	.230
%RSD	3.0621	.54356	2.6202	.32018	.46665	.56618	.44100
#1	.04537	1.9334	1.9087	.98949	1.9503	.04966	52.339
#2	.04685	1.9115	1.9616	.98223	1.9311	.04911	51.782
#3	.04537	1.9334	1.9736	.98800	1.9503	.04966	52.047
#4	.04834	1.9295	2.0345	.98738	1.9429	.04925	52.116
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04237	.49117	.19617	.23879	1.0437	48.377	.94827
SDev	.00565	.00573	.00080	.00089	.0056	.305	.00587
%RSD	13.339	1.1674	.40536	.37287	.53280	.63133	.61870
#1	.04152	.49635	.19617	.23809	1.0485	48.294	.94552
#2	.04960	.49339	.19673	.23902	1.0357	48.226	.94582
#3	.04253	.49191	.19504	.23995	1.0450	48.827	.95704
#4	L.03583	.48303	.19673	.23808	1.0457	48.159	.94470
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.903	.49199	.99521	49.075	.49403	.52157	.50798
SDev	.271	.00347	.01155	.214	.01594	.01648	.02756
%RSD	.54272	.70436	1.1608	.43522	3.2256	3.1587	5.4262
#1	50.165	.49564	1.0043	49.193	.51223	.49953	.46664
#2	49.537	.48729	.97827	48.795	.47433	.52367	.52185
#3	50.032	.49251	.99911	49.281	.49932	.52361	.52172
#4	49.880	.49251	.99911	49.031	.49026	.53946	.52173
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9176	9.8951	1.9964	.97817	.97479	2.0237	.48638
SDev	.0486	.0532	.0492	.00463	.00453	.0898	.00022
%RSD	2.5344	.53785	2.4628	.47293	.46445	4.4399	.04575
#1	1.9838	9.9237	2.0317	.98087	.97859	2.1503	.48656
#2	1.8901	9.8154	1.9358	.97180	.96821	1.9403	.48606

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#3	1.9227	9.9177	2.0408	.98219	.97617	1.9897	.48646
#4	1.8738	9.9237	1.9773	.97782	.97617	2.0145	.48646
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass
High	2.4000					2.4000	.60000
Low	1.6000					1.6000	.40000
Elem	ZN						
Units	ppm						
Avge	.48698						
SDev	.00292						
%RSD	.59953						
#1	.49104						
#2	.48430						
#3	.48559						
#4	.48700						
Errors	LC Pass						
High	.60000						
Low	.40000						

Method: QUANMET Sample Name: DHV7M

Operator: RJG

Run Time: 08/18/00 11:20:57

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00217	1.1220	.06627	.07176	.17599	.00009	42.848
SDev	.00149	.0092	.02408	.00417	.00095	.00000	.271
%RSD	68.459	.82425	36.339	5.8135	.54168	.26945	.63243

#1	.00143	1.1234	.09871	.07504	.17620	.00009	42.487
#2	.00143	1.1085	.05017	.07442	.17515	.00009	42.824
#3	.00441	1.1289	.07026	.07167	.17537	.00009	43.128
#4	.00143	1.1270	.04596	.06590	.17725	.00009	42.953

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00265	.00247	.04943	.03007	1.4078	4.0719	.00338
SDev	.00323	.00254	.00032	.00054	.0089	.1656	.00029
%RSD	121.76	102.97	.65707	1.7893	.63358	4.0666	8.5104

#1	-.00175	.00357	.04971	.02961	1.3991	3.9915	.00322
#2	-.00028	-.00088	.04971	.02960	1.4033	3.8815	.00341
#3	L-.00741	.00507	.04914	.03054	1.4197	4.1692	.00377
#4	-.00117	.00209	.04915	.03054	1.4090	4.2454	.00311

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.509	.16940	.00542	S3675.2	.00875	.02325	.02721
SDev	.035	.00060	.00499	.1	.00397	.02033	.02907
%RSD	.28360	.35708	92.030	.00317	45.397	87.449	106.83

#1	12.471	.16887	-.00109	S3675.1	.01353	.04342	.05212
#2	12.504	.16888	.00933	S3675.3	.00385	-.00504	-.01423
#3	12.504	.16992	.00412	S3675.1	.00928	.02735	.04101
#4	12.556	.16992	.00933	S3675.2	.00833	.02726	.02996

Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.03601	10.090	-.00299	.31219	.02940	.06979	.00278
SDev	.03748	.051	.01141	.00129	.00077	.06266	.00010
%RSD	104.07	.50911	381.13	.41359	2.6087	89.785	3.4577

#1	-.06048	10.014	.00149	.31111	.03018	.16256	.00266
#2	.01694	10.110	-.01631	.31123	.02845	.05133	.00286

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#3	-.06450	10.122	.01019	.31259	.02983	.03876	.00276
#4	-.03601	10.116	-.00735	.31385	.02914	.02653	.00286
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .18778
SDev .00086
%RSD .45580

#1 .18680
#2 .18740
#3 .18874
#4 .18818

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHV7MP5 Operator: RJG
Run Time: 08/18/00 11:24:05
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00044	.23122	.03324	.03450	.03667	.00006	8.7832
SDev	.00259	.01171	.02979	.01074	.00025	.00013	.0436
%RSD	586.84	5.0663	89.619	31.123	.67719	196.59	.49688

#1	.00119	.22787	.07075	.02454	.03633	.00009	8.7862
#2	.00268	.23537	.03420	.03818	.03686	-.00004	8.7853
#3	-.00330	.21699	-.00205	.02730	.03664	-.00003	8.7272
#4	.00119	.24467	.03007	.04797	.03686	.00023	8.8338

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00137	.00257	.01014	.00583	.29149	.97303	.00096
SDev	.00239	.00390	.00245	.00093	.00220	.22475	.00049
%RSD	174.23	151.59	24.154	15.952	.75479	23.098	50.843

#1	-.00422	-.00076	.00803	.00629	.29345	.93707	.00044
#2	-.00149	.00220	.00915	.00630	.29274	.81861	.00090
#3	.00163	.00071	.00972	.00444	.28847	.83554	.00087
#4	-.00142	.00813	.01366	.00630	.29132	1.3009	.00161

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.5915	.03451	.00135	204.69	-.00359	-.00414	.01096
SDev	.0120	.00060	.00521	1.31	.00786	.00648	.00554
%RSD	.46147	1.7499	387.06	.63912	218.68	156.65	50.508

#1	2.5915	.03503	.00916	204.41	.00393	-.00423	.00818
#2	2.5860	.03503	-.00126	204.50	-.01412	-.00416	.00815
#3	2.5805	.03399	-.00126	206.50	.00050	.00386	.00825
#4	2.6081	.03399	-.00126	203.37	-.00469	-.01202	.01926

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03590	2.0635	-.01741	.06518	.00476	.01569	.00134
SDev	.04239	.0280	.01679	.00036	.00035	.09318	.00262
%RSD	118.08	1.3581	96.443	.55833	7.2727	593.84	195.78

#1	.02216	2.1027	.00773	.06481	.00527	.06203	.00277
#2	-.06747	2.0605	-.02507	.06508	.00458	.04966	.00257
#3	-.03081	2.0364	-.02507	.06568	.00458	-.12326	-.00258
#4	-.06747	2.0545	-.02721	.06513	.00458	.07434	.00258

Elem	ZN
Units	ppm
Avge	.03971
SDev	.00265
%RSD	6.6665

#1	.03627
#2	.04181
#3	.03900

#4 .04178

Method: QUANMET Sample Name: DHV7MS

Operator: RJG

Run Time: 08/18/00 11:27:14

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04487	3.3002	1.9976	1.0067	2.0259	.04799	96.179
SDev	.00150	.0189	.0420	.0000	.0116	.00028	.754
%RSD	3.3516	.57364	2.1027	.00223	.57132	.57687	.78368

#1	.04562	3.3043	2.0543	1.0067	2.0122	.04792	96.951
#2	.04562	3.2970	2.0017	1.0068	2.0292	.04805	96.022
#3	.04562	3.3226	1.9569	1.0068	2.0397	.04833	96.542
#4	.04261	3.2768	1.9776	1.0067	2.0224	.04766	95.203

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04421	.47372	.23926	.26837	2.4643	54.022	.94250
SDev	.00227	.00390	.00372	.00246	.0149	.436	.00950
%RSD	5.1277	.82258	1.5562	.91567	.60644	.80708	1.0080

#1	.04624	.47706	.24405	.26513	2.4652	54.141	.92853
#2	.04125	.47410	.23842	.27070	2.4716	54.234	.94497
#3	.04365	.47556	.23954	.26977	2.4773	54.335	.94953
#4	.04570	.46817	.23504	.26790	2.4431	53.379	.94699

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	60.931	.65094	.95895	S3673.2	.48091	.51596	.53250
SDev	.210	.00422	.01556	.1	.01022	.03181	.01806
%RSD	.34478	.64891	1.6224	.00404	2.1241	6.1653	3.3918

#1	60.808	.65459	.96286	S3673.2	.47059	.56227	.51034
#2	60.982	.65042	.95244	S3673.0	.49078	.50594	.55458
#3	61.204	.65356	.97849	S3673.3	.48851	.50594	.53251
#4	60.730	.64519	.94202	S3673.4	.47375	.48968	.53258

Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8867	H20.847	1.9799	1.2600	.95965	1.8989	.47416
SDev	.0345	.093	.0395	.0064	.00443	.1153	.00281
%RSD	1.8277	.44495	1.9939	.50473	.46192	6.0702	.59266

#1	1.9101	H20.819	1.9579	1.2532	.95784	1.9267	.47554
#2	1.9224	H20.921	2.0390	1.2611	.96095	1.7289	.47533

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#3	1.8572	H20.921	1.9602	1.2682	.96510	1.9760	.47583
#4	1.8571	H20.728	1.9624	1.2576	.95472	1.9641	.46996
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.68072
SDev	.00107
%RSD	.15692

#1	.68220
#2	.67993
#3	.67995
#4	.68079

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHV7MD

Operator: RJG

Run Time: 08/18/00 11:30:22

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04440	3.1717	1.9200	.95956	1.9264	.04525	93.304
SDev	.00223	.0120	.0460	.02174	.0042	.00016	.396
%RSD	5.0148	.37698	2.3978	2.2654	.21973	.34705	.42488
#1	.04553	3.1883	1.9745	.99217	1.9287	.04538	93.825
#2	.04256	3.1661	1.9382	.94868	1.9245	.04510	93.379
#3	.04253	3.1716	1.8977	.94869	1.9308	.04539	92.917
#4	.04699	3.1607	1.8694	.94870	1.9214	.04512	93.094
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04085	.45231	.23067	.27787	2.3983	52.093	.89121
SDev	.00356	.00490	.00207	.00117	.0025	.358	.00744
%RSD	8.7181	1.0837	.89894	.42201	.10574	.68808	.83461
#1	.04107	.45787	.23334	.27904	2.4019	52.448	.89478
#2	.03686	.45492	.23053	.27811	2.3983	52.347	.88151
#3	.04000	.44898	.22828	.27810	2.3969	51.721	.89877
#4	.04547	.44749	.23053	.27624	2.3962	51.856	.88979
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	58.809	.62327	.94982	S3673.9	.46198	.48730	.52692
SDev	.119	.00209	.00998	.1	.01432	.03040	.02099
%RSD	.20158	.33477	1.0503	.00403	3.0990	6.2390	3.9836
#1	58.929	.62640	.94722	S3673.8	.44824	.52165	.54335
#2	58.815	.62223	.95764	S3674.0	.47519	.44913	.49949
#3	58.845	.62223	.95764	S3674.1	.47345	.48117	.52148
#4	58.646	.62222	.93680	S3673.8	.45102	.49725	.54334
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.8040	H20.309	1.9400	1.2024	.93743	1.7360	.45721
SDev	.0456	.054	.0282	.0030	.00233	.0905	.00304
%RSD	2.5281	.26647	1.4552	.24570	.24843	5.2138	.66582
#1	1.7959	H20.373	1.9472	1.2043	.94089	1.6803	.45974
#2	1.7633	H20.241	1.9098	1.2007	.93605	1.8410	.45994

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#3	1.7877	H20.313	1.9274	1.2054	.93674	1.7793	.45478
#4	1.8692	H20.307	1.9756	1.1991	.93605	1.6434	.45438
Errors	LC Pass	LC High	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.65373
SDev	.00637
%RSD	.97452

#1	.65610
#2	.64425
#3	.65794
#4	.65665

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-9

Operator: RJG

Run Time: 08/18/00 11:33:31

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0024	49.767	5.1477	5.0681	4.9702	5.0364	52.086
SDev	.0055	.252	.0346	.0196	.0344	.0296	.312
%RSD	.55338	.50549	.67272	.38626	.69225	.58864	.59839
#1	1.0077	49.857	5.1862	5.0926	4.9655	5.0524	52.269
#2	.99997	49.489	5.1213	5.0548	4.9449	5.0098	51.813
#3	1.0062	49.651	5.1676	5.0501	4.9502	5.0134	52.431
#4	.99575	50.069	5.1157	5.0749	5.0201	5.0702	51.832
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1733	5.0786	5.0309	4.9255	52.388	49.066	4.8780
SDev	.0325	.0292	.0210	.0386	.170	.422	.0644
%RSD	.62736	.57504	.41807	.78432	.32496	.85973	1.3196
#1	5.2034	5.0945	5.0410	4.9232	52.500	48.607	4.8728
#2	5.1361	5.0413	5.0050	4.9018	52.134	49.284	4.8547
#3	5.1973	5.1079	5.0534	4.8963	52.467	49.538	4.8165
#4	5.1562	5.0708	5.0242	4.9808	52.449	48.836	4.9679
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.117	5.0442	5.0391	49.740	5.1439	5.1174	5.1031
SDev	.277	.0205	.0364	.490	.0506	.0589	.0356
%RSD	.55226	.40653	.72170	.98453	.98460	1.1501	.69827
#1	50.265	5.0586	5.0443	49.696	5.2033	5.1620	5.1037
#2	49.783	5.0147	4.9870	49.461	5.1385	5.0884	5.0595
#3	50.010	5.0576	5.0547	49.358	5.1535	5.1706	5.1468
#4	50.409	5.0461	5.0704	50.443	5.0803	5.0486	5.1025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9873	5.1507	5.1117	4.9712	4.9666	10.002	5.0261
SDev	.0741	.0172	.1427	.0303	.0198	.168	.0187
%RSD	1.4857	.33453	2.7908	.61051	.39832	1.6832	.37236
#1	4.9061	5.1629	5.0734	4.9731	4.9746	9.9546	5.0356
#2	4.9703	5.1263	4.9792	4.9447	4.9424	9.8970	4.9983

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#3	4.9875	5.1509	5.3143	4.9538	4.9607	9.9054	5.0384
#4	5.0852	5.1628	5.0799	5.0131	4.9888	10.252	5.0322
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	5.0143
SDev	.0185
%RSD	.36987

#1	5.0393
#2	4.9989
#3	5.0174
#4	5.0016

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB9

Operator: RJG

Run Time: 08/18/00 11:36:39

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00113	.00601	-.00915	.03602	.00013	.00021	.00142
SDev	.00285	.00957	.01851	.01128	.00005	.00007	.00246
%RSD	252.58	159.24	202.71	31.299	35.294	32.285	173.73

#1	-.00038	.01056	-.02842	.04743	.00011	.00024	-.00065
#2	.00259	.01619	.01207	.02824	.00011	.00011	.00492
#3	-.00336	.00319	.00001	.02462	.00011	.00024	.00015
#4	-.00336	-.00591	-.02018	.04380	.00020	.00024	.00124

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00176	.00149	-.00155	-.00023	.00213	.16288	-.00016
SDev	.00136	.00309	.00145	.00076	.00058	.17237	.00046
%RSD	77.183	207.38	94.022	328.02	27.293	105.83	292.18

#1	-.00272	-.00222	-.00324	-.00023	.00213	.06557	-.00052
#2	-.00314	.00520	.00014	-.00116	.00284	-.01058	.00044
#3	-.00071	.00074	-.00211	.00070	.00142	.21787	-.00003
#4	-.00048	.00223	-.00098	-.00023	.00213	.37864	-.00052

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00554	-.00026	.00391	.00831	-.00179	-.02006	.00828
SDev	.01620	.00052	.00425	.00247	.00060	.01143	.01560
%RSD	292.62	201.00	108.86	29.745	33.621	56.966	188.50

#1	-.02422	-.00052	.00391	.01062	-.00256	-.02818	.03035
#2	-.01038	-.00052	.00391	.00554	-.00112	-.00389	-.00276
#3	-.00208	-.00052	.00912	.00693	-.00162	-.02008	.00824
#4	.01453	.00052	-.00130	.01016	-.00185	-.02809	-.00272

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01120	.06314	-.01199	.00019	-.00069	-.01546	-.00251
SDev	.02783	.00491	.00534	.00011	.00033	.10364	.00008
%RSD	248.54	7.7809	44.517	59.574	47.871	670.18	3.2441

#1	-.04787	.05712	-.01626	.00036	-.00061	.08960	-.00251
#2	.01732	.06314	-.00985	.00013	-.00026	.01539	-.00250

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#3	.00102	.06915	-.00543	.00013	-.00095	-.15757	-.00241
#4	-.01527	.06314	-.01641	.00013	-.00095	-.00929	-.00261
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00048
SDev	.00121
%RSD	251.86

#1	-.00012
#2	-.00093
#3	.00148
#4	.00149

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHV7M/5 Na Operator: RJG
Run Time: 08/18/00 11:41:35
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00143	.22525	.01306	.02866	.03623	.00014	8.7372
SDev	.00188	.01090	.05071	.00674	.00013	.00013	.0143
%RSD	131.83	4.8398	388.44	23.511	.34454	90.848	.16360
#1	-.00181	.21700	.08308	.02158	.03633	.00011	8.7347
#2	-.00181	.23175	.01404	.03606	.03612	.00024	8.7538
#3	-.00329	.21507	-.03448	.03245	.03612	-.00003	8.7194
#4	.00119	.23719	-.01042	.02454	.03633	.00023	8.7410
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00231	.00035	.00929	.00560	.29931	.86727	.00037
SDev	.00355	.00518	.00253	.00047	.00187	.44297	.00083
%RSD	153.59	1479.1	27.271	8.3168	.62488	51.077	225.04
#1	L-.00572	-.00224	.00915	.00536	.30198	.64939	.00145
#2	.00010	.00220	.00915	.00630	.29842	1.1655	.00049
#3	-.00496	-.00520	.00634	.00536	.29771	.35325	-.00052
#4	.00134	.00664	.01253	.00537	.29913	1.3009	.00005
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.5735	.03425	.00004	203.75	-.00183	-.01427	-.00009
SDev	.0258	.00052	.00656	2.28	.00435	.01388	.02751
%RSD	1.0032	1.5284	14646.	1.1207	237.97	97.300	29231.
#1	2.5694	.03399	-.00647	204.06	.00181	-.01233	-.00278
#2	2.5611	.03399	-.00126	202.08	-.00382	-.02024	.00815
#3	2.6109	.03399	-.00126	206.87	.00172	-.02854	-.03588
#4	2.5528	.03504	.00916	202.00	-.00702	.00404	.03014
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00181	2.0289	-.00488	.06466	.00502	-.04305	-.00127
SDev	.04401	.0309	.01681	.00061	.00071	.04787	.00270
%RSD	2435.2	1.5207	344.33	.94808	14.218	111.18	212.64
#1	.00589	2.0184	-.01201	.06497	.00562	-.08630	-.00269
#2	-.01042	2.0003	.00773	.06404	.00424	.02492	-.00259

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#3	-.04709	2.0244	-.02528	.06536	.00458	-.04916	-.00259
#4	.05884	2.0726	.01002	.06426	.00562	-.06166	.00278

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.04568
SDev	.00220
%RSD	4.8235

#1	.04286
#2	.04506
#3	.04778
#4	.04703

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHV7MP25 Na Operator: RJG
 Run Time: 08/18/00 11:44:44
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00149	.04290	.02497	.02735	.00782	.00007	1.8744
SDev	.00223	.00910	.03006	.00833	.00011	.00007	.0067
%RSD	149.98	21.221	120.41	30.468	1.3820	90.528	.35568

#1	-.00037	.05303	-.00045	.02474	.00798	-.00003	1.8769
#2	-.00335	.03833	.06454	.03880	.00777	.00011	1.8781
#3	.00112	.04752	.03202	.01898	.00777	.00011	1.8781
#4	-.00335	.03271	.00376	.02686	.00777	.00011	1.8644

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00201	.00037	.00099	.00047	.06075	.38287	.00002
SDev	.00107	.00187	.00098	.00089	.00136	.23290	.00069
%RSD	53.238	502.46	98.943	189.46	2.2401	60.830	3377.3
#1	-.00112	-.00223	.00014	.00070	.06181	.04019	-.00003
#2	-.00334	.00075	.00183	-.00023	.06039	.50555	.00096
#3	-.00242	.00223	.00014	.00163	.06181	.43786	-.00014
#4	-.00116	.00074	.00183	-.00023	.05897	.54786	-.00071

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.52315	.00784	-.00260	40.624	-.00444	-.00204	.00275
SDev	.00886	.00000	.00499	.266	.00316	.01007	.01910
%RSD	1.6940	.01934	192.15	.65364	71.191	494.35	694.84
#1	.51554	.00784	-.00650	40.366	-.00061	.01194	-.01374
#2	.52938	.00784	-.00650	40.993	-.00681	-.00401	.01931
#3	.53215	.00784	-.00129	40.531	-.00725	-.00398	.01926
#4	.51554	.00784	.00392	40.606	-.00309	-.01210	-.01383

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00391	.46170	-.01365	.01342	.00017	-.01601	-.00263
SDev	.03215	.01139	.00706	.00014	.00059	.02141	.00010
%RSD	821.31	2.4666	51.732	1.0192	341.57	133.70	3.6907

#1	-.01919	.45418	-.01865	.01321	.00078	.00253	-.00270
#2	-.00697	.46020	-.01630	.01349	-.00061	.00252	-.00270
#3	.04192	.47825	-.00318	.01349	.00009	-.03458	-.00260
#4	-.03142	.45418	-.01646	.01349	.00043	-.03454	-.00250

Elem	ZN
Units	ppm
Avge	.01034
SDev	.00125
%RSD	12.047

#1	.01163
#2	.00892
#3	.01109

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#4 .00971

Method: QUANMET Sample Name: DHV7MS/5 Na Operator: RJG
 Run Time: 08/18/00 11:47:52
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00802	.66576	.39677	.21315	.42762	.01011	19.821
SDev	.00144	.01246	.02790	.01927	.00244	.00008	.121
%RSD	17.920	1.8714	7.0312	9.0420	.57037	.78022	.61137
#1	.00615	.65010	.37769	.19722	.43064	.01005	19.684
#2	.00915	.67036	.43824	.22983	.42592	.01017	19.917
#3	.00764	.67960	.38555	.22984	.42854	.01018	19.928
#4	.00915	.66297	.38560	.19572	.42539	.01003	19.754
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00675	.10029	.04957	.05517	.52201	10.621	.19268
SDev	.00145	.00191	.00303	.00194	.00315	.450	.00157
%RSD	21.455	1.9090	6.1080	3.5083	.60266	4.2378	.81535
#1	.00566	.09807	.04577	.05284	.51864	10.058	.19400
#2	.00595	.10252	.05309	.05749	.52432	11.116	.19056
#3	.00653	.09954	.05028	.05470	.52503	10.803	.19373
#4	.00885	.10103	.04915	.05563	.52006	10.507	.19242
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.734	.13662	.20716	229.98	.10151	.07680	.11477
SDev	.030	.00052	.00000	1.55	.00607	.01904	.01388
%RSD	.23301	.38151	.00023	.67466	5.9840	24.797	12.095
#1	12.745	.13740	.20716	232.11	.09322	.06268	.11748
#2	12.739	.13636	.20716	228.65	.10170	.10302	.12853
#3	12.761	.13636	.20716	230.11	.10344	.07876	.09545
#4	12.692	.13636	.20716	229.04	.10769	.06275	.11760
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.36499	4.2606	.38539	.26551	.19957	.39244	.09694
SDev	.07158	.0312	.00726	.00149	.00059	.05240	.00298
%RSD	19.610	.73281	1.8834	.56013	.29598	13.352	3.0755
#1	.33239	4.2877	.37720	.26724	.19897	.38015	.09435
#2	.42204	4.2336	.39475	.26483	.19966	.46652	.09952

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#3	.27944	4.2877	.38365	.26614	.20035	.34300	.09436
#4	.42610	4.2336	.38595	.26384	.19932	.38007	.09952
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.14004
SDev	.00227
%RSD	1.6217

#1	.13758
#2	.13893
#3	.14085
#4	.14279

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHV7MD/5 Na Operator: RJG
Run Time: 08/18/00 11:51:01
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01061	.64602	.41828	.19666	.40536	.00964	19.200
SDev	.00321	.00771	.02559	.00150	.00371	.00019	.126
%RSD	30.280	1.1938	6.1179	.76182	.91588	1.9955	.65796
#1	.01507	.65377	.43444	.19506	.39988	.00937	19.110
#2	.01061	.64840	.44260	.19804	.40649	.00964	19.096
#3	.00912	.63541	.38593	.19571	.40702	.00978	19.226
#4	.00763	.64649	.41017	.19783	.40807	.00978	19.368
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00707	.09586	.04647	.05609	.50477	10.312	.18055
SDev	.00350	.00191	.00202	.00053	.00214	.151	.00180
%RSD	49.485	1.9883	4.3557	.95337	.42287	1.4662	.99780
#1	.00460	.09364	.04464	.05655	.50298	10.371	.17795
#2	.01187	.09807	.04520	.05563	.50299	10.270	.18166
#3	.00746	.09511	.04690	.05656	.50725	10.126	.18185
#4	.00434	.09660	.04915	.05563	.50584	10.481	.18073
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SE
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	12.238	.13087	.19674	220.02	.09909	.06264	.12859
SDev	.084	.00052	.00425	2.42	.00417	.00929	.01274
%RSD	.68579	.39807	2.1621	1.0995	4.2065	14.833	9.9048
#1	12.127	.13009	.20195	216.49	.10324	.05454	.13965
#2	12.219	.13113	.19153	220.55	.09337	.05464	.11759
#3	12.299	.13113	.19674	221.89	.09921	.07065	.11752
#4	12.307	.13113	.19674	221.16	.10054	.07072	.13959
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.34661	4.1102	.39367	.25240	.19465	.33394	.09415
SDev	.02630	.0465	.01574	.00201	.00118	.03827	.00008
%RSD	7.5873	1.1306	3.9989	.79824	.60696	11.461	.08690
#1	.35272	4.0410	.39044	.24951	.19309	.35559	.09425
#2	.32828	4.1252	.37284	.25257	.19447	.36792	.09405

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#3	.32421	4.1373	.40346	.25366	.19516	.28140	.09415
#4	.38125	4.1373	.40793	.25388	.19586	.33083	.09416
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .13475
SDev .00091
%RSD .67608

#1 .13536
#2 .13483
#3 .13343
#4 .13537

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-10 Operator: RJG
 Run Time: 08/18/00 11:54:10
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99419	48.990	5.0441	4.9917	4.8770	4.9596	51.919
SDev	.00232	.195	.0709	.0316	.0186	.0193	.184
%RSD	.23300	.39856	1.4056	.63281	.38177	.38820	.35439
#1	.99220	48.815	4.9862	4.9557	4.8606	4.9343	51.815
#2	.99229	49.036	5.1462	5.0066	4.8841	4.9730	51.716
#3	.99683	48.863	5.0094	4.9772	4.8631	4.9551	52.046
#4	.99543	49.246	5.0344	5.0273	4.9000	4.9761	52.101
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.1535	5.0302	4.9904	4.8240	51.861	48.235	4.7472
SDev	.0093	.0125	.0185	.0187	.143	.122	.0328
%RSD	.17977	.24761	.37141	.38737	.27651	.25339	.69088
#1	5.1581	5.0221	4.9791	4.8042	51.705	48.082	4.7259
#2	5.1397	5.0177	4.9707	4.8349	51.789	48.311	4.7799
#3	5.1572	5.0369	5.0016	4.8126	51.918	48.192	4.7129
#4	5.1591	5.0443	5.0101	4.8442	52.031	48.353	4.7701
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.409	4.9979	4.9869	48.694	5.0952	5.1166	5.0286
SDev	.181	.0138	.0154	.235	.0272	.0154	.0332
%RSD	.36696	.27568	.30787	.48308	.53330	.30065	.66120
#1	49.265	4.9833	4.9661	48.446	5.0591	5.1365	4.9924
#2	49.393	4.9895	4.9869	48.861	5.1219	5.1042	5.0703
#3	49.310	5.0063	5.0026	48.544	5.0911	5.1047	5.0145
#4	49.670	5.0126	4.9922	48.927	5.1088	5.1208	5.0369
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.9441	5.0793	5.1028	4.8853	4.8991	9.9341	4.9693
SDev	.0557	.0272	.0299	.0194	.0161	.1647	.0156
%RSD	1.1268	.53594	.58548	.39750	.32925	1.6583	.31430
#1	5.0059	5.0655	5.1300	4.8674	4.8815	9.8771	4.9501
#2	4.9124	5.0657	5.0865	4.8903	4.8964	10.062	4.9647

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#3	4.8842	5.0659	5.1257	4.8729	4.8978	9.7264	4.9754
#4	4.9741	5.1202	5.0688	4.9104	4.9206	10.071	4.9868
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem ZN
Units ppm
Avge 4.9655
SDev .0179
%RSD .35982

#1 4.9410
#2 4.9709
#3 4.9665
#4 4.9836

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB10
Run Time: 08/18/00 11:57:18
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61EICP
Mode: CONC Corr. Factor: 1

Operator: RJG

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00149	.00274	.01214	.02099	-.00008	.00017	.00189
SDev	.00144	.00988	.04050	.00155	.00022	.00008	.00198
%RSD	96.695	360.66	333.66	7.3927	284.72	46.441	105.07

#1	-.00036	-.00048	.01618	.02099	.00011	.00009	.00288
#2	-.00187	.01242	-.03249	.02313	-.00020	.00011	-.00065
#3	-.00336	-.00965	.00012	.01949	-.00032	.00024	.00393
#4	-.00036	.00865	.06475	.02036	.00011	.00023	.00139

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00234	.00149	-.00113	-.00070	.00071	.11423	-.00009
SDev	.00059	.00353	.00071	.00093	.00101	.16310	.00043
%RSD	25.130	236.99	63.144	133.79	142.00	142.79	481.53

#1	-.00183	.00371	-.00211	-.00023	-.00000	-.07827	-.00022
#2	-.00267	-.00073	-.00098	-.00209	.00213	.21787	-.00060
#3	-.00301	.00520	-.00042	-.00023	-.00000	.27710	.00041
#4	-.00186	-.00222	-.00099	-.00023	.00071	.04019	.00005

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01246	-.00026	.00521	.01178	-.00296	-.01202	.00829
SDev	.00857	.00052	.00261	.00770	.00449	.00928	.01560
%RSD	68.793	201.39	49.998	65.346	152.00	77.251	188.21

#1	-.00761	-.00052	.00391	.01339	.00261	-.02001	-.00269
#2	-.02422	.00052	.00391	.02124	-.00388	-.02010	.03035
#3	-.00484	-.00052	.00912	.00277	-.00229	-.00388	-.00277
#4	-.01315	-.00052	.00391	.00970	-.00827	-.00408	.00826

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01731	.05866	-.02128	.00013	-.00061	-.00311	.00010
SDev	.05992	.00575	.00930	.00000	.00049	.05097	.00295
%RSD	346.12	9.8000	43.716	.00000	80.812	1638.7	2995.5

#1	-.00713	.05117	-.00985	.00013	-.00061	-.05875	.00265
#2	.04177	.06314	-.02501	.00013	-.00026	.04017	-.00251

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#3	-.00306	.05712	-.01860	.00013	-.00130	-.03401	-.00240
#4	-.10083	.06320	-.03167	.00013	-.00026	.04015	.00265

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00048
SDev	.00132
%RSD	276.20

#1	.00013
#2	-.00124
#3	.00149
#4	.00153

Errors	LC Pass
High	.02000
Low	-.02000

Michael Twombly 8-18-00

#	Sample Name	AG	AS	CD	CR	PB	SE
1	STD1	.00069	-.01338	-.00017	-.00188		
2	STD6	11.5399	5.79477	13.6931			
3	STD7				12.615		
4	ICV3-1 0057-022-8	.51532	.25815	.25072	1.0011	.25807	.25750
5	ICB1	.00057	.00078	.00011	.00065	-.00072	.00001
6	ICSA 0057-011-1	.00010	.00045	.00047	.00337	.00523	.00017
7	ICSAB 0014-197-7	1.1534	1.0482	.95497	.51244	1.0563	1.0796
8	DJ0MXB	-.00027	-.00079	.00023	-.00033	.00071	-.00067
9	DJ0MXC	.05133	2.0629	.05048	.20909	.53324	.51213
10	DHGDF	-.00009	.00293	.00026	.00486	.00440	.00380
11	DHGDH	.00016	.00199	.00026	.00112	.00320	.00112
12	DHGDHP5	-.00002	-.00013	.00007	.00032	.00017	-.00050
13	DHGDHS	.04955	2.0110	.04873	.20282	.51396	.49031
14	DHGDHD	.05078	2.0484	.04962	.20618	.52416	.50070
15	DHGDK	.00039	.00304	.00030	.00147	.00236	.00267
16	CCV3-1 0057-023-9	1.0708	.52851	.50804	2.0493	.52661	.52429
17	CCB1	.00005	.00066	.00025	.00073	.00028	.00082
18	DHGDM	.00014	.00280	.00030	.00343	.00256	.00119
19	DHGDP	-.00034	.00236	.00013	.00364	.00175	.00091
20	DHGDY	.00011	.00352	.00031	.00501	.00193	.00097
21	DHGE3	.00029	.00343	.00025	.00363	.00163	.00222
22	DHGE5	-.00003	.00253	.00014	.00289	.00321	.00219
23	DHGE7	-.00041	.00193	.00021	.00230	.00532	.00116
24	DHGE8	.00008	.00332	.00033	.00579	.00287	.00042
25	DHGE9	.00005	.00203	.00030	.00320	.00174	.00015
26	DHGEA	-.00030	.00354	.00012	.00394	.00137	.00217
27	DHGEH	.00000	.00238	.00018	.00573	.00537	.00197
28	CCV3-2	1.0561	.51906	.50107	2.0215	.52168	.51748
29	CCB2	-.00024	-.00016	.00017	.00007	-.00024	-.00115
30	DHGEM	-.00013	.00370	.00052	.00627	.00394	.00094
31	DHGEP	.00056	.00167	.00037	.00328	.00359	.00117
32	DHGET	.00000	.00346	.00025	.00604	.00318	.00249
33	DHGEW	-.00016	.00342	.00039	.00217	.00560	.00154
34	DHGF9	-.00017	.00254	.00027	.00077	.00251	.00266
35	DHGFH	.00025	.00261	.00019	.00092	.00466	.00271
36	DHXCX	.00009	.00347	.00027	.00483	.00329	.00172
37	CCV3-3	1.0316	.50455	.48851	1.9702	.50837	.50516
38	CCB3	-.00028	.00013	.00007	.00031	-.00075	-.00091
39	DGR3T	.00119	.07692	-.00025	.16545	.13609	.00145
40	DGTM3	.00277	.06175	.00227	.16206	.17860	.00024
41	DGR3T/2 SE	.00072	.03813	.00122	.08886	.07254	.00010
42	DGTM3/2 SE	.00112	.03118	.00078	.08372	.09278	.00029
43	DHWLVB	-.00019	.00019	.00002	.00027	-.00042	-.00139
44	DHWLVC	.05139	2.0166	.04863	.20056	.51378	.51190
45	DHV7M	.00142	.00640	.00066	.05243	.01235	.01021
46	DHV7MP5	.00033	.00097	.00027	.01098	.00237	.00157
47	DHV7MS	.05631	2.0683	.04728	.25668	.54389	.54443
48	DHV7MD	.05237	1.9322	.04462	.24142	.51090	.52397
49	CCV3-4	1.0581	.52096	.50274	2.0219	.52165	.52176
50	CCB4	.00078	.00078	.00029	.00104	.00040	.00064
51	DJ0RHB	.00005	.00000	.00018	.00029	-.00005	.00012
52	DJ0RHC	.04537	1.8393	.04469	.18366	.46756	.49409
53	DHX4C	.00008	.00218	.00030	.00721	.00425	.00045

#	Sample Name	AG	AS	CD	CR	PB	SB
54	DHX4D	.00020	.00187	.00026	.00227	.00302	.00157
55	DHX4E	.00018	.00651	.00017	.01630	.01470	.00204
56	DHX4EP5	-.00011	.00243	.00011	.00335	.00208	.00018
57	DHX4ES	.04801	1.8833	.04463	.20328	.49650	.50135
58	DHX4ED	.04880	1.9088	.04520	.20686	.50173	.52105
59	DHX4H	-.00030	.00634	.00024	.02260	.01134	.00029
60	DHX4J	.00026	.00360	.00016	.00293	.00168	.00081
61	CCV3-5	1.0683	.52572	.50575	2.0467	.52753	.52760
62	CCB5	.00000	.00000	.00013	.00026	.00134	.00054
63	DHX4K	.00046	.00227	.00014	.00810	.00384	.00080
64	CCV3-6	1.0772	.52457	.50854	2.0614	.53089	.53070
65	CCB6	.00041	.00046	.00028	.00121	.00053	.00075
66	DHP13B	-.00006	.00011	.00018	.00079	.00104	-.00057
67	DHP13C	.05302	2.0308	.04989	.20858	.52974	.51206
68	DHLX6	.00789	.12930	.00734	.66739	1.1718	.01053
69	DHLX6P5	.00147	.02892	.00179	.14634	.25762	.00159
70	DHLX6S	.05323	1.8681	.04812	.81037	1.5684	.28489
71	DHLX6D	.05339	1.8404	.05545	.82328	1.6382	.31139
72	DHLXR	.00462	.07406	.00379	.41056	.89101	.01070
73	DHLXT	.00759	.16147	.00335	.61991	1.3173	.01302
74	DHLXW	.01065	.25713	.00434	.83713	1.5636	.01476
75	DHM03	.00509	.11643	.00531	.49123	.99364	.00948
76	CCV3-7	1.0582	.51798	.50009	2.0235	.52138	.51793
77	CCB7	-.00025	.00049	.00011	.00029	-.00084	.00021
78	DHM06	.00683	.15519	.00825	.57570	1.1332	.01119
79	DHM07	.00526	.12195	.00938	.43941	.88075	.00682
80	DHM0A	.01062	.22602	.01015	.74181	1.5206	.01556
81	DHM0E	.00238	.04615	.00151	.16972	.17283	.00302
82	DHM0F	.00247	.05511	.00172	.18363	.18956	.00250
83	DHM0K	.01222	.14710	.01737	.43412	1.9496	.02391
84	DHM0M	.00115	.15989	.00283	.58554	.58384	.01124
85	DHM0N	.00944	.32946	.02341	.41982	2.1206	.02727
86	DHM0R	.01143	.24303	.00839	.91107	1.8797	.01622
87	CCV3-8	1.0525	.51338	.49866	2.0191	.52100	.51665
88	CCB8	-.00022	.00001	.00011	.00056	.00096	.00112
89	DJ0RCB	.00037	-.00005	.00014	.00091	.00109	-.00068
90	DJ0RCC	.04749	1.9709	.04948	.19977	.49543	L-.00050
91	DHX6T	-.00022	.00144	-.00010	.00075	.00147	.00028
92	DHX6TP5	.00036	-.00037	.00016	.00053	.00044	-.00016
93	DHX6TS	.04775	1.9365	.04797	.19690	.49513	-.00083
94	DHX6TD	.04682	1.9204	.04751	.19444	.49155	-.00100
95	DHX72	-.00007	.00153	.00003	.00039	.00186	.00101
96	CCV3-9	1.0516	.51629	.50078	2.0217	.51928	.51756
97	CCB9	.00027	.00037	.00016	.00054	.00091	.00078

#	Sample Name	SE	TL
1	STD1		-.04904
2	STD6		4.24119
3	STD7		
4	ICV3-1 0057-022-8	.25884	.52980
5	ICB1	-.00205	.00203
6	ICSA 0057-011-1	-.00876	.00547

#	Sample Name	SE	TL
7	ICSAB 0014-197-7	1.0545	1.1100
8	DJ0MXB	-.00116	-.00180
9	DJ0MXC	2.0369	2.1973
10	DHGDF	.00993	.00459
11	DHGDH	.00716	.00495
12	DHGDHP5	.00024	.00170
13	DHGDHS	2.0156	2.1391
14	DHGDHD	2.0462	2.1774
15	DHGDK	.00692	.00903
16	CCV3-1 0057-023-9	.53254	1.0712
17	CCB1	.00184	.00473
18	DHGDM	.00890	.00281
19	DHGDP	.00687	.00719
20	DHGDY	.00889	.00749
21	DHGE3	.01162	.00441
22	DHGE5	.00998	.00525
23	DHGE7	.01315	.00482
24	DHGEC	.01209	.00655
25	DHGEE	.00986	.00685
26	DHGEG	.00912	.00299
27	DHGEH	.00760	.00393
28	CCV3-2	.52721	1.0511
29	CCB2	-.00028	.00295
30	DHGEM	.00726	.00564
31	DHGEP	.00698	.00121
32	DHGET	.00654	.00530
33	DHGEW	.00507	.00081
34	DHGF9	.00484	.00376
35	DHGFH	.00630	.00488
36	DHXCX	.00696	.00358
37	CCV3-3	.51215	1.0313
38	CCB3	-.00040	.00163
39	DGR3T	-.00339	-.00158
40	DGTM3	-.00257	-.00016
41	DGR3T/2 SE	.00032	-.00339
42	DGTM3/2 SE	-.00056	.00088
43	DHWLVB	.00030	.00083
44	DHWLVC	2.0293	2.1305
45	DHV7M	.00193	.00556
46	DHV7MP5	.00189	.00486
47	DHV7MS	2.1343	2.2973
48	DHV7MD	1.9911	2.1517
49	CCV3-4	.52705	1.0568
50	CCB4	-.00058	.00274
51	DJ0RHB	-.00094	-.00004
52	DJ0RHC	1.8272	1.9402
53	DHX4C	.00037	.00045
54	DHX4D	.00060	-.00239
55	DHX4E	.00126	-.00279
56	DHX4EP5	-.00064	.00226
57	DHX4ES	1.8869	1.9929
58	DHX4ED	1.9000	2.0309
59	DHX4H	.00197	.00035
60	DHX4J	-.00009	.00026

#	Sample Name	SE	TL
61	CCV3-5	.52997	1.0529
62	CCB5	.00121	.00344
63	DHX4K	-.00031	-.00282
64	CCV3-6	.53243	1.0298
65	CCB6	.00098	.00221
66	DHP13B	.00138	-.00440
67	DHP13C	2.0098	2.1591
68	DHLX6	.03165	.01456
69	DHLX6P5	.00666	.00247
70	DHLX6S	1.7241	1.8498
71	DHLX6D	1.7261	1.8530
72	DHLXR	.02071	.01154
73	DHLXT	.03182	.01549
74	DHLXW	.04171	.01244
75	DHM03	.01610	.00646
76	CCV3-7	.52064	1.0538
77	CCB7	.00012	.00208
78	DHM06	.02045	.00934
79	DHM07	.01671	.00740
80	DHM0A	.03563	.00769
81	DHM0E	.00226	-.00018
82	DHM0F	.00237	-.00103
83	DHM0K	.00415	.00277
84	DHM0M	.00145	.00678
85	DHM0N	.00753	.00421
86	DHM0R	.03582	.01185
87	CCV3-8	.51939	1.0433
88	CCB8	-.00035	.00138
89	DJ0RCB	-.00029	.00067
90	DJ0RCC	1.9435	1.9731
91	DHX6T	.00062	.00013
92	DHX6TP5	-.00028	.00099
93	DHX6TS	1.9224	2.0356
94	DHX6TD	1.8991	2.0141
95	DHX72	.00177	.00459
96	CCV3-9	.52059	1.0566
97	CCB9	-.00030	.00355

MTW 8-18-00

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	T00818A	ME'TTRA	08/18/00	07:17		X	IR
2	STD6	T00818A	ME'TTRA	08/18/00	07:22		X	IR
3	STD7	T00818A	ME'TTRA	08/18/00	07:26		X	IR
4	ICV3-1 0057-022-8	T00818A	ME'TTRA	08/18/00	07:30	MTW	S	CONC
5	ICB1	T00818A	ME'TTRA	08/18/00	07:34	MTW	S	CONC
6	ICSA 0057-011-1	T00818A	ME'TTRA	08/18/00	07:38	MTW	Q	CONC
7	ICSAB 0014-197-7	T00818A	ME'TTRA	08/18/00	07:42	MTW	Q	CONC
8	DJ0MXB	T00818A	ME'TTRA	08/18/00	07:48	MTW	S	CONC
9	DJ0MXC	T00818A	ME'TTRA	08/18/00	07:53	MTW	S	CONC
10	DHGDf	T00818A	ME'TTRA	08/18/00	07:57	MTW	S	CONC
11	DHGDH	T00818A	ME'TTRA	08/18/00	08:01	MTW	S	CONC
12	DHGDHP5	T00818A	ME'TTRA	08/18/00	08:05	MTW	S	CONC
13	DHGDHS	T00818A	ME'TTRA	08/18/00	08:09	MTW	S	CONC
14	DHGDHD	T00818A	ME'TTRA	08/18/00	08:13	MTW	S	CONC
15	DHGDK	T00818A	ME'TTRA	08/18/00	08:17	MTW	S	CONC
16	CCV3-1 0057-023-9	T00818A	ME'TTRA	08/18/00	08:22	MTW	S	CONC
17	CCB1	T00818A	ME'TTRA	08/18/00	08:26	MTW	S	CONC
18	DHGDm	T00818A	ME'TTRA	08/18/00	08:30	MTW	S	CONC
19	DHGDP	T00818A	ME'TTRA	08/18/00	08:34	MTW	S	CONC
20	DHGDx	T00818A	ME'TTRA	08/18/00	08:38	MTW	S	CONC
21	DHGE3	T00818A	ME'TTRA	08/18/00	08:42	MTW	S	CONC
22	DHGE5	T00818A	ME'TTRA	08/18/00	08:47	MTW	S	CONC
23	DHGE7	T00818A	ME'TTRA	08/18/00	08:51	MTW	S	CONC
24	DHGEc	T00818A	ME'TTRA	08/18/00	08:55	MTW	S	CONC
25	DHGEe	T00818A	ME'TTRA	08/18/00	08:59	MTW	S	CONC
26	DHGEg	T00818A	ME'TTRA	08/18/00	09:03	MTW	S	CONC
27	DHGEh	T00818A	ME'TTRA	08/18/00	09:07	MTW	S	CONC
28	CCV3-2	T00818A	ME'TTRA	08/18/00	09:12	MTW	S	CONC
29	CCB2	T00818A	ME'TTRA	08/18/00	09:16	MTW	S	CONC
30	DHGEM	T00818A	ME'TTRA	08/18/00	09:20	MTW	S	CONC
31	DHGEP	T00818A	ME'TTRA	08/18/00	09:24	MTW	S	CONC
32	DHGET	T00818A	ME'TTRA	08/18/00	09:28	MTW	S	CONC
33	DHGEW	T00818A	ME'TTRA	08/18/00	09:32	MTW	S	CONC
34	DHGF9	T00818A	ME'TTRA	08/18/00	09:36	MTW	S	CONC
35	DHGFH	T00818A	ME'TTRA	08/18/00	09:41	MTW	S	CONC
36	DHXCX	T00818A	ME'TTRA	08/18/00	09:45	MTW	S	CONC
37	CCV3-3	T00818A	ME'TTRA	08/18/00	09:49	MTW	S	CONC
38	CCB3	T00818A	ME'TTRA	08/18/00	09:53	MTW	S	CONC
39	DGR3T	T00818A	ME'TTRA	08/18/00	10:04	MTW	S	CONC
40	DGTM3	T00818A	ME'TTRA	08/18/00	10:08	MTW	S	CONC
41	DGR3T/2 SE	T00818A	ME'TTRA	08/18/00	10:12	MTW	S	CONC
42	DGTM3/2 SE	T00818A	ME'TTRA	08/18/00	10:16	MTW	S	CONC
43	DHWLVB	T00818A	ME'TTRA	08/18/00	10:20	MTW	S	CONC
44	DHWLVC	T00818A	ME'TTRA	08/18/00	10:24	MTW	S	CONC
45	DHV7M	T00818A	ME'TTRA	08/18/00	10:28	MTW	S	CONC
46	DHV7MP5	T00818A	ME'TTRA	08/18/00	10:33	MTW	S	CONC
47	DHV7MS	T00818A	ME'TTRA	08/18/00	10:37	MTW	S	CONC
48	DHV7MD	T00818A	ME'TTRA	08/18/00	10:41	MTW	S	CONC
49	CCV3-4	T00818A	ME'TTRA	08/18/00	10:45	MTW	S	CONC
50	CCB4	T00818A	ME'TTRA	08/18/00	10:49	MTW	S	CONC
51	DJ0RHB	T00818A	ME'TTRA	08/18/00	10:53	MTW	S	CONC
52	DJ0RHC	T00818A	ME'TTRA	08/18/00	10:58	MTW	S	CONC
53	DHX4C	T00818A	ME'TTRA	08/18/00	11:02	MTW	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	DHX4D	T00818A	METTRA	08/18/00	11:06	MTW	S	CONC
55	DHX4E	T00818A	METTRA	08/18/00	11:10	MTW	S	CONC
56	DHX4EP5	T00818A	METTRA	08/18/00	11:14	MTW	S	CONC
57	DHX4ES	T00818A	METTRA	08/18/00	11:18	MTW	S	CONC
58	DHX4ED	T00818A	METTRA	08/18/00	11:23	MTW	S	CONC
59	DHX4H	T00818A	METTRA	08/18/00	11:27	MTW	S	CONC
60	DHX4J	T00818A	METTRA	08/18/00	11:31	MTW	S	CONC
61	CCV3-5	T00818A	METTRA	08/18/00	11:35	MTW	S	CONC
62	CCB5	T00818A	METTRA	08/18/00	11:39	MTW	S	CONC
63	DHX4K	T00818A	METTRA	08/18/00	11:43	MTW	S	CONC
64	CCV3-6	T00818A	METTRA	08/18/00	11:47	MTW	S	CONC
65	CCB6	T00818A	METTRA	08/18/00	11:52	MTW	S	CONC
66	DHP13B	T00818A	METTRA	08/18/00	11:59	MTW	S	CONC
67	DHP13C	T00818A	METTRA	08/18/00	12:04	MTW	S	CONC
68	DHLX6	T00818A	METTRA	08/18/00	12:08	MTW	S	CONC
69	DHLX6P5	T00818A	METTRA	08/18/00	12:12	MTW	S	CONC
70	DHLX6S	T00818A	METTRA	08/18/00	12:16	MTW	S	CONC
71	DHLX6D	T00818A	METTRA	08/18/00	12:20	MTW	S	CONC
72	DHLXR	T00818A	METTRA	08/18/00	12:24	MTW	S	CONC
73	DHLXT	T00818A	METTRA	08/18/00	12:29	MTW	S	CONC
74	DHLXW	T00818A	METTRA	08/18/00	12:33	MTW	S	CONC
75	DHM03	T00818A	METTRA	08/18/00	12:37	MTW	S	CONC
76	CCV3-7	T00818A	METTRA	08/18/00	12:41	MTW	S	CONC
77	CCB7	T00818A	METTRA	08/18/00	12:45	MTW	S	CONC
78	DHM06	T00818A	METTRA	08/18/00	12:49	MTW	S	CONC
79	DHM07	T00818A	METTRA	08/18/00	12:54	MTW	S	CONC
80	DHM0A	T00818A	METTRA	08/18/00	12:58	MTW	S	CONC
81	DHMOE	T00818A	METTRA	08/18/00	13:02	MTW	S	CONC
82	DHMOF	T00818A	METTRA	08/18/00	13:06	MTW	S	CONC
83	DHMOK	T00818A	METTRA	08/18/00	13:10	MTW	S	CONC
84	DHMO M	T00818A	METTRA	08/18/00	13:14	MTW	S	CONC
85	DHMON	T00818A	METTRA	08/18/00	13:19	MTW	S	CONC
86	DHMO R	T00818A	METTRA	08/18/00	13:23	MTW	S	CONC
87	CCV3-8	T00818A	METTRA	08/18/00	13:27	MTW	S	CONC
88	CCB8	T00818A	METTRA	08/18/00	13:31	MTW	S	CONC
89	DJ0RCB	T00818A	METTRA	08/18/00	13:38	MTW	S	CONC
90	DJ0RCC	T00818A	METTRA	08/18/00	13:42	MTW	S	CONC
91	DHX6T	T00818A	METTRA	08/18/00	13:46	MTW	S	CONC
92	DHX6TP5	T00818A	METTRA	08/18/00	13:50	MTW	S	CONC
93	DHX6TS	T00818A	METTRA	08/18/00	13:54	MTW	S	CONC
94	DHX6TD	T00818A	METTRA	08/18/00	13:59	MTW	S	CONC
95	DHX72	T00818A	METTRA	08/18/00	14:03	MTW	S	CONC
96	CCV3-9	T00818A	METTRA	08/18/00	14:07	MTW	S	CONC
97	CCB9	T00818A	METTRA	08/18/00	14:11	MTW	S	CONC

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Standardization Rpt.

08/18/00 07:22:04 AM

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Method: METTRA Standard: STD1

Run Time: 08/18/00 07:17:55

Elem	AG	AL	AS	BA	BE	CA	CD
Avge	.00070	.04334	-.01339	.00101	-.08248	.00478	-.00017
SDev	.00238	.00998	.00479	.00003	.00346	.00015	.00138
%RSD	341.71	23.019	35.761	2.9842	4.2000	3.2326	796.74

#1	-.00099	.05039	-.01678	.00099	-.08493	.00467	-.00115
#2	.00238	.03628	-.01000	.00103	-.08003	.00489	.00080

Elem	CO	CR	CU	FE	MG	MN	MO
Avge	-.00107	-.00189	.02957	-.00162	-.00185	.00075	.00104
SDev	.00015	.00021	.00094	.00043	.00008	.00015	.00002
%RSD	14.421	11.323	3.1649	26.765	4.0592	19.996	1.5789

#1	-.00118	-.00204	.02891	-.00132	-.00191	.00086	.00105
#2	-.00096	-.00174	.03024	-.00193	-.00180	.00064	.00103

Elem	NI	PB/1	PB/2	SB/1	SB/2	SE/1	SE/2
Avge	.00116	.02709	-.01867	-.07002	.00878	-.13327	.09700
SDev	.00090	.00035	.01626	.00524	.00023	.00105	.00153
%RSD	77.469	1.3076	87.109	7.4869	2.6262	.78501	1.5789

#1	.00053	.02684	-.00717	-.06631	.00895	-.13401	.09809
#2	.00180	.02734	-.03017	-.07373	.00862	-.13253	.09592

Elem	TL	V	ZN
Avge	-.04904	.00043	-.00075
SDev	.00051	.00060	.00013
%RSD	1.0472	141.42	16.892

#1	-.04868	.00086	-.00066
#2	-.04941	.00000	-.00084

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15373	--	--	--	--	--	--
SDev	242.7144	--	--	--	--	--	--
%RSD	1.578884	--	--	--	--	--	--
#1	15201	--	--	--	--	--	--
#2	15544	--	--	--	--	--	--

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Standardization Rpt.

08/18/00 07:26:15 AM

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Method: METTRA Standard: STD6
 Run Time: 08/18/00 07:22:09

0057-023-10

Elem	AG	AS	CD	PB/1	PB/2	SB/1	SB/2
Avge	11.540	5.7948	13.693	5.7716	7.2677	9.7445	7.0466
SDev	.021	.0029	.036	.0251	.0194	.0839	.0229
%RSD	.17881	.05052	.26181	.43447	.26758	.86101	.32561

#1	11.555	5.7968	13.718	5.7539	7.2815	9.8039	7.0304
#2	11.525	5.7927	13.668	5.7893	7.2540	9.6852	7.0628

Elem	SE/1	SE/2	TL
Avge	5.5415	5.4163	4.2412
SDev	.0189	.0493	.0026
%RSD	.34145	.91070	.06063

#1	5.5549	5.4512	4.2430
#2	5.5281	5.3814	4.2394

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15723	--	--	--	--	--	--
SDev	5.197649	--	--	--	--	--	--
%RSD	.0330573	--	--	--	--	--	--

#1	15720	--	--	--	--	--	--
#2	15727	--	--	--	--	--	--

Method: METTRA Standard: STD7 0057-024-1
Run Time: 08/18/00 07:26:20

Elem	AL	BA	BE	CA	CO	CR	CU
Avge	8.1819	15.394	11.312	4.5471	3.2822	12.615	3.9379
SDev	.0752	.138	.105	.0385	.0259	.101	.0394
%RSD	.91921	.89806	.92987	.84656	.79038	.79697	.99949
#1	8.1287	15.296	11.238	4.5199	3.2639	12.544	3.9101
#2	8.2350	15.492	11.387	4.5743	3.3005	12.686	3.9658
Elem	FE	MG	MN	MO	NI	V	ZN
Avge	4.1342	13.665	10.513	2.3712	2.6742	.88585	3.3317
SDev	.0405	.124	.081	.0367	.0270	.00795	.0300
%RSD	.97944	.90544	.76842	1.5470	1.0088	.89712	.89938
#1	4.1056	13.577	10.456	2.3453	2.6551	.88023	3.3105
#2	4.1629	13.752	10.570	2.3972	2.6933	.89147	3.3529
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15234	--	--	--	--	--	--
SDev	109.5311	--	--	--	--	--	--
%RSD	.7189676	--	--	--	--	--	--
#1	15312	--	--	--	--	--	--
#2	15157	--	--	--	--	--	--

Method: METTRA

Slope = Corc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD6	STD1	.173322	-.000121	08/18/00 07:26:20
AL	308.215	STD7	STD1	6.15872	-.266905	08/18/00 07:26:20
AS	189.042	STD6	STD1	.172171	.002305	08/18/00 07:26:20
BA	493.409	STD7	STD1	.259855	-.000262	08/18/00 07:26:20
BE	313.042	STD7	STD1	.348280	.028726	08/18/00 07:26:20
CA	317.933	STD7	STD1	22.0152	-.105234	08/18/00 07:26:20
CD	226.502	STD6	STD1	.073029	.000013	08/18/00 07:26:20
CO	228.616	STD7	STD1	1.21830	.001309	08/18/00 07:26:20
CR	267.716	STD7	STD1	.316879	.000598	08/18/00 07:26:20
CU	324.753	STD7	STD1	1.02344	-.030268	08/18/00 07:26:20
FE	271.441	STD7	STD1	12.1763	.019760	08/18/00 07:26:20
MG	279.078	STD7	STD1	7.31701	.013570	08/18/00 07:26:20
MN	257.610	STD7	STD1	.380511	-.000285	08/18/00 07:26:20
MO	202.030	STD7	STD1	1.68763	-.001757	08/18/00 07:26:20
NI	231.604	STD7	STD1	1.49544	-.001740	08/18/00 07:26:20
PB/1	220.351	STD6	STD1	.174079	-.004716	08/18/00 07:26:20
PB/2	220.352	STD6	STD1	.137242	.002563	08/18/00 07:26:20
PB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SB/1	206.831	STD6	STD1	.101889	.007134	08/18/00 07:26:20
SB/2	206.832	STD6	STD1	.142090	-.001248	08/18/00 07:26:20
SB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SE/1	196.021	STD6	STD1	.176219	.023484	08/18/00 07:26:20
SE/2	196.022	STD6	STD1	.187994	-.018236	08/18/00 07:26:20
SE	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
TL	190.864	STD6	STD1	.466175	.022863	08/18/00 07:26:20
V	292.402	STD7	STD1	4.49792	-.001923	08/18/00 07:26:20
ZN	213.856	STD7	STD1	1.20786	.000902	08/18/00 07:26:20

Analysis Report

08/18/00 07:34:07 AM

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Method: METTRA Sample Name: ICV3-1 0057-022-8 Operator: MTW
 Run Time: 08/18/00 07:30:00
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51533	11.615	.25816	.98608	1.0104	25.195	.25072
SDev	.00508	.066	.00487	.01943	.0535	1.289	.00140
%RSD	.98628	.56531	1.8846	1.9704	5.2944	5.1159	.55670
#1	.51892	11.661	.26160	.99982	1.0482	26.106	.25171
#2	.51174	11.568	.25472	.97234	.97254	24.283	.24974
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.55000	13.750	.27500	1.1000	1.1000	27.500	.27500
Low	.45000	11.250	.22500	.90000	.90000	22.500	.22500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99458	1.0011	.94930	12.314	24.100	.98348	1.0091
SDev	.00078	.0040	.01954	.281	1.005	.02114	.0033
%RSD	.07824	.39923	2.0586	2.2811	4.1721	2.1493	.33127
#1	.99513	1.0039	.96312	12.513	24.811	.99843	1.0067
#2	.99403	.99829	.93548	12.116	23.389	.96854	1.0115
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	1.1000	1.1000	13.750	27.500	1.1000	1.1000
Low	.90000	.90000	.90000	11.250	22.500	.90000	.90000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0104	.25703	.25860	.25807	.25974	.25639	.25750
SDev	.0471	.00314	.00523	.00453	.01404	.00138	.00375
%RSD	4.6586	1.2218	2.0223	1.7568	5.4069	.53934	1.4580
#1	1.0436	.25925	.26229	.26128	.26967	.25541	.26016
#2	.97707	.25481	.25490	.25487	.24981	.25736	.25485
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	1.1000			.27500			.27500
Low	.90000			.22500			.22500
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.25621	.26016	.25884	.52981	1.0047	1.0417	
SDev	.00133	.00992	.00618	.01464	.0430	.0236	
%RSD	.51809	3.8139	2.3860	2.7638	4.2794	2.2684	
#1	.25527	.26718	.26321	.54016	1.0351	1.0584	
#2	.25715	.25315	.25448	.51946	.97434	1.0249	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.27500	.55000	1.1000	1.1000	
Low			.22500	.45000	.90000	.90000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15779	--	--	--	--	--	--
SDev	13.22303	--	--	--	--	--	--
%RSD	.0837999	--	--	--	--	--	--
#1	15789	--	--	--	--	--	--
#2	15770	--	--	--	--	--	--

Analysis Report

08/18/00 07:38:16 AM

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Method: METTRA Sample Name: ICB1

Operator: MTW

Run Time: 08/18/00 07:34:10

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00058	-.03141	.00078	.00054	.00127	.01641	.00012
SDev	.00003	.00643	.00105	.00035	.00067	.01071	.00011
%RSD	5.3951	20.455	133.80	64.278	53.273	65.253	90.123
#1	.00060	-.02687	.00004	.00029	.00079	.00884	.00004
#2	.00055	-.03595	.00153	.00078	.00174	.02399	.00019
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00072	.00066	.00134	.00482	.01448	.00050	.00573
SDev	.00001	.00040	.00022	.00095	.00664	.00044	.00085
%RSD	.86784	61.032	16.475	19.672	45.887	89.119	14.773
#1	.00072	.00037	.00119	.00549	.00978	.00018	.00633
#2	.00073	.00094	.00150	.00415	.01917	.00081	.00513
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	-.00272	.00027	-.00073	.00017	-.00006	.00002
SDev	.00222	.00009	.00248	.00162	.00190	.00019	.00076
%RSD	8356.6	3.4001	925.07	223.52	1112.4	314.56	4681.3
#1	-.00155	-.00278	.00202	.00042	.00151	.00007	.00055
#2	.00160	-.00265	-.00149	-.00187	-.00117	-.00020	-.00052
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00148	-.00234	-.00205	.00203	.00169	.00127	
SDev	.00244	.00209	.00058	.00243	.00017	.00045	
%RSD	164.77	89.501	28.474	119.32	9.7886	35.682	
#1	-.00320	-.00086	-.00164	.00375	.00157	.00095	
#2	.00024	-.00382	-.00246	.00032	.00181	.00159	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15556	--	--	--	--	--	--
SDev	165.8870	--	--	--	--	--	--
%RSD	1.066351	--	--	--	--	--	--
#1	15439	--	--	--	--	--	--
#2	15674	--	--	--	--	--	--

Analysis Report

QC Standard

08/18/00 07:42:26 AM

page 1

Method: METTRA Sample Name: ICSA 0057-011-1 Operator: MTW
 Run Time: 08/18/00 07:38:20
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00011	507.07	.00045	.00159	-.00081	475.79	.00047
SDev	.00001	.13	.00131	.00011	.00011	5.65	.00052
%RSD	6.8318	.02487	288.49	7.1170	13.410	1.1878	110.19
#1	.00010	506.98	-.00047	.00167	-.00088	479.78	.00010
#2	.00011	507.16	.00138	.00151	-.00073	471.79	.00084
Errors	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value		500.00				500.00	
Range		20.000				20.000	
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00069	.00337	.00307	203.16	516.49	.00846	-.00107
SDev	.00041	.00049	.00020	1.15	4.20	.00000	.00000
%RSD	59.509	14.649	6.3764	.56486	.81398	.04582	.24298
#1	.00098	.00302	.00293	203.97	519.47	.00845	-.00106
#2	.00040	.00372	.00321	202.35	513.52	.00846	-.00107
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	QC Pass	NOCHECK	NOCHECK
Value				200.00	500.00		
Range				20.000	20.000		
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00213	-.04677	.03120	.00523	.00379	-.00163	.00017
SDev	.00027	.00826	.00280	.00089	.00190	.00462	.00372
%RSD	12.820	17.670	8.9686	16.925	50.114	283.50	2124.9
#1	.00194	-.05261	.03318	.00461	.00245	-.00490	-.00245
#2	.00233	-.04093	.02922	.00586	.00513	.00164	.00280
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00885	-.00872	-.00876	.00548	-.00382	.00551	
SDev	.00299	.00130	.00013	.00434	.00182	.00006	
%RSD	33.783	14.891	1.4788	79.155	47.709	1.0331	
#1	-.00673	-.00964	-.00867	.00854	-.00511	.00555	
#2	-.01096	-.00780	-.00885	.00241	-.00253	.00547	
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	
Value							
Range							

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Analysis Report

QC Standard

08/18/00 07:42:26 AM

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14667	--	--	--	--	--	--
SDev	55.04868	--	--	--	--	--	--
%RSD	.3753125	--	--	--	--	--	--
#1	14628	--	--	--	--	--	--
#2	14706	--	--	--	--	--	--

Method: METTRA Sample Name: ICSAB 0014-197-7 Operator: MTW
 Run Time: 08/18/00 07:42:30
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1534	516.20	1.0482	.52764	.49328	483.26	.95498
SDev	.0109	3.98	.0131	.00490	.00640	6.27	.00712
%RSD	.94109	.77159	1.2506	.92791	1.2980	1.2979	.74513
#1	1.1611	519.02	1.0574	.53110	.49780	487.70	.96001
#2	1.1457	513.39	1.0389	.52417	.48875	478.83	.94994
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.0000	500.00	1.0000	.50000	.50000	500.00	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50161	.51244	.55347	206.45	523.23	.51286	1.0062
SDev	.00302	.00407	.00506	1.72	6.79	.00520	.0021
%RSD	.60227	.79504	.91444	.83508	1.2976	1.0138	.20378
#1	.50375	.51532	.55705	207.67	528.04	.51653	1.0077
#2	.49948	.50956	.54989	205.23	518.43	.50918	1.0048
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.50000	.50000	.50000	200.00	500.00	.50000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99797	1.0437	1.0626	1.0563	1.0847	1.0770	1.0796
SDev	.01265	.0015	.0065	.0048	.0161	.0038	.0029
%RSD	1.2675	.14029	.61493	.45876	1.4855	.34903	.26475
#1	1.0069	1.0447	1.0672	1.0597	1.0961	1.0744	1.0816
#2	.98902	1.0427	1.0580	1.0529	1.0733	1.0797	1.0776
Errors	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK	QC Pass
Value	1.0000			1.0000			1.0000
Range	20.000			20.000			20.000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.0360	1.0637	1.0545	1.1100	.50742	1.0773	
SDev	.0017	.0125	.0089	.0065	.00666	.0103	
%RSD	.16017	1.1717	.84075	.58176	1.3127	.95767	
#1	1.0372	1.0725	1.0608	1.1146	.51213	1.0846	
#2	1.0349	1.0549	1.0482	1.1055	.50271	1.0700	
Errors	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	
Value			1.0000	1.0000	.50000	1.0000	
Range			20.000	20.000	20.000	20.000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14407	--	--	--	--	--	--
SDev	105.0758	--	--	--	--	--	--
%RSD	.7293385	--	--	--	--	--	--
#1	14333	--	--	--	--	--	--
#2	14481	--	--	--	--	--	--

Analysis Report

08/18/00 07:53:02 AM

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page 1

Method: METTRA Sample Name: DJ0MXB

Operator: MTW

Run Time: 08/18/00 07:48:56

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00028	-.02670	-.00079	.00014	.00061	.09999	.00024
SDev	.00053	.00615	.00091	.00002	.00012	.00442	.00000
%RSD	190.08	23.025	114.82	10.498	19.633	4.4195	1.8175
#1	-.00065	-.02236	-.00015	.00015	.00052	.10311	.00023
#2	.00010	-.03105	-.00144	.00013	.00069	.09686	.00024
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00112	-.00033	.00201	.02191	.02875	.00014	.00280
SDev	.00101	.00055	.00019	.00634	.00161	.00010	.00113
%RSD	89.941	166.30	9.3238	28.946	5.5825	73.617	40.299
#1	-.00184	-.00072	.00214	.02639	.02761	.00007	.00360
#2	-.00041	.00006	.00188	.01743	.02988	.00021	.00201
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00126	-.00036	.00126	.00072	-.00294	.00045	-.00068
SDev	.00033	.00353	.00035	.00094	.00337	.00044	.00083
%RSD	26.086	989.29	27.956	130.60	114.76	98.256	122.11
#1	.00103	-.00285	.00151	.00006	-.00055	.00014	-.00009
#2	.00150	.00214	.00101	.00138	-.00532	.00077	-.00126
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00774	.00212	-.00117	-.00181	-.00192	.00451	
SDev	.00089	.00049	.00003	.00423	.00000	.00002	
%RSD	11.536	22.881	2.2192	233.95	.11559	.54104	
#1	-.00838	.00246	-.00115	.00118	-.00191	.00453	
#2	-.00711	.00178	-.00118	-.00480	-.00192	.00450	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15181	--	--	--	--	--	--
SDev	99.31329	--	--	--	--	--	--
%RSD	.6542151	--	--	--	--	--	--
#1	15110	--	--	--	--	--	--
#2	15251	--	--	--	--	--	--

Method: METTRA Sample Name: DJ0MXC

Operator: MTW

Run Time: 08/18/00 07:53:05

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05133	2.0531	2.0629	2.0234	.05168	51.234	.05049
SDev	.00018	.0029	.0055	.0059	.00032	.454	.00037
%RSD	.35816	.14023	.26871	.29139	.61805	.88517	.73790

#1	.05146	2.0551	2.0668	2.0275	.05190	51.554	.05075
#2	.05120	2.0511	2.0590	2.0192	.05145	50.913	.05022

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51930	.20910	.26726	.93528	49.006	.50917	1.0540
SDev	.00229	.00051	.00091	.00605	.381	.00336	.0067
%RSD	.44028	.24599	.34077	.64727	.77741	.66071	.63794

#1	.52091	.20946	.26790	.93956	49.275	.51155	1.0588
#2	.51768	.20873	.26662	.93100	48.736	.50679	1.0493

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51286	.54346	.52814	.53324	.50853	.51393	.51213
SDev	.00353	.00498	.00562	.00541	.00581	.00392	.00455
%RSD	.68887	.91642	1.0641	1.0140	1.1415	.76221	.88761

#1	.51536	.54698	.53211	.53706	.51263	.51670	.51535
#2	.51036	.53994	.52416	.52942	.50442	.51116	.50892

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.60000			.60000			.60000
Low	.40000			.40000			.40000

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0140	2.0484	2.0369	2.1973	.51183	.54046
SDev	.0177	.0230	.0213	.0076	.00687	.00301
%RSD	.87820	1.1244	1.0433	.34704	1.3416	.55658

#1	2.0265	2.0647	2.0520	2.1920	.51669	.54258
#2	2.0015	2.0321	2.0219	2.2027	.50698	.53833

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			2.4000	2.4000	.60000	.60000
Low			1.6000	1.6000	.40000	.40000

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15222	--	--	--	--	--	--
SDev	135.3757	--	--	--	--	--	--
%RSD	.8893266	--	--	--	--	--	--
#1	15127	--	--	--	--	--	--
#2	15318	--	--	--	--	--	--

Analysis Report

08/18/00 08:01:20 AM

6681069

page 1

Method: METTRA Sample Name: DHGDF

Operator: MTW

Run Time: 08/18/00 07:57:14

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00010	.08936	.00293	.02086	-.00007	189.60	.00026
SDev	.00025	.02123	.00030	.00140	.00149	12.61	.00009
%RSD	247.90	23.761	10.374	6.7199	2073.8	6.6533	34.252
#1	.00007	.07434	.00272	.01987	.00098	180.68	.00033
#2	-.00027	.10437	.00315	.02185	-.00112	198.52	.00020
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00033	.00486	.01208	.82900	5.3102	.04929	.00439
SDev	.00008	.00027	.00235	.05736	.3656	.00335	.00028
%RSD	24.594	5.4720	19.494	6.9194	6.8847	6.8007	6.3763
#1	.00039	.00467	.01041	.78844	5.0517	.04692	.00459
#2	.00028	.00505	.01374	.86956	5.5687	.05167	.00420
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00160	.00585	.00368	.00440	.00508	.00317	.00381
SDev	.00087	.00094	.00062	.00010	.00101	.00232	.00188
%RSD	54.756	16.039	16.804	2.2779	19.811	73.228	49.501
#1	.00098	.00518	.00412	.00447	.00436	.00153	.00247
#2	.00222	.00651	.00324	.00433	.00579	.00481	.00514
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00741	.01120	.00994	.00460	.00086	.31203	
SDev	.00161	.00226	.00204	.00133	.00005	.02185	
%RSD	21.795	20.129	20.543	29.016	5.7080	7.0041	
#1	.00627	.00961	.00849	.00554	.00089	.29657	
#2	.00855	.01279	.01138	.00365	.00082	.32748	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15348	--	--	--	--	--	--
SDev	853.2306	--	--	--	--	--	--
%RSD	5.559384	--	--	--	--	--	--
#1	15951	--	--	--	--	--	--
#2	14744	--	--	--	--	--	--

Analysis Report

08/18/00 08:05:29 AM

6681071
page 1

Method: METTRA Sample Name: DHGDH

Operator: MTW

Run Time: 08/18/00 08:01:23

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00017	-.04293	.00200	.00157	.00024	1.0414	.00027
SDev	.00033	.00353	.00044	.00005	.00005	.0136	.00010
%RSD	196.89	8.2271	22.287	3.2130	19.960	1.3013	38.943
#1	-.00007	-.04044	.00231	.00161	.00021	1.0510	.00019
#2	.00040	-.04543	.00168	.00154	.00028	1.0318	.00034
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00003	.00112	.00673	.03636	2.0669	.00121	.00213
SDev	.00046	.00020	.00015	.00065	.0218	.00001	.00064
%RSD	1429.7	17.422	2.1835	1.7849	1.0533	.38914	30.187
#1	.00029	.00099	.00684	.03682	2.0822	.00121	.00258
#2	-.00035	.00126	.00663	.03591	2.0515	.00121	.00167
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00107	.00383	.00289	.00320	.00296	.00021	.00113
SDev	.00139	.00128	.00082	.00012	.00107	.00198	.00096
%RSD	130.04	33.331	28.470	3.8751	36.236	923.50	85.090
#1	.00009	.00292	.00347	.00329	.00372	-.00118	.00045
#2	.00206	.00473	.00231	.00311	.00220	.00161	.00181
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00807	.00672	.00717	.00496	-.00191	.05977	
SDev	.00015	.00121	.00076	.00196	.00000	.00025	
%RSD	1.7951	18.019	10.594	39.562	.01186	.42235	
#1	.00797	.00758	.00771	.00357	-.00191	.05995	
#2	.00817	.00586	.00663	.00635	-.00191	.05959	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

6681072

Analysis Report

08/18/00 08:05:29 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15648	--	--	--	--	--	--
SDev	130.6380	--	--	--	--	--	--
%RSD	.8348368	--	--	--	--	--	--
#1	15556	--	--	--	--	--	--
#2	15741	--	--	--	--	--	--

Analysis Report

08/18/00 08:09:37 AM

page 1

Method: METTRA Sample Name: DHGDHP5 Operator: MTW
 Run Time: 08/18/00 08:05:32
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00003	-.04190	-.00014	.00031	.00015	.22732	.00008
SDev	.00035	.00134	.00025	.00009	.00023	.00033	.00010
%RSD	1384.2	3.1935	175.93	27.532	151.97	.14563	121.70
#1	.00022	-.04095	-.00031	.00037	.00032	.22709	.00001
#2	-.00027	-.04284	.00003	.00025	-.00001	.22756	.00015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00036	.00032	.00255	.00505	.41375	.00022	.00140
SDev	.00055	.00014	.00034	.01779	.00003	.00001	.00033
%RSD	152.27	44.225	13.423	352.16	.00763	5.2555	23.458
#1	.00003	.00042	.00231	.01764	.41373	.00023	.00117
#2	-.00075	.00022	.00279	-.00753	.41377	.00022	.00163
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00062	.00003	.00024	.00017	-.00199	.00024	-.00050
SDev	.00001	.00294	.00126	.00014	.00228	.00130	.00011
%RSD	1.6904	8861.6	515.54	79.073	114.41	541.37	21.187
#1	-.00063	-.00205	.00114	.00008	-.00038	-.00068	-.00058
#2	-.00062	.00211	-.00065	.00027	-.00360	.00116	-.00043
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00136	.00104	.00025	.00170	-.00136	.01204	
SDev	.00133	.00061	.00085	.00228	.00000	.00006	
%RSD	98.410	58.707	347.78	134.05	.05532	.47755	
#1	-.00230	.00061	-.00036	.00331	-.00136	.01200	
#2	-.00041	.00148	.00085	.00009	-.00136	.01208	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

6681074

Analysis Report

08/18/00 08:09:37 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16054	--	--	--	--	--	--
SDev	156.4122	--	--	--	--	--	--
%RSD	.9743150	--	--	--	--	--	--
#1	16164	--	--	--	--	--	--
#2	15943	--	--	--	--	--	--

Analysis Report

08/18/00 08:13:46 AM

6681075

page 1

Method: METTRA Sample Name: DHGDHS

Operator: MTW

Run Time: 08/18/00 08:09:41

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04956	2.0410	2.0110	1.9634	.04926	49.972	.04873
SDev	.00085	.0392	.0260	.0384	.00040	.884	.00032
%RSD	1.7192	1.9202	1.2948	1.9576	.81570	1.7680	.66290
#1	.05016	2.0687	2.0294	1.9906	.04955	50.596	.04896
#2	.04896	2.0132	1.9926	1.9362	.04898	49.347	.04850
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50285	.20282	.25727	.98167	49.464	.49139	1.0027
SDev	.00627	.00273	.00545	.00173	.968	.00784	.0103
%RSD	1.2461	1.3446	2.1167	.17678	1.9575	1.5961	1.0317
#1	.50728	.20475	.26112	.98044	50.149	.49694	1.0100
#2	.49842	.20089	.25342	.98290	48.780	.48584	.99540
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49083	.52157	.51016	.51396	.49163	.48966	.49032
SDev	.00747	.00812	.00019	.00283	.00369	.00675	.00573
%RSD	1.5229	1.5566	.03761	.55091	.74969	1.3783	1.1684
#1	.49612	.52731	.51030	.51596	.49423	.49444	.49437
#2	.48555	.51583	.51003	.51196	.48902	.48489	.48627
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	2.0125	2.0171	2.0156	2.1391	.49349	.61243	
SDev	.0236	.0247	.0244	.0177	.00765	.00873	
%RSD	1.1719	1.2267	1.2085	.82781	1.5499	1.4255	
#1	2.0292	2.0346	2.0328	2.1516	.49890	.61861	
#2	1.9959	1.9996	1.9984	2.1266	.48809	.60626	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15365	--	--	--	--	--	--
SDev	211.7080	--	--	--	--	--	--
%RSD	1.377868	--	--	--	--	--	--
#1	15215	--	--	--	--	--	--
#2	15515	--	--	--	--	--	--

Analysis Report

08/18/00 08:17:55 AM

page 1

Method: METTRA Sample Name: DHGDHD Operator: MTW
 Run Time: 08/18/00 08:13:50
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05078	2.0998	2.0484	1.9902	.05034	50.675	.04963
SDev	.00056	.0222	.0221	.0244	.00047	.754	.00020
%RSD	1.1011	1.0557	1.0764	1.2260	.92371	1.4871	.39799
#1	.05118	2.1154	2.0640	2.0074	.05067	51.208	.04977
#2	.05039	2.0841	2.0328	1.9729	.05002	50.142	.04949
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51394	.20619	.26222	.95439	50.097	.50107	1.0239
SDev	.00490	.00176	.00414	.01611	.673	.00547	.0050
%RSD	.95372	.85120	1.5798	1.6882	1.3430	1.0918	.48806
#1	.51741	.20743	.26515	.96579	50.573	.50494	1.0274
#2	.51048	.20495	.25929	.94300	49.621	.49720	1.0203
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49941	.53485	.51882	.52416	.50322	.49945	.50070
SDev	.00532	.00274	.00369	.00337	.00614	.00136	.00295
%RSD	1.0653	.51161	.71075	.64308	1.2199	.27229	.58943
#1	.50318	.53679	.52143	.52654	.50756	.50041	.50279
#2	.49565	.53292	.51621	.52178	.49888	.49848	.49862
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	2.0385	2.0500	2.0462	2.1774	.50370	.60055	
SDev	.0172	.0245	.0220	.0232	.00479	.00514	
%RSD	.84232	1.1942	1.0775	1.0648	.95148	.85640	
#1	2.0507	2.0674	2.0618	2.1938	.50709	.60419	
#2	2.0264	2.0327	2.0306	2.1611	.50031	.59691	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

6681078

Analysis Report

08/18/00 08:17:55 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15093	--	--	--	--	--	--
SDev	86.33746	--	--	--	--	--	--
%RSD	.5720270	--	--	--	--	--	--
#1	15032	--	--	--	--	--	--
#2	15154	--	--	--	--	--	--

Analysis Report

08/18/00 08:22:04 AM

6681079
page 1

Method: METTRA Sample Name: DHGDK

Operator: MTW

Run Time: 08/18/00 08:17:59

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00040	-.04234	.00305	.00210	.00039	1.4074	.00030
SDev	.00084	.01324	.00013	.00034	.00172	.0880	.00010
%RSD	211.35	31.277	4.3420	16.178	442.42	6.2542	32.117
#1	-.00020	-.05171	.00314	.00186	.00161	1.3451	.00037
#2	.00099	-.03298	.00296	.00234	-.00083	1.4696	.00023
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00041	.00148	.00593	.04723	2.4994	.00202	.00322
SDev	.00005	.00102	.00245	.00920	.1630	.00028	.00027
%RSD	11.841	69.195	41.288	19.477	6.5205	13.846	8.3847
#1	.00045	.00076	.00420	.04072	2.3841	.00183	.00303
#2	.00038	.00220	.00767	.05373	2.6146	.00222	.00341
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00124	.00373	.00169	.00237	.00443	.00180	.00267
SDev	.00057	.00177	.00026	.00042	.00247	.00220	.00065
%RSD	45.716	47.521	15.099	17.752	55.822	122.62	24.152
#1	.00084	.00248	.00187	.00207	.00618	.00024	.00222
#2	.00164	.00498	.00151	.00266	.00268	.00336	.00313
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.01366	.00357	.00693	.00904	.00047	.04851	
SDev	.00343	.00098	.00180	.00193	.00257	.00302	
%RSD	25.107	27.471	25.919	21.321	552.99	6.2179	
#1	.01123	.00287	.00566	.00768	-.00135	.04637	
#2	.01608	.00426	.00820	.01040	.00229	.05064	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15627	--	--	--	--	--	--
SDev	847.6090	--	--	--	--	--	--
%RSD	5.423969	--	--	--	--	--	--
#1	16226	--	--	--	--	--	--
#2	15028	--	--	--	--	--	--

Analysis Report

08/18/00 08:26:13 AM

6681081
page 1

Method: METTRA Sample Name: CCV3-1 0057-023-9 Operator: MTW
 Run Time: 08/18/00 08:22:08
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0708	24.390	.52851	2.0012	2.0342	50.791	.50804
SDev	.0098	.155	.00439	.0185	.0252	.683	.00378
%RSD	.91140	.63624	.83109	.92576	1.2372	1.3438	.74325
#1	1.0777	24.500	.53162	2.0143	2.0520	51.274	.51071
#2	1.0639	24.281	.52541	1.9881	2.0164	50.309	.50537
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0494	2.0493	1.9691	25.145	49.174	2.0186	2.0622
SDev	.0139	.0137	.0189	.210	.607	.0199	.0002
%RSD	.67886	.67082	.96131	.83486	1.2352	.98807	.00869
#1	2.0593	2.0591	1.9825	25.293	49.604	2.0327	2.0620
#2	2.0396	2.0396	1.9557	24.996	48.745	2.0045	2.0623
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0215	.52875	.52555	.52662	.52575	.52357	.52430
SDev	.0284	.00190	.00551	.00430	.00661	.00215	.00363
%RSD	1.4030	.35889	1.0474	.81721	1.2573	.40970	.69273
#1	2.0416	.53009	.52945	.52966	.53042	.52509	.52687
#2	2.0015	.52740	.52166	.52357	.52107	.52206	.52173
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.53057	.53353	.53254	1.0712	2.0271	2.0744	
SDev	.00331	.00586	.00501	.0027	.0271	.0191	
%RSD	.62387	1.0986	.94111	.25230	1.3363	.92072	
#1	.53291	.53767	.53609	1.0693	2.0462	2.0879	
#2	.52823	.52938	.52900	1.0731	2.0079	2.0609	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED)	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15351	--	--	--	--	--	--
SDev	65.16016	--	--	--	--	--	--
%RSD	.4244748	--	--	--	--	--	--
#1	15305	--	--	--	--	--	--
#2	15397	--	--	--	--	--	--

Analysis Report

08/18/00 08:30:22 AM

page 1

Method: METTRA Sample Name: CCB1

Operator: MTW

Run Time: 08/18/00 08:26:17

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00006	-.04870	.00067	.00065	.00163	.02223	.00026
SDev	.00085	.00744	.00105	.00046	.00024	.01213	.00017
%RSD	1467.8	15.273	156.83	70.672	14.522	54.586	64.993
#1	-.00054	-.05396	-.00007	.00032	.00146	.01365	.00014
#2	.00066	-.04344	.00141	.00097	.00180	.03081	.00038
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00066	.00073	.00217	.01539	.01852	.00054	.00790
SDev	.00080	.00108	.00015	.00508	.01432	.00043	.00107
%RSD	121.12	147.36	6.7374	33.002	77.307	81.007	13.483
#1	.00010	-.00003	.00207	.01899	.00840	.00023	.00866
#2	.00123	.00150	.00228	.01180	.02864	.00084	.00715
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00028	-.00427	.00255	.00028	.00150	.00049	.00082
SDev	.00041	.00353	.00248	.00048	.00298	.00123	.00017
%RSD	146.40	82.578	96.975	169.95	199.33	252.93	20.917
#1	-.00001	-.00677	.00430	.00062	.00360	-.00038	.00094
#2	.00057	-.00178	.00080	-.00006	-.00061	.00136	.00070
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00181	.00186	.00184	.00474	.00025	.00107	
SDev	.00036	.00084	.00068	.00038	.00307	.00047	
%RSD	19.788	45.157	36.851	8.0525	1210.5	43.373	
#1	.00206	.00245	.00232	.00500	-.00192	.00074	
#2	.00156	.00126	.00136	.00447	.00242	.00140	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15545	--	--	--	--	--	--
SDev	14.39004	--	--	--	--	--	--
%RSD	.0925692	--	--	--	--	--	--
#1	15555	--	--	--	--	--	--
#2	15535	--	--	--	--	--	--

Analysis Report

08/18/00 08:34:32 AM

page 1

Method: METTRA Sample Name: DHGDM

Operator: MTW

Run Time: 08/18/00 08:30:26

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00014	.06622	.00280	.02118	.00029	128.91	.00030
SDev	.00080	.00385	.00058	.00043	.00022	2.64	.00007
%RSD	558.45	5.8078	20.653	2.0335	74.840	2.0446	23.723
#1	-.00042	.06350	.00239	.02149	.00014	130.78	.00035
#2	.00071	.06894	.00321	.02088	.00044	127.05	.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00024	.00344	.01221	.45157	4.1550	.05192	.00294
SDev	.00044	.00042	.00044	.00057	.0837	.00081	.00038
%RSD	187.05	12.181	3.6401	.12573	2.0138	1.5521	13.055
#1	-.00008	.00314	.01253	.45117	4.2141	.05249	.00321
#2	.00055	.00374	.01190	.45197	4.0958	.05135	.00267
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00172	.00195	.00287	.00256	.00239	.00060	.00120
SDev	.00023	.00184	.00048	.00029	.00034	.00061	.00052
%RSD	13.367	94.200	16.675	11.418	14.236	101.78	43.550
#1	.00156	.00325	.00253	.00277	.00263	.00103	.00157
#2	.00189	.00065	.00320	.00235	.00215	.00017	.00083
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00952	.00860	.00891	.00282	.00032	.29851	
SDev	.00115	.00103	.00030	.00189	.00039	.00426	
%RSD	12.073	11.947	3.3932	67.259	123.68	1.4281	
#1	.00871	.00932	.00912	.00416	.00004	.30152	
#2	.01034	.00787	.00869	.00148	.00059	.29549	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

08/18/00 08:34:32 AM

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15101	--	--	--	--	--	--
SDev	217.6473	--	--	--	--	--	--
%RSD	1.441254	--	--	--	--	--	--
#1	14947	--	--	--	--	--	--
#2	15255	--	--	--	--	--	--

Analysis Report

08/18/00 08:38:41 AM

page 1

Method: METTRA Sample Name: DHGDP

Operator: MTW

Run Time: 08/18/00 08:34:35

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00034	.05386	.00237	.01647	-.00044	121.18	.00013
SDev	.00008	.01121	.00031	.00100	.00134	5.97	.00007
%RSD	23.042	20.804	13.054	6.0414	302.35	4.9300	53.954
#1	-.00040	.04594	.00259	.01576	.00050	116.96	.00008
#2	-.00029	.06179	.00215	.01717	-.00139	125.41	.00018
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00008	.00364	.00976	.55819	4.1246	.08228	.00176
SDev	.00017	.00044	.00205	.01764	.2114	.00423	.00065
%RSD	210.44	12.230	21.052	3.1604	5.1247	5.1377	36.778
#1	.00021	.00333	.00831	.54572	3.9752	.07929	.00130
#2	-.00004	.00396	.01122	.57067	4.2741	.08527	.00222
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00065	.00141	.00193	.00175	.00165	.00055	.00091
SDev	.00045	.00111	.00022	.00022	.00063	.00155	.00083
%RSD	69.566	79.126	11.520	12.666	38.408	284.14	90.366
#1	.00097	.00062	.00208	.00160	.00210	-.00055	.00033
#2	.00033	.00219	.00177	.00191	.00120	.00165	.00150
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.01216	.00424	.00688	.00719	-.00036	.20667	
SDev	.00087	.00367	.00216	.00154	.00071	.01085	
%RSD	7.1196	86.675	31.448	21.414	198.43	5.2495	
#1	.01277	.00164	.00535	.00828	-.00086	.19900	
#2	.01155	.00684	.00841	.00611	.00014	.21435	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14949	--	--	--	--	--	--
SDev	713.2587	--	--	--	--	--	--
%RSD	4.771153	--	--	--	--	--	--
#1	15454	--	--	--	--	--	--
#2	14445	--	--	--	--	--	--

Method: METTRA Sample Name: DHGDX

Operator: MTW

Run Time: 08/18/00 08:38:45

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00012	-.01338	.00352	.02495	-.00033	285.02	.00032
SDev	.00009	.01146	.00155	.00008	.00008	1.13	.00006
%RSD	77.100	85.641	44.127	.33598	23.861	.39515	17.596
#1	.00005	-.02148	.00242	.02489	-.00028	285.82	.00036
#2	.00018	-.00528	.00462	.02501	-.00039	284.22	.00028
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00003	.00501	.01050	.20979	6.9313	.06228	.00229
SDev	.00035	.00019	.00007	.02087	.0220	.00013	.00064
%RSD	1110.6	3.7355	.69011	9.9456	.31670	.20733	28.057
#1	-.00028	.00515	.01055	.19504	6.9468	.06237	.00275
#2	.00021	.00488	.01045	.22455	6.9158	.06219	.00184
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00140	.00353	.00113	.00193	.00319	-.00013	.00098
SDev	.00006	.00476	.00156	.00055	.00397	.00127	.00048
%RSD	4.6535	134.60	137.50	28.293	124.37	1002.4	48.719
#1	.00135	.00690	.00003	.00232	.00038	.00077	.00064
#2	.00145	.00017	.00223	.00155	.00600	-.00102	.00132
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.01497	.00586	.00889	.00749	-.00185	.87094	
SDev	.00301	.00070	.00147	.00447	.00001	.00078	
%RSD	20.093	11.974	16.526	59.622	.39378	.09016	
#1	.01710	.00635	.00993	.00433	-.00186	.87038	
#2	.01285	.00536	.00785	.01065	-.00184	.87149	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

08/18/00 08:42:51 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15001	--	--	--	--	--	--
SDev	26.65806	--	--	--	--	--	--
%RSD	.1777133	--	--	--	--	--	--
#1	14982	--	--	--	--	--	--
#2	15019	--	--	--	--	--	--

Analysis Report

08/18/00 08:47:01 AM

page 1

Method: METTRA Sample Name: DHGE3 Operator: MTW
 Run Time: 08/18/00 08:42:55
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00030	-.01784	.00343	.01880	-.00006	173.40	.00026
SDev	.00086	.00446	.00002	.00003	.00057	1.52	.00003
%RSD	288.67	24.989	.57179	.16220	971.38	.87788	13.399
#1	.00091	-.01469	.00345	.01878	-.00046	174.47	.00028
#2	-.00031	-.02099	.00342	.01882	.00034	172.32	.00024
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00042	.00363	.00986	.17914	4.6905	.07344	.00219
SDev	.00009	.00106	.00012	.00794	.0300	.00036	.00034
%RSD	21.612	29.047	1.2614	4.4327	.63966	.49569	15.571
#1	.00036	.00438	.00995	.18476	4.7117	.07369	.00243
#2	.00048	.00289	.00977	.17353	4.6693	.07318	.00194
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00141	.00206	.00142	.00163	.00323	.00173	.00223
SDev	.00100	.00312	.00211	.00037	.00154	.00093	.00011
%RSD	71.316	151.66	148.34	22.456	47.755	53.982	4.8611
#1	.00070	.00427	-.00007	.00138	.00214	.00238	.00230
#2	.00212	-.00015	.00291	.00189	.00432	.00107	.00215
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01519	.00984	.01162	.00442	-.00040	1.3084
SDev	.00219	.00119	.00152	.00267	.00084	.0065
%RSD	14.416	12.049	13.079	60.392	210.43	.49817
#1	.01674	.01068	.01270	.00253	.00019	1.3130
#2	.01365	.00900	.01055	.00630	-.00099	1.3038
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

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Analysis Report

08/18/00 08:47:01 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15418	--	--	--	--	--	--
SDev	119.9250	--	--	--	--	--	--
%RSD	.7778400	--	--	--	--	--	--
#1	15333	--	--	--	--	--	--
#2	15502	--	--	--	--	--	--

Analysis Report

08/18/00 08:51:10 AM

page 1

Method: METTRA Sample Name: DHGE5

Operator: MTW

Run Time: 08/18/00 08:47:04

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00003	-.02793	.00254	.02542	.00057	141.32	.00015
SDev	.00017	.00392	.00101	.00056	.00066	3.21	.00018
%RSD	487.28	14.016	39.931	2.2046	116.03	2.2705	121.38
#1	.00008	-.02516	.00182	.02581	.00010	143.59	.00027
#2	-.00015	-.03070	.00325	.02502	.00103	139.05	.00002
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00046	.00289	.01069	.30588	4.4036	.03707	.00098
SDev	.00005	.00030	.00080	.00214	.1075	.00095	.00021
%RSD	10.003	10.217	7.4329	.70059	2.4414	2.5526	21.642
#1	.00043	.00310	.01126	.30740	4.4797	.03773	.00113
#2	.00049	.00269	.01013	.30437	4.3276	.03640	.00083
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00082	.00216	.00374	.00321	.00437	.00110	.00219
SDev	.00125	.00069	.00029	.00042	.00150	.00161	.00058
%RSD	152.77	31.806	7.7733	13.150	34.227	146.35	26.402
#1	-.00007	.00264	.00395	.00351	.00331	.00224	.00260
#2	.00170	.00167	.00353	.00291	.00543	-.00004	.00178
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.01468	.00764	.00999	.00525	.00052	.22784	
SDev	.00053	.00056	.00020	.00050	.00005	.00427	
%RSD	3.6382	7.3603	1.9777	9.5142	9.6557	1.8759	
#1	.01430	.00804	.01013	.00490	.00055	.23086	
#2	.01505	.00725	.00985	.00560	.00048	.22482	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15413	--	--	--	--	--	--
SDev	325.5875	--	--	--	--	--	--
%RSD	2.112452	--	--	--	--	--	--
#1	15183	--	--	--	--	--	--
#2	15643	--	--	--	--	--	--

Analysis Report

08/18/00 08:55:20 AM

page 1

Method: METTRA Sample Name: DHGE7

Operator: MTW

Run Time: 08/18/00 08:51:14

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00042	-.03066	.00193	.01999	.00027	130.44	.00022
SDev	.00125	.00294	.00142	.00000	.00013	.04	.00013
%RSD	299.38	9.5919	73.402	.00873	47.540	.03323	58.574
#1	-.00130	-.03273	.00093	.01999	.00018	130.41	.00013
#2	.00047	-.02858	.00294	.02000	.00036	130.47	.00031
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00086	.00231	.02521	.30526	4.1645	.02734	.00067
SDev	.00030	.00106	.00019	.01287	.0083	.00027	.00061
%RSD	34.820	46.093	.77324	4.2161	.19946	.97608	91.353
#1	-.00065	.00156	.02535	.29616	4.1703	.02715	.00024
#2	-.00108	.00306	.02507	.31436	4.1586	.02753	.00111
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00016	.00272	.00663	.00533	.00408	-.00028	.00117
SDev	.00200	.00332	.00088	.00052	.00171	.00294	.00139
%RSD	1221.1	122.46	13.287	9.7472	41.956	1035.1	118.93
#1	-.00125	.00036	.00726	.00496	.00529	-.00236	.00019
#2	.00158	.00507	.00601	.00570	.00287	.00180	.00215
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.01424	.01262	.01316	.00483	.00010	.31219	
SDev	.00068	.00077	.00029	.00040	.00062	.00045	
%RSD	4.7503	6.0726	2.1713	8.3845	647.46	.14299	
#1	.01376	.01316	.01336	.00454	-.00034	.31188	
#2	.01472	.01207	.01296	.00511	.00053	.31251	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

08/18/00 08:55:20 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15275	--	--	--	--	--	--
SDev	66.71594	--	--	--	--	--	--
%RSD	.4367591	--	--	--	--	--	--
#1	15228	--	--	--	--	--	--
#2	15322	--	--	--	--	--	--

Analysis Report

08/18/00 08:59:29 AM

page 1

Method: METTRA Sample Name: DHGEC

Operator: MTW

Run Time: 08/18/00 08:55:23

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00008	-.01132	.00332	.03165	.00006	214.90	.00034
SDev	.00006	.00415	.00036	.00006	.00008	.20	.00027
%RSD	76.351	36.691	10.847	.17218	128.71	.09323	78.222
#1	.00013	-.00838	.00307	.03169	.00001	215.04	.00015
#2	.00004	-.01426	.00358	.03162	.00012	214.75	.00053
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00023	.00579	.02666	.14588	5.5613	.04050	.00190
SDev	.00000	.00019	.00021	.01195	.0122	.00002	.00047
%RSD	.26617	3.2507	.77172	8.1905	.21903	.05662	24.830
#1	.00023	.00593	.02681	.13743	5.5699	.04048	.00157
#2	.00023	.00566	.02652	.15433	5.5527	.04052	.00224
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00214	.00342	.00259	.00287	.00082	.00023	.00043
SDev	.00021	.00187	.00132	.00150	.00038	.00061	.00028
%RSD	9.8360	54.663	50.916	52.404	46.187	265.91	66.277
#1	.00199	.00475	.00353	.00393	.00055	.00066	.00063
#2	.00229	.00210	.00166	.00181	.00109	-.00020	.00023
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V__	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.01785	.00923	.01210	.00656	-.00099	.51085	
SDev	.00075	.00058	.00014	.00111	.00000	.00054	
%RSD	4.2048	6.3277	1.1535	16.984	.47384	.10508	
#1	.01732	.00964	.01220	.00734	-.00099	.51047	
#2	.01838	.00881	.01200	.00577	-.00098	.51123	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSEL	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15217	--	--	--	--	--	--
SDev	8.555716	--	--	--	--	--	--
%RSD	.0562249	--	--	--	--	--	--
#1	15223	--	--	--	--	--	--
#2	15211	--	--	--	--	--	--

Analysis Report

08/18/00 09:03:38 AM

page 1

Method: METTRA Sample Name: DHGEE

Operator: MTW

Run Time: 08/18/00 08:59:32

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00005	-.03201	.00203	.01447	.00074	106.09	.00030
SDev	.00089	.00599	.00072	.00005	.00032	.29	.00022
%RSD	1697.6	18.717	35.626	.30941	42.653	.27519	71.285
#1	.00069	-.02777	.00152	.01451	.00052	106.30	.00046
#2	-.00058	-.03624	.00255	.01444	.00096	105.88	.00015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00044	.00320	.01811	.12785	3.7191	.02672	.00122
SDev	.00047	.00094	.00015	.00023	.0026	.00002	.00029
%RSD	106.71	29.332	.85346	.18418	.07067	.06885	24.085
#1	-.00011	.00386	.01822	.12802	3.7210	.02673	.00142
#2	-.00076	.00254	.01800	.12769	3.7173	.02671	.00101
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00169	.00339	.00092	.00174	.00130	-.00041	.00016
SDev	.00099	.00418	.00046	.00109	.00028	.00121	.00072
%RSD	58.466	123.48	49.925	62.444	21.763	297.64	448.08
#1	.00239	.00635	.00059	.00251	.00110	.00045	.00067
#2	.00099	.00043	.00124	.00097	.00150	-.00127	-.00035
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.01733	.00614	.00987	.00686	-.00046	.18668	
SDev	.00232	.00162	.00185	.00316	.00040	.00094	
%RSD	13.402	26.304	18.759	46.040	85.621	.50596	
#1	.01569	.00500	.00856	.00462	-.00018	.18602	
#2	.01897	.00729	.01118	.00909	-.00074	.18735	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15888	--	--	--	--	--	--
SDev	38.99652	--	--	--	--	--	--
%RSD	.2454506	--	--	--	--	--	--
#1	15915	--	--	--	--	--	--
#2	15860	--	--	--	--	--	--

Analysis Report

08/18/00 09:07:47 AM

page 1

Method: METTRA Sample Name: DHGEG

Operator: MTW

Run Time: 08/18/00 09:03:41

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00030	-.02770	.00355	.04088	.00030	236.96	.00013
SDev	.00043	.00320	.00026	.00048	.00004	4.20	.00002
%RSD	142.25	11.553	7.4521	1.1809	11.984	1.7730	12.892
#1	-.00061	-.02996	.00336	.04122	.00032	239.93	.00014
#2	.00000	-.02543	.00373	.04053	.00027	233.99	.00012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00095	.00395	.01344	.19466	5.6362	.08571	.00082
SDev	.00025	.00036	.00032	.00244	.0925	.00118	.00027
%RSD	26.919	9.1461	2.3790	1.2525	1.6411	1.3809	32.695
#1	-.00113	.00369	.01367	.19638	5.7016	.08655	.00101
#2	-.00077	.00420	.01322	.19294	5.5708	.08488	.00063
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00073	.00176	.00118	.00137	.00249	.00202	.00218
SDev	.00086	.00295	.00077	.00046	.00077	.00203	.00110
%RSD	117.90	167.43	65.499	33.792	31.015	100.45	50.323
#1	.00012	-.00032	.00173	.00105	.00304	.00059	.00140
#2	.00134	.00384	.00063	.00170	.00195	.00346	.00295
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.01271	.00733	.00912	.00300	-.00055	.47578	
SDev	.00164	.00159	.00052	.00046	.00060	.00532	
%RSD	12.872	21.743	5.6836	15.195	109.99	1.1183	
#1	.01155	.00846	.00949	.00332	-.00097	.47954	
#2	.01387	.00620	.00876	.00267	-.00012	.47202	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15408	--	--	--	--	--	--
SDev	212.0616	--	--	--	--	--	--
%RSD	1.376331	--	--	--	--	--	--
#1	15258	--	--	--	--	--	--
#2	15558	--	--	--	--	--	--

Analysis Report

08/18/00 09:11:56 AM

page 1

Method: METTRA Sample Name: DHGEH

Operator: MTW

Run Time: 08/18/00 09:07:51

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00000	.00116	.00238	.07086	-.00033	272.53	.00019
SDev	.00005	.00056	.00039	.00002	.00024	1.52	.00003
%RSD	1227.4	48.625	16.486	.02311	73.597	.55613	14.938
#1	.00003	.00155	.00211	.07085	-.00050	273.61	.00017
#2	-.00004	.00076	.00266	.07087	-.00016	271.46	.00020
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00070	.00573	.01142	.42683	6.9259	.10889	.00080
SDev	.00064	.00010	.00023	.01047	.0352	.00030	.00009
%RSD	91.222	1.7179	1.9920	2.4534	.50835	.28033	11.436
#1	.00114	.00567	.01158	.41942	6.9508	.10911	.00086
#2	.00025	.00580	.01126	.43423	6.9010	.10868	.00073
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00148	.00624	.00494	.00537	.00303	.00144	.00197
SDev	.00027	.00333	.00161	.00003	.00011	.00011	.00004
%RSD	18.283	53.335	32.656	.57583	3.4811	7.4840	1.8778
#1	.00129	.00859	.00380	.00540	.00310	.00137	.00195
#2	.00167	.00388	.00609	.00535	.00295	.00152	.00200
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00843	.00719	.00760	.00393	-.00177	.55463	
SDev	.00036	.00538	.00347	.00075	.00000	.00111	
%RSD	4.3021	74.798	45.589	19.037	.20607	.20072	
#1	.00868	.00339	.00515	.00340	-.00178	.55542	
#2	.00817	.01099	.01005	.00446	-.00177	.55384	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

08/18/00 09:11:56 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14866	--	--	--	--	--	--
SDev	63.74595	--	--	--	--	--	--
%RSD	.4287943	--	--	--	--	--	--
#1	14821	--	--	--	--	--	--
#2	14911	--	--	--	--	--	--

Analysis Report

08/18/00 09:16:05 AM

page 1

Method: METTRA Sample Name: CCV3-2

Operator: MTW

Run Time: 08/18/00 09:12:00

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0561	23.969	.51906	1.9568	2.0108	50.142	.50107
SDev	.0083	.198	.00392	.0123	.0077	.115	.00511
%RSD	.78511	.82471	.75614	.63041	.38278	.22850	1.0197
#1	1.0502	23.829	.51629	1.9481	2.0053	50.061	.49746
#2	1.0619	24.109	.52184	1.9655	2.0162	50.223	.50468
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0218	2.0215	1.9354	24.794	48.595	1.9928	2.0332
SDev	.0184	.0171	.0139	.186	.221	.0124	.0340
%RSD	.91027	.84789	.71872	.75192	.45413	.62435	1.6723
#1	2.0088	2.0094	1.9256	24.662	48.439	1.9840	2.0091
#2	2.0349	2.0336	1.9452	24.926	48.751	2.0016	2.0572
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9869	.52413	.52047	.52169	.52277	.51484	.51748
SDev	.0067	.00147	.00567	.00427	.00162	.00540	.00414
%RSD	.33546	.28136	1.0897	.81924	.30937	1.0481	.79961
#1	1.9821	.52309	.51646	.51866	.52162	.51103	.51455
#2	1.9916	.52517	.52448	.52471	.52391	.51866	.52041
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.52698	.52733	.52721	1.0511	1.9977	2.0443	
SDev	.00096	.00213	.00110	.0086	.0079	.0143	
%RSD	.18150	.40350	.20878	.81827	.39493	.70158	
#1	.52766	.52582	.52643	1.0450	1.9921	2.0342	
#2	.52631	.52883	.52799	1.0571	2.0033	2.0545	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15468	--	--	--	--	--	--
SDev	118.2988	--	--	--	--	--	--
%RSD	.7647724	--	--	--	--	--	--
#1	15552	--	--	--	--	--	--
#2	15385	--	--	--	--	--	--

Analysis Report

08/18/00 09:20:15 AM

page 1

Method: METTRA Sample Name: CCB2

Operator: MTW

Run Time: 08/18/00 09:16:09

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00024	-.05051	-.00017	.00028	.00147	.04076	.00018
SDev	.00020	.00270	.00059	.00009	.00022	.00085	.00006
%RSD	84.061	5.3485	354.01	33.552	14.848	2.0933	34.488
#1	-.00039	-.04860	-.00058	.00021	.00131	.04016	.00013
#2	-.00010	-.05242	.00025	.00035	.00162	.04136	.00022
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00010	.00007	.00154	-.00325	.00654	.00030	.00711
SDev	.00028	.00003	.00039	.00607	.00266	.00010	.00246
%RSD	279.73	39.946	25.132	186.47	40.681	34.290	34.530
#1	-.00010	.00009	.00126	-.00754	.00466	.00023	.00885
#2	.00030	.00005	.00181	.00104	.00842	.00037	.00537
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00032	-.00248	.00087	-.00025	-.00071	-.00138	-.00116
SDev	.00034	.00076	.00139	.00068	.00037	.00010	.00006
%RSD	105.43	30.655	160.10	275.60	51.497	6.9187	5.0331
#1	.00008	-.00194	-.00011	-.00072	-.00097	-.00131	-.00120
#2	.00056	-.00301	.00185	.00023	-.00045	-.00145	-.00112
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00148	-.00117	-.00028	.00296	-.00149	.00079	
SDev	.00136	.00034	.00023	.00076	.00021	.00006	
%RSD	91.319	28.993	79.069	25.652	13.769	7.2542	
#1	.00053	-.00093	-.00044	.00242	-.00164	.00083	
#2	.00244	-.00141	-.00013	.00349	-.00135	.00074	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15607	--	--	--	--	--	--
SDev	15.41479	--	--	--	--	--	--
%RSD	.0987662	--	--	--	--	--	--
#1	15596	--	--	--	--	--	--
#2	15618	--	--	--	--	--	--

Analysis Report

08/18/00 09:24:24 AM

page 1

Method: METTRA Sample Name: DHGEM

Operator: MTW

Run Time: 08/18/00 09:20:18

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00013	.98333	.00370	.02334	.00073	61.721	.00053
SDev	.00002	.00768	.00116	.00004	.00008	.232	.00018
%RSD	12.056	.78121	31.258	.15316	10.831	.37646	34.660
#1	-.00014	.97790	.00288	.02331	.00079	61.885	.00065
#2	-.00012	.98876	.00452	.02336	.00068	61.557	.00040
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00159	.00628	.01669	8.1072	3.0531	.05071	.00204
SDev	.00006	.00003	.00010	.0307	.0040	.00005	.00025
%RSD	3.4570	.41359	.57627	.37860	.13133	.09473	12.299
#1	.00163	.00626	.01662	8.0855	3.0559	.05074	.00186
#2	.00155	.00630	.01676	8.1290	3.0503	.05067	.00221
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00221	.00396	.00394	.00395	.00253	.00015	.00094
SDev	.00050	.00227	.00018	.00064	.00272	.00166	.00201
%RSD	22.659	57.299	4.5210	16.152	107.34	1144.8	214.08
#1	.00185	.00557	.00381	.00440	.00445	.00132	.00236
#2	.00256	.00236	.00406	.00350	.00061	-.00103	-.00048
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V__	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.01011	.00585	.00727	.00565	.00794	.17394	
SDev	.00072	.00138	.00116	.00181	.00004	.00037	
%RSD	7.1075	23.594	15.961	32.048	.53871	.21267	
#1	.00960	.00488	.00645	.00437	.00791	.17368	
#2	.01062	.00683	.00809	.00693	.00797	.17420	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

08/18/00 09:24:24 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15350	--	--	--	--	--	--
SDev	69.96767	--	--	--	--	--	--
%RSD	.4558132	--	--	--	--	--	--
#1	15400	--	--	--	--	--	--
#2	15301	--	--	--	--	--	--

Analysis Report

08/18/00 09:28:33 AM

6681111
page 1

Method: METTRA Sample Name: DHGEP

Operator: MTW

Run Time: 08/18/00 09:24:27

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00057	-.02494	.00167	.02358	-.00024	138.08	.00038
SDev	.00025	.00088	.00024	.00026	.00030	1.51	.00012
%RSD	43.611	3.5227	14.491	1.1209	124.86	1.0957	32.056
#1	.00039	-.02556	.00184	.02377	-.00045	139.15	.00029
#2	.00074	-.02431	.00150	.02339	-.00003	137.01	.00046
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00001	.00329	.01467	.52713	3.9651	.04765	.00252
SDev	.00010	.00020	.00072	.01001	.0415	.00051	.00028
%RSD	1273.0	6.2370	4.9001	1.8991	1.0468	1.0730	11.009
#1	.00008	.00343	.01518	.53421	3.9944	.04801	.00233
#2	-.00006	.00314	.01416	.52005	3.9357	.04729	.00272
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00125	.00516	.00281	.00359	.00028	.00163	.00118
SDev	.00040	.00051	.00025	.00000	.00005	.00149	.00101
%RSD	31.517	9.7916	8.9253	.02023	18.964	91.439	85.711
#1	.00097	.00552	.00264	.00359	.00024	.00057	.00046
#2	.00153	.00480	.00299	.00359	.00032	.00268	.00189
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00584	.00755	.00698	.00122	.00036	.20254	
SDev	.00096	.00052	.00003	.00269	.00040	.00124	
%RSD	16.486	6.9451	.41705	220.98	111.10	.61271	
#1	.00652	.00718	.00696	-.00069	.00008	.20342	
#2	.00516	.00792	.00700	.00312	.00064	.20167	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14976	--	--	--	--	--	--
SDev	142.9067	--	--	--	--	--	--
%RSD	.9542158	--	--	--	--	--	--
#1	14875	--	--	--	--	--	--
#2	15077	--	--	--	--	--	--

Analysis Report

08/18/00 09:32:42 AM

page 1

Method: METTRA Sample Name: DHGET Operator: MTW
 Run Time: 08/18/00 09:28:36
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00001	.05935	.00346	.09997	-.00012	321.97	.00026
SDev	.00039	.00362	.00060	.00155	.00031	3.78	.00007
%RSD	4383.5	6.1027	17.210	1.5496	268.26	1.1730	26.367
#1	.00027	.05679	.00388	.09888	.00010	319.30	.00021
#2	-.00028	.06191	.00304	.10107	-.00034	324.64	.00030
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00028	.00605	.01111	.59374	7.6841	.19437	.00148
SDev	.00007	.00011	.00081	.01813	.0984	.00280	.00011
%RSD	25.230	1.7297	7.2750	3.0541	1.2799	1.4420	7.6635
#1	.00023	.00597	.01054	.58092	7.6146	.19238	.00156
#2	.00033	.00612	.01169	.60656	7.7537	.19635	.00140
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00029	.00412	.00272	.00319	.00486	.00132	.00250
SDev	.00080	.00209	.00185	.00193	.00089	.00173	.00145
%RSD	272.83	50.603	68.011	60.517	18.218	131.66	58.145
#1	-.00027	.00560	.00403	.00455	.00423	.00009	.00147
#2	.00086	.00265	.00141	.00182	.00548	.00254	.00352
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00923	.00519	.00654	.00531	.00587	.40038	
SDev	.00511	.00156	.00066	.00377	.00032	.00682	
%RSD	55.293	30.116	10.043	71.047	5.4687	1.7030	
#1	.01285	.00409	.00700	.00798	.00564	.39556	
#2	.00562	.00630	.00608	.00264	.00610	.40520	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

6681114

Analysis Report

08/18/00 09:32:42 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSEL	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15125	--	--	--	--	--	--
SDev	208.1014	--	--	--	--	--	--
%RSD	1.375868	--	--	--	--	--	--
#1	15272	--	--	--	--	--	--
#2	14978	--	--	--	--	--	--

Analysis Report

08/18/00 09:36:52 AM

page 1

Method: METTRA Sample Name: DHGEW

Operator: MTW

Run Time: 08/18/00 09:32:46

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00017	-.00619	.00343	.03652	.00008	98.614	.00039
SDev	.00026	.00293	.00195	.00000	.00005	.110	.00016
%RSD	155.58	47.346	56.784	.01197	60.801	.11196	41.278
#1	-.00035	-.00412	.00481	.03653	.00012	98.692	.00028
#2	.00002	-.00827	.00205	.03652	.00005	98.536	.00050
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00007	.00217	.01252	.76149	3.6001	.03654	.00185
SDev	.00019	.00041	.00037	.01014	.0003	.00005	.00041
%RSD	261.81	18.704	2.9528	1.3312	.00831	.14691	22.220
#1	-.00021	.00189	.01226	.75432	3.5999	.03650	.00156
#2	.00006	.00246	.01278	.76866	3.6003	.03658	.00214
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00161	.00631	.00526	.00560	.00235	.00115	.00155
SDev	.00016	.00115	.00108	.00034	.00081	.00188	.00098
%RSD	9.7819	18.283	20.508	5.9759	34.236	163.69	63.544
#1	.00149	.00549	.00602	.00584	.00292	-.00018	.00085
#2	.00172	.00712	.00449	.00537	.00178	.00248	.00224
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00737	.00392	.00507	.00082	-.00032	.22058	
SDev	.00097	.00355	.00269	.00211	.00064	.00040	
%RSD	13.192	90.430	53.052	259.00	196.93	.18360	
#1	.00668	.00141	.00317	.00231	-.00078	.22029	
#2	.00806	.00643	.00697	-.00068	.00013	.22087	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15200	--	--	--	--	--	--
SDev	80.61018	--	--	--	--	--	--
%RSD	.5303336	--	--	--	--	--	--
#1	15257	--	--	--	--	--	--
#2	15143	--	--	--	--	--	--

Analysis Report

08/18/00 09:41:02 AM

6681117
page 1

Method: METTRA Sample Name: DHGF9

Operator: MTW

Run Time: 08/18/00 09:36:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00018	-.03450	.00255	.00161	.00034	1.5045	.00027
SDev	.00021	.00526	.00164	.00004	.00025	.0231	.00013
%RSD	117.19	15.239	64.542	2.2613	73.231	1.5372	47.256
#1	-.00032	-.03078	.00138	.00158	.00016	1.5208	.00018
#2	-.00003	-.03822	.00371	.00163	.00052	1.4881	.00036
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00151	.00077	.00690	.03271	2.8051	.00204	.00116
SDev	.00027	.00016	.00005	.01239	.0226	.00005	.00022
%RSD	18.014	20.824	.77951	37.873	.80454	2.2440	19.350
#1	-.00132	.00089	.00686	.04147	2.8210	.00201	.00100
#2	-.00171	.00066	.00693	.02395	2.7891	.00207	.00132
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00070	.00346	.00204	.00251	.00411	.00194	.00266
SDev	.00055	.00015	.00169	.00118	.00061	.00162	.00088
%RSD	77.998	4.3110	82.771	46.813	14.800	83.401	32.942
#1	.00031	.00357	.00324	.00335	.00368	.00309	.00328
#2	.00108	.00335	.00085	.00168	.00454	.00080	.00204
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00756	.00349	.00484	.00377	-.00133	.05627	
SDev	.00025	.00279	.00178	.00036	.00041	.00014	
%RSD	3.3218	80.103	36.753	9.5159	30.874	.24770	
#1	.00738	.00546	.00610	.00351	-.00161	.05637	
#2	.00773	.00151	.00358	.00402	-.00104	.05617	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

6681118

Analysis Report

08/18/00 09:41:02 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15318	--	--	--	--	--	--
SDev	45.99716	--	--	--	--	--	--
%RSD	.3002773	--	--	--	--	--	--
#1	15286	--	--	--	--	--	--
#2	15351	--	--	--	--	--	--

Analysis Report

08/18/00 09:45:11 AM

page 1

Method: METTRA Sample Name: DHGFH

Operator: MTW

Run Time: 08/18/00 09:41:05

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00025	-.03694	.00261	.00145	.00011	1.4183	.00019
SDev	.00026	.00018	.00085	.00013	.00040	.0250	.00012
%RSD	101.53	.47473	32.428	8.7781	358.80	1.7661	62.650
#1	.00043	-.03682	.00201	.00154	-.00017	1.4360	.00011
#2	.00007	-.03706	.00321	.00136	.00039	1.4006	.00028
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00101	.00092	.01034	.05316	2.7902	.00309	.00140
SDev	.00036	.00022	.00087	.00780	.0428	.00008	.00003
%RSD	35.948	24.423	8.4247	14.677	1.5332	2.7199	2.3397
#1	-.00075	.00108	.01096	.05867	2.8205	.00315	.00138
#2	-.00127	.00076	.00972	.04764	2.7600	.00303	.00143
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00131	.00583	.00408	.00466	.00486	.00165	.00272
SDev	.00074	.00071	.00077	.00027	.00069	.00125	.00060
%RSD	56.433	12.248	18.815	5.8756	14.145	75.708	22.189
#1	.00183	.00533	.00462	.00486	.00535	.00077	.00229
#2	.00079	.00634	.00354	.00447	.00437	.00253	.00314
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00913	.00489	.00630	.00488	-.00087	.06460	
SDev	.00107	.00041	.00008	.00240	.00019	.00092	
%RSD	11.680	8.4738	1.2486	49.247	21.930	1.4160	
#1	.00838	.00518	.00625	.00658	-.00101	.06525	
#2	.00988	.00460	.00636	.00318	-.00074	.06395	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSEL	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15225	--	--	--	--	--	--
SDev	219.6630	--	--	--	--	--	--
%RSD	1.442752	--	--	--	--	--	--
#1	15070	--	--	--	--	--	--
#2	15381	--	--	--	--	--	--

Analysis Report

08/18/00 09:49:21 AM

page 1

Method: METTRA Sample Name: DHXCX

Operator: MTW

Run Time: 08/18/00 09:45:15

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00009	.06106	.00347	.01985	.00061	187.76	.00028
SDev	.00024	.00110	.00218	.00063	.00064	7.76	.00017
%RSD	254.04	1.8072	62.963	3.1710	104.89	4.1328	61.701
#1	-.00007	.06184	.00193	.02029	.00016	193.25	.00016
#2	.00026	.06028	.00502	.01940	.00107	182.28	.00040
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00019	.00484	.01495	.34705	5.4044	.03876	.00147
SDev	.00011	.00022	.00150	.02546	.2182	.00155	.00034
%RSD	56.705	4.5776	10.004	7.3361	4.0383	3.9894	23.448
#1	-.00027	.00500	.01600	.36506	5.5587	.03986	.00172
#2	-.00011	.00468	.01389	.32905	5.2500	.03767	.00123
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00156	.00352	.00319	.00330	.00285	.00116	.00172
SDev	.00053	.00248	.00019	.00096	.00021	.00091	.00053
%RSD	33.752	70.647	6.0454	28.996	7.4498	78.199	31.019
#1	.00193	.00176	.00305	.00262	.00300	.00052	.00135
#2	.00119	.00527	.00332	.00397	.00270	.00180	.00210
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.01134	.00479	.00697	.00359	-.00094	.25123	
SDev	.00215	.00075	.00121	.00063	.00078	.00954	
%RSD	18.909	15.559	17.375	17.485	83.237	3.7971	
#1	.00983	.00426	.00611	.00403	-.00150	.25797	
#2	.01286	.00531	.00783	.00314	-.00039	.24448	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15446	--	--	--	--	--	--
SDev	542.8101	--	--	--	--	--	--
%RSD	3.514147	--	--	--	--	--	--
#1	15063	--	--	--	--	--	--
#2	15830	--	--	--	--	--	--

Analysis Report

08/18/00 09:53:30 AM

6681123
page 1

Method: METTRA Sample Name: CCV3-3

Operator: MTW

Run Time: 08/18/00 09:49:25

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0316	23.449	.50456	1.9179	1.9686	49.102	.48851
SDev	.0385	.864	.01810	.0710	.0821	2.112	.01797
%RSD	3.7364	3.6842	3.5874	3.7029	4.1712	4.3005	3.6787
#1	1.0588	24.060	.51735	1.9681	2.0267	50.595	.50122
#2	1.0043	22.838	.49176	1.8676	1.9105	47.609	.47581
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9701	1.9702	1.8904	24.265	47.622	1.9495	1.9755
SDev	.0755	.0747	.0713	.911	1.961	.0777	.0632
%RSD	3.8337	3.7910	3.7696	3.7560	4.1171	3.9879	3.2009
#1	2.0235	2.0230	1.9408	24.909	49.009	2.0045	2.0202
#2	1.9167	1.9174	1.8400	23.620	46.236	1.8946	1.9308
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9355	.50976	.50769	.50838	.51360	.50095	.50516
SDev	.0830	.01093	.02055	.01735	.02020	.01473	.01655
%RSD	4.2873	2.1450	4.0485	3.4129	3.9328	2.9414	3.2770
#1	1.9942	.51749	.52222	.52065	.52789	.51137	.51687
#2	1.8768	.50203	.49315	.49611	.49932	.49053	.49346
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V__	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.50781	.51432	.51216	1.0313	1.9581	1.9929	
SDev	.01031	.02218	.01823	.0407	.0820	.0763	
%RSD	2.0304	4.3133	3.5595	3.9443	4.1876	3.8286	
#1	.51510	.53001	.52505	1.0601	2.0161	2.0469	
#2	.50052	.49864	.49926	1.0025	1.9001	1.9390	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

6681124

Analysis Report

08/18/00 09:53:30 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15974	--	--	--	--	--	--
SDev	490.9441	--	--	--	--	--	--
%RSD	3.073337	--	--	--	--	--	--
#1	15627	--	--	--	--	--	--
#2	16321	--	--	--	--	--	--

Analysis Report

08/18/00 09:57:40 AM

page 1

Method: METTRA Sample Name: CCB3

Operator: MTW

Run Time: 08/18/00 09:53:34

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00029	-.03580	.00014	.00031	.00128	.03152	.00008
SDev	.00032	.00905	.00084	.00001	.00084	.00536	.00001
%RSD	109.74	25.280	603.40	2.9203	65.369	17.016	16.066
#1	-.00006	-.02940	.00073	.00032	.00069	.02772	.00007
#2	-.00051	-.04221	-.00045	.00031	.00188	.03531	.00008
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00016	.00031	.00118	.00449	.00980	.00025	.00699
SDev	.00039	.00038	.00045	.01079	.00274	.00006	.00251
%RSD	243.86	121.36	38.205	240.55	27.916	22.076	35.913
#1	-.00011	.00058	.00150	-.00315	.00787	.00021	.00876
#2	.00043	.00004	.00086	.01212	.01174	.00029	.00521
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00002	-.00403	.00088	-.00076	.00047	-.00160	-.00091
SDev	.00043	.00076	.00088	.00033	.00110	.00089	.00023
%RSD	2422.1	18.909	100.36	44.234	232.71	55.572	24.884
#1	-.00028	-.00457	.00150	-.00052	.00125	-.00223	-.00107
#2	.00032	-.00349	.00026	-.00099	-.00031	-.00097	-.00075
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00075	-.00098	-.00041	.00163	-.00178	.00076	
SDev	.00266	.00105	.00019	.00083	.00020	.00030	
%RSD	354.87	106.65	45.808	51.070	11.419	39.273	
#1	-.00113	-.00024	-.00054	.00222	-.00163	.00055	
#2	.00263	-.00172	-.00027	.00104	-.00192	.00097	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

6681126

Analysis Report

08/18/00 09:57:40 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15688	--	--	--	--	--	--
SDev	409.2733	--	--	--	--	--	--
%RSD	2.608764	--	--	--	--	--	--
#1	15399	--	--	--	--	--	--
#2	15978	--	--	--	--	--	--

Analysis Report

08/18/00 10:08:06 AM

page 1

Method: METTRA Sample Name: DGR3T

Operator: MTW

Run Time: 08/18/00 10:04:00

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00119	104.22	.07693	.41606	.00788	151.09	-.00026
SDev	.00002	1.49	.00017	.00323	.00029	5.17	.00454
%RSD	1.7952	1.4266	.22767	.77522	3.7084	3.4229	1777.9
#1	.00118	103.17	.07705	.41834	.00767	154.75	-.00347
#2	.00121	105.28	.07680	.41378	.00809	147.43	.00296
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.12601	.16545	.35374	268.08	69.876	5.1401	.00456
SDev	.00239	.00260	.00070	1.43	1.831	.0218	.00028
%RSD	1.8992	1.5693	.19686	.53248	2.6199	.42508	6.1843
#1	.12432	.16362	.35424	269.09	71.171	5.1555	.00436
#2	.12770	.16729	.35325	267.07	68.582	5.1246	.00476
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.28828	.13010	.13909	.13610	.00270	.00083	.00145
SDev	.00962	.00388	.00210	.00269	.00216	.00104	.00141
%RSD	3.3368	2.9802	1.5127	1.9799	79.967	125.24	97.231
#1	.29508	.13284	.14058	.13800	.00423	.00157	.00245
#2	.28147	.12736	.13760	.13419	.00117	.00010	.00045
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00978	-.00020	-.00339	-.00158	.18214	.76633	
SDev	.00416	.00252	.00307	.00131	.00562	.00449	
%RSD	42.545	1245.4	90.493	82.560	3.0874	.58594	
#1	-.01272	-.00199	L-.00556	-.00251	.18612	.76950	
#2	-.00684	.00158	-.00122	-.00066	.17817	.76315	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

6681128

Analysis Report

08/18/00 10:08:06 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16701	--	--	--	--	--	--
SDev	178.8980	--	--	--	--	--	--
%RSD	1.071188	--	--	--	--	--	--
#1	16827	--	--	--	--	--	--
#2	16574	--	--	--	--	--	--

Analysis Report

08/18/00 10:12:15 AM

6681129
page 1

Method: METTRA Sample Name: DGTM3

Operator: MTW

Run Time: 08/18/00 10:08:09

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00278	98.541	.06176	.41154	.00752	107.38	.00227
SDev	.00073	.117	.00172	.00192	.00027	.88	.00003
%RSD	26.200	.11849	2.7913	.46624	3.5349	.82320	1.3620
#1	.00226	98.623	.06297	.41290	.00771	108.00	.00230
#2	.00329	98.458	.06054	.41019	.00733	106.75	.00225
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.12443	.16207	.26012	238.18	56.537	5.4422	.00194
SDev	.00007	.00038	.00032	.72	.348	.0221	.00048
%RSD	.05398	.23595	.12312	.30064	.61472	.40569	24.909
#1	.12439	.16179	.26035	238.69	56.783	5.4578	.00228
#2	.12448	.16234	.25990	237.68	56.291	5.4266	.00160
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.24096	.16885	.18347	.17860	.00196	-.00061	.00025
SDev	.00007	.00900	.00194	.00171	.00368	.00209	.00017
%RSD	.02786	5.3321	1.0556	.95527	188.11	344.21	68.160
#1	.24101	.16248	.18484	.17740	.00456	-.00209	.00013
#2	.24092	.17521	.18210	.17981	-.00065	.00087	.00037
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00749	-.00012	-.00258	-.00017	.18612	.65788	
SDev	.00097	.00240	.00128	.00189	.00259	.00147	
%RSD	12.892	1992.3	49.672	1118.3	1.3937	.22341	
#1	-.00818	.00158	-.00167	.00117	.18795	.65892	
#2	-.00681	-.00182	-.00348	-.00151	.18429	.65684	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16660	--	--	--	--	--	--
SDev	82.55472	--	--	--	--	--	--
%RSD	.4955139	--	--	--	--	--	--
#1	16719	--	--	--	--	--	--
#2	16602	--	--	--	--	--	--

Analysis Report

08/18/00 10:16:24 AM

page 1

Method: METTRA Sample Name: DGR3T/2 SE Operator: MTW
 Run Time: 08/18/00 10:12:19
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00073	53.718	.03814	.21496	.00439	78.659	.00122
SDev	.00019	.419	.00088	.00226	.00023	.852	.00044
%RSD	26.501	.77971	2.3006	1.0510	5.1843	1.0838	36.288
#1	.00086	54.014	.03876	.21656	.00423	79.262	.00091
#2	.00059	53.422	.03752	.21336	.00455	78.057	.00154
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06856	.08886	.17944	140.51	35.688	2.6736	.00371
SDev	.00045	.00112	.00217	1.29	.371	.0217	.00001
%RSD	.65486	1.2605	1.2120	.92145	1.0384	.81073	.30920
#1	.06824	.08966	.18098	141.42	35.950	2.6890	.00372
#2	.06887	.08807	.17790	139.59	35.426	2.6583	.00370
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.15059	.06965	.07399	.07254	-.00046	.00039	.00011
SDev	.00078	.00338	.00013	.00121	.00021	.00133	.00082
%RSD	.51800	4.8548	.17990	1.6745	44.948	338.29	757.16
#1	.15115	.07204	.07408	.07340	-.00061	.00134	.00069
#2	.15004	.06726	.07390	.07168	-.00032	-.00055	-.00047
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00437	.00268	.00033	-.00339	.09321	.40447	
SDev	.00026	.00114	.00068	.00056	.00114	.00308	
%RSD	6.0221	42.707	204.70	16.413	1.2261	.76240	
#1	-.00418	.00187	-.00015	-.00379	.09402	.40665	
#2	-.00456	.00348	.00081	-.00300	.09240	.40229	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

08/18/00 10:16:24 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSEL	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16060	--	--	--	--	--	--
SDev	33.69322	--	--	--	--	--	--
%RSD	.2097930	--	--	--	--	--	--
#1	16036	--	--	--	--	--	--
#2	16084	--	--	--	--	--	--

Analysis Report

08/18/00 10:20:34 AM

page 1

Method: METTRA Sample Name: DGT3/2 SE Operator: MTW
 Run Time: 08/18/00 10:16:28
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00112	49.203	.03118	.20917	.00455	55.386	.00078
SDev	.00004	.277	.00029	.00108	.00002	.010	.00028
%RSD	3.1627	.56308	.94168	.51833	.41673	.01784	35.172
#1	.00115	49.007	.03139	.20840	.00457	55.393	.00059
#2	.00110	49.399	.03097	.20993	.00454	55.379	.00098
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06500	.08372	.12958	121.82	28.573	2.7701	.00047
SDev	.00041	.00028	.00054	.17	.053	.0079	.00038
%RSD	.63323	.33835	.41952	.13943	.18584	.28560	81.277
#1	.06471	.08352	.12920	121.70	28.536	2.7646	.00020
#2	.06529	.08392	.12997	121.94	28.611	2.7757	.00074
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.12534	.08755	.09540	.09279	.00310	-.00110	.00030
SDev	.00098	.00012	.00336	.00220	.00129	.00110	.00031
%RSD	.78143	.13239	3.5216	2.3735	41.512	100.13	102.73
#1	.12464	.08747	.09778	.09434	.00401	-.00188	.00008
#2	.12603	.08763	.09303	.09123	.00219	-.00032	.00052
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00549	.00189	-.00057	.00088	.09417	.33966	
SDev	.00254	.00138	.00177	.00125	.00086	.00043	
%RSD	46.332	73.377	311.93	141.63	.91594	.12620	
#1	-.00728	.00091	-.00182	.00177	.09356	.33936	
#2	-.00369	.00287	.00068	-.00000	.09478	.33996	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16293	--	--	--	--	--	--
SDev	125.5826	--	--	--	--	--	--
%RSD	.7707716	--	--	--	--	--	--
#1	16382	--	--	--	--	--	--
#2	16204	--	--	--	--	--	--

Analysis Report

08/18/00 10:24:43 AM

page 1

Method: METTRA Sample Name: DHWLVB

Operator: MTW

Run Time: 08/18/00 10:20:37

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00019	-.02829	.00019	-.00005	.00080	.02630	.00003
SDev	.00034	.00414	.00074	.00005	.00020	.00074	.00015
%RSD	175.95	14.620	385.09	91.064	25.133	2.8138	536.17
#1	.00005	-.02537	-.00033	-.00002	.00066	.02682	.00013
#2	-.00043	-.03121	.00071	-.00009	.00094	.02578	-.00008
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00031	.00027	.00073	.05699	.00841	.00069	.00057
SDev	.00046	.00034	.00045	.01178	.00263	.00018	.00037
%RSD	147.10	125.65	61.785	20.671	31.286	25.730	64.586
#1	.00001	.00052	.00105	.06532	.01027	.00082	.00031
#2	-.00064	.00003	.00041	.04866	.00655	.00057	.00083
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00054	-.00255	.00063	-.00043	-.00287	-.00065	-.00139
SDev	.00103	.00071	.00131	.00064	.00104	.00092	.00027
%RSD	191.13	27.927	207.63	149.62	36.324	140.50	19.071
#1	.00019	-.00205	-.00030	-.00088	-.00214	-.00130	-.00158
#2	-.00126	-.00305	.00156	.00002	-.00361	-.00000	-.00121
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00223	.00157	.00031	.00083	-.00161	.00074	
SDev	.00163	.00113	.00130	.00115	.00041	.00010	
%RSD	73.161	71.930	424.24	137.76	25.686	13.807	
#1	-.00108	.00237	.00122	.00164	-.00132	.00082	
#2	-.00339	.00077	-.00061	.00002	-.00191	.00067	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

08/18/00 10:24:43 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15566	--	--	--	--	--	--
SDev	87.57490	--	--	--	--	--	--
%RSD	.5626028	--	--	--	--	--	--
#1	15504	--	--	--	--	--	--
#2	15628	--	--	--	--	--	--

Analysis Report

08/18/00 10:28:52 AM

page 1

Method: METTRA Sample Name: DHWLVC

Operator: MTW

Run Time: 08/18/00 10:24:47

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05139	1.9577	2.0166	1.9281	.04962	50.952	.04863
SDev	.00047	.0018	.0058	.0025	.00001	.352	.00034
%RSD	.90573	.09293	.28623	.12857	.02044	.69045	.69009
#1	.05172	1.9590	2.0207	1.9299	.04963	51.201	.04839
#2	.05106	1.9565	2.0125	1.9264	.04961	50.703	.04887
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49893	.20056	.24324	.91953	49.242	.48961	1.0179
SDev	.00256	.00102	.00086	.00802	.265	.00173	.0019
%RSD	.51292	.50993	.35420	.87211	.53734	.35351	.19023
#1	.50074	.20128	.24385	.92520	49.430	.49083	1.0166
#2	.49712	.19984	.24263	.91386	49.055	.48838	1.0193
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.48903	.52107	.51014	.51378	.51582	.50995	.51190
SDev	.00269	.00322	.00613	.00516	.00680	.00435	.00516
%RSD	.54961	.61789	1.2017	1.0045	1.3176	.85247	1.0085
#1	.49093	.52335	.51448	.51743	.52063	.51302	.51555
#2	.48713	.51879	.50581	.51013	.51102	.50687	.50825
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	2.0085	2.0396	2.0293	2.1305	.49349	.51626	
SDev	.0087	.0299	.0228	.0018	.00217	.00191	
%RSD	.43295	1.4661	1.1256	.08287	.43895	.36931	
#1	2.0147	2.0608	2.0454	2.1317	.49502	.51761	
#2	2.0024	2.0185	2.0131	2.1292	.49195	.51491	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			2.4000	2.4000	.60000	.60000	
Low			1.6000	1.6000	.40000	.40000	

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Analysis Report

08/18/00 10:28:52 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15499	--	--	--	--	--	--
SDev	80.57426	--	--	--	--	--	--
%RSD	.5198566	--	--	--	--	--	--
#1	15442	--	--	--	--	--	--
#2	15556	--	--	--	--	--	--

Analysis Report

08/18/00 10:33:02 AM

page 1

Method: METTRA Sample Name: DHV7M

Operator: MTW

Run Time: 08/18/00 10:28:56

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00143	1.3014	.00640	.18318	.00010	42.622	.00067
SDev	.00010	.0041	.00119	.00111	.00011	.145	.00009
%RSD	7.2643	.31396	18.614	.60831	112.81	.33993	12.669
#1	.00136	1.3043	.00725	.18397	.00002	42.724	.00061
#2	.00150	1.2985	.00556	.18239	.00018	42.519	.00073
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00105	.05244	.03503	1.4216	12.866	.17386	.00595
SDev	.00031	.00052	.00029	.0012	.032	.00026	.00081
%RSD	29.305	.98704	.82530	.08601	.24964	.15023	13.584
#1	.00127	.05207	.03483	1.4225	12.889	.17404	.00652
#2	.00083	.05280	.03524	1.4208	12.844	.17367	.00537
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00838	.01050	.01328	.01235	.01251	.00907	.01021
SDev	.00040	.00141	.00107	.00118	.00112	.00124	.00120
%RSD	4.7473	13.460	8.0507	9.5819	8.9755	13.691	11.768
#1	.00810	.00950	.01252	.01152	.01330	.00995	.01106
#2	.00866	.01150	.01403	.01319	.01171	.00819	.00936
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00344	.00119	.00194	.00557	.00222	.20194	
SDev	.00271	.00315	.00301	.00025	.00187	.00022	
%RSD	78.904	265.41	155.14	4.5363	84.414	.10962	
#1	.00152	-.00104	-.00019	.00575	.00089	.20210	
#2	.00536	.00342	.00406	.00539	.00354	.20179	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

08/18/00 10:33:02 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15442	--	--	--	--	--	--
SDev	84.99368	--	--	--	--	--	--
%RSD	.5504166	--	--	--	--	--	--
#1	15502	--	--	--	--	--	--
#2	15382	--	--	--	--	--	--

Analysis Report

08/18/00 10:37:11 AM

page 1

Method: METTRA Sample Name: DHV7MP5 Operator: MTW
 Run Time: 08/18/00 10:33:06
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00034	.20371	.00097	.03646	.00063	8.5935	.00027
SDev	.00025	.00311	.00010	.00013	.00010	.0291	.00012
%RSD	75.611	1.5248	10.176	.35887	15.238	.33832	42.502
#1	.00016	.20591	.00104	.03637	.00069	8.6141	.00036
#2	.00051	.20151	.00090	.03655	.00056	8.5730	.00019
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00035	.01099	.00751	.29747	2.5472	.03455	.00149
SDev	.00031	.00049	.00018	.01523	.0016	.00008	.00029
%RSD	87.516	4.4947	2.3572	5.1202	.06253	.22286	19.549
#1	.00057	.01064	.00738	.30824	2.5461	.03449	.00169
#2	.00013	.01134	.00763	.28670	2.5483	.03460	.00128
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00118	-.00188	.00449	.00237	.00248	.00112	.00157
SDev	.00046	.00368	.00161	.00015	.00205	.00134	.00021
%RSD	39.003	195.84	35.774	6.4086	82.773	120.23	13.516
#1	.00151	-.00448	.00563	.00227	.00394	.00017	.00142
#2	.00086	.00072	.00336	.00248	.00103	.00207	.00172
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00353	.00108	.00190	.00486	-.00023	.04099	
SDev	.00411	.00127	.00052	.00355	.00061	.00008	
%RSD	116.20	117.69	27.484	72.981	263.62	.20168	
#1	.00063	.00198	.00153	.00737	-.00067	.04093	
#2	.00644	.00018	.00226	.00235	.00020	.04105	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15605	--	--	--	--	--	--
SDev	73.11443	--	--	--	--	--	--
%RSD	.4685291	--	--	--	--	--	--
#1	15657	--	--	--	--	--	--
#2	15553	--	--	--	--	--	--

Analysis Report

08/18/00 10:41:21 AM

6681143
page 1

Method: METTRA Sample Name: DHV7MS Operator: MTW
 Run Time: 08/18/00 10:37:15
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05631	4.0080	2.0683	2.1329	.04828	96.715	.04728
SDev	.00064	.0195	.0182	.0145	.00018	1.079	.00048
%RSD	1.1346	.48584	.88148	.68134	.38263	1.1160	1.0065
#1	.05676	4.0217	2.0812	2.1432	.04841	97.478	.04762
#2	.05586	3.9942	2.0554	2.1226	.04815	95.952	.04695
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50470	.25669	.30079	2.4808	64.439	.68668	1.0052
SDev	.00405	.00310	.00342	.0294	.717	.00656	.0049
%RSD	.80302	1.2056	1.1362	1.1835	1.1120	.95470	.49209
#1	.50756	.25887	.30321	2.5016	64.946	.69131	1.0087
#2	.50183	.25450	.29838	2.4601	63.932	.68204	1.0017
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50202	.56600	.53285	.54389	.54719	.54305	.54443
SDev	.00694	.00728	.00838	.00801	.01122	.00790	.00900
%RSD	1.3829	1.2855	1.5718	1.4726	2.0510	1.4539	1.6538
#1	.50693	.57115	.53877	.54955	.55513	.54864	.55080
#2	.49711	.56086	.52693	.53823	.53926	.53747	.53807
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	2.0971	2.1529	2.1343	2.2973	.50394	.74424	
SDev	.0246	.0387	.0340	.0034	.00337	.00602	
%RSD	1.1735	1.7955	1.5920	.14849	.66906	.80854	
#1	2.1145	2.1802	2.1583	2.2997	.50633	.74849	
#2	2.0797	2.1255	2.1103	2.2949	.50156	.73998	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

08/18/00 10:41:21 AM

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15316	--	--	--	--	--	--
SDev	171.2255	--	--	--	--	--	--
%RSD	1.117972	--	--	--	--	--	--
#1	15195	--	--	--	--	--	--
#2	15437	--	--	--	--	--	--

Analysis Report

08/18/00 10:45:30 AM

6681145

page 1

Method: METTRA Sample Name: DHV7MD

Operator: MTW

Run Time: 08/18/00 10:41:24

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05237	3.7959	1.9322	2.0028	.04541	92.130	.04463
SDev	.00017	.0060	.0039	.0046	.00005	.458	.00022
%RSD	.32901	.15816	.20068	.23141	.11977	.49663	.49446
#1	.05249	3.8001	1.9349	2.0061	.04545	92.453	.04479
#2	.05225	3.7916	1.9294	1.9995	.04537	91.806	.04447
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.47308	.24142	.30659	2.3768	61.214	.64605	.97016
SDev	.00257	.00089	.00131	.0142	.287	.00207	.00018
%RSD	.54372	.36867	.42645	.59651	.46908	.31976	.01828
#1	.47490	.24205	.30751	2.3868	61.417	.64751	.97003
#2	.47126	.24079	.30566	2.3667	61.011	.64459	.97028
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.47206	.53225	.50025	.51090	.52884	.52155	.52398
SDev	.00066	.00033	.00545	.00352	.00876	.00387	.00550
%RSD	.14068	.06248	1.0894	.68977	1.6561	.74191	1.0492
#1	.47253	.53202	.50410	.51340	.53503	.52429	.52787
#2	.47159	.53249	.49639	.50841	.52265	.51882	.52009
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.9629	2.0051	1.9911	2.1517	.47604	.70962	
SDev	.0095	.0376	.0282	.0080	.00001	.00170	
%RSD	.48518	1.8745	1.4184	.37320	.00142	.23998	
#1	1.9696	2.0317	2.0110	2.1460	.47603	.71083	
#2	1.9562	1.9785	1.9711	2.1574	.47604	.70842	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15522	--	--	--	--	--	--
SDev	46.28028	--	--	--	--	--	--
%RSD	.2981664	--	--	--	--	--	--
#1	15489	--	--	--	--	--	--
#2	15554	--	--	--	--	--	--

Analysis Report

08/18/00 10:49:40 AM

page 1

Method: METTRA Sample Name: CCV3-4

Operator: MTW

Run Time: 08/18/00 10:45:34

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0581	23.948	.52096	1.9525	2.0351	50.747	.50274
SDev	.0072	.198	.00211	.0148	.0071	.057	.00287
%RSD	.67696	.82558	.40529	.75639	.34901	.11215	.57040
#1	1.0531	23.808	.51947	1.9421	2.0300	50.707	.50072
#2	1.0632	24.088	.52245	1.9630	2.0401	50.788	.50477
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0221	2.0219	1.9374	25.010	49.076	1.9979	2.0355
SDev	.0096	.0119	.0139	.160	.147	.0087	.0255
%RSD	.47368	.58645	.71577	.63775	.29945	.43764	1.2523
#1	2.0153	2.0135	1.9276	24.897	48.972	1.9917	2.0175
#2	2.0289	2.0302	1.9472	25.123	49.180	2.0041	2.0535
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9947	.52133	.52181	.52165	.53038	.51746	.52176
SDev	.0037	.00447	.00298	.00347	.00307	.00569	.00482
%RSD	.18321	.85663	.57029	.66559	.57897	1.0989	.92294
#1	1.9921	.51817	.51971	.51920	.52821	.51344	.51836
#2	1.9972	.52449	.52392	.52411	.53255	.52148	.52517
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.52245	.52935	.52706	1.0568	2.0164	2.0488	
SDev	.00678	.00290	.00420	.0044	.0044	.0096	
%RSD	1.2985	.54865	.79615	.41793	.21742	.46901	
#1	.51766	.52730	.52409	1.0537	2.0133	2.0420	
#2	.52725	.53141	.53002	1.0600	2.0195	2.0556	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15523	--	--	--	--	--	--
SDev	205.9449	--	--	--	--	--	--
%RSD	1.326672	--	--	--	--	--	--
#1	15669	--	--	--	--	--	--
#2	15378	--	--	--	--	--	--

Analysis Report

08/18/00 10:53:49 AM

Method: METTRA Sample Name: CCB4

Operator: MTW

Run Time: 08/18/00 10:49:43

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00079	-.02871	.00079	.00075	.00087	.02567	.00030
SDev	.00020	.00503	.00036	.00046	.00029	.01388	.00009
%RSD	25.960	17.507	45.612	61.054	33.775	54.058	31.661
#1	.00064	-.03226	.00053	.00043	.00066	.01586	.00023
#2	.00093	-.02515	.00104	.00108	.00108	.03548	.00037
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00066	.00104	.00188	.01777	.02288	.00058	.00767
SDev	.00003	.00040	.00060	.01174	.01316	.00042	.00212
%RSD	4.8202	37.811	32.028	66.085	57.531	73.002	27.630
#1	.00068	.00077	.00145	.00946	.01357	.00028	.00916
#2	.00063	.00132	.00231	.02607	.03218	.00088	.00617
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00074	-.00302	.00212	.00041	.00104	.00045	.00064
SDev	.00063	.00120	.00116	.00037	.00170	.00247	.00108
%RSD	85.511	39.844	54.657	91.356	164.15	549.60	167.53
#1	.00029	-.00387	.00294	.00067	-.00017	.00220	.00141
#2	.00119	-.00217	.00130	.00014	.00224	-.00130	-.00012
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00162	-.00006	-.00058	.00275	-.00031	.00096	
SDev	.00258	.00039	.00112	.00319	.00022	.00058	
%RSD	158.74	602.13	191.37	116.28	71.009	60.439	
#1	.00020	.00021	.00021	.00501	-.00046	.00055	
#2	-.00345	-.00034	-.00137	.00049	-.00015	.00137	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

08/18/00 10:53:49 AM

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15393	--	--	--	--	--	--
SDev	85.84235	--	--	--	--	--	--
%RSD	.5576786	--	--	--	--	--	--
#1	15454	--	--	--	--	--	--
#2	15332	--	--	--	--	--	--

Method: METTRA Sample Name: DJORHB Operator: MTW
 Run Time: 08/18/00 10:53:53
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00006	-.03381	.00000	.00016	.00035	.03867	.00018
SDev	.00044	.00253	.00260	.00003	.00020	.00086	.00004
%RSD	786.35	7.4734	602690.	16.327	57.407	2.2376	23.158
#1	.00037	-.03203	.00184	.00018	.00021	.03928	.00015
#2	-.00026	-.03560	-.00184	.00014	.00049	.03806	.00021
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00006	.00030	.00131	.02301	.00712	.00018	.00244
SDev	.00036	.00039	.00052	.01574	.00098	.00009	.00081
%RSD	563.56	131.44	39.787	68.428	13.713	51.741	33.035
#1	.00019	.00058	.00168	.03414	.00781	.00024	.00301
#2	-.00032	.00002	.00094	.01188	.00643	.00011	.00187
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00031	-.00113	.00048	-.00005	-.00172	.00104	.00012
SDev	.00070	.00117	.00129	.00047	.00131	.00037	.00069
%RSD	223.83	103.79	266.51	875.58	76.090	35.851	570.32
#1	.00081	-.00196	.00139	.00028	-.00080	.00131	.00061
#2	-.00018	-.00030	-.00043	-.00039	-.00265	.00078	-.00036
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00380	.00048	-.00094	-.00005	-.00118	.00149	
SDev	.00063	.00470	.00292	.00103	.00022	.00011	
%RSD	16.494	969.54	310.84	2242.7	18.465	7.3742	
#1	-.00335	-.00284	-.00301	.00068	-.00103	.00157	
#2	-.00424	.00381	.00113	-.00077	-.00133	.00141	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15299	--	--	--	--	--	--
SDev	91.99500	--	--	--	--	--	--
%RSD	.6013315	--	--	--	--	--	--
#1	15234	--	--	--	--	--	--
#2	15364	--	--	--	--	--	--

Analysis Report

08/18/00 11:02:09 AM

page 1

Method: METTRA Sample Name: DJORHC Operator: MTW
 Run Time: 08/18/00 10:58:03
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04538	1.7879	1.8393	1.7615	.04561	49.293	.04469
SDev	.00036	.0081	.0036	.0060	.00017	.088	.00004
%RSD	.78978	.45485	.19668	.33971	.36400	.17832	.09580
#1	.04513	1.7822	1.8367	1.7573	.04573	49.355	.04472
#2	.04563	1.7937	1.8418	1.7658	.04550	49.231	.04466
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.45704	.18367	.22267	.82974	47.662	.44890	.99275
SDev	.00018	.00095	.00073	.00307	.002	.00093	.00961
%RSD	.04039	.51667	.32903	.36962	.00394	.20781	.96776
#1	.45690	.18300	.22215	.82757	47.660	.44824	.98596
#2	.45717	.18434	.22319	.83191	47.663	.44956	.99955
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.44597	.47946	.46162	.46756	.49635	.49297	.49409
SDev	.00003	.00329	.00197	.00241	.00123	.00076	.00092
%RSD	.00714	.68674	.42620	.51517	.24723	.15400	.18519
#1	.44595	.47713	.46023	.46586	.49548	.49243	.49345
#2	.44600	.48179	.46301	.46926	.49722	.49350	.49474
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.8102	1.8357	1.8272	1.9402	.45352	.47283	
SDev	.0098	.0060	.0073	.0156	.00097	.00097	
%RSD	.54123	.32613	.39709	.80221	.21434	.20613	
#1	1.8032	1.8314	1.8220	1.9292	.45421	.47214	
#2	1.8171	1.8399	1.8323	1.9512	.45284	.47352	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			2.4000	2.4000	.60000	.60000	
Low			1.6000	1.6000	.40000	.40000	

6681154

Analysis Report

08/18/00 11:02:09 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15584	--	--	--	--	--	--
SDev	36.55756	--	--	--	--	--	--
%RSD	.2345832	--	--	--	--	--	--
#1	15610	--	--	--	--	--	--
#2	15558	--	--	--	--	--	--

Analysis Report

08/18/00 11:06:18 AM

page 1

Method: METTRA Sample Name: DHX4C

Operator: MTW

Run Time: 08/18/00 11:02:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00009	6.7263	.00218	.09985	.00122	21.577	.00030
SDev	.00041	.0926	.00019	.00127	.00003	.140	.00005
%RSD	458.77	1.3771	8.8587	1.2678	2.5660	.64904	15.547
#1	.00038	6.6608	.00204	.09896	.00125	21.478	.00027
#2	-.00020	6.7918	.00232	.10075	.00120	21.676	.00033
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00376	.00721	.00824	5.8656	4.0735	.73718	.00471
SDev	.00043	.00021	.00020	.0445	.0371	.00792	.00004
%RSD	11.339	2.8499	2.3956	.75890	.91146	1.0742	.78584
#1	.00406	.00736	.00810	5.8342	4.0473	.73158	.00469
#2	.00346	.00707	.00838	5.8971	4.0998	.74277	.00474
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00576	.00197	.00539	.00425	.00167	-.00015	.00045
SDev	.00070	.00109	.00021	.00022	.00042	.00081	.00040
%RSD	12.160	55.160	3.8814	5.2201	25.006	528.43	87.971
#1	.00626	.00120	.00554	.00409	.00137	.00042	.00074
#2	.00527	.00274	.00524	.00441	.00197	-.00072	.00017
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00049	.00081	.00038	.00046	.00932	.06198	
SDev	.00122	.00096	.00023	.00464	.00007	.00136	
%RSD	248.42	118.06	61.696	1010.6	.73156	2.1966	
#1	.00037	.00013	.00021	.00374	.00927	.06101	
#2	-.00136	.00149	.00054	-.00282	.00937	.06294	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

6681156

Analysis Report

08/18/00 11:06:18 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15649	--	--	--	--	--	--
SDev	89.58987	--	--	--	--	--	--
%RSD	.5724885	--	--	--	--	--	--
#1	15713	--	--	--	--	--	--
#2	15586	--	--	--	--	--	--

Analysis Report

08/18/00 11:10:28 AM

6601157
page 1

Method: METTRA Sample Name: DHX4D

Operator: MTW

Run Time: 08/18/00 11:06:22

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00020	.73651	.00188	.06659	.00086	20.753	.00026
SDev	.00047	.00033	.00016	.00010	.00020	.223	.00001
%RSD	234.17	.04527	8.7733	.15422	22.971	1.0765	2.6658
#1	.00053	.73628	.00176	.06666	.00072	20.911	.00027
#2	-.00013	.73675	.00199	.06651	.00100	20.595	.00026
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00123	.00227	.01088	.77728	2.8629	.60215	.00305
SDev	.00061	.00029	.00056	.00797	.0232	.00436	.00004
%RSD	49.735	12.752	5.1107	1.0255	.81166	.72368	1.3219
#1	.00167	.00248	.01128	.78292	2.8794	.60523	.00308
#2	.00080	.00207	.01049	.77165	2.8465	.59907	.00302
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00446	.00312	.00297	.00302	-.00145	.00309	.00158
SDev	.00005	.00109	.00071	.00011	.00150	.00001	.00051
%RSD	1.1754	34.805	23.783	3.6133	103.01	.35367	32.016
#1	.00450	.00235	.00347	.00310	-.00251	.00308	.00122
#2	.00442	.00389	.00247	.00294	-.00039	.00310	.00194
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00292	.00237	.00061	-.00240	-.00019	.13992	
SDev	.00105	.00196	.00095	.00207	.00043	.00072	
%RSD	36.090	82.615	156.96	86.191	220.69	.51717	
#1	-.00366	.00375	.00128	-.00094	.00011	.14044	
#2	-.00217	.00098	-.00007	-.00386	-.00050	.13941	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15439	--	--	--	--	--	--
SDev	129.5421	--	--	--	--	--	--
%RSD	.8390521	--	--	--	--	--	--
#1	15348	--	--	--	--	--	--
#2	15531	--	--	--	--	--	--

Analysis Report

08/18/00 11:14:38 AM

page 1

Method: METTRA Sample Name: DHX4E

Operator: MTW

Run Time: 08/18/00 11:10:32

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00019	5.6669	.00651	.07160	.00114	115.89	.00017
SDev	.00064	.0169	.00006	.00038	.00029	1.28	.00012
%RSD	339.69	.29794	.91445	.53613	25.156	1.1072	72.310
#1	.00064	5.6788	.00655	.07188	.00094	116.79	.00026
#2	-.00027	5.6549	.00647	.07133	.00135	114.98	.00008
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01337	.01630	.05028	5.8614	5.8899	2.8174	.03077
SDev	.00028	.00058	.00022	.0349	.0489	.0223	.00014
%RSD	2.1246	3.5561	.44290	.59524	.82957	.79055	.46927
#1	.01357	.01671	.05044	5.8861	5.9245	2.8331	.03067
#2	.01316	.01589	.05013	5.8367	5.8554	2.8016	.03087
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01116	.01180	.01615	.01470	.00155	.00229	.00204
SDev	.00016	.00184	.00106	.00132	.00137	.00106	.00117
%RSD	1.4690	15.578	6.5765	8.9816	88.250	46.492	57.037
#1	.01128	.01309	.01690	.01563	.00251	.00304	.00287
#2	.01104	.01050	.01540	.01377	.00058	.00154	.00122
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00330	.00354	.00126	-.00280	.00580	.05037	
SDev	.00071	.00043	.00053	.00104	.00354	.00009	
%RSD	21.666	12.258	41.832	37.233	61.131	.18123	
#1	-.00380	.00323	.00089	-.00353	.00831	.05043	
#2	-.00279	.00384	.00163	-.00206	.00329	.05030	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15488	--	--	--	--	--	--
SDev	114.6929	--	--	--	--	--	--
%RSD	.7405344	--	--	--	--	--	--
#1	15407	--	--	--	--	--	--
#2	15569	--	--	--	--	--	--

Analysis Report

08/18/00 11:18:47 AM

page 1

Method: METTRA Sample Name: DHX4EP5 Operator: MTW
 Run Time: 08/18/00 11:14:41
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00012	1.0085	.00243	.01383	.00150	22.963	.00012
SDev	.00013	.0021	.00084	.00004	.00013	.157	.00004
%RSD	113.31	.20437	34.412	.30176	8.4061	.68240	32.337
#1	-.00021	1.0070	.00302	.01380	.00159	23.073	.00009
#2	-.00002	1.0099	.00184	.01386	.00141	22.852	.00014
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00243	.00336	.00891	1.1680	1.1329	.55330	.00706
SDev	.00003	.00029	.00023	.0114	.0005	.00157	.00004
%RSD	1.3008	8.6976	2.6036	.97283	.04368	.28409	.53489
#1	.00241	.00315	.00874	1.1760	1.1333	.55441	.00709
#2	.00246	.00356	.00907	1.1599	1.1326	.55219	.00703
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00215	-.00394	.00510	.00209	.00271	-.00108	.00018
SDev	.00048	.00456	.00295	.00045	.00432	.00092	.00083
%RSD	22.348	115.74	57.861	21.480	159.24	84.863	450.47
#1	.00181	-.00717	.00719	.00241	.00577	-.00173	.00077
#2	.00248	-.00072	.00301	.00177	-.00034	-.00043	-.00040
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00153	-.00021	-.00065	.00226	.00046	.01038	
SDev	.00415	.00222	.00010	.00002	.00040	.00012	
%RSD	271.72	1061.2	15.516	.81906	88.356	1.1638	
#1	-.00447	.00136	-.00058	.00225	.00017	.01046	
#2	.00141	-.00178	-.00072	.00228	.00074	.01029	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

6681162

Analysis Report

08/18/00 11:18:47 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15983	--	--	--	--	--	--
SDev	66.89203	--	--	--	--	--	--
%RSD	.4185290	--	--	--	--	--	--
#1	16030	--	--	--	--	--	--
#2	15935	--	--	--	--	--	--

Analysis Report

08/18/00 11:22:57 AM

6681163

page 1

Method: METTRA Sample Name: DHX4ES Operator: MTW
 Run Time: 08/18/00 11:18:51
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04801	8.7291	1.8833	1.8820	.04628	163.38	.04463
SDev	.00073	.0251	.0117	.0058	.00023	1.77	.00023
%RSD	1.5200	.28779	.62312	.30648	.50289	1.0820	.50579
#1	.04853	8.7468	1.8916	1.8860	.04645	164.63	.04479
#2	.04750	8.7113	1.8750	1.8779	.04612	162.13	.04447
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.47892	.20329	.28413	6.7312	54.465	3.2446	1.0154
SDev	.00369	.00126	.00068	.0284	.427	.0244	.0031
%RSD	.77020	.61784	.23745	.42170	.78466	.75135	.30897
#1	.48153	.20418	.28460	6.7512	54.768	3.2619	1.0176
#2	.47631	.20240	.28365	6.7111	54.163	3.2274	1.0132
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.46637	.50981	.48986	.49650	.50377	.50015	.50136
SDev	.00442	.00345	.00382	.00370	.00975	.00305	.00528
%RSD	.94855	.67711	.78071	.74529	1.9350	.60900	1.0527
#1	.46950	.51225	.49256	.49912	.51066	.50231	.50509
#2	.46324	.50737	.48715	.49389	.49688	.49800	.49763
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.8639	1.8984	1.8869	1.9929	.47326	.52969	
SDev	.0005	.0242	.0163	.0053	.00207	.00364	
%RSD	.02419	1.2764	.86451	.26529	.43703	.68762	
#1	1.8643	1.9155	1.8985	1.9966	.47473	.53226	
#2	1.8636	1.8812	1.8754	1.9891	.47180	.52711	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15411	--	--	--	--	--	--
SDev	134.3503	--	--	--	--	--	--
%RSD	.8717987	--	--	--	--	--	--
#1	15316	--	--	--	--	--	--
#2	15506	--	--	--	--	--	--

Method: METTRA Sample Name: DHX4ED

Operator: MTW

Run Time: 08/18/00 11:23:01

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04880	9.1524	1.9088	1.9200	.04647	171.88	.04520
SDev	.00263	.2806	.0604	.0552	.00055	5.12	.00147
%RSD	5.3883	3.0662	3.1665	2.8731	1.1755	2.9798	3.2595
#1	.04694	8.9540	1.8661	1.8810	.04608	168.26	.04416
#2	.05066	9.3509	1.9516	1.9590	.04685	175.51	.04624
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.48630	.20687	.29259	7.1148	57.171	3.3968	1.0574
SDev	.01404	.00723	.00956	.2091	1.646	.1003	.0335
%RSD	2.8875	3.4948	3.2676	2.9387	2.8794	2.9517	3.1634
#1	.47637	.20175	.28583	6.9669	56.007	3.3259	1.0338
#2	.49623	.21198	.29935	7.2626	58.334	3.4677	1.0811
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.47611	.51579	.49471	.50173	.52331	.51993	.52105
SDev	.01855	.01872	.00550	.00990	.00509	.01095	.00900
%RSD	3.8962	3.6297	1.1123	1.9740	.97285	2.1069	1.7276
#1	.46299	.50255	.49082	.49473	.51971	.51218	.51469
#2	.48923	.52903	.49860	.50873	.52691	.52767	.52742
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.8693	1.9154	1.9000	2.0310	.48103	.53802	
SDev	.0451	.0342	.0378	.0608	.01624	.01602	
%RSD	2.4148	1.7832	1.9901	2.9944	3.3762	2.9776	
#1	1.8374	1.8912	1.8733	1.9880	.46955	.52669	
#2	1.9013	1.9395	1.9268	2.0740	.49252	.54935	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15055	--	--	--	--	--	--
SDev	380.8122	--	--	--	--	--	--
%RSD	2.529494	--	--	--	--	--	--
#1	15324	--	--	--	--	--	--
#2	14786	--	--	--	--	--	--

Analysis Report

08/18/00 11:31:16 AM

6681167
page 1

Method: METTRA Sample Name: DHX4H

Operator: MTW

Run Time: 08/18/00 11:27:11

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00030	1.6507	.00635	.05603	.00113	108.94	.00024
SDev	.00002	.0079	.00031	.00001	.00005	.04	.00009
%RSD	7.7633	.47655	4.9345	.01290	4.1806	.03750	39.275
#1	-.00032	1.6452	.00657	.05602	.00116	108.96	.00017
#2	-.00029	1.6563	.00612	.05603	.00110	108.91	.00031
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01337	.02261	.04338	2.1694	4.9363	2.6589	.02649
SDev	.00017	.00005	.00030	.0129	.0062	.0016	.00077
%RSD	1.2700	.21441	.67929	.59524	.12622	.06089	2.9198
#1	.01349	.02258	.04317	2.1603	4.9407	2.6577	.02703
#2	.01325	.02264	.04358	2.1786	4.9319	2.6600	.02594
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01112	.00966	.01219	.01134	-.00002	.00045	.00029
SDev	.00033	.00077	.00166	.00136	.00125	.00016	.00053
%RSD	2.9917	8.0211	13.608	12.025	5806.2	36.078	178.54
#1	.01088	.01020	.01336	.01231	.00086	.00057	.00067
#2	.01135	.00911	.01101	.01038	-.00091	.00034	-.00008
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00067	.00331	.00198	.00036	.00444	.05522	
SDev	.00096	.00251	.00136	.00015	.00061	.00033	
%RSD	141.59	75.932	68.483	41.446	13.790	.59752	
#1	-.00135	.00508	.00294	.00046	.00400	.05498	
#2	.00000	.00153	.00102	.00025	.00487	.05545	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15655	--	--	--	--	--	--
SDev	6.151277	--	--	--	--	--	--
%RSD	.0392922	--	--	--	--	--	--
#1	15651	--	--	--	--	--	--
#2	15660	--	--	--	--	--	--

Analysis Report

08/18/00 11:35:26 AM

page 1

Method: METTRA Sample Name: DHX4J

Operator: MTW

Run Time: 08/18/00 11:31:20

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00026	1.3714	.00360	.08011	.00078	21.618	.00017
SDev	.00057	.0092	.00047	.00047	.00011	.161	.00006
%RSD	218.87	.66873	12.937	.58065	13.567	.74337	35.612
#1	-.00014	1.3779	.00393	.08044	.00070	21.731	.00012
#2	.00067	1.3649	.00327	.07978	.00085	21.504	.00021
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00148	.00294	.00246	2.6668	3.5147	.92745	.00311
SDev	.00041	.00042	.00024	.0038	.0240	.00543	.00059
%RSD	27.869	14.265	9.7675	.14389	.68165	.58506	18.822
#1	.00119	.00264	.00229	2.6641	3.5317	.93129	.00270
#2	.00178	.00323	.00263	2.6695	3.4978	.92362	.00353
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00286	.00142	.00182	.00168	-.00171	.00208	.00082
SDev	.00106	.00149	.00094	.00013	.00110	.00042	.00009
%RSD	37.054	105.24	51.529	7.6367	64.742	20.075	11.002
#1	.00211	.00036	.00248	.00177	-.00092	.00178	.00088
#2	.00361	.00247	.00116	.00159	-.00249	.00237	.00075
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00349	.00159	-.00010	.00026	-.00085	.01723	
SDev	.00259	.00009	.00092	.00031	.00020	.00012	
%RSD	74.384	5.3823	922.29	117.64	24.114	.71555	
#1	-.00532	.00153	-.00075	.00004	-.00099	.01732	
#2	-.00165	.00165	.00055	.00048	-.00070	.01714	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15588	--	--	--	--	--	--
SDev	84.49926	--	--	--	--	--	--
%RSD	.5420876	--	--	--	--	--	--
#1	15528	--	--	--	--	--	--
#2	15648	--	--	--	--	--	--

Analysis Report

08/18/00 11:39:36 AM

6681171

page 1

Method: METTRA Sample Name: CCV3-5

Operator: MTW

Run Time: 08/18/00 11:35:30

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0683	24.220	.52572	1.9708	2.0554	51.346	.50575
SDev	.0154	.342	.00730	.0324	.0334	.794	.00617
%RSD	1.4400	1.4113	1.3886	1.6438	1.6244	1.5455	1.2193
#1	1.0792	24.462	.53089	1.9937	2.0790	51.908	.51011
#2	1.0574	23.978	.52056	1.9479	2.0318	50.785	.50139
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0427	2.0467	1.9553	25.241	49.704	2.0222	2.0507
SDev	.0237	.0267	.0333	.322	.831	.0287	.0142
%RSD	1.1619	1.3066	1.7010	1.2740	1.6729	1.4171	.69193
#1	2.0595	2.0656	1.9788	25.469	50.292	2.0425	2.0608
#2	2.0259	2.0278	1.9318	25.014	49.116	2.0020	2.0407
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0033	.53112	.52575	.52754	.53429	.52427	.52761
SDev	.0327	.00780	.00890	.00853	.00974	.00643	.00753
%RSD	1.6324	1.4691	1.6928	1.6178	1.8228	1.2258	1.4271
#1	2.0265	.53663	.53205	.53357	.54117	.52882	.53293
#2	1.9802	.52560	.51946	.52150	.52740	.51973	.52228
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.52313	.53339	.52998	1.0529	2.0384	2.0611	
SDev	.00157	.01290	.00913	.0231	.0348	.0284	
%RSD	.30088	2.4179	1.7220	2.1951	1.7065	1.3755	
#1	.52424	.54251	.53643	1.0693	2.0630	2.0812	
#2	.52202	.52427	.52352	1.0366	2.0138	2.0411	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15545	--	--	--	--	--	--
SDev	135.3757	--	--	--	--	--	--
%RSD	.8708677	--	--	--	--	--	--
#1	15449	--	--	--	--	--	--
#2	15641	--	--	--	--	--	--

Analysis Report

08/18/00 11:43:46 AM

page 1

Method: METTRA Sample Name: CCB5

Operator: MTW

Run Time: 08/18/00 11:39:40

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00000	-.02968	-.00001	.00028	.00097	.02873	.00013
SDev	.00006	.00408	.00021	.00001	.00013	.00004	.00003
%RSD	4680.3	13.754	2198.4	4.1589	13.375	.14362	21.011
#1	.00005	-.02679	-.00016	.00029	.00088	.02870	.00015
#2	-.00004	-.03256	.00014	.00027	.00107	.02875	.00011
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00029	.00027	.00043	.00766	.00818	.00037	.00694
SDev	.00006	.00033	.00036	.00276	.00166	.00003	.00191
%RSD	18.829	124.74	83.623	36.043	20.277	9.2963	27.477
#1	.00033	.00050	.00017	.00571	.00935	.00035	.00829
#2	.00026	.00003	.00068	.00961	.00701	.00040	.00560
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00022	-.00093	.00247	.00134	.00047	.00058	.00055
SDev	.00074	.00063	.00077	.00030	.00012	.00037	.00028
%RSD	333.45	68.165	31.270	22.752	24.122	63.715	52.251
#1	.00075	-.00138	.00302	.00156	.00056	.00084	.00075
#2	-.00030	-.00048	.00193	.00112	.00039	.00032	.00034
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00295	.00035	.00121	.00344	-.00163	.00127	
SDev	.00011	.00284	.00193	.00263	.00041	.00013	
%RSD	3.7286	820.31	159.12	76.493	24.891	10.530	
#1	.00303	.00235	.00258	.00158	-.00135	.00136	
#2	.00287	-.00166	-.00015	.00531	-.00192	.00117	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

6681174

Analysis Report

08/18/00 11:43:46 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15613	--	--	--	--	--	--
SDev	4.808188	--	--	--	--	--	--
%RSD	.0307968	--	--	--	--	--	--
#1	15616	--	--	--	--	--	--
#2	15609	--	--	--	--	--	--

Analysis Report

08/18/00 11:47:56 AM

6681175
page 1

Method: METTRA Sample Name: DHX4K

Operator: MTW

Run Time: 08/18/00 11:43:50

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00046	.44059	.00228	.07902	.00080	22.148	.00014
SDev	.00003	.00266	.00102	.00016	.00013	.051	.00012
%RSD	6.9356	.60445	44.754	.20333	15.841	.22819	86.348
#1	.00048	.44247	.00156	.07891	.00071	22.183	.00006
#2	.00044	.43870	.00300	.07913	.00089	22.112	.00023
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00417	.00810	.00616	2.2639	3.3593	.92283	.00370
SDev	.00009	.00015	.00005	.0104	.0120	.00053	.00077
%RSD	2.0474	1.8490	.73301	.45770	.35832	.05723	20.941
#1	.00423	.00821	.00619	2.2566	3.3678	.92245	.00425
#2	.00411	.00800	.00613	2.2713	3.3508	.92320	.00315
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00479	.00478	.00338	.00385	.00009	.00117	.00081
SDev	.00075	.00092	.00208	.00108	.00151	.00118	.00028
%RSD	15.620	19.261	61.610	28.119	1701.1	100.88	35.120
#1	.00426	.00544	.00191	.00308	-.00098	.00200	.00101
#2	.00532	.00413	.00485	.00461	.00115	.00033	.00061
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00551	.00227	-.00032	-.00282	-.00041	.03958	
SDev	.00081	.00350	.00261	.00252	.00020	.00003	
%RSD	14.786	153.87	818.43	89.096	49.956	.07101	
#1	-.00609	-.00020	-.00216	-.00460	-.00026	.03960	
#2	-.00494	.00475	.00152	-.00104	-.00055	.03956	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

6681176

Analysis Report

08/18/00 11:47:56 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15460	--	--	--	--	--	--
SDev	9.227606	--	--	--	--	--	--
%RSD	.0596880	--	--	--	--	--	--
#1	15453	--	--	--	--	--	--
#2	15466	--	--	--	--	--	--

Analysis Report

08/18/00 11:52:05 AM

page 1

Method: METTRA Sample Name: CCV3-6

Operator: MTW

Run Time: 08/18/00 11:47:59

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0772	24.421	.52457	1.9860	2.0646	51.604	.50854
SDev	.0097	.322	.00579	.0245	.0130	.309	.00480
%RSD	.90265	1.3199	1.1030	1.2340	.62791	.59809	.94475
#1	1.0703	24.193	.52048	1.9687	2.0555	51.386	.50515
#2	1.0841	24.649	.52867	2.0033	2.0738	51.822	.51194
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0571	2.0614	1.9701	25.268	50.037	2.0384	2.0706
SDev	.0212	.0208	.0216	.276	.394	.0188	.0310
%RSD	1.0282	1.0071	1.0958	1.0937	.78661	.92428	1.4994
#1	2.0422	2.0467	1.9549	25.073	49.759	2.0251	2.0486
#2	2.0721	2.0761	1.9854	25.464	50.315	2.0518	2.0925
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0087	.53226	.53021	.53089	.53994	.52609	.53070
SDev	.0164	.00849	.00135	.00373	.00339	.00760	.00394
%RSD	.81842	1.5952	.25381	.70163	.62759	1.4444	.74245
#1	1.9970	.52626	.52926	.52826	.54234	.52072	.52792
#2	2.0203	.53827	.53116	.53353	.53754	.53146	.53349
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.52239	.53745	.53243	1.0298	2.0518	2.0685	
SDev	.00531	.00216	.00321	.0103	.0172	.0171	
%RSD	1.0171	.40248	.60331	.99647	.83932	.82789	
#1	.51864	.53592	.53016	1.0226	2.0396	2.0564	
#2	.52615	.53897	.53470	1.0371	2.0639	2.0806	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15394	--	--	--	--	--	--
SDev	156.9073	--	--	--	--	--	--
%RSD	1.019309	--	--	--	--	--	--
#1	15504	--	--	--	--	--	--
#2	15283	--	--	--	--	--	--

Analysis Report

08/18/00 11:56:15 AM

page 1

Method: METTRA Sample Name: CCB6

Operator: MTW

Run Time: 08/18/00 11:52:09

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00042	-.02957	.00046	.00074	.00174	.02915	.00029
SDev	.00112	.00130	.00095	.00078	.00063	.02244	.00035
%RSD	268.20	4.3984	205.98	106.33	35.967	76.994	122.31
#1	-.00037	-.02865	-.00021	.00018	.00130	.01328	.00004
#2	.00121	-.03049	.00113	.00129	.00218	.04502	.00053
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00067	.00122	.00070	.00543	.02060	.00090	.00795
SDev	.00079	.00099	.00108	.01572	.02240	.00083	.00154
%RSD	117.61	80.950	154.18	289.32	108.71	91.665	19.428
#1	.00011	.00052	-.00006	-.00568	.00477	.00032	.00904
#2	.00123	.00191	.00146	.01655	.03644	.00149	.00686
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00121	-.00031	.00096	.00054	-.00030	.00128	.00076
SDev	.00149	.00431	.00047	.00112	.00200	.00038	.00092
%RSD	123.44	1409.5	48.760	209.45	676.69	29.768	121.80
#1	.00015	-.00335	.00129	-.00026	.00112	.00155	.00141
#2	.00227	.00274	.00063	.00133	-.00171	.00101	.00010
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00160	.00067	.00098	.00222	-.00077	.00117	
SDev	.00222	.00074	.00025	.00120	.00122	.00086	
%RSD	139.21	109.40	25.463	53.912	157.99	73.777	
#1	.00002	.00119	.00080	.00137	-.00164	.00056	
#2	.00317	.00015	.00116	.00306	.00009	.00178	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

08/18/00 11:56:15 AM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15734	--	--	--	--	--	--
SDev	79.33752	--	--	--	--	--	--
%RSD	.5042585	--	--	--	--	--	--
#1	15790	--	--	--	--	--	--
#2	15677	--	--	--	--	--	--

Analysis Report

08/18/00 12:03:57 PM

page 1

Method: METTRA Sample Name: DHP13B

Operator: MTW

Run Time: 08/18/00 11:59:51

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00006	-.02086	.00012	.00036	.00003	.59861	.00019
SDev	.00015	.00535	.00093	.00003	.00038	.00615	.00024
%RSD	237.23	25.640	800.05	8.2713	1480.2	1.0280	127.76
#1	.00004	-.01708	-.00054	.00038	-.00025	.60297	.00002
#2	-.00017	-.02464	.00077	.00034	.00030	.59426	.00036
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00042	.00079	.00134	.01820	.00967	.00029	.00202
SDev	.00030	.00048	.00044	.00226	.00135	.00002	.00043
%RSD	72.140	60.719	33.161	12.416	13.933	8.0145	21.364
#1	-.00020	.00113	.00166	.01980	.01062	.00030	.00232
#2	-.00063	.00045	.00103	.01660	.00872	.00027	.00171
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00100	.00053	.00129	.00104	-.00262	.00045	-.00057
SDev	.00146	.00011	.00083	.00052	.00135	.00073	.00094
%RSD	146.13	19.610	63.850	49.590	51.754	162.06	163.38
#1	-.00003	.00046	.00188	.00141	-.00166	.00096	.00009
#2	.00203	.00061	.00071	.00068	-.00358	-.00007	-.00123
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V__	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00817	.00615	.00138	-.00441	-.00177	H.02845	
SDev	.00006	.00194	.00128	.00149	.00021	.00011	
%RSD	.74177	31.605	92.251	33.849	11.889	.36883	
#1	-.00821	.00753	.00229	-.00546	-.00192	H.02852	
#2	-.00812	.00478	.00048	-.00335	-.00162	H.02837	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC High	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

6681182

Analysis Report

08/18/00 12:03:57 PM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14983	--	--	--	--	--	--
SDev	130.9915	--	--	--	--	--	--
%RSD	.8742721	--	--	--	--	--	--
#1	14890	--	--	--	--	--	--
#2	15076	--	--	--	--	--	--

Analysis Report

08/18/00 12:08:12 PM

Method: METTRA Sample Name: DHP13C

Operator: MTW

Run Time: 08/18/00 12:04:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05302	2.0291	2.0308	1.9752	.05232	52.116	.04989
SDev	.00021	.0101	.0002	.0076	.00011	.268	.00001
%RSD	.39495	.49781	.00846	.38705	.20615	.51505	.01280
#1	.05317	2.0363	2.0309	1.9806	.05239	52.305	.04989
#2	.05287	2.0220	2.0307	1.9698	.05224	51.926	.04990
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51336	.20859	.25392	.94366	49.599	.50767	1.0378
SDev	.00094	.00019	.00107	.01188	.243	.00148	.0024
%RSD	.18293	.09281	.41987	1.2589	.49002	.29141	.23612
#1	.51269	.20872	.25467	.95206	49.771	.50872	1.0360
#2	.51402	.20845	.25316	.93526	49.427	.50662	1.0395
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50134	.54597	.52165	.52975	.51285	.51168	.51207
SDev	.00086	.00211	.00379	.00323	.00423	.00009	.00147
%RSD	.17074	.38668	.72642	.60982	.82513	.01671	.28633
#1	.50195	.54746	.52433	.53203	.51584	.51174	.51310
#2	.50074	.54448	.51897	.52746	.50986	.51161	.51103
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.9606	2.0344	2.0098	2.1591	.50991	.55741	
SDev	.0050	.0206	.0121	.0089	.00320	.00099	
%RSD	.25433	1.0113	.60019	.41158	.62853	.17745	
#1	1.9571	2.0490	2.0184	2.1654	.51218	.55811	
#2	1.9641	2.0199	2.0013	2.1528	.50764	.55672	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			2.4000	2.4000	.60000	.60000	
Low			1.6000	1.6000	.40000	.40000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14980	--	--	--	--	--	--
SDev	12.90470	--	--	--	--	--	--
%RSD	.0861472	--	--	--	--	--	--
#1	14971	--	--	--	--	--	--
#2	14989	--	--	--	--	--	--

Analysis Report

08/18/00 12:12:22 PM

page 1

Method: METTRA Sample Name: DHLX6
 Run Time: 08/18/00 12:08:16
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Operator: MTW

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00789	89.969	.12931	.60495	.00949	16.544	.00734
SDev	.00000	.194	.00079	.00309	.00004	.183	.00036
%RSD	.03769	.21519	.60814	.51117	.45003	1.1090	4.8992
#1	.00789	90.106	.12875	.60714	.00946	16.674	.00709
#2	.00789	89.832	.12986	.60276	.00952	16.415	.00760
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.07192	.66739	.52999	164.87	23.768	1.6657	.01190
SDev	.00044	.00326	.00129	.64	.187	.0103	.00022
%RSD	.61446	.48772	.24261	.38518	.78880	.61684	1.8803
#1	.07223	.66970	.53090	165.32	23.901	1.6730	.01174
#2	.07160	.66509	.52908	164.42	23.635	1.6585	.01206
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.17051	1.1991	1.1582	1.1718	.01727	.00718	.01054
SDev	.00195	.0011	.0089	.0063	.00135	.00012	.00053
%RSD	1.1427	.08902	.76522	.53481	7.8269	1.6381	5.0154
#1	.17189	1.1999	1.1645	1.1763	.01822	.00726	.01091
#2	.16913	1.1984	1.1520	1.1674	.01631	.00709	.01016
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.02729	.03383	.03165	.01456	.49169	1.6033	
SDev	.00152	.00613	.00359	.00216	.00481	.0086	
%RSD	5.5695	18.133	11.327	14.808	.97868	.53906	
#1	.02622	.03817	.03419	.01609	.49510	1.6094	
#2	.02837	.02949	.02912	.01304	.48829	1.5972	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

08/18/00 12:12:22 PM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17056	--	--	--	--	--	--
SDev	70.14582	--	--	--	--	--	--
%RSD	.4112593	--	--	--	--	--	--
#1	17007	--	--	--	--	--	--
#2	17106	--	--	--	--	--	--

Analysis Report

08/18/00 12:16:32 PM

6601187
page 1

Method: METTRA Sample Name: DHLX6P5 Operator: MTW
 Run Time: 08/18/00 12:12:26
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00148	18.725	.02892	.13078	.00274	3.6500	.00179
SDev	.00035	.115	.00011	.00075	.00017	.0434	.00007
%RSD	23.911	.61519	.38917	.57125	6.0627	1.1878	4.1220
#1	.00173	18.807	.02884	.13131	.00262	3.6806	.00184
#2	.00123	18.644	.02900	.13025	.00286	3.6193	.00174
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01540	.14635	.10954	35.861	5.1057	.36259	.00306
SDev	.00127	.00162	.00081	.168	.0538	.00360	.00012
%RSD	8.2628	1.1066	.73961	.46937	1.0544	.99142	3.7525
#1	.01630	.14749	.11011	35.980	5.1437	.36513	.00297
#2	.01450	.14520	.10897	35.742	5.0676	.36004	.00314
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03670	.25861	.25713	.25763	.00253	.00113	.00159
SDev	.00073	.00390	.00330	.00350	.00051	.00006	.00021
%RSD	1.9771	1.5069	1.2842	1.3587	20.266	4.9779	13.059
#1	.03722	.26136	.25947	.26010	.00217	.00109	.00145
#2	.03619	.25585	.25480	.25515	.00289	.00117	.00174
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V__	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00599	.00699	.00666	.00248	.10472	.36092	
SDev	.00117	.00176	.00078	.00080	.00051	.00308	
%RSD	19.592	25.151	11.749	32.076	.48962	.85369	
#1	.00516	.00824	.00721	.00192	.10508	.36310	
#2	.00682	.00575	.00611	.00304	.10436	.35874	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

08/18/00 12:16:32 PM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16129	--	--	--	--	--	--
SDev	111.5820	--	--	--	--	--	--
%RSD	.6918226	--	--	--	--	--	--
#1	16050	--	--	--	--	--	--
#2	16208	--	--	--	--	--	--

Analysis Report

08/18/00 12:20:42 PM

Method: METTRA Sample Name: DHLX6S

Operator: MTW

Run Time: 08/18/00 12:16:36

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05324	115.06	1.8681	2.3514	.05347	65.227	.04812
SDev	.00012	.10	.0020	.0076	.00012	.182	.00078
%RSD	.23371	.08334	.10591	.32118	.22416	.27962	1.6139
#1	.05333	115.00	1.8695	2.3568	.05339	65.356	.04758
#2	.05315	115.13	1.8667	2.3461	.05356	65.098	.04867
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51390	.81038	.72948	188.48	70.419	2.1878	.90541
SDev	.00026	.00213	.00226	.32	.215	.0002	.00413
%RSD	.05073	.26219	.31001	.17002	.30541	.00771	.45597
#1	.51371	.80888	.73107	188.71	70.571	2.1877	.90249
#2	.51408	.81188	.72788	188.26	70.267	2.1879	.90833
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.60128	1.6160	1.5447	1.5685	.29340	.28065	.28489
SDev	.00014	.0007	.0017	.0014	.00482	.00055	.00124
%RSD	.02268	.04523	.10999	.08777	1.6432	.19727	.43391
#1	.60119	1.6165	1.5459	1.5694	.29681	.28025	.28577
#2	.60138	1.6154	1.5435	1.5675	.28999	.28104	.28402
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.6790	1.7467	1.7241	1.8498	.95230	1.9599	
SDev	.0093	.0090	.0029	.0016	.00338	.0008	
%RSD	.55381	.51465	.16816	.08487	.35476	.04057	
#1	1.6725	1.7530	1.7262	1.8509	.95469	1.9605	
#2	1.6856	1.7403	1.7221	1.8487	.94991	1.9594	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16725	--	--	--	--	--	--
SDev	43.59341	--	--	--	--	--	--
%RSD	.2606447	--	--	--	--	--	--
#1	16694	--	--	--	--	--	--
#2	16756	--	--	--	--	--	--

Analysis Report

08/18/00 12:24:52 PM

6681191
page 1

Method: METTRA Sample Name: DHLX6D

Operator: MTW

Run Time: 08/18/00 12:20:46

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05339	110.30	1.8404	2.3553	.05410	63.185	.05545
SDev	.00072	1.16	.0166	.0324	.00042	.999	.00062
%RSD	1.3497	1.0492	.90015	1.3748	.78492	1.5807	1.1157
#1	.05390	111.12	1.8521	2.3782	.05440	63.892	.05589
#2	.05288	109.48	1.8287	2.3324	.05380	62.479	.05502
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50921	.82329	.76290	159.72	69.947	1.9903	.91535
SDev	.00511	.00944	.01069	1.66	1.032	.0259	.00686
%RSD	1.0030	1.1461	1.4013	1.0374	1.4753	1.3025	.74968
#1	.51283	.82996	.77046	160.89	70.677	2.0086	.92020
#2	.50560	.81661	.75534	158.55	69.218	1.9720	.91049
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.60435	1.6920	1.6114	1.6382	.31743	.30838	.31139
SDev	.00769	.0126	.0189	.0168	.00460	.00213	.00295
%RSD	1.2723	.74672	1.1751	1.0277	1.4506	.69026	.94835
#1	.60978	1.7010	1.6248	1.6502	.32068	.30989	.31348
#2	.59891	1.6831	1.5980	1.6263	.31417	.30688	.30931
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.6911	1.7436	1.7261	1.8530	.94902	2.3039	
SDev	.0100	.0247	.0198	.0096	.01485	.0248	
%RSD	.59282	1.4156	1.1472	.51543	1.5647	1.0751	
#1	1.6982	1.7611	1.7401	1.8597	.95952	2.3214	
#2	1.6840	1.7262	1.7121	1.8462	.93852	2.2863	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

6681192

Analysis Report

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page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16640	--	--	--	--	--	--
SDev	162.2451	--	--	--	--	--	--
%RSD	.9750087	--	--	--	--	--	--
#1	16526	--	--	--	--	--	--
#2	16755	--	--	--	--	--	--

Analysis Report

08/18/00 12:29:02 PM

page 1

Method: METTRA Sample Name: DHLXR

Operator: MTW

Run Time: 08/18/00 12:24:56

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00462	48.297	.07406	.46435	.00537	8.6568	.00379
SDev	.00020	.068	.00038	.00078	.00027	.0738	.00007
%RSD	4.3154	.14041	.51759	.16804	5.0280	.85217	1.7403
#1	.00477	48.345	.07379	.46490	.00518	8.7090	.00384
#2	.00448	48.249	.07433	.46379	.00556	8.6046	.00375
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04149	.41057	.43251	99.553	13.808	.89064	.01316
SDev	.00105	.00213	.00162	.218	.109	.00462	.00094
%RSD	2.5438	.51871	.37572	.21913	.78853	.51825	7.1586
#1	.04224	.41207	.43366	99.707	13.885	.89390	.01382
#2	.04074	.40906	.43136	99.399	13.731	.88737	.01249
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10430	.91133	.88088	.89102	.01488	.00863	.01071
SDev	.00067	.01329	.00813	.00985	.00095	.00042	.00003
%RSD	.64400	1.4583	.92256	1.1050	6.3696	4.8989	.31403
#1	.10477	.92073	.88663	.89798	.01555	.00833	.01073
#2	.10382	.90193	.87513	.88406	.01421	.00893	.01069
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.01649	.02282	.02071	.01155	.35070	.75502	
SDev	.00157	.00219	.00199	.00438	.00070	.00442	
%RSD	9.5292	9.6070	9.5864	37.893	.19855	.58533	
#1	.01761	.02437	.02212	.01464	.35120	.75815	
#2	.01538	.02127	.01931	.00845	.35021	.75190	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

6681194

Analysis Report

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page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16018	--	--	--	--	--	--
SDev	131.3092	--	--	--	--	--	--
%RSD	.8197499	--	--	--	--	--	--
#1	15925	--	--	--	--	--	--
#2	16111	--	--	--	--	--	--

Analysis Report

08/18/00 12:33:12 PM

page 1

Method: METTRA Sample Name: DHLXT

Operator: MTW

Run Time: 08/18/00 12:29:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00759	80.346	.16148	.60272	.00772	11.461	.00335
SDev	.00005	.179	.00098	.00257	.00013	.075	.00033
%RSD	.61326	.22225	.60578	.42664	1.6303	.65275	9.9556
#1	.00756	80.472	.16217	.60454	.00763	11.514	.00312
#2	.00763	80.219	.16079	.60091	.00781	11.408	.00359
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05637	.61992	.56382	143.59	20.437	1.1143	.02305
SDev	.00002	.00161	.00329	.67	.120	.0052	.00008
%RSD	.02696	.25933	.58384	.46786	.58633	.46237	.36282
#1	.05636	.62106	.56615	144.06	20.522	1.1180	.02311
#2	.05639	.61878	.56149	143.11	20.352	1.1107	.02299
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.13846	1.3474	1.3022	1.3173	.01936	.00987	.01303
SDev	.00251	.0018	.0155	.0098	.00367	.00263	.00053
%RSD	1.8098	.13312	1.1915	.74031	18.985	26.681	4.0847
#1	.14023	1.3461	1.3132	1.3242	.02195	.00800	.01265
#2	.13669	1.3487	1.2913	1.3104	.01676	.01173	.01340
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.02826	.03361	.03183	.01550	.54564	.91601	
SDev	.00564	.00445	.00109	.00088	.00031	.00580	
%RSD	19.950	13.230	3.4200	5.6573	.05687	.63278	
#1	.02427	.03675	.03260	.01612	.54586	.92011	
#2	.03225	.03046	.03106	.01488	.54542	.91191	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

6681196

Analysis Report

08/18/00 12:33:12 PM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16837	--	--	--	--	--	--
SDev	104.8645	--	--	--	--	--	--
%RSD	.6228291	--	--	--	--	--	--
#1	16763	--	--	--	--	--	--
#2	16911	--	--	--	--	--	--

Analysis Report

08/18/00 12:37:22 PM

6681197
page 1

Method: METTRA Sample Name: DHLXW

Operator: MTW

Run Time: 08/18/00 12:33:16

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01065	80.644	.25714	.67135	.01222	12.259	.00435
SDev	.00031	.206	.00061	.00297	.00004	.052	.00017
%RSD	2.8993	.25571	.23868	.44282	.29317	.42746	4.0256
#1	.01043	80.790	.25757	.67845	.01220	12.296	.00422
#2	.01087	80.499	.25670	.66925	.01225	12.222	.00447
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07882	.83714	.62755	191.49	24.039	1.6602	.01513
SDev	.00022	.00032	.00243	.00	.090	.0042	.00033
%RSD	.27599	.03767	.38752	.00164	.37607	.25309	2.1832
#1	.07867	.83736	.62927	191.50	24.103	1.6632	.01490
#2	.07897	.83691	.62583	191.49	23.975	1.6573	.01537
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.17874	1.6020	1.5444	1.5636	.02394	.01019	.01477
SDev	.00115	.0033	.0105	.0059	.00116	.00007	.00034
%RSD	.64206	.20441	.67727	.37646	4.8379	.65525	2.3106
#1	.17792	1.5997	1.5518	1.5678	.02313	.01023	.01453
#2	.17955	1.6043	1.5370	1.5594	.02476	.01014	.01501
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.03429	.04543	.04172	.01245	.56840	1.7132	
SDev	.00549	.00077	.00132	.00044	.00090	.0005	
%RSD	16.021	1.6890	3.1586	3.5340	.15844	.02835	
#1	.03041	.04597	.04079	.01276	.56903	1.7136	
#2	.03818	.04488	.04265	.01214	.56776	1.7129	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17435	--	--	--	--	--	--
SDev	12.19759	--	--	--	--	--	--
%RSD	.0699613	--	--	--	--	--	--
#1	17426	--	--	--	--	--	--
#2	17443	--	--	--	--	--	--

Analysis Report

08/18/00 12:41:32 PM

page 1

Method: METTRA Sample Name: DHM03

Operator: MTW

Run Time: 08/18/00 12:37:26

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00510	61.224	.11643	.48972	.00716	11.315	.00531
SDev	.00038	.002	.00132	.00084	.00026	.064	.00017
%RSD	7.4083	.00251	1.1369	.17210	3.6375	.56492	3.1393
#1	.00537	61.225	.11737	.49032	.00697	11.360	.00519
#2	.00483	61.223	.11550	.48913	.00734	11.269	.00543
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06805	.49123	.36990	136.30	18.966	1.1832	.01111
SDev	.00016	.00172	.00118	.34	.082	.0029	.00033
%RSD	.24021	.35009	.31846	.25217	.43208	.24913	2.9789
#1	.06817	.49245	.37073	136.54	19.024	1.1852	.01088
#2	.06793	.49002	.36906	136.06	18.908	1.1811	.01135
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.15484	1.0166	.98218	.99365	.01412	.00717	.00948
SDev	.00019	.0055	.00653	.00620	.00057	.00150	.00119
%RSD	.12318	.54464	.66471	.62380	4.0485	20.964	12.578
#1	.15497	1.0205	.98679	.99803	.01452	.00823	.01033
#2	.15470	1.0127	.97756	.98926	.01371	.00611	.00864
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00966	.01932	.01610	.00647	.42710	1.2451	
SDev	.00195	.00230	.00089	.00178	.00511	.0033	
%RSD	20.198	11.920	5.5055	27.431	1.1971	.26348	
#1	.01104	.01769	.01548	.00772	.43072	1.2474	
#2	.00828	.02095	.01673	.00521	.42349	1.2428	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

6681200

Analysis Report

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page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16456	--	--	--	--	--	--
SDev	40.30509	--	--	--	--	--	--
%RSD	.2449264	--	--	--	--	--	--
#1	16428	--	--	--	--	--	--
#2	16484	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-7

Operator: MTW

Run Time: 08/18/00 12:41:36

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0582	23.957	.51798	1.9563	2.0535	51.294	.50010
SDev	.0009	.018	.00108	.0059	.0036	.025	.00174
%RSD	.08729	.07540	.20746	.29923	.17472	.04826	.34863
#1	1.0588	23.970	.51722	1.9604	2.0560	51.311	.49886
#2	1.0575	23.945	.51874	1.9521	2.0509	51.276	.50133
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0151	2.0235	1.9403	25.284	49.539	2.0068	2.0195
SDev	.0052	.0017	.0079	.040	.128	.0004	.0120
%RSD	.26024	.08275	.40859	.16018	.25844	.01786	.59290
#1	2.0114	2.0223	1.9459	25.255	49.630	2.0070	2.0110
#2	2.0188	2.0246	1.9347	25.313	49.449	2.0065	2.0279
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9993	.52671	.51873	.52139	.52660	.51361	.51794
SDev	.0007	.00162	.00339	.00280	.00378	.00084	.00182
%RSD	.03367	.30703	.65350	.53694	.71713	.16367	.35106
#1	1.9988	.52785	.52113	.52337	.52927	.51420	.51922
#2	1.9998	.52556	.51634	.51941	.52393	.51302	.51665
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.50704	.52744	.52065	1.0538	2.0312	2.0409	
SDev	.00416	.00606	.00266	.0078	.0034	.0009	
%RSD	.82088	1.1491	.51027	.74031	.16948	.04327	
#1	.50409	.53173	.52252	1.0483	2.0336	2.0403	
#2	.50998	.52315	.51877	1.0594	2.0287	2.0415	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15969	--	--	--	--	--	--
SDev	45.00693	--	--	--	--	--	--
%RSD	.2818319	--	--	--	--	--	--
#1	16001	--	--	--	--	--	--
#2	15938	--	--	--	--	--	--

Analysis Report

08/18/00 12:49:52 PM

6681203

page 1

Method: METTRA Sample Name: CCB7

Operator: MTW

Run Time: 08/18/00 12:45:46

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00026	-.02264	.00050	.00028	.00150	.01190	.00011
SDev	.00037	.00951	.00076	.00001	.00049	.00028	.00005
%RSD	141.53	42.017	152.00	3.6714	32.278	2.3918	47.431
#1	-.00052	-.01591	.00104	.00028	.00184	.01170	.00007
#2	.00000	-.02936	-.00004	.00029	.00116	.01210	.00015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00039	.00029	-.00031	.01903	.00742	.00026	.00705
SDev	.00004	.00005	.00098	.00537	.00345	.00001	.00110
%RSD	9.2496	16.494	315.64	28.222	46.432	3.9753	15.622
#1	.00037	.00033	-.00100	.01523	.00498	.00026	.00783
#2	.00042	.00026	.00038	.02283	.00986	.00027	.00627
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00008	-.00576	.00161	-.00084	.00035	.00014	.00021
SDev	.00003	.00156	.00096	.00012	.00245	.00069	.00035
%RSD	36.964	27.142	59.683	14.393	705.23	480.46	166.94
#1	.00011	-.00687	.00229	-.00076	.00208	-.00035	.00046
#2	.00006	-.00466	.00093	-.00093	-.00139	.00063	-.00004
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00111	-.00037	.00012	.00209	-.00163	.00122	
SDev	.00065	.00292	.00173	.00316	.00041	.00007	
%RSD	58.553	779.46	1428.8	151.32	24.856	6.1150	
#1	.00158	-.00244	-.00110	.00432	-.00192	.00127	
#2	.00065	.00169	.00135	-.00015	-.00134	.00117	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

6681204

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15976	--	--	--	--	--	--
SDev	304.6215	--	--	--	--	--	--
%RSD	1.906732	--	--	--	--	--	--
#1	16192	--	--	--	--	--	--
#2	15761	--	--	--	--	--	--

Analysis Report

08/18/00 12:54:02 PM

6681205
page 1

Method: METTRA Sample Name: DHM06

Operator: MTW

Run Time: 08/18/00 12:49:56

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00684	71.089	.15519	.56598	.00798	17.342	.00826
SDev	.00070	.326	.00058	.00491	.00009	.156	.00036
%RSD	10.205	.45913	.37271	.86810	1.0630	.89956	4.3441
#1	.00634	71.319	.15560	.56946	.00804	17.452	.00801
#2	.00733	70.858	.15478	.56251	.00792	17.231	.00851
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07729	.57571	.49384	172.23	22.729	2.1522	.01270
SDev	.00081	.00182	.00340	.91	.192	.0134	.00017
%RSD	1.0435	.31547	.68918	.52667	.84528	.62421	1.3527
#1	.07672	.57699	.49625	172.87	22.865	2.1617	.01257
#2	.07786	.57442	.49144	171.59	22.593	2.1427	.01282
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.17100	1.1628	1.1184	1.1332	.01578	.00890	.01119
SDev	.00079	.0063	.0008	.0026	.00086	.00003	.00030
%RSD	.46338	.54214	.07228	.23282	5.4386	.31041	2.7187
#1	.17156	1.1672	1.1190	1.1351	.01639	.00892	.01141
#2	.17044	1.1583	1.1179	1.1313	.01518	.00888	.01098
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.01417	.02359	.02045	.00934	.41062	1.6687	
SDev	.00185	.00127	.00146	.00138	.00700	.0083	
%RSD	13.050	5.3642	7.1370	14.757	1.7034	.49989	
#1	.01548	.02449	.02149	.00837	.41557	1.6746	
#2	.01286	.02270	.01942	.01032	.40567	1.6628	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

6681206

Analysis Report

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page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16523	--	--	--	--	--	--
SDev	51.37158	--	--	--	--	--	--
%RSD	.3109156	--	--	--	--	--	--
#1	16486	--	--	--	--	--	--
#2	16559	--	--	--	--	--	--

Analysis Report

08/18/00 12:58:12 PM

page 1

Method: METTRA Sample Name: DHM07

Operator: MTW

Run Time: 08/18/00 12:54:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00527	57.277	.12196	.48726	.00733	11.628	.00939
SDev	.00029	.099	.00067	.00046	.00005	.055	.00016
%RSD	5.4787	.17229	.54666	.09364	.70396	.47286	1.7449
#1	.00547	57.207	.12149	.48758	.00729	11.667	.00950
#2	.00506	57.347	.12243	.48693	.00736	11.589	.00927
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.06606	.43941	.39317	124.52	17.099	1.6707	.01155
SDev	.00003	.00005	.00060	.09	.050	.0019	.00084
%RSD	.04861	.01188	.15346	.07081	.29334	.11462	7.2310
#1	.06608	.43938	.39360	124.46	17.134	1.6720	.01096
#2	.06604	.43945	.39275	124.58	17.063	1.6693	.01214
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.15853	.90238	.86996	.88076	.01087	.00481	.00683
SDev	.00005	.00038	.00421	.00294	.00193	.00128	.00021
%RSD	.02916	.04205	.48410	.33329	17.736	26.639	3.1098
#1	.15850	.90265	.87294	.88283	.01224	.00390	.00668
#2	.15857	.90211	.86698	.87868	.00951	.00572	.00698
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00849	.02082	.01672	.00740	.33948	1.5934	
SDev	.00091	.00073	.00079	.00003	.00303	.0005	
%RSD	10.733	3.4862	4.7122	.39558	.89341	.03020	
#1	.00914	.02134	.01727	.00742	.34162	1.5938	
#2	.00785	.02031	.01616	.00738	.33733	1.5931	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16487	--	--	--	--	--	--
SDev	41.43618	--	--	--	--	--	--
%RSD	.2513302	--	--	--	--	--	--
#1	16457	--	--	--	--	--	--
#2	16516	--	--	--	--	--	--

Analysis Report

08/18/00 01:02:22 PM

page 1

Method: METTRA Sample Name: DHM0A Operator: MTW
 Run Time: 08/18/00 12:58:16
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01062	65.537	.22602	.60279	.01042	14.509	.01016
SDev	.00033	.007	.00063	.00248	.00006	.025	.00065
%RSD	3.1416	.01100	.27956	.41151	.54737	.16963	6.4218
#1	.01039	65.542	.22647	.60455	.01046	14.527	.00969
#2	.01086	65.532	.22557	.60104	.01038	14.492	.01062
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07889	.74182	.59456	172.90	22.164	2.4620	.01341
SDev	.00015	.00159	.00173	.01	.045	.0005	.00032
%RSD	.18988	.21484	.29179	.00662	.20081	.02010	2.3461
#1	.07878	.74069	.59579	172.89	22.195	2.4623	.01319
#2	.07899	.74294	.59333	172.91	22.132	2.4616	.01363
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.17607	1.5608	1.5006	1.5206	.02032	.01319	.01556
SDev	.00022	.0029	.0017	.0021	.00144	.00009	.00054
%RSD	.12479	.18486	.11467	.13866	7.0742	.69632	3.4690
#1	.17623	1.5588	1.4993	1.5191	.02134	.01326	.01595
#2	.17592	1.5629	1.5018	1.5221	.01930	.01313	.01518
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.02714	.03988	.03564	.00770	.47291	1.9010	
SDev	.00053	.00276	.00166	.00099	.00093	.0008	
%RSD	1.9697	6.9115	4.6590	12.859	.19632	.03962	
#1	.02676	.04183	.03681	.00700	.47357	1.9004	
#2	.02752	.03793	.03446	.00840	.47225	1.9015	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17027	--	--	--	--	--	--
SDev	38.43098	--	--	--	--	--	--
%RSD	.2257018	--	--	--	--	--	--
#1	17054	--	--	--	--	--	--
#2	17000	--	--	--	--	--	--

Analysis Report

08/18/00 01:06:32 PM

page 1

Method: METTRA Sample Name: DHM0E

Operator: MTW

Run Time: 08/18/00 13:02:26

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00238	41.929	.04615	.26898	.00475	10.648	.00151
SDev	.00026	.170	.00092	.00157	.00020	.084	.00016
%RSD	10.970	.40465	1.9829	.58283	4.2090	.78957	10.612
#1	.00257	42.049	.04680	.27009	.00461	10.707	.00140
#2	.00220	41.809	.04551	.26787	.00489	10.589	.00163
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05269	.16973	.11214	95.009	18.758	5.3216	.00094
SDev	.00008	.00068	.00043	.271	.143	.0282	.00083
%RSD	.15780	.40108	.38534	.28527	.76316	.52967	88.363
#1	.05275	.17021	.11244	95.200	18.860	5.3415	.00153
#2	.05263	.16925	.11183	94.817	18.657	5.3016	.00035
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.09150	.17557	.17147	.17283	.00284	.00311	.00302
SDev	.00083	.00437	.00127	.00230	.00000	.00043	.00029
%RSD	.90449	2.4880	.73833	1.3302	.08933	13.847	9.5383
#1	.09209	.17865	.17236	.17446	.00284	.00281	.00282
#2	.09092	.17248	.17057	.17121	.00285	.00342	.00323
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00679	.00679	.00227	-.00018	.16114	.72984	
SDev	.00430	.00269	.00323	.00157	.00051	.00284	
%RSD	63.378	39.560	142.19	849.10	.31616	.38882	
#1	-.00983	.00489	-.00001	.00092	.16150	.73184	
#2	-.00375	.00869	.00455	-.00129	.16078	.72783	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

6681212

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15964	--	--	--	--	--	--
SDev	50.98282	--	--	--	--	--	--
%RSD	.3193591	--	--	--	--	--	--
#1	15928	--	--	--	--	--	--
#2	16000	--	--	--	--	--	--

Analysis Report

08/18/00 01:10:42 PM

page 1

Method: METTRA Sample Name: DHMOF Operator: MTW
 Run Time: 08/18/00 13:06:36
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00248	44.552	.05512	.28120	.00574	11.637	.00172
SDev	.00019	1.513	.00314	.00972	.00074	.440	.00004
%RSD	7.5074	3.3962	5.6896	3.4554	12.914	3.7770	2.4034
#1	.00261	45.622	.05733	.28807	.00522	11.948	.00169
#2	.00234	43.482	.05290	.27433	.00627	11.327	.00175
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05716	.18363	.12014	103.90	21.513	6.4728	.00060
SDev	.00241	.00637	.00518	3.63	.815	.2250	.00022
%RSD	4.2124	3.4699	4.3139	3.4922	3.7874	3.4754	36.026
#1	.05886	.18814	.12380	106.47	22.090	6.6318	.00045
#2	.05545	.17912	.11647	101.34	20.937	6.3137	.00075
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10017	.19343	.18763	.18956	.00375	.00188	.00250
SDev	.00352	.00088	.00607	.00434	.00008	.00094	.00060
%RSD	3.5145	.45686	3.2343	2.2906	2.0988	50.081	24.008
#1	.10265	.19405	.19192	.19263	.00370	.00254	.00292
#2	.09768	.19280	.18334	.18649	.00381	.00121	.00208
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00470	.00590	.00237	-.00104	.17247	.79002	
SDev	.00323	.00377	.00144	.00004	.00850	.02781	
%RSD	68.664	63.951	60.840	3.8200	4.9301	3.5200	
#1	-.00698	.00857	.00339	-.00106	.17848	.80968	
#2	-.00242	.00323	.00135	-.00101	.16646	.77035	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

08/18/00 01:10:42 PM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16443	--	--	--	--	--	--
SDev	516.0816	--	--	--	--	--	--
%RSD	3.138529	--	--	--	--	--	--
#1	16078	--	--	--	--	--	--
#2	16808	--	--	--	--	--	--

Analysis Report

08/18/00 01:14:53 PM

page 1

Method: METTRA Sample Name: DHM0K

Operator: MTW

Run Time: 08/18/00 13:10:46

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01222	91.271	.14711	1.7951	.00645	24.052	.01738
SDev	.00051	.484	.00046	.0086	.00026	.106	.00012
%RSD	4.1396	.53020	.31512	.47834	4.0745	.44260	.70935
#1	.01258	90.929	.14743	1.7890	.00627	24.127	.01746
#2	.01186	91.614	.14678	1.8011	.00664	23.977	.01729
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08552	.43413	1.8369	158.13	21.411	3.2978	.01281
SDev	.00002	.00095	.0089	.30	.013	.0017	.00016
%RSD	.02606	.21837	.48500	.18794	.05898	.05047	1.2543
#1	.08554	.43480	1.8306	157.92	21.420	3.2990	.01293
#2	.08551	.43346	1.8432	158.34	21.402	3.2966	.01270
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.43429	1.9835	1.9326	1.9496	.02479	.02348	.02392
SDev	.00051	.0045	.0155	.0118	.00209	.00198	.00063
%RSD	.11635	.22907	.80014	.60666	8.4289	8.4515	2.6251
#1	.43465	1.9867	1.9436	1.9579	.02627	.02208	.02347
#2	.43393	1.9803	1.9217	1.9412	.02331	.02488	.02436
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00692	.00969	.00416	.00278	.82195	3.3670	
SDev	.00227	.00175	.00041	.00139	.00192	.0058	
%RSD	32.790	18.080	9.9241	50.146	.23364	.17248	
#1	-.00852	.01092	.00445	.00376	.82331	3.3711	
#2	-.00532	.00845	.00386	.00179	.82059	3.3629	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16159	--	--	--	--	--	--
SDev	96.34330	--	--	--	--	--	--
%RSD	.5962068	--	--	--	--	--	--
#1	16091	--	--	--	--	--	--
#2	16228	--	--	--	--	--	--

Analysis Report

08/18/00 01:19:03 PM

page 1

Method: METTRA Sample Name: DHMOM

Operator: MTW

Run Time: 08/18/00 13:14:57

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00116	87.549	.15990	.74620	.01008	13.016	.00284
SDev	.00044	.174	.00003	.00040	.00021	.034	.00002
%RSD	38.196	.19855	.01682	.05419	2.1325	.26235	.56640
#1	.00147	87.427	.15992	.74591	.00993	13.040	.00283
#2	.00085	87.672	.15988	.74649	.01024	12.992	.00285
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09122	.58555	.28691	134.98	24.217	1.5366	.00275
SDev	.00029	.00057	.00000	.04	.036	.0012	.00020
%RSD	.32075	.09823	.00126	.02662	.14807	.08054	7.2943
#1	.09101	.58514	.28692	134.95	24.242	1.5357	.00289
#2	.09142	.58595	.28691	135.00	24.191	1.5375	.00261
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.16417	.59106	.58024	.58384	.01578	.00897	.01124
SDev	.00082	.00443	.00470	.00167	.00272	.00045	.00120
%RSD	.50263	.74859	.81082	.28512	17.241	4.9908	10.718
#1	.16475	.58793	.58357	.58502	.01770	.00929	.01209
#2	.16358	.59419	.57691	.58267	.01386	.00866	.01039
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00553	.00494	.00145	.00679	.22080	1.4145	
SDev	.00432	.00164	.00035	.00302	.00204	.0012	
%RSD	78.088	33.161	23.922	44.583	.92342	.08625	
#1	-.00859	.00610	.00121	.00465	.22224	1.4137	
#2	-.00248	.00378	.00170	.00893	.21936	1.4154	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17047	--	--	--	--	--	--
SDev	36.31104	--	--	--	--	--	--
%RSD	.2130114	--	--	--	--	--	--
#1	17072	--	--	--	--	--	--
#2	17021	--	--	--	--	--	--

Analysis Report

08/18/00 01:23:13 PM

page 1

Method: METTRA Sample Name: DHMON

Operator: MTW

Run Time: 08/18/00 13:19:07

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00944	80.904	.32946	1.6683	.00623	21.283	.02342
SDev	.00074	.049	.00000	.0007	.00050	.130	.00024
%RSD	7.8156	.06054	.00108	.04187	7.9555	.60964	1.0411
#1	.00997	80.870	.32947	1.6678	.00588	21.374	.02324
#2	.00892	80.939	.32946	1.6688	.00658	21.191	.02359
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.08622	.41982	1.7040	141.86	20.259	2.8969	.01116
SDev	.00007	.00116	.0020	.35	.095	.0065	.00052
%RSD	.07718	.27539	.11551	.24538	.47067	.22431	4.6823
#1	.08618	.42064	1.7054	142.11	20.326	2.9015	.01079
#2	.08627	.41901	1.7026	141.61	20.192	2.8924	.01153
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.48302	2.1651	2.0984	2.1206	.03048	.02567	.02727
SDev	.00237	.0098	.0211	.0173	.00077	.00030	.00006
%RSD	.49151	.45227	1.0055	.81739	2.5426	1.1628	.21634
#1	.48470	2.1720	2.1133	2.1329	.03103	.02546	.02731
#2	.48134	2.1581	2.0835	2.1083	.02993	.02588	.02723
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00050	.01104	.00753	.00422	.90903	4.9177	
SDev	.00121	.00054	.00076	.00323	.00477	.0164	
%RSD	242.85	4.8634	10.099	76.597	.52466	.33267	
#1	.00135	.01142	.00807	.00193	.91240	4.9293	
#2	-.00036	.01066	.00699	.00650	.90566	4.9062	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16195	--	--	--	--	--	--
SDev	83.68650	--	--	--	--	--	--
%RSD	.5167516	--	--	--	--	--	--
#1	16136	--	--	--	--	--	--
#2	16254	--	--	--	--	--	--

Analysis Report

08/18/00 01:27:23 PM

page 1

Method: METTRA Sample Name: DHMOR

Operator: MTW

Run Time: 08/18/00 13:23:17

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01143	90.928	.24304	.76546	.01309	14.915	.00839
SDev	.00007	.013	.00158	.00094	.00009	.079	.00010
%RSD	.58117	.01459	.65057	.12236	.65170	.52913	1.1635
#1	.01138	90.919	.24416	.76612	.01303	14.971	.00832
#2	.01148	90.937	.24192	.76480	.01315	14.859	.00846
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09327	.91108	.64665	195.68	28.022	1.7740	.01806
SDev	.00009	.00001	.00195	.06	.129	.0036	.00050
%RSD	.09646	.00062	.30159	.03169	.46202	.20449	2.7608
#1	.09334	.91108	.64803	195.72	28.114	1.7766	.01771
#2	.09321	.91108	.64527	195.64	27.931	1.7715	.01841
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.22008	1.9324	1.8534	1.8797	.02353	.01257	.01622
SDev	.00099	.0025	.0101	.0059	.00144	.00017	.00060
%RSD	.44933	.12934	.54471	.31396	6.1378	1.3769	3.6763
#1	.22078	1.9307	1.8605	1.8839	.02455	.01270	.01664
#2	.21938	1.9342	1.8463	1.8755	.02251	.01245	.01580
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V__	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.03086	.03831	.03583	.01185	.61772	2.0174	
SDev	.00106	.00186	.00159	.00106	.00330	.0039	
%RSD	3.4283	4.8472	4.4401	8.9236	.53405	.19475	
#1	.03012	.03699	.03470	.01260	.62005	2.0202	
#2	.03161	.03962	.03695	.01110	.61538	2.0147	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

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Analysis Report

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page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17712	--	--	--	--	--	--
SDev	36.06245	--	--	--	--	--	--
%RSD	.2036017	--	--	--	--	--	--
#1	17687	--	--	--	--	--	--
#2	17738	--	--	--	--	--	--

Analysis Report

08/18/00 01:31:34 PM

page 1

Method: METTRA Sample Name: CCV3-8

Operator: MTW

Run Time: 08/18/00 13:27:27

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0525	23.791	.51339	1.9381	2.0386	50.979	.49867
SDev	.0070	.087	.00110	.0081	.0171	.458	.00277
%RSD	.66890	.36412	.21437	.41853	.83811	.89833	.55582
#1	1.0574	23.852	.51417	1.9438	2.0507	51.302	.50063
#2	1.0475	23.729	.51261	1.9324	2.0265	50.655	.49671
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0105	2.0191	1.9246	25.124	49.184	1.9973	2.0180
SDev	.0114	.0106	.0113	.078	.383	.0131	.0008
%RSD	.56731	.52316	.58667	.31061	.77926	.65476	.03858
#1	2.0185	2.0266	1.9326	25.180	49.455	2.0065	2.0186
#2	2.0024	2.0117	1.9166	25.069	48.913	1.9880	2.0175
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9752	.52628	.51837	.52100	.52688	.51156	.51666
SDev	.0151	.00433	.00607	.00549	.01175	.00510	.00732
%RSD	.76266	.82311	1.1705	1.0537	2.2302	.99756	1.4162
#1	1.9859	.52935	.52266	.52489	.53518	.51516	.52183
#2	1.9646	.52322	.51408	.51712	.51857	.50795	.51148
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.51087	.52366	.51940	1.0433	2.0152	2.0214	
SDev	.00468	.01136	.00913	.0037	.0173	.0111	
%RSD	.91525	2.1693	1.7586	.35947	.85742	.54898	
#1	.51417	.53169	.52586	1.0460	2.0274	2.0292	
#2	.50756	.51562	.51294	1.0407	2.0030	2.0135	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

8681224

Analysis Report

08/18/00 01:31:34 PM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16057	--	--	--	--	--	--
SDev	63.49805	--	--	--	--	--	--
%RSD	.3954515	--	--	--	--	--	--
#1	16012	--	--	--	--	--	--
#2	16102	--	--	--	--	--	--

Analysis Report

08/18/00 01:35:44 PM

page 1

Method: METTRA Sample Name: CCB8

Operator: MTW

Run Time: 08/18/00 13:31:38

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00022	-.00941	.00002	.00047	.00175	.01542	.00011
SDev	.00013	.00028	.00031	.00039	.00032	.00581	.00005
%RSD	58.105	3.0113	2058.6	82.012	18.599	37.702	42.294
#1	-.00032	-.00961	-.00021	.00020	.00152	.01131	.00008
#2	-.00013	-.00921	.00024	.00075	.00198	.01953	.00015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00025	.00056	-.00066	.02278	.01334	.00066	.00670
SDev	.00038	.00014	.00054	.00533	.00741	.00034	.00230
%RSD	152.09	24.764	81.460	23.388	55.546	50.560	34.370
#1	-.00002	.00046	-.00104	.01902	.00810	.00043	.00833
#2	.00051	.00066	-.00028	.02655	.01858	.00090	.00507
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00020	-.00154	.00221	.00096	.00042	.00148	.00113
SDev	.00059	.00099	.00156	.00137	.00052	.00283	.00172
%RSD	291.04	64.144	70.729	142.64	124.03	191.01	152.27
#1	.00022	-.00224	.00110	-.00001	.00005	.00349	.00234
#2	-.00062	-.00084	.00332	.00193	.00078	-.00052	-.00009
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00097	-.00102	-.00036	.00138	-.00122	.00137	
SDev	.00106	.00056	.00073	.00164	.00020	.00030	
%RSD	109.60	55.342	204.85	118.70	16.452	21.497	
#1	.00022	-.00142	-.00087	.00022	-.00136	.00116	
#2	.00172	-.00062	.00016	.00255	-.00107	.00158	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16058	--	--	--	--	--	--
SDev	.6007646	--	--	--	--	--	--
%RSD	.0037413	--	--	--	--	--	--
#1	16057	--	--	--	--	--	--
#2	16058	--	--	--	--	--	--

Analysis Report

08/18/00 01:42:13 PM

6681227

page 1

Method: METTRA Sample Name: DJ0RCB

Operator: MTW

Run Time: 08/18/00 13:38:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00037	-.01820	-.00006	.00017	.00076	.03133	.00015
SDev	.00042	.00322	.00111	.00003	.00006	.00053	.00013
%RSD	111.80	17.677	1993.6	17.829	7.9747	1.7020	86.569
#1	.00008	-.01593	-.00084	.00015	.00080	.03095	.00006
#2	.00067	-.02048	.00073	.00020	.00071	.03171	.00024
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00005	.00091	.00442	.02835	.00702	.00034	.00170
SDev	.00006	.00073	.00023	.00444	.00262	.00002	.00062
%RSD	111.09	80.095	5.1584	15.672	37.320	5.8519	36.749
#1	-.00001	.00040	.00426	.02521	.00517	.00032	.00126
#2	-.00010	.00143	.00458	.03149	.00888	.00035	.00214
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00041	.00159	.00085	.00110	-.00263	.00028	-.00069
SDev	.00060	.00044	.00081	.00039	.00163	.00066	.00098
%RSD	146.36	27.928	94.985	35.666	61.858	235.77	142.77
#1	.00083	.00127	.00142	.00137	-.00378	-.00019	-.00139
#2	-.00001	.00190	.00028	.00082	-.00148	.00075	.00001
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00153	.00032	-.00030	.00068	-.00091	.00215	
SDev	.00261	.00030	.00107	.00356	.00021	.00002	
%RSD	170.97	95.649	360.63	524.17	23.047	.93664	
#1	-.00337	.00010	-.00106	-.00184	-.00105	.00217	
#2	.00032	.00053	.00046	.00320	-.00076	.00214	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15637	--	--	--	--	--	--
SDev	61.05909	--	--	--	--	--	--
%RSD	.3904664	--	--	--	--	--	--
#1	15681	--	--	--	--	--	--
#2	15594	--	--	--	--	--	--

Analysis Report

08/18/00 01:46:23 PM

page 1

Method: METTRA Sample Name: DJ0RCC

Operator: MTW

Run Time: 08/18/00 13:42:17

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04749	1.7131	1.9709	1.8634	.04976	L.09570	.04949
SDev	.00021	.0080	.0038	.0035	.00011	.00459	.00009
%RSD	.44388	.46639	.19252	.18679	.21204	4.7934	.17208
#1	.04764	1.7187	1.9736	1.8659	.04984	L.09246	.04955
#2	.04734	1.7074	1.9682	1.8609	.04969	L.09895	.04943
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49846	.19977	.22888	.99393	L.01683	.48513	L.00146
SDev	.00105	.00040	.00088	.01124	.00330	.00004	.00092
%RSD	.20990	.19764	.38572	1.1311	19.588	.00805	62.598
#1	.49772	.19949	.22951	1.0019	L.01916	.48516	L.00211
#2	.49920	.20005	.22826	.98599	L.01450	.48510	L.00082
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Low
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.48612	.50209	.49212	.49544	-.00146	-.00003	L-.00051
SDev	.00391	.00382	.00110	.00200	.00066	.00053	.00013
%RSD	.80381	.76181	.22277	.40468	44.855	1651.7	26.315
#1	.48888	.50479	.49289	.49686	-.00193	.00034	L-.00041
#2	.48336	.49938	.49134	.49402	-.00100	-.00041	L-.00060
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Low
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V__	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.9160	1.9572	1.9435	1.9731	.48864	.50814	
SDev	.0027	.0115	.0086	.0020	.00150	.00196	
%RSD	.13935	.58781	.44058	.10113	.30639	.38593	
#1	1.9179	1.9653	1.9495	1.9745	.48970	.50953	
#2	1.9141	1.9490	1.9374	1.9717	.48758	.50675	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			2.4000	2.4000	.60000	.60000	
Low			1.6000	1.6000	.40000	.40000	

6681230

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15722	--	--	--	--	--	--
SDev	28.42583	--	--	--	--	--	--
%RSD	.1808029	--	--	--	--	--	--
#1	15702	--	--	--	--	--	--
#2	15742	--	--	--	--	--	--

Analysis Report

08/18/00 01:50:38 PM

page 1

Method: METTRA Sample Name: DHX6T

Operator: MTW

Run Time: 08/18/00 13:46:32

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00023	.08396	.00144	.04181	.00097	15.364	-0.00011
SDev	.00065	.00230	.00053	.00007	.00008	.106	.00013
%RSD	283.56	2.7377	36.991	.16163	8.3256	.69308	123.48
#1	-0.00069	.08234	.00182	.04186	.00103	15.439	-0.00001
#2	.00023	.08559	.00106	.04177	.00092	15.289	-0.00020
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-0.01000	-0.20000	-0.01000	-0.20000	-0.00500	-5.0000	-0.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	.00076	.00276	13.036	3.0592	.10652	.00102
SDev	.00003	.00034	.00018	.007	.0176	.00043	.00031
%RSD	155.37	44.932	6.3724	.05364	.57648	.40645	30.040
#1	-0.00000	.00052	.00264	13.041	3.0717	.10683	.00081
#2	.00003	.00100	.00288	13.031	3.0467	.10622	.00124
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-0.05000	-0.01000	-0.02500	-0.10000	-5.0000	-0.01500	-0.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00101	-0.00076	.00260	.00148	-0.00068	.00076	.00028
SDev	.00068	.00055	.00059	.00058	.00129	.00113	.00118
%RSD	66.956	72.590	22.808	39.227	187.92	148.48	421.74
#1	.00053	-0.00116	.00218	.00107	-0.00159	-0.00004	-0.00056
#2	.00149	-0.00037	.00302	.00189	.00023	.00156	.00112
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-0.04000			-0.00300			-0.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-0.00362	.00275	.00063	.00014	-0.00122	.02463	
SDev	.00089	.00328	.00189	.00105	.00019	.00020	
%RSD	24.547	119.26	301.04	753.69	15.745	.80709	
#1	-0.00425	.00507	.00197	.00088	-0.00136	.02477	
#2	-0.00299	.00043	-0.00071	-0.00060	-0.00108	.02449	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-0.00500	-0.01000	-0.05000	-0.02000	

6681232

Analysis Report

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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15781	--	--	--	--	--	--
SDev	29.23859	--	--	--	--	--	--
%RSD	.1852822	--	--	--	--	--	--
#1	15801	--	--	--	--	--	--
#2	15760	--	--	--	--	--	--

Analysis Report

08/18/00 01:54:49 PM

6681233
page 1

Method: METTRA Sample Name: DHX6TP5 Operator: MTW
 Run Time: 08/18/00 13:50:42
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00037	.00613	-.00038	.00844	.00103	3.0528	.00016
SDev	.00008	.00270	.00117	.00026	.00010	.0126	.00001
%RSD	20.610	44.090	310.04	3.0640	9.9300	.41339	2.7928
#1	.00042	.00422	.00045	.00826	.00096	3.0617	.00017
#2	.00032	.00804	-.00120	.00863	.00110	3.0439	.00016
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00037	.00054	.00013	2.5824	.60487	.02124	.00089
SDev	.00003	.00022	.00017	.0043	.00213	.00011	.00001
%RSD	7.7452	41.750	132.17	.16616	.35285	.50915	.55948
#1	.00039	.00038	.00025	2.5793	.60638	.02117	.00089
#2	.00035	.00070	.00001	2.5854	.60337	.02132	.00090
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00010	-.00049	.00092	.00045	-.00226	.00089	-.00016
SDev	.00113	.00238	.00019	.00067	.00003	.00033	.00023
%RSD	1149.3	486.87	21.003	148.14	1.5440	36.599	142.35
#1	.00070	.00119	.00078	.00092	-.00224	.00112	.00000
#2	-.00089	-.00217	.00105	-.00002	-.00229	.00066	-.00032
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00047	-.00065	-.00028	.00099	-.00102	.00550	
SDev	.00019	.00150	.00107	.00197	.00000	.00012	
%RSD	40.907	229.48	380.25	198.18	.14664	2.2037	
#1	.00061	.00041	.00047	.00238	-.00102	.00542	
#2	.00033	-.00172	-.00103	-.00040	-.00102	.00559	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

6681234

Analysis Report

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page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15926	--	--	--	--	--	--
SDev	30.01682	--	--	--	--	--	--
%RSD	.1884801	--	--	--	--	--	--
#1	15947	--	--	--	--	--	--
#2	15904	--	--	--	--	--	--

Analysis Report

08/18/00 01:58:59 PM

page 1

Method: METTRA Sample Name: DHX6TS

Operator: MTW

Run Time: 08/18/00 13:54:53

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04776	1.9243	1.9365	1.9109	.04895	14.819	.04797
SDev	.00016	.0042	.0029	.0070	.00024	.094	.00013
%RSD	.33343	.21776	.14981	.36853	.49396	.63733	.26286
#1	.04787	1.9272	1.9386	1.9159	.04912	14.886	.04806
#2	.04765	1.9213	1.9345	1.9060	.04878	14.752	.04788
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.48968	.19690	.23964	13.574	2.9815	.58280	.00063
SDev	.00134	.00031	.00105	.008	.0124	.00231	.00030
%RSD	.27343	.15844	.43893	.06219	.41713	.39552	48.041
#1	.49063	.19712	.24038	13.580	2.9903	.58443	.00041
#2	.48873	.19668	.23889	13.568	2.9727	.58117	.00084
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.48084	.50460	.49041	.49513	-.00238	-.00006	-.00083
SDev	.00275	.00029	.00207	.00148	.00052	.00082	.00037
%RSD	.57142	.05687	.42246	.29839	21.926	1365.1	44.718
#1	.48278	.50481	.49187	.49618	-.00201	-.00064	-.00110
#2	.47890	.50440	.48894	.49409	-.00275	.00052	-.00057
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.8958	1.9357	1.9224	2.0356	.48362	.52433	
SDev	.0001	.0118	.0079	.0027	.00207	.00187	
%RSD	.00582	.60823	.41040	.13093	.42803	.35735	
#1	1.8959	1.9440	1.9280	2.0375	.48509	.52566	
#2	1.8958	1.9274	1.9169	2.0337	.48216	.52301	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15571	--	--	--	--	--	--
SDev	33.87069	--	--	--	--	--	--
%RSD	.2175186	--	--	--	--	--	--
#1	15547	--	--	--	--	--	--
#2	15595	--	--	--	--	--	--

Analysis Report

08/18/00 02:03:09 PM

page 1

Method: METTRA Sample Name: DHX6TD

Operator: MTW

Run Time: 08/18/00 13:59:03

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04682	1.9023	1.9204	1.8829	.04903	15.095	.04752
SDev	.00098	.0234	.0131	.0166	.00041	.214	.00071
%RSD	2.0881	1.2279	.68012	.88387	.84248	1.4207	1.4944
#1	.04751	1.9188	1.9296	1.8946	.04932	15.246	.04802
#2	.04613	1.8857	1.9111	1.8711	.04874	14.943	.04702
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.48549	.19444	.23531	13.790	3.0226	.57999	.00017
SDev	.00371	.00172	.00317	.156	.0394	.00603	.00016
%RSD	.76469	.88364	1.3471	1.1322	1.3034	1.0398	98.350
#1	.48811	.19566	.23755	13.900	3.0505	.58425	.00028
#2	.48286	.19323	.23307	13.680	2.9947	.57572	.00005
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.47751	.50194	.48637	.49155	-.00223	-.00039	-.00100
SDev	.00488	.00676	.01033	.00914	.00011	.00031	.00017
%RSD	1.0216	1.3470	2.1232	1.8593	4.9204	79.889	17.242
#1	.48096	.50672	.49367	.49801	-.00215	-.00061	-.00113
#2	.47406	.49716	.47906	.48509	-.00230	-.00017	-.00088
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.8677	1.9148	1.8991	2.0141	.47775	.51867	
SDev	.0128	.0381	.0297	.0198	.00585	.00539	
%RSD	.68497	1.9921	1.5640	.98358	1.2234	1.0401	
#1	1.8767	1.9418	1.9201	2.0281	.48188	.52248	
#2	1.8586	1.8879	1.8781	2.0001	.47361	.51486	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

6681238

Analysis Report

08/18/00 02:03:09 PM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15791	--	--	--	--	--	--
SDev	112.1828	--	--	--	--	--	--
%RSD	.7104278	--	--	--	--	--	--
#1	15712	--	--	--	--	--	--
#2	15870	--	--	--	--	--	--

Analysis Report

08/18/00 02:07:19 PM

6681239
page 1

Method: METTRA Sample Name: DHX72

Operator: MTW

Run Time: 08/18/00 14:03:13

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00008	.03909	.00154	.01820	.00086	6.2544	.00003
SDev	.00099	.00499	.00155	.00017	.00010	.0356	.00010
%RSD	1288.5	12.761	100.92	.91194	11.015	.56849	281.63
#1	-.00078	.04261	.00264	.01831	.00093	6.2796	.00010
#2	.00062	.03556	.00044	.01808	.00079	6.2293	-.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00044	.00040	.00003	5.3576	2.8825	.03666	.00095
SDev	.00073	.00059	.00027	.0038	.0106	.00003	.00082
%RSD	167.39	148.52	1061.5	.07167	.36815	.07386	86.436
#1	-.00095	-.00002	-.00017	5.3549	2.8900	.03664	.00154
#2	.00008	.00082	.00022	5.3604	2.8750	.03668	.00037
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00085	.00161	.00199	.00186	-.00083	.00193	.00101
SDev	.00073	.00492	.00215	.00020	.00326	.00050	.00075
%RSD	86.416	305.39	107.83	10.953	394.68	26.043	74.232
#1	.00033	-.00187	.00351	.00172	.00148	.00157	.00154
#2	.00137	.00509	.00047	.00201	-.00313	.00229	.00048
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00105	.00318	.00177	.00459	-.00062	.01218	
SDev	.00255	.00003	.00087	.00546	.00040	.00009	
%RSD	242.39	1.0279	49.108	118.83	64.863	.70220	
#1	-.00285	.00316	.00116	.00845	-.00090	.01212	
#2	.00075	.00321	.00239	.00073	-.00034	.01224	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			10.000	10.000	50.000	5.0000	
Low			-.00500	-.01000	-.05000	-.02000	

6681240

Analysis Report

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page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15870	--	--	--	--	--	--
SDev	11.63204	--	--	--	--	--	--
%RSD	.0732952	--	--	--	--	--	--
#1	15878	--	--	--	--	--	--
#2	15862	--	--	--	--	--	--

Analysis Report

08/18/00 02:11:30 PM

page 1

Method: METTRA Sample Name: CCV3-9

Operator: MTW

Run Time: 08/18/00 14:07:23

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0516	23.788	.51629	1.9464	2.0514	51.215	.50079
SDev	.0000	.032	.00194	.0102	.0088	.133	.00074
%RSD	.00155	.13525	.37516	.52261	.42956	.25957	.14858
#1	1.0516	23.811	.51766	1.9536	2.0577	51.309	.50026
#2	1.0516	23.765	.51492	1.9392	2.0452	51.121	.50131
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0125	2.0217	1.9273	25.215	49.458	2.0079	2.0171
SDev	.0073	.0044	.0097	.019	.235	.0008	.0203
%RSD	.36078	.21809	.50229	.07467	.47416	.04052	1.0078
#1	2.0074	2.0185	1.9341	25.228	49.624	2.0085	2.0027
#2	2.0176	2.0248	1.9204	25.202	49.292	2.0074	2.0314
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9867	.52799	.51494	.51928	.52452	.51409	.51756
SDev	.0042	.00046	.00049	.00048	.00903	.00625	.00116
%RSD	.21372	.08612	.09498	.09197	1.7211	1.2153	.22432
#1	1.9897	.52766	.51459	.51895	.53091	.50967	.51674
#2	1.9837	.52831	.51529	.51962	.51814	.51850	.51838
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.51477	.52350	.52059	1.0566	2.0246	2.0258	
SDev	.00165	.00121	.00026	.0019	.0076	.0016	
%RSD	.31983	.23126	.04981	.17910	.37433	.07675	
#1	.51361	.52436	.52078	1.0553	2.0299	2.0269	
#2	.51593	.52264	.52041	1.0580	2.0192	2.0247	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

6681242

Analysis Report

08/18/00 02:11:30 PM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15938	--	--	--	--	--	--
SDev	93.09088	--	--	--	--	--	--
%RSD	.5840896	--	--	--	--	--	--
#1	16004	--	--	--	--	--	--
#2	15872	--	--	--	--	--	--

Analysis Report

08/18/00 02:15:40 PM

page 1

Method: METTRA Sample Name: CCB9

Operator: MTW

Run Time: 08/18/00 14:11:34

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00027	-.01162	.00038	.00059	.00131	.01955	.00017
SDev	.00070	.00752	.00103	.00048	.00033	.01225	.00013
%RSD	254.53	64.702	275.16	80.988	25.570	62.654	74.620
#1	-.00022	-.00630	.00111	.00025	.00107	.01089	.00008
#2	.00077	-.01693	-.00035	.00093	.00154	.02821	.00026
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00039	.00054	-.00016	.00060	.01244	.00057	.00669
SDev	.00114	.00099	.00087	.01392	.01335	.00049	.00064
%RSD	290.54	182.07	556.20	2328.5	107.30	87.326	9.6181
#1	-.00041	-.00016	-.00077	-.00924	.00300	.00022	.00714
#2	.00119	.00124	.00046	.01044	.02189	.00092	.00623
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00052	.00104	.00085	.00091	-.00124	.00179	.00078
SDev	.00147	.00202	.00036	.00044	.00126	.00157	.00063
%RSD	282.13	194.67	42.077	47.722	101.38	87.679	80.439
#1	-.00052	-.00039	.00110	.00060	-.00035	.00068	.00034
#2	.00157	.00247	.00060	.00122	-.00213	.00291	.00123
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.00173	-.00132	-.00031	.00356	-.00107	.00109	
SDev	.00311	.00085	.00047	.00283	.00081	.00037	
%RSD	180.10	64.334	152.29	79.537	75.490	33.784	
#1	-.00047	-.00072	-.00064	.00156	-.00164	.00083	
#2	.00392	-.00192	.00002	.00556	-.00050	.00135	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

6681244

Analysis Report

08/18/00 02:15:40 PM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15882	--	--	--	--	--	--
SDev	61.69507	--	--	--	--	--	--
%RSD	.3884621	--	--	--	--	--	--
#1	15926	--	--	--	--	--	--
#2	15838	--	--	--	--	--	--

STL-Pittsburgh Atomic Absorption Data for Mercury

Instrument: PS200HG

Analyst Name: William A. HyleDate of Analysis: 8-16-00File ID: 0816HGAMatrix: WATER

Lot Number/SDG

Method

<u>COH110155</u>	<u>TCLP</u>	<u>7470A</u>
<u>COH110157</u>	↓	
<u>COH120157</u>	↓	
<u>COH090213</u>	<u>TCLP</u>	
<u>COH140112</u>		
<u>COH150146</u>		
<u>COH090143</u>		↓

6681246

William A. Hoyle 8-16-00

09:35:17 16 Aug 2000

Folder: OB16HGA
Protocol: HGMET

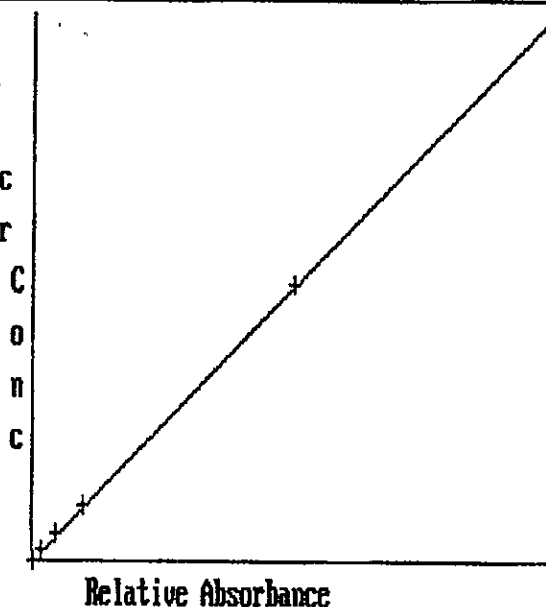
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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 0	09:35:17 16 Aug 2000 HG			
Hg	.000	ppb	5016					
*** Standard: 2 Rep: 1				Seq: 1	09:36:47 16 Aug 2000 HG			
Hg	.200	ppb	24706	0057-026-9				
*** Standard: 3 Rep: 1				Seq: 2	09:38:35 16 Aug 2000 HG			
Hg	.500	ppb	56433	0057-026-10				
*** Standard: 4 Rep: 1				Seq: 3	09:41:35 16 Aug 2000 HG			
Hg	1.00	ppb	114962	0057-026-11				
*** Standard: 5 Rep: 1				Seq: 4	09:43:04 16 Aug 2000 HG			
Hg	5.00	ppb	585798	0057-026-12				
*** Standard: 6 Rep: 1				Seq: 5	09:44:50 16 Aug 2000 HG			
Hg	10.0	ppb	1169770	0057-026-13				

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
 RunFold: 0016HGA Seq: 6 Batch:
 Prnt: R/T On Pump: On
 Rev: 4.2 09:45:07 16 Aug 2000 Xmit: Off Gas: 0.30 LPM
 State: Idle User: WAH A/S: On

CALIBRATION: Line proto: HGMET

	Hg	Accepted
	Conc. Calc. Dev. ->linear	
S1	.000 .036 .036 Quadratic	
S2	.200 .205 .005 Wtdlinear	
S3	.500 .476 -.024	
S4	1.00 .977 -.023 Accept	
S5	5.00 5.00 .005	
S6	10.0 10.0 .001	
A	.0000000 r .999905	
B	0.55487e-6 C -6.53185e-3	



	Mean	SD	%RSD
S1	5016	5016	
S2	24706	24706	
S3	56433	56433	
S4	114962	114962	
S5	585798	585798	
S6	1169770	1169770	

New cal coefficients stored

6081248

William a Hoyle 8-16-00

09:47:17 16 Aug 2000

Folder: 0816HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: ICV5-1				Seq: 6	09:47:17 16 Aug 2000 HG			
Hg	2.57	ppb	301087	0057-026-14				
*** Sample ID: ICB1				Seq: 7	09:49:26 16 Aug 2000 HG			
Hg	.032	ppb	4506					
*** Sample ID: CCV5-1				Seq: 8	09:50:54 16 Aug 2000 HG			
Hg	5.07	ppb	593187	0057-026-15				
*** Sample ID: CCB1				Seq: 9	09:52:32 16 Aug 2000 HG			
Hg	.015	ppb	2505					
*** Sample ID: DHVJOBT				Seq: 10	09:54:28 16 Aug 2000 HG			
Hg	.032	ppb	4542					
*** Sample ID: DHVJOCT				Seq: 11	09:55:54 16 Aug 2000 HG			
Hg	2.54	ppb	298154	0057-026-16				
*** Sample ID: DHVFXBT				Seq: 12	09:57:19 16 Aug 2000 HG			
Hg	.028	ppb	4009					
*** Sample ID: DHPDWT				Seq: 13	09:59:10 16 Aug 2000 HG			
Hg	.118	ppb	14549					
*** Sample ID: DHPDWST				Seq: 14	10:00:57 16 Aug 2000 HG			
Hg	5.19	ppb	606970	SP.REC. 101%				
*** Sample ID: DHPDWDT				Seq: 15	10:02:24 16 Aug 2000 HG			
Hg	5.19	ppb	607211	SP.REC. 101%				
*** Sample ID: DHPE3T				Seq: 16	10:04:14 16 Aug 2000 HG			
Hg	.853	ppb	100442					
*** Sample ID: DHPE4T				Seq: 17	10:05:49 16 Aug 2000 HG			
Hg	.306	ppb	36577					

SP.REC.
101%SP.REC.
101%

10:07:49 16 Aug 2000

Folder: 0816HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DHPE6T				Seq: 18		10:07:49 16 Aug 2000	HG	
Hg	.045	ppb	6022					
*** Sample ID: DHPE7T				Seq: 19		10:09:13 16 Aug 2000	HG	
Hg	.085	ppb	10702					
*** Sample ID: CCV5-2				Seq: 20		10:10:59 16 Aug 2000	HG	
Hg	5.12	ppb	599708					
*** Sample ID: CCB2				Seq: 21		10:12:36 16 Aug 2000	HG	
Hg	.028	ppb	4018					
*** Sample ID: DHPE8T				Seq: 22		10:14:02 16 Aug 2000	HG	
Hg	.035	ppb	4845					
*** Sample ID: DHPE9T				Seq: 23		10:15:53 16 Aug 2000	HG	
Hg	.036	ppb	4980					
*** Sample ID: DHPEAT				Seq: 24		10:18:24 16 Aug 2000	HG	
Hg	.076	ppb	9599					
*** Sample ID: DHPEDT				Seq: 25		10:20:03 16 Aug 2000	HG	
Hg	.058	ppb	7490					
*** Sample ID: DHPEET				Seq: 26		10:22:01 16 Aug 2000	HG	
Hg	.058	ppb	7509					
*** Sample ID: DHPF2T				Seq: 27		10:23:41 16 Aug 2000	HG	
Hg	.049	ppb	6513					
*** Sample ID: DHQXNT				Seq: 28		10:25:10 16 Aug 2000	HG	
Hg	.069	ppb	8781					
*** Sample ID: DHQXQT				Seq: 29		10:26:37 16 Aug 2000	HG	
Hg	.057	ppb	7390					

6681250

10:28:37 16 Aug 2000

Folder: 0816HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DHQXRT				Seq: 30		10:28:37 16 Aug 2000	HG	
Hg	.034	ppb	4764					
*** Sample ID: DHVGQBT				Seq: 31		10:30:02 16 Aug 2000	HG	
Hg	.033	ppb	4669					
*** Sample ID: CCV5-3				Seq: 32		10:31:41 16 Aug 2000	HG	
Hg	5.02	ppb	587629					
*** Sample ID: CCB3				Seq: 33		10:33:26 16 Aug 2000	HG	
Hg	.030	ppb	4318					
*** Sample ID: DHVGQCT				Seq: 34		10:35:01 16 Aug 2000	HG	
Hg	2.64	ppb	308939	0057-027-1				
*** Sample ID: DHVOKBT				Seq: 35		10:36:49 16 Aug 2000	HG	
Hg	.057	ppb	7398					
*** Sample ID: DHKQ4T				Seq: 36		10:38:46 16 Aug 2000	HG	
Hg	.019	ppb	2991					
*** Sample ID: DHKQ4ST				Seq: 37		10:40:14 16 Aug 2000	HG	
Hg	1.59	ppb	186352					SP. REC. 33%
*** Sample ID: DHKQ4DT				Seq: 38		10:41:40 16 Aug 2000	HG	
Hg	1.72	ppb	202014					SP. REC. 34%
*** Sample ID: DHVGVB				Seq: 39		10:43:07 16 Aug 2000	HG	
Hg	.030	ppb	4258					
*** Sample ID: DHVGVCY				Seq: 40		10:44:52 16 Aug 2000	HG	
Hg	2.49	ppb	292079	0057-027-2				
*** Sample ID: DHRQD				Seq: 41		10:46:33 16 Aug 2000	HG	
Hg	.080	ppb	10091					

10:49:02 16 Aug 2000

Folder: 0816HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DHRQN				Seq: 42		10:49:02 16 Aug 2000 HG		
Hg	.056	ppb	7270					
*** Sample ID: DHRQQ				Seq: 43		10:50:59 16 Aug 2000 HG		
Hg	.053	ppb	6926					
*** Sample ID: CCV5-4				Seq: 44		10:52:35 16 Aug 2000 HG		
Hg	4.97	ppb	581845					
*** Sample ID: CCB4				Seq: 45		10:54:03 16 Aug 2000 HG		
Hg	.029	ppb	4171					
*** Sample ID: DHRQT				Seq: 46		10:56:09 16 Aug 2000 HG		
Hg	.435	ppb	51622					
*** Sample ID: DHRQTS				Seq: 47		10:57:39 16 Aug 2000 HG		
Hg	1.52	ppb	178192					SP.REC. 105%
*** Sample ID: DHRQTD				Seq: 48		10:59:06 16 Aug 2000 HG		
Hg	1.47	ppb	172364					SP.REC. 104%
*** Sample ID: DHRQX				Seq: 49		11:00:35 16 Aug 2000 HG		
Hg	.230	ppb	27629					
*** Sample ID: DHWJ2B				Seq: 50		11:02:16 16 Aug 2000 HG		
Hg	.063	ppb	8140					
*** Sample ID: DHWJ2C				Seq: 51		11:03:43 16 Aug 2000 HG		
Hg	2.41	ppb	283013		0057-027-3			
*** Sample ID: DHV7M				Seq: 52		11:05:12 16 Aug 2000 HG		
Hg	.458	ppb	54346					
*** Sample ID: DHV7MS				Seq: 53		11:07:22 16 Aug 2000 HG		
Hg	1.48	ppb	173580					SP.REC. 103%

6681252

11:09:27 16 Aug 2000

Folder: 0816HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DHV7MD				Seq: 54	11:09:27 16 Aug 2000	HG		
Hg	1.50	ppb	175941					
*** Sample ID: DHWJDB				Seq: 55	11:11:03 16 Aug 2000	HG		
Hg	.027	ppb	3864					
*** Sample ID: CCV5-5				Seq: 56	11:13:11 16 Aug 2000	HG		
Hg	4.93	ppb	577066					
*** Sample ID: CCB5				Seq: 57	11:14:39 16 Aug 2000	HG		
Hg	.045	ppb	6023					
*** Sample ID: DHWJDC				Seq: 58	11:16:07 16 Aug 2000	HG		
Hg	2.44	ppb	286246					
*** Sample ID: DHK36				Seq: 59	11:19:30 16 Aug 2000	HG		
Hg	14.2	H ppb	1664204					
*** Sample ID: DHK36S				Seq: 60	11:21:29 16 Aug 2000	HG		
Hg	14.2	H ppb	1660186					
*** Sample ID: DHK36D				Seq: 61	11:23:17 16 Aug 2000	HG		
Hg	13.5	H ppb	1573745					
*** Sample ID: CCV5-6				Seq: 62	11:24:42 16 Aug 2000	HG		
Hg	4.83	ppb	565056					
*** Sample ID: CCB6				Seq: 63	11:26:19 16 Aug 2000	HG		
Hg	.013	ppb	2327					

SP. REC.
104%

0057-027-4

VOID
OVERRANGE
WILL RERUN
FURTHER IN
RWD
WAH
8-16-00

11:31:07 16 Aug 2000

Folder: 0816HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DHK36/2					Seq: 64	11:31:07 16 Aug 2000 HG		
Hg	7.46	ppb	872226					
*** Sample ID: DHK36S/2					Seq: 65	11:32:45 16 Aug 2000 HG		
Hg	7.19	ppb	840652			NC: SAMPLE CONC. WAS 74 % SPIKE ADDED	WAH 8-16-00	
*** Sample ID: DHK36D/2					Seq: 66	11:34:14 16 Aug 2000 HG		
Hg	6.76	ppb	791314			NC: SAMPLE CONC. WAS 74 % SPIKE ADDED	WAH 8-16-00	
*** Sample ID: CCV5-6					Seq: 67	11:36:35 16 Aug 2000 HG		
Hg	4.92	ppb	576161					
*** Sample ID: CCB6					Seq: 68	11:39:07 16 Aug 2000 HG		
Hg	.056	ppb	7257					

END OF ANALYSIS
WAH
8-16-00

6681254

William a Hoyle 8-16-00

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS		
RunFold: 0816HGA	Seq: 0	Batch:	
	Prnt: R/T On	Pump: Off	
	Rev: 4.2	08:43:58 16 Aug 2000	Xmit: Off Gas: LPM
State: Idle		User: WAH	A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1

cup ID	Extended id	Weight	Volume	Macro	check macros
1	ICV5-1	1.0000	1.0000		
2	ICB1	1.0000	1.0000		
3	CCV5-1	1.0000	1.0000		
4	CCB1	1.0000	1.0000		
5	DHVJOBT	1.0000	1.0000		
6	DHVJOCT	1.0000	1.0000		
7	DHVFXBT	1.0000	1.0000		
8	DHPDWT	1.0000	1.0000		
9	DHPDWST	1.0000	1.0000		
10	DHPDWDT	1.0000	1.0000		
11	DHPE3T	1.0000	1.0000		
12	DHPE4T	1.0000	1.0000		
13	DHPE6T	1.0000	1.0000		
14	DHPE7T	1.0000	1.0000		
15	CCV5-2	1.0000	1.0000		

PgDn

Cup 1 ID: ICV5-1

Cell down mode Ins to switch

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS		
RunFold: 0816HGA	Seq: 0	Batch:	
	Prnt: R/T On	Pump: Off	
State: Idle	Rev: 4.2	08:44:00 16 Aug 2000	Xmit: Off Gas: LPM
		User: WAH	A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1				PgUp
cup ID	Extended id	Weight	Volume Macro	check macros
16 CCB2		1.0000	1.0000	
17 DHPE8T		1.0000	1.0000	
18 DHPE9T		1.0000	1.0000	
19 DHPEAT		1.0000	1.0000	
20 DHPEDT		1.0000	1.0000	
21 DHPEET		1.0000	1.0000	
22 DHPF2T		1.0000	1.0000	
23 DHQXNT		1.0000	1.0000	
24 DHQXQT		1.0000	1.0000	
25 DHQXRT		1.0000	1.0000	
26 DHVGQBT		1.0000	1.0000	
27 CCV5-3		1.0000	1.0000	
28 CCB3		1.0000	1.0000	
29 DHVGQCT		1.0000	1.0000	
30 DHVOKBT		1.0000	1.0000	

PgDn

Cup 16 ID: CCB2

Cell down mode Ins to switch

6681256

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0816HGA Seq: 0 Batch:
Prnt: R/T On Pump: Off
Rev: 4.2 08:44:01 16 Aug 2000 Xmit: Off Gas: LPM
State: Idle User: WAH A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1 PgUp
cup ID Extended id Weight Volume Macro check macros
31 DHKQ4T 1.0000 1.0000
32 DHKQ4ST 1.0000 1.0000
33 DHKQ4DT 1.0000 1.0000
34 DHVGVB 1.0000 1.0000
35 DHVGVCX WAH 8-16-00 1.0000 1.0000
36 DHRQD 1.0000 1.0000
37 DHRQN 1.0000 1.0000
38 DHRQQ 1.0000 1.0000
39 CCV5-4 1.0000 1.0000
40 CCB4 1.0000 1.0000
41 DHRQT 1.0000 1.0000
42 DHRQTS 1.0000 1.0000
43 DHRQTD 1.0000 1.0000
44 DHRQX 1.0000 1.0000

PgDn

Cup 31 ID: DHKQ4T

Cell down mode Ins to switch

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
 RunFold: 0816HGA Seq: 69 Batch:
 Prnt: R/T On Pump: On
 Rev: 4.2 11:41:10 16 Aug 2000 Xmit: Off Gas: 0.30 LPM
 State: Idle User: WAH A/S: On

AUTOSAMPLER: Rack Edit rack: RACK2 Range 1-44 Clear seQ Undo exit
 cup ID Extended id Weight Volume Macro check macros
 1 DHWJ2B 1.0000 1.0000
 2 DHWJ2C 1.0000 1.0000
 3 DHV7M 1.0000 1.0000
 4 DHV7MS 1.0000 1.0000
 5 DHV7MD 1.0000 1.0000
 6 DHWJDB 1.0000 1.0000
 7 CCV5-5 1.0000 1.0000
 8 CCB5 1.0000 1.0000
 9 DHWJDC 1.0000 1.0000
 10 DHK36 1.0000 1.0000
 11 DHK36S 1.0000 1.0000
 12 DHK36D 1.0000 1.0000
 13 CCV5-6 1.0000 1.0000
 14 CCB6 1.0000 1.0000
 15 DHK36/2 1.0000 1.0000

PgDn

Cup 1 ID: DHWJ2B

Cell down mode Ins to switch

6681258

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0816HGA Seq: 69 Batch:
Prnt: R/T On Pump: On
Rev: 4.2 11:41:12 16 Aug 2000 Xmit: Off Gas: 0.30 LPM
State: Idle User: WAH A/S: On

AUTOSAMPLER: Rack Edit rack: RACK2 PgUp
cup ID Extended id Weight Volume Macro check macros
16 DHK36S/2 1.0000 1.0000
17 DHK36D/2 1.0000 1.0000
18 CCV5-6 1.0000 1.0000
19 CCB6 1.0000 1.0000
20 1.0000 1.0000
21 1.0000 1.0000
22 1.0000 1.0000
23 1.0000 1.0000
24 1.0000 1.0000
25 1.0000 1.0000
26 1.0000 1.0000
27 1.0000 1.0000
28 1.0000 1.0000
29 1.0000 1.0000
30 1.0000 1.0000

PgDn

Cup 16 ID: DHK36S/2

Cell down mode Ins to switch

Metals Preparation



STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238
412-820-8380

Method: 3010A		Matrix: Water		Start Time: 0900		SDG: —		Balance# —		Reagents:	
Analyst: Melissa Mahan		Date: 8-16-00		Lot Number: COH150146		Lab Lot No. (book, page, line): 0014-138-13, 0014-1426, 138-12		3ml conc HNO ₃		6623N35058 Mallinckred	
Reviewed By: [Signature]		Date: 8-16-00		Comments: MS-A, MS-BUREV, MS-CUREV		MS		5ml 1:1 HCl		0057-025-4	
Sample ID	Init Wt/Vol g/mL	Final Vol mL	Comments	Color Pre	Color Post	Clarity Pre	Clarity Post	Texture Pre	Texture Post	Artifacts	Artifact Codes
1. DHV7M	50ml	50ml	MS-A, MS-BUREV, MS-CUREV								S=Stones
2. DHV7M S			+ 0.5ml MS-A, MS-BUREV, MS-CUREV								O=Organic (plant mat)
3. DHV7M D			+ 0.5ml MS-A, MS-BUREV, MS-CUREV								W=free H ₂ O
4. DHV7M B			+ 0.5ml MS-A, MS-BUREV, MS-CUREV								G=Glass
5. DHV7M C			+ 0.5ml MS-A, MS-BUREV, MS-CUREV								M=Metal Fragments
6. DHV7M											R=Rubber/Plastic
7. DHV7M											C=Cloth
8. DHV7M											P=Paper
9. DHV7M											I=Insects
10. DHV7M											
11. DHV7M											
12. DHV7M											
13. DHV7M											
14. DHV7M											
15. DHV7M											
16. DHV7M											
17. DHV7M											
18. DHV7M											
19. DHV7M											
20. DHV7M											
21. DHV7M											
22. DHV7M											
23. DHV7M											
24. DHV7M											

Digestate(s)	Date	Time	Analyst	Location	Date	Time	Analyst	Location	Digestate(s) Relaminated	Hot plate /Block Temp	Correction Factor	Color
411. All water	8-16-00	15:30	Melissa Mahan	metlab	8-16-00	15:35	Melissa Mahan	metlab	MS-A, MS-BUREV, MS-CUREV	95°C	-0.8°C	R=Red BL=Blue BR=Brown BLK=Black Y=Yellow O=Orange V=Violet P=Pink W=White GY=Gray GN=Green C=Colorless

Hg Digestion Log

CUA-4169

[illegible]

Hg Digestion Log

EUA-4169

[illegible]

Hg Digestion Log

Quanterra Incorporated
450 William Pitt Way
Pittsburgh, Pennsylvania 15238
412/826-5477 FAX: 412/826-5571



6681200

QUA-4169

Serial Number 045 Log Book Number 96-MT-580 Start Time 08:05 → 08:00

Sample ID	Date Rec'd	Prep Date	Prepared By	Wt/Vol	Sample Type	Run Date	Comments
1. DHK36C	N/A	8-16-00	WAH	100ml	WATER	8-16-00	0057-027-4
2. DHK36	8-9-00						N/A
3. DHK36S							41ml 0057-026-7
4. DHK36D							41ml 0057-026-7
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.							
19.							
20.							
21.							
22.							
23.							
24.							
25.							

Reagents	Vol (mL)	Ref. Number	Method
HNO3	2.5ml	MAILING KRDT 6623	7470A AUTOCLAVE 15PSI 200°C
H2SO4	5.0ml	MAILING KRDT 5557	50CL2 = 0057-025-3
KMNO4	15.0ml	0057-021-3	40CL-AH2OH = 0057-020-5
K2S2O4	8.0ml	0057-019-8	

Extract(s)	Extract(s) Received			Extract(s) Relinquished		
	Date	Time	Analyst	Date	Time	Analyst
(Record line number from above)			WAH 8-16-00			

6681263

PSR024 8/16/00 5:59:01 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

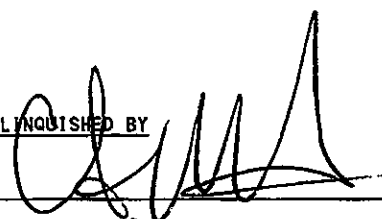
PAGE 001

REQUESTED BY: MAHAN

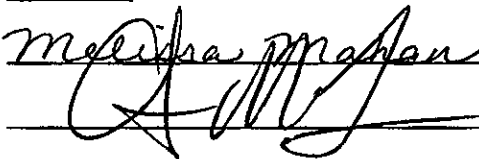
METHOD: Q0 Inductively Coupled Plasma (6010B)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
22D CLP1	DHV7M	— — —	259346	399411	1-05-Q0	COH150146	001		WATER	0	12 1

RELINQUISHED BY


Melissa Mahan

RECEIVED BY



DATE/TIME

8-16-00 0830
8-16-00 0930

***** END OF REPORT *****

6681264

PSR024 8/16/00 3:48:56 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: HOYLEW

METHOD: 08 Mercury (7470A, Cold Vapor) - Liquid

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
22D CLP1	DHV7M	— — —	259291	399411	I-19-08	CON150146	001		WATER	0	12 1

RELINQUISHED BYRECEIVED BYDATE/TIME

<u>William A Hoyle</u>	<u>William A Hoyle</u>	<u>8-16-00</u>	<u>06:00</u>
<u>William A Hoyle</u>	<u>William A Hoyle</u>	<u>8-16-00</u>	<u>07:00</u>

***** END OF REPORT *****

GENERAL CHEMISTRY DATA

6681266

UXB INTERNATIONAL

Client Sample ID: DF/S1/0227/IDW/003

General Chemistry

Lot-Sample #...: C0H150146-001 Work Order #...: DHV7M Matrix.....: WATER
Date Sampled...: 08/14/00 Date Received...: 08/15/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.1		No Units	SW846 9040	08/15/00	0228349
		Dilution Factor: 1		MS Run #.....: 0228155		
Cyanide, Total	ND	10.0	ug/L	SW846 9012A	08/17-08/18/00	0230124
		Dilution Factor: 1		MS Run #.....:		
Flashpoint	>200		deg F	SW846 1010	08/15/00	0228379
		Dilution Factor: 1		MS Run #.....: 0228169		
Sulfide	ND	1.0	mg/L	MCAWW 376.1	08/16/00	0229177
		Dilution Factor: 1		MS Run #.....:		

METHOD BLANK REPORT

General Chemistry

Client Lot #...: C0H150146

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Cyanide, Total	ND	Work Order #: DJ0Q5101	MB Lot-Sample #:	C0H170000-124		
		10.0	ug/L	SW846 9012A	08/17-08/18/00	0230124
		Dilution Factor: 1				
Sulfide	ND	Work Order #: DHWQ6101	MB Lot-Sample #:	C0H160000-177		
		1.0	mg/L	MCAWW 376.1	08/16/00	0229177
		Dilution Factor: 1				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

6681268

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: C0H150146

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Cyanide, Total							
		WO#:DJ0Q5102-LCS/DJ0Q5103-LCSD				LCS Lot-Sample#:	C0H170000-124
	104	(85 - 145)			SW846 9012A	08/17-08/18/00	0230124
	103	(85 - 145)	1.0	(0-35)	SW846 9012A	08/17-08/18/00	0230124
		Dilution Factor: 1					

Sulfide							
		WO#:DHWQ6102-LCS/DHWQ6103-LCSD				LCS Lot-Sample#:	C0H160000-177
	94	(75 - 125)			MCAWW 376.1	08/16/00	0229177
	90	(75 - 125)	4.1	(0-20)	MCAWW 376.1	08/16/00	0229177
		Dilution Factor: 1					

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C0H150146

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
pH	101	Work Order #: DHVJH101 (85 - 115)	LCS Lot-Sample#: C0H150000-349 SW846 9040	08/15/00	0228349
		Dilution Factor: 1			
Flashpoint	100	Work Order #: DHVNJ101 (85 - 115)	LCS Lot-Sample#: C0H150000-379 SW846 1010	08/15/00	0228379
		Dilution Factor: 1			

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results

6681270

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0H150146

Work Order #...: DHTDF-SMP
DHTDF-DUP

Matrix.....: WATER

Date Sampled...: 08/14/00

Date Received..: 08/14/00

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE RESULT</u>	<u>UNITS</u>	<u>RPD</u>	<u>RPD LIMIT</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
pH	5.2	5.3	No Units	2.1	(0-20)	SD Lot-Sample #: COH140150-001 SW846 9040	08/15/00	0228349
Dilution Factor: 1								
Prep Date.....: 0228155 Analysis Date...: Prep Batch #....:								

6681271

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0H150146

Work Order #...: DHV7M-SMP
DHV7M-DUP

Matrix.....: WATER

Date Sampled...: 08/14/00

Date Received...: 08/15/00

<u>PARAM</u>	<u>RESULT</u>	<u>DUPLICATE</u> <u>RESULT</u>	<u>UNITS</u>	<u>RPD</u> <u>RPD</u>	<u>RPD</u> <u>LIMIT</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Flashpoint						SD Lot-Sample #: C0H150146-001		
	>200	>200	deg F	0.0	(0-20)	SW846 1010	08/15/00	0228379
Dilution Factor: 1								
			Prep Date.....: 0228169	Analysis Date...:		Prep Batch #...:		

STL Pittsburgh
pH LOG SHEET

Page ____ of ____

Lot No.	Batch No.	SDG No.
COH140150	C228349	2
COH150146		

Analyst: PETER G. ROSE
Date: 8-15-00
Start Time: 10:15

pH Meter Calibration

Reading	Buffer	Manf. Lot No.	Rec'd	Expire
4.00	4.0	LABCHEM 9167-08	5-19-00	6-25-01
7.02	7.0	0062-04	5-19-00	3-1-02
10.05	10.0	0047-16	5-19-00	3-8-02

LCS ID No.: 342-162-3

Relative Percent Difference =

Range = $\pm .05$ pH units

$$\frac{\frac{|X_1 - X_2|}{2}}{\frac{X_1 + X_2}{2}} \times 100$$

X₁ =Original Result

X₂ = Duplicate

Sample ID	pH Reading
LCS	7.04
COH140150-001	5.23
-001 DUP	5.34
-002	5.90
-003	6.43
-004	5.86
-005	6.39
LCS	7.05
COH150146-001	7.10
LCS	7.03

Sample ID	pH Solid	pH Reading

REQUESTED BY: GROVEP

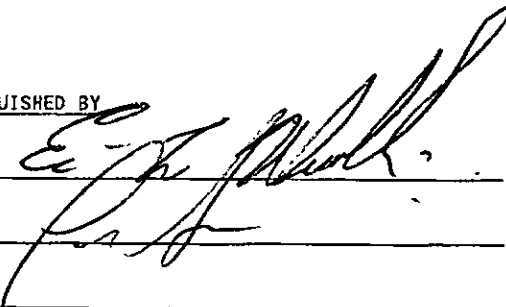
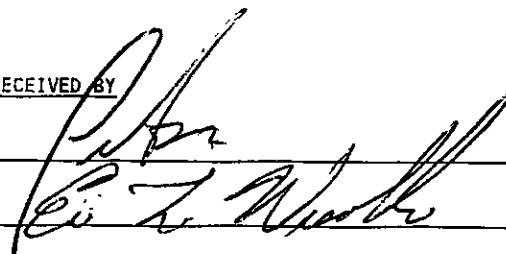
MOD: AJ pH - Aqueous (150.1)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
22C,CLP1	DHTDF-1-18	___	259146	071212	I-88-AJ	COH140150	001		WATER	6	1
22C,CLP1	DHTDQ-1-18	___	259147	071212	I-88-AJ	COH140150	002		WATER	6	1
22C,CLP1	DHTDW-1-18	___	259148	071212	I-88-AJ	COH140150	003		WATER	6	1
22C,CLP1	DHTDX-1-18	___	259149	071212	I-88-AJ	COH140150	004		WATER	6	1
22C,CLP1	DHTE1-1-18	___	259150	071212	I-88-AJ	COH140150	005		WATER	6	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

		8-15-00 10:15
		8-15-00 10:45

REQUESTED BY: GROVEP

400: FJ pH (9040) - Aqueous

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
22D CLP1	DHV7M-1-11		259183	399411	I-88-FJ	COH150146	001		WATER	12	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

8-15-00 12:45

8-15-00 14:00

***** END OF REPORT *****

Ignitability

Method: Flash Point (101.0 Closed Cup)STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238

ANALYST: <u>PETER GROVE</u>	DATE: <u>8-15-00</u>
BATCH: <u>0228379</u>	TIME: <u>14:15</u>

SAMPLE ID	RESULT
<u>P XYLENE</u>	<u>81°F</u>
<u>COH 150146-001</u>	<u>>200°F</u>
<u>↓ -001 DUP</u>	<u>>200°F</u>
<u>P XYLENE</u>	<u>81°F</u>

Reviewed by J. Johnson Date 8-15-00

WC-00-0060

Page 6 of 100

6681276

PSR024 8/15/00 10:48:42 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: GROVEP

METHOD: AE Flash Point (1010, Closed Cup)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
22D CLP1	DHV7M-1-0X	— — —	259185	399411	I-88-AE	COH150146	001		WATER	12	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

8-15-00 14:15

8-15-00 15:30

***** END OF REPORT *****

Quanterra Environmental Services SULFIDE LOG SHEET

Lot No. Batch No. - SDG No.

COH150146 0229177 8-16-00

Includes attachment(s) _____

Analyst: Eric L. Wesoloski

Date: 8-16-00

Start Time: 09:40

Stock Std. ID No.: 0071-010-02 True Value 200 ppm
Prep 8-15-00 Exp 8-22-00

LCS 5 mL of 200 ppm (ID No.: 0071-010-02) = 200 ppm
Range ± 25%

Calculations:

$$\text{Sulfide mg/L} = \frac{[(20 \text{ mL of Iodine} \times N \text{ Iodine}) - (\text{mL Na}_2\text{S}_2\text{O}_3 \times N \text{ Na}_2\text{S}_2\text{O}_3)]}{\text{mL Sample}} \times 16,000$$

Iodine Standardization ID No.: 0071-008-10

$$\text{.0240 N Iodine} = \frac{(\text{20.0 mL Na}_2\text{S}_2\text{O}_3)(\text{.0240 N of Na}_2\text{S}_2\text{O}_3)}{20.0 \text{ mL of Iodine Solution}}$$

Sodium Thiosulfate Standardization

ID No. 0071-008-12

Relative Percent Difference = 4.19

Titration mLs Normality

1 10.35 .0242
2 8.44 8-16-00 Avg. = N

$$\frac{|X_1 - X_2|}{\left(\frac{X_1 + X_2}{2}\right)} \times 100 \quad \begin{array}{l} X_1 = \text{Original Result} \\ X_2 = \text{Duplicate} \end{array}$$

$$\frac{(10 \text{ mL of KH(IO}_3)_2)(0.025 \text{ N KH(IO}_3)_2)}{\text{mL of Na}_2\text{S}_2\text{O}_3}$$

Concentration of Sample in Spike:

MS Percent Recovery:

$$\frac{\text{Orig. Smp. Conc.} \left(\frac{\text{Vol. of Smp. in Spike}}{\text{Orig. Smp. Vol.}} \right)}{\text{Observed Conc. of MS} - \text{Conc. of Smp. in Spike}} \times 100 = \frac{\text{True Spike Conc.}}{\text{True Spike Conc.}}$$

Sample ID: _____

Sample ID: _____

Quanterra Environmental Services
SULFIDE LOG SHEET

~~| Observed Conc.
of MSD | Conc. of Smp.
in Spike |
|--------------------------|---------------------------|
| _____ | _____ |
| True Spike | _____ |

100 x _____ = _____~~

Sample ID: _____

Sample ID	Sample mL	N = $\frac{0.0240}{\text{mL of Iodine}}$	mL of Na ₂ S ₂ O ₃ N = $\frac{0.0242}{\text{Na}_2\text{S}_2\text{O}_3}$	Conc.	LDL
MB	↓	20ml	19.8	ND	1.0
LCS	↓	↓	17.4	4.71	94.2%
LCSD	↓	↓	17.5	4.52	90.4%
CCH150146-001	↓	↓	20.4	ND	1.0
CCV	200 ml	20 ml	17.4	4.71	94.2%
CCB	↓	↓	19.9	ND	1.0

CCH
8-16-00

4.17.24

~~8-16-00~~

REQUESTED BY: MESOLOSE

OD: CT Sulfide (376.1)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
22D CLP1	DHV7M-1-10	— — —	259293	399411	1-88-CT	COH150146	001		WATER	12	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

E. T. Murphy
E. T. Murphy

E. T. Murphy
E. T. Murphy

8/16/00 (07:00)
8/16/00 (10:30)

***** END OF REPORT *****

Run Results Report
Results: C:\FLOW 4\081800A.RST
Results completed: 11:20 August 18, 2000.
Operator: ERIC WESOLOSKI

COH160282 > 0230125

COH150146 > 0230124

COH160286
COH160292 > 0230126
COH160295

E. J. Wesołowski 8/18/00

CYANIDE

6681280

Time	Cup	Name	Height	Calc.	Flags
User request: Start Data Collect					
08:03	0	CARRYOVER	452	0.001650	
08:04	0	CARRYOVER	45	0.000085	
Mean & RSD:			248	0.000867	NoRSD
08:05	0	READ BASELIN	0	-0.000088	BL
08:06	301	0.500 PPM ST	118768	0.457076	OL
08:07	301	0.500 PPM ST	125117	0.481515	
08:09	301	0.500 PPM ST	127968	0.492491	
Mean & RSD:			126543	0.487003	3.72%
08:10	302	0.400 PPM ST	100973	0.388581	
08:11	302	0.400 PPM ST	101397	0.390212	
08:12	302	0.400 PPM ST	102096	0.392903	
Mean & RSD:			101489	0.390566	.559%
08:13	303	0.300 ppm ST	76640	0.294915	
08:14	303	0.300 ppm ST	76957	0.296136	
08:16	303	0.300 ppm ST	78196	0.300905	
Mean & RSD:			77264	0.297318	1.06%
08:17	304	0.200 PPM ST	51888	0.199638	
08:18	304	0.200 PPM ST	51608	0.198562	
08:19	304	0.200 PPM ST	52198	0.200832	
Mean & RSD:			51898	0.199677	.569%
08:20	305	0.100 PPM ST	25970	0.099877	
08:21	305	0.100 PPM ST	26237	0.100902	
08:23	305	0.100 PPM ST	26158	0.100601	
Mean & RSD:			26122	0.100460	.524%
08:24	306	0.050 PPM ST	13020	0.050028	
08:25	306	0.050 PPM ST	13023	0.050039	
08:26	306	0.050 PPM ST	13052	0.050154	
Mean & RSD:			13032	0.050074	.138%
08:27	307	0.010 PPM ST	3254	0.012436	
08:28	307	0.010 PPM ST	3263	0.012471	
08:30	307	0.010 PPM ST	3734	0.014284	OL
Mean & RSD:			3258	0.012453	8.43%
08:31	0	0.000 PPM ST	-1	-0.000092	LO
08:32	0	0.000 PPM ST	19	-0.000014	LO OL
08:33	0	0.000 PPM ST	-18	-0.000157	LO
Mean & RSD:			-9	-0.000125	197%
08:34	0	BLANK	12	-0.000041	LO
08:35	2	CCV 7211403	26951	0.103651	103.6% 77. 8-18-00
08:37	0	CCB	-32	-0.000212	LO
08:38	0	BASELINE	0	-0.000088	BL
08:39	101	.05 7211316	13455	0.051702	103.4%
08:40	102	.40 7211401	93526	0.359915	90%
08:41	0	BLANK	-18	-0.000158	LO

Page #1

Run Results Report

E. J. Wesołowski
8/18/00

Run Results Report

Results: C:\FLOW_4\081800A.RST

Results completed: 11:20 August 18, 2000.

Operator: ERIC WESOLOSKI

6681281

Eric L. Wesolowski 8/18/00

CYANIDE

Time	Cup	Name	Height	Calc.	Flags
08:42	2	CCV 7211403	26929	0.103566	103.6%
08:44	0	CCB	-27	-0.000191	LO
08:45	0	BASELINE	0	-0.000088	BL
08:46	103	DJ0Q5101B	902	0.003383	
08:47	104	DH0Q5102C	43360	0.166813	104.2% } RPD
08:48	105	DH0Q5103L	42914	0.165095	103.2% } 1.02%
08:49	106	DHV7M10W	1001	0.003765	
08:51	0	BLANK	-4	-0.000103	LO
08:52	2	CCV 7211403	27164	0.104470	104.5%
08:53	0	CCB	12	-0.000043	LO
08:54	0	BASELINE	0	-0.000088	BL
~~08:55~~	~~107~~	~~DJ0Q6102C~~	~~33120~~	~~0.127398~~	
08:56	0	ICB	-20	-0.000167	LO
08:58	0	BLANK	-6	-0.000110	LO
08:59	2	CCV 7211403	27002	0.103847	
09:00	0	CCB	-23	-0.000178	LO
09:01	0	BASELINE	0	-0.000088	BL
09:02	108	DJ0Q8101B	1213	0.004580	
09:03	109	DJ03A109	2361	0.009000	
09:05	110	DJ03J109	1797	0.006828	
09:06	111	DJ03N109	1476	0.005593	
09:07	112	DJ03P109	6274	0.024062	
09:08	113	DJ03T109	2993	0.011431	
09:09	114	DJ03W10P	1898	0.007216	
09:10	115	DJ03W10XX	1990	0.007573	
09:12	0	BLANK	32	0.000035	
09:13	2	CCV 7211403	27082	0.104042	
09:14	0	CCB	6	-0.000064	LO
09:15	0	BASELINE	0	-0.000088	BL
09:16	117	DJ042108	1817	0.006907	
09:17	117	DJ042108	1772	0.006731	
		Mean & RSD:	1794	0.006819	NoRSD
09:19	118	DJ044108	1673	0.006351	
09:20	119	DJ047108	2352	0.008965	
09:21	120	DJ04D108	1254	0.004738	
09:22	121	DJ04E108	1257	0.004751	
09:23	122	DJ04G108	2159	0.008223	
09:24	123	DJ04J108	1690	0.006416	
09:26	0	BLANK	-7	-0.000114	LO
09:27	2	CCV 7211403	26624	0.102392	
09:28	0	CCB	-24	-0.000181	LO
09:29	0	BASELINE	0	-0.000088	BL
09:30	124	DJ04K108	1188	0.004483	
~~09:31~~	~~125~~	~~DJ068108~~	~~1574~~	~~0.005971~~	

Page #2

Run Results Report

Run Results Report
 Results: C:\FLOW_4\081800A.RST
 Results completed: 11:20 August 18, 2000.
 Operator: ERIC WESOLOSKI

E. Z. Wesołowski 8/18/00

6681282

CYANIDE					
Time	Cup	Name	Height	Calc.	Flags
09:33	126	DJ06G108	2689	0.010263	
09:34	0	BLANK	-24	-0.000181	LO
09:35	2	CCV 7211403	26338	0.101291	101.3%
09:36	0	CCB	-3	-0.000100	LO
09:37	0	BASELINE	0	-0.000088	BL
09:38	127	DJ0QC102C	42328	0.162842	101.7% 84. 8-18-00
09:40	0	ICB	-17	-0.000156	LO
09:41	0	BLANK	29	0.000024	
09:42	2	CCV 7211403	26426	0.101632	101.6%
09:43	0	CCB	50	0.000102	
09:44	0	BASELINE	0	-0.000088	BL
09:45	128	DJ0QC101B	14954	0.057472	PERCU-Duz To Air-Spike.
09:47	129	DJ07010L	9451	0.036291	2.870
09:48	130	DJ07010NX	9940	0.038171	3.80%
09:49	131	DJ07010MS	33851	0.130212	94%
09:50	132	DJ079107	20267	0.077923	
09:51	133	DJ07D107	20026	0.076997	
09:52	134	DJ07E107	1976	0.007518	
09:54	135	DJ07F107	8174	0.031375	
09:55	0	BLANK	23	0.000001	
09:56	2	CCV 7211403	26883	0.103390	103.4%
09:57	0	CCB	-3	-0.000101	LO
09:58	0	BASELINE	0	-0.000088	BL
09:59	136	DJ07G107	1564	0.005932	
10:01	137	DJ07H107	1273	0.004812	
10:02	138	DJ083107	1462	0.005541	
10:03	139	DJ08D107	1377	0.005210	
10:04	140	DJ08F107	1736	0.006595	
10:05	141	DJ08G107	3446	0.013177	
10:06	142	DJ08H107	16197	0.062258	
10:08	143	DJ08J107	18923	0.072751	
10:09	0	BLANK	-44	-0.000257	LO
10:10	2	CCV 7211403	26934	0.103585	103.6%
10:11	0	CCB	-64	-0.000335	LO
10:12	0	BASELINE	0	-0.000088	BL
10:13	144	DJ08M107	11322	0.043494	
10:15	145	DJ08P107	41062	0.157970	
10:16	146	DJ08Q107	28011	0.107732	
10:17	0	BLANK	9	-0.000055	LO
10:18	2	CCV 7211403	27088	0.104180	104.2%
10:19	0	CCB	8	-0.000058	LO
10:20	0	BASELINE	0	-0.000088	BL
10:26	128	DJ0QC101B	1496	0.005669	
10:28	0	BLANK	3	-0.000077	LO

Run Results Report
Results: C:\FLOW_4\081800A.RST
Results completed: 11:20 August 18, 2000.
Operator: ERIC WESOLOSKI

6681283

Eric L. Wesołowski 8/18/00

CYANIDE					
Time	Cup	Name	Height	Calc.	Flags
10:29	2	CCV 7211403	26887	0.103407	103.4%
10:30	0	CCB	7	-0.000062	LO
10:31	0	BASELINE	0	-0.000088	BL <i>8-8-cc</i>
10:32	107	DJ0Q8102C	43059	0.165657	103.8%
10:33	0	ICB	-11	-0.000133	LO
10:35	0	BLANK	-15	-0.000145	LO
10:36	2	CCV 7211403	26735	0.102821	102.8%
10:37	0	CCB	-7	-0.000116	LO
10:38	0	BASELINE	0	-0.000088	BL
10:39	108	DJ0Q8101B	1002	0.003770	
10:40	109	DJ03A109	2376	0.009056	
10:42	110	DJ03J109	1680	0.006380	
10:43	111	DJ03N109	1373	0.005196	
10:44	112	DJ03P109	6288	0.024114	
10:45	113	DJ03T109	2995	0.011439	
10:46	114	DJ03W10P	2063	0.007854	3.8%
10:47	115	DJ03W10XX	2019	0.007682	3.0%
10:49	0	BLANK	-4	-0.000102	LO
10:50	2	CCV 7211403	26655	0.102513	102.5%
10:51	0	CCB	-13	-0.000138	LO
10:52	0	BASELINE	0	-0.000088	BL
10:53	116	DJ03W10QS	26258	0.100983	101%
10:54	117	DJ042108	1730	0.006569	
10:56	118	DJ044108	1606	0.006095	
10:57	119	DJ047108	14668	0.056371	
10:58	120	DJ04D108	1240	0.004684	
10:59	121	DJ04E108	1239	0.004679	
11:00	122	DJ04G108	2318	0.008835	
11:01	123	DJ04J108	1759	0.006681	
11:03	0	BLANK	-10	-0.000128	LO
11:04	2	CCV 7211403	26645	0.102473	102.5%
11:05	0	CCB	-37	-0.000233	LO
11:06	0	BASELINE	0	-0.000088	BL
11:07	124	DJ04K108	1124	0.004238	
11:08	125	DJ068108	1645	0.006245	
11:10	126	DJ06G108	2535	0.009670	
11:11	0	BLANK	-14	-0.000141	LO
11:12	2	CCV 7211403	26760	0.102917	102.9%
11:13	0	CCB	-13	-0.000137	LO
11:14	0	BASELINE	0	-0.000088	BL

File name: C:\FLOW 4\081800A.RST

Date: August 18, 2000

Operator: ERIC WESOLOSKI

E. J. Wesołowski 8/18/00

6681281

Name	Conc	Height
* 0.500 PPM STD	0.500000	118767.953125
* 0.500 PPM STD	0.500000	125116.976562
* 0.500 PPM STD	0.500000	127968.343750
* 0.400 PPM STD	0.400000	100973.445312
* 0.400 PPM STD	0.400000	101397.109375
* 0.400 PPM STD	0.400000	102096.351562
* 0.300 ppm STD	0.300000	76639.546875
* 0.300 ppm STD	0.300000	76956.898438
* 0.300 ppm STD	0.300000	78195.742188
* 0.200 PPM STD	0.200000	51887.507812
* 0.200 PPM STD	0.200000	51607.761719
* 0.200 PPM STD	0.200000	52197.613281
* 0.100 PPM STD	0.100000	25970.363281
* 0.100 PPM STD	0.100000	26236.660156
* 0.100 PPM STD	0.100000	26158.248047
* 0.050 PPM STD	0.050000	13019.950195
* 0.050 PPM STD	0.050000	13022.751953
* 0.050 PPM STD	0.050000	13052.498047
* 0.010 PPM STD	0.010000	3253.660645
* 0.010 PPM STD	0.010000	3262.903320
* 0.010 PPM STD	0.010000	3733.823242
* 0.000 PPM STD	0.000000	-1.049373
* 0.000 PPM STD	0.000000	19.345436
* 0.000 PPM STD	0.000000	-17.809053

Calib Coef:

y=bx+a

a: (intercept) 2.2970e+01

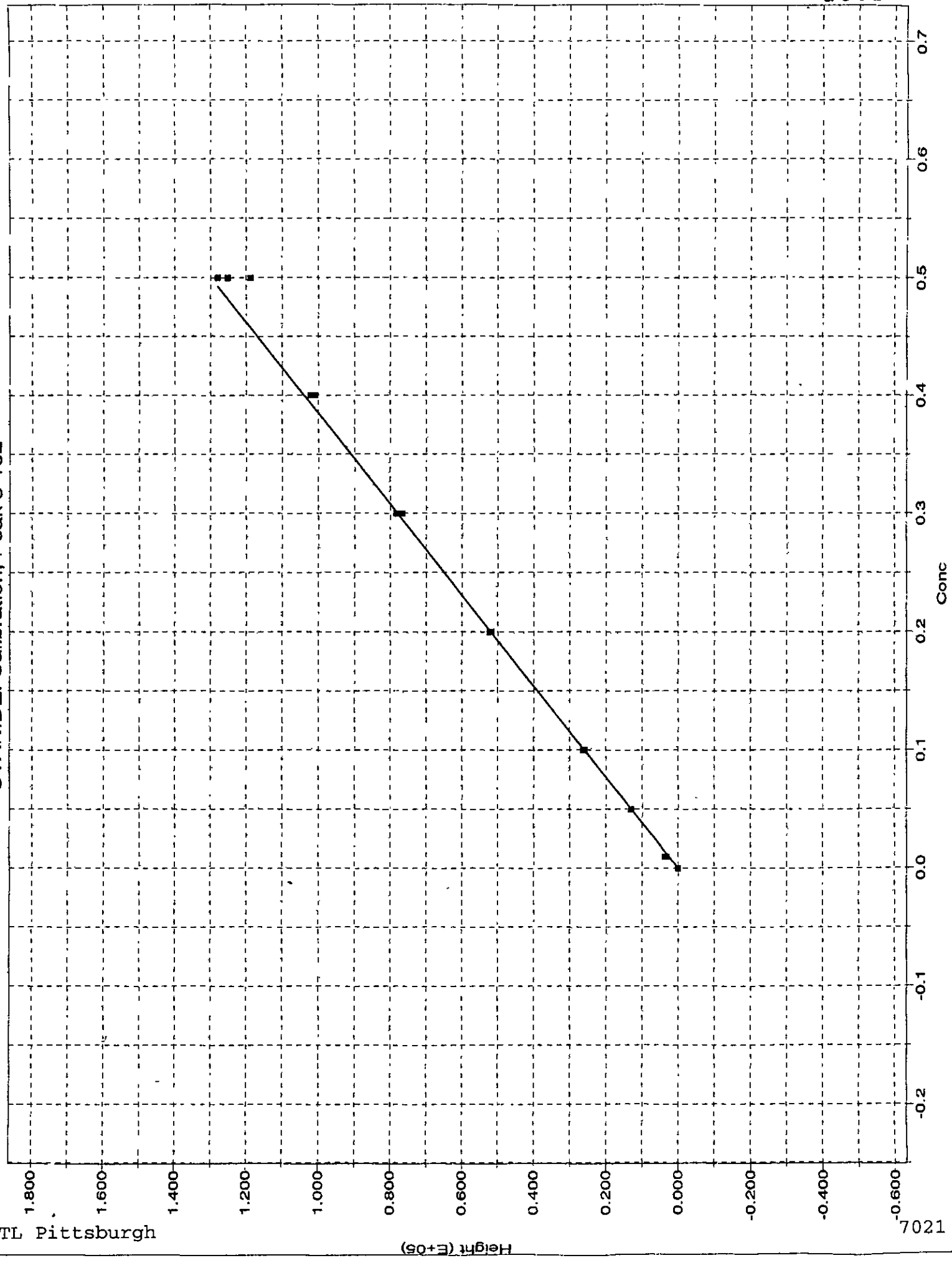
b: 2.5979e+05

Corr Coef: 0.999241

Carryover: 0.197%

No Drift Peaks

CYANIDE: Calibration, Peak 5-162



Cyanide Distillation Worksheet

COH160267
COH160282

Total 0230125

STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238
412-820-8380



Distilled by: <u>P. Johnson</u>		Date: <u>8-17-00</u>	Reagent/Std Book ID: <u>3421627, 3421637, 3421524</u>	Sample Description (CLP Samples Only)			
Sample ID		Distillation	Initial	Final	Before Distillation	After Distillation	Expiration Date
1.	30081076		30ml	30ml	NA	NA	NA
2.	30081019				NA	NA	8-28-00
3.	30081099				NA	NA	
4.	30081099				NA	NA	
5.	30081099				NA	NA	
6.	30081099				NA	NA	
7.	30081099				NA	NA	
8.	30081099				NA	NA	
9.	30081099				NA	NA	
10.	30081099				NA	NA	
11.	30081099				NA	NA	
12.	30081099				NA	NA	
13.	30081099				NA	NA	
14.	30081099				NA	NA	
15.	30081099				NA	NA	
16.	30081099				NA	NA	
17.	30081099				NA	NA	
18.	30081099				NA	NA	
19.	30081099				NA	NA	
20.	30081099				NA	NA	
21.	30081099				NA	NA	
22.							
23.							
24.							
25.							
26.							
Distillate(s)		Distillate(s) Received		Distillate(s) Relinquished			
(Record line number from	Date	Time	Analyst	Location	Date	Time	Analyst
1-30	8-17-00	10:30	P. Johnson	WC	8-17-00	11:00	P. Johnson
1-30	8-18-00	06:30	P. Johnson	WC	8-18-00	12:00	P. Johnson
Comments: <u>See above 72-113.13</u> <u>See above 72-113.03</u> Reviewed by: <u>P. Johnson</u> Date: <u>8-17-00</u>							

Cyanide Distillation
Worksheet

COH160286
COH160292
COH160292

Total 0230126

STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238
412-820-8380

STL
Committed To Your Success

6681288

Distilled by: <u>Johnson</u>		Date: <u>Start 1310</u>		Reagent/Sid Book ID: <u>3421627 3421637 3421638</u>		Sample Description (CLP Samples Only)			
Sample ID		Distillation		Before Distillation		After Distillation		Expiration Date	
Initial	Final								
1	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
2	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
3	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
4	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
5	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
6	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
7	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
8	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
9	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
10	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
11	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
12	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
13	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
14	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
15	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
16	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
17	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
18	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
19	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
20	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
21	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
22	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
23	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
24	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
25	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA
26	COH160286	SONU	SONU	HA	HA	HA	HA	HA	HA

Distillate(s) (Record line number from)	Distillate(s) Received		Distillate(s) Relinquished		Location	Analyst	Location
	Date	Time	Date	Time			
1-30	08-18-00	06:30	08-18-00	12:40	WC	08-18-00	12:40
1-30	08-18-00	06:30	08-18-00	12:40	WC	08-18-00	12:40

Comments: TCU 16 ppm 72.13.13
 Review: 0.1 ppm 0.5 ppm of 72.113.22. To 50 ppm
 Date: 08-18-00

REQUESTED BY: JOHNSONP

METHOD: QP Cyanide, Total

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
22D CLP1	DHV7M-1-OW	_____	259753	399411	I-06-QP	COH150146	001		WATER	12	1

RELINQUISHED BYRECEIVED BYDATE/TIME

<u>P. Johnson</u>	<u>P. Johnson</u>	<u>8-17-00/0800</u>
<u>P. Johnson</u>	<u>P. Johnson</u>	<u>8-17-00/1500</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

***** END OF REPORT *****

REQUESTED BY: JOHNSONP

METHOD: OU Cyanide, Total (CLP)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
1B,C,D CLP1	DJ03A-1-09	___	259754	039108	I-06-OU	COH160267	001		WATER	15	1
1B,C,D CLP1	DJ03J-1-09	___	259755	039108	I-06-OU	COH160267	002		WATER	11	1
1B,C,D CLP1	DJ03N-1-09	___	259756	039108	I-06-OU	COH160267	004		WATER	10	1
1B,C,D CLP1	DJ03P-1-09	___	259757	039108	I-06-OU	COH160267	005		WATER	11	1
1B,C,D CLP1	DJ03T-1-09	___	259758	039108	I-06-OU	COH160267	006		WATER	10	1
1B,C,D CLP1	DJ03W-1-0P	___	259759	039108	I-06-OU	COH160267	007		WATER	30	1
1B,C,D CLP1	DJ04D-1-08	___	259760	039108	I-06-OU	COH160267	011		WATER	10	1
1B,C,D CLP1	DJ04E-1-08	___	259761	039108	I-06-OU	COH160267	012		WATER	10	1
1B,C,D CLP1	DJ04G-1-08	___	259762	039108	I-06-OU	COH160267	013		WATER	10	1
1B,C,D CLP1	DJ04J-1-08	___	259763	039108	I-06-OU	COH160267	014		WATER	10	1
1B,C,D CLP1	DJ04K-1-08	___	259764	039108	I-06-OU	COH160267	015		WATER	10	1
1B,C,D CLP1	DJ042-1-08	___	259765	039108	I-06-OU	COH160267	008		WATER	12	1
1B,C,D CLP1	DJ044-1-08	___	259766	039108	I-06-OU	COH160267	009		WATER	10	1
1B,C,D CLP1	DJ047-1-08	___	259767	039108	I-06-OU	COH160267	010		WATER	10	1
1C,D,E CLP1	DJ06G-1-08	___	259768	039108	I-06-OU	COH160282	002		WATER	10	1
1C,D,E CLP1	DJ06B-1-08	___	259769	039108	I-06-OU	COH160282	001		WATER	10	1
1C,D,E 2A CLP1	DJ08M-1-07	___	259782	039108	I-06-OU	COH160295	001		WATER	8	1
1C,D,E 2A CLP1	DJ08P-1-07	___	259783	039108	I-06-OU	COH160295	002		WATER	8	1
1C,D,E 2A CLP1	DJ08Q-1-07	___	259784	039108	I-06-OU	COH160295	003		WATER	8	1
1C,D,E, CLP1	DJ07D-1-07	___	259770	039108	I-06-OU	COH160286	003		WATER	8	1
1C,D,E, CLP1	DJ07E-1-07	___	259771	039108	I-06-OU	COH160286	004		WATER	8	1
1C,D,E, CLP1	DJ07F-1-07	___	259772	039108	I-06-OU	COH160286	005		WATER	8	1
1C,D,E, CLP1	DJ07G-1-07	___	259773	039108	I-06-OU	COH160286	006		WATER	8	1
1C,D,E, CLP1	DJ07H-1-07	___	259774	039108	I-06-OU	COH160286	007		WATER	8	1
1C,D,E, CLP1	DJ070-1-QL	___	259775	039108	I-06-OU	COH160286	001		WATER	24	1
1C,D,E, CLP1	DJ079-1-07	___	259776	039108	I-06-OU	COH160286	002		WATER	8	1

STL Pittsburgh

7026

REQUESTED BY: JOHNSONP

METHOD: OU Cyanide, Total (CLP)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
1C,D,E, 2A CLP1	DJ08D-1-07	___	259777	039108	I-06-OU	COH160292	002		WATER	8	1
1C,D,E, 2A CLP1	DJ08F-1-07	___	259778	039108	I-06-OU	COH160292	003		WATER	8	1
1C,D,E, 2A CLP1	DJ08G-1-07	___	259779	039108	I-06-OU	COH160292	004		WATER	8	1
1C,D,E, 2A CLP1	DJ08H-1-07	___	259780	039108	I-06-OU	COH160292	005		WATER	8	1
1C,D,E, 2A CLP1	DJ08J-1-07	___	259781	039108	I-06-OU	COH160292	006		WATER	8	1
1C,D,E, 2A CLP1	DJ083-1-07	___	259785	039108	I-06-OU	COH160292	001		WATER	8	1

RELINQUISHED BYRECEIVED BYDATE/TIME

P. G. Johnson
P. G. Johnson

P. G. Johnson
P. G. Johnson

8-17-00/0800
8-17-00/1500

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE