



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 679

Report Date : 28-Mar-2001 12:57

6D
Hp 68901A
RTx-50

679 599

STL-Pittsburgh

COMPOUND LISTING

Method file : \\gpitpa02\d\chem\gc1.i\2151.b\LONGH.m
Quant Method : ESTD Target Version : 4.04
Last Update : 28-Mar-2001 12:57 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	5.313	5.263-5.363	1.33e+007
\$ 2 DCAA	14.445	14.395-14.495	6.25e+007
3 MCPP	15.080	15.030-15.130	8.97e+004
4 DICAMBA	15.263	15.213-15.313	4.22e+007
5 MCPA	16.424	16.374-16.474	1.06e+005
6 DICHLOROPROP	17.419	17.369-17.469	9.55e+006
7 2,4-D	19.067	19.017-19.117	1.63e+007
8 PENTACHLOROPHENOL	19.977	19.927-20.027	2.70e+008
9 2,4,5-TP (SILVEX)	20.383	20.333-20.433	3.45e+008
10 2,4,5-T	21.161	21.111-21.211	3.00e+008
11 DINOSEB	21.477	21.427-21.527	2.46e+008
12 2,4-DB	21.631	21.581-21.681	3.65e+007

679 600

6E
Hp68901A
RTx-50

Report Date : 26-Mar-2001 11:24

STL-Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2001 16:29
 End Cal Date : 15-MAR-2001 18:34
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 4.04
 Integrator : Falcon
 Method file : \\qpitpa02\d\chem\gc1.i\2151.b\LONGH.m
 Cal Date : 26-Mar-2001 11:23 MorganW
 Curve Type : Average

Calibration File Names:

Level 1: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20275.D
 Level 2: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20276.D
 Level 3: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20277.D
 Level 4: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20278.D
 Level 5: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20279.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 DALAPON	15246455	13611591	13378815	12406925	12089352	13346628	9.286
3 MCPP	142721	109992	86632	63009	46319	89735	42.532<-
4 DICAMBA	47277547	42473803	42580071	39902421	38788418	42204452	7.761
5 MCPA	172100	129624	100042	72936	55766	106094	43.653<-
6 DICHLOROPROP	11192406	9984882	9636981	8763976	8152558	9546161	12.244
7 2,4-D	18776825	16688141	16451011	15109771	14493124	16303774	10.166
8 PENTACHLOROPHENOL	276634586	262108083	272856297	265978289	270959506	269707352	2.123
9 2,4,5-TP(SILVEX)	371101143	339788857	345695355	333814727	333220417	344724100	4.523
10 2,4,5-T	326898292	291121048	300393223	289794242	292048780	300051117	5.190
11 DINOSEB	275743849	246706929	244238740	232127638	232401063	246243644	7.223
12 2,4-DB	41586540	37166351	36143183	33724929	33913038	36506808	8.752
\$ 2 DCAA	73862254	65710353	62768378	56985171	53398435	62544958	12.709

Data File: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20349.D
 Report Date: 27-Mar-2001 13:59

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 Hp68901A
 RT-50

679 601

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CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 27-MAR-2001 09:33
 Lab File ID: A-A20349.D Init. Cal. Date(s): 15-MAR-2001 15-MAR-2001
 Analysis Type: Init. Cal. Times: 16:29 18:34
 Lab Sample ID: MHERB Quant Type: ESTD
 Method: \\qpitpa02\d\chem\gc1.i\2151.b\LONGH.m

COMPOUND	RRF	RF0	MIN	MAX
1 DALAPON	13346628	13271458	0.010	-0.6
2 DCAA	62544958	62633655	0.010	0.1
3 MCPP	89735	85168	0.010	-5.1
4 DICAMBA	42204452	42198682	0.010	-0.0
5 MCPA	106094	98680	0.010	-7.0
6 DICHLOROPROP	9546161	9468903	0.010	-0.8
7 2,4-D	16303774	16201833	0.010	-0.6
8 PENTACHLOROPHENOL	269707352	273996053	0.010	1.6
9 2,4,5-TP(SILVEX)	344724100	342801137	0.010	-0.6
10 2,4,5-T	300051117	299517204	0.010	-0.2
11 DINOSEB	246243644	245595906	0.010	-0.3
12 2,4-DB	36506808	36685882	0.010	0.5

679 602

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RTX-SDData File: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20365.D
Report Date: 28-Mar-2001 07:03

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 27-MAR-2001 17:53
 Lab File ID: A-A20365.D Init. Cal. Date(s): 15-MAR-2001 15-MAR-2001
 Analysis Type: Init. Cal. Times: 16:29 18:34
 Lab Sample ID: MHERB Quant Type: ESTD
 Method: \\qpitpa02\d\chem\gc1.i\2151.b\LONGH.m

COMPOUND	RRF	RFO	MIN	MAX
=====	=====	=====	=====	=====
1 DALAPON	13346628	13566469	0.010	1.6 15 0
\$ 2 DCAA	62544958	63466075	0.010	1.5 15.0
3 MCPP	89735	86550	0.010	-3 5 15 0
4 DICAMBA	42204452	43024729	0.010	1 9 15 0
5 MCPA	106094	99447	0.010	-6 3 15 0
6 DICHLOROPROP	9546161	9677370	0.010	1 4 15 0
7 2,4-D	16303774	16637133	0.010	2 0 15.0
8 PENTACHLOROPHENOL	269707352	278500376	0.010	3 3 15.0
9 2,4,5-TP(SILVEX)	344724100	351139289	0.010	1.9 15.0
10 2,4,5-T	300051117	305522986	0.010	1 8 15 0
11 DINOSEB	246243644	244257717	0.010	-0 8 15 0
12 2,4-DB	36506808	35576994	0.010	-2 5 15 0

Data File: \\qpitpa02\d\chem\gcl.i\2151.b\A-A20383.D
Report Date: 28-Mar-2001 07:04

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RTY-50

STL-Pittsburgh

679 603

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gcl.i Injection Date: 28-MAR-2001 03:14
Lab File ID: A-A20383.D Init. Cal. Date(s): 15-MAR-2001 15-MAR-2001
Analysis Type: Init. Cal. Times: 16:29 18:34
Lab Sample ID: MHERB Quant Type: ESTD
Method: \\qpitpa02\d\chem\gcl.i\2151.b\LONGH.m

COMPOUND	RRF	RFO	MIN	MAX
1 DALAPON	13346628	13497449	0.010	1 1 15 0
2 DCAA	62544958	65324994	0.010	4 4 15 0
3 MCPP	89735	87560	0.010	-2 4 15 0
4 DICAMBA	42204452	44278447	0.010	4 9 15 0
5 MCPA	106094	100604	0.010	-5 2 15.0
6 DICHLOROPROP	9546161	10040967	0.010	5.2 15 0
7 2,4-D	16303774	17412902	0.010	6 8 15.0
8 PENTACHLOROPHENOL	269707352	284509774	0.010	5.5 15 0
9 2,4,5-TP(SILVEX)	344724100	363518199	0.010	5.5 15.0
10 2,4,5-T	300051117	320483744	0.010	6.8 15 0
11 DINOSEB	246243644	250808740	0.010	1 9 15 0
12 2,4-DB	36506808	37407964	0.010	2 5 15.0

679 604

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Hp 68901A
RTX-SDData File: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20385.D
Report Date: 28-Mar-2001 12:57

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 28-MAR-2001 09:55
 Lab File ID: A-A20385.D Init. Cal. Date(s): 15-MAR-2001 15-MAR-2001
 Analysis Type: Init. Cal. Times: 16:29 18:34
 Lab Sample ID: MHERB Quant Type: ESTD
 Method: \\qpitpa02\d\chem\gc1.i\2151.b\LONGH.m

COMPOUND	RRF	RFO	MIN	MAX
1 DALAPON	13346628	13428178	0.010	0.6
2 DCAA	62544958	64539553	0.010	3.2
3 MCPP	89735	86815	0.010	-3.3
4 DICAMBA	42204452	43457012	0.010	3.0
5 MCPA	106094	100228	0.010	-5.5
6 DICHLOROPROP	9546161	9864469	0.010	3.3
7 2,4-D	16303774	17299659	0.010	6.1
8 PENTACHLOROPHENOL	269707352	283287782	0.010	5.0
9 2,4,5-TP (SILVEX)	344724100	359603744	0.010	4.3
10 2,4,5-T	300051117	317520616	0.010	5.8
11 DINOSEB	246243644	252289685	0.010	2.5
12 2,4-DB	36506808	38842308	0.010	6.4

Data File: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20389.D
 Report Date: 28-Mar-2001 12:58

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 Hp68901A
 RTX-50

STL-Pittsburgh

679 605

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 28-MAR-2001 12:00
 Lab File ID: A-A20389.D Init. Cal. Date(s): 15-MAR-2001 15-MAR-2001
 Analysis Type: Init. Cal. Times: 16:29 18:34
 Lab Sample ID: MHERB Quant Type: ESTD
 Method: \\qpitpa02\d\chem\gc1.i\2151.b\LONGH.m

COMPOUND	RRF	RFO	MIN	RRF	%D	MAX
1 DALAPON	13346628	13963781	0.010	4.6	15.0	
2 DCAA	62544958	65432421	0.010	4.6	15.0	
3 MCPP	89735	87017	0.010	-3.0	15.0	
4 DICAMBA	42204452	44318329	0.010	5.0	15.0	
5 MCPA	106094	100405	0.010	-5.4	15.0	
6 DICHLOROPROP	9546161	10053101	0.010	5.3	15.0	
7 2,4-D	16303774	17572644	0.010	7.8	15.0	
8 PENTACHLOROPHENOL	269707352	280624248	0.010	4.0	15.0	
9 2,4,5-TP(SILVEX)	344724100	360695972	0.010	4.6	15.0	
10 2,4,5-T	300051117	319184076	0.010	6.4	15.0	
11 DINOSEB	246243644	247421339	0.010	0.5	15.0	
12 2,4-DB	36506808	36431396	0.010	-0.2	15.0	

679 606

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name:

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C1C210184

GC Column: RTX-50

ID: 0.53

(mm)

Init. Calib. Date(s): 03/15/01 03/15/01

Instrument ID: GC1

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION S1 : 14.45							
EPA SAMPLE NO.		LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	RT
=====		=====	=====	=====	=====		=====
01		LHERB	03/15/01	1629	14.46		
02		MLHERB	03/15/01	1700	14.46		
03		MHERB	03/15/01	1731	14.46		
04		MHHERB	03/15/01	1803	14.47		
05		HHERB	03/15/01	1834	14.46		
06		2ND HERB	03/15/01	1905	14.47		
07		MHERB	03/27/01	0933	14.45		
08		MHERB	03/27/01	1753	14.45		
09	LCS2391	DXWV51AC	03/27/01	1957	14.45		
10	LCD2391	DXWV51AD	03/27/01	2029	14.45		
11	PBLK2391	DXWV51AA	03/27/01	2100	14.45		
12		MHERB	03/28/01	0314	14.45		
13		MHERB	03/28/01	0955	14.45		
14	DF/24-B/1079	DXPK31CC	03/28/01	1026	14.41		
15		MHERB	03/28/01	1200	14.45		
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							

QC LIMITS

S1 = DCAA

(+/- 0.05 MINUTES)

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

Data File: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20275.D
 Report Date: 16-Mar-2001 08:52

679 607

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Data file : \\qpitpa02\d\chem\gc1.i\2151.b\A-A20275.D
 Lab Smp Id: LHERB
 Inj Date : 15-MAR-2001 16:29
 Operator : 010139
 Smp Info : LHERB,2151.b
 Misc Info : 190-107-1
 Comment : 8151/515 ANALYSIS
 Method : \\qpitpa02\d\chem\gc1.i\2151.b\LONGH.m
 Meth Date : 16-Mar-2001 08:52 morganw
 Cal Date : 15-MAR-2001 16:29
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC003

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-A20275.D
 Calibration Sample, Level: 1
 Compound Sublist: all.sub

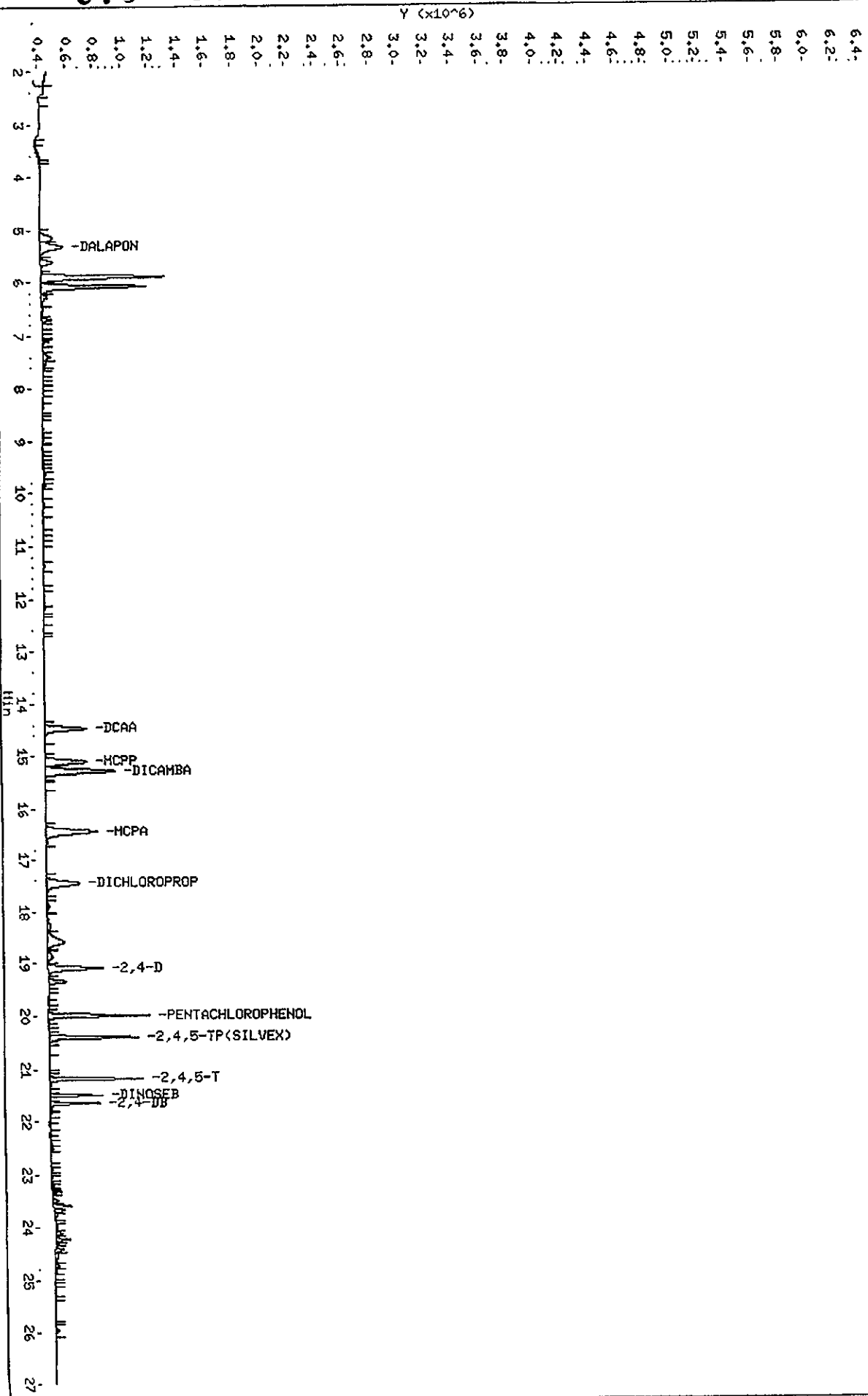
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	5.325	5.326	-0.001	167711	0.01100	0.01100
2 DCAA	14.461	14.463	-0.002	1573266	0.02130	0.02130
3 MCPP	15.096	15.097	-0.001	302568	2.12000	2.120
4 DICAMBA	15.279	15.279	0.000	501142	0.01060	0.01060
5 MCPA	16.445	16.446	-0.001	368294	2.14000	2.140
6 DICHLOROPROP	17.441	17.443	-0.002	237279	0.02120	0.02120
7 2,4-D	19.083	19.080	0.003	396191	0.02110	0.02110
8 PENTACHLOROPHENOL	19.986	19.987	-0.001	735848	0.00266	0.002660
9 2,4,5-TP(SILVEX)	20.392	20.392	0.000	1948281	0.00525	0.005250
10 2,4,5-T	21.169	21.168	0.001	1722754	0.00527	0.005270
11 DINOSEB	21.486	21.485	0.001	874108	0.00317	0.003170
12 2,4-DB	21.641	21.638	0.003	877476	0.02110	0.02110

679 608

Data File: \\pittpa02\chem\gc1.1\2151.b\A-A20275.D
 Date: 15-MAR-2001 16:29
 Client ID:
 Sample Info: LHERB,2151.b
 Column phase: RTX-50

Instrument: gc1.1
 Operator: 010139
 Column diameter: 0.53

\\pittpa02\chem\gc1.1\2151.b\A-A20275.D



Data File: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20276.D
Report Date: 16-Mar-2001 08:53

679 609

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc1.i\2151.b\A-A20276.D
Lab Smp Id: MLHERB
Inj Date : 15-MAR-2001 17:00
Operator : 010139
Smp Info : MLHERB,2151.b
Misc Info : 190-107-2
Comment : 8151/515 ANALYSIS
Method : \\qpitpa02\d\chem\gc1.i\2151.b\LONGH.m
Meth Date : 16-Mar-2001 08:52 morganw
Cal Date : 15-MAR-2001 17:00
Als bottle: 3
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC003

Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-A20276.D
Calibration Sample, Level: 2
Compound Sublist: all.sub

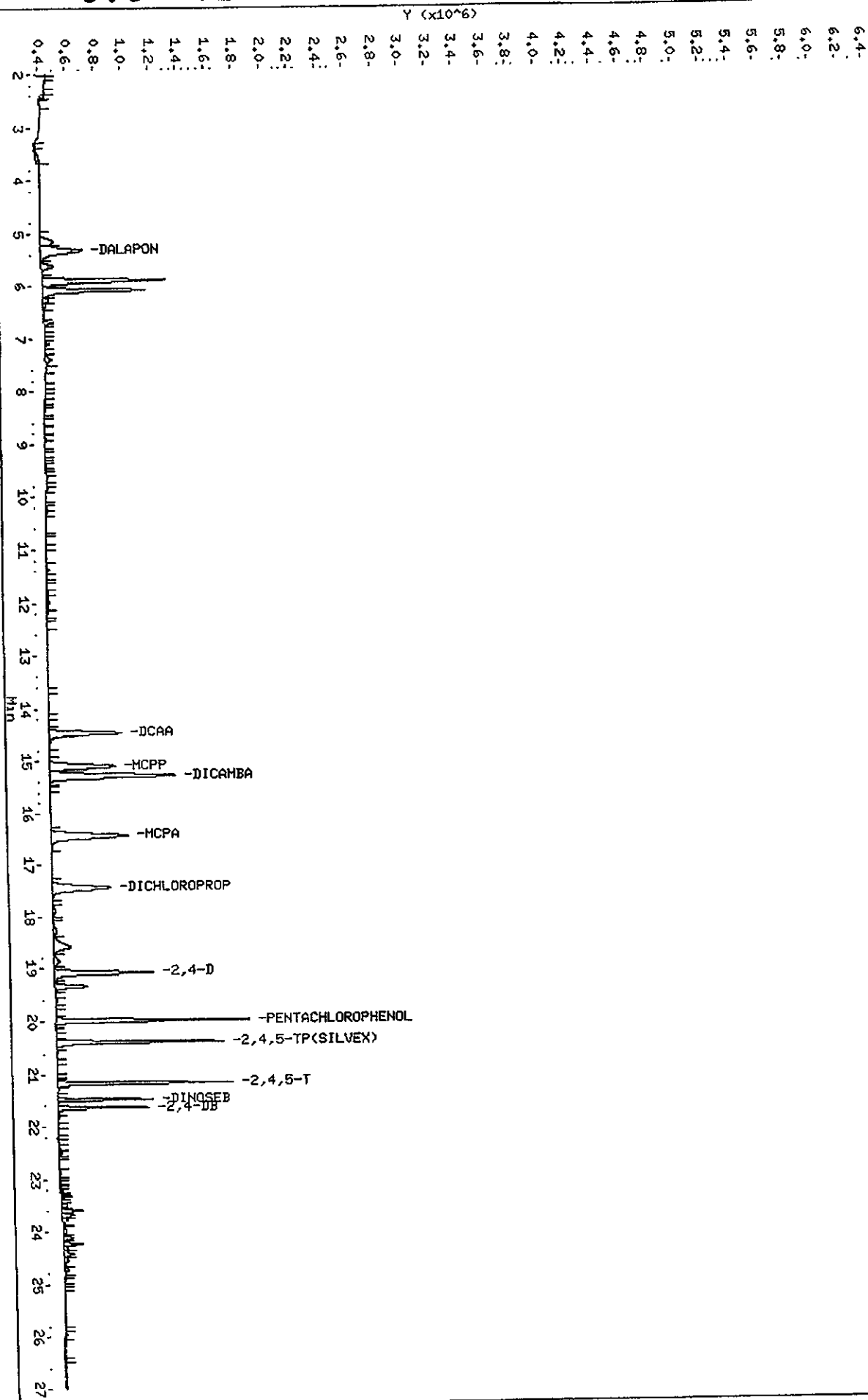
Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
*****	***	*****	*****	*****	*****	*****
1 DALAPON	5.328	5.326	0.002	299455	0.02200	0.02075
2 DCAA	14.461	14.463	-0.002	2792690	0.04250	0.04002
3 MCPP	15.097	15.097	0.000	468566	4.26000	3.708
4 DICAMBA	15.277	15.279	-0.002	904692	0.02130	0.02016
5 MCPA	16.442	16.446	-0.004	554791	4.28000	3.677
6 DICHLOROPROP	17.440	17.443	-0.003	423359	0.04240	0.03998
7 2,4-D	19.079	19.080	-0.001	709246	0.04250	0.04000
8 PENTACHLOROPHENOL	19.986	19.987	-0.001	1394415	0.00532	0.005176
9 2,4,5-TP(SILVEX)	20.391	20.392	-0.001	3567783	0.01050	0.01004
10 2,4,5-T	21.168	21.168	0.000	3056771	0.01050	0.009892
11 DINOSEB	21.484	21.485	-0.001	1566589	0.00635	0.005997
12 2,4-DB	21.639	21.638	0.001	1568420	0.04220	0.03983

679 610

Data File: \\qpitpa02\chem\col.1\2151.b\A-A20276.D
 Date: 15-MAR-2001 17:00
 Client ID:
 Sample Info: MLHERB, 2151.b
 Column phase: RTX-50

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

\\qpitpa02\chem\col.1\2151.b\A-A20276.D



Data File: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20277.D
Report Date: 16-Mar-2001 08:53

679 611

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc1.i\2151.b\A-A20277.D
Lab Smp Id: MHERB
Inj Date : 15-MAR-2001 17:31
Operator : 010139
Smp Info : MHERB,2151.b
Misc Info : 190-107-3
Comment : 8151/515 ANALYSIS
Method : \\qpitpa02\d\chem\gc1.i\2151.b\LONGH.m
Meth Date : 16-Mar-2001 08:52 morganw
Cal Date : 15-MAR-2001 17:31
Als bottle: 4
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC003

Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-A20277.D
Calibration Sample, Level: 3
Compound Sublist: all.sub

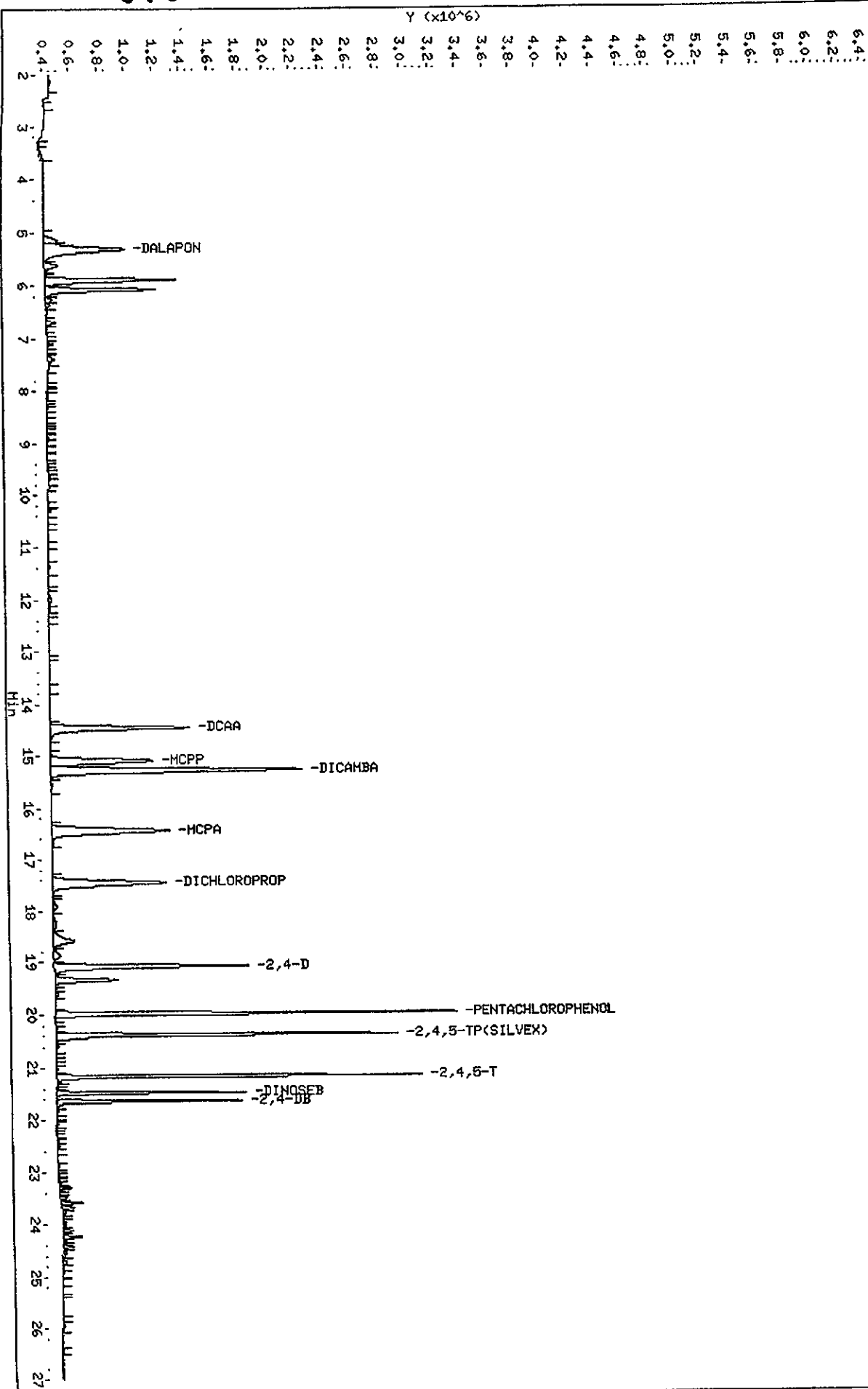
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	5.326	5.326	0.000	587330	0.04390	0.04172
\$ 2 DCAA	14.463	14.463	0.000	5341589	0.08510	0.07920
3 MCPP	15.097	15.097	0.000	738103	8.52000	6.525
4 DICAMBA	15.279	15.279	0.000	1809653	0.04250	0.04102
5 MCPA	16.446	16.446	0.000	856359	8.56000	6.394
6 DICHLOROPROP	17.443	17.443	0.000	817216	0.08480	0.07956
7 2,4-D	19.080	19.080	0.000	1399981	0.08510	0.08090
8 PENTACHLOROPHENOL	19.987	19.987	0.000	2903191	0.01064	0.01073
9 2,4,5-TP(SILVEX)	20.392	20.392	0.000	7294172	0.02110	0.02071
10 2,4,5-T	21.168	21.168	0.000	6338297	0.02110	0.02070
11 DINOSEB	21.485	21.485	0.000	3101832	0.01270	0.01214
12 2,4-DB	21.638	21.638	0.000	3054099	0.08450	0.07974

679 612

Data File: \\qpltpa02\chem\god.i\2151.b\A-A20277.D
 Date: 15-MAR-2001 17:31
 Client ID:
 Sample Info: MHERB,2151.b
 Column phase: RTX-50

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

\\qpltpa02\chem\god.i\2151.b\A-A20277.D



Data File: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20278.D
Report Date: 16-Mar-2001 08:53

679 613

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc1.i\2151.b\A-A20278.D

Lab Smp Id: MHHERB

Inj Date : 15-MAR-2001 18:03

Inst ID: gc1.i

Operator : 010139

Smp Info : MHHERB,2151.b

Misc Info : 190-107-4

Comment : 8151/515 ANALYSIS

Method : \\qpitpa02\d\chem\gc1.i\2151.b\LONGH.m

Meth Date : 16-Mar-2001 08:52 morganw

Quant Type: ESTD

Cal Date : 15-MAR-2001 18:03

Cal File: A-A20278.D

Als bottle: 5

Calibration Sample, Level: 4

Dil Factor: 1.00000

Compound Sublist: all.sub

Integrator: Falcon

Target Version: 4.04

Processing Host: PITPC003

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
-----	---	-----	-----	-----	-----	-----
1 DALAPON	5.189	5.326	-0.137	111501	0.08780	0.01025(M)
\$ 2 DCAA	14.465	14.463	0.002	9687513	0.17000	0.1494
3 MCPP	15.102	15.097	0.005	1071150	17.0000	10.65
4 DICAMBA	15.280	15.279	0.001	3395696	0.08510	0.07886
5 MCPA	16.445	16.446	-0.001	1247206	17.1000	10.51
6 DICHLOROPROP	17.445	17.443	0.002	1489876	0.17000	0.1506
7 2,4-D	19.080	19.080	0.000	2568661	0.17000	0.1533
8 PENTACHLOROPHENOL	19.989	19.987	0.002	5660018	0.02128	0.02101
9 2,4,5-TP(SILVEX)	20.393	20.392	0.001	14053600	0.04210	0.04043
10 2,4,5-T	21.169	21.168	0.001	12229317	0.04220	0.04049
11 DINOSEB	21.485	21.485	0.000	5896042	0.02540	0.02361
12 2,4-DB	21.638	21.638	0.000	5699513	0.16900	0.1534

QC Flag Legend

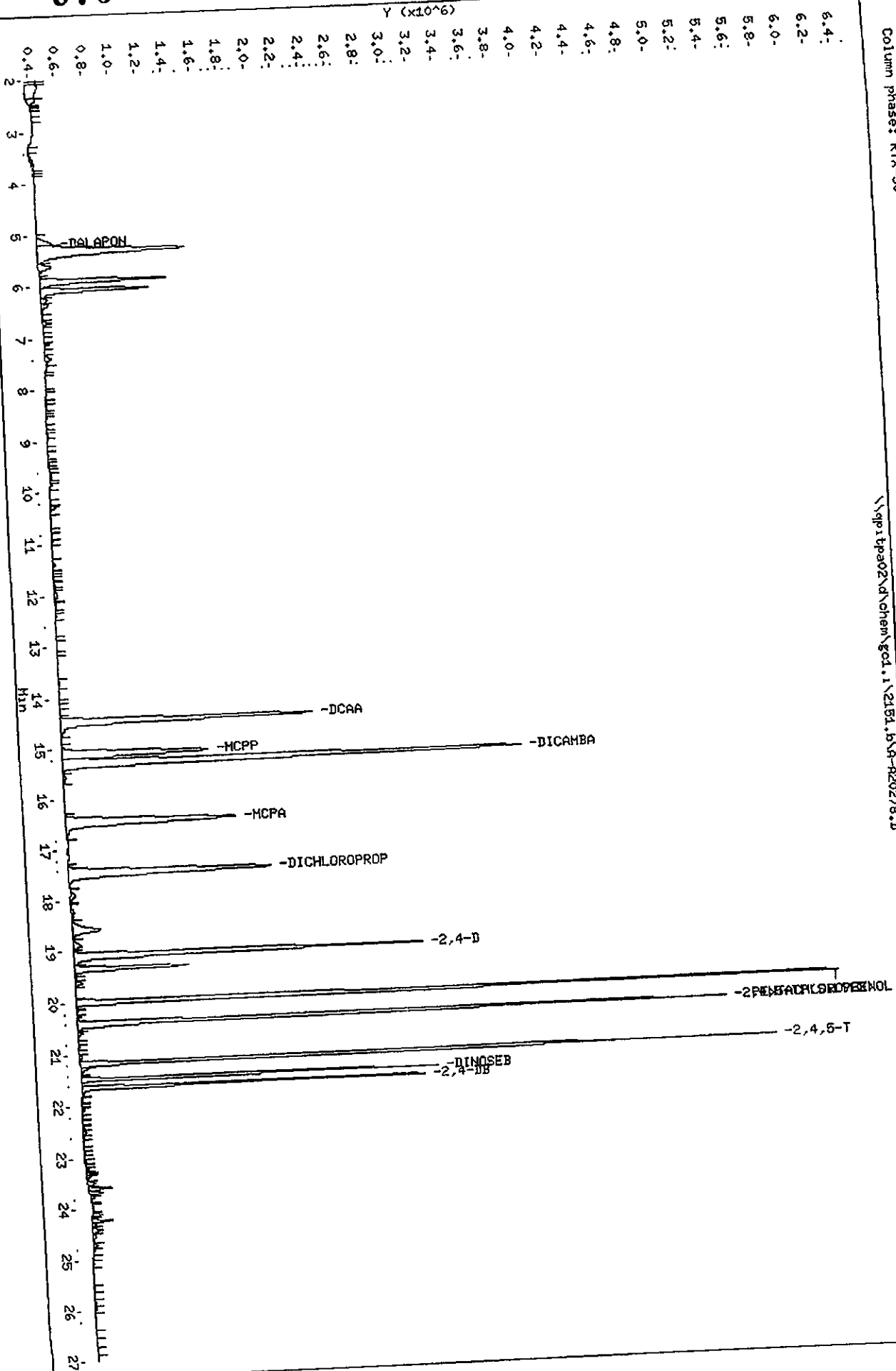
M - Compound response manually integrated.

679 614

Data File: \\sp1tpa02\chem\gcl.1\2151.b\A-R20278.D
Date: 15-MAR-2001 18:03
Client ID:
Sample Info: MHHERB/2151.b
Column phase: RTX-50

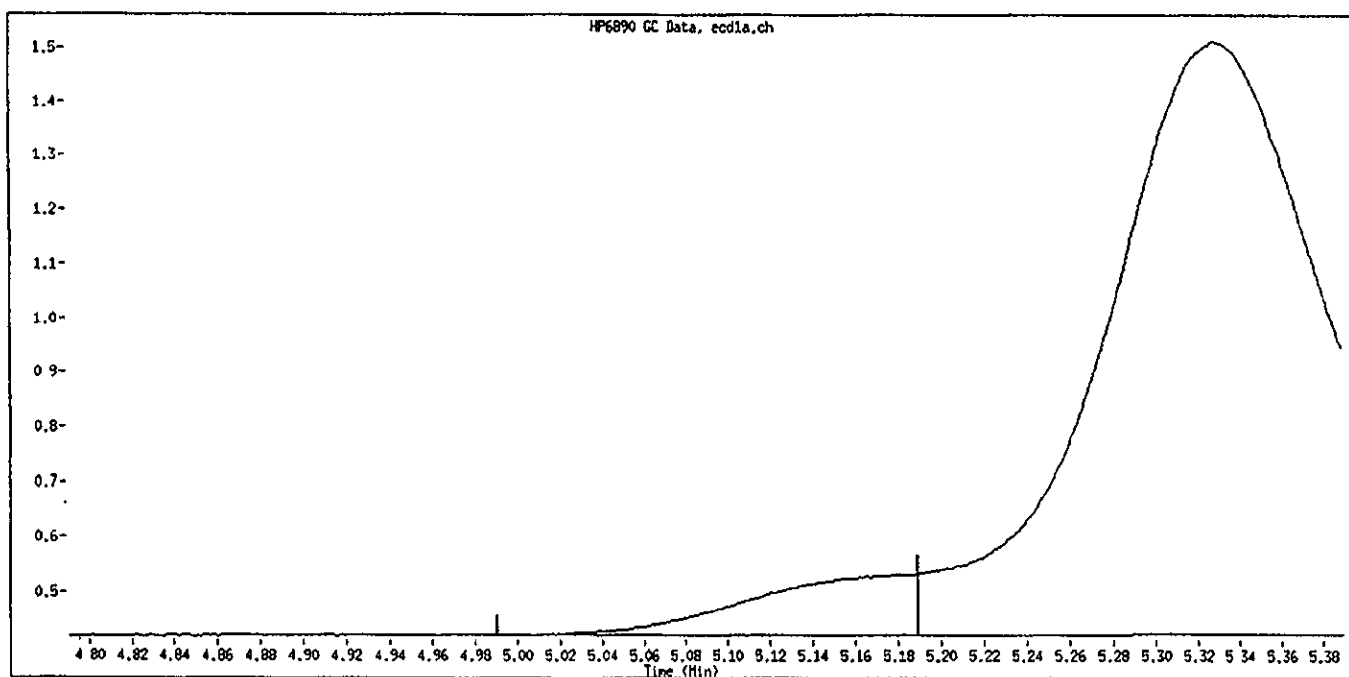
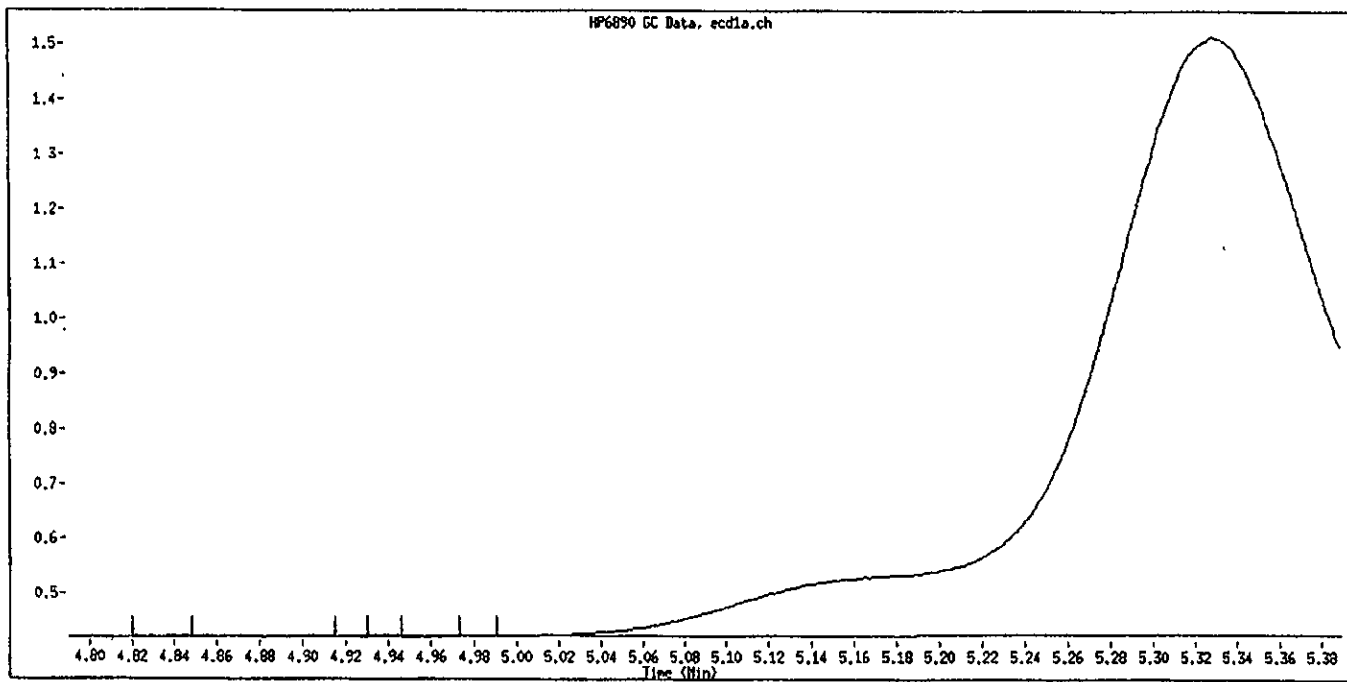
Instrument: gcl.1
Operator: 010139
Column diameter: 0.63

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Data File Name A-A20278 D
Inj Date and Time 15-MAR-2001 18:03
Instrument ID gc1.i
Client ID
Compound Name DALAPON
CAS # 75-99-0
Report Date 03/16/2001

679 615



Manually Integrated By MorganW
Manual Integration Reason Poor Chromatography

679 616

Data File: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20279.D
Report Date: 16-Mar-2001 08:53

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc1.i\2151.b\A-A20279.D
Lab Smp Id: HHERB
Inj Date : 15-MAR-2001 18:34
Operator : 010139
Smp Info : HHERB,2151.b
Misc Info : 190-107-5
Comment : 8151/515 ANALYSIS
Method : \\qpitpa02\d\chem\gc1.i\2151.b\LONGH.m
Meth Date : 16-Mar-2001 08:52 morganw
Cal Date : 15-MAR-2001 18:34
Als bottle: 6
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC003

Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-A20279.D
Calibration Sample, Level: 5
Compound Sublist: all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	5.182	5.326	-0.144	139625	0 17600	0.01576 (M)
5 2 DCAA	14.463	14 463	0 000	18155468	0 34000	0.2903
3 MCPP	15.103	15 097	0.006	1579493	34 1000	17.60
4 DICAMBA	15.281	15 279	0.002	6594031	0 17000	0.1562
5 MCPA	16.444	16.446	-0.002	1896027	34.0000	17.87
6 DICHLOROPROP	17.441	17 443	-0.002	2763717	0.33900	0.2895
7 2,4-D	19 076	19.080	-0 004	4927662	0.34000	0.3022
8 PENTACHLOROPHENOL	19 987	19 987	0 000	11529327	0 04255	0 04275
9 2,4,5-TP(SILVEX)	20 392	20 392	0 000	27990515	0 08400	0 08120
10 2,4,5-T	21.169	21.168	0 001	24648917	0 08440	0 08215
11 DINOSEB	21.485	21.485	0.000	11805974	0.05080	0 04794
12 2,4-DB	21.638	21.638	0.000	11462607	0.33800	0.3140

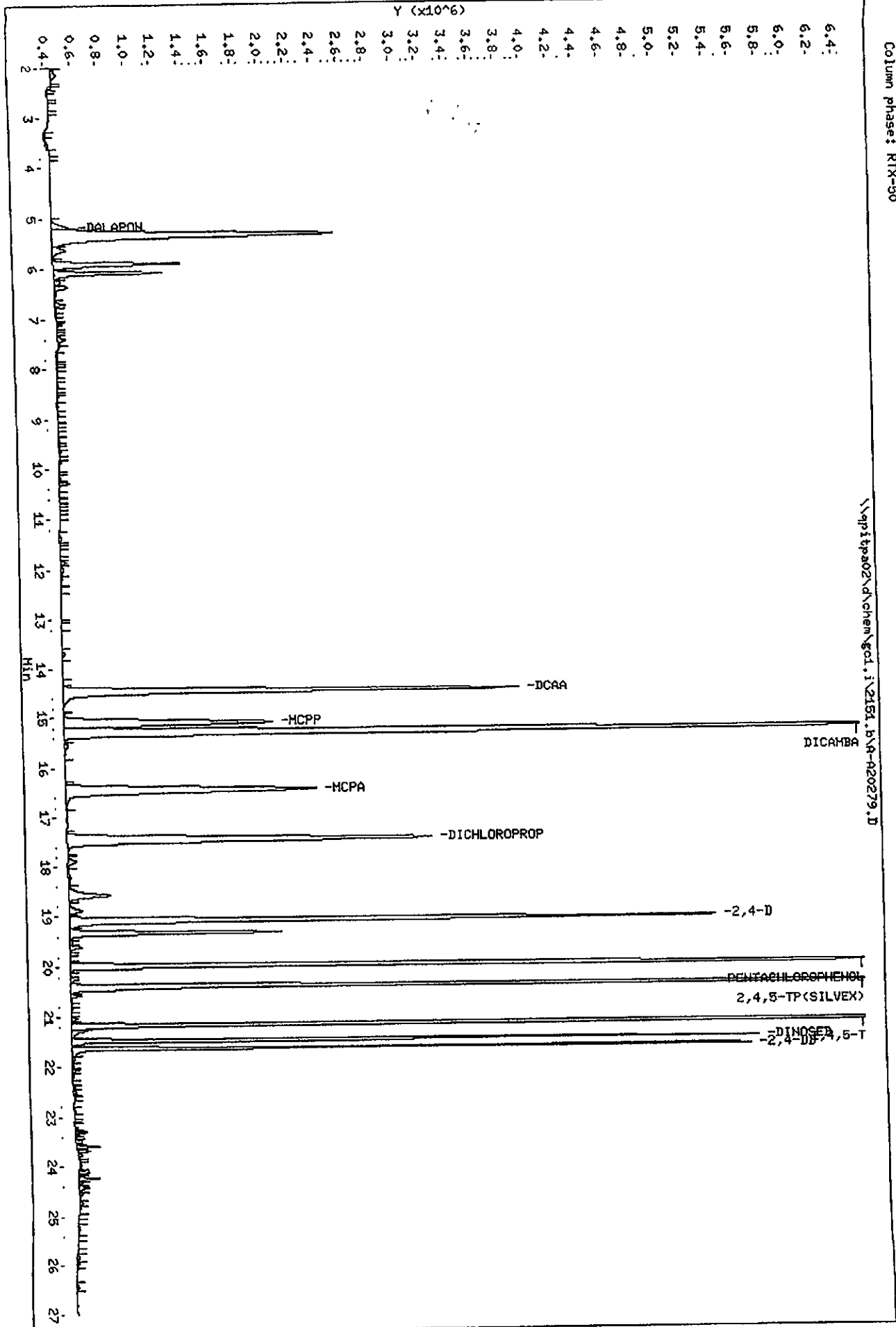
QC Flag Legend

M - Compound response manually integrated.

679 617

Data File: \\pp1tpa02\chem\col.1\2151.b\A-020279.D
 Date: 15-MAR-2001 18:34
 Client ID:
 Sample Info: HHERB, 2151.b
 Column phase: RTX-50

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



679 618

Data File Name A-A20279.D

Inj. Date and Time 15-MAR-2001 18:34

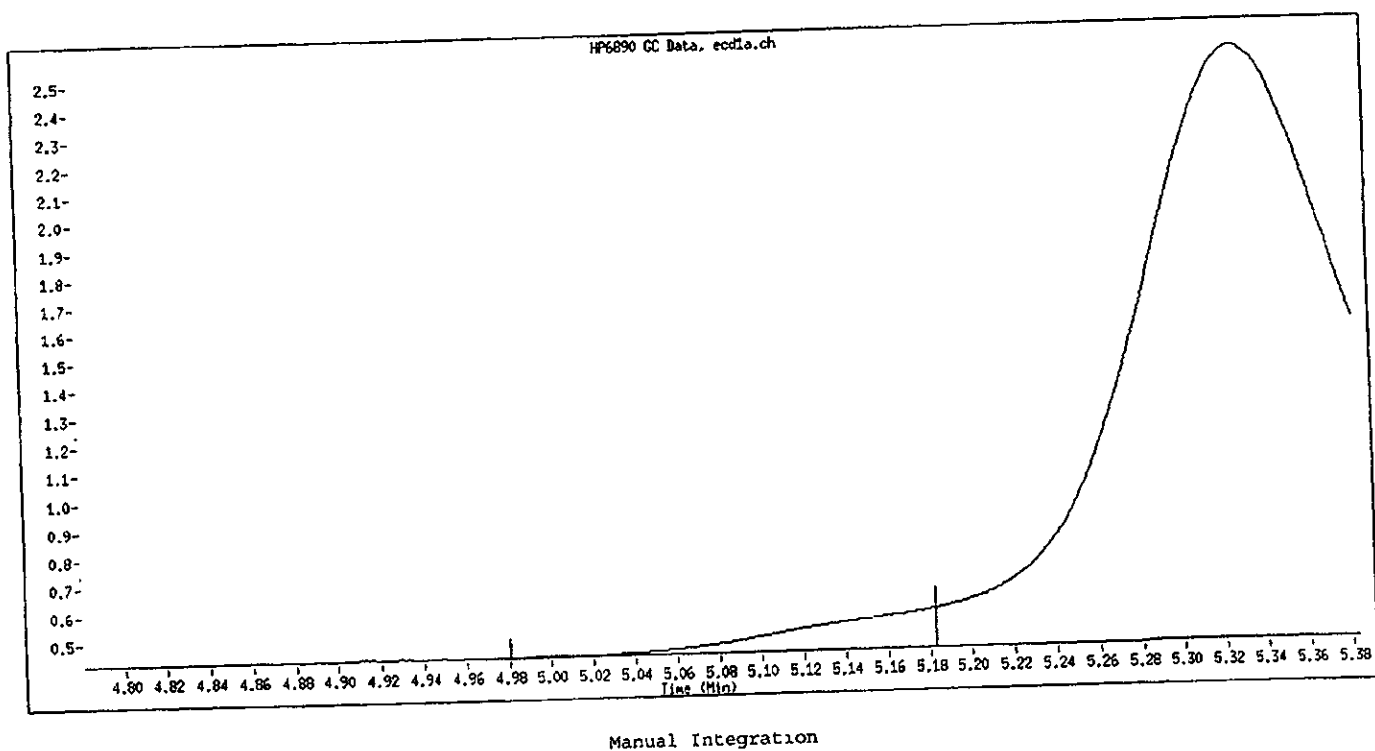
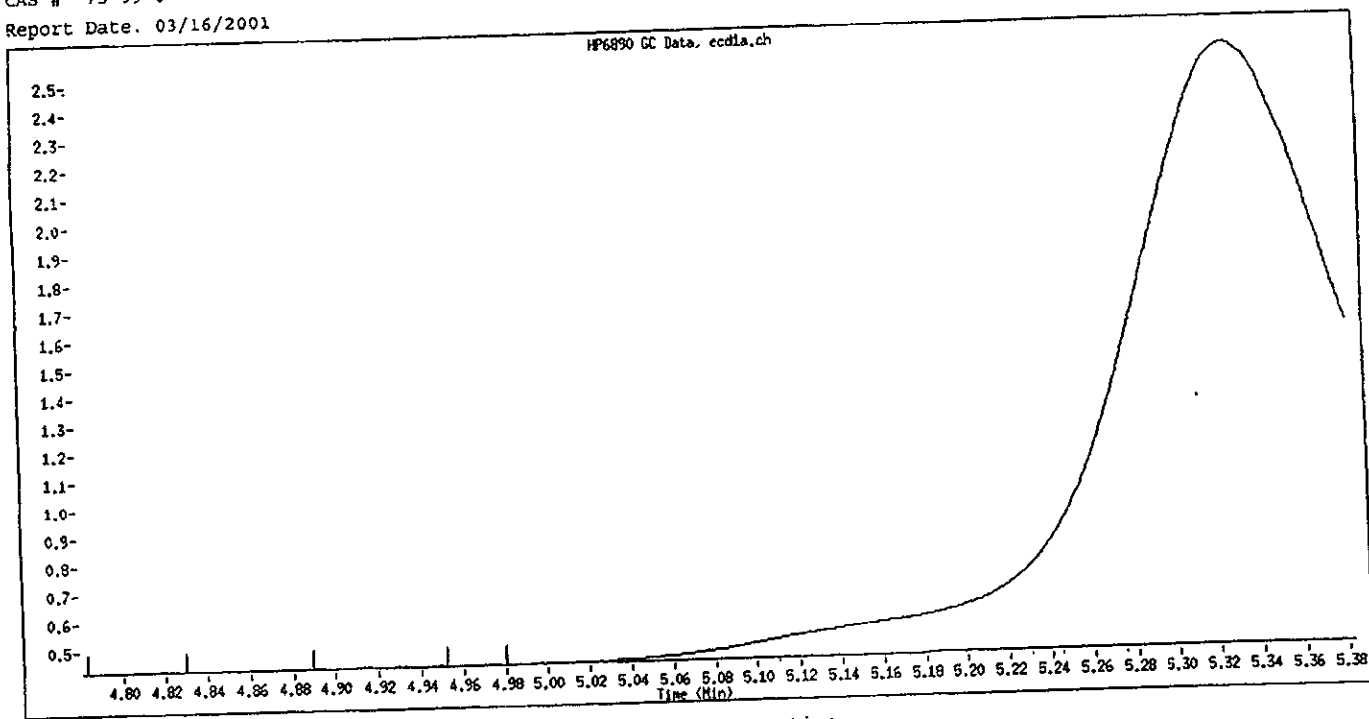
Instrument ID gcl 1

Client ID

Compound Name DALAPON

CAS # 75-99-0

Report Date. 03/16/2001



Manually Integrated By: MorganW

Manual Integration Reason: Poor Chromatography

Data File: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20280.D
 Report Date: 16-Mar-2001 10:08

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc1.i\2151.b\A-A20280.D
 Lab Smp Id: 2ND HERB
 Inj Date : 15-MAR-2001 19:05
 Operator : 010139
 Smp Info : 2ND HERB,2151.b
 Misc Info : 190-119-8
 Comment : 8151/515 ANALYSIS
 Method : \\qpitpa02\d\chem\gc1.i\2151.b\LONGH.m
 Meth Date : 16-Mar-2001 10:05 MorganW
 Cal Date : 15-MAR-2001 18:34
 Als bottle: 7
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC003

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-A20279.D
 Continuing Calibration Sample
 Compound Sublist: all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	5.328	5.328	0.000	296238	0.04390	0.03344 (M) 83%
\$ 2 DCAA	14.465	14.463	0.002	829191	0.08510	0.01326
3 MCPP	15.094	15.097	-0.003	691346	8.52000	7.704 96%
4 DICAMBA	15.280	15.279	0.001	1662419	0.04250	0.03939 98%
5 MCPA	16.444	16.446	-0.002	814425	8.56000	7.676 96%
6 DICHLOROPROP	17.446	17.443	0.003	394977	0.08480	0.04138 103%
7 2,4-D	19.078	19.080	-0.002	712369	0.08510	0.04369 108%
8 PENTACHLOROPHENOL	19.987	19.987	0.000	2803571	0.01064	0.01039 100%
9 2,4,5-TP(SILVEX)	20.392	20.392	0.000	12867023	0.02110	0.03732 73%
10 2,4,5-T	21.168	21.168	0.000	11578598	0.02110	0.03859 95%
11 DINOSEB	21.484	21.485	-0.001	9041943	0.01270	0.03672 90%
12 2,4-DB	21.639	21.638	0.001	1497903	0.08450	0.04103 103%

QC Flag Legend

M - Compound response manually integrated.

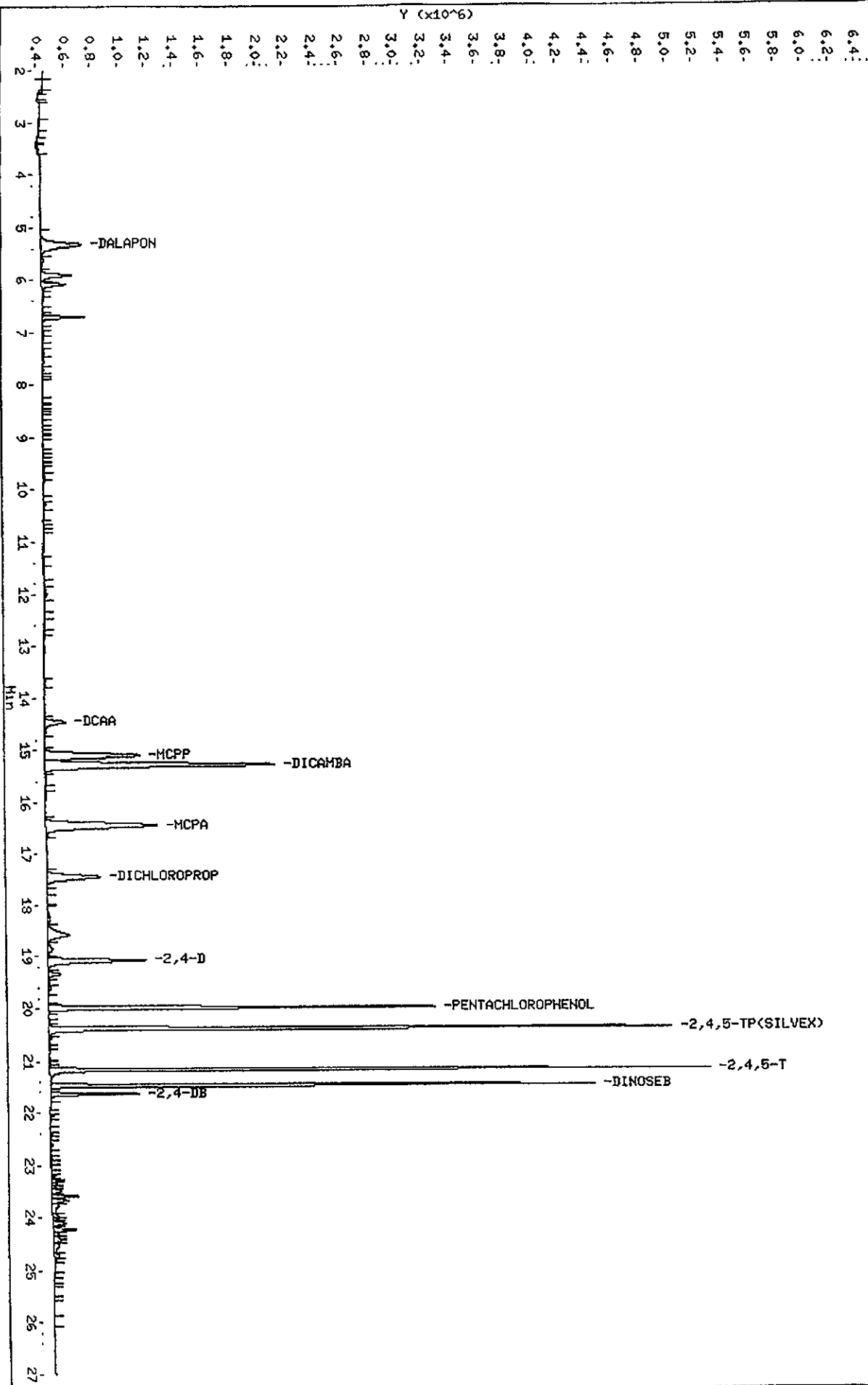
679 620

Data File: \\sp1tpa02\chem\gc1.i\2151.b\A-A20280.D
 Date: 15-MAR-2004 19:05
 Client ID:
 Sample Info: 2ND HERB, 2151.b

Column phase: RTX-50

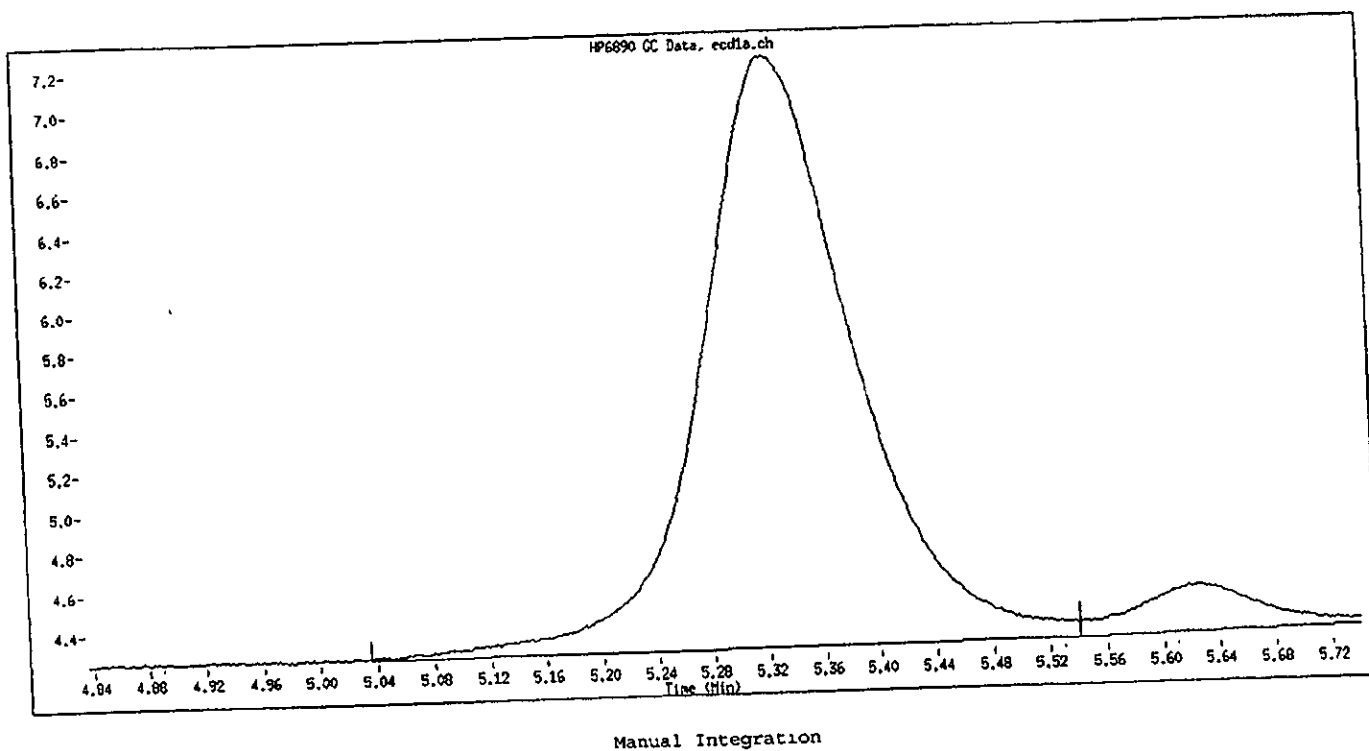
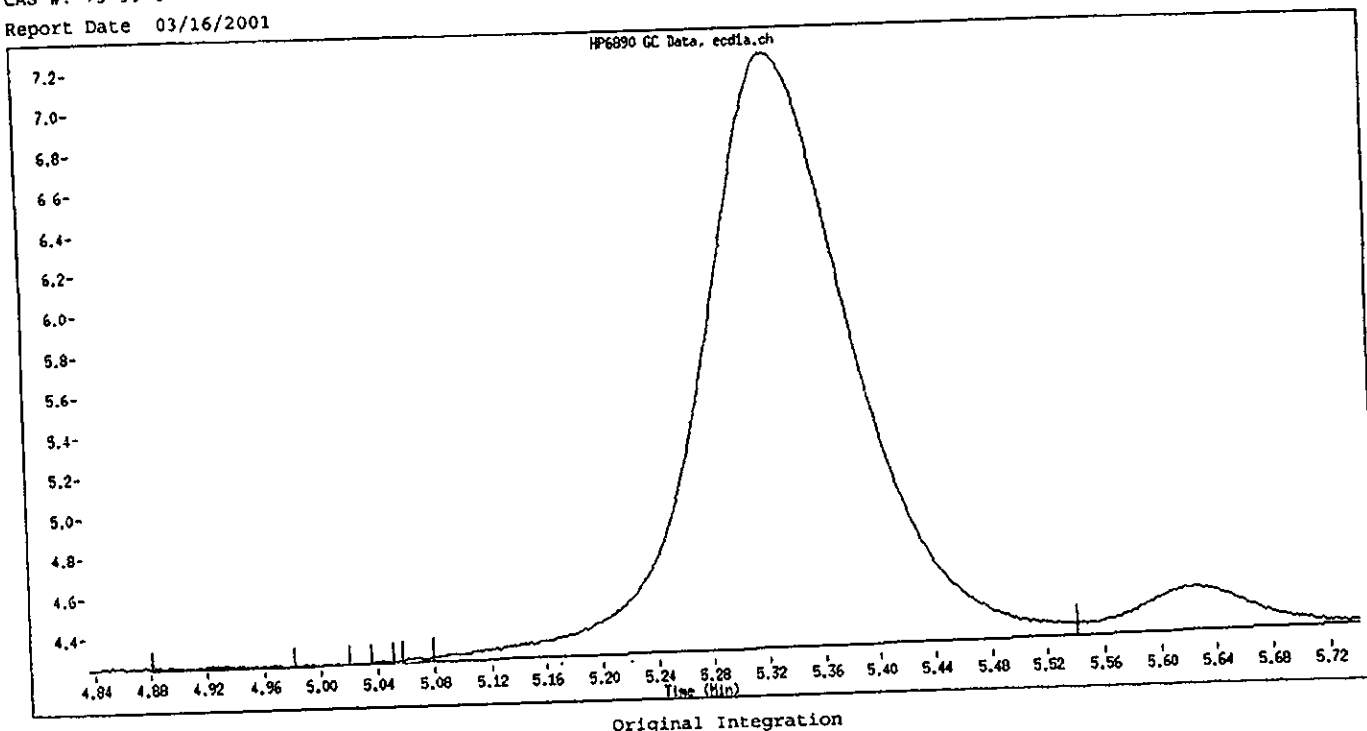
Instrument: gc1.i
 Operator: 010139
 Column diameter: 0.53

\\sp1tpa02\chem\gc1.i\2151.b\A-A20280.D



Data File Name A-A20280 D
Inj Date and Time 15-MAR-2001 19 05
Instrument ID gcl 1
Client ID
Compound Name DALAPON
CAS #. 75-99-0
Report Date 03/16/2001

679 621



Manually Integrated By MorganW
Manual Integration Reason. Unknown *Assign peak*
amw
3-16-01

679 622

Data File: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20349.D
 Report Date: 27-Mar-2001 14:00

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc1.i\2151.b\A-A20349.D
 Lab Smp Id: MHERB
 Inj Date : 27-MAR-2001 09:33
 Operator : 010139
 Smp Info : MHERB,2151.b
 Misc Info : 190-107-3
 Comment : 8151/515 ANALYSIS
 Method : \\qpitpa02\d\chem\gc1.i\2151.b\LONGH.m
 Meth Date : 27-Mar-2001 14:00 morganw
 Cal Date : 15-MAR-2001 18:34
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC003

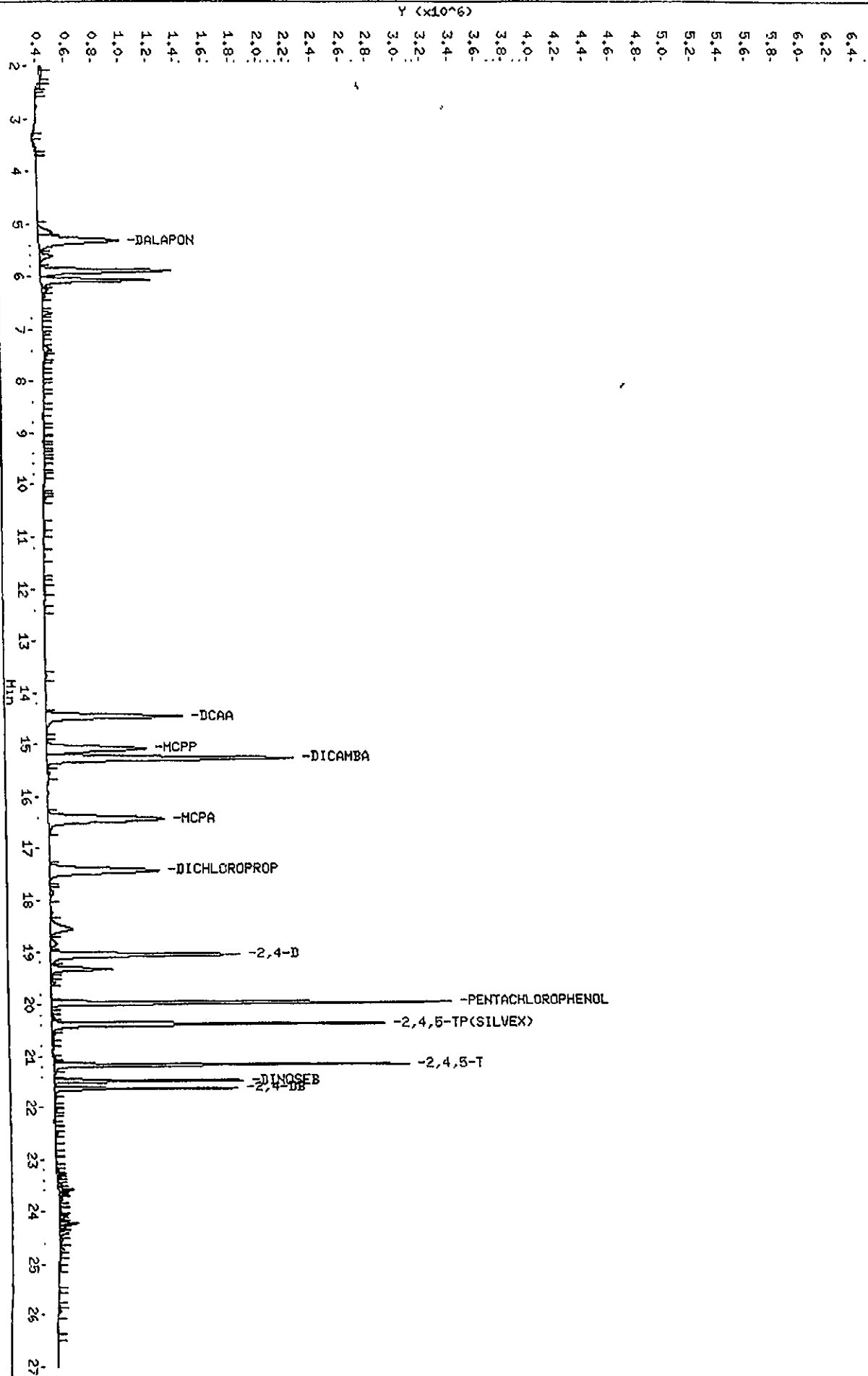
Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-A20279.D
 Continuing Calibration Sample
 Compound Sublist: all.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
*****	==	=====	=====	=====	=====	=====
1 DALAPON	5.314	5.314	0.000	582617	0.04390	0.04365
\$ 2 DCAA	14.450	14.450	0.000	5330124	0.08510	0.08522
3 MCPP	15.082	15.082	0.000	725634	8.52000	8.086
4 DICAMBA	15.263	15.263	0.000	1793444	0.04250	0.04249
5 MCPA	16.425	16.425	0.000	844699	8.56000	7.962
6 DICHLOROPROP	17.423	17.423	0.000	802963	0.08480	0.08411
7 2,4-D	19.066	19.066	0.000	1378776	0.08510	0.08457
8 PENTACHLOROPHENOL	19.977	19.977	0.000	2915318	0.01064	0.01081
9 2,4,5-TP(SILVEX)	20.384	20.384	0.000	7233104	0.02110	0.02098
10 2,4,5-T	21.162	21.162	0.000	6319813	0.02110	0.02106
11 DINOSEB	21.478	21.478	0.000	3119068	0.01270	0.01267
12 2,4-DB	21.632	21.632	0.000	3099957	0.08450	0.08491

Data File: \\qpltpa02\chem\gcl.1\2151.b\A-A20349.D
 Date: 27-MAR-2001 09:33
 Client ID:
 Sample Info: H-ERB, 2151.b
 Column phase: RTX-50

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

\\qpltpa02\chem\gcl.1\2151.b\A-A20349.D



679 624

Data File: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20365.D
 Report Date: 28-Mar-2001 09:19

STL-Pittsburgh

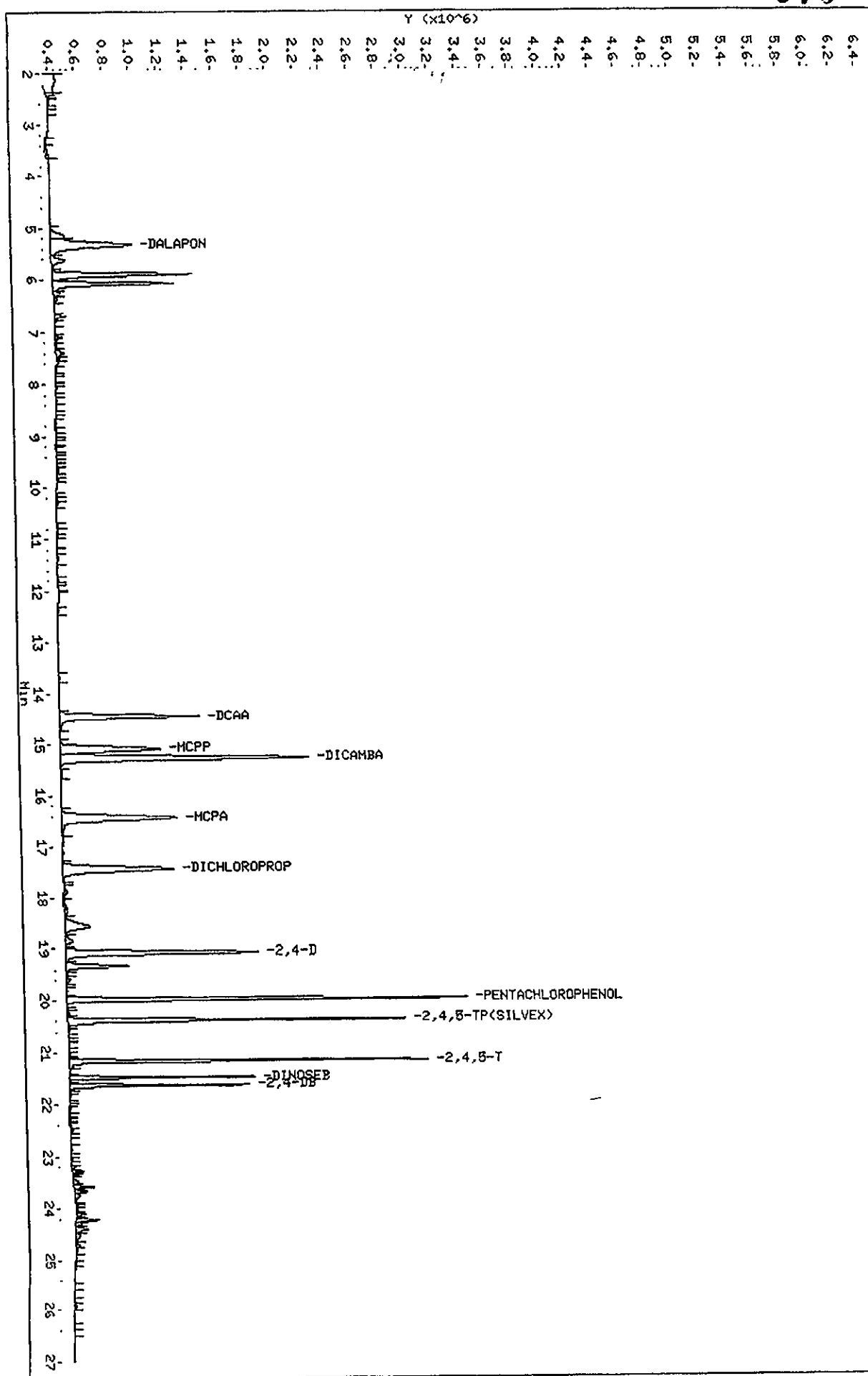
Data file : \\qpitpa02\d\chem\gc1.i\2151.b\A-A20365.D
 Lab Smp Id: MHERB
 Inj Date : 27-MAR-2001 17:53
 Operator : 010139
 Smp Info : MHERB,2151.b
 Misc Info : 190-107-3
 Comment : 8151/515 ANALYSIS
 Method : \\qpitpa02\d\chem\gc1.i\2151.b\LONGH.m
 Meth Date : 28-Mar-2001 07:04 MorganW
 Cal Date : 15-MAR-2001 18:34
 Als bottle: 18
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC003

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-A20279.D
 Continuing Calibration Sample
 Compound Sublist: all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	5.317	5.314	0.003	595568	0.04390	0.04462
2 DCAA	14.449	14.450	-0.001	5400963	0.08510	0.08635
3 MCPP	15.082	15.082	0.000	737405	8.52000	8.218
4 DICAMBA	15.263	15.263	0.000	1828551	0.04250	0.04333
5 MCPA	16.428	16.425	0.003	851265	8.56000	8.024
6 DICHLOROPROP	17.423	17.423	0.000	820641	0.08480	0.08596
7 2,4-D	19.067	19.066	0.001	1415820	0.08510	0.08684
8 PENTACHLOROPHENOL	19.978	19.977	0.001	2963244	0.01064	0.01099
9 2,4,5-TP(SILVEX)	20.384	20.384	0.000	7409039	0.02110	0.02149
10 2,4,5-T	21.161	21.162	-0.001	6446535	0.02110	0.02148
11 DINOSEB	21.477	21.478	-0.001	3102073	0.01270	0.01260
12 2,4-DB	21.631	21.632	-0.001	3006256	0.08450	0.08235

Data File: \\pp1tpa02\chem\gc1.i\2151.b\A-A20365.D
 Date : 27-MAR-2001 17:53
 Client ID:
 Sample Info: HHERB,2151.b
 Column phase: RTX-50
 Instrument: gc1.i
 Operator: 010139
 Column diameter: 0.53

\\pp1tpa02\chem\gc1.i\2151.b\A-A20365.D



Data File: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20383.D
 Report Date: 28-Mar-2001 09:19

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc1.i\2151.b\A-A20383.D
 Lab Smp Id: MHERB
 Inj Date : 28-MAR-2001 03:14
 Operator : 010139
 Smp Info : MHERB,2151.b
 Misc Info : 190-107-3
 Comment : 8151/515 ANALYSIS
 Method : \\qpitpa02\d\chem\gc1.i\2151.b\LONGH.m
 Meth Date : 28-Mar-2001 07:04 MorganW
 Cal Date : 15-MAR-2001 18:34
 Als bottle: 36
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC003

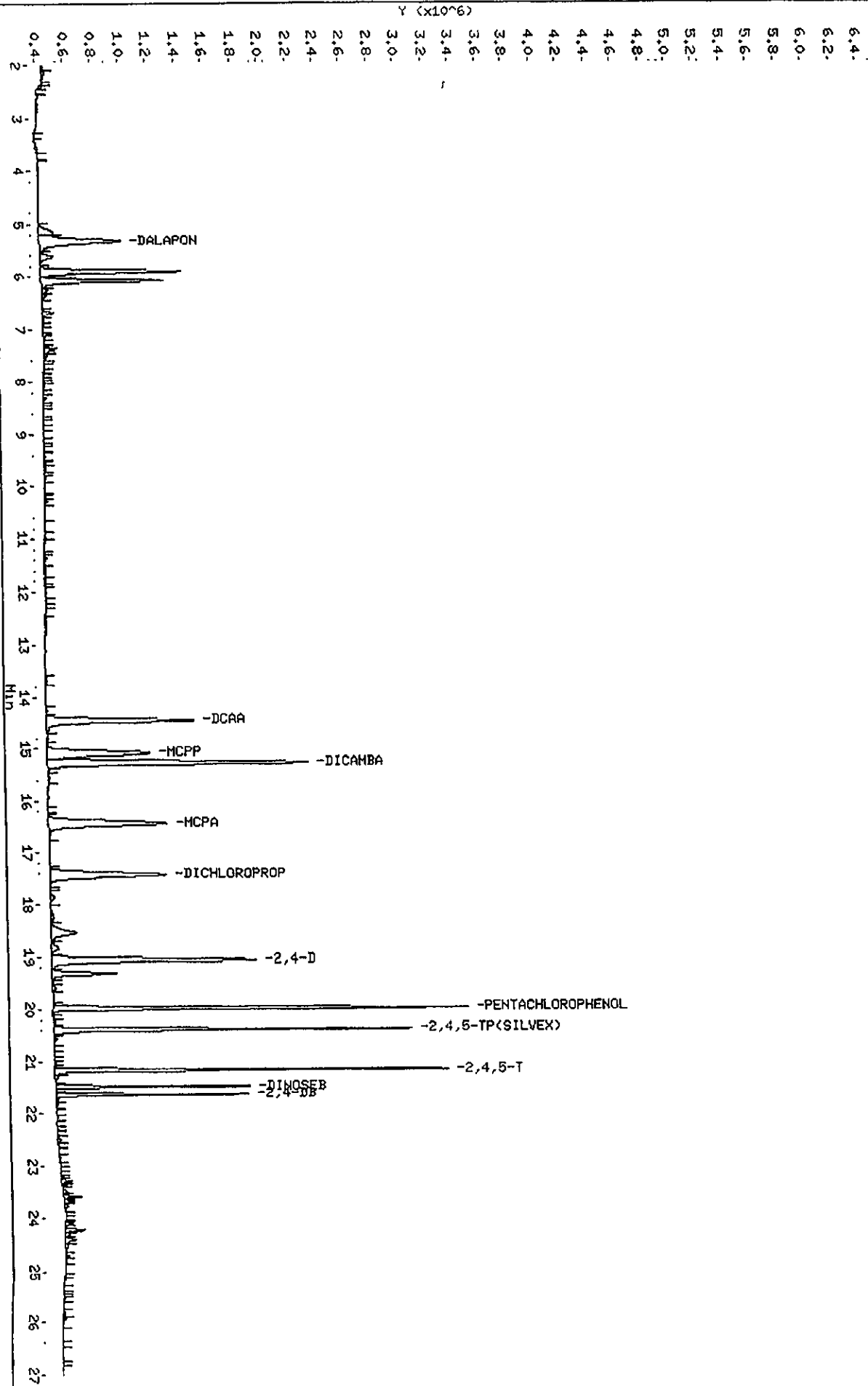
Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-A20279.D
 Continuing Calibration Sample
 Compound Sublist: all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	5 319	5 314	0.005	592538	0.04390	0.04440
\$ 2 DCAA	14.445	14.450	-0.005	5559157	0.08510	0.08888
3 MCPP	15 079	15 082	-0.003	746010	8.52000	8.314
4 DICAMBA	15 260	15 263	-0.003	1881834	0.04250	0.04459
5 MCPA	16 421	16 425	-0.004	861171	8.56000	8.117
6 DICHLOROPROP	17 419	17.423	-0.004	851474	0.08480	0.08920
7 2,4-D	19 064	19.066	-0.002	1481838	0.08510	0.09089
8 PENTACHLOROPHENOL	19 975	19 977	-0.002	3027184	0.01064	0.01122
9 2,4,5-TP(SILVEX)	20.382	20.384	-0.002	7670234	0.02110	0.02225
10 2,4,5-T	21 159	21 162	-0.003	6762207	0.02110	0.02254
11 DINOSEB	21 476	21.478	-0.002	3185271	0.01270	0.01294
12 2,4 DB	21.630	21 632	-0.002	3160973	0.08450	0.08658

Data File: \\pp1tpa02\chem\gc1.i\2151.b\A-020383.D
Date: 28-MAR-2001 03:14
Client ID:
Sample Info: HHERB, 2151.b
Column phase: RTX-50

Instrument: gc1.1
Operator: 010139
Column diameter: 0.53

\\pp1tpa02\chem\gc1.i\2151.b\A-020383.D



Data File: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20385.D
 Report Date: 28-Mar-2001 12:58

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc1.i\2151.b\A-A20385.D
 Lab Smp Id: MHERB
 Inj Date : 28-MAR-2001 09:55
 Operator : 010139
 Smp Info : MHERB,2151.b
 Misc Info : 190-107-3
 Comment : 8151/515 ANALYSIS
 Method : \\qpitpa02\d\chem\gc1.i\2151.b\LONGH.m
 Meth Date : 28-Mar-2001 12:58 MorganW
 Cal Date : 15-MAR-2001 18:34
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC003

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-A20279.D
 Continuing Calibration Sample
 Compound Sublist: all.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	5 312	5 312	0.000	589497	0.04390	0 04417
\$ 2 DCAA	14 445	14 445	0.000	5492316	0.08510	0 08781
3 MCPP	15.080	15.080	0 000	739660	8.52000	8.243
4 DICAMBA	15 262	15 262	0.000	1846923	0.04250	0 04376
5 MCPA	16 424	16 424	0 000	857954	8 56000	8 087
6 DICHLOROPROP	17 419	17.419	0 000	836507	0.08480	0 08763
7 2,4-D	19 066	19.066	0 000	1472201	0.08510	0 09030
8 PENTACHLOROPHENOL	19 976	19 976	0.000	3014182	0 01064	0 01118
9 2,4,5-TP(SILVEX)	20 383	20 383	0.000	7587639	0.02110	0.02201
10 2,4,5-T	21.160	21.160	0 000	6699685	0.02110	0.02233
11 DINOSEB	21 476	21 476	0.000	3204079	0 01270	0.01301
12 2,4-DB	21 630	21.630	0 000	3282175	0.08450	0.08990

Data File: \\npitpa02\chem\gc1.i\2151.b\A-A20385.D

Date: 28-MAR-2001 09:55

Client ID:

Sample Info: MHERB,2151.b

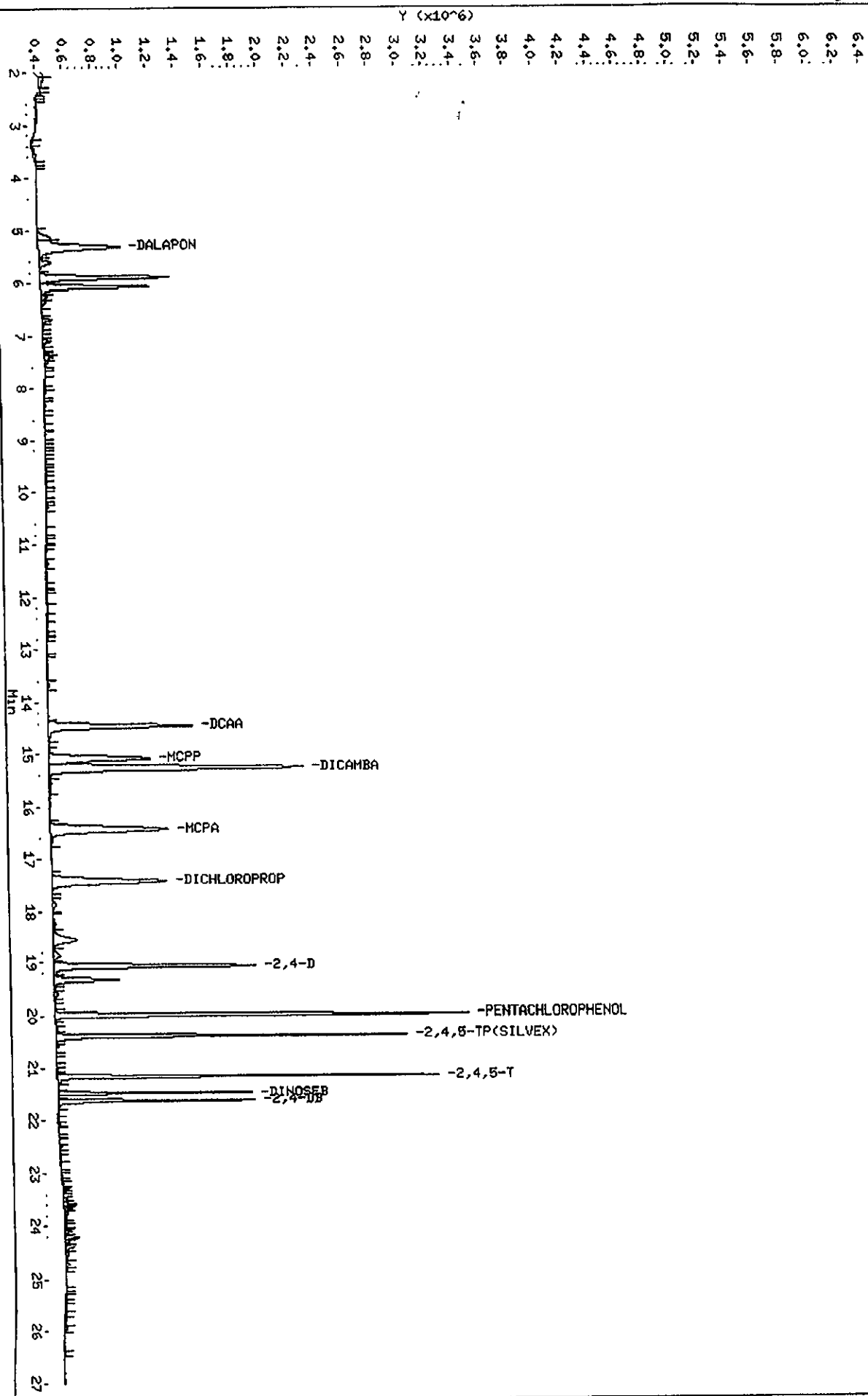
Column phase: RTX-50

Instrument: gc1.1

Operator: 010139

Column diameter: 0.53

\\npitpa02\chem\gc1.i\2151.b\A-A20385.D



679 630

Data File: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20389.D
 Report Date: 28-Mar-2001 12:59

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc1.i\2151.b\A-A20389.D
 Lab Smp Id: MHERB
 Inj Date : 28-MAR-2001 12:00
 Operator : 010139
 Smp Info : MHERB,2151.b
 Misc Info : 190-107-3
 Comment : 8151/515 ANALYSIS
 Method : \\qpitpa02\d\chem\gc1.i\2151.b\LONGH.m
 Meth Date : 28-Mar-2001 12:58 MorganW
 Cal Date : 15-MAR-2001 18:34
 Als bottle: 6
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC003

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-A20279.D
 Continuing Calibration Sample
 Compound Sublist: all.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
=====	==	=====	=====	=====	=====	=====
1 DALAPON	5.315	5.312	0.003	613010	0.04390	0.04593
\$ 2 DCAA	14.448	14.445	0.003	5568299	0.08510	0.08903
3 MCPP	15.079	15.080	-0.001	741387	8.52000	8.262
4 DICAMBA	15.263	15.262	0.001	1883529	0.04250	0.04463
5 MCPA	16.427	16.424	0.003	859463	8.56000	8.101
6 DICHLOROPROP	17.424	17.419	0.005	852503	0.08480	0.08930
7 2,4-D	19.064	19.066	-0.002	1495432	0.08510	0.09172
8 PENTACHLOROPHENOL	19.976	19.976	0.000	2985842	0.01064	0.01107
9 2,4,5-TP(SILVEX)	20.382	20.383	-0.001	7610685	0.02110	0.02208
10 2,4,5-T	21.159	21.160	-0.001	6734784	0.02110	0.02244
11 DINOSEB	21.477	21.476	0.001	3142251	0.01270	0.01276
12 2,4-DB	21.631	21.630	0.001	3078453	0.08450	0.08432

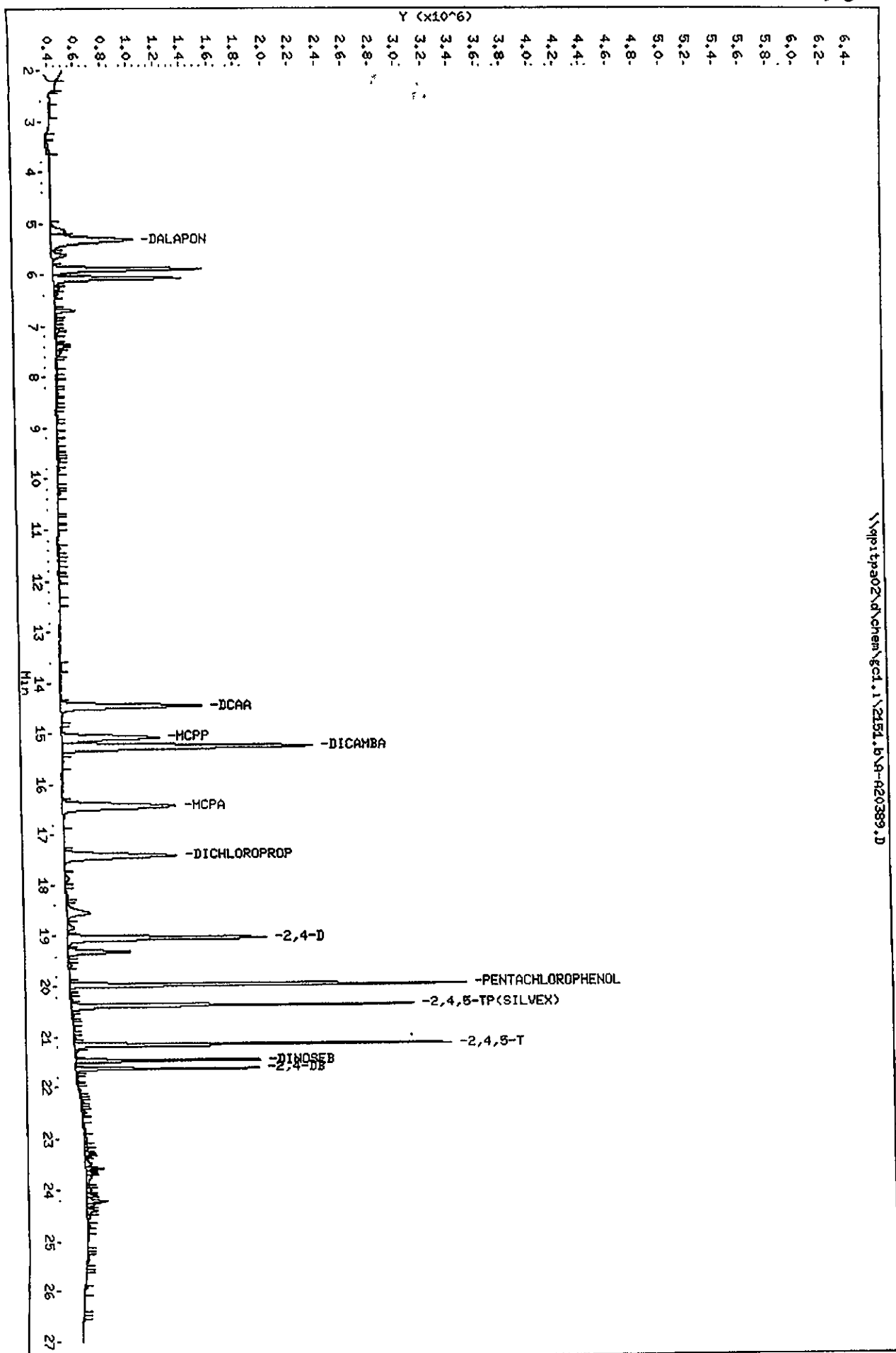
679

631

Data File: \\ppitpa02\chem\gc1.1\2151.b\A-020389.D
Date: 28-MAR-2001 12:00
Client ID:
Sample Info: HHERB,2151.b
Column phase: RTX-50

Instrument: gc1.1
Operator: 010139
Column diameter: 0.53

\\ppitpa02\chem\gc1.1\2151.b\A-020389.D



679 632

6D
Hp 68901B
081701

Report Date : 27-Mar-2001 12:36

STL-Pittsburgh

COMPOUND LISTING

Method file : \\qpitpa02\d\chem\gc1.i\2151A.b\LONGHB.m
Quant Method : ESTD Target Version : 4.04
Last Update : 27-Mar-2001 12:34 Number of Cpnds : 12
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events

Values

Initial:Start Threshold 1018.000000
Initial:End Threshold 509.000000
Initial:Area Threshold 10180.000000
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	5.080	5.010-5.150	1.08e+007
\$ 2 DCAA	13.087	13.017-13.157	4.65e+007
3 DICAMBA	13.681	13.611-13.751	4.07e+007
4 MCPP	14.128	14.058-14.198	3.72e+004
5 MCPA	15.000	14.930-15.070	5.06e+004
6 DICHLOROPROP	16.144	16.074-16.214	8.52e+006
7 2,4-D	17.632	17.562-17.702	8.63e+006
8 PENTACHLOROPHENOL	18.069	17.999-18.139	1.16e+008
9 2,4,5-TP (SILVEX)	19.769	19.699-19.839	9.17e+007
10 2,4,5-T	20.540	20.470-20.610	9.70e+007
11 2,4-DB	21.119	21.049-21.189	1.45e+007
12 DINOSEB	21.826	21.756-21.896	9.28e+007

Report Date : 28-Mar-2001 13:07

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DB1701

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STL-Pittsburgh

COMPOUND LISTING

Method file : \\qpitpa02\d\chem\gc1.i\2151A.b\LONGHB.m
Quant Method : ESTD Target Version : 4.04
Last Update : 28-Mar-2001 13:06 Number of Cpnds : 12
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events Values

Initial:Start Threshold 1018.000000
Initial:End Threshold 509.000000
Initial:Area Threshold 10180.000000
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	5.077	5.007-5.147	1.08e+007
\$ 2 DCAA	13.084	13.014-13.154	4.65e+007
3 DICAMBA	13.681	13.611-13.751	4.07e+007
4 MCPP	14.124	14.054-14.194	3.72e+004
5 MCPA	14.999	14.929-15.069	5.06e+004
6 DICHLOROPROP	16.140	16.070-16.210	8.52e+006
7 2,4-D	17.628	17.558-17.698	8.63e+006
8 PENTACHLOROPHENOL	18.066	17.996-18.136	1.16e+008
9 2,4,5-TP(SILVEX)	19.767	19.697-19.837	9.17e+007
10 2,4,5-T	20.538	20.468-20.608	9.70e+007
11 2,4-DB	21.118	21.048-21.188	1.45e+007
12 DINOSEB	21.825	21.755-21.895	9.28e+007

679 634

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08/701

Report Date : 16-Mar-2001 07:53

STL-Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 15-MAR-2001 17:00
 End Cal Date : 15-MAR-2001 19:05
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 4.04
 Integrator : Falcon
 Method file : \\qpitpa02\d\chem\gc1.i\2151A.b\LONGHB.m
 Cal Date : 16-Mar-2001 07:52 MorganW
 Curve Type : Average

Calibration File Names:

Level 1: \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20276.D
 Level 2: \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20277.D
 Level 3: \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20278.D
 Level 4: \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20279.D
 Level 5: \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20280.D

	0.00500	0.01000	0.02500	0.05000	0.10000		
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	RRF	% RSD
1 DALAPON	11814727	10995045	10692118	10189715	10078807	10754083	6.511
3 DICAMBA	44748208	41717700	41239035	38665429	37207882	40715651	7.166
4 MCPP	54410	41776	34982	29082	25928	37235	30.473<-
5 MCPA	71727	55980	47808	40127	37151	50558	27.507<-
6 DICHLOROPROP	9833679	8976274	8627665	7824612	7326516	8517749	11.523
7 2,4-D	9102085	8752706	8892949	8347529	8034274	8625909	4.992
8 PENTACHLOROPHENOL	116801504	112681391	118291353	114317293	115624489	115543206	1.878
9 2,4,5-TP (SILVEX)	96700000	92417429	92457109	89559264	87267619	91680284	3.868
10 2,4,5-T	95448767	93322571	99955118	97740995	98428661	96979223	2.691
11 2,4-DB	14580237	13997417	14571373	14325959	15008547	14496707	2.565
12 DINOSEB	95671609	90806457	93230236	91787520	92714094	92841983	1.974
\$ 2 DCAA	54031221	49824753	47115969	42031153	39652500	46531119	12.485

AVG RSD = 9.5%

Data File: \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20383.D
 Report Date: 27-Mar-2001 12:33

7E
 Hp 68901B
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STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 27-MAR-2001 10:05
 Lab File ID: A-B20383.D Init. Cal. Date(s): 15-MAR-2001 15-MAR-2001
 Analysis Type: Init. Cal. Times: 17:00 19:05
 Lab Sample ID: MHERB Quant Type: ESTD
 Method: \\qpitpa02\d\chem\gc1.i\2151A.b\LONGHB.m

COMPOUND	RRF	RF0	MIN	MAX
1 DALAPON	10754083	9883827	0.010	-8.1 15.0
2 DCAA	46531119	43767168	0.010	-5.9 15.0
3 DICAMBA	40715651	39404659	0.010	-3.2 15.0
4 MCPP	37235	36153	0.010	-2.9 15.0
5 MCPA	50558	48179	0.010	-4.7 15.0
6 DICHLOROPROP	8517749	8175436	0.010	-4.0 15.0
7 2,4-D	8625909	8394536	0.010	-2.7 15.0
8 PENTACHLOROPHENOL	115543206	109381861	0.010	-5.3 15.0
9 2,4,5-TP(SILVEX)	91680284	88762038	0.010	-3.2 15.0
10 2,4,5-T	96979223	93481422	0.010	-3.6 15.0
11 2,4-DB	14496707	13955775	0.010	-3.7 15.0
12 DINOSEB	92841983	92694646	0.010	-0.2 15.0

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Hp 689013
081701Data File: \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20399.D
Report Date: 28-Mar-2001 06:22

STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 27-MAR-2001 18:24
 Lab File ID: A-B20399.D Init. Cal. Date(s): 15-MAR-2001 15-MAR-2001
 Analysis Type: Init. Cal. Times: 17:00 19:05
 Lab Sample ID: MHERB Quant Type: ESTD
 Method: \\qpitpa02\d\chem\gc1.i\2151A.b\LONGHB.m

COMPOUND	RRF	RF0	MIN	MAX
1 DALAPON	10754083	10613144	0.010	-1.3 15.0
2 DCAA	46531119	45524242	0.010	-2.2 15.0
3 DICAMBA	40715651	40915882	0.010	0.5 15.0
4 MCPP	37235	36464	0.010	-2.1 15.0
5 MCPA	50558	48958	0.010	-3.2 15.0
6 DICHLOROPROP	8517749	8539292	0.010	0.3 15.0
7 2,4-D	8625909	8834830	0.010	2.4 15.0
8 PENTACHLOROPHENOL	115543206	114752726	0.010	-0.7 15.0
9 2,4,5-TP(SILVEX)	91680284	91829431	0.010	0.2 15.0
10 2,4,5-T	96979223	98927867	0.010	2.0 15.0
11 2,4-DB	14496707	13949669	0.010	-3.8 15.0
12 DINOSEB	92841983	95314724	0.010	2.7 15.0

Data File: \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20417.D
 Report Date: 28-Mar-2001 06:28

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 Hp 154018
 081701

STL-Pittsburgh

679 637

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 28-MAR-2001 03:45
 Lab File ID: A-B20417.D Init. Cal. Date(s): 15-MAR-2001 15-MAR-2001
 Analysis Type: Init. Cal. Times: 17:00 19:05
 Lab Sample ID: MHERB Quant Type: ESTD
 Method: \\qpitpa02\d\chem\gc1.i\2151A.b\LONGHB.m

COMPOUND	RRF	RFO	MIN	RRF	%D	MAX
1 DALAPON	10754083	10765080	0.010	0.1	15.0	
\$ 2 DCAA	46531119	46408308	0.010	-0.3	15.0	
3 DICAMBA	40715651	42245812	0.010	3.8	15.0	
4 MCPP	37235	37313	0.010	0.2	15.0	
5 MCPA	50558	49652	0.010	-1.8	15.0	
6 DICHLOROPROP	8517749	8726580	0.010	2.5	15.0	
7 2,4-D	8625909	9324348	0.010	8.1	15.0	
8 PENTACHLOROPHENOL	115543206	116369925	0.010	0.7	15.0	
9 2,4,5-TP(SILVEX)	91680284	95734171	0.010	4.4	15.0	
10 2,4,5-T	96979223	106335024	0.010	9.6	15.0	
11 2,4-DB	14496707	14682047	0.010	1.3	15.0	
12 DINOSEB	92841983	98597402	0.010	6.2	15.0	

679 638

Data File: \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20420.D
 Report Date: 28-Mar-2001 13:06

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 Hp 68901B
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STL-Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 28-MAR-2001 10:26
 Lab File ID: A-B20420.D Init. Cal. Date(s): 15-MAR-2001 15-MAR-2001
 Analysis Type: Init. Cal. Times: 17:00 19:05
 Lab Sample ID: MHERB Quant Type: ESTD
 Method: \\qpitpa02\d\chem\gc1.i\2151A.b\LONGHB.m

COMPOUND	RRF	RFO	MIN	RRF	%D	MAX
=====	=====	=====	=====	=====	=====	=====
1 DALAPON	10754083	10365194	0.010	-3.6	15.0	
\$ 2 DCAA	46531119	44907427	0.010	-3.5	15.0	
3 DICAMBA	40715651	40561718	0.010	-0.4	15.0	
4 MCPP	37235	36691	0.010	-1.5	15.0	
5 MCPA	50558	49048	0.010	-3.0	15.0	
6 DICHLOROPROP	8517749	8502040	0.010	-0.2	15.0	
7 2,4-D	8625909	8941445	0.010	3.7	15.0	
8 PENTACHLOROPHENOL	115543206	112090602	0.010	-3.0	15.0	
9 2,4,5-TP (SILVEX)	91680284	92228720	0.010	0.6	15.0	
10 2,4,5-T	96979223	100868246	0.010	4.0	15.0	
11 2,4-DB	14496707	14911704	0.010	2.9	15.0	
12 DINOSEB	92841983	94130472	0.010	1.4	15.0	

Data File: \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20424.D
 Report Date: 28-Mar-2001 13:08

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 031701

STL-Pittsburgh

679 639

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 28-MAR-2001 12:31
 Lab File ID: A-B20424.D Init. Cal. Date(s): 15-MAR-2001 15-MAR-2001
 Analysis Type: Init. Cal. Times: 17:00 19:05
 Lab Sample ID: MHERB Quant Type: ESTD
 Method: \\qpitpa02\d\chem\gc1.i\2151A.b\LONGHB.m

COMPOUND	RRF	RFO	MIN	MAX
-----	-----	-----	-----	-----
1 DALAPON	10754083	10740433	0.010	-0.1 15.0
2 DCAA	46531119	46271962	0.010	-0.6 15.0
3 DICAMBA	40715651	41696659	0.010	2.4 15.0
4 MCPP	37235	36830	0.010	-1.1 15.0
5 MCPA	50558	49282	0.010	-2.5 15.0
6 DICHLOROPROP	8517749	8749481	0.010	2.7 15.0
7 2,4-D	8625909	9289177	0.010	7.7 15.0
8 PENTACHLOROPHENOL	115543206	114862218	0.010	-0.6 15.0
9 2,4,5-TP(SILVEX)	91680284	95216588	0.010	3.9 15.0
10 2,4,5-T	96979223	105581185	0.010	8.9 15.0
11 2,4-DB	14496707	14467740	0.010	-0.2 15.0
12 DINOSEB	92841983	97103465	0.010	4.6 15.0

679 640

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name:

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C1C210184

GC Column: DB1701 ID: 0.53 (mm) Init. Calib. Date(s): 03/15/01 03/15/01

Instrument ID: GC1

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION							
S1 : 13.08							
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	RT	#
=====	=====	=====	=====	=====		=====	=====
01	LHERB	03/15/01	1700	13.10			
02	MLHERB	03/15/01	1731	13.10			
03	MHERB	03/15/01	1803	13.10			
04	MHHERB	03/15/01	1834	13.10			
05	HHERB	03/15/01	1905	13.09			
06	2ND HERB	03/15/01	1937	13.10			
07	MHERB	03/27/01	1005	13.09			
08	MHERB	03/27/01	1824	13.09			
09	PBLK2391 DXWV51AA	03/27/01	2131	13.09			
10	MHERB	03/28/01	0345	13.09			
11	MHERB	03/28/01	1026	13.08			
12	DF/24-B/1079 DXPK31CC	03/28/01	1057	13.13			
13	MHERB	03/28/01	1231	13.09			
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\2151A.b\A-B20276.D
Report Date: 16-Mar-2001 07:53

679 641

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20276.D
Lab Smp Id: LHERB
Inj Date : 15-MAR-2001 17:00
Operator : 010139
Smp Info : LHERB,2151A.b
Misc Info : 190-107-1
Comment : 8151/515 ANALYSIS
Method : \\qpitpa02\d\chem\gc1.i\2151A.b\LONGHB.m
Meth Date : 16-Mar-2001 07:53 morganw
Cal Date : 15-MAR-2001 17:00
Als bottle: 2
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC003

Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-B20276.D
Calibration Sample, Level: 1
Compound Sublist: all.sub

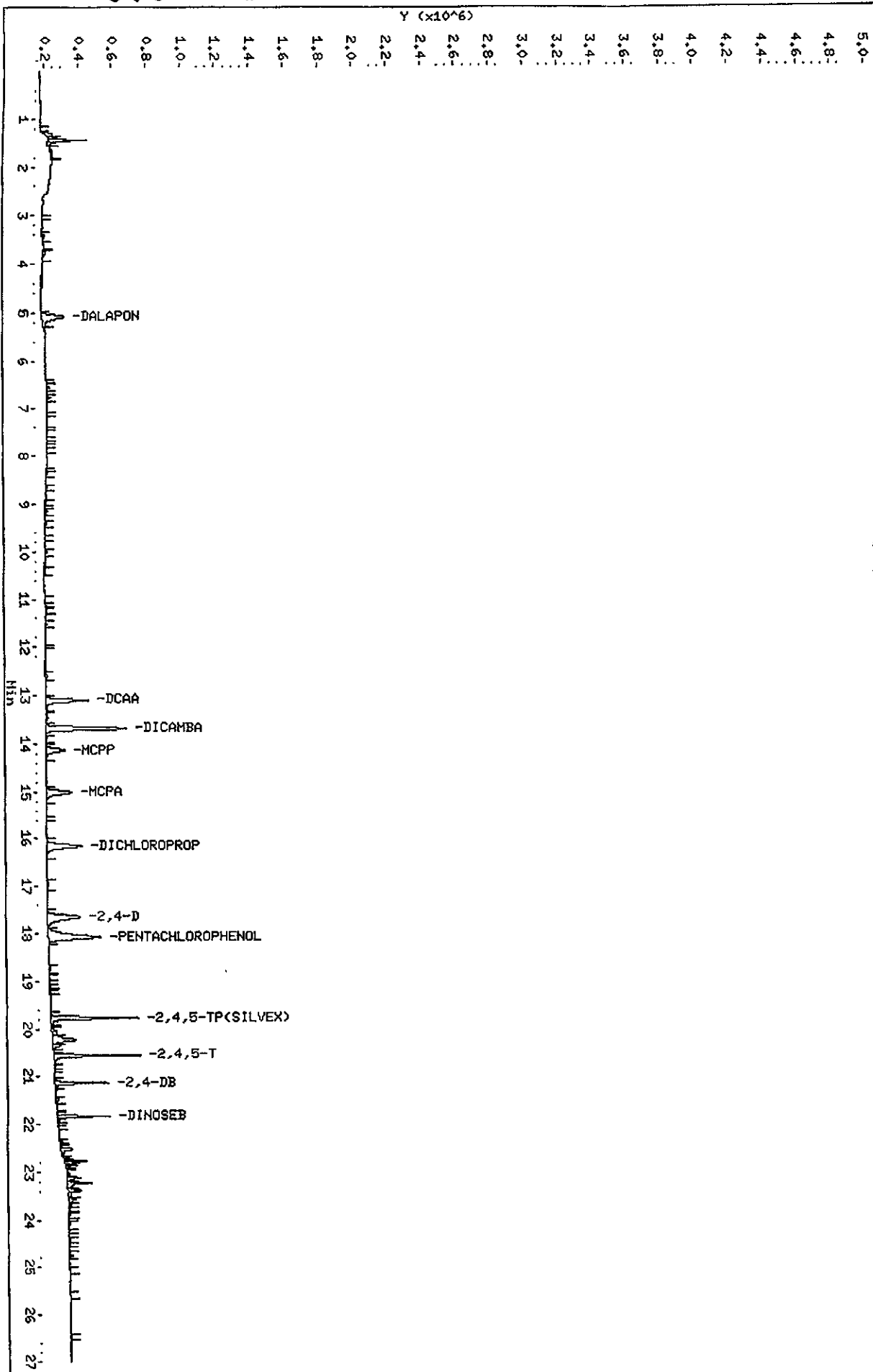
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	5.085	5.095	-0.010	129962	0.01100	0.01100
\$ 2 DCAA	13.095	13.098	-0.003	1150865	0.02130	0.02130
3 DICAMBA	13.687	13.692	-0.005	474331	0.01060	0.01060
4 MCPP	14.135	14.140	-0.005	115349	2.12000	2.120
5 MCPA	15.011	15.016	-0.005	153495	2.14000	2.140
6 DICHLOROPROP	16.152	16.160	-0.008	208474	0.02120	0.02120
7 2,4-D	17.656	17.652	0.004	192054	0.02110	0.02110
8 PENTACHLOROPHENOL	18.079	18.086	-0.007	310692	0.00266	0.002660
9 2,4,5-TP(SILVEX)	19.772	19.775	-0.003	507675	0.00525	0.005250
10 2,4,5-T	20.545	20.546	-0.001	503015	0.00527	0.005270
11 2,4-DB	21.124	21.125	-0.001	307643	0.02110	0.02110
12 DINOSEB	21.828	21.831	-0.003	303279	0.00317	0.003170

679 642

Data File: \\qpi1tpa02\chem\gc1.1\2151A.b\A-B20276.D
 Date: 15-MAR-2001 17:00
 Client ID:
 Sample Info: LHERB,2151A.b
 Column phase: DB1701

Instrument: gc1.1
 Operator: 010139
 Column diameter: 0.53

\\qpi1tpa02\chem\gc1.1\2151A.b\A-B20276.D



Data File: \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20277.D
 Report Date: 16-Mar-2001 07:53

679 643

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20277.D
 Lab Smp Id: MLHERB
 Inj Date : 15-MAR-2001 17:31
 Operator : 010139
 Smp Info : MLHERB,2151A.b
 Misc Info : 190-107-2
 Comment : 8151/515 ANALYSIS
 Method : \\qpitpa02\d\chem\gc1.i\2151A.b\LONGHB.m
 Meth Date : 16-Mar-2001 07:53 morganw
 Cal Date : 15-MAR-2001 17:31
 Als bottle: 3
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC003

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-B20277.D
 Calibration Sample, Level: 2
 Compound Sublist: all.sub

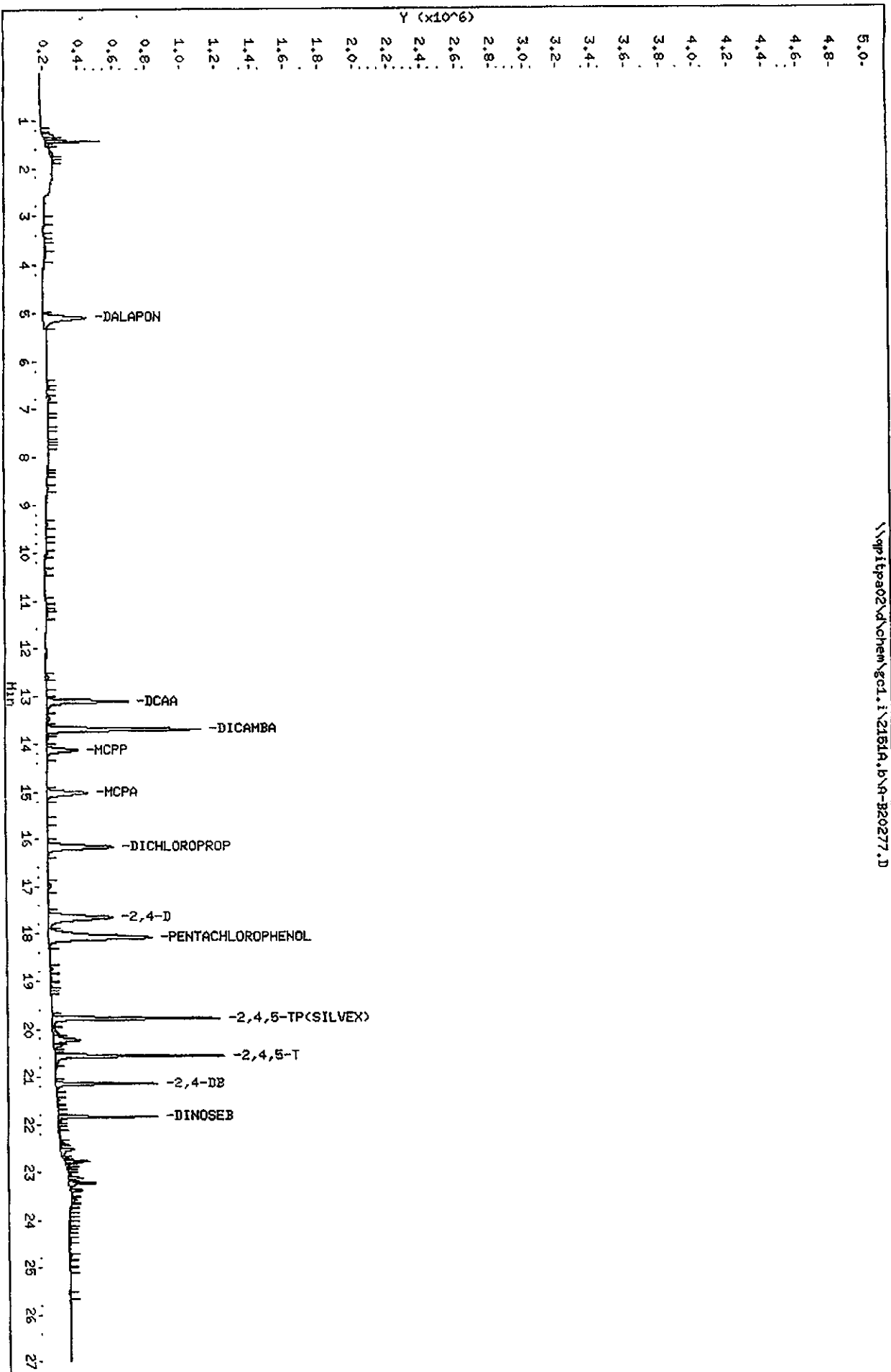
Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	5.095	5.095	0.000	241891	0.02200	0.02121
2 DCAA	13.098	13.098	0.000	2117552	0.04250	0.04078
3 DICAMBA	13.691	13.692	-0.001	868587	0.02130	0.02055
4 MCPP	14.139	14.140	-0.001	177965	4.26000	3.700
5 MCPA	15.014	15.016	-0.002	239594	4.28000	3.752
6 DICHLOROPROP	16.158	16.160	-0.002	380594	0.04240	0.04047
7 2,4-D	17.653	17.652	0.001	371990	0.04250	0.04167
8 PENTACHLOROPHENOL	18.085	18.086	-0.001	599465	0.00532	0.005224
9 2,4,5-TP(SILVEX)	19.775	19.775	0.000	970383	0.01050	0.01026
10 2,4,5-T	20.547	20.546	0.001	979887	0.01050	0.01038
11 2,4-DB	21.126	21.125	0.001	590691	0.04220	0.04134
12 DINOSEB	21.830	21.831	-0.001	576621	0.00635	0.006184

679 644

Data File: \\spitpa02\chem\ec1.1\21519.b\A-B20277.D
 Date: 15-MAR-2001 17:31
 Client ID:
 Sample Info: HLERB,21519.b
 Column phase: DB1.701

Instrument: ec1.1
 Operator: 010139
 Column diameter: 0.53

\\spitpa02\chem\ec1.1\21519.b\A-B20277.D



Data File: \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20278.D
Report Date: 16-Mar-2001 07:54

679 645

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20278.D
Lab Smp Id: MHERB
Inj Date : 15-MAR-2001 18:03
Operator : 010139
Smp Info : MHERB,2151A.b
Misc Info : 190-107-3
Comment : 8151/515 ANALYSIS
Method : \\qpitpa02\d\chem\gc1.i\2151A.b\LONGHB.m
Meth Date : 16-Mar-2001 07:53 morganw
Cal Date : 15-MAR-2001 18:03
Als bottle: 4
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC003

Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-B20278.D
Calibration Sample, Level: 3
Compound Sublist: all.sub

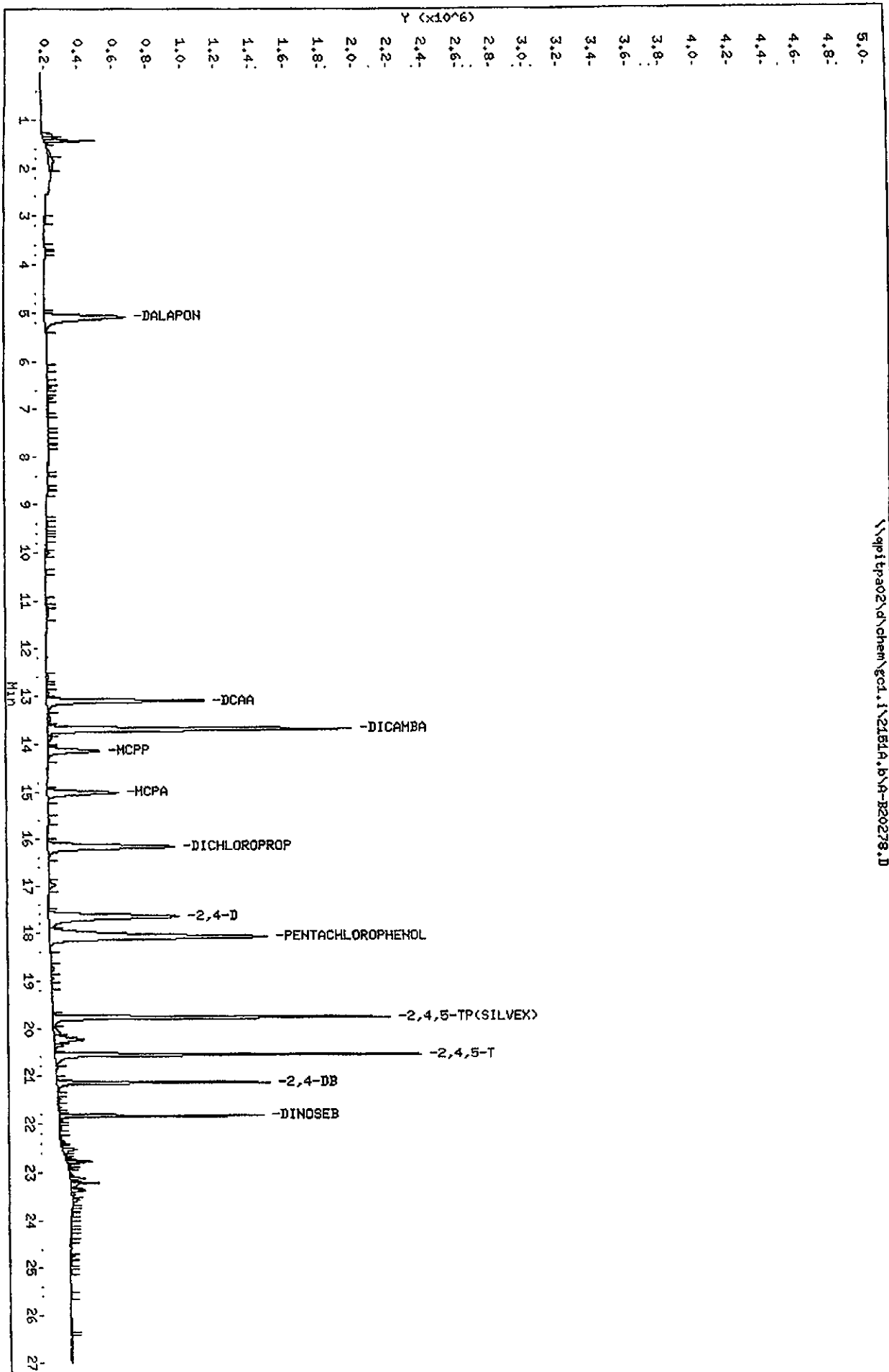
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	5.095	5.095	0.000	469384	0.04390	0.04203
\$ 2 DCAA	13.098	13.098	0.000	4009569	0.08510	0.07968
3 DICAMBA	13.692	13.692	0.000	1752659	0.04250	0.04117
4 MCPP	14.140	14.140	0.000	298046	8.52000	6.817
5 MCPA	15.016	15.016	0.000	409238	8.56000	6.995
6 DICHLOROPROP	16.160	16.160	0.000	731626	0.08480	0.08000
7 2,4-D	17.652	17.652	0.000	756790	0.08510	0.08488
8 PENTACHLOROPHENOL	18.086	18.086	0.000	1258620	0.01064	0.01086
9 2,4,5-TP(SILVEX)	19.775	19.775	0.000	1950845	0.02110	0.02078
10 2,4,5-T	20.546	20.546	0.000	2109053	0.02110	0.02191
11 2,4-DB	21.125	21.125	0.000	1231281	0.08450	0.08561
12 DINOSEB	21.831	21.831	0.000	1184024	0.01270	0.01270

679 646

Data File: \\pptipa02\chem\gcl.1\2151a.b\A-B20278.D
 Date: 15-MAR-2001 18:03
 Client ID:
 Sample Info: MHERB,2151a.b
 Column phase: DB1.701

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

\\pptipa02\chem\gcl.1\2151a.b\A-B20278.D



Data File: \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20279.D
Report Date: 16-Mar-2001 07:54

679 647

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20279.D
Lab Smp Id: MHHERB
Inj Date : 15-MAR-2001 18:34
Operator : 010139
Smp Info : MHHERB,2151A.b
Misc Info : 190-107-4
Comment : 8151/515 ANALYSIS
Method : \\qpitpa02\d\chem\gc1.i\2151A.b\LONGHB.m
Meth Date : 16-Mar-2001 07:53 morganw
Cal Date : 15-MAR-2001 18:34
Als bottle: 5
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC003

Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-B20279.D
Calibration Sample, Level: 4
Compound Sublist: all.sub

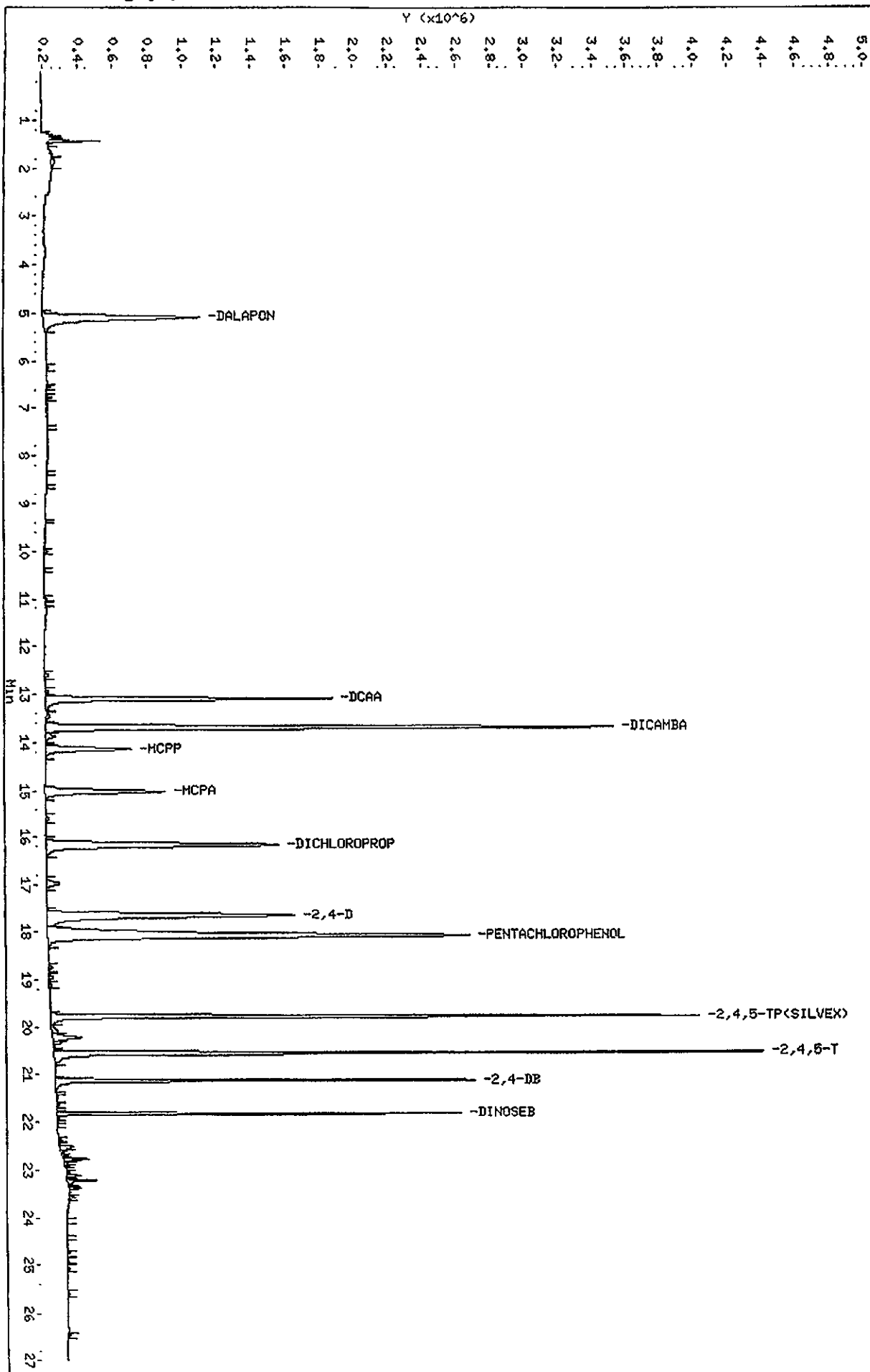
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	5.098	5.095	0.003	894657	0.08780	0.08191
2 DCAA	13.096	13.098	-0.002	7145296	0.17000	0.1481
3 DICAMBA	13.694	13.692	0.002	3290428	0.08510	0.07911
4 MCPP	14.141	14.140	0.001	494390	17.0000	12.34
5 MCPA	15.016	15.016	0.000	686170	17.1000	12.73
6 DICHLOROPROP	16.158	16.160	-0.002	1330184	0.17000	0.1509
7 2,4-D	17.648	17.652	-0.004	1419080	0.17000	0.1617
8 PENTACHLOROPHENOL	18.085	18.086	-0.001	2432672	0.02128	0.02106
9 2,4,5-TP(SILVEX)	19.776	19.775	0.001	3770445	0.04210	0.04064
10 2,4,5-T	20.545	20.546	-0.001	4124670	0.04220	0.04269
11 2,4-DB	21.124	21.125	-0.001	2421087	0.16900	0.1685
12 DINOSEB	21.831	21.831	0.000	2331403	0.02540	0.02510

679 648

Data File: \\sp1tpa02\chem\gcl.1\2151A.b\A-B20279.D
 Date: 15-MAR-2001 18:34
 Client ID:
 Sample Info: MHERB,2151A.b
 Column phase: DB1701

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

\\sp1tpa02\chem\gcl.1\2151A.b\A-B20279.D



Data File: \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20280.D
 Report Date: 16-Mar-2001 07:54

679 649

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Data file : \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20280.D
 Lab Smp Id: HHERB
 Inj Date : 15-MAR-2001 19:05
 Operator : 010139
 Smp Info : HHERB,2151A.b
 Misc Info : 190-107-5
 Comment : 8151/515 ANALYSIS
 Method : \\qpitpa02\d\chem\gc1.i\2151A.b\LONGHB.m
 Meth Date : 16-Mar-2001 07:53 morganw
 Cal Date : 15-MAR-2001 19:05
 Als bottle: 6
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC003

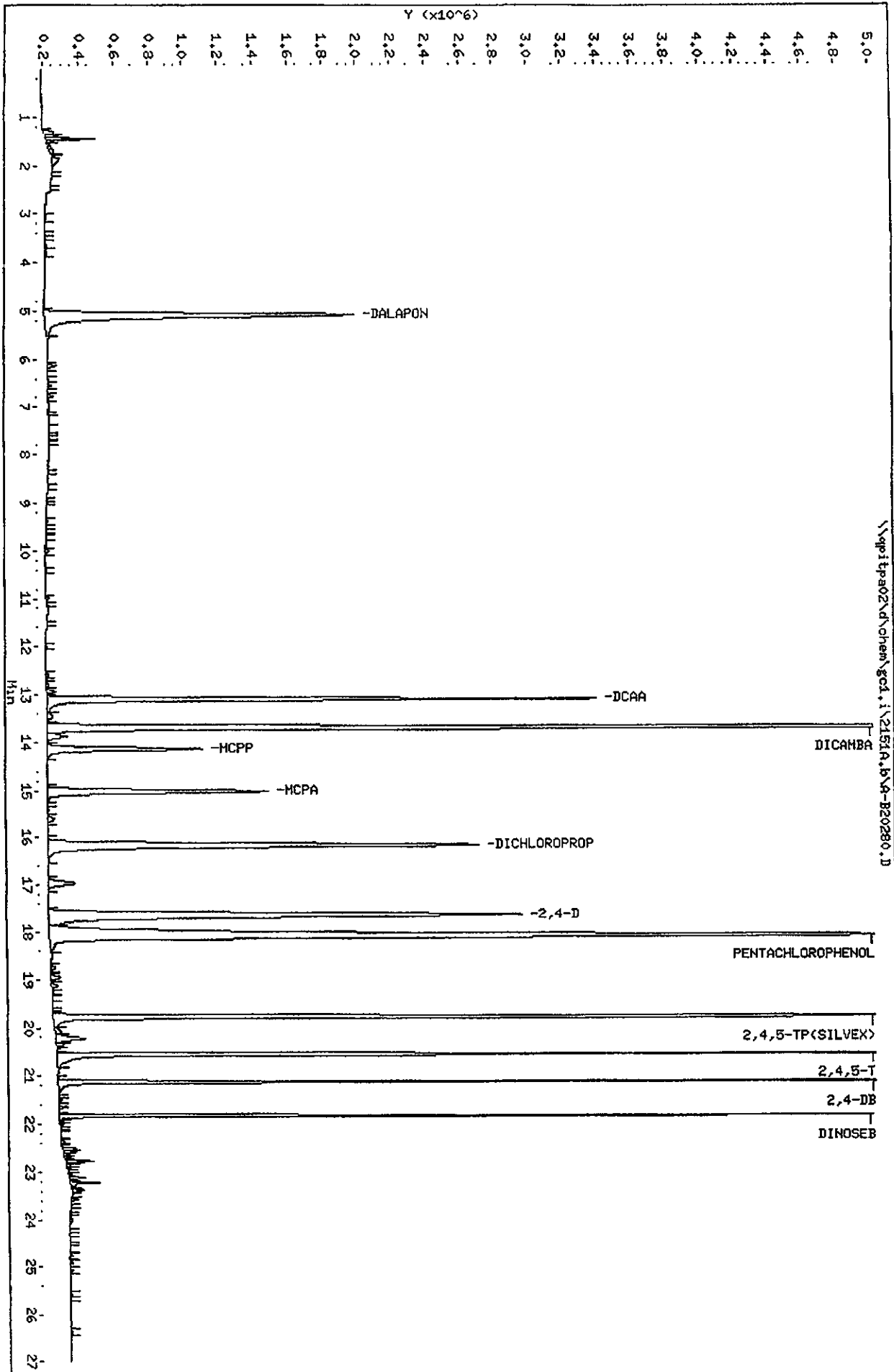
Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-B20280.D
 Calibration Sample, Level: 5
 Compound Sublist: all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	5.094	5.095	-0.001	1773870	0.17600	0.1649
2 DCAA	13.093	13.098	-0.005	13481850	0.34000	0.2897
3 DICAMBA	13.692	13.692	0.000	6325340	0.17000	0.1554
4 MCPP	14.138	14.140	-0.002	884138	34.1000	23.74
5 MCPA	15.014	15.016	-0.002	1263129	34.0000	24.98
6 DICHLOROPROP	16.154	16.160	-0.006	2483689	0.33900	0.2916
7 2,4-D	17.643	17.652	-0.009	2731653	0.34000	0.3167
8 PENTACHLOROPHENOL	18.087	18.086	0.001	4919822	0.04255	0.04258
9 2,4,5-TP(SILVEX)	19.775	19.775	0.000	7330480	0.08400	0.07996
10 2,4,5-T	20.544	20.546	-0.002	8307379	0.08440	0.08566
11 2,4-DB	21.122	21.125	-0.003	5072889	0.33800	0.3499
12 DINOSEB	21.831	21.831	0.000	4709876	0.05080	0.05073

679 650

Data File: \\ppitpa02\chem\gc1.1\2151A.b\A-B20280.D
 Date: 15-MAR-2001 19:05
 Client ID:
 Sample Info: HHERB,2151A.b
 Column phase: DB1701

Instrument: gc1.i
 Operator: 010139
 Column diameter: 0.53



Data File: \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20281.D
 Report Date: 16-Mar-2001 08:13

679 651

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Data file : \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20281.D
 Lab Smp Id: 2ND HERB
 Inj Date : 15-MAR-2001 19:37
 Operator : 010139
 Smp Info : 2ND HERB,2151A.b
 Misc Info : 190-119-8
 Comment : 8151/515 ANALYSIS
 Method : \\qpitpa02\d\chem\gc1.i\2151A.b\LONGHB.m
 Meth Date : 16-Mar-2001 08:12 MorganW
 Cal Date : 15-MAR-2001 19:05
 Als bottle: 7
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC003

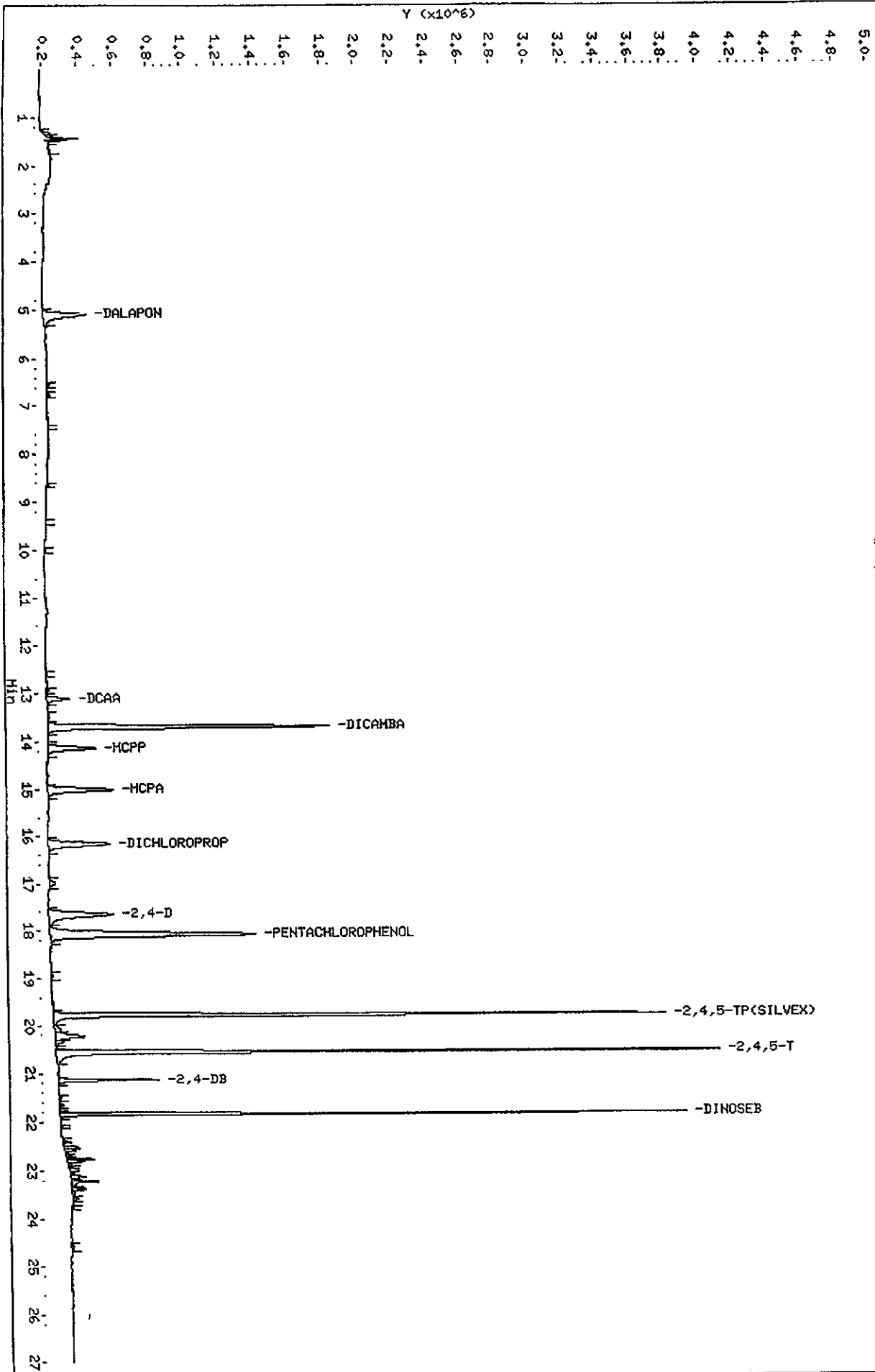
Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-B20280.D
 Continuing Calibration Sample
 Compound Sublist: all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS		
					CAL-AMT (ng)	ON-COL (ng)	
1 DALAPON	5.096	5.095	0.001	244786	0.04390	0.02276	110%
2 DCAA	13.100	13.098	0.002	548741	0.08510	0.01179	
3 DICAMBA	13.693	13.692	0.001	1618621	0.04250	0.03975	98%
4 MCPP	14.139	14.140	-0.001	274544	8.52000	7.373	93%
5 MCPA	15.013	15.016	-0.003	378187	8.56000	7.480	94%
6 DICHLOROPROP	16.159	16.160	-0.001	351699	0.08480	0.04129	103%
7 2,4-D	17.658	17.652	0.006	364671	0.08510	0.04228	105%
8 PENTACHLOROPHENOL	18.089	18.086	0.003	1177660	0.01064	0.01019	100%
9 2,4,5-TP(SILVEX)	19.774	19.775	-0.001	3542326	0.02110	0.03864	98%
10 2,4,5-T	20.544	20.546	-0.002	3838824	0.02110	0.03958	100%
11 2,4-DB	21.125	21.125	0.000	574430	0.08450	0.03962	100%
12 DINOSEB	21.831	21.831	0.000	3627416	0.01270	0.03907	98%

Data File: \\ppitpa02\chem\gc1.1\2151A.b\A-B20281.D
Date: 15-MAR-2001 19:37
Client ID:
Sample Info: 2ND HERB, 2151A.b
Column phase: DB1701

Instrument: gc1.1
Operator: 010139
Column diameter: 0.53

\\ppitpa02\chem\gc1.1\2151A.b\A-B20281.D



Data File: \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20383.D
 Report Date: 27-Mar-2001 12:36

679 653

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Data file : \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20383.D
 Lab Smp Id: MHERB
 Inj Date : 27-MAR-2001 10:05
 Operator : 010139
 Smp Info : MHERB,2151A.b
 Misc Info : 190-107-3
 Comment : 8151/515 ANALYSIS
 Method : \\qpitpa02\d\chem\gc1.i\2151A.b\LONGHB.m
 Meth Date : 27-Mar-2001 12:36 morganw
 Cal Date : 15-MAR-2001 19:05
 Als bottle: 2
 Dil Factor: 1.00000
 Integrator: Falcon
 Target Version: 4.04
 Processing Host: PITPC003

Inst ID: gc1.i
 Quant Type: ESTD
 Cal File: A-B20280.D
 Continuing Calibration Sample
 Compound Sublist: all.sub

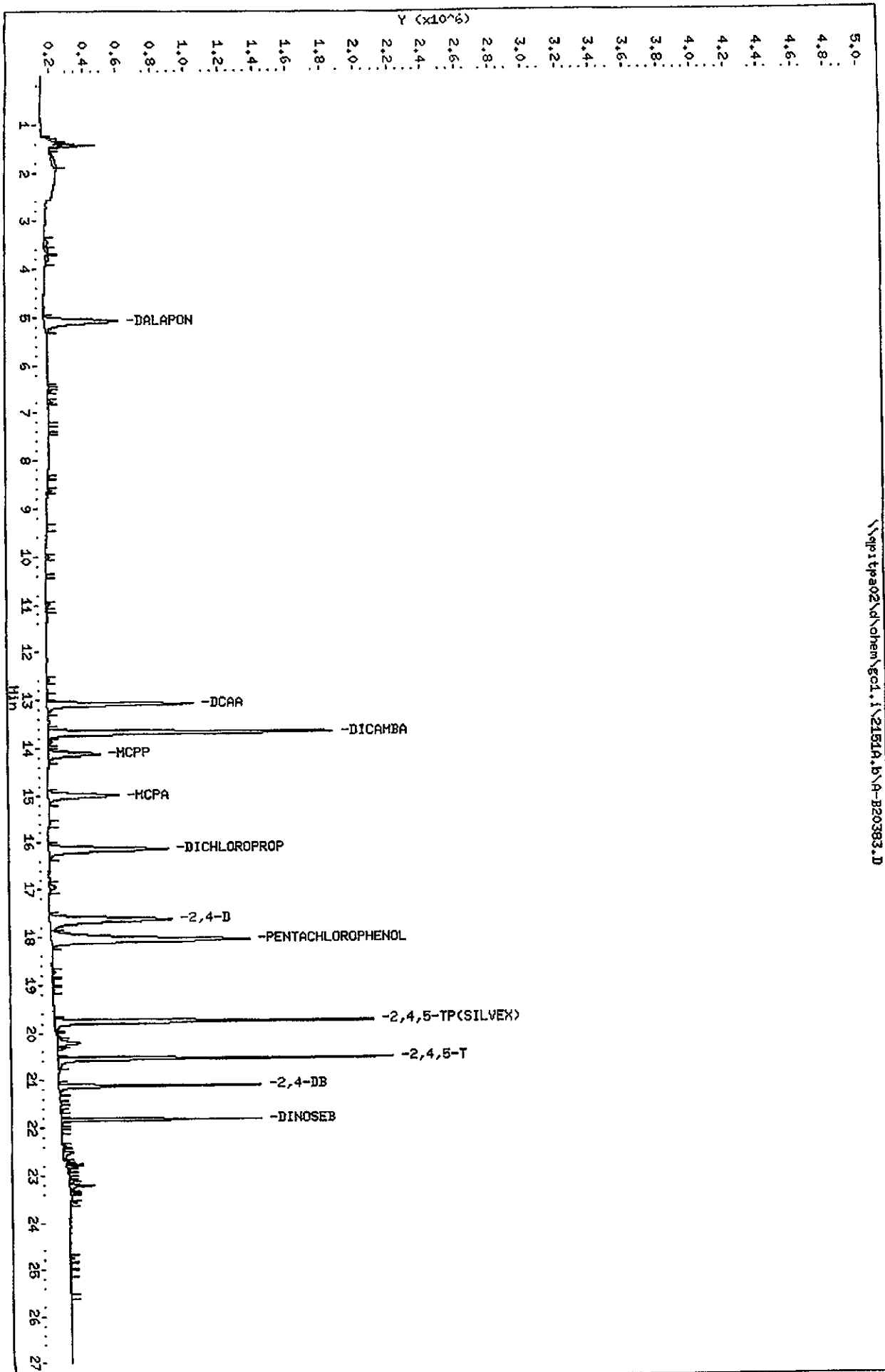
Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	5.080	5.080	0.000	433900	0.04390	0.04035
\$ 2 DCAA	13.086	13.086	0.000	3724586	0.08510	0.08004
3 DICAMBA	13.681	13.681	0.000	1674698	0.04250	0.04113
4 MCPP	14.127	14.127	0.000	308022	8.52000	8.272
5 MCPA	15.000	15.000	0.000	412409	8.56000	8.157
6 DICHLOROPROP	16.144	16.144	0.000	693277	0.08480	0.08139
7 2,4-D	17.631	17.631	0.000	714375	0.08510	0.08282
8 PENTACHLOROPHENOL	18.068	18.068	0.000	1163823	0.01064	0.01007
9 2,4,5-TP(SILVEX)	19.768	19.768	0.000	1872879	0.02110	0.02043
10 2,4,5-T	20.540	20.540	0.000	1972458	0.02110	0.02034
11 2,4-DB	21.119	21.119	0.000	1179263	0.08450	0.08135
12 DINOSEB	21.826	21.826	0.000	1177222	0.01270	0.01268

673 654

Data File: \\pp1tpa02\chem\gc1.1\2151A.b-A-B20383.D
 Date: 27-MAR-2001 10:05
 Client ID:
 Sample Info: IHERB,2151A.b
 Column phase: DB1701

Instrument: gc1.1
 Operator: 010139
 Column diameter: 0.53

\\pp1tpa02\chem\gc1.1\2151A.b-A-B20383.D



Data File: \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20399.D
Report Date: 28-Mar-2001 06:24

679 655

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Data file : \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20399.D
Lab Smp Id: MHERB
Inj Date : 27-MAR-2001 18:24
Operator : 010139
Smp Info : MHERB,2151A.b
Misc Info : 190-107-3
Comment : 8151/515 ANALYSIS
Method : \\qpitpa02\d\chem\gc1.i\2151A.b\LONGHB.m
Meth Date : 28-Mar-2001 06:22 MorganW
Cal Date : 15-MAR-2001 19:05
Als bottle: 18
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC003

Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-B20280.D
Continuing Calibration Sample
Compound Sublist: all.sub

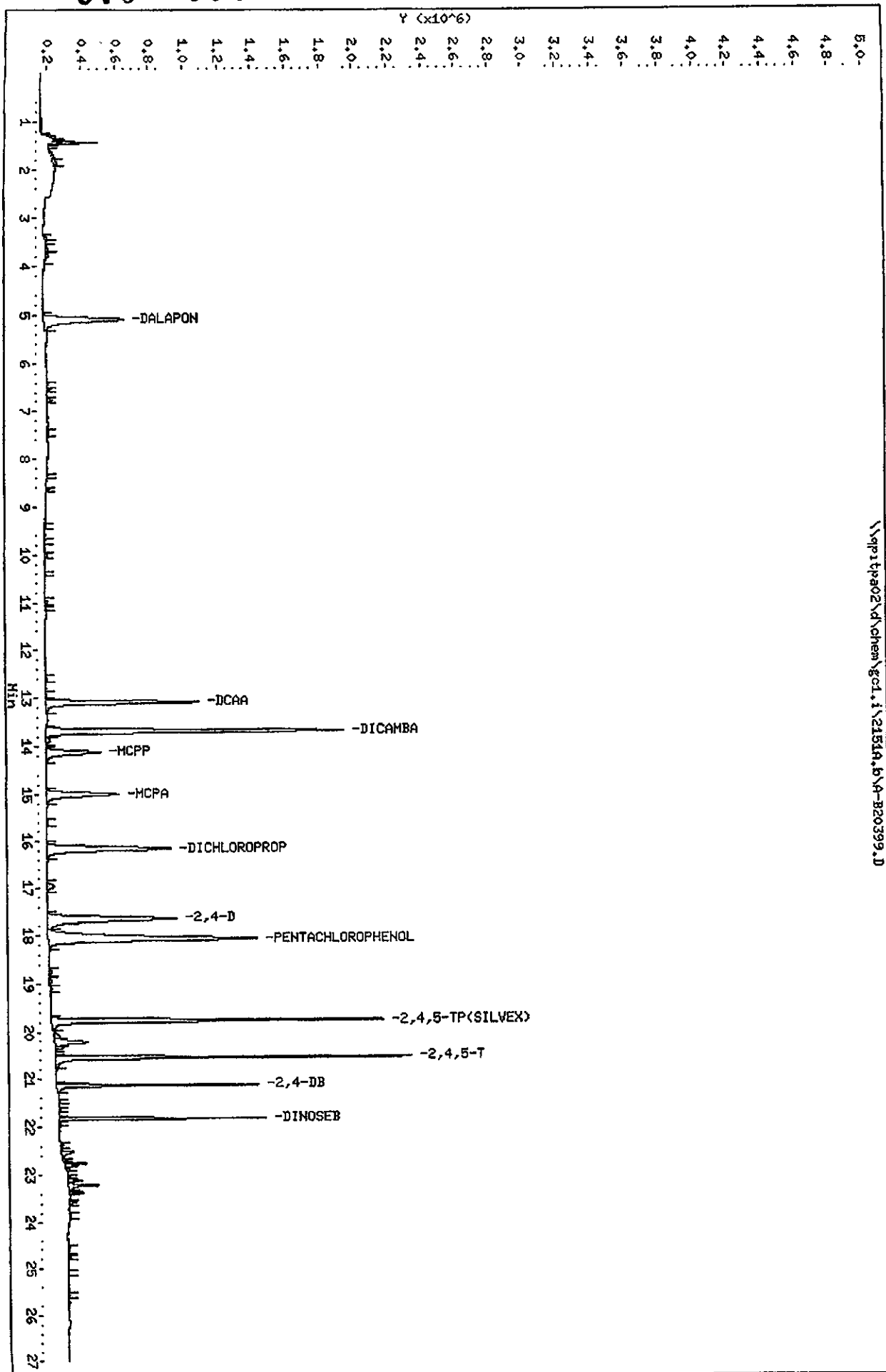
Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	5.087	5.080	0.007	465917	0.04390	0.04332
\$ 2 DCAA	13.091	13.086	0.005	3874113	0.08510	0.08326
3 DICAMBA	13.685	13.681	0.004	1738925	0.04250	0.04271
4 MCPP	14.132	14.127	0.005	310674	8.52000	8.344
5 MCPA	15.006	15.000	0.006	419082	8.56000	8.289
6 DICHLOROPROP	16.147	16.144	0.003	724132	0.08480	0.08501
7 2,4-D	17.638	17.631	0.007	751844	0.08510	0.08716
8 PENTACHLOROPHENOL	18.077	18.068	0.009	1220969	0.01064	0.01057
9 2,4,5-TP (SILVEX)	19.769	19.768	0.001	1937601	0.02110	0.02113
10 2,4,5-T	20.542	20.540	0.002	2087378	0.02110	0.02152
11 2,4-DB	21.119	21.119	0.000	1178747	0.08450	0.08131
12 DINOSEB	21.827	21.826	0.001	1210497	0.01270	0.01304

679 656

Data File: \\pp1tpa02\\chem\\gc1.i\\2151A.b\\A-B20399.D
 Date : 27-HAR-2001 18:24
 Client ID:
 Sample Info: HHERB, 2151A.b
 Column phase: DB1701

Instrument: gc1.i
 Operator: 010139
 Column diameter: 0.53

\\pp1tpa02\\chem\\gc1.i\\2151A.b\\A-B20399.D



Data File: \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20417.D
Report Date: 28-Mar-2001 06:32

679 657

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20417.D
Lab Smp Id: MHERB
Inj Date : 28-MAR-2001 03:45
Operator : 010139
Smp Info : MHERB,2151A.b
Misc Info : 190-107-3
Comment : 8151/515 ANALYSIS
Method : \\qpitpa02\d\chem\gc1.i\2151A.b\LONGHB.m
Meth Date : 28-Mar-2001 06:28 MorganW
Cal Date : 15-MAR-2001 19:05
Als bottle: 36
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC003

Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-B20280.D
Continuing Calibration Sample
Compound Sublist: all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	5.088	5.080	0.008	472587	0.04390	0.04394
\$ 2 DCAA	13.088	13.086	0.002	3949347	0.08510	0.08488
3 DICAMBA	13.682	13.681	0.001	1795447	0.04250	0.04410
4 MCPP	14.128	14.127	0.001	317910	8.52000	8.538
5 MCPA	15.004	15.000	0.004	425022	8.56000	8.406
6 DICHLOROPROP	16.144	16.144	0.000	740014	0.08480	0.08688
7 2,4-D	17.629	17.631	-0.002	793502	0.08510	0.09199
8 PENTACHLOROPHENOL	18.072	18.068	0.004	1238176	0.01064	0.01072
9 2,4,5-TP(SILVEX)	19.769	19.768	0.001	2019991	0.02110	0.02203
10 2,4,5-T	20.539	20.540	-0.001	2243669	0.02110	0.02314
11 2,4-DB	21.117	21.119	-0.002	1240633	0.08450	0.08558
12 DINOSEB	21.825	21.826	-0.001	1252187	0.01270	0.01349

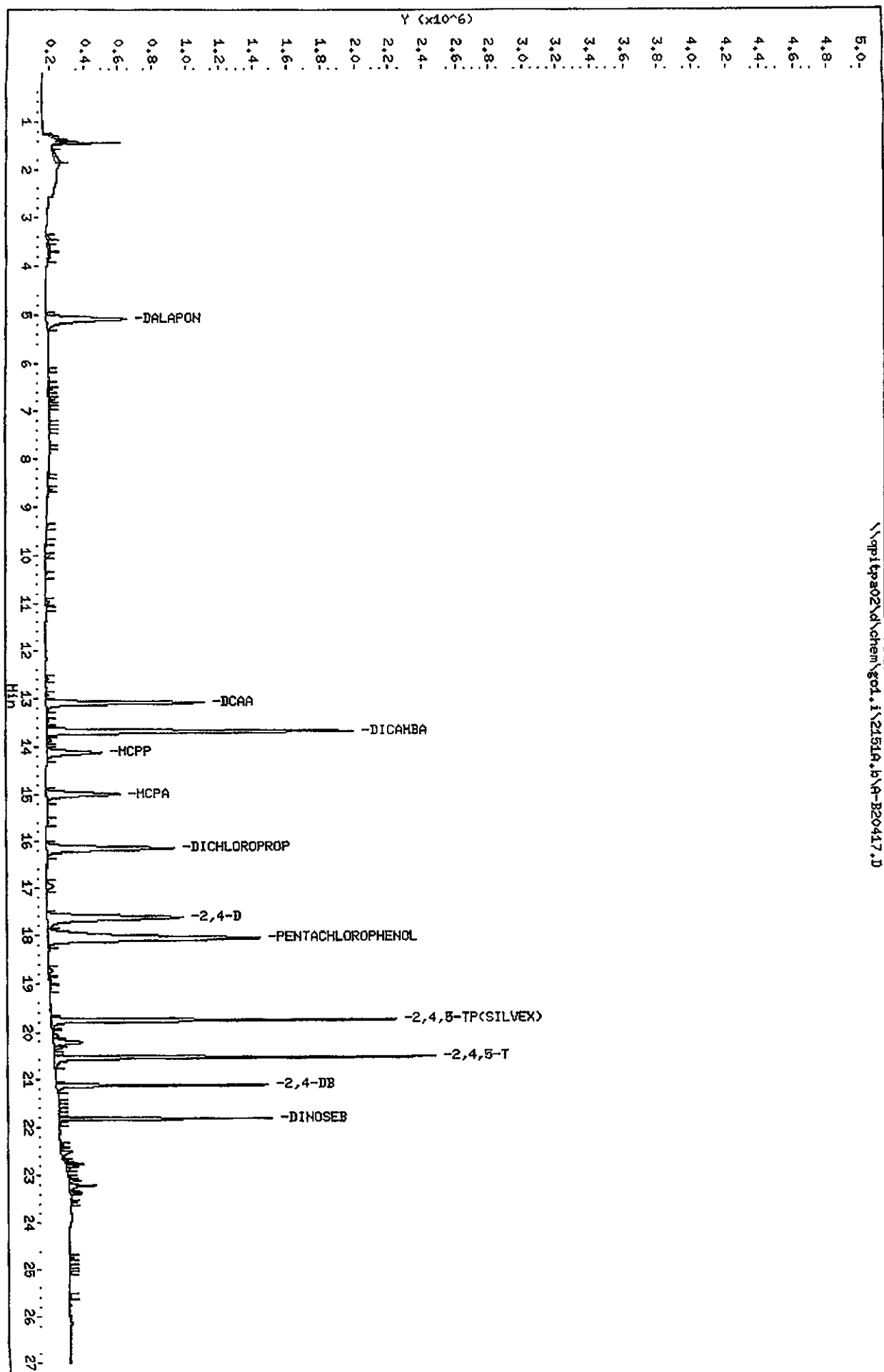
679 658

Data File: \\ppitp02\chem\g01.1\2151A.b\A-B20417.D
 Date: 28-MAR-2001 03:45
 Client ID:
 Sample Info: MHERB,2151A.b

Column Phase: DB1701

Instrument: g01.1
 Operator: 010139
 Column diameter: 0.53

\\ppitp02\chem\g01.1\2151A.b\A-B20417.D



Data File: \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20420.D
Report Date: 28-Mar-2001 13:08

679 659

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Data file : \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20420.D
Lab Smp Id: MHERB
Inj Date : 28-MAR-2001 10:26
Operator : 010139
Smp Info : MHERB,2151A.b
Misc Info : 190-107-3
Comment : 8151/515 ANALYSIS
Method : \\qpitpa02\d\chem\gc1.i\2151A.b\LONGHB.m
Meth Date : 28-Mar-2001 13:07 MorganW
Cal Date : 15-MAR-2001 19:05
Als bottle: 2
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC003

Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-B20280.D
Continuing Calibration Sample
Compound Sublist: all.sub

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	5.077	5.077	0.000	455032	0.04390	0.04231
\$ 2 DCAA	13.083	13.083	0.000	3821622	0.08510	0.08213
3 DICAMBA	13.680	13.680	0.000	1723873	0.04250	0.04234
4 MCPP	14.123	14.123	0.000	312610	8.52000	8.395
5 MCPA	14.998	14.998	0.000	419854	8.56000	8.304
6 DICHLOROPROP	16.139	16.139	0.000	720973	0.08480	0.08464
7 2,4-D	17.628	17.628	0.000	760917	0.08510	0.08821
8 PENTACHLOROPHENOL	18.066	18.066	0.000	1192644	0.01064	0.01032
9 2,4,5-TP(SILVEX)	19.767	19.767	0.000	1946026	0.02110	0.02123
10 2,4,5-T	20.538	20.538	0.000	2128320	0.02110	0.02195
11 2,4-DB	21.118	21.118	0.000	1260039	0.08450	0.08692
12 DINOSEB	21.824	21.824	0.000	1195457	0.01270	0.01288

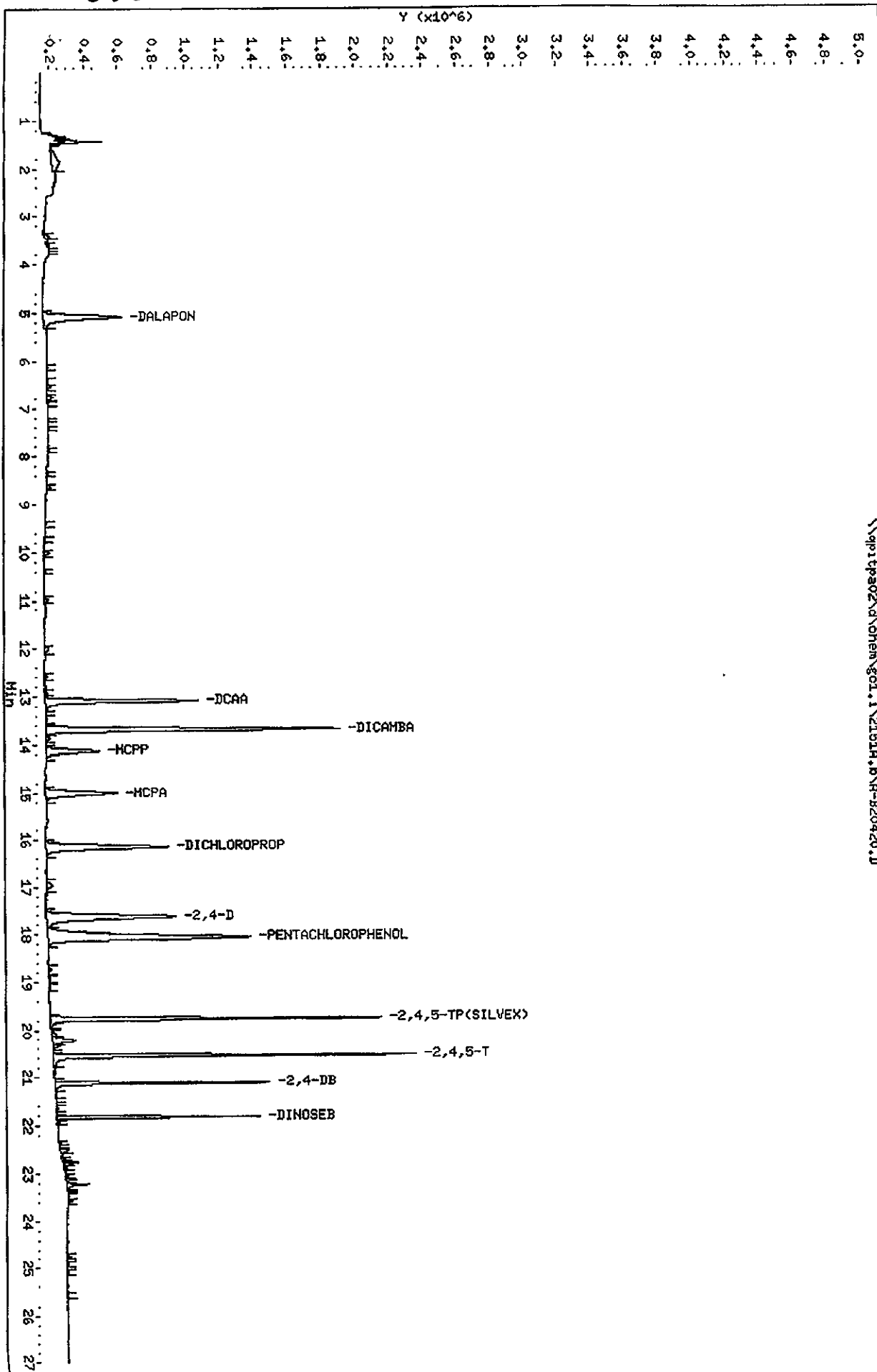
679 660

Data File: \\qptipa02\chem\gcl.1\2151A.b\A-B20420.D
 Date: 28-MAR-2001 10:26
 Client ID:
 Sample Info: MHERB,2151A.b

Column Phase: DB1701

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

\\qptipa02\chem\gcl.1\2151A.b\A-B20420.D



Data File: \\gpitpa02\d\chem\gc1.i\2151A.b\A-B20424.D
Report Date: 28-Mar-2001 13:08

679

661

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Data file : \\gpitpa02\d\chem\gc1.i\2151A.b\A-B20424.D
Lab Smp Id: MHERB
Inj Date : 28-MAR-2001 12:31
Operator : 010139
Smp Info : MHERB,2151A.b
Misc Info : 190-107-3
Comment : 8151/515 ANALYSIS
Method : \\gpitpa02\d\chem\gc1.i\2151A.b\LONGHB.m
Meth Date : 28-Mar-2001 13:07 MorganW
Cal Date : 15-MAR-2001 19:05
Als bottle: 6
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC003

Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-B20280.D
Continuing Calibration Sample
Compound Sublist: all.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	5.089	5.077	0.012	471505	0.04390	0.04384
\$ 2 DCAA	13.086	13.083	0.003	3937744	0.08510	0.08463
3 DICAMBA	13.683	13.680	0.003	1772108	0.04250	0.04352
4 MCPP	14.126	14.123	0.003	313793	8.52000	8.427
5 MCPA	15.004	14.998	0.006	421850	8.56000	8.344
6 DICHLOROPROP	16.144	16.139	0.005	741956	0.08480	0.08711
7 2,4-D	17.633	17.628	0.005	790509	0.08510	0.09164
8 PENTACHLOROPHENOL	18.070	18.066	0.004	1222134	0.01064	0.01058
9 2,4,5-TP(SILVEX)	19.769	19.767	0.002	2009070	0.02110	0.02191
10 2,4,5-T	20.540	20.538	0.002	2227763	0.02110	0.02297
11 2,4-DB	21.118	21.118	0.000	1222524	0.08450	0.08433
12 DINOSEB	21.826	21.824	0.002	1233214	0.01270	0.01328

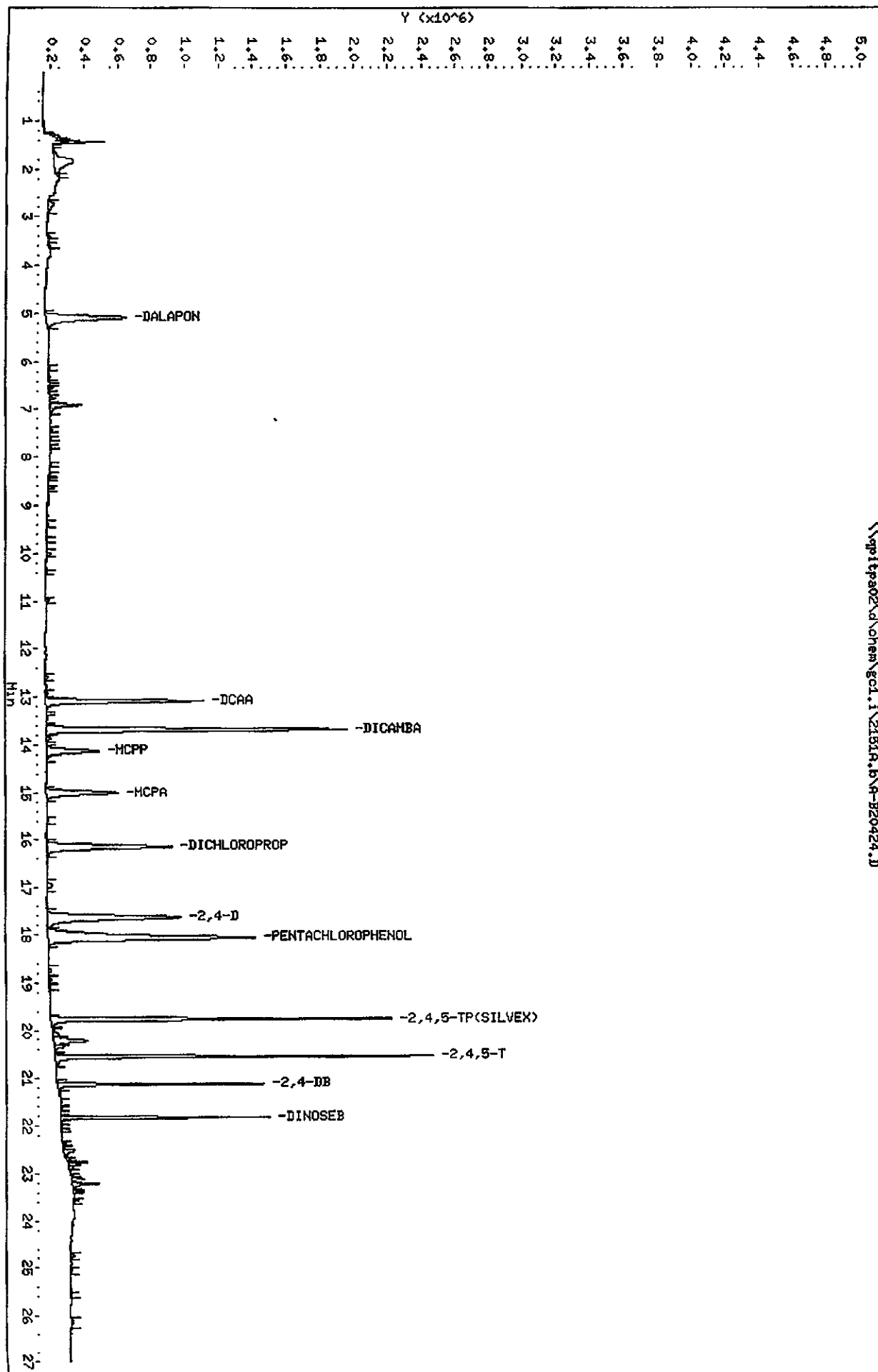
679 662

Data File: \\vpitpa02\chem\gcl.1\2151A.b\A-B20424.D
 Date : 28-Mar-2001 12:31
 Client ID:
 Sample Info: HHERB,2151A.b

Column phase: DB1701

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

\\vpitpa02\chem\gcl.1\2151A.b\A-B20424.D



679 663

HERBICIDE
QC DATA

679 664

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

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

Matrix: (soil/water) WATER Lab Sample ID: C1C230000 391
Method: SW846 8151A
Herbicides (8151A)

Sample WT/Vol: 1000 / mL Date Received: 03/21/01
Work Order: DXWV51AA Date Extracted: 03/23/01
Dilution factor: 1 Date Analyzed: 03/27/01
Moisture %: NA

QC Batch: 1082391

Client Sample Id: INTRA-LAB BLANK

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

Data File: \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20405.D
 Report Date: 28-Mar-2001 06:57

679 665

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc1.i\2151A.b\A-B20405.D
 Lab Smp Id: DXWV51AA Client Smp ID: PBLK2391
 Inj Date : 27-MAR-2001 21:31
 Operator : 010139 Inst ID: gc1.i
 Smp Info : DXWV51AA,2151A.b
 Misc Info : 220173BLK
 Comment : 8151/515 ANALYSIS
 Method : \\qpitpa02\d\chem\gc1.i\2151A.b\LONGHB.m
 Meth Date : 28-Mar-2001 06:28 MorganW Quant Type: ESTD
 Cal Date : 15-MAR-2001 19:05 Cal File: A-B20280.D
 Als bottle: 24 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC003

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

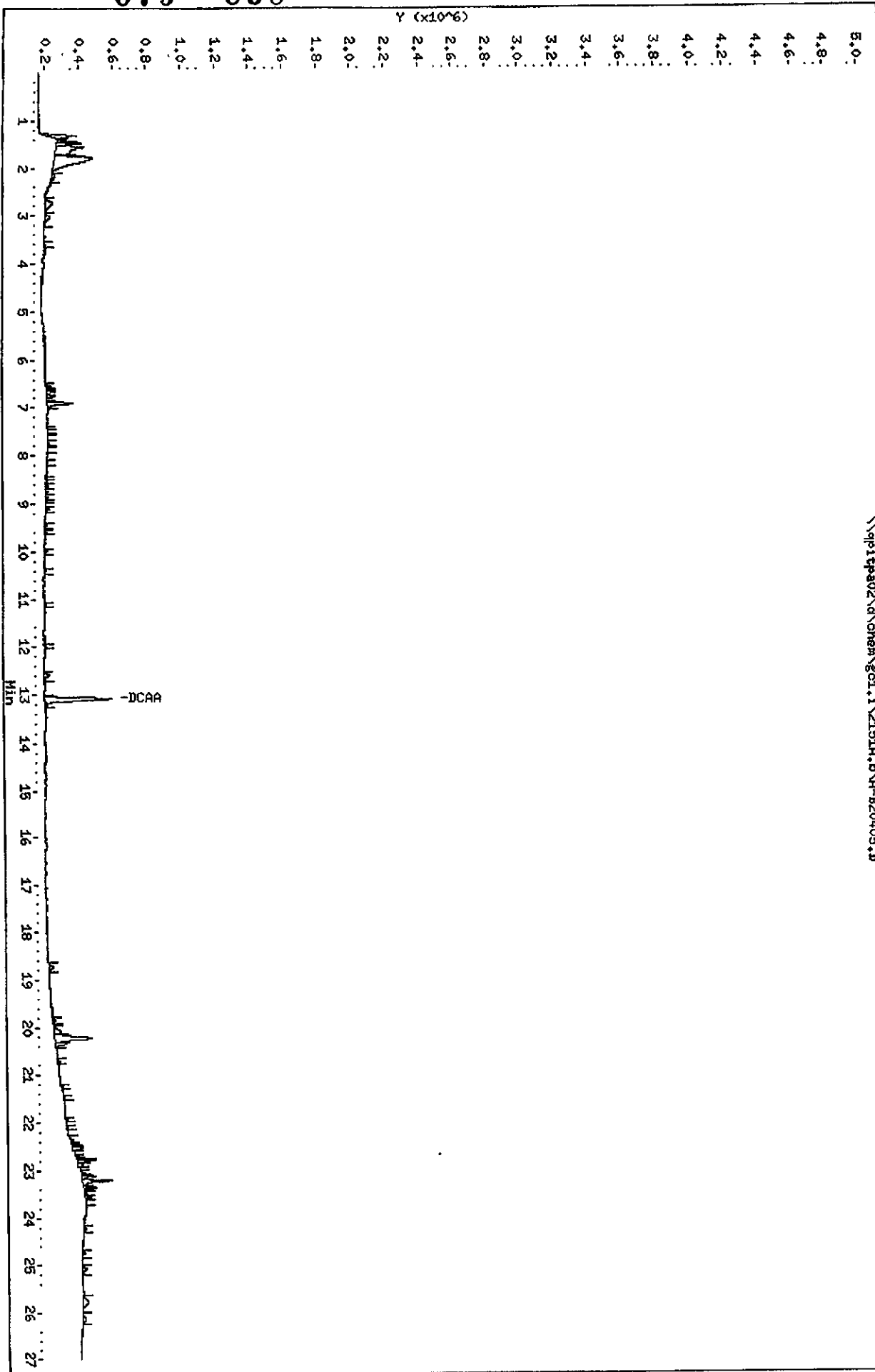
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON						
\$ 2 DCAA	13.089	13.086	0.003	1668722	0.03586	7.172
3 DICAMBA						
4 MCPP						
5 MCFA						
6 DICHLOROPROP						
7 2,4-D						
8 PENTACHLOROPHENOL						
9 2,4,5-TP (SILVEX)						
10 2,4,5-T						
11 2,4-DB						
12 DINOSEB						

679 666

Data File: \\pp1tpa02\chem\gc1.i\2151A.b\A-B20405.D
Date : 27-MAR-2001 21:31
Client ID: PBLK2391
Sample Info: DKKV51A9,2151A.b
Volume Injected (uL): 1.0
Column phase: DB1701

Instrument: gc1.i
Operator: 010139
Column diameter: 0.53

\\pp1tpa02\chem\gc1.i\2151A.b\A-B20405.D



Data File: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20371.D
Report Date: 28-Mar-2001 09:12

679 667

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc1.i\2151.b\A-A20371.D
Lab Smp Id: DXWV51AA Client Smp ID: PBLK2391
Inj Date : 27-MAR-2001 21:00
Operator : 010139 Inst ID: gc1.i
Smp Info : DXWV51AA,2151.b
Misc Info : 220173BLK
Comment : 8151/515 ANALYSIS
Method : \\qpitpa02\d\chem\gc1.i\2151.b\LONGH.m
Meth Date : 28-Mar-2001 07:04 MorganW Quant Type: ESTD
Cal Date : 15-MAR-2001 18:34 Cal File: A-A20279.D
Als bottle: 24 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC003

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

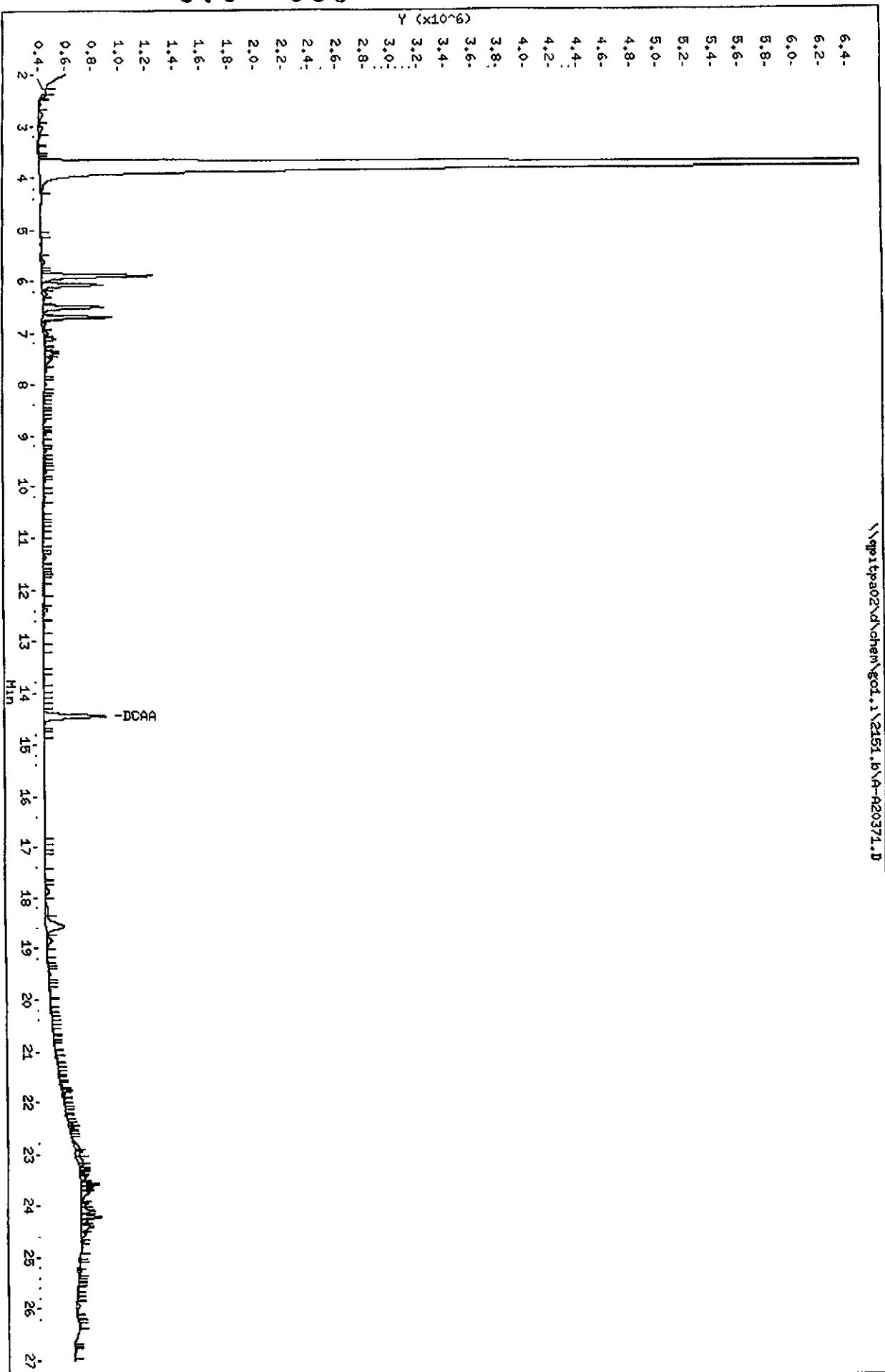
Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON				Compound Not Detected		
\$ 2 DCAA	14.448	14.450	-0.002	2345495	0.03750	7.500
3 MCPP				Compound Not Detected		
4 DICAMBA				Compound Not Detected		
5 MCPA				Compound Not Detected.		
6 DICHLOROPROP				Compound Not Detected		
7 2,4-D				Compound Not Detected.		
8 PENTACHLOROPHENOL				Compound Not Detected		
9 2,4,5-TP(SILVEX)				Compound Not Detected		
10 2,4,5-T				Compound Not Detected.		
11 DINOSEB				Compound Not Detected.		
12 2,4-DB				Compound Not Detected		

679 668

Data File: \\qptp02\chem\gcl.1\2151.b\A-A20371.D
Date : 27-MAR-2001 21:00
Client ID: PBLK2391
Sample Info: DXW514A, 2151.b
Volume Injected (uL): 1.0
Column phase: RTX-50

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



UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

679 663

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

Matrix: (soil/water) WATER
Method: SW846 8151A
Herbicides (8151A)

Lab Sample ID: C1C230000 391

Sample WT/Vol: 1000 / mL
Work Order: DXWV51AC
Dilution factor: 1
Moisture %: NA

Date Received: 03/21/01
Date Extracted: 03/23/01
Date Analyzed: 03/27/01

QC Batch: 1082391

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(ug/L or ug/kg)	ug/L	
94-75-7	2,4-D		11.5	
93-72-1	2,4,5-TP (Silvex)		2.73	

Data File: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20369.D
 Report Date: 28-Mar-2001 09:12

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc1.i\2151.b\A-A20369.D
 Lab Smp Id: DXWV51AC Client Smp ID: LCS2391
 Inj Date : 27-MAR-2001 19:57
 Operator : 010139 Inst ID: gc1.i
 Smp Info : DXWV51AC,2151.b
 Misc Info : 220173LCS
 Comment : 8151/515 ANALYSIS
 Method : \\qpitpa02\d\chem\gc1.i\2151.b\LONGH.m
 Meth Date : 28-Mar-2001 07:04 MorganW Quant Type: ESTD
 Cal Date : 15-MAR-2001 18:34 Cal File: A-A20279.D
 Als bottle: 22 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC003

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

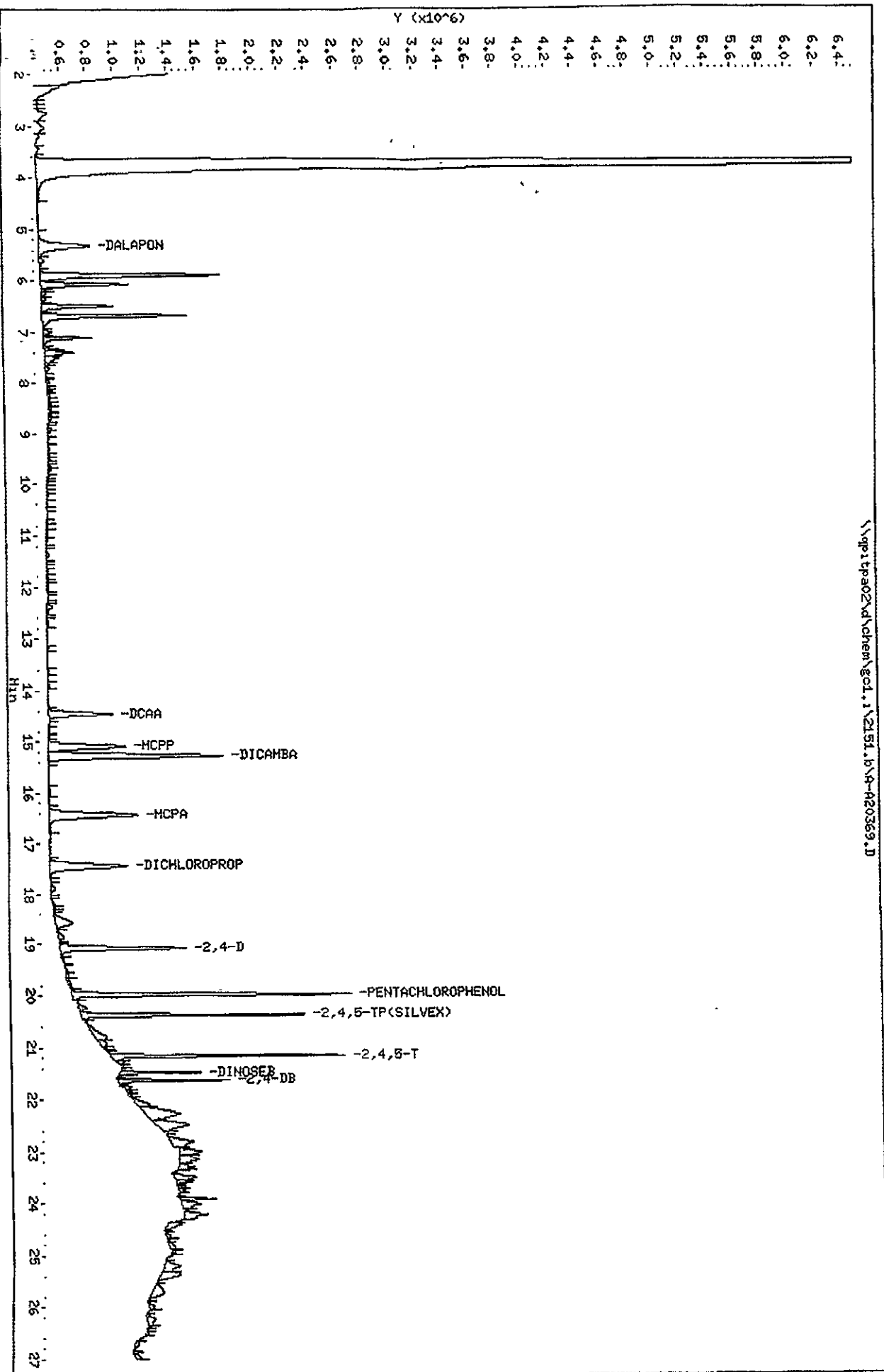
Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON	5.318	5.314	0.004	379169	0.02841	5.682
\$ 2 DCAA	14.450	14.450	0.000	2370968	0.03791	7.582
3 MCPP	15.082	15.082	0.000	572025	6.37463	1275
4 DICAMBA	15.265	15.263	0.002	1297062	0.03073	6.146
5 MCPA	16.428	16.425	0.003	662734	6.24670	1249
6 DICHLOROPROP	17.423	17.423	0.000	577352	0.06048	12.10
7 2,4-D	19.065	19.066	-0.001	935891	0.05740	11.48
8 PENTACHLOROPHENOL	19.978	19.977	0.001	2060416	0.00764	1.528
9 2,4,5-TP (SILVEX)	20.382	20.384	-0.002	4705631	0.01365	2.730
10 2,4,5-T	21.160	21.162	-0.002	4265634	0.01422	2.843
11 DINOSEB	21.477	21.478	-0.001	1375035	0.00558	1.117
12 2,4-DB	21.631	21.632	-0.001	1829726	0.05012	10.02

Data File: \\pp1tpa02\chem\gc1.i\2151.b\A-A20369.D
Date: 27-MAR-2001 19:57
Client ID: LCS2391
Sample Info: DKNV510C, 2151.b
Volume Injected (uL): 1.0
Column phase: RTX-50

Instrument: gc1.i
Operator: 010139
Column diameter: 0.53

\\pp1tpa02\chem\gc1.i\2151.b\A-A20369.D



679 672

UXB INTERNATIONAL
CHECK SAMPLE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc. SDG Number:
Matrix: (soil/water) WATER Lab Sample ID: C1C230000 391
Method: SW846 8151A
Herbicides (8151A)
Sample WT/Vol: 1000 / mL Date Received: 03/21/01
Work Order: DXWV51AD Date Extracted: 03/23/01
Dilution factor: 1 Date Analyzed: 03/27/01
Moisture %: NA QC Batch: 1082391
Client Sample Id: DUPLICATE CHECK

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) ug/L	Q
94-75-7	2,4-D	9.47	
93-72-1	2,4,5-TP (Silvex)	2.54	

Data File: \\qpitpa02\d\chem\gc1.i\2151.b\A-A20370.D
 Report Date: 28-Mar-2001 09:12

679 673

STL-Pittsburgh

Data file : \\qpitpa02\d\chem\gc1.i\2151.b\A-A20370.D
 Lab Smp Id: DXWV51AD Client Smp ID: LCD2391
 Inj Date : 27-MAR-2001 20:29
 Operator : 010139 Inst ID: gc1.i
 Smp Info : DXWV51AD,2151.b
 Misc Info : 220173LCD
 Comment : 8151/515 ANALYSIS
 Method : \\qpitpa02\d\chem\gc1.i\2151.b\LONGH.m
 Meth Date : 28-Mar-2001 07:04 MorganW Quant Type: ESTD
 Cal Date : 15-MAR-2001 18:34 Cal File: A-A20279.D
 Als bottle: 23 QC Sample: LCSD
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC003

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

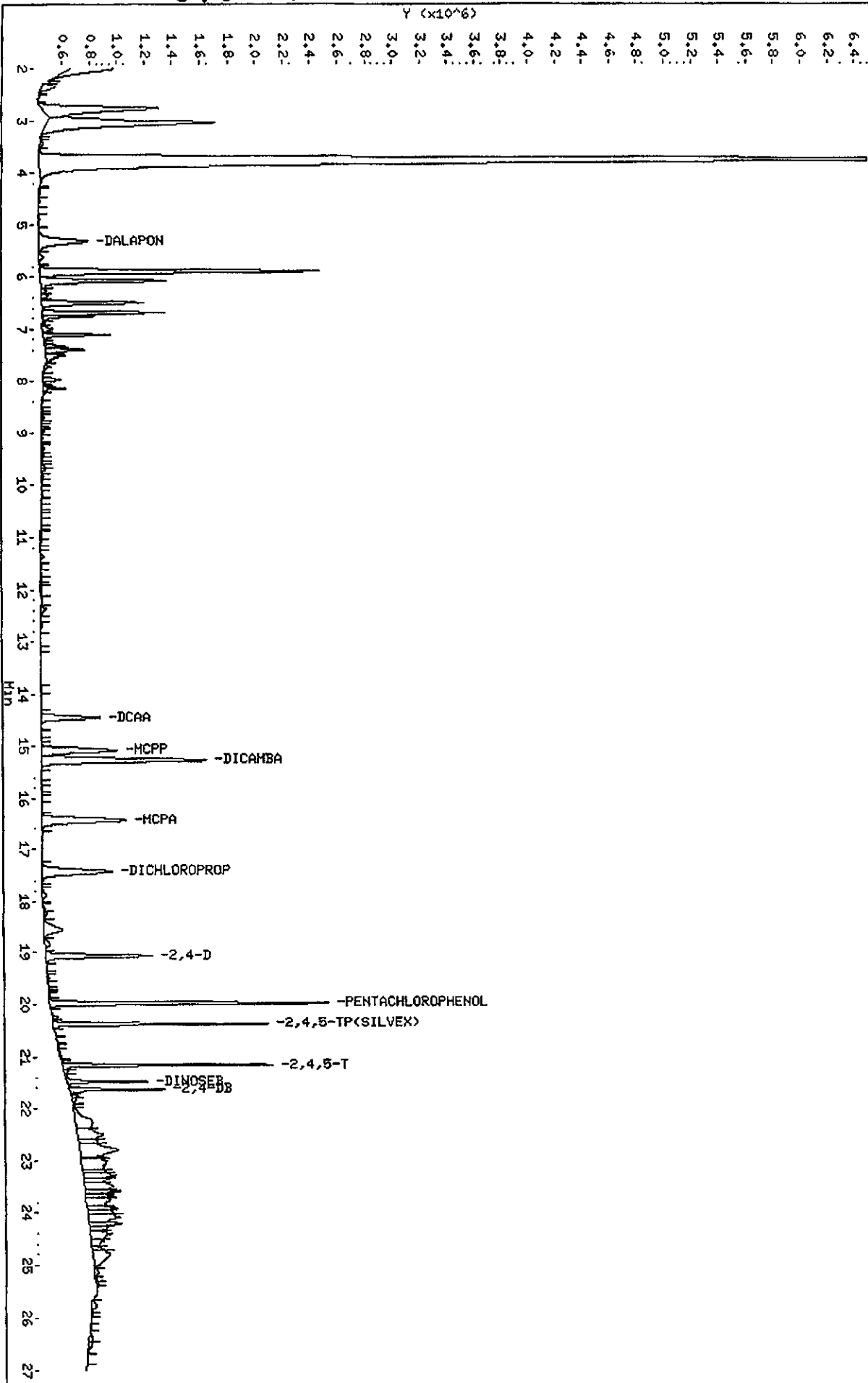
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON	5.320	5.314	0.006	358442	0.02686	5.371
\$ 2 DCAA	14.447	14.450	-0.003	2162515	0.03458	6.915
3 MCPP	15.082	15.082	0.000	549953	6.12866	1226
4 DICAMBA	15.264	15.263	0.001	1195601	0.02833	5.666
5 MCPA	16.425	16.425	0.000	610874	5.75788	1152
6 DICHLOROPROP	17.422	17.423	-0.001	514214	0.05387	10.77
7 2,4-D	19.066	19.066	0.000	771842	0.04734	9.468
8 PENTACHLOROPHENOL	19.977	19.977	0.000	2024357	0.00751	1.501
9 2,4,5-TP(SILVEX)	20.383	20.384	-0.001	4383148	0.01271	2.543
10 2,4,5-T	21.160	21.162	-0.002	3702343	0.01234	2.468
11 DINOSEB	21.477	21.478	-0.001	1494495	0.00607	1.214
12 2,4-DB	21.632	21.632	0.000	1599479	0.04381	8.763

679 674

Data File: \\pittpa02\chem\gcl.1\2151.b\A-A20370.D
 Date : 27-MAR-2001 20:29
 Client ID: LCD2391
 Sample Info: DXW61AD,2151.b
 Volume Injected (uL): 1.0
 Column phase: RTX-50

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

\\pittpa02\chem\gcl.1\2151.b\A-A20370.D



679 675

HERBICIDE
MISCELLANEOUS

B# 108 2391

STL - Pittsburgh

Separatory Funnel Extraction Worksheet

Logbook ID: OP50

Lot Number	Date Completed	Parameter	Method	Final Volume (mL)	pH	Surrogate #	Surrogate (mL)	Matrix Spike Lot #	MS Vol (mL)	Cleanup Date
1. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
2. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
3. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
4. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
5. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
6. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
7. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
8. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
9. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
10. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
11. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
12. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
13. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
14. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
15. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
16. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
17. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
18. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
19. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
20. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
21. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
22. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA
23. 100210184	3-27-01	Hexyl-(8.51A)	3510C	10.0	5.12	190-125-1	1.0	NA	NA	NA

Reviewed by:

James Miller

Date

3-27-01

Sodium Sulfate Mfg/Lot Number

Baker V02599

Sequence Table (Front Injector):

Vial Information Part:

Line	Vial	Vial Information	Created: 3-15-01 num	A
1	1	8151/515 HERB ANALYSIS		
2	2	275 190-107-1		
3	3	276 190-107-2		
4	4	277 190-107-3		
5	5	278 190-107-4		
6	6	279 190-107-5		
7	7	280 190-119-8		
8	8	281 190-115-14		
9	9	282 070142003 50X		
10	10	283 070142004 50X		
11	11	284 070142005 50X 100X		
12	12	285 070142006 50X		
13	13	286 070142LCS		
14	14	287 070142LCD		
15	15	288 070142BLK		
16	16	289 190-107-3		

✓ DE
3-19-01

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	HEXANE	HERB	1	Sample		
2	2	LHERB,2151.b	HERB	1	Sample		
3	3	MLHERB,2151.b	HERB	1	Sample		
4	4	MHERB,2151.b	HERB	1	Sample		
5	5	MHHERB,2151.b	HERB	1	Sample		
6	6	HHERB,2151.b	HERB	1	Sample		
7	7	2ND HERB,2151.b	HERB	1	Sample		
8	8	LPC ,2151.b	HERB	1	Sample		
9	9	DW2LC1AA ,2151.b	HERB	1	Sample		
10	10	DW2LE1AA ,2151.b	HERB	1	Sample		
11	11	DW2LF1AA ,2151.b	HERB	1	Sample		
12	12	DW2LH1AA ,2151.b	HERB	1	Sample		
13	13	DW5J21AC ,2151.b	HERB	1	Sample		

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Sequence Table (Front Injector):

Vial Information Part:

Line	Vial	Vial Information
1	1	8151/515 HERB ANALYSIS
2	2 349	190-107-3
3	3 350	200203001
4	4 351	200203001MS
5	5 352	200203001MSD
6	6 353	200203002
7	7 354	200203LCS
8	8 355	200203BLK
9	9 356	190-107-3
10	10 357	190-115-14
11	11 358	210136003 50X 500X
12	12 359	210136004 50X 200X
13	13 360	210136LCS
14	14 361	210136LCD
15	15 362	210136BLK
16	16 363	210136003 500X
17	17 364	210136004 200X
18	18 365	190-107-3
19	19 366	210184001 10X
20	20 367	220173001 10X
21	21 368	220173002 10X
22	22 369	220173LCS
23	23 370	220173LCD
24	24 371	220173BLK
25	25 372	150114001

created: 3-27-01 www A

✓ OF 3-28-01

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Line	Vial	Vial Information
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====	====	=====
------	------	-------

26	26 373	150114001MS
27	27 374	150114001MSD
28	28 375	150114002
29	29 376	150114003
30	30 377	150114004
31	31 378	150114005
32	32 379	150114006
33	33 380	150114007
34	34 381	150114LCS
35	35 382	150114BLK
36	36 383	190-107-3

Sequence Table (Back Injector):

Vial Information Part:

Line	Vial	Vial Information
------	------	------------------

====	====	=====
------	------	-------

1	100	8151/515 HERB ANALYSIS
2	1	8151/515 HERB ANALYSIS
3	2	190-107-3
4	3	200203001
5	4	200203001MS
6	5	200203001MSD
7	6	200203002
8	7	200203LCS
9	8	200203BLK
10	9	190-107-3
11	10	190-115-14
12	11	210136003 50X
13	12	210136004 50X
14	13	210136LCS

Sequence Table (Front Injector):

Vial Information Part:

Line	Vial	Vial Information
1	1	8151/515 HERB ANALYSIS
2	2 385	190-107-3
3	3 386	210184001 10X
4	4 387	220173001 10X
5	5 388	220173002 10X
6	6 389	190-107-3

created: 3-28-01 wwm A

✓ DE 38801

Sequence Table (Back Injector):

Vial Information Part:

Line	Vial	Vial Information
1	100	8151/515 HERB ANALYSIS
2	1	8151/515 HERB ANALYSIS
3	2	190-107-3
4	3	210184001 10X
5	4	220173001 10X
6	5	220173002 10X
7	6	190-107-3

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Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
14	14	DW5J21AD ,2151.b	HERB	1	Sample		
15	15	DW5J21AA ,2151.b	HERB	1	Sample		
16	16	MHERB ,2151.b	HERB	1	Sample		

Sequence Table (Back Injector):

Vial Information Part:

Line	Vial	Vial Information	Created	Worm	13
1	100	8151/515 HERB ANALYSIS			
2	1	8151/515 HERB ANALYSIS			
3	2	276 190-107-1			
4	3	277 190-107-2			
5	4	278 190-107-3			
6	5	279 190-107-4			

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	==	=====	=====	=====
6	5	MHHERB,2151A.b	HERBA	1	Sample		
7	6	HHERB,2151A.b	HERBA	1	Sample		
8	7	2ND HERB,2151A.b	HERBA	1	Sample		
9	8	LPC ,2151A.b	HERBA	1	Sample		
10	9	DW2LC1AA,2151A.b	HERBA	1	Sample		
11	10	DW2LE1AA,2151A.b	HERBA	1	Sample		
12	11	DW2LF1AA,2151A.b	HERBA	1	Sample		
13	12	DW2LH1AA,2151A.b	HERBA	1	Sample		
14	13	DW5J21AC,2151A.b	HERBA	1	Sample		
15	14	DW5J21AA,2151A.b	HERBA	1	Sample		
16	15	DW5J21AA,2151A.b	HERBA	1	Sample		
17	16	MHERB ,2151A.b	HERBA	1	Sample		

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Line	Vial	Vial Information
====	====	=====
26	26	150114001MS
27	27	150114001MSD
28	28	150114002
29	29	150114003
30	30	150114004
31	31	150114005
32	32	150114006
33	33	150114007
34	34	150114LCS
35	35	150114BLK
36	36	190-107-3

created: 3-27-01 wwm B

Sequence Table (Back Injector):

Vial Information Part:

Line	Vial	Vial Information
====	====	=====
1	100	8151/515 HERB ANALYSIS
2	1	8151/515 HERB ANALYSIS
3	2 383	190-107-3
4	3 384	200203001
5	4 385	200203001MS
6	5 386	200203001MSD
7	6 387	200203002
8	7 388	200203LCS
9	8 389	200203BLK
10	9 390	190-107-3
11	10 391	190-115-14
12	11 392	210136003 50X 500X
13	12 393	210136004 50X 200X
14	13 394	210136LCS

✓ DE 3-28-01

15 14 395 210136LCD
16 15 396 210136BLK
17 16 397 210136003 500X
18 17 398 210136004 200X
19 18 399 190-107-3
20 19 400 ~~210136001~~ 10X
21 20 401 ~~220173001~~ 10X
22 21 402 ~~220173002~~ 10X
23 22 403 ~~220173LCS~~
24 23 404 ~~220173LCD~~
25 24 405 220173BLK
26 25 406 ~~150114001~~
27 26 407 ~~150114001MS~~
28 27 408 ~~150114001MSD~~
29 28 409 ~~150114002~~
30 29 410 ~~150114003~~
31 30 411 ~~150114004~~
32 31 412 ~~150114005~~
33 32 413 ~~150114006~~
34 33 414 ~~150114007~~
35 34 415 ~~150114LCS~~
36 35 416 ~~150114BLK~~
37 36 417 190-107-3

679 685

Sequence Table (Front Injector):

Vial Information Part:

Line	Vial	Vial Information
1	1	8151/515 HERB ANALYSIS
2	2	190-107-3
3	3	210184001 10X
4	4	220173001 10X
5	5	220173002 10X
6	6	190-107-3

created: 3-28-01 num B

Sequence Table (Back Injector):

Vial Information Part:

Line	Vial	Vial Information
1	100	8151/515 HERB ANALYSIS
2	1	8151/515 HERB ANALYSIS
3	2 420	190-107-3
4	3 421	210184001 10X
5	4 422	220173001 10X
6	5 423	220173002 10X
7	6 424	190-107-3

✓ 02
3-28-01

679 686

PSR024 3/23/01 13.41 32 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY YUSHINSC

METHOD. QS Herbicides (8151A)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
										RCVD	REQD
14A,CLP1	DXPK3-1-CC	— — —	322684	399411	I-0A-QS	C1C210184	001		WATER	0	13 1
14C,CLP1	DXRH2-1-CC	— — —	322682	399411	I-0A-QS	C1C220173	001		WATER	0	13 1
14C,CLP1	DXRKF-1-CC	— — —	322683	399411	I-0A-QS	C1C220173	002		WATER	0	13 1

Used 1 liter per sample, and
empty bottles were thrown
away!

P. Yushinski
3-23-01

RELINQUISHED BY

P. Yushinski
P. Yushinski

RECEIVED BY

P. Yushinski
P. Yushinski

DATE/TIME

3-23-01 153
3-23-01 2100

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

679 687

METALS DATA

679 688

STL-Pittsburgh

Cover Page - Inorganic Analysis Data Package

<u>Client ID</u>	<u>Lab Sample ID:</u>
<u>DF/24-B/1079/IDW/006</u>	<u>DXPK3</u>
<u>DF/24-B/1079/IDW/006S</u>	<u>DXPK3S</u>
<u>DF/24-B/1079/IDW/006SD</u>	<u>DXPK3D</u>

Comments: UXB DUNN FIELD
C1C210184
METALS ANALYSIS
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.

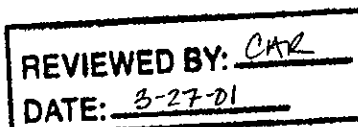
Signature: _____

Name: _____

Date: _____

Title: _____

Version 4.10.2



Cover Page Equivalent

**METALS
RESULTS**

Metals Data Reporting Form

Sample Results

Lab Sample ID: DXPK3 Client ID: DF/24-B/1079/IDW/006
 Matrix: Water Units: ug/L Prep Date: 3/22/01 Prep Batch: 1081151
 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	1710	N	1	ICP	3/23/01	12:47
Antimony	220.35	1.5	60.0	2.7	B	1	ICPST	3/24/01	22:13
Arsenic	189.04	2.6	10.0	3.3	B	1	ICPST	3/24/01	22:13
Barium	493.41	0.41	200	92.5	BNE	1	ICP	3/23/01	12:47
Beryllium	313.04	0.071	5.0	0.080	BN	1	ICP	3/23/01	15:27
Cadmium	226.50	0.49	5.0	0.49	U	1	ICPST	3/24/01	22:13
Calcium	317.93	37.9	5000	18800	N	1	ICP	3/23/01	12:47
Chromium	267.72	1.0	10.0	60.1	E	1	ICPST	3/24/01	22:13
Cobalt	228.62	3.2	50.0	3.8	BN	1	ICP	3/23/01	12:47
Copper	324.75	2.2	25.0	24.5	BN	1	ICP	3/23/01	12:47
Iron	259.94	8.8	100	1640	N	1	ICP	3/23/01	12:47
Lead	220.35	1.9	3.0	3.0	B	1	ICPST	3/24/01	22:13
Magnesium	279.08	19.9	5000	4710	BNE	1	ICP	3/23/01	12:47
Manganese	257.61	0.87	15.0	52.8	N	1	ICP	3/23/01	12:47
Nickel	231.60	6.1	40.0	6.1	UN	1	ICP	3/23/01	12:47
Potassium	766.49	496	5000	4240	B	1	ICP	3/23/01	12:47
Selenium	220.35	2.1	5.0	2.1	U	1	ICPST	3/24/01	22:13
Silver	328.07	0.94	10.0	2.7	B	1	ICPST	3/24/01	22:13
Sodium	589	363	125000	4710000		25	ICP	3/23/01	15:40
Thallium	190.86	3.9	10.0	3.9	U	1	ICPST	3/24/01	22:13
Vanadium	292.40	1.8	50.0	5.5	BN	1	ICP	3/23/01	12:47
Zinc	213.86	3.1	20.0	92.6		1	ICP	3/23/01	12:47

Comments: Lot # C1C210184 Sample # 1

Version 4.10.2

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

Form 1 Equivalent

Metals Data Reporting Form

Sample Results

Lab Sample ID: DXPK3 Client ID: DF/24-B/1079/IDW/006
Matrix: Water Units: ug/L Prep Date: 3/23/01 Prep Batch: 1081287
Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.054	0.20	0.24		1	CVAA	3/23/01	10:05

Comments: Lot #: C1C210184 Sample # 1

Version 4 10.2

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

Form 1 Equivalent

679 692 STL-Pittsburgh
Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: CVAA

Units: ug/L

Chart Number: 0323HGA.PRN

Acceptable Range: 80% - 120%

Standard Source: Ultra

Standard ID: 0087-166-2

Element	WL/ Mass	True Conc	ICV5-1 3/23/01 9:44 AM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	2.5	2.49	99.6								

Initial Calibration Verification Standard

Instrument: ICPUnits: ug/LChart Number: J10323A.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0087-158-3

Element	WL/ Mass	True Conc	ICV2-1 3/23/01 11:40 AM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	25000.0	24480.23	97.9								
Barium	493.409	1000.0	953.48	95.3								
Calcium	317.933	25000.0	24284.40	97.1								
Cobalt	228.616	1000.0	981.58	98.2								
Copper	324.754	1000.0	956.77	95.7								
Iron	259.94	25000.0	25285.03	101.1								
Magnesium	279.079	25000.0	24594.31	98.4								
Manganese	257.61	1000.0	978.68	97.9								
Nickel	231.604	1000.0	984.81	98.5								
Potassium	766.491	25000.0	23906.55	95.6								
Sodium	588.995	25000.0	24398.39	97.6								
Vanadium	292.402	1000.0	974.42	97.4								
Zinc	213.856	1000.0	979.89	98.0								

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPUnits: ug/LChart Number: J10323B.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0087-158-3

Element	WL/ Mass	True Conc	ICV2-1 3/23/01 3:08 PM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	25000.0	25666.94	102.7								
Barium	493.409	1000.0	1021.82	102.2								
Beryllium	313.042	1000.0	998.87	99.9								
Calcium	317.933	25000.0	25589.59	102.4								
Cobalt	228.616	1000.0	1013.71	101.4								
Copper	324.754	1000.0	1017.61	101.8								
Iron	259.94	25000.0	26490.74	106.0								
Magnesium	279.079	25000.0	25725.01	102.9								
Manganese	257.61	1000.0	1021.75	102.2								
Nickel	231.604	1000.0	1019.43	101.9								
Potassium	766.491	25000.0	24866.44	99.5								
Sodium	588.995	25000.0	25525.93	102.1								
Vanadium	292.402	1000.0	1021.81	102.2								
Zinc	213.856	1000.0	1018.21	101.8								

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPSTUnits: ug/LChart Number: T10324C.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0087-148-1

Element	WL/ Mass	True Conc	ICV3-1 3/24/01 8:09 PM							
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	220.353	250.0	251.62	100.6						
Arsenic	189.042	250.0	253.81	101.5						
Cadmium	226.502	250.0	249.85	99.9						
Chromium	267.716	1000.0	1011.62	101.2						
Lead	220.353	250.0	249.92	100.0						
Selenium	220.353	250.0	255.31	102.1						
Silver	328.068	500.0	501.59	100.3						
Thallium	190.864	500.0	511.06	102.2						

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAAUnits: ug/LChart Number: 0323HGA.PRNAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0087-166-3

Element	WL/ Mass	True Conc	CCV5-1 3/23/01 9:48 AM		CCV5-2 3/23/01 10:07 AM		CCV5-3 3/23/01 10:27 AM					
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	5.0	5.00	100.0	5.04	100.8	5.11	102.2				

STL-Pittsburgh

Metals Data Reporting Form

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Continuing Calibration Verification

Instrument: ICP

Units: ug/L

Chart Number: J10323A.ARC

Acceptable Range: 90% - 110%

Standard Source: Inorganic Ventures

Standard ID: 0087-121-12

Element	WL/ Mass	True Conc	CCV2-1 3/23/01 12:18 PM		CCV2-2 3/23/01 12:56 PM					
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	50000.0	48434.37	96.9	48184.32	96.4				
Barium	493.409	5000.0	4725.64	94.5	4702.34	94.0				
Calcium	317.933	50000.0	48147.36	96.3	48207.67	96.4				
Cobalt	228.616	5000.0	4788.19	95.8	4774.64	95.5				
Copper	324.754	5000.0	4765.58	95.3	4723.99	94.5				
Iron	259.94	50000.0	49547.36	99.1	49375.14	98.8				
Magnesium	279.079	50000.0	48700.47	97.4	48461.09	96.9				
Manganese	257.61	5000.0	4769.18	95.4	4759.45	95.2				
Nickel	231.604	5000.0	4769.43	95.4	4791.09	95.8				
Potassium	766.491	50000.0	48542.07	97.1	48074.84	96.1				
Sodium	588.995	50000.0	48827.54	97.7	53425.86	106.9				
Vanadium	292.402	5000.0	4762.41	95.2	4744.56	94.9				
Zinc	213.856	5000.0	4823.81	96.5	4801.37	96.0				

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPUnits: ug/LChart Number: J10323B.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0087-121-12

Element	WL/ Mass	True Conc	CCV2-1 3/23/01 3:46 PM		CCV2-2 3/23/01 ^{CA2} 4:26 PM ^{5:20} 12:56 PM							
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	50000.0	49579.96	99.2								
Barium	493.409	5000.0	4930.28	98.6								
Beryllium	313.042	5000.0	4859.11	97.2								
Calcium	317.933	50000.0	49394.55	98.8								
Cobalt	228.616	5000.0	4840.39	96.8								
Copper	324.754	5000.0	4948.34	99.0								
Iron	259.94	50000.0	50593.00	101.2								
Magnesium	279.079	50000.0	49742.32	99.5								
Manganese	257.61	5000.0	4852.87	97.1								
Nickel	231.604	5000.0	4838.83	96.8								
Potassium	766.491	50000.0	49182.42	98.4								
Sodium	588.995	50000.0	50095.80	100.2	49882.21	99.8						
Vanadium	292.402	5000.0	4879.83	97.6								
Zinc	213.856	5000.0	4900.38	98.0								

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICPSTUnits: ug/LChart Number: T10324C.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0087-118-1

Element	WL/ Mass	True Conc	CCV3-1 3/24/01 9:03 PM		CCV3-2 3/24/01 9:56 PM		CCV3-3 3/24/01 10:49 PM			
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	220.353	500.0	496.57	99.3	502.25	100.4	503.89	100.8		
Arsenic	189.042	500.0	505.52	101.1	509.94	102.0	535.89	107.2		
Cadmium	226.502	500.0	486.60	97.3	493.91	98.8	541.53	108.3		
Chromium	267.716	2000.0	2011.99	100.6	2040.78	102.0	2160.98	108.0		
Lead	220.353	500.0	495.01	99.0	501.60	100.3	541.27	108.3		
Selenium	220.353	500.0	502.67	100.5	514.16	102.8	527.50	105.5		
Silver	328.068	1000.0	1010.80	101.1	1026.90	102.7	1014.04	101.4		
Thallium	190.864	1000.0	1002.50	100.3	1020.72	102.1	1068.33	106.8		

679 700

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0323HGA.PRN

Standard Source: _____

Standard ID: _____

			ICB1 3/23/01 9:46 AM					
Element	WL/ Mass	Report Limit	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.1	U				

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J10323A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICBI 3/23/01 11:43 AM							
			Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	308.215	200	12.7	U						
Barium	493.409	200	0.4	U						
Calcium	317.933	5000	37.9	U						
Cobalt	228.616	50	3.2	U						
Copper	324.754	25	2.5	B						
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	16.9	B						
Vanadium	292.402	50	1.8	U						
Zinc	213.856	20	3.1	U						

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STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J10323B.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICBI 3/23/01 3:11 PM							
			Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	308.215	200	37.8	B						
Barium	493.409	200	2.5	B						
Beryllium	313.042	5	2.5	B						
Calcium	317.933	5000	44.9	B						
Cobalt	228.616	50	3.2	U						
Copper	324.754	25	4.6	B						
Iron	259.94	100	55.6	B						
Magnesium	279.079	5000	36.7	B						
Manganese	257.61	15	3.3	B						
Nickel	231.604	40	9.1	B						
Potassium	766.491	5000	496.0	U						
Sodium	588.995	5000	73.1	B						
Vanadium	292.402	50	1.8	U						
Zinc	213.856	20	4.8	B						

Initial Calibration Blank Results:

Units: ug/L

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICBI 3/24/01 8:14 PM				
			Found Q	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	3.8 B				
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				

679 704

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0323HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 3/23/01 9:50 AM		CCB2 3/23/01 10:08 AM		CCB3 3/23/01 10:28 AM		Found	Q
			Found	Q	Found	Q	Found	Q		
Mercury	253.7	0.2	0.1	U	0.1	U	0.1	U		

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J10323A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 3/23/01 12:21 PM		CCB2 3/23/01 12:59 PM					
			Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	308.215	200	12.7	U	66.5	B				
Barium	493.409	200	0.4	U	7.3	B				
Calcium	317.933	5000	37.9	U	87.9	B				
Cobalt	228.616	50	3.2	U	6.6	B				
Copper	324.754	25	2.2	U	8.4	B				
Iron	259.94	100	8.8	U	71.5	B				
Magnesium	279.079	5000	19.9	U	67.7	B				
Manganese	257.61	15	0.9	U	7.1	B				
Nickel	231.604	40	6.1	U	6.1	U				
Potassium	766.491	5000	496.0	U	496.0	U				
Sodium	588.995	5000	14.5	U	797.0	B				
Vanadium	292.402	50	-2.5	B	3.3	B				
Zinc	213.856	20	3.1	U	7.2	B				

679 706

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J10323B.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 3/23/01 3 51 PM		CCB2 ^{CRM} 3/23/01 4:29 PM					
			Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	308.215	200	-57.0	B						
Barium	493.409	200	0.4	U						
Beryllium	313.042	5	0.1	B						
Calcium	317.933	5000	-44.0	B						
Cobalt	228.616	50	3.2	U						
Copper	324.754	25	2.2	U						
Iron	259.94	100	-23.0	B						
Magnesium	279.079	5000	-25.0	B						
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	200.0	B				
Vanadium	292.402	50	3.8	B						
Zinc	213.856	20	3.1	U						

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T10324C.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 3/24/01 9:07 PM		CCB2 3/24/01 10:00 PM		CCB3 3/24/01 10:53 PM			
			Found	Q	Found	Q	Found	Q	Found	Q
Antimony	220.353	60	1.5	U	-2.1	B	1.5	U		
Arsenic	189.042	10	2.6	U	2.6	U	2.6	U		
Cadmium	226.502	5	0.5	U	0.5	U	0.5	U		
Chromium	267.716	10	2.9	B	2.7	B	3.3	B		
Lead	220.353	3	1.9	U	1.9	U	1.9	U		
Selenium	220.353	5	2.1	U	2.1	U	2.1	U		
Silver	328.068	10	-0.9	B	0.9	U	0.9	U		
Thallium	190.864	10	-5.4	B	3.9	U	3.9	U		

679 708

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DXQVCBMatrix: Water Units: ug/L Prep Date: 3/22/01 Prep Batch: 1081151Weight: 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	3/23/01	12:40
Antimony	220.353	1.5	60.0	-1.6	B	1	ICPST	3/24/01	22:05
Arsenic	189.042	2.6	10.0	2.6	U	1	ICPST	3/24/01	22:05
Barium	493.409	0.41	200	0.41	U	1	ICP	3/23/01	12:40
Beryllium	313.042	0.071	5.0	0.63	B	1	ICP	3/23/01	15:21
Cadmium	226.502	0.49	5.0	0.49	U	1	ICPST	3/24/01	22:05
Calcium	317.933	37.9	5000	37.9	U	1	ICP	3/23/01	12:40
Chromium	267.716	1.0	10.0	-1.7	B	1	ICPST	3/24/01	22:05
Cobalt	228.616	3.2	50.0	3.2	U	1	ICP	3/23/01	12:40
Copper	324.754	2.2	25.0	2.2	U	1	ICP	3/23/01	12:40
Iron	259.94	8.8	100	8.8	U	1	ICP	3/23/01	12:40
Lead	220.353	1.9	3.0	1.9	U	1	ICPST	3/24/01	22:05
Magnesium	279.079	19.9	5000	19.9	U	1	ICP	3/23/01	12:40
Manganese	257.61	0.87	15.0	0.87	U	1	ICP	3/23/01	12:40
Nickel	231.604	6.1	40.0	6.1	U	1	ICP	3/23/01	12:40
Potassium	766.491	496	5000	496	U	1	ICP	3/23/01	12:40
Selenium	220.353	2.1	5.0	2.1	U	1	ICPST	3/24/01	22:05
Silver	328.068	0.94	10.0	0.94	U	1	ICPST	3/24/01	22:05
Sodium	588.995	14.5	5000	14.5	U	1	ICP	3/23/01	12:40
Thallium	190.864	3.9	10.0	-5.4	B	1	ICPST	3/24/01	22:05
Vanadium	292.402	1.8	50.0	1.8	U	1	ICP	3/23/01	12:40
Zinc	213.856	3.1	20.0	3.1	U	1	ICP	3/23/01	12:40

Comments: Lot #. C1C210184

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

679 709

Preparation Blank Results

Lab Sample ID: DXRFHB

Matrix: Water Units: ug/L Prep Date: 3/23/01 Prep Batch: 1081287

Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.054	0.20	-0.098	B	1	CVAA	3/23/01	10:02

Comments: Lot #. C1C210184

Version 4.10.2

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

Form 3 Equivalent

679 710

STL-Pittsburgh

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPUnits: ug/LChart Number: J10323A.ARCAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0087-133-5

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 3/23/01 11:47 AM	Found	Found	Found	Found
				Found				
Aluminum	308.215		500000	481000				
Barium	493.409	200		2				
Calcium	317.933		500000	460000				
Cobalt	228.616	50		13				
Copper	324.754	25		-1				
Iron	259.94		200000	177000				
Magnesium	279.079		500000	468000				
Manganese	257.61	15		2				
Nickel	231.604	40		-19				
Potassium	766.491	5000		-260				
Sodium	588.995	5000		10				
Vanadium	292.402	50		-1				
Zinc	213.856	20		5				

Interference Check Standard A

Instrument: ICPUnits: ug/LChart Number: J10323B.ARCAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0087-133-5

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 3/23/01 3:14 PM	Found	Found	Found	Found
				Found				
Aluminum	308.215		500000	504000				
Barium	493.409	200		2				
Beryllium	313.042	5		1				
Calcium	317.933		500000	473000				
Cobalt	228.616	50		7				
Copper	324.754	25		-3				
Iron	259.94		200000	183000				
Magnesium	279.079		500000	489000				
Manganese	257.61	15		5				
Nickel	231.604	40		-8				
Potassium	766.491	5000		-690				
Sodium	588.995	5000		6				
Vanadium	292.402	50		3				
Zinc	213.856	20		4				

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPSTUnits: ug/LChart Number: T10324C.ARCAcceptable Range: 0% - 0%Standard Source: Inorganic VenturesStandard ID: 0087-133-5

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 3/24/01 8:18 PM	Found	Found	Found	Found
				Found				
Antimony	220.353	60		-2				
Arsenic	189.042	10		3				
Cadmium	226.502	5		-2				
Chromium	267.716	10		3				
Lead	220.353	3		2				
Selenium	220.353	5		3				
Silver	328.068	10		-1				
Thallium	190.864	10		3				

STL-Pittsburgh

Metals Data Reporting Form

679 713

Interference Check Standard AB

Instrument: ICPUnits: ug/LChart Number: J10323A.ARCAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0087-133-6

Element	WL/ Mass	True Conc	ICSAB 3/23/01 11:50 AM							
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	500000	476215.1	95.2						
Barium	493.409	500	446.3	89.3						
Calcium	317.933	500000	455269.0	91.1						
Cobalt	228.616	500	445.1	89.0						
Copper	324.754	500	471.9	94.4						
Iron	259.94	200000	175575.8	87.8						
Magnesium	279.079	500000	462002.1	92.4						
Manganese	257.61	500	438.7	87.7						
Nickel	231.604	1000	843.9	84.4						
Potassium	766.491	10000	9597.7	96.0						
Sodium	588.995	10000	9750.2	97.5						
Vanadium	292.402	500	449.7	89.9						
Zinc	213.856	1000	918.1	91.8						

679 714

STL-Pittsburgh

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPUnits: ug/LChart Number: J10323B.ARCAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0087-133-6

Element	WL/ Mass	True Conc	ICSAB 3/23/01 3:17 PM		Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
			Found	% Rec								
Aluminum	308.215	500000	496234.5	99.2								
Barium	493.409	500	476.3	95.3								
Beryllium	313.042	500	459.2	91.8								
Calcium	317.933	500000	468758.4	93.8								
Cobalt	228.616	500	454.6	90.9								
Copper	324.754	500	503.4	100.7								
Iron	259.94	200000	181454.5	90.7								
Magnesium	279.079	500000	481184.1	96.2								
Manganese	257.61	500	452.7	90.5								
Nickel	231.604	1000	867.8	86.8								
Potassium	766.491	10000	9708.7	97.1								
Sodium	588.995	10000	10210.6	102.1								
Vanadium	292.402	500	463.8	92.8								
Zinc	213.856	1000	939.7	94.0								

STL-Pittsburgh

Metals Data Reporting Form

679 715

Interference Check Standard.AB

Instrument: ICPST

Units: ug/L

Chart Number: T10324C.ARC

Acceptable Range: 80% - 120%

Standard Source: Inorganic Ventures

Standard ID: 0087-081-6

Element	WL/ Mass	True Conc	ICSAB 3/24/01 8:23 PM							
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	220.353	1000	1018.4	101.8						
Arsenic	189.042	1000	1011.3	101.1						
Cadmium	226.502	1000	919.8	92.0						
Chromium	267.716	500	508.3	101.6						
Lead	220.353	1000	969.3	96.9						
Selenium	220.353	1000	1019.9	102.0						
Silver	328.068	1000	1085.7	108.6						
Thallium	190.864	1000	996.6	99.7						

679 716

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DXPK3S

Original Sample ID: DXPK3 Client ID: DF/24-B/1079/IDW/006S

Matrix: Water Units: ug/L Prep Date: 3/22/01 Prep Batch: 1081151

Weight: NA Volume: 50 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
Aluminum	308.2	1710		3150	N	2000	72.1	1	1	ICP	3/23/01	12:47	3/23/01	12:53
Antimony	220.4	2.7	B	453		500	89.9	1	1	ICPST	3/24/01	22:13	3/24/01	22:22
Arsenic	189.0	3.3	B	1920		2000	95.8	1	1	ICPST	3/24/01	22:13	3/24/01	22:22
Barium	493.4	92.5	B	1430	N	2000	67.1	1	1	ICP	3/23/01	12:47	3/23/01	12:53
Beryllium	313.0	0.080	B	35.6	N	50	70.9	1	1	ICP	3/23/01	15:27	3/23/01	15:33
Cadmium	226.5	0.49	U	44.5		50	89.0	1	1	ICPST	3/24/01	22:13	3/24/01	22:22
Calcium	317.9	18800		55500	N	50000	73.5	1	1	ICP	3/23/01	12:47	3/23/01	12:53
Chromium	267.7	60.1		235		200	87.5	1	1	ICPST	3/24/01	22:13	3/24/01	22:22
Cobalt	228.6	3.8	B	368	N	500	72.7	1	1	ICP	3/23/01	12:47	3/23/01	12:53
Copper	324.8	24.5	B	211	N	250	74.4	1	1	ICP	3/23/01	12:47	3/23/01	12:53
Iron	259.9	1640		1960	N	1000	32.4	1	1	ICP	3/23/01	12:47	3/23/01	12:53
Lead	220.4	3.0	B	459		500	91.2	1	1	ICPST	3/24/01	22:13	3/24/01	22:22
Magnesium	279.1	4710	B	40900	N	50000	72.3	1	1	ICP	3/23/01	12:47	3/23/01	12:53
Manganese	257.6	52.8		407	N	500	70.7	1	1	ICP	3/23/01	12:47	3/23/01	12:53
Nickel	231.6	6.1	U	367	N	500	73.3	1	1	ICP	3/23/01	12:47	3/23/01	12:53
Potassium	766.5	4240	B	46800		50000	85.1	1	1	ICP	3/23/01	12:47	3/23/01	12:53
Selenium	220.4	2.1	U	1880		2000	94.2	1	1	ICPST	3/24/01	22:13	3/24/01	22:22
Silver	328.1	2.7	B	51.1		50	96.7	1	1	ICPST	3/24/01	22:13	3/24/01	22:22
Sodium	589	4710000		4850000	NC	50000		25	25	ICP	3/23/01	15:40	3/23/01	15:55
Thallium	190.9	3.9	U	1920		2000	95.9	1	1	ICPST	3/24/01	22:13	3/24/01	22:22
Vanadium	292.4	5.5	B	371	N	500	73.1	1	1	ICP	3/23/01	12:47	3/23/01	12:53
Zinc	213.9	92.6		474		500	76.2	1	1	ICP	3/23/01	12:47	3/23/01	12:53

Comments: Lot #: C1C210184 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

679 717

Matrix Spike Duplicate Sample Results

Spike Sample ID: DXPK3D
 Original Sample ID: DXPK3 Client ID: DF/24-B/1079/IDW/006SD
 Matrix: Water Units: ug/L Prep Date: 3/22/01 Prep Batch: 1081151
 Weight: 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	1710	N	3300		2000	79.8	1	1	ICP	3/23/01	12:47	3/23/01	15:36
Antimony	220.4	2.7	B	466		500	92.7	1	1	ICPST	3/24/01	22:13	3/24/01	22:27
Arsenic	189.0	3.3	B	2010		2000	100.1	1	1	ICPST	3/24/01	22:13	3/24/01	22:27
Barium	493.4	92.5	BN	1600		2000	75.4	1	1	ICP	3/23/01	12:47	3/23/01	15:36
Beryllium	313.0	0.080	BN	36.7	N	50	73.2	1	1	ICP	3/23/01	15:27	3/23/01	15:36
Cadmium	226.5	0.49	U	46.7		50	93.4	1	1	ICPST	3/24/01	22:13	3/24/01	22:27
Calcium	317.9	18800	N	61100		50000	84.6	1	1	ICP	3/23/01	12:47	3/23/01	15:36
Chromium	267.7	60.1		249		200	94.6	1	1	ICPST	3/24/01	22:13	3/24/01	22:27
Cobalt	228.6	3.8	BN	391		500	77.5	1	1	ICP	3/23/01	12:47	3/23/01	15:36
Copper	324.8	24.5	BN	235		250	84.0	1	1	ICP	3/23/01	12:47	3/23/01	15:36
Iron	259.9	1640	N	2030	N	1000	39.5	1	1	ICP	3/23/01	12:47	3/23/01	15:36
Lead	220.4	3.0	B	481		500	95.6	1	1	ICPST	3/24/01	22:13	3/24/01	22:27
Magnesium	279.1	4710	BN	44900		50000	80.4	1	1	ICP	3/23/01	12:47	3/23/01	15:36
Manganese	257.6	52.8	N	440		500	77.3	1	1	ICP	3/23/01	12:47	3/23/01	15:36
Nickel	231.6	6.1	UN	397		500	79.4	1	1	ICP	3/23/01	12:47	3/23/01	15:36
Potassium	766.5	4240	B	51300		50000	94.1	1	1	ICP	3/23/01	12:47	3/23/01	15:36
Selenium	220.4	2.1	U	1930		2000	96.6	1	1	ICPST	3/24/01	22:13	3/24/01	22:27
Silver	328.1	2.7	B	51.4		50	97.4	1	1	ICPST	3/24/01	22:13	3/24/01	22:27
Sodium	589	4710000		4660000	NC	50000		25	25	ICP	3/23/01	15:40	3/23/01	15:58
Thallium	190.9	3.9	U	1980		2000	99.1	1	1	ICPST	3/24/01	22:13	3/24/01	22:27
Vanadium	292.4	5.5	BN	404		500	79.7	1	1	ICP	3/23/01	12:47	3/23/01	15:36
Zinc	213.9	92.6		509		500	83.3	1	1	ICP	3/23/01	12:47	3/23/01	15:36

Comments: Lot #: C1C210184 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

679 718

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DXPK3S
Original Sample ID: DXPK3 Client ID: DF/24-B/1079/IDW/006S
Matrix: Water Units: ug/L Prep Date: 3/23/01 Prep Batch: 1081287
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	0.24		1.3		1	102.0	1	1	CVAA	3/23/01	10:05	3/23/01	10 10

Comments: Lot # C1C210184 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: DXPK3D
 Original Sample ID: DXPK3 Client ID: DF/24-B/1079/IDW/006SD
 Matrix: Water Units: ug/L Prep Date: 3/23/01 Prep Batch: 1081287
 Weight: 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	0.24		1.4		1	111.0	1	1	CVAA	3/23/01	10:05	3/23/01	10:11

Comments Lot # C1C210184 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: DXPK3DMatrix Spike Sample ID: DXPK3S Client ID: DF/24-B/1079/IDW/006SDMatrix: Water Units: ug/L Prep Date: 3/22/01 Prep Batch: 1081151Weight: 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	3150	N	3300		10.1 %	1	1	ICP	3/23/01	12:53	3/23/01	15:36
Antimony	220.353	453		466		3.0 %	1	1	ICPST	3/24/01	22:22	3/24/01	22:27
Arsenic	189.042	1920		2010		4.4 %	1	1	ICPST	3/24/01	22:22	3/24/01	22:27
Barium	493.409	1430	N	1600		11.7 %	1	1	ICP	3/23/01	12:53	3/23/01	15:36
Beryllium	313.042	35.6	N	36.7	N	3.1 %	1	1	ICP	3/23/01	15:33	3/23/01	15:36
Cadmium	226.502	44.5		46.7		4.8 %	1	1	ICPST	3/24/01	22:22	3/24/01	22:27
Calcium	317.933	55500	N	61100		14.1 %	1	1	ICP	3/23/01	12:53	3/23/01	15:36
Chromium	267.716	235		249		7.8 %	1	1	ICPST	3/24/01	22:22	3/24/01	22:27
Cobalt	228.616	368	N	391		6.3 %	1	1	ICP	3/23/01	12:53	3/23/01	15:36
Copper	324.754	211	N	235		12.1 %	1	1	ICP	3/23/01	12:53	3/23/01	15:36
Iron	259.94	1960	N	2030	N	19.8 %	1	1	ICP	3/23/01	12:53	3/23/01	15:36
Lead	220.353	459		481		4.7 %	1	1	ICPST	3/24/01	22:22	3/24/01	22:27
Magnesium	279.079	40900	N	44900		10.6 %	1	1	ICP	3/23/01	12:53	3/23/01	15:36
Manganese	257.61	407	N	440		8.9 %	1	1	ICP	3/23/01	12:53	3/23/01	15:36
Nickel	231.604	367	N	397		7.9 %	1	1	ICP	3/23/01	12:53	3/23/01	15:36
Potassium	766.491	46800		51300		10.0 %	1	1	ICP	3/23/01	12:53	3/23/01	15:36
Selenium	220.353	1880		1930		2.5 %	1	1	ICPST	3/24/01	22:22	3/24/01	22:27
Silver	328.068	51.1		51.4		0.7 %	1	1	ICPST	3/24/01	22:22	3/24/01	22:27
Sodium	588.995	4850000	NC	4660000	NC		25	25	ICP	3/23/01	15:55	3/23/01	15:58
Thallium	190.864	1920		1980		3.3 %	1	1	ICPST	3/24/01	22:22	3/24/01	22:27
Vanadium	292.402	371	N	404		8.6 %	1	1	ICP	3/23/01	12:53	3/23/01	15:36
Zinc	213.856	474		509		9.0 %	1	1	ICP	3/23/01	12:53	3/23/01	15:36

Comments: Lot #: C1C210184 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

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DXPK3DMatrix Spike Sample ID: DXPK3S Client ID: DF/24-B/1079/IDW/006SDMatrix: Water Units: ug/L Prep Date: 3/23/01 Prep Batch: 1081287Weight: 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	1.3		1.4		8.5 %	1	1	CVAA	3/23/01	10.10	3/23/01	10.11

Comments: Lot # C1C210184 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

679 722

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DXQVCCMatrix: Water Units: ug/L Prep Date: 3/22/01 Prep Batch: 1081151Weight: 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	1850	92.7		80-120	1	ICP	3/23/01	12:43
Antimony	220.353	500	483	96.5		80-120	1	ICPST	3/24/01	22:09
Arsenic	189.042	2000	1960	97.9		80-120	1	ICPST	3/24/01	22:09
Barium	493.409	2000	1830	91.7		80-120	1	ICP	3/23/01	12:43
Beryllium	313.042	50.0	47.1	94.1		80-120	1	ICP	3/23/01	15:24
Cadmium	226.502	50.0	46.9	93.8		80-120	1	ICPST	3/24/01	22:09
Calcium	317.933	50000	49100	98.3		80-120	1	ICP	3/23/01	12:43
Chromium	267.716	200	199	99.3		80-120	1	ICPST	3/24/01	22:09
Cobalt	228.616	500	460	92.0		80-120	1	ICP	3/23/01	12:43
Copper	324.754	250	231	92.6		80-120	1	ICP	3/23/01	12:43
Iron	259.94	1000	979	97.9		80-120	1	ICP	3/23/01	12:43
Lead	220.353	500	482	96.4		80-120	1	ICPST	3/24/01	22:09
Magnesium	279.079	50000	50400	100.8		80-120	1	ICP	3/23/01	12:43
Manganese	257.61	500	461	92.3		80-120	1	ICP	3/23/01	12:43
Nickel	231.604	500	464	92.8		80-120	1	ICP	3/23/01	12:43
Potassium	766.491	50000	49800	99.5		80-120	1	ICP	3/23/01	12:43
Selenium	220.353	2000	1960	98.0		80-120	1	ICPST	3/24/01	22:09
Silver	328.068	50.0	49.0	98.0		80-120	1	ICPST	3/24/01	22:09
Sodium	588.995	50000	50400	100.9		80-120	1	ICP	3/23/01	12:43
Thallium	190.864	2000	2010	100.6		80-120	1	ICPST	3/24/01	22:09
Vanadium	292.402	500	461	92.2		80-120	1	ICP	3/23/01	12:43
Zinc	213.856	500	467	93.4		80-120	1	ICP	3/23/01	12:43

Comments: Lot #: C1C210184

Version 4 10.2

U Result is less than the MDL

Form 7 Equivalent

B Result is between MDL and RL

STL-Pittsburgh
Metals Data Reporting Form

679 723

Laboratory Control Sample Results

Lab Sample ID: DXRFHC

Matrix: Water Units: ug/L Prep Date: 3/23/01 Prep Batch: 1081287

Weight: 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	2.5	100.4		80-120	1	CVAA	3/23/01	10.04

Comments: Lot # C1C210184

Version 4 10.2

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

Form 7 Equivalent

679 724

STL-Pittsburgh

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: DXPK3POriginal Sample ID: DXPK3 Client ID: DF/24-B/1079/IDW/006Matrix: Water Units: ug/L Prep Date: 3/22/01 Prep Batch: 1081151Weight: 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	1710	N	1720		0.7 %	1	5	ICP	3/23/01	12:47	3/23/01	12:50
Antimony	220.353	2.7	B	7.3	U		1	5	ICPST	3/24/01	22:13	3/24/01	22:18
Arsenic	189.042	3.3	B	12.8	U		1	5	ICPST	3/24/01	22:13	3/24/01	22:18
Barium	493.409	92.5	BN	103	B E	11.6 %	1	5	ICP	3/23/01	12:47	3/23/01	12:50
Beryllium	313.042	0.080	BN	0.36	U		1	5	ICP	3/23/01	15:27	3/23/01	15:30
Cadmium	226.502	0.49	U	2.5	U		1	5	ICPST	3/24/01	22:13	3/24/01	22:18
Calcium	317.933	18800	N	19700	B	5.0 %	1	5	ICP	3/23/01	12:47	3/23/01	12:50
Chromium	267.716	60.1		72.0	E	19.7 %	1	5	ICPST	3/24/01	22:13	3/24/01	22:18
Cobalt	228.616	3.8	BN	16.1	U		1	5	ICP	3/23/01	12:47	3/23/01	12:50
Copper	324.754	24.5	BN	25.8	B		1	5	ICP	3/23/01	12:47	3/23/01	12:50
Iron	259.94	1640	N	1750		7.0 %	1	5	ICP	3/23/01	12:47	3/23/01	12:50
Lead	220.353	3.0	B	9.5	U		1	5	ICPST	3/24/01	22:13	3/24/01	22:18
Magnesium	279.079	4710	BN	5240	B E	11.2 %	1	5	ICP	3/23/01	12:47	3/23/01	12:50
Manganese	257.61	52.8	N	55.4	B	4.9 %	1	5	ICP	3/23/01	12:47	3/23/01	12:50
Nickel	231.604	6.1	UN	30.7	U		1	5	ICP	3/23/01	12:47	3/23/01	12:50
Potassium	766.491	4240	B	4510	B		1	5	ICP	3/23/01	12:47	3/23/01	12:50
Selenium	220.353	2.1	U	10.5	U		1	5	ICPST	3/24/01	22:13	3/24/01	22:18
Silver	328.068	2.7	B	4.7	U		1	5	ICPST	3/24/01	22:13	3/24/01	22:18
Sodium	588.995	4710000		5170000		9.8 %	25	125	ICP	3/23/01	15:40	3/23/01	15:43
Thallium	190.864	3.9	U	19.4	U		1	5	ICPST	3/24/01	22:13	3/24/01	22:18
Vanadium	292.402	5.5	BN	8.9	U		1	5	ICP	3/23/01	12:47	3/23/01	12:50
Zinc	213.856	92.6		96.7	B		1	5	ICP	3/23/01	12:47	3/23/01	12:50

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

Metals Data Reporting Form

Instrument Detection Limits

Instrument: CVAAUnits: ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Mercury	253.70	0.2	0.054	1/24/01

679 726

STL-Pittsburgh

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPUnits: 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

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

679 728

STL-Pittsburgh
Metals Data Reporting Form

Inter-Element Correction FactorsInstrument: ICPDate of IEC's: 3/2/01

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	As(0.008569), Mn(0.000025), Pb(0.000632)
Antimony	206.838	Ni(-0.000354), Pb(-0.001557), Sn(-0.00417)
Arsenic	193.696	Cd(0.007291)
Barium	493.409	Co(0.000631)
Beryllium	313.042	Cd(0.00808)
Cadmium	228.802	Co(0.002654)
Chromium	267.716	Pb(-0.000925), Sb(0.008569), V(-0.002108)
Cobalt	228.616	Al(-0.004453), B(0.00232), Cd(-0.004299), Cu(-0.000959), Pb(-0.029108), Sb(-0.003991), Tl(0.008744)
Copper	324.754	Zn(0.004381)
Iron	259.94	Ag(-0.000227), As(0.00109), B(-0.002012), Cd(-0.000044), Cu(-0.000109), Mn(-0.000266), Mo(-0.000131), Pb(0.000343), Se(-0.003143), Sn(-0.0001176), Tl(0.015465), Zn(0.000077)
Manganese	257.61	Ag(0.000172), Tl(-0.005376)
Molybdenum	202.03	Al(0.012081), Cr(-0.000336), Mn(-0.000311), Sb(0.006459), V(-0.025228)
Nickel	231.604	Cd(-0.000465), Sb(-0.09347), Zn(0.003201)
Tin	189.989	Sb(0.001907)
Titanium	334.941	Co(0.001649), Fe(-0.003351), Sb(0.001736), Sn(0.003716)
Vanadium	292.402	Ag(-0.005641), Al(0.012439), As(0.016935), Be(0.003088), Cd(0.000028), Cr(0.000571), Sb(-0.004188), Si(-0.010896), Tl(0.00749), Zn(-0.004465)

Metals Data Reporting Form

Inter-Element Correction FactorsInstrument: ICPSTDate of IEC's: 3/22/01

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	Pb(0.000544), Tl(-0.00002)
Aluminum	308.215	Pb(-0.000175)
Chromium	267.716	Sb(0.008241)
Chromium	267.716	As(-0.003229), Sb(0.012398)
Cobalt	228.616	Pb(0.000058), Se(-0.000475)
Cobalt	228.616	Cd(-0.000081), Fe(0.086311), Ni(-0.000612), Pb(-0.000681), Se(0.000663), Tl(0.002869)
Iron	271.441	Cd(0.000142), Cr(-0.000015), Pb(0.00009), Sb(0.000031), Se(0.000057), Tl(0.00004), V(-0.00032), Zn(0.000116)
Iron	271.441	Pb(0.000051), Sb(0.000027), Se(-0.000331)
Magnesium	279.078	Fe(-0.000952)
Manganese	257.61	Se(0.000727), Tl(-0.004581)
Molybdenum	202.03	Pb(-0.000647), Sb(-0.010712)
Molybdenum	202.03	As(-0.000976), Pb(-0.000535), Sb(-0.001617), Se(0.000346)
Nickel	231.604	Pb(0.000252), Sb(-0.00114), Zn(0.004843)
Nickel	231.604	Pb(0.00014)
Vanadium	292.402	Al(0.016848), Be(-0.006118), Cr(-0.00018), Fe(0.00979), Sb(-0.00817), Se(0.000491), Tl(0.001797)
Vanadium	292.402	Pb(-0.000322)

679 730

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	1/24/01

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICPUnits: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Aluminum	308.21	600000	1/15/01
Barium	493.41	100000	1/15/01
Beryllium	313.04	15000	1/15/01
Calcium	317.93	600000	1/15/01
Cobalt	228.62	100000	1/15/01
Copper	324.75	100000	1/15/01
Iron	259.94	400000	1/15/01
Magnesium	279.08	600000	1/15/01
Manganese	257.61	100000	1/15/01
Nickel	231.60	100000	1/15/01
Potassium	766.49	1000000	1/15/01
Sodium	589.00	400000	1/15/01
Vanadium	292.40	100000	1/15/01
Zinc	213.86	100000	1/15/01

679 732

STL-Pittsburgh
Metals Data Reporting FormLinear Dynamic RangesInstrument: ICPSTUnits: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Antimony	220.35	10000	3/26/01
Arsenic	189.04	10000	3/26/01
Cadmium	226.50	5000	3/26/01
Chromium	267.72	20000	3/26/01
Lead	220.35	5000	3/26/01
Selenium	220.35	10000	3/26/01
Silver	328.07	2000	3/26/01
Thallium	190.86	10000	3/26/01

STL-Pittsburgh
Metals Data Reporting Form

679 733

Preparation Log

Preparation Batch: 1081151 **Instrument:** ICP **Matrix:** Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DXQVCB	3/22/01	NA	50	NA
DXQVCC	3/22/01	NA	50	NA
DXPK3	3/22/01	NA	50	NA
DXPK3D	3/22/01	NA	50	NA
DXPK3S	3/22/01	NA	50	NA

679 734

STL-Pittsburgh

Metals Data Reporting Form

Preparation Log

Preparation Batch: 1081287 Instrument: CVAA Matrix: Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DXRFHB	3/23/01	NA	100	NA
DXRFHC	3/23/01	NA	100	NA
DXPK3	3/23/01	NA	100	NA
DXPK3D	3/23/01	NA	100	NA
DXPK3S	3/23/01	NA	100	NA

STL-Pittsburgh
Metals Data Reporting Form

679 735

Instrument Runlog

Instrument: CVAA

Chart Number: 0323HGA.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Std1Rep1		3/23/01	9:35
Std2Rep1		3/23/01	9:36
Std3Rep1		3/23/01	9:38
Std4Rep1		3/23/01	9:39
Std5Rep1		3/23/01	9:41
Std6Rep1		3/23/01	9:42
ICV5-1		3/23/01	9:44
ICB1		3/23/01	9:46
CCV5-1		3/23/01	9:48
CCB1		3/23/01	9:50
ZZZZZZ		3/23/01	9:51
ZZZZZZ		3/23/01	9:53
ZZZZZZ		3/23/01	9:54
ZZZZZZ		3/23/01	9:56
ZZZZZZ		3/23/01	9:58
ZZZZZZ		3/23/01	9:59
ZZZZZZ		3/23/01	10:01
DXRFHB		3/23/01	10:02
DXRFHC		3/23/01	10:04
DXPK3	DF/24-B/1079/IDW/006	3/23/01	10:05
CCV5-2		3/23/01	10:07
CCB2		3/23/01	10:08
DXPK3S	DF/24-B/1079/IDW/006S	3/23/01	10:10
DXPK3D	DF/24-B/1079/IDW/006SD	3/23/01	10:11
ZZZZZZ		3/23/01	10:13
ZZZZZZ		3/23/01	10:14
ZZZZZZ		3/23/01	10:16
ZZZZZZ		3/23/01	10:18
ZZZZZZ		3/23/01	10:19
ZZZZZZ		3/23/01	10:21
ZZZZZZ		3/23/01	10:23
ZZZZZZ		3/23/01	10:25
CCV5-3		3/23/01	10:27
CCB3		3/23/01	10:28
ZZZZZZ		3/23/01	10:30
ZZZZZZ		3/23/01	10:32
ZZZZZZ		3/23/01	10:33
ZZZZZZ		3/23/01	10:35
ZZZZZZ		3/23/01	10:36

STL-Pittsburgh

Metals Data Reporting Form

679 736

Instrument Runlog

Instrument: CVAAChart Number: 0323HGA.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		3/23/01	10:38
ZZZZZZ		3/23/01	10:39
ZZZZZZ		3/23/01	10:41
ZZZZZZ		3/23/01	10:42
ZZZZZZ		3/23/01	10:44
ZZZZZZ		3/23/01	10:45
ZZZZZZ		3/23/01	10:47
ZZZZZZ		3/23/01	10:49
ZZZZZZ		3/23/01	10:51
ZZZZZZ		3/23/01	10:52
ZZZZZZ		3/23/01	10:54
ZZZZZZ		3/23/01	10:55
ZZZZZZ		3/23/01	10:57
ZZZZZZ		3/23/01	10:58
ZZZZZZ		3/23/01	11:02
ZZZZZZ		3/23/01	11:04
ZZZZZZ		3/23/01	11:05
ZZZZZZ		3/23/01	11:07
ZZZZZZ		3/23/01	11:09
ZZZZZZ		3/23/01	11:10
ZZZZZZ		3/23/01	11:12
ZZZZZZ		3/23/01	11:15
ZZZZZZ		3/23/01	11:16
ZZZZZZ		3/23/01	11:18
ZZZZZZ		3/23/01	11:19
ZZZZZZ		3/23/01	11:21
ZZZZZZ		3/23/01	11:22
ZZZZZZ		3/23/01	11:24
ZZZZZZ		3/23/01	11:26
ZZZZZZ		3/23/01	11:27

STL-Pittsburgh

Metals Data Reporting Form

679 737

Instrument Runlog

Instrument: ICP

Chart Number: J10323A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
STD1		3/23/01	11:31
STD5A		3/23/01	11:34
STD5B		3/23/01	11:37
ICV2-1		3/23/01	11:40
ICB1		3/23/01	11:43
ICSA		3/23/01	11:47
ICSAB		3/23/01	11:50
ZZZZZZ		3/23/01	11:53
ZZZZZZ		3/23/01	11:56
ZZZZZZ		3/23/01	11:59
ZZZZZZ		3/23/01	12:02
ZZZZZZ		3/23/01	12:06
ZZZZZZ		3/23/01	12:09
ZZZZZZ		3/23/01	12:12
ZZZZZZ		3/23/01	12:15
CCV2-1		3/23/01	12:18
CCB1		3/23/01	12:21
ZZZZZZ		3/23/01	12:24
ZZZZZZ		3/23/01	12:28
ZZZZZZ		3/23/01	12:31
ZZZZZZ		3/23/01	12:34
ZZZZZZ		3/23/01	12:37
DXQVCB		3/23/01	12:40
DXQVCC		3/23/01	12:43
DXPK3	DF/24-B/1079/IDW/006	3/23/01	12:47
DXPK3P	DF/24-B/1079/IDW/006	3/23/01	12:50
DXPK3S	DF/24-B/1079/IDW/006S	3/23/01	12:53
CCV2-2		3/23/01	12:56
CCB2		3/23/01	12:59
ZZZZZZ		3/23/01	13:02

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPChart Number: J10323B.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		3/23/01	13:48
ZZZZZZ		3/23/01	13:51
ZZZZZZ		3/23/01	13:54
ZZZZZZ		3/23/01	13:57
ZZZZZZ		3/23/01	14:00
ZZZZZZ		3/23/01	14:06
ZZZZZZ		3/23/01	14:09
ZZZZZZ		3/23/01	14:13
ZZZZZZ		3/23/01	14:16
ZZZZZZ		3/23/01	14:19
ZZZZZZ		3/23/01	14:24
ZZZZZZ		3/23/01	14:27
ZZZZZZ		3/23/01	14:30
ZZZZZZ		3/23/01	14 34
ZZZZZZ		3/23/01	14:37
ZZZZZZ		3/23/01	14:42
ZZZZZZ		3/23/01	14:47
STD1		3/23/01	14:58
STD5A		3/23/01	15:01
STD5B		3/23/01	15:05
ICV2-1		3/23/01	15:08
ICB1		3/23/01	15:11
ICSA		3/23/01	15:14
ICSAB		3/23/01	15:17
DXQVCB		3/23/01	15:21
DXQVCC		3/23/01	15:24
DXPK3	DF/24-B/1079/IDW/006	3/23/01	15:27
DXPK3P	DF/24-B/1079/IDW/006	3/23/01	15:30
DXPK3S	DF/24-B/1079/IDW/006S	3/23/01	15:33
DXPK3D	DF/24-B/1079/IDW/006SD	3/23/01	15:36
DXPK3	DF/24-B/1079/IDW/006	3/23/01	15:40
DXPK3P	DF/24-B/1079/IDW/006	3/23/01	15:43
CCV2-1		3/23/01	15:46
CCB1		3/23/01	15:51
DXPK3S	DF/24-B/1079/IDW/006S	3/23/01	15:55
DXPK3D	DF/24-B/1079/IDW/006SD	3/23/01	15:58
ZZZZZZ		3/23/01	16:01
ZZZZZZ		3/23/01	16:04
ZZZZZZ		3/23/01	16:07

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPChart Number: J10323B.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		3/23/01	16:10
ZZZZZZ		3/23/01	16:14
ZZZZZZ		3/23/01	16:17
ZZZZZZ		3/23/01	16:20
ZZZZZZ		3/23/01	16:23
CCV2-2		3/23/01	16:26
CCB2		3/23/01	16:29
ZZZZZZ		3/23/01	16:32
ZZZZZZ		3/23/01	16:36
ZZZZZZ		3/23/01	16:39
ZZZZZZ		3/23/01	16:42
ZZZZZZ		3/23/01	16:45
ZZZZZZ		3/23/01	16:48
ZZZZZZ		3/23/01	16:51
ZZZZZZ		3/23/01	16:55
ZZZZZZ		3/23/01	16:58
ZZZZZZ		3/23/01	17:01
ZZZZZZ		3/23/01	17:04
ZZZZZZ		3/23/01	17:07
ZZZZZZ		3/23/01	17:10
ZZZZZZ		3/23/01	17:14
ZZZZZZ		3/23/01	17:17
ZZZZZZ		3/23/01	17:20
ZZZZZZ		3/23/01	17:26
ZZZZZZ		3/23/01	17:30
ZZZZZZ		3/23/01	17:33
ZZZZZZ		3/23/01	17:36
ZZZZZZ		3/23/01	17:39
ZZZZZZ		3/23/01	17:42
ZZZZZZ		3/23/01	17:45
ZZZZZZ		3/23/01	17:49
ZZZZZZ		3/23/01	17:52
ZZZZZZ		3/23/01	17:55
ZZZZZZ		3/23/01	17:58
ZZZZZZ		3/23/01	18:01
ZZZZZZ		3/23/01	18:04
ZZZZZZ		3/23/01	18:08
ZZZZZZ		3/23/01	18:11
ZZZZZZ		3/23/01	18:14

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STL-Pittsburgh
Metals Data Reporting Form

Instrument Runlog

Instrument: ICPChart Number: J10323B.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		3/23/01	18:17
ZZZZZZ		3/23/01	18:20
ZZZZZZ		3/23/01	18:23
ZZZZZZ		3/23/01	18:27
ZZZZZZ		3/23/01	18:30
ZZZZZZ		3/23/01	18:33
ZZZZZZ		3/23/01	18:36
ZZZZZZ		3/23/01	18:39
ZZZZZZ		3/23/01	18:42
ZZZZZZ		3/23/01	18:46
ZZZZZZ		3/23/01	18:49
ZZZZZZ		3/23/01	18:52
ZZZZZZ		3/23/01	18:55
ZZZZZZ		3/23/01	18:58
ZZZZZZ		3/23/01	19:01
ZZZZZZ		3/23/01	19:05
ZZZZZZ		3/23/01	19:08
ZZZZZZ		3/23/01	19:11
ZZZZZZ		3/23/01	19:14
ZZZZZZ		3/23/01	19:17

STL-Pittsburgh
Metals Data Reporting Form

679 741

Instrument Runlog

Instrument: ICPST

Chart Number: T10324C.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
STD1		3/24/01	19:57
STD6		3/24/01	20:01
STD7		3/24/01	20:05
ICV3-1		3/24/01	20:09
ICB1		3/24/01	20:14
ICSA		3/24/01	20:18
ICSAB		3/24/01	20:23
ZZZZZZ		3/24/01	20:27
ZZZZZZ		3/24/01	20:32
ZZZZZZ		3/24/01	20:36
ZZZZZZ		3/24/01	20:40
ZZZZZZ		3/24/01	20:45
ZZZZZZ		3/24/01	20:49
ZZZZZZ		3/24/01	20:54
ZZZZZZ		3/24/01	20:58
CCV3-1		3/24/01	21:03
CCB1		3/24/01	21:07
ZZZZZZ		3/24/01	21:11
ZZZZZZ		3/24/01	21:16
ZZZZZZ		3/24/01	21:20
ZZZZZZ		3/24/01	21:25
ZZZZZZ		3/24/01	21:29
ZZZZZZ		3/24/01	21:34
ZZZZZZ		3/24/01	21:38
ZZZZZZ		3/24/01	21:42
ZZZZZZ		3/24/01	21:47
ZZZZZZ		3/24/01	21:51
CCV3-2		3/24/01	21:56
CCB2		3/24/01	22:00
DXQVCB		3/24/01	22:05
DXQVCC		3/24/01	22:09
DXPK3	DF/24-B/1079/IDW/006	3/24/01	22:13
DXPK3P	DF/24-B/1079/IDW/006	3/24/01	22:18
DXPK3S	DF/24-B/1079/IDW/006S	3/24/01	22:22
DXPK3D	DF/24-B/1079/IDW/006SD	3/24/01	22:27
ZZZZZZ		3/24/01	22:31
ZZZZZZ		3/24/01	22:36
ZZZZZZ		3/24/01	22:40
ZZZZZZ		3/24/01	22:44

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPSTChart Number: T10324C.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
CCV3-3		3/24/01	22:49
CCB3		3/24/01	22:53
ZZZZZZ		3/24/01	22:58
ZZZZZZ		3/24/01	23:02
ZZZZZZ		3/24/01	23:07
ZZZZZZ		3/24/01	23:11
ZZZZZZ		3/24/01	23:15
ZZZZZZ		3/24/01	23:20
ZZZZZZ		3/24/01	23:24
ZZZZZZ		3/24/01	23:29
ZZZZZZ		3/24/01	23:33
ZZZZZZ		3/24/01	23:38
ZZZZZZ		3/24/01	23:42
ZZZZZZ		3/24/01	23:47
ZZZZZZ		3/24/01	23 51
ZZZZZZ		3/24/01	23:55
ZZZZZZ		3/25/01	0:00
ZZZZZZ		3/25/01	0:04
ZZZZZZ		3/25/01	0:09
ZZZZZZ		3/25/01	0:13
ZZZZZZ		3/25/01	0:18
ZZZZZZ		3/25/01	0:22
ZZZZZZ		3/25/01	0:26
ZZZZZZ		3/25/01	0:31
ZZZZZZ		3/25/01	0:35
ZZZZZZ		3/25/01	0:40
ZZZZZZ		3/25/01	0:44
ZZZZZZ		3/25/01	0:49
ZZZZZZ		3/25/01	0:53
ZZZZZZ		3/25/01	0:58
ZZZZZZ		3/25/01	1:02
ZZZZZZ		3/25/01	1:06
ZZZZZZ		3/25/01	1:11
ZZZZZZ		3/25/01	1:15
ZZZZZZ		3/25/01	1:20
ZZZZZZ		3/25/01	1:24
ZZZZZZ		3/25/01	1:29
ZZZZZZ		3/25/01	1:33
ZZZZZZ		3/25/01	1:38

STL-Pittsburgh
Metals Data Reporting Form

679 743

Instrument Runlog

Instrument: ICPST

Chart Number: T10324C.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		3/25/01	1:42
ZZZZZZ		3/25/01	1:46
ZZZZZZ		3/25/01	1:51
ZZZZZZ		3/25/01	1:55
ZZZZZZ		3/25/01	2:00
ZZZZZZ		3/25/01	2:04
ZZZZZZ		3/25/01	2:09

679 744

**METALS
RAW DATA**

CICZ10184

679 745

Analysis Report 6010B Averages

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Sample Name AL BA BE CA CO CU

#	Sample Name	AL	BA	BE	CA	CO	CU
1	STD1	.00994	.00012	.003	-.00144	.00004	.00039
2	STD5A		4.68613	16.5534		1.28839	2.44064
3	STD5B	11.6398			26.4236		
4	ICV2-1 0087-158-3	24.480	.95348	.95441	24.284	.98158	.95677
5	ICB1	.00687	.00033	.00014	.02030	.00038	.00245
6	ICSA 0087-133-5	481.22	.00173	-.00011	459.49	.01251	-.00140
7	ICSAB 0087-133-6	476.22	.44628	.44120	455.27	.44515	.47191
8	DXNT3B	.00051	.00000	-.00023	.01530	-.00078	.00040
9	DXNT3C	1.9826	1.9001	.04653	51.602	.48071	.23822
10	DXM3W	.49652	.10981	-.00015	2.0017	.00934	.13511
11	DXM3WP5	.09825	.02179	-.00020	.39673	.00147	.02729
12	DXM3WS	2.3900	2.0002	.04713	51.076	.46674	.36690
13	DXM3WD	2.4181	2.0191	.04718	51.687	.46866	.36804
14	DXNVWB	-.00167	.00006	-.00020	.03257	.00000	H.02968
15	DXNVWC	L.00477	L.00027	L-.00022	L.03098	L.00160	L.00389
16	CCV2-1 0087-121-12	48.434	4.7256	4.7647	48.147	4.7882	4.7656
17	CCB1	.00640	.00008	-.00008	.00284	.00000	.00061
18	DXG8A	.02668	.01980	-.00017	2.6171	.00037	-.00061
19	DXG8AP5	.01151	.00392	-.00019	.55527	-.00039	.00000
20	DXG8AS	.02744	.01995	-.00025	2.6701	-.00036	.00102
21	DXG8AD	.01854	.01973	-.00030	2.6184	-.00151	.00143
22	DXG8P	.03547	.01941	-.00024	2.6313	-.00079	-.00081
23	DXQVCB	-.00647	-.00002	-.00018	.01214	-.00194	.00122
24	DXQVCC	1.8543	1.8337	.04530	49.128	.46015	.23144
25	DXPK3	1.7050	.09249	-.00007	18.774	.00378	.02454
26	DXPK3P5	.34355	.02065	-.00021	3.9430	-.00002	.00515
27	DXPK3S	3.1474	1.4345	.03349	55.501	.36749	.21058
28	CCV2-2	48.184	4.7023	4.7387	48.208	4.7746	4.7240
29	CCB2	.06647	.00725	H.00695	.08792	.00659	.00840
30	DXPK3D	3.1720	1.4827	.03610	58.676	.38534	.22002

Sample Name

FE

K

MG

MN

NA

NI

void sample not reported wrt 3-23-01

void ccb2 > EL samples following CCB1 will be re-run for Be. wrt 3-23

#	Sample Name	FE	K	MG	MN	NA	NI
1	STD1	.00205	-.0234	.00035	.00009	.06075	.00075
2	STD5A				1.90794		1.59839
3	STD5B	29.0467	2.2881	7.45695		52.2505	
4	ICV2-1 0087-158-3	25.285	23.907	24.594	.97868	24.398	.98481
5	ICB1	.00654	.42396	.00938	.00026	.01686	-.00396
6	ICSA 0087-133-5	177.04	-.25524	467.80	.00146	.01034	-.01860
7	ICSAB 0087-133-6	175.58	9.5977	462.00	.43873	9.7502	.84391
8	DXNT3B	.00189	.09085	.00402	.00052	.01427	.00131
9	DXNT3C	1.0144	51.813	52.370	.47996	52.866	.48327
10	DXM3W	22.660	.31148	.24474	.30679	3.8644	.04067
11	DXM3WP5	4.4221	.02379	.04425	.05959	.76882	.00068
12	DXM3WS	24.862	50.800	50.571	.78523	56.318	.50231
13	DXM3WD	27.771	51.082	50.870	.82242	57.100	.50538
14	DXNVWB	.05422	.05407	-.00737	.00027	.00114	-.01085
15	DXNVWC	L.01133	L.37205	L-.01072	L.00028	L.00632	L-.00480
16	CCV2-1 0087-121-12	49.547	48.542	48.700	4.7692	48.828	4.7694
17	CCB1	-.00137	.17953	-.00737	.00052	.00450	-.00278
18	DXG8A	.00705	1.5920	.08717	.00026	87.654	-.00704
19	DXG8AP5	-.00051	.38286	.01609	.00052	17.673	-.00066

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Analysis Report

Averages

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#	Sample Name	FE	K _—	MG	MN	NA	NI
20	DXG8AS	.00842	1.3433	.06437	.00003	87.340	-.00620
21	DXG8AD	.02456	1.3887	.05699	.00029	87.223	-.00440
22	DXG8P	.02788	1.1508	.07711	.00053	86.944	-.00800
23	DXQVCB	-.00155	.37205	.00201	-.00026	.00134	-.00417
24	DXQVCC	.97894	49.749	50.376	.46134	50.436	.46412
25	DXPK3	1.6359	4.2418	4.7133	.05279	S-.11640	.00493
26	DXPK3P5	.35000	.90201	1.0481	.01108	S3047.0	-.00511
27	DXPK3S	1.9594	46.792	40.867	.40649	S-.11640	.36666
28	CCV2-2	49.375	48.075	48.461	4.7595	53.426	4.7911
29	CCB2	.07146	.25740	.06772	.00709	.79728	-.00402
30	DXPK3D	1.9657	48.685	42.786	.42354	S-.11640	.38618

Sample Name Voids: Sample not reported
V_— ZN WIX 3-23-01

Na over range:
Dilutions will need run

1	STD1	.00029	.00008
2	STD5A	1.63724	1.23862
3	STD5B		
4	ICV2-1 0087-158-3	.97442	.97989
5	ICB1	.00059	.00252
6	ICSA 0087-133-5	-.00098	.00486
7	ICSAB 0087-133-6	.44974	.91807
8	DXNT3B	-.00279	.00143
9	DXNT3C	.48389	.48449
10	DXM3W	.09841	.04747
11	DXM3WP5	.01751	.00990
12	DXM3WS	.55561	.52163
13	DXM3WD	.55798	.51532
14	DXNVWB	-.00182	.00232
15	DXNVWC	L.00442	L.00663
16	CCV2-1 0087-121-12	4.7624	4.8238
17	CCB1	-.00251	.00113
18	DXG8A	.02602	.00905
19	DXG8AP5	.00424	.00278
20	DXG8AS	.03276	.01083
21	DXG8AD	.03133	.00993
22	DXG8P	.05082	.00349
23	DXQVCB	.00148	.00187
24	DXQVCC	.46113	.46690
25	DXPK3	.00545	.09258
26	DXPK3P5	-.00064	.01933
27	DXPK3S	.37102	.47361
28	CCV2-2	4.7446	4.8014
29	CCB2	.00329	.00720
30	DXPK3D	.38771	.48947

Voids Sample not reported.

WIX 3-23-01
WIX 3-23-01

JNC 3-23-01

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	J10323A	QUANMET	03/23/01	11:31		X	IR
2	STD5A	J10323A	QUANMET	03/23/01	11:34		X	IR
3	STD5B	J10323A	QUANMET	03/23/01	11:37		X	IR
4	ICV2-1 0087-158-3	J10323A	QUANMET	03/23/01	11:40	WTR	S	CONC
5	ICB1	J10323A	QUANMET	03/23/01	11:43	WTR	S	CONC
6	ICSA 0087-133-5	J10323A	QUANMET	03/23/01	11:47	WTR	Q	CONC
7	ICSAB 0087-133-6	J10323A	QUANMET	03/23/01	11:50	WTR	Q	CONC
8	DXNT3B	J10323A	QUANMET	03/23/01	11:53	WTR	S	CONC
9	DXNT3C	J10323A	QUANMET	03/23/01	11:56	WTR	S	CONC
10	DXM3W	J10323A	QUANMET	03/23/01	11:59	WTR	S	CONC
11	DXM3WP5	J10323A	QUANMET	03/23/01	12:02	WTR	S	CONC
12	DXM3WS	J10323A	QUANMET	03/23/01	12:06	WTR	S	CONC
13	DXM3WD	J10323A	QUANMET	03/23/01	12:09	WTR	S	CONC
14	DXNVWB	J10323A	QUANMET	03/23/01	12:12	WTR	S	CONC
15	DXNVWC	J10323A	QUANMET	03/23/01	12:15	WTR	S	CONC
16	CCV2-1 0087-121-12	J10323A	QUANMET	03/23/01	12:18	WTR	S	CONC
17	CCB1	J10323A	QUANMET	03/23/01	12:21	WTR	S	CONC
18	DXG8A	J10323A	QUANMET	03/23/01	12:24	WTR	S	CONC
19	DXG8AP5	J10323A	QUANMET	03/23/01	12:28	WTR	S	CONC
20	DXG8AS	J10323A	QUANMET	03/23/01	12:31	WTR	S	CONC
21	DXG8AD	J10323A	QUANMET	03/23/01	12:34	WTR	S	CONC
22	DXG8P	J10323A	QUANMET	03/23/01	12:37	WTR	S	CONC
23	DXQVCB	J10323A	QUANMET	03/23/01	12:40	WTR	S	CONC
24	DXQVCC	J10323A	QUANMET	03/23/01	12:43	WTR	S	CONC
25	DXPK3	J10323A	QUANMET	03/23/01	12:47	WTR	S	CONC
26	DXPK3P5	J10323A	QUANMET	03/23/01	12:50	WTR	S	CONC
27	DXPK3S	J10323A	QUANMET	03/23/01	12:53	WTR	S	CONC
28	CCV2-2	J10323A	QUANMET	03/23/01	12:56	WTR	S	CONC
29	CCB2	J10323A	QUANMET	03/23/01	12:59	WTR	S	CONC
30	DXPK3D	J10323A	QUANMET	03/23/01	13:02	WTR	S	CONC

Method: QUANMET Standard: STD1
Run Time: 03/23/01 11:31:08

Elem	AG	AL	AS	B	BA	BE	CA
Avge	-.00055	.00995	-.00050	.00000	.00012	.00300	-.00145
SDev	.00030	.00092	.00060	.00000	.00016	.00016	.00037
%RSD	54.545	9.1929	120.00	.00000	131.71	5.4433	25.598

#1	-.00040	.01020	-.00020	.00000	.00020	.00280	-.00115
#2	-.00040	.01060	-.00020	.00000	.00020	.00300	-.00171
#3	-.00100	.00860	-.00140	.00000	-.00012	.00300	-.00182
#4	-.00040	.01040	-.00020	.00000	.00020	.00320	-.00111

Elem	CD	CO	CR	CU	FE	K	LI
Avge	-.00004	.00005	.00080	.00040	.00205	-.02340	-.00053
SDev	.00012	.00034	.00065	.00016	.00087	.00604	.00018
%RSD	288.08	683.13	81.650	40.825	42.432	25.811	34.665

#1	-.00016	.00000	.00080	.00040	.00140	-.02220	-.00040
#2	.00012	.00020	.00160	.00060	.00120	-.01740	-.00044
#3	-.00008	-.00040	.00080	.00020	.00280	-.03180	-.00080
#4	-.00004	.00040	.00000	.00040	.00280	-.02220	-.00048

Elem	MG	MN	MO	NA	NI	PB	SB
Avge	.00035	.00010	.00015	.06075	.00076	.00060	-.00015
SDev	.00077	.00012	.00019	.00373	.00057	.00049	.00066
%RSD	220.70	115.47	127.66	6.1378	75.472	81.650	440.54

#1	-.00040	.00000	.00020	.06460	.00099	.00100	-.00060
#2	-.00020	.00000	.00000	.06260	.00145	.00040	-.00060
#3	.00080	.00020	.00040	.05600	.00016	.00100	-.00020
#4	.00120	.00020	.00000	.05980	.00044	.00000	.00080

Elem	SE	SI	SN	SR	TI	TL	V
Avge	.00095	.00000	.00025	.00023	.00190	-.00010	.00030
SDev	.00101	.00000	.00060	.00012	.00020	.00066	.00066
%RSD	106.48	.00000	238.89	52.381	10.526	663.32	221.11

#1	-.00020	.00000	.00040	.00012	.00200	.00080	.00020
#2	.00120	.00000	.00100	.00020	.00200	-.00060	.00080
#3	.00220	.00000	-.00040	.00020	.00160	.00000	-.00060
#4	.00060	.00000	.00000	.00040	.00200	-.00060	.00080

Elem	ZN
Avge	.00009
SDev	.00017
%RSD	196.71
#1	.00032
#2	-.00008
#3	.00000
#4	.00012

Method: QUANMET Standard: STD5A
Run Time: 03/23/01 11:34:21

0087-031-4

Elem	AG	AS	B	BA	BE	CD	CO
Avge	.27845	.42810	.55288	4.6861	16.553	.78953	1.2884
SDev	.00053	.00420	.00287	.0373	.072	.00399	.0015
%RSD	.18890	.98182	.51990	.79616	.43403	.50570	.11407
#1	.27820	.42180	.55252	4.6511	16.518	.79161	1.2874
#2	.27920	.43000	.55480	4.7045	16.599	.78786	1.2904
#3	.27800	.43040	.55524	4.7297	16.626	.78481	1.2886
#4	.27840	.43020	.54895	4.6593	16.470	.79382	1.2872

Elem	CR	CU	LI	MN	MO	NI	PB
Avge	3.6653	2.4406	4.3938	1.9079	.32395	1.5984	.21585
SDev	.0051	.0180	.0562	.0041	.00159	.0095	.00030
%RSD	.13908	.73791	1.2793	.21352	.48971	.59559	.13899
#1	3.6626	2.4260	4.3355	1.9036	.32160	1.5929	.21600
#2	3.6724	2.4468	4.4213	1.9130	.32480	1.6118	.21600
#3	3.6608	2.4634	4.4585	1.9092	.32500	1.5983	.21540
#4	3.6654	2.4264	4.3600	1.9060	.32440	1.5906	.21600

Elem	SB	SE	SI	SN	SR	TI	TL
Avge	.15675	.40500	.34260	.74595	9.1084	6.6613	.26500
SDev	.00110	.00372	.00180	.00537	.0636	.0262	.00136
%RSD	.70175	.91946	.52431	.71989	.69876	.39331	.51188
#1	.15580	.40140	.34000	.75260	9.0522	6.6406	.26420
#2	.15820	.41020	.34380	.74760	9.1429	6.6808	.26560
#3	.15700	.40460	.34380	.74020	9.1807	6.6868	.26360
#4	.15600	.40380	.34280	.74340	9.0577	6.6368	.26660

Elem	V	ZN
Avge	1.6372	1.2386
SDev	.0046	.0014
%RSD	.27863	.11675
#1	1.6340	1.2400
#2	1.6422	1.2385
#3	1.6400	1.2394
#4	1.6328	1.2367

Method: QUANMET Standard: STD5B
Run Time: 03/23/01 11:37:32

0037-032-1

Elem	AL	CA	FE	K	MG	NA
Avge	11.640	26.424	29.047	2.2881	7.4570	52.250
SDev	.025	.137	.073	.0087	.0159	.224
%RSD	.21527	.51905	.25223	.38070	.21356	.42931
#1	11.611	26.262	28.939	2.2774	7.4394	52.241
#2	11.671	26.359	29.063	2.2950	7.4740	52.564
#3	11.645	26.518	29.087	2.2954	7.4662	52.155
#4	11.632	26.555	29.098	2.2846	7.4482	52.042

Method: QUANMET

Slope = Conc(SIR)/IR

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Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD5A	STD1	6.97243	.003835	03/23/01 11:37:32
AL	308.215	STD5B	STD1	8.59853	-.085555	03/23/01 11:37:32
AS	193.696	STD5A	STD1	23.7269	.011863	03/23/01 11:37:32
B	249.600	STD5A	STD1	18.1292	.000000	03/23/01 11:37:32
BA	493.409	STD5A	STD1	2.13401	-.000257	03/23/01 11:37:32
BE	313.042	STD5A	STD1	.606079	-.001818	03/23/01 11:37:32
CA	317.933	STD5B	STD1	3.78428	.005476	03/23/01 11:37:32
CD	228.802	STD5A	STD1	12.7999	.000527	03/23/01 11:37:32
CO	228.616	STD5A	STD1	7.80016	-.000390	03/23/01 11:37:32
CR	267.716	STD5A	STD1	2.72953	-.002184	03/23/01 11:37:32
CU	324.754	STD5A	STD1	4.09401	-.001638	03/23/01 11:37:32
FE	259.940	STD5B	STD1	3.44297	-.007058	03/23/01 11:37:32
K	766.491	STD5B	STD1	43.2620	1.01233	03/23/01 11:37:32
LI	670.789	STD5A	STD1	2.27564	.001205	03/23/01 11:37:32
MG	279.079	STD5B	STD1	13.4109	-.004694	03/23/01 11:37:32
MN	257.610	STD5A	STD1	5.23987	-.000524	03/23/01 11:37:32
MO	202.030	STD5A	STD1	30.8833	-.004632	03/23/01 11:37:32
NA	588.995	STD5B	STD1	1.91609	-.116402	03/23/01 11:37:32
NI	231.604	STD5A	STD1	6.25703	-.004748	03/23/01 11:37:32
PB	220.353	STD5A	STD1	44.9900	-.026994	03/23/01 11:37:32
SB	206.838	STD5A	STD1	63.8079	.009571	03/23/01 11:37:32
SE	196.026	STD5A	STD1	24.7494	-.023512	03/23/01 11:37:32
SI	288.158	STD5A	STD1	28.8705	.000000	03/23/01 11:37:32
SN	189.989	STD5A	STD1	13.4041	-.003351	03/23/01 11:37:32
SR	409.552	STD5A	STD1	1.09792	-.000252	03/23/01 11:37:32
TI	334.941	STD5A	STD1	1.50165	-.002853	03/23/01 11:37:32
TL	190.864	STD5A	STD1	75.8528	.007585	03/23/01 11:37:32
V	292.402	STD5A	STD1	5.94193	-.001783	03/23/01 11:37:32
ZN	213.856	STD5A	STD1	8.09920	-.000715	03/23/01 11:37:32

Analysis Report

03/23/01 11:43:49 AM

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Method: QUANMET Sample Name: ICV2-1 0087-158-3 Operator: WTR
 Run Time: 03/23/01 11:40:43
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP **673 752**
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.48936	24.480	.97110	1.0019	.95348	.95441	24.284
SDev	.00211	.028	.06210	.0070	.00232	.00239	.073
%RSD	.43072	.11639	6.3946	.70345	.24381	.25003	.30054
#1	.48620	24.513	.95667	.99130	.95668	.95522	24.248
#2	.49043	24.487	1.0611	1.0058	.95113	.95410	24.394
#3	.49041	24.477	.94740	1.0052	.95284	.95702	24.242
#4	.49041	24.444	.91919	1.0051	.95327	.95132	24.254
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	.97939	.98159	.98021	.95678	25.285	23.907	.95484
SDev	.01066	.00549	.00118	.00389	.013	.299	.00375
%RSD	1.0882	.55885	.12053	.40698	.05207	1.2506	.39312
#1	.97632	.98705	.98021	.95433	25.290	23.699	.95898
#2	.99495	.97765	.97966	.95432	25.301	23.604	.95023
#3	.97075	.97615	.98185	.96250	25.270	24.123	.95371
#4	.97556	.98550	.97911	.95596	25.279	24.201	.95644
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	24.594	.97868	.94062	24.398	.98482	.94714	.97237
SDev	.043	.00276	.00617	.073	.00572	.03622	.00732
%RSD	.17389	.28180	.65652	.29949	.58094	3.8239	.75324
#1	24.612	.97632	.93753	24.465	.98744	.91577	.96598
#2	24.548	.98261	.93753	24.298	.97920	.97852	.97874
#3	24.645	.97842	.94988	24.435	.98104	.97849	.97869
#4	24.572	.97737	.93753	24.395	.99157	.91577	.96607
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	.93828	1.0269	.94385	.94935	.93845	4.8170	.97443
SDev	.03008	.0000	.02740	.00183	.00051	.1004	.00343
%RSD	3.2054	.00363	2.9031	.19320	.05465	2.0847	.35156
#1	.98161	1.0268	.97063	.95186	.93838	4.8245	.96989
#2	.91234	1.0269	.93584	.94747	.93868	4.6727	.97821

#3	.92710	1.0269	.90902	.94919	.93898	4.8856	.97496
#4	.93207	1.0269	.95991	.94888	.93778	4.8853	.97464
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 .97990
SDev .00473
%RSD .48253

#1 .98024
#2 .98640
#3 .97729
#4 .97567

Errors LC Pass
High 1.1000
Low .90000

Method: QUANMET Sample Name: ICB1

Operator: WTR

Run Time: 03/23/01 11:43:53

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	.00105	.00687	.00111	.00001	.00034	.00015	.02030
SDev	.00196	.01869	.03024	.00003	.00046	.00046	.01306
%RSD	186.50	271.88	2714.4	209.95	136.77	310.02	64.314
#1	.00243	.00387	.00712	-.00000	.00017	-.00012	.01336
#2	-.00173	-.01683	-.01178	-.00000	-.00001	-.00013	.01304
#3	.00243	.01246	-.03091	.00000	.00017	.00001	.01496
#4	.00107	.02798	.04003	.00005	.00102	.00084	.03985
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	-.00024	.00039	.00191	.00246	.00654	.42397	.00037
SDev	.00220	.00270	.00032	.00134	.01574	.42711	.00071
%RSD	935.92	692.55	16.469	54.564	240.53	100.74	192.09
#1	.00092	-.00039	.00219	.00246	-.00086	.43262	-.00016
#2	.00167	-.00039	.00164	.00246	-.00224	.52780	.00102
#3	-.00333	-.00194	.00164	.00082	-.00086	-.14709	-.00032
#4	-.00021	.00429	.00218	.00410	.03013	.88254	.00094
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	.00939	.00026	.00000	.01686	-.00397	.00678	.01911
SDev	.02012	.00052	.00309	.01260	.00730	.03920	.01220
%RSD	214.29	199.13	360270.	74.744	183.93	577.71	63.868
#1	.01140	.00052	.00154	.00699	-.00776	-.02699	.00954
#2	.00335	-.00052	.00154	.01236	.00608	.03601	.00960
#3	-.01274	.00052	.00154	.01274	-.01063	-.02702	.02221
#4	.03554	.00053	-.00463	.03535	-.00356	.04514	.03509
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	-.01359	.04476	-.00863	.00035	.00038	.06057	.00060
SDev	.01765	.03035	.02469	.00036	.00051	.06133	.00270
%RSD	129.83	67.805	285.99	102.71	136.63	101.25	451.36
#1	.00123	.05195	-.04352	.00019	.00015	-.02272	-.00174
#2	-.03342	.06355	.01009	.00014	-.00015	.11379	.00301

#3	-.02351	-.00002	-.00862	.00019	.00045	.09865	-.00174
#4	.00133	.06355	.00752	.00088	.00105	.05257	.00286
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 .00253
SDev .00055
%RSD 21.870

#1 .00253
#2 .00184
#3 .00255
#4 .00320

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: ICSA 0087-133-5 Operator: WTR
 Run Time: 03/23/01 11:47:03
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP **679 756**
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00244	481.22	.10128	-.000903	.00173	-.00012	459.49
SDev	.00139	.84	.12103	.00098	.00013	.00001	2.63
%RSD	56.949	.17483	119.50	10.907	7.3304	12.139	.57320
#1	-.00200	480.23	-.07031	-.00840	.00188	-.00013	461.97
#2	-.00367	480.83	.12548	-.01042	.00163	-.00010	456.03
#3	-.00067	481.77	.13590	-.00902	.00180	-.00013	458.92
#4	-.00341	482.05	.21404	-.00827	.00163	-.00011	461.03
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	-.00201	.01251	-.00151	-.00140	177.04	-.25525	.00137
SDev	.00608	.00389	.00211	.00126	.49	.49641	.00121
%RSD	302.31	31.103	139.97	89.903	.27524	194.48	88.308
#1	.00085	.01212	-.00001	-.00035	177.35	.05191	.00303
#2	-.00878	.01370	-.00382	-.00291	176.35	-.91715	.00067
#3	.00491	.01679	.00054	-.00038	177.05	.19035	.00150
#4	-.00502	.00745	-.00274	-.00198	177.41	-.34610	.00029
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	467.80	.00147	-.01542	.01035	-.01860	.04043	.01291
SDev	.58	.00059	.01067	.00381	.02603	.05111	.03808
%RSD	.12402	39.908	69.180	36.836	139.95	126.40	294.89
#1	467.47	.00131	-.01230	.00814	.01758	.04102	.06089
#2	467.15	.00103	-.01243	.00738	-.04449	-.02202	.02227
#3	468.27	.00119	-.00616	.01581	-.02315	.10317	-.00313
#4	468.30	.00232	-.03082	.01006	-.02434	.03957	-.02837
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	-.18602	.11836	-.07148	.01313	-.01817	.39843	-.00099
SDev	.10614	.03005	.07948	.00015	.00065	.11307	.00465
%RSD	57.060	25.387	111.20	1.1360	3.5707	28.379	470.87
#1	-.17886	.14438	.03398	.01326	-.01757	.42016	.00266
#2	-.05331	.09231	-.09497	.01300	-.01907	.54190	-.00686

679**757**

#3	-.19960	.14438	-.06819	.01326	-.01817	.27307	.00282
#4	-.31231	.09236	-.15672	.01300	-.01787	.35861	-.00257

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	ZN
Units	ppm
Avge	.00486
SDev	.00186
%RSD	38.237

#1	.00578
#2	.00412
#3	.00689
#4	.00266

Errors	NOCHECK
Value	
Range	

Method: QUANMET

Sample Name: ICSAB 0087-133-6

Operator: WTR

Run Time: 03/23/01 11:50:13

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61EICP **679 758**

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.92110	476.22	1.1107	.90932	.44628	.44120	455.27
SDev	.00386	3.86	.0893	.04081	.00462	.00257	2.48
%RSD	.41922	.81104	8.0420	4.4875	1.0351	.58251	.54462
#1	.91748	476.09	1.1017	.87360	.44688	.43996	452.37
#2	.92176	471.84	1.0121	.95291	.44048	.44020	457.97
#3	.91892	475.69	1.1000	.87548	.44603	.43960	454.19
#4	.92625	481.25	Q1.2291	.93528	.45175	.44504	456.55
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	.92883	.44516	.42816	.47191	175.58	9.5977	.95217
SDev	.00327	.00265	.00572	.00526	.73	.2103	.01378
%RSD	.35229	.59650	1.3352	1.1153	.41445	2.1915	1.4469
#1	.93294	.44476	.42147	.47226	175.02	9.3705	.95615
#2	.92652	.44166	.43076	.46657	175.43	9.8378	.93248
#3	.92996	.44633	.42584	.46983	175.22	9.4830	.95542
#4	.92589	.44788	.43458	.47899	176.64	9.6993	.96463
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	462.00	.43874	.85684	9.7502	.84391	.88860	.94051
SDev	2.45	.00194	.00933	.1160	.01091	.03298	.09484
%RSD	.52972	.44174	1.0894	1.1895	1.2923	3.7118	10.084
#1	461.16	.43702	.84595	9.7817	.83336	.85060	.92794
#2	460.14	.43828	.86454	9.5989	.84283	.92526	1.0679
#3	461.11	.43813	.85216	9.7419	.84032	.90468	.83841
#4	465.60	.44152	.86470	9.8783	.85912	.87388	.92775
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	.86989	1.1135	.80901	.89316	.84032	8.9952	.44974
SDev	.03110	.0000	.05839	.00758	.00477	.3950	.00253
%RSD	3.5752	.00247	7.2177	.84808	.56773	4.3908	.56169
#1	.82855	1.1135	Q.72311	.89375	.83837	9.3414	.44827
#2	.86942	1.1135	.85243	.88409	.83687	8.4401	.44876

679 759

#3	.90341	1.1135	.82463	.89221	.83867	9.0046	.44843
#4	.87818	1.1136	.83586	.90257	.84738	9.1949	.45352
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 .91808
SDev .00943
%RSD 1.0268

#1 .91848
#2 .91225
#3 .91035
#4 .93122

Errors QC Pass
Value 1.0000
Range 20.000

Method: QUANMET Sample Name: DXNT3B

Operator: WTR

Run Time: 03/23/01 11:53:23

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	-.00002	.00052	.00004	.00001	-.00000	-.00023	.01530
SDev	.00135	.00366	.04496	.00001	.00021	.00001	.00334
%RSD	8755.6	707.09	109550.	179.98	11e9	3.5151	21.845
#1	.00104	.00384	-.05934	.00002	.00017	-.00024	.01861
#2	-.00178	-.00459	.00727	.00000	-.00008	-.00022	.01371
#3	.00104	.00225	.00238	-.00001	.00017	-.00024	.01750
#4	-.00036	.00058	.04986	.00001	-.00026	-.00024	.01140
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	.00015	-.00078	-.00027	.00041	.00189	.09085	.00023
SDev	.00131	.00390	.00095	.00082	.00097	.06868	.00068
%RSD	877.79	499.46	347.04	200.22	51.502	75.593	296.62
#1	-.00057	-.00507	.00055	.00081	.00327	.09518	-.00062
#2	.00002	-.00039	.00000	-.00082	.00120	.01730	.00003
#3	.00204	.00428	-.00000	.00082	.00190	.18170	.00094
#4	-.00089	-.00195	-.00164	.00082	.00120	.06922	.00056
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	.00402	.00052	-.00463	.01427	.00131	.01124	.00958
SDev	.00801	.00000	.00504	.00388	.00269	.03387	.01477
%RSD	199.07	.33723	108.87	27.201	205.47	301.36	154.11
#1	.00067	.00053	.00154	.01542	.00173	.04483	-.00323
#2	-.00469	.00052	-.00463	.01619	.00018	-.01801	-.00318
#3	.00603	.00052	-.00463	.01696	-.00150	-.01784	.02233
#4	.01408	.00052	-.01081	.00853	.00483	.03597	.02241
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	-.03217	.04472	.01076	-.00003	-.00015	.09102	-.00279
SDev	.02568	.02995	.01040	.00029	.00055	.05606	.00266
%RSD	79.833	66.979	96.660	908.63	365.15	61.582	95.348
#1	-.03340	.05773	.01004	.00019	.00015	.14412	-.00055
#2	-.06806	.05767	-.00336	-.00007	-.00045	.02279	-.00665

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#3	-.01361	.06349	.01551	.00019	.00045	.12890	-.00190
#4	-.01361	-.00002	.02087	-.00043	-.00075	.06828	-.00206

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	.00143
SDev	.00112
%RSD	78.243

#1	.00280
#2	.00183
#3	.00023
#4	.00088

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DXNT3C

Operator: WTR

Run Time: 03/23/01 11:56:33

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	.04924	1.9826	1.9025	1.0856	1.9001	.04654	51.602
SDev	.00140	.0162	.0361	.0173	.0085	.00006	.284
%RSD	2.8374	.81578	1.8976	1.5975	.44538	.12491	.55080
#1	.04715	1.9646	1.8896	1.0959	1.9078	.04651	51.181
#2	.04994	1.9731	1.8611	1.0944	1.8910	.04651	51.683
#3	.04995	1.9970	1.9463	1.0597	1.9068	.04662	51.789
#4	.04994	1.9954	1.9131	1.0923	1.8948	.04651	51.754
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	.05403	.48071	.19165	.23823	1.0144	51.813	.96378
SDev	.00201	.00267	.00194	.00181	.0050	.266	.00873
%RSD	3.7147	.55464	1.0147	.76188	.49096	.51261	.90530
#1	.05525	.48032	.19001	.23720	1.0097	52.113	.97282
#2	.05141	.48346	.19002	.23639	1.0132	51.612	.95416
#3	.05590	.48187	.19275	.24048	1.0132	51.958	.96926
#4	.05357	.47720	.19384	.23884	1.0214	51.568	.95888
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	52.370	.47996	.94670	52.866	.48327	.49473	.49314
SDev	.244	.00148	.01009	.351	.00716	.00525	.02627
%RSD	.46549	.30947	1.0654	.66425	1.4824	1.0618	5.3277
#1	52.260	.47786	.93435	53.244	.47677	.49019	.46455
#2	52.142	.47996	.94670	52.479	.47817	.49931	.48991
#3	52.708	.48102	.95906	53.068	.48605	.49925	.48987
#4	52.370	.48101	.94671	52.674	.49210	.49017	.52824
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	1.9237	1.9107	1.9014	.93851	.94416	2.0498	.48390
SDev	.0391	.0368	.0308	.00332	.00285	.1087	.00082
%RSD	2.0306	1.9269	1.6203	.35400	.30219	5.3014	.16887
#1	1.8705	1.8818	1.8557	.94119	.94198	2.0651	.48328
#2	1.9596	1.9396	1.9148	.93474	.94198	2.0802	.48360

#3	1.9200	1.8761	1.9121	.94141	.94799	1.8981	.48510
#4	1.9448	1.9454	1.9230	.93671	.94469	2.1560	.48360

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	.48449
SDev	.00383
%RSD	.78964

#1	.48637
#2	.48799
#3	.47919
#4	.48441

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DXM3W

Operator: WTR

Run Time: 03/23/01 11:59:42

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	.00110	.49653	.12742	.01240	.10982	-.00015	2.0017
SDev	.00113	.00289	.06407	.00276	.00055	.00012	.0063
%RSD	102.24	.58266	50.281	22.246	.50173	76.184	.31331
#1	-.00028	.49603	.20449	.01515	.11046	-.00030	1.9944
#2	.00111	.49954	.04788	.00935	.10918	-.00006	2.0013
#3	.00110	.49276	.12388	.01082	.10961	-.00018	2.0098
#4	.00248	.49777	.13342	.01427	.11003	-.00006	2.0013
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	-.00122	.00934	.02915	.13512	22.660	.31149	.00055
SDev	.00092	.00201	.00202	.00067	.052	.12657	.00030
%RSD	75.593	21.569	6.9208	.49777	.23070	40.635	54.392
#1	-.00246	.00856	.02834	.13594	22.703	.44127	.00056
#2	-.00027	.00700	.03216	.13512	22.682	.32014	.00021
#3	-.00127	.01012	.02833	.13512	22.672	.13844	.00048
#4	-.00088	.01168	.02779	.13430	22.584	.34610	.00094
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	.24475	.30680	.01223	3.8644	.04067	.02370	.00014
SDev	.00903	.00061	.00591	.0319	.00729	.00897	.01920
%RSD	3.6893	.19842	48.329	.82638	17.925	37.828	13629.
#1	.24207	.30628	.01687	3.9097	.04443	.02818	.00968
#2	.25548	.30732	.01069	3.8537	.04907	.02814	.00981
#3	.24743	.30732	.00451	3.8591	.03530	.02824	.00974
#4	.23402	.30625	.01685	3.8350	.03389	.01025	-.02866
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	-.00797	.63478	-.00145	.01150	.20888	-.06517	.09841
SDev	.04293	.02598	.02015	.00022	.00024	.06076	.00015
%RSD	538.49	4.0933	1387.2	1.9101	.11740	93.221	.15059
#1	.03300	.64777	.02004	.01161	.20918	-.09996	.09853
#2	.02303	.59580	-.02554	.01117	.20888	-.03894	.09838

#3	-.05620	.64777	-.00945	.01161	.20858	.00670	.09822
#4	-.03172	.64777	.00914	.01161	.20888	-.12850	.09853
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 .04747
SDev .00153
%RSD 3.2162

#1 .04650
#2 .04840
#3 .04911
#4 .04588

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXM3WP5

Operator: WTR

Run Time: 03/23/01 12:02:51

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	.00004	.09825	.04155	-.01084	.02179	-.00021	.39674
SDev	.00180	.01220	.03057	.00104	.00056	.00011	.00808
%RSD	4056.2	12.412	73.575	9.5960	2.5509	55.016	2.0357
#1	.00212	.09141	.06304	-.01049	.02126	-.00006	.39259
#2	-.00206	.08454	.01087	-.01035	.02151	-.00029	.38778
#3	.00075	.10861	.02008	-.01238	.02186	-.00030	.40082
#4	-.00063	.10845	.07219	-.01013	.02254	-.00018	.40576
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	.00054	.00148	.00531	.02730	4.4221	.02379	.00021
SDev	.00281	.00266	.00121	.00182	.0769	.42184	.00137
%RSD	518.78	179.81	22.770	6.6577	1.7379	1772.9	659.74
#1	.00284	.00420	.00654	.02913	4.3312	.51049	.00147
#2	-.00298	-.00202	.00381	.02504	4.3959	-.48453	-.00171
#3	-.00047	.00109	.00599	.02669	4.4497	-.10383	.00078
#4	.00277	.00264	.00491	.02833	4.5116	.17305	.00029
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	.04426	.05960	-.00097	.76883	.00069	.01648	.01273
SDev	.00458	.00159	.00618	.01774	.00334	.02200	.03013
%RSD	10.350	2.6718	640.76	2.3069	487.38	133.44	236.68
#1	.04627	.05826	-.00407	.74354	.00344	-.00136	.03513
#2	.03822	.05828	-.00406	.76960	-.00245	-.00156	.03503
#3	.04895	.06039	-.00405	.77994	.00371	.02539	-.02867
#4	.04359	.06146	.00831	.78224	-.00195	.04347	.00944
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	.00647	.16908	.00243	.00210	.04092	.04936	.01752
SDev	.04018	.00554	.01475	.00011	.00079	.05344	.00123
%RSD	620.66	3.2741	605.97	5.2217	1.9302	108.26	7.0107
#1	.05445	.17342	-.00552	.00220	.04039	.03176	.01833
#2	-.00969	.16185	.01057	.00194	.04009	.07635	.01595

#3	-.03923	.17341	-.01382	.00212	.04160	.10583	.01714
#4	.02037	.16765	.01851	.00212	.04160	-.01651	.01864
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 .00991
SDev .00176
%RSD 17.739

#1 .01052
#2 .00768
#3 .00956
#4 .01186

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXM3WS

Operator: WTR

Run Time: 03/23/01 12:06:00

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	.04593	2.3900	2.0393	.94249	2.0002	.04713	51.076
SDev	.00117	.0078	.0694	.00215	.0060	.00014	.233
%RSD	2.5411	.32779	3.4009	.22845	.29823	.29228	.45624
#1	.04450	2.3905	1.9920	.94290	1.9979	.04703	50.865
#2	.04592	2.3904	2.1058	.94448	2.0079	.04726	50.886
#3	.04736	2.3991	2.0913	.94313	2.0013	.04725	51.248
#4	.04596	2.3799	1.9681	.93943	1.9939	.04700	51.305
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	.04929	.46674	.21099	.36690	24.862	50.800	.96226
SDev	.00310	.00326	.00181	.00078	.046	.200	.00820
%RSD	6.2836	.69733	.85826	.21379	.18635	.39441	.85224
#1	.04890	.47064	.21345	.36588	24.809	50.980	.95933
#2	.05316	.46283	.20963	.36751	24.843	50.902	.97207
#3	.04560	.46597	.21126	.36752	24.915	50.521	.96487
#4	.04951	.46753	.20963	.36670	24.882	50.798	.95277
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	50.571	.78523	.91431	56.318	.50232	.45440	.49037
SDev	.133	.00158	.00777	.298	.00559	.03824	.02548
%RSD	.26375	.20160	.84999	.52837	1.1126	8.4148	5.1959
#1	50.498	.78391	.91276	56.226	.50481	.47247	.45215
#2	50.654	.78391	.91276	56.663	.50608	.41832	.50322
#3	50.710	.78603	.90660	56.423	.50438	.42738	.50309
#4	50.423	.78707	.92512	55.961	.49401	.49944	.50301
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	2.0445	10.249	1.7789	.93906	1.1078	1.9212	.55561
SDev	.0420	.039	.0424	.00229	.0008	.0894	.00409
%RSD	2.0521	.38516	2.3843	.24338	.07000	4.6551	.73589
#1	2.0344	10.197	1.7479	.93785	1.1075	1.9106	.55053
#2	2.1038	10.267	1.7508	.94158	1.1081	1.8343	.55408

#3	2.0348	10.290	1.8393	.94026	1.1087	1.8938	.55868
#4	2.0049	10.244	1.7776	.93653	1.1069	2.0460	.55915
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 .52163
SDev .00425
%RSD .81456

#1 .52401
#2 .51725
#3 .52632
#4 .51893

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXM3WD

Operator: WTR

Run Time: 03/23/01 12:09:10

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	.04451	2.4181	2.1569	.95703	2.0191	.04719	51.687
SDev	.00180	.0060	.0991	.01628	.0083	.00006	.232
%RSD	4.0487	.24668	4.5962	1.7008	.40899	.13502	.44789
#1	.04520	2.4161	2.0976	.94885	2.0222	.04713	51.601
#2	.04378	2.4212	2.1403	.98144	2.0272	.04714	51.403
#3	.04661	2.4243	2.0880	.94888	2.0077	.04724	51.921
#4	.04243	2.4107	2.3016	.94893	2.0192	.04724	51.821
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	.04696	.46867	.21073	.36804	27.771	51.082	.96276
SDev	.00332	.00198	.00126	.00182	.028	.210	.00798
%RSD	7.0700	.42202	.59799	.49369	.10069	.41176	.82868
#1	.04480	.46906	.21181	.37029	27.762	51.291	.96726
#2	.05155	.46592	.20964	.36619	27.739	51.118	.97151
#3	.04426	.47064	.21183	.36866	27.780	51.127	.95432
#4	.04722	.46905	.20964	.36702	27.805	50.790	.95797
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	50.870	.82243	.93785	57.100	.50539	.43992	.47417
SDev	.107	.00122	.01595	.350	.00942	.02985	.04209
%RSD	.21079	.14847	1.7007	.61308	1.8632	6.7865	8.8768
#1	50.927	.82137	.91932	57.265	.51341	.43535	.41371
#2	50.911	.82137	.93167	57.494	.51351	.40840	.50307
#3	50.710	.82348	.95639	56.701	.49894	.43552	.50271
#4	50.933	.82349	.94404	56.939	.49569	.48042	.47720
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	2.1316	10.401	1.8415	.94345	1.1190	1.9219	.55799
SDev	.0365	.035	.0329	.00302	.0019	.1361	.00247
%RSD	1.7139	.34020	1.7871	.32054	.16761	7.0790	.44236
#1	2.1081	10.376	1.8607	.94466	1.1183	1.8044	.55782
#2	2.0931	10.434	1.7940	.94619	1.1201	1.8200	.55456

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#3	2.1675	10.365	1.8450	.93917	1.1168	1.9710	.55994
#4	2.1577	10.428	1.8663	.94378	1.1210	2.0920	.55963
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	.51533
SDev	.00254
%RSD	.49316

#1	.51634
#2	.51701
#3	.51154
#4	.51642

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXNVWB

Operator: WTR

Run Time: 03/23/01 12:12:19

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	-.00104	-.00168	-.03086	.00011	.00006	-.00021	.03258
SDev	.00139	.00353	.01228	.00001	.00021	.00006	.00327
%RSD	133.63	210.34	39.777	7.7342	340.00	29.272	10.030

#1	-.00174	-.00638	-.01658	.00011	-.00026	-.00024	.02827
#2	.00105	-.00130	-.04510	.00012	.00017	-.00024	.03357
#3	-.00174	-.00121	-.02612	.00011	.00017	-.00024	.03237
#4	-.00174	.00218	-.03564	.00010	.00017	-.00012	.03611

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	.00150	-.00000	.00000	H.02969	.05423	.05408	.00007
SDev	.00157	.00410	.00204	.00041	.00187	.32431	.00105
%RSD	104.10	104990.	390260.	1.3918	3.4417	599.71	1427.5

#1	.00319	-.00352	-.00218	H.02948	.05147	-.34610	-.00115
#2	.00085	-.00195	-.00054	H.02948	.05561	.00865	.00021
#3	-.00034	-.00039	.00273	H.02948	.05492	.11248	-.00016
#4	.00232	.00584	.00000	H.03031	.05491	.44127	.00139

Errors	LC Pass	LC Pass	LC Pass	LC High	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	-.00738	.00028	-.00154	.00115	-.01085	.02250	.01267
SDev	.00876	.00052	.00357	.00354	.00399	.05172	.02829
%RSD	118.76	189.60	232.02	308.37	36.807	229.88	223.35

#1	-.01810	.00054	-.00463	.00240	-.00703	-.01812	-.00321
#2	-.00738	.00054	.00155	.00278	-.01033	-.01800	.04773
#3	-.00738	.00054	-.00463	.00354	-.01646	.08993	-.01610
#4	.00335	-.00051	.00155	-.00412	-.00960	.03618	.02225

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	-.04190	.01586	-.00195	-.00025	-.00008	.04469	-.00182
SDev	.02504	.03176	.00568	.00000	.00051	.06611	.00009
%RSD	59.756	200.25	290.98	.00000	683.13	147.94	4.9090

#1	-.06295	-.00002	-.00872	-.00025	-.00075	.06752	-.00190
#2	-.02829	-.00002	.00490	-.00025	.00045	-.00841	-.00174

#3	-.01344	.06349	-.00341	-.00025	.00015	-.00841	-.00189
#4	-.06294	-.00002	-.00057	-.00025	-.00015	.12806	-.00174

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	.00232
SDev	.00077
%RSD	33.037

#1	.00174
#2	.00175
#3	.00244
#4	.00336

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DXNVWC

Operator: WTR

Run Time: 03/23/01 12:15:28

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
Avg	L.00072	L.00478	L-.01436	.00002	L.00028	L-.00023	L.03099
SDev	.00177	.01445	.02794	.00000	.00026	.00006	.00260
%RSD	243.56	302.41	194.52	11.638	93.117	25.837	8.3852

#1	L-.00173	L-.01410	L-.03553	.00002	L-.00001	L-.00025	L.02787
#2	L.00108	L.01002	L.00218	.00002	L.00060	L-.00014	L.03352
#3	L.00248	L.02024	L.01631	.00002	L.00035	L-.00026	L.03268
#4	L.00106	L.00296	L-.04042	.00002	L.00017	L-.00025	L.02987

Errors	LC Low	LC Low	LC Low	NOCHECK	LC Low	LC Low	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
Avg	L.00079	L.00161	L.00058	L.00389	L.01133	L.37205	.00065
SDev	.00166	.00149	.00095	.00041	.00117	.16568	.00058
%RSD	210.02	92.763	163.49	10.524	10.352	44.531	89.297

#1	L.00078	L-.00034	L.00194	L.00409	L.00979	L.13844	.00083
#2	L.00052	L.00278	L.00030	L.00410	L.01254	L.44992	.00137
#3	L-.00109	L.00123	L-.00024	L.00328	L.01184	L.38071	.00003
#4	L.00294	L.00277	L.00031	L.00410	L.01117	L.51914	.00037

Errors	LC Low	LC Low	LC Low	LC Low	LC Low	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
Avg	L-.01073	L.00029	.91723	L.00632	L-.00481	L.00301	.46119
SDev	.00801	.00061	.00777	.00618	.00208	.02882	.03009
%RSD	74.652	209.89	.84734	97.771	43.268	958.24	6.5237

#1	L-.02079	L-.00024	.91569	L-.00220	L-.00666	L-.00835	.41982
#2	L-.01274	L.00081	.90951	L.01159	L-.00200	L-.00817	.48347
#3	L-.00201	L-.00024	.91569	L.01006	L-.00450	L-.01722	.48349
#4	L-.00738	L.00082	.92804	L.00584	L-.00606	L.04578	.45799

Errors	LC Low	LC Low	NOCHECK	LC Low	LC Low	LC Low	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	L-.05936	9.2817	1.8067	-.00014	.91646	L.00742	L.00442
SDev	.02438	.0075	.0677	.00022	.00263	.15410	.00233
%RSD	41.064	.08040	3.7474	154.55	.28694	2077.8	52.750

#1	L-.05813	9.2845	1.7348	-.00025	.91706	L-.02292	L.00231
#2	L-.02842	9.2903	1.8826	-.00025	.91676	L.17420	L.00571

#3	L-.06307	9.2788	1.8424	.00019	.91285	L.06802	L.00706
#4	L-.08783	9.2730	1.7672	-.00025	.91916	L-.18964	L.00262

Errors	LC Low	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Low	LC Low
High	2.4000					2.4000	.60000
Low	1.6000					1.6000	.40000

Elem	ZN
Units	ppm
Avge	L.00664
SDev	.00226
%RSD	34.006

#1	L.00930
#2	L.00768
#3	L.00513
#4	L.00444

Errors	LC Low
High	.60000
Low	.40000

Method: QUANMET Sample Name: CCV2-1 0087-121-12 Operator: WTR
 Run Time: 03/23/01 12:18:38
 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	.95658	48.434	4.7198	4.8306	4.7256	4.7647	48.147
SDev	.00490	.406	.0815	.0402	.0548	.0256	.292
%RSD	.51234	.83772	1.7276	.83311	1.1603	.53818	.60637
#1	.95887	48.910	4.7830	4.8746	4.7868	4.7949	48.051
#2	.95569	47.925	4.6831	4.7770	4.6535	4.7329	48.359
#3	.95018	48.389	4.6222	4.8351	4.7290	4.7605	47.777
#4	.96159	48.514	4.7911	4.8358	4.7333	4.7702	48.402
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	4.8929	4.7882	4.7599	4.7656	49.547	48.542	4.7934
SDev	.0076	.0120	.0178	.0533	.226	.478	.0847
%RSD	.15607	.25060	.37321	1.1187	.45595	.98540	1.7661
#1	4.8942	4.7932	4.7712	4.8262	49.754	49.042	4.8853
#2	4.8975	4.7887	4.7575	4.6968	49.348	47.891	4.6838
#3	4.8817	4.7715	4.7357	4.7762	49.356	48.644	4.8232
#4	4.8980	4.7995	4.7750	4.7632	49.731	48.592	4.7814
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	48.700	4.7692	4.7471	48.828	4.7694	4.7647	4.8634
SDev	.371	.0189	.0392	.707	.0330	.0125	.0217
%RSD	.76255	.39537	.82583	1.4478	.69102	.26215	.44707
#1	49.103	4.7834	4.7332	49.569	4.7421	4.7825	4.8665
#2	48.216	4.7592	4.7455	47.878	4.7903	4.7561	4.8414
#3	48.661	4.7476	4.7084	49.047	4.7406	4.7643	4.8922
#4	48.822	4.7865	4.8011	48.816	4.8047	4.7559	4.8536
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	4.8173	4.9657	4.7798	4.7300	4.7090	9.4637	4.7624
SDev	.0828	.0550	.0708	.0468	.0273	.0564	.0251
%RSD	1.7189	1.1075	1.4813	.98998	.57936	.59565	.52768
#1	4.7016	5.0006	4.7556	4.7827	4.7382	9.5324	4.7885
#2	4.8686	4.9480	4.7048	4.6690	4.6751	9.4176	4.7353

#3	4.8142	4.8962	4.7853	4.7293	4.7009	9.4175	4.7474
#4	4.8847	5.0178	4.8736	4.7388	4.7219	9.4873	4.7784
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 4.8238
SDev .0179
%RSD .37125

#1 4.8212
#2 4.8094
#3 4.8150
#4 4.8497

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB1

Operator: WTR

Run Time: 03/23/01 12:21:47

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	.00138	.00641	-.02373	-.00000	.00009	-.00008	.00285
SDev	.00351	.01218	.02123	.00001	.00031	.00005	.00419
%RSD	254.28	190.22	89.443	220.04	347.88	58.879	147.06
#1	.00102	.00220	-.03552	-.00001	-.00008	-.00010	.00107
#2	-.00317	-.00647	-.04017	-.00000	-.00026	-.00010	-.00156
#3	.00525	.02257	.00688	.00001	.00035	-.00001	.00828
#4	.00243	.00732	-.02613	-.00001	.00035	-.00012	.00361
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	.00273	-.00001	-.00013	.00061	-.00138	.17954	.00053
SDev	.00171	.00150	.00287	.00041	.00130	.35021	.00032
%RSD	62.425	18042.	2155.4	66.572	94.897	195.06	60.530
#1	.00079	.00117	-.00163	.00082	-.00224	-.16440	.00086
#2	.00488	-.00040	-.00272	.00082	-.00155	.03461	.00011
#3	.00303	-.00196	.00382	.00082	.00052	.65758	.00067
#4	.00223	.00116	.00000	.00000	-.00224	.19035	.00048
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	-.00738	.00053	.00618	.00450	-.00278	-.02244	.03823
SDev	.02078	.00000	.00591	.00049	.00330	.01869	.01217
%RSD	281.67	.38386	95.748	10.987	118.69	83.290	31.830
#1	-.03688	.00052	.00154	.00431	.00078	-.02693	.02231
#2	-.00469	.00053	.00772	.00469	-.00459	-.01795	.03511
#3	.01140	.00053	.01390	.00508	-.00642	.00001	.04764
#4	.00067	.00052	.00154	.00393	-.00090	-.04489	.04784
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	-.01733	.01296	-.00990	.00018	.00060	.04556	-.00252
SDev	.01021	.02599	.03451	.00030	.00057	.08973	.00437
%RSD	58.896	200.47	348.74	169.98	95.743	196.96	173.49
#1	-.00867	-.00006	.00746	-.00025	.00015	.09868	-.00531
#2	-.02847	-.00007	-.05950	.00019	.00015	-.02268	-.00635

#3	-.00866	.00004	.01829	.00041	.00135	.14411	.00333
#4	-.02352	.05195	-.00584	.00037	.00075	-.03789	-.00174

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	.00114
SDev	.00111
%RSD	97.790

#1	.00250
#2	.00022
#3	.00160
#4	.00023

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DXG8A

Operator: WTR

Run Time: 03/23/01 12:24:57

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
Avge	-.00194	.02669	.02188	.29008	.01980	-.00017	2.6171
SDev	.00175	.00696	.03488	.00000	.00040	.00011	.0274
%RSD	90.227	26.073	159.43	.00086	2.0417	65.049	1.0455
#1	-.00161	.01723	-.02190	.29008	.01938	-.00031	2.5760
#2	-.00019	.03096	.06335	.29008	.01955	-.00020	2.6301
#3	-.00159	.03276	.02537	.29008	.02023	-.00008	2.6312
#4	-.00438	.02580	.02068	.29008	.02005	-.00008	2.6309
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	.00037	.00038	.01036	-.00061	.00706	1.5920	.03023
SDev	.00267	.00156	.00148	.00079	.00089	.4697	.00093
%RSD	727.45	414.00	14.258	128.12	12.609	29.502	3.0674
#1	.00174	-.00197	.00818	-.00164	.00602	.91715	.02889
#2	.00007	.00116	.01091	.00000	.00809	1.7997	.03036
#3	.00290	.00115	.01090	.00000	.00740	1.9900	.03098
#4	-.00324	.00117	.01145	-.00082	.00671	1.6613	.03068
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	.08717	.00027	.00618	87.654	-.00705	-.00674	.00630
SDev	.01491	.00052	.00309	.509	.00678	.03627	.01607
%RSD	17.109	197.52	49.992	.58113	96.194	538.32	255.12
#1	.06504	-.00052	.00772	88.007	.00225	-.02704	.00958
#2	.09186	.00053	.00772	86.902	-.00820	-.03596	.00947
#3	.09455	.00053	.00155	87.795	-.01403	.04499	-.01607
#4	.09723	.00053	.00772	87.914	-.00820	-.00894	.02221
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	-.03091	9.7657	.00003	.07589	-.00045	.11727	.02603
SDev	.05680	.0482	.00673	.00033	.00042	.09304	.00176
%RSD	183.72	.49337	23379.	.43362	94.281	79.338	6.7674
#1	-.03339	9.7065	-.00867	.07565	-.00075	.23489	.02339
#2	-.10268	9.7470	.00205	.07565	-.00045	.00725	.02696

#3	-.02349	9.7989	-.00074	.07590	.00015	.11346	.02680
#4	.03591	9.8105	.00747	.07634	-.00075	.11347	.02696

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 .00905
SDev .00152
%RSD 16.812

#1	.01006
#2	.00915
#3	.01012
#4	.00687

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXG8AP5

Operator: WTR

Run Time: 03/23/01 12:28:06

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	.00037	.01152	.04373	.05801	.00393	-.00019	.55528
SDev	.00181	.00587	.05842	.00001	.00021	.00007	.00829
%RSD	486.43	50.942	133.59	.00895	5.3045	33.801	1.4928
#1	-.00033	.01068	.08765	.05801	.00376	-.00025	.54854
#2	.00248	.01400	.08754	.05801	.00419	-.00015	.55883
#3	.00106	.01758	-.03578	.05801	.00401	-.00013	.56533
#4	-.00173	.00380	.03551	.05802	.00376	-.00025	.54841
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	.00198	-.00040	.00150	-.00000	-.00052	.38287	.00628
SDev	.00316	.00285	.00225	.00201	.00089	.55201	.00070
%RSD	159.77	715.43	149.70	458280.	172.43	144.18	11.192
#1	-.00268	-.00194	-.00000	-.00164	-.00155	-.23361	.00602
#2	.00291	.00116	.00218	.00082	-.00017	.75276	.00685
#3	.00336	.00272	.00437	.00246	.00052	.93446	.00685
#4	.00432	-.00352	-.00055	-.00164	-.00086	.07787	.00541
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	.01609	.00052	.00309	17.673	-.00067	-.02028	-.00961
SDev	.01570	.00000	.00309	.139	.00319	.00870	.01648
%RSD	97.539	.19019	100.00	.78893	479.28	42.910	171.55
#1	-.00201	.00052	.00154	17.771	.00033	-.02708	-.01591
#2	.01945	.00053	.00772	17.678	.00254	-.00896	.00951
#3	.03554	.00052	.00154	17.474	-.00048	-.01793	-.00322
#4	.01140	.00052	.00154	17.768	-.00505	-.02714	-.02881
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	-.04331	2.0325	.00599	.01485	-.00000	.05308	.00424
SDev	.01852	.0000	.02303	.00010	.00052	.05398	.00246
%RSD	42.754	.00127	384.28	.69957	596e6	101.70	57.910
#1	-.02352	2.0325	-.02486	.01477	-.00045	-.02273	.00301
#2	-.03836	2.0326	.02618	.01499	.00045	.05303	.00792

#3	-.06806	2.0325	.00200	.01486	.00045	.08339	.00302
#4	-.04331	2.0325	.02066	.01477	-.00045	.09863	.00301
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 .00278
SDev .00165
%RSD 59.399

#1 .00188
#2 .00417
#3 .00091
#4 .00418

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXG8AS

Operator: WTR

Run Time: 03/23/01 12:31:16

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	-.00225	.02745	-.02451	.29007	.01995	-.00025	2.6701
SDev	.00180	.00671	.02530	.00000	.00011	.00007	.0216
%RSD	79.741	24.443	103.20	.00131	.53383	27.291	.81036
#1	-.00159	.03030	.00640	.29008	.01998	-.00021	2.6428
#2	-.00296	.01970	-.02680	.29008	.02005	-.00022	2.6626
#3	-.00014	.03513	-.02226	.29007	.01998	-.00023	2.6872
#4	-.00433	.02465	-.05539	.29007	.01980	-.00035	2.6877
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	.00213	-.00037	.00958	.00102	.00843	1.3433	.03007
SDev	.00269	.00127	.00077	.00194	.00148	.2550	.00064
%RSD	126.27	345.34	8.0756	188.88	17.613	18.980	2.1185
#1	.00409	-.00037	.00957	.00246	.00980	1.0902	.02953
#2	-.00185	-.00192	.00903	.00246	.00843	1.4449	.03025
#3	.00325	.00119	.00903	.00082	.00911	1.6526	.03090
#4	.00304	-.00037	.01067	-.00164	.00636	1.1854	.02961
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	.06437	.00003	.93268	87.340	-.00621	-.02624	.49924
SDev	.00553	.00052	.01273	.490	.00366	.00005	.02836
%RSD	8.5898	1731.5	1.3652	.56082	58.941	.18340	5.6803
#1	.06504	.00081	.91569	87.763	-.00155	-.02623	.50906
#2	.05700	-.00023	.93422	87.694	-.00979	-.02624	.52154
#3	.06504	-.00023	.93422	86.714	-.00516	-.02618	.50872
#4	.07041	-.00023	.94657	87.188	-.00834	-.02630	.45766
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	-.02225	18.984	1.8826	.07581	.92164	-.03071	.03276
SDev	.07004	.052	.0498	.00033	.00172	.12661	.00433
%RSD	314.83	.27587	2.6433	.43446	.18696	412.22	13.207
#1	-.05813	18.945	1.8264	.07565	.92006	.02241	.02728
#2	.04581	19.037	1.8720	.07631	.92366	-.22032	.03131

#3	-.10268	18.933	1.9470	.07565	.92036	.03750	.03607
#4	.02601	19.020	1.8851	.07565	.92246	.03756	.03638
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 .01083
SDev .00125
%RSD 11.492

#1 .01007
#2 .01202
#3 .01175
#4 .00949

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXG8AD

Operator: WTR

Run Time: 03/23/01 12:34:26

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
Avge	-.00051	.01854	.03844	.29012	.01974	-.00031	2.6184
SDev	.00176	.00764	.03760	.00002	.00013	.00005	.0222
%RSD	342.28	41.228	97.814	.00712	.63593	16.763	.84637

#1	-.00017	.01290	-.01727	.29012	.01980	-.00034	2.6033
#2	.00125	.02327	.05850	.29009	.01980	-.00023	2.6509
#3	-.00296	.01123	.04919	.29013	.01955	-.00034	2.6055
#4	-.00019	.02677	.06335	.29013	.01980	-.00033	2.6138

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	.00216	-.00152	.01039	.00143	.02457	1.3887	.03047
SDev	.00313	.00589	.00130	.00123	.00324	.4465	.00083
%RSD	144.64	387.62	12.505	85.911	13.189	32.152	2.7368

#1	.00623	-.00035	.01067	.00246	.02489	1.2286	.03090
#2	.00164	.00589	.01121	.00246	.02217	2.0506	.03135
#3	-.00137	-.00815	.00848	.00081	.02218	1.0729	.03017
#4	.00215	-.00346	.01121	-.00000	.02903	1.2027	.02945

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	.05700	.00029	.92341	87.223	-.00440	-.02634	.45796
SDev	.01027	.00061	.00309	1.041	.00954	.00021	.02759
%RSD	18.022	206.44	.33445	1.1934	216.62	.78055	6.0238

#1	.04895	.00082	.92804	86.330	.00220	-.02626	.48350
#2	.07041	-.00023	.92187	86.957	.00506	-.02610	.47084
#3	.04895	-.00023	.92187	88.728	-.01012	-.02658	.41968
#4	.05968	.00082	.92187	86.879	-.01474	-.02640	.45783

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	-.03705	18.805	1.8222	.07546	.91000	.03733	.03134
SDev	.02753	.104	.0245	.00085	.00535	.03033	.00341
%RSD	74.304	.55474	1.3473	1.1325	.58823	81.250	10.881

#1	-.02838	18.691	1.8397	.07477	.90474	.02214	.03116
#2	-.01849	18.905	1.8316	.07578	.91315	.02209	.03576

#3	-.07789	18.881	1.7858	.07652	.91586	.02225	.03100
#4	-.02342	18.743	1.8316	.07477	.90624	.08282	.02744
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 .00994
SDev .00170
%RSD 17.147

#1 .00779
#2 .01171
#3 .00946
#4 .01079

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXG8P

Operator: WTR

Run Time: 03/23/01 12:37:36

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	-.00180	.03548	.00713	.30916	.01942	-.00025	2.6313
SDev	.00238	.01250	.04258	.02203	.00009	.00012	.0234
%RSD	132.43	35.223	597.37	7.1257	.45249	46.421	.89032
#1	-.00424	.02728	.02499	.29013	.01938	-.00040	2.6007
#2	.00134	.05138	.00582	.29012	.01955	-.00016	2.6482
#3	-.00285	.02392	.04875	.33001	.01938	-.00028	2.6254
#4	-.00144	.03933	-.05105	.32638	.01938	-.00016	2.6511
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	.00213	-.00080	.00939	-.00082	.02789	1.1508	.03032
SDev	.00079	.00322	.00211	.00164	.00172	.4298	.00081
%RSD	36.971	403.68	22.459	200.85	6.1755	37.348	2.6603
#1	.00289	-.00353	.00816	-.00164	.02737	.58836	.02916
#2	.00154	.00115	.00871	-.00163	.02806	1.1940	.03044
#3	.00271	-.00353	.00816	-.00164	.02599	1.1854	.03071
#4	.00136	.00271	.01253	.00164	.03012	1.6353	.03098
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	.07711	.00053	.00000	86.944	-.00801	-.01355	-.00636
SDev	.01341	.00000	.00309	.747	.00253	.03988	.02181
%RSD	17.391	.21878	84591.	.85921	31.596	294.22	342.98
#1	.05968	.00053	.00155	87.914	-.00733	-.04514	-.01593
#2	.07577	.00053	.00155	86.197	-.00673	-.02696	.02238
#3	.08114	.00053	-.00463	87.109	-.01174	.04487	-.00317
#4	.09186	.00053	.00155	86.559	-.00623	-.02698	-.02872
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	-.00610	9.6505	.01807	.07532	-.00053	.03712	.05082
SDev	.03144	.0318	.00896	.00042	.00051	.02769	.00063
%RSD	515.44	.32914	49.584	.55827	97.590	74.595	1.2375
#1	-.02343	9.6433	.01267	.07565	-.00105	.06750	.05056
#2	-.02342	9.6433	.01283	.07477	.00015	.00677	.05056

679 789

#3	-.01848	9.6202	.01541	.07565	-.00075	.02201	.05041
#4	.04093	9.6953	.03139	.07521	-.00045	.05222	.05176

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 .00349
SDev .00165
%RSD 47.155

#1	.00211
#2	.00535
#3	.00441
#4	.00210

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXQVCB

Operator: WTR

Run Time: 03/23/01 12:40:46

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
Avge	-.00174	-.00648	.00240	.00000	-.00003	-.00019	.01214
SDev	.00198	.00976	.02801	.00000	.00018	.00006	.00245
%RSD	114.32	150.76	1166.6	292.08	699.39	34.869	20.198
#1	-.00454	-.01670	.04050	.00000	-.00001	-.00024	.00877
#2	-.00033	-.01160	-.00707	.00000	-.00026	-.00013	.01385
#3	-.00034	-.00314	-.02611	.00001	-.00001	-.00025	.01189
#4	-.00173	.00553	.00228	-.00000	.00017	-.00013	.01407
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	-.00052	-.00195	.00027	.00123	-.00155	.37205	-.00005
SDev	.00078	.00127	.00181	.00217	.00056	.22418	.00049
%RSD	152.17	65.369	665.04	176.72	36.221	60.256	917.44
#1	-.00128	-.00195	-.00218	-.00164	-.00155	.17305	-.00054
#2	.00057	-.00195	.00163	.00245	-.00155	.33744	-.00035
#3	-.00080	-.00351	.00000	.00082	-.00086	.28553	.00056
#4	-.00055	-.00039	.00164	.00327	-.00224	.69219	.00011
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	.00201	-.00026	-.00000	.00134	-.00418	-.01804	.00316
SDev	.01189	.00100	.00591	.00263	.00058	.05645	.01649
%RSD	591.29	382.59	2913600.	195.70	13.859	312.87	521.46
#1	-.01542	-.00157	-.00463	-.00259	-.00342	-.09003	-.00311
#2	.00603	.00052	-.00463	.00240	-.00416	-.02703	.00953
#3	.00603	-.00052	.00772	.00278	-.00483	-.00012	-.01607
#4	.01140	.00052	.00154	.00278	-.00430	.04501	.02230
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	-.00743	.02600	-.00736	-.00017	-.00053	.01520	.00149
SDev	.05904	.03002	.02594	.00021	.00029	.04716	.00231
%RSD	794.61	115.47	352.64	127.72	54.710	310.29	155.15
#1	.04578	-.00002	-.04357	-.00043	-.00075	-.00754	-.00190
#2	.02598	.05200	.01278	.00001	-.00075	.06829	.00286

#3	-.01361	.00002	.00999	-.00025	-.00045	-.03790	.00198
#4	-.08787	.05200	-.00862	.00001	-.00015	.03794	.00301
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 .00187
SDev .00115
%RSD 61.697

#1 .00025
#2 .00254
#3 .00283
#4 .00187

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: DXQVCC

Operator: WTR

Run Time: 03/23/01 12:43:55

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	.04458	1.8543	1.8032	.93669	1.8337	.04530	49.128
SDev	.00240	.0177	.0431	.00762	.0107	.00016	.542
%RSD	5.3757	.95357	2.3893	.81315	.58597	.34499	1.1031
#1	.04703	1.8773	1.8575	.92913	1.8319	.04548	49.489
#2	.04564	1.8500	1.8150	.94214	1.8194	.04512	49.619
#3	.04143	1.8346	1.7820	.94426	1.8437	.04525	48.432
#4	.04421	1.8552	1.7581	.93123	1.8399	.04537	48.972
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	.05121	.46015	.18387	.23145	.97895	49.749	.93202
SDev	.00321	.00284	.00390	.00177	.00657	.380	.01548
%RSD	6.2642	.61629	2.1191	.76450	.67144	.76385	1.6610
#1	.05240	.46171	.18783	.23309	.98550	49.864	.92945
#2	.04953	.45861	.18510	.22899	.98342	49.414	.91170
#3	.04781	.45704	.17855	.23227	.97515	49.483	.94782
#4	.05509	.46326	.18401	.23145	.97172	50.236	.93909
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	50.376	.46134	.90501	50.436	.46412	.44917	.45823
SDev	.168	.00233	.00777	.523	.01163	.03331	.04346
%RSD	.33377	.50443	.85886	1.0377	2.5067	7.4154	9.4855
#1	50.501	.46423	.91582	50.297	.47742	.46267	.43917
#2	50.133	.46213	.90346	49.764	.44947	.48971	.51548
#3	50.391	.45898	.89729	50.948	.46217	.41753	.41366
#4	50.477	.46003	.90346	50.734	.46742	.42678	.46462
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	1.8321	9.4587	1.8297	.90618	.90587	1.8496	.46114
SDev	.1070	.0364	.0260	.00377	.00275	.1024	.00289
%RSD	5.8389	.38431	1.4212	.41549	.30310	5.5376	.62659
#1	1.8803	9.5092	1.8048	.90645	.90955	1.9140	.46380
#2	1.8754	9.4515	1.8560	.90078	.90444	1.7623	.46348

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#3	1.9001	9.4226	1.8101	.90886	.90324	1.9597	.45856
#4	1.6724	9.4514	1.8478	.90864	.90624	1.7625	.45872

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	.46690
SDev	.00155
%RSD	.33256

#1	.46591
#2	.46792
#3	.46527
#4	.46850

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DXPK3

Operator: WTR

Run Time: 03/23/01 12:47:05

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	.00109	1.7050	.01048	.04210	.09249	-.00008	18.774
SDev	.00176	.0231	.04524	.00002	.00070	.00006	.135
%RSD	161.33	1.3526	431.53	.03804	.75952	79.223	.71895

#1	.00145	1.6805	.01540	.04208	.09168	-.00002	18.628
#2	.00282	1.7357	.05773	.04210	.09339	-.00013	18.691
#3	.00145	1.7063	.01991	.04212	.09236	-.00002	18.873
#4	-.00136	1.6977	-.05111	.04211	.09253	-.00013	18.903

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	.00130	.00379	.04954	.02454	1.6359	4.2418	.00336
SDev	.00130	.00150	.00103	.00041	.0084	.1414	.00050
%RSD	100.65	39.491	2.0866	1.6704	.51484	3.3325	14.757

#1	.00140	.00262	.04967	.02474	1.6243	4.4127	.00292
#2	.00021	.00574	.04804	.02475	1.6360	4.0666	.00294
#3	.00047	.00418	.05022	.02475	1.6443	4.2483	.00383
#4	.00309	.00261	.05022	.02393	1.6388	4.2397	.00375

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	4.7133	.05279	.00021	S-.11640	.00494	.01879	.01552
SDev	.0118	.00105	.00309	.00000	.00540	.02130	.00739
%RSD	.25022	1.9876	1441.9	.00000	109.44	113.36	47.625

#1	4.7079	.05122	.00176	S-.11640	.00652	.01651	.00916
#2	4.7186	.05331	-.00442	S-.11640	.01190	.03458	.02199
#3	4.7267	.05332	.00176	S-.11640	.00034	.03455	.02186
#4	4.6999	.05332	.00176	S-.11640	.00100	-.01050	.00908

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	-.00105	9.0423	.01623	.09186	.03138	.03559	.00546
SDev	.06914	.0424	.00672	.00044	.00042	.09052	.00279
%RSD	6613.0	.46897	41.406	.47634	1.3533	254.32	51.144

#1	-.09760	8.9846	.01285	.09150	.03108	.01300	.00787
#2	.05588	9.0769	.02630	.09246	.03199	.01284	.00296

#3	.04105	9.0366	.01290	.09159	.03138	.16439	.00787
#4	-.00351	9.0711	.01285	.09190	.03108	-.04786	.00312
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 .09258
SDev .00238
%RSD 2.5708

#1 .09426
#2 .09298
#3 .09399
#4 .08911

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXPK3P5

Operator: WTR

Run Time: 03/23/01 12:50:14

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
Avg	-.00027	.34356	-.00551	.03424	.02066	-.00021	3.9430
SDev	.00196	.00905	.03547	.00181	.00044	.00005	.0170
%RSD	712.89	2.6350	643.58	5.2768	2.1215	25.387	.43148
#1	-.00028	.34445	-.00549	.03695	.02023	-.00024	3.9451
#2	-.00304	.33063	-.05292	.03334	.02048	-.00013	3.9217
#3	.00111	.35125	.03241	.03334	.02066	-.00024	3.9421
#4	.00111	.34789	.00396	.03334	.02126	-.00024	3.9633
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	.00186	-.00003	.00996	.00516	.35000	.90201	.00068
SDev	.00122	.00078	.00144	.00169	.00235	.42957	.00021
%RSD	65.684	2674.2	14.407	32.739	.67228	47.624	31.414
#1	.00315	.00114	.00873	.00495	.34690	.80467	.00075
#2	.00243	-.00042	.01146	.00741	.34966	1.5315	.00046
#3	.00030	-.00042	.01092	.00331	.35103	.69219	.00056
#4	.00157	-.00042	.00873	.00495	.35241	.57971	.00094
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	1.0481	.01109	-.00304	S3047.0	-.00511	-.01607	.00624
SDev	.0119	.00000	.00309	.2	.00111	.01132	.00637
%RSD	1.1349	.01063	101.51	.00655	21.767	70.438	102.10
#1	1.0333	.01109	-.00459	S3047.1	-.00651	-.01828	.00946
#2	1.0440	.01109	-.00459	S3047.2	-.00512	-.00034	-.00332
#3	1.0601	.01109	.00159	S3046.9	-.00504	-.02732	.00937
#4	1.0548	.01109	-.00459	S3046.7	-.00379	-.01833	.00945
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	-.03726	1.8434	.00674	.02006	.00676	.07050	-.00065
SDev	.04866	.0087	.00801	.00022	.00035	.05185	.00235
%RSD	130.59	.47033	118.75	1.0946	5.1320	73.538	362.20
#1	.02213	1.8304	-.00329	.01995	.00646	.13882	-.00188
#2	-.02241	1.8477	.00469	.01995	.00646	.01739	.00288

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#3	-.09171	1.8477	.01547	.01995	.00706	.07809	-.00172
#4	-.05705	1.8477	.01011	.02039	.00706	.04772	-.00188

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	.01933
SDev	.00153
%RSD	7.9292

#1	.02097
#2	.01803
#3	.01802
#4	.02030

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXPK3S

Operator: WTR

Run Time: 03/23/01 12:53:23

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	.04186	3.1474	1.5737	.78184	1.4345	.03349	55.501
SDev	.00140	.0342	.0568	.00844	.0176	.00026	.159
%RSD	3.3563	1.0881	3.6099	1.0796	1.2267	.77633	.28682
#1	.04115	3.0964	1.4923	.77534	1.4089	.03317	55.315
#2	.04397	3.1666	1.5866	.77690	1.4375	.03364	55.654
#3	.04115	3.1583	1.5915	.79395	1.4431	.03341	55.425
#4	.04118	3.1682	1.6245	.78118	1.4484	.03376	55.611
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	.04719	.36749	.18769	.21059	1.9594	46.792	.73132
SDev	.00314	.00297	.00237	.00357	.0130	.543	.01292
%RSD	6.6520	.80827	1.2644	1.6943	.66235	1.1610	1.7661
#1	.04860	.37181	.19000	.20609	1.9406	45.987	.71268
#2	.05089	.36553	.18946	.20936	1.9661	47.121	.73297
#3	.04529	.36710	.18564	.21345	1.9613	46.939	.73808
#4	.04398	.36554	.18564	.21345	1.9696	47.121	.74154
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	40.867	.40650	.72447	S-.11640	.36666	.40252	.41701
SDev	.300	.00357	.01513	.00000	.00637	.02252	.01599
%RSD	.73420	.87899	2.0886	.00000	1.7379	5.5945	3.8357
#1	40.424	.40151	.71211	S-.11640	.37259	.41393	.41414
#2	40.958	.40781	.73065	S-.11640	.36766	.36874	.43921
#3	41.003	.40676	.71212	S-.11640	.36875	.41372	.40104
#4	41.084	.40991	.74300	S-.11640	.35764	.41369	.41366
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	1.5406	16.291	1.5809	.75482	.72958	1.5360	.37103
SDev	.0464	.164	.0712	.00773	.00545	.0448	.00311
%RSD	3.0088	1.0073	4.5016	1.0248	.74657	2.9172	.83727
#1	1.4874	16.068	1.4865	.74367	.72154	1.5818	.36835
#2	1.5171	16.281	1.6259	.75597	.73115	1.4904	.37357

#3	1.5716	16.368	1.6445	.75838	.73205	1.5664	.36834
#4	1.5864	16.449	1.5668	.76124	.73356	1.5056	.37387
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 .47362
SDev .00620
%RSD 1.3099

#1 .46749
#2 .47037
#3 .47490
#4 .48172

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-2

Operator: WTR

Run Time: 03/23/01 12:56:33

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	.95331	48.184	4.7959	4.7823	4.7023	4.7387	48.208
SDev	.00533	.279	.0515	.0277	.0492	.0219	.552
%RSD	.55896	.57909	1.0742	.57820	1.0463	.46170	1.1458
#1	.94589	48.593	4.7491	4.8205	4.7751	4.7699	47.410
#2	.95719	48.065	4.8429	4.7772	4.6759	4.7376	48.506
#3	.95717	47.966	4.7536	4.7544	4.6694	4.7220	48.638
#4	.95297	48.114	4.8380	4.7770	4.6890	4.7252	48.277
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	4.8733	4.7746	4.7462	4.7240	49.375	48.075	4.7377
SDev	.0557	.0266	.0353	.0574	.080	.338	.1043
%RSD	1.1420	.55655	.74433	1.2142	.16172	.70389	2.2021
#1	4.7976	4.7358	4.6969	4.8081	49.280	48.376	4.8895
#2	4.9316	4.7917	4.7696	4.7042	49.439	48.350	4.6928
#3	4.8837	4.7918	4.7739	4.6788	49.443	47.865	4.6536
#4	4.8805	4.7793	4.7444	4.7050	49.339	47.709	4.7150
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	48.461	4.7595	4.7470	53.426	4.7911	4.8072	4.8572
SDev	.239	.0201	.0354	.663	.0141	.0393	.0349
%RSD	.49216	.42257	.74672	1.2401	.29329	.81674	.71833
#1	48.811	4.7319	4.6961	54.380	4.7747	4.7540	4.8162
#2	48.403	4.7697	4.7640	52.914	4.8086	4.8371	4.8922
#3	48.347	4.7781	4.7764	53.358	4.7935	4.8012	4.8792
#4	48.283	4.7581	4.7517	53.052	4.7876	4.8367	4.8412
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	4.7227	4.9525	4.8207	4.7081	4.6881	9.6220	4.7446
SDev	.0986	.0477	.0297	.0386	.0138	.2050	.0095
%RSD	2.0880	.96326	.61635	.81973	.29535	2.1309	.20129
#1	4.5813	4.9595	4.7769	4.7651	4.7084	9.4038	4.7304
#2	4.7402	5.0117	4.8283	4.6882	4.6829	9.8864	4.7513

#3	4.7600	4.9424	4.8363	4.6810	4.6772	9.5375	4.7480
#4	4.8092	4.8962	4.8415	4.6983	4.6841	9.6605	4.7485
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 4.8014
SDev .0090
%RSD .18841

#1 4.7933
#2 4.8015
#3 4.8140
#4 4.7967

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB2

Operator: WTR

Run Time: 03/23/01 12:59:42

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	.00143	.06648	.02306	.03820	.00726	H.00696	.08793
SDev	.00133	.00855	.03687	.00469	.00063	.00070	.00910
%RSD	93.411	12.861	159.93	12.276	8.7143	10.098	10.344

#1	.00248	.07765	.02059	.04364	.00760	H.00751	.09781
#2	.00108	.06724	-.02204	.04002	.00743	H.00726	.08877
#3	-.00031	.06387	.06816	.03640	.00768	H.00714	.08935
#4	.00247	.05715	.02552	.03274	.00632	H.00593	.07577

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	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	H.00587	.00660	.00683	.00841	.07146	.25741	.00728
SDev	.00170	.00270	.00158	.00245	.00757	.27583	.00144
%RSD	28.949	40.871	23.071	29.099	10.587	107.16	19.787

#1	H.00804	.01049	.00874	.01066	.07767	.66623	.00921
#2	H.00638	.00582	.00492	.00493	.07353	.06922	.00731
#3	.00466	.00426	.00655	.00902	.07422	.12113	.00685
#4	.00438	.00582	.00710	.00902	.06044	.17305	.00576

Errors	LC High	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	.06773	.00710	.01236	.79728	-.00402	-.00884	.01898
SDev	.01138	.00052	.00777	.07520	.00263	.03608	.01218
%RSD	16.803	7.4029	62.874	9.4316	65.473	408.29	64.180

#1	.08382	.00788	.01391	.83743	-.00356	.04528	.03488
#2	.05968	.00684	.02008	.83398	-.00320	-.02687	.00939
#3	.05968	.00683	.01391	.83321	-.00158	-.02691	.00949
#4	.06773	.00683	.00155	.68452	-.00776	-.02684	.02217

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	.02497	.06788	.00676	.00680	.00691	.06333	.00330
SDev	.03390	.00553	.02670	.00072	.00080	.00760	.00019
%RSD	135.75	8.1430	394.76	10.552	11.503	12.005	5.9067

#1	.03118	.07510	.02894	.00743	.00796	.06699	.00334
#2	-.02328	.06355	.00471	.00699	.00706	.06709	.00349

#3	.05592	.06355	-.03013	.00699	.00646	.05192	.00334
#4	.03608	.06932	.02353	.00577	.00616	.06730	.00303
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 .00720
SDev .00144
%RSD 19.933

#1 .00574
#2 .00900
#3 .00765
#4 .00643

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: DXPK3D

Operator: WTR

Run Time: 03/23/01 13:02:56

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	.04579	3.1720	1.6586	.82581	1.4827	.03611	58.676
SDev	.00134	.0198	.0791	.00950	.0110	.00047	.249
%RSD	2.9199	.62475	4.7711	1.1507	.74366	1.2973	.42377
#1	.04684	3.1678	1.6764	.81163	1.4731	.03674	58.613
#2	.04405	3.1539	1.6149	.82910	1.4787	.03589	58.360
#3	.04684	3.1661	1.5816	.83123	1.4804	.03565	58.937
#4	.04542	3.2003	1.7617	.83126	1.4986	.03615	58.793
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	.05048	.38534	.19984	.22002	1.9657	48.685	.75306
SDev	.00295	.00077	.00100	.00116	.0076	.220	.00926
%RSD	5.8396	.19926	.49881	.52667	.38886	.45273	1.2292
#1	.04728	.38419	.19929	.21920	1.9697	48.929	.74301
#2	.05438	.38573	.19875	.22002	1.9587	48.419	.75447
#3	.05056	.38573	.20093	.21920	1.9601	48.782	.74973
#4	.04969	.38571	.20039	.22166	1.9745	48.609	.76502
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	42.786	.42354	.77234	S-.11640	.38619	.39404	.41675
SDev	.234	.00192	.01055	.00000	.01052	.03629	.01222
%RSD	.54615	.45215	1.3659	.00000	2.7227	9.2101	2.9330
#1	42.559	.42250	.76771	S-.11640	.37252	.41426	.42616
#2	42.765	.42145	.77388	S-.11640	.39430	.42330	.41367
#3	42.709	.42459	.76153	S-.11640	.39460	.39632	.42643
#4	43.111	.42565	.78624	S-.11640	.38333	.34226	.40073
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	1.6112	16.774	1.6411	.78065	.76231	1.6116	.38771
SDev	.0765	.108	.0346	.00518	.00413	.1135	.00215
%RSD	4.7454	.64227	2.1098	.66341	.54246	7.0409	.55348
#1	1.5666	16.697	1.6767	.77631	.75998	1.7329	.38878
#2	1.7250	16.691	1.6284	.77895	.75878	1.4600	.38894

#3	1.5666	16.784	1.6606	.77917	.76239	1.6420	.38863
#4	1.5865	16.922	1.5988	.78817	.76809	1.6115	.38450
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 .48948
SDev .00233
%RSD .47696

#1 .48724
#2 .48946
#3 .48850
#4 .49270

Errors LC Pass
High 100.00
Low -.02000

C1210184

679

806

Analysis Report 60103 Averages

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William J. Rembert 3-25-01

#	Sample Name	AL	BA	BE	CA	CO	CU
1	STD1	.01484	.00009	.00279	.00977	.0005	.0006
2	STD5A		4.33927	15.8815		1.24545	2.2613
3	STD5B	10.9672			25.3247		
4	ICV2-1 0087-158-3	25.667	1.0218	.99887	25.590	1.0137	1.0176
5	ICB1	.03779	.00251	.00245	.04489	.00079	.00464
6	ICSA 0087-133-5	503.95	.00235	.00055	472.58	.00731	-.00301
7	ICSAB 0087-133-6	496.23	.47625	.45921	468.76	.45464	.50341
8	DXQVCB	H.64089	.00071	.00063	.65310	-.00525	-.00262
9	DXQVCC	1.9867	1.9456	.04707	51.513	.47413	.23986
10	DXPK3	1.7393	.10004	.00008	19.371	-.00132	.02426
11	DXPK3P5	.36244	.02281	.00002	4.1303	-.00244	.00710
12	DXPK3S	3.2953	1.5534	.03555	57.761	.37620	.22485
13	DXPK3D	3.3003	1.6011	.03668	61.073	.39103	.23459
14	DXPK3/25 NA	.04197	.00751	.00005	.93001	-.00162	.00111
15	DXPK3P125	-.02103	.00200	.00000	.18573	-.00363	-.00265
16	CCV2-1 0087-121-12	49.580	4.9303	4.8591	49.395	4.8404	4.9483
17	CCB1	-.05669	.00027	.00014	-.04401	.00000	.00043
18	DXPK3S/25 NA	.11990	.08264	.00192	2.5846	.01602	.01063
19	DXPK3D/25 NA	.09622	.07907	.00183	2.5831	.01764	.00974
20	DXCMHB	-.03741	.00018	.00003	-.02902	-.00323	-.00109
21	DXCMHC	1.9152	1.9959	.04785	47.257	.46398	.24228
22	DW68N	.08670	.03196	.00001	123.48	-.00122	.00178
23	DW68T	.17371	.02101	.00004	108.98	-.00324	.00744
24	DW68X	16.854	.01209	.00226	125.32	.10896	.06210
25	DW680	.91589	.03005	.00069	133.55	.00645	.01028
26	DW684	.22141	.11998	-.00001	208.89	-.00449	.00225
27	DW685	.40623	.01260	.00001	101.36	-.00162	.00472
28	CCV2-2	50.381	4.9953	4.9376	50.936	4.9678	4.9877
29	CCB2	-.02972	.00193	.00195	-.00763	-.00324	.00000
30	DW69A	-.01837	.02883	-.00003	112.11	-.00484	.00706
31	DW8V0	.99347	.03846	.00003	151.95	-.00284	.01123
32	DW8V0P5	.17107	.00845	.00030	30.482	-.00403	-.00261
33	DW8V0S	3.8155	2.0349	.04724	200.01	.45711	.26634
34	DW8V0D	3.7583	2.0545	.04776	198.53	.45991	.26678
35	DW8WP	1.0446	.04240	.00003	154.88	-.00124	.01397
36	DW8WR	-.03382	-.00002	-.00003	.06839	-.00403	-.00265
37	DW8WT	-.00987	.00069	-.00002	102.17	.00162	.19055
38	DXNVLB	-.03513	-.00018	.00002	.01329	-.00363	-.00088
39	DXNVLC	1.9459	2.0778	.04941	L-.01977	.48530	.25954
40	CCV2-3	52.128	5.2457	5.1178	49.996	4.9857	5.2640
41	CCB3	-.03069	.00149	.00138	-.02633	-.00081	.00375
42	DXLKX	.02737	.15137	.00000	23.830	-.00251	-.00173
43	DXLKXP5	-.02560	.03014	.00009	4.7859	-.00244	-.00065
44	DXLKXS	1.9907	2.2150	.04937	23.462	.47836	.25913
45	DXLKXD	2.0562	2.2827	.05068	24.045	.49002	.26665
46	DXLK6	-.00273	.15033	-.00003	23.706	-.00534	-.00196
47	DXLK9	-.00182	.15429	-.00003	24.516	-.00534	-.00219
48	DXNVDB	.00681	-.00016	.00000	-.02977	-.00282	-.00088
49	DXNVDC	1.9476	2.0877	.05001	L-.02037	.48772	.26219
50	DXLLC	18.840	.22954	.00075	6.9238	.00869	.03042
51	DXLLCP5	3.8825	.04699	.00013	1.4412	-.00214	.00652
52	CCV2-4	51.837	5.2157	5.0799	49.725	4.9632	5.2332
53	CCB4	-.01286	.00246	.00204	-.02037	-.00041	.00662

*new 3-25-01
not repeated
TUBE contain-
reaction.
WPK
3-25-01*

#	Sample Name	AL	BA	BE	CA	CO	CU
54	DXLLCS	19.536	2.3046	.05119	6.3806	.49399	.28639
55	DXLLCD	19.497	2.2971	.05224	6.0659	.50210	.28264
56	DXLLG	25.694	.33362	.00089	5.6818	.01867	.03458
57	DXLLJ	30.136	.35090	.00116	21.185	.01045	.05542
58	DXLLM	-.01691	.00133	-.00005	1.1358	-.00685	.02629
59	DXLLT	-.01137	.00027	.00000	1.2586	-.00241	.00597
60	DXLLX	-.02689	.00032	-.00005	1.0608	-.00523	.02807
61	DXCMHB RERUN	-.03241	-.00013	.00000	-.03425	-.00403	-.00199
62	DW68X/5 NA	3.4707	.00241	.00047	26.800	.02179	.00830
63	DW680/2 NA	.45011	.01555	.00043	69.942	.00242	.00636
64	CCV2-5	52.641	5.3259	5.1646	50.042	5.0049	5.3389
65	CCB5	-.01837	.00175	.00169	-.02479	-.00001	.00640
66	DW684/10 NA	-.00817	.01532	.00052	22.915	-.00242	-.00265
67	SI-200 0087-149-8	.00594	.00006	.00000	.81239	-.00525	-.00111
68	SI-300 0087-149-9	.04335	.00039	.00003	.91540	-.00323	-.00155
69	SI-400 0087-167-1	-.02467	-.00006	.00000	-.03436	-.00323	-.00243
70	SI-600 0087-167-2	-.01870	.00000	.00002	-.02757	-.00284	-.00265
71	SI-750 0087-167-3	-.01917	-.00008	-.00003	-.03483	-.00526	-.00265
72	AL-3000 0087-166-10	3175.1	-.00002	.00009	-.01495	-.00079	-.00265
73	AL-4000 0087-166-11	4175.9	-.00046	.00001	-.02236	-.00360	-.00265
74	AL-5000 0087-166-12	S14555.	-.00020	.00004	-.01331	k-.00143	k.00198
75	MG-3000 0087-166-13	1.7543	.00009	-.00006	.01175	-.00732	-.00177
76	CCV2-6	52.050	5.3332	5.1264	48.859	4.9330	5.3591
77	CCB6	.18249	.00212	.00211	-.02496	-.00041	-.00066
78	MG-4000 0087-166-14	.02723	.00057	.00025	.03349	-.00533	.00728
79	MG-5000 0087-166-15	-.02555	.00025	-.00004	.04823	-.00736	-.00067
80	CCV2-7	50.857	5.1496	4.9940	49.094	4.8889	5.1520
81	CCB7	-.02604	.00126	.00151	-.02968	-.00161	.00662

#	Sample Name	FE	K	MG	MN	NA	NI
1	STD1	.00634	-.01105	.0032	0	.0665	-.00003
2	STD5A				1.8319		1.5702
3	STD5B	27.7065	2.14164	7.0858		48.2898	
4	ICV2-1 0087-158-3	26.491	24.866	25.725	1.0217	25.526	1.0194
5	ICB1	.05560	-.17652	.03670	.00329	.07309	.00908
6	ICSA 0087-133-5	183.42	-.69215	489.05	.00529	.00549	-.00798
7	ICSAB 0087-133-6	181.45	9.7087	481.18	.45272	10.211	.86779
8	DXQVCB	H.27310	-.58995	.67277	.00114	.02716	.00333
9	DXQVCC	1.0440	51.554	52.220	.47802	52.398	.46470
10	DXPBK3	1.7117	3.5351	4.8909	.05498	S-.13790	.00745
11	DXPBK3P5	.37402	.32052	1.1062	.01291	S3296.8	.00171
12	DXPBK3S	2.0600	49.368	42.986	.42336	S-.13790	.37821
13	DXPBK3D	2.0305	51.291	44.921	.43946	S-.13790	.39686
14	DXPBK3/25 NA	.06463	-.23923	.26049	.00410	188.20	.00124
15	DXPBK3P125	.00072	-.46685	.03388	.00109	41.337	.00160
16	CCV2-1 0087-121-12	50.593	49.182	49.742	4.8529	50.096	4.8388
17	CCB1	-.02310	-.03716	-.02541	-.00027	.01389	-.00171
18	DXPBK3S/25 NA	.08388	2.1624	2.1673	.02104	193.85	.02242
19	DXPBK3D/25 NA	.07413	1.8906	2.1115	.02076	186.53	.02273
20	DXCMHB	H.14169	-.26013	-.04235	.00167	.18725	.00904
21	DXCMHC	1.0615	49.447	49.807	.47530	51.155	.46084
22	DW68N	16.406	5.0077	25.105	.96863	136.69	.00416

Na over range: Report
divisions: WNK 3-25-01
6121

#	Sample Name	FE	K_	MG	MN	NA	NI
23	DW68T	1.3931	11.293	19.503	.08986	90.156	.00270
24	DW68X	114.92	4.0995	67.704	2.0736	S3300.7	.29076
25	DW680	3.0606	.85241	36.217	.10065	H498.72	.01497
26	DW684	.48480	154.67	489.86	.00421	S-.13790	-.00094
27	DW685	.80938	2.8940	2.1334	.00375	17.839	.00464
28	CCV2-2	51.676	49.424	50.431	4.9705	49.882	4.9718
29	CCB2	-.00703	-.70144	-.01411	.00218	.20031	-.00007
30	DW69A	-.00706	1.6491	5.8404	.00791	15.898	.02202
31	DW8V0	1.7208	.55279	16.245	.25637	18.509	.00043
32	DW8V0P5	.34999	-.19742	3.3250	.05411	3.7924	-.00093
33	DW8V0S	2.8924	52.467	67.377	.72213	72.398	.46550
34	DW8V0D	2.8520	52.632	67.552	.72239	72.778	.47421
35	DW8WP	2.5702	.68983	17.148	.35455	19.803	.00614
36	DW8WR	.01985	-.30659	-.03388	.00137	.13458	.00070
37	DW8WT	.84654	2.4388	8.9953	.24116	13.267	.17317
38	DXNVLB	.05342	-.08361	-.04023	.00028	-.00943	.00416
39	DXNVLC	1.0588	L-.10916	L-.05294	.49191	L-.00933	.48967
40	CCV2-3	52.334	52.383	52.196	4.9988	53.213	4.9940
41	CCB3	-.01245	-.63408	-.03459	.00163	.02343	.00022
42	DXLKX	.34169	4.3016	4.8125	.00964	4.6665	-.00324
43	DXLKXP5	.07129	.77344	.92833	.00193	.92724	-.00116
44	DXLKXS	1.3902	4.1413	4.6671	.49145	4.5314	.48892
45	DXLKXD	1.3908	4.5501	4.7948	.50564	4.6484	.49514
46	DXLK6	.23050	4.4014	4.7292	.00551	4.7102	.00414
47	DXLK9	.18068	4.4409	4.8224	.00332	4.6067	.00257
48	DXNVDB	-.00686	-.25084	-.04800	.00027	.00653	-.00454
49	DXNVDC	1.0334	L.09522	L-.04729	.49082	L.00487	.49315
50	DXLLC	43.995	.56905	1.9668	.12148	.18134	.02870
51	DXLLCP5	9.2352	-.27639	.37627	.02582	.03535	.00327
52	CCV2-4	52.006	51.814	51.901	4.9708	52.977	4.9746
53	CCB4	-.00595	-.43666	-.02047	.00272	.03214	.00472
54	DXLLCS	42.652	.68054	1.8440	.60051	.16838	.50750
55	DXLLCD	40.615	.79899	1.8228	.59779	.16942	.51874
56	DXLLG	193.86	1.5539	1.8122	1.1110	.27704	.01913
57	DXLLJ	88.940	2.1903	3.5644	.15063	.19907	.04764
58	DXLLM	.08411	40.249	2.6198	.00247	3.3912	.00259
59	DXLLT	.06407	43.176	3.1076	.00192	3.0769	-.00034
60	DXLLX	.13844	34.336	2.3205	.00221	3.8188	-.00189
61	DXCMHB RERUN	-.01227	-.27639	-.04729	.00026	-.00362	.00118
62	DW68X/5 NA	25.328	.47150	14.544	.45059	154.48	.06243
63	DW680/2 NA	1.6007	.43898	18.911	.05280	254.69	-.00248
64	CCV2-5	52.645	52.929	52.628	5.0207	54.455	5.0179
65	CCB5	-.00902	-.33446	-.02047	.00191	.03141	.00575
66	DW684/10 NA	.02292	15.931	58.515	.00054	H480.79	-.00440
67	SI-200 0087-149-8	-.01695	-.29033	-.03741	.00026	.02498	.00043
68	SI-300 0087-149-9	-.01279	-.40414	-.03812	.00000	.05256	-.00162
69	SI-400 0087-167-1	-.01929	-.37162	-.04588	.00000	.00155	.00518
70	SI-600 0087-167-2	-.01856	-.05109	-.04447	.00108	-.00207	.00016
71	SI-750 0087-167-3	-.01277	-.76415	-.05224	.00054	-.00300	.00395
72	AL-3000 0087-166-10	-.01750	-.18813	-.03953	-.01647	.00819	-.00457
73	AL-4000 0087-166-11	-.01750	-.67821	-.05224	-.02126	.00445	.00220
74	AL-5000 0087-166-12	-.01533	-.25549	-.04447	k-.25903	.01264	k-.00662
75	MG-3000 0087-166-13	-.01066	-.92209	2708.9	.05480	.00870	-.01246
76	CCV2-6	52.069	52.966	52.464	4.9482	54.663	4.9251

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Analysis Report

Averages

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#	Sample Name	FE	K	MG	MN	NA	NI
77	CCB6	-.00541	-.46685	.17931	.00217	.02799	.00590
78	MG-4000 0087-166-14	-.00303	-1.2473	3428.1	.07122	.02229	-.03219
79	MG-5000 0087-166-15	-.00227	-1.2728	4117.6	.08787	.02104	.00338
80	CCV2-7	51.369	50.931	51.938	4.9041	52.356	4.8841
81	CCB7	-.01118	-.26478	.28167	.00218	.02032	.00661

#	Sample Name	V	ZN
1	STD1	0	.00003
2	STD5A	1.55505	1.18413
3	STD5B		
4	ICV2-1 0087-158-3	1.0218	1.0182
5	ICB1	.00141	.00478
6	ICSA 0087-133-5	.00276	.00426
7	ICSAB 0087-133-6	.46375	.93967
8	DXQVCB	.00007	.00329
9	DXQVCC	.48597	.48370
10	DXPK3	.00417	.09396
11	DXPK3P5	.00221	.02010
12	DXPK3S	.39285	.48863
13	DXPK3D	.40378	.50933
14	DXPK3/25 NA	.00125	.00779
15	DXPK3P125	.00003	.00374
16	CCV2-1 0087-121-12	4.8798	4.9004
17	CCB1	.00383	.00034
18	DXPK3S/25 NA	.02062	.02343
19	DXPK3D/25 NA	.01991	.02097
20	DXCMHB	.00022	.00183
21	DXCMHC	.48106	.47657
22	DW68N	.00465	.00611
23	DW68T	.00497	.02334
24	DW68X	.00381	.56358
25	DW680	.00105	.04821
26	DW684	.00636	.02410
27	DW685	.00501	.01228
28	CCV2-2	4.9845	5.0165
29	CCB2	.00008	.00306
30	DW69A	.00141	.08970
31	DW8V0	.00811	.01009
32	DW8V0P5	.00478	.00441
33	DW8V0S	.48233	.47275
34	DW8V0D	.48781	.48369
35	DW8WP	.00901	.01264
36	DW8WR	.00034	.00407
37	DW8WT	.04938	.61935
38	DXNVLB	.00175	.00719
39	DXNVLC	.49536	.48646
40	CCV2-3	5.0584	5.0278
41	CCB3	.00172	.00280
42	DXLKX	.00062	.00261
43	DXLKXP5	.00066	.00356
44	DXLKXS	.48937	.48285
45	DXLKXD	.50451	.49348

#	Sample Name	V_	ZN
46	DXLK6	.00116	.00972
47	DXLK9	.00148	.00320
48	DXNVDB	.00156	.00224
49	DXNVDC	.49579	.48061
50	DXLLC	.07318	.13108
51	DXLLCP5	.01630	.02802
52	CCV2-4	5.0331	5.0056
53	CCB4	.00137	.00310
54	DXLLCS	.56467	.59659
55	DXLLCD	.56226	.60451
56	DXLLG	.11025	.17982
57	DXLLJ	.20561	.21844
58	DXLLM	-.00214	.04822
59	DXLLT	.00112	.05073
60	DXLLX	-.00164	.05154
61	DXCMHB RERUN	-.00004	.00279
62	DW68X/5 NA	-.00009	.12092
63	DW680/2 NA	.00371	.02596
64	CCV2-5	5.0944	5.0519
65	CCB5	.00297	.00258
66	DW684/10 NA	.00233	.00427
67	SI-200 0087-149-8	.00085	.02001
68	SI-300 0087-149-9	.00000	.06414
69	SI-400 0087-167-1	.00245	.00070
70	SI-600 0087-167-2	.00147	.00148
71	SI-750 0087-167-3	-.00004	.00009
72	AL-3000 0087-166-10	-.00139	-.00635
73	AL-4000 0087-166-11	-.00402	-.01189
74	AL-5000 0087-166-12	-.00409	k-.01502
75	MG-3000 0087-166-13	.01116	.00727
76	CCV2-6	5.0390	4.9684
77	CCB6	.00114	.00295
78	MG-4000 0087-166-14	.01098	.00983
79	MG-5000 0087-166-15	.01460	.01146
80	CCV2-7	4.9656	4.9352
81	CCB7	.00156	.00317

WNC 3-25-01

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	J10323B	QUANMET	03/23/01	14:58		X	IR
2	STD5A	J10323B	QUANMET	03/23/01	15:01		X	IR
3	STD5B	J10323B	QUANMET	03/23/01	15:05		X	IR
4	ICV2-1 0087-158-3	J10323B	QUANMET	03/23/01	15:08	WTR	S	CONC
5	ICB1	J10323B	QUANMET	03/23/01	15:11	WTR	S	CONC
6	ICSA 0087-133-5	J10323B	QUANMET	03/23/01	15:14	WTR	Q	CONC
7	ICSAB 0087-133-6	J10323B	QUANMET	03/23/01	15:17	WTR	Q	CONC
8	DXQVCB	J10323B	QUANMET	03/23/01	15:21	WTR	S	CONC
9	DXQVCC	J10323B	QUANMET	03/23/01	15:24	WTR	S	CONC
10	DXPK3	J10323B	QUANMET	03/23/01	15:27	WTR	S	CONC
11	DXPK3P5	J10323B	QUANMET	03/23/01	15:30	WTR	S	CONC
12	DXPK3S	J10323B	QUANMET	03/23/01	15:33	WTR	S	CONC
13	DXPK3D	J10323B	QUANMET	03/23/01	15:36	WTR	S	CONC
14	DXPK3/25 NA	J10323B	QUANMET	03/23/01	15:40	WTR	S	CONC
15	DXPK3P125	J10323B	QUANMET	03/23/01	15:43	WTR	S	CONC
16	CCV2-1 0087-121-12	J10323B	QUANMET	03/23/01	15:46	WTR	S	CONC
17	CCB1	J10323B	QUANMET	03/23/01	15:51	WTR	S	CONC
18	DXPK3S/25 NA	J10323B	QUANMET	03/23/01	15:55	WTR	S	CONC
19	DXPK3D/25 NA	J10323B	QUANMET	03/23/01	15:58	WTR	S	CONC
20	DXCMHB	J10323B	QUANMET	03/23/01	16:01	WTR	S	CONC
21	DXCMHC	J10323B	QUANMET	03/23/01	16:04	WTR	S	CONC
22	DW68N	J10323B	QUANMET	03/23/01	16:07	WTR	S	CONC
23	DW68T	J10323B	QUANMET	03/23/01	16:10	WTR	S	CONC
24	DW68X	J10323B	QUANMET	03/23/01	16:14	WTR	S	CONC
25	DW680	J10323B	QUANMET	03/23/01	16:17	WTR	S	CONC
26	DW684	J10323B	QUANMET	03/23/01	16:20	WTR	S	CONC
27	DW685	J10323B	QUANMET	03/23/01	16:23	WTR	S	CONC
28	CCV2-2	J10323B	QUANMET	03/23/01	16:26	WTR	S	CONC
29	CCB2	J10323B	QUANMET	03/23/01	16:29	WTR	S	CONC
30	DW69A	J10323B	QUANMET	03/23/01	16:32	WTR	S	CONC
31	DW8V0	J10323B	QUANMET	03/23/01	16:36	WTR	S	CONC
32	DW8V0P5	J10323B	QUANMET	03/23/01	16:39	WTR	S	CONC
33	DW8V0S	J10323B	QUANMET	03/23/01	16:42	WTR	S	CONC
34	DW8V0D	J10323B	QUANMET	03/23/01	16:45	WTR	S	CONC
35	DW8WP	J10323B	QUANMET	03/23/01	16:48	WTR	S	CONC
36	DW8WR	J10323B	QUANMET	03/23/01	16:51	WTR	S	CONC
37	DW8WT	J10323B	QUANMET	03/23/01	16:55	WTR	S	CONC
38	DXNVLB	J10323B	QUANMET	03/23/01	16:58	WTR	S	CONC
39	DXNVLC	J10323B	QUANMET	03/23/01	17:01	WTR	S	CONC
40	CCV2-3	J10323B	QUANMET	03/23/01	17:04	WTR	S	CONC
41	CCB3	J10323B	QUANMET	03/23/01	17:07	WTR	S	CONC
42	DXLKX	J10323B	QUANMET	03/23/01	17:10	WTR	S	CONC
43	DXLKXP5	J10323B	QUANMET	03/23/01	17:14	WTR	S	CONC
44	DXLKXS	J10323B	QUANMET	03/23/01	17:17	WTR	S	CONC
45	DXLKXD	J10323B	QUANMET	03/23/01	17:20	WTR	S	CONC
46	DXLK6	J10323B	QUANMET	03/23/01	17:26	WTR	S	CONC
47	DXLK9	J10323B	QUANMET	03/23/01	17:30	WTR	S	CONC
48	DXNVDB	J10323B	QUANMET	03/23/01	17:33	WTR	S	CONC
49	DXNVDC	J10323B	QUANMET	03/23/01	17:36	WTR	S	CONC
50	DXLLC	J10323B	QUANMET	03/23/01	17:39	WTR	S	CONC
51	DXLLCP5	J10323B	QUANMET	03/23/01	17:42	WTR	S	CONC
52	CCV2-4	J10323B	QUANMET	03/23/01	17:45	WTR	S	CONC
53	CCB4	J10323B	QUANMET	03/23/01	17:49	WTR	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	DXLLCS	J10323B	QUANMET	03/23/01	17:52	WTR	S	CONC
55	DXLLCD	J10323B	QUANMET	03/23/01	17:55	WTR	S	CONC
56	DXLLG	J10323B	QUANMET	03/23/01	17:58	WTR	S	CONC
57	DXLLJ	J10323B	QUANMET	03/23/01	18:01	WTR	S	CONC
58	DXLLM	J10323B	QUANMET	03/23/01	18:04	WTR	S	CONC
59	DXLLT	J10323B	QUANMET	03/23/01	18:08	WTR	S	CONC
60	DXLLX	J10323B	QUANMET	03/23/01	18:11	WTR	S	CONC
61	DXCMHB RERUN	J10323B	QUANMET	03/23/01	18:14	WTR	S	CONC
62	DW68X/5 NA	J10323B	QUANMET	03/23/01	18:17	WTR	S	CONC
63	DW680/2 NA	J10323B	QUANMET	03/23/01	18:20	WTR	S	CONC
64	CCV2-5	J10323B	QUANMET	03/23/01	18:23	WTR	S	CONC
65	CCB5	J10323B	QUANMET	03/23/01	18:27	WTR	S	CONC
66	DW684/10 NA	J10323B	QUANMET	03/23/01	18:30	WTR	S	CONC
67	SI-200 0087-149-8	J10323B	QUANMET	03/23/01	18:33	WTR	S	CONC
68	SI-300 0087-149-9	J10323B	QUANMET	03/23/01	18:36	WTR	S	CONC
69	SI-400 0087-167-1	J10323B	QUANMET	03/23/01	18:39	WTR	S	CONC
70	SI-600 0087-167-2	J10323B	QUANMET	03/23/01	18:42	WTR	S	CONC
71	SI-750 0087-167-3	J10323B	QUANMET	03/23/01	18:46	WTR	S	CONC
72	AL-3000 0087-166-10	J10323B	QUANMET	03/23/01	18:49	WTR	S	CONC
73	AL-4000 0087-166-11	J10323B	QUANMET	03/23/01	18:52	WTR	S	CONC
74	AL-5000 0087-166-12	J10323B	QUANMET	03/23/01	18:55	WTR	S	CONC
75	MG-3000 0087-166-13	J10323B	QUANMET	03/23/01	18:58	WTR	S	CONC
76	CCV2-6	J10323B	QUANMET	03/23/01	19:01	WTR	S	CONC
77	CCB6	J10323B	QUANMET	03/23/01	19:05	WTR	S	CONC
78	MG-4000 0087-166-14	J10323B	QUANMET	03/23/01	19:08	WTR	S	CONC
79	MG-5000 0087-166-15	J10323B	QUANMET	03/23/01	19:11	WTR	S	CONC
80	CCV2-7	J10323B	QUANMET	03/23/01	19:14	WTR	S	CONC
81	CCB7	J10323B	QUANMET	03/23/01	19:17	WTR	S	CONC

Method: QUANMET Standard: STD1
Run Time: 03/23/01 14:58:47

Elem	AG	AL	AS	B ₁	BA	BE	CA
Avge	-.00040	.01485	.00005	.00000	.00010	.00280	.00977
SDev	.00033	.00079	.00096	.00000	.00012	.00000	.00118
%RSD	81.650	5.3166	1914.9	.00000	115.47	.00000	12.075
#1	-.00080	.01460	-.00040	.00000	.00000	.00280	.01013
#2	-.00040	.01600	-.00100	.00000	.00000	.00280	.01013
#3	-.00040	.01420	.00040	.00000	.00020	.00280	.01076
#4	.00000	.01460	.00120	.00000	.00020	.00280	.00806

Elem	CD	CO	CR	CU	FE	K ₁	LI
Avge	.00005	.00050	.00120	.00060	.00635	-.01105	-.00035
SDev	.00006	.00026	.00033	.00069	.00060	.00190	.00052
%RSD	119.01	51.640	27.217	115.47	9.4050	17.195	147.60
#1	.00008	.00060	.00080	.00000	.00660	-.01360	-.00092
#2	.00000	.00080	.00120	.00000	.00700	-.01140	-.00028
#3	.00000	.00020	.00120	.00120	.00620	-.00960	-.00052
#4	.00012	.00040	.00160	.00120	.00560	-.00960	.00032

Elem	MG	MN	MO	NA	NI	PB	SB
Avge	.00320	.00000	.00015	.06650	-.00004	.00025	-.00030
SDev	.00059	.00000	.00010	.00141	.00062	.00050	.00076
%RSD	18.399	.00000	66.667	2.1195	1747.6	200.00	252.40
#1	.00320	.00000	.00020	.06560	.00053	.00000	-.00020
#2	.00380	.00000	.00000	.06500	-.00047	.00000	.00020
#3	.00340	.00000	.00020	.06780	-.00066	.00000	-.00140
#4	.00240	.00000	.00020	.06760	.00046	.00100	.00020

Elem	SE	SI	SN	SR	TI	TL	V ₁
Avge	-.00115	.00220	.00065	.00024	.00205	.00010	.00000
SDev	.00101	.00016	.00097	.00010	.00019	.00119	.00000
%RSD	87.965	7.4227	149.42	40.996	9.3408	1194.4	.00000
#1	-.00240	.00220	.00120	.00032	.00200	-.00160	.00000
#2	.00000	.00200	-.00060	.00012	.00180	.00120	.00000
#3	-.00080	.00220	.00040	.00032	.00220	.00040	.00000
#4	-.00140	.00240	.00160	.00020	.00220	.00040	.00000

Elem	ZN
Avge	.00004
SDev	.00012
%RSD	321.12
#1	.00015
#2	.00012
#3	.00000
#4	-.00012

Method: QUANMET

Standard: STD5A

Run Time: 03/23/01 15:01:58

0057158-1

Elem	AG	AS	B	BA	BE	CD	CO
Avge	.26325	.40165	.52261	4.3393	15.882	.77439	1.2455
SDev	.00077	.00272	.00199	.0152	.036	.00270	.0041
%RSD	.29342	.67835	.38111	.34954	.22559	.34835	.32946

#1	.26240	.39800	.52125	4.3300	15.861	.77114	1.2404
#2	.26400	.40280	.52055	4.3385	15.857	.77566	1.2460
#3	.26280	.40140	.52421	4.3277	15.875	.77341	1.2450
#4	.26380	.40440	.52441	4.3609	15.934	.77734	1.2504

Elem	CR	CU	LI	MN	MO	NI	PB
Avge	3.5271	2.2613	3.9152	1.8319	.30830	1.5702	.20830
SDev	.0092	.0068	.0244	.0043	.00104	.0044	.00139
%RSD	.26127	.30041	.62398	.23593	.33708	.27989	.66752

#1	3.5136	2.2596	3.9134	1.8264	.30740	1.5637	.20640
#2	3.5302	2.2586	3.9087	1.8336	.30740	1.5713	.20960
#3	3.5302	2.2558	3.8900	1.8310	.30920	1.5731	.20900
#4	3.5344	2.2712	3.9485	1.8366	.30920	1.5727	.20820

Elem	SB	SE	SI	SN	SR	TI	TL
Avge	.14980	.38680	.32790	.72980	8.4920	6.2280	.25255
SDev	.00180	.00183	.00272	.00557	.0252	.0156	.00068
%RSD	1.1991	.47201	.83110	.76308	.29637	.25031	.26952

#1	.14760	.38780	.32440	.72660	8.4767	6.2138	.25160
#2	.14980	.38480	.32940	.73420	8.4917	6.2282	.25280
#3	.14980	.38880	.32720	.72360	8.4720	6.2202	.25260
#4	.15200	.38580	.33060	.73480	8.5276	6.2496	.25320

Elem	V	ZN
Avge	1.5551	1.1841
SDev	.0034	.0049
%RSD	.22162	.41131

#1	1.5510	1.1791
#2	1.5560	1.1888
#3	1.5540	1.1808
#4	1.5592	1.1878

Method: QUANMET Standard: STD5B

Run Time: 03/23/01 15:05:09

0057-158-Z

Elem	AL	CA	FE	K_	MG	NA
Avge	10.967	25.325	27.707	2.1416	7.0858	48.290
SDev	.028	.060	.010	.0073	.0103	.252
%RSD	.25705	.23778	.03620	.34239	.14563	.52210

#1	10.951	25.330	27.694	2.1464	7.0814	48.164
#2	11.009	25.240	27.703	2.1386	7.0990	48.667
#3	10.955	25.349	27.714	2.1328	7.0880	48.191
#4	10.953	25.380	27.715	2.1488	7.0748	48.138

Method: QUANMET

Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD5A	STD1	7.37837	.002951	03/23/01 03:05:09
AL	308.215	STD5B	STD1	9.13046	-.135587	03/23/01 03:05:09
AS	193.696	STD5A	STD1	25.3221	-.001266	03/23/01 03:05:09
B	249.600	STD5A	STD1	19.1793	.000000	03/23/01 03:05:09
BA	493.409	STD5A	STD1	2.30458	-.000230	03/23/01 03:05:09
BE	313.042	STD5A	STD1	.631719	-.001769	03/23/01 03:05:09
CA	317.933	STD5B	STD1	3.95023	-.038596	03/23/01 03:05:09
CD	228.802	STD5A	STD1	13.0516	-.000653	03/23/01 03:05:09
CO	228.616	STD5A	STD1	8.07208	-.004036	03/23/01 03:05:09
CR	267.716	STD5A	STD1	2.83682	-.003404	03/23/01 03:05:09
CU	324.754	STD5A	STD1	4.41917	-.002652	03/23/01 03:05:09
FE	259.940	STD5B	STD1	3.61009	-.022924	03/23/01 03:05:09
K	766.491	STD5B	STD1	46.4533	.513309	03/23/01 03:05:09
LI	670.789	STD5A	STD1	2.55394	.000894	03/23/01 03:05:09
MG	279.079	STD5B	STD1	14.1191	-.045181	03/23/01 03:05:09
MN	257.610	STD5A	STD1	5.45711	.000000	03/23/01 03:05:09
MO	202.030	STD5A	STD1	32.4517	-.004868	03/23/01 03:05:09
NA	588.995	STD5B	STD1	2.07369	-.137900	03/23/01 03:05:09
NI	231.604	STD5A	STD1	6.36621	.000225	03/23/01 03:05:09
PB	220.353	STD5A	STD1	46.5470	-.011637	03/23/01 03:05:09
SB	206.838	STD5A	STD1	66.6986	.020010	03/23/01 03:05:09
SE	196.026	STD5A	STD1	25.7765	.029643	03/23/01 03:05:09
SI	288.158	STD5A	STD1	30.3686	-.066811	03/23/01 03:05:09
SN	189.989	STD5A	STD1	13.7084	-.008910	03/23/01 03:05:09
SR	409.552	STD5A	STD1	1.17761	-.000281	03/23/01 03:05:09
TI	334.941	STD5A	STD1	1.60619	-.003293	03/23/01 03:05:09
TL	190.864	STD5A	STD1	79.6537	-.007965	03/23/01 03:05:09
V	292.402	STD5A	STD1	6.25487	.000000	03/23/01 03:05:09
ZN	213.856	STD5A	STD1	8.47155	-.000324	03/23/01 03:05:09

Analysis Report



3-23-01

679 817

03/23/01 03:11:27 PM

page 1

Method: QUANMET Sample Name: ICV2-1 0087-158-3 Operator: WTR
 Run Time: 03/23/01 15:08:20
 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	.51627	25.667	.99788	1.0428	1.0218	.99888	25.590
SDev	.00437	.088	.06358	.0200	.0062	.00356	.165
%RSD	.84637	.34123	6.3716	1.9175	.60637	.35600	.64637

#1	.51033	25.647	1.0830	1.0567	1.0253	.99864	25.367
#2	.51628	25.676	.97624	1.0553	1.0231	1.0004	25.581
#3	.52071	25.566	.93155	1.0138	1.0127	.99407	25.759
#4	.51776	25.778	1.0007	1.0454	1.0262	1.0024	25.651

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	1.0170	1.0137	1.0196	1.0176	26.491	24.866	1.0313
SDev	.0069	.0055	.0052	.0071	.061	.226	.0108
%RSD	.68162	.54286	.51129	.69825	.22961	.90823	1.0507

#1	1.0153	1.0065	1.0125	1.0211	26.403	24.818	1.0368
#2	1.0088	1.0129	1.0199	1.0203	26.515	24.641	1.0339
#3	1.0254	1.0161	1.0250	1.0070	26.502	25.180	1.0153
#4	1.0186	1.0193	1.0210	1.0220	26.543	24.827	1.0390

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	25.725	1.0218	.99649	25.526	1.0194	1.0471	1.0429
SDev	.108	.0039	.01788	.205	.0269	.0252	.0277
%RSD	.41799	.38197	1.7939	.80408	2.6356	2.4108	2.6575

#1	25.637	1.0163	.98512	25.629	.97963	1.0283	1.0193
#2	25.731	1.0218	.97865	25.611	1.0363	1.0843	1.0733
#3	25.657	1.0239	1.0176	25.219	1.0267	1.0379	1.0195
#4	25.875	1.0250	1.0046	25.644	1.0351	1.0379	1.0596

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	1.0602	.99963	.98665	1.0114	.99841	5.1471	1.0218
SDev	.0485	.02732	.04474	.0048	.00367	.1254	.0027
%RSD	4.5725	2.7329	4.5348	.47626	.36720	2.4361	.26761

#1	H1.1179	1.0133	.97902	1.0119	.99480	5.0848	1.0178
#2	1.0770	1.0133	.94634	1.0131	.99994	5.2264	1.0226

#3	1.0048	.95865	.97080	1.0046	.99608	5.2743	1.0236
#4	1.0410	1.0133	1.0505	1.0159	1.0028	5.0028	1.0233

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 1.0182
SDev .0054
%RSD .52898

#1 1.0119
#2 1.0158
#3 1.0237
#4 1.0216

Errors LC Pass
High 1.1000
Low .90000

Analysis Report

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Method: QUANMET Sample Name: ICB1

Operator: WTR

Run Time: 03/23/01 15:11:30

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	.00260	.03780	-.00799	.02600	.00251	.00246	.04489
SDev	.00222	.01268	.01673	.01726	.00042	.00030	.00902
%RSD	85.445	33.558	209.52	66.377	16.758	12.090	20.101
#1	.00149	.03237	.00348	.03464	.00226	.00227	.04176
#2	.00001	.02327	-.01670	.03461	.00207	.00215	.03372
#3	.00447	.04314	-.02709	.00011	.00272	.00264	.05393
#4	.00444	.05241	.00837	.03464	.00300	.00278	.05017
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	.00162	.00080	.00199	.00465	.05560	-.17652	.00302
SDev	.00154	.00348	.00268	.00044	.00763	.38920	.00111
%RSD	95.149	437.49	134.96	9.4948	13.722	220.48	36.734
#1	.00191	-.00405	.00000	.00442	.05362	-.40647	.00264
#2	.00053	.00080	.00000	.00531	.04567	-.47150	.00183
#3	.00369	.00402	.00568	.00443	.06084	.38324	.00447
#4	.00036	.00241	.00227	.00443	.06229	-.21136	.00315
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	.03671	.00329	.00650	.07310	.00909	-.00705	-.03333
SDev	.02247	.00126	.00622	.00924	.00632	.00528	.05442
%RSD	61.217	38.404	95.647	12.648	69.556	74.891	163.30
#1	.03953	.00220	.00163	.06532	.01578	-.00258	-.05996
#2	.00565	.00219	.00163	.06532	.00230	-.01176	L-.07339
#3	.05930	.00439	.01461	.07818	.00533	-.01149	.04664
#4	.04236	.00438	.00812	.08357	.01294	-.00238	-.04661
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	.01564	.00001	.00466	.00230	.00281	-.01281	.00142
SDev	.05024	.00494	.01952	.00042	.00095	.08273	.00265
%RSD	321.20	33635.	419.21	18.048	33.645	645.92	186.37
#1	.03497	.00000	.02648	.00207	.00217	-.07247	.00004
#2	-.03723	.00607	.01546	.00184	.00185	.10285	.00004

#3	.07623	-.00602	-.00872	.00255	.00377	-.00896	.00538
#4	-.01140	.00000	-.01459	.00274	.00345	-.07265	.00021
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	.00479
SDev	.00156
%RSD	32.570

#1	.00568
#2	.00403
#3	.00644
#4	.00300

Errors	LC Pass
High	.02000
Low	-.02000

Analysis Report

QC Standard

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Method: QUANMET Sample Name: IC5A 0087-133-5 Operator: WTR
 Run Time: 03/23/01 15:14:40
 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	-.00419	503.95	.19409	-.01828	.00235	.00056	472.58
SDev	.00011	1.22	.05123	.00291	.00033	.00006	2.71
%RSD	2.7315	.24207	26.393	15.927	14.036	11.669	.57313

#1	-.00434	503.80	.12011	-.02262	.00272	.00062	469.01
#2	-.00412	505.72	.23523	-.01670	.00254	.00050	472.21
#3	-.00420	503.06	.20133	-.01734	.00207	.00051	473.72
#4	-.00408	503.23	.21968	-.01648	.00207	.00062	475.38

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	-.00622	.00731	-.00227	-.00302	183.42	-.69215	.00178
SDev	.00541	.00395	.00131	.00412	.52	.20904	.00044
%RSD	87.066	54.084	57.641	136.31	.28122	30.201	24.900

#1	-.01320	.00571	-.00114	-.00045	182.70	-.70377	.00171
#2	-.00767	.01054	-.00340	-.00917	183.74	-.98249	.00119
#3	-.00116	.01053	-.00341	-.00125	183.42	-.56441	.00201
#4	-.00284	.00246	-.00114	-.00121	183.84	-.51795	.00222

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	489.05	.00530	-.00195	.00550	-.00798	.04011	.04021
SDev	.89	.00072	.00978	.00417	.01268	.02171	.03527
%RSD	.18101	13.649	502.55	75.817	158.93	54.126	87.716

#1	488.07	.00456	-.00691	.00477	.00113	.04503	.02024
#2	490.18	.00480	.00621	.00021	.00436	.05295	.04713
#3	488.77	.00586	-.01330	.00684	-.02164	.00813	.00673
#4	489.18	.00598	.00622	.01016	-.01577	.05432	.08673

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	-.13490	.03040	-.08162	.01440	-.01847	.38124	.00276
SDev	.08764	.00003	.06067	.00000	.00048	.32609	.00268
%RSD	64.965	.09130	74.335	.00000	2.6087	85.534	96.971

#1	-.01475	.03042	-.04752	.01440	-.01807	-.07749	.00483
#2	-.14035	.03038	-.17065	.01440	-.01903	.43208	.00140

#3	-.22384	.03037	-.03926	.01440	-.01871	.69195	-.00034
#4	-.16067	.03042	-.06904	.01440	-.01807	.47843	.00516

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	ZN
Units	ppm
Avge	.00426
SDev	.00122
%RSD	28.558

#1	.00366
#2	.00330
#3	.00406
#4	.00603

Errors	NOCHECK
Value	
Range	

Method: QUANMET Sample Name: ICSAB 0087-133-6 Operator: WTR
 Run Time: 03/23/01 15:17:51
 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	.95708	496.23	Q1.3015	.95678	.47626	.45922	468.76
SDev	.00135	1.08	.0957	.01703	.00094	.00142	2.00
%RSD	.14056	.21849	7.3508	1.7801	.19761	.30927	.42766
#1	.95541	494.92	Q1.3611	.94239	.47508	.45734	466.26
#2	.95711	497.58	Q1.4045	.94571	.47739	.45998	468.21
#3	.95870	496.27	Q1.2271	.95910	.47628	.46059	470.94
#4	.95710	496.16	Q1.2133	.97991	.47628	.45897	469.62
Errors	QC Pass	QC Pass	QC Fail	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	.93792	.45465	.43918	.50341	181.45	9.7087	1.0383
SDev	.00941	.00153	.00245	.00401	.52	.3332	.0042
%RSD	1.0033	.33773	.55745	.79678	.28831	3.4320	.40278
#1	.92644	.45347	.43805	.50002	180.72	9.2372	1.0393
#2	.93873	.45343	.43691	.50806	181.59	9.8504	1.0437
#3	.94943	.45502	.44258	.50546	181.96	10.008	1.0344
#4	.93709	.45667	.43917	.50011	181.55	9.7389	1.0356
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	481.18	.45272	.87886	10.211	.86779	.95664	1.0132
SDev	1.13	.00198	.00370	.029	.02076	.06542	.0908
%RSD	.23542	.43818	.42124	.28207	2.3927	6.8389	8.9581
#1	479.55	.45092	.88201	10.187	.84885	.96927	.97975
#2	481.91	.45109	.88212	10.249	.85323	.89298	1.0863
#3	481.98	.45449	.87568	10.190	.89353	1.0427	1.0868
#4	481.29	.45439	.87563	10.216	.87556	.92162	.89992
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	.84744	1.0786	Q.79550	.94617	.88501	9.1726	.46375
SDev	.11806	.0330	.04670	.00238	.00229	.2175	.00455
%RSD	13.931	3.0641	5.8706	.25131	.25900	2.3713	.98115
#1	Q.72657	1.0800	Q.73703	.94361	.88172	9.1720	.45851
#2	.84785	1.1044	.84996	.94936	.88622	9.1587	.46352

#3	.80780	1.0984	.80614	.94573	.88686	8.9138	.46962
#4	1.0075	1.0315	Q.78887	.94597	.88525	9.4460	.46336

Errors	QC Pass	QC Pass	QC Fail	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	.93967
SDev	.00600
%RSD	.63847

#1	.93659
#2	.93749
#3	.93598
#4	.94862

Errors	QC Pass
Value	1.0000
Range	20.000

Method: QUANMET Sample Name: DXQVCB **679 825** Operator: WTR
 Run Time: 03/23/01 15:21:06
 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	-.00104	H.64090	-.00420	.00056	.00072	.00063	.65310
SDev	.00186	.03683	.01237	.00003	.00036	.00010	.03491
%RSD	178.30	5.7463	294.57	4.7783	50.346	16.049	5.3446
#1	-.00289	H.58567	.01400	.00052	.00042	.00051	.60162
#2	-.00142	H.65873	-.00686	.00058	.00042	.00064	.67844
#3	.00155	H.66045	-.01198	.00057	.00115	.00075	.66292
#4	-.00141	H.65873	-.01195	.00057	.00088	.00063	.66942
Errors	LC Pass	LC High	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	.00144	-.00525	-.00142	-.00263	H.27311	-.58996	.00049
SDev	.00179	.00203	.00375	.00000	.01474	.51958	.00100
%RSD	124.61	38.602	264.54	.12277	5.3969	88.071	204.25
#1	.00076	-.00727	-.00227	-.00263	H.25144	-1.1776	-.00022
#2	-.00062	-.00565	-.00567	-.00263	H.28394	-.84313	-.00043
#3	.00203	-.00566	.00341	-.00263	H.27672	-.01626	.00089
#4	.00358	-.00243	-.00113	-.00262	H.28033	-.32285	.00171
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	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	.67278	.00115	.00328	.02717	.00334	-.00994	.01669
SDev	.03114	.00089	.00325	.00155	.00396	.00463	.01282
%RSD	4.6281	77.780	98.920	5.7125	118.49	46.630	76.841
#1	.62689	.00005	.00166	.02717	-.00172	-.00299	.00671
#2	.68901	.00115	.00166	.02882	.00735	-.01229	.02013
#3	.68054	.00224	.00815	.02509	.00232	-.01230	.00653
#4	.69466	.00115	.00166	.02758	.00540	-.01217	.03338
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	.04468	-.00304	-.00607	.00137	.00080	-.02409	.00008
SDev	.05626	.00352	.03134	.00019	.00040	.08274	.00110
%RSD	125.92	115.77	516.36	14.273	50.332	343.52	1375.1
#1	-.03659	-.00607	-.03901	.00113	.00024	.03600	.00004
#2	.05631	-.00609	-.02250	.00133	.00088	-.06008	-.00122

#3	.06660	.00002	.03227	.00160	.00120	-.12371	.00146
#4	.09239	.00000	.00497	.00141	.00088	.05145	.00004

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 .00329
SDev .00102
%RSD 30.920

#1	.00306
#2	.00233
#3	.00305
#4	.00473

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DXQVCC **679 827** Operator: WTR
 Run Time: 03/23/01 15:24:15
 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	.04717	1.9867	1.9156	.96397	1.9456	.04708	51.513
SDev	.00319	.0040	.0606	.02666	.0175	.00022	.205
%RSD	6.7581	.20071	3.1611	2.7656	.89915	.46222	.39739

#1	.05159	1.9854	1.9840	.93851	1.9194	.04677	51.759
#2	.04569	1.9834	1.8371	.94372	1.9551	.04727	51.468
#3	.04718	1.9925	1.9281	.98299	1.9530	.04713	51.558
#4	.04421	1.9856	1.9131	.99065	1.9549	.04715	51.266

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	.04725	.47413	.18869	.23987	1.0440	51.554	.99972
SDev	.00394	.00438	.00143	.00085	.0036	.534	.01526
%RSD	8.3453	.92468	.75882	.35358	.34646	1.0351	1.5262

#1	.04638	.47739	.18841	.23921	1.0387	50.776	.97719
#2	.04223	.47575	.19069	.24097	1.0467	51.984	1.0039
#3	.04890	.46766	.18841	.23920	1.0445	51.770	1.0074
#4	.05149	.47573	.18727	.24009	1.0460	51.686	1.0104

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
Avg	52.220	.47803	.96233	52.398	.46470	.48093	.49545
SDev	.318	.00110	.01402	.674	.01226	.03096	.04743
%RSD	.60865	.22909	1.4570	1.2862	2.6372	6.4378	9.5725

#1	51.744	.47857	.96233	51.399	.46125	.47644	.53541
#2	52.404	.47858	.97531	52.676	.48095	.47639	.53544
#3	52.373	.47857	.96882	52.636	.46511	.44807	.44213
#4	52.356	.47638	.94286	52.879	.45149	.52283	.46883

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	2.0035	9.8098	1.8691	.95549	.95633	1.9222	.48597
SDev	.0932	.0497	.0419	.00729	.00422	.1520	.00201
%RSD	4.6528	.50663	2.2402	.76324	.44171	7.9054	.41442

#1	1.8888	9.7657	1.8954	.94461	.95014	1.7550	.48503
#2	1.9713	9.7718	1.9118	.95846	.95850	1.8345	.48537

#3	2.0538	9.8690	1.8209	.95874	.95946	2.0736	.48895
#4	2.1002	9.8325	1.8485	.96015	.95721	2.0257	.48454
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	.48370						
SDev	.00095						
%RSD	.19601						
#1	.48381						
#2	.48235						
#3	.48451						
#4	.48413						
Errors	LC Pass						
High	.60000						
Low	.40000						

Method: QUANMET Sample Name: DXPK3 **679 829** Operator: WTR
 Run Time: 03/23/01 15:27:25
 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	.00003	1.7393	.00684	.05861	.10005	.00008	19.371
SDev	.00075	.0165	.02969	.01909	.00132	.00006	.089
%RSD	2277.7	.94634	434.26	32.568	1.3192	79.925	.45698
#1	-.00109	1.7545	.01816	.06482	.10163	.00012	19.278
#2	.00041	1.7525	-.01734	.04227	.10063	-.00002	19.316
#3	.00041	1.7233	.04367	.08287	.09906	.00011	19.464
#4	.00041	1.7270	-.01714	.04450	.09887	.00011	19.426
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	-.00074	-.00133	.04964	.02427	1.7117	3.5351	.00370
SDev	.00091	.00276	.00143	.00309	.0020	.1851	.00159
%RSD	122.87	207.70	2.8763	12.750	.11620	5.2359	43.017
#1	-.00071	-.00092	.04993	.02582	1.7129	3.8022	.00609
#2	-.00200	-.00415	.04766	.02581	1.7136	3.4306	.00285
#3	.00017	-.00254	.05106	.01963	1.7093	3.3934	.00294
#4	-.00044	.00231	.04993	.02582	1.7108	3.5142	.00294
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	4.8909	.05498	.00022	S-.13790	.00746	-.01096	.01959
SDev	.0400	.00089	.00325	.00000	.00410	.01925	.00006
%RSD	.81788	1.6208	1448.0	.00000	54.938	175.64	.30437
#1	4.9502	.05498	-.00464	S-.13790	.00780	-.03190	.01958
#2	4.8796	.05608	.00185	S-.13790	.00488	-.01338	.01956
#3	4.8683	.05498	.00185	S-.13790	.00405	-.01331	.01955
#4	4.8654	.05389	.00185	S-.13790	.01311	.01476	.01968
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	.01827	9.2700	.00633	.09764	.03349	.05346	.00418
SDev	.05669	.0988	.01425	.00081	.00018	.06694	.00196
%RSD	310.34	1.0663	225.12	.82638	.55381	125.23	46.886
#1	-.00106	9.3414	.02415	.09883	.03365	.09328	.00124
#2	.08658	9.2746	.01044	.09728	.03365	-.01824	.00515

679 830

#3	-.04747	9.1288	-.00053	.09705	.03333	.01367	.00516
#4	.03502	9.3353	-.00875	.09742	.03333	.12512	.00516
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 .09397
SDev .00173
%RSD 1.8469

#1 .09529
#2 .09532
#3 .09166
#4 .09360

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXPK3P5 Operator: WTR
 Run Time: 03/23/01 15:30:34
 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
Avge	-.00138	.36244	-.01856	.02953	.02282	.00002	4.1303
SDev	.00122	.02457	.03594	.01941	.00067	.00006	.0110
%RSD	88.041	6.7805	193.66	65.750	2.9366	232.65	.26704
#1	.00011	.33189	-.06013	.04293	.02189	.00011	4.1249
#2	-.00139	.36282	-.02992	.03911	.02282	.00000	4.1269
#3	-.00287	.36299	-.00966	.03528	.02309	.00000	4.1466
#4	-.00137	.39207	.02548	.00079	.02347	-.00001	4.1226
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	-.00143	-.00244	.01021	.00711	.37403	.32053	.00079
SDev	.00258	.00187	.00207	.00191	.00875	.23993	.00064
%RSD	180.12	76.456	20.271	26.858	2.3399	74.854	81.676
#1	-.00389	-.00082	.01248	.00888	.36482	.67125	.00137
#2	.00217	-.00407	.00908	.00799	.37132	.21601	.00089
#3	-.00164	-.00083	.01135	.00711	.37421	.13239	-.00013
#4	-.00237	-.00406	.00794	.00446	.38576	.26246	.00101
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	1.1062	.01291	.00005	S3296.8	.00172	.01593	.03660
SDev	.0280	.00054	.00621	.5	.00441	.03312	.04274
%RSD	2.5302	4.2105	12690.	.01474	257.18	207.91	116.79
#1	1.0759	.01318	-.00482	S3297.3	-.00014	.05321	.01989
#2	1.1041	.01319	.00816	S3296.9	-.00352	.03445	.00649
#3	1.1013	.01319	-.00482	S3296.9	.00637	-.01198	.02001
#4	1.1436	.01210	.00167	S3296.1	.00415	-.01197	.10001
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	.00375	1.8616	.00017	.02191	.00731	-.02164	.00221
SDev	.02643	.0303	.01821	.00060	.00026	.04008	.00252
%RSD	704.25	1.6302	10735.	2.7622	3.5890	185.21	114.11
#1	-.00014	1.8161	.02683	.02139	.00699	.01830	.00491
#2	-.00528	1.8768	-.00613	.02139	.00763	-.07733	.00023

#3	-.02073	1.8768	-.01429	.02233	.00731	-.01367	-.00010
#4	.04117	1.8768	-.00573	.02252	.00731	-.01386	.00381

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 .02010
SDev .00070
%RSD 3.4866

#1 .02096
#2 .01996
#3 .02023
#4 .01926

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXPK3S

Operator: WTR

Run Time: 03/23/01 15:33:44

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	.04393	3.2953	1.7384	.83447	1.5534	.03555	57.761
SDev	.00210	.0330	.0500	.00956	.0169	.00031	.467
%RSD	4.7858	1.0021	2.8742	1.1461	1.0898	.87087	.80877
#1	.04394	3.3068	1.7408	.83993	1.5564	.03555	57.172
#2	.04244	3.3324	1.7153	.84515	1.5742	.03594	57.668
#3	.04244	3.2539	1.6906	.82638	1.5334	.03518	57.921
#4	.04690	3.2883	1.8067	.82641	1.5493	.03554	58.284
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	.04177	.37621	.19408	.22486	2.0600	49.368	.81510
SDev	.00379	.00397	.00227	.00196	.0091	.717	.01746
%RSD	9.0704	1.0542	1.1704	.87105	.44265	1.4526	2.1421
#1	.03891	.37621	.19067	.22685	2.0540	49.884	.81876
#2	.04583	.37133	.19521	.22596	2.0671	50.070	.83786
#3	.03820	.37624	.19521	.22243	2.0504	48.611	.79778
#4	.04414	.38104	.19521	.22420	2.0685	48.908	.80599
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	42.986	.42336	.77911	S-.13790	.37821	.43726	.43919
SDev	.339	.00243	.00974	.00000	.01347	.04712	.05153
%RSD	.78791	.57270	1.2497	.00000	3.5607	10.777	11.732
#1	42.948	.42090	.77424	S-.13790	.36881	.49082	.46927
#2	43.374	.42418	.77424	S-.13790	.38292	.42533	.36248
#3	42.555	.42200	.77424	S-.13790	.36603	.37913	.45588
#4	43.066	.42637	.79372	S-.13790	.39510	.45374	.46915
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	1.6910	17.102	1.5660	.81017	.77860	1.5931	.39286
SDev	.0414	.108	.0581	.00760	.00557	.1520	.00303
%RSD	2.4505	.63338	3.7122	.93781	.71541	9.5438	.77253
#1	1.7116	17.071	1.5257	.81040	.77700	1.6927	.39523
#2	1.7065	17.199	1.5828	.81935	.78503	1.5652	.39023

#3	1.7167	16.962	1.5147	.80075	.77186	1.7247	.39023
#4	1.6291	17.175	1.6409	.81017	.78053	1.3898	.39573

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 .48863
SDev .00479
%RSD .98109

#1 .48976
#2 .49478
#3 .48369
#4 .48630

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXPK3D

Operator: WTR

Run Time: 03/23/01 15:36:53

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	.04435	3.3003	1.7128	.86833	1.6011	.03669	61.073
SDev	.00141	.0209	.0398	.00663	.0119	.00011	.199
%RSD	3.1733	.63252	2.3232	.76324	.74055	.30842	.32573
#1	.04252	3.3263	1.7455	.87618	1.6148	.03677	60.961
#2	.04397	3.3007	1.6952	.86556	1.6042	.03666	60.926
#3	.04544	3.2752	1.6650	.86081	1.5862	.03654	61.043
#4	.04547	3.2990	1.7457	.87077	1.5993	.03678	61.363
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	.04870	.39103	.20288	.23459	2.0305	51.291	.83542
SDev	.00446	.00275	.00194	.00151	.0104	.709	.01062
%RSD	9.1633	.70360	.95419	.64419	.51108	1.3821	1.2709
#1	.04309	.39225	.20543	.23658	2.0354	52.234	.84766
#2	.04714	.39063	.20203	.23481	2.0267	50.934	.84051
#3	.05256	.38741	.20089	.23304	2.0180	50.599	.82425
#4	.05201	.39385	.20316	.23393	2.0419	51.398	.82927
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	44.921	.43946	.81480	S-.13790	.39687	.44004	.44562
SDev	.256	.00155	.00817	.00000	.00865	.00533	.00656
%RSD	.57009	.35171	1.0022	.00000	2.1801	1.2113	1.4717
#1	45.142	.44056	.81318	S-.13790	.39569	.44471	.44233
#2	44.958	.44056	.82616	S-.13790	.39861	.43537	.44233
#3	44.554	.43728	.81318	S-.13790	.38610	.44460	.44236
#4	45.031	.43947	.80669	S-.13790	.40707	.43548	.45545
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	1.7669	17.658	1.6503	.83745	.81273	1.6771	.40378
SDev	.0534	.093	.1184	.00566	.00309	.0873	.00276
%RSD	3.0247	.52444	7.1774	.67536	.37963	5.2039	.68225
#1	1.7682	17.770	1.6214	.84310	.81490	1.7726	.40625
#2	1.8043	17.642	1.5913	.83933	.81394	1.7249	.40156

#3	1.8043	17.545	1.5639	.82967	.80816	1.6295	.40123
#4	1.6909	17.673	1.8244	.83768	.81394	1.5813	.40608

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 .50934
SDev .00193
%RSD .37894

#1 .51171
#2 .50730
#3 .50835
#4 .50999

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXPK3/25 NA

Operator: WTR

Run Time: 03/23/01 15:40:02

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	-.00109	.04198	.00210	.00876	.00752	.00006	.93001
SDev	.00142	.00653	.02962	.01726	.00052	.00008	.02994
%RSD	130.75	15.555	1409.0	196.91	6.9839	130.00	3.2192
#1	.00004	.03798	-.00679	.00012	.00733	-.00001	.91057
#2	-.00146	.04326	-.03207	.03465	.00687	.00000	.89979
#3	.00001	.05064	.03877	.00014	.00779	.00013	.94576
#4	-.00294	.03603	.00850	.00014	.00807	.00013	.96393
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	-.00079	-.00162	.00170	.00111	.06463	-.23923	.00125
SDev	.00261	.00280	.00236	.00435	.00224	.33455	.00053
%RSD	331.60	172.41	138.75	392.12	3.4607	139.84	42.263
#1	-.00166	.00242	.00226	.00531	.06445	-.22994	.00192
#2	.00065	-.00243	-.00113	-.00265	.06156	-.66660	.00101
#3	-.00402	-.00404	.00454	.00442	.06589	.15097	.00140
#4	.00189	-.00244	.00114	-.00265	.06662	-.21136	.00068
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	.26050	.00411	.00001	188.20	.00125	-.00005	.03003
SDev	.03071	.00055	.00817	2.00	.00231	.02323	.01681
%RSD	11.788	13.254	96508.	1.0632	185.29	48826.	55.999
#1	.23438	.00438	-.01135	185.61	.00458	-.01156	.03343
#2	.23438	.00329	.00812	189.02	-.00007	-.01175	.00663
#3	.27956	.00438	.00163	187.85	.00099	.03479	.03334
#4	.29368	.00438	.00163	190.33	-.00051	-.01168	.04671
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	.05691	.39480	-.01084	.00560	.00281	-.03283	.00125
SDev	.04342	.00496	.02339	.00026	.00045	.07414	.00231
%RSD	76.294	1.2561	215.72	4.5792	16.162	225.82	184.33
#1	.02469	.39484	.02138	.00547	.00281	.03880	.00472
#2	.01437	.38872	-.00888	.00547	.00217	-.02481	.00020

#3	.09687	.40086	-.02523	.00547	.00313	-.00893	.00005
#4	.09172	.39479	-.03065	.00598	.00313	-.13640	.00004
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 .00779
SDev .00163
%RSD 20.940

#1 .00813
#2 .00915
#3 .00543
#4 .00845

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXPK3P125 Operator: WTR
 Run Time: 03/23/01 15:43:11
 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	-.00111	-.02104	.00903	.00001	.00201	.00000	.18573
SDev	.00074	.00541	.02984	.00000	.00028	.00010	.00613
%RSD	66.680	25.703	330.40	43.637	13.803	183e6	3.3012
#1	.00000	-.01876	-.03150	.00001	.00226	.00000	.19005
#2	-.00148	-.02232	.03943	.00001	.00161	-.00013	.17783
#3	-.00148	-.02787	.01921	.00001	.00207	.00013	.19108
#4	-.00147	-.01519	.00898	.00001	.00207	.00000	.18396
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	.00096	-.00364	-.00255	-.00265	.00072	-.46686	.00034
SDev	.00335	.00242	.00143	.00000	.00123	.22407	.00056
%RSD	350.21	66.619	55.958	.09103	170.37	47.996	167.01
#1	-.00198	-.00565	-.00227	-.00266	.00091	-.50866	.00101
#2	.00427	-.00243	-.00227	-.00265	.00018	-.66660	-.00013
#3	-.00187	-.00080	-.00454	-.00265	.00235	-.54583	-.00013
#4	.00340	-.00566	-.00113	-.00266	-.00054	-.14633	.00059
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	.03389	.00109	.00162	41.337	.00161	.02325	.04672
SDev	.00399	.00000	.00530	.546	.00517	.02324	.04495
%RSD	11.785	.14267	326.58	1.3217	321.18	99.974	96.221
#1	.02824	.00109	.00162	42.049	.00745	.03493	.11347
#2	.03389	.00109	-.00487	41.052	.00436	.03490	.03343
#3	.03671	.00109	.00162	41.453	-.00351	-.01162	.01997
#4	.03671	.00109	.00811	40.795	-.00187	.03479	.02000
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	.04640	.07288	-.00940	.00097	.00056	-.03184	.00004
SDev	.02642	.02849	.02380	.00005	.00026	.03318	.00014
%RSD	56.930	39.087	253.16	5.0000	46.657	104.24	378.84
#1	.07089	.08503	-.01667	.00099	.00088	-.03979	.00004
#2	.05026	.08503	.00219	.00099	.00024	.00799	-.00013

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#3	.05543	.03037	.01585	.00090	.00056	-.07171	.00003
#4	.00902	.09111	-.03899	.00099	.00056	-.02383	.00020

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	.00374
SDev	.00083
%RSD	22.198

#1	.00405
#2	.00306
#3	.00478
#4	.00308

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-1 0087-121-12 Operator: WTR
 Run Time: 03/23/01 15:46:21
 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	.98369	49.580	4.9702	4.9560	4.9303	4.8591	49.395
SDev	.00389	.113	.0559	.0186	.0272	.0077	.230
%RSD	.39552	.22778	1.1251	.37564	.55078	.15936	.46599
#1	.98554	49.476	4.9318	4.9628	4.9098	4.8506	49.516
#2	.97813	49.680	4.9353	4.9665	4.9607	4.8680	49.065
#3	.98699	49.489	4.9621	4.9282	4.9051	4.8552	49.581
#4	.98410	49.675	5.0516	4.9667	4.9455	4.8627	49.416
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	4.9304	4.8404	4.8393	4.9483	50.593	49.182	5.0769
SDev	.0208	.0050	.0170	.0258	.041	.145	.0558
%RSD	.42108	.10338	.35143	.52056	.08081	.29487	1.1000
#1	4.9612	4.8375	4.8470	4.9260	50.602	49.048	5.0264
#2	4.9161	4.8360	4.8152	4.9799	50.536	49.085	5.1478
#3	4.9208	4.8408	4.8408	4.9287	50.600	49.234	5.0386
#4	4.9232	4.8472	4.8544	4.9587	50.634	49.364	5.0947
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	49.742	4.8529	4.9052	50.096	4.8388	4.8918	4.9998
SDev	.148	.0086	.0112	.448	.0177	.0383	.0514
%RSD	.29746	.17765	.22910	.89465	.36591	.78384	1.0279
#1	49.696	4.8564	4.8955	49.665	4.8601	4.9336	4.9233
#2	49.832	4.8400	4.9149	50.525	4.8244	4.8591	5.0296
#3	49.555	4.8586	4.9149	49.755	4.8241	4.9152	5.0161
#4	49.886	4.8564	4.8955	50.438	4.8467	4.8594	5.0301
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	4.9431	4.9941	4.8731	4.9117	4.8892	9.7308	4.8798
SDev	.0918	.0303	.0893	.0204	.0093	.0920	.0049
%RSD	1.8567	.60744	1.8334	.41466	.19111	.94508	.10068
#1	4.8903	4.9790	4.8632	4.8951	4.8789	9.6551	4.8812
#2	4.8747	4.9789	4.9513	4.9344	4.8959	9.8631	4.8766

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#3	4.9316	5.0396	4.9266	4.8939	4.8837	9.7188	4.8754
#4	5.0760	4.9790	4.7512	4.9233	4.8982	9.6863	4.8862

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	4.9004
SDev	.0157
%RSD	.31984

#1	4.9182
#2	4.8861
#3	4.8883
#4	4.9089

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB1

Operator: WTR

Run Time: 03/23/01 15:51:53

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	-.00293	-.05670	-.01857	-.00005	.00027	.00015	-.04401
SDev	.00168	.00891	.02880	.00001	.00055	.00015	.00769
%RSD	57.234	15.723	155.05	19.494	202.40	99.459	17.466

#1	-.00437	-.06822	-.03125	-.00006	.00104	.00035	-.03260
#2	-.00441	-.05890	-.05149	-.00005	.00004	.00011	-.04715
#3	-.00148	-.04803	.01434	-.00005	.00023	.00000	-.04938
#4	-.00148	-.05163	-.00589	-.00003	-.00023	.00013	-.04691

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	-.00094	.00000	-.00000	.00044	-.02311	-.03716	-.00013
SDev	.00277	.00466	.00578	.00385	.00160	1.33010	.00106
%RSD	293.68	123210.	528140.	877.09	6.9280	3579.1	829.01

#1	-.00255	.00566	.00794	.00177	-.02148	1.9162	.00134
#2	-.00397	-.00079	-.00000	.00530	-.02509	-.37859	-.00118
#3	.00185	.00080	-.00227	-.00265	-.02220	-1.0382	-.00034
#4	.00090	-.00565	-.00567	-.00266	-.02365	-.64802	-.00034

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	-.02541	-.00028	.00324	.01389	-.00172	.00705	.01332
SDev	.04157	.00054	.00621	.00783	.00656	.03146	.00768
%RSD	163.55	196.76	191.67	56.375	381.72	446.44	57.629

#1	.03389	-.00109	.00811	.00477	.00465	.05376	.00668
#2	-.02824	-.00001	-.00487	.01016	-.00943	-.01160	.00666
#3	-.05930	-.00000	.00811	.01887	-.00479	-.00224	.01990
#4	-.04800	-.00000	.00162	.02177	.00270	-.01173	.02004

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	.03344	-.01211	-.00131	-.00018	-.00088	-.01560	.00383
SDev	.02608	.03014	.01623	.00021	.00041	.06030	.00482
%RSD	77.996	248.97	1234.4	117.65	46.945	386.46	125.68

#1	.06566	-.01204	-.01162	.00014	-.00137	.02410	.01023
#2	.00379	-.05461	-.01711	-.00028	-.00104	-.00761	.00488

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#3	.02442	.01215	.01859	-.00028	-.00040	-.10322	.00020
#4	.03988	.00607	.00488	-.00028	-.00072	.02431	.00003

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	.00035
SDev	.00177
%RSD	511.32

#1	.00199
#2	.00140
#3	-.00199
#4	-.00002

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DXPK3S/25 NA Operator: WTR
 Run Time: 03/23/01 15:55:02
 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	.00198	.11991	.02898	.06151	.08265	.00193	2.5846
SDev	.00142	.00378	.01117	.00001	.00080	.00005	.0081
%RSD	71.870	3.1545	38.544	.01221	.96962	2.7871	.31165
#1	.00311	.11943	.03778	.06150	.08200	.00195	2.5789
#2	.00158	.11951	.01260	.06151	.08292	.00185	2.5798
#3	.00308	.12493	.03273	.06151	.08200	.00196	2.5963
#4	.00013	.11575	.03280	.06150	.08366	.00196	2.5834
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	.00116	.01603	.00823	.01063	.08388	2.1624	.04124
SDev	.00224	.00385	.00194	.00072	.00137	.3374	.00046
%RSD	193.32	24.015	23.534	6.8126	1.6287	15.604	1.1056
#1	-.00085	.01845	.01021	.01152	.08479	2.3621	.04086
#2	.00406	.01198	.00568	.00974	.08406	1.7490	.04188
#3	.00177	.01360	.00794	.01063	.08190	2.0370	.04098
#4	-.00035	.02007	.00908	.01063	.08478	2.5015	.04125
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	2.1673	.02104	.03571	193.85	.02243	.04698	.04322
SDev	.0228	.00055	.00325	2.34	.00585	.02681	.02956
%RSD	1.0505	2.5900	9.0883	1.2072	26.074	57.060	68.401
#1	2.1659	.02077	.03409	192.04	.03042	.05402	.03335
#2	2.1489	.02077	.03409	194.47	.01838	.06322	.08654
#3	2.1546	.02186	.03409	192.00	.01776	.00731	.01984
#4	2.1998	.02077	.04058	196.91	.02315	.06338	.03315
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	.12012	.71237	.06585	.04240	.03847	.06623	.02062
SDev	.04990	.00300	.01943	.00024	.00037	.07282	.00360
%RSD	41.538	.42148	29.502	.57028	.96426	109.96	17.471
#1	.18972	.71089	.04593	.04240	.03879	.10200	.02465
#2	.10724	.71687	.06260	.04250	.03815	-.04124	.01588

#3	.07114	.71085	.06232	.04207	.03879	.11806	.02089
#4	.11239	.71085	.09254	.04264	.03815	.08609	.02106
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 .02344
SDev .00113
%RSD 4.8287

#1 .02265
#2 .02266
#3 .02338
#4 .02506

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXPK3D/25 NA Operator: WTR
 Run Time: 03/23/01 15:58:12
 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	.00013	.09622	.04818	.06052	.07907	.00183	2.5831
SDev	.00209	.00956	.05634	.00192	.00022	.00010	.0195
%RSD	1662.7	9.9348	116.93	3.1682	.27573	5.3704	.75608
#1	.00161	.10122	.10383	.05765	.07905	.00183	2.5889
#2	-.00282	.08302	-.02769	.06148	.07924	.00183	2.5561
#3	.00161	.10487	.04303	.06149	.07878	.00196	2.6025
#4	.00011	.09578	.07356	.06148	.07924	.00172	2.5851
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	.00076	.01765	.00964	.00975	.07413	1.8906	.03865
SDev	.00178	.00161	.00217	.00161	.00285	.4335	.00094
%RSD	234.79	9.1253	22.538	16.569	3.8448	22.931	2.4367
#1	.00281	.01845	.01135	.01152	.07539	2.3900	.03980
#2	-.00147	.01523	.00681	.00798	.07178	1.4424	.03890
#3	.00126	.01845	.01135	.01063	.07756	2.1020	.03758
#4	.00043	.01845	.00908	.00886	.07179	1.6282	.03830
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	2.1115	.02076	.03246	186.53	.02273	.00982	.04990
SDev	.0150	.00000	.00325	1.82	.00735	.00897	.05593
%RSD	.71081	.00639	9.9976	.97753	32.353	91.332	112.09
#1	2.1179	.02077	.03408	185.29	.02266	.01695	.12656
#2	2.1037	.02076	.02759	188.85	.01236	.00734	-.00687
#3	2.1292	.02077	.03408	184.88	.02817	-.00182	.03326
#4	2.0953	.02076	.03408	187.09	.02773	.01682	.04665
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	.09303	.70780	.06931	.04051	.03718	.13407	.01992
SDev	.05128	.00349	.02073	.00022	.00026	.06764	.00185
%RSD	55.123	.49384	29.910	.53307	.70540	50.448	9.2976
#1	.15361	.70478	.08470	.04033	.03718	.08625	.02090
#2	.03502	.70478	.08415	.04070	.03686	.22971	.02073

#3	.11237	.71085	.06787	.04033	.03718	.08621	.02090
#4	.07111	.71081	.04050	.04070	.03750	.13412	.01714

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 .02097
SDev .00136
%RSD 6.5039

#1	.02266
#2	.01932
#3	.02096
#4	.02095

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXCMHB

Operator: WTR

Run Time: 03/23/01 16:01:22

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	-.00070	-.03741	-.00112	.00029	.00018	.00003	-.02902
SDev	.00085	.00406	.03382	.00001	.00030	.00006	.00358
%RSD	120.81	10.855	3012.1	2.7067	166.02	200.00	12.349

#1	-.00145	-.03328	.04443	.00029	-.00023	.00000	-.03316
#2	-.00144	-.03869	-.02138	.00028	.00050	.00012	-.02503
#3	.00003	-.03518	.00393	.00029	.00023	.00000	-.02730
#4	.00003	-.04249	-.03147	.00030	.00023	.00000	-.03060

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	.00185	-.00323	-.00114	-.00109	H.14170	-.26014	-.00023
SDev	.00191	.00093	.00093	.00085	.00354	.27710	.00084
%RSD	103.61	28.912	81.462	77.452	2.4970	106.52	374.50

#1	.00117	-.00404	-.00227	-.00087	H.13881	-.49937	-.00043
#2	.00211	-.00243	-.00000	.00001	H.13881	.13239	-.00085
#3	-.00022	-.00242	-.00113	-.00175	H.14314	-.27640	-.00064
#4	.00433	-.00405	-.00113	-.00176	H.14603	-.39718	.00101

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	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	-.04236	.00167	-.00323	.18725	.00904	.00453	.00009
SDev	.00799	.00109	.00621	.00256	.00602	.02211	.06757
%RSD	18.856	65.279	192.60	1.3653	66.511	487.65	72703.

#1	-.04800	.00113	-.00485	.18725	.01271	-.01188	-.05986
#2	-.03106	.00113	-.01134	.18435	.00175	.03495	H.08681
#3	-.04236	.00113	.00164	.18684	.00665	-.01181	-.04666
#4	-.04800	.00331	.00164	.19057	.01506	.00687	.02008

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	.00689	-.06073	.00550	-.00028	-.00016	-.03003	.00023
SDev	.02711	.00495	.01751	.00000	.00031	.06423	.00050
%RSD	393.43	8.1583	318.38	.00000	191.49	213.86	217.01

#1	.03008	-.06074	-.00914	-.00028	-.00040	.00586	-.00013
#2	.03008	-.06680	-.00853	-.00028	-.00040	-.05788	.00096

#3	-.01115	-.06074	.01285	-.00028	-.00008	.03764	.00004
#4	-.02145	-.05466	.02683	-.00028	.00024	-.10576	.00004
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 .00183
SDev .00080
%RSD 43.622

#1 .00132
#2 .00166
#3 .00135
#4 .00301

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: DXCMHC Operator: WTR
 Run Time: 03/23/01 16:04:32
 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	.04493	1.9152	1.9567	.96516	1.9959	.04785	47.257
SDev	.00149	.0093	.0388	.02384	.0104	.00016	.174
%RSD	3.3169	.48469	1.9840	2.4702	.51980	.33745	.36888
#1	.04418	1.9087	1.9796	.97987	1.9859	.04767	47.141
#2	.04716	1.9289	1.9996	.94852	2.0005	.04790	47.236
#3	.04418	1.9125	1.9238	.94152	1.9890	.04779	47.510
#4	.04418	1.9106	1.9239	.99071	2.0083	.04804	47.141
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	.04924	.46399	.18501	.24229	1.0615	49.447	1.0400
SDev	.00411	.00275	.00207	.00089	.0047	.187	.0071
%RSD	8.3566	.59298	1.1185	.36590	.44667	.37890	.67879
#1	.04788	.46118	.18274	.24184	1.0554	49.271	1.0341
#2	.05144	.46761	.18614	.24362	1.0669	49.698	1.0431
#3	.04414	.46441	.18728	.24185	1.0619	49.345	1.0343
#4	.05350	.46276	.18387	.24185	1.0619	49.475	1.0485
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	49.807	.47530	.95422	51.155	.46085	.47604	.50879
SDev	.164	.00154	.00621	.388	.00960	.05831	.04612
%RSD	.32995	.32459	.65116	.75807	2.0827	12.248	9.0649
#1	49.617	.47530	.96233	50.876	.47141	.52244	.46889
#2	49.891	.47421	.94935	51.275	.46553	.45758	.54886
#3	49.733	.47748	.94935	50.818	.45689	.52254	.46881
#4	49.987	.47421	.95584	51.650	.44957	.40159	.54861
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	1.9392	9.7718	1.8541	.97566	.96468	1.8742	.48107
SDev	.0387	.0457	.0392	.00382	.00263	.1451	.00243
%RSD	1.9932	.46803	2.1148	.39173	.27241	7.7426	.50412
#1	1.9765	9.7049	1.8210	.97146	.96107	1.9301	.48002
#2	1.8889	9.8082	1.8762	.97721	.96588	1.9776	.48470

679 852

#3	1.9611	9.7839	1.8210	.97381	.96460	1.9300	.47970
#4	1.9301	9.7900	1.8981	.98017	.96717	1.6592	.47986
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	.47658						
SDev	.00258						
%RSD	.54193						
#1	.47457						
#2	.47769						
#3	.47970						
#4	.47434						
Errors	LC Pass						
High	.60000						
Low	.40000						

Method: QUANMET Sample Name: DW68N

Operator: WTR

Run Time: 03/23/01 16:07:42

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	-.00233	.08670	-.00347	.12755	.03197	.00002	123.48
SDev	.00121	.00983	.03791	.00232	.00028	.00006	.72
%RSD	52.168	11.332	1093.5	1.8207	.86636	362.14	.57996
#1	-.00234	.09815	.00535	.12407	.03157	-.00002	123.50
#2	-.00381	.08537	.00037	.12866	.03203	-.00001	122.61
#3	-.00232	.07437	-.05529	.12869	.03222	-.00002	123.46
#4	-.00084	.08892	.03570	.12878	.03203	.00011	124.36
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	-.00029	-.00122	-.00227	.00178	16.406	5.0077	.00032
SDev	.00326	.00154	.00245	.00102	.043	.2568	.00099
%RSD	1141.7	125.96	107.90	57.318	.25995	5.1290	306.36
#1	-.00211	-.00081	-.00227	.00266	16.358	5.0657	-.00004
#2	-.00147	-.00243	-.00454	.00090	16.394	4.6384	-.00034
#3	-.00214	-.00243	-.00341	.00090	16.412	5.0936	-.00013
#4	.00459	.00078	.00113	.00268	16.461	5.2330	.00180
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	25.105	.96864	-.00110	136.69	.00416	-.00337	.01681
SDev	.115	.00341	.00325	1.24	.00925	.02219	.01677
%RSD	.45796	.35155	296.23	.91071	222.12	658.80	99.771
#1	24.948	.96481	-.00273	135.22	.01356	.02924	.02024
#2	25.225	.96700	-.00272	138.18	-.00366	-.01734	.03339
#3	25.126	.97028	-.00272	137.05	-.00390	-.01740	-.00655
#4	25.121	.97247	.00378	136.31	.01064	-.00798	.02015
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	.01033	1.9239	-.02265	.63970	-.00570	-.01755	.00466
SDev	.02362	.0240	.01803	.00399	.00041	.10284	.00066
%RSD	228.74	1.2466	79.607	.62388	7.2732	585.93	14.189
#1	.02435	1.9315	-.02333	.63445	-.00554	-.16021	.00493
#2	-.01678	1.8890	-.00133	.64401	-.00618	.07823	.00367

#3	-.00126	1.9315	-.04536	.64095	-.00586	-.01763	.00493
#4	.03498	1.9436	-.02057	.63940	-.00522	.02940	.00510
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 .00611
SDev .00130
%RSD 21.235

#1 .00516
#2 .00621
#3 .00791
#4 .00516

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DW68T

Operator: WTR

Run Time: 03/23/01 16:10:51

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	-.00115	.17372	-.00554	.14130	.02102	.00005	108.98
SDev	.00209	.00842	.04437	.00079	.00024	.00007	.99
%RSD	182.23	4.8444	801.54	.55790	1.1459	151.52	.90851

#1	-.00411	.17095	.00590	.14089	.02097	-.00001	107.70
#2	.00033	.16379	-.07003	.14091	.02124	.00011	108.82
#3	.00033	.18364	.01083	.14091	.02116	-.00002	110.04
#4	-.00115	.17650	.03116	.14248	.02070	.00011	109.37

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	.00351	-.00325	-.00170	.00744	1.3931	11.293	.00472
SDev	.00218	.00094	.00285	.00370	.0053	.297	.00094
%RSD	62.313	28.884	167.81	49.804	.37949	2.6278	19.904

#1	.00565	-.00406	-.00567	.00899	1.3857	10.919	.00396
#2	.00512	-.00406	-.00114	.00899	1.3973	11.476	.00510
#3	.00147	-.00243	-.00113	.00192	1.3966	11.198	.00588
#4	.00178	-.00243	.00113	.00987	1.3929	11.578	.00396

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	19.503	.08987	.01154	90.156	.00270	.00633	.02001
SDev	.043	.00155	.00838	.579	.00311	.03135	.00010
%RSD	.21943	1.7202	72.604	.64217	114.97	495.37	.47921

#1	19.456	.08877	.01478	90.723	.00585	-.01231	.02004
#2	19.558	.08877	.00181	90.465	.00158	-.01231	.02012
#3	19.487	.09205	.02128	89.398	-.00112	.05289	.01989
#4	19.510	.08987	.00830	90.038	.00450	-.00296	.02001

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	.01340	6.8056	-.01276	.67840	-.00353	-.02904	.00498
SDev	.05323	.0469	.02130	.00236	.00048	.10890	.00061
%RSD	397.21	.68946	166.87	.34833	13.636	375.04	12.282

#1	.07524	6.7358	-.00591	.67958	-.00426	.08260	.00411
#2	-.04845	6.8330	-.04429	.68052	-.00329	-.17248	.00505

#3	-.00721	6.8208	.00232	.67510	-.00329	-.04502	.00554
#4	.03402	6.8330	-.00317	.67840	-.00329	.01875	.00522
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 .02334
SDev .00070
%RSD 2.9856

#1 .02255
#2 .02327
#3 .02331
#4 .02425

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DW68X

Operator: WTR

Run Time: 03/23/01 16:14:01

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	-.00124	16.854	.07058	.30978	.01210	.00226	125.32
SDev	.00142	.044	.03121	.00843	.00023	.00001	.89
%RSD	114.55	.26123	44.217	2.7208	1.9048	.34217	.71006
#1	-.00100	16.853	.06233	.30481	.01221	.00227	124.22
#2	-.00231	16.915	.11677	.30067	.01175	.00226	125.01
#3	-.00231	16.831	.05164	.31506	.01221	.00226	125.84
#4	.00068	16.815	.05157	.31859	.01221	.00226	126.21
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	-.00096	.10897	.06184	.06210	114.92	4.0995	.00748
SDev	.00198	.00131	.00236	.00072	.35	.2407	.00081
%RSD	205.72	1.2068	3.8197	1.1617	.30326	5.8720	10.803
#1	-.00004	.11058	.05900	.06205	114.41	4.0345	.00672
#2	-.00149	.10897	.06240	.06123	115.04	4.1924	.00702
#3	.00113	.10896	.06468	.06299	115.02	4.3689	.00762
#4	-.00347	.10736	.06127	.06213	115.20	3.8022	.00856
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	67.704	2.0736	-.00280	S3300.7	.29077	.01599	.00274
SDev	.170	.0077	.00527	.1	.00301	.00017	.04004
%RSD	.25087	.37230	187.90	.00268	1.0360	1.0555	1461.6
#1	67.611	2.0634	.00362	S3300.6	.29120	.01624	.02275
#2	67.958	2.0723	-.00928	S3300.8	.29480	.01594	.02283
#3	67.611	2.0777	-.00279	S3300.7	.28915	.01588	-.05731
#4	67.636	2.0810	-.00277	S3300.6	.28791	.01591	.02270
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	-.10020	12.085	-.05089	.69455	.00859	.12072	.00381
SDev	.06596	.015	.01067	.00161	.00045	.10618	.00240
%RSD	65.835	.12587	20.970	.23196	5.2868	87.955	62.927
#1	-.10566	12.062	-.06115	.69498	.00827	.12855	.00022
#2	-.14491	12.093	-.05011	.69663	.00859	.23026	.00490

#3	-.14499	12.093	-.05592	.69310	.00827	-.02421	.00507
#4	-.00523	12.093	-.03638	.69347	.00924	.14828	.00506
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 .56359
SDev .00253
%RSD .44831

#1 .55994
#2 .56400
#3 .56570
#4 .56470

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DW680

Operator: WTR

Run Time: 03/23/01 16:17:10

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	-.00375	.91590	-.02973	.24109	.03005	.00069	133.55
SDev	.00242	.01163	.04420	.00576	.00022	.00007	.81
%RSD	64.721	1.2696	148.68	2.3904	.73289	9.9630	.60353
#1	-.00671	.90179	-.08782	.23628	.03000	.00063	132.76
#2	-.00375	.92546	-.03232	.23630	.03038	.00076	133.69
#3	-.00376	.91092	.01846	.24394	.02992	.00063	133.15
#4	-.00077	.92541	-.01723	.24783	.02992	.00074	134.62
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	-.00016	.00645	.00142	.01028	3.0606	.85242	-.00041
SDev	.00221	.00209	.00194	.00044	.0133	.33218	.00056
%RSD	1418.0	32.349	136.94	4.3248	.43390	38.969	135.99
#1	-.00246	.00565	.00113	.01006	3.0536	.43898	-.00004
#2	.00082	.00725	.00227	.01006	3.0644	1.2380	.00008
#3	.00244	.00402	-.00114	.01006	3.0471	.94068	-.00055
#4	-.00142	.00888	.00340	.01095	3.0774	.79203	-.00115
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	36.217	.10066	-.00771	H498.72	.01497	-.00138	.03692
SDev	.099	.00109	.00375	3.49	.00491	.02327	.01284
%RSD	.27430	1.0873	48.608	.70029	32.791	1683.3	34.778
#1	36.261	.10120	-.01096	H502.36	.01739	-.01304	.03362
#2	36.280	.10120	-.00447	H498.19	.00772	.03352	.02013
#3	36.258	.09901	-.01096	H500.18	.01634	-.01307	.04694
#4	36.069	.10121	-.00446	H494.14	.01844	-.01294	.04699
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	.01606	6.0464	-.00837	.81429	-.00691	.02085	.00106
SDev	.01486	.0116	.01499	.00320	.00066	.11426	.00256
%RSD	92.532	.19259	179.12	.39340	9.5886	548.03	241.70
#1	.00315	6.0433	-.00564	.81747	-.00779	-.10249	-.00027
#2	.02896	6.0555	-.00022	.81417	-.00618	-.02301	-.00011

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#3	.02891	6.0312	.00264	.81558	-.00683	.04099	-.00028
#4	.00323	6.0555	-.03026	.80993	-.00683	.16790	.00490

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	.04821
SDev	.00084
%RSD	1.7404

#1	.04947
#2	.04781
#3	.04778
#4	.04779

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW684

Operator: WTR

Run Time: 03/23/01 16:20:20

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	-.00354	.22141	-.03787	1.6436	.11998	-.00002	208.89
SDev	.00257	.01366	.03154	.0121	.00090	.00001	.65
%RSD	72.380	6.1715	83.276	.73476	.75341	51.998	.30878
#1	-.00130	.21484	-.00371	1.6285	.11888	-.00003	208.32
#2	-.00577	.20959	-.07953	1.6439	.12072	-.00001	208.40
#3	-.00577	.22041	-.02898	1.6581	.11961	-.00002	209.67
#4	-.00134	.24081	-.03927	1.6439	.12072	-.00001	209.17
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	-.00322	-.00449	-.00114	.00226	.48480	154.67	.02718
SDev	.00400	.00203	.00321	.00503	.00600	1.20	.00065
%RSD	124.49	45.155	281.21	222.56	1.2365	.77318	2.3890
#1	L-.00799	-.00407	.00340	.00977	.47668	153.12	.02694
#2	-.00484	-.00731	-.00341	-.00084	.48896	155.81	.02797
#3	-.00106	-.00248	-.00341	.00005	.48390	154.36	.02643
#4	.00103	-.00410	-.00115	.00005	.48968	155.38	.02736
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	489.86	.00421	-.00805	S-.13790	-.00094	.08806	.04023
SDev	2.00	.00055	.01243	.00000	.01783	.02977	.03191
%RSD	.40930	13.017	154.39	.00000	1895.6	33.809	79.331
#1	487.03	.00449	.00168	S-.13790	.00510	.06248	.03366
#2	490.83	.00449	-.01129	S-.13790	.00720	.11821	.02026
#3	489.94	.00449	.00169	S-.13790	-.02741	.06249	.01986
#4	491.63	.00339	-.02427	S-.13790	.01134	.10908	.08712
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	.00410	14.850	-.06828	2.9324	-.00899	.14386	.00636
SDev	.07594	.081	.04610	.0197	.00031	.20604	.00331
%RSD	1851.5	.54751	67.510	.67179	3.4194	143.23	51.998
#1	-.09259	14.747	L-.13480	2.9051	-.00907	-.11095	.01131
#2	.03118	14.899	-.04164	2.9475	-.00875	.31907	.00471

#3	.08787	14.826	-.03341	2.9311	-.00940	.30317	.00504
#4	-.01006	14.929	-.06329	2.9461	-.00875	.06414	.00439
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 .02410
SDev .00119
%RSD 4.9479

#1 .02534
#2 .02266
#3 .02476
#4 .02364

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DW685

Operator: WTR

Run Time: 03/23/01 16:23:29

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	-.00016	.40623	-.00044	.06301	.01261	.00002	101.36
SDev	.00327	.00636	.02441	.00001	.00028	.00016	.39
%RSD	2071.4	1.5669	5515.8	.01239	2.1966	985.47	.38477
#1	.00464	.41398	.03494	.06301	.01268	.00024	101.87
#2	-.00126	.40301	-.01054	.06301	.01221	-.00002	101.45
#3	-.00274	.40850	-.00553	.06301	.01268	-.00002	101.12
#4	-.00127	.39945	-.02064	.06299	.01287	-.00014	101.01
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	.00057	-.00163	.00170	.00473	.80939	2.8940	.00281
SDev	.00188	.00162	.00197	.00459	.00384	.8425	.00103
%RSD	329.70	99.421	115.67	97.028	.47427	29.111	36.857
#1	.00066	-.00082	.00454	.01158	.81246	4.1088	.00426
#2	.00205	-.00405	.00113	.00274	.80812	2.7059	.00201
#3	-.00211	-.00081	-.00000	.00274	.81245	2.5944	.00213
#4	.00168	-.00082	.00113	.00185	.80451	2.1670	.00285
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	2.1334	.00375	.00011	17.839	.00465	-.01220	.01341
SDev	.0167	.00055	.00325	.146	.00668	.05839	.01726
%RSD	.78307	14.562	3062.7	.81657	143.73	478.74	128.67
#1	2.1518	.00457	.00173	17.643	.01348	.06229	.00673
#2	2.1179	.00348	.00173	17.814	-.00209	-.05880	.02007
#3	2.1433	.00348	.00173	17.948	.00157	.00641	-.00663
#4	2.1207	.00348	-.00476	17.952	.00563	-.05868	.03349
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	.01157	2.4751	-.01767	.43417	.00096	.02332	.00501
SDev	.05323	.0304	.02875	.00219	.00066	.03763	.00008
%RSD	460.26	1.2270	162.66	.50524	68.718	161.32	1.6523
#1	-.05029	2.4599	.01588	.43142	.00185	.07505	.00506
#2	.03218	2.4599	-.05260	.43344	.00024	-.00452	.00505

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#3	-.00905	2.5206	-.00885	.43627	.00088	-.00461	.00505
#4	.07341	2.4599	-.02513	.43556	.00088	.02737	.00489
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 .01228
SDev .00184
%RSD 15.009

#1 .01409
#2 .01149
#3 .01347
#4 .01007

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-2

Operator: WTR

Run Time: 03/23/01 16:26:38

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	1.0096	50.381	5.0684	5.0337	4.9953	4.9376	50.936
SDev	.0007	.186	.0430	.0292	.0233	.0116	.083
%RSD	.07017	.36999	.84916	.58012	.46628	.23558	.16386

#1	1.0099	50.243	5.0545	5.0375	4.9822	4.9342	50.943
#2	1.0099	50.210	5.0397	4.9913	4.9714	4.9253	50.956
#3	1.0100	50.475	5.0472	5.0530	5.0036	4.9376	51.022
#4	1.0085	50.598	5.1323	5.0530	5.0239	4.9532	50.822

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	5.0589	4.9678	4.9593	4.9877	51.676	49.424	5.0787
SDev	.0213	.0068	.0056	.0217	.090	.413	.0321
%RSD	.42151	.13761	.11243	.43589	.17448	.83511	.63228

#1	5.0492	4.9695	4.9633	4.9793	51.645	49.289	5.0691
#2	5.0607	4.9581	4.9525	4.9660	51.563	48.908	5.0517
#3	5.0877	4.9693	4.9644	4.9881	51.755	49.837	5.0689
#4	5.0380	4.9743	4.9570	5.0173	51.742	49.661	5.1253

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	50.431	4.9705	5.0157	49.882	4.9718	5.0415	5.0465
SDev	.161	.0055	.0293	.295	.0145	.0531	.0981
%RSD	.31905	.11010	.58362	.59044	.29184	1.0524	1.9444

#1	50.343	4.9670	5.0124	49.716	4.9824	5.0579	5.0431
#2	50.253	4.9647	4.9930	49.607	4.9693	4.9643	4.9233
#3	50.524	4.9746	4.9995	49.929	4.9522	5.0857	5.0563
#4	50.603	4.9757	5.0579	50.276	4.9832	5.0580	5.1632

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	5.0471	5.1016	5.0197	4.9804	4.9835	10.051	4.9845
SDev	.0659	.0425	.0626	.0221	.0119	.128	.0092
%RSD	1.3064	.83244	1.2479	.44339	.23903	1.2712	.18389

#1	5.0534	5.0650	5.0746	4.9695	4.9765	10.132	4.9769
#2	5.1357	5.0650	4.9534	4.9572	4.9708	9.8780	4.9764

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#3	5.0177	5.1320	5.0718	4.9867	4.9897	10.034	4.9941
#4	4.9816	5.1441	4.9790	5.0081	4.9968	10.162	4.9906

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 5.0165
SDev .0080
%RSD .15874

#1	5.0222
#2	5.0102
#3	5.0092
#4	5.0245

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB2

Operator: WTR

Run Time: 03/23/01 16:29:48

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	-.00148	-.02973	.02810	.03739	.00194	.00196	-.00763
SDev	.00121	.00393	.03161	.00192	.00016	.00016	.00750
%RSD	81.616	13.221	112.48	5.1377	8.0748	8.3290	98.313

#1	-.00148	-.02797	-.00104	.03837	.00207	.00215	.00067
#2	-.00148	-.02605	.00908	.03451	.00207	.00190	-.00490
#3	-.00000	-.02970	.06988	.03835	.00180	.00202	-.00918
#4	-.00295	-.03518	.03448	.03834	.00180	.00177	-.01713

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	.00422	-.00324	-.00085	-.00000	-.00703	-.70144	.00157
SDev	.00044	.00162	.00298	.00216	.00468	.53092	.00078
%RSD	10.518	49.801	351.15	55840.	66.543	75.689	49.650

#1	.00453	-.00567	.00114	.00176	-.00198	-.34143	.00110
#2	.00448	-.00244	.00227	.00176	-.00848	-.18349	.00255
#3	.00357	-.00243	-.00340	-.00089	-.00487	-.96391	.00183
#4	.00429	-.00244	-.00340	-.00266	-.01281	-1.3170	.00080

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	-.01412	.00218	.00324	.20032	-.00007	-.01634	.01331
SDev	.02126	.00000	.00325	.01757	.00726	.01781	.01339
%RSD	150.55	.09376	100.04	8.7685	10341.	108.94	100.61

#1	.00282	.00219	.00811	.21297	.00136	-.00244	.01996
#2	.00565	.00218	.00162	.19596	.00675	-.00235	.02003
#3	-.03106	.00218	.00162	.21504	.00195	-.03959	.02004
#4	-.03389	.00218	.00162	.17730	-.01034	-.02100	-.00678

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	.01931	-.04707	-.00132	.00219	.00169	-.01977	.00008
SDev	.07044	.00911	.00901	.00045	.00061	.07291	.00009
%RSD	364.76	19.355	681.49	20.570	36.473	368.89	106.00

#1	-.01161	-.05466	-.01158	.00255	.00217	-.03974	.00021
#2	.11210	-.05466	-.00061	.00207	.00217	-.05559	.00005

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#3	.02963	-.04252	-.00335	.00255	.00153	-.07158	.00003
#4	-.05288	-.03644	.01025	.00160	.00088	.08785	.00003

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	.00307
SDev	.00071
%RSD	23.254

#1	.00275
#2	.00403
#3	.00237
#4	.00311

Errors	LC Pass
High	.02000
Low	-.02000

.

Method: QUANMET Sample Name: DW69A

Operator: WTR

Run Time: 03/23/01 16:32:57

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
Avge	-.00258	-.01838	-.01380	.15823	.02883	-.00004	112.11
SDev	.00187	.01721	.00891	.00192	.00036	.00006	.63
%RSD	72.562	93.651	64.596	1.2145	1.2545	172.66	.56050
#1	-.00292	-.02446	-.02141	.15727	.02854	-.00002	111.99
#2	-.00298	-.01148	-.00615	.16111	.02900	.00001	111.61
#3	.00003	.00126	-.02161	.15727	.02854	-.00002	113.03
#4	-.00443	-.03884	-.00601	.15726	.02927	-.00013	111.82
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	-.00279	-.00484	-.00113	.00707	-.00706	1.6491	.00008
SDev	.00134	.00209	.00207	.00511	.00156	.5368	.00105
%RSD	48.221	43.058	182.71	72.248	22.113	32.554	1401.5
#1	-.00157	-.00404	.00114	.01149	-.00634	2.3529	.00128
#2	-.00171	-.00727	-.00226	.00264	-.00706	1.0707	-.00001
#3	-.00420	-.00565	-.00000	.00265	-.00562	1.7025	.00029
#4	-.00368	-.00242	-.00340	.01149	-.00923	1.4702	-.00127
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	5.8404	.00791	.00649	15.898	.02203	.03015	.01686
SDev	.0392	.00055	.00621	.282	.00704	.03089	.01676
%RSD	.67156	6.8989	95.757	1.7742	31.950	102.45	99.389
#1	5.8171	.00764	.01460	15.640	.03094	.03484	.02022
#2	5.8255	.00873	.00811	15.966	.01948	-.01179	.03350
#3	5.8199	.00764	.00162	15.721	.01424	.06271	.02019
#4	5.8990	.00764	.00162	16.267	.02344	.03485	-.00645
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	.02447	1.2603	-.00950	.46186	-.00618	.04399	.00141
SDev	.02490	.0353	.01818	.00609	.00045	.09051	.00481
%RSD	101.77	2.7974	191.33	1.3176	7.3466	205.73	340.65
#1	.02962	1.2269	-.00332	.45591	-.00586	.05589	.00537
#2	.03478	1.2329	-.01972	.46251	-.00618	.16753	-.00480

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#3	-.01162	1.2938	-.02800	.45897	-.00586	-.02376	.00504
#4	.04508	1.2876	.01302	.47004	-.00683	-.02369	.00003

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	.08970
SDev	.00261
%RSD	2.9143

#1	.09035
#2	.08599
#3	.09213
#4	.09035

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW8V0

Operator: WTR

Run Time: 03/23/01 16:36:06

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	-.00256	.99348	-.02395	.08081	.03847	.00004	151.95
SDev	.00172	.01008	.04507	.00307	.00041	.00007	.50
%RSD	67.224	1.0149	188.22	3.7965	1.0633	192.96	.33229
#1	-.00107	.99254	-.06196	.08175	.03822	.00009	152.27
#2	-.00405	.99807	.03430	.08177	.03803	.00011	152.30
#3	-.00107	1.0034	-.05700	.08336	.03887	-.00003	152.02
#4	-.00405	.97990	-.01113	.07635	.03876	-.00002	151.22
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	-.00111	-.00285	.03546	.01123	1.7208	.55279	.00062
SDev	.00346	.00154	.00170	.00114	.0046	.51991	.00077
%RSD	312.79	54.035	4.8009	10.163	.26753	94.051	125.41
#1	.00294	-.00084	.03631	.01256	1.7164	.98713	.00089
#2	-.00499	-.00405	.03632	.01079	1.7200	.68983	.00059
#3	.00029	-.00406	.03631	.01167	1.7273	.73628	.00140
#4	-.00266	-.00244	.03291	.00991	1.7193	-.20207	-.00043
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	16.245	.25638	.02132	18.509	.00044	-.02451	.01960
SDev	.071	.00141	.00530	.240	.00613	.02326	.00004
%RSD	.43675	.55021	24.859	1.2973	1399.8	94.900	.21537
#1	16.166	.25692	.02132	18.236	.00405	-.01281	.01960
#2	16.217	.25474	.02132	18.410	-.00224	-.01291	.01955
#3	16.265	.25802	.02781	18.597	.00675	-.01292	.01964
#4	16.333	.25583	.01483	18.793	-.00681	-.05940	.01963
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	.02216	4.0163	-.00589	.81358	.00145	-.04518	.00812
SDev	.03705	.0472	.01938	.00740	.00031	.05269	.00299
%RSD	167.14	1.1744	329.15	.90948	21.276	116.62	36.795
#1	.07113	4.0148	.01878	.80616	.00185	.01459	.01062
#2	.02989	3.9601	-.00041	.80899	.00153	-.03320	.00562

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#3	-.01133	4.0756	-.01685	.81676	.00120	-.11299	.01079
#4	-.00104	4.0148	-.02508	.82241	.00120	-.04913	.00545
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 .01009
SDev .00291
%RSD 28.806

#1 .01338
#2 .00800
#3 .01168
#4 .00732

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DW8V0P5 Operator: WTR
 Run Time: 03/23/01 16:39:16
 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	-.00064	.17108	-.00564	.04387	.00846	.00030	30.482
SDev	.00085	.01622	.01886	.00192	.00032	.00030	.077
%RSD	133.35	9.4832	334.48	4.3777	3.7515	99.505	.25308
#1	-.00138	.15459	.01224	.04290	.00834	-.00001	30.385
#2	-.00138	.16196	.00709	.04291	.00807	.00011	30.460
#3	.00010	.19119	-.02860	.04292	.00872	.00062	30.519
#4	.00010	.17657	-.01329	.04675	.00872	.00049	30.563
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	-.00404	.00624	-.00262	.35000	-.19743	.00032
SDev	.00188	.00132	.00065	.00000	.00488	.27071	.00065
%RSD	287.37	32.591	10.487	.06806	1.3947	137.12	200.23
#1	.00078	-.00566	.00567	-.00262	.34386	-.22994	.00035
#2	-.00178	-.00404	.00681	-.00262	.34891	.10452	-.00034
#3	.00109	-.00243	.00567	-.00262	.35542	-.54583	.00008
#4	-.00271	-.00404	.00681	-.00262	.35181	-.11846	.00119
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	3.3250	.05412	.00329	3.7924	-.00094	-.01198	-.00343
SDev	.0150	.00109	.00325	.0448	.00374	.00005	.04669
%RSD	.45205	2.0175	98.591	1.1815	398.90	.45514	1361.6
#1	3.3067	.05466	.00816	3.7428	-.00112	-.01198	.01994
#2	3.3236	.05248	.00167	3.7751	-.00561	-.01194	.01986
#3	3.3434	.05466	.00167	3.8486	-.00055	-.01206	L-.07347
#4	3.3265	.05466	.00167	3.8029	.00353	-.01195	.01995
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	.02559	.76078	.00757	.16904	.00016	.04267	.00479
SDev	.05998	.02778	.02053	.00052	.00071	.03787	.00054
%RSD	234.42	3.6517	271.40	.30895	443.47	88.755	11.372
#1	-.01052	.74103	-.02249	.16851	-.00072	.03482	.00397
#2	.01527	.74712	.01589	.16874	-.00008	.01878	.00506

#3	.11324	.80178	.02372	.16968	.00088	.09833	.00506
#4	-.01565	.75319	.01315	.16921	.00056	.01875	.00506
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 .00442
SDev .00165
%RSD 37.316

#1 .00576
#2 .00239
#3 .00576
#4 .00376

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DW8V0S

Operator: WTR

Run Time: 03/23/01 16:42:25

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	.04457	3.8155	1.9508	1.0487	2.0350	.04725	200.01
SDev	.00207	.0148	.0768	.0011	.0083	.00015	.29
%RSD	4.6518	.38889	3.9367	.10903	.40560	.32299	.14488
#1	.04751	3.7969	1.9067	1.0481	2.0254	.04703	200.41
#2	.04310	3.8171	1.8862	1.0481	2.0307	.04728	199.99
#3	.04456	3.8332	1.9519	1.0504	2.0420	.04729	199.74
#4	.04311	3.8149	2.0583	1.0481	2.0417	.04740	199.88
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	.04654	.45711	.22302	.26634	2.8924	52.467	1.0686
SDev	.00229	.00209	.00147	.00088	.0089	.472	.0085
%RSD	4.9244	.45816	.65760	.33159	.30883	.89921	.79429
#1	.04680	.45954	.22359	.26502	2.8799	51.835	1.0591
#2	.04340	.45794	.22245	.26679	2.8958	52.690	1.0638
#3	.04706	.45468	.22473	.26679	2.9009	52.411	1.0767
#4	.04890	.45630	.22132	.26679	2.8929	52.931	1.0747
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	67.377	.72213	.96420	72.398	.46551	.49505	.54849
SDev	.297	.00105	.01338	.550	.00702	.03518	.00009
%RSD	.44111	.14480	1.3878	.76010	1.5080	7.1060	.01591
#1	67.004	.72240	.95608	71.723	.47152	.49281	.54851
#2	67.292	.72131	.94959	72.187	.45676	.52067	.54859
#3	67.687	.72132	.97555	72.932	.46290	.44609	.54838
#4	67.526	.72350	.97555	72.750	.47084	.52063	.54847
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	2.0390	15.139	1.8325	1.8176	.96251	1.9110	.48234
SDev	.0270	.021	.0349	.0068	.00197	.0950	.00261
%RSD	1.3226	.13664	1.9042	.37398	.20483	4.9733	.54001
#1	2.0183	15.123	1.8764	1.8107	.96107	1.7917	.47995
#2	2.0132	15.123	1.7942	1.8130	.96074	2.0145	.48353

#3	2.0648	15.147	1.8188	1.8247	.96492	1.8870	.48044
#4	2.0596	15.165	1.8408	1.8219	.96331	1.9508	.48544
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 .47276
SDev .00427
%RSD .90312

#1 .47672
#2 .47608
#3 .46827
#4 .46996

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DW8V0D

Operator: WTR

Run Time: 03/23/01 16:45:35

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	.04570	3.7583	1.9854	1.0591	2.0545	.04777	198.53
SDev	.00187	.0240	.0632	.0197	.0086	.00017	1.11
%RSD	4.0970	.63992	3.1817	1.8643	.41624	.34822	.56002
#1	.04311	3.7438	2.0539	1.0886	2.0443	.04765	198.77
#2	.04605	3.7401	1.9830	1.0480	2.0507	.04765	198.05
#3	.04605	3.7565	1.9019	1.0518	2.0609	.04778	197.36
#4	.04758	3.7928	2.0027	1.0481	2.0623	.04800	199.96
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	.04787	.45991	.22104	.26679	2.8520	52.632	1.0813
SDev	.00620	.00357	.00143	.00001	.0137	.176	.0079
%RSD	12.956	.77678	.64553	.00182	.48124	.33380	.72659
#1	.04112	.46115	.22245	.26679	2.8496	52.615	1.0710
#2	.05206	.45627	.22132	.26678	2.8424	52.662	1.0801
#3	.04421	.45790	.21905	.26678	2.8439	52.411	1.0895
#4	.05410	.46432	.22132	.26679	2.8720	52.838	1.0846
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	67.552	.72240	.97068	72.778	.47421	.49053	.54856
SDev	.208	.00296	.00817	.451	.01196	.03173	.00016
%RSD	.30844	.40986	.84151	.61989	2.5224	6.4690	.02854
#1	67.371	.72131	.96257	72.199	.46777	.49290	.54854
#2	67.422	.72021	.96906	72.694	.47107	.50207	.54862
#3	67.583	.72131	.96906	73.264	.46613	.44625	.54836
#4	67.834	.72677	.98204	72.957	.49189	.52088	.54873
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	1.9925	15.048	1.8346	1.8174	.97086	1.8279	.48782
SDev	.0350	.034	.0525	.0067	.00300	.1085	.00439
%RSD	1.7554	.22454	2.8625	.36995	.30862	5.9378	.90027
#1	1.9512	15.086	1.8353	1.8099	.96813	1.9355	.48636
#2	1.9770	15.007	1.7832	1.8137	.96910	1.8242	.48527

679 878

#3	2.0285	15.038	1.9065	1.8217	.97135	1.8719	.48527
#4	2.0132	15.062	1.8133	1.8243	.97488	1.6802	.49436
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 .48370
SDev .00358
%RSD .74012

#1 .47915
#2 .48422
#3 .48354
#4 .48788

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DW8WP

Operator: WTR

Run Time: 03/23/01 16:48:45

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	-.00312	1.0446	.01142	.08443	.04240	.00004	154.88
SDev	.00148	.0062	.02783	.00198	.00035	.00007	1.24
%RSD	47.396	.59659	243.75	2.3476	.81631	197.31	.80122
#1	-.00385	1.0418	.01775	.08662	.04291	.00009	153.68
#2	-.00388	1.0383	-.00745	.08187	.04217	-.00002	154.09
#3	-.00090	1.0528	-.01272	.08505	.04217	.00010	155.31
#4	-.00384	1.0456	.04809	.08417	.04236	-.00003	156.42
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	-.00124	.03206	.01398	2.5702	.68983	.00028
SDev	.00187	.00154	.00339	.00385	.0095	.33984	.00072
%RSD	204.87	124.18	10.570	27.563	.37097	49.264	257.88
#1	-.00021	-.00084	.03631	.01972	2.5655	.77345	.00047
#2	-.00111	-.00245	.03291	.01177	2.5597	1.0243	.00119
#3	.00217	.00077	.02837	.01265	2.5742	.74558	-.00013
#4	.00279	-.00246	.03064	.01177	2.5814	.21601	-.00043
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	17.148	.35456	.01981	19.803	.00614	-.01318	.00306
SDev	.061	.00225	.00324	.161	.00408	.01526	.03343
%RSD	.35582	.63508	16.379	.81084	66.439	115.80	1092.3
#1	17.237	.35319	.02143	20.025	.00967	.00548	.01968
#2	17.138	.35210	.02143	19.815	.00028	-.03190	-.04708
#3	17.121	.35647	.02143	19.703	.00780	-.01311	.01988
#4	17.098	.35647	.01494	19.670	.00682	-.01320	.01977
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	.02999	4.2988	-.02162	.86192	.00193	-.04587	.00901
SDev	.04992	.0115	.03379	.00385	.00055	.05672	.00233
%RSD	166.45	.26733	156.24	.44685	28.464	123.67	25.894
#1	.03771	4.2821	.00243	.86754	.00185	-.07768	.01062
#2	-.03964	4.3002	-.00607	.86132	.00120	.00211	.00561

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#3	.07898	4.3064	-.07159	.85943	.00249	-.10966	.00936
#4	.04291	4.3064	-.01127	.85939	.00217	.00176	.01045
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 .01264
SDev .00146
%RSD 11.548

#1 .01057
#2 .01400
#3 .01299
#4 .01300

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DW8WR

Operator: WTR

Run Time: 03/23/01 16:51:55

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	-.00073	-.03382	-.00609	.04608	-.00002	-.00003	.06840
SDev	.00085	.00908	.01984	.00001	.00019	.00006	.05157
%RSD	116.76	26.845	325.98	.01549	932.55	169.66	75.392
#1	.00003	-.03343	-.02643	.04608	-.00023	-.00002	.04097
#2	-.00002	-.02420	.01923	.04609	-.00004	-.00011	.03674
#3	-.00147	-.03161	-.00103	.04607	-.00004	.00000	.05063
#4	-.00147	-.04606	-.01611	.04608	.00023	.00000	.14525
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	.00080	-.00404	-.00255	-.00265	.01985	-.30659	-.00023
SDev	.00145	.00228	.00109	.00000	.00238	.29246	.00110
%RSD	181.50	56.513	42.516	.08303	12.011	95.390	470.75
#1	.00213	-.00404	-.00114	-.00265	.02040	-.03484	.00017
#2	-.00036	-.00726	-.00340	-.00266	.01967	-.62015	-.00187
#3	.00196	-.00243	-.00227	-.00265	.01679	-.49008	.00038
#4	-.00054	-.00242	-.00341	-.00265	.02256	-.08129	.00038
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	-.03389	.00137	.00163	.13458	.00071	-.00711	-.01665
SDev	.01614	.00055	.00530	.01167	.00139	.00531	.04276
%RSD	47.629	39.793	326.06	8.6726	196.92	74.666	256.77
#1	-.02541	.00110	.00163	.13126	-.00137	-.00253	L-.06004
#2	-.05648	.00219	.00163	.12380	.00128	-.00250	.02002
#3	-.03389	.00110	.00812	.13209	.00133	-.01177	-.04672
#4	-.01977	.00110	-.00486	.15117	.00158	-.01166	.02013
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	.04646	.09111	-.00966	.00019	-.00032	.01965	.00035
SDev	.02078	.00498	.01441	.00038	.00031	.02008	.00360
%RSD	44.728	5.4614	149.12	201.90	95.743	102.20	1032.7
#1	.05548	.09116	.00181	.00019	-.00008	-.00828	.00504
#2	.07095	.08499	-.01431	-.00028	-.00040	.02369	-.00372

#3	.03485	.09111	.00186	.00019	-.00008	.03959	.00020
#4	.02456	.09718	-.02801	.00066	-.00072	.02358	-.00013

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 .00407
SDev .00121
%RSD 29.707

#1 .00509
#2 .00475
#3 .00237
#4 .00407

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DW8WT

Operator: WTR

Run Time: 03/23/01 16:55:05

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	-.00178	-.00988	.00972	.09308	.00069	-.00003	102.17
SDev	.00086	.00722	.03425	.01172	.00038	.00010	.24
%RSD	48.059	73.128	352.56	12.591	54.433	376.29	.23470
#1	-.00254	-.01581	.04779	.08992	.00023	-.00014	102.23
#2	-.00104	-.01587	-.00798	.08384	.00069	.00010	102.28
#3	-.00104	-.00656	-.02831	.08834	.00115	-.00003	101.82
#4	-.00252	-.00126	.02735	.11023	.00069	-.00003	102.36
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	-.00114	.00163	-.00116	.19056	.84655	2.4388	.00572
SDev	.00304	.00209	.00307	.00561	.00036	.3190	.00068
%RSD	267.68	128.35	265.11	2.9461	.04263	13.080	11.958
#1	.00066	.00243	-.00343	.18570	.84637	2.0091	.00531
#2	.00213	-.00080	-.00229	.18570	.84637	2.4086	.00591
#3	-.00292	.00405	-.00230	.19542	.84709	2.5851	.00507
#4	-.00441	.00083	.00338	.19542	.84637	2.7524	.00660
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	8.9953	.24116	.01147	13.267	.17317	.00679	.02846
SDev	.0510	.00055	.00649	.109	.00891	.02014	.01333
%RSD	.56709	.22598	56.590	.82259	5.1451	296.65	46.830
#1	8.9600	.24143	.01471	13.184	.16830	-.01182	.02175
#2	8.9430	.24034	.01471	13.238	.16763	-.00256	.04845
#3	9.0391	.24143	.00173	13.427	.17032	.03477	.02184
#4	9.0391	.24143	.01471	13.219	.18642	.00675	.02179
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	-.02054	H22.772	.00024	.13067	-.00578	-.05599	.04939
SDev	.01651	.069	.02421	.00076	.00016	.09325	.00183
%RSD	80.367	.30443	10087.	.57879	2.7778	166.55	3.7091
#1	-.03472	H22.728	-.00870	.12992	-.00586	.04360	.04665
#2	-.03472	H22.759	-.02504	.13039	-.00586	-.09979	.05041

#3	-.00378	H22.874	.00227	.13171	-.00586	-.16356	.05008
#4	-.00894	H22.728	.03243	.13067	-.00554	-.00421	.05042
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	.61936
SDev	.00556
%RSD	.89712

#1	.62397
#2	.61143
#3	.62224
#4	.61980

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXNVLB

Operator: WTR

Run Time: 03/23/01 16:58:14

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	.00002	-.03513	-.02893	.00012	-.00018	.00003	.01329
SDev	.00171	.01068	.03418	.00000	.00009	.00006	.00188
%RSD	7808.6	30.398	118.18	3.1871	51.852	250.28	14.121
#1	-.00147	-.03867	.00406	.00011	-.00023	.00000	.01471
#2	-.00146	-.04608	-.07694	.00011	-.00023	-.00000	.01401
#3	.00152	-.02065	-.02150	.00012	-.00004	-.00002	.01053
#4	.00149	-.03512	-.02132	.00012	-.00023	.00012	.01392
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	.00035	-.00363	-.00085	-.00088	.05343	-.08362	.00033
SDev	.00176	.00154	.00109	.00000	.00149	.06843	.00011
%RSD	499.42	42.489	127.33	.17566	2.7869	81.838	31.818
#1	.00300	-.00243	-.00227	-.00088	.05361	-.15562	.00038
#2	-.00056	-.00403	-.00114	-.00088	.05144	-.12775	.00017
#3	-.00052	-.00565	-.00000	-.00088	.05361	-.01626	.00038
#4	-.00050	-.00242	-.00000	-.00088	.05505	-.03484	.00038
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	-.04024	.00029	-.00486	-.00944	.00416	.00226	.02013
SDev	.00778	.00055	.00530	.00243	.00258	.02216	.00006
%RSD	19.325	190.91	109.02	25.725	61.832	982.37	.30823
#1	-.04800	.00001	-.01135	-.00809	.00218	-.01167	.02014
#2	-.03671	.00001	-.00486	-.01306	.00720	.03483	.02018
#3	-.04518	.00111	.00163	-.00850	.00188	-.01178	.02004
#4	-.03106	.00001	-.00486	-.00809	.00540	-.00236	.02016
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	.01177	-.04857	-.02458	-.00028	-.00040	.02309	.00175
SDev	.04092	.01111	.01350	.00000	.00026	.09906	.00230
%RSD	347.77	22.872	54.916	.00000	65.320	429.03	130.98
#1	.02981	-.06074	-.01430	-.00028	-.00040	-.12029	-.00029
#2	-.04752	-.05465	-.03623	-.00028	-.00072	.07092	.00113

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#3	.01950	-.03639	-.01156	-.00028	-.00008	.10274	.00505
#4	.04528	-.04250	-.03624	-.00028	-.00040	.03899	.00113

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	.00720
SDev	.00148
%RSD	20.641

#1	.00744
#2	.00574
#3	.00916
#4	.00644

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DXNVLC

Operator: WTR

Run Time: 03/23/01 17:01:24

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	.04906	1.9459	1.9448	1.0031	2.0778	.04942	L-.01977
SDev	.00143	.0108	.0339	.0011	.0083	.00016	.00299
%RSD	2.9171	.55655	1.7420	.11434	.39735	.32198	15.096
#1	.04719	1.9313	1.9184	1.0022	2.0766	.04940	L-.02163
#2	.05017	1.9532	1.9790	1.0022	2.0678	.04926	L-.01592
#3	.05019	1.9440	1.9688	1.0037	2.0789	.04937	L-.01898
#4	.04870	1.9550	1.9131	1.0044	2.0879	.04964	L-.02256
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	.04873	.48531	.19517	.25954	1.0588	L-.10917	1.0541
SDev	.00180	.00510	.00143	.00479	.0040	.24569	.0104
%RSD	3.7048	1.0514	.73116	1.8437	.37924	225.06	.98811
#1	.04734	.48208	.19376	.26131	1.0529	L-.01626	1.0581
#2	.04906	.48693	.19716	.25247	1.0601	L.10452	1.0414
#3	.05115	.49176	.19489	.26132	1.0615	L-.06271	1.0512
#4	.04736	.48046	.19489	.26307	1.0608	L-.46221	1.0659
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-.05295	.49192	-.00473	L-.00933	.48967	.45026	L.00363
SDev	.00961	.00141	.00000	.00197	.00684	.00464	.03157
%RSD	18.152	.28656	.01112	21.160	1.3977	1.0309	868.69
#1	L-.04518	.49028	-.00473	L-.01141	.49927	.44789	L.02703
#2	L-.04518	.49356	-.00473	L-.00726	.48576	.45722	L-.03979
#3	L-.05648	.49246	-.00473	L-.00809	.48391	.44816	L.02698
#4	L-.06495	.49137	-.00473	L-.01058	.48975	.44778	L.00031
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	2.0139	-.06141	-.01151	1.0131	-.00032	1.9936	.49537
SDev	.0585	.00004	.01299	.0039	.00031	.1015	.00359
%RSD	2.9066	.06377	112.89	.38390	95.743	5.0904	.72559
#1	2.0177	-.06146	-.00319	1.0124	-.00072	1.8503	.49067
#2	1.9662	-.06141	.00202	1.0084	-.00008	2.0254	.49568

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#3	2.0951	-.06137	-.01964	1.0138	-.00008	2.0890	.49943
#4	1.9765	-.06141	-.02523	1.0178	-.00040	2.0095	.49568

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	.48647
SDev	.00485
%RSD	.99744

#1	.48192
#2	.49289
#3	.48739
#4	.48366

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: CCV2-3

Operator: WTR

Run Time: 03/23/01 17:04:33

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	1.0161	52.128	5.1448	5.1840	5.2457	5.1178	49.996
SDev	.0041	.095	.0859	.0230	.0180	.0079	.237
%RSD	.40755	.18311	1.6700	.44365	.34341	.15341	.47338
#1	1.0134	52.026	5.1345	5.2113	5.2324	5.1113	49.975
#2	1.0209	52.126	5.0876	5.1770	5.2354	5.1215	50.181
#3	1.0180	52.104	5.0878	5.1567	5.2433	5.1113	50.158
#4	1.0119	52.255	5.2694	5.1909	5.2718	5.1271	49.669
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	5.0058	4.9857	4.9554	5.2640	52.334	52.383	5.4528
SDev	.0218	.0135	.0131	.0191	.090	.129	.0434
%RSD	.43508	.27038	.26338	.36294	.17140	.24618	.79556
#1	4.9893	4.9676	4.9587	5.2472	52.268	52.337	5.4298
#2	5.0137	4.9982	4.9598	5.2569	52.403	52.569	5.4205
#3	5.0331	4.9933	4.9667	5.2605	52.419	52.272	5.4450
#4	4.9872	4.9837	4.9366	5.2914	52.246	52.355	H5.5161
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	52.196	4.9988	5.0563	53.213	4.9940	5.0433	5.2434
SDev	.077	.0122	.0082	.258	.0085	.0236	.0002
%RSD	.14803	.24424	.16155	.48535	.16947	.46886	.00386
#1	52.119	4.9966	5.0450	53.051	5.0032	5.0382	5.2433
#2	52.173	5.0075	5.0580	53.030	4.9937	5.0762	5.2434
#3	52.187	5.0086	5.0580	53.186	4.9829	5.0388	5.2432
#4	52.303	4.9824	5.0644	53.587	4.9963	5.0199	5.2436
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	5.1187	5.2360	5.0126	5.1943	5.1159	10.256	5.0584
SDev	.0904	.0001	.0721	.0139	.0060	.056	.0108
%RSD	1.7658	.00226	1.4381	.26813	.11752	.54546	.21438
#1	5.1018	5.2359	5.0887	5.1828	5.1070	10.217	5.0491
#2	5.0610	5.2361	5.0119	5.1893	5.1182	10.199	5.0707

#3	5.0610	5.2361	5.0338	5.1907	5.1182	10.310	5.0644
#4	5.2512	5.2359	4.9159	5.2146	5.1201	10.297	5.0495
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 5.0278
SDev .0088
%RSD .17468

#1 5.0189
#2 5.0383
#3 5.0315
#4 5.0225

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB3

Operator: WTR

Run Time: 03/23/01 17:07:43

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	-.00147	-.03069	.00023	.02683	.00150	.00138	-.02634
SDev	.00122	.00748	.05888	.01800	.00069	.00060	.01189
%RSD	82.866	24.377	25410.	67.074	46.154	42.968	45.132
#1	-.00295	-.03883	-.00094	.03449	.00069	.00076	-.03883
#2	-.00148	-.03526	.03448	-.00003	.00115	.00101	-.03376
#3	-.00147	-.02429	.04956	.03449	.00207	.00176	-.01908
#4	.00003	-.02438	-.08218	.03835	.00207	.00201	-.01369
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	.00340	-.00082	-.00170	.00375	-.01245	-.63409	.00128
SDev	.00139	.00348	.00146	.00429	.00375	.27409	.00140
%RSD	41.013	425.76	86.072	114.34	30.152	43.226	109.83
#1	.00257	-.00081	-.00227	-.00265	-.01570	-.82455	-.00064
#2	.00215	-.00243	-.00340	.00530	-.01570	-.86171	.00110
#3	H.00528	.00402	-.00113	.00619	-.00920	-.26711	.00243
#4	.00360	-.00405	-.00000	.00618	-.00920	-.58299	.00222
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	-.03459	.00164	.00649	.02343	.00022	.01396	-.00003
SDev	.01570	.00063	.00325	.00997	.00460	.02993	.05916
%RSD	45.390	38.588	50.017	42.552	2045.2	214.35	193890.
#1	-.05083	.00109	.00162	.01306	.00102	-.01177	L-.08674
#2	-.04518	.00109	.00811	.01680	.00577	.03490	.01996
#3	-.01977	.00218	.00811	.03090	-.00538	.04443	.04666
#4	-.02259	.00218	.00811	.03297	-.00052	-.01170	.01999
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	.03991	.00609	.00411	.00113	.00080	.00418	.00172
SDev	.07808	.00498	.03099	.00054	.00089	.06676	.00241
%RSD	195.61	81.787	754.39	48.024	110.15	1597.7	139.69
#1	-.01165	.00607	.02637	.00066	-.00008	.02415	.00004
#2	.02959	.00000	.03504	.00066	.00024	-.08735	.00020

#3	-.01163	.00609	-.02517	.00160	.00120	.00807	.00145
#4	.15334	.01220	-.01980	.00160	.00185	.07184	.00521

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	.00281
SDev	.00052
%RSD	18.492

#1	.00307
#2	.00203
#3	.00306
#4	.00306

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DXLKX

Operator: WTR

Run Time: 03/23/01 17:10:52

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	-.00103	.02737	-.01073	.05056	.15137	-.00000	23.830
SDev	.00142	.00478	.02522	.00442	.00070	.00001	.190
%RSD	138.12	17.451	234.94	8.7506	.46467	338.07	.79611
#1	.00007	.03239	-.00696	.05438	.15206	.00000	23.648
#2	-.00288	.02332	-.02715	.05440	.15179	.00000	23.744
#3	-.00141	.02325	-.03219	.04674	.15114	.00000	23.838
#4	.00010	.03052	.02337	.04672	.15049	-.00001	24.090
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	-.00149	-.00251	-.00312	-.00173	.34169	4.3016	.01110
SDev	.00284	.00294	.00143	.00072	.00312	.4796	.00110
%RSD	189.94	117.11	45.777	41.706	.91330	11.150	9.9398
#1	-.00059	-.00090	-.00113	-.00085	.33736	4.6291	.01144
#2	-.00046	-.00413	-.00454	-.00262	.34169	3.8858	.01093
#3	L-.00565	-.00573	-.00340	-.00174	.34458	3.8951	.00970
#4	.00073	.00071	-.00341	-.00173	.34314	4.7963	.01234
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	4.8125	.00964	.00004	4.6665	-.00325	-.00946	.03669
SDev	.0239	.00104	.00325	.0191	.00800	.05806	.07345
%RSD	.49644	10.829	7253.7	.40872	246.50	613.56	200.19
#1	4.8174	.01100	.00167	4.6635	.00790	-.01164	.10019
#2	4.7864	.00991	-.00482	4.6905	-.00993	-.08623	.08671
#3	4.8033	.00882	.00167	4.6681	-.00804	.00659	L-.06009
#4	4.8429	.00882	.00167	4.6440	-.00291	.05344	.01994
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	.01654	.12755	-.00666	.18711	-.00088	.00673	.00062
SDev	.02121	.00002	.03543	.00054	.00041	.05259	.00218
%RSD	128.24	.01857	532.12	.29069	46.945	781.15	352.21
#1	-.01054	.12755	-.03861	.18664	-.00137	-.04498	.00004
#2	.02041	.12755	-.02221	.18758	-.00104	-.02909	-.00013

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#3	.01526	.12753	-.00912	.18758	-.00072	.06647	-.00122
#4	.04103	.12759	.04331	.18664	-.00040	.03453	.00379

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	.00261
SDev	.00078
%RSD	30.007

#1	.00162
#2	.00338
#3	.00237
#4	.00307

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXLKXP5 Operator: WTR
 Run Time: 03/23/01 17:14:02
 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	-.00183	-.02560	-.01381	.00015	.03014	.00009	4.7859
SDev	.00074	.00853	.04170	.00000	.00030	.00006	.0254
%RSD	40.332	33.328	301.96	1.6901	1.0080	66.699	.53079
#1	-.00145	-.03711	-.00107	.00015	.03019	.00012	4.7569
#2	-.00146	-.01693	-.05185	.00015	.03046	.00013	4.7722
#3	-.00293	-.02233	-.04170	.00015	.02973	.00012	4.8081
#4	-.00146	-.02605	.03938	.00015	.03019	.00000	4.8063
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	.00048	-.00244	-.00113	-.00066	.07130	.77345	.00193
SDev	.00294	.00131	.00185	.00111	.00042	.05777	.00046
%RSD	617.94	53.739	163.22	169.28	.58599	7.4694	23.994
#1	-.00065	-.00244	-.00113	-.00088	.07093	.78274	.00252
#2	-.00136	-.00405	-.00340	-.00088	.07093	.68983	.00201
#3	.00487	-.00084	.00113	.00089	.07166	.80132	.00180
#4	-.00095	-.00244	-.00113	-.00176	.07166	.81990	.00140
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	.92833	.00193	.00163	.92725	-.00117	.01385	-.02002
SDev	.00933	.00054	.00530	.00235	.00778	.02673	.03926
%RSD	1.0050	28.197	324.73	.25401	665.90	192.95	196.10
#1	.91774	.00111	.00812	.92549	.00644	.03485	.00666
#2	.92339	.00220	.00163	.93046	.00313	.00677	-.04664
#3	.93751	.00220	-.00486	.92756	-.01126	.03478	L-.06008
#4	.93468	.00220	.00163	.92549	-.00299	-.02100	.01997
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	.03889	-.01670	-.00213	.03697	-.00096	-.05285	.00066
SDev	.03821	.03378	.01165	.00028	.00031	.08954	.00074
%RSD	98.241	202.30	547.67	.75965	31.914	169.43	110.93
#1	.02987	-.00606	.01306	.03656	-.00137	-.15242	.00145
#2	-.01138	-.06681	-.00635	.03713	-.00104	.02285	.00003

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#3	.06596	.00001	-.01463	.03717	-.00072	-.10465	.00113
#4	.07111	.00607	-.00059	.03703	-.00072	.02282	.00004
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 .00357
SDev .00151
%RSD 42.428

#1 .00165
#2 .00305
#3 .00479
#4 .00477

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXLKXS

Operator: WTR

Run Time: 03/23/01 17:17:11

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	.04911	1.9907	1.9759	1.0191	2.2150	.04937	23.462
SDev	.00184	.0112	.0763	.0233	.0106	.00027	.046
%RSD	3.7536	.56282	3.8609	2.2863	.48030	.55458	.19444
#1	.04874	1.9752	1.9988	.99900	2.2129	.04928	23.479
#2	.05167	1.9989	1.9581	.99903	2.2009	.04904	23.500
#3	.04727	1.9896	1.8822	1.0412	2.2219	.04953	23.474
#4	.04874	1.9990	2.0644	1.0374	2.2244	.04965	23.396
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
Avge	.04680	.47837	.18922	.25913	1.3902	4.1413	1.0738
SDev	.00111	.00677	.00161	.00448	.0032	.1526	.0075
%RSD	2.3733	1.4142	.84862	1.7303	.22974	3.6840	.70215
#1	.04828	.47877	.19035	.26046	1.3872	4.1645	1.0723
#2	.04701	.46909	.18922	.25249	1.3879	4.3225	1.0638
#3	.04607	.48038	.19035	.26223	1.3922	4.1274	1.0802
#4	.04583	.48522	.18695	.26135	1.3937	3.9509	1.0790
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	4.6671	.49146	-.00631	4.5314	.48893	.47553	.01362
SDev	.0157	.00126	.00621	.0335	.00517	.03309	.04625
%RSD	.33642	.25611	98.507	.73867	1.0578	6.9577	339.50
#1	4.6593	.49255	-.01118	4.5200	.48171	.44752	-.05311
#2	4.6565	.49037	-.00469	4.4893	.49260	.51251	.02694
#3	4.6621	.49037	.00180	4.5619	.49275	.44768	.02694
#4	4.6904	.49255	-.01118	4.5544	.48864	.49440	.05373
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	1.9917	.11921	-.00115	1.1879	-.00120	1.9846	.48937
SDev	.0199	.02732	.00415	.0052	.00041	.0642	.00248
%RSD	.99972	22.918	362.67	.44114	34.427	3.2361	.50669
#1	1.9724	.13289	-.00348	1.1863	-.00104	1.9089	.49050
#2	2.0136	.13284	-.00315	1.1811	-.00072	2.0205	.48566

#3	1.9776	.07823	.00508	1.1913	-.00137	2.0522	.49083
#4	2.0033	.13289	-.00303	1.1927	-.00169	1.9566	.49049
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 .48285
SDev .00434
%RSD .89989

#1 .48465
#2 .48702
#3 .48291
#4 .47685

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXLKXD

Operator: WTR

Run Time: 03/23/01 17:20:20

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	.04919	2.0562	2.0434	1.0565	2.2827	.05069	24.045
SDev	.00222	.0043	.0315	.0031	.0169	.00022	.144
%RSD	4.5178	.21098	1.5418	.29640	.74140	.43535	.59724
#1	.05030	2.0607	2.0282	1.0565	2.2666	.05037	24.046
#2	.04732	2.0590	2.0384	1.0565	2.2996	.05076	23.862
#3	.04735	2.0517	2.0890	1.0527	2.2949	.05087	24.060
#4	.05178	2.0534	2.0181	1.0604	2.2699	.05074	24.213
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	.04754	.49003	.19574	.26665	1.3908	4.5501	1.1044
SDev	.00349	.00295	.00339	.00000	.0052	.4517	.0128
%RSD	7.3443	.60163	1.7310	.00125	.37195	9.9270	1.1581
#1	.04764	.48842	.19715	.26665	1.3850	4.9914	1.0932
#2	.04494	.48679	.19148	.26665	1.3879	4.0066	1.1207
#3	.05244	.49162	.19488	.26666	1.3944	4.3596	1.1085
#4	.04512	.49327	.19942	.26666	1.3958	4.8428	1.0952
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	4.7948	.50565	-.00144	4.6484	.49514	.51307	.01375
SDev	.0183	.00154	.00375	.0350	.00918	.01530	.02678
%RSD	.38167	.30523	260.13	.75295	1.8549	2.9813	194.77
#1	4.7694	.50565	.00180	4.6166	.49431	.51300	.00033
#2	4.7948	.50455	-.00469	4.6772	.48802	.49433	.00036
#3	4.8033	.50783	-.00469	4.6801	.50834	.53180	.05391
#4	4.8118	.50456	.00181	4.6196	.48990	.51315	.00039
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	2.0794	.10420	-.02513	1.2226	-.00112	1.9804	.50452
SDev	.0567	.03339	.02275	.0078	.00071	.0707	.00256
%RSD	2.7260	32.045	90.496	.63505	63.353	3.5691	.50816
#1	2.0600	.13306	-.00600	1.2145	-.00040	2.0203	.50585
#2	2.1477	.13300	-.01970	1.2293	-.00201	1.9566	.50067

#3	2.0137	.07232	-.01674	1.2293	-.00137	2.0520	.50569
#4	2.0962	.07840	-.05809	1.2175	-.00072	1.8927	.50586
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	.49348
SDev	.00597
%RSD	1.2091

#1	.49451
#2	.48604
#3	.50055
#4	.49283

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXLK6

Operator: WTR

Run Time: 03/23/01 17:26:54

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	-.00142	-.00274	-.03317	.04555	.15033	-.00004	23.706
SDev	.00210	.01185	.05826	.00192	.00102	.00007	.125
%RSD	148.12	432.59	175.65	4.2095	.67984	200.00	.52787
#1	-.00142	-.00415	-.04200	.04267	.14976	.00000	23.684
#2	-.00290	-.00773	-.03691	.04651	.15160	.00000	23.590
#3	.00155	.01413	.04387	.04650	.14930	-.00014	23.883
#4	-.00290	-.01320	-.09763	.04651	.15068	.00000	23.666
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	.00077	-.00534	-.00255	-.00197	.23050	4.4014	.01093
SDev	.00138	.00081	.00194	.00044	.00102	.1842	.00078
%RSD	179.37	15.088	75.882	22.411	.44288	4.1845	7.1160
#1	.00225	-.00575	.00000	-.00175	.23050	4.6384	.01150
#2	-.00040	-.00574	-.00454	-.00175	.23194	4.1924	.01111
#3	.00163	-.00413	-.00227	-.00263	.22978	4.4154	.01132
#4	-.00041	-.00574	-.00341	-.00175	.22978	4.3596	.00979
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	4.7292	.00552	-.00321	4.7102	.00414	.03244	.06010
SDev	.0195	.00000	.00325	.0327	.00588	.04183	.04619
%RSD	.41189	.02051	100.94	.69371	142.12	128.95	76.848
#1	4.7214	.00552	.00165	4.7008	.00910	.05344	.10011
#2	4.7158	.00552	-.00484	4.7419	-.00074	.05331	.02006
#3	4.7214	.00552	-.00484	4.6685	-.00116	-.03031	.10010
#4	4.7581	.00552	-.00484	4.7295	.00937	.05332	.02015
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	.05228	.09871	-.00383	.18664	-.00120	-.06324	.00116
SDev	.02242	.01255	.00149	.00109	.00019	.10023	.00248
%RSD	42.885	12.709	38.897	.58285	15.396	158.50	212.66
#1	.03552	.09718	-.00298	.18570	-.00104	.05227	.00004
#2	.03037	.09718	-.00331	.18758	-.00137	-.01147	-.00013

#3	.07161	.11545	-.00298	.18570	-.00104	-.15487	.00488
#4	.07161	.08503	-.00605	.18758	-.00137	-.13888	-.00013

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	.00973
SDev	.00133
%RSD	13.711

#1	.00911
#2	.00814
#3	.01086
#4	.01080

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXLK9

Operator: WTR

Run Time: 03/23/01 17:30:04

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	-.00180	-.00183	-.01667	.04641	.15430	-.00004	24.516
SDev	.00222	.01394	.01984	.00313	.00129	.00006	.217
%RSD	123.81	761.87	119.04	6.7531	.83491	173.38	.88426
#1	-.00291	-.00780	-.02672	.04640	.15391	.00000	24.391
#2	.00007	.00865	-.03707	.05025	.15363	-.00002	24.579
#3	-.00439	-.01870	-.01144	.04641	.15621	.00000	24.303
#4	.00005	.01053	.00856	.04257	.15344	-.00013	24.792
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	.00076	-.00534	-.00114	-.00220	.18068	4.4409	.01088
SDev	.00391	.00277	.00185	.00051	.00264	.2454	.00051
%RSD	514.57	51.786	163.00	23.145	1.4604	5.5255	4.6548
#1	-.00200	-.00412	-.00113	-.00264	.17779	4.3875	.01060
#2	.00114	-.00575	-.00114	-.00175	.18213	4.4525	.01162
#3	.00616	-.00899	-.00341	-.00176	.17923	4.1645	.01051
#4	-.00225	-.00251	.00113	-.00263	.18357	4.7591	.01081
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	4.8224	.00332	-.00322	4.6067	.00258	-.00483	.03007
SDev	.0202	.00154	.00324	.0666	.00387	.01402	.01277
%RSD	.41784	46.484	100.73	1.4448	150.27	290.51	42.476
#1	4.7948	.00441	.00165	4.5847	.00526	-.01174	.04677
#2	4.8231	.00332	-.00484	4.5665	.00652	-.01184	.02012
#3	4.8429	.00114	-.00484	4.7058	-.00104	-.01192	.02003
#4	4.8287	.00441	-.00484	4.5698	-.00044	.01620	.03335
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	.01088	.11390	-.00670	.19006	-.00145	.04107	.00148
SDev	.01991	.01253	.01365	.00151	.00066	.07848	.00233
%RSD	183.07	10.999	203.72	.79349	45.812	191.10	157.70
#1	-.01104	.11540	-.02514	.18947	-.00201	.10086	.00004
#2	-.00072	.11545	-.00606	.18900	-.00104	-.07447	.00488

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#3	.02505	.09718	-.00331	.19229	-.00201	.06900	-.00013
#4	.03022	.12756	.00770	.18947	-.00072	.06889	.00113

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	.00321
SDev	.00254
%RSD	79.092

#1	.00334
#2	.00136
#3	.00675
#4	.00137

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXNVDB

Operator: WTR

Run Time: 03/23/01 17:33:13

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	-.00147	.00682	-.03552	-.00001	-.00016	-.00000	-.02978
SDev	.00121	.00417	.03733	.00001	.00014	.00001	.00218
%RSD	82.128	61.250	105.09	131.11	83.333	149.43	7.3284
#1	-.00295	.00326	-.01141	-.00002	.00004	.00000	-.03135
#2	-.00147	.00314	-.06208	-.00001	-.00023	-.00000	-.03176
#3	.00000	.01038	.00372	.00000	-.00023	.00000	-.02712
#4	-.00145	.01048	-.07233	-.00000	-.00023	-.00002	-.02888
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	.00117	-.00283	-.00000	-.00089	-.00686	-.25085	-.00039
SDev	.00231	.00242	.00093	.00072	.00239	.16833	.00042
%RSD	198.60	85.765	103590.	81.527	34.786	67.103	107.58
#1	-.00057	.00081	-.00000	-.00000	-.00921	-.09987	-.00004
#2	.00085	-.00404	.00113	-.00089	-.00849	-.22994	-.00097
#3	.00452	-.00405	-.00113	-.00089	-.00415	-.18349	-.00043
#4	-.00014	-.00403	-.00000	-.00177	-.00560	-.49008	-.00013
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	-.04800	.00027	-.00000	.00653	-.00454	.00460	.01999
SDev	.01198	.00105	.00621	.00773	.00439	.06238	.05447
%RSD	24.957	386.30	691890.	118.26	96.691	1355.6	272.49
#1	-.03671	-.00110	-.00487	.00187	.00023	-.01158	.02006
#2	-.05365	-.00000	.00162	.01223	-.01038	.05355	H.08665
#3	-.03953	.00109	.00811	.01389	-.00354	.05333	-.04676
#4	-.06212	.00109	-.00487	-.00187	-.00449	-.07689	.02000
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	.02704	-.05161	-.01294	-.00028	-.00048	.03596	.00156
SDev	.02961	.00353	.01622	.00000	.00031	.02723	.00229
%RSD	109.49	6.8323	125.35	.00000	63.828	75.715	146.65
#1	.02961	-.05466	-.00883	-.00028	-.00072	.02403	-.00012
#2	.06055	-.04858	-.03596	-.00028	-.00072	.07185	.00129

679 906

#3	.02963	-.05466	-.00911	-.00028	-.00008	.03993	.00020
#4	-.01162	-.04854	.00214	-.00028	-.00040	.00806	.00488

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	.00224
SDev	.00165
%RSD	73.571

#1	.00406
#2	.00311
#3	.00039
#4	.00141

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DXNVDC

Operator: WTR

Run Time: 03/23/01 17:36:23

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	.04759	1.9476	1.9942	.98828	2.0877	.05002	L-.02038
SDev	.00186	.0061	.0714	.00662	.0152	.00037	.00207
%RSD	3.9039	.31354	3.5788	.66975	.72804	.74400	10.153

#1	.05017	1.9495	1.9182	.98067	2.0655	.04951	L-.01805
#2	.04722	1.9458	2.0601	.98903	2.0968	.05014	L-.02307
#3	.04722	1.9549	2.0499	.99669	2.0901	.05002	L-.01996
#4	.04574	1.9404	1.9487	.98675	2.0982	.05040	L-.02043

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	.04761	.48773	.19376	.26219	1.0334	L.09523	1.0550
SDev	.00351	.00596	.00161	.00125	.0047	.13822	.0114
%RSD	7.3647	1.2231	.82823	.47577	.45294	145.14	1.0791

#1	.05213	.49176	.19603	.26043	1.0392	L.02090	1.0384
#2	.04367	.48047	.19262	.26307	1.0312	L.28104	1.0640
#3	.04792	.48530	.19262	.26219	1.0283	L-.03484	1.0576
#4	.04670	.49337	.19375	.26308	1.0348	L.11381	1.0601

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-.04730	.49082	.00014	L.00487	.49316	.48061	L.01366
SDev	.00706	.00063	.00325	.00591	.00870	.03285	.01538
%RSD	14.925	.12850	2398.4	121.23	1.7643	6.8345	112.65

#1	L-.05648	.49137	.00176	L.01016	.48668	.51333	L.02697
#2	L-.04800	.49028	.00176	L-.00270	.48593	.45710	L.00021
#3	L-.04518	.49137	.00176	L.00311	.49560	.44797	L.02698
#4	L-.03953	.49027	-.00473	L.00892	.50443	.50403	L.00046

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	2.0100	-.01737	-.00736	1.0182	-.00024	2.0298	.49580
SDev	.0535	.02950	.01753	.0064	.00041	.0795	.00008
%RSD	2.6614	169.77	238.15	.63035	172.13	3.9192	.01653

#1	1.9713	-.00067	-.03335	1.0091	.00024	2.0894	.49584
#2	1.9713	-.00674	-.00056	1.0213	-.00040	2.0418	.49584

#3	2.0125	-.00067	.00503	1.0190	-.00072	2.0737	.49584
#4	2.0847	-.06141	-.00056	1.0237	-.00008	1.9142	.49567
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	.48062						
SDev	.00360						
%RSD	.74989						
#1	.48438						
#2	.48198						
#3	.48026						
#4	.47584						
Errors	LC Pass						
High	.60000						
Low	.40000						

Method: QUANMET Sample Name: DXLLC

Operator: WTR

Run Time: 03/23/01 17:39:33

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	-.00071	18.840	.07752	.01763	.22954	.00075	6.9238
SDev	.00147	.065	.04638	.00478	.00100	.00007	.0433
%RSD	207.01	.34453	59.838	27.135	.43573	8.9947	.62521
#1	-.00001	18.800	.03625	.02425	.22969	.00078	6.8676
#2	.00000	18.846	.10667	.01559	.22996	.00080	6.9159
#3	-.00292	18.786	.12732	.01309	.22811	.00078	6.9688
#4	.00008	18.930	.03982	.01759	.23042	.00065	6.9430
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	.00331	.00869	.03173	.03043	43.995	.56905	.02461
SDev	.00418	.00203	.00321	.00002	.159	.45382	.00067
%RSD	126.13	23.342	10.111	.05473	.36125	79.750	2.7346
#1	.00475	.00828	.03173	.03040	43.809	.61551	.02370
#2	.00793	.00828	.02719	.03042	43.991	-.05342	.02451
#3	.00258	.01152	.03400	.03043	43.981	1.0336	.02502
#4	-.00202	.00669	.03400	.03045	44.197	.68054	.02520
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	1.9668	.12148	-.00235	.18134	.02871	.04080	.01325
SDev	.0204	.00087	.00375	.00571	.00681	.00530	.01342
%RSD	1.0386	.71930	159.33	3.1490	23.712	13.001	101.28
#1	1.9569	.12253	.00087	.17398	.02734	.04554	.01988
#2	1.9428	.12148	-.00560	.18062	.02704	.03613	.02003
#3	1.9851	.12039	-.00560	.18767	.03828	.03627	.01996
#4	1.9823	.12154	.00092	.18311	.02217	.04524	-.00688
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	-.03700	2.3771	-.00946	.04535	.26759	-.08296	.07319
SDev	.05165	.0273	.03300	.00049	.00092	.07987	.00303
%RSD	139.61	1.1504	348.94	1.0706	.34481	96.278	4.1422
#1	.00237	2.3635	-.00740	.04494	.26880	-.01636	.07390
#2	-.04861	2.3634	-.05398	.04565	.26687	-.03507	.06872

679 910

#3	-.10535	2.3635	.02553	.04494	.26783	-.19432	.07499
#4	.00359	2.4182	-.00197	.04588	.26687	-.08609	.07515
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 .13109
SDev .00301
%RSD 2.2965

#1 .13435
#2 .12853
#3 .12852
#4 .13294

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXLLCP5

Operator: WTR

Run Time: 03/23/01 17:42:43

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61E1CP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00077	3.8825	.00901	-.00849	.04699	.00014	1.4412
SDev	.00208	.0188	.02094	.00005	.00019	.00007	.0089
%RSD	269.90	.48305	232.36	.56770	.40352	49.305	.61435
#1	-.00078	3.9072	-.01777	-.00846	.04697	.00008	1.4339
#2	.00218	3.8853	.02798	-.00846	.04697	.00021	1.4541
#3	-.00223	3.8742	.00272	-.00856	.04724	.00019	1.4390
#4	-.00226	3.8633	.02312	-.00850	.04678	.00008	1.4380
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	.00218	-.00214	.00425	.00653	9.2352	-.27640	.00549
SDev	.00100	.00242	.00194	.00044	.0237	.14413	.00140
%RSD	46.035	112.85	45.615	6.8203	.25611	52.146	25.545
#1	.00248	-.00416	.00339	.00631	9.2516	-.45292	.00528
#2	.00109	.00068	.00453	.00719	9.2545	-.13704	.00714
#3	.00342	-.00094	.00680	.00630	9.2032	-.18349	.00579
#4	.00172	-.00416	.00226	.00630	9.2314	-.33214	.00375
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	.37627	.02583	.00121	.03536	.00328	.01760	.00662
SDev	.00811	.00064	.00324	.01025	.00343	.04054	.02669
%RSD	2.1556	2.4571	268.26	28.993	104.50	230.30	403.48
#1	.36710	.02638	-.00366	.03546	-.00000	-.01741	-.00664
#2	.38686	.02638	.00283	.04873	.00090	.05722	-.00676
#3	.37557	.02528	.00283	.02385	.00494	.04789	-.00679
#4	.37557	.02528	.00283	.03339	.00728	-.01729	.04665
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	.00196	.49670	.00228	.00931	.05541	-.02729	.01630
SDev	.03452	.00580	.03406	.00032	.00137	.06006	.00253
%RSD	1759.3	1.1680	1492.4	3.4120	2.4765	220.07	15.544
#1	.01748	.49213	-.04369	.00886	.05453	-.03946	.01493
#2	.02264	.50428	.00565	.00961	.05742	-.03955	.01509

679 912

#3	-.04969	.49219	.03855	.00942	.05453	-.08658	.02010
#4	.01742	.49821	.00862	.00933	.05517	.05643	.01509
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	.02803
SDev	.00107
%RSD	3.8144

#1	.02711
#2	.02710
#3	.02881
#4	.02908

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-4

Operator: WTR

Run Time: 03/23/01 17:45:53

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	1.0122	51.837	5.1441	5.1744	5.2157	5.0799	49.725
SDev	.0020	.346	.1298	.0464	.0494	.0295	.204
%RSD	.19702	.66655	2.5239	.89700	.94640	.58076	.40976
#1	1.0116	51.391	5.3180	5.1145	5.1492	5.0418	49.887
#2	1.0103	51.898	5.0955	5.2108	5.2267	5.0915	49.541
#3	1.0117	51.828	5.0103	5.1607	5.2188	5.0748	49.557
#4	1.0150	52.231	5.1527	5.2114	5.2682	5.1115	49.916
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	5.0055	4.9632	4.9218	5.2332	52.006	51.814	5.4135
SDev	.0187	.0213	.0209	.0500	.224	.374	.0780
%RSD	.37295	.42839	.42522	.95494	.43021	.72235	1.4400
#1	5.0265	4.9515	4.9145	5.1649	51.807	51.445	5.3032
#2	4.9859	4.9418	4.9111	5.2506	51.977	51.575	5.4378
#3	5.0154	4.9692	4.9088	5.2339	51.914	52.262	5.4264
#4	4.9943	4.9902	4.9530	5.2834	52.325	51.974	5.4864
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	51.901	4.9708	5.0466	52.977	4.9746	5.0101	5.1069
SDev	.321	.0203	.0365	.611	.0201	.0867	.0600
%RSD	.61877	.40782	.72324	1.1539	.40459	1.7315	1.1743
#1	51.464	4.9593	4.9995	52.135	4.9537	4.9355	5.0567
#2	51.947	4.9648	5.0384	53.181	4.9874	4.9628	5.0570
#3	51.955	4.9583	5.0644	53.008	4.9615	5.0103	5.1368
#4	52.238	5.0009	5.0839	53.585	4.9956	5.1317	5.1768
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	5.0146	5.2038	4.9086	5.1680	5.0895	9.9424	5.0331
SDev	.1171	.0449	.0642	.0427	.0285	.1625	.0244
%RSD	2.3348	.86318	1.3070	.82546	.55904	1.6348	.48400
#1	4.9354	5.1383	5.0003	5.1126	5.0572	9.7625	5.0103
#2	5.0596	5.2114	4.9042	5.1760	5.0925	10.031	5.0350

#3	4.9048	5.2295	4.8580	5.1674	5.0826	9.8561	5.0207
#4	5.1587	5.2361	4.8718	5.2162	5.1259	10.120	5.0663

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	5.0056
SDev	.0012
%RSD	.02336

#1	5.0054
#2	5.0056
#3	5.0071
#4	5.0043

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB4

Operator: WTR

Run Time: 03/23/01 17:49:02

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	-.01286	-.05056	.02684	.00247	.00205	-.02038
SDev	.00186	.01611	.02744	.01800	.00094	.00090	.01327
%RSD	495.01	125.26	54.277	67.060	38.304	43.966	65.130

#1	-.00148	-.02613	-.05169	-.00002	.00134	.00114	-.03451
#2	-.00000	-.02422	-.08716	.03451	.00207	.00152	-.02884
#3	.00295	.00867	-.04185	.03451	.00300	.00240	-.01015
#4	.00003	-.00976	-.02153	.03836	.00346	.00314	-.00802

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	.00246	-.00041	-.00085	.00663	-.00595	-.43666	.00340
SDev	.00256	.00306	.00234	.00089	.00609	.39398	.00150
%RSD	104.09	737.00	275.07	13.383	102.29	90.225	43.929

#1	.00231	-.00243	-.00227	.00618	-.01281	-.91745	.00243
#2	-.00049	-.00081	-.00340	.00619	-.00920	-.57370	.00183
#3	.00227	.00402	.00114	.00796	-.00198	-.01626	.00468
#4	H.00577	-.00244	.00113	.00618	.00019	-.23923	.00468

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	-.02047	.00273	.00487	.03214	.00473	-.00694	.02671
SDev	.01184	.00063	.00375	.01273	.00643	.04601	.01338
%RSD	57.838	23.136	76.991	39.603	136.10	662.70	50.099

#1	-.03671	.00218	.00811	.02219	-.00306	-.05820	.01995
#2	-.01977	.00218	.00162	.02011	.00195	-.01161	.02004
#3	-.00847	.00327	.00162	.04375	.01005	.05372	.04679
#4	-.01694	.00328	.00811	.04251	.00997	-.01167	.02007

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	.03091	.01216	-.00606	.00192	.00185	-.00787	.00137
SDev	.05164	.01309	.00448	.00111	.00095	.07233	.00256
%RSD	167.04	107.67	73.849	57.811	51.199	919.55	186.63

#1	-.03742	.01822	-.00609	.00066	.00088	-.10332	.00020
#2	.01930	.01215	-.00061	.00137	.00120	-.00780	.00003

#3	.07088	.02429	-.00598	.00255	.00281	.07170	.00004
#4	.07089	-.00602	-.01158	.00311	.00249	.00796	.00521
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 .00310
SDev .00150
%RSD 48.376

#1 .00135
#2 .00303
#3 .00300
#4 .00502

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: DXLLCS

Operator: WTR

Run Time: 03/23/01 17:52:12

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	.04816	19.536	2.0161	.93306	2.3046	.05119	6.3806
SDev	.00208	.091	.0679	.00016	.0167	.00018	.0232
%RSD	4.3082	.46438	3.3688	.01736	.72541	.35639	.36319
#1	.04961	19.428	2.0804	.93282	2.2874	.05094	6.3812
#2	.04965	19.516	1.9479	.93308	2.2968	.05119	6.4003
#3	.04523	19.647	2.0683	.93320	2.3263	.05132	6.3480
#4	.04815	19.552	1.9679	.93312	2.3079	.05133	6.3931
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	.05289	.49399	.22379	.28639	42.652	.68054	1.0848
SDev	.00350	.00424	.00197	.00111	.081	.45736	.0111
%RSD	6.6182	.85910	.87837	.38816	.19108	67.205	1.0211
#1	.05232	.49118	.22435	.28616	42.534	1.0893	1.0730
#2	.05793	.49762	.22549	.28618	42.670	1.0243	1.0795
#3	.05134	.48955	.22095	.28794	42.717	.13239	1.0987
#4	.04996	.49763	.22436	.28530	42.689	.47615	1.0879
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	1.8440	.60052	.00072	.16838	.50751	.54854	.02674
SDev	.0210	.00138	.00001	.00349	.00867	.02468	.00010
%RSD	1.1391	.22931	1.4888	2.0754	1.7089	4.4994	.36285
#1	1.8581	.60022	.00070	.16610	.49470	.51598	.02660
#2	1.8553	.59916	.00072	.17232	.51013	.56262	.02676
#3	1.8129	.60026	.00073	.17025	.51140	.54366	.02681
#4	1.8496	.60244	.00072	.16486	.51380	.57190	.02680
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	1.9410	2.5480	-.02259	1.0577	.26960	2.1110	.56468
SDev	.0550	.0304	.00822	.0065	.00119	.0595	.00250
%RSD	2.8332	1.1929	36.382	.61204	.44049	2.8194	.44292
#1	1.8646	2.5632	-.01574	1.0504	.26848	2.0531	.56593
#2	1.9784	2.5632	-.01573	1.0555	.27008	2.1624	.56593

#3	1.9373	2.5632	-.03217	1.0658	.26880	2.0662	.56592
#4	1.9836	2.5024	-.02670	1.0590	.27105	2.1622	.56093

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 .59659
SDev .00426
%RSD .71425

#1 .59079
#2 .59651
#3 .59819
#4 .60087

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXLLCD

Operator: WTR

Run Time: 03/23/01 17:55:22

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	.04879	19.497	2.0389	.92894	2.2971	.05224	6.0659
SDev	.00139	.059	.0578	.00020	.0113	.00026	.0156
%RSD	2.8456	.30348	2.8333	.02127	.49205	.48966	.25664
#1	.05061	19.432	2.0219	.92878	2.2860	.05209	6.0831
#2	.04770	19.501	2.0212	.92889	2.3031	.05245	6.0453
#3	.04914	19.481	2.1227	.92887	2.2894	.05196	6.0666
#4	.04771	19.574	1.9901	.92923	2.3100	.05247	6.0686
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	.05189	.50210	.22748	.28264	40.615	.79900	1.0832
SDev	.00352	.00675	.00143	.00533	.105	.35381	.0094
%RSD	6.7927	1.3452	.62717	1.8870	.25804	44.282	.86387
#1	.04944	.49284	.22776	.27533	40.524	.56905	1.0726
#2	.05056	.50412	.22549	.28773	40.591	1.3123	1.0903
#3	.05044	.50252	.22889	.28242	40.581	.75487	1.0781
#4	.05713	.50894	.22776	.28510	40.766	.55976	1.0918
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	1.8228	.59780	.00370	.16942	.51874	.55881	.02683
SDev	.0107	.00188	.00838	.00289	.01279	.02790	.00015
%RSD	.58651	.31529	226.66	1.7077	2.4659	4.9936	.56894
#1	1.8242	.59532	.00693	.16901	.51926	.57258	.02673
#2	1.8298	.59752	.01343	.16693	.50136	.57284	.02666
#3	1.8298	.59860	-.00604	.16818	.52234	.51695	.02694
#4	1.8072	.59974	.00047	.17357	.53200	.57287	.02697
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	1.8882	2.5920	-.00974	1.0588	.25169	1.9234	.56226
SDev	.0576	.0398	.01768	.0050	.00121	.0467	.00267
%RSD	3.0522	1.5345	181.54	.47538	.48180	2.4281	.47419
#1	1.8892	2.6057	.01150	1.0531	.25049	1.9249	.56109
#2	1.9203	2.5571	-.02139	1.0616	.25145	1.8600	.56625

#3	1.8069	2.5631	-.02688	1.0562	.25145	1.9717	.56077
#4	1.9364	2.6421	-.00219	1.0642	.25338	1.9369	.56093
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 .60452
SDev .00284
%RSD .46906

#1 .60584
#2 .60038
#3 .60510
#4 .60674

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DXLLG

Operator: WTR

Run Time: 03/23/01 17:58:32

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	.00118	25.694	.16597	.00403	.33362	.00089	5.6818
SDev	.00127	.135	.07477	.00133	.00233	.00006	.0489
%RSD	107.74	.52574	45.048	32.998	.69992	7.1524	.86095
#1	.00139	25.684	.26304	.00383	.33477	.00092	5.6295
#2	.00288	25.507	.08204	.00241	.33017	.00092	5.7033
#3	.00014	25.803	.16984	.00424	.33524	.00080	5.6553
#4	.00029	25.783	.14897	.00564	.33431	.00092	5.7391
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	.00430	.01868	.04873	.03458	193.86	1.5539	.02811
SDev	.00287	.00280	.00185	.00405	.80	.3959	.00130
%RSD	66.861	14.976	3.7990	11.715	.41420	25.480	4.6096
#1	.00577	.01624	.04873	.03252	193.16	1.4795	.02839
#2	.00451	.02110	.05100	.03253	193.25	1.9441	.02983
#3	.00020	.01626	.04647	.03263	194.15	1.0336	.02706
#4	.00670	.02109	.04873	.04066	194.86	1.7583	.02715
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	1.8122	1.1110	.00267	.27704	.01913	.08082	.03983
SDev	.0109	.0054	.00821	.00626	.00623	.03496	.04005
%RSD	.60183	.48901	308.10	2.2588	32.580	43.258	100.56
#1	1.8185	1.1051	-.00554	.26771	.01531	.08341	.09990
#2	1.7960	1.1084	.00096	.27933	.02824	.05558	.01981
#3	1.8185	1.1130	.01406	.28098	.01806	.05494	.01973
#4	1.8157	1.1176	.00117	.28016	.01491	.12933	.01986
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	-.13047	2.8513	-.01504	.04270	.28847	-.15740	.11026
SDev	.09586	.0058	.03710	.00041	.00259	.10021	.00020
%RSD	73.475	.20390	246.65	.95531	.89722	63.666	.18562
#1	-.10557	2.8498	-.03888	.04282	.29193	-.07503	.11005
#2	-.10531	2.8558	.03485	.04211	.28582	-.21974	.11022

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#3	L-.26743	2.8437	-.00892	.04306	.28871	-.26553	.11054
#4	-.04355	2.8558	-.04722	.04282	.28743	-.06929	.11022

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	.17982
SDev	.00324
%RSD	1.8016

#1	.18303
#2	.18129
#3	.17548
#4	.17948

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXLLJ

Operator: WTR

Run Time: 03/23/01 18:01:41

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	.00099	30.136	.07325	-.00816	.35091	.00117	21.185
SDev	.00150	.147	.11251	.00613	.00229	.00012	.142
%RSD	151.75	.48825	153.60	75.067	.65236	10.304	.67218
#1	-.00100	29.945	.08814	-.01414	.34814	.00113	20.978
#2	.00214	30.161	.11591	-.00192	.35137	.00126	21.296
#3	.00065	30.137	-.08644	-.01265	.35045	.00126	21.254
#4	.00216	30.303	.17541	-.00394	.35367	.00101	21.214
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	-.00052	.01046	.08442	.05542	88.940	2.1903	.02133
SDev	.00250	.00335	.00217	.00402	.420	.3056	.00040
%RSD	478.84	32.066	2.5727	7.2620	.47194	13.951	1.8944
#1	-.00302	.00643	.08272	.04939	88.319	2.0091	.02081
#2	-.00209	.01126	.08726	.05743	89.128	2.5944	.02124
#3	.00247	.01448	.08499	.05743	89.071	2.2507	.02175
#4	.00055	.00965	.08272	.05744	89.241	1.9069	.02154
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	3.5644	.15064	-.00134	.19907	.04764	.12773	.02001
SDev	.0081	.00098	.00323	.00494	.00605	.02979	.00004
%RSD	.22755	.64948	241.75	2.4797	12.704	23.324	.21045
#1	3.5552	.14939	.00021	.19472	.04232	.09769	.01994
#2	3.5750	.15178	-.00618	.19928	.05034	.15328	.02003
#3	3.5637	.15067	.00030	.19638	.04300	.15341	.02002
#4	3.5637	.15072	.00033	.20592	.05491	.10655	.02004
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	-.03363	3.0953	-.01277	.10924	.38051	-.07796	.20562
SDev	.03399	.0348	.01838	.00047	.00190	.08773	.00066
%RSD	101.07	1.1258	143.93	.43121	.49886	112.54	.31993
#1	.00824	3.0452	-.01078	.10900	.37802	-.03647	.20534
#2	-.02015	3.1120	-.00795	.10900	.38027	-.20831	.20519

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#3	-.06157	3.0998	-.03812	.10900	.38123	-.04816	.20660
#4	-.06104	3.1241	.00577	.10994	.38251	-.01888	.20534

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	.21844
SDev	.00091
%RSD	.41760

#1	.21779
#2	.21965
#3	.21770
#4	.21864

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXLLM

Operator: WTR

Run Time: 03/23/01 18:04:51

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	-.00184	-.01691	.07985	.00019	.00134	-.00006	1.1358
SDev	.00073	.00496	.06574	.00001	.00013	.00007	.0081
%RSD	39.680	29.348	82.337	4.7026	9.5776	115.50	.71746
#1	-.00148	-.01879	.00394	.00019	.00134	-.00011	1.1279
#2	-.00293	-.02060	.11529	.00019	.00142	.00000	1.1316
#3	-.00146	-.01869	.04944	.00018	.00142	.00000	1.1467
#4	-.00148	-.00959	.15072	.00017	.00115	-.00011	1.1369
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	-.00164	-.00686	-.00085	.02630	.08412	40.249	-.00033
SDev	.00390	.00081	.00143	.00196	.00350	.296	.00075
%RSD	237.58	11.813	167.89	7.4515	4.1674	.73648	226.41
#1	-.00332	-.00726	-.00113	.02387	.08754	40.147	-.00034
#2	-.00413	-.00725	-.00113	.02740	.08610	40.565	.00059
#3	.00418	-.00728	.00113	.02828	.08321	40.398	-.00034
#4	-.00331	-.00564	-.00227	.02563	.07960	39.887	-.00124
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	2.6198	.00248	.00163	3.3912	.00259	-.02820	-.03337
SDev	.0277	.00054	.00530	.0106	.00383	.03600	.04494
%RSD	1.0575	21.954	324.41	.31234	147.91	127.65	134.64
#1	2.5866	.00221	.00812	3.4044	-.00002	-.03058	L-.06011
#2	2.6544	.00221	.00163	3.3940	.00597	-.07712	L-.06004
#3	2.6205	.00330	-.00486	3.3795	.00578	-.01181	.03336
#4	2.6177	.00220	.00163	3.3870	-.00136	.00672	-.04671
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	.01702	.02579	.00467	.00160	.00008	.00675	-.00215
SDev	.06609	.00305	.01442	.00000	.00042	.11920	.00248
%RSD	388.34	11.836	308.82	.00000	516.40	1764.9	115.18
#1	-.01132	.02424	-.00641	.00160	-.00008	.13417	-.00480
#2	.07631	.03037	.01827	.00160	-.00040	.03857	.00004

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#3	.06599	.02429	.01591	.00160	.00056	-.15255	-.00012
#4	-.06290	.02425	-.00910	.00160	.00024	.00682	-.00372

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	.04822
SDev	.00049
%RSD	1.0252

#1	.04798
#2	.04896
#3	.04796
#4	.04798

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXLLT

Operator: WTR

Run Time: 03/23/01 18:08:01

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	-.00109	-.01138	.10509	.00013	.00028	-.00000	1.2586
SDev	.00252	.01185	.03530	.00001	.00010	.00010	.0157
%RSD	232.44	104.17	33.594	3.3829	34.146	2485.5	1.2452
#1	-.00146	-.01122	.10005	.00014	.00023	.00000	1.2404
#2	.00004	-.00602	.07459	.00013	.00023	.00011	1.2707
#3	-.00441	-.02788	.09005	.00013	.00023	-.00013	1.2507
#4	.00149	-.00040	.15566	.00014	.00042	.00000	1.2727
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	-.00077	-.00242	.00028	.00597	.06408	43.176	-.00069
SDev	.00317	.00228	.00194	.00547	.00366	.437	.00048
%RSD	409.67	94.164	688.02	91.594	5.7105	1.0125	69.599
#1	-.00140	-.00565	.00113	-.00177	.06083	43.315	-.00064
#2	.00141	-.00081	.00227	.01061	.06516	43.733	-.00136
#3	-.00500	-.00241	-.00227	.00619	.06155	42.814	-.00055
#4	.00190	-.00081	-.00000	.00885	.06877	42.842	-.00022
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	3.1076	.00193	-.00486	3.0769	-.00035	-.00004	.03003
SDev	.0236	.00055	.00918	.0165	.00318	.01172	.01278
%RSD	.75844	28.276	188.89	.53764	920.20	30627.	42.568
#1	3.0808	.00219	-.01784	3.1000	.00188	-.00245	.03343
#2	3.1373	.00220	.00163	3.0606	-.00157	.01628	.01992
#3	3.1119	.00111	.00163	3.0730	.00256	-.01164	.04668
#4	3.1006	.00220	-.00486	3.0742	-.00426	-.00234	.02007
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	.01696	.01216	.00493	.00160	.00008	-.01292	.00113
SDev	.03163	.00703	.03096	.00000	.00042	.07166	.00262
%RSD	186.54	57.801	627.86	.00000	516.40	554.84	232.22
#1	.05561	.00607	.00769	.00160	-.00040	-.00884	-.00045
#2	-.01139	.01828	.03230	.00160	.00024	-.07272	.00505

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#3	.02984	.00607	.01871	.00160	-.00008	-.05668	.00004
#4	-.00623	.01822	-.03898	.00160	.00056	.08658	-.00012

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	.05073
SDev	.00137
%RSD	2.7085

#1	.04951
#2	.05247
#3	.04977
#4	.05117

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXLLX

Operator: WTR

Run Time: 03/23/01 18:11:10

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	-.00256	-.02690	.09379	.00029	.00033	-.00006	1.0608
SDev	.00253	.01156	.04749	.00001	.00046	.00007	.0221
%RSD	98.874	42.968	50.635	2.7895	141.50	115.76	2.0841

#1	-.00590	-.04237	.14082	.00030	-.00023	-.00011	1.0290
#2	.00003	-.01509	.06961	.00028	.00088	.00000	1.0791
#3	-.00292	-.02781	.12542	.00030	.00042	.00000	1.0714
#4	-.00145	-.02232	.03930	.00029	.00023	-.00012	1.0637

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	-.00266	-.00524	-.00113	.02807	.13845	34.336	-.00082
SDev	.00238	.00332	.00334	.00133	.00172	.137	.00060
%RSD	89.565	63.361	294.34	4.7296	1.2423	.39920	73.700

#1	L-.00540	-.00886	-.00340	.02741	.13736	34.155	-.00166
#2	.00038	-.00081	.00227	.02918	.13809	34.322	-.00034
#3	-.00312	-.00564	.00113	.02918	.14097	34.387	-.00085
#4	-.00249	-.00564	-.00454	.02652	.13736	34.480	-.00043

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	2.3205	.00222	-.00323	3.8188	-.00189	.01144	-.01001
SDev	.0099	.00000	.00325	.0458	.00897	.03920	.03513
%RSD	.42592	.03949	100.56	1.1993	473.33	342.77	350.84

#1	2.3155	.00222	-.00485	3.8618	-.01380	-.01201	L-.06013
#2	2.3240	.00222	.00164	3.7540	.00689	.05346	-.00660
#3	2.3325	.00222	-.00485	3.8282	.00262	.03473	.00668
#4	2.3099	.00222	-.00485	3.8311	-.00329	-.03043	.02000

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	.02235	.02276	-.00277	.00160	-.00032	-.01004	-.00165
SDev	.01547	.01816	.01465	.00000	.00121	.06884	.00241
%RSD	69.224	79.799	529.82	.00000	377.49	685.90	146.28

#1	-.00086	-.00006	-.00914	.00160	-.00201	-.00996	-.00513
#2	.03008	.03037	-.01989	.00160	.00088	.05364	.00005

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#3	.03009	.04252	.00484	.00160	-.00008	-.10567	-.00012
#4	.03007	.01821	.01312	.00160	-.00008	.02184	-.00138

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	.05154
SDev	.00056
%RSD	1.0933

#1	.05139
#2	.05104
#3	.05235
#4	.05138

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DXCMHB RERUN Operator: WTR
 Run Time: 03/23/01 18:14:20
 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	-.00037	-.03241	-.01745	-.00002	-.00014	.00000	-.03425
SDev	.00252	.01130	.06890	.00001	.00042	.00010	.00375
%RSD	677.63	34.867	394.85	41.345	311.77	183e6	10.934

#1	-.00000	-.03145	.01420	-.00002	-.00050	.00000	-.03530
#2	.00295	-.01692	.06472	-.00001	.00023	.00013	-.02916
#3	-.00148	-.03876	-.07184	-.00002	.00023	.00000	-.03441
#4	-.00295	-.04251	-.07688	-.00001	-.00050	-.00013	-.03813

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	-.00081	-.00403	-.00085	-.00199	-.01227	-.27640	.00011
SDev	.00098	.00228	.00298	.00085	.00239	.43584	.00154
%RSD	120.65	56.630	350.49	42.502	19.440	157.68	1468.9

#1	-.00077	-.00242	-.00114	-.00266	-.01282	-.31356	-.00043
#2	-.00221	-.00242	.00340	-.00089	-.00920	.34608	.00222
#3	-.00015	-.00404	-.00227	-.00177	-.01498	-.49937	.00008
#4	-.00012	-.00726	-.00340	-.00266	-.01210	-.63873	-.00145

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	-.04730	.00027	-.00162	-.00363	.00119	-.00704	.02002
SDev	.01620	.00055	.00375	.00683	.00196	.01214	.06534
%RSD	34.253	201.91	230.73	188.11	165.35	172.32	326.44

#1	-.04800	.00109	-.00487	-.01016	.00390	-.00234	.02004
#2	-.02824	-.00000	.00162	.00518	.00123	.00708	H.10003
#3	-.04518	-.00000	-.00487	-.00187	-.00062	-.01182	L-.06001
#4	-.06777	-.00000	.00162	-.00767	.00023	-.02110	.02001

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	.03734	-.06226	.00351	-.00028	-.00000	.01616	-.00004
SDev	.02286	.00304	.01410	.00000	.00048	.04011	.00010
%RSD	61.229	4.8780	401.78	.00000	3311e6	248.26	226.32

#1	.07085	-.06074	.02133	-.00028	-.00040	-.02367	-.00013
#2	.02961	-.06074	-.01124	-.00028	.00056	.00813	.00005

#3	.02960	-.06681	.00729	-.00028	.00024	.07196	-.00013
#4	.01929	-.06074	-.00334	-.00028	-.00040	.00822	.00003

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 .00280
SDev .00067
%RSD 24.098

#1 .00336
#2 .00207
#3 .00238
#4 .00338

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: DW68X/5 NA Operator: WTR
 Run Time: 03/23/01 18:17:30
 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	-.00098	3.4707	.03179	.07352	.00242	.00047	26.800
SDev	.00147	.0148	.03562	.00324	.00023	.00006	.106
%RSD	150.06	.42643	112.05	4.4022	9.5238	13.333	.39592
#1	.00123	3.4583	.04963	.07771	.00254	.00051	26.958
#2	-.00172	3.4712	.04445	.07234	.00254	.00038	26.768
#3	-.00172	3.4619	-.02129	.07002	.00254	.00051	26.729
#4	-.00171	3.4913	.05436	.07401	.00207	.00051	26.746
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	.00040	.02179	.01163	.00830	25.328	.47150	.00148
SDev	.00278	.00131	.00363	.00398	.033	.25551	.00066
%RSD	698.06	6.0348	31.243	47.915	.13061	54.190	44.377
#1	.00131	.02340	.01702	.01427	25.310	.83848	.00180
#2	-.00128	.02018	.00908	.00631	25.326	.32750	.00171
#3	-.00232	.02180	.01021	.00631	25.300	.44827	.00050
#4	.00388	.02178	.01021	.00632	25.375	.27175	.00192
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	14.544	.45059	-.00480	154.48	.06243	-.01020	.02398
SDev	.072	.00055	.00837	1.58	.00409	.02331	.00665
%RSD	.49842	.12171	174.60	1.0222	6.5463	228.55	27.742
#1	14.449	.45086	-.00155	152.49	.06195	.02477	.02051
#2	14.531	.45087	-.00804	154.34	.05700	-.02189	.02065
#3	14.577	.44977	.00494	154.77	.06420	-.02181	.03396
#4	14.619	.45088	-.01453	156.33	.06659	-.02187	.02080
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	.02677	2.5221	-.01954	.14813	.00137	.04464	-.00010
SDev	.03595	.0076	.02502	.00097	.00042	.09144	.00021
%RSD	134.29	.30303	128.09	.65555	30.376	204.84	221.33
#1	.07311	2.5327	.01609	.14707	.00153	-.03076	-.00000
#2	-.01448	2.5145	-.03052	.14802	.00185	.17611	-.00018

679 934

#3	.02153	2.5206	-.02224	.14802	.00088	.03311	.00015
#4	.02692	2.5206	-.04148	.14943	.00120	.00011	-.00034

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	.12092
SDev	.00076
%RSD	.63046

#1	.12015
#2	.12120
#3	.12048
#4	.12186

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DW680/2 NA

Operator: WTR

Run Time: 03/23/01 18:20:39

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	-.00258	.45011	-.01683	.12179	.01556	.00043	69.942
SDev	.00119	.00682	.03173	.00288	.00026	.00012	.117
%RSD	46.345	1.5158	188.50	2.3675	1.6740	27.560	.16774
#1	-.00112	.45606	-.02188	.12370	.01563	.00025	69.956
#2	-.00257	.44330	-.00667	.12212	.01571	.00049	70.073
#3	-.00257	.45591	.01854	.12371	.01517	.00049	69.950
#4	-.00405	.44519	-.05732	.11761	.01571	.00049	69.787
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	-.00241	.00242	-.00057	.00636	1.6007	.43898	-.00016
SDev	.00080	.00132	.00196	.00072	.0035	.40970	.00085
%RSD	33.369	54.333	344.38	11.333	.21908	93.330	541.21
#1	-.00149	.00242	-.00340	.00636	1.5987	.00232	.00059
#2	-.00206	.00404	-.00000	.00548	1.6016	.98713	.00026
#3	-.00332	.00243	-.00000	.00725	1.6052	.43898	-.00136
#4	-.00277	.00081	.00113	.00636	1.5973	.32750	-.00013
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	18.911	.05280	-.00141	254.69	-.00248	.01323	.02006
SDev	.054	.00000	.00838	.71	.00504	.03753	.00009
%RSD	.28514	.00617	593.02	.27917	202.89	283.60	.46946
#1	18.855	.05280	.00183	254.40	.00180	-.00307	.02006
#2	18.903	.05280	-.00466	255.06	-.00681	.03423	.02001
#3	18.903	.05281	.00832	253.84	-.00688	-.03099	.01998
#4	18.985	.05280	-.01115	255.45	.00195	.05276	.02019
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	.01405	3.0916	-.01274	.42429	-.00394	-.05240	.00372
SDev	.02381	.0368	.02118	.00089	.00037	.03983	.00246
%RSD	169.41	1.1899	166.28	.20954	9.4261	76.015	66.193
#1	-.00657	3.0733	.00234	.42412	-.00361	-.00057	.00004
#2	.03468	3.1159	.00783	.42459	-.00426	-.06438	.00489

#3	-.00655	3.1280	-.02507	.42318	-.00361	-.04850	.00521
#4	.03466	3.0491	-.03604	.42529	-.00426	-.09615	.00473
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 .02596
SDev .00119
%RSD 4.5878

#1 .02593
#2 .02529
#3 .02498
#4 .02765

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-5

Operator: WTR

Run Time: 03/23/01 18:23:49

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	1.0182	52.641	5.2182	5.2364	5.3259	5.1647	50.042
SDev	.0036	.167	.0433	.0252	.0262	.0103	.266
%RSD	.35659	.31638	.82957	.48056	.49230	.20010	.53121
#1	1.0196	52.585	5.2757	5.2388	5.3165	5.1555	50.174
#2	1.0152	52.777	5.1778	5.2389	5.3497	5.1731	49.851
#3	1.0152	52.771	5.1932	5.2645	5.3444	5.1741	49.792
#4	1.0226	52.430	5.2261	5.2033	5.2932	5.1559	50.351
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	5.0251	5.0049	4.9722	5.3389	52.645	52.929	H5.5514
SDev	.0203	.0132	.0145	.0322	.042	.361	.0614
%RSD	.40300	.26378	.29192	.60261	.07918	.68125	1.1059
#1	5.0471	5.0109	4.9797	5.3153	52.632	53.182	H5.5154
#2	5.0011	5.0045	4.9559	5.3630	52.645	53.238	H5.5969
#3	5.0170	4.9867	4.9650	5.3701	52.602	52.457	H5.6094
#4	5.0354	5.0174	4.9882	5.3074	52.702	52.838	5.4838
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
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	52.628	5.0207	5.1067	54.455	5.0179	5.0947	5.2700
SDev	.119	.0088	.0112	.449	.0404	.0691	.0530
%RSD	.22553	.17511	.22017	.82532	.80435	1.3567	1.0054
#1	52.546	5.0239	5.1099	54.134	5.0427	5.1600	5.2434
#2	52.738	5.0130	5.0905	54.785	5.0218	5.0107	5.2436
#3	52.721	5.0141	5.1099	54.894	4.9597	5.0663	5.3494
#4	52.506	5.0316	5.1164	54.006	5.0473	5.1417	5.2434
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	5.1829	5.2698	5.0050	5.2719	5.1681	10.270	5.0944
SDev	.1193	.0399	.0385	.0217	.0086	.070	.0036
%RSD	2.3011	.75653	.76928	.41207	.16620	.68107	.07156
#1	5.2267	5.2364	5.0255	5.2614	5.1645	10.195	5.0920
#2	5.1700	5.2911	4.9624	5.2911	5.1764	10.322	5.0965

#3	5.3090	5.2363	4.9847	5.2888	5.1738	10.227	5.0907
#4	5.0258	5.3154	5.0474	5.2464	5.1577	10.337	5.0985

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 5.0519
SDev .0115
%RSD .22715

#1 5.0379
#2 5.0659
#3 5.0532
#4 5.0505

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB5

Operator: WTR

Run Time: 03/23/01 18:27:04

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	.00038	-.01838	-.02142	.02779	.00176	.00170	-.02479
SDev	.00304	.01066	.05173	.01864	.00039	.00017	.00240
%RSD	793.40	58.005	241.54	67.061	22.108	10.056	9.6758
#1	-.00148	-.02423	-.07703	.03836	.00180	.00190	-.02349
#2	.00296	-.00613	.03421	.03834	.00226	.00176	-.02298
#3	-.00292	-.02983	-.05175	.03450	.00161	.00163	-.02828
#4	.00298	-.01333	.00890	-.00003	.00134	.00150	-.02442
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	.00275	-.00001	.00000	.00641	-.00902	-.33446	.00134
SDev	.00233	.00208	.00185	.00133	.00576	.24065	.00035
%RSD	84.439	19004.	384840.	20.683	63.828	71.950	26.486
#1	-.00012	-.00242	-.00227	.00795	-.00270	-.53654	.00183
#2	.00431	.00079	.00000	.00707	-.00703	-.36930	.00122
#3	.00495	.00241	-.00000	.00530	-.00992	-.44363	.00098
#4	.00188	-.00082	.00227	.00530	-.01642	.01161	.00131
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	-.02047	.00191	.00649	.03142	.00576	-.01624	.02339
SDev	.00811	.00055	.00621	.00715	.00413	.04581	.06001
%RSD	39.618	28.552	95.762	22.773	71.801	282.10	256.59
#1	-.03106	.00218	.00162	.03131	.00210	-.01166	.02000
#2	-.01412	.00219	.01460	.03961	.00483	-.07662	H.10007
#3	-.02259	.00109	.00811	.02219	.01169	-.01151	.02013
#4	-.01412	.00218	.00162	.03256	.00440	.03483	-.04663
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	.03477	.00914	-.01225	.00130	.00153	.01208	.00298
SDev	.04799	.00605	.02046	.00044	.00069	.08863	.00257
%RSD	138.01	66.195	167.06	33.675	45.479	734.00	86.184
#1	-.01161	.01822	.01584	.00160	.00120	-.07161	.00004
#2	.01931	.00609	-.03318	.00170	.00249	.07179	.00162

679 940

#3	.10179	.00613	-.01706	.00113	.00088	-.05566	.00521
#4	.02959	.00613	-.01460	.00076	.00153	.10378	.00505

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	.00258
SDev	.00103
%RSD	39.846

#1	.00233
#2	.00233
#3	.00163
#4	.00405

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DW684/10 NA Operator: WTR
 Run Time: 03/23/01 18:30:14
 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	-.00256	-.00818	-.03798	.21102	.01533	.00053	22.915
SDev	.00141	.00699	.04795	.01799	.00032	.00021	.140
%RSD	54.935	85.497	126.25	8.5228	2.0851	39.369	.61310
#1	-.00147	-.00581	.02408	.21870	.01517	.00025	22.830
#2	-.00295	-.00025	-.09244	.22253	.01498	.00051	22.972
#3	-.00144	-.00977	-.04688	.18418	.01544	.00062	23.084
#4	-.00439	-.01688	-.03669	.21868	.01571	.00074	22.773
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	-.00005	-.00243	-.00057	-.00265	.02292	15.931	.00370
SDev	.00209	.00323	.00066	.00000	.00225	.270	.00043
%RSD	4549.2	132.90	114.87	.11615	9.7982	1.6972	11.732
#1	-.00039	-.00404	-.00114	-.00265	.02184	15.964	.00375
#2	.00261	-.00405	-.00001	-.00265	.02112	15.546	.00417
#3	-.00249	-.00404	-.00000	-.00265	.02617	16.047	.00375
#4	.00008	.00241	-.00114	-.00265	.02256	16.168	.00312
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	58.515	.00055	-.00649	H480.79	-.00440	.02792	.04007
SDev	.185	.00063	.01108	3.35	.00325	.02322	.04004
%RSD	.31662	113.93	170.87	.69586	73.870	83.178	99.941
#1	58.752	.00109	-.01136	H485.73	-.00434	.06275	.02009
#2	58.490	.00109	-.01785	H479.05	-.00558	.01632	.10013
#3	58.518	.00001	.00812	H478.49	-.00771	.01620	.01993
#4	58.301	.00000	-.00486	H479.87	.00001	.01639	.02012
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	.03229	1.5018	-.02107	.35714	-.00096	-.10390	.00234
SDev	.08925	.0273	.00478	.00149	.00048	.06638	.00313
%RSD	276.37	1.8212	22.696	.41839	50.000	63.894	133.88
#1	-.01153	1.4881	-.02801	.35920	-.00137	-.08791	-.00029
#2	.04002	1.4881	-.01945	.35661	-.00072	-.02418	-.00045

#3	.15345	1.5428	-.01979	.35708	-.00040	-.18361	.00521
#4	-.05277	1.4881	-.01704	.35566	-.00137	-.11989	.00488
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 .00427
SDev .00090
%RSD 20.991

#1 .00309
#2 .00478
#3 .00512
#4 .00409

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: SI-200 0087-149-8 Operator: WTR
 Run Time: 03/23/01 18:33:24
 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	-.00184	.00594	-.03170	.13711	.00007	-.00000	.81240
SDev	.00074	.00230	.06756	.01013	.00022	.00001	.00786
%RSD	40.225	38.754	213.13	7.3898	321.66	200.00	.96730
#1	-.00148	.00688	-.00636	.13040	.00023	.00000	.80494
#2	-.00296	.00506	.02910	.14687	-.00023	.00000	.80634
#3	-.00148	.00325	-.12788	.12656	.00004	.00000	.82000
#4	-.00146	.00858	-.02164	.14461	.00023	-.00001	.81833
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00098	-.00525	-.00227	-.00111	-.01696	-.29033	.00026
SDev	.00192	.00203	.00293	.00151	.00069	.38869	.00070
%RSD	196.46	38.692	129.01	135.95	4.0718	133.88	274.29
#1	.00090	-.00727	-.00568	-.00266	-.01786	-.64802	.00029
#2	-.00089	-.00565	-.00341	-.00177	-.01642	-.40647	.00029
#3	.00027	-.00243	.00113	.00088	-.01642	.26246	.00107
#4	.00363	-.00567	-.00114	-.00089	-.01714	-.36930	-.00064
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03742	.00027	-.00325	.02499	.00044	.01850	.01998
SDev	.00843	.00055	.00325	.00856	.00329	.03516	.00004
%RSD	22.536	204.16	99.931	34.267	751.22	190.10	.21933
#1	-.04800	-.00001	-.00487	.03629	-.00082	.04404	.02000
#2	-.02824	.00109	-.00487	.02634	.00023	-.01177	.02002
#3	-.03953	-.00001	-.00487	.01638	-.00269	.05349	.01992
#4	-.03389	-.00000	.00162	.02094	.00503	-.01177	.02000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05923	196.54	.02543	.00054	.00249	-.04749	.00085
SDev	.02078	1.38	.01013	.00014	.00045	.08278	.00196
%RSD	35.088	.70200	39.852	25.006	18.248	174.31	230.17
#1	.02959	194.81	.02680	.00043	.00249	.00831	-.00013
#2	.07599	196.15	.01310	.00043	.00217	-.16696	-.00013
#3	.07083	197.20	.03777	.00066	.00217	-.03955	-.00012
#4	.06052	198.00	.02406	.00066	.00313	.00825	.00379
Elem	ZN						
Units	ppm						
Avge	.02002						
SDev	.00240						
%RSD	11.983						
#1	.02172						
#2	.02171						
#3	.02001						

#4 .01663

Method: QUANMET Sample Name: SI-300 0087-149-9 Operator: WTR
 Run Time: 03/23/01 18:36:34
 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	- .00000	.04336	.00853	.07839	.00039	.00003	.91541
SDev	.00120	.00336	.02713	.00075	.00022	.00006	.00299
%RSD	41171.	7.7488	318.20	.95622	55.459	200.00	.32618

#1	- .00000	.04152	.01867	.07737	.00023	.00013	.91095
#2	- .00148	.03968	.02375	.07896	.00023	.00000	.91708
#3	- .00000	.04516	.02371	.07895	.00069	.00000	.91652
#4	.00147	.04706	-.03202	.07828	.00042	.00000	.91708

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00069	-.00324	-.00227	-.00155	-.01280	-.40414	-.00008
SDev	.00291	.00209	.00093	.00085	.00059	.46213	.00074
%RSD	421.28	64.414	40.862	54.638	4.6127	114.35	991.35

#1	.00182	-.00082	-.00227	-.00089	-.01208	.02090	.00008
#2	.00330	-.00405	-.00227	-.00089	-.01352	-.08129	.00056
#3	-.00345	-.00242	-.00113	-.00177	-.01280	-.58299	-.00115
#4	.00109	-.00566	-.00341	-.00266	-.01280	-.97320	.00020

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.03812	-.00000	-.00000	.05257	-.00162	.03482	.01967
SDev	.00937	.00089	.00325	.00609	.00541	.03317	.06533
%RSD	24.568	19891.	193660.	11.584	333.30	95.257	332.16

#1	-.03671	-.00000	.00162	.05329	-.00332	.06270	-.06033
#2	-.02824	-.00110	.00162	.04375	.00251	.06285	.09970
#3	-.03671	.00109	.00162	.05703	.00285	.01623	.01966
#4	-.05083	-.00001	-.00487	.05620	-.00853	-.00249	.01964

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03347	297.93	.17005	.00066	.00482	.05997	-.00000
SDev	.02958	1.49	.02300	.00000	.00066	.07952	.00008
%RSD	88.375	.50025	13.527	.00000	13.744	132.60	1729.5

#1	.07085	295.86	.13887	.00066	.00474	.07188	.00004
#2	.03476	297.88	.18889	.00066	.00410	-.05552	.00004
#3	.02960	298.75	.18581	.00066	.00474	.10377	.00004
#4	-.00133	299.23	.16662	.00066	.00570	.11973	-.00013

Elem	ZN
Units	ppm
Avg	.06415
SDev	.00216
%RSD	3.3619

#1	.06338
#2	.06166
#3	.06675

#4 .06480

Method: QUANMET Sample Name: SI-400 0087-167-1 Operator: WTR
 Run Time: 03/23/01 18:39:44
 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
Avg	- .00036	- .02468	- .02768	.00854	- .00007	- .00001	- .03437
SDev	.00187	.00795	.03999	.00353	.00022	.00011	.00253
%RSD	519.69	32.232	144.50	41.318	321.66	1432.7	7.3555

#1	.00150	- .03159	.01412	.00831	- .00004	- .00014	- .03664
#2	.00002	- .01326	- .06199	.00990	.00023	- .00002	- .03200
#3	- .00001	- .02781	- .06179	.01216	- .00023	.00013	- .03646
#4	- .00296	- .02606	- .00104	.00381	- .00023	.00000	- .03237

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	- .00019	- .00324	- .00256	- .00244	- .01929	- .37163	- .00020
SDev	.00145	.00162	.00109	.00044	.00059	.19494	.00039
%RSD	743.12	49.886	42.486	18.122	3.0601	52.455	193.73

#1	- .00075	- .00082	- .00341	- .00265	- .02002	- .53654	- .00043
#2	.00193	- .00405	- .00114	- .00266	- .01857	- .09058	.00038
#3	- .00129	- .00404	- .00341	- .00266	- .01929	- .45292	- .00043
#4	- .00066	- .00404	- .00227	- .00177	- .01929	- .40647	- .00034

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	- .04589	- .00001	- .00163	.00156	.00518	- .00002	.03662
SDev	.00355	.00000	.00375	.00476	.00274	.01164	.03338
%RSD	7.7434	23.360	230.58	305.89	52.927	67042.	91.153

#1	- .04518	- .00000	.00162	- .00145	.00864	- .01150	.08670
#2	- .04236	- .00001	- .00487	.00601	.00338	.01622	.01992
#3	- .05083	- .00001	- .00487	.00518	.00263	- .00239	.01995
#4	- .04518	- .00000	.00162	- .00353	.00607	- .00239	.01993

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	- .02455	418.92	.06798	- .00028	.00610	.01624	.00246
SDev	.05915	.83	.00917	.00000	.00040	.11524	.00289
%RSD	240.97	.19797	13.495	.00000	6.6227	709.64	117.74

#1	.01927	418.12	.06271	- .00028	.00602	.15162	.00504
#2	- .05290	418.45	.08162	- .00028	.00667	- .08733	.00488
#3	- .09414	420.00	.06243	- .00028	.00602	.07202	- .00013
#4	.02958	419.10	.06517	- .00028	.00570	- .07135	.00004

Elem	ZN
Units	ppm
Avg	.00070
SDev	.00153
%RSD	218.02

#1	.00108
#2	.00239
#3	- .00132

#4 .00066

Method: QUANMET Sample Name: SI-600 0087-167-2 Operator: WTR
 Run Time: 03/23/01 18:42:54
 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	-.00073	-.01871	-.00239	-.00003	.00000	.00003	-.02757
SDev	.00086	.00330	.02354	.00001	.00027	.00006	.00143
%RSD	116.90	17.640	986.40	23.286	3657e6	238.93	5.1888
#1	-.00001	-.02049	-.02640	-.00003	.00023	.00000	-.02958
#2	-.00148	-.02233	.02932	-.00002	-.00023	.00000	-.02744
#3	-.00147	-.01693	-.01126	-.00004	-.00023	.00012	-.02702
#4	.00002	-.01508	-.00121	-.00003	.00023	-.00002	-.02623

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00131	-.00284	-.00114	-.00266	-.01856	-.05110	-.00023
SDev	.00367	.00204	.00131	.00000	.00132	.25425	.00053
%RSD	280.05	71.686	115.17	.06895	7.1021	497.57	229.25
#1	-.00247	-.00243	-.00227	-.00266	-.01928	-.36001	-.00073
#2	.00633	-.00568	-.00000	-.00266	-.01712	-.06271	-.00013
#3	.00096	-.00082	-.00227	-.00265	-.02001	-.04413	-.00055
#4	.00042	-.00244	-.00000	-.00266	-.01784	.26246	.00047

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04448	.00109	-.00325	-.00207	.00016	.06515	.03311
SDev	.00535	.00000	.00325	.00210	.00349	.01588	.01548
%RSD	12.019	.07080	99.921	101.32	2159.4	24.372	46.740
#1	-.04518	.00109	-.00487	-.00104	.00249	.06286	.04652
#2	-.03671	.00109	-.00487	-.00145	.00076	.08134	.01971
#3	-.04800	.00109	.00162	-.00062	.00234	.07221	.04652
#4	-.04800	.00109	-.00487	-.00518	-.00494	.04420	.01971

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02958	627.00	.12896	-.00005	.00924	.02819	.00148
SDev	.05274	1.45	.02748	.00027	.00000	.06551	.00236
%RSD	178.26	.23156	21.310	604.00	.00000	232.44	159.76
#1	.06051	626.48	.11462	.00019	.00924	.00829	-.00013
#2	-.04259	625.18	.15838	.00019	.00924	.08794	-.00012
#3	.07598	628.13	.09817	-.00028	.00924	-.05544	.00129
#4	.02443	628.21	.14467	-.00028	.00924	.07195	.00488

Elem	ZN
Units	ppm
Avg	.00149
SDev	.00072
%RSD	48.450
#1	.00108
#2	.00208
#3	.00068

#4 .00212

Method: QUANMET Sample Name: SI-750 0087-167-3 Operator: WTR
 Run Time: 03/23/01 18:46:03
 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	-.00111	-.01918	-.00110	.04026	-.00009	-.00003	-.03483
SDev	.00074	.00272	.10237	.00384	.00030	.00006	.00377
%RSD	66.495	14.164	9333.5	9.5271	344.81	200.00	10.834

#1	-.00148	-.02049	-.03147	.03834	-.00004	.00000	-.03409
#2	-.00148	-.02052	.08501	.03835	-.00050	-.00013	-.04036
#3	-.00000	-.02059	-.13276	.03835	.00023	.00000	-.03218
#4	-.00148	-.01510	.07483	.04602	-.00004	.00000	-.03269

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00140	-.00526	-.00397	-.00266	-.01278	-.76416	-.00104
SDev	.00405	.00275	.00217	.00000	.00118	.20503	.00046
%RSD	290.47	52.343	54.730	.09835	9.2340	26.830	44.426

#1	.00325	-.00245	-.00568	-.00266	-.01422	-.81526	-.00115
#2	-.00222	-.00889	-.00568	-.00266	-.01278	-1.0289	-.00103
#3	-.00017	-.00567	-.00113	-.00266	-.01278	-.56441	-.00043
#4	-.00644	-.00404	-.00340	-.00266	-.01133	-.64802	-.00154

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.05224	.00054	-.00162	-.00301	.00396	.08143	.07315
SDev	.00711	.00063	.00375	.00190	.00901	.03134	.04861
%RSD	13.603	116.21	230.71	63.082	227.65	38.493	66.448

#1	-.04236	-.00000	-.00487	-.00560	.00758	.06285	.04660
#2	-.05365	.00109	-.00487	-.00270	.01409	.07193	.01984
#3	-.05365	.00109	.00162	-.00270	.00116	.12801	.09982
#4	-.05930	-.00000	.00162	-.00104	-.00700	.06293	.12635

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06053	786.22	.13460	-.00028	.01124	-.02763	-.00005
SDev	.08544	2.21	.03481	.00000	.00031	.10275	.00010
%RSD	141.14	.28101	25.859	.00000	2.7355	371.85	200.00

#1	.08115	785.03	.10913	-.00028	.01084	.07193	-.00013
#2	.06053	789.47	.17208	-.00028	.01116	.04011	-.00013
#3	-.05288	784.67	.10113	-.00028	.01148	-.07144	.00004
#4	.15333	785.72	.15607	-.00028	.01148	-.15113	.00003

Elem	ZN
Units	ppm
Avge	.00010
SDev	.00149
%RSD	1500.5
#1	.00066
#2	-.00205
#3	.00138

#4 .00041

Method: QUANMET Sample Name: AL-3000 0087-166-10 Operator: WTR
 Run Time: 03/23/01 18:49:13
 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	3175.1	1.0508	.00442	-.00002	.00010	-.01495
SDev	.00142	34.3	.2545	.00266	.00019	.00007	.00512
%RSD	375.77	1.0789	24.216	60.074	932.55	66.894	34.251

#1	.00147	3138.6	1.3686	.00764	.00023	.00013	-.00774
#2	-.00150	3218.7	.78427	.00314	-.00004	.00014	-.01829
#3	-.00000	3160.0	.92289	.00537	-.00004	.00000	-.01889
#4	-.00148	3183.0	1.1274	.00154	-.00023	.00013	-.01489

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00621	-.00079	.00085	-.00265	-.01751	-.18814	-.00005
SDev	.00368	.00295	.00193	.00000	.00267	.66783	.00043
%RSD	59.291	372.56	226.22	.11081	15.251	354.97	952.75

#1	-.01062	.00245	.00340	-.00265	-.01426	.61551	.00038
#2	-.00270	-.00403	-.00112	-.00266	-.01642	-.59228	.00008
#3	-.00370	.00081	-.00000	-.00265	-.01931	-.86171	-.00001
#4	-.00782	-.00240	.00114	-.00266	-.02003	.08594	-.00064

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03953	-.01647	.00649	.00819	-.00457	-.16584	-.11326
SDev	.02494	.00086	.02009	.01292	.00652	.07217	.10212
%RSD	63.084	5.2039	309.68	157.72	142.54	43.515	90.163

#1	-.00565	-.01640	-.01136	.02592	-.00123	-.06819	-.08637
#2	-.05365	-.01727	.03407	.00394	.00203	-.15638	-.19339
#3	-.06212	-.01692	-.00487	.00767	-.00614	-.23086	-.19322
#4	-.03671	-.01531	.00811	-.00477	-.01295	-.20793	.01995

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07083	4.3624	-.12111	-.00006	.00112	-.06353	-.00140
SDev	.21286	.8590	.03416	.00033	.00040	.16938	.00188
%RSD	300.52	19.692	28.205	602.21	35.952	266.63	134.17

#1	.33376	5.4299	-.15459	.00043	.00120	-.27868	-.00028
#2	.05537	4.6038	-.13584	-.00028	.00120	.07191	-.00415
#3	-.18694	3.9904	-.11939	-.00009	.00153	.07189	-.00012
#4	.08113	3.4256	-.07463	-.00028	.00056	-.11923	-.00104

Elem	ZN
Units	ppm
Avge	-.00636
SDev	.00343
%RSD	53.957

#1	-.00160
#2	-.00970
#3	-.00757

#4 - .00655

Method: QUANMET Sample Name: AL-4000 0087-166-11 Operator: WTR
 Run Time: 03/23/01 18:52:23
 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	-.00297	4175.9	1.4936	-.00003	-.00046	.00001	-.02237
SDev	.00319	10.6	.2124	.00001	.00005	.00000	.00046
%RSD	107.30	.25451	14.224	32.284	10.188	14.254	2.0596

#1	-.00150	4190.0	1.5512	-.00002	-.00050	.00001	-.02298
#2	-.00741	4178.3	1.7517	-.00004	-.00042	.00001	-.02242
#3	-.00002	4168.0	1.4242	-.00002	-.00050	.00001	-.02191
#4	-.00298	4167.3	1.2474	-.00003	-.00042	.00001	-.02214

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01125	-.00360	-.00027	-.00266	-.01751	-.67822	-.00092
SDev	.00594	.00203	.00109	.00000	.00254	.14240	.00070
%RSD	52.831	56.271	405.15	.06779	14.503	20.996	75.594

#1	-.01612	-.00400	-.00112	-.00266	-.01497	-.57370	-.00013
#2	-.00974	-.00078	-.00113	-.00265	-.01932	-.58299	-.00148
#3	-.01566	-.00561	.00002	-.00266	-.01570	-.88029	-.00154
#4	-.00347	-.00403	.00115	-.00266	-.02003	-.67590	-.00055

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.05224	-.02126	.03894	.00446	.00221	-.18607	.04319
SDev	.01314	.00103	.02272	.01122	.00730	.02076	.06397
%RSD	25.161	4.8538	58.337	251.72	330.94	11.157	148.13

#1	-.06777	-.02270	.04705	.01929	.00494	-.20203	-.00685
#2	-.04800	-.02024	.01460	-.00560	.00042	-.20365	.12680
#3	-.05648	-.02106	.06652	.00684	.01036	-.16018	.05972
#4	-.03671	-.02105	.02758	-.00270	-.00689	-.17842	-.00691

Elem	SE	SI	SN	SR	TI	TL	v_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.22549	1.3149	-.04986	-.00027	.00096	-.05156	-.00402
SDev	.07864	.1212	.03058	.00019	.00124	.19525	.00057
%RSD	34.873	9.2190	61.335	71.351	128.74	378.68	14.254

#1	.18941	1.4637	-.05556	-.00005	.00217	.02407	-.00382
#2	.13269	1.3544	-.09063	-.00047	-.00072	.15157	-.00464
#3	.27705	1.2572	-.03060	-.00018	.00153	-.07149	-.00333
#4	.30281	1.1843	-.02265	-.00038	.00088	-.31039	-.00431

Elem	ZN
Units	ppm
Avge	-.01190
SDev	.00566
%RSD	47.544

#1	-.00612
#2	-.01967
#3	-.01052

#4 -.01127

Method: QUANMET Sample Name: AL-5000 0087-166-12 Operator: WTR
 Run Time: 03/23/01 18:55:33
 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	k-.00072	S14555.	k-73.700	k.01819	-.00020	.00004	-.01331
SDev	.00191	.	.850	.02110	.00022	.00006	.00367
%RSD	265.02	.00341	1.1531	116.00	107.22	137.33	27.600

#1	k.00001	S14555.	k-74.682	k.03834	-.00023	.00002	-.01541
#2	k.00150	S14555.	k-73.661	k.03449	-.00004	.00014	-.00834
#3	k-.00146	S14555.	k-73.845	k-.00002	-.00004	.00001	-.01285
#4	k-.00294	S14555.	k-72.614	k-.00004	-.00050	.00001	-.01666

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	k.53786	k-.00143	.00057	k.00199	-.01534	-.25549	-.00028
SDev	.00499	.00428	.00236	.00537	.00093	.33165	.00105
%RSD	.92800	299.13	412.06	270.17	6.0810	129.81	377.30

#1	k.54534	k-.00549	.00113	k.00707	-.01425	-.24853	-.00154
#2	k.53546	k-.00062	.00342	k.00619	-.01569	.03019	.00089
#3	k.53557	k-.00385	.00000	k-.00266	-.01497	-.08129	.00017
#4	k.53506	k.00423	-.00226	k-.00265	-.01642	-.72235	-.00064

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.04448	k-.25903	.01136	.01265	k-.00662	k-6.0940	k-.19006
SDev	.01291	.00126	.02018	.00512	.00499	.0862	.08245
%RSD	29.038	.48652	177.69	40.511	75.426	1.4143	43.384

#1	-.05083	k-.26014	-.01136	.01597	k-.01179	k-6.1854	k-.28635
#2	-.03106	k-.26010	.03407	.01763	k-.00959	k-5.9890	k-.20710
#3	-.03671	k-.25795	.00162	.01058	k-.00078	k-6.1384	k-.08643
#4	-.05930	k-.25793	.02109	.00643	k-.00433	k-6.0633	k-.18035

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.16879	.63314	k-.10224	-.00016	.00225	k.11438	-.00409
SDev	.21172	.04792	.15438	.00029	.00066	.14329	.00103
%RSD	125.44	7.5682	150.99	177.50	29.451	125.28	25.157

#1	.15333	.70450	k-.28428	-.00018	.00217	k.16616	-.00529
#2	.32860	.61340	k-.00979	.00019	.00313	k.29357	-.00289
#3	-.12506	.61340	k-.17104	-.00014	.00217	k.00687	-.00371
#4	.31829	.60124	k.05613	-.00052	.00153	k-.00910	-.00448

Elem	ZN
Units	ppm
Avge	k-.01503
SDev	.00397
%RSD	26.424

#1	k-.01379
#2	k-.01040
#3	k-.01607

#4 k-.01985

Method: QUANMET Sample Name: MG-3000 0087-166-13 Operator: WTR
 Run Time: 03/23/01 18:58:43
 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	-0.00253	1.7543	-0.08015	-0.02420	0.00009	-0.00007	0.01176
SDev	0.00516	0.5207	0.01513	0.00607	0.00027	0.00006	0.00565
%RSD	203.97	29.679	18.877	25.092	283.80	95.358	48.055

#1	0.00300	2.3197	-0.06572	-0.02212	0.00015	-0.00004	0.01898
#2	-0.00880	2.0369	-0.06852	-0.01895	-0.00023	-0.00004	0.00541
#3	0.00005	1.4948	-0.09451	-0.02278	0.00042	-0.00003	0.01011
#4	-0.00438	1.1658	-0.09187	-0.03296	0.00004	-0.00016	0.01252

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.00640	-0.00733	0.01192	-0.00178	-0.01067	-0.92210	0.00685
SDev	0.00340	0.00474	0.00270	0.00177	0.00224	0.34174	0.00088
%RSD	53.055	64.743	22.667	99.705	20.973	37.061	12.854

#1	-0.00265	-0.00411	0.01249	-0.00266	-0.00760	-0.63873	0.00817
#2	-0.00882	-0.01055	0.00795	-0.00266	-0.01194	-1.3262	0.00630
#3	-0.00969	-0.01216	0.01361	-0.00266	-0.01049	-1.0847	0.00642
#4	-0.00444	-0.00249	0.01362	0.00088	-0.01266	-0.63873	0.00651

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2708.9	0.05481	0.03245	0.00871	-0.01247	0.18489	0.00647
SDev	13.8	0.00054	0.01938	0.00671	0.02887	0.03530	0.07690
%RSD	0.50971	0.98788	59.724	77.029	231.54	19.090	1189.0

#1	2690.2	0.05562	0.05354	0.01058	-0.01127	0.21037	0.09978
#2	2719.4	0.05453	0.02758	-0.00104	-0.05010	0.18231	0.01958
#3	2706.7	0.05453	0.00811	0.01431	-0.00872	0.13590	-0.08673
#4	2719.3	0.05455	0.04056	0.01099	0.02022	0.21099	-0.00676

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-0.02968	0.49361	-0.15300	-0.00010	0.04811	0.08009	0.01116
SDev	0.07453	0.06202	0.05301	0.00035	0.00083	0.09419	0.00072
%RSD	251.15	12.564	34.649	340.00	1.7242	117.60	6.4657

#1	0.03993	0.57105	-0.18140	0.00043	0.04907	0.21543	0.01138
#2	0.02961	0.49210	-0.18996	-0.00028	0.04714	0.02438	0.01197
#3	-0.09412	0.49208	-0.16573	-0.00028	0.04843	0.00845	0.01024
#4	-0.09412	0.41921	-0.07492	-0.00028	0.04778	0.07212	0.01106

Elem	ZN
Units	ppm
Avg	0.00727
SDev	0.00183
%RSD	25.082

#1	0.00924
#2	0.00728
#3	0.00485

#4 .00773

Method: QUANMET Sample Name: CCV2-6

Operator: WTR

Run Time: 03/23/01 19:01:53

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	1.0056	52.050	5.2207	5.2177	5.3332	5.1264	48.859
SDev	.0039	.131	.1458	.0289	.0191	.0090	.173
%RSD	.39099	.25122	2.7936	.55474	.35862	.17479	.35439

#1	.99995	51.953	5.1206	5.2376	5.3343	5.1201	48.600
#2	1.0074	51.960	5.2568	5.1765	5.3179	5.1202	48.933
#3	1.0089	52.053	5.0940	5.2187	5.3209	5.1264	48.950
#4	1.0060	52.234	5.4116	5.2381	5.3599	5.1391	48.954

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	4.9254	4.9330	4.8831	5.3591	52.069	52.966	H5.6007
SDev	.0230	.0214	.0087	.0144	.124	.354	.0211
%RSD	.46617	.43315	.17908	.26797	.23767	.66753	.37726

#1	4.8918	4.9032	4.8713	5.3602	51.904	53.210	H5.6045
#2	4.9301	4.9419	4.8855	5.3514	52.065	52.736	H5.5900
#3	4.9428	4.9338	4.8923	5.3461	52.103	52.597	H5.5798
#4	4.9368	4.9531	4.8833	5.3788	52.202	53.321	H5.6285

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
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	52.464	4.9482	5.0385	54.663	4.9251	4.9696	5.2167
SDev	.115	.0119	.0159	.196	.0317	.0350	.0438
%RSD	.21971	.24119	.31581	.35859	.64457	.70345	.83994

#1	52.421	4.9310	5.0255	54.691	4.9216	4.9991	5.2170
#2	52.354	4.9528	5.0255	54.462	4.8816	4.9443	5.1629
#3	52.458	4.9507	5.0450	54.577	4.9459	4.9348	5.2702
#4	52.625	4.9583	5.0579	54.921	4.9514	5.0003	5.2167

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	5.1437	5.3254	4.8911	5.2681	5.1243	9.9415	5.0390
SDev	.0637	.0152	.1018	.0152	.0121	.1127	.0057
%RSD	1.2388	.28625	2.0807	.28791	.23662	1.1335	.11402

#1	5.1161	5.3025	4.7677	5.2663	5.1156	9.9044	5.0309
#2	5.1578	5.3330	4.9731	5.2564	5.1173	9.9494	5.0434

#3	5.2250	5.3330	4.8475	5.2596	5.1224	9.8215	5.0427
#4	5.0758	5.3330	4.9760	5.2899	5.1420	10.091	5.0392
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 4.9684
SDev .0137
%RSD .27616

#1 4.9481
#2 4.9721
#3 4.9753
#4 4.9781

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB6

Operator: WTR

Run Time: 03/23/01 19:05:07

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	-.00221	.18250	-.00908	.00862	.00212	.00211	-.02497
SDev	.00086	.04253	.01800	.01726	.00010	.00019	.00022
%RSD	38.891	23.302	198.24	200.19	4.4729	9.2047	.87798

#1	-.00295	.15649	.01267	.03451	.00207	.00202	-.02465
#2	-.00145	.13629	-.00243	-.00002	.00207	.00188	-.02512
#3	-.00148	H.21674	-.01821	.00000	.00226	.00227	-.02498
#4	-.00295	H.22046	-.02836	-.00001	.00207	.00227	-.02512

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	.00412	-.00042	.00000	-.00066	-.00541	-.46686	.00222
SDev	.00211	.00358	.00161	.00398	.00246	.47212	.00099
%RSD	51.173	856.92	77337.	599.22	45.453	101.13	44.579

#1	H.00554	.00079	.00227	.00530	-.00631	-.21136	.00333
#2	.00198	.00403	-.00113	-.00265	-.00559	-.08129	.00264
#3	.00268	-.00243	-.00113	-.00265	-.00198	-1.1404	.00101
#4	H.00628	-.00406	.00000	-.00266	-.00776	-.43434	.00192

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	.17931	.00218	.00811	.02799	.00590	.00222	.01334
SDev	.02288	.00089	.00530	.00652	.00566	.02805	.01722
%RSD	12.761	40.957	65.327	23.299	95.966	1262.3	129.11

#1	.16943	.00218	.00811	.03007	.01169	-.01168	.02006
#2	.15531	.00218	.01460	.02219	.00967	.04430	.03332
#3	.18355	.00327	.00811	.03629	-.00007	-.01183	.00661
#4	.20896	.00108	.00162	.02343	.00232	-.01190	-.00665

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	.01029	.03038	.00416	.00189	.00137	-.01584	.00114
SDev	.05526	.00002	.02001	.00008	.00061	.11079	.00199
%RSD	536.83	.07387	480.62	4.4240	45.055	699.43	173.73

#1	.08118	.03037	-.00335	.00184	.00088	-.11938	.00021
#2	.01416	.03041	.03235	.00194	.00153	-.07166	.00412

#3	-.05285	.03037	.00208	.00180	.00217	-.00790	.00020
#4	-.00131	.03037	-.01443	.00198	.00088	.13557	.00004
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 .00295
SDev .00120
%RSD 40.718

#1 .00231
#2 .00476
#3 .00238
#4 .00237

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: MG-4000 0087-166-14 Operator: WTR
 Run Time: 03/23/01 19:08:17
 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	-.00216	.02724	-.08143	-.02357	.00058	.00025	.03350
SDev	.00351	.01883	.04597	.00736	.00044	.00016	.00673
%RSD	162.32	69.143	56.450	31.223	76.594	63.578	20.080

#1	-.00438	.02454	-.07761	-.01376	.00023	.00022	.02888
#2	.00300	.04638	-.03221	-.02955	.00115	.00047	.04324
#3	-.00291	.03567	-.07263	-.02889	.00023	.00022	.02916
#4	-.00438	.00235	-.14328	-.02209	.00069	.00009	.03269

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00494	-.00534	.01533	.00729	-.00304	-1.2473	.00949
SDev	.01068	.00479	.00217	.00364	.00239	.7198	.00121
%RSD	216.32	89.825	14.195	49.942	78.530	57.706	12.805

#1	.00479	-.00415	.01362	.00707	-.00177	-1.6793	.00804
#2	-.00551	-.00413	.01816	.01149	-.00033	-.18349	.01099
#3	.00062	-.00091	.01362	.00795	-.00538	-1.4284	.00967
#4	-.01964	-.01216	.01590	.00264	-.00467	-1.6979	.00925

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3428.1	.07123	.03732	.02229	-.03219	.20695	-.01709
SDev	26.3	.00104	.01351	.01035	.02132	.01622	.06494
%RSD	.76736	1.4662	36.203	46.434	66.235	7.8357	380.09

#1	3451.2	.07095	.03407	.01680	-.04482	.18358	-.10062
#2	3393.7	.06986	.04056	.03712	-.00051	.21173	.04645
#3	3445.8	.07204	.02109	.02136	-.03864	.22110	.01972
#4	3421.6	.07205	.05354	.01389	-.04480	.21140	-.03391

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01417	.34480	-.18126	.00043	.06288	.19156	.01098
SDev	.12272	.04219	.04954	.00027	.00069	.21943	.00034
%RSD	866.23	12.237	27.331	63.837	1.1036	114.55	3.1286

#1	-.12502	.31595	-.13842	.00019	.06288	-.02353	.01090
#2	.12244	.33417	-.14055	.00066	.06320	.31098	.01107
#3	.11211	.32202	-.20921	.00066	.06352	.04023	.01057
#4	-.05286	.40706	-.23684	.00019	.06192	.43858	.01139

Elem	ZN
Units	ppm
Avge	.00984
SDev	.00147
%RSD	14.969

#1	.00960
#2	.01184
#3	.00828

#4 .00963

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Method: QUANMET Sample Name: MG-5000 0087-166-15 Operator: WTR
 Run Time: 03/23/01 19:11:27
 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	-.00399	-.02555	-.10006	-.02453	.00025	-.00005	.04824
SDev	.00253	.01936	.07789	.02484	.00029	.00014	.00530
%RSD	63.444	75.767	77.845	101.30	116.23	312.33	10.988

#1	-.00733	-.05260	-.18842	-.03202	.00004	-.00016	.04334
#2	-.00140	-.00672	-.00149	.00927	.00050	.00008	.05416
#3	-.00288	-.01990	-.08746	-.02527	.00050	.00008	.05124
#4	-.00436	-.02299	-.12287	-.05008	-.00004	-.00017	.04422

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01086	-.00736	.01760	-.00067	-.00227	-1.2728	.01090
SDev	.00625	.00436	.00503	.00182	.00443	.6510	.00131
%RSD	57.585	59.280	28.587	272.20	195.02	51.148	12.010

#1	-.01394	-.01381	.01250	-.00178	-.00679	-1.7629	.01057
#2	-.00723	-.00414	.02384	.00088	.00333	-.77809	.01090
#3	-.01800	-.00573	.01931	.00088	-.00462	-.64802	.01264
#4	-.00426	-.00577	.01475	-.00266	-.00101	-1.9023	.00949

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4117.6	.08788	.05679	.02105	.00338	.20227	-.02035
SDev	4.6	.00063	.02018	.00820	.05115	.03218	.04656
%RSD	.11087	.71677	35.532	38.959	1512.6	15.911	228.83

#1	4119.7	.08733	.06653	.01182	-.02242	.21134	-.06056
#2	4114.9	.08733	.04706	.03090	.07041	.21172	.02034
#3	4123.0	.08843	.07951	.01763	.01311	.15583	.01961
#4	4112.9	.08842	.03407	.02385	-.04758	.23017	-.06079

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02965	.38736	-.12991	.00041	.07645	.15977	.01461
SDev	.05398	.03758	.04846	.00029	.00080	.12022	.00204
%RSD	182.04	9.7026	37.301	70.079	1.0504	75.249	13.986

#1	.02962	.34633	-.18491	.00014	.07541	.00857	.01171
#2	-.09923	.41926	-.13797	.00066	.07734	.13574	.01625
#3	-.03739	.41926	-.12975	.00066	.07670	.29520	.01581
#4	-.01160	.36458	-.06702	.00019	.07637	.19957	.01465

Elem	ZN
Units	ppm
Avge	.01147
SDev	.00112
%RSD	9.8127

#1	.01267
#2	.00998
#3	.01186

#4 .01137

Method: QUANMET Sample Name: CCV2-7

Operator: WTR

Run Time: 03/23/01 19:14:37

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
Avge	.99467	50.857	5.1209	5.0857	5.1496	4.9940	49.094
SDev	.00227	.085	.0470	.0366	.0100	.0047	.199
%RSD	.22859	.16637	.91737	.71899	.19336	.09315	.40618

#1	.99349	50.802	5.0710	5.0319	5.1545	4.9874	48.912
#2	.99650	50.772	5.1014	5.1138	5.1369	4.9974	49.165
#3	.99205	50.899	5.1815	5.0983	5.1470	4.9940	48.955
#4	.99665	50.955	5.1298	5.0987	5.1598	4.9972	49.343

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	4.9139	4.8889	4.8641	5.1520	51.369	50.931	5.3384
SDev	.0196	.0137	.0150	.0136	.116	.290	.0193
%RSD	.39877	.28115	.30741	.26303	.22621	.56879	.36166

#1	4.9176	4.8695	4.8458	5.1665	51.254	51.361	5.3636
#2	4.9059	4.8906	4.8685	5.1365	51.377	50.804	5.3165
#3	4.8929	4.8938	4.8606	5.1595	51.317	50.729	5.3363
#4	4.9391	4.9018	4.8816	5.1454	51.526	50.832	5.3372

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	51.938	4.9041	4.9946	52.356	4.8841	4.9109	5.0931
SDev	.709	.0141	.0134	.090	.0115	.0583	.0399
%RSD	1.3652	.28711	.26814	.17135	.23556	1.1878	.78397

#1	51.024	4.8882	4.9929	52.420	4.8751	4.8499	5.0832
#2	52.317	4.9057	4.9929	52.224	4.8749	4.9808	5.0429
#3	52.645	4.9003	4.9799	52.396	4.8874	4.8786	5.1366
#4	51.766	4.9222	5.0124	52.386	4.8989	4.9345	5.1096

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	5.0577	5.1378	4.8895	5.1025	5.0149	9.9371	4.9656
SDev	.0509	.0001	.0450	.0086	.0075	.3045	.0119
%RSD	1.0070	.00252	.92116	.16760	.14982	3.0641	.23942

#1	5.1295	5.1377	4.8333	5.1033	5.0100	9.7399	4.9562
#2	5.0165	5.1378	4.8962	5.0925	5.0154	10.327	4.9625

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#3	5.0575	5.1378	4.8856	5.1012	5.0090	10.025	4.9609
#4	5.0273	5.1380	4.9430	5.1133	5.0254	9.6557	4.9830

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	4.9352
SDev	.0136
%RSD	.27594

#1	4.9258
#2	4.9222
#3	4.9414
#4	4.9513

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB7

Operator: WTR

Run Time: 03/23/01 19:17:47

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	-.00184	-.02605	.00399	.02683	.00127	.00151	-.02968
SDev	.00074	.00781	.00713	.01800	.00032	.00017	.00368
%RSD	40.492	29.988	178.44	67.065	25.211	11.581	12.400

#1	-.00148	-.02970	.00912	.03834	.00088	.00126	-.03283
#2	-.00147	-.03328	.00406	.03451	.00142	.00151	-.02893
#3	-.00296	-.02599	-.00611	.03451	.00115	.00164	-.03218
#4	-.00145	-.01522	.00891	-.00002	.00161	.00163	-.02479

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	-.00173	-.00161	-.00000	.00663	-.01119	-.26478	.00119
SDev	.00123	.00336	.00160	.00051	.00231	.37612	.00045
%RSD	71.113	208.29	179510.	7.6747	20.665	142.05	37.764

#1	-.00074	-.00242	-.00227	.00618	-.01354	-.27640	.00068
#2	-.00223	-.00080	-.00000	.00707	-.00920	-.34143	.00098
#3	-.00325	-.00564	.00113	.00706	-.01281	-.67590	.00171
#4	-.00072	.00242	.00113	.00619	-.00920	.23459	.00140

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	.28168	.00218	-.00000	.02032	.00662	.01165	.02342
SDev	.05583	.00000	.00621	.00404	.00835	.02682	.00668
%RSD	19.821	.09261	424250.	19.891	126.15	230.26	28.526

#1	.20896	.00218	.00162	.02219	-.00224	-.01165	.01999
#2	.27109	.00218	-.00487	.01431	.00195	.03494	.02008
#3	.30780	.00218	-.00487	.02177	.01633	.03480	.02018
#4	.33886	.00218	.00811	.02302	.01042	-.01150	.03345

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	.03219	-.01517	-.01019	.00105	.00096	.04400	.00156
SDev	.05916	.03080	.00688	.00045	.00031	.08157	.00249
%RSD	183.82	203.05	67.546	43.021	31.914	185.40	159.50

#1	-.02195	-.02429	-.00061	.00066	.00056	.00821	.00004
#2	.06055	-.03036	-.01157	.00066	.00088	.15149	.00113

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#3	-.01164	-.03644	-.01157	.00137	.00120	-.03957	-.00012
#4	.10179	.03043	-.01700	.00151	.00120	.05585	.00521

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
Avg	.00317
SDev	.00100
%RSD	31.475

#1	.00404
#2	.00403
#3	.00228
#4	.00233

Errors	LC Pass
High	.02000
Low	-.02000

CKZ10184

Analysis Report *GOOD* Averages

03/25/01 11:02:09 AM

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William J. Henderson 3-26-01

679 973

#	Sample Name	AG	AS	CD	CR	PB	SB
1	STD1	.0039	.00125	.00432	.00645		
2	STD6	9.56519	5.49702	12.3137			
3	STD7				9.73455		
4	ICV3-1 0087-148-1	.50159	.25381	.24985	1.0116	.24992	.25162
5	ICB1	-.00054	.00160	-.00005	.00384	.00029	-.00082
6	ICSA 0087-133-5	-.00064	.00305	-.00160	.00318	.00173	-.00240
7	ICSAB 0087-081-6	1.0857	1.0113	.91978	.50825	.96925	1.0184
8	DW8TVB	-.00115	.00070	.00009	-.00060	.00139	-.00226
9	DW8TVC	.04895	1.9662	.04694	.19959	.48692	.47718
10	DW6KC	-.00037	.00079	.00004	-.00094	.00063	-.00162
11	DW6KM	-.00087	.00241	.00000	-.00084	.00093	-.00090
12	DW6KN	-.00056	.00018	-.00008	-.00121	.00157	-.00292
13	DW6KR	-.00085	.00776	-.00020	.00000	-.00038	-.00119
14	DW6KT	-.00082	.00273	.00000	-.00133	.00007	-.00167
15	DW6KW	-.00069	.00131	.00000	-.00156	-.00099	-.00351
16	CCV3-1 0087-118-1	1.0108	.50552	.48660	2.0120	.49501	.49657
17	CCB1	-.00094	-.00054	.00003	.00289	.00031	-.00044
18	DW6KWP5	-.00038	.00025	-.00004	.00173	.00057	-.00096
19	DW6KWS	.04995	1.9847	.04546	.19616	.47967	.47844
20	DW6KWD	.05082	2.0183	.04612	.20012	.48679	.48354
21	DW6K1	-.00055	.00163	.00022	-.00066	.00046	-.00224
22	DW6K2	-.00068	-.00138	.00004	-.00110	.00127	.00057
23	DW6K3	-.00061	.00072	.00010	-.00090	.00112	-.00094
24	DW6K5	-.00067	.00147	.00027	-.00061	.00036	-.00088
25	DW6K7	-.00055	.00064	.00000	-.00048	.00120	-.00021
26	DW6K8	-.00062	.00006	.00018	-.00055	.00107	-.00291
27	DXK88	-.00100	-.00165	.00005	-.00117	-.00004	-.00057
28	CCV3-2	1.0269	.50994	.49391	2.0408	.50160	.50225
29	CCB2	-.00066	-.00021	-.00005	.00265	-.00018	-.00207
30	DXQVCB	-.00053	.00000	-.00011	-.00166	.00016	-.00158
31	DXQVCC	.04900	1.9587	.04690	.19866	.48203	.48274
32	DXPK3	.00271	.00333	.00015	.06012	.00296	.00271
33	DXPK3P5	-.00026	.00100	.00001	.01439	-.00042	-.00033
34	DXPK3S	.05107	1.9200	.04452	.23519	.45920	.45245
35	DXPK3D	.05140	2.0053	.04672	.24932	.48105	.46632
36	DXCMMB	-.00095	-.00014	-.00013	-.00167	-.00026	-.00128
37	DXCMMC	.04981	2.0911	.05193	.21518	.52743	.49872
38	DW7DJ	-.00005	.00898	-.00033	.00253	-.00009	-.00277
39	DW7DJP5	-.00043	.00209	-.00014	.00276	.00054	-.00292
40	CCV3-3	1.0140	.53589	.54153	2.1610	.54127	.50389
41	CCB3	-.00084	.00055	.00020	.00329	-.00156	-.00048
42	DW7DJS	.05147	2.1062	.04874	.21361	.50751	.49318
43	DW7DJD	.04990	2.0854	.04893	.21151	.50709	.49070
44	DW7D5	-.00097	.00403	-.00010	.01971	-.00050	-.00195
45	DW7ED	-.00069	.00827	-.00056	.02165	.00784	-.00104
46	DW7EF	-.00054	.00633	-.00076	.00121	.00459	-.00053
47	DW7EM	-.00108	.00054	-.00009	-.00104	.00025	-.00253
48	DW7EV	-.00094	.00409	-.00045	.01790	-.00018	-.00326
49	DW7E5	-.00092	.03229	-.00070	.00917	.01686	-.00068
50	DW8TXB	-.00112	.00126	-.00001	-.00152	.00120	-.00152
51	DW8TXC	.04985	2.1162	.05313	.21755	.53693	.49065
52	CCV3-4	1.0384	.54646	.54910	H2.2028	.54935	.51404
53	CCB4	-.00059	-.00048	.00006	9.00328	-.00013	-.00144

Not Reported for this lot.
Wre 3-26-01Result acceptable. Result recovery
rounds to 110% wre 3-26-01

#	Sample Name	AG	AS	CD	CR	PB	SB
54	DW8LD	-.00042	.00380	-.00015	.00050	-.00011	-.00166
55	DW8LDP5	-.00047	.00196	.00000	.00217	-.00074	-.00120
56	DW8LDS	.04951	2.0763	.04885	.20904	.50836	.48065
57	DW8LDD	.04995	2.1072	.04980	.21375	.51448	.48353
58	DW8L1	-.00051	.00345	-.00016	.00754	.00183	-.00144
59	DW8L2	-.00012	.00547	.00004	.00028	-.00006	-.00250
60	DW8L4	-.00048	.00011	.00009	-.00057	.00075	-.00095
61	DW8L5	-.00031	.00327	-.00031	.00388	.00155	-.00101
62	DW8L6	-.00059	.02094	-.00055	.04245	.02346	-.00193
63	DW8L8	-.00072	.01217	.00030	.00336	.00314	-.00292
64	CCV3-5	1.0386	.53965	.54235	2.1870	.54290	.51099
65	CCB5	-.00079	.00033	.00005	.00411	-.00033	-.00187
66	DXCMHB	-.00079	-.00113	-.00009	-.00116	.00058	-.00213
67	DXCMHC	.04761	1.9875	.04900	.20421	.49805	.47291
68	DW68N	-.00087	.01634	-.00019	.00037	-.00078	-.00066
69	DW68T	-.00089	.00082	.00005	-.00020	.00086	-.00188
70	DW68X	-.00286	.00729	-.00030	.06737	.00483	-.00190
71	DW680	-.00077	.00120	-.00013	.00466	.00227	.00019
72	DW684	-.00051	.00255	-.00010	.00081	-.00153	-.00145
73	DW685	-.00028	.00226	.00004	.00261	.00156	-.00079
74	DW69A	-.00063	.00028	-.00014	-.00094	.00130	-.00086
75	DW8V0	-.00052	.00498	.00001	.04330	.00494	.00111
76	CCV3-6	1.0285	.53811	.54295	2.1779	.54228	.50826
77	CCB6	-.00049	.00040	.00005	.00311	-.00018	-.00197
78	DW8V0P5	-.00087	.00107	.00007	.01077	.00131	-.00167
79	DW8V0S	.04884	2.0451	.04951	.25626	.50963	.48399
80	DW8V0D	.05005	2.0647	.05004	.25637	.51904	.49069
81	DW8WP	-.00062	.00914	-.00005	.03956	.00358	-.00269
82	DW8WR	-.00070	.00159	.00002	-.00169	-.00016	-.00244
83	DW8WT	-.00059	.00874	.00056	-.00045	.00154	.00658
84	CCV3-7	1.0356	.54069	.54248	2.1804	.54250	.51164
85	CCB7	-.00106	-.00067	.00025	.00383	.00167	-.00079

#	Sample Name	SE	TL
1	STD1		-.01924
2	STD6		3.35411
3	STD7		
4	ICV3-1 0087-148-1	.25531	.51106
5	ICB1	-.00067	-.00145
6	ICSA 0087-133-5	.00310	.00299
7	ICSAB 0087-081-6	1.0199	.99655
8	DW8TVB	.00244	-.00274
9	DW8TVC	1.9372	2.0253
10	DW6KC	.00017	-.00258
11	DW6KM	.00125	-.00283
12	DW6KN	-.00007	-.00702
13	DW6KR	.00050	-.00753
14	DW6KT	.00199	-.00658
15	DW6KW	.00159	-.00612
16	CCV3-1 0087-118-1	.50267	1.0025
17	CCB1	.00039	-.00536
18	DW6KWP5	-.00125	-.00418

#	Sample Name	SE	TL	679	975
19	DW6KWS	1.9668	2.0228		
20	DW6KWD	1.9845	2.0572		
21	DW6K1	.00146	-.00050		
22	DW6K2	-.00044	-.00510		
23	DW6K3	-.00067	-.00124		
24	DW6K5	.00041	-.00674		
25	DW6K7	-.00029	-.00626		
26	DW6K8	.00199	-.00765		
27	DXK88	.00157	-.00698		
28	CCV3-2	.51416	1.0207		
29	CCB2	.00177	-.00354		
30	DXQVCB	.00159	-.00537		
31	DXQVCC	1.9596	2.0116		
32	DXPK3	.00177	.00172		
33	DXPK3P5	.00010	.00129		
34	DXPK3S	1.8834	1.9178		
35	DXPK3D	1.9320	1.9826		
36	DXCMMB	.00338	-.00581		
37	DXCMMC	2.0329	2.1479		
38	DW7DJ	.00096	-.00531		
39	DW7DJP5	-.00021	.00035		
40	CCV3-3	.52750	1.0683		
41	CCB3	-.00024	-.00200		
42	DW7DJS	2.0281	2.1026		
43	DW7DJD	2.0005	2.0868		
44	DW7D5	.00132	.00107		
45	DW7ED	.00204	-.00566		
46	DW7EF	.00171	-.00499		
47	DW7EM	.00154	-.00851		
48	DW7EV	.00051	-.00469		
49	DW7E5	.00119	-.00796		
50	DW8TXB	.00260	-.00580		
51	DW8TXC	2.0211	2.1552		
52	CCV3-4	.53495	1.0926		
53	CCB4	-.00059	.00032		
54	DW8LD	.00145	-.00523		
55	DW8LDP5	.00115	-.00484		
56	DW8LDS	2.0040	2.0883		
57	DW8LDD	2.0189	2.1325		
58	DW8L1	.00021	-.00020		
59	DW8L2	.00258	-.00196		
60	DW8L4	.00136	-.00427		
61	DW8L5	-.00026	.00069		
62	DW8L6	-.00160	-.00109		
63	DW8L8	-.00454	-.00159		
64	CCV3-5	.53354	1.0733		
65	CCB5	.00046	-.00433		
66	DXCMHB	.00103	-.00081		
67	DXCMHC	1.9306	2.0210		
68	DW68N	.00297	-.00068		
69	DW68T	.00205	-.00643		
70	DW68X	-.00182	-.00564		
71	DW680	-.00029	-.00187		
72	DW684	-.00012	.00148		

#	Sample Name	SE	TL
73	DW685	-.00049	-.00136
74	DW69A	.00725	-.00441
75	DW8V0	-.00002	-.00522
76	CCV3-6	.53147	1.0700
77	CCB6	.00177	-.00286
78	DW8V0P5	.00349	-.00496
79	DW8V0S	1.9695	2.0626
80	DW8V0D	1.9962	2.0912
81	DW8WP	.00143	-.00050
82	DW8WR	-.00021	-.00169
83	DW8WT	.00250	-.00487
84	CCV3-7	.53259	1.0722
85	CCB7	.00050	-.00613

WNC 3-26-01

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	T10324C	METTRA	03/24/01	19:57		X	IR
2	STD6	T10324C	METTRA	03/24/01	20:01		X	IR
3	STD7	T10324C	METTRA	03/24/01	20:05		X	IR
4	ICV3-1 0087-148-1	T10324C	METTRA	03/24/01	20:09	WTR	S	CONC
5	ICB1	T10324C	METTRA	03/24/01	20:14	WTR	S	CONC
6	ICSA 0087-133-5	T10324C	METTRA	03/24/01	20:18	WTR	Q	CONC
7	ICSAB 0087-081-6	T10324C	METTRA	03/24/01	20:23	WTR	Q	CONC
8	DW8TVB	T10324C	METTRA	03/24/01	20:27	WTR	S	CONC
9	DW8TVC	T10324C	METTRA	03/24/01	20:32	WTR	S	CONC
10	DW6KC	T10324C	METTRA	03/24/01	20:36	WTR	S	CONC
11	DW6KM	T10324C	METTRA	03/24/01	20:40	WTR	S	CONC
12	DW6KN	T10324C	METTRA	03/24/01	20:45	WTR	S	CONC
13	DW6KR	T10324C	METTRA	03/24/01	20:49	WTR	S	CONC
14	DW6KT	T10324C	METTRA	03/24/01	20:54	WTR	S	CONC
15	DW6KW	T10324C	METTRA	03/24/01	20:58	WTR	S	CONC
16	CCV3-1 0087-118-1	T10324C	METTRA	03/24/01	21:03	WTR	S	CONC
17	CCB1	T10324C	METTRA	03/24/01	21:07	WTR	S	CONC
18	DW6KWP5	T10324C	METTRA	03/24/01	21:11	WTR	S	CONC
19	DW6KWS	T10324C	METTRA	03/24/01	21:16	WTR	S	CONC
20	DW6KWD	T10324C	METTRA	03/24/01	21:20	WTR	S	CONC
21	DW6K1	T10324C	METTRA	03/24/01	21:25	WTR	S	CONC
22	DW6K2	T10324C	METTRA	03/24/01	21:29	WTR	S	CONC
23	DW6K3	T10324C	METTRA	03/24/01	21:34	WTR	S	CONC
24	DW6K5	T10324C	METTRA	03/24/01	21:38	WTR	S	CONC
25	DW6K7	T10324C	METTRA	03/24/01	21:42	WTR	S	CONC
26	DW6K8	T10324C	METTRA	03/24/01	21:47	WTR	S	CONC
27	DXK88	T10324C	METTRA	03/24/01	21:51	WTR	S	CONC
28	CCV3-2	T10324C	METTRA	03/24/01	21:56	WTR	S	CONC
29	CCB2	T10324C	METTRA	03/24/01	22:00	WTR	S	CONC
30	DXQVCB	T10324C	METTRA	03/24/01	22:05	WTR	S	CONC
31	DXQVCC	T10324C	METTRA	03/24/01	22:09	WTR	S	CONC
32	DXPK3	T10324C	METTRA	03/24/01	22:13	WTR	S	CONC
33	DXPK3P5	T10324C	METTRA	03/24/01	22:18	WTR	S	CONC
34	DXPK3S	T10324C	METTRA	03/24/01	22:22	WTR	S	CONC
35	DXPK3D	T10324C	METTRA	03/24/01	22:27	WTR	S	CONC
36	DXCMMB	T10324C	METTRA	03/24/01	22:31	WTR	S	CONC
37	DXCMMC	T10324C	METTRA	03/24/01	22:36	WTR	S	CONC
38	DW7DJ	T10324C	METTRA	03/24/01	22:40	WTR	S	CONC
39	DW7DJP5	T10324C	METTRA	03/24/01	22:44	WTR	S	CONC
40	CCV3-3	T10324C	METTRA	03/24/01	22:49	WTR	S	CONC
41	CCB3	T10324C	METTRA	03/24/01	22:53	WTR	S	CONC
42	DW7DJS	T10324C	METTRA	03/24/01	22:58	WTR	S	CONC
43	DW7DJD	T10324C	METTRA	03/24/01	23:02	WTR	S	CONC
44	DW7D5	T10324C	METTRA	03/24/01	23:07	WTR	S	CONC
45	DW7ED	T10324C	METTRA	03/24/01	23:11	WTR	S	CONC
46	DW7EF	T10324C	METTRA	03/24/01	23:15	WTR	S	CONC
47	DW7EM	T10324C	METTRA	03/24/01	23:20	WTR	S	CONC
48	DW7EV	T10324C	METTRA	03/24/01	23:24	WTR	S	CONC
49	DW7E5	T10324C	METTRA	03/24/01	23:29	WTR	S	CONC
50	DW8TXB	T10324C	METTRA	03/24/01	23:33	WTR	S	CONC
51	DW8TXC	T10324C	METTRA	03/24/01	23:38	WTR	S	CONC
52	CCV3-4	T10324C	METTRA	03/24/01	23:42	WTR	S	CONC
53	CCB4	T10324C	METTRA	03/24/01	23:47	WTR	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	DW8LD	T10324C	METTRA	03/24/01	23:51	WTR	S	CONC
55	DW8LDP5	T10324C	METTRA	03/24/01	23:55	WTR	S	CONC
56	DW8LDS	T10324C	METTRA	03/25/01	00:00	WTR	S	CONC
57	DW8LDD	T10324C	METTRA	03/25/01	00:04	WTR	S	CONC
58	DW8L1	T10324C	METTRA	03/25/01	00:09	WTR	S	CONC
59	DW8L2	T10324C	METTRA	03/25/01	00:13	WTR	S	CONC
60	DW8L4	T10324C	METTRA	03/25/01	00:18	WTR	S	CONC
61	DW8L5	T10324C	METTRA	03/25/01	00:22	WTR	S	CONC
62	DW8L6	T10324C	METTRA	03/25/01	00:26	WTR	S	CONC
63	DW8L8	T10324C	METTRA	03/25/01	00:31	WTR	S	CONC
64	CCV3-5	T10324C	METTRA	03/25/01	00:35	WTR	S	CONC
65	CCB5	T10324C	METTRA	03/25/01	00:40	WTR	S	CONC
66	DXCMHB	T10324C	METTRA	03/25/01	00:44	WTR	S	CONC
67	DXCMHC	T10324C	METTRA	03/25/01	00:49	WTR	S	CONC
68	DW68N	T10324C	METTRA	03/25/01	00:53	WTR	S	CONC
69	DW68T	T10324C	METTRA	03/25/01	00:58	WTR	S	CONC
70	DW68X	T10324C	METTRA	03/25/01	01:02	WTR	S	CONC
71	DW680	T10324C	METTRA	03/25/01	01:06	WTR	S	CONC
72	DW684	T10324C	METTRA	03/25/01	01:11	WTR	S	CONC
73	DW685	T10324C	METTRA	03/25/01	01:15	WTR	S	CONC
74	DW69A	T10324C	METTRA	03/25/01	01:20	WTR	S	CONC
75	DW8V0	T10324C	METTRA	03/25/01	01:24	WTR	S	CONC
76	CCV3-6	T10324C	METTRA	03/25/01	01:29	WTR	S	CONC
77	CCB6	T10324C	METTRA	03/25/01	01:33	WTR	S	CONC
78	DW8V0P5	T10324C	METTRA	03/25/01	01:38	WTR	S	CONC
79	DW8V0S	T10324C	METTRA	03/25/01	01:42	WTR	S	CONC
80	DW8V0D	T10324C	METTRA	03/25/01	01:46	WTR	S	CONC
81	DW8WP	T10324C	METTRA	03/25/01	01:51	WTR	S	CONC
82	DW8WR	T10324C	METTRA	03/25/01	01:55	WTR	S	CONC
83	DW8WT	T10324C	METTRA	03/25/01	02:00	WTR	S	CONC
84	CCV3-7	T10324C	METTRA	03/25/01	02:04	WTR	S	CONC
85	CCB7	T10324C	METTRA	03/25/01	02:09	WTR	S	CONC

Method: METTRA Standard: STD1
Run Time: 03/24/01 19:57:02

679 979

Elem	AG	AL	AS	BA	BE	CA	CD
Avge	.00391	.05770	.00125	.00009	-.02452	.00154	.00433
SDev	.00602	.00012	.00351	.00031	.00027	.00031	.00059
%RSD	154.15	.20092	280.64	353.06	1.1070	20.294	13.732
#1	.00817	.05762	.00373	-.00013	-.02433	.00132	.00391
#2	-.00035	.05778	-.00123	.00031	-.02471	.00176	.00475
Elem	CO	CR	CU	FE	MG	MN	MO
Avge	-.00068	.00646	.00736	-.00070	.00026	.00180	.00127
SDev	.00096	.00391	.00021	.00062	.00087	.00006	.00006
%RSD	141.42	60.533	2.8619	88.332	330.40	3.3561	4.7835
#1	.00000	.00922	.00751	-.00114	.00088	.00184	.00132
#2	-.00136	.00369	.00721	-.00026	-.00035	.00176	.00123
Elem	NI	PB/1	PB/2	SB/1	SB/2	SE/1	SE/2
Avge	.00158	.03765	-.01577	-.02204	.01467	-.08112	.03801
SDev	.00037	.02551	.01496	.03863	.01142	.00604	.00475
%RSD	23.661	67.751	94.886	175.28	77.844	7.4475	12.496
#1	.00132	.05568	-.02635	-.04936	.02275	-.07685	.04137
#2	.00185	.01961	-.00519	.00528	.00660	-.08539	.03465
Elem	TL	V	ZN				
Avge	-.01925	.00061	.00002				
SDev	.00110	.00075	.00015				
%RSD	5.7188	121.19	704.88				
#1	-.02002	.00114	-.00009				
#2	-.01847	.00009	.00013				

679 980

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11378	--	--	--	--	--	--
SDev	10.60660	--	--	--	--	--	--
%RSD	.0932170	--	--	--	--	--	--
#1	11386	--	--	--	--	--	--
#2	11371	--	--	--	--	--	--

Method: METTRA Standard: STD6

Run Time: 03/24/01 20:01:32

0027-154-1

679 981

Elem	AG	AS	CD	PB/1	PB/2	SB/1	SB/2
Avge	9.5652	5.4970	12.314	4.6202	6.5168	6.7635	3.9778
SDev	.0129	.0128	.008	.0086	.0086	.0217	.0087
%RSD	.13475	.23318	.06685	.18699	.13169	.32033	.21793

#1	9.5743	5.4880	12.320	4.6141	6.5229	6.7482	3.9717
#2	9.5561	5.5061	12.308	4.6263	6.5107	6.7788	3.9839

Elem	SE/1	SE/2	TL
Avge	4.8393	3.0012	3.3541
SDev	.0308	.0166	.0046
%RSD	.63603	.55314	.13582

#1	4.8175	3.0129	3.3509
#2	4.8610	2.9894	3.3573

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11208	--	--	--	--	--	--
SDev	12.69271	--	--	--	--	--	--
%RSD	.1132466	--	--	--	--	--	--

#1	11217	--	--	--	--	--	--
#2	11199	--	--	--	--	--	--

Method: METTRA Standard: STD7

Run Time: 03/24/01 20:05:59

0087-154-Z

Elem	AL	BA	BE	CA	CO	CR	CU
Avge	5.8221	12.413	10.425	4.3462	2.4920	9.7346	2.7463
SDev	.0037	.008	.024	.0023	.0131	.0149	.0083
%RSD	.06348	.06654	.22647	.05199	.52387	.15261	.30315
#1	5.8195	12.419	10.442	4.3446	2.5012	9.7451	2.7404
#2	5.8247	12.407	10.409	4.3478	2.4827	9.7240	2.7521
Elem	FE	MG	MN	MO	NI	V	ZN
Avge	2.5303	11.377	7.3120	2.3316	2.1216	.70611	2.3665
SDev	.0015	.098	.0076	.0059	.0320	.00789	.0143
%RSD	.05798	.85784	.10401	.25248	1.5093	1.1175	.60234
#1	2.5293	11.308	7.3174	2.3275	2.0990	.70053	2.3564
#2	2.5314	11.446	7.3066	2.3358	2.1443	.71168	2.3765
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11263	--	--	--	--	--	--
SDev	5.692071	--	--	--	--	--	--
%RSD	.0505368	--	--	--	--	--	--
#1	11267	--	--	--	--	--	--
#2	11259	--	--	--	--	--	--

Method: METTRA

Slope = Conc(SIR)/IR

679 983

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD6	STD1	.209177	-.000817	03/24/01 08:05:59
AL	308.215	STD7	STD1	8.68556	-.501132	03/24/01 08:05:59
AS	189.042	STD6	STD1	.181958	-.000228	03/24/01 08:05:59
BA	493.409	STD7	STD1	.322239	-.000028	03/24/01 08:05:59
BE	313.042	STD7	STD1	.380442	.009329	03/24/01 08:05:59
CA	317.933	STD7	STD1	23.0166	-.035403	03/24/01 08:05:59
CD	226.502	STD6	STD1	.081239	-.000352	03/24/01 08:05:59
CO	228.616	STD7	STD1	1.60473	.001094	03/24/01 08:05:59
CR	267.716	STD7	STD1	.411029	-.002654	03/24/01 08:05:59
CU	324.753	STD7	STD1	1.46044	-.010749	03/24/01 08:05:59
FE	271.441	STD7	STD1	19.8692	.013964	03/24/01 08:05:59
MG	279.078	STD7	STD1	8.78986	-.002314	03/24/01 08:05:59
MN	257.610	STD7	STD1	.547179	-.000986	03/24/01 08:05:59
MO	202.030	STD7	STD1	1.71649	-.002187	03/24/01 08:05:59
NI	231.604	STD7	STD1	1.88558	-.002983	03/24/01 08:05:59
PB/1	220.351	STD6	STD1	.218220	-.008215	03/24/01 08:05:59
PB/2	220.352	STD6	STD1	.153079	.002414	03/24/01 08:05:59
PB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SB/1	206.831	STD6	STD1	.147373	.003248	03/24/01 08:05:59
SB/2	206.832	STD6	STD1	.252327	-.003702	03/24/01 08:05:59
SB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SE/1	196.021	STD6	STD1	.203236	.016487	03/24/01 08:05:59
SE/2	196.022	STD6	STD1	.337475	-.012827	03/24/01 08:05:59
SE	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
TL	190.864	STD6	STD1	.592880	.011411	03/24/01 08:05:59
V	292.402	STD7	STD1	5.64716	-.003472	03/24/01 08:05:59
ZN	213.856	STD7	STD1	1.70094	-.000037	03/24/01 08:05:59

Method: METTRA Sample Name: ICV3-1 0087-148-1 Operator: WTR

Run Time: 03/24/01 20:09:56

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP 679 984

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.50159	11.957	.25381	1.0008	1.0025	25.052	.24986
SDev	.00070	.044	.00726	.0126	.0035	.081	.00452
%RSD	.13879	.37125	2.8608	1.2560	.35377	.32218	1.8102
#1	.50209	11.988	.25895	1.0097	1.0050	25.109	.25306
#2	.50110	11.925	.24868	.99195	.99996	24.995	.24666
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
Avg	1.0285	1.0116	.97738	12.646	24.606	1.0069	1.0170
SDev	.0028	.0020	.00834	.010	.306	.0012	.0003
%RSD	.26899	.19676	.85342	.07850	1.2442	.11813	.02984
#1	1.0265	1.0102	.98328	12.653	24.823	1.0060	1.0168
#2	1.0304	1.0130	.97148	12.639	24.390	1.0077	1.0172
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
Avg	1.0249	.24651	.25163	.24993	.25286	.25102	.25163
SDev	.0271	.00332	.00160	.00003	.00186	.00300	.00138
%RSD	2.6459	1.3457	.63740	.01395	.73602	1.1973	.55032
#1	1.0441	.24417	.25277	.24990	.25154	.25314	.25261
#2	1.0057	.24886	.25050	.24995	.25418	.24889	.25065
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	
Avg	.24909	.25842	.25531	.51106	1.0126	1.0415	
SDev	.00106	.00187	.00160	.00415	.0185	.0106	
%RSD	.42608	.72322	.62669	.81270	1.8265	1.0211	
#1	.24834	.25710	.25418	.51400	1.0256	1.0490	
#2	.24984	.25974	.25645	.50813	.99949	1.0340	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.27500	.55000	1.1000	1.1000	
Low			.22500	.45000	.90000	.90000	

679 985

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11394	--	--	--	--	--	--
SDev	52.21956	--	--	--	--	--	--
%RSD	.4582945	--	--	--	--	--	--
#1	11431	--	--	--	--	--	--
#2	11357	--	--	--	--	--	--

Method: METTRA Sample Name: ICB1

Operator: WTR

Run Time: 03/24/01 20:14:22

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	-.00055	-.00171	.00160	.00036	.00025	.00424	-.00005
SDev	.00012	.00706	.00096	.00014	.00003	.00436	.00033
%RSD	21.457	411.97	60.194	39.711	12.030	102.80	594.30
#1	-.00063	.00328	.00228	.00026	.00028	.00116	-.00028
#2	-.00047	-.00670	.00092	.00046	.00023	.00733	.00018
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	.00109	.00384	-.00037	.03317	-.00348	-.00012	.00122
SDev	.00000	.00027	.00020	.00002	.00165	.00014	.00118
%RSD	.00000	6.9063	53.453	.05910	47.319	118.98	96.068
#1	.00109	.00366	-.00050	.03319	-.00464	-.00021	.00205
#2	.00109	.00403	-.00023	.03316	-.00231	-.00002	.00039
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	-.00107	-.00390	.00239	.00030	.00416	-.00331	-.00082
SDev	.00012	.00159	.00194	.00077	.00042	.00407	.00257
%RSD	10.813	40.785	81.187	257.67	10.052	123.00	313.14
#1	-.00099	-.00502	.00376	.00084	.00445	-.00618	-.00264
#2	-.00115	-.00277	.00102	-.00024	.00386	-.00043	.00100
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	-.00606	.00201	-.00068	-.00145	-.00022	-.00026	
SDev	.00061	.00047	.00052	.00191	.00459	.00021	
%RSD	10.120	23.169	76.278	131.78	2118.4	81.389	
#1	-.00563	.00234	-.00031	-.00010	-.00346	-.00041	
#2	-.00650	.00168	-.00104	-.00280	.00303	-.00011	
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	11322	--	--	--	--	--	--
SDev	13.93014	--	--	--	--	--	--
%RSD	.1230388	--	--	--	--	--	--
#1	11332	--	--	--	--	--	--
#2	11312	--	--	--	--	--	--

Method: METTRA Sample Name: ICESA 0087-133-5 Operator: WTR

Run Time: 03/24/01 20:18:48

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP 679 988

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00065	527.33	.00306	.00199	-.00085	491.30	-.00160
SDev	.00055	.08	.00138	.00009	.00013	.95	.00033
%RSD	84.334	.01430	44.994	4.5690	15.513	.19336	20.646
#1	-.00104	527.38	.00208	.00192	-.00076	490.63	-.00137
#2	-.00026	527.28	.00403	.00205	-.00094	491.97	-.00184
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
Avge	.00049	.00318	-.00093	203.90	527.74	.00713	-.00186
SDev	.00054	.00056	.00041	.15	.32	.00005	.00161
%RSD	110.27	17.530	44.611	.07377	.05999	.76406	86.571
#1	.00011	.00279	-.00122	203.80	527.96	.00709	-.00300
#2	.00087	.00358	-.00063	204.01	527.51	.00717	-.00072
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
Avge	-.00048	-.01158	.00838	.00174	.00963	-.00842	-.00241
SDev	.00076	.00452	.00051	.00185	.00155	.00096	.00012
%RSD	158.70	39.028	6.0721	106.33	16.136	11.371	5.0193
#1	-.00102	-.01478	.00802	.00043	.01073	-.00909	-.00249
#2	.00006	-.00839	.00874	.00304	.00853	-.00774	-.00232
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	
Avge	-.00300	.00616	.00311	.00300	.00659	.00237	
SDev	.00900	.00799	.00233	.00113	.00537	.00009	
%RSD	300.22	129.82	75.065	37.690	81.506	3.9261	
#1	-.00936	.01181	.00476	.00220	.01038	.00230	
#2	.00337	.00050	.00146	.00379	.00279	.00243	
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	
Value							
Range							

						679	989
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10556	--	--	--	--	--	--
SDev	23.15775	--	--	--	--	--	--
%RSD	.2193888	--	--	--	--	--	--
#1	10572	--	--	--	--	--	--
#2	10539	--	--	--	--	--	--

Method: METTRA Sample Name: ICSAB 0087-081-6 Operator: WTR

Run Time: 03/24/01 20:23:15

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

679 990

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0857	528.98	1.0113	.53419	.50533	492.57	.91978
SDev	.0024	1.25	.0040	.00071	.00124	1.42	.00065
%RSD	.21723	.23724	.40026	.13231	.24455	.28833	.07085
#1	1.0840	528.09	1.0084	.53369	.50446	491.56	.91932
#2	1.0874	529.87	1.0142	.53469	.50621	493.57	.92024
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	.50062	.50826	.54940	204.69	527.67	.51814	.99740
SDev	.00336	.00157	.00103	.63	.71	.00127	.00524
%RSD	.67165	.30947	.18780	.30585	.13373	.24494	.52493
#1	.49824	.50714	.54867	204.25	527.17	.51724	.99370
#2	.50300	.50937	.55013	205.13	528.17	.51903	1.0011
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	.96802	.97413	.96683	.96926	1.0245	1.0154	1.0184
SDev	.00099	.00400	.00608	.00272	.0069	.0067	.0021
%RSD	.10204	.41099	.62906	.28098	.67547	.65648	.21029
#1	.96732	.97130	.97113	.97118	1.0294	1.0107	1.0169
#2	.96872	.97696	.96252	.96733	1.0196	1.0201	1.0199
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	1.0152	1.0222	1.0199	.99655	.52482	1.0464	
SDev	.0078	.0141	.0068	.00243	.00097	.0029	
%RSD	.76906	1.3810	.66830	.24365	.18514	.27288	
#1	1.0097	1.0322	1.0247	.99484	.52413	1.0444	
#2	1.0207	1.0122	1.0151	.99827	.52551	1.0485	
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	

						679	991
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	10541	--	--	--	--	--	--
SDev	17.57133	--	--	--	--	--	--
%RSD	.1666947	--	--	--	--	--	--
#1	10553	--	--	--	--	--	--
#2	10529	--	--	--	--	--	--

Method: METTRA Sample Name: DW8TVB

Operator: WTR

Run Time: 03/24/01 20:27:41

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	-.00115	.02910	.00071	.00001	-.00009	.05264	.00009
SDev	.00066	.01242	.00068	.00002	.00006	.01708	.00008
%RSD	57.056	42.673	95.414	139.12	64.030	32.451	88.244
#1	-.00069	.02032	.00119	.00003	-.00013	.04056	.00003
#2	-.00162	.03788	.00023	.00000	-.00005	.06472	.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	.00067	-.00061	-.00029	.03250	.03482	-.00033	.00133
SDev	.00020	.00052	.00004	.02372	.01149	.00004	.00088
%RSD	30.119	86.527	12.282	72.987	32.996	11.159	65.998
#1	.00081	-.00023	-.00026	.01573	.02670	-.00030	.00195
#2	.00052	-.00098	-.00031	.04927	.04294	-.00035	.00071
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	-.00340	-.00256	.00337	.00140	.00064	-.00371	-.00226
SDev	.00154	.00050	.00168	.00096	.00148	.00279	.00137
%RSD	45.337	19.362	49.854	68.454	231.93	75.149	60.446
#1	-.00450	-.00221	.00219	.00072	.00168	-.00568	-.00323
#2	-.00231	-.00291	.00456	.00207	-.00041	-.00174	-.00130
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	-.01088	.00910	.00244	-.00275	-.00346	.00096	
SDev	.00490	.00348	.00069	.00200	.00001	.00042	
%RSD	45.016	38.310	28.361	72.910	.21899	43.258	
#1	-.01435	.01156	.00293	-.00133	-.00347	.00067	
#2	-.00742	.00663	.00195	-.00417	-.00346	.00125	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

	1	2	3	4	5	6	7
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11238	--	--	--	--	--	--
SDev	37.97108	--	--	--	--	--	--
%RSD	.3378826	--	--	--	--	--	--
#1	11211	--	--	--	--	--	--
#2	11265	--	--	--	--	--	--

679

993

Method: METTRA Sample Name: DW8TVC Operator: WTR
 Run Time: 03/24/01 20:32:07
 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	.04896	2.0348	1.9662	1.9901	.04969	49.973	.04695
SDev	.00030	.0012	.0047	.0059	.00016	.043	.00022
%RSD	.61426	.05688	.23727	.29839	.31662	.08564	.46835
#1	.04875	2.0340	1.9695	1.9943	.04980	50.003	.04710
#2	.04917	2.0356	1.9629	1.9859	.04958	49.943	.04679
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	.50394	.19959	.24646	.87997	48.412	.50020	.98827
SDev	.00068	.00046	.00024	.00370	.113	.00067	.00164
%RSD	.13397	.23116	.09956	.42019	.23443	.13365	.16586
#1	.50346	.19927	.24629	.88259	48.492	.50068	.98711
#2	.50442	.19992	.24664	.87736	48.331	.49973	.98942
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	.49177	.48755	.48661	.48692	.47193	.47981	.47719
SDev	.00852	.00136	.00082	.00100	.00050	.00684	.00473
%RSD	1.7317	.27796	.16860	.20506	.10603	1.4249	.99057
#1	.49780	.48659	.48603	.48622	.47228	.48465	.48053
#2	.48575	.48850	.48719	.48763	.47158	.47498	.47385
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	1.9392	1.9363	1.9373	2.0253	.49234	.50456	
SDev	.0014	.0012	.0013	.0049	.00012	.00037	
%RSD	.07326	.06254	.06611	.24415	.02407	.07322	
#1	1.9382	1.9354	1.9364	2.0219	.49226	.50482	
#2	1.9402	1.9371	1.9382	2.0288	.49243	.50429	
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	11271	--	--	--	--	--	--
SDev	2.722085	--	--	--	--	--	--
%RSD	.0241517	--	--	--	--	--	--
#1	11273	--	--	--	--	--	--
#2	11269	--	--	--	--	--	--

Method: METTRA Sample Name: DW6KC

Operator: WTR

Run Time: 03/24/01 20:36:32

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	-.00037	.05896	.00080	.03084	-.00014	138.17	.00005
SDev	.00013	.00934	.00193	.00011	.00002	.00	.00022
%RSD	35.073	15.851	242.12	.34648	17.881	.00168	461.09
#1	-.00028	.05235	-.00057	.03076	-.00015	138.17	-.00011
#2	-.00047	.06557	.00216	.03091	-.00012	138.17	.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	.00109	-.00094	.00027	-.02401	18.430	.19960	.00138
SDev	.00000	.00015	.00060	.00121	.025	.00017	.00032
%RSD	.00000	16.375	219.01	5.0209	.13584	.08346	23.348
#1	.00109	-.00105	-.00015	-.02487	18.448	.19972	.00116
#2	.00109	-.00083	.00069	-.02316	18.412	.19948	.00161
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	-.00081	-.00109	.00149	.00063	.00084	-.00285	-.00162
SDev	.00142	.00056	.00056	.00018	.00178	.00278	.00245
%RSD	174.39	51.921	37.346	29.024	212.59	97.551	150.92
#1	-.00181	-.00069	.00110	.00050	-.00042	-.00482	-.00336
#2	.00019	-.00149	.00189	.00076	.00210	-.00088	.00011
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	-.01098	.00575	.00018	-.00259	.00277	.00547	
SDev	.00045	.00304	.00218	.00371	.00036	.00042	
%RSD	4.1058	52.856	1226.6	143.35	12.823	7.6841	
#1	-.01066	.00790	.00172	-.00521	.00252	.00517	
#2	-.01130	.00360	-.00136	.00004	.00302	.00576	
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	11296	--	--	--	--	--	--
SDev	2.191755	--	--	--	--	--	--
%RSD	.0194025	--	--	--	--	--	--
#1	11298	--	--	--	--	--	--
#2	11295	--	--	--	--	--	--

Method: METTRA Sample Name: DW6KM

Operator: WTR

Run Time: 03/24/01 20:40:57

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
Avg	-.00087	.00415	.00241	.01096	-.00006	81.210	-.00001
SDev	.00008	.00365	.00028	.00014	.00004	.200	.00015
%RSD	8.9696	88.035	11.422	1.2313	69.461	.24668	1525.5

#1	-.00082	.00673	.00222	.01087	-.00003	81.068	.00010
#2	-.00093	.00157	.00260	.01106	-.00009	81.351	-.00011

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	.00081	-.00084	.00199	.22676	4.6723	.00714	.01060
SDev	.00020	.00020	.00016	.00222	.0048	.00011	.00034
%RSD	24.618	24.127	8.2880	.97761	.10262	1.5827	3.1876

#1	.00067	-.00070	.00211	.22833	4.6757	.00706	.01036
#2	.00095	-.00098	.00188	.22519	4.6689	.00722	.01084

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	-.00232	-.00338	.00308	.00093	.00463	-.00367	-.00090
SDev	.00000	.00044	.00010	.00021	.00265	.00149	.00187
%RSD	.04307	13.033	3.0824	22.495	57.088	40.602	207.67

#1	-.00232	-.00306	.00315	.00108	.00651	-.00261	.00042
#2	-.00232	-.00369	.00302	.00078	.00276	-.00472	-.00223

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	-.00950	.00663	.00126	-.00283	-.00240	.00126
SDev	.00173	.00218	.00088	.00164	.00070	.00005
%RSD	18.179	32.957	70.158	58.068	29.246	4.0521

#1	-.01072	.00817	.00188	-.00167	-.00191	.00130
#2	-.00828	.00508	.00063	-.00399	-.00290	.00122

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	11346	--	--	--	--	--	--
SDev	14.95489	--	--	--	--	--	--
%RSD	.1318079	--	--	--	--	--	--
#1	11357	--	--	--	--	--	--
#2	11335	--	--	--	--	--	--

Method: METTRA Sample Name: DW6KN

Operator: WTR

Run Time: 03/24/01 20:45:22

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
Avg	-.00057	.01737	.00018	.01349	-.00014	97.381	-.00009
SDev	.00033	.00229	.00108	.00002	.00000	.024	.00003
%RSD	57.608	13.206	597.02	.17158	3.0270	.02509	33.783

#1	-.00034	.01899	.00094	.01351	-.00014	97.364	-.00011
#2	-.00080	.01575	-.00058	.01348	-.00014	97.398	-.00007

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	.00109	-.00121	.00155	.33370	2.7851	.05277	.00525
SDev	.00000	.00008	.00023	.00862	.0061	.00019	.00021
%RSD	.00000	6.3409	14.533	2.5824	.21956	.36640	4.0571

#1	.00109	-.00127	.00139	.32760	2.7894	.05264	.00510
#2	.00109	-.00116	.00171	.33979	2.7808	.05291	.00540

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	-.00115	-.00227	.00350	.00158	.00318	-.00597	-.00292
SDev	.00000	.00014	.00224	.00154	.00006	.00265	.00175
%RSD	.03546	5.9813	63.994	97.493	1.9644	44.465	59.877

#1	-.00115	-.00236	.00192	.00049	.00322	-.00784	-.00416
#2	-.00115	-.00217	.00508	.00267	.00314	-.00409	-.00168

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	-.00870	.00424	-.00007	-.00702	-.00262	.00850
SDev	.00122	.00059	.00080	.00741	.00036	.00000
%RSD	14.081	13.930	1120.2	105.52	13.595	.03412

#1	-.00956	.00382	-.00064	-.00178	-.00287	.00851
#2	-.00783	.00465	.00050	L-.01226	-.00236	.00850

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	11308	--	--	--	--	--	--
SDev	2.510091	--	--	--	--	--	--
%RSD	.0221972	--	--	--	--	--	--
#1	11306	--	--	--	--	--	--
#2	11310	--	--	--	--	--	--

Method: METTRA Sample Name: DW6KR

Operator: WTR

Run Time: 03/24/01 20:49:48

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	- .00085	.01797	.00777	.01181	- .00032	164.40	- .00020
SDev	.00021	.00588	.00078	.00000	.00006	.29	.00008
%RSD	24.663	32.739	10.030	.00640	20.077	.17547	38.190

#1	- .00071	.02213	.00832	.01181	- .00027	164.20	- .00015
#2	- .00100	.01381	.00721	.01181	- .00037	164.61	- .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
Avg	- .00109	- .00001	.00034	4.3320	46.586	.19886	.11349
SDev	.00005	.00013	.00031	.0004	.038	.00019	.00067
%RSD	4.4934	1834.3	91.697	.00930	.08107	.09355	.58601

#1	- .00105	- .00010	.00012	4.3317	46.559	.19873	.11302
#2	- .00112	.00008	.00056	4.3323	46.612	.19900	.11396

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	- .00214	- .00497	.00190	- .00039	.00260	- .00310	- .00120
SDev	.00095	.00037	.00009	.00018	.00133	.00495	.00286
%RSD	44.278	7.4760	4.5494	46.584	51.083	159.98	238.65

#1	- .00282	- .00523	.00184	- .00052	.00166	.00041	.00082
#2	- .00147	- .00471	.00196	- .00026	.00354	- .00660	- .00322

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	- .00663	.00407	.00051	- .00753	.00445	.00398
SDev	.00237	.00315	.00290	.00752	.00001	.00006
%RSD	35.786	77.506	570.99	99.868	.11370	1.5534

#1	- .00831	.00184	- .00154	L- .01285	.00446	.00402
#2	- .00495	.00630	.00255	- .00221	.00445	.00393

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	11226	--	--	--	--	--	--
SDev	8.909960	--	--	--	--	--	--
%RSD	.0793722	--	--	--	--	--	--
#1	11219	--	--	--	--	--	--
#2	11232	--	--	--	--	--	--

Method: METTRA Sample Name: DW6KT

Operator: WTR

Run Time: 03/24/01 20:54:13

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	-.00083	.04169	.00273	.02973	-.00029	105.52	.00001
SDev	.00027	.00283	.00106	.00003	.00015	.11	.00008
%RSD	33.250	6.7805	38.691	.08637	53.865	.10520	1395.9
#1	-.00063	.03969	.00348	.02971	-.00018	105.44	-.00005
#2	-.00102	.04369	.00198	.02975	-.00040	105.60	.00006
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	.00109	-.00134	.00014	1.7385	16.784	.56459	.00830
SDev	.00000	.00033	.00003	.0017	.011	.00037	.00001
%RSD	.00000	24.894	23.028	.09711	.06665	.06579	.15185
#1	.00109	-.00110	.00016	1.7397	16.792	.56433	.00829
#2	.00109	-.00157	.00012	1.7373	16.776	.56486	.00830
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	-.00173	-.00276	.00150	.00008	.00256	-.00380	-.00168
SDev	.00082	.00151	.00096	.00114	.00321	.00143	.00011
%RSD	47.630	54.727	64.023	1438.3	125.45	37.796	6.7308
#1	-.00115	-.00169	.00217	.00089	.00029	-.00278	-.00176
#2	-.00231	-.00383	.00082	-.00073	.00483	-.00481	-.00160
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	-.00728	.00663	.00200	-.00659	-.00292	.00267	
SDev	.00073	.00066	.00019	.00050	.00000	.00006	
%RSD	10.001	9.8951	9.7669	7.5388	.01850	2.2832	
#1	-.00676	.00616	.00186	-.00694	-.00292	.00262	
#2	-.00779	.00709	.00214	-.00624	-.00292	.00271	
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	11298	--	--	--	--	--	--
SDev	13.57659	--	--	--	--	--	--
%RSD	.1201723	--	--	--	--	--	--
#1	11307	--	--	--	--	--	--
#2	11288	--	--	--	--	--	--

Method: METTRA Sample Name: DW6KW
 Run Time: 03/24/01 20:58:38
 Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Operator: WTR

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00070	.03256	.00131	.08911	-.00043	193.85	.00000
SDev	.00012	.00312	.00092	.00023	.00003	.83	.00013
%RSD	16.934	9.5895	70.392	.25342	7.4872	.42808	23501.
#1	-.00061	.03035	.00197	.08927	-.00041	193.27	.00009
#2	-.00078	.03477	.00066	.08895	-.00045	194.44	-.00009
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	.53426	-.00156	.00231	-.09423	39.389	.97874	3.4379
SDev	.00228	.00021	.00052	.02341	.044	.00240	.0132
%RSD	.42593	13.339	22.343	24.839	.11070	.24482	.38454
#1	.53265	-.00171	.00194	L-.11078	39.358	.97704	3.4286
#2	.53586	-.00141	.00267	-.07768	39.420	.98043	3.4473
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	.00261	-.00275	-.00012	-.00100	-.00218	-.00418	-.00352
SDev	.00106	.00221	.00166	.00037	.00080	.00135	.00063
%RSD	40.509	80.359	1350.0	37.012	36.539	32.276	18.052
#1	.00336	-.00119	-.00129	-.00126	-.00275	-.00323	-.00307
#2	.00186	-.00431	.00105	-.00074	-.00162	-.00514	-.00396
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	-.00314	.00395	.00159	-.00612	-.00074	.00845	
SDev	.00351	.00070	.00163	.00140	.00391	.00113	
%RSD	111.69	17.618	102.55	22.824	524.64	13.380	
#1	-.00066	.00445	.00275	-.00513	-.00351	.00765	
#2	-.00562	.00346	.00044	-.00711	.00202	.00925	
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	11270	--	--	--	--	--	--
SDev	9.793153	--	--	--	--	--	--
%RSD	.0868933	--	--	--	--	--	--
#1	11277	--	--	--	--	--	--
#2	11263	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-1 0087-118-1 Operator: WTR
 Run Time: 03/24/01 21:03:03
 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	1.0108	24.227	.50552	1.9886	2.0199	50.417	.48661
SDev	.0061	.124	.00390	.0145	.0142	.220	.00218
%RSD	.60833	.51185	.77120	.72986	.70362	.43720	.44900
#1	1.0152	24.315	.50828	1.9989	2.0300	50.573	.48815
#2	1.0065	24.140	.50277	1.9784	2.0099	50.261	.48506
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	2.0299	2.0120	1.9499	24.899	48.633	2.0046	2.0172
SDev	.0108	.0112	.0137	.126	.403	.0113	.0123
%RSD	.53359	.55686	.70235	.50565	.82786	.56380	.60760
#1	2.0375	2.0199	1.9596	24.988	48.917	2.0126	2.0259
#2	2.0222	2.0041	1.9402	24.810	48.348	1.9966	2.0086
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	1.9999	.49233	.49635	.49501	.49988	.49493	.49658
SDev	.0160	.00197	.00010	.00072	.00015	.00316	.00216
%RSD	.80070	.40051	.01937	.14561	.02903	.63904	.43456
#1	2.0113	.49094	.49628	.49450	.49998	.49716	.49810
#2	1.9886	.49372	.49642	.49552	.49978	.49269	.49505
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	.49661	.50571	.50268	1.0025	1.9736	2.0241	
SDev	.00236	.00372	.00169	.0094	.0184	.0141	
%RSD	.47624	.73484	.33642	.94188	.93385	.69631	
#1	.49494	.50833	.50387	1.0092	1.9866	2.0341	
#2	.49828	.50308	.50148	.99583	1.9605	2.0142	
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	11434	--	--	--	--	--	--
SDev	13.50546	--	--	--	--	--	--
%RSD	.1181115	--	--	--	--	--	--
#1	11425	--	--	--	--	--	--
#2	11444	--	--	--	--	--	--

Method: METTRA Sample Name: CCB1

Operator: WTR

Run Time: 03/24/01 21:07:29

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	-.00095	-.00936	-.00055	.00033	.00015	.02632	.00003
SDev	.00021	.00677	.00007	.00022	.00009	.02150	.00001
%RSD	21.981	72.304	13.257	67.697	61.179	81.690	17.236
#1	-.00109	-.01415	-.00050	.00017	.00009	.01112	.00004
#2	-.00080	-.00458	-.00060	.00048	.00022	.04152	.00003
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	-.00018	.00289	.00032	.02186	.00735	.00584	.00272
SDev	.00140	.00064	.00040	.01123	.00929	.00034	.00096
%RSD	795.23	22.200	123.93	51.366	126.49	5.8909	35.240
#1	-.00116	.00244	.00061	.02980	.00078	.00560	.00339
#2	.00081	.00335	.00004	.01392	.01392	.00609	.00204
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	-.00083	-.00322	.00208	.00032	.00436	-.00284	-.00044
SDev	.00235	.00005	.00111	.00076	.00050	.00107	.00088
%RSD	283.50	1.6764	53.432	240.79	11.558	37.551	197.80
#1	-.00249	-.00318	.00287	.00085	.00400	-.00360	-.00107
#2	.00083	-.00326	.00130	-.00022	.00472	-.00209	.00018
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	-.00649	.00383	.00039	-.00537	-.00198	-.00011	
SDev	.00017	.00328	.00225	.00364	.00070	.00031	
%RSD	2.6964	85.745	573.87	67.729	35.402	277.43	
#1	-.00661	.00151	-.00120	-.00794	-.00247	-.00033	
#2	-.00636	.00614	.00198	-.00280	-.00148	.00011	
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	11375	--	--	--	--	--	--
SDev	6.964726	--	--	--	--	--	--
%RSD	.0612282	--	--	--	--	--	--
#1	11380	--	--	--	--	--	--
#2	11370	--	--	--	--	--	--

Method: METTRA Sample Name: DW6KWP5

Operator: WTR

Run Time: 03/24/01 21:11:54

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	-.00039	-.00853	.00025	.01782	-.00012	39.382	-.00004
SDev	.00030	.00072	.00006	.00002	.00001	.100	.00012
%RSD	76.675	8.4386	25.862	.13354	8.1109	.25470	261.14

#1	-.00060	-.00802	.00030	.01780	-.00011	39.453	.00004
#2	-.00018	-.00903	.00021	.01783	-.00013	39.311	-.00013

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	.10927	.00173	.00171	-.00980	7.7763	.19766	.70275
SDev	.00019	.00062	.00002	.01842	.0467	.00063	.00177
%RSD	.17350	35.552	1.0627	187.95	.60078	.31810	.25232

#1	.10914	.00217	.00173	-.02282	7.8094	.19810	.70400
#2	.10941	.00130	.00170	.00322	7.7433	.19721	.70149

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	-.00061	-.00246	.00208	.00057	.00599	-.00444	-.00096
SDev	.00116	.00424	.00055	.00178	.00097	.00049	.00000
%RSD	191.77	172.50	26.424	310.81	16.197	10.966	.15317

#1	-.00143	.00054	.00247	.00183	.00530	-.00409	-.00096
#2	.00022	-.00545	.00169	-.00069	.00667	-.00478	-.00097

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	-.00562	.00093	-.00125	-.00418	-.00150	.00242
SDev	.00338	.00407	.00384	.00416	.00000	.00022
%RSD	60.037	437.48	306.11	99.589	.20010	9.1575

#1	-.00324	.00380	.00146	-.00124	-.00150	.00258
#2	-.00801	-.00195	-.00397	-.00712	-.00150	.00227

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	11426	--	--	--	--	--	--
SDev	16.68813	--	--	--	--	--	--
%RSD	.1460534	--	--	--	--	--	--
#1	11414	--	--	--	--	--	--
#2	11438	--	--	--	--	--	--

Method: METTRA Sample Name: DW6KWS

Operator: WTR

Run Time: 03/24/01 21:16:20

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	.04995	2.2075	1.9847	2.0619	.04847	244.59	.04546
SDev	.00014	.0035	.0057	.0013	.00018	.35	.00019
%RSD	.28218	.15852	.28870	.06535	.37524	.14149	.42558
#1	.05005	2.2099	1.9888	2.0629	.04860	244.35	.04560
#2	.04985	2.2050	1.9807	2.0610	.04834	244.84	.04533
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	1.0299	.19617	.25554	.83315	88.804	1.4853	4.4398
SDev	.0022	.00139	.00055	.03426	.032	.0019	.0047
%RSD	.21221	.70852	.21597	4.1117	.03583	.12860	.10556
#1	1.0284	.19715	.25593	.85738	88.827	1.4839	4.4365
#2	1.0315	.19519	.25515	.80893	88.782	1.4866	4.4431
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	.48353	.48224	.47839	.47967	.47531	.48001	.47844
SDev	.00120	.00060	.00071	.00067	.00057	.00393	.00281
%RSD	.24872	.12480	.14809	.14030	.11997	.81861	.58749
#1	.48268	.48266	.47889	.48015	.47572	.48279	.48043
#2	.48438	.48181	.47789	.47920	.47491	.47723	.47646
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	1.9737	1.9634	1.9668	2.0228	.49399	.51257	
SDev	.0055	.0019	.0006	.0049	.00003	.00082	
%RSD	.27759	.09631	.02863	.24436	.00651	.16086	
#1	1.9776	1.9620	1.9672	2.0193	.49397	.51199	
#2	1.9698	1.9647	1.9664	2.0263	.49401	.51315	
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	11165	--	--	--	--	--	--
SDev	33.09315	--	--	--	--	--	--
%RSD	.2964021	--	--	--	--	--	--
#1	11188	--	--	--	--	--	--
#2	11142	--	--	--	--	--	--

Method: METTRA Sample Name: DW6KWD

Operator: WTR

Run Time: 03/24/01 21:20:47

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	.05082	2.2492	2.0183	2.0859	.04963	240.11	.04612
SDev	.00037	.0029	.0008	.0022	.00003	.08	.00032
%RSD	.72386	.12951	.03902	.10496	.05430	.03279	.68306
#1	.05108	2.2513	2.0178	2.0874	.04961	240.06	.04634
#2	.05056	2.2472	2.0189	2.0843	.04965	240.17	.04590
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	1.0239	.20013	.25931	.84380	88.354	1.4639	4.3581
SDev	.0005	.00030	.00079	.00630	.133	.0007	.0028
%RSD	.04564	.15018	.30627	.74691	.15073	.04948	.06330
#1	1.0236	.20034	.25987	.83934	88.448	1.4634	4.3600
#2	1.0242	.19992	.25875	.84826	88.260	1.4645	4.3561
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	.49484	.49024	.48508	.48680	.47810	.48626	.48354
SDev	.00025	.00042	.00300	.00186	.00343	.00113	.00190
%RSD	.05125	.08647	.61895	.38239	.71769	.23308	.39264
#1	.49502	.48994	.48721	.48812	.48052	.48707	.48489
#2	.49466	.49054	.48296	.48548	.47567	.48546	.48220
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	1.9920	1.9808	1.9845	2.0572	.50123	.52031	
SDev	.0041	.0124	.0096	.0133	.00402	.00129	
%RSD	.20367	.62806	.48621	.64872	.80308	.24761	
#1	1.9949	1.9896	1.9914	2.0477	.49839	.52122	
#2	1.9892	1.9720	1.9777	2.0666	.50408	.51940	
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	11178	--	--	--	--	--	--
SDev	13.75337	--	--	--	--	--	--
%RSD	.1230382	--	--	--	--	--	--
#1	11168	--	--	--	--	--	--
#2	11188	--	--	--	--	--	--

Method: METTRA Sample Name: DW6K1

Operator: WTR

Run Time: 03/24/01 21:25:13

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	-.00055	.11042	.00163	.02020	.00022	89.234	.00023
SDev	.00017	.00417	.00132	.00001	.00017	.074	.00023
%RSD	30.783	3.7775	80.595	.02475	77.193	.08280	101.67
#1	-.00043	.11337	.00256	.02020	.00034	89.182	.00039
#2	-.00067	.10747	.00070	.02019	.00010	89.286	.00006
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	.02658	-.00067	.00321	.89868	21.329	.29739	.01044
SDev	.00056	.00018	.00009	.00015	.023	.00027	.00139
%RSD	2.0927	26.946	2.7230	.01662	.10859	.08964	13.285
#1	.02619	-.00079	.00328	.89858	21.346	.29758	.01142
#2	.02698	-.00054	.00315	.89879	21.313	.29720	.00946
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	.01091	-.00359	.00249	.00046	.00359	-.00515	-.00224
SDev	.00129	.00263	.00173	.00028	.00346	.00381	.00139
%RSD	11.814	73.461	69.778	60.294	96.499	73.833	61.762
#1	.01182	-.00172	.00126	.00027	.00114	-.00246	-.00126
#2	.01000	-.00545	.00371	.00066	.00604	-.00785	-.00322
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	-.00486	.00463	.00147	-.00050	-.00095	.14171	
SDev	.00044	.00259	.00158	.00177	.00035	.00001	
%RSD	8.9522	55.993	107.91	352.95	37.147	.00805	
#1	-.00456	.00280	.00035	-.00175	-.00070	.14172	
#2	-.00517	.00646	.00259	.00075	-.00119	.14170	
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	

679 1019

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11348	--	--	--	--	--	--
SDev	2.828427	--	--	--	--	--	--
%RSD	.0249245	--	--	--	--	--	--
#1	11350	--	--	--	--	--	--
#2	11346	--	--	--	--	--	--

Method: METTRA Sample Name: DW6K2

Operator: WTR

Run Time: 03/24/01 21:29:39

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	-.00069	-.00889	-.00139	.00012	-.00041	.02906	.00005
SDev	.00008	.00069	.00106	.00011	.00010	.00449	.00017
%RSD	11.433	7.8053	76.032	91.490	23.952	15.462	366.65
#1	-.00063	-.00938	-.00214	.00004	-.00034	.02588	-.00007
#2	-.00074	-.00840	-.00064	.00020	-.00048	.03223	.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	-.00065	-.00110	.00012	.01491	-.00192	-.00028	.00155
SDev	.00075	.00008	.00044	.00373	.00276	.00010	.00055
%RSD	115.23	7.3026	351.94	25.033	143.94	37.401	35.333
#1	-.00119	-.00116	-.00019	.01227	-.00387	-.00035	.00116
#2	-.00012	-.00104	.00043	.01755	.00003	-.00021	.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	-.00265	-.00047	.00214	.00127	.00388	-.00107	.00058
SDev	.00024	.00007	.00079	.00055	.00089	.00235	.00127
%RSD	8.9995	15.560	36.755	43.196	22.968	220.60	219.54
#1	-.00282	-.00052	.00159	.00088	.00325	.00060	.00148
#2	-.00248	-.00042	.00270	.00166	.00451	-.00273	-.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	-.01142	.00503	-.00045	-.00511	-.00021	.00058	
SDev	.00143	.00259	.00125	.00224	.00461	.00011	
%RSD	12.535	51.463	279.69	43.854	2197.0	18.453	
#1	-.01041	.00320	-.00133	-.00669	.00305	.00050	
#2	-.01243	.00686	.00044	-.00353	-.00347	.00065	
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	11249	--	--	--	--	--	--
SDev	26.55172	--	--	--	--	--	--
%RSD	.2360441	--	--	--	--	--	--
#1	11267	--	--	--	--	--	--
#2	11230	--	--	--	--	--	--

Method: METTRA Sample Name: DW6K3

Operator: WTR

Run Time: 03/24/01 21:34:05

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	-.00061	.01536	.00072	.04673	-.00046	106.69	.00011
SDev	.00005	.00598	.00019	.00005	.00007	.23	.00022
%RSD	8.5184	38.929	26.926	.10871	15.365	.22027	204.21
#1	-.00065	.01958	.00058	.04677	-.00041	106.52	.00027
#2	-.00058	.01113	.00086	.04670	-.00051	106.85	-.00005
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	.00531	-.00091	.00107	.16834	14.055	.14749	.00244
SDev	.00075	.00021	.00018	.00379	.003	.00007	.00011
%RSD	14.158	22.643	17.129	2.2533	.02253	.04545	4.3938
#1	.00585	-.00105	.00094	.16566	14.053	.14744	.00237
#2	.00478	-.00076	.00119	.17102	14.058	.14753	.00252
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	.00185	-.00169	.00253	.00112	.00287	-.00286	-.00095
SDev	.00094	.00137	.00166	.00156	.00002	.00049	.00032
%RSD	50.875	80.695	65.787	139.35	.83796	17.130	33.548
#1	.00252	-.00266	.00135	.00002	.00286	-.00251	-.00072
#2	.00119	-.00073	.00371	.00223	.00289	-.00320	-.00117
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	-.00847	.00321	-.00068	-.00124	-.00342	.01309	
SDev	.00709	.00340	.00009	.00452	.00000	.00010	
%RSD	83.743	105.87	13.944	363.84	.03546	.78159	
#1	-.00345	.00081	-.00061	-.00444	-.00342	.01317	
#2	-.01348	.00561	-.00075	.00196	-.00342	.01302	
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	11310	--	--	--	--	--	--
SDev	.1056517	--	--	--	--	--	--
%RSD	.0009341	--	--	--	--	--	--
#1	11310	--	--	--	--	--	--
#2	11310	--	--	--	--	--	--

Method: METTRA Sample Name: DW6K5

Operator: WTR

Run Time: 03/24/01 21:38:30

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	-.00067	.13070	.00148	.01928	.00059	82.709	.00028
SDev	.00036	.00627	.00086	.00002	.00001	.231	.00006
%RSD	54.046	4.7960	58.297	.12365	1.5297	.27983	22.583
#1	-.00041	.13513	.00087	.01930	.00059	82.872	.00023
#2	-.00093	.12627	.00209	.01927	.00058	82.545	.00032
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	.03539	-.00061	.00127	.99504	23.194	.38378	.00568
SDev	.00032	.00029	.00010	.02349	.110	.00075	.00007
%RSD	.88911	47.277	8.1267	2.3607	.47479	.19483	1.1950
#1	.03561	-.00041	.00134	.97843	23.272	.38431	.00563
#2	.03517	-.00082	.00120	1.0117	23.116	.38325	.00573
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	.01285	-.00009	.00059	.00037	.00045	-.00156	-.00089
SDev	.00031	.00290	.00108	.00169	.00162	.00004	.00057
%RSD	2.4099	3249.1	183.08	462.32	358.05	2.5037	63.653
#1	.01307	-.00214	-.00017	-.00083	-.00069	-.00159	-.00129
#2	.01263	.00196	.00136	.00156	.00160	-.00153	-.00049
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	-.00259	.00192	.00042	-.00675	-.00069	.15842	
SDev	.00133	.00075	.00006	.00009	.00070	.00077	
%RSD	51.413	39.115	13.552	1.3847	102.20	.48555	
#1	-.00353	.00245	.00046	-.00681	-.00019	.15896	
#2	-.00165	.00139	.00038	-.00668	-.00118	.15788	
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	11452	--	--	--	--	--	--
SDev	55.43745	--	--	--	--	--	--
%RSD	.4841064	--	--	--	--	--	--
#1	11412	--	--	--	--	--	--
#2	11491	--	--	--	--	--	--

Method: METTRA Sample Name: DW6K7

Operator: WTR

Run Time: 03/24/01 21:42:56

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	-.00056	.02597	.00064	.06092	-.00046	179.18	-.00001
SDev	.00011	.00185	.00034	.00000	.00002	.04	.00001
%RSD	18.942	7.1054	52.349	.00310	3.4657	.01984	125.63
#1	-.00048	.02728	.00040	.06092	-.00045	179.15	-.00000
#2	-.00063	.02467	.00088	.06092	-.00048	179.20	-.00001
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	-.00048	.00135	.96708	18.209	.30879	.00277
SDev	.00167	.00026	.00067	.00346	.028	.00042	.00055
%RSD	13116.	52.678	49.577	.35817	.15552	.13574	19.728
#1	-.00119	-.00066	.00088	.96463	18.229	.30908	.00316
#2	.00116	-.00030	.00183	.96953	18.189	.30849	.00238
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	-.00080	-.00054	.00208	.00121	.00262	-.00163	-.00022
SDev	.00024	.00218	.00203	.00063	.00278	.00024	.00109
%RSD	29.719	405.10	97.596	52.042	106.22	14.869	505.59
#1	-.00064	.00100	.00064	.00076	.00065	-.00180	-.00099
#2	-.00097	-.00208	.00351	.00165	.00459	-.00146	.00055
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	-.00465	.00187	-.00030	-.00626	.00462	.00601	
SDev	.00035	.00047	.00043	.00381	.00108	.00015	
%RSD	7.5202	25.022	143.70	60.886	23.284	2.5286	
#1	-.00489	.00154	-.00060	-.00357	.00538	.00591	
#2	-.00440	.00220	.00000	-.00896	.00386	.00612	
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	11253	--	--	--	--	--	--
SDev	16.47545	--	--	--	--	--	--
%RSD	.1464120	--	--	--	--	--	--
#1	11241	--	--	--	--	--	--
#2	11264	--	--	--	--	--	--

Method: METTRA Sample Name: DW6K8

Operator: WTR

Run Time: 03/24/01 21:47:21

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	-.00062	.11491	.00006	.01750	-.00046	78.581	.00018
SDev	.00025	.00001	.00059	.00001	.00000	.085	.00025
%RSD	39.615	.01180	981.45	.05853	.49036	.10810	135.11
#1	-.00045	.11490	-.00036	.01749	-.00046	78.641	.00001
#2	-.00080	.11492	.00048	.01751	-.00046	78.521	.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	-.00078	-.00055	.00268	.24122	2.6255	.03500	.00574
SDev	.00075	.00061	.00018	.00872	.0093	.00024	.00075
%RSD	96.350	110.90	6.7879	3.6133	.35287	.67955	13.021
#1	-.00025	-.00012	.00255	.23505	2.6320	.03517	.00521
#2	-.00131	-.00099	.00281	.24738	2.6189	.03484	.00627
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	-.00025	-.00175	.00248	.00107	.00167	-.00521	-.00292
SDev	.00082	.00095	.00038	.00006	.00009	.00047	.00028
%RSD	333.63	54.394	15.365	5.8663	5.0951	8.9887	9.7308
#1	-.00083	-.00108	.00221	.00112	.00173	-.00554	-.00312
#2	.00033	-.00242	.00275	.00103	.00161	-.00488	-.00272
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	-.00635	.00617	.00200	-.00765	-.00215	.00671	
SDev	.00316	.00349	.00127	.00262	.00035	.00005	
%RSD	49.756	56.551	63.747	34.203	16.191	.71574	
#1	-.00412	.00370	.00110	-.00580	-.00191	.00667	
#2	-.00859	.00864	.00290	-.00951	-.00240	.00674	
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	

679 1029

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11364	--	--	--	--	--	--
SDev	.1415595	--	--	--	--	--	--
%RSD	.0012456	--	--	--	--	--	--
#1	11365	--	--	--	--	--	--
#2	11364	--	--	--	--	--	--

Method: METTRA Sample Name: DXK88

Operator: WTR

Run Time: 03/24/01 21:51:46

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	-.00100	-.01447	-.00166	.00015	-.00050	.09112	.00005
SDev	.00055	.00370	.00025	.00003	.00006	.00445	.00011
%RSD	54.554	25.593	14.848	20.059	12.486	4.8876	211.91
#1	-.00139	-.01185	-.00149	.00017	-.00045	.08797	-.00003
#2	-.00061	-.01709	-.00183	.00013	-.00054	.09427	.00013
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	-.00194	-.00117	.00027	.01765	-.00348	-.00041	.00015
SDev	.00000	.00025	.00051	.00494	.00492	.00007	.00053
%RSD	.19691	21.652	193.40	27.982	141.55	16.849	348.45
#1	-.00194	-.00099	-.00010	.02114	.00000	-.00046	.00053
#2	-.00194	-.00135	.00063	.01416	-.00696	-.00036	-.00022
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	-.00207	-.00588	.00287	-.00004	.00391	-.00281	-.00057
SDev	.00129	.00075	.00109	.00047	.00141	.00450	.00347
%RSD	62.168	12.792	37.859	1054.4	36.083	160.09	605.07
#1	-.00116	-.00641	.00363	.00029	.00291	-.00599	-.00303
#2	-.00298	-.00535	.00210	-.00038	.00491	.00037	.00188
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	-.00863	.00668	.00158	-.00699	-.00322	.00042	
SDev	.00534	.00594	.00218	.00035	.00035	.00010	
%RSD	61.878	88.953	138.26	4.9605	10.952	23.472	
#1	-.01241	.01087	.00312	-.00723	-.00297	.00049	
#2	-.00485	.00248	.00004	-.00674	-.00347	.00035	
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	

679 1031

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11370	--	--	--	--	--	--
SDev	14.31891	--	--	--	--	--	--
%RSD	.1259378	--	--	--	--	--	--
#1	11380	--	--	--	--	--	--
#2	11360	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-2

Operator: WTR

Run Time: 03/24/01 21:56:12

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	1.0269	24.621	.50995	2.0169	2.0576	51.256	.49392
SDev	.0008	.035	.00191	.0022	.0010	.049	.00108
%RSD	.07315	.14278	.37502	.11092	.05031	.09532	.21818
#1	1.0264	24.645	.51130	2.0185	2.0569	51.291	.49468
#2	1.0274	24.596	.50860	2.0153	2.0584	51.221	.49315
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	2.0608	2.0408	1.9781	25.290	49.322	2.0332	2.0418
SDev	.0011	.0019	.0033	.017	.089	.0013	.0053
%RSD	.05276	.09108	.16743	.06606	.18123	.06169	.26104
#1	2.0616	2.0395	1.9805	25.301	49.385	2.0323	2.0380
#2	2.0601	2.0421	1.9758	25.278	49.259	2.0341	2.0455
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	2.0244	.50220	.50130	.50160	.50293	.50192	.50226
SDev	.0029	.00207	.00199	.00201	.00227	.00145	.00021
%RSD	.14159	.41238	.39608	.40151	.45104	.28871	.04204
#1	2.0264	.50074	.49990	.50018	.50454	.50089	.50211
#2	2.0223	.50367	.50270	.50302	.50133	.50294	.50241
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	.51158	.51545	.51416	1.0207	1.9995	2.0543	
SDev	.00589	.00124	.00279	.0016	.0019	.0011	
%RSD	1.1516	.24122	.54285	.15284	.09318	.05154	
#1	.50742	.51457	.51219	1.0218	2.0008	2.0551	
#2	.51575	.51633	.51614	1.0196	1.9982	2.0536	
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	11293	--	--	--	--	--	--
SDev	23.51130	--	--	--	--	--	--
%RSD	.2081848	--	--	--	--	--	--
#1	11310	--	--	--	--	--	--
#2	11277	--	--	--	--	--	--

Method: METTRA Sample Name: CCB2

Operator: WTR

Run Time: 03/24/01 22:00:37

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	-.00066	-.02398	-.00022	.00025	-.00036	.00921	-.00006
SDev	.00072	.00097	.00051	.00009	.00006	.00291	.00014
%RSD	108.38	4.0525	235.27	36.457	17.519	31.576	239.29
#1	-.00015	-.02467	-.00058	.00018	-.00040	.00715	-.00015
#2	-.00117	-.02330	.00014	.00031	-.00031	.01127	.00004
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	-.00011	.00265	.00057	.02976	.00156	-.00002	.00220
SDev	.00140	.00012	.00037	.02218	.00219	.00014	.00000
%RSD	1302.6	4.6366	65.243	74.507	140.72	634.94	.18022
#1	-.00110	.00274	.00031	.01408	.00001	-.00012	.00220
#2	.00088	.00256	.00084	.04544	.00311	.00008	.00220
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	-.00057	-.00486	.00215	-.00018	.00192	-.00407	-.00207
SDev	.00012	.00152	.00015	.00061	.00498	.00156	.00062
%RSD	20.976	31.305	7.1478	334.01	259.56	38.245	29.993
#1	-.00066	-.00378	.00226	.00025	-.00160	-.00297	-.00251
#2	-.00049	-.00593	.00204	-.00061	.00545	-.00517	-.00163
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	-.00382	.00458	.00178	-.00355	-.00247	-.00023	
SDev	.00663	.00069	.00267	.00231	.00001	.00026	
%RSD	173.46	15.103	149.98	65.046	.32364	116.07	
#1	.00087	.00506	.00367	-.00518	-.00247	-.00041	
#2	-.00851	.00409	-.00011	-.00192	-.00246	-.00004	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

679 1035

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11351	--	--	--	--	--	--
SDev	10.25305	--	--	--	--	--	--
%RSD	.0903304	--	--	--	--	--	--
#1	11358	--	--	--	--	--	--
#2	11343	--	--	--	--	--	--

Method: METTRA Sample Name: DXQVCB

Operator: WTR

Run Time: 03/24/01 22:05:02

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	-.00054	-.02091	-.00000	.00013	-.00067	.01158	-.00011
SDev	.00050	.00122	.00004	.00002	.00013	.00298	.00007
%RSD	92.718	5.8402	1234.0	15.458	20.067	25.709	60.229
#1	-.00089	-.02004	.00002	.00014	-.00057	.00948	-.00007
#2	-.00019	-.02177	-.00003	.00011	-.00076	.01369	-.00016
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	.00109	-.00167	.00098	.02181	-.00777	-.00050	-.00028
SDev	.00000	.00016	.00030	.00628	.00109	.00007	.00010
%RSD	.00000	9.3554	30.292	28.807	14.059	13.914	36.758
#1	.00109	-.00178	.00077	.01736	-.00855	-.00055	-.00021
#2	.00109	-.00156	.00119	.02625	-.00700	-.00045	-.00036
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	-.00265	-.00343	.00195	.00016	.00373	-.00424	-.00159
SDev	.00047	.00156	.00090	.00008	.00014	.00233	.00151
%RSD	17.902	45.383	45.871	49.336	3.7386	54.948	95.085
#1	-.00298	-.00453	.00259	.00022	.00364	-.00259	-.00052
#2	-.00231	-.00233	.00132	.00010	.00383	-.00589	-.00265
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	-.00635	.00555	.00159	-.00538	-.00021	.00031	
SDev	.00095	.00037	.00007	.00221	.00318	.00016	
%RSD	15.011	6.5826	4.6152	41.026	1510.6	50.458	
#1	-.00702	.00581	.00154	-.00694	.00204	.00020	
#2	-.00567	.00530	.00164	-.00382	-.00246	.00042	
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	11268	--	--	--	--	--	--
SDev	21.24842	--	--	--	--	--	--
%RSD	.1885744	--	--	--	--	--	--
#1	11283	--	--	--	--	--	--
#2	11253	--	--	--	--	--	--

Method: METTRA Sample Name: DXQVCC

Operator: WTR

Run Time: 03/24/01 22:09:28

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
Avg	.04901	1.9870	1.9587	1.9576	.04851	53.101	.04690
SDev	.00052	.0004	.0039	.0004	.00003	.016	.00027
%RSD	1.0708	.01949	.19654	.01861	.06405	.02978	.56998
#1	.04938	1.9868	1.9614	1.9578	.04853	53.090	.04671
#2	.04864	1.9873	1.9560	1.9573	.04849	53.112	.04709
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
Avg	.50011	.19867	.24266	.86597	51.154	.49352	.99607
SDev	.00061	.00018	.00097	.00076	.058	.00007	.00103
%RSD	.12282	.08991	.40102	.08816	.11321	.01480	.10319
#1	.49968	.19879	.24335	.86543	51.195	.49357	.99534
#2	.50054	.19854	.24198	.86651	51.113	.49347	.99680
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
Avg	.48770	.48158	.48226	.48203	.47823	.48500	.48275
SDev	.00020	.00147	.00045	.00019	.00314	.00314	.00105
%RSD	.04158	.30630	.09248	.04019	.65668	.64783	.21749
#1	.48785	.48263	.48194	.48217	.47601	.48722	.48349
#2	.48756	.48054	.48258	.48190	.48045	.48278	.48200
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	
Avg	1.9686	1.9551	1.9596	2.0116	.48969	.50581	
SDev	.0027	.0033	.0013	.0082	.00051	.00012	
%RSD	.13507	.16647	.06559	.40847	.10369	.02264	
#1	1.9667	1.9574	1.9605	2.0058	.48933	.50589	
#2	1.9705	1.9528	1.9587	2.0174	.49005	.50573	
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	11297	--	--	--	--	--	--
SDev	11.63204	--	--	--	--	--	--
%RSD	.1029656	--	--	--	--	--	--
#1	11305	--	--	--	--	--	--
#2	11289	--	--	--	--	--	--

Method: METTRA Sample Name: DXPK3

Operator: WTR

Run Time: 03/24/01 22:13:53

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	.00272	2.0559	.00333	.10725	-.00058	22.045	.00016
SDev	.00145	.0163	.00026	.00098	.00017	.312	.00007
%RSD	53.273	.79268	7.7813	.91881	30.080	1.4163	42.251
#1	.00374	2.0675	.00315	.10795	-.00070	21.824	.00011
#2	.00170	2.0444	.00351	.10655	-.00045	22.266	.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	.00189	.06013	.02917	1.8798	5.3638	.06291	.00422
SDev	.00052	.00072	.00022	.0635	.0227	.00051	.00108
%RSD	27.598	1.1984	.75478	3.3766	.42396	.81711	25.494
#1	.00226	.06064	.02932	1.8349	5.3477	.06255	.00499
#2	.00152	.05962	.02901	1.9247	5.3798	.06328	.00346
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	.00853	.01288	-.00198	.00297	-.00292	.00553	.00272
SDev	.00199	.00976	.00618	.00087	.00996	.00346	.00101
%RSD	23.289	75.821	311.79	29.413	340.64	62.475	37.249
#1	.00713	.01978	-.00635	.00235	-.00997	.00798	.00200
#2	.00994	.00597	.00239	.00358	.00412	.00309	.00343
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	.01461	-.00464	.00177	.00172	.00274	.10135	
SDev	.00529	.00834	.00380	.00101	.00365	.00080	
%RSD	36.192	179.92	214.61	58.899	133.29	.79084	
#1	.01834	-.01053	-.00092	.00244	.00532	.10079	
#2	.01087	.00126	.00446	.00100	.00016	.10192	
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	

679 1041

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11123	--	--	--	--	--	--
SDev	164.8270	--	--	--	--	--	--
%RSD	1.481884	--	--	--	--	--	--
#1	11006	--	--	--	--	--	--
#2	11239	--	--	--	--	--	--

Method: METTRA Sample Name: DXPK3P5

Operator: WTR

Run Time: 03/24/01 22:18:19

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	-.00027	.35199	.00100	.02211	-.00020	4.6417	.00001
SDev	.00113	.00178	.00003	.00009	.00008	.0182	.00003
%RSD	418.31	.50626	2.5101	.39934	41.301	.39143	295.62
#1	.00053	.35325	.00098	.02205	-.00014	4.6289	-.00001
#2	-.00107	.35073	.00102	.02217	-.00026	4.6546	.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
Avge	.00096	.01440	.00588	.42614	1.1418	.01242	-.00015
SDev	.00019	.00062	.00042	.01743	.0031	.00002	.00123
%RSD	20.066	4.3341	7.1724	4.0893	.27440	.16222	798.66
#1	.00109	.01484	.00617	.43846	1.1440	.01244	.00072
#2	.00082	.01396	.00558	.41382	1.1396	.01241	-.00102
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	.00093	-.00582	.00227	-.00043	.00571	-.00335	-.00034
SDev	.00012	.00159	.00281	.00135	.00035	.00156	.00092
%RSD	12.553	27.288	124.08	314.83	6.1942	46.584	274.05
#1	.00084	-.00470	.00028	-.00138	.00546	-.00225	.00032
#2	.00101	-.00695	.00425	.00052	.00596	-.00446	-.00099
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	.00008	.00011	.00010	.00130	-.00262	.02103	
SDev	.00645	.00429	.00071	.00180	.00102	.00017	
%RSD	7609.7	3822.8	692.03	138.74	38.891	.82720	
#1	.00464	-.00292	-.00040	.00002	-.00190	.02091	
#2	-.00447	.00314	.00061	.00257	-.00334	.02116	
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	

679 1043

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11816	--	--	--	--	--	--
SDev	11.10171	--	--	--	--	--	--
%RSD	.0939581	--	--	--	--	--	--
#1	11823	--	--	--	--	--	--
#2	11808	--	--	--	--	--	--

Method: METTRA Sample Name: DXPK3S

Operator: WTR

Run Time: 03/24/01 22:22:45

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
Avg	.05107	3.9535	1.9200	1.6969	.04456	68.814	.04453
SDev	.00360	.0144	.0077	.0038	.00015	.303	.00063
%RSD	7.0506	.36527	.40359	.22658	.32938	.44019	1.4071
#1	.05362	3.9433	1.9255	1.6942	.04466	69.028	.04497
#2	.04853	3.9637	1.9145	1.6997	.04445	68.600	.04408
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	.45034	.23519	.23997	2.2587	49.181	.50552	.91982
SDev	.00300	.00375	.00006	.0005	.299	.00186	.00438
%RSD	.66718	1.5948	.02724	.02119	.60751	.36805	.47570
#1	.45247	.23785	.24002	2.2590	49.393	.50683	.92291
#2	.44822	.23254	.23992	2.2583	48.970	.50420	.91672
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	.44488	.46694	.45534	.45921	.44635	.45551	.45246
SDev	.00205	.02752	.01240	.00089	.01836	.01167	.00167
%RSD	.46118	5.8931	2.7239	.19392	4.1136	2.5625	.36933
#1	.44633	.48640	.44657	.45984	.43337	.46376	.45364
#2	.44343	.44748	.46411	.45858	.45934	.44725	.45128
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	1.9340	1.8582	1.8834	1.9178	.45142	.55478	
SDev	.0151	.0067	.0006	.0026	.00419	.00107	
%RSD	.78137	.36032	.03007	.13481	.92833	.19359	
#1	1.9447	1.8534	1.8838	1.9196	.45438	.55554	
#2	1.9233	1.8629	1.8830	1.9159	.44845	.55402	
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	11290	--	--	--	--	--	--
SDev	33.83478	--	--	--	--	--	--
%RSD	.2996794	--	--	--	--	--	--
#1	11266	--	--	--	--	--	--
#2	11314	--	--	--	--	--	--

Method: METTRA Sample Name: DXPK3D

Operator: WTR

Run Time: 03/24/01 22:27:11

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	.05141	3.9320	2.0053	1.7406	.04715	73.545	.04672
SDev	.00174	.0470	.0112	.0135	.00013	.453	.00064
%RSD	3.3849	1.1962	.55922	.77542	.26455	.61619	1.3739
#1	.05264	3.9652	2.0132	1.7501	.04724	73.866	.04718
#2	.05018	3.8987	1.9974	1.7310	.04707	73.225	.04627
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	.47574	.24932	.24570	2.2842	52.275	.52851	.97293
SDev	.00257	.00237	.00249	.0371	.340	.00289	.00488
%RSD	.54098	.95144	1.0123	1.6239	.65025	.54726	.50117
#1	.47756	.25100	.24746	2.3104	52.516	.53056	.97638
#2	.47392	.24765	.24394	2.2579	52.035	.52647	.96948
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	.47037	.48870	.47723	.48105	.46617	.46641	.46633
SDev	.00186	.00056	.00256	.00152	.00281	.00200	.00227
%RSD	.39552	.11424	.53692	.31664	.60301	.42796	.48623
#1	.47169	.48831	.47904	.48213	.46815	.46782	.46793
#2	.46906	.48910	.47542	.47997	.46418	.46500	.46472
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	1.9597	1.9181	1.9320	1.9826	.47746	.57311	
SDev	.0025	.0313	.0200	.0022	.00529	.00453	
%RSD	.12712	1.6315	1.0374	.10878	1.1072	.79130	
#1	1.9580	1.9403	1.9462	1.9841	.48120	.57632	
#2	1.9615	1.8960	1.9178	1.9810	.47372	.56990	
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	11167	--	--	--	--	--	--
SDev	114.3393	--	--	--	--	--	--
%RSD	1.023936	--	--	--	--	--	--
#1	11086	--	--	--	--	--	--
#2	11248	--	--	--	--	--	--

Method: METTRA Sample Name: DXCMMB Operator: WTR
 Run Time: 03/24/01 22:31:37
 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	-.00096	-.06720	-.00015	.00025	-.00002	.01548	-.00013
SDev	.00010	.00013	.00045	.00007	.00004	.00284	.00007
%RSD	10.504	.19727	302.04	27.020	148.19	18.373	53.421
#1	-.00089	-.06730	.00017	.00020	.00000	.01347	-.00019
#2	-.00103	-.06711	-.00046	.00030	-.00005	.01749	-.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	-.00181	-.00168	.00012	.01668	-.00194	-.00047	.00022
SDev	.00014	.00025	.00016	.00598	.00159	.00013	.00052
%RSD	7.7728	14.828	137.37	35.846	81.790	27.928	234.96
#1	-.00190	-.00185	.00023	.02091	-.00306	-.00057	-.00015
#2	-.00171	-.00150	.00000	.01245	-.00082	-.00038	.00059
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	-.00258	-.00593	.00256	-.00026	.00407	-.00397	-.00129
SDev	.00079	.00135	.00018	.00033	.00178	.00227	.00092
%RSD	30.750	22.730	6.8520	125.59	43.736	57.282	71.522
#1	-.00314	-.00497	.00244	-.00003	.00281	-.00236	-.00064
#2	-.00202	-.00688	.00269	-.00050	.00533	-.00557	-.00194
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	-.00667	.00841	.00339	-.00582	-.00347	-.00010	
SDev	.00172	.00066	.00101	.00361	.00000	.00000	
%RSD	25.813	7.8436	29.891	62.037	.05512	3.2868	
#1	-.00545	.00888	.00411	-.00837	-.00347	-.00010	
#2	-.00789	.00794	.00267	-.00327	-.00347	-.00010	
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	11761	--	--	--	--	--	--
SDev	17.74880	--	--	--	--	--	--
%RSD	.1509110	--	--	--	--	--	--
#1	11774	--	--	--	--	--	--
#2	11749	--	--	--	--	--	--

679 1050

Method: METTRA Sample Name: DXCMMC

Operator: WTR

Run Time: 03/24/01 22:36:03

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
Avg	.04981	1.9614	2.0911	1.9386	.05364	55.630	.05193
SDev	.00015	.0045	.0029	.0014	.00028	.027	.00009
%RSD	.29293	.23090	.14009	.07166	.51629	.04824	.16965
#1	.04992	1.9646	2.0931	1.9396	.05384	55.649	.05199
#2	.04971	1.9582	2.0890	1.9376	.05344	55.611	.05187
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
Avg	.54700	.21518	.23955	.95141	52.250	.52906	1.0694
SDev	.00008	.00019	.00059	.01184	.076	.00020	.0007
%RSD	.01410	.08996	.24621	1.2443	.14465	.03806	.06365
#1	.54694	.21505	.23913	.94304	52.303	.52920	1.0689
#2	.54705	.21532	.23997	.95978	52.196	.52892	1.0699
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
Avg	.53148	.52777	.52727	.52744	.49700	.49958	.49872
SDev	.00203	.00152	.00096	.00013	.00420	.00212	.00281
%RSD	.38145	.28875	.18121	.02461	.84467	.42364	.56336
#1	.53291	.52884	.52660	.52734	.49404	.49809	.49674
#2	.53004	.52669	.52795	.52753	.49997	.50108	.50071
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	
Avg	2.0308	2.0340	2.0329	2.1479	.51055	.53728	
SDev	.0020	.0099	.0073	.0079	.00386	.00186	
%RSD	.09963	.48681	.35801	.36901	.75710	.34586	
#1	2.0322	2.0410	2.0380	2.1423	.51328	.53859	
#2	2.0294	2.0270	2.0278	2.1535	.50782	.53597	
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	

679 1051

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11680	--	--	--	--	--	--
SDev	13.08147	--	--	--	--	--	--
%RSD	.1120018	--	--	--	--	--	--
#1	11689	--	--	--	--	--	--
#2	11670	--	--	--	--	--	--

Method: METTRA Sample Name: DW7DJ

Operator: WTR

Run Time: 03/24/01 22:40:29

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	-.00005	-.00855	.00899	1.0058	-.00026	277.09	-.00034
SDev	.00031	.00814	.00116	.0014	.00003	1.25	.00011
%RSD	566.36	95.161	12.931	.13918	10.839	.45169	31.982
#1	-.00027	-.00280	.00816	1.0068	-.00028	276.21	-.00026
#2	.00016	-.01431	.00981	1.0048	-.00024	277.98	-.00042
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	.00172	.00253	.00052	9.9778	82.976	.91975	.00162
SDev	.00000	.00052	.00020	.0162	.182	.00158	.00096
%RSD	.08270	20.360	38.470	.16224	.21985	.17152	59.203
#1	.00172	.00290	.00038	9.9893	82.847	.91864	.00230
#2	.00172	.00217	.00066	9.9664	83.105	.92087	.00094
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	-.00044	-.00265	.00118	-.00010	-.00051	-.00391	-.00278
SDev	.00057	.00077	.00052	.00061	.00480	.00122	.00241
%RSD	129.70	29.196	44.583	624.58	944.15	31.102	86.808
#1	-.00085	-.00210	.00155	.00033	.00289	-.00305	-.00107
#2	-.00004	-.00320	.00081	-.00053	-.00390	-.00477	-.00448
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	.00162	.00064	.00096	-.00532	.00315	.02553	
SDev	.00063	.00030	.00041	.00349	.00485	.00022	
%RSD	39.169	46.766	42.520	65.595	153.98	.85516	
#1	.00207	.00085	.00125	-.00285	-.00028	.02569	
#2	.00117	.00043	.00067	-.00779	.00657	.02538	
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	

679 1053

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11504	--	--	--	--	--	--
SDev	26.09252	--	--	--	--	--	--
%RSD	.2268047	--	--	--	--	--	--
#1	11486	--	--	--	--	--	--
#2	11523	--	--	--	--	--	--

679 1054

Method: METTRA Sample Name: DW7DJP5

Operator: WTR

Run Time: 03/24/01 22:44:55

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	-.00043	-.06360	.00209	.20299	-.00001	56.992	-.00014
SDev	.00009	.00518	.00136	.00005	.00007	.250	.00004
%RSD	20.035	8.1479	65.072	.02338	614.63	.43868	30.247
#1	-.00037	-.05994	.00306	.20302	.00004	57.169	-.00017
#2	-.00050	-.06726	.00113	.20296	-.00006	56.816	-.00011
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	.00113	.00276	.00096	2.0414	16.620	.18610	-.00051
SDev	.00111	.00011	.00037	.0356	.071	.00069	.00010
%RSD	98.555	4.0473	38.083	1.7444	.42895	.36904	19.508
#1	.00191	.00268	.00122	2.0666	16.670	.18659	-.00044
#2	.00034	.00284	.00070	2.0162	16.569	.18561	-.00058
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	.00015	-.00546	.00354	.00054	.00657	-.00767	-.00293
SDev	.00126	.00010	.00013	.00012	.00589	.00114	.00120
%RSD	850.94	1.9059	3.7544	22.798	89.552	14.903	40.927
#1	-.00074	-.00553	.00344	.00045	.01074	-.00848	-.00208
#2	.00103	-.00539	.00363	.00063	.00241	-.00686	-.00377
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	-.00658	.00296	-.00022	.00035	-.00282	.00602	
SDev	.00487	.00364	.00405	.00206	.00001	.00009	
%RSD	74.131	123.09	1862.4	588.48	.40364	1.4720	
#1	-.01002	.00038	-.00308	.00181	-.00281	.00608	
#2	-.00313	.00553	.00265	-.00111	-.00283	.00596	
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	11753	--	--	--	--	--	--
SDev	29.23859	--	--	--	--	--	--
%RSD	.2487739	--	--	--	--	--	--
#1	11774	--	--	--	--	--	--
#2	11732	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-3

Operator: WTR

Run Time: 03/24/01 22:49:20

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	1.0140	24.173	.53589	1.9374	2.1954	H55.536	.54154
SDev	.0011	.014	.00051	.0020	.0017	.059	.00009
%RSD	.10686	.05598	.09505	.10302	.07779	.10683	.01719
#1	1.0133	24.164	.53625	1.9360	2.1966	H55.578	.54160
#2	1.0148	24.183	.53553	1.9388	2.1942	H55.494	.54147
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	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	H2.2007	2.1610	1.8932	26.736	51.915	2.1263	2.1370
SDev	.0008	.0021	.0010	.018	.073	.0015	.0057
%RSD	.03523	.09625	.05030	.06582	.14154	.06822	.26548
#1	H2.2012	2.1625	1.8925	26.724	51.967	2.1274	2.1329
#2	H2.2001	2.1595	1.8939	26.749	51.863	2.1253	2.1410
Errors	LC High	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	2.1604	.53804	.54290	.54128	.50990	.50090	.50390
SDev	.0033	.00263	.00475	.00405	.00063	.00565	.00356
%RSD	.15230	.48803	.87594	.74755	.12330	1.1276	.70611
#1	2.1627	.53990	.54626	.54414	.50945	.50490	.50641
#2	2.1581	.53618	.53953	.53842	.51034	.49691	.50138
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	.52333	.52958	.52750	1.0683	2.0530	2.1376	
SDev	.00637	.00019	.00225	.0100	.0016	.0010	
%RSD	1.2174	.03504	.42566	.93312	.07690	.04670	
#1	.52784	.52972	.52909	1.0754	2.0541	2.1383	
#2	.51883	.52945	.52591	1.0613	2.0519	2.1369	
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	

679 1057

03/24/01 10:53:42 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	11726	--	--	--	--	--	--
SDev	12.37437	--	--	--	--	--	--
%RSD	.1055280	--	--	--	--	--	--
#1	11735	--	--	--	--	--	--
#2	11717	--	--	--	--	--	--

Method: METTRA Sample Name: CCB3

Operator: WTR

Run Time: 03/24/01 22:53:51

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
Avg	-.00084	-.07090	.00055	.00034	.00005	.02293	.00020
SDev	.00032	.00462	.00004	.00019	.00007	.00697	.00008
%RSD	37.620	6.5224	6.9965	54.920	153.17	30.416	40.751
#1	-.00107	-.07417	.00058	.00021	-.00000	.01800	.00014
#2	-.00062	-.06763	.00053	.00047	.00010	.02786	.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	.00006	.00330	.00073	.02167	.00448	-.00002	.00165
SDev	.00000	.00022	.00035	.02776	.00107	.00017	.00063
%RSD	.49959	6.7794	48.079	128.13	23.868	749.68	38.056
#1	.00006	.00314	.00048	.00204	.00524	-.00014	.00209
#2	.00006	.00345	.00098	.04129	.00373	.00010	.00120
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	-.00136	-.00531	.00030	-.00157	.00504	-.00325	-.00049
SDev	.00252	.00168	.00133	.00033	.00011	.00331	.00224
%RSD	184.95	31.569	438.99	21.005	2.1116	101.83	461.19
#1	.00042	-.00412	-.00064	-.00180	.00512	-.00091	.00110
#2	-.00315	-.00649	.00124	-.00133	.00497	-.00558	-.00207
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	-.00718	.00321	-.00025	-.00201	-.00249	-.00007	
SDev	.00337	.00242	.00050	.00291	.00001	.00006	
%RSD	46.862	75.425	199.99	145.07	.34438	86.722	
#1	-.00480	.00150	-.00060	.00005	-.00250	-.00011	
#2	-.00956	.00493	.00010	-.00407	-.00249	-.00003	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

679 1059

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11640	--	--	--	--	--	--
SDev	3.358757	--	--	--	--	--	--
%RSD	.0288562	--	--	--	--	--	--
#1	11637	--	--	--	--	--	--
#2	11642	--	--	--	--	--	--

679 1060

Method: METTRA Sample Name: DW7DJS

Operator: WTR

Run Time: 03/24/01 22:58:16

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	.05148	2.2230	2.1062	2.8835	.05192	330.99	.04874
SDev	.00008	.0083	.0001	.0051	.00029	1.89	.00007
%RSD	.15889	.37299	.00604	.17714	.56146	.57013	.14808
#1	.05142	2.2289	2.1061	2.8871	.05171	329.65	.04869
#2	.05154	2.2172	2.1063	2.8799	.05213	332.32	.04879
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	.52617	.21362	.24639	11.042	135.80	1.4426	1.0403
SDev	.00250	.00110	.00012	.039	.39	.0053	.0043
%RSD	.47570	.51240	.04810	.35262	.28804	.36535	.41065
#1	.52440	.21285	.24647	11.015	135.53	1.4389	1.0373
#2	.52793	.21439	.24630	11.070	136.08	1.4463	1.0433
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	.51056	.51692	.50281	.50751	.48658	.49649	.49319
SDev	.00139	.00212	.00567	.00308	.00370	.00576	.00261
%RSD	.27152	.41080	1.1281	.60616	.76094	1.1605	.52923
#1	.51154	.51842	.49880	.50534	.48396	.50056	.49503
#2	.50958	.51541	.50683	.50969	.48920	.49241	.49134
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	2.0514	2.0164	2.0281	2.1026	.51675	.53591	
SDev	.0131	.0170	.0070	.0096	.00197	.00130	
%RSD	.63841	.84313	.34409	.45849	.38190	.24292	
#1	2.0607	2.0044	2.0232	2.0957	.51535	.53499	
#2	2.0422	2.0285	2.0330	2.1094	.51815	.53683	
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	

679 1061

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11481	--	--	--	--	--	--
SDev	41.43687	--	--	--	--	--	--
%RSD	.3609075	--	--	--	--	--	--
#1	11452	--	--	--	--	--	--
#2	11511	--	--	--	--	--	--

Method: METTRA Sample Name: DW7DJD

Operator: WTR

Run Time: 03/24/01 23:02:42

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
Avg	.04990	2.1786	2.0854	2.8054	.05168	321.91	.04893
SDev	.00052	.0034	.0030	.0019	.00004	.60	.00008
%RSD	1.0322	.15670	.14293	.06635	.08260	.18572	.16772
#1	.05027	2.1762	2.0833	2.8041	.05165	321.48	.04887
#2	.04954	2.1810	2.0875	2.8068	.05171	322.33	.04899
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	.52204	.21151	.24319	10.636	132.33	1.4026	1.0325
SDev	.00134	.00058	.00007	.029	.09	.0019	.0053
%RSD	.25673	.27226	.02814	.27595	.06559	.13748	.51485
#1	.52109	.21192	.24324	10.615	132.27	1.4012	1.0287
#2	.52299	.21111	.24314	10.657	132.39	1.4039	1.0362
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	.51127	.51335	.50397	.50710	.48255	.49478	.49070
SDev	.00170	.00722	.00492	.00088	.00163	.00289	.00138
%RSD	.33358	1.4067	.97595	.17274	.33799	.58359	.28181
#1	.51247	.51846	.50049	.50648	.48139	.49682	.49168
#2	.51006	.50825	.50745	.50771	.48370	.49273	.48973
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	2.0212	1.9901	2.0005	2.0868	.51397	.52963	
SDev	.0027	.0111	.0065	.0072	.00132	.00077	
%RSD	.13421	.55657	.32416	.34407	.25718	.14579	
#1	2.0231	1.9823	1.9959	2.0817	.51303	.52909	
#2	2.0193	1.9980	2.0051	2.0919	.51490	.53018	
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	11469	--	--	--	--	--	--
SDev	17.32412	--	--	--	--	--	--
%RSD	.1510497	--	--	--	--	--	--
#1	11457	--	--	--	--	--	--
#2	11481	--	--	--	--	--	--

Method: METTRA Sample Name: DW7D5

Operator: WTR

Run Time: 03/24/01 23:07:08

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
Ave	-.00098	-.02126	.00404	.00958	-.00036	196.40	-.00011
SDev	.00074	.00295	.00058	.00012	.00001	.15	.00015
%RSD	75.420	13.858	14.464	1.2148	2.8162	.07765	138.85
#1	-.00046	-.01918	.00445	.00966	-.00035	196.51	-.00022
#2	-.00150	-.02334	.00362	.00950	-.00037	196.30	-.00000
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
Ave	.00251	.01971	.00191	6.4514	34.958	.22676	.00195
SDev	.00015	.00056	.00054	.0073	.045	.00007	.00064
%RSD	6.0596	2.8569	28.147	.11356	.12873	.02918	32.977
#1	.00262	.02011	.00230	6.4463	34.990	.22671	.00240
#2	.00240	.01931	.00153	6.4566	34.926	.22681	.00150
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
Ave	.00107	-.00576	.00212	-.00051	.00450	-.00518	-.00196
SDev	.00090	.00292	.00242	.00064	.00007	.00109	.00070
%RSD	84.026	50.650	114.22	126.83	1.6575	21.081	35.921
#1	.00044	-.00370	.00041	-.00096	.00455	-.00595	-.00246
#2	.00171	-.00783	.00383	-.00005	.00444	-.00441	-.00146
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	
Ave	.00145	.00127	.00133	.00107	.00029	.00492	
SDev	.00285	.00299	.00105	.00501	.00035	.00013	
%RSD	196.58	236.40	78.989	467.83	119.44	2.6693	
#1	.00346	-.00085	.00059	.00461	.00054	.00501	
#2	-.00057	.00338	.00207	-.00247	.00005	.00482	
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	

679 1065

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11620	--	--	--	--	--	--
SDev	45.89082	--	--	--	--	--	--
%RSD	.3949262	--	--	--	--	--	--
#1	11588	--	--	--	--	--	--
#2	11653	--	--	--	--	--	--

Method: METTRA Sample Name: DW7ED

Operator: WTR

Run Time: 03/24/01 23:11:33

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	-.00069	13.798	.00828	.44755	.00063	302.07	-.00056
SDev	.00048	.016	.00010	.00096	.00003	.10	.00013
%RSD	68.786	.11638	1.2428	.21415	5.4368	.03311	23.482
#1	-.00103	13.810	.00835	.44822	.00065	302.14	-.00047
#2	-.00036	13.787	.00821	.44687	.00060	302.00	-.00065
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	.01080	.02166	.01929	23.308	28.072	.96425	.00575
SDev	.00023	.00001	.00035	.030	.075	.00034	.00133
%RSD	2.1093	.03663	1.8366	.12922	.26577	.03552	23.096
#1	.01064	.02167	.01904	23.329	28.125	.96449	.00481
#2	.01096	.02165	.01954	23.286	28.019	.96401	.00669
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	.01743	.00325	.01014	.00785	.00548	-.00430	-.00104
SDev	.00031	.00313	.00063	.00147	.00047	.00153	.00118
%RSD	1.7916	96.573	6.2515	18.691	8.5384	35.581	112.89
#1	.01721	.00546	.01059	.00888	.00515	-.00538	-.00187
#2	.01766	.00103	.00970	.00681	.00581	-.00322	-.00021
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	-.00147	.00379	.00204	-.00566	.03466	.04952	
SDev	.00136	.00107	.00026	.00102	.00005	.00024	
%RSD	92.321	28.262	12.914	18.070	.14655	.48076	
#1	-.00051	.00304	.00185	-.00639	.03470	.04935	
#2	-.00243	.00455	.00223	-.00494	.03463	.04969	
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	

679 1067

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11778	--	--	--	--	--	--
SDev	15.80425	--	--	--	--	--	--
%RSD	.1341791	--	--	--	--	--	--
#1	11767	--	--	--	--	--	--
#2	11790	--	--	--	--	--	--

679 1068

Method: METTRA Sample Name: DW7EF

Operator: WTR

Run Time: 03/24/01 23:15:59

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	-.00054	.12521	.00633	.23237	-.00058	240.15	-.00076
SDev	.00010	.00144	.00024	.00022	.00003	.54	.00008
%RSD	19.291	1.1501	3.8572	.09334	5.2939	.22445	10.594
#1	-.00047	.12623	.00650	.23253	-.00056	239.77	-.00082
#2	-.00061	.12419	.00616	.23222	-.00060	240.53	-.00071
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	.05623	.00121	.00339	37.734	59.917	3.3087	.03431
SDev	.00022	.00061	.00023	.084	.020	.0055	.00001
%RSD	.38324	50.526	6.8337	.22152	.03325	.16600	.02952
#1	.05608	.00165	.00323	37.675	59.903	3.3048	.03430
#2	.05638	.00078	.00355	37.793	59.931	3.3126	.03431
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	.03414	.00008	.00685	.00460	.00439	-.00299	-.00053
SDev	.00166	.00335	.00005	.00115	.00031	.00363	.00253
%RSD	4.8531	4374.3	.74342	25.031	7.0691	121.29	472.64
#1	.03297	.00245	.00689	.00541	.00461	-.00043	.00125
#2	.03532	-.00229	.00682	.00378	.00417	-.00556	-.00232
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	-.00286	.00399	.00171	-.00500	.00161	.00615	
SDev	.00222	.00542	.00287	.00035	.00068	.00009	
%RSD	77.610	135.71	168.04	6.9436	42.129	1.4862	
#1	-.00129	.00016	-.00032	-.00524	.00209	.00608	
#2	-.00443	.00782	.00374	-.00475	.00113	.00621	
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	11336	--	--	--	--	--	--
SDev	3.146763	--	--	--	--	--	--
%RSD	.0277593	--	--	--	--	--	--
#1	11338	--	--	--	--	--	--
#2	11334	--	--	--	--	--	--

Method: METTRA Sample Name: DW7EM

Operator: WTR

Run Time: 03/24/01 23:20:24

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	-.00109	-.08143	.00054	.00005	-.00033	.04292	-.00010
SDev	.00020	.00114	.00172	.00007	.00002	.01563	.00001
%RSD	18.674	1.4057	315.65	143.39	6.8564	36.428	6.2324
#1	-.00123	-.08224	-.00067	-.00000	-.00031	.03186	-.00010
#2	-.00094	-.08062	.00176	.00010	-.00034	.05397	-.00009
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	-.00084	-.00104	.00048	.05088	-.00004	-.00002	.00033
SDev	.00118	.00058	.00052	.01351	.00322	.00010	.00041
%RSD	139.79	55.667	109.06	26.552	8355.7	522.88	126.46
#1	-.00001	-.00145	.00011	.04133	-.00231	-.00009	.00062
#2	-.00168	-.00063	.00084	.06043	.00224	.00005	.00003
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	-.00168	-.00327	.00201	.00025	.00149	-.00455	-.00254
SDev	.00046	.00083	.00157	.00133	.00103	.00221	.00113
%RSD	27.445	25.524	78.315	527.39	69.285	48.526	44.463
#1	-.00201	-.00386	.00090	-.00069	.00076	-.00299	-.00174
#2	-.00136	-.00268	.00312	.00119	.00222	-.00611	-.00334
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	-.00621	.00541	.00154	-.00852	-.00345	.00044	
SDev	.00244	.00171	.00033	.00395	.00069	.00005	
%RSD	39.234	31.667	21.504	46.430	20.032	12.316	
#1	-.00794	.00662	.00177	L-.01131	-.00394	.00048	
#2	-.00449	.00420	.00131	-.00572	-.00297	.00040	
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	

679 1071

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11611	--	--	--	--	--	--
SDev	31.99658	--	--	--	--	--	--
%RSD	.2755612	--	--	--	--	--	--
#1	11634	--	--	--	--	--	--
#2	11589	--	--	--	--	--	--

Method: METTRA Sample Name: DW7EV

Operator: WTR

Run Time: 03/24/01 23:24:50

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
Avg	-.00094	-.02515	.00410	.07999	-.00054	283.83	-.00046
SDev	.00013	.00237	.00015	.00012	.00007	.89	.00006
%RSD	13.578	9.4081	3.6624	.14944	12.246	.31195	13.132
#1	-.00085	-.02682	.00420	.08007	-.00059	283.21	-.00050
#2	-.00104	-.02347	.00399	.07991	-.00049	284.46	-.00041
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	.00433	.01791	.00308	26.976	51.924	.87196	.00497
SDev	.00073	.00067	.00007	.010	.114	.00171	.00086
%RSD	16.926	3.7210	2.1327	.03784	.21992	.19567	17.221
#1	.00381	.01838	.00303	26.983	51.843	.87075	.00557
#2	.00485	.01743	.00312	26.969	52.005	.87317	.00436
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	.01045	-.00512	.00227	-.00019	.00108	-.00543	-.00326
SDev	.00026	.00090	.00078	.00082	.00477	.00126	.00243
%RSD	2.4360	17.599	34.244	433.36	440.84	23.137	74.329
#1	.01063	-.00576	.00172	-.00077	.00445	-.00454	-.00155
#2	.01027	-.00449	.00282	.00039	-.00229	-.00632	-.00498
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	-.00484	.00319	.00052	-.00470	.00196	.00428	
SDev	.00053	.00545	.00346	.00404	.00035	.00004	
%RSD	10.975	170.62	669.78	86.090	17.802	.97206	
#1	-.00522	.00704	.00296	-.00756	.00171	.00425	
#2	-.00447	-.00066	-.00193	-.00184	.00221	.00431	
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	

679 1073

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11513	--	--	--	--	--	--
SDev	20.04620	--	--	--	--	--	--
%RSD	.1741123	--	--	--	--	--	--
#1	11499	--	--	--	--	--	--
#2	11528	--	--	--	--	--	--

Method: METTRA Sample Name: DW7E5

Operator: WTR

Run Time: 03/24/01 23:29:16

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	-.00093	2.4467	.03229	.15291	-.00040	265.96	-.00071
SDev	.00049	.0094	.00130	.00023	.00008	.33	.00027
%RSD	52.560	.38482	4.0132	.14937	19.363	.12449	38.845
#1	-.00058	2.4534	.03138	.15307	-.00034	265.72	-.00090
#2	-.00127	2.4401	.03321	.15275	-.00045	266.19	-.00051
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	.00467	.00917	.01626	31.053	61.198	.54089	.00435
SDev	.00005	.00011	.00012	.056	.006	.00062	.00041
%RSD	1.1251	1.2265	.70942	.18184	.01053	.11462	9.5139
#1	.00464	.00909	.01618	31.013	61.193	.54046	.00465
#2	.00471	.00925	.01634	31.093	61.203	.54133	.00406
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	.00780	.01414	.01823	.01686	.00376	-.00291	-.00069
SDev	.00070	.00360	.00072	.00072	.00324	.00296	.00306
%RSD	9.0173	25.441	3.9211	4.2758	86.322	101.89	443.79
#1	.00730	.01668	.01772	.01737	.00146	-.00500	-.00285
#2	.00830	.01160	.01873	.01635	.00605	-.00081	.00147
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	-.00265	.00311	.00119	-.00796	.01257	.02844	
SDev	.00131	.00263	.00219	.00103	.00037	.00013	
%RSD	49.551	84.424	183.27	12.975	2.9425	.43955	
#1	-.00358	.00125	-.00035	-.00869	.01231	.02835	
#2	-.00172	.00497	.00274	-.00723	.01283	.02853	
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	

679 1075

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11545	--	--	--	--	--	--
SDev	11.06650	--	--	--	--	--	--
%RSD	.0958526	--	--	--	--	--	--
#1	11553	--	--	--	--	--	--
#2	11538	--	--	--	--	--	--

679 1076

Method: METTRA Sample Name: DW8TXB

Operator: WTR

Run Time: 03/24/01 23:33:43

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	-.00112	-.07954	.00127	.00009	-.00045	.05641	-.00002
SDev	.00079	.00568	.00072	.00001	.00004	.01773	.00038
%RSD	70.115	7.1378	57.082	10.350	9.3240	31.428	2096.1
#1	-.00168	-.07552	.00178	.00008	-.00042	.04387	.00025
#2	-.00057	-.08355	.00076	.00010	-.00048	.06894	-.00029
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	-.00149	-.00153	.00037	.03802	.00484	-.00052	-.00042
SDev	.00016	.00006	.00044	.00736	.00370	.00006	.00124
%RSD	10.624	3.6163	116.64	19.366	76.394	12.435	293.86
#1	-.00160	-.00149	.00007	.04323	.00223	-.00056	-.00130
#2	-.00138	-.00156	.00068	.03281	.00746	-.00047	.00046
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	-.00331	-.00698	.00529	.00120	.00421	-.00439	-.00152
SDev	.00000	.00147	.00187	.00174	.00275	.00096	.00027
%RSD	.04880	21.064	35.358	144.32	65.355	21.953	17.936
#1	-.00331	-.00594	.00661	.00243	.00226	-.00370	-.00172
#2	-.00331	-.00802	.00397	-.00002	.00615	-.00507	-.00133
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	-.00666	.00722	.00260	-.00581	-.00346	-.00039	
SDev	.00397	.00466	.00179	.00053	.00068	.00010	
%RSD	59.602	64.558	68.782	9.1644	19.732	25.772	
#1	-.00946	.01052	.00387	-.00543	-.00394	-.00032	
#2	-.00385	.00393	.00134	-.00618	-.00298	-.00046	
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	11652	--	--	--	--	--	--
SDev	54.62400	--	--	--	--	--	--
%RSD	.4687860	--	--	--	--	--	--
#1	11614	--	--	--	--	--	--
#2	11691	--	--	--	--	--	--

Method: METTRA Sample Name: DW8TXC

Operator: WTR

Run Time: 03/24/01 23:38:09

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	.04986	1.9900	2.1162	1.9699	.05440	55.307	.05314
SDev	.00043	.0031	.0035	.0012	.00003	.067	.00018
%RSD	.86613	.15643	.16556	.06293	.05783	.12026	.34882
#1	.05016	1.9878	2.1186	1.9708	.05438	55.260	.05300
#2	.04955	1.9923	2.1137	1.9690	.05442	55.354	.05327
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
Avg	.55449	.21755	.24362	.94498	51.629	.53769	1.0578
SDev	.00019	.00017	.00024	.01260	.003	.00014	.0015
%RSD	.03393	.07785	.09987	1.3336	.00638	.02562	.14591
#1	.55462	.21767	.24379	.95389	51.631	.53759	1.0567
#2	.55435	.21743	.24344	.93607	51.627	.53779	1.0589
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
Avg	.53639	.53973	.53555	.53694	.49093	.49052	.49066
SDev	.00196	.00104	.00205	.00171	.00103	.00268	.00144
%RSD	.36615	.19187	.38365	.31945	.21000	.54604	.29414
#1	.53778	.53900	.53409	.53573	.49020	.49242	.49168
#2	.53500	.54046	.53700	.53815	.49166	.48863	.48964
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	
Avg	2.0283	2.0175	2.0211	2.1552	.51668	.54028	
SDev	.0032	.0002	.0009	.0032	.00427	.00027	
%RSD	.15993	.01159	.04574	.14912	.82654	.05072	
#1	2.0260	2.0176	2.0204	2.1574	.51366	.54047	
#2	2.0306	2.0173	2.0217	2.1529	.51970	.54009	
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	11542	--	--	--	--	--	--
SDev	4.949748	--	--	--	--	--	--
%RSD	.0428850	--	--	--	--	--	--
#1	11538	--	--	--	--	--	--
#2	11545	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-4

Operator: WTR

Run Time: 03/24/01 23:42:35

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	1.0384	24.780	.54646	1.9891	H2.2401	H56.547	.54911
SDev	.0006	.012	.00336	.0002	.0007	.006	.00061
%RSD	.06022	.04664	.61432	.01019	.02985	.01026	.11075
#1	1.0380	24.788	.54883	1.9893	H2.2406	H56.542	.54868
#2	1.0389	24.772	.54409	1.9890	H2.2396	H56.551	.54954
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC High	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	H2.2366	H2.2028	1.9413	27.200	52.781	2.1651	2.1729
SDev	.0008	.0014	.0002	.013	.073	.0008	.0037
%RSD	.03493	.06268	.01198	.04767	.13917	.03760	.16796
#1	H2.2360	H2.2038	1.9412	27.209	52.833	2.1657	2.1703
#2	H2.2371	H2.2018	1.9415	27.191	52.729	2.1646	2.1755
Errors	LC High	LC High	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	H2.2006	.54915	.54945	.54935	.51579	.51318	.51405
SDev	.0004	.00182	.00173	.00055	.00047	.00238	.00143
%RSD	.01855	.33219	.31477	.09941	.09071	.46446	.27895
#1	H2.2003	.55044	.54823	.54897	.51546	.51486	.51506
#2	H2.2009	.54786	.55068	.54974	.51612	.51149	.51303
Errors	LC High	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	.52719	.53884	.53496	1.0927	2.0960	2.1768	
SDev	.00639	.00622	.00202	.0061	.0006	.0002	
%RSD	1.2126	1.1542	.37752	.55965	.02953	.00953	
#1	.53171	.53444	.53353	1.0970	2.0965	2.1766	
#2	.52267	.54323	.53638	1.0883	2.0956	2.1769	
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	11579	--	--	--	--	--	--
SDev	23.33452	--	--	--	--	--	--
%RSD	.2015262	--	--	--	--	--	--
#1	11595	--	--	--	--	--	--
#2	11562	--	--	--	--	--	--

Method: METTRA Sample Name: CCB4

Operator: WTR

Run Time: 03/24/01 23:47:06

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	-.00059	-.08217	-.00049	.00032	-.00018	.01577	.00007
SDev	.00075	.00516	.00150	.00019	.00009	.00556	.00004
%RSD	125.64	6.2748	306.89	61.624	51.196	35.221	53.913
#1	-.00112	-.08582	-.00155	.00018	-.00025	.01185	.00010
#2	-.00007	-.07852	.00057	.00045	-.00012	.01970	.00004
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	.00109	.00329	.00124	.03173	.00144	-.00007	.00156
SDev	.00000	.00045	.00000	.00360	.00106	.00003	.00052
%RSD	.00000	13.574	.22210	11.350	73.538	44.836	33.411
#1	.00109	.00297	.00124	.02919	.00069	-.00010	.00192
#2	.00109	.00360	.00124	.03428	.00220	-.00005	.00119
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	-.00137	-.00607	.00282	-.00014	.00521	-.00477	-.00145
SDev	.00091	.00057	.00103	.00050	.00057	.00071	.00066
%RSD	66.550	9.4127	36.395	357.23	10.881	14.904	45.869
#1	-.00201	-.00567	.00210	-.00049	.00562	-.00427	-.00098
#2	-.00073	-.00648	.00355	.00021	.00481	-.00527	-.00191
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	-.00189	.00006	-.00059	.00033	-.00201	-.00025	
SDev	.00175	.00281	.00129	.00046	.00000	.00000	
%RSD	92.523	5061.6	217.77	140.59	.04064	1.8927	
#1	-.00066	-.00193	-.00151	.00066	-.00201	-.00025	
#2	-.00313	.00205	.00032	.00000	-.00201	-.00026	
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	11693	--	--	--	--	--	--
SDev	2.686868	--	--	--	--	--	--
%RSD	.0229778	--	--	--	--	--	--
#1	11691	--	--	--	--	--	--
#2	11695	--	--	--	--	--	--

Method: METTRA Sample Name: DW8LD Operator: WTR
 Run Time: 03/24/01 23:51:32
 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	-.00042	.18633	.00380	.44281	-.00075	277.88	-.00015
SDev	.00071	.00110	.00069	.00093	.00005	.48	.00007
%RSD	168.86	.58885	18.102	.20957	7.2824	.17433	45.527
#1	.00008	.18711	.00331	.44347	-.00071	278.22	-.00010
#2	-.00093	.18556	.00429	.44216	-.00079	277.53	-.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
Avg	.00095	.00050	.00200	.74415	74.878	1.0218	.00427
SDev	.00020	.00004	.00019	.00456	.212	.0015	.00040
%RSD	20.900	7.4865	9.2929	.61286	.28303	.14602	9.3517
#1	.00081	.00053	.00213	.74092	75.027	1.0228	.00399
#2	.00109	.00048	.00187	.74737	74.728	1.0207	.00455
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	.00246	-.00418	.00191	-.00012	.00282	-.00390	-.00166
SDev	.00021	.00179	.00076	.00110	.00051	.00265	.00160
%RSD	8.6108	42.863	39.674	949.03	18.234	67.991	96.079
#1	.00231	-.00545	.00138	-.00090	.00245	-.00202	-.00053
#2	.00261	-.00292	.00245	.00066	.00318	-.00577	-.00279
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	-.00335	.00385	.00145	-.00523	.00171	.00396	
SDev	.00283	.00096	.00030	.00209	.00002	.00012	
%RSD	84.378	24.920	20.772	39.894	1.0554	3.1063	
#1	-.00135	.00317	.00167	-.00376	.00172	.00404	
#2	-.00535	.00453	.00124	-.00671	.00169	.00387	
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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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11427	--	--	--	--	--	--
SDev	45.04215	--	--	--	--	--	--
%RSD	.3941661	--	--	--	--	--	--
#1	11395	--	--	--	--	--	--
#2	11459	--	--	--	--	--	--

Method: METTRA Sample Name: DW8LDP5 Operator: WTR
 Run Time: 03/24/01 23:55:57
 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
Avg	-0.00048	-0.03534	0.00196	0.08877	-0.00056	56.559	0.00001
SDev	0.00008	0.00059	0.00317	0.00014	0.00006	0.020	0.00023
%RSD	16.026	1.6691	161.65	0.16162	11.206	0.03551	3961.5
#1	-0.00053	-0.03576	0.00421	0.08887	-0.00051	56.544	-0.00016
#2	-0.00042	-0.03493	-0.00028	0.08867	-0.00060	56.573	0.00017
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	0.00109	0.00217	0.00120	0.15567	14.844	0.20666	0.00083
SDev	0.00000	0.00065	0.00037	0.00946	0.001	0.00013	0.00052
%RSD	0.00000	30.070	30.768	6.0779	0.00942	0.06061	62.439
#1	0.00109	0.00171	0.00094	0.16236	14.843	0.20657	0.00119
#2	0.00109	0.00263	0.00146	0.14898	14.845	0.20675	0.00046
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	-0.00072	-0.00492	0.00134	-0.00074	0.00515	-0.00437	-0.00120
SDev	0.00000	0.00095	0.00027	0.00050	0.00017	0.00089	0.00065
%RSD	0.38931	19.257	20.104	66.824	3.2403	20.354	53.925
#1	-0.00072	-0.00425	0.00153	-0.00039	0.00503	-0.00500	-0.00166
#2	-0.00072	-0.00559	0.00115	-0.00109	0.00526	-0.00374	-0.00074
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	-0.00393	0.00369	0.00115	-0.00484	-0.00197	0.00064	
SDev	0.00115	0.00143	0.00057	0.00178	0.00069	0.00005	
%RSD	29.159	38.887	49.934	36.741	34.760	7.7454	
#1	-0.00474	0.00470	0.00156	-0.00358	-0.00149	0.00068	
#2	-0.00312	0.00267	0.00075	-0.00610	-0.00246	0.00060	
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	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11674	--	--	--	--	--	--
SDev	14.49569	--	--	--	--	--	--
%RSD	.1241723	--	--	--	--	--	--
#1	11684	--	--	--	--	--	--
#2	11664	--	--	--	--	--	--

Method: METTRA Sample Name: DW8LDS

Operator: WTR

Run Time: 03/25/01 00:00:23

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	.04951	2.5491	2.0763	2.3334	.05170	319.65	.04885
SDev	.00031	.0281	.0198	.0219	.00038	3.75	.00045
%RSD	.62986	1.1021	.95433	.94061	.74456	1.1730	.91767
#1	.04973	2.5292	2.0623	2.3179	.05143	317.00	.04853
#2	.04929	2.5690	2.0904	2.3490	.05198	322.30	.04917
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	.52051	.20905	.24255	1.7436	123.54	1.5000	1.0204
SDev	.00392	.00262	.00219	.0378	1.22	.0160	.0136
%RSD	.75221	1.2534	.90492	2.1706	.99020	1.0643	1.3292
#1	.51774	.20720	.24099	1.7169	122.68	1.4887	1.0108
#2	.52328	.21090	.24410	1.7704	124.41	1.5113	1.0300
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	.50797	.51151	.50680	.50837	.47988	.48104	.48065
SDev	.00707	.00148	.00721	.00530	.00846	.00043	.00253
%RSD	1.3921	.28953	1.4229	1.0432	1.7633	.08880	.52696
#1	.50297	.51046	.50170	.50462	.47389	.48134	.47886
#2	.51297	.51255	.51190	.51212	.48586	.48074	.48244
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	2.0070	2.0025	2.0040	2.0883	.50766	.52719	
SDev	.0102	.0279	.0220	.0241	.00428	.00454	
%RSD	.50768	1.3947	1.0989	1.1529	.84388	.86140	
#1	1.9998	1.9827	1.9884	2.0713	.50463	.52398	
#2	2.0142	2.0222	2.0195	2.1054	.51069	.53040	
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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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11437	--	--	--	--	--	--
SDev	111.3334	--	--	--	--	--	--
%RSD	.9734643	--	--	--	--	--	--
#1	11516	--	--	--	--	--	--
#2	11358	--	--	--	--	--	--

Method: METTRA Sample Name: DW8LDD Operator: WTR
 Run Time: 03/25/01 00:04:49
 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	.04995	2.5972	2.1072	2.3698	.05254	328.78	.04980
SDev	.00006	.0083	.0014	.0013	.00001	.64	.00002
%RSD	.11196	.31819	.06791	.05338	.01845	.19472	.03250
#1	.04991	2.5914	2.1082	2.3707	.05253	328.32	.04979
#2	.04999	2.6030	2.1061	2.3689	.05255	329.23	.04981
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	.52600	.21376	.24668	1.7806	126.37	1.5394	1.0303
SDev	.00294	.00036	.00103	.0161	.05	.0014	.0008
%RSD	.55831	.17077	.41925	.90414	.03961	.09083	.07606
#1	.52393	.21401	.24741	1.7692	126.33	1.5385	1.0309
#2	.52808	.21350	.24595	1.7920	126.40	1.5404	1.0298
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	.51388	.52050	.51149	.51449	.48221	.48420	.48354
SDev	.00221	.00079	.00560	.00348	.00386	.00260	.00045
%RSD	.42928	.15134	1.0957	.67561	.80135	.53672	.09236
#1	.51544	.52106	.50752	.51203	.47948	.48603	.48385
#2	.51232	.51995	.51545	.51695	.48494	.48236	.48322
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	2.0286	2.0141	2.0189	2.1325	.51177	.53302	
SDev	.0006	.0030	.0018	.0029	.00127	.00093	
%RSD	.03203	.15113	.08984	.13763	.24747	.17364	
#1	2.0291	2.0119	2.0176	2.1304	.51267	.53236	
#2	2.0282	2.0162	2.0202	2.1346	.51088	.53367	
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	11400	--	--	--	--	--	--
SDev	18.38478	--	--	--	--	--	--
%RSD	.1612678	--	--	--	--	--	--
#1	11413	--	--	--	--	--	--
#2	11387	--	--	--	--	--	--

Method: METTRA Sample Name: DW8L1

Operator: WTR

Run Time: 03/25/01 00:09:15

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
Avg	-.00051	3.0070	.00346	.57347	-.00056	103.24	-.00016
SDev	.00015	.0099	.00069	.00095	.00002	.14	.00019
%RSD	29.670	.32819	20.049	.16564	3.4488	.13827	114.22
#1	-.00062	3.0139	.00297	.57414	-.00058	103.14	-.00030
#2	-.00040	3.0000	.00394	.57280	-.00055	103.35	-.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	.00320	.00755	.00901	4.5755	49.279	1.4318	.00895
SDev	.00005	.00088	.00021	.0017	.006	.0013	.00012
%RSD	1.4094	11.672	2.3545	.03723	.01117	.08866	1.3844
#1	.00316	.00693	.00916	4.5743	49.283	1.4309	.00903
#2	.00323	.00817	.00886	4.5767	49.275	1.4327	.00886
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	.00479	-.00110	.00330	.00184	.00455	-.00443	-.00144
SDev	.00001	.00162	.00157	.00051	.00311	.00100	.00170
%RSD	.28465	146.94	47.685	27.834	68.371	22.657	118.30
#1	.00480	-.00225	.00441	.00220	.00674	-.00372	-.00024
#2	.00478	.00004	.00219	.00147	.00235	-.00514	-.00265
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	-.00011	.00037	.00021	-.00021	.00697	.01826	
SDev	.00053	.00228	.00169	.00249	.00033	.00003	
%RSD	480.80	609.30	797.69	1194.0	4.7065	.18229	
#1	.00026	.00198	.00141	-.00197	.00673	.01828	
#2	-.00048	-.00124	-.00099	.00155	.00720	.01824	
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	11640	--	--	--	--	--	--
SDev	20.47088	--	--	--	--	--	--
%RSD	.1758670	--	--	--	--	--	--
#1	11626	--	--	--	--	--	--
#2	11654	--	--	--	--	--	--

Method: METTRA Sample Name: DW8L2

Operator: WTR

Run Time: 03/25/01 00:13:41

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	-.00013	-.02882	.00548	1.0007	-.00093	423.83	.00004
SDev	.00007	.00085	.00030	.0005	.00004	.31	.00028
%RSD	51.554	2.9467	5.4578	.04720	4.5017	.07281	662.10
#1	-.00008	-.02822	.00526	1.0004	-.00096	423.62	.00024
#2	-.00018	-.02942	.00569	1.0010	-.00091	424.05	-.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	-.00035	.00029	.01731	.14079	.25827	.00161	.01666
SDev	.00035	.00034	.00082	.02078	.00102	.00001	.00067
%RSD	98.712	116.17	4.7449	14.761	.39282	.28995	4.0430
#1	-.00011	.00053	.01789	.12609	.25898	.00161	.01714
#2	-.00060	.00005	.01673	.15548	.25755	.00161	.01618
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	.02385	-.00301	.00140	-.00007	.00820	-.00784	-.00250
SDev	.00229	.00008	.00028	.00016	.00110	.00005	.00040
%RSD	9.6195	2.6524	20.376	242.36	13.354	.63474	15.909
#1	.02222	-.00295	.00120	-.00018	.00742	-.00788	-.00278
#2	.02547	-.00306	.00160	.00005	.00897	-.00781	-.00222
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	-.00084	.00430	.00258	-.00196	-.00343	.01115	
SDev	.00066	.00258	.00150	.00020	.00001	.00019	
%RSD	78.457	60.080	58.083	10.016	.19380	1.7253	
#1	-.00131	.00612	.00365	-.00183	-.00343	.01128	
#2	-.00038	.00247	.00152	-.00210	-.00342	.01101	
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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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11385	--	--	--	--	--	--
SDev	20.47088	--	--	--	--	--	--
%RSD	.1798132	--	--	--	--	--	--
#1	11370	--	--	--	--	--	--
#2	11399	--	--	--	--	--	--

Analysis Report

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Method: METTRA

Sample Name: DW8L6

Operator: WTR

Run Time: 03/25/01 00:26:59

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	-.00060	25.427	.02094	3.0536	.00201	H636.35	-.00055
SDev	.00089	.022	.00016	.0023	.00001	1.13	.00004
%RSD	148.36	.08594	.76943	.07652	.27157	.17788	7.2061
#1	.00003	25.411	.02106	3.0552	.00201	H635.55	-.00052
#2	-.00122	25.442	.02083	3.0519	.00200	H637.15	-.00058
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	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	.02164	.04246	.04052	48.106	231.74	5.5349	.00056
SDev	.00051	.00058	.00073	.024	.13	.0001	.00123
%RSD	2.3628	1.3655	1.8146	.04911	.05788	.00238	217.51
#1	.02200	.04287	.04000	48.089	231.84	5.5350	.00143
#2	.02128	.04205	.04103	48.123	231.65	5.5348	-.00030
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	.04508	.01745	.02648	.02347	.00423	-.00502	-.00194
SDev	.00049	.00503	.00278	.00017	.00329	.00376	.00141
%RSD	1.0767	28.853	10.487	.74763	77.679	74.908	72.892
#1	.04474	.02101	.02451	.02335	.00191	-.00236	-.00094
#2	.04542	.01389	.02844	.02359	.00656	-.00767	-.00293
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	-.00298	-.00091	-.00160	-.00109	.07290	.13744	
SDev	.00044	.00207	.00123	.00176	.00005	.00015	
%RSD	14.727	226.33	77.042	161.17	.07251	.11067	
#1	-.00329	.00055	-.00073	.00015	.07286	.13733	
#2	-.00267	-.00238	-.00247	-.00234	.07293	.13754	
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	

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	11851	--	--	--	--	--	--
SDev	8.803617	--	--	--	--	--	--
%RSD	.0742845	--	--	--	--	--	--
#1	11857	--	--	--	--	--	--
#2	11845	--	--	--	--	--	--

Analysis Report

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Method: METTRA

Sample Name: DW8L8

Run Time: 03/25/01 00:31:25

Operator: WTR

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	- .00072	2.0434	.01218	1.3302	- .00092	450.69	.00030
SDev	.00024	.0010	.00040	.0001	.00007	.65	.00049
%RSD	32.815	.04769	3.2707	.00776	7.7291	.14311	161.47
#1	- .00056	2.0441	.01190	1.3301	- .00087	451.15	- .00004
#2	- .00089	2.0427	.01246	1.3303	- .00097	450.23	.00065
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	.00181	.00337	.06617	9.6018	270.01	3.1109	.00303
SDev	.00040	.00061	.00026	.0352	.60	.0011	.00064
%RSD	22.316	18.140	.39575	.36655	.22210	.03614	21.120
#1	.00210	.00380	.06599	9.6267	270.44	3.1117	.00348
#2	.00152	.00294	.06636	9.5769	269.59	3.1101	.00257
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	.00443	- .00422	.00682	.00314	.00262	- .00570	- .00293
SDev	.00073	.00218	.00388	.00186	.00288	.00233	.00251
%RSD	16.492	51.572	56.884	59.258	109.93	40.951	85.905
#1	.00391	- .00268	.00408	.00183	.00465	- .00405	- .00115
#2	.00495	- .00576	.00956	.00446	.00058	- .00734	- .00470
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	- .00322	- .00521	- .00455	- .00159	.00918	.07732	
SDev	.00386	.00639	.00555	.00257	.00001	.00028	
%RSD	119.66	122.69	121.97	161.61	.10770	.36353	
#1	- .00595	- .00973	L- .00847	.00023	.00918	.07713	
#2	- .00050	- .00069	- .00063	- .00341	.00919	.07752	
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	11192	--	--	--	--	--	--
SDev	24.67830	--	--	--	--	--	--
%RSD	.2204995	--	--	--	--	--	--
#1	11209	--	--	--	--	--	--
#2	11175	--	--	--	--	--	--

Analysis Report

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page 1

Method: METTRA

Sample Name: CCV3-5

Operator: WTR

Run Time: 03/25/01 00:35:51

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem Units	AG ppm	AL ppm	AS ppm	BA ppm	BE ppm	CA ppm	CD ppm
Avge	1.0386	24.754	.53966	1.9898	H2.2295	H55.932	.54235
SDev	.0012	.044	.00039	.0044	.0050	.071	.00181
%RSD	.11273	.17839	.07269	.22301	.22371	.12673	.33423
#1	1.0394	24.785	.53993	1.9930	H2.2331	H55.982	.54364
#2	1.0378	24.723	.53938	1.9867	H2.2260	H55.882	.54107
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC High	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 Units	CO ppm	CR ppm	CU ppm	FE ppm	MG ppm	MN ppm	MO ppm
Avge	H2.2184	2.1870	1.9424	27.023	52.182	2.1462	2.1549
SDev	.0081	.0033	.0035	.030	.143	.0032	.0017
%RSD	.36648	.15161	.17906	.11174	.27465	.14891	.07980
#1	H2.2242	2.1894	1.9449	27.044	52.284	2.1485	2.1536
#2	H2.2127	2.1847	1.9400	27.001	52.081	2.1440	2.1561
Errors	LC High	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 Units	NI ppm	PB/1 ppm	PB/2 ppm	PB ppm	SB/1 ppm	SB/2 ppm	SB ppm
Avge	2.1805	.54342	.54265	.54290	.51453	.50924	.51100
SDev	.0106	.00293	.00059	.00058	.00027	.00087	.00067
%RSD	.48552	.53952	.10867	.10738	.05299	.17009	.13083
#1	2.1879	.54135	.54306	.54249	.51472	.50985	.51147
#2	2.1730	.54549	.54223	.54332	.51433	.50862	.51053
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem Units	SE/1 ppm	SE/2 ppm	SE ppm	TL ppm	V_ ppm	ZN ppm	
Avge	.52825	.53619	.53355	1.0733	2.0874	2.1584	
SDev	.00233	.00253	.00091	.0059	.0094	.0068	
%RSD	.44198	.47184	.17056	.54665	.45196	.31577	
#1	.52660	.53798	.53419	1.0774	2.0940	2.1633	
#2	.52990	.53440	.53290	1.0691	2.0807	2.1536	
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	11567	--	--	--	--	--	--
SDev	1.343088	--	--	--	--	--	--
%RSD	.0116113	--	--	--	--	--	--
#1	11568	--	--	--	--	--	--
#2	11566	--	--	--	--	--	--

Method: METTRA Sample Name: CCB5

Operator: WTR

Run Time: 03/25/01 00:40:22

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	-.00079	-.09513	.00033	.00056	-.00047	.03725	.00006
SDev	.00001	.00443	.00016	.00037	.00019	.02236	.00025
%RSD	1.6022	4.6568	47.940	65.807	39.863	60.009	436.87
#1	-.00080	-.09199	.00022	.00030	-.00061	.02145	.00024
#2	-.00078	-.09826	.00045	.00082	-.00034	.05306	-.00012
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	.00017	.00411	.00102	.03179	.01194	.00006	.00176
SDev	.00043	.00031	.00046	.00120	.01275	.00023	.00082
%RSD	254.64	7.5663	45.393	3.7919	106.77	361.56	46.482
#1	-.00014	.00389	.00069	.03093	.00293	-.00010	.00234
#2	.00048	.00433	.00135	.03264	.02096	.00023	.00118
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	.00064	-.00703	.00300	-.00034	.00361	-.00462	-.00188
SDev	.00149	.00287	.00029	.00077	.00123	.00432	.00329
%RSD	233.31	40.884	9.5412	226.86	33.951	93.596	175.40
#1	-.00041	-.00906	.00320	-.00088	.00448	-.00156	.00045
#2	.00169	-.00500	.00280	.00020	.00275	-.00767	-.00420
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	-.00335	.00237	.00047	-.00433	-.00322	-.00026	
SDev	.00460	.00392	.00108	.00365	.00034	.00030	
%RSD	137.35	165.28	232.09	84.214	10.601	114.68	
#1	-.00010	-.00040	-.00030	-.00692	-.00346	-.00047	
#2	-.00660	.00514	.00123	-.00175	-.00298	-.00005	
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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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11725	--	--	--	--	--	--
SDev	23.51130	--	--	--	--	--	--
%RSD	.2005284	--	--	--	--	--	--
#1	11741	--	--	--	--	--	--
#2	11708	--	--	--	--	--	--

Method: METTRA Sample Name: DXCMHB Operator: WTR
 Run Time: 03/25/01 00:44:48
 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	-.00080	-.09795	-.00113	.00016	-.00096	.02692	-.00009
SDev	.00018	.00097	.00100	.00003	.00007	.00438	.00032
%RSD	22.275	.98573	87.886	18.858	7.4452	16.254	350.59
#1	-.00093	-.09727	-.00043	.00014	-.00091	.02383	-.00031
#2	-.00067	-.09863	-.00184	.00018	-.00101	.03001	.00013
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	-.00117	.00174	.01998	-.00117	-.00037	-.00019
SDev	.00044	.00070	.00030	.01568	.00588	.00007	.00053
%RSD	267.06	60.185	17.356	78.453	501.56	18.238	270.58
#1	-.00015	-.00167	.00153	.00890	-.00533	-.00042	-.00057
#2	.00047	-.00067	.00195	.03107	.00299	-.00033	.00018
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	-.00153	-.00470	.00322	.00058	.00316	-.00477	-.00213
SDev	.00137	.00373	.00025	.00107	.00395	.00272	.00050
%RSD	89.797	79.381	7.8738	184.64	125.08	56.953	23.287
#1	-.00056	-.00206	.00304	.00134	.00037	-.00285	-.00178
#2	-.00250	-.00734	.00340	-.00018	.00596	-.00669	-.00248
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	-.00634	.00472	.00103	-.00082	-.00346	-.00003	
SDev	.00012	.00204	.00133	.00018	.00069	.00032	
%RSD	1.8400	43.360	128.20	21.801	19.956	984.95	
#1	-.00626	.00327	.00010	-.00094	-.00395	-.00025	
#2	-.00643	.00616	.00197	-.00069	-.00298	.00019	
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	11635	--	--	--	--	--	--
SDev	33.41080	--	--	--	--	--	--
%RSD	.2871682	--	--	--	--	--	--
#1	11658	--	--	--	--	--	--
#2	11611	--	--	--	--	--	--

Method: METTRA Sample Name: DXCMHC

Run Time: 03/25/01 00:49:15

Operator: WTR

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	.04762	1.8462	1.9875	1.8745	.05017	52.677	.04900
SDev	.00041	.0037	.0014	.0043	.00005	.144	.00016
%RSD	.85655	.19837	.07106	.22707	.10322	.27274	.32616
#1	.04733	1.8488	1.9865	1.8715	.05013	52.575	.04889
#2	.04791	1.8436	1.9885	1.8775	.05021	52.778	.04911
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	.51781	.20422	.23184	.89855	49.244	.50227	1.0150
SDev	.00121	.00016	.00016	.00423	.058	.00128	.0050
%RSD	.23285	.07881	.06896	.47097	.11830	.25530	.49159
#1	.51696	.20410	.23172	.90155	49.203	.50137	1.0114
#2	.51867	.20433	.23195	.89556	49.286	.50318	1.0185
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	.50416	.50229	.49595	.49806	.46951	.47461	.47291
SDev	.00022	.00522	.00032	.00152	.00285	.00190	.00032
%RSD	.04398	1.0390	.06525	.30559	.60765	.40103	.06756
#1	.50400	.49860	.49618	.49698	.47152	.47327	.47269
#2	.50432	.50598	.49572	.49913	.46749	.47596	.47314
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	1.9369	1.9274	1.9306	2.0211	.48747	.50966	
SDev	.0001	.0068	.0046	.0027	.00066	.00136	
%RSD	.00709	.35121	.23625	.13414	.13546	.26606	
#1	1.9370	1.9322	1.9338	2.0191	.48701	.50871	
#2	1.9368	1.9226	1.9273	2.0230	.48794	.51062	
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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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11803	--	--	--	--	--	--
SDev	7.778174	--	--	--	--	--	--
%RSD	.0659008	--	--	--	--	--	--
#1	11808	--	--	--	--	--	--
#2	11797	--	--	--	--	--	--

Method: METTRA Sample Name: DW68N
 Run Time: 03/25/01 00:53:41 Operator: WTR
 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	-.00087	.04654	.01634	.03209	-.00139	138.93	-.00019
SDev	.00005	.00009	.00075	.00003	.00007	.37	.00037
%RSD	5.8964	.18180	4.6108	.08687	4.7310	.26448	189.44
#1	-.00084	.04660	.01581	.03207	-.00135	138.67	.00007
#2	-.00091	.04648	.01687	.03211	-.00144	139.19	-.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	.00092	.00037	.00356	17.457	25.618	1.0667	.00340
SDev	.00015	.00027	.00020	.018	.013	.0015	.00073
%RSD	16.015	73.254	5.7444	.10177	.05027	.13835	21.411
#1	.00082	.00056	.00342	17.445	25.627	1.0657	.00391
#2	.00102	.00018	.00371	17.470	25.609	1.0678	.00288
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	-.00647	.00205	-.00078	.00146	-.00172	-.00066
SDev	.00115	.00059	.00018	.00008	.00290	.00076	.00147
%RSD	97.340	9.1771	8.7130	9.9860	198.33	43.963	222.39
#1	-.00037	-.00688	.00218	-.00084	-.00059	-.00226	-.00170
#2	-.00200	-.00605	.00192	-.00073	.00351	-.00119	.00038
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	-.00296	.00594	.00298	-.00068	.00064	.00300	
SDev	.00103	.00146	.00063	.00057	.00000	.00004	
%RSD	34.690	24.596	21.257	83.528	.47760	1.3216	
#1	-.00368	.00697	.00342	-.00028	.00064	.00302	
#2	-.00223	.00491	.00253	-.00108	.00064	.00297	
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	11529	--	--	--	--	--	--
SDev	20.64766	--	--	--	--	--	--
%RSD	.1790893	--	--	--	--	--	--
#1	11544	--	--	--	--	--	--
#2	11515	--	--	--	--	--	--

Analysis Report

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Method: METTRA Sample Name: DW68T

Run Time: 03/25/01 00:58:07

Operator: WTR

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	-.00090	.10893	.00082	.02078	-.00114	120.91	.00006
SDev	.00037	.00315	.00056	.00006	.00005	.00	.00001
%RSD	40.909	2.8892	68.212	.28021	4.0702	.00194	23.419
#1	-.00064	.11116	.00043	.02082	-.00110	120.91	.00005
#2	-.00116	.10671	.00122	.02074	-.00117	120.90	.00006
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	-.00020	.00342	1.4213	19.526	.09517	.01597
SDev	.00044	.00005	.00049	.0121	.008	.00003	.00031
%RSD	1537.4	24.545	14.241	.85031	.03939	.03635	1.9512
#1	.00034	-.00024	.00307	1.4128	19.532	.09514	.01619
#2	-.00028	-.00017	.00376	1.4299	19.521	.09519	.01575
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	-.00080	-.00550	.00404	.00087	.00310	-.00438	-.00189
SDev	.00057	.00164	.00140	.00039	.00304	.00249	.00065
%RSD	71.159	29.808	34.599	44.724	97.967	56.805	34.299
#1	-.00040	-.00434	.00305	.00059	.00525	-.00614	-.00235
#2	-.00121	-.00666	.00503	.00114	.00095	-.00262	-.00143
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	-.00416	.00516	.00206	-.00644	-.00060	.02337	
SDev	.00180	.00147	.00158	.00043	.00000	.00005	
%RSD	43.234	28.440	76.682	6.6839	.65060	.21307	
#1	-.00289	.00620	.00317	-.00613	-.00060	.02340	
#2	-.00543	.00412	.00094	-.00674	-.00060	.02333	
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	11675	--	--	--	--	--	--
SDev	.1767767	--	--	--	--	--	--
%RSD	.0015142	--	--	--	--	--	--
#1	11675	--	--	--	--	--	--
#2	11674	--	--	--	--	--	--

Method: METTRA Sample Name: DW68X

Operator: WTR

Run Time: 03/25/01 01:02:33

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	-.00287	16.615	.00729	.01060	.00197	128.72	-.00030
SDev	.00010	.002	.00028	.00010	.00003	.37	.00003
%RSD	3.6502	.01372	3.9086	.95757	1.2708	.28789	10.256
#1	-.00279	16.617	.00709	.01053	.00199	128.46	-.00028
#2	-.00294	16.614	.00750	.01068	.00195	128.99	-.00032
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	.10962	.06738	.05473	114.91	64.020	2.0784	.00257
SDev	.00013	.00037	.00034	.22	.058	.0048	.00009
%RSD	.11452	.54409	.62288	.19550	.09012	.23037	3.6215
#1	.10954	.06712	.05497	114.75	63.979	2.0750	.00264
#2	.10971	.06764	.05449	115.07	64.060	2.0818	.00251
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	.29590	.00024	.00713	.00483	.00026	-.00298	-.00190
SDev	.00052	.00213	.00002	.00072	.00275	.00003	.00089
%RSD	.17693	886.66	.26402	14.948	1038.9	1.1130	46.885
#1	.29627	.00175	.00714	.00534	.00221	-.00301	-.00127
#2	.29552	-.00127	.00711	.00432	-.00168	-.00296	-.00253
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	-.00165	-.00191	-.00182	-.00564	.00236	.55836	
SDev	.00374	.00335	.00348	.00441	.00368	.00097	
%RSD	226.72	175.41	190.86	78.164	155.82	.17374	
#1	.00099	.00046	.00064	-.00252	.00497	.55767	
#2	-.00429	-.00428	-.00428	-.00876	-.00024	.55904	
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	12797	--	--	--	--	--	--
SDev	4.348292	--	--	--	--	--	--
%RSD	.0339784	--	--	--	--	--	--
#1	12800	--	--	--	--	--	--
#2	12794	--	--	--	--	--	--

Method: METTRA Sample Name: DW680

Operator: WTR

Run Time: 03/25/01 01:06:59

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	-.00077	.87911	.00121	.02904	-.00015	150.54	-.00013
SDev	.00011	.00400	.00034	.00004	.00002	.44	.00008
%RSD	14.469	.45544	28.212	.15089	13.762	.29018	58.432
#1	-.00069	.87628	.00145	.02900	-.00013	150.24	-.00008
#2	-.00085	.88194	.00097	.02907	-.00016	150.85	-.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	.01398	.00467	.00472	3.1683	36.575	.10823	-.00067
SDev	.00009	.00017	.00027	.0257	.021	.00018	.00071
%RSD	.63920	3.5987	5.6727	.81159	.05875	.16297	106.09
#1	.01391	.00455	.00491	3.1501	36.560	.10810	-.00118
#2	.01404	.00479	.00453	3.1865	36.590	.10835	-.00017
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	.00939	-.00408	.00545	.00228	.00553	-.00247	.00020
SDev	.00001	.00158	.00104	.00122	.00154	.00053	.00016
%RSD	.06125	38.581	19.047	53.451	27.811	21.492	80.356
#1	.00939	-.00297	.00619	.00314	.00662	-.00284	.00031
#2	.00938	-.00520	.00472	.00142	.00444	-.00209	.00009
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	-.00671	.00291	-.00029	-.00187	.00110	.05174	
SDev	.00289	.00267	.00082	.00179	.00033	.00028	
%RSD	43.087	91.836	277.49	95.517	29.900	.53316	
#1	-.00466	.00102	-.00087	-.00061	.00133	.05154	
#2	-.00875	.00479	.00028	-.00314	.00087	.05193	
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	11896	--	--	--	--	--	--
SDev	5.586420	--	--	--	--	--	--
%RSD	.0469585	--	--	--	--	--	--
#1	11893	--	--	--	--	--	--
#2	11900	--	--	--	--	--	--

Method: METTRA Sample Name: DW684

Run Time: 03/25/01 01:11:25

Operator: WTR

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	-.00051	.22968	.00255	.13290	-.00116	242.99	-.00010
SDev	.00084	.00155	.00227	.00026	.00001	.24	.00003
%RSD	164.40	.67300	89.036	.19197	.76188	.10078	34.093
#1	.00008	.23077	.00416	.13308	-.00115	243.16	-.00008
#2	-.00111	.22859	.00095	.13272	-.00116	242.82	-.00013
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	.00109	.00082	.00345	.28882	573.29	.00317	.00011
SDev	.00000	.00059	.00027	.02036	.83	.00015	.00035
%RSD	.00000	72.131	7.7696	7.0485	.14440	4.5756	329.80
#1	.00109	.00123	.00364	.27442	573.88	.00328	-.00014
#2	.00109	.00040	.00326	.30321	572.71	.00307	.00036
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	-.00281	-.00368	-.00046	-.00153	.00051	-.00243	-.00146
SDev	.00025	.00488	.00212	.00021	.00605	.00240	.00042
%RSD	8.7998	132.70	460.84	13.828	1193.9	98.506	28.617
#1	-.00298	-.00023	-.00196	-.00138	-.00377	-.00074	-.00175
#2	-.00263	-.00713	.00104	-.00168	.00479	-.00413	-.00116
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	.00649	-.00343	-.00013	.00149	.01327	.02525	
SDev	.00133	.00406	.00227	.00417	.00014	.00002	
%RSD	20.407	118.26	1776.0	280.66	1.0467	.09479	
#1	.00743	-.00630	-.00173	.00444	.01317	.02527	
#2	.00556	-.00056	.00148	-.00146	.01337	.02524	
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	10853	--	--	--	--	--	--
SDev	86.30225	--	--	--	--	--	--
%RSD	.7951614	--	--	--	--	--	--
#1	10914	--	--	--	--	--	--
#2	10792	--	--	--	--	--	--

Method: METTRA Sample Name: DW685

Operator: WTR

Run Time: 03/25/01 01:15:51

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	-.00028	.33035	.00226	.01268	-.00082	111.57	.00005
SDev	.00023	.00218	.00112	.00006	.00001	.07	.00000
%RSD	79.685	.65894	49.295	.48242	.64419	.05978	3.2411
#1	-.00012	.33189	.00305	.01272	-.00082	111.53	.00005
#2	-.00044	.32881	.00147	.01264	-.00082	111.62	.00004
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	.00109	.00262	.00810	.87618	2.2218	.00211	.00533
SDev	.00000	.00007	.00003	.01239	.0094	.00010	.00011
%RSD	.00000	2.7187	.42041	1.4141	.42348	4.6043	2.0102
#1	.00109	.00267	.00812	.86742	2.2284	.00218	.00526
#2	.00109	.00257	.00808	.88494	2.2151	.00204	.00541
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	-.00002	-.00293	.00381	.00157	.00564	-.00401	-.00080
SDev	.00261	.00140	.00192	.00081	.00186	.00152	.00039
%RSD	15948.	47.787	50.262	51.805	33.020	37.858	49.245
#1	.00183	-.00194	.00246	.00099	.00696	-.00509	-.00108
#2	-.00186	-.00392	.00516	.00214	.00432	-.00294	-.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	-.00240	.00045	-.00050	-.00136	-.00319	.01140	
SDev	.00183	.00565	.00438	.00250	.00000	.00017	
%RSD	76.360	1256.3	878.13	183.59	.12405	1.4973	
#1	-.00110	.00445	.00260	.00041	-.00319	.01128	
#2	-.00369	-.00355	-.00360	-.00313	-.00319	.01152	
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	

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	11758	--	--	--	--	--	--
SDev	6.151967	--	--	--	--	--	--
%RSD	.0523236	--	--	--	--	--	--
#1	11762	--	--	--	--	--	--
#2	11753	--	--	--	--	--	--

Method: METTRA Sample Name: DW69A

Operator: WTR

Run Time: 03/25/01 01:20:17

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	-.00063	-.09260	.00028	.02821	-.00088	126.07	-.00014
SDev	.00001	.00215	.00064	.00002	.00000	.44	.00005
%RSD	1.9909	2.3188	227.65	.08585	.04002	.35003	34.742
#1	-.00064	-.09412	.00074	.02820	-.00088	125.75	-.00018
#2	-.00062	-.09109	-.00017	.02823	-.00088	126.38	-.00011
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	.00058	-.00095	.00868	-.00900	6.0266	.00732	.00429
SDev	.00072	.00010	.00035	.02613	.0058	.00006	.00072
%RSD	123.55	10.326	4.0703	290.41	.09606	.87680	16.825
#1	.00007	-.00088	.00843	-.02748	6.0225	.00736	.00378
#2	.00109	-.00102	.00893	.00948	6.0307	.00727	.00480
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	.01588	-.00246	.00318	.00130	.00236	-.00248	-.00087
SDev	.00046	.00336	.00087	.00170	.00030	.00036	.00014
%RSD	2.8708	136.71	27.381	130.40	12.883	14.334	15.648
#1	.01555	-.00008	.00380	.00251	.00258	-.00273	-.00097
#2	.01620	-.00484	.00257	.00010	.00215	-.00223	-.00077
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	.00159	.01008	.00725	-.00442	.00251	.09536	
SDev	.00009	.00106	.00068	.00344	.00035	.00057	
%RSD	5.6822	10.561	9.3769	77.877	13.870	.59985	
#1	.00165	.00933	.00677	-.00685	.00226	.09496	
#2	.00152	.01083	.00773	-.00198	.00275	.09577	
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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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11798	--	--	--	--	--	--
SDev	2.050886	--	--	--	--	--	--
%RSD	.0173827	--	--	--	--	--	--
#1	11800	--	--	--	--	--	--
#2	11797	--	--	--	--	--	--

Method: METTRA

Sample Name: DW8V0

Operator: WTR

Run Time: 03/25/01 01:24:44

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	-.00052	.95061	.00498	.03794	-.00103	171.09	.00001
SDev	.00039	.00821	.00004	.00001	.00000	.39	.00017
%RSD	74.572	.86409	.85343	.03611	.10448	.22518	1699.7
#1	-.00080	.95641	.00501	.03793	-.00103	170.82	.00013
#2	-.00025	.94480	.00495	.03795	-.00103	171.36	-.00011
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	.00109	.04331	.01306	1.8257	16.779	.28341	.02558
SDev	.00000	.00007	.00105	.0062	.008	.00023	.00104
%RSD	.00000	.16004	8.0576	.33755	.04939	.08031	4.0512
#1	.00109	.04336	.01381	1.8213	16.785	.28324	.02485
#2	.00109	.04326	.01232	1.8301	16.774	.28357	.02631
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	.00191	.00173	.00656	.00495	.00439	-.00053	.00111
SDev	.00079	.00098	.00177	.00085	.00262	.00229	.00066
%RSD	41.487	56.659	26.993	17.277	59.546	435.99	59.039
#1	.00248	.00103	.00781	.00555	.00624	-.00215	.00065
#2	.00135	.00242	.00531	.00434	.00254	.00109	.00158
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	-.00270	.00131	-.00002	-.00522	.00096	.00937	
SDev	.00284	.00215	.00238	.00186	.00000	.00000	
%RSD	105.40	163.98	10290.	35.579	.24790	.04424	
#1	-.00069	.00283	.00166	-.00391	.00096	.00937	
#2	-.00471	-.00021	-.00171	-.00653	.00096	.00938	
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	11744	--	--	--	--	--	--
SDev	1.237437	--	--	--	--	--	--
%RSD	.0105365	--	--	--	--	--	--
#1	11745	--	--	--	--	--	--
#2	11743	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-6 Operator: WTR
 Run Time: 03/25/01 01:29:10
 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	1.0285	24.584	.53812	1.9724	H2.2235	H56.039	.54296
SDev	.0008	.011	.00113	.0002	.0029	.051	.00105
%RSD	.07324	.04286	.21027	.01116	.13107	.09094	.19315
#1	1.0280	24.591	.53892	1.9725	H2.2255	H56.075	.54370
#2	1.0291	24.576	.53732	1.9722	H2.2214	H56.003	.54221
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC High	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	H2.2077	2.1779	1.9218	26.921	52.077	2.1413	2.1399
SDev	.0006	.0024	.0007	.025	.077	.0001	.0032
%RSD	.02588	.11204	.03430	.09101	.14800	.00531	.14993
#1	H2.2073	2.1796	1.9214	26.938	52.131	2.1414	2.1421
#2	H2.2081	2.1761	1.9223	26.903	52.022	2.1412	2.1376
Errors	LC High	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	2.1707	.54521	.54083	.54229	.51359	.50560	.50826
SDev	.0065	.00002	.00297	.00198	.00503	.00214	.00310
%RSD	.29874	.00380	.54993	.36455	.97957	.42343	.61057
#1	2.1752	.54519	.54294	.54369	.51715	.50711	.51046
#2	2.1661	.54522	.53873	.54089	.51004	.50409	.50607
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	.52773	.53335	.53148	1.0700	2.0742	2.1494	
SDev	.00536	.00626	.00596	.0065	.0019	.0020	
%RSD	1.0154	1.1745	1.1219	.60590	.09277	.09133	
#1	.53152	.53778	.53569	1.0745	2.0755	2.1507	
#2	.52394	.52892	.52726	1.0654	2.0728	2.1480	
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	11712	--	--	--	--	--	--
SDev	14.70768	--	--	--	--	--	--
%RSD	.1255806	--	--	--	--	--	--
#1	11701	--	--	--	--	--	--
#2	11722	--	--	--	--	--	--

Method: METTRA Sample Name: CCB6

Operator: WTR

Run Time: 03/25/01 01:33:41

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	-.00050	-.09931	.00040	.00032	-.00072	.02998	.00006
SDev	.00050	.00346	.00099	.00001	.00009	.01239	.00032
%RSD	100.64	3.4820	247.33	2.9633	12.495	41.322	537.12
#1	-.00085	-.10176	.00110	.00031	-.00079	.02122	-.00017
#2	-.00014	-.09687	-.00030	.00033	-.00066	.03874	.00029
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	.00109	.00311	.00117	.03749	.00178	-.00001	.00160
SDev	.00000	.00013	.00030	.00000	.00685	.00013	.00062
%RSD	.00000	4.0573	25.665	.01187	383.98	1142.5	38.549
#1	.00109	.00320	.00096	.03748	-.00306	-.00010	.00116
#2	.00109	.00302	.00138	.03749	.00663	.00008	.00203
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	-.00058	-.00718	.00330	-.00019	.00251	-.00421	-.00198
SDev	.00113	.00186	.00068	.00107	.00187	.00358	.00301
%RSD	193.26	25.904	20.559	570.37	74.526	84.915	152.31
#1	-.00138	-.00587	.00378	.00057	.00383	-.00168	.00015
#2	.00021	-.00850	.00282	-.00095	.00119	-.00674	-.00410
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	-.00722	.00626	.00177	-.00287	-.00274	-.00026	
SDev	.00071	.00339	.00250	.00440	.00102	.00030	
%RSD	9.7875	54.134	140.91	153.36	37.066	117.68	
#1	-.00672	.00866	.00354	.00024	-.00202	-.00047	
#2	-.00772	.00386	.00001	-.00598	-.00346	-.00004	
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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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11793	--	--	--	--	--	--
SDev	6.010407	--	--	--	--	--	--
%RSD	.0509676	--	--	--	--	--	--
#1	11788	--	--	--	--	--	--
#2	11797	--	--	--	--	--	--

Method: METTRA Sample Name: DW8V0P5 Operator: WTR
 Run Time: 03/25/01 01:38:07
 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	-.00088	.09096	.00107	.00754	-.00096	34.059	.00008
SDev	.00046	.00039	.00134	.00003	.00005	.042	.00002
%RSD	52.479	.43152	124.86	.40318	4.9723	.12385	25.951
#1	-.00121	.09124	.00202	.00752	-.00092	34.089	.00009
#2	-.00055	.09068	.00013	.00757	-.00099	34.029	.00006
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	.00109	.01078	.00310	.40314	3.2739	.05642	.00490
SDev	.00000	.00036	.00026	.00600	.0087	.00002	.00000
%RSD	.00000	3.3826	8.3245	1.4873	.26693	.03628	.03061
#1	.00109	.01104	.00329	.39890	3.2801	.05644	.00490
#2	.00109	.01052	.00292	.40738	3.2677	.05641	.00490
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	.00012	-.00250	.00322	.00131	.00339	-.00420	-.00167
SDev	.00034	.00034	.00089	.00048	.00384	.00063	.00086
%RSD	287.81	13.482	27.500	36.397	113.48	14.991	51.507
#1	-.00012	-.00226	.00259	.00098	.00067	-.00375	-.00228
#2	.00036	-.00274	.00384	.00165	.00611	-.00464	-.00106
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	-.00237	.00643	.00350	-.00496	-.00334	.00167	
SDev	.00267	.00092	.00028	.00230	.00000	.00005	
%RSD	113.01	14.307	7.9159	46.375	.05731	2.9154	
#1	-.00426	.00708	.00330	-.00334	-.00334	.00164	
#2	-.00048	.00578	.00369	-.00659	-.00334	.00171	
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	11861	--	--	--	--	--	--
SDev	2.510091	--	--	--	--	--	--
%RSD	.0211621	--	--	--	--	--	--
#1	11863	--	--	--	--	--	--
#2	11860	--	--	--	--	--	--

Method: METTRA Sample Name: DW8V0S Operator: WTR
 Run Time: 03/25/01 01:42:33
 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	.04885	3.9211	2.0451	1.9493	.05083	226.64	.04952
SDev	.00002	.0064	.0032	.0017	.00011	.11	.00059
%RSD	.04103	.16375	.15579	.08933	.22080	.04800	1.1910
#1	.04884	3.9166	2.0473	1.9506	.05091	226.57	.04910
#2	.04886	3.9257	2.0428	1.9481	.05075	226.72	.04993
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	.52816	.25626	.25546	2.9336	68.378	.79824	1.0529
SDev	.00022	.00026	.00027	.0279	.038	.00005	.0016
%RSD	.04241	.10209	.10463	.94980	.05607	.00681	.15229
#1	.52800	.25608	.25565	2.9139	68.405	.79820	1.0518
#2	.52831	.25645	.25527	2.9533	68.351	.79827	1.0540
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	.51664	.51225	.50833	.50964	.48138	.48530	.48400
SDev	.00128	.00205	.00050	.00035	.00010	.00353	.00239
%RSD	.24819	.40117	.09901	.06841	.02057	.72743	.49332
#1	.51755	.51080	.50869	.50939	.48131	.48281	.48231
#2	.51574	.51370	.50798	.50988	.48145	.48780	.48568
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	1.9751	1.9667	1.9695	2.0626	.50453	.52758	
SDev	.0010	.0044	.0033	.0016	.00059	.00058	
%RSD	.05069	.22502	.16681	.07713	.11773	.11032	
#1	1.9744	1.9636	1.9672	2.0615	.50495	.52799	
#2	1.9758	1.9699	1.9718	2.0637	.50411	.52717	
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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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11761	--	--	--	--	--	--
SDev	1.767767	--	--	--	--	--	--
%RSD	.0150311	--	--	--	--	--	--
#1	11762	--	--	--	--	--	--
#2	11760	--	--	--	--	--	--

Method: METTRA Sample Name: DW8V0D

Operator: WTR

Run Time: 03/25/01 01:46:59

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	.05005	3.8673	2.0647	1.9619	.05137	224.94	.05005
SDev	.00044	.0094	.0072	.0009	.00006	.13	.00008
%RSD	.86906	.24275	.34642	.04811	.12303	.05867	.15762
#1	.04974	3.8607	2.0698	1.9625	.05142	224.84	.05010
#2	.05036	3.8740	2.0597	1.9612	.05133	225.03	.04999
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	.53306	.25638	.25691	2.8664	68.722	.80074	1.0661
SDev	.00030	.00059	.00079	.0159	.071	.00050	.0026
%RSD	.05727	.22808	.30869	.55475	.10388	.06288	.24832
#1	.53327	.25597	.25747	2.8777	68.773	.80038	1.0642
#2	.53284	.25679	.25635	2.8552	68.672	.80109	1.0679
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	.52357	.52228	.51743	.51905	.48819	.49194	.49069
SDev	.00018	.00175	.00135	.00032	.00033	.00074	.00060
%RSD	.03404	.33494	.26103	.06133	.06751	.15012	.12275
#1	.52345	.52104	.51839	.51927	.48795	.49142	.49027
#2	.52370	.52352	.51648	.51882	.48842	.49247	.49112
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	2.0071	1.9907	1.9962	2.0912	.51022	.53457	
SDev	.0044	.0183	.0137	.0048	.00120	.00054	
%RSD	.21880	.91819	.68403	.23128	.23485	.10166	
#1	2.0102	2.0037	2.0058	2.0878	.51106	.53418	
#2	2.0040	1.9778	1.9865	2.0946	.50937	.53495	
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	11685	--	--	--	--	--	--
SDev	3.960212	--	--	--	--	--	--
%RSD	.0338920	--	--	--	--	--	--
#1	11688	--	--	--	--	--	--
#2	11682	--	--	--	--	--	--

Method: METTRA Sample Name: DW8WP

Operator: WTR

Run Time: 03/25/01 01:51:26

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	-.00062	.96308	.00914	.04016	-.00103	172.20	-.00006
SDev	.00010	.00091	.00072	.00003	.00006	.09	.00008
%RSD	16.012	.09454	7.9181	.07918	5.6528	.05177	136.70
#1	-.00055	.96373	.00965	.04013	-.00107	172.27	-.00012
#2	-.00069	.96244	.00863	.04018	-.00098	172.14	-.00000
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	.00116	.03957	.01509	2.6773	17.004	.38308	.02768
SDev	.00000	.00060	.00033	.0175	.005	.00014	.00100
%RSD	.00461	1.5282	2.1762	.65435	.03200	.03668	3.6185
#1	.00116	.03999	.01532	2.6649	17.008	.38298	.02839
#2	.00116	.03914	.01486	2.6897	17.000	.38318	.02697
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	.00458	-.00178	.00626	.00358	.00438	-.00622	-.00269
SDev	.00125	.00200	.00048	.00099	.00638	.00108	.00140
%RSD	27.161	112.57	7.7253	27.627	145.57	17.323	52.180
#1	.00370	-.00036	.00660	.00428	-.00013	-.00546	-.00369
#2	.00546	-.00320	.00592	.00288	.00889	-.00699	-.00170
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	-.00384	.00406	.00143	-.00050	.00144	.01270	
SDev	.00110	.00069	.00082	.00808	.00033	.00010	
%RSD	28.543	16.908	57.552	1611.4	22.849	.81767	
#1	-.00307	.00455	.00201	.00521	.00167	.01263	
#2	-.00462	.00358	.00085	-.00622	.00121	.01278	
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	11840	--	--	--	--	--	--
SDev	9.369165	--	--	--	--	--	--
%RSD	.0791316	--	--	--	--	--	--
#1	11847	--	--	--	--	--	--
#2	11833	--	--	--	--	--	--

Method: METTRA Sample Name: DW8WR

Operator: WTR

Run Time: 03/25/01 01:55:52

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	-.00070	-.09857	.00160	.00020	-.00116	.08125	.00002
SDev	.00039	.00343	.00027	.00025	.00013	.02071	.00002
%RSD	55.691	3.4776	17.039	123.09	11.381	25.490	62.156
#1	-.00043	-.09615	.00140	.00003	-.00107	.06661	.00003
#2	-.00098	-.10100	.00179	.00038	-.00125	.09590	.00001
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	.00031	-.00169	.00119	.03344	.00218	-.00036	-.00051
SDev	.00053	.00022	.00034	.00114	.00317	.00003	.00010
%RSD	173.08	13.218	28.741	3.4186	145.74	9.1147	20.687
#1	-.00007	-.00153	.00095	.03263	-.00007	-.00038	-.00043
#2	.00068	-.00185	.00144	.03424	.00442	-.00033	-.00058
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	-.00338	-.00641	.00295	-.00017	.00486	-.00609	-.00244
SDev	.00011	.00314	.00112	.00179	.00315	.00193	.00234
%RSD	3.3375	49.028	37.882	1075.5	64.787	31.727	95.655
#1	-.00330	-.00419	.00374	.00110	.00263	-.00746	-.00410
#2	-.00346	-.00863	.00216	-.00143	.00709	-.00473	-.00079
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	-.00720	.00327	-.00022	-.00169	-.00322	.00055	
SDev	.00100	.00347	.00264	.00124	.00034	.00010	
%RSD	13.844	106.04	1216.4	73.234	10.555	18.474	
#1	-.00790	.00082	-.00209	-.00082	-.00298	.00048	
#2	-.00649	.00572	.00165	-.00257	-.00346	.00063	
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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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11739	--	--	--	--	--	--
SDev	8.590933	--	--	--	--	--	--
%RSD	.0731833	--	--	--	--	--	--
#1	11733	--	--	--	--	--	--
#2	11745	--	--	--	--	--	--

Method: METTRA Sample Name: DW8WT

Operator: WTR

Run Time: 03/25/01 02:00:19

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
Avg	-.00059	-.07481	.00874	.00085	-.00119	113.21	.00057
SDev	.00027	.00339	.00065	.00010	.00013	.43	.00011
%RSD	44.610	4.5307	7.4090	11.611	11.110	.37984	19.944
#1	-.00078	-.07241	.00920	.00078	-.00110	112.90	.00065
#2	-.00041	-.07720	.00828	.00092	-.00128	113.51	.00049
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	.00448	-.00046	.17742	.85138	8.9019	.25757	.01588
SDev	.00006	.00124	.00014	.00157	.0110	.00069	.00034
%RSD	1.2222	270.34	.07604	.18402	.12323	.26617	2.1688
#1	.00444	-.00134	.17733	.85027	8.8941	.25708	.01564
#2	.00452	.00042	.17752	.85249	8.9096	.25805	.01612
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	.18931	-.00274	.00368	.00154	.00943	.00517	.00659
SDev	.00025	.00237	.00139	.00172	.00314	.00165	.00214
%RSD	.13160	86.485	37.801	111.27	33.256	31.883	32.538
#1	.18913	-.00106	.00466	.00276	.01165	.00633	.00810
#2	.18948	-.00441	.00270	.00033	.00721	.00400	.00507
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	-.00307	.00529	.00251	-.00488	.04806	.67245	
SDev	.00174	.00009	.00052	.00053	.00044	.00112	
%RSD	56.681	1.6607	20.759	10.885	.91039	.16586	
#1	-.00430	.00535	.00214	-.00450	.04775	.67166	
#2	-.00184	.00523	.00287	-.00525	.04837	.67324	
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	11733	--	--	--	--	--	--
SDev	22.13230	--	--	--	--	--	--
%RSD	.1886346	--	--	--	--	--	--
#1	11749	--	--	--	--	--	--
#2	11717	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-7

Operator: WTR

Run Time: 03/25/01 02:04:45

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	1.0356	24.743	.54069	1.9871	H2.2290	H56.126	.54249
SDev	.0014	.023	.00114	.0003	.0054	.070	.00104
%RSD	.13620	.09371	.21034	.01620	.24412	.12444	.19176
#1	1.0366	24.760	.54150	1.9869	H2.2329	H56.176	.54322
#2	1.0346	24.727	.53989	1.9873	H2.2252	H56.077	.54175
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC High	LC High	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	H2.2095	2.1804	1.9393	27.020	52.179	2.1453	2.1435
SDev	.0036	.0020	.0013	.027	.142	.0026	.0020
%RSD	.16268	.08951	.06752	.10045	.27268	.11907	.09525
#1	H2.2121	2.1818	1.9402	27.001	52.280	2.1471	2.1421
#2	H2.2070	2.1790	1.9383	27.039	52.079	2.1435	2.1449
Errors	LC High	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	2.1711	.54489	.54132	.54251	.51491	.51001	.51164
SDev	.0108	.00113	.00479	.00282	.00033	.00201	.00123
%RSD	.49824	.20721	.88530	.51990	.06401	.39502	.24120
#1	2.1787	.54409	.54471	.54450	.51468	.51144	.51251
#2	2.1634	.54568	.53793	.54051	.51514	.50859	.51077
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	.53080	.53349	.53260	1.0722	2.0866	2.1572	
SDev	.00065	.00124	.00104	.0133	.0104	.0019	
%RSD	.12284	.23249	.19610	1.2395	.49888	.08912	
#1	.53126	.53437	.53333	1.0628	2.0939	2.1586	
#2	.53034	.53262	.53186	1.0816	2.0792	2.1558	
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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IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11664	--	--	--	--	--	--
SDev	20.01168	--	--	--	--	--	--
%RSD	.1715686	--	--	--	--	--	--
#1	11650	--	--	--	--	--	--
#2	11678	--	--	--	--	--	--

Method: METTRA Sample Name: CCB7

Operator: WTR

Run Time: 03/25/01 02:09:16

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	-.00107	-.10095	-.00067	.00019	-.00099	.02858	.00025
SDev	.00000	.00759	.00192	.00006	.00009	.00963	.00019
%RSD	.04406	7.5164	286.53	30.224	9.1462	33.679	73.919
#1	-.00107	-.09558	-.00203	.00015	-.00105	.02178	.00012
#2	-.00107	-.10631	.00069	.00023	-.00093	.03539	.00039
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	.00034	.00383	.00131	.03351	.00295	-.00003	.00178
SDev	.00029	.00026	.00015	.00595	.00318	.00010	.00105
%RSD	86.481	6.8215	11.784	17.750	107.93	370.97	58.804
#1	.00013	.00365	.00120	.02930	.00070	-.00010	.00252
#2	.00055	.00402	.00142	.03771	.00520	.00004	.00104
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	-.00145	-.00255	.00378	.00167	.00381	-.00309	-.00079
SDev	.00148	.00093	.00150	.00131	.00275	.00020	.00105
%RSD	101.94	36.413	39.536	78.145	72.204	6.4408	132.64
#1	-.00250	-.00321	.00272	.00075	.00187	-.00323	-.00153
#2	-.00041	-.00190	.00484	.00260	.00576	-.00295	-.00005
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	-.00593	.00371	.00050	-.00614	-.00274	-.00014	
SDev	.00290	.00111	.00171	.00083	.00034	.00004	
%RSD	48.830	29.912	339.87	13.511	12.500	30.511	
#1	-.00388	.00450	.00171	-.00555	-.00298	-.00017	
#2	-.00798	.00293	-.00070	-.00672	-.00250	-.00011	
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	11689	--	--	--	--	--	--
SDev	21.95553	--	--	--	--	--	--
%RSD	.1878287	--	--	--	--	--	--
#1	11674	--	--	--	--	--	--
#2	11705	--	--	--	--	--	--

679 1144

STL-Pittsburgh Atomic Absorption Data for Mercury

Instrument: PS200HG

Analyst Name: William A. Hagle

Date of Analysis: 2-23-81

File ID: 0323HGA

Matrix: WATER

Lot Number/SDG

Method

<u>CIC190153</u>	<u>TCLP</u>	<u>7470A</u>
<u>CIC310184</u>		
<u>CIC190151</u>		
<u>CIC130174</u>		
<u>CIC140126</u>		
<u>CIC150288</u>		
<u>CIC170114</u>		
<u>CIC160169</u>	<u>WM009</u>	

679 1145

William a Hoyle 3-23-01

09:35:06 23 Mar 2001

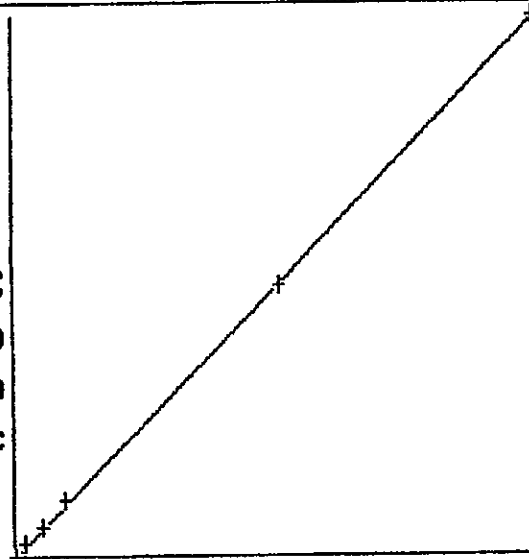
Folder: 0323HGA
Protocol: HGMET

Page 1437

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 0		09:35:06 23 Mar 2001	HG	
Hg	.000	ppb	5019					
*** Standard: 2 Rep: 1				Seq: 1		09:36:36 23 Mar 2001	HG	
Hg	.200	ppb	23078		0087-165-4			
*** Standard: 3 Rep: 1				Seq: 2		09:38:03 23 Mar 2001	HG	
Hg	.500	ppb	54195		0087-165-5			
*** Standard: 4 Rep: 1				Seq: 3		09:39:28 23 Mar 2001	HG	
Hg	1.00	ppb	94637		0087-165-6			
*** Standard: 5 Rep: 1				Seq: 4		09:41:07 23 Mar 2001	HG	
Hg	5.00	ppb	483728		0087-165-7			
*** Standard: 6 Rep: 1				Seq: 5		09:42:33 23 Mar 2001	HG	
Hg	10.0	ppb	950624		0087-166-1			

RunProt: HGNET STL-PITTSBURGH METALS ANALYSIS
 RunFold: 0323HGA Seq: 6 Batch:
 Prnt: R/T On Pump: On
 Rev: 4.2 09:42:42 23 Mar 2001 Xmit: Off Gas: 0.30 LPM
 State: Idle User: WAH A/S: On

CALIBRATION: Line proto: HGNET
 Hg Accepted
 Conc. Calc. Dev. ->linear
 S1 .000 .004 .004 Quadratic
 S2 .200 .194 -.006 Wtdlinear
 S3 .500 .523 .023 C
 S4 1.00 .949 -.051 Accept o
 S5 5.00 5.05 .053 n
 S6 10.0 9.98 -.023 c
 A .0000000 r .999960
 B 1.05467e-5 C -4.89597e-2



Mean
 S1 5019 0 SD 5019
 S2 23078 0 %RSD 23078
 S3 54195 0 %RSD 54195
 S4 94637 0 %RSD 94637
 S5 483728 0 %RSD 483728
 S6 950624 0 %RSD 950624

New cal coefficients stored

679 1147

William a. Hoyle 3-23-01

09:44:59 23 Mar 2001

Folder: 0323HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: ICV5-1					Seq: 6	09:44:59 23 Mar 2001 HG		
Hg	2.49	ppb	240938		0087-166-2			
*** Sample ID: ICB1					Seq: 7	09:46:25 23 Mar 2001 HG		
Hg	-.037	ppb	1154					
*** Sample ID: CCV5-1					Seq: 8	09:48:04 23 Mar 2001 HG		
Hg	5.00	ppb	479012		0087-166-3			
*** Sample ID: CCB1					Seq: 9	09:50:08 23 Mar 2001 HG		
Hg	-.014	ppb	3331					
*** Sample ID: DXRFABT					Seq: 10	09:51:34 23 Mar 2001 HG		
Hg	.015	ppb	6026					
*** Sample ID: DXRFACF					Seq: 11	09:53:04 23 Mar 2001 HG		
Hg	2.63	ppb	254458		0087-166-4			
*** Sample ID: DXNT6BT					Seq: 12	09:54:49 23 Mar 2001 HG		
Hg	.052	ppb	9587					
*** Sample ID: DXLMFT					Seq: 13	09:56:18 23 Mar 2001 HG		
Hg	7.54	ppb	719786					
*** Sample ID: DXLMFST					Seq: 14	09:58:07 23 Mar 2001 HG		
Hg	11.9 H	ppb	1132215					
*** Sample ID: DXLMFDT					Seq: 15	09:59:38 23 Mar 2001 HG		
Hg	11.9 H	ppb	1132906					
*** Sample ID: DXLMKT					Seq: 16	10:01:08 23 Mar 2001 HG		
Hg	10.6 H	ppb	1013701					
*** Sample ID: DXRFHB					Seq: 17	10:02:36 23 Mar 2001 HG		
Hg	-.098	ppb	-4646					

VOID

VOID
OVER RANGE
WILL RERUN
FURTHER IN
RUN
WAH
3-23-01

679 1148

Folder: 0323HGA

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10:04:05 23 Mar 2001

Protocol: HGMET

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DXRFHC				Seq: 18	10:04:05 23 Mar 2001	HG		
Hg	2.51	ppb	242464	0087-166-5				
*** Sample ID: DXPK3				Seq: 19	10:05:40 23 Mar 2001	HG		
Hg	.240	ppb	27353					
*** Sample ID: CCV5-2				Seq: 20	10:07:18 23 Mar 2001	HG		
Hg	5.04	ppb	482463					
*** Sample ID: CCB2				Seq: 21	10:08:54 23 Mar 2001	HG		
Hg	.027	ppb	7168					
*** Sample ID: DXPK35				Seq: 22	10:10:19 23 Mar 2001	HG		
Hg	1.26	ppb	123983					SP.REC. 102%
*** Sample ID: DXPK3D				Seq: 23	10:11:54 23 Mar 2001	HG		
Hg	1.35	ppb	132426					SP.REC. 114%
*** Sample ID: DXRFNB				Seq: 24	10:13:21 23 Mar 2001	HG		
Hg	-.003	ppb	4359					
*** Sample ID: DXRFNC				Seq: 25	10:14:58 23 Mar 2001	HG		
Hg	2.40	ppb	232628	0087-166-6				
*** Sample ID: DXLKX				Seq: 26	10:16:35 23 Mar 2001	HG		
Hg	-.044	ppb	441					
*** Sample ID: DXLKXS				Seq: 27	10:18:02 23 Mar 2001	HG		
Hg	1.06	ppb	105116					SP.REC. 106%
*** Sample ID: DXLKXD				Seq: 28	10:19:57 23 Mar 2001	HG		
Hg	1.05	ppb	104461					SP.REC. 105%
*** Sample ID: DXLK6				Seq: 29	10:21:21 23 Mar 2001	HG		
Hg	-.008	ppb	3922					

10:23:26 23 Mar 2001

Folder: 0323HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DXLK9				Seq: 30	10:23:26 23 Mar 2001	HG		
Hg	.007	ppb	5302					
*** Sample ID: DXRF2B				Seq: 31	10:25:22 23 Mar 2001	HG		
Hg	.025	ppb	7057					
*** Sample ID: CCV5-3				Seq: 32	10:27:17 23 Mar 2001	HG		
Hg	5.11	ppb	488727					
*** Sample ID: CCB3				Seq: 33	10:28:54 23 Mar 2001	HG		
Hg	.007	ppb	5345					
*** Sample ID: DXRF2C				Seq: 34	10:30:39 23 Mar 2001	HG		
Hg	2.47	ppb	238652					
*** Sample ID: DXATD				Seq: 35	10:32:16 23 Mar 2001	HG		
Hg	.019	ppb	6482					
*** Sample ID: DXATDS				Seq: 36	10:33:46 23 Mar 2001	HG		
Hg	1.01	ppb	100701					
*** Sample ID: DXATDD				Seq: 37	10:35:14 23 Mar 2001	HG		
Hg	1.03	ppb	101837					
*** Sample ID: DXATQ				Seq: 38	10:36:42 23 Mar 2001	HG		
Hg	.069	ppb	11217					
*** Sample ID: DXATX				Seq: 39	10:38:10 23 Mar 2001	HG		
Hg	.181	ppb	21783					
*** Sample ID: DXATO				Seq: 40	10:39:35 23 Mar 2001	HG		
Hg	-.013	ppb	3365					
*** Sample ID: DXAT1				Seq: 41	10:41:03 23 Mar 2001	HG		
Hg	.036	ppb	8049					

C087-166-9

SP REC.
101%SP REC.
103%

679 1150

Folder: 0323HGA
Protocol: HGMET

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10:42:41 23 Mar 2001

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DXAT4				Seq: 42		10:42:41 23 Mar 2001	HG	
Hg	.046	ppb	9024					
*** Sample ID: DXAT7				Seq: 43		10:44:11 23 Mar 2001	HG	
Hg	.011	ppb	5677					
*** Sample ID: CCV5-4				Seq: 44		10:45:39 23 Mar 2001	HG	
Hg	5.09	ppb	487502					
*** Sample ID: CCB4				Seq: 45		10:47:45 23 Mar 2001	HG	
Hg	-.001	ppb	4540					
*** Sample ID: DXAT9				Seq: 46		10:49:33 23 Mar 2001	HG	
Hg	.027	ppb	7215					
*** Sample ID: DXA2N				Seq: 47		10:51:08 23 Mar 2001	HG	
Hg	-.002	ppb	4499					
*** Sample ID: DXCVO				Seq: 48		10:52:36 23 Mar 2001	HG	
Hg	.022	ppb	6767					
*** Sample ID: DXCWA				Seq: 49		10:54:07 23 Mar 2001	HG	
Hg	.013	ppb	5830					
*** Sample ID: DXCWC				Seq: 50		10:55:35 23 Mar 2001	HG	
Hg	-.004	ppb	4281					
*** Sample ID: DXCWL				Seq: 51		10:57:11 23 Mar 2001	HG	
Hg	.126	ppb	16567					
*** Sample ID: DXCWM				Seq: 52		10:58:39 23 Mar 2001	HG	
Hg	-.003	ppb	4373					
*** Sample ID: DXCWP				Seq: 53		11:02:01 23 Mar 2001	HG	
Hg	.019	ppb	6423					

679 1151

11:04:27 23 Mar 2001

Folder: 0323HGA

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Protocol: HGMET

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DXCWD				Seq: 54	11:04:27 23 Mar 2001 HG			
Hg	.039	ppb	8351					
*** Sample ID: DXGLD				Seq: 55	11:05:54 23 Mar 2001 HG			
Hg	.020	ppb	6520					
*** Sample ID: CCV5-5				Seq: 56	11:07:44 23 Mar 2001 HG			
Hg	4.97	ppb	475555					
*** Sample ID: CCB5				Seq: 57	11:09:26 23 Mar 2001 HG			
Hg	-.014	ppb	3293					
*** Sample ID: DXKDW				Seq: 58	11:10:53 23 Mar 2001 HG			
Hg	.025	ppb	6993					
*** Sample ID: DXRGHBF				Seq: 59	11:12:34 23 Mar 2001 HG			
Hg	-.004	ppb	4280					
*** Sample ID: DXRGHCF				Seq: 60	11:15:03 23 Mar 2001 HG			
Hg	2.52	ppb	243472	C087-166-8				
*** Sample ID: DXHPTF				Seq: 61	11:16:39 23 Mar 2001 HG			
Hg	.046	ppb	8961					
*** Sample ID: DXHPTSF				Seq: 62	11:18:09 23 Mar 2001 HG			
Hg	1.05	ppb	103735					SP.REC. 105%
*** Sample ID: DXHPTDF				Seq: 63	11:19:34 23 Mar 2001 HG			
Hg	1.09	ppb	108173					SP.REC. 109%
*** Sample ID: DXLMFST/2				Seq: 64	11:21:25 23 Mar 2001 HG			
Hg	6.15	ppb	587735					
*** Sample ID: DXLMFDT/2				Seq: 65	11:22:51 23 Mar 2001 HG			
Hg	6.22	ppb	594867					

679 1152

Folder: 0323HGA
Protocol: HGMET

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11:24:29 23 Mar 2001

Line	Conc.	Units	SD/RSD	1	2	3	4	5
------	-------	-------	--------	---	---	---	---	---

*** Sample ID: DXLMKT/2 Seq: 66 11:24:29 23 Mar 2001 HG

Hg 5.70 ppb 545360

*** Sample ID: CCV5-6 Seq: 67 11:26:10 23 Mar 2001 HG

Hg 5.08 ppb 486306

*** Sample ID: CCB6 Seq: 68 11:27:50 23 Mar 2001 HG

Hg -.004 ppb 4270

END OF ANALYSIS
WAH
3-23-01

679 1153

William & Hogle 3 22-01

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS		
RunFold: 0323HGA	Seq: 0	Batch:	
	Prnt: R/T On	Pump: On	
	Rev: 4.2	09:28:26 23 Mar 2001	Xmit: Off Gas: 0.30 LPM
State: Idle		User: WAH	A/S: On

AUTOSAMPLER: Rack Edit		rack: RACK1	Range 1-44	Clear seq	Undo exit
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	DXRFABT	1.0000	1.0000		
6	DXRFACF	1.0000	1.0000		
7	DXNT6BT	1.0000	1.0000		
8	DXLMFT	1.0000	1.0000		
9	DXLMFST	1.0000	1.0000		
10	DXLMFDT	1.0000	1.0000		
11	DXLMKT	1.0000	1.0000		
12	DXRFHB	1.0000	1.0000		
13	DXRFHC	1.0000	1.0000		
14	DXPK3	1.0000	1.0000		
15	CCV5-2	1.0000	1.0000		

PgDn

Cup 1 ID: ICV5-1

Cell down mode Ins to switch

679 1154

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0323HGA Seq: 0 Batch:
Print: R/T On Pump: On
Rev: 4.2 09:28:28 23 Mar 2001 Xmit: Off Gas: 0.30 LPM
State: Idle 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 DXPK3S 1.0000 1.0000
18 DXPK3D 1.0000 1.0000
19 DXRFNB 1.0000 1.0000
20 DXRFNC 1.0000 1.0000
21 DXLKX 1.0000 1.0000
22 DXLKXS 1.0000 1.0000
23 DXLKXD 1.0000 1.0000
24 DXLK6 1.0000 1.0000
25 DXLK9 1.0000 1.0000
26 DXRF2B 1.0000 1.0000
27 CCV5-3 1.0000 1.0000
28 CCB3 1.0000 1.0000
29 DXRF2C 1.0000 1.0000
30 DXATD 1.0000 1.0000 PgDn

Cup 16 ID: CCB2

Cell down mode Ins to switch

679 1155

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS		
RunFold: 0323HGA	Seq: 0	Batch:	
	Prnt: R/T On	Pump: On	
State: Idle	Rev: 4.2	09:28:29 23 Mar 2001	Xmit: Off Gas: 0.30 LPM
		User: WAH	A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1				PgUp
cup ID	Extended id	Weight	Volume Macro	checkK macros
31 DXATDS		1.0000	1.0000	
32 DXATDD		1.0000	1.0000	
33 DXATQ		1.0000	1.0000	
34 DXATX		1.0000	1.0000	
35 DXATO		1.0000	1.0000	
36 DXAT1		1.0000	1.0000	
37 DXAT4		1.0000	1.0000	
38 DXAT7		1.0000	1.0000	
39 CCV5-4		1.0000	1.0000	
40 CCB4		1.0000	1.0000	
41 DXAT9		1.0000	1.0000	
42 DXA2N		1.0000	1.0000	
43 DXCVO		1.0000	1.0000	
44 DXCWA		1.0000	1.0000	

PgDn

Cup 31 ID: DXATDS	Cell down mode Ins to switch
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679 1156

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0323HGA Seq: 69 Batch:
Prnt: R/T On Pump: On
Rev: 4.2 11:28:50 23 Mar 2001 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 DXCWC 1.0000 1.0000
2 DXCWL 1.0000 1.0000
3 DXCWM 1.0000 1.0000
4 DXCWP 1.0000 1.0000
5 DXCWQ 1.0000 1.0000
6 DXGLD 1.0000 1.0000
7 CCV5-5 1.0000 1.0000
8 CCBS 1.0000 1.0000
9 DXKDW 1.0000 1.0000
10 DXRGHBF 1.0000 1.0000
11 DXRGHCF 1.0000 1.0000
12 DXHPTF 1.0000 1.0000
13 DXHPTSF 1.0000 1.0000
14 DXHPTDF 1.0000 1.0000
15 DXLMFST/2 1.0000 1.0000

PgDn

For help on <hotkey> press Shift <hotkey> Full column mode Ins to switch

679 1157

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS		
RunFold: 0323HGA	Seq: 69	Batch:	
	Prnt: R/T On	Pump: On	
	Rev: 4.2	11:28:52 23 Mar 2001	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	PgUp
cup ID	Extended id	Weight	Volume	Macro	checkK	macros	
16	DXLMFDT/2	1.0000	1.0000				
17	DXLMKT/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				

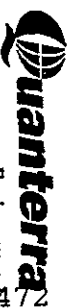
PgDn

Full column mode Ins to switch

Hg Digestion Log

Quanterra Incorporated
450 William Pitt Way
Pittsburgh, Pennsylvania 15238
412/826-5477 FAX: 412/826-5571

679 1158



QUA-4169

P/PET # H31608

Serial Number

026

Log Book Number

96-MT-584

Start Time

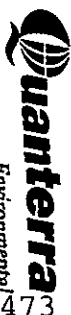
07:35 707:46

Sample ID	Date Rec'd	Prep Date	Prepared By	Wt/Vol	Sample Type	Run Date	Comments
1. STD0	N/A	3-23-01	WAH	100cm ³	WATER	3-23-01	N/A
2. STD1							0087-165-4
3. STD2							0087-165-5
4. STD3							0087-165-6
5. STD4							0087-165-7
6. STD5							0087-166-1
7. IGV							0087-166-2
8. IGV							N/A
9. IGV							0087-166-3
10. CCB							N/A
11. DXRFA8T							0087-166-4
12. DXREACT							N/A
13. DXTEBT							N/A
14. DXMEFT	3-19-01						5ml 0087-165-2
15. DXMEFT							5ml 0087-165-2
16. DXMEFT							N/A
17. DXMEFT							N/A
18. DXRFH0	N/A						0087-166-5
19. DXRFH0							N/A
20. DXPK3	3-21-01						1ml 0087-165-3
21. DXPK35							1ml 0087-165-3
22. DXPK30							N/A
23. DXRFH0	N/A						0087-166-6
24. DXRFH0							N/A
25. DXPK3	3-19-01						Method
Reagents		Vol (ml)			Ref. Number		
HNO3	2.5ml				0087-166-3	74704	Autoclave 15 PSI 120°C
H2SO4	5.0ml				5587	71616	SACLS = 0087-137-2
KMNO4	15.0ml				0087-160-6		Wash-NH2OH = 0087-159-8
K2S2O4	8.0ml				0087-153-46		WAH 3-23-01
Extract(s)			Extract(s) Received				Extract(s) Relinquished
(Record line number from above)	Date	Time	Analyst	Location	Date	Time	Analyst
			WAH 3-23-01				

Hg Digestion Log

Quanterra Incorporated
450 William Pitt Way
Pittsburgh, Pennsylvania 15238
412/826-5477 FAX: 412/826-5571

679 1159



QUA-4169

Pipe # H31608

Serial Number 027 Log Book Number 96-MT-584 Start Time 02:25:30

Sample ID	Date Rec'd	Prep Date	Prepared By	Wt/Vol	Sample Type	Run Date	Comments
1. DYLKX5	3-19-01	3-23-01	WAH	100ml	WATER	3-23-01	1ml 0087-165-3
2. DYLKX0							1ml 0087-165-2
3. DYLKX6							N/A
4. DYLKX9							
5. DXRF2B	N/A						0087-166-7
6. DXRF2C							N/A
7. DXATD	3-13-01						1ml 0087-165-2
8. DXATD5							1ml 0087-165-2
9. DXATD0							N/A
10. DXATG							
11. DXATX							
12. DXATO							
13. DXATI							
14. DXATI4							
15. DXATI7							
16. DXATI9							
17. DXAPM							
18. DXCVO	3-14-01						
19. DXCWA							
20. DXCWC							
21. DXCWL							
22. DXCWM							
23. DXCW8							
24. DXCW0							
25. DXGLD	3-15-01						
Reagents							
HNO3	2.5ml		MAILICKROBT	6623	705065	7420A	AUTOCCLAVE 15PSI 120°C
H2SO4	5.0ml			5559	716816		
KMNO4	15.0ml						
K2S2O4	8.0ml						
Extract(s) Received							
Date Time Analyst Location Date Time							
WAH 3-23-01							
Extract(s) Relinquished							
Date Time Analyst Location							

Hg Digestion Log

Quanterra Incorporated
450 William Pitt Way
Pittsburgh, Pennsylvania 15238
412/826-5477 FAX: 412/826-5571

679 1160



CUA-4169

Pipe # H31609

Serial Number 028 Log Book Number 96-MT-584 Start Time 07:25:46

Sample ID	Date Rec'd	Prep Date	Prepared By	WV/Vol	Sample Type	Run Date	Comments
1. DXKDW	3-17-01	3-23-01	WAH	100ml	WATER	3-23-01	N/A
2. DXRGHBF	N/A						0087-166-8
3. DXRGHBF	↓						N/A
4. DXHPTF	3-16-01						1ml 0087-165-2
5. DXHPTSF	↓						1ml 0087-165-2
6. DXHPTDF	↓						
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			6623 TORAO5		7420A AUTOCALVE 15PSI 120°C	
H2SO4	5.0ml			5557 T16AH6		50612 = 0087-137-2	
KMNO4	15.0ml			0087-160-6		NACL-NH2OH = 0087-155-8	
K2S2O4	8.0ml			0087-153-16		WAH 3-23-01	
Extract(s)			Extract(s) Received			Extract(s) Relinquished	
(Record line number from above)	Date	Time	Analyst	Location	Date	Time	Analyst
			WAH 3-23-01				

5475

6475

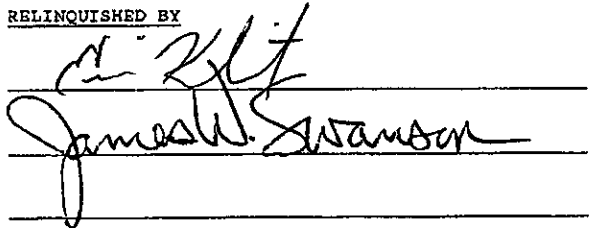
Method:		3010 A		Matrix: WATER		Start Time: 0930		Reagents: 3ml Conc. HNO3		6623 709 AOS					
Analyzed by: Russell Swanson		Lynell A. B. B.		Date: 3/22/01		Lot Number: 21C2 10184		5ml 1:1 HCl		0087-125-2					
Reviewed by: Russell Swanson		Date: 3/22/01		Date: 3/22/01		Date: 3/22/01		Date: 3/22/01		Date: 3/22/01					
SDG:	MS	MSB1 Rev	MSA	MSC Rev	Lab Lot # (Book, page, line)	0087-081-3	0057-124-1	0057-122-1	Balance #:						
Sample ID	Initial Wt/Vol g/mL	Final Vol mL	Comments		Color	Pre	Post	Clarity	Pre	Post	Texture	Pre	Post	Antilocks	Antilock Codes
1. DXPK3	50mL	50mL	JWS 3/22/01												S-Stones
2. DXPK3S			+ 0.51 MSB1 Rev, MSA, MSC Rev												O=Organic (plant mat)
3. DXPK3D			0.501 MSB1 Rev, MSA, MSC Rev												W=free H2O
4. DXPK3B			0.51 MSB1 Rev, MSA, MSC Rev												G=Glass
5. DXPK3C															M=Metal Fragments
6.															R=Rubber/Plastic
7.															C=Cloth
8.															P=Paper
9.															I=Insects
10.															
11.															
12.															
13.															
14.															
15.															
16.															
17.															
18.															
19.															
20.															
21.															
22.															
23.															
24.															
Digestate(s)															
Date		Time		(Received)		Analyst		Location		Date		Time		(Relinquished)	
3/22/01		15:20				JWS		Met 1 B7		3/22/01		15:30		JWS	
3/23/01		10:30				JWS		Met 1 B7		3/23/01				JWS	
3/24/01		18:30				JWS		Met 1 B7		3/24/01		21:00		JWS	
Hot Plate/Bloc Temp															
#11 / 95°C															
Correction Factor															
+ 0.5°C															
Color															
R=Red Y=Yellow W=White															
BL=Blue O=Orange GY=Gray															
BR=Brown V=Violet GN=Green															
BLK=Black P=Pink C=Colorless															
Clarity															
C=Clear															
CL=Cloudy															
O=Opaque															
Texture															
F=Fine															
M=Medium															
C=Coarse															

REQUESTED BY RIZZOC

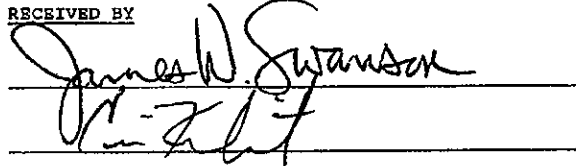
METHOD QM Inductively Coupled Plasma (6010B Trace)

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	
		CNTR#								RCVD	REQD
13C CLP1	DXL6T	___	322165	027262	A-46-QM	C1C200114	001		SOLID	0	2 1
13C CLP1	DXL68	___	322166	027262	A-46-QM	C1C200117	001		SOLID	0	2 1
13B	DXME5	___	322160	378644	D-46-QM	C1C200146	002		WIPE	0	1 1
13B	DXMFP	___	322161	378644	D-46-QM	C1C200146	007		WIPE	0	1 1
13B	DXMF8	___	322162	378644	D-46-QM	C1C200146	011		WIPE	0	1 1
13B	DXMGN	___	322163	378644	D-46-QM	C1C200146	017		WIPE	0	1 1
13B	DXMGW	___	322164	378644	D-46-QM	C1C200146	019		WIPE	0	1 1
CLP1, 13D	DXM3W	___	322159	039108	N-46-QM	C1C200229	001		WASTE	0	2 1
14A	DXN6J	___	322157	417201	I-05-QM	C1C210136	001		WATER	0	3 1
14A, CLP1	DXPK3	___	322158	399411	I-05-QM	C1C210184	001		WATER	0	13 1

RELINQUISHED BY



RECEIVED BY



DATE/TIME

3/22/01 0830
3/22/01 1030

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

REQUESTED BY HOYLEW

METHOD: 08 Mercury (7470A, Cold Vapor) - Liquid

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SPX	MATRIX DESCRIPTION	QTY	QTY
										RCVD	REQD
14A, CLP1	DXPK3		322230	399411	I-19-08	C1C210184	001		WATER	0	13 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<i>William A. Hoyle</i>	<i>William A. Hoyle</i>	<i>3-23-01</i>	<i>05:30</i>
<i>William A. Hoyle</i>	<i>William A. Hoyle</i>	<i>3-23-01</i>	<i>06:20</i>

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

679 1164

GENERAL CHEMISTRY DATA

679 1165

UXB INTERNATIONAL

Client Sample ID: DF/24-B/1079/IDW/006

General Chemistry

Lot-Sample #...: C1C210184-001 Work Order #...: DXPK3 Matrix.....: WATER
Date Sampled...: 03/20/01 Date Received...: 03/21/01

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	8.6		No Units	SW846 9040	03/21/01	1080359
		Dilution Factor: 1		MS Run #.....: 1080197		
Cyanide, Total	ND	10.0	ug/L	SW846 9012A	03/26/01	1085156
		Dilution Factor: 1		MS Run #.....: 1085051		
Flashpoint	>201		deg F	SW846 1010	03/21/01	1080356
		Dilution Factor: 1		MS Run #.....: 1080194		
Total Sulfide	ND	1.0	mg/L	MCAWW 376.1	03/27/01	1086345
		Dilution Factor: 1		MS Run #.....: 1086171		

679 1166

METHOD BLANK REPORT

General Chemistry

Client Lot #...: C1C210184

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING</u> <u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION-</u> <u>ANALYSIS DATE</u>	<u>PREP</u> <u>BATCH #</u>
Cyanide, Total	ND	Work Order #: DXVE91AA 10.0	ug/L	MB Lot-Sample #: SW846 9012A	C1C230000-161 03/26/01	1085156
		Dilution Factor: 1				
Total Sulfide	ND	Work Order #: DX16R1AA 1.0	mg/L	MB Lot-Sample #: MCAWW 376.1	C1C270000-345 03/27/01	1086345
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results

679 1167

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C1C210184

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 #: DXP241AA (85 - 115)	LCS Lot-Sample#: C1C210000-359 SW846 9040	03/21/01	1080359
		Dilution Factor: 1			
Cyanide, Total	101	Work Order #: DXVE91AC (85 - 115)	LCS Lot-Sample#: C1C230000-161 SW846 9012A	03/26/01	1085156
		Dilution Factor: 1			
Flashpoint	100	Work Order #: DXP071AA (85 - 115)	LCS Lot-Sample#: C1C210000-356 SW846 1010	03/21/01	1080356
		Dilution Factor: 1			
Total Sulfide	95	Work Order #: DX16R1AC (75 - 125)	LCS Lot-Sample#: C1C270000-345 MCAWW 376.1	03/27/01	1086345
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results

679 1168

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C1C210184

Matrix.....: WATER

Date Sampled...: 03/21/01

Date Received...: 03/22/01

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Cyanide, Total			WO#:	DXRKF1CD-MS/DXRKF1CE-MSD	MS Lot-Sample #:	C1C220173-002	
	0.0	(75 - 125)			SW846 9012A	03/26/01	1085156
	0 0	(75 - 125)	0.0	(0-20)	SW846 9012A	03/26/01	1085156
			Dilution Factor: 1				
			MS Run #.....: 1085051				
Total Sulfide			WO#:	DXRAF1AX-MS/DXRAF1A0-MSD	MS Lot-Sample #:	C1C220157-001	
	94	(75 - 125)			MCAWW 376.1	03/27/01	1086345
	94	(75 - 125)	0.0	(0-20)	MCAWW 376.1	03/27/01	1086345
			Dilution Factor: 1				
			MS Run #.... : 1086171				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results

679 1169

Client Lot #....: C1C210184 Work Order #....: DXGMH-SMP Matrix.....: WATER
DXGMH-DUP

Initial Wgt/Vol:

Dilution Factor:

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Flashpoint	>201	>201	deg F	0.0	(0-20)	SD Lot-Sample #: C1C150304-001	03/21/01	1080356
Dilution Factor: 1				MS Run Number.: 1080194				

679 1170

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C1C210184		Work Order #...: DXM5E-SMP		Matrix.....: WATER					
		DXM5E-DUP							
Date Sampled...: 03/20/01		Date Received...: 03/20/01							
% Moisture.....: 100		Dilution Factor:		Initial Wgt/Vol:					
				PREPARATION-					
				ANALYSIS DATE					
				PREP					
PARAM	RESULT	DUPLICATE	UNITS	RPD	LIMIT	METHOD	SD Lot-Sample #:	H1C200237-001	BATCH #
pH	7.1	7.1	No Units	0.99	(0-20)	SW846 9040		03/21/01	1080359
				Dilution Factor: 1		MS Run Number..		1080197	

Barometric Pressure
740.4

Ignitability

Method: Flash Point (101°C Closed Cup)

STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238

679 1171

ANALYST: <u>[Signature]</u>	DATE: <u>3-21-01</u>
BATCH: <u>1080356</u>	TIME: <u>13:30</u>

SAMPLE ID	RESULT	Corrected Result
P-xylene	80°F	81.2
CIC 150304-001	>200°F	>201.2
CIC 150304-001 DUP	>200°F	>201.2
HIC 200237-001	>200°F	>201.2
P-xylene	80°F	81.2
CIC 210184-001	>200°F	>201.2
P-xylene	80°F	81.2
<u>[Signature]</u> 3-21-01		

Reviewed by [Signature] Date 3/21/01

WC-00-0060

Page 48 of 100

[Signature]
3-21-01

679 1172

PSR024 3/21/01 7 44 14 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY. GROVER

METHOD. AB 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>QTY</u>
										<u>RCVD</u>	<u>REQD</u>
SUB, 5M1, 3R4	DXM5E-1-AM	___	321891	367970	I-88-AB	H1C200237	001		WATER	6	1
11C CLP1	DXGMH-1-A8	___	321890	399411	I-88-AE	C1C150304	001		WATER	13	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

3-21-01 10:00

3-21-01 15:00

REQUESTED BY GROVEP

679 1173

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>QTY</u>
										<u>RCVD</u>	<u>REQD</u>
14A, CLP1	DXPK3-1-A8	_____	322063	399411	I-88-AE	C1C210184	001		WATER	13	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

3-21-01 15:15

3-21-01 15:40

STL Pittsburgh
pH LOG SHEET

Lot No.	Batch No.	SDG No.
45C200237 C1C210184	1080359	

Analyst: Foster G. Rous

Date: 3-21-01

Start Time: 12:15

CIC200187
CIC200229
CIC210117

pH Meter Calibration
1080361

Reading	Buffer	Lot No.	Rec'd	Expire
4.00	4.0	Lot 0271-0F	12-19-00	12-19-01
7.00	7.0	0062-04	5-19-00	3-1-02
10.00	10.0	0146-04	10-26-00	5-25-01

LCS ID No.: 6299-26 Exp: 12-19-11

Relative Percent Difference =

Range = $\pm .05$ pH units

$$\frac{|X_1 - X_2|}{\left(\frac{X_1 + X_2}{2}\right)} \times 100$$

X_1 =Original Result

X₂ = Duplicate

pH Liquid

[illegible]

pH Solid

[illegible]

REQUESTED BY GROVER

679 1175

OD PJ pH (9040) - Aqueous

<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>SPX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
SUB, 5M1, 3R4	DXMSE-1-AN		321894	367970	I-88-FJ H1C200237	001			WATER	6	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

3-21-01 12:30

3-21-01 13:00

679 1176

PSR024 3/21/01 13 08 00 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 002

REQUESTED BY GROVER

OD FJ pH (9040) - Aqueous

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX	QTY	QTY
		CNTR#							DESCRIPTION	RCVD	REQD
	DXPK3-1-CA		322062	399411	I-88-FJ	C1C210184	001		WATER	13	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

3-21-01 15:15

3-21-01 15:30

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

REQUESTED BY: ~~GROVER~~

679 1177

OD OZ pH (9045C) - Non-Aqueous

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SPX	MATRIX	QTY	QTY
		CNTR#							DESCRIPTION	RCVD	REQD
CLP1,13D	DXM3W-1-AS	___	321893	039108	N-88-OZ	C1C200229	001		WASTE	2	1
13D	DXMAM-1-AP	___	321892	378644	A-88-OZ	C1C200137	001		SOLID	3	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

3-21-01 12:30

3-21-01 13:00

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

679 1178

PSR024 3/21/01 11 49:01 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: GROVER

OD: OZ pH (9045C) - Non-Aqueous

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SPX	MATRIX	QTY	QTY
		CNTR#							DESCRIPTION	RCVD	REQD
13E	DXN19-1-AN		322061	002532	A-88-OZ	C1C210117	001		SOLID	4	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

3-21-01 14:10

3-21-01 14:20

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

STL Pittsburgh-Cyanide Analysis

679 1179

Analyst J. Johnson Date 03-26-01
Data File 032601A

Lot Number(s) Batch Number(s) Method

012210184 1085156 Total Water
012230173 ↓ ↓

012230227 1085157 Total Solids

Run Results Report

Results: C:\FLOW_4\032601A.RST

Results completed: 12:10 March 26, 2001.

Operator: P.JOHNSON

679 1180

P. Johnson 3.26.01

CYANIDE

Time	Cup	Name	Height	Calc.	Flags
----- User request: Start Data Collect -----					
10:58	0	CARRYOVER	855	0.002125	
10:59	0	CARRYOVER	202	0.000615	
		Mean & RSD:	528	0.001370	NoRSD
11:01	0	READ BASELIN	0	0.000148	BL
11:02	301	0.500 PPM ST	219679	0.508011	HI
11:03	301	0.500 PPM ST	216550	0.500777	HI
11:04	301	0.500 PPM ST	215435	0.498200	
		Mean & RSD:	217221	0.502329	1.01%
11:05	302	0.400 PPM ST	171480	0.396583	
11:06	302	0.400 PPM ST	172088	0.397989	
11:08	302	0.400 PPM ST	172084	0.397980	
		Mean & RSD:	171884	0.397517	.204%
11:09	303	0.300 ppm ST	129322	0.299120	
11:10	303	0.300 ppm ST	130191	0.301129	
11:11	303	0.300 ppm ST	130076	0.300863	
		Mean & RSD:	129863	0.300371	.364%
11:12	304	0.200 PPM ST	86493	0.200106	
11:13	304	0.200 PPM ST	86675	0.200527	
11:15	304	0.200 PPM ST	86303	0.199667	
		Mean & RSD:	86490	0.200100	.215%
11:16	305	0.100 PPM ST	43763	0.101320	
11:17	305	0.100 PPM ST	43764	0.101323	
11:18	305	0.100 PPM ST	43402	0.100488	
		Mean & RSD:	43643	0.101044	.477%
11:19	306	0.050 PPM ST	21906	0.050791	
11:20	306	0.050 PPM ST	21928	0.050843	
11:22	306	0.050 PPM ST	22139	0.051330	
		Mean & RSD:	21991	0.050988	.585%
11:23	307	0.010 PPM ST	4707	0.011031	
11:24	307	0.010 PPM ST	4662	0.010927	
11:25	307	0.010 PPM ST	4553	0.010674	OL
		Mean & RSD:	4685	0.010979	1.69%
11:26	0	0.000 PPM ST	-75	-0.000024	LO
11:27	0	0.000 PPM ST	-71	-0.000016	LO
11:29	0	0.000 PPM ST	-61	0.000008	OL
		Mean & RSD:	-73	-0.000020	9.91%
11:30	0	BLANK	-34	0.000070	
11:31	2	CCV 7216208	45893	0.106245	106.27
11:32	0	CCB	-30	0.000079	
11:33	0	BASELINE	0	0.000148	BL
11:34	101	.05 7216205	23278	0.053963	108.07
11:36	102	.40 7216206	184709	0.427166	106.87
11:37	0	BLANK	-34	0.000070	

Page #1

Run Results Report

Run Results Report

Results: C:\FLOW 4\032601A.RST

Results completed: 12:10 March 26, 2001.

Operator: P.JOHNSON

679 1181

P. Johnson 3-26-01

Time	Cup	Name	Height	Calc.	Flags
11:38	2	CCV 7216208	46245	0.107060	102.17.
11:39	0	CCB	-16	0.000113	
11:40	0	BASELINE	0	0.000148	BL
11:41	103	DXVE91AAB	858	0.002133	
11:43	104	DXVE91ACC	69562	0.160964	100.67.
11:44	105	DXPK31A7	1877	0.004488	
11:45	106	DXRH21A7	1503	0.003624	
11:46	107	DXRKF1AJ	1366	0.003307	
11:47	108	DXRKF1CDS	1515	0.003652	0.07.
11:48	109	DXRKF1CED	1509	0.003637	0.07: 0.07-2P)
11:50	0	BLANK	-10	0.000124	
11:51	2	CCV 7216208	44324	0.102619	102.67.
11:52	0	CCB	-15	0.000113	
11:53	0	BASELINE	0	0.000148	BL
11:54	110	DXX6R1AAB	1467	0.176970	
11:55	111	DXX6R1ACC	101814	117.763161	mg/kg 114.37.
11:57	112	DXV8N1AR	33514	3.881356	
11:58	113	DXV8N1ARS	58539	6.774081	52.97.
11:59	114	DXV8N1ARD	57480	6.651613	mg/kg 55.47: 1.87-2P)
12:00	0	BLANK	50	0.000264	
12:01	2	CCV 7216208	45742	0.105898	105.97.
12:02	0	CCB	41	0.000244	
12:04	0	BASELINE	0	0.000148	BL

679 1182

File name: C:\FLOW'4\032601A.RST

Date: March 26, 2001

Operator: P.JOHNSON

P. Johnson 3.26.01

* Name	Conc	Height
* 0.500 PPM STD	0.500000	219678.875000
* 0.500 PPM STD	0.500000	216549.750000
* 0.500 PPM STD	0.500000	215435.375000
* 0.400 PPM STD	0.400000	171480.062500
* 0.400 PPM STD	0.400000	172088.203125
* 0.400 PPM STD	0.400000	172084.359375
* 0.300 ppm STD	0.300000	129321.875000
* 0.300 ppm STD	0.300000	130191.093750
* 0.300 ppm STD	0.300000	130076.062500
* 0.200 PPM STD	0.200000	86492.921875
* 0.200 PPM STD	0.200000	86674.867188
* 0.200 PPM STD	0.200000	86302.734375
* 0.100 PPM STD	0.100000	43762.562500
* 0.100 PPM STD	0.100000	43763.542969
* 0.100 PPM STD	0.100000	43402.375000
* 0.050 PPM STD	0.050000	21905.890625
* 0.050 PPM STD	0.050000	21928.390625
* 0.050 PPM STD	0.050000	22138.982422
* 0.010 PPM STD	0.010000	4707.087891
* 0.010 PPM STD	0.010000	4662.359863
* 0.010 PPM STD	0.010000	4552.918457
* 0.000 PPM STD	0.000000	-74.673691
* 0.000 PPM STD	0.000000	-71.334450
* 0.000 PPM STD	0.000000	-60.806103

Calib Coef:

y=bx+a

a: (intercept) -6.4224e+01

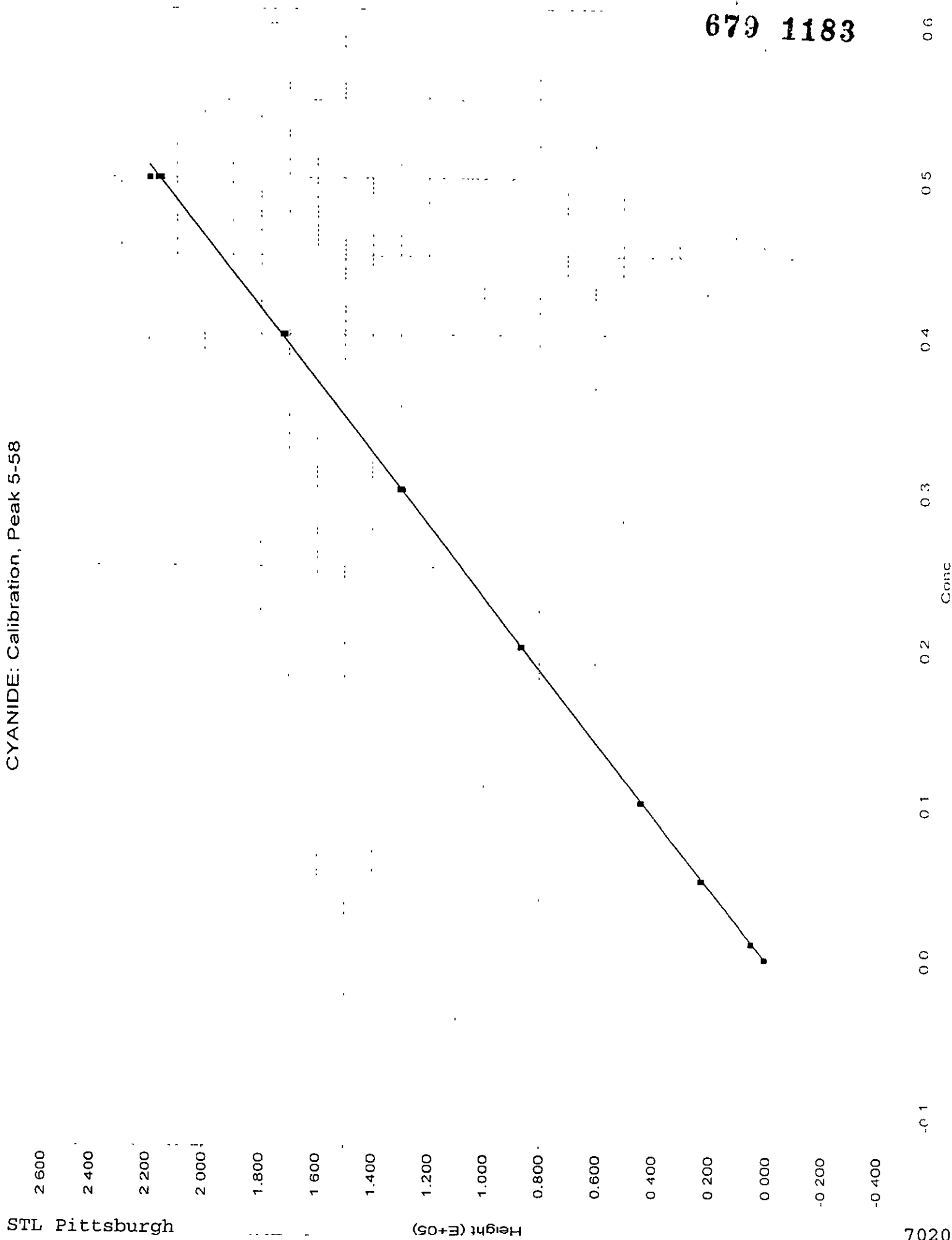
b: 4.3256e+05

Corr Coef: 0.999935

Carryover: 0.189%

No Drift Peaks

CYANIDE: Calibration, Peak 5-58



STL - Pittsburgh

CYANIDE DISTILLATION WORKSHEET

Logbook ID: WC37

1085156
Total
Water
C1210104
C1220173

Distilled by		Reagent/Std Book ID		Date		Sample Description (CLP Samples Only)		Expiration Date		Color	
Sample ID	Initial	Distillation	Final	Before Distillation	After Distillation	Sample Description (CLP Samples Only)	Expiration Date	Color	Texture	Clarity	
1	XXUEQIAR	Some	Some					R=Red			
2	XXUEQIAR							BL=Blue			
3	XXUEQIAR							BR=Brown			
4	XXUEQIAR							BLK=Black			
5	XXUEQIAR							Y=Yellow			
6	XXUEQIAR							O=Orange			
7	XXUEQIAR							V=Violet			
8	XXUEQIAR							P=Pink			
9	XXUEQIAR							W=White			
10								GY=Gray			
11								GN=Green			
12								C=Colorless			
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											

Distillate(s) Received		Distillate(s) Relinquished	
Date	Time	Date	Time
3.26.01	1025	3.26.01	1300

Distillate(s) Received		Distillate(s) Relinquished	
Analyst	Location	Analyst	Location
Johnson	WC	Johnson	Johnson

Comments

1.7
3.26.01 1025 Johnson WC
3.26.01 1300 Johnson Johnson

679 1186

PSR024 3/26/01 5 57 21 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: JOHNSONP

METHOD QP Cyanide, Total

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SPX	MATRIX	QTY	QTY
		CNTR#							DESCRIPTION	RCVD	REQD
14A, CLP1	DXPK3-1-A7	_____	323099	399411	I-06-QP	C1C210184	001		WATER	13	1
14C, CLP1	DXRH2-1-A7	_____	323100	399411	I-06-QP	C1C220173	001		WATER	13	1
14C, CLP1	DXRKF-1-AJ	_____	323101	399411	I-06-QP	C1C220173	002		WATER	13	1
15A	DXV8N-1-AR	_____	323102	061313	A-06-QP	C1C230227	001		SOLID	7	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

P. Johnson
P. Johnson

P. Johnson
P. Johnson

3-26-01/0810
3-26-01/1010

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

STL Pittsburgh

7023

STL Pittsburgh
SULFIDE LOG SHEET

679 1187

Soil C10230227 1086347

Page ____ of ____

Lot No. Batch No. SDG No.

C1C210184
C1C220157
C1C220173
C1C230216
C1C220157
C1C230216

1086345 → TOTALS
1086346 → DISSOLVED

Analyst. ERIC L. WESOLOSKI

Date: 3-27-01

Start Time: 10:45

Stock Std. ID No: 647 - 026 - 09 True Value ~1000 ppm Days Actual Value 927.36 ppm
Prep 3-27-01 Exp. 4-3-01

ICV/LCS 2.5 mL of 927.36 ppm (ID No.: 647 - 026 - 09) = 4.37 ppm Range 7-15%
CCV 2.5 mL of 927.36 ppm Range 7-10%

Calculations:

$$\text{Sulfide mg/L} = \frac{[(20 \text{ mL of Iodine} \times N \text{ Iodine}) - (X \text{ mL Na}_2\text{S}_2\text{O}_3 \times N \text{ Na}_2\text{S}_2\text{O}_3)]}{\text{mL Sample}} \times 16,000$$

Iodine Standardization ID No: 647 - 026 - 11

Relative Percent Difference =

$$.0234 \text{ N Iodine} = \frac{(19.0 \text{ mL Na}_2\text{S}_2\text{O}_3)(.0246 \text{ N of Na}_2\text{S}_2\text{O}_3)}{20.0 \text{ mL of Iodine Solution}}$$

$$\frac{|X_1 - X_2|}{\left(\frac{X_1 + X_2}{2}\right)} \times 100 \quad \begin{array}{l} X_1 = \text{Original Result} \\ X_2 = \text{Duplicate} \end{array}$$

Sodium Thiosulfate Standardization = ID No. 647 - 026 - 10

Titration	mLs	Normality	
1	<u>10.1</u>	<u>.0248</u>	$\frac{(10 \text{ mL of KH(IO}_3)_2)(0.025 \text{ N KH(IO}_3)_2)}{\text{mL of Na}_2\text{S}_2\text{O}_3}$
2	<u>10.2</u>	<u>.0245</u>	
Avg = <u>.0246 N</u>			

Concentration of Sample in Spike:

$$\text{Sample ID: } \frac{\text{Ong. Smp. Conc.} \times \left(\frac{\text{Vol. of Smp in Spike}}{\text{Ong. Smp. Vol.}} \right)}{1} =$$

MS Percent Recovery:

$$100 \times \left(\frac{\text{Observed Conc. of MS} - \text{Conc. of Smp in Spike}}{\text{True Spike Conc.}} \right) =$$

MSD Percent Recovery:

$$100 \times \left(\frac{\text{Observed Conc. of MS} - \text{Conc. of Smp in Spike}}{\text{True Spike Conc.}} \right) =$$

Sample ID _____

Sample ID _____

E. L. Wesoloski 3/27/01

679 1188

STL Pittsburgh
SULFIDE LOG SHEET

Page ____ of ____

True Value LCS/ICV = $\frac{46.37}{231.85}$ ppmTrue Value MS/MSD = $\frac{18.55}{92.75}$ ppm
Soil Value

Sample ID	Sample mL	N = .0234 mL of Iodine	mL of N = .0246 Na ₂ S ₂ O ₃	Conc.	LDL
ICV	50 ml	20 ml	12.6	50.57	109%
ICB			19.0	ND	1.0
PB 1-2			13.4	44.48	95.5%
CIC210184-001			22.1	ND	1.0
CIC230157-001			20.2	ND	1.0
↓ -001 S			16.8	17.51	94.4%
↓ -001 D			16.8	17.51	94.4%
CIC228173-001			22.5	ND	1.0
↓ -002			21.9	ND	
CIC230216-001			20.0	ND	
↓ -002			20.2	ND	
CCV			13.6	42.70	92%
CCB			19.1	ND	1.0
CIC230216-003			20.0	ND	
↓ -004			20.0	ND	
PB-2			19.1	ND	1.0
LCS-2			13.5	43.49	93.8%
CIC220157-001			19.9	ND	1.0
↓ -001 S			16.2	22.23	120%
↓ -001 D			16.3	21.45	116%
CIC230216-001			19.4	ND	1.0
↓ -002			19.3	ND	
↓ -003			20.0	ND	
CCV			13.6	42.70	92%
CCB			19.2	ND	1.0
CIC230216-CCB-004			19.8	ND	1.0
CCV			13.6	42.70	92%
CCB			19.1	ND	1.0
ICV			12.8	49.00	106%
ICB			19.2	ND	1.0
PB-3			19.2	ND	5.0
LCS-3			13.4	221.38	955%
CIC230227-001			22.5	ND	5.0
↓ -001 S			18.1	36.38	39.2%
↓ -001 D			18.1	36.38	39.2%
CCV			13.6	42.70	92%
CCB			19.2	ND	1.0

Soils

RPD
0%RPD
3.6%RPD
0%

SULFIDE DISTILLATION WORKSHEET

Logbook ID: WC1

Distilled by Eric L. Wesoloski Date 3-27-01 Reagent/Std Book ID 342-173-6/342-170-0/647-016-4 Actual Stock Value (ppm) 927.36 True Value 1000 ppm

Sample ID	Distillation		Expiration Date
	Initial	Final	
1 ICB	50ml	50ml	
2 ICB			
3 PB-1			
4 LCS-1			
5 C1C210184-001			3-27-01
6 C1C220157-001			3-28-01
7 -001 MSD			
8 -001 MSD			
9 C1C220173-001			3-28-01
10 -002			
11 C1C230216-001			3-29-01
12 -002			
13 -003			
14 -004			
15 PB-2			
16 LCS-2			
17 C1C220157-001			3-28-01
18 -001 MSD			
19 -001 MSD			
20 C1C230216-001			3-29-01
21 -002			
22 -003			
23 -004			
24			
25			
26			

Distillate(s) Received		Distillate(s) Relinquished	
Date	Time	Date	Time
3-27-01	08:00	3-27-01	13:30
Analyst <u>Eric L. Wesoloski</u>		Analyst <u>Eric L. Wesoloski</u>	
Location <u>Wet Chem</u>		Location <u>Disposal</u>	
Date		Date	
Time		Time	
Analyst		Analyst	
Location		Location	

Comments

Stock: 647-026-09 ICB/LCS 2.5ml of 647-026-09 to 50ml D.H₂O. MSD = 1.0ml of 647-026-09 to 50ml Sample

Reviewed by

Date 3-27-01

REQUESTED BY WRSOLOSR

METHOD CT Sulfide (376.1)

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SPX	MATRIX DESCRIPTION	QTY	QTY
		CNTR#								RCVD	REQD
14A, CLP1	DXPK3-1-A9	___	323275	399411	I-88-CT	C1C210184	001		WATER	13	1
14B	DXRAP-1-AK	___	323276	059184	I-88-CT	C1C220157	001		WATER	12	1
14C, CLP1	DXRH2-1-A9	___	323278	399411	I-88-CT	C1C220173	001		WATER	13	1
14C, CLP1	DXRKF-1-AL	___	323279	399411	I-88-CT	C1C220173	002		WATER	13	1
15A	DXV6D-1-AB	___	323280	059184	I-88-CT	C1C230216	001		WATER	2	1
15A	DXV6L-1-AB	___	323282	059184	I-88-CT	C1C230216	002		WATER	2	1
15A	DXV6Q-1-AB	___	323284	059184	I-88-CT	C1C230216	003		WATER	2	1
15A	DXV60-1-AB	___	323286	059184	I-88-CT	C1C230216	004		WATER	2	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

C. T. Winkler
C. T. Winkler

C. T. Winkler
C. T. Winkler

3/27/01 (07:30)
3/27/01 (10:00)

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

679 1192

PSR024 3/27/01 5 26 09 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY. WESOLOSE

METHOD. TV Sulfides, Total (9030B-dist/9034-titrat)

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX	QTY	QTY
		CNTR#							DESCRIPTION	RCVD	REQD
15A	DXV8N-1-AT	_____	323269	061313	A-06-TV	C1C230227	001		SOLID	7	1

RELINQUISHED BY

E. L. Murphy
E. L. Murphy

RECEIVED BY

E. L. Murphy
E. L. Murphy

DATE/TIME

3/27/01 (07:30)
3/27/01 (10:00)

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

STL Pittsburgh

7029

REQUESTED BY **WRSOLOSE**

METHOD CT Dissolved Sulfide

<u>STORAGE</u>	<u>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>
14B		DXRAF-1-AL	___	323277	059184	I-87-CT	C1C220157	001		WATER	12	1
15A		DXV6D-1-AF	___	323281	059184	I-87-CT	C1C230216	001		WATER	2	1
15A		DXV6L-1-AF	___	323283	059184	I-87-CT	C1C230216	002		WATER	2	1
15A		DXV6Q-1-AF	___	323285	059184	I-87-CT	C1C230216	003		WATER	2	1
15A		DXV60-1-AF	___	323287	059184	I-87-CT	C1C230216	004		WATER	2	1

RELINQUISHED BY

E. L. Whittle
E. L. Whittle

RECEIVED BY

E. L. Whittle
E. L. Whittle

DATE/TIME

3/27/01 (07:30)
3/27/01 (10:00)

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE