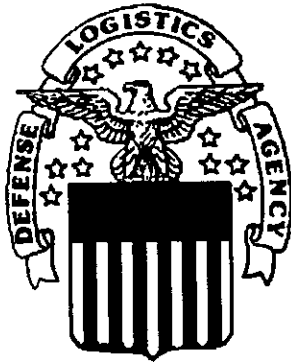


666 6448

File: 541.460.000n
C.H.



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 666

Part II of II

Report Date : 04-Aug-2000 11:30

611
HP68901B
03721

666

645

STL Pittsburgh

COMPOUND LISTING

Method file : \\QPITPA02\D\chem\gc1.i\5030.b\LONGHB.m
Quant Method : ESTD Target Version : 4.04
Last Update : 04-Aug-2000 11:28 Number of Cpnds : 12
Data Type : GC MULTI COMP

Global Integrator : Falcon

Chromat Events Values

Initial:Start Threshold 3608.000000
Initial:End Threshold 1804.000000
Initial:Area Threshold 36080.000000
Initial:P-P Resolution 1.000000
Initial:Bunch Factor 10.000000
Initial:Negative Peaks ON
Initial:Tension 0.200000

Compound	RT	RT Window	RF
1 DALAPON	4.661	4.591-4.731	1.49e+008
\$ 2 DCAA	12.261	12.191-12.331	4.09e+008
3 DICAMBA	12.946	12.876-13.016	3.33e+008
4 MCPP	13.441	13.371-13.511	2.86e+005
5 MCPA	14.443	14.373-14.513	3.64e+005
6 DICHLOROPROP	15.747	15.677-15.817	6.52e+007
7 2,4-D	17.073	17.003-17.143	8.39e+007
8 PENTACHLOROPHENOL	17.346	17.276-17.416	1.55e+009
9 2,4,5-TP (SILVEX)	18.511	18.441-18.581	7.48e+008
10 2,4,5-T	19.166	19.096-19.236	5.64e+008
11 2,4-DB	19.686	19.616-19.756	6.11e+007
12 DINOSEB	20.345	20.275-20.415	7.10e+008

666 646
Report Date : 04-Aug-2000 09:37

6E
H2850AB
DB1721

STL Pittsburgh

INITIAL CALIBRATION DATA

Start Cal Date : 03-AUG-2000 16:11
End Cal Date : 03-AUG-2000 18:07
Quant Method : ESTD
Origin : Disabled
Target Version : 4.04
Integrator : Falcon
Method file : \\QPITPA02\D\chem\gc1.i\5030.b\LONGHB.m
Cal Date : 04-Aug-2000 09:36 eppingerd
Curve Type : Average

Calibration File Names:

Level 1: \\QPITPA02\D\chem\gc1.i\5030.b\A-B50020.D
Level 2: \\QPITPA02\D\chem\gc1.i\5030.b\A-B50021.D
Level 3: \\QPITPA02\D\chem\gc1.i\5030.b\A-B50022.D
Level 4: \\QPITPA02\D\chem\gc1.i\5030.b\A-B50023.D
Level 5: \\QPITPA02\D\chem\gc1.i\5030.b\A-B50024.D

Compound	0.00500	0.01000	0.02500	0.05000	0.10000	RRF	% RSD
1 DALAPON	158102818	155784091	149850342	140837107	138944182	148703708	5.794
3 DICAMBA	324763679	338060376	344012376	330473690	329535700	333369164	2.287
4 MCPP	338304	330354	290463	242124	230391	286327	17.234
5 MCPA	409499	404411	368660	325503	309714	363557	12.418
6 DICHLOROPROP	65763443	67696014	67263172	63294182	61989012	65201165	3.815
7 2,4-D	70577251	79747341	86818942	88462353	93675947	83856367	10.660
8 PENTACHLOROPHENOL	1.426e+09	1.521e+09	1.592e+09	1.578e+09	1.626e+09	1.548e+09	5.066
9 2,4,5-TP(SILVEX)	647853524	703630857	770023033	783234371	836043226	748157002	9.794
10 2,4,5-T	427950854	493120095	577415450	613839858	708438211	564152894	19.226
11 2,4-DB	43314834	50817133	60879562	67103639	83379559	61098945	25.283
12 DINOSEB	678583912	699290709	719462126	707319134	742890256	709509227	3.364
\$ 2 DCAA	428896150	438202024	423321293	388062224	367692794	409234897	7.329

Aug 10. 2000
P50

7L 017687015
Data File: \\QPITPA02\D\chem\gc1.i\5030.b\A-B50029.D
Report Date: 04-Aug-2000 11:28

STL Pittsburgh

666: 3647

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 04-AUG-2000 09:53
Lab File ID: A-B50029.D Init. Cal. Date(s): 03-AUG-2000 03-AUG-2000
Analysis Type: Init. Cal. Times: 16:11 18:07
Lab Sample ID: Mherb Quant Type: ESTD
Method: \\QPITPA02\D\chem\gc1.i\5030.b\LONGHB.m

COMPOUND	RRF	RFO	MIN	RRF	%D	MAX
1 DALAPON	148703708	138033462	0.010	-7.2	15.0	
\$ 2 DCAA	409234897	383965523	0.010	-6.2	15.0	
3 DICAMBA	333369164	319233200	0.010	-4.2	15.0	
4 MCPP	286327	263877	0.010	-7.8	15.0	
5 MCPA	363557	341745	0.010	-6.0	15.0	
6 DICHLOROPROP	65201165	61638597	0.010	-5.5	15.0	
7 2,4-D	83856367	80414994	0.010	-4.1	15.0	
8 PENTACHLOROPHENOL	1.548e+09	1.465e+09	0.010	-5.4	15.0	
9 2,4,5-TP (SILVEX)	748157002	709787678	0.010	-5.1	15.0	
10 2,4,5-T	564152894	525484028	0.010	-6.9	15.0	
11 2,4-DB	61098945	56562379	0.010	-7.4	15.0	
12 DINOSEB	709509227	674125984	0.010	-5.0	15.0	

7E HV68501B
Data File: \\QPITPA02\D\chem\gc1.i\5030.b\A-B50045.D DB1721
Report Date: 07-Aug-2000 08:31

66600648

STL Pittsburgh

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc1.i Injection Date: 04-AUG-2000 17:32
Lab File ID: A-B50045.D Init. Cal. Date(s): 03-AUG-2000 03-AUG-2000
Analysis Type: Init. Cal. Times: 16:11 18:07
Lab Sample ID: Mherb Quant Type: ESTD
Method: \\QPITPA02\D\chem\gc1.i\5030.b\LONGHB.m

COMPOUND	RRF	RFO	MIN	MAX
			RRF	%D
1 DALAPON	148703708	147685011	0.010	-0.7
2 DCAA	409234897	422814536	0.010	3.3
3 DICAMBA	333369164	342575012	0.010	2.8
4 MCPP	286327	286810	0.010	0.2
5 MCPA	363557	367145	0.010	1.0
6 DICHLOROPROP	65201165	66563149	0.010	2.1
7 2,4-D	83856367	84950529	0.010	1.3
8 PENTACHLOROPHENOL	1.548e+09	1.593e+09	0.010	2.9
9 2,4,5-TP(SILVEX)	748157002	759444123	0.010	1.5
10 2,4,5-T	564152894	553116398	0.010	-2.0
11 2,4-DB	61098945	60040000	0.010	-1.7
12 DINOSEB	709509227	716685591	0.010	1.0

8D
PESTICIDE ANALYTICAL SEQUENCE

666 649

Lab Name:

Contract:

Lab Code:

Case No.:

SAS No.:

SDG No.: C0G270302

GC Column: DB1701

ID: 0.53

(mm)

Init. Calib. Date(s): 08/03/00 08/03/00

Instrument ID: GC1

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

MEAN SURROGATE RT FROM INITIAL CALIBRATION S1 : 12.26					
EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	LHERB	08/03/00	1611	12.27	
02	MLHERB	08/03/00	1640	12.26	
03	MHERB	08/03/00	1709	12.27	
04	MHHERB	08/03/00	1738	12.26	
05	HHERB	08/03/00	1807	12.26	
06	MHERB	08/04/00	0953	12.26	
07	DF/S1/0208/I	08/04/00	1635	12.29	
08	PBLK	08/04/00	1703	12.30	
09	MHERB	08/04/00	1732	12.26	
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
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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\5030.b\A-B50020.D
Report Date: 04-Aug-2000 09:42

666 650

STL Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5030.b\A-B50020.D
Lab Smp Id: Lherb
Inj Date : 03-AUG-2000 16:11
Operator : 01797
Smp Info : Lherb,5030.b
Misc Info : 190-94-1
Comment :
Method : \\QPITPA02\D\chem\gc1.i\5030.b\LONGHB.m
Meth Date : 04-Aug-2000 09:42 eppingerd
Cal Date : 03-AUG-2000 16:11
Als bottle: 2
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC086

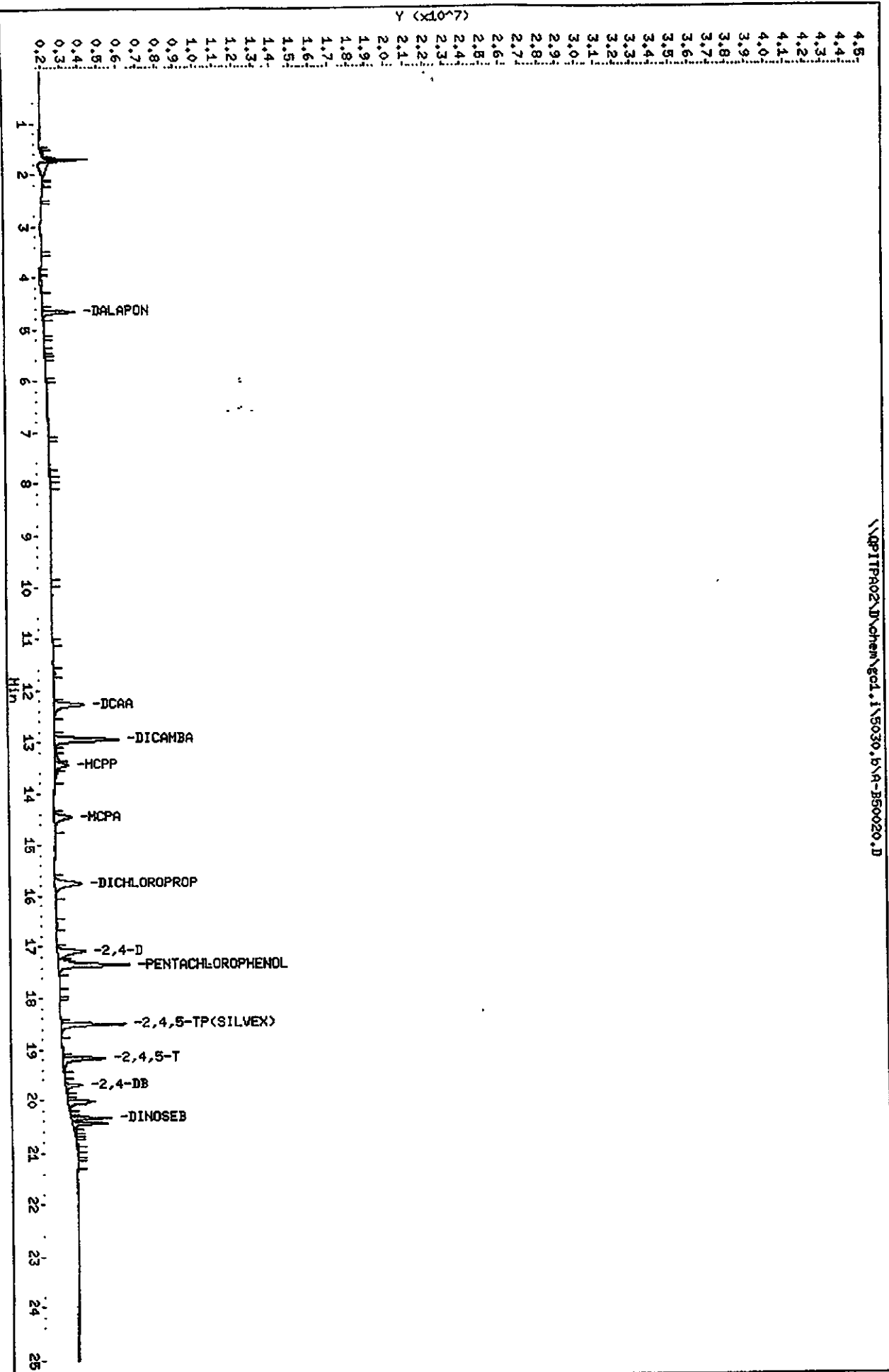
Inst ID: gc1.i
Quant Type: ESTD
Cal File: A-B50020.D
Calibration Sample, Level: 1
Compound Sublist: 1-all.sub

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
8 PENTACHLOROPHENOL	17.346	17.349	-0.003	3791844	0.00266	0.002449
1 DALAPON	4.660	4.661	-0.001	1739131	0.01100	0.01170
\$ 2 DCAA	12.270	12.265	0.005	9135488	0.02130	0.02232
3 DICAMBA	12.947	12.949	-0.002	3442495	0.01060	0.01033
4 MCPP	13.441	13.445	-0.004	717205	2.12000	2.505
5 MCPA	14.449	14.450	-0.001	876328	2.14000	2.410
6 DICHLOROPROP	15.751	15.751	0.000	1394185	0.02120	0.02138
7 2,4-D	17.085	17.075	0.010	1489180	0.02110	0.01776
9 2,4,5-TP(SILVEX)	18.514	18.512	0.002	3401231	0.00525	0.004546
10 2,4,5-T	19.171	19.167	0.004	2255301	0.00527	0.003998
11 2,4-DB	19.696	19.686	0.010	913943	0.02110	0.01496
12 DINOSEB	20.345	20.345	0.000	2151111	0.00317	0.003032

666 651

Data File: \\QP1TPA02\chem\ec1.i\5030.b\A-B50020.D
Date: 03-AUG-2000 16:11
Client ID:
Sample Info: Lherb, 5030.b
Column phase: DB1701

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



Data File: \\QPITPA02\D\chem\gc1.i\5030.b\A-B50021.D
Report Date: 04-Aug-2000 09:43

666 652

STL Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5030.b\A-B50021.D
Lab Smp Id: MLherb
Inj Date : 03-AUG-2000 16:40
Operator : 01797
Smp Info : MLherb,5030.b
Misc Info : 190-94-2
Comment :
Method : \\QPITPA02\D\chem\gc1.i\5030.b\LONGHB.m
Meth Date : 04-Aug-2000 09:43 eppingerd Quant Type: ESTD
Cal Date : 03-AUG-2000 16:11 Cal File: A-B50020.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: 1-all.sub
Target Version: 4.04
Processing Host: PITPC086

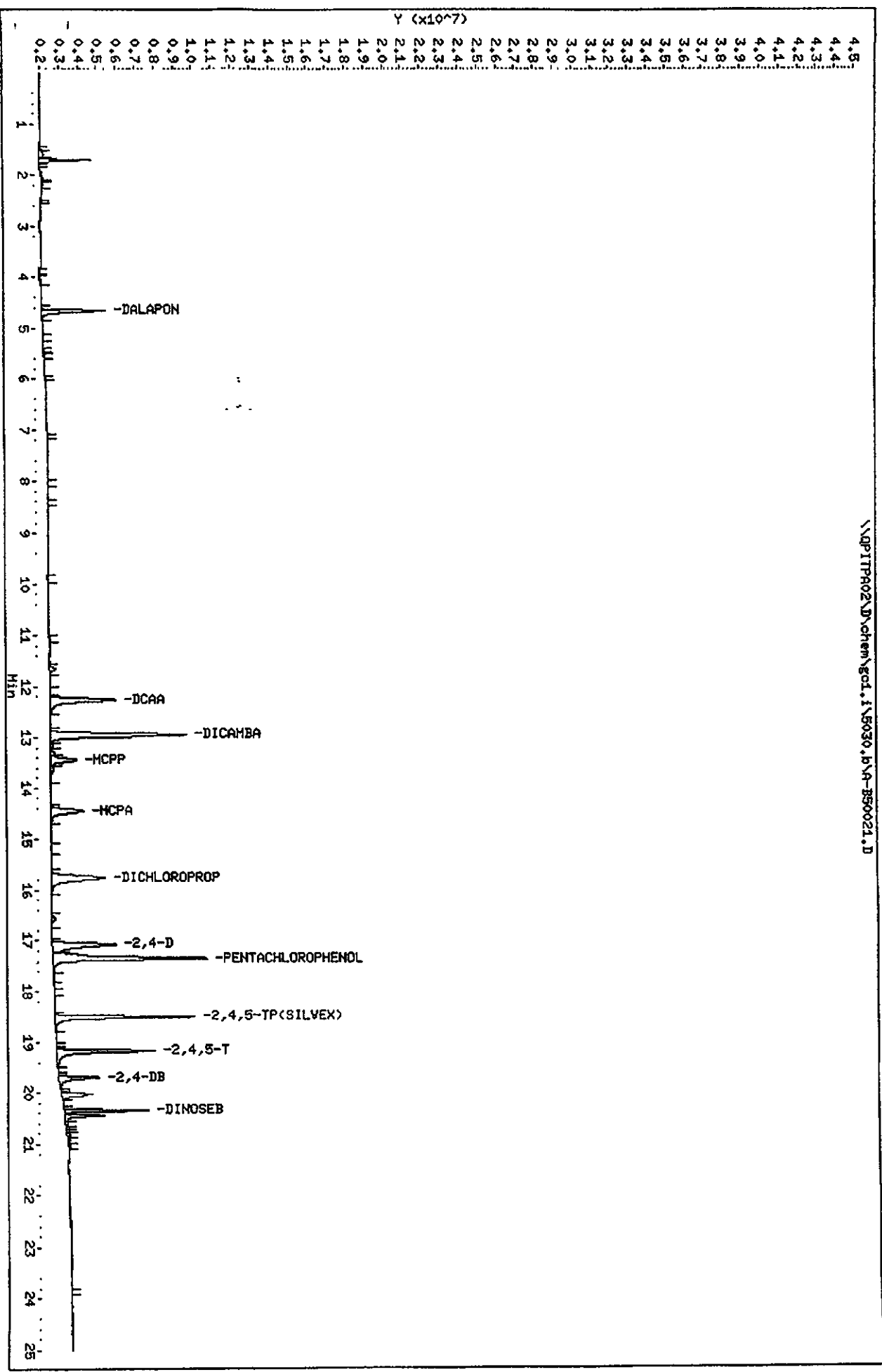
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
8 PENTACHLOROPHENOL	17.347	17.349	-0.002	8090476	0.00532	0.005225
1 DALAPON	4.660	4.661	-0.001	3427250	0.02200	0.02305
\$ 2 DCAA	12.264	12.265	-0.001	18623586	0.04250	0.04551
3 DICAMBA	12.948	12.949	-0.001	7200686	0.02130	0.02160
4 MCPP	13.438	13.445	-0.007	1407309	4.26000	4.915
5 MCPA	14.447	14.450	-0.003	1730880	4.28000	4.761
6 DICHLOROPROP	15.750	15.751	-0.001	2870311	0.04240	0.04402
7 2,4-D	17.078	17.075	0.003	3389262	0.04250	0.04042
9 2,4,5-TP(SILVEX)	18.512	18.512	0.000	7388124	0.01050	0.009875
10 2,4,5-T	19.170	19.167	0.003	5177761	0.01050	0.009178
11 2,4-DB	19.691	19.686	0.005	2144483	0.04220	0.03510
12 DINOSEB	20.345	20.345	0.000	4440496	0.00635	0.006258

666 666 666
Data File: \\NPITPA02\chem\col.1\5030.b\A-850021.D
Date: 03-AUG-2000 16:40

Client ID:
Sample Info: HHerb, B030.b

Column phase: DB1701

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



STL Pittsburgh

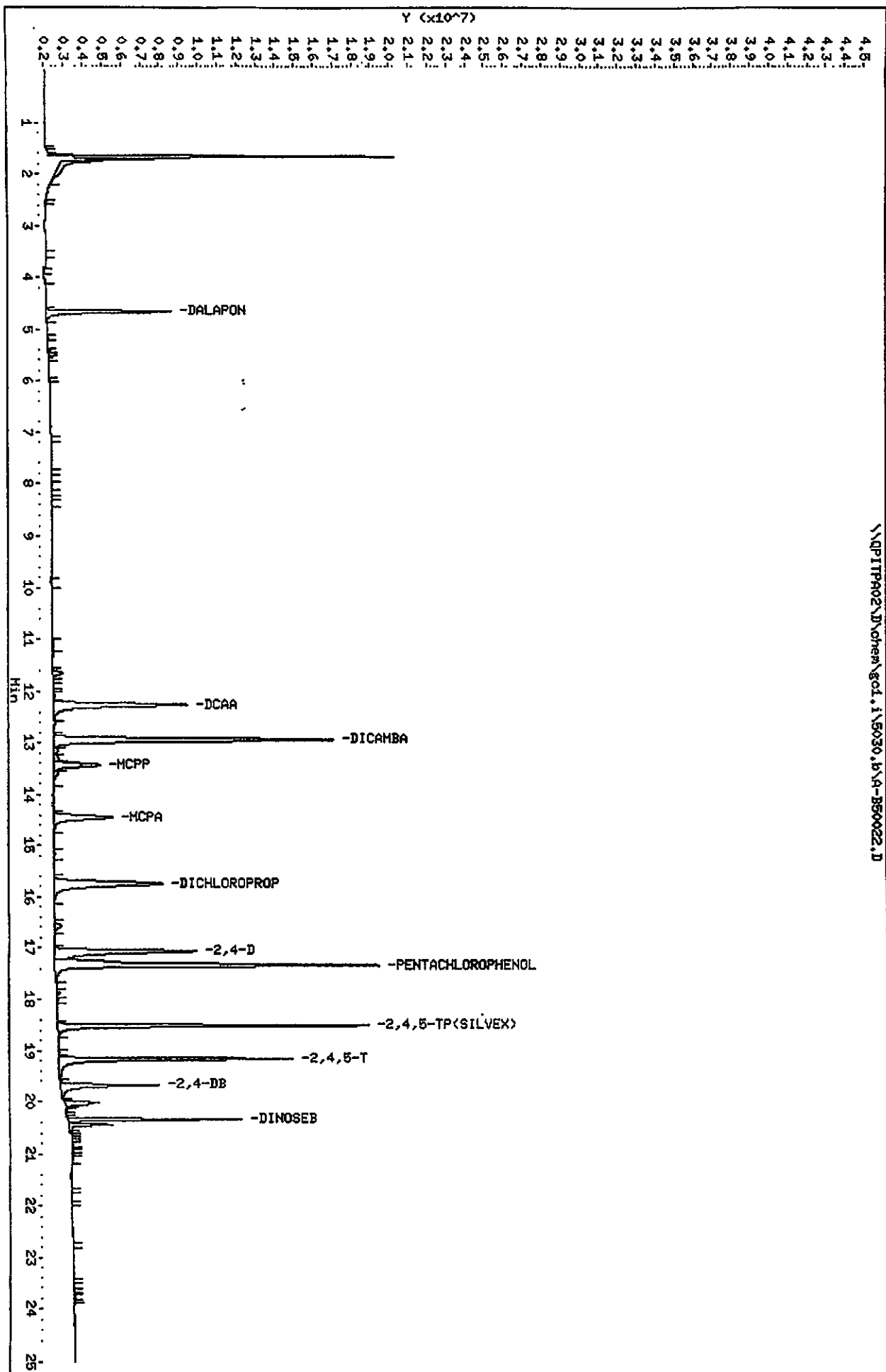
Data file : \\QPITPA02\D\chem\gc1.i\5030.b\A-B50022.D
Lab Smp Id: Mherb
Inj Date : 03-AUG-2000 17:09
Operator : 01797
Smp Info : Mherb,5030.b
Misc Info : 190-94-3
Comment :
Method : \\QPITPA02\D\chem\gc1.i\5030.b\LONGHB.m
Meth Date : 04-Aug-2000 09:44 eppingerd Quant Type: ESTD
Cal Date : 03-AUG-2000 16:11 Cal File: A-B50020.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC086

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
8 PENTACHLOROPHENOL	17.349	17.349	0.000	16934728	0.01064	0.01094
1 DALAPON	4.661	4.661	0.000	6578430	0.04390	0.04424
\$ 2 DCAA	12.265	12.265	0.000	36024642	0.08510	0.08803
3 DICAMBA	12.949	12.949	0.000	14620526	0.04250	0.04386
4 MCPP	13.445	13.445	0.000	2474742	8.52000	8.643
5 MCPA	14.450	14.450	0.000	3155728	8.56000	8.680
6 DICHLOROPROP	15.751	15.751	0.000	5703917	0.08480	0.08748
7 2,4-D	17.075	17.075	0.000	7388292	0.08510	0.08811
9 2,4,5-TP(SILVEX)	18.512	18.512	0.000	16247486	0.02110	0.02172
10 2,4,5-T	19.167	19.167	0.000	12183466	0.02110	0.02160
11 2,4-DB	19.686	19.686	0.000	5144323	0.08450	0.08420
12 DINOSEB	20.345	20.345	0.000	9137169	0.01270	0.01288

655 666

Data File: \\QPITPA02\Nchem\col.i\5030.b\A-B50022.D
Date: 03-AUG-2000 17:09
Client ID:
Sample Info: Herb, 6030.b
Column Phase: DB1701

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



STL Pittsburgh

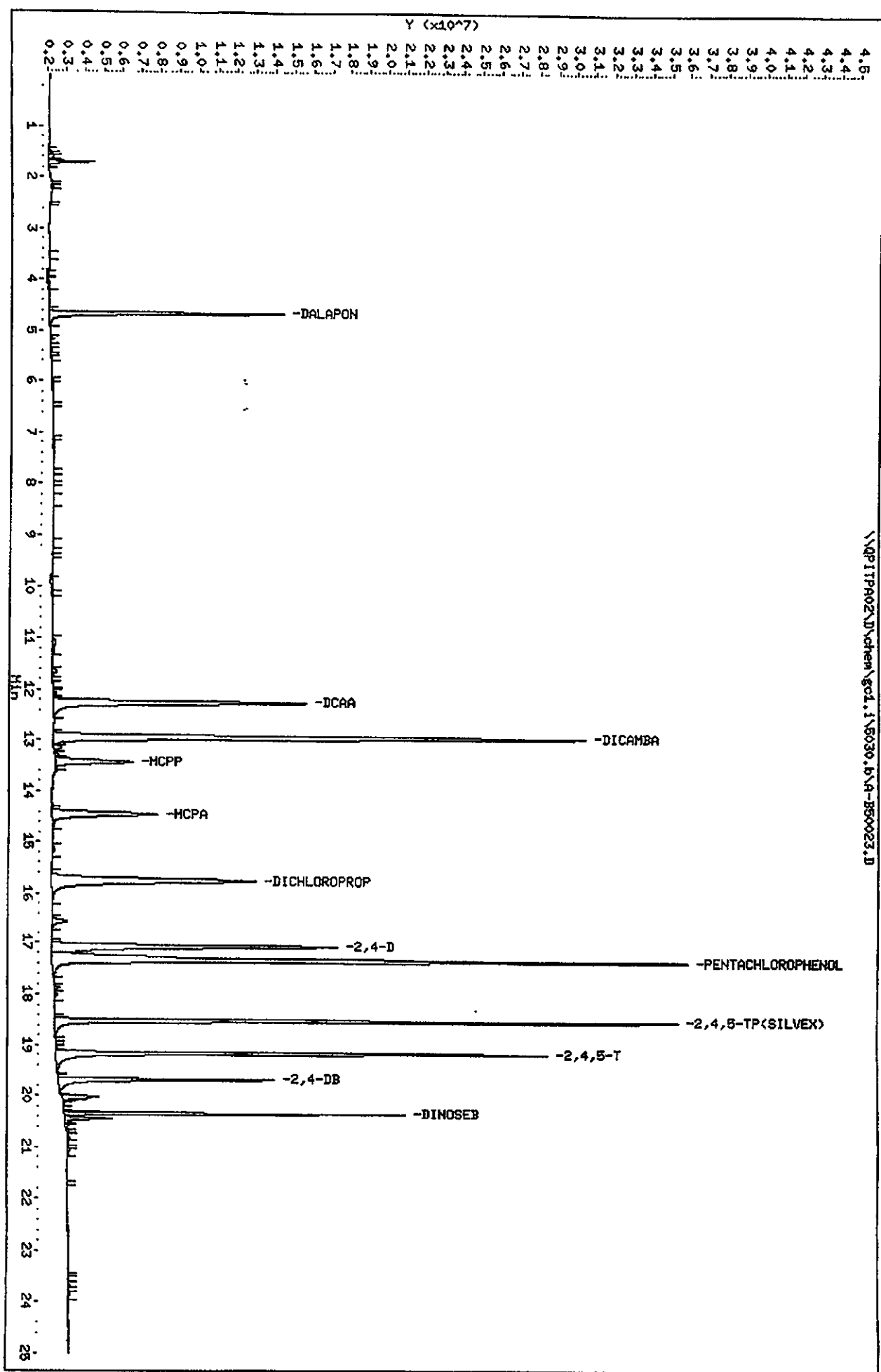
Data file : \\QPITPA02\D\chem\gc1.i\5030.b\A-B50023.D
Lab Smp Id: MHherb
Inj Date : 03-AUG-2000 17:38
Operator : 01797
Smp Info : MHherb,5030.b
Misc Info : 190-94-4
Comment :
Method : \\QPITPA02\D\chem\gc1.i\5030.b\LONGHB.m
Meth Date : 04-Aug-2000 09:45 eppingerd Quant Type: ESTD
Cal Date : 03-AUG-2000 16:11 Cal File: A-B50020.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC086

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
8 PENTACHLOROPHENOL	17.348	17.349	-0.001	33577722	0.02128	0.02169
1 DALAPON	4.662	4.661	0.001	12365498	0.08780	0.08316
\$ 2 DCAA	12.258	12.265	-0.007	65970578	0.17000	0.1612
3 DICAMBA	12.947	12.949	-0.002	28123311	0.08510	0.08436
4 MCPP	13.443	13.445	-0.002	4116101	17.0000	14.38
5 MCPA	14.444	14.450	-0.006	5566098	17.1000	15.31
6 DICHLOROPROP	15.750	15.751	-0.001	10760011	0.17000	0.1650
7 2,4-D	17.067	17.075	-0.008	15038600	0.17000	0.1793
9 2,4,5-TP(SILVEX)	18.511	18.512	-0.001	32974167	0.04210	0.04407
10 2,4,5-T	19.165	19.167	-0.002	25904042	0.04220	0.04592
11 2,4-DB	19.683	19.686	-0.003	11340515	0.16900	0.1856
12 DINOSEB	20.345	20.345	0.000	17965906	0.02540	0.02532

666 657

Data File: \APITPA02\chem\col.1\5030.b\A-B50023.D
 Date: 03-AUG-2000 17:38
 Client ID:
 Sample Info: Hhenb,5030.b
 Column phase: DB1701

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



STL Pittsburgh

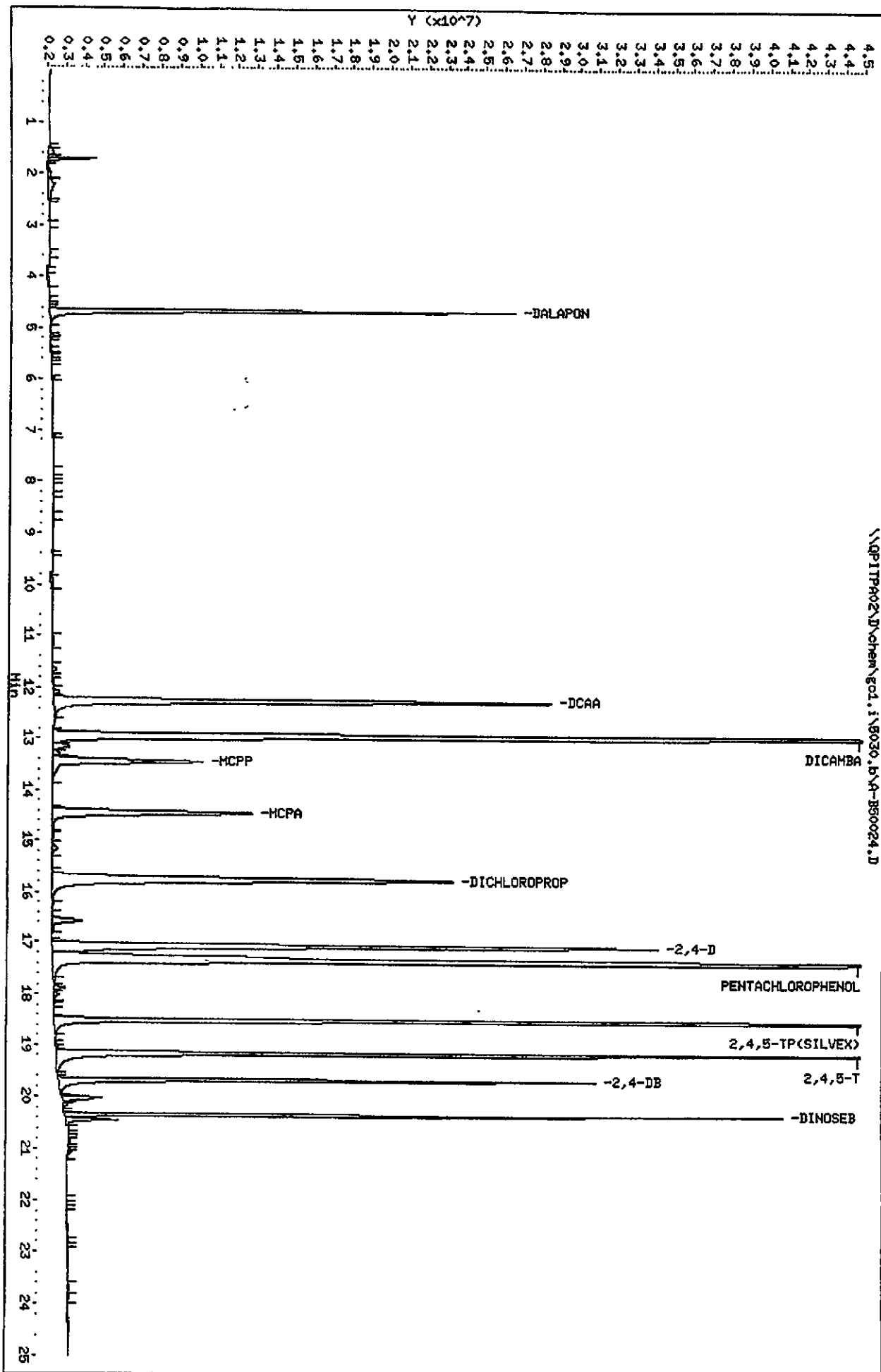
Data file : \\QPITPA02\D\chem\gc1.i\5030.b\A-B50024.D
Lab Smp Id: Hherb
Inj Date : 03-AUG-2000 18:07
Operator : 01797
Smp Info : Hherb,5030.b
Misc Info : 190-94-5
Comment :
Method : \\QPITPA02\D\chem\gc1.i\5030.b\LONGHB.m
Meth Date : 04-Aug-2000 09:46 eppingerd Quant Type: ESTD
Cal Date : 03-AUG-2000 18:07 Cal File: A-B50024.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon
Target Version: 4.04
Processing Host: PITPC086

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
8 PENTACHLOROPHENOL	17.349	17.349	0.000	69181429	0.04255	0.04468
1 DALAPON	4.662	4.661	0.001	24454176	0.17600	0.1644
\$ 2 DCAA	12.258	12.265	-0.007	125015550	0.34000	0.3055
3 DICAMBA	12.949	12.949	0.000	56021069	0.17000	0.1680
4 MCPP	13.445	13.445	0.000	7856343	34.1000	27.44
5 MCPA	14.449	14.450	-0.001	10530271	34.0000	28.96
6 DICHLOROPROP	15.750	15.751	-0.001	21014275	0.33900	0.3223
7 2,4-D	17.064	17.075	-0.011	31849822	0.34000	0.3798
9 2,4,5-TP(SILVEX)	18.510	18.512	-0.002	70227631	0.08400	0.09387
10 2,4,5-T	19.160	19.167	-0.007	59792185	0.08440	0.1060
11 2,4-DB	19.679	19.686	-0.007	28182291	0.33800	0.4612
12 DINOSEB	20.344	20.345	-0.001	37738825	0.05080	0.05319

659 666

Data File: \\QPI7P02\chem\gc1.i\5030.b\A-B50024.D
 Date: 03-AUG-2000 18:07
 Client ID:
 Sample Info: Herb, 5030.b
 Column phase: DB1701

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



STL Pittsburgh

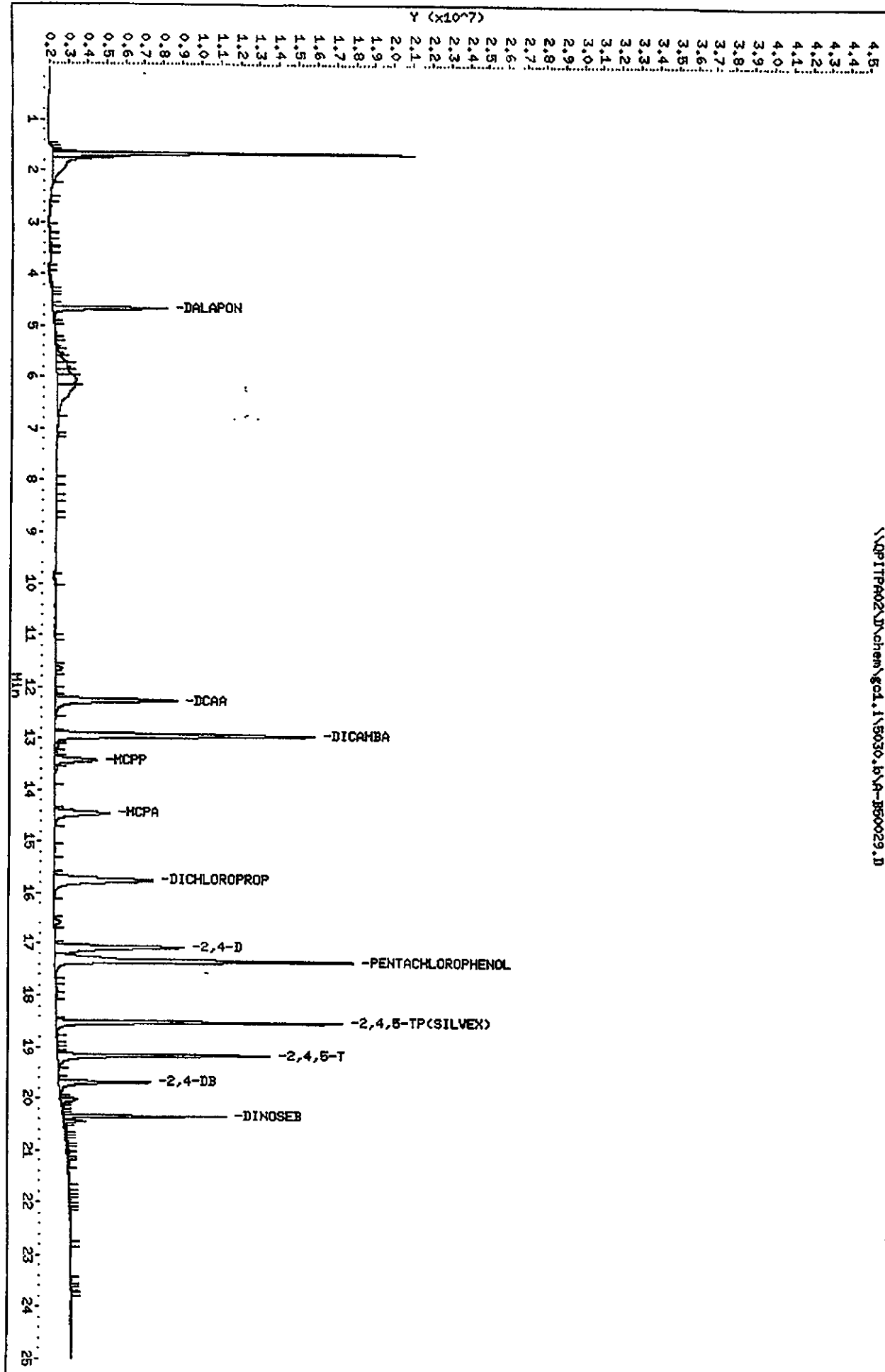
Data file : \\QPITPA02\D\chem\gc1.i\5030.b\A-B50029.D
Lab Smp Id: Mherb
Inj Date : 04-AUG-2000 09:53
Operator : 01797
Smp Info : Mherb,5030.b
Misc Info : 190-94-3
Comment :
Method : \\QPITPA02\D\chem\gc1.i\5030.b\LONGHB.m
Meth Date : 04-Aug-2000 11:31 eppingerd Quant Type: ESTD
Cal Date : 03-AUG-2000 18:07 Cal File: A-B50024.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC086

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS	
					CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	4.660	4.660	0.000	6059669	0.04390	0.04075
2 DCAA	12.261	12.261	0.000	32675466	0.08510	0.07984
3 DICAMBA	12.946	12.946	0.000	13567411	0.04250	0.04070
4 MCPP	13.441	13.441	0.000	2248231	8.52000	7.852
5 MCPA	14.443	14.443	0.000	2925335	8.56000	8.046
6 DICHLOROPROP	15.747	15.747	0.000	5226953	0.08480	0.08017
7 2,4-D	17.073	17.073	0.000	6843316	0.08510	0.08161
8 PENTACHLOROPHENOL	17.346	17.346	0.000	15587137	0.01064	0.01007
9 2,4,5-TP(SILVEX)	18.511	18.511	0.000	14976520	0.02110	0.02002
10 2,4,5-T	19.166	19.166	0.000	11087713	0.02110	0.01965
11 2,4-DB	19.685	19.685	0.000	4779521	0.08450	0.07822
12 DINOSEB	20.344	20.344	0.000	8561400	0.01270	0.01207

666 661

Data File: \\QPITPA02\chem\gcl.i\5030.b\A-B50029.D
Date: 04-AUG-2000 09:53
Client ID:
Sample Info: Herb, 5030.b
Column phase: DB1701

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



STL Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5030.b\A-B50045.D
Lab Smp Id: Mherb
Inj Date : 04-AUG-2000 17:32
Operator : 01797
Smp Info : Mherb,5030.b
Misc Info : 190-94-3
Comment :
Method : \\QPITPA02\D\chem\gc1.i\5030.b\LONGHB.m
Meth Date : 07-Aug-2000 08:31 eppingerd Quant Type: ESTD
Cal Date : 03-AUG-2000 18:07 Cal File: A-B50024.D
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC086

Compounds	AMOUNTS					
	RT	EXP RT	DLT RT	RESPONSE	CAL-AMT (ng)	ON-COL (ng)
1 DALAPON	4.660	4.660	0.000	6483372	0.04390	0.04360
2 DCAA	12.260	12.261	-0.001	35981517	0.08510	0.08792
3 DICAMBA	12.946	12.946	0.000	14559438	0.04250	0.04367
4 MCPP	13.438	13.441	-0.003	2443620	8.52000	8.534
5 MCPA	14.443	14.443	0.000	3142758	8.56000	8.644
6 DICHLOROPROP	15.750	15.747	0.003	5644555	0.08480	0.08657
7 2,4-D	17.073	17.073	0.000	7229290	0.08510	0.08621
8 PENTACHLOROPHENOL	17.346	17.346	0.000	16952173	0.01064	0.01095
9 2,4,5-TP(SILVEX)	18.511	18.511	0.000	16024271	0.02110	0.02142
10 2,4,5-T	19.167	19.166	0.001	11670756	0.02110	0.02069
11 2,4-DB	19.686	19.685	0.001	5073380	0.08450	0.08304
12 DINOSEB	20.343	20.344	-0.001	9101907	0.01270	0.01283

663 Data File: \\GPITPA02\N\chem\gc1.i\5030.b\A-350045.D
Date : 04-AUG-2000 17:32

666 Client ID:
Sample Info: Mherb,5030.b

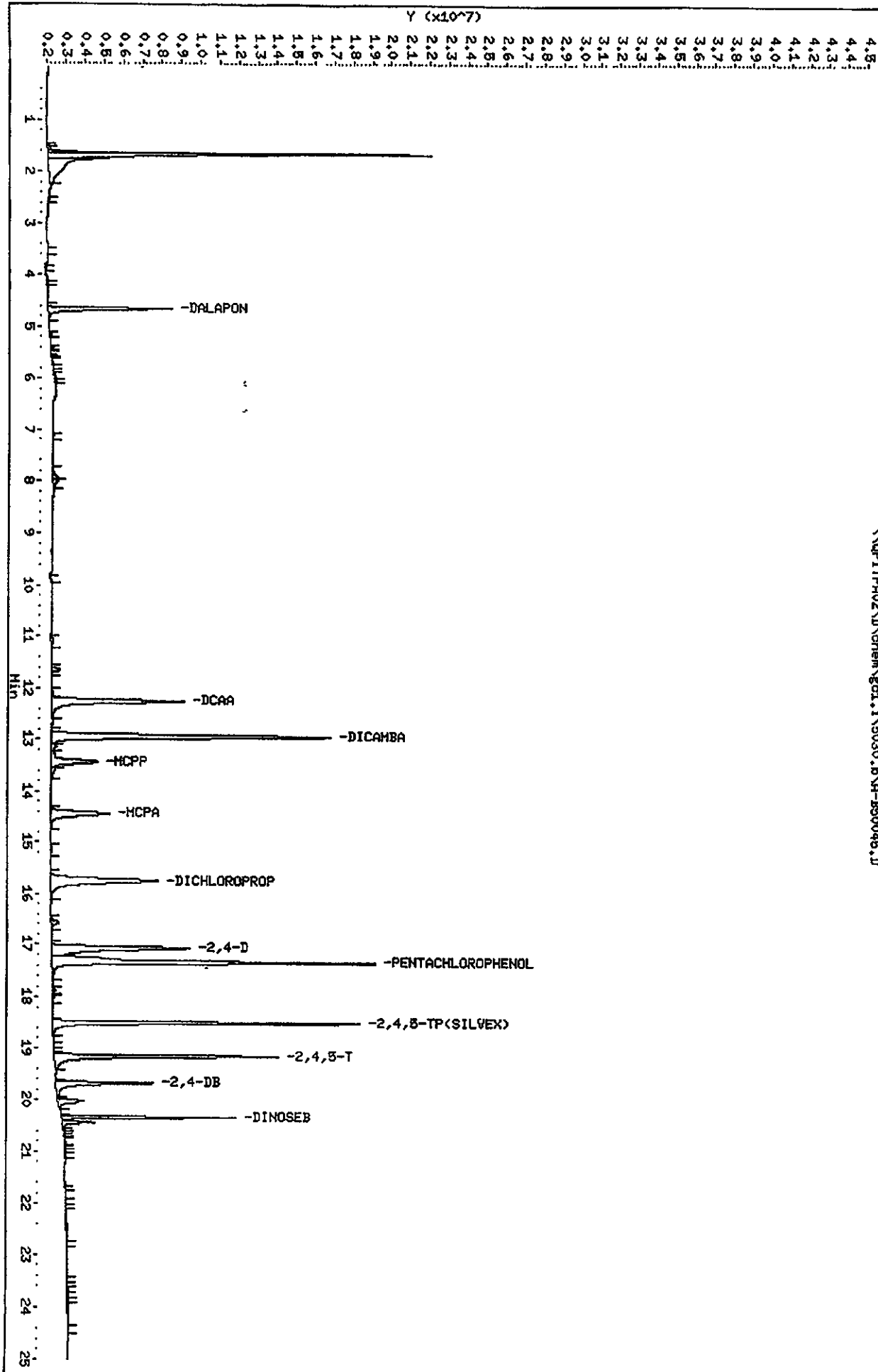
666 Column Phase: DB1701

Instrument: gc1.i

Operator: 021797

Column diameter: 0.53

\\GPITPA02\N\chem\gc1.i\5030.b\A-350045.D



HERBICIDE
QC DATA

666

664

666 665

UXB INTERNATIONAL
METHOD BLANK COMPOUNDS

666 665

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) WATER

Lab Sample ID: C0G310000 610

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 1000 / mL

Date Received: 07/27/00

Work Order: DH4LM101

Date Extracted: 07/31/00

Dilution factor: 1

Date Analyzed: 08/02/00

Moisture %: NA

QC Batch: 0213610

Client Sample Id: INTRA-LAB BLANK

CAS NO.	COMPOUND	CONCENTRATION UNITS:		Q
		(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

STL Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5020.b\A-A50025.D
 Lab Smp Id: DH4LM101 Client Smp ID: PBLK
 Inj Date : 02-AUG-2000 22:40
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DH4LM101,5020.b
 Misc Info : 270267BLK
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5020.b\LONGH.m
 Meth Date : 03-Aug-2000 14:19 eppingerd Quant Type: ESTD
 Cal Date : 02-AUG-2000 19:16 Cal File: A-A50018.D
 Als bottle: 13 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC086

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

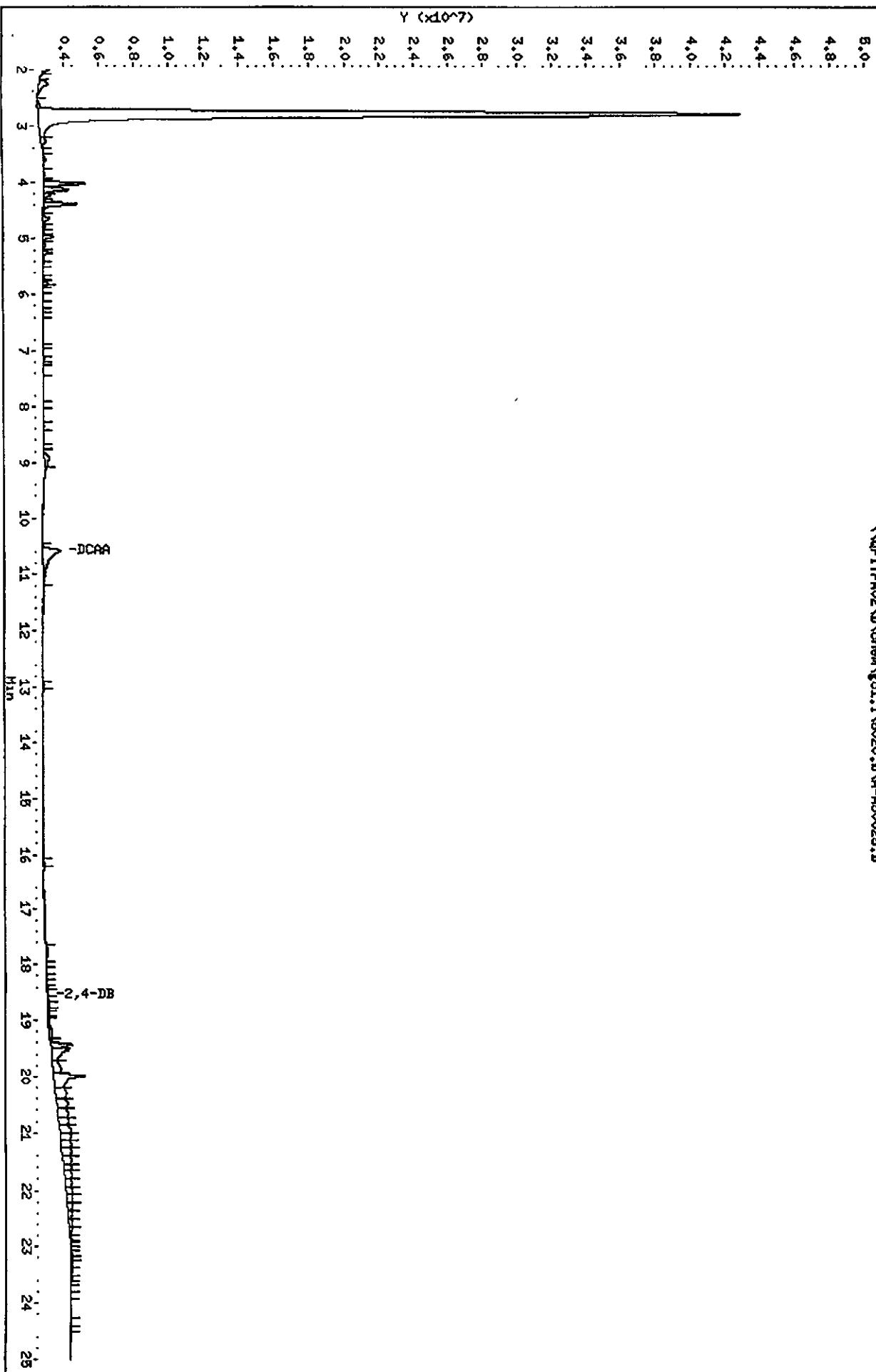
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON				Compound Not Detected.		
\$ 2 DCAA	10.582	10.571	0.011	12298012	0.04654	9.308
3 MCPP				Compound Not Detected.		
4 DICAMBA				Compound Not Detected.		
5 MCPA				Compound Not Detected.		
6 DICHLOROPROP				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	18.542	18.563	-0.021	195453	0.00150	0.2996

667 666

Data File: \\GPITPA02\chem\gc1.1\5020.b\A-AB0025.D
 Date : 02-AUG-2000 22:40
 Client ID: PLK
 Sample Info: DH4LH01.5020.b
 Volume Injected (uL): 1.0
 Column phase: DB608

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

\\GPITPA02\chem\gc1.1\5020.b\A-AB0025.D



STL Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5030.b\A-B50044.D
Lab Smp Id: DH4LM101 Client Smp ID: PBLK
Inj Date : 04-AUG-2000 17:03
Operator : 01797 Inst ID: gc1.i
Smp Info : DH4LM101,5030.b
Misc Info : 270302BLK
Comment :
Method : \\QPITPA02\D\chem\gc1.i\5030.b\LONGHB.m
Meth Date : 07-Aug-2000 08:31 eppingerd Quant Type: ESTD
Cal Date : 03-AUG-2000 18:07 Cal File: A-B50024.D
Als bottle: 17 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC086

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

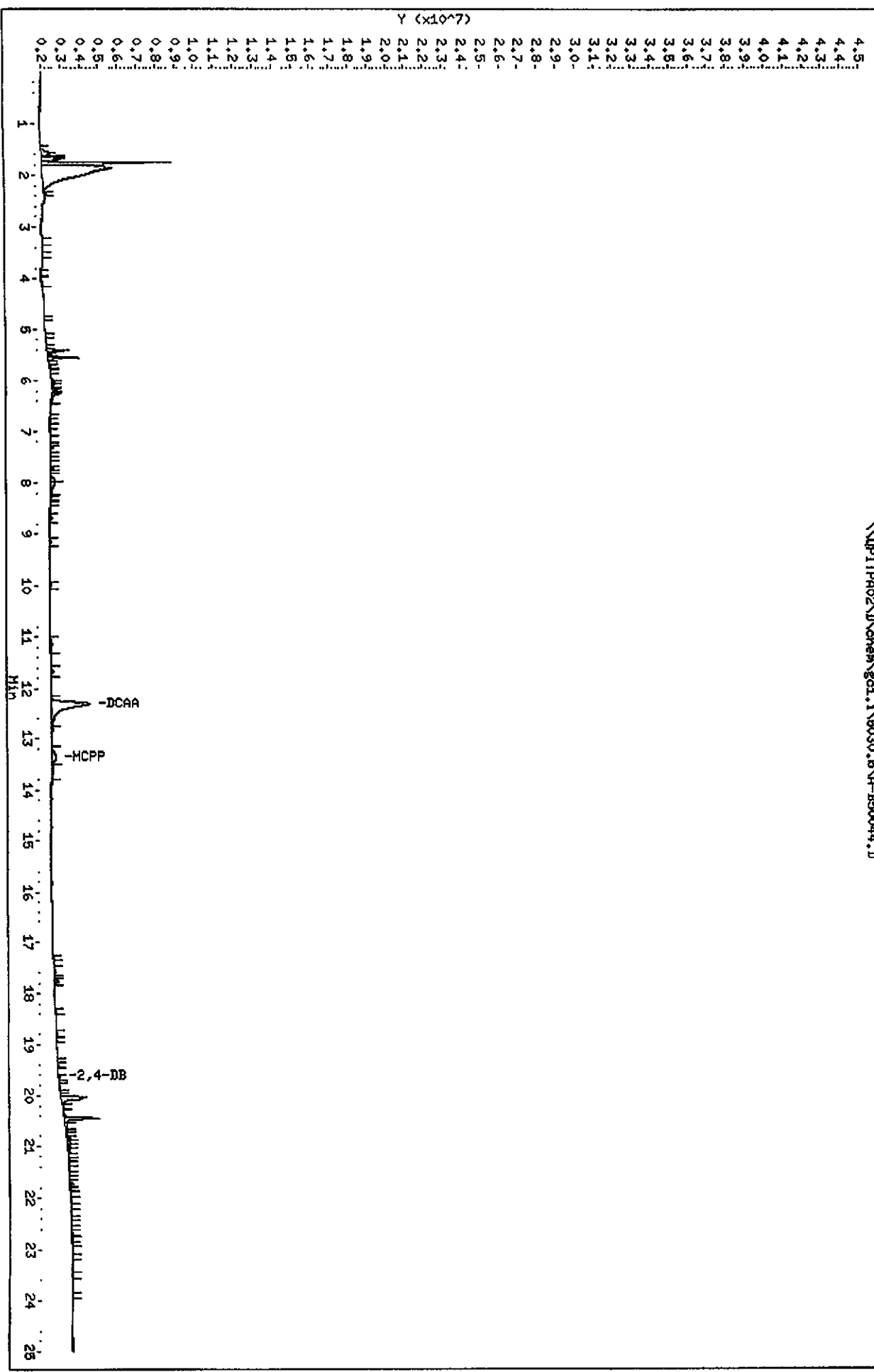
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON				Compound Not Detected.		
\$ 2 DCAA	12.300	12.261	0.039	19357385	0.04730	9.460
3 DICAMBA				Compound Not Detected.		
4 MCPP	13.373	13.441	-0.068	243775	0.85139	170.3
5 MCPA				Compound Not Detected.		
6 DICHLOROPROP				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 2,4-DB	19.632	19.685	-0.053	96792	0.00158	0.3168
12 DINOSEB				Compound Not Detected.		

69 Data File: \NPITPA02\B\chem\gcl.i\B030.b\A-B50044.D
 69 Date : 04-AUG-2000 17:03

69 Client ID: BLK
 69 Sample Info: DH4LH401,5030.b
 69 Volume Injected (uL): 1.0
 69 Column phase: DB1701

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

\\NPITPA02\B\chem\gcl.i\B030.b\A-B50044.D



UXB INTERNATIONAL
CHECK SAMPLE COMPOUNDS

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

Matrix: (soil/water) WATER

Lab Sample ID: COG310000 610

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 1000 / mL

Date Received: 07/27/00

Work Order: DH4LM102

Date Extracted: 07/31/00

Dilution factor: 1

Date Analyzed: 08/02/00

Moisture %: NA

QC Batch: 0213610

Client Sample Id: CHECK SAMPLE

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) ug/L	Q
94-75-7	2,4-D	16.7	
93-72-1	2,4,5-TP (Silvex)	4.12	
93-76-5	2,4,5-T	4.37	
87-86-5	Pentachlorophenol	2.24	

STL Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5020.b\A-A50026.D
 Lab Smp Id: DH4LM102 Client Smp ID: LCS
 Inj Date : 02-AUG-2000 23:09
 Operator : 01797 Inst ID: gc1.i
 Smp Info : DH4LM102,5020.b
 Misc Info : 270267LCS
 Comment :
 Method : \\QPITPA02\D\chem\gc1.i\5020.b\LONGH.m
 Meth Date : 03-Aug-2000 14:19 eppingerd Quant Type: ESTD
 Cal Date : 02-AUG-2000 19:16 Cal File: A-A50018.D
 Als bottle: 14 QC Sample: LCS
 Dil Factor: 1.00000
 Integrator: Falcon Compound Sublist: all.sub
 Target Version: 4.04
 Processing Host: PITPC086

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

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

Compounds	CONCENTRATIONS					
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON	3.732	3.730	0.002	3340318	0.03959	7.918
\$ 2 DCAA	10.572	10.571	0.001	14309665	0.05415	10.83
3 MCPP	11.010	11.010	0.000	3897373	9.28875	1858
4 DICAMBA	11.184	11.185	-0.001	7558422	0.04303	8.605
5 MCPA	11.971	11.968	0.003	4280397	9.04400	1809
6 DICHLOROPROP	12.799	12.805	-0.006	3151973	0.08759	17.52
7 2,4-D	14.310	14.314	-0.004	2604172	0.08339	16.68
8 PENTACHLOROPHENOL	15.533	15.536	-0.003	4904117	0.01118	2.236(R)
9 2,4,5-TP(SILVEX)	16.760	16.761	-0.001	28611140	0.02062	4.124
10 2,4,5-T	17.885	17.890	-0.005	19499296	0.02183	4.366
11 DINOSEB	18.063	18.060	0.003	10932247	0.00903	1.806
12 2,4-DB	18.562	18.563	-0.001	9862408	0.07558	15.12

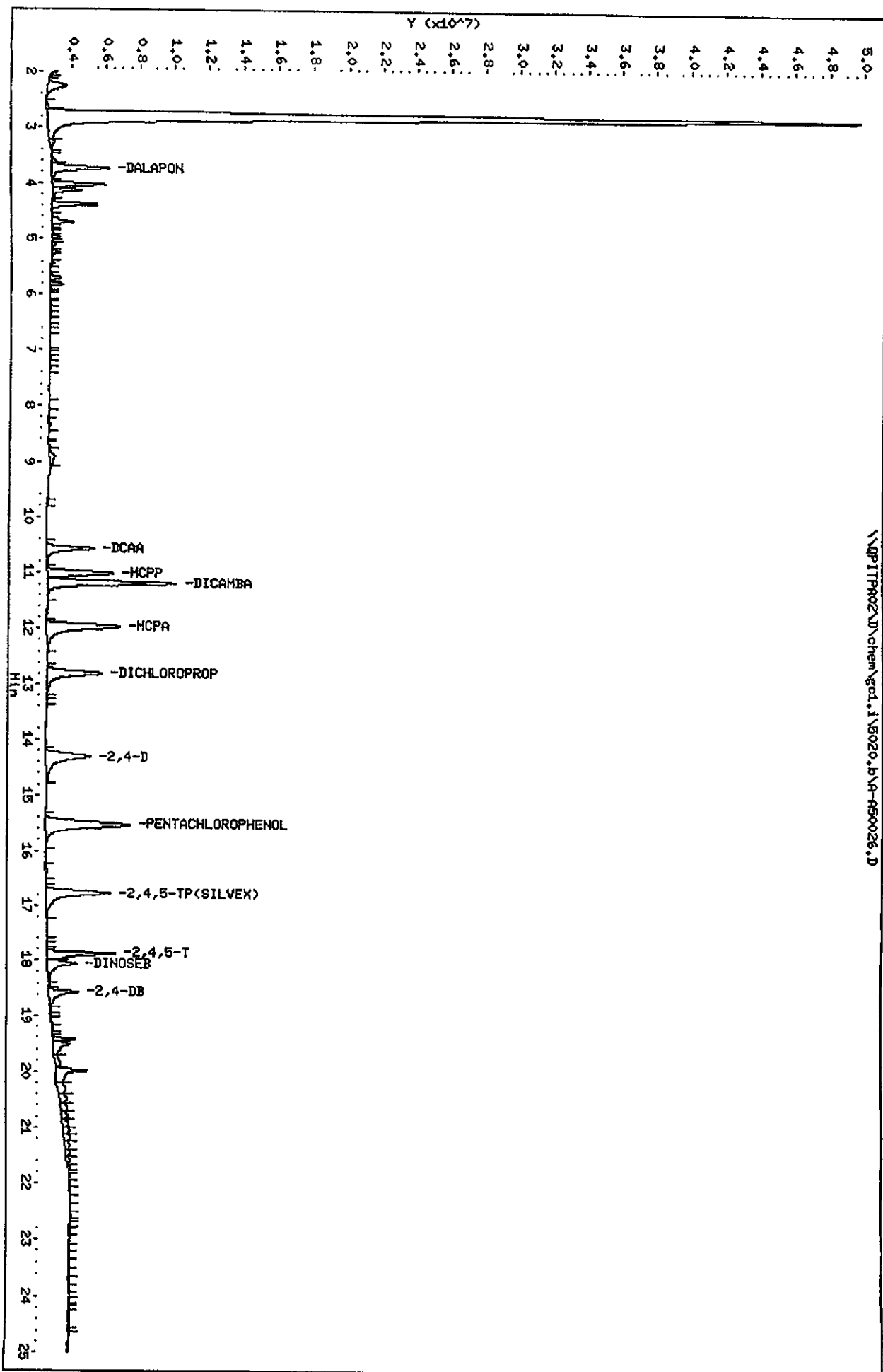
666 672

R - Spike/Surrogate failed recovery limits.

666 673

Data File: \QPI7P402\chem\gc1.1\5020.b\A-450026.D
 Date : 02-AUG-2000 23:09
 Client ID: LCS
 Sample Info: M4LH102,5020.b
 Volume Injected (uL): 1.0
 Column phase: DB608

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



UXB INTERNATIONAL
CHECK SAMPLE DUPLICATE COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc.

SDG Number:

Matrix: (soil/water) WATER

Lab Sample ID: COG310000 610

Method: SW846 8151A

Herbicides (8151A)

Sample WT/Vol: 1000 / mL

Date Received: 07/27/00

Work Order: DH4LM103

Date Extracted: 07/31/00

Dilution factor: 1

Date Analyzed: 08/02/00

Moisture %: NA

QC Batch: 0213610

Client Sample Id: DUPLICATE CHECK

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/kg) ug/L	Q
94-75-7	2,4-D	14.4	
93-72-1	2,4,5-TP (Silvex)	3.76	
93-76-5	2,4,5-T	3.88	
87-86-5	Pentachlorophenol	1.98	

STL Pittsburgh

Data file : \\QPITPA02\D\chem\gc1.i\5020.b\A-A50027.D
Lab Smp Id: DH4LM103 Client Smp ID: LCSD
Inj Date : 02-AUG-2000 23:38
Operator : 01797 Inst ID: gc1.i
Smp Info : DH4LM103,5020.b
Misc Info : 270267LCD
Comment :
Method : \\QPITPA02\D\chem\gc1.i\5020.b\LONGH.m
Meth Date : 03-Aug-2000 14:19 eppingerd Quant Type: ESTD
Cal Date : 02-AUG-2000 19:16 Cal File: A-A50018.D
Als bottle: 15 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: all.sub
Target Version: 4.04
Processing Host: PITPC086

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

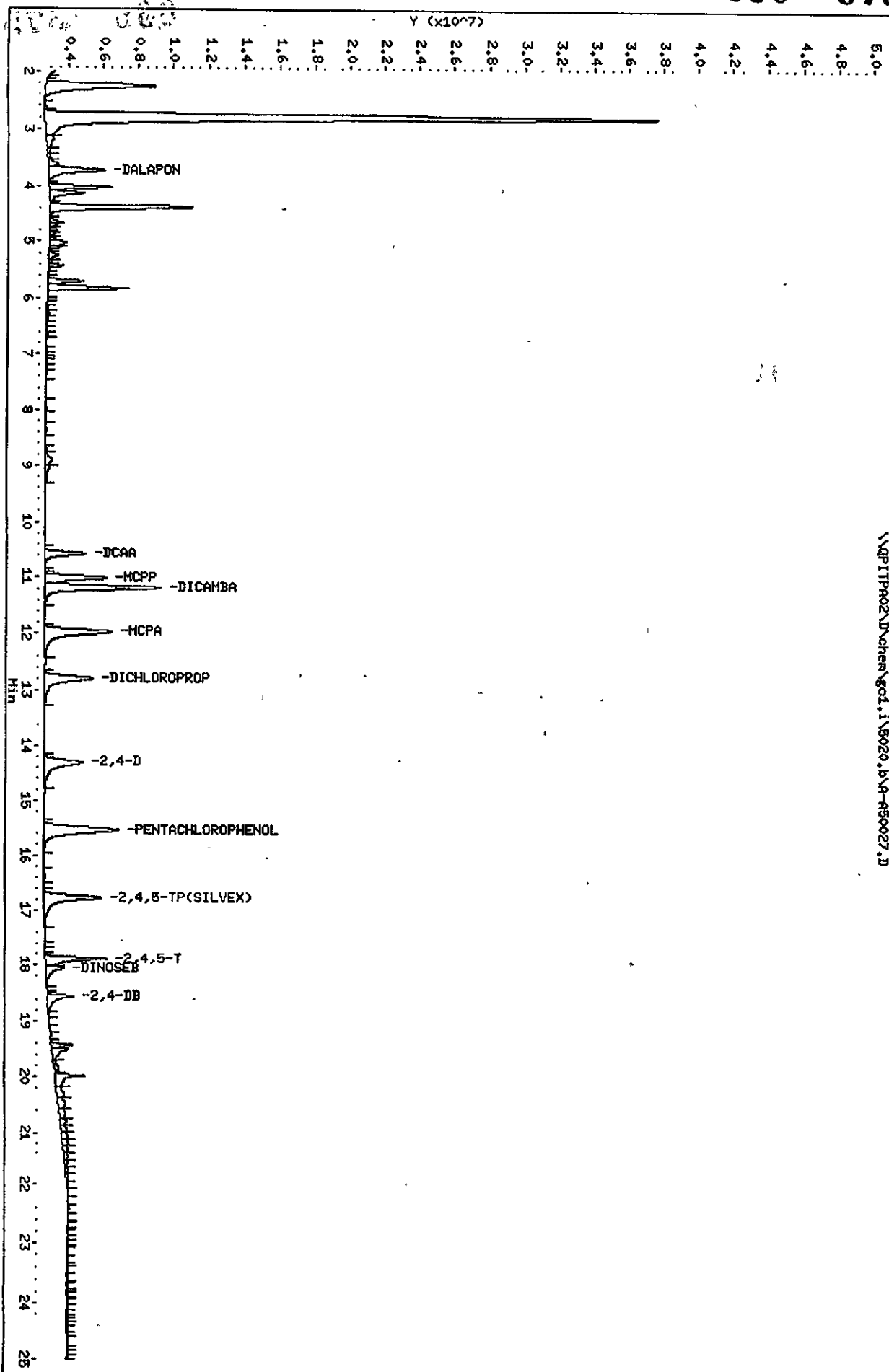
Name	Value	Description
DF	1.000	Dilution Factor
Vt	10000.000	Volume of final extract (uL)
Vo	1000.000	Volume of sample extracted (mL)
Vi	1.000	Volume injected

Compounds					CONCENTRATIONS	
	RT	EXP RT	DLT RT	RESPONSE	ON-COLUMN (ng)	FINAL (ug/L)
1 DALAPON	3.730	3.730	0.000	3261291	0.03865	7.730
2 DCAA	10.574	10.571	0.003	13015220	0.04925	9.850
3 MCPP	11.012	11.010	0.002	3565056	8.49672	1699
4 DICAMBA	11.187	11.185	0.002	6723903	0.03827	7.655
5 MCPA	11.974	11.968	0.006	3917656	8.27756	1656
6 DICHLOROPROP	12.804	12.805	-0.001	2752708	0.07649	15.30
7 2,4-D	14.308	14.314	-0.006	2243406	0.07184	14.37
8 PENTACHLOROPHENOL	15.538	15.536	0.002	4348775	0.00992	1.983
9 2,4,5-TP(SILVEX)	16.761	16.761	0.000	26094851	0.01881	3.762
10 2,4,5-T	17.888	17.890	-0.002	17324157	0.01940	3.879
11 DINOSEB	18.059	18.060	-0.001	7538969	0.00623	1.246
12 2,4-DB	18.564	18.563	0.001	8748711	0.06705	13.41

Data File: \\PITPA02\chem\gc1.i\5020.b\4-850027.D
Date : 02-AUG-2000 23:38
Client ID: LCSD
Sample Info: DM4LH03,5020.b
Volume Injected (uL): 1.0
Column phase: DB608

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

\\PITPA02\chem\gc1.i\5020.b\4-850027.D



666 677

**HERBICIDE
MISCELLANEOUS**

Separatory Funnel Extraction Worksheet

2018 8-22-20

B#0213610

666 678

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

[illegible]

Created: DE 8-2-00

666 679

Sequence Table (Front Injector):

Vial Information Part:

Line	Vial	Vial Information
1	1	8151 HERB ANALYSIS
2	2	190-94-1 (14)
3	3	190-94-2
4	4	190-94-3
5	5	190-94-4
6	6	190-94-5
7	7	270267001
8	8	270275001 (20)
9	9	~~270302001~~ 1000X 10X DE 8/3/00
10	10	280179001
11	11	290120001
12	12	270298008
13	13	270267BLK (25)
14	14	270267LCS
15	15	270267LCD
16	16	190-94-3

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Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	HEXANE	HERB	1	Sample		
2	2	Lherb, 5020.b	HERB	1	Sample		
3	3	MLherb, 5020.b	HERB	1	Sample		
4	4	Mherb, 5020.b	HERB	1	Sample		
5	5	MHherb, 5020.b	HERB	1	Sample		
6	6	Hherb, 5020.b	HERB	1	Sample		
7	7	DGXCX11D, 5020.b	HERB	1	Sample		
8	8	DGXF111D, 5020.b	HERB	1	Sample		
9	9	DGXL3112, 5020.b	HERB	1	Sample		
10	10	DH13G11D, 5020.b	HERB	1	Sample		
11	11	DH2KE10N, 5020.b	HERB	1	Sample		
12	12	DGXXK10W, 5020.b	HERB	1	Sample		
13	13	DH4LM101, 5020.b	HERB	1	Sample		

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Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
14	14	DH4LM102,5020.b	HERB	1	Sample		
15	15	DH4LM103,5020.b	HERB	1	Sample		
16	16	Mherb,5020.b	HERB	1	Sample		

Sequence Table (Back Injector):

Vial Information Part:

Line	Vial	Vial Information

1	100	8151 HERB ANALYSIS
2	1	RINSE
3	2	190-94-1
4	3	190-94-2
5	4	190-94-3
6	5	190-94-4
7	6	190-94-5
8	7	270267001
9	8	270275001
10	9	270302001
11	10	280179001
12	11	290120001
13	12	270298008
14	13	270267BLK
15	14	270267LCS
16	15	270267LCD
17	16	190-94-3

DE
8200

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	100	HEXANE	HERBA	1	Sample		
2	1	HEXANE	HERBA	1	Sample		
3	2	Lherb,5020A.b	HERBA	1	Sample		
4	3	MLherb,5020A.b	HERBA	1	Sample		
5	4	Mherb,5020A.b	HERBA	1	Sample		

Sequence Table (Front Injector):

No entries - empty table!

Contd: DE 8-3-00

Sequence Table (Back Injector):

Vial Information Part:

Line Vial Vial Information

Line	Vial	Vial Information
1	1	8151 HERB ANALYSIS
2	2	190-94-1 <i>70</i>
3	3	190-94-2
4	4	190-94-3
5	5	190-94-4
6	6	190-94-5
7	7	~~270302001 X10~~ <i>DE 8-3-00</i>
8	8	~~270267BLK~~ <i>VOID</i>
9	9	190-94-3

Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	HEXANE	HERBA	1	Sample		
2	2	Lherb,5030.b	HERBA	1	Sample		
3	3	MLherb,5030.b	HERBA	1	Sample		
4	4	Mherb,5030.b	HERBA	1	Sample		
5	5	MHherb,5030.b	HERBA	1	Sample		
6	6	Hherb,5030.b	HERBA	1	Sample		
7	7	DGXL3112,5030.b	HERBA	1	Sample		
8	8	DH4LM101,5030.b	HERBA	1	Sample		
9	9	Mherb,5030.b	HERBA	1	Sample		

666 682

10-~~Created~~: 02-8-4-00

Sequence Table (Front Injector):

No entries - empty table!

B

Sequence Table (Back Injector):

Vial Information Part:

Line	Vial	Vial Information
1	1	8151 HERB ANALYSIS
2	2	190-94-3 25
3	3	010136001
4	4	010136002
5	5	010136003
6	6	010136003S
7	7	010136003D
8	8	010136004 35
9	9	010136005
10	10	010136006
11	11	010136007
12	12	010136008
13	13	010136009 40
14	14	010136BLK
15	15	010136LCS
16	16	270302001 X100
17	17	270302BLK
18	18	190-94-3 45

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Method and Injection Info Part:

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	1	HEXANE	HERBA	1	Sample		
2	2	Mherb,5030.b	HERBA	1	Sample		
3	3	DH502102,5030.b	HERBA	1	Sample		
4	4	DH507102,5030.b	HERBA	1	Sample		

Line	Vial	SampleName	Method	Inj	SampleType	InjVolume	DataFile
====	====	=====	=====	===	=====	=====	=====
5	5	DH508103,5030.b	HERBA	1	Sample	666	683
6	6	DH508104,5030.b	HERBA	1	Sample		
7	7	DH508105,5030.b	HERBA	1	Sample		
8	8	DH50A103,5030.b	HERBA	1	Sample		
9	9	DH50D103,5030.b	HERBA	1	Sample		
10	10	DH50F103,5030.b	HERBA	1	Sample		
11	11	DH50G103,5030.b	HERBA	1	Sample		
12	12	DH50K103,5030.b	HERBA	1	Sample		
13	13	DH50L103,5030.b	HERBA	1	Sample		
14	14	DH8H0101,5030.b	HERBA	1	Sample		
15	15	DH8H0102,5030.b	HERBA	1	Sample		
16	16	DGXL3112,5030.b	HERBA	1	Sample		
17	17	DH4LM101,5030.b	HERBA	1	Sample		
18	18	Mherb;5030.b	HERBA	1	Sample		

REQUESTED BY: YUSHINSKI
(-000 000)

METHOD: QS Herbicides (8151A)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
13A, CLP1	DGXCX-1-1D	___	254863	416241	I-0A-QS	COG270267	001		WATER	0	22
13A, CLP1	DGXF1-1-1D	___	254864	416241	I-0A-QS	COG270275	001		WATER	0	21
12D CLP1	DGXL3-1-12	___	254862	399411	I-0A-QS	COG270302	001		WATER	0	13
14A CLP1	DH13G-1-1D	___	254865	416241	I-0A-QS	COG280179	001		WATER	0	21
15B CLP1	DH2KE-1-0N	___	254867	413032	I-64-QS	COG290120	001		WATER	0	18
2M3,CS2B,SUB	DGXXK-1-0W	___	254866	367697	I-0A-QS	HOG270298	008		WATER	0	6

RELINQUISHED BY

RECEIVED BY

DATE/TIME

Yushinski
YushinskiYushinski
Yushinski7-31-00 1541
7-31-00 2200

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

METALS DATA

STL-Pittsburgh

Cover Page - Inorganic Analysis Data Package

Client ID	Lab Sample ID:
DF/S1/0208/IDW/002	DGXL3
DF/S1/0208/IDW/002D	DGXL3D
DF/S1/0208/IDW/002S	DGXL3S

Comments: UXB, DUNN FIELD
C0G270302
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: _____

100 000

666 687

**METALS
RESULTS**

188 888

STL-Pittsburgh

666 688

Metals Data Reporting Form

Sample Results

Lab Sample ID: DGXL3 Client ID: DF/S1/0208/IDW/002
 Matrix: Water Units: ug/L Prep Date: 7/28/00 Prep Batch: 0210102
 Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.045	0.20	0.40		1	CVAA	7/28/00	12:03

Comments: Lot #: C0G270302 Sample #: 1

Version 3.63.5

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: DGXL3 Client ID: DF/S1/0208/IDW/002
 Matrix: Water Units: ug/L Prep Date: 7/28/00 Prep Batch: 0210106
 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	376		1	ICP	7/29/00	12:32
Antimony	220.35	1.5	60.0	12.1	B	1	ICPST	7/30/00	13:13
Arsenic	189.04	2.6	10.0	4.2	B	1	ICPST	7/30/00	13:13
Barium	493.41	0.41	200	120	B	1	ICP	7/29/00	12:32
Beryllium	313.04	0.071	5.0	0.12	B	1	ICP	7/29/00	12:32
Cadmium	226.50	0.49	5.0	0.77	B	1	ICPST	7/30/00	13:13
Calcium	317.93	37.9	5000	34500		1	ICP	7/29/00	12:32
Chromium	267.72	1.0	10.0	49.2		1	ICPST	7/30/00	13:13
Cobalt	228.62	3.2	50.0	3.2	U	1	ICP	7/29/00	12:32
Copper	324.75	2.2	25.0	18.9	B	1	ICP	7/29/00	12:32
Iron	259.94	8.8	100	428		1	ICP	7/29/00	12:32
Lead	220.35	1.9	3.0	1.9	U	1	ICPST	7/30/00	13:13
Magnesium	279.08	19.9	5000	9060		1	ICP	7/29/00	12:32
Manganese	257.61	0.87	15.0	43.4		1	ICP	7/29/00	12:32
Nickel	231.60	6.1	40.0	6.1	U	1	ICP	7/29/00	12:32
Potassium	766.49	496	5000	4150	B	1	ICP	7/29/00	12:32
Selenium	220.35	2.1	5.0	2.1	U	1	ICPST	7/30/00	13:13
Silver	328.07	0.94	5.0	1.6	B	1	ICPST	7/30/00	13:13
Sodium	589	72.5	25000	1000000		5	ICP	7/29/00	12:47
Thallium	190.86	3.9	10.0	7.9	B	1	ICPST	7/30/00	13:13
Vanadium	292.40	1.8	50.0	2.7	B	1	ICP	7/29/00	12:32
Zinc	213.86	3.1	20.0	67.3		1	ICP	7/29/00	12:32

Comments: Lot #: C0G270302 Sample #: 1

Version 3.63.5

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

Form 1 Equivalent

080 000

STL-Pittsburgh

666 690

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: CVAA

Units: ug/L

Chart Number: 0728HGA.PRN

Acceptable Range: 80% - 120%

Standard Source: Ultra

Standard ID: 0014-198-5

Element	WL/ Mass	True Conc	ICV5-1 7/28/00 10:21 AM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	2.5	2.63	105.2								

Initial Calibration Verification Standard

Instrument: ICPUnits: ug/LChart Number: J00729A.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0014-148-7

Element	WL/ Mass	True Conc	ICV2-1 7/29/00 8:37 AM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	25000.0	25312.15	101.2								
Barium	493.409	1000.0	992.37	99.2								
Beryllium	313.042	1000.0	974.84	97.5								
Calcium	317.933	25000.0	25574.37	102.3								
Cobalt	228.616	1000.0	998.31	99.8								
Copper	324.754	1000.0	984.53	98.5								
Iron	259.94	25000.0	26188.59	104.8								
Magnesium	279.079	25000.0	25397.72	101.6								
Manganese	257.61	1000.0	1003.96	100.4								
Nickel	231.604	1000.0	1002.81	100.3								
Potassium	766.491	25000.0	24492.65	98.0								
Sodium	588.995	25000.0	24927.28	99.7								
Vanadium	292.402	1000.0	987.64	98.8								
Zinc	213.856	1000.0	996.78	99.7								

100 800

STL-Pittsburgh

666 692

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICPSTUnits: ug/LChart Number: T00730A.ARCAcceptable Range: 90% - 110%Standard Source: Inorganic VenturesStandard ID: 0014-183-4

Element	WL/ Mass	True Conc	ICV3-1 7/30/00 11:15 AM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	220.353	250.0	252.86	101.1								
Arsenic	189.042	250.0	254.94	102.0								
Cadmium	226.502	250.0	250.15	100.1								
Chromium	267.716	1000.0	1020.92	102.1								
Lead	220.353	250.0	252.74	101.1								
Selenium	220.353	250.0	254.50	101.8								
Silver	328.068	500.0	506.03	101.2								
Thallium	190.864	500.0	518.25	103.6								

STL-Pittsburgh
Metals Data Reporting Form

666 693

Continuing Calibration Verification

Instrument: CVAA

Units: ug/L

Chart Number: 0728HGA.PRN

Acceptable Range: 80% - 120%

Standard Source: Inorganic Ventures

Standard ID: 0014-198-6

Element	WL/ Mass	True Conc	CCV5-1 7/28/00 10:23 AM		CCV5-2 7/28/00 10:44 AM		CCV5-3 7/28/00 11:05 AM		CCV5-4 7/28/00 11:28 AM		CCV5-5 7/28/00 11:50 AM	
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	5.0	5.16	103.2	5.36	107.2	5.40	108.0	5.41	108.2	5.37	107.4

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STL-Pittsburgh

666 694

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAA

Units: ug/L

Chart Number: 0728HGA.PRN

Acceptable Range: 80% - 120%

Standard Source: Inorganic Ventures

Standard ID: 0014-198-6

			CCV5-6 7/28/00 12:04 PM							
Element	WL/ Mass	True Conc	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	5.0	5.37	107.4						

STL-Pittsburgh
Metals Data Reporting Form

666 695

Continuing Calibration Verification

Instrument: ICP

Units: ug/L

Chart Number: J00729A.ARC

Acceptable Range: 90% - 110%

Standard Source: Inorganic Ventures

Standard ID: 0014-195-2

Element	WL/ Mass	True Conc	CCV2-1 7/29/00 9:17 AM		CCV2-2 7/29/00 9:45 AM		CCV2-3 7/29/00 10:23 AM		CCV2-4 7/29/00 11:01 AM		CCV2-5 7/29/00 11:40 AM	
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	50000.0	50161.69	100.3	50546.89	101.1	49831.84	99.7	49749.95	99.5	50464.08	100.9
Barium	493.409	5000.0	4909.83	98.2	4952.24	99.0	4865.29	97.3	4859.15	97.2	4972.29	99.4
Beryllium	313.042	5000.0	4949.04	99.0	5009.46	100.2	4986.71	99.7	5019.20	100.4	5123.78	102.5
Calcium	317.933	50000.0	51240.98	102.5	51857.97	103.7	51728.03	103.5	51658.62	103.3	52428.76	104.9
Cobalt	228.616	5000.0	4987.86	99.8	5051.59	101.0	5026.09	100.5	5022.46	100.4	5092.16	101.8
Copper	324.754	5000.0	4915.21	98.3	4955.93	99.1	4892.31	97.8	4895.28	97.9	4978.70	99.6
Iron	259.94	50000.0	51912.96	103.8	52470.50	104.9	52071.85	104.1	51941.99	103.9	52629.96	105.3
Magnesium	279.079	50000.0	50256.18	100.5	50646.49	101.3	50025.16	100.1	50076.20	100.2	50781.65	101.6
Manganese	257.61	5000.0	4975.44	99.5	5027.95	100.6	4991.86	99.8	4982.25	99.6	5048.13	101.0
Nickel	231.604	5000.0	4987.64	99.8	5038.38	100.8	5002.35	100.0	5020.56	100.4	5146.18	102.9
Potassium	766.491	50000.0	49901.58	99.8	50319.27	100.6	49118.69	98.2	49144.94	98.3	50052.48	100.1
Sodium	588.995	50000.0	50027.47	100.1	50422.55	100.8	49271.37	98.5	49156.02	98.3	50289.50	100.6
Vanadium	292.402	5000.0	4972.22	99.4	5029.04	100.6	5001.72	100.0	4995.02	99.9	5079.79	101.6
Zinc	213.856	5000.0	4982.33	99.6	5046.03	100.9	5000.26	100.0	4983.58	99.7	5019.22	100.4

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666 696

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICP

Units: ug/L

Chart Number: J00729A.ARC

Acceptable Range: 90% - 110%

Standard Source: Inorganic Ventures

Standard ID: 0014-195-2

Element	WL/ Mass	True Conc	CCV2-6 7/29/00 12:18 PM		CCV2-7 7/29/00 1:00 PM					
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Aluminum	308.215	50000.0	49390.59	98.8	49297.48	98.6				
Barium	493.409	5000.0	4828.21	96.6	4816.79	96.3				
Beryllium	313.042	5000.0	5010.41	100.2	5012.54	100.3				
Calcium	317.933	50000.0	52334.44	104.7	52090.54	104.2				
Cobalt	228.616	5000.0	5045.97	100.9	5027.06	100.5				
Copper	324.754	5000.0	4836.77	96.7	4832.14	96.6				
Iron	259.94	50000.0	51831.59	103.7	51602.33	103.2				
Magnesium	279.079	50000.0	49747.95	99.5	49805.19	99.6				
Manganese	257.61	5000.0	4988.26	99.8	4968.57	99.4				
Nickel	231.604	5000.0	5087.32	101.7	5109.19	102.2				
Potassium	766.491	50000.0	48674.77	97.3	48641.96	97.3				
Sodium	588.995	50000.0	48848.13	97.7	48807.26	97.6				
Vanadium	292.402	5000.0	5009.40	100.2	4989.33	99.8				
Zinc	213.856	5000.0	4970.11	99.4	4961.01	99.2				

STL-Pittsburgh
Metals Data Reporting Form

666 697

Continuing Calibration Verification

Instrument: ICPST

Units: ug/L

Chart Number: T00730A.ARC

Acceptable Range: 90% - 110%

Standard Source: Inorganic Ventures

Standard ID: 0014-183-1

Element	WL/ Mass	True Conc	CCV3-1 7/30/00 12:07 PM		CCV3-2 7/30/00 12:56 PM		CCV3-3 7/30/00 1:46 PM					
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	220.353	500.0	514.02	102.8	506.24	101.2	506.83	101.4				
Arsenic	189.042	500.0	512.86	102.6	503.24	100.6	502.48	100.5				
Cadmium	226.502	500.0	495.57	99.1	486.35	97.3	484.28	96.9				
Chromium	267.716	2000.0	2042.04	102.1	2001.74	100.1	1996.18	99.8				
Lead	220.353	500.0	512.32	102.5	505.48	101.1	503.22	100.6				
Selenium	220.353	500.0	523.77	104.8	515.18	103.0	513.90	102.8				
Silver	328.068	1000.0	1032.74	103.3	1011.46	101.1	1009.32	100.9				
Thallium	190.864	1000.0	1038.80	103.9	1018.15	101.8	1017.67	101.8				

700 100

STL-Pittsburgh

666 698

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0728HGA.PRN

Standard Source: _____

Standard ID: _____

			ICB1 7/28/00 10:22 AM					
Element	WL/ Mass	Report Limit	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.1	B				

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00729A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 7/29/00 8:40 AM							
			Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	308.215	200	12.7	U						
Barium	493.409	200	0.4	U						
Beryllium	313.042	5	0.2	B						
Calcium	317.933	5000	37.9	U						
Cobalt	228.616	50	3.2	U						
Copper	324.754	25	2.2	U						
Iron	259.94	100	8.8	U						
Magnesium	279.079	5000	19.9	U						
Manganese	257.61	15	0.9	U						
Nickel	231.604	40	6.1	U						
Potassium	766.491	5000	496.0	U						
Sodium	588.995	5000	14.5	U						
Vanadium	292.402	50	1.8	U						
Zinc	213.856	20	3.1	U						

666 700
800 800

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPST

Units: ug/L

Chart Number: T00730A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICBI 7/30/00 11:19 AM							
			Found	Q	Found	Q	Found	Q	Found	Q
Antimony	220.353	60	1.5	U						
Arsenic	189.042	10	2.6	U						
Cadmium	226.502	5	0.5	U						
Chromium	267.716	10	1.0	U						
Lead	220.353	3	1.9	U						
Selenium	220.353	5	2.1	U						
Silver	328.068	5	0.9	U						
Thallium	190.864	10	3.9	U						

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0728HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 7/28/00 10:25 AM	CCB2 7/28/00 10:46 AM	CCB3 7/28/00 11:06 AM	CCB4 7/28/00 11:29 AM	CCB5 7/28/00 11:53 AM
			Found Q	Found Q	Found Q	Found Q	Found Q
Mercury	253.7	0.2	0.0 U	0.1 B	0.1 B	0.1 B	0.1 B

10666 28802

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAA

Units: ug/L

Chart Number: 0728HGA.PRN

Standard Source: _____

Standard ID: _____

			CCB6 7/28/00 12:06 PM					
Element	WL/ Mass	Report Limit	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.1	B				

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00729A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 7/29/00 9:20 AM	CCB2 7/29/00 9:48 AM	CCB3 7/29/00 10:26 AM	CCB4 7/29/00 11:05 AM	CCB5 7/29/00 11:43 AM
			Found Q	Found Q	Found Q	Found Q	Found Q
Aluminum	308.215	200	12.7 U	12.7 U	12.7 U	32.4 B	12.7 U
Barium	493.409	200	0.4 U	0.4 U	1.2 B	3.2 B	0.4 U
Beryllium	313.042	5	0.3 B	0.2 B	1.4 B	2.8 B	0.6 B
Calcium	317.933	5000	37.9 U	37.9 U	37.9 U	37.9 U	37.9 U
Cobalt	228.616	50	3.2 U	3.2 U	3.2 U	3.2 U	-3.2 B
Copper	324.754	25	2.2 U	2.2 U	2.2 U	3.0 B	2.2 U
Iron	259.94	100	8.8 U	8.8 U	14.4 B	28.2 B	8.8 U
Magnesium	279.079	5000	19.9 U	19.9 U	19.9 U	19.9 U	19.9 U
Manganese	257.61	15	0.9 U	0.9 U	1.3 B	2.8 B	0.9 U
Nickel	231.604	40	6.1 U	6.1 U	6.1 U	6.1 U	-6.9 B
Potassium	766.491	5000	496.0 U	496.0 U	496.0 U	496.0 U	496.0 U
Sodium	588.995	5000	14.5 U	14.5 U	29.7 B	45.4 B	14.5 U
Vanadium	292.402	50	1.8 U	1.8 U	2.6 B	1.8 U	1.8 U
Zinc	213.856	20	3.1 U	3.1 U	3.1 U	3.1 U	3.1 U

666 704
807 088

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICP

Units: ug/L

Chart Number: J00729A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB6 7/29/00 12:21 PM		CCB7 7/29/00 1:03 PM					
			Found	Q	Found	Q	Found	Q	Found	Q
Aluminum	308.215	200	12.7	U	19.0	B				
Barium	493.409	200	0.6	B	0.4	U				
Beryllium	313.042	5	0.7	B	0.6	B				
Calcium	317.933	5000	37.9	U	37.9	U				
Cobalt	228.616	50	-3.2	B	3.2	U				
Copper	324.754	25	2.2	U	2.2	U				
Iron	259.94	100	8.8	U	8.8	U				
Magnesium	279.079	5000	19.9	U	19.9	U				
Manganese	257.61	15	0.9	U	0.9	U				
Nickel	231.604	40	-7.3	B	6.1	U				
Potassium	766.491	5000	496.0	U	496.0	U				
Sodium	588.995	5000	23.6	B	19.8	B				
Vanadium	292.402	50	1.8	U	1.8	U				
Zinc	213.856	20	3.1	U	3.1	U				

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICPSTUnits: ug/LChart Number: T00730A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 7/30/00 12:11 PM		CCB2 7/30/00 1:01 PM		CCB3 7/30/00 1:50 PM		Found	Q
			Found	Q	Found	Q	Found	Q		
Antimony	220.353	60	1.5	B	1.5	U	2.5	B		
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	1.0	U	1.0	U	1.0	U		
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	5	0.9	U	0.9	U	0.9	U		
Thallium	190.864	10	3.9	U	3.9	U	3.9	U		

208 068
666 706

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DH0C9B

Matrix: Water Units: ug/L Prep Date: 7/28/00 Prep Batch: 0210102

Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.045	0.20	0.084	B	1	CVAA	7/28/00	11:58

Comments: Lot #: C0G270302

Version 3.63.5

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-Pittsburgh

666 707

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DH0CHB

Matrix: Water Units: ug/L Prep Date: 7/28/00 Prep Batch: 0210106

Weight: 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	7/29/00	12:26
Antimony	220.353	1.5	60.0	1.5	U	1	ICPST	7/30/00	13:05
Arsenic	189.042	2.6	10.0	2.6	U	1	ICPST	7/30/00	13:05
Barium	493.409	0.41	200	0.41	U	1	ICP	7/29/00	12:26
Beryllium	313.042	0.071	5.0	0.13	B	1	ICP	7/29/00	12:26
Cadmium	226.502	0.49	5.0	0.49	U	1	ICPST	7/30/00	13:05
Calcium	317.933	37.9	5000	37.9	U	1	ICP	7/29/00	12:26
Chromium	267.716	1.0	10.0	1.0	U	1	ICPST	7/30/00	13:05
Cobalt	228.616	3.2	50.0	3.2	U	1	ICP	7/29/00	12:26
Copper	324.754	2.2	25.0	2.2	U	1	ICP	7/29/00	12:26
Iron	259.94	8.8	100	8.8	U	1	ICP	7/29/00	12:26
Lead	220.353	1.9	3.0	1.9	U	1	ICPST	7/30/00	13:05
Magnesium	279.079	19.9	5000	19.9	U	1	ICP	7/29/00	12:26
Manganese	257.61	0.87	15.0	0.87	U	1	ICP	7/29/00	12:26
Nickel	231.604	6.1	40.0	-6.4	B	1	ICP	7/29/00	12:26
Potassium	766.491	496	5000	496	U	1	ICP	7/29/00	12:26
Selenium	220.353	2.1	5.0	2.1	U	1	ICPST	7/30/00	13:05
Silver	328.068	0.94	5.0	0.94	U	1	ICPST	7/30/00	13:05
Sodium	588.995	14.5	5000	14.5	U	1	ICP	7/29/00	12:26
Thallium	190.864	3.9	10.0	3.9	U	1	ICPST	7/30/00	13:05
Vanadium	292.402	1.8	50.0	1.8	U	1	ICP	7/29/00	12:26
Zinc	213.856	3.1	20.0	3.1	U	1	ICP	7/29/00	12:26

Comments: Lot #: C0G270302

Version 3.63.5

U Result is less than the MDL

Form 3 Equivalent

B Result is between MDL and RL

666 708

STL-Pittsburgh
Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPUnits: ug/LChart Number: J00729A.ARCAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0014-170-1

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 7/29/00 8:43 AM	Found	Found	Found	Found
				Found				
Aluminum	308.215		500000	494000				
Barium	493.409	200		2				
Beryllium	313.042	5		0				
Calcium	317.933		500000	486000				
Cobalt	228.616	50		10				
Copper	324.754	25		-7				
Iron	259.94		200000	186000				
Magnesium	279.079		500000	487000				
Manganese	257.61	15		6				
Nickel	231.604	40		-28				
Potassium	766.491	5000		20				
Sodium	588.995	5000		2				
Vanadium	292.402	50		5				
Zinc	213.856	20		5				

STL-Pittsburgh
Metals Data Reporting Form

666 709

Interference Check Standard A

Instrument: ICPST

Units: ug/L

Chart Number: T00730A.ARC

Acceptable Range: 0% - 0%

Standard Source: Inorganic Ventures

Standard ID: 0014-170-1

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 7/30/00 11:27 AM	Found	Found	Found	Found
				Found				
Antimony	220.353	60		1				
Arsenic	189.042	10		1				
Cadmium	226.502	5		0				
Chromium	267.716	10		3				
Lead	220.353	3		2				
Selenium	220.353	5		-8				
Silver	328.068	5		0				
Thallium	190.864	10		1				

666 710

STL-Pittsburgh

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICP

Units: ug/L

Chart Number: J00729A.ARC

Acceptable Range: 80% - 120%

Standard Source: Inorganic Ventures

Standard ID: 0014-187-1

Element	WL/ Mass	True Conc	ICSAB 7/29/00 8:46 AM		Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
			Found	% Rec								
Aluminum	308.215	500000	489860.6	98.0								
Barium	493.409	500	460.3	92.1								
Beryllium	313.042	500	452.7	90.5								
Calcium	317.933	500000	480971.1	96.2								
Cobalt	228.616	500	454.8	91.0								
Copper	324.754	500	471.4	94.3								
Iron	259.94	200000	184421.6	92.2								
Magnesium	279.079	500000	481561.6	96.3								
Manganese	257.61	500	454.2	90.8								
Nickel	231.604	1000	860.0	86.0								
Potassium	766.491	10000	9786.1	97.9								
Sodium	588.995	10000	9975.1	99.8								
Vanadium	292.402	500	460.2	92.0								
Zinc	213.856	1000	931.0	93.1								

STL-Pittsburgh

Metals Data Reporting Form

666 711
000 000

Interference Check Standard AB.000

Instrument: ICPSTUnits: ug/LChart Number: T00730A.ARCAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0014-136-3

Element	WL/ Mass	True Conc	ICSAB 7/30/00 11:31 AM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Antimony	220.353	1000	1038.6	103.9								
Arsenic	189.042	1000	1015.9	101.6								
Cadmium	226.502	1000	925.4	92.5								
Chromium	267.716	500	505.7	101.1								
Lead	220.353	1000	1005.9	100.6								
Selenium	220.353	1000	1027.7	102.8								
Silver	328.068	1000	1108.0	110.8								
Thallium	190.864	1000	1063.7	106.4								

STL 666 712

STL-Pittsburgh
Metals Data Reporting Form

Matrix Spike Sample Results

Spike Sample ID: DGXL3S
Original Sample ID: DGXL3 Client ID: DF/S1/0208/IDW/002S
Matrix: Water Units: ug/L Prep Date: 7/28/00 Prep Batch: 0210106
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	376		2350		2000	98.5	1	1	ICP	7/29/00	12:32	7/29/00	12:39
Antimony	220.4	12.1	B	511		500	99.7	1	1	ICPST	7/30/00	13:13	7/30/00	13:21
Arsenic	189.0	4.2	B	1970		2000	98.2	1	1	ICPST	7/30/00	13:13	7/30/00	13:21
Barium	493.4	120	B	1900		2000	89.1	1	1	ICP	7/29/00	12:32	7/29/00	12:39
Beryllium	313.0	0.12	B	47.6		50	94.9	1	1	ICP	7/29/00	12:32	7/29/00	12:39
Cadmium	226.5	0.77	B	45.9		50	90.2	1	1	ICPST	7/30/00	13:13	7/30/00	13:21
Calcium	317.9	34500		83700		50000	98.5	1	1	ICP	7/29/00	12:32	7/29/00	12:39
Chromium	267.7	49.2		244		200	97.4	1	1	ICPST	7/30/00	13:13	7/30/00	13:21
Cobalt	228.6	3.2	U	470		500	93.9	1	1	ICP	7/29/00	12:32	7/29/00	12:39
Copper	324.8	18.9	B	248		250	91.6	1	1	ICP	7/29/00	12:32	7/29/00	12:39
Iron	259.9	428		1410		1000	98.0	1	1	ICP	7/29/00	12:32	7/29/00	12:39
Lead	220.4	1.9	U	503		500	100.7	1	1	ICPST	7/30/00	13:13	7/30/00	13:21
Magnesium	279.1	9060		55700		50000	93.2	1	1	ICP	7/29/00	12:32	7/29/00	12:39
Manganese	257.6	43.4		510		500	93.3	1	1	ICP	7/29/00	12:32	7/29/00	12:39
Nickel	231.6	6.1	U	463		500	92.5	1	1	ICP	7/29/00	12:32	7/29/00	12:39
Potassium	766.5	4150	B	52200		50000	96.1	1	1	ICP	7/29/00	12:32	7/29/00	12:39
Selenium	220.4	2.1	U	2050		2000	102.6	1	1	ICPST	7/30/00	13:13	7/30/00	13:21
Silver	328.1	1.6	B	52.4		50	101.7	1	1	ICPST	7/30/00	13:13	7/30/00	13:21
Sodium	589	1000000		1040000	NC	50000		5	5	ICP	7/29/00	12:47	7/29/00	12:53
Thallium	190.9	7.9	B	2140		2000	106.4	1	1	ICPST	7/30/00	13:13	7/30/00	13:21
Vanadium	292.4	2.7	B	474		500	94.2	1	1	ICP	7/29/00	12:32	7/29/00	12:39
Zinc	213.9	67.3		544		500	95.2	1	1	ICP	7/29/00	12:32	7/29/00	12:39

Comments: Lot # C0G270302 Sample #: 1

Version 3.63.5

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: DGXL3D

Original Sample ID: DGXL3

Client ID: DF/S1/0208/IDW/002D

Matrix: Water Units: ug/L Prep Date: 7/28/00 Prep Batch: 0210106

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	376		2370		2000	99.8	1	1	ICP	7/29/00	12:32	7/29/00	12:42
Antimony	220.4	12.1	B	517		500	100.9	1	1	ICPST	7/30/00	13:13	7/30/00	13:26
Arsenic	189.0	4.2	B	1990		2000	99.4	1	1	ICPST	7/30/00	13:13	7/30/00	13:26
Barium	493.4	120	B	1920		2000	90.1	1	1	ICP	7/29/00	12:32	7/29/00	12:42
Beryllium	313.0	0.12	B	48.1		50	96.0	1	1	ICP	7/29/00	12:32	7/29/00	12:42
Cadmium	226.5	0.77	B	46.1		50	90.7	1	1	ICPST	7/30/00	13:13	7/30/00	13:26
Calcium	317.9	34500		85100		50000	101.2	1	1	ICP	7/29/00	12:32	7/29/00	12:42
Chromium	267.7	49.2		245		200	97.9	1	1	ICPST	7/30/00	13:13	7/30/00	13:26
Cobalt	228.6	3.2	U	477		500	95.4	1	1	ICP	7/29/00	12:32	7/29/00	12:42
Copper	324.8	18.9	B	252		250	93.2	1	1	ICP	7/29/00	12:32	7/29/00	12:42
Iron	259.9	428		1430		1000	100.6	1	1	ICP	7/29/00	12:32	7/29/00	12:42
Lead	220.4	1.9	U	508		500	101.5	1	1	ICPST	7/30/00	13:13	7/30/00	13:26
Magnesium	279.1	9060		56500		50000	95.0	1	1	ICP	7/29/00	12:32	7/29/00	12:42
Manganese	257.6	43.4		517		500	94.7	1	1	ICP	7/29/00	12:32	7/29/00	12:42
Nickel	231.6	6.1	U	484		500	96.7	1	1	ICP	7/29/00	12:32	7/29/00	12:42
Potassium	766.5	4150	B	53100		50000	98.0	1	1	ICP	7/29/00	12:32	7/29/00	12:42
Selenium	220.4	2.1	U	2080		2000	103.8	1	1	ICPST	7/30/00	13:13	7/30/00	13:26
Silver	328.1	1.6	B	52.8		50	102.4	1	1	ICPST	7/30/00	13:13	7/30/00	13:26
Sodium	589	1000000		1040000	NC	50000		5	5	ICP	7/29/00	12:47	7/29/00	12:56
Thallium	190.9	7.9	B	2160		2000	107.7	1	1	ICPST	7/30/00	13:13	7/30/00	13:26
Vanadium	292.4	2.7	B	482		500	95.8	1	1	ICP	7/29/00	12:32	7/29/00	12:42
Zinc	213.9	67.3		552		500	96.9	1	1	ICP	7/29/00	12:32	7/29/00	12:42

Comments: Lot #: C0G270302 Sample #: 1

Version 3.63.5

U Result is less than the MDL

Form SA 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

666 714
718 080

STL-Pittsburgh

Metals Data Reporting Form

Matrix Spike Duplicate RPD Report

Matrix Spike Duplicate Sample ID: DGXL3D

Matrix Spike Sample ID: DGXL3S Client ID: DF/S1/0208/IDW/002D

Matrix: Water Units: ug/L Prep Date: 7/28/00 Prep Batch: 0210106

Weight: 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	2350		2370		1.3 %	1	1	ICP	7/29/00	12:39	7/29/00	12:42
Antimony	220.353	511		517		1.2 %	1	1	ICPST	7/30/00	13:21	7/30/00	13:26
Arsenic	189.042	1970		1990		1.2 %	1	1	ICPST	7/30/00	13:21	7/30/00	13:26
Barium	493.409	1900		1920		1.2 %	1	1	ICP	7/29/00	12:39	7/29/00	12:42
Beryllium	313.042	47.6		48.1		1.1 %	1	1	ICP	7/29/00	12:39	7/29/00	12:42
Cadmium	226.502	45.9		46.1		0.6 %	1	1	ICPST	7/30/00	13:21	7/30/00	13:26
Calcium	317.933	83700		85100		2.7 %	1	1	ICP	7/29/00	12:39	7/29/00	12:42
Chromium	267.716	244		245		0.6 %	1	1	ICPST	7/30/00	13:21	7/30/00	13:26
Cobalt	228.616	470		477		1.6 %	1	1	ICP	7/29/00	12:39	7/29/00	12:42
Copper	324.754	248		252		1.7 %	1	1	ICP	7/29/00	12:39	7/29/00	12:42
Iron	259.94	1410		1430		2.6 %	1	1	ICP	7/29/00	12:39	7/29/00	12:42
Lead	220.353	503		508		0.9 %	1	1	ICPST	7/30/00	13:21	7/30/00	13:26
Magnesium	279.079	55700		56500		1.8 %	1	1	ICP	7/29/00	12:39	7/29/00	12:42
Manganese	257.61	510		517		1.6 %	1	1	ICP	7/29/00	12:39	7/29/00	12:42
Nickel	231.604	463		484		4.4 %	1	1	ICP	7/29/00	12:39	7/29/00	12:42
Potassium	766.491	52200		53100		1.9 %	1	1	ICP	7/29/00	12:39	7/29/00	12:42
Selenium	220.353	2050		2080		1.1 %	1	1	ICPST	7/30/00	13:21	7/30/00	13:26
Silver	328.068	52.4		52.8		0.6 %	1	1	ICPST	7/30/00	13:21	7/30/00	13:26
Sodium	588.995	1040000	NC	1040000	NC		5	5	ICP	7/29/00	12:53	7/29/00	12:56
Thallium	190.864	2140		2160		1.2 %	1	1	ICPST	7/30/00	13:21	7/30/00	13:26
Vanadium	292.402	474		482		1.6 %	1	1	ICP	7/29/00	12:39	7/29/00	12:42
Zinc	213.856	544		552		1.7 %	1	1	ICP	7/29/00	12:39	7/29/00	12:42

Comments: Lot #: C0G270302 Sample #: 1

Version 3.63.5

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

STL-Pittsburgh

666 715

Metals Data Reporting Form

Duplicate LCS RPD Report

Duplicate LCS ID: DH0C9LOriginal LCS ID: DH0C9CMatrix: Water Units: ug/L Prep Date: 7/28/00 Prep Batch: 0210102Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	LCS Conc	Q	LCS Dupe Conc	Q	RPD	LCS DF	LCS Dupe DF	Instr	LCS Anal Date	LCS Anal Time	LCS Dupe Anal Date	LCS Dupe Anal Time
Mercury	253.7	2.8		2.8		1.4 %	1	1	CVAA	7/28/00	11:59	7/28/00	12:01

877 888
666 716

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DH0C9C

Matrix: Water Units: ug/L Prep Date: 7/28/00 Prep Batch: 0210102

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	2.8	111.6		80-120	1	CVAA	7/28/00	11:59

Comments: Lot #: C0G270302

Version 3.63.5

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

Form 7 Equivalent

Metals Data Reporting Form

Laboratory Control Sample Duplicate Results

Lab Sample ID: DH0C9LMatrix: Water Units: ug/L Prep Date: 7/28/00 Prep Batch: 0210102Weight: 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	2.8	113.2		80-120	1	CVAA	7/28/00	12:01

Comments: Lot #: C0G270302

Version 3.63.5

U Result is less than the MDL

Form 7 Equivalent

B Result is between MDL and RL

666 718
717 800

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DH0CHC

Matrix: Water Units: ug/L Prep Date: 7/28/00 Prep Batch: 0210106

Weight: 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	1940	97.2		80-120	1	ICP	7/29/00	12:29
Antimony	220.353	500	494	98.8		80-120	1	ICPST	7/30/00	13:09
Arsenic	189.042	2000	1980	99.1		80-120	1	ICPST	7/30/00	13:09
Barium	493.409	2000	1920	95.9		80-120	1	ICP	7/29/00	12:29
Beryllium	313.042	50.0	50.0	100.0		80-120	1	ICP	7/29/00	12:29
Cadmium	226.502	50.0	47.2	94.3		80-120	1	ICPST	7/30/00	13:09
Calcium	317.933	50000	51700	103.4		80-120	1	ICP	7/29/00	12:29
Chromium	267.716	200	200	99.8		80-120	1	ICPST	7/30/00	13:09
Cobalt	228.616	500	491	98.1		80-120	1	ICP	7/29/00	12:29
Copper	324.754	250	242	96.6		80-120	1	ICP	7/29/00	12:29
Iron	259.94	1000	1040	104.0		80-120	1	ICP	7/29/00	12:29
Lead	220.353	500	495	99.0		80-120	1	ICPST	7/30/00	13:09
Magnesium	279.079	50000	49500	99.1		80-120	1	ICP	7/29/00	12:29
Manganese	257.61	500	492	98.3		80-120	1	ICP	7/29/00	12:29
Nickel	231.604	500	496	99.1		80-120	1	ICP	7/29/00	12:29
Potassium	766.491	50000	48000	96.0		80-120	1	ICP	7/29/00	12:29
Selenium	220.353	2000	2010	100.4		80-120	1	ICPST	7/30/00	13:09
Silver	328.068	50.0	49.6	99.3		80-120	1	ICPST	7/30/00	13:09
Sodium	588.995	50000	48300	96.5		80-120	1	ICP	7/29/00	12:29
Thallium	190.864	2000	2060	102.7		80-120	1	ICPST	7/30/00	13:09
Vanadium	292.402	500	493	98.7		80-120	1	ICP	7/29/00	12:29
Zinc	213.856	500	490	98.0		80-120	1	ICP	7/29/00	12:29

Comments: Lot #: C0G270302

Version 3.63.5

U Result is less than the MDL

Form 7 Equivalent

B Result is between MDL and RL

Metals Data Reporting Form

Serial Dilution RPD Report

Serial Dilution Sample ID: DGXL3POriginal Sample ID: DGXL3 Client ID: DF/S1/0208/IDW/002Matrix: Water Units: ug/L Prep Date: 7/28/00 Prep Batch: 0210106Weight: 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	376		404	B		1	5	ICP	7/29/00	12:32	7/29/00	12:35
Antimony	220.353	12.1	B	20.1	B		1	5	ICPST	7/30/00	13:13	7/30/00	13:17
Arsenic	189.042	4.2	B	12.8	U		1	5	ICPST	7/30/00	13:13	7/30/00	13:17
Barium	493.409	120	B	123	B	2.9 %	1	5	ICP	7/29/00	12:32	7/29/00	12:35
Beryllium	313.042	0.12	B	0.50	B		1	5	ICP	7/29/00	12:32	7/29/00	12:35
Cadmium	226.502	0.77	B	2.5	U		1	5	ICPST	7/30/00	13:13	7/30/00	13:17
Calcium	317.933	34500		35800		3.7 %	1	5	ICP	7/29/00	12:32	7/29/00	12:35
Chromium	267.716	49.2		46.5	B		1	5	ICPST	7/30/00	13:13	7/30/00	13:17
Cobalt	228.616	3.2	U	16.1	U		1	5	ICP	7/29/00	12:32	7/29/00	12:35
Copper	324.754	18.9	B	21.8	B		1	5	ICP	7/29/00	12:32	7/29/00	12:35
Iron	259.94	428		444	B		1	5	ICP	7/29/00	12:32	7/29/00	12:35
Lead	220.353	1.9	U	9.5	U		1	5	ICPST	7/30/00	13:13	7/30/00	13:17
Magnesium	279.079	9060		9330	B	2.9 %	1	5	ICP	7/29/00	12:32	7/29/00	12:35
Manganese	257.61	43.4		44.2	B		1	5	ICP	7/29/00	12:32	7/29/00	12:35
Nickel	231.604	6.1	U	30.7	U		1	5	ICP	7/29/00	12:32	7/29/00	12:35
Potassium	766.491	4150	B	5230	B		1	5	ICP	7/29/00	12:32	7/29/00	12:35
Selenium	220.353	2.1	U	10.5	U		1	5	ICPST	7/30/00	13:13	7/30/00	13:17
Silver	328.068	1.6	B	4.7	U		1	5	ICPST	7/30/00	13:13	7/30/00	13:17
Sodium	588.995	1000000		1010000		0.5 %	5	25	ICP	7/29/00	12:47	7/29/00	12:50
Thallium	190.864	7.9	B	19.4	U		1	5	ICPST	7/30/00	13:13	7/30/00	13:17
Vanadium	292.402	2.7	B	8.9	U		1	5	ICP	7/29/00	12:32	7/29/00	12:35
Zinc	213.856	67.3		73.6	B		1	5	ICP	7/29/00	12:32	7/29/00	12:35

Comments: _____

Version 3.63.5

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

RTY 883
666 720

STL-Pittsburgh

Metals Data Reporting Form

Instrument Detection Limits

Instrument: CVAA

Units: ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Mercury	253.70	0.2	0.045	3/20/00

STL-Pittsburgh
Metals Data Reporting Form

666 721

Instrument Detection Limits

Instrument: ICP

Units: ppb

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

187 388
666 722

STL-Pittsburgh
Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPST

Units: 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	5	0.94	4/1/00
Thallium	190.86	10	3.9	4/1/00

Metals Data Reporting Form

Inter-Element Correction Factors

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

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

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897724
880

STL-Pittsburgh

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICPST

Date of IEC's: 7/26/00

Interfering Element	Wavelength /Mass	Correction Factor(s)
Aluminum	308.215	Pb(0.00055), Se(0.00001), Tl(-0.00002)
Aluminum	308.215	Pb(-0.000197), Se(0.000011)
Chromium	267.716	Sb(0.007006)
Chromium	267.716	As(-0.002615), Sb(0.012173)
Cobalt	228.616	Se(-0.000381)
Cobalt	228.616	Cd(-0.00009), Fe(0.089705), Ni(-0.00066), Pb(0.000077), Se(0.000351), Tl(0.002179)
Iron	271.441	Cd(0.000088), Pb(0.000086), Sb(0.000019), Se(-0.000016), Tl(-0.000034), V(-0.000349), Zn(0.000127)
Iron	271.441	Pb(0.000047), Sb(0.000021), Se(-0.00029)
Magnesium	279.078	Fe(-0.000306)
Manganese	257.61	Se(0.000579), Tl(-0.006029)
Molybdenum	202.03	Pb(-0.00087), Sb(-0.010184)
Molybdenum	202.03	Al(0.011136), As(-0.000847), Cr(-0.000312), Pb(-0.000331), Sb(-0.003352)
Nickel	231.604	Pb(0.000274), Sb(-0.000886), Zn(0.004694)
Nickel	231.604	Pb(0.000086)
Vanadium	292.402	Al(0.019591), Be(-0.00787), Cr(-0.000183), Fe(0.007812), Sb(-0.008005), Se(0.000216), Tl(0.001386)
Vanadium	292.402	Pb(-0.000428), Se(0.000099)

Metals Data Reporting Form

Linear Dynamic RangesInstrument: CVAAUnits: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Mercury	253.70	10	1/15/00

668 726
357 668

STL-Pittsburgh

Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICP

Units: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Aluminum	308.21	600000	4/5/00
Barium	493.41	100000	4/5/00
Beryllium	313.04	15000	4/5/00
Calcium	317.93	600000	4/5/00
Cobalt	228.62	100000	4/5/00
Copper	324.75	100000	4/5/00
Iron	259.94	400000	4/5/00
Magnesium	279.08	600000	4/5/00
Manganese	257.61	100000	4/5/00
Nickel	231.60	100000	4/5/00
Potassium	766.49	1000000	4/5/00
Sodium	589.00	400000	4/5/00
Vanadium	292.40	100000	4/5/00
Zinc	213.86	100000	4/5/00

STL-Pittsburgh
Metals Data Reporting Form

666

727

Linear Dynamic Ranges

Instrument: ICPST

Units: ppb

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

666 728
VEN 000

STL-Pittsburgh
Metals Data Reporting Form

Preparation Log

Preparation Batch: 0210102 Instrument: CVAA Matrix: Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DH0C9B	7/28/00	NA	100	NA
DH0C9C	7/28/00	NA	100	NA
DH0C9L	7/28/00	NA	100	NA
DGXL3	7/28/00	NA	100	NA

STL-Pittsburgh
Metals Data Reporting Form

666 729

Preparation Log

Preparation Batch: 0210106 **Instrument:** ICP **Matrix:** Water

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DH0CHB	7/28/00	NA	50	NA
DH0CHC	7/28/00	NA	50	NA
DGXL3	7/28/00	NA	50	NA
DGXL3D	7/28/00	NA	50	NA
DGXL3S	7/28/00	NA	50	NA

666 730
067 060STL-Pittsburgh
Metals Data Reporting Form

Instrument Runlog

Instrument: CVAAChart Number: 0728HGA.PRN

Sample Name	Date of Analysis	Time of Analysis
Std1Rep1	7/28/00	10:07 AM
Std2Rep1	7/28/00	10:08 AM
Std3Rep1	7/28/00	10:10 AM
Std4Rep1	7/28/00	10:12 AM
Std5Rep1	7/28/00	10:15 AM
Std6Rep1	7/28/00	10:16 AM
ICV5-1	7/28/00	10:21 AM
ICB1	7/28/00	10:22 AM
CCV5-1	7/28/00	10:23 AM
CCB1	7/28/00	10:25 AM
ZZZZZZ	7/28/00	10:26 AM
ZZZZZZ	7/28/00	10:28 AM
ZZZZZZ	7/28/00	10:30 AM
ZZZZZZ	7/28/00	10:31 AM
ZZZZZZ	7/28/00	10:32 AM
ZZZZZZ	7/28/00	10:34 AM
ZZZZZZ	7/28/00	10:36 AM
ZZZZZZ	7/28/00	10:40 AM
ZZZZZZ	7/28/00	10:41 AM
ZZZZZZ	7/28/00	10:42 AM
CCV5-2	7/28/00	10:44 AM
CCB2	7/28/00	10:46 AM
ZZZZZZ	7/28/00	10:47 AM
ZZZZZZ	7/28/00	10:49 AM
ZZZZZZ	7/28/00	10:51 AM
ZZZZZZ	7/28/00	10:52 AM
ZZZZZZ	7/28/00	10:54 AM
ZZZZZZ	7/28/00	10:56 AM
ZZZZZZ	7/28/00	10:57 AM
ZZZZZZ	7/28/00	10:59 AM
ZZZZZZ	7/28/00	11:01 AM
ZZZZZZ	7/28/00	11:03 AM
CCV5-3	7/28/00	11:05 AM
CCB3	7/28/00	11:06 AM
ZZZZZZ	7/28/00	11:10 AM
ZZZZZZ	7/28/00	11:11 AM
ZZZZZZ	7/28/00	11:13 AM
ZZZZZZ	7/28/00	11:16 AM
ZZZZZZ	7/28/00	11:17 AM
ZZZZZZ	7/28/00	11:19 AM
ZZZZZZ	7/28/00	11:21 AM

Version 3.63.5

Form 14 Equivalent

STL-Pittsburgh
Metals Data Reporting Form

666 731

Instrument Runlog

Instrument: CVAA

Chart Number: 0728HGA.PRN

Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ	7/28/00	11:23 AM
ZZZZZZ	7/28/00	11:25 AM
ZZZZZZ	7/28/00	11:26 AM
CCV5-4	7/28/00	11:28 AM
CCB4	7/28/00	11:29 AM
ZZZZZZ	7/28/00	11:31 AM
ZZZZZZ	7/28/00	11:33 AM
ZZZZZZ	7/28/00	11:35 AM
ZZZZZZ	7/28/00	11:38 AM
ZZZZZZ	7/28/00	11:39 AM
ZZZZZZ	7/28/00	11:41 AM
ZZZZZZ	7/28/00	11:44 AM
ZZZZZZ	7/28/00	11:45 AM
ZZZZZZ	7/28/00	11:47 AM
ZZZZZZ	7/28/00	11:49 AM
CCV5--5	7/28/00	11:50 AM
CCB5	7/28/00	11:53 AM
ZZZZZZ	7/28/00	11:54 AM
ZZZZZZ	7/28/00	11:56 AM
DH0C9B	7/28/00	11:58 AM
DH0C9C	7/28/00	11:59 AM
DH0C9L	7/28/00	12:01 PM
DGXL3	7/28/00	12:03 PM
CCV5-6	7/28/00	12:04 PM
CCB6	7/28/00	12:06 PM

666 732
128 300

STL-Pittsburgh
Metals Data Reporting Form

Instrument Runlog

Instrument: ICP

Chart Number: J00729A.ARC

Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ	7/29/00	7:58 AM
ZZZZZZ	7/29/00	8:01 AM
ZZZZZZ	7/29/00	8:04 AM
ZZZZZZ	7/29/00	8:08 AM
ZZZZZZ	7/29/00	8:12 AM
ZZZZZZ	7/29/00	8:16 AM
ZZZZZZ	7/29/00	8:19 AM
ZZZZZZ	7/29/00	8:22 AM
STD1	7/29/00	8:27 AM
STD5A	7/29/00	8:31 AM
STD5B	7/29/00	8:34 AM
ICV2-1	7/29/00	8:37 AM
ICB1	7/29/00	8:40 AM
ICSA	7/29/00	8:43 AM
ICSAB	7/29/00	8:46 AM
ZZZZZZ	7/29/00	8:52 AM
ZZZZZZ	7/29/00	8:55 AM
ZZZZZZ	7/29/00	8:58 AM
ZZZZZZ	7/29/00	9:01 AM
ZZZZZZ	7/29/00	9:04 AM
ZZZZZZ	7/29/00	9:07 AM
ZZZZZZ	7/29/00	9:11 AM
ZZZZZZ	7/29/00	9:14 AM
CCV2-1	7/29/00	9:17 AM
CCB1	7/29/00	9:20 AM
ZZZZZZ	7/29/00	9:23 AM
ZZZZZZ	7/29/00	9:26 AM
ZZZZZZ	7/29/00	9:29 AM
ZZZZZZ	7/29/00	9:33 AM
ZZZZZZ	7/29/00	9:36 AM
ZZZZZZ	7/29/00	9:39 AM
ZZZZZZ	7/29/00	9:42 AM
CCV2-2	7/29/00	9:45 AM
CCB2	7/29/00	9:48 AM
ZZZZZZ	7/29/00	9:51 AM
ZZZZZZ	7/29/00	9:55 AM
ZZZZZZ	7/29/00	9:58 AM
ZZZZZZ	7/29/00	10:01 AM
ZZZZZZ	7/29/00	10:04 AM
ZZZZZZ	7/29/00	10:07 AM
ZZZZZZ	7/29/00	10:10 AM

STL-Pittsburgh
Metals Data Reporting Form

666 733

Instrument Runlog

Instrument: ICP

Chart Number: J00729A.ARC

Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ	7/29/00	10:14 AM
ZZZZZZ	7/29/00	10:17 AM
ZZZZZZ	7/29/00	10:20 AM
CCV2-3	7/29/00	10:23 AM
CCB3	7/29/00	10:26 AM
ZZZZZZ	7/29/00	10:29 AM
ZZZZZZ	7/29/00	10:33 AM
ZZZZZZ	7/29/00	10:36 AM
ZZZZZZ	7/29/00	10:39 AM
ZZZZZZ	7/29/00	10:42 AM
ZZZZZZ	7/29/00	10:46 AM
ZZZZZZ	7/29/00	10:49 AM
ZZZZZZ	7/29/00	10:52 AM
ZZZZZZ	7/29/00	10:55 AM
ZZZZZZ	7/29/00	10:58 AM
CCV2-4	7/29/00	11:01 AM
CCB4	7/29/00	11:05 AM
ZZZZZZ	7/29/00	11:08 AM
ZZZZZZ	7/29/00	11:11 AM
ZZZZZZ	7/29/00	11:14 AM
ZZZZZZ	7/29/00	11:17 AM
ZZZZZZ	7/29/00	11:20 AM
ZZZZZZ	7/29/00	11:24 AM
ZZZZZZ	7/29/00	11:27 AM
ZZZZZZ	7/29/00	11:30 AM
ZZZZZZ	7/29/00	11:33 AM
ZZZZZZ	7/29/00	11:37 AM
CCV2-5	7/29/00	11:40 AM
CCB5	7/29/00	11:43 AM
ZZZZZZ	7/29/00	11:46 AM
ZZZZZZ	7/29/00	11:49 AM
ZZZZZZ	7/29/00	11:52 AM
ZZZZZZ	7/29/00	11:56 AM
ZZZZZZ	7/29/00	11:59 AM
ZZZZZZ	7/29/00	12:02 PM
ZZZZZZ	7/29/00	12:05 PM
ZZZZZZ	7/29/00	12:09 PM
ZZZZZZ	7/29/00	12:12 PM
ZZZZZZ	7/29/00	12:15 PM
CCV2-6	7/29/00	12:18 PM
CCB6	7/29/00	12:21 PM

887 070
666 734

STL-Pittsburgh
Metals Data Reporting Form

Instrument Runlog

Instrument: ICP

Chart Number: J00729A.ARC

Sample Name	Date of Analysis	Time of Analysis
DH0CHB	7/29/00	12:26 PM
DH0CHC	7/29/00	12:29 PM
DGXL3	7/29/00	12:32 PM
DGXL3P	7/29/00	12:35 PM
DGXL3S	7/29/00	12:39 PM
DGXL3D	7/29/00	12:42 PM
DGXL3	7/29/00	12:47 PM
DGXL3P	7/29/00	12:50 PM
DGXL3S	7/29/00	12:53 PM
DGXL3D	7/29/00	12:56 PM
CCV2-7	7/29/00	1:00 PM
CCB7	7/29/00	1:03 PM
ZZZZZZ	7/29/00	1:09 PM
ZZZZZZ	7/29/00	1:12 PM
ZZZZZZ	7/29/00	1:15 PM
ZZZZZZ	7/29/00	1:18 PM
ZZZZZZ	7/29/00	1:22 PM
ZZZZZZ	7/29/00	1:25 PM
ZZZZZZ	7/29/00	1:28 PM
ZZZZZZ	7/29/00	1:31 PM
ZZZZZZ	7/29/00	1:34 PM
ZZZZZZ	7/29/00	1:38 PM
ZZZZZZ	7/29/00	1:41 PM
ZZZZZZ	7/29/00	1:44 PM
ZZZZZZ	7/29/00	1:47 PM
ZZZZZZ	7/29/00	1:51 PM
ZZZZZZ	7/29/00	1:54 PM
ZZZZZZ	7/29/00	1:57 PM
ZZZZZZ	7/29/00	2:05 PM
ZZZZZZ	7/29/00	2:08 PM
ZZZZZZ	7/29/00	2:12 PM
ZZZZZZ	7/29/00	2:17 PM
ZZZZZZ	7/29/00	2:20 PM
ZZZZZZ	7/29/00	2:23 PM
ZZZZZZ	7/29/00	2:26 PM
ZZZZZZ	7/29/00	2:29 PM
ZZZZZZ	7/29/00	2:33 PM
ZZZZZZ	7/29/00	2:36 PM
ZZZZZZ	7/29/00	2:39 PM
ZZZZZZ	7/29/00	2:42 PM
ZZZZZZ	7/29/00	2:45 PM

STL-Pittsburgh**Metals Data Reporting Form****666.735****Instrument Runlog****Instrument:** ICP**Chart Number:** J00729A.ARC

Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ	7/29/00	2:48 PM

666 736
 288 000

STL-Pittsburgh
 Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST

Chart Number: T00730A.ARC

Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ	7/30/00	10:12 AM
ZZZZZZ	7/30/00	10:16 AM
ZZZZZZ	7/30/00	10:20 AM
ZZZZZZ	7/30/00	10:24 AM
ZZZZZZ	7/30/00	10:28 AM
ZZZZZZ	7/30/00	10:32 AM
ZZZZZZ	7/30/00	10:36 AM
ZZZZZZ	7/30/00	10:48 AM
ZZZZZZ	7/30/00	10:52 AM
STD1	7/30/00	11:03 AM
STD6	7/30/00	11:07 AM
STD7	7/30/00	11:11 AM
ICV3-1	7/30/00	11:15 AM
ICB1	7/30/00	11:19 AM
ZZZZZZ	7/30/00	11:23 AM
ICSA	7/30/00	11:27 AM
ICSAB	7/30/00	11:31 AM
ZZZZZZ	7/30/00	11:38 AM
ZZZZZZ	7/30/00	11:42 AM
ZZZZZZ	7/30/00	11:46 AM
ZZZZZZ	7/30/00	11:50 AM
ZZZZZZ	7/30/00	11:54 AM
ZZZZZZ	7/30/00	11:58 AM
ZZZZZZ	7/30/00	12:03 PM
CCV3-1	7/30/00	12:07 PM
CCB1	7/30/00	12:11 PM
ZZZZZZ	7/30/00	12:15 PM
ZZZZZZ	7/30/00	12:19 PM
ZZZZZZ	7/30/00	12:23 PM
ZZZZZZ	7/30/00	12:27 PM
ZZZZZZ	7/30/00	12:32 PM
ZZZZZZ	7/30/00	12:36 PM
ZZZZZZ	7/30/00	12:40 PM
ZZZZZZ	7/30/00	12:44 PM
ZZZZZZ	7/30/00	12:48 PM
ZZZZZZ	7/30/00	12:52 PM
CCV3-2	7/30/00	12:56 PM
CCB2	7/30/00	1:01 PM
DH0CHB	7/30/00	1:05 PM
DH0CHC	7/30/00	1:09 PM
DGXL3	7/30/00	1:13 PM

Instrument Runlog

Instrument: ICPSTChart Number: T00730A.ARC

Sample Name	Date of Analysis	Time of Analysis
DGXL3P	7/30/00	1:17 PM
DGXL3S	7/30/00	1:21 PM
DGXL3D	7/30/00	1:26 PM
ZZZZZZ	7/30/00	1:30 PM
ZZZZZZ	7/30/00	1:34 PM
ZZZZZZ	7/30/00	1:38 PM
ZZZZZZ	7/30/00	1:42 PM
CCV3-3	7/30/00	1:46 PM
CCB3	7/30/00	1:50 PM
ZZZZZZ	7/30/00	1:55 PM
ZZZZZZ	7/30/00	1:59 PM
ZZZZZZ	7/30/00	2:03 PM
ZZZZZZ	7/30/00	2:07 PM
ZZZZZZ	7/30/00	2:11 PM
ZZZZZZ	7/30/00	2:15 PM
ZZZZZZ	7/30/00	2:19 PM
ZZZZZZ	7/30/00	2:24 PM
ZZZZZZ	7/30/00	2:28 PM
ZZZZZZ	7/30/00	2:32 PM
ZZZZZZ	7/30/00	2:36 PM
ZZZZZZ	7/30/00	2:40 PM
ZZZZZZ	7/30/00	2:44 PM
ZZZZZZ	7/30/00	2:49 PM
ZZZZZZ	7/30/00	2:53 PM
ZZZZZZ	7/30/00	2:57 PM
ZZZZZZ	7/30/00	3:01 PM
ZZZZZZ	7/30/00	3:05 PM
ZZZZZZ	7/30/00	3:09 PM
ZZZZZZ	7/30/00	3:13 PM
ZZZZZZ	7/30/00	3:18 PM
ZZZZZZ	7/30/00	3:22 PM
ZZZZZZ	7/30/00	3:26 PM
ZZZZZZ	7/30/00	3:30 PM
ZZZZZZ	7/30/00	3:40 PM
ZZZZZZ	7/30/00	3:44 PM
ZZZZZZ	7/30/00	3:48 PM
ZZZZZZ	7/30/00	3:52 PM
ZZZZZZ	7/30/00	3:57 PM
ZZZZZZ	7/30/00	4:01 PM
ZZZZZZ	7/30/00	4:05 PM
ZZZZZZ	7/30/00	4:09 PM

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080

STL-Pittsburgh
Metals Data Reporting Form

Instrument Runlog

Instrument: ICPST

Chart Number: T00730A.ARC

Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ	7/30/00	4:13 PM

666 739

666 739

**METALS
RAW DATA**

087 Michael Nussle 7-27-00

666 740

#	Sample Name	AL	BA	BE	CA	CO	CU
1	STD1	.00844	.00002	.00234	.00227	.0003	.00019
2	STD5A		3.91192	15.1801		1.4067	2.17694
3	STD5B	10.7861			24.1962		
4	ICV2-1 0014-148-7	25.312	.99237	.97484	25.574	.99831	.98453
5	ICB1	-.00046	.00025	.00020	.00629	-.00214	-.00023
6	ICSA 0014-170-1	494.24	.00184	.00001	485.98	.01004	-.00667
7	ICSAB 0014-187-1	489.86	.46033	.45274	480.97	.45483	.47139
8	DH0CKB	.01434	-.00005	.00003	.02958	-.00356	-.00023
9	DH0CKC	2.0561	2.0059	.05147	L.03751	.52252	.25484
10	DGX1R	.07517	.01894	.00006	.75519	-.00036	.02340
11	DGX1RP5	.01160	.00381	-.00006	.15019	.00000	.00436
12	DGX1RS	2.1247	2.0345	.05200	.66459	.52608	.25805
13	DGX1RD	2.0909	2.0087	.05129	.64827	.51860	.25277
14	DH0J3B	-.00317	-.00010	.00000	.01170	.00072	-.00045
15	DH0J3C	1.9526	1.9292	.04868	50.602	.48600	.24103
16	CCV2-1 0014-195-2	50.162	4.9098	4.9490	51.241	4.9879	4.9152
17	CCB1	.00324	.00025	.00029	-.00070	-.00142	.00022
18	DGXN4	.01577	.00018	.00000	.05023	-.00071	.00046
19	DGXN4P5	.00461	.00007	.00009	.01184	-.00213	-.00023
20	DGXN4S	1.9624	1.9292	.04861	50.377	.48565	.24080
21	DGXN4D	1.9488	1.9171	.04865	49.916	.48102	.24056
22	DGXNE	1.6609	.08487	.00016	19.219	.00124	.00292
23	DGXNH	.08165	.01651	.00003	10.353	-.00072	.00047
24	DGXNN	.02272	.00012	.00003	.06382	-.00285	-.00023
25	CCV2-2	50.547	4.9522	5.0095	51.858	5.0516	4.9559
26	CCB2	-.00047	.00012	.00019	.00556	-.00214	-.00023
27	DH0CFBT	.00462	-.00020	-.00002	.01886	-.00464	-.00115
28	DGWD8BT	.00000	.00204	.00000	.11021	-.00320	.00091
29	DH0CFCT	1.9742	1.9150	.04802	L.13251	.49258	.24700
30	DGQCPT	2.8020	.15295	.00011	328.98	-.00156	.00118
31	DGQCPP5T	.57064	.03208	.00002	67.649	.00104	.00046
32	DGQCPST	2.8034	46.576	.00018	322.81	-.00338	.00118
33	DGQCPDT	2.7209	46.376	.00024	320.66	-.00255	.00347
34	DH0CMBT	.00325	.00593	.00003	.05781	-.00142	-.00023
35	DH0CMCT	1.9641	1.9835	.05008	L.05573	.50291	.24908
36	DGDJ0T	7.8388	.08779	.00034	H777.11	.00118	.00093
37	CCV2-3	49.832	4.8653	4.9867	51.728	5.0261	4.8923
38	CCB3	.01150	.00120	.00138	.02982	-.00143	.00137
39	DGDJ0P5T	1.5768	.01833	.00021	161.77	-.00111	.00114
40	DGDJ0ST	7.8875	45.082	.00042	H781.13	-.00486	.00046
41	DGDJ0DT	7.8996	45.382	.00048	H783.71	-.00323	.00092
42	DGF39T	2.7510	.57685	.00078	364.20	-.00167	.00206
43	DGF39P5T	.56044	.12437	.00016	76.027	-.00218	-.00023
44	DGF39ST	2.6711	46.313	.00081	350.51	-.00524	.00206
45	DGF39DT	2.7162	45.879	.00075	357.75	-.00146	.00229
46	DGW22BT	.01164	.00598	.00010	.08031	-.00071	.00068
47	DGW22CT	1.9441	1.9637	.05006	L.03186	.49828	.24586
48	DGQ5LT	.05523	.03819	.00010	1.2752	-.00037	.92301
49	CCV2-4	49.750	4.8592	5.0192	51.659	5.0225	4.8953
50	CCB4	.03243	.00317	.00280	.03349	.00106	.00298
51	DGQ5LP5T	.01900	.00772	.00055	.27091	.00034	.18497
52	DGQ5LST	.04082	49.468	.00016	1.2554	-.00222	.92900
53	DGQ5LDT	.04452	49.439	.00016	1.3156	-.00113	.97146

#	Sample Name	AL	BA	BE	CA	CO	CU
54	DH0CRBT	.00557	.04341	.00000	.02503	-.00145	.00000
55	DGWEXBT	.03246	.03963	.00012	.44380	-.00179	.00229
56	DH0CRCT	1.9644	1.9174	.04849	L.55986	.48651	.24493
57	DGHCET	2.0288	.36588	.00062	124.56	.00018	.00322
58	DGHCRT	2.3159	.30187	.00068	128.83	-.00086	.00485
59	DGHCVT	2.2581	.16929	.00092	34.360	.01419	.00806
60	DGHCWT	27.803	.28329	.00144	270.02	.00716	.01817
61	CCV2-5	50.464	4.9723	5.1238	52.429	5.0922	4.9787
62	CCB5	.01062	.00038	.00056	.00348	-.00321	.00091
63	DGHCXT	6.6187	.12946	.00084	48.249	.00016	.00551
64	DGKTKT	.41656	.28329	.00045	38.819	-.00192	.00345
65	DGKTLT	2.7730	.14470	.00065	32.993	.01022	.00369
66	DGKTPT	.91813	.13741	.00029	114.53	.00065	.00253
67	DGKTQT	.30154	.09571	.00010	44.424	-.00432	.00138
68	DGKTQP5T	.06820	.01993	.00006	9.2443	-.00143	.00023
69	DGKTQST	.25462	40.752	.00016	33.959	-.00339	.00138
70	DGKTQDT	.23707	40.654	.00010	32.829	-.00368	.00069
71	DGMVNT	.79093	.08193	.00016	30.701	-.00289	.00206
72	DGMVWT	.91717	.08551	.00023	30.177	-.00182	.00229
73	CCV2-6	49.391	4.8282	5.0104	52.334	5.0460	4.8368
74	CCB6	.01066	.00059	.00073	.00132	-.00321	-.00023
75	DH0CHB	.00929	.00025	.00013	.02309	-.00142	.00045
76	DH0CHC	1.9442	1.9175	.04998	51.686	.49064	.24149
77	DGXL3	.37566	.11974	.00012	34.468	-.00043	.01885
78	DGXL3P5	.08071	.02464	.00010	7.1498	-.00072	.00436
79	DGXL3S	2.3453	1.9008	.04759	83.725	.46964	.24793
80	DGXL3D	2.3716	1.9221	.04810	85.088	.47712	.25184
81	DGXL3/5 NA	.07238	.02449	.00003	7.0513	-.00143	.00321
82	DGXL3P25 NA	.02180	.00488	.00003	1.4384	-.00357	.00000
83	DGXL3S/5 NA	.48081	.40129	.01009	17.376	.09876	.05243
84	DGXL3D/5 NA	.48453	.40392	.01006	17.437	.09805	.05220
85	CCV2-7	49.297	4.8168	5.0125	52.091	5.0271	4.8321
86	CCB7	.01898	.00038	.00059	.01028	-.00071	.00160
87	DGW34B	.00836	.00000	.00013	.05310	-.00035	.00000
88	DGW34C	1.9178	1.9508	.05018	L.05198	.49348	.24471
89	DGQ5L	.04224	.00516	.00013	.87678	-.00071	1.0768
90	DGT5K	.09000	.01927	.00003	.99742	-.00251	3.8020
91	DGT81	1.5129	.01208	.00010	.51122	.00068	.92646
92	DGT81P5	.32386	.00245	.00013	.20425	-.00071	.18864
93	DGT81S	3.3574	1.9281	.04930	.61633	.49136	1.1269
94	DGT81D	3.4125	1.9630	.05013	.54340	.49988	1.1547
95	CCV2-8	49.752	4.8676	5.0512	52.640	5.0858	4.8719
96	CCB8	.01205	.00051	.00062	1.1428	-.00214	-.00023
97	DGW3AB	.00786	-.00020	.00010	.05010	-.00285	.00022
98	DGW3AC	1.8863	1.9224	.04962	L.06973	.49173	.24057
99	DGDFK	.01395	.49632	.00006	159.44	.00155	.00602
100	DGDFKP5	.13643	.10198	.00010	33.078	-.00040	.00143
101	DGDFKS	1.9148	2.3862	.04922	159.31	.47940	.23672
102	DGDFKD	1.9295	2.4113	.04945	161.48	.48330	.23948
103	DGDFKP5 RERUN ZN	.01069	.10165	.00010	33.071	-.00111	.00143
104	CCV2-9	49.799	4.9029	5.0451	51.773	5.0210	4.9060
105	CCB9	.00649	.00038	.00049	.11766	-.00107	.00068
106	DH0EEB	.00788	-.00002	.00006	.05172	-.00142	.00091
107	DH0EEC	1.9943	1.9420	.04991	L.15937	.50419	.24449

#	Sample Name	AL	BA	BE	CA	CO	CU
108	DGQ67	3.4422	.19761	.00001	10.518	.00265	.58135
109	DGQ67P5	.72233	.04069	.00003	2.2422	-.00039	.12059
110	DGQ67S	5.5424	2.1533	.05072	11.190	.48545	.90021
111	DGQ67D	5.9339	2.1664	.05054	11.859	.49863	.93133
112	DGT5C	13.229	.42530	.00064	27.972	.01504	2.2276
113	DGT8W	3.0325	2.0006	.00049	6.1301	.02874	.21364
114	DGT9H	5.9084	.24327	.00008	11.421	.00254	6.0274
115	CCV2-10	50.488	4.9468	5.1395	53.807	5.1854	4.9421
116	CCB10	.00186	.00036	.00069	.24006	-.00106	.00022

#	Sample Name	FE	K	MG	MN	NA	NI
1	STD1	.00089	-.03494	.00039	.00009	.06265	.00085
2	STD5A				1.9867		1.67309
3	STD5B	29.2359	2.25145	7.25104		44.1041	
4	ICV2-1 0014-148-7	26.189	24.493	25.398	1.0040	24.927	1.0028
5	ICB1	.00547	-.22743	-.00068	.00000	.00420	-.00284
6	ICSA 0014-170-1	186.10	.01968	487.17	.00545	.00204	-.02791
7	ICSAB 0014-187-1	184.42	9.7861	481.56	.45422	9.9751	.86004
8	DH0CKB	.00957	-.10496	.01448	-.00100	-.00090	-.00193
9	DH0CKC	1.1071	L-.33677	L-.00206	.52235	L.00465	.52695
10	DGX1R	.02308	-.09184	.03792	.09007	9.9066	.00205
11	DGX1RP5	.00376	-.34114	-.00620	.01761	1.9650	-.00131
12	DGX1RS	1.1283	.00000	.02896	.61494	10.089	.54128
13	DGX1RD	1.1137	.05685	.03241	.60513	10.011	.52406
14	DH0J3B	.01350	-.11152	-.00965	-.00050	.01169	-.00667
15	DH0J3C	1.0372	48.515	49.707	.48642	49.178	.48621
16	CCV2-1 0014-195-2	51.913	49.902	50.256	4.9754	50.027	4.9876
17	CCB1	.00239	-.10496	.00068	.00025	-.00317	-.00344
18	DGXN4	.02326	.17494	.00482	.00025	.01101	-.00406
19	DGXN4P5	.00444	.01530	-.00620	.00025	.00397	-.00861
20	DGXN4S	1.0599	48.248	49.145	.48819	48.628	.48364
21	DGXN4D	1.0526	47.426	48.550	.48618	48.033	.48028
22	DGXNE	2.1650	6.0838	3.1294	.71086	137.26	-.00289
23	DGXNH	.26920	8.3078	1.4564	.40163	54.323	-.00071
24	DGXNN	.02445	-.23836	.00275	-.00049	.00658	-.00321
25	CCV2-2	52.471	50.319	50.646	5.0280	50.423	5.0384
26	CCB2	.00102	.00218	-.00758	.00050	-.00158	-.00509
27	DH0CFBT	.00307	-.40893	-.01792	.00000	-.00647	-.00416
28	DGWD8BT	.00906	-.04811	.01241	-.00025	S901.36	-.00507
29	DH0CFCT	1.0510	L.32365	L.02758	.49642	S-.14225	.48765
30	DGQCPT	.45080	.70197	4.4913	.07505	S1802.9	-.00385
31	DGQCPP5T	.09836	.14651	.95301	.01536	278.89	-.00512
32	DGQCPST	.45969	.73915	4.4706	.07404	S-.14225	-.00378
33	DGQCPDT	.43950	1.3996	4.4258	.07303	S1803.1	-.00552
34	DH0CMBT	.00273	.16401	.00344	-.00050	.18062	.00055
35	DH0CMCT	1.0785	L.06779	L-.00344	.50372	L.04359	.50658
36	DGDJ0T	.16634	8.6162	5.0458	1.4396	S901.33	-.00072
37	CCV2-3	52.072	49.119	50.025	4.9919	49.271	5.0024
38	CCB3	.01436	-.13777	.00620	.00126	.02974	-.00205
39	DGDJ0P5T	.03891	1.7429	1.0820	.30920	276.75	-.00308
40	DGDJ0ST	.16788	8.7605	5.0830	1.4466	S2704.1	.00644
41	DGDJ0DT	.16788	8.9070	5.0885	1.4499	S2704.3	-.00202


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#	Sample Name	FE	K	MG	MN	NA	NI
42	DGF39T	.02147	2.1693	1.7805	.38087	S3606.0	.00050
43	DGF39P5T	.00357	.22305	.38134	.08251	280.04	-.00115
44	DGF39ST	.01960	2.4012	1.7474	.36880	S3606.6	-.00272
45	DGF39DT	.02473	2.4099	1.7633	.37509	S3606.4	-.00519
46	DGW22BT	.00170	.30615	.00758	-.00025	.17506	-.00370
47	DGW22CT	1.0749	L.01093	L-.00689	.49643	L.06119	.50626
48	DGQ5LT	.04326	.55983	.17170	.01158	3.9625	.09878
49	CCV2-4	51.942	49.145	50.076	4.9823	49.156	5.0206
50	CCB4	.02822	-.01312	.01930	.00277	.04541	-.00488
51	DGQ5LP5T	.01522	.45486	.03654	.00352	.79391	.01549
52	DGQ5LST	.04464	.59700	.15377	.01133	3.9827	.09898
53	DGQ5LDT	.04840	.73915	.17239	.01234	4.1710	.11072
54	DH0CRBT	.00102	-.15307	-.01103	-.00050	.01419	-.00451
55	DGWEXBT	.01795	.40019	.10137	.00050	S-.14225	-.00703
56	DH0CRCT	1.0429	L.42206	L.10826	.48686	S1802.6	.49034
57	DGHCET	.18692	2.3246	2.9887	.08756	S3607.0	-.00356
58	DGHCRT	.40056	2.1059	2.9570	.61523	S3607.2	-.00805
59	DGHCVT	.30890	9.0973	4.6720	2.9383	S3607.5	.00431
60	DGHCWT	14.768	12.021	9.2695	1.5498	S2705.0	.06741
61	CCV2-5	52.630	50.052	50.782	5.0481	50.290	5.1462
62	CCB5	.00478	.31053	.01103	.00050	.00840	-.00690
63	DGHCXT	5.8255	2.2087	2.9949	.39807	S2704.6	.00471
64	DGKTKT	.14384	4.6099	4.1176	.08155	S3606.5	-.00482
65	DGKTLT	3.0267	4.6995	6.6980	.78053	S3607.5	.00467
66	DGKTPT	.11115	9.7533	7.5552	.05058	S3607.0	-.00241
67	DGKTQT	.11099	1.0016	2.2563	.05361	S3607.3	-.00446
68	DGKTQP5T	.02274	.25586	.47650	.01107	266.31	-.00672
69	DGKTQST	.08278	1.0650	1.7598	.04203	S3611.6	-.00290
70	DGKTQDT	.08346	.52265	1.6902	.04027	S3612.1	.00132
71	DGMVNT	.06122	1.8107	1.5481	.13058	S3607.1	-.00370
72	DGMVWT	.08243	2.0688	1.6992	.05862	S3607.3	-.00751
73	CCV2-6	51.832	48.675	49.748	4.9883	48.848	5.0873
74	CCB6	.00649	-.17494	-.00551	.00050	.02361	-.00730
75	DH0CHB	.00341	.29959	.00068	-.00025	.01294	-.00644
76	DH0CHC	1.0403	48.021	49.537	.49171	48.247	.49567
77	DGXL3	.42776	4.1528	9.0626	.04339	S3612.8	.00409
78	DGXL3P5	.08876	1.0453	1.8654	.00883	200.53	-.00266
79	DGXL3S	1.4079	52.222	55.674	.50966	S3612.4	.46260
80	DGXL3D	1.4335	53.140	56.543	.51697	S3612.2	.48358
81	DGXL3/5 NA	.08705	.71728	1.8585	.00857	200.63	-.00231
82	DGXL3P25 NA	.01710	.10278	.36962	.00176	40.316	-.00196
83	DGXL3S/5 NA	.29637	10.606	11.700	.10757	207.53	.10079
84	DGXL3D/5 NA	.29979	10.536	11.760	.10807	208.77	.10134
85	CCV2-7	51.602	48.642	49.805	4.9686	48.807	5.1092
86	CCB7	.00341	.40456	.00413	.00050	.01975	-.00560
87	DGW34B	-.00102	.28428	-.00689	-.00050	.01055	-.00514
88	DGW34C	1.0478	L.30178	L-.02896	.49222	L.02043	.50359
89	DGQ5L	.07285	.61887	.09447	.01033	1.3655	.10955
90	DGT5K	.03180	.72821	.09861	.00604	.83898	.26150
91	DGT81	.09372	.82444	.15033	.00754	1.7590	.09892
92	DGT81P5	.02018	.35645	.02413	.00226	.37487	.01853
93	DGT81S	1.1376	1.1940	.13791	.49397	1.7956	.60575
94	DGT81D	1.1340	.93596	.13929	.50278	1.7602	.60994
95	CCV2-8	52.068	48.968	50.283	5.0140	49.150	5.1344

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#	Sample Name	FE	K_	MG	MN	NA	NI
96	CCB8	.00615	.12465	-.00275	.00050	.01543	-.00446
97	DGW3AB	-.00034	.10278	-.00551	-.00050	.01055	-.00282
98	DGW3AC	1.0403	L.23836	L-.02482	.48793	L.01748	.50701
99	DGDFK	3.6206	5.2462	38.597	4.4559	40.162	-.00183
100	DGDFKP5	.76294	1.0869	7.9386	.94196	8.0332	-.00706
101	DGDFKS	4.6333	5.6005	38.608	4.9355	40.100	.49447
102	DGDFKD	4.6892	5.7077	39.230	4.9972	40.878	.48588
103	DGDFKP5 RERUN ZN	.75849	1.2006	7.9407	.93442	8.0397	-.00576
104	CCV2-9	51.671	48.961	50.282	4.9613	49.742	5.0869
105	CCB9	.00256	.18369	.01034	.00025	.00488	-.00347
106	DH0EEB	.00529	.39581	.00137	-.00025	.03258	-.00765
107	DH0EEC	1.0711	L.33458	L-.02896	.49977	L.14225	.51442
108	DGQ67	6.4142	3.3240	1.7826	.11273	13.583	.07461
109	DGQ67P5	1.3508	.73915	.37513	.02377	2.8007	.00795
110	DGQ67S	7.8307	3.2737	1.8598	.60178	14.144	.60026
111	DGQ67D	9.4656	3.7920	2.0171	.63068	14.393	.69062
112	DGT5C	15.868	8.2378	17.080	.32762	14.116	.55109
113	DGT8W	2.4361	1.2071	1.2895	.03914	7.9483	.08446
114	DGT9H	5.7619	1.8872	1.5916	.08457	3.9967	.14769
115	CCV2-10	52.993	49.434	50.965	5.1094	49.896	5.2683
116	CCB10	.00410	-.01530	-.01310	.00100	.01101	-.00069

#	Sample Name	V_	ZN
1	STD1	.00019	.00032
2	STD5A	1.56555	1.49799
3	STD5B		
4	ICV2-1 0014-148-7	.98764	.99678
5	ICB1	-.00127	-.00080
6	ICSA 0014-170-1	.00524	.00451
7	ICSAB 0014-187-1	.46021	.93099
8	DH0CKB	-.00033	.00073
9	DH0CKC	.50425	.52726
10	DGX1R	-.00127	.01816
11	DGX1RP5	-.00122	.00257
12	DGX1RS	.50682	.53176
13	DGX1RD	.49804	.52201
14	DH0J3B	-.00134	.00088
15	DH0J3C	.48816	.49421
16	CCV2-1 0014-195-2	4.9722	4.9823
17	CCB1	-.00033	.00012
18	DGXN4	-.00124	.00816
19	DGXN4P5	.00120	.00149
20	DGXN4S	.48804	.48819
21	DGXN4D	.48690	.49615
22	DGXNE	.00116	.04038
23	DGXNH	-.00002	.00519
24	DGXNN	-.00007	.00274
25	CCV2-2	5.0290	5.0460
26	CCB2	-.00004	-.00067
27	DH0CFBT	-.00132	.00618
28	DGWD8BT	-.00041	.00690
29	DH0CFCT	.48557	.51728

#	Sample Name	V	ZN
30	DGQCPT	.00622	.01417
31	DGQCPP5T	.00240	.00255
32	DGQCPST	.00538	.01586
33	DGQCPDT	.00803	.01572
34	DH0CMBT	-.00127	.00233
35	DH0CMCT	.49301	.49753
36	DGDJ0T	.00874	.01060
37	CCV2-3	5.0017	5.0003
38	CCB3	.00260	.00160
39	DGDJ0P5T	.00502	.00496
40	DGDJ0ST	.00263	.00840
41	DGDJ0DT	.00422	.00991
42	DGF39T	.00126	.03221
43	DGF39P5T	-.00012	.00770
44	DGF39ST	.00252	.02826
45	DGF39DT	.00094	.03161
46	DGW22BT	-.00134	.00181
47	DGW22CT	.48766	.48621
48	DGQ5LT	-.00098	.19201
49	CCV2-4	4.9950	4.9836
50	CCB4	.00164	.00302
51	DGQ5LP5T	.00247	.04042
52	DGQ5LST	-.00142	.19812
53	DGQ5LDT	-.00039	.20367
54	DH0CRBT	-.00035	.00235
55	DGWEXBT	.00118	.02104
56	DH0CRCT	.48302	.52235
57	DGHCET	-.00012	.04074
58	DGHCRT	.00370	.06187
59	DGHCVT	-.00122	.11260
60	DGHCWT	.02993	.29868
61	CCV2-5	5.0798	5.0192
62	CCB5	-.00122	-.00099
63	DGHCXT	.00492	.07062
64	DGKTKT	.00276	.03032
65	DGKTLT	.00340	.04463
66	DGKTPT	.00237	.03193
67	DGKTQT	-.00134	.02886
68	DGKTQP5T	-.00007	.00524
69	DGKTQST	.00163	.02357
70	DGKTQDT	-.00230	.02488
71	DGMVNT	-.00120	.02860
72	DGMVWT	.00024	.03691
73	CCV2-6	5.0094	4.9701
74	CCB6	-.00130	.00060
75	DH0CHB	-.00098	.00281
76	DH0CHC	.49329	.48982
77	DGXL3	.00274	.06732
78	DGXL3P5	-.00120	.01471
79	DGXL3S	.47390	.54346
80	DGXL3D	.48170	.55178
81	DGXL3/5 NA	-.00156	.01276
82	DGXL3P25 NA	-.00132	.00307
83	DGXL3S/5 NA	.10273	.11255

#	Sample Name	V	ZN
84	DGXL3D/5 NA	.10208	.11274
85	CCV2-7	4.9893	4.9610
86	CCB7	.00004	.00119
87	DGW34B	-.00125	.00188
88	DGW34C	.49331	.48021
89	DGQ5L	-.00129	.21718
90	DGT5K	-.00129	.22222
91	DGT81	-.00129	.51646
92	DGT81P5	-.00134	.11072
93	DGT81S	.48932	.94954
94	DGT81D	.49929	.95829
95	CCV2-8	5.0402	5.0003
96	CCB8	-.00005	.01071
97	DGW3AB	-.00125	.00240
98	DGW3AC	.49160	.48139
99	DGDFK	-.00124	.01307
100	DGDFKP5	-.00132	.08033
101	DGDFKS	.48137	.47358
102	DGDFKD	.48296	.47801
103	DGDFKP5 RERUN ZN	-.00129	.00213
104	CCV2-9	5.0098	4.9643
105	CCB9	.00057	.00168
106	DH0EEB	-.00125	.00529
107	DH0EEC	.49768	.49887
108	DGQ67	.00642	8.7028
109	DGQ67P5	.00004	1.8567
110	DGQ67S	.49092	9.9591
111	DGQ67D	.49632	10.296
112	DGT5C	.01885	15.831
113	DGT8W	.03662	.82970
114	DGT9H	.00445	2.5399
115	CCV2-10	5.1344	5.1029
116	CCB10	-.00127	.00421

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mtw 7-29-00

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	J00729A	QUANMET	07/29/00	08:27		X	IR
2	STD5A	J00729A	QUANMET	07/29/00	08:31		X	IR
3	STD5B	J00729A	QUANMET	07/29/00	08:34		X	IR
4	ICV2-1 0014-148-7	J00729A	QUANMET	07/29/00	08:37	MTW	S	CONC
5	ICB1	J00729A	QUANMET	07/29/00	08:40	MTW	S	CONC
6	ICSA 0014-170-1	J00729A	QUANMET	07/29/00	08:43	MTW	Q	CONC
7	ICSAB 0014-187-1	J00729A	QUANMET	07/29/00	08:46	MTW	Q	CONC
8	DH0CKB	J00729A	QUANMET	07/29/00	08:52	MTW	S	CONC
9	DH0CKC	J00729A	QUANMET	07/29/00	08:55	MTW	S	CONC
10	DGX1R	J00729A	QUANMET	07/29/00	08:58	MTW	S	CONC
11	DGX1RP5	J00729A	QUANMET	07/29/00	09:01	MTW	S	CONC
12	DGX1RS	J00729A	QUANMET	07/29/00	09:04	MTW	S	CONC
13	DGX1RD	J00729A	QUANMET	07/29/00	09:07	MTW	S	CONC
14	DH0J3B	J00729A	QUANMET	07/29/00	09:11	MTW	S	CONC
15	DH0J3C	J00729A	QUANMET	07/29/00	09:14	MTW	S	CONC
16	CCV2-1 0014-195-2	J00729A	QUANMET	07/29/00	09:17	MTW	S	CONC
17	CCB1	J00729A	QUANMET	07/29/00	09:20	MTW	S	CONC
18	DGXN4	J00729A	QUANMET	07/29/00	09:23	MTW	S	CONC
19	DGXN4P5	J00729A	QUANMET	07/29/00	09:26	MTW	S	CONC
20	DGXN4S	J00729A	QUANMET	07/29/00	09:29	MTW	S	CONC
21	DGXN4D	J00729A	QUANMET	07/29/00	09:33	MTW	S	CONC
22	DGXNE	J00729A	QUANMET	07/29/00	09:36	MTW	S	CONC
23	DGXNH	J00729A	QUANMET	07/29/00	09:39	MTW	S	CONC
24	DGXNN	J00729A	QUANMET	07/29/00	09:42	MTW	S	CONC
25	CCV2-2	J00729A	QUANMET	07/29/00	09:45	MTW	S	CONC
26	CCB2	J00729A	QUANMET	07/29/00	09:48	MTW	S	CONC
27	DH0CFBT	J00729A	QUANMET	07/29/00	09:51	MTW	S	CONC
28	DGWD8BT	J00729A	QUANMET	07/29/00	09:55	MTW	S	CONC
29	DH0CFCT	J00729A	QUANMET	07/29/00	09:58	MTW	S	CONC
30	DGQCPT	J00729A	QUANMET	07/29/00	10:01	MTW	S	CONC
31	DGQCPP5T	J00729A	QUANMET	07/29/00	10:04	MTW	S	CONC
32	DGQCPST	J00729A	QUANMET	07/29/00	10:07	MTW	S	CONC
33	DGQCPDT	J00729A	QUANMET	07/29/00	10:10	MTW	S	CONC
34	DH0CMBT	J00729A	QUANMET	07/29/00	10:14	MTW	S	CONC
35	DH0CMCT	J00729A	QUANMET	07/29/00	10:17	MTW	S	CONC
36	DGDJ0T	J00729A	QUANMET	07/29/00	10:20	MTW	S	CONC
37	CCV2-3	J00729A	QUANMET	07/29/00	10:23	MTW	S	CONC
38	CCB3	J00729A	QUANMET	07/29/00	10:26	MTW	S	CONC
39	DGDJ0P5T	J00729A	QUANMET	07/29/00	10:29	MTW	S	CONC
40	DGDJ0ST	J00729A	QUANMET	07/29/00	10:33	MTW	S	CONC
41	DGDJ0DT	J00729A	QUANMET	07/29/00	10:36	MTW	S	CONC
42	DGF39T	J00729A	QUANMET	07/29/00	10:39	MTW	S	CONC
43	DGF39P5T	J00729A	QUANMET	07/29/00	10:42	MTW	S	CONC
44	DGF39ST	J00729A	QUANMET	07/29/00	10:46	MTW	S	CONC
45	DGF39DT	J00729A	QUANMET	07/29/00	10:49	MTW	S	CONC
46	DGW22BT	J00729A	QUANMET	07/29/00	10:52	MTW	S	CONC
47	DGW22CT	J00729A	QUANMET	07/29/00	10:55	MTW	S	CONC
48	DGQ5LT	J00729A	QUANMET	07/29/00	10:58	MTW	S	CONC
49	CCV2-4	J00729A	QUANMET	07/29/00	11:01	MTW	S	CONC
50	CCB4	J00729A	QUANMET	07/29/00	11:05	MTW	S	CONC
51	DGQ5LP5T	J00729A	QUANMET	07/29/00	11:08	MTW	S	CONC
52	DGQ5LST	J00729A	QUANMET	07/29/00	11:11	MTW	S	CONC
53	DGQ5LDT	J00729A	QUANMET	07/29/00	11:14	MTW	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	DH0CRBT	J00729A	QUANMET	07/29/00	11:17	MTW	S	CONC
55	DGWEXBT	J00729A	QUANMET	07/29/00	11:20	MTW	S	CONC
56	DH0CRCT	J00729A	QUANMET	07/29/00	11:24	MTW	S	CONC
57	DGHCET	J00729A	QUANMET	07/29/00	11:27	MTW	S	CONC
58	DGHCRT	J00729A	QUANMET	07/29/00	11:30	MTW	S	CONC
59	DGHCVT	J00729A	QUANMET	07/29/00	11:33	MTW	S	CONC
60	DGHCWT	J00729A	QUANMET	07/29/00	11:37	MTW	S	CONC
61	CCV2-5	J00729A	QUANMET	07/29/00	11:40	MTW	S	CONC
62	CCB5	J00729A	QUANMET	07/29/00	11:43	MTW	S	CONC
63	DGHCXT	J00729A	QUANMET	07/29/00	11:46	MTW	S	CONC
64	DGKTKT	J00729A	QUANMET	07/29/00	11:49	MTW	S	CONC
65	DGKTLT	J00729A	QUANMET	07/29/00	11:52	MTW	S	CONC
66	DGKTPT	J00729A	QUANMET	07/29/00	11:56	MTW	S	CONC
67	DGKTQT	J00729A	QUANMET	07/29/00	11:59	MTW	S	CONC
68	DGKTQP5T	J00729A	QUANMET	07/29/00	12:02	MTW	S	CONC
69	DGKTQST	J00729A	QUANMET	07/29/00	12:05	MTW	S	CONC
70	DGKTQDT	J00729A	QUANMET	07/29/00	12:09	MTW	S	CONC
71	DGMVNT	J00729A	QUANMET	07/29/00	12:12	MTW	S	CONC
72	DGMVWT	J00729A	QUANMET	07/29/00	12:15	MTW	S	CONC
73	CCV2-6	J00729A	QUANMET	07/29/00	12:18	MTW	S	CONC
74	CCB6	J00729A	QUANMET	07/29/00	12:21	MTW	S	CONC
75	DH0CHB	J00729A	QUANMET	07/29/00	12:26	MTW	S	CONC
76	DH0CHC	J00729A	QUANMET	07/29/00	12:29	MTW	S	CONC
77	DGXL3	J00729A	QUANMET	07/29/00	12:32	MTW	S	CONC
78	DGXL3P5	J00729A	QUANMET	07/29/00	12:35	MTW	S	CONC
79	DGXL3S	J00729A	QUANMET	07/29/00	12:39	MTW	S	CONC
80	DGXL3D	J00729A	QUANMET	07/29/00	12:42	MTW	S	CONC
81	DGXL3/5 NA	J00729A	QUANMET	07/29/00	12:47	MTW	S	CONC
82	DGXL3P25 NA	J00729A	QUANMET	07/29/00	12:50	MTW	S	CONC
83	DGXL3S/5 NA	J00729A	QUANMET	07/29/00	12:53	MTW	S	CONC
84	DGXL3D/5 NA	J00729A	QUANMET	07/29/00	12:56	MTW	S	CONC
85	CCV2-7	J00729A	QUANMET	07/29/00	13:00	MTW	S	CONC
86	CCB7	J00729A	QUANMET	07/29/00	13:03	MTW	S	CONC
87	DGW34B	J00729A	QUANMET	07/29/00	13:09	MTW	S	CONC
88	DGW34C	J00729A	QUANMET	07/29/00	13:12	MTW	S	CONC
89	DGQ5L	J00729A	QUANMET	07/29/00	13:15	MTW	S	CONC
90	DGT5K	J00729A	QUANMET	07/29/00	13:18	MTW	S	CONC
91	DGT81	J00729A	QUANMET	07/29/00	13:22	MTW	S	CONC
92	DGT81P5	J00729A	QUANMET	07/29/00	13:25	MTW	S	CONC
93	DGT81S	J00729A	QUANMET	07/29/00	13:28	MTW	S	CONC
94	DGT81D	J00729A	QUANMET	07/29/00	13:31	MTW	S	CONC
95	CCV2-8	J00729A	QUANMET	07/29/00	13:34	MTW	S	CONC
96	CCB8	J00729A	QUANMET	07/29/00	13:38	MTW	S	CONC
97	DGW3AB	J00729A	QUANMET	07/29/00	13:41	MTW	S	CONC
98	DGW3AC	J00729A	QUANMET	07/29/00	13:44	MTW	S	CONC
99	DGDFK	J00729A	QUANMET	07/29/00	13:47	MTW	S	CONC
100	DGDFKP5	J00729A	QUANMET	07/29/00	13:51	MTW	S	CONC
101	DGDFKS	J00729A	QUANMET	07/29/00	13:54	MTW	S	CONC
102	DGDFKD	J00729A	QUANMET	07/29/00	13:57	MTW	S	CONC
103	DGDFKP5 RERUN ZN	J00729A	QUANMET	07/29/00	14:05	MTW	S	CONC
104	CCV2-9	J00729A	QUANMET	07/29/00	14:08	MTW	S	CONC
105	CCB9	J00729A	QUANMET	07/29/00	14:12	MTW	S	CONC
106	DH0EEB	J00729A	QUANMET	07/29/00	14:17	MTW	S	CONC
107	DH0EEC	J00729A	QUANMET	07/29/00	14:20	MTW	S	CONC

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#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
108	DGQ67	J00729A	QUANMET	07/29/00	14:23	MTW	S	CONC
109	DGQ67P5	J00729A	QUANMET	07/29/00	14:26	MTW	S	CONC
110	DGQ67S	J00729A	QUANMET	07/29/00	14:29	MTW	S	CONC
111	DGQ67D	J00729A	QUANMET	07/29/00	14:33	MTW	S	CONC
112	DGT5C	J00729A	QUANMET	07/29/00	14:36	MTW	S	CONC
113	DGT8W	J00729A	QUANMET	07/29/00	14:39	MTW	S	CONC
114	DGT9H	J00729A	QUANMET	07/29/00	14:42	MTW	S	CONC
115	CCV2-10	J00729A	QUANMET	07/29/00	14:45	MTW	S	CONC
116	CCB10	J00729A	QUANMET	07/29/00	14:48	MTW	S	CONC

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Method: QUANMET Standard: STD1
Run Time: 07/29/00 08:27:52

666 750

Elem	AG	AL	AS	B	BA	BE	CA
Avge	-.00075	.00845	-.00090	.00066	.00002	.00235	.00227
SDev	.00044	.00115	.00293	.00059	.00013	.00019	.00078
%RSD	59.129	13.579	325.34	89.844	640.36	8.1483	34.367
#1	-.00140	.00680	-.00280	.00118	.00000	.00220	.00145
#2	-.00060	.00860	.00160	.00114	-.00012	.00220	.00200
#3	-.00040	.00900	.00160	.00000	.00020	.00260	.00331
#4	-.00060	.00940	-.00400	.00032	.00000	.00240	.00233

Elem	CD	CO	CR	CU	FE	K	LI
Avge	.00011	.00030	.00065	.00020	.00090	-.03495	-.00001
SDev	.00013	.00026	.00082	.00016	.00053	.01007	.00056
%RSD	115.55	86.066	126.55	81.650	58.794	28.800	4728.0
#1	.00000	.00040	.00040	.00000	.00020	-.03560	-.00045
#2	.00028	.00000	-.00040	.00020	.00080	-.04740	-.00052
#3	.00004	.00060	.00140	.00040	.00140	-.03400	.00060
#4	.00012	.00020	.00120	.00020	.00120	-.02280	.00032

Elem	MG	MN	MO	NA	NI	PB	SB
Avge	.00040	.00010	.00015	.06265	.00085	.00045	-.00020
SDev	.00091	.00012	.00010	.00315	.00047	.00019	.00052
%RSD	227.30	115.47	66.667	5.0298	55.206	42.552	258.20
#1	-.00040	.00000	.00020	.05940	.00084	.00060	-.00080
#2	-.00020	.00000	.00000	.06100	.00104	.00020	-.00040
#3	.00060	.00020	.00020	.06660	.00132	.00060	.00040
#4	.00160	.00020	.00020	.06360	.00021	.00040	.00000

Elem	SE	SI	SN	SR	TI	TL	V
Avge	.00025	.00220	.00045	.00017	.00235	.00020	.00020
SDev	.00044	.00023	.00236	.00028	.00034	.00063	.00040
%RSD	177.39	10.497	525.09	167.28	14.535	316.23	200.00
#1	.00040	.00200	-.00020	.00004	.00200	.00040	.00000
#2	-.00020	.00240	.00200	.00040	.00240	-.00040	.00000
#3	.00000	.00200	.00260	-.00016	.00280	.00100	.00080
#4	.00080	.00240	-.00260	.00040	.00220	-.00020	.00000

Elem	ZN
Avge	.00033
SDev	.00016
%RSD	47.649
#1	.00040
#2	.00052
#3	.00020
#4	.00020

Method: QUANMET Standard: STD5A 0014-155-1
 Run Time: 07/29/00 08:31:02

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Elem	AG	AS	B	BA	BE	CD	CO
Avge	.26215	.51220	.57572	3.9119	15.180	.89907	1.4067
SDev	.00025	.00228	.00237	.0378	.064	.00261	.0021
%RSD	.09600	.44521	.41104	.96637	.42106	.29035	.14615
#1	.26180	.51000	.57592	3.9340	15.201	.89540	1.4070
#2	.26220	.51060	.57712	3.9240	15.200	.90056	1.4040
#3	.26240	.51340	.57752	3.9340	15.233	.90125	1.4090
#4	.26220	.51480	.57232	3.8557	15.087	.89908	1.4068

Elem	CR	CU	LI	MN	MO	NI	PB
Avge	3.6470	2.1769	4.1504	1.9867	.39935	1.6731	.24990
SDev	.0065	.0168	.0622	.0035	.00072	.0141	.00038
%RSD	.17739	.77020	1.4988	.17715	.17999	.84165	.15325
#1	3.6456	2.1854	4.1915	1.9852	.39840	1.6571	.25020
#2	3.6384	2.1854	4.1760	1.9860	.40000	1.6824	.24940
#3	3.6528	2.1852	4.1762	1.9918	.39980	1.6872	.25020
#4	3.6510	2.1518	4.0577	1.9838	.39920	1.6657	.24980

Elem	SB	SE	SI	SN	SR	TI	TL
Avge	.18815	.50595	.33025	.95740	7.4766	5.9201	.33665
SDev	.00090	.00495	.00130	.00714	.0638	.0273	.00226
%RSD	.47834	.97758	.39364	.74621	.85387	.46157	.67104
#1	.18760	.50860	.32960	.95000	7.5156	5.9304	.33400
#2	.18740	.51160	.32960	.95440	7.4986	5.9280	.33600
#3	.18940	.50180	.33220	.95840	7.5109	5.9420	.33940
#4	.18820	.50180	.32960	.96680	7.3815	5.8802	.33720

Elem	V	ZN
Avge	1.5656	1.4980
SDev	.0050	.0032
%RSD	.32190	.21319
#1	1.5660	1.4937
#2	1.5678	1.4985
#3	1.5700	1.5014
#4	1.5584	1.4984

Standardization Rpt.

07/29/00 08:37:17 AM

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Method: QUANMET Standard: STD5B
Run Time: 07/29/00 08:34:11

0014-155-2

666 752

Elem	AL	CA	FE	K	MG	NA
Avge	10.786	24.196	29.236	2.2515	7.2510	44.104
SDev	.048	.089	.061	.0180	.0301	.323
%RSD	.44365	.36882	.20951	.80163	.41498	.73256
#1	10.814	24.226	29.278	2.2670	7.2592	44.272
#2	10.827	24.227	29.299	2.2520	7.2894	44.279
#3	10.784	24.065	29.180	2.2608	7.2348	44.246
#4	10.720	24.267	29.187	2.2260	7.2208	43.620

Method: QUANMET

Slope = Conc(SIR)/IR

666 753

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD5A	STD1	7.42231	.005567	07/29/00 08:34:11
AL	308.215	STD5B	STD1	9.27842	-.078403	07/29/00 08:34:11
AS	193.696	STD5A	STD1	19.8254	.017843	07/29/00 08:34:11
B	249.600	STD5A	STD1	17.4245	-.011480	07/29/00 08:34:11
BA	493.409	STD5A	STD1	2.55630	-.000053	07/29/00 08:34:11
BE	313.042	STD5A	STD1	.660603	-.001552	07/29/00 08:34:11
CA	317.933	STD5B	STD1	4.13326	-.009385	07/29/00 08:34:11
CD	228.802	STD5A	STD1	11.2906	-.001229	07/29/00 08:34:11
CO	228.616	STD5A	STD1	7.14431	-.002143	07/29/00 08:34:11
CR	267.716	STD5A	STD1	2.74326	-.001783	07/29/00 08:34:11
CU	324.754	STD5A	STD1	4.58982	-.000918	07/29/00 08:34:11
FE	259.940	STD5B	STD1	3.42055	-.003078	07/29/00 08:34:11
K	766.491	STD5B	STD1	43.7369	1.52860	07/29/00 08:34:11
LI	670.789	STD5A	STD1	2.40943	.000028	07/29/00 08:34:11
MG	279.079	STD5B	STD1	13.7919	-.005517	07/29/00 08:34:11
MN	257.610	STD5A	STD1	5.03206	-.000503	07/29/00 08:34:11
MO	202.030	STD5A	STD1	25.0501	-.003758	07/29/00 08:34:11
NA	588.995	STD5B	STD1	2.27059	-.142252	07/29/00 08:34:11
NI	231.604	STD5A	STD1	5.97728	-.005081	07/29/00 08:34:11
PB	220.353	STD5A	STD1	38.9088	-.017509	07/29/00 08:34:11
SB	206.838	STD5A	STD1	53.1542	.010631	07/29/00 08:34:11
SE	196.026	STD5A	STD1	19.7746	-.004944	07/29/00 08:34:11
SI	288.158	STD5A	STD1	30.0941	-.066207	07/29/00 08:34:11
SN	189.989	STD5A	STD1	10.4390	-.004698	07/29/00 08:34:11
SR	409.552	STD5A	STD1	1.33753	-.000224	07/29/00 08:34:11
TI	334.941	STD5A	STD1	1.68982	-.003971	07/29/00 08:34:11
TL	190.864	STD5A	STD1	59.7229	-.011945	07/29/00 08:34:11
V	292.402	STD5A	STD1	6.25230	-.001250	07/29/00 08:34:11
ZN	213.856	STD5A	STD1	6.69996	-.002207	07/29/00 08:34:11

Analysis Report

07/29/00 08:40:27 AM

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Method: QUANMET Sample Name: ICV2-1 0014-148-7 Operator: MTW
 Run Time: 07/29/00 08:37:21
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

666 754

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50315	25.312	1.0327	1.0032	.99238	.97484	25.574
SDev	.00188	.134	.0120	.0042	.00856	.00585	.075
%RSD	.37373	.53046	1.1652	.41907	.86299	.60020	.29296

#1	.50504	25.480	1.0411	1.0092	1.0028	.98276	25.517
#2	.50054	25.335	1.0345	1.0022	.99588	.97472	25.545
#3	.50351	25.157	1.0400	1.0019	.98463	.96876	25.551
#4	.50351	25.276	1.0152	.99946	.98617	.97313	25.684

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	1.0027	.99832	1.0084	.98454	26.189	24.493	.98982
SDev	.0049	.00830	.0012	.00784	.074	.304	.01650
%RSD	.48590	.83153	.12071	.79652	.28389	1.2401	1.6672

#1	1.0016	1.0004	1.0080	.99441	26.263	24.333	1.0113
#2	1.0049	.98759	1.0069	.98705	26.207	24.464	.99416
#3	1.0080	.99760	1.0091	.97696	26.085	24.928	.97613
#4	.99656	1.0076	1.0097	.97973	26.199	24.246	.97766

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	25.398	1.0040	.98588	24.927	1.0028	1.0292	1.0327
SDev	.129	.0027	.00479	.243	.0078	.0317	.0318
%RSD	.50729	.26519	.48551	.97372	.77545	3.0790	3.0803

#1	25.581	1.0052	.98213	25.220	1.0093	1.0485	1.0195
#2	25.385	1.0042	.98213	25.032	.99294	.98599	.99802
#3	25.286	1.0002	.99213	24.705	1.0003	1.0254	1.0406
#4	25.338	1.0062	.98713	24.752	1.0087	1.0567	1.0727

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	1.0231	1.0042	.99272	.98839	.98305	4.9939	.98765
SDev	.0314	.0030	.01189	.00812	.00413	.0523	.00292
%RSD	3.0707	.29764	1.1976	.82110	.42059	1.0479	.29539

#1	.99365	.99972	.98273	.99875	.98863	5.0110	.99007
#2	1.0607	1.0057	1.0098	.99068	.98322	5.0117	.98507

#3	1.0011	1.0057	.99118	.98047	.97883	4.9172	.99027
#4	1.0370	1.0057	.98717	.98368	.98153	5.0355	.98517
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	.99679
SDev	.00577
%RSD	.57859

666 755

#1	1.0027
#2	.99587
#3	.98923
#4	.99932

Errors	LC Pass
High	1.1000
Low	.90000

Method: QUANMET Sample Name: ICB1

Operator: MTW

Run Time: 07/29/00 08:40:29

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 756

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00074	-.00047	.00101	-.00429	.00026	.00020	.00630
SDev	.00074	.00923	.03191	.00321	.00025	.00013	.00454
%RSD	100.72	1978.5	3158.4	74.765	97.666	62.781	72.113
#1	.00111	-.01164	-.04153	-.00306	.00046	.00004	.00608
#2	-.00038	-.00416	.03375	-.00859	-.00005	.00017	-.00005
#3	.00111	.00512	.01385	-.00101	.00046	.00030	.00958
#4	.00111	.00881	-.00204	-.00450	.00016	.00030	.00958
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00115	-.00214	.00014	-.00023	.00547	-.22743	.00073
SDev	.00460	.00117	.00105	.00046	.00118	.11346	.00084
%RSD	399.34	54.497	763.76	198.35	21.626	49.889	114.61
#1	-.00437	-.00356	.00041	-.00000	.00582	-.12465	.00031
#2	-.00122	-.00214	-.00069	-.00000	.00581	-.28210	-.00006
#3	H.00538	-.00216	.00151	-.00000	.00650	-.14214	.00187
#4	-.00440	-.00070	-.00068	-.00092	.00377	-.36083	.00079
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00069	.00000	-.00125	.00420	-.00285	.00967	.00530
SDev	.00612	.00058	.00289	.00293	.00575	.02879	.01370
%RSD	886.94	49539.	231.08	69.784	202.23	297.63	258.29
#1	-.00276	-.00050	.00125	.00488	-.00993	-.00980	.01050
#2	-.00276	.00050	-.00376	-.00011	.00378	-.01757	.00007
#3	.00828	-.00050	-.00376	.00579	-.00101	.02132	-.01062
#4	-.00552	.00050	.00125	.00624	-.00423	.04475	.02126
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01188	-.00453	-.00885	.00012	.00017	-.00003	-.00127
SDev	.02488	.00576	.01116	.00006	.00058	.06396	.00006
%RSD	209.45	127.19	126.17	46.666	341.57	209190.	4.3383
#1	.02276	-.00002	.00579	.00009	.00042	.07164	-.00123
#2	-.02470	-.00604	-.01096	.00009	-.00059	.03580	-.00132

Analysis Report

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#3	.01880	-.00002	-.00892	.00009	.00008	-.05977	-.00132
#4	.03066	-.01205	-.02130	.00020	.00076	-.04780	-.00123
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	-.00080
SDev	.00053
%RSD	66.304

#1	-.00139
#2	-.00010
#3	-.00087
#4	-.00085

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET

Sample Name: ICSA 0014-170-1

Operator: MTW

Run Time: 07/29/00 08:43:38

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

666 758

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00048	494.24	-.03505	-.02738	.00184	.00002	485.98
SDev	.00115	1.19	.11187	.02174	.00032	.00001	2.15
%RSD	240.02	.24060	319.19	79.407	17.330	34.949	.44261
#1	-.00051	493.67	.00740	-.05959	.00148	.00002	486.60
#2	.00085	492.88	-.17209	-.01788	.00169	.00002	484.10
#3	-.00195	495.53	.09126	-.02002	.00220	.00002	484.46
#4	-.00031	494.88	-.06676	-.01201	.00199	.00001	488.74
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	-.00457	.01004	-.00288	-.00668	186.10	.01968	.00145
SDev	.00361	.00082	.00118	.00120	.52	.33136	.00083
%RSD	78.858	8.1562	41.136	17.945	.27694	1683.6	57.166
#1	.00060	.01074	-.00288	-.00714	185.98	-.06342	.00204
#2	-.00738	.00934	-.00343	-.00627	185.49	.35646	.00167
#3	-.00486	.00933	-.00398	-.00805	186.19	-.40457	.00184
#4	-.00664	.01076	-.00124	-.00525	186.73	.19026	.00023
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	487.17	.00546	.01280	.00204	-.02791	.10522	-.02670
SDev	1.08	.00058	.00627	.00684	.01234	.03516	.02532
%RSD	.22115	10.645	49.016	334.75	44.217	33.415	94.855
#1	486.86	.00594	.01403	.00534	-.02512	.07452	-.00009
#2	485.77	.00481	.01897	.00761	-.03963	.07502	-.04281
#3	487.93	.00596	.00404	-.00783	-.03511	.13554	-.01072
#4	488.10	.00513	.01415	.00307	-.01178	.13579	-.05318
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	.11458	.07680	-.04038	.01331	-.01893	.41346	.00524
SDev	.07478	.03124	.01670	.00013	.00108	.18272	.00252
%RSD	65.265	40.673	41.364	1.0047	5.7171	44.192	48.124
#1	.20028	.09033	-.04863	.01351	-.01850	.63568	.00402
#2	.02498	.09033	-.03222	.01325	-.01850	.21071	.00411

						666	759
#3	.09010	.03014	-.05907	.01325	-.02053	.33488	.00382
#4	.14295	.09641	-.02159	.01325	-.01817	.47255	.00902
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem ZN
Units ppm
Avge .00451
SDev .00179
%RSD 39.732

#1 .00477
#2 .00620
#3 .00510
#4 .00198

Errors NOCHECK
Value
Range

Method: QUANMET

Sample Name: ICSAB 0014-187-1

Operator: MTW

Run Time: 07/29/00 08:46:47

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

666 760

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.94842	489.86	.88845	.92696	.46034	.45275	480.97
SDev	.00438	2.57	.08680	.01334	.00295	.00269	1.98
%RSD	.46207	.52525	9.7703	1.4388	.64101	.59335	.41130
#1	.95154	492.00	1.0133	.94006	.46279	.45530	482.27
#2	.95154	492.09	.81431	.91728	.46279	.45476	481.16
#3	.94224	488.32	.87431	.93671	.45891	.44987	478.12
#4	.94837	487.04	.85194	.91379	.45686	.45107	482.33
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	.95109	.45483	.44346	.47140	184.42	9.7861	.98112
SDev	.00337	.00137	.00463	.00395	.81	.4743	.01003
%RSD	.35429	.30059	1.0432	.83725	.43691	4.8466	1.0225
#1	.94716	.45662	.44812	.47329	185.10	9.4625	.99056
#2	.95255	.45518	.44647	.47603	184.99	9.9348	.98849
#3	.95492	.45376	.43824	.46856	183.36	9.3575	.97565
#4	.94975	.45377	.44098	.46771	184.24	10.390	.96978
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	481.56	.45422	.91185	9.9751	.86005	1.0054	.98497
SDev	2.16	.00285	.01259	.1040	.01653	.0643	.03806
%RSD	.44904	.62796	1.3806	1.0430	1.9221	6.3945	3.8639
#1	483.46	.45589	.92573	10.041	.88275	1.0390	1.0090
#2	483.40	.45686	.91569	10.069	.84331	1.0312	1.0192
#3	479.74	.45042	.91044	9.9537	.85529	.90917	.93463
#4	479.64	.45372	.89554	9.8374	.85883	1.0421	.97708
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.00	.50000	1.0000	10.000	1.0000	1.0000	1.0000
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0415	1.0652	.86319	.92508	.88766	9.3551	.46022
SDev	.1074	.0348	.04363	.00605	.00371	.2668	.00257
%RSD	10.309	3.2625	5.0542	.65352	.41751	2.8516	.55751
#1	.96524	1.0351	.86916	.93025	.89096	9.6706	.45768
#2	1.1904	1.0351	.90885	.93021	.89062	9.0506	.46249

666

761

#3	.96064	1.0953	.80379	.92127	.88352	9.2466	.46237
#4	1.0500	1.0953	.87095	.91859	.88555	9.4526	.45833
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 .93100
SDev .00476
%RSD .51118

#1 .93787
#2 .92943
#3 .92690
#4 .92979

Errors QC Pass
Value 1.0000
Range 20.000

Method: QUANMET Sample Name: DH0CKB

Operator: MTW

Run Time: 07/29/00 08:52:11

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

666 762

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00000	.01435	.00682	-.00438	-.00005	.00003	.02959
SDev	.00255	.00990	.02398	.00957	.00042	.00001	.00303
%RSD	329440.	68.987	351.70	218.36	793.17	34.758	10.258
#1	-.00036	.00879	-.00210	.00760	-.00005	.00003	.02655
#2	.00113	.02174	.04138	-.00305	.00046	.00002	.03380
#3	.00259	.02359	.00180	-.01555	-.00005	.00004	.02913
#4	-.00337	.00327	-.01381	-.00654	-.00056	.00005	.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	-.00155	-.00357	-.00055	-.00023	.00957	-.10497	-.00005
SDev	.00296	.00116	.00251	.00157	.00265	.44828	.00071
%RSD	190.25	32.660	456.65	676.02	27.690	427.06	1427.0
#1	-.00122	-.00214	-.00014	-.00000	.00649	.04155	-.00009
#2	-.00397	-.00356	.00260	.00183	.01060	.46142	.00079
#3	-.00353	-.00499	-.00123	-.00184	.01266	-.40457	-.00094
#4	.00250	-.00358	-.00343	-.00092	.00855	-.51828	.00003
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	.01448	-.00100	-.00125	-.00091	-.00193	.00379	.00263
SDev	.01157	.00058	.00289	.00485	.00632	.02940	.01819
%RSD	79.871	57.902	231.22	534.43	326.98	776.69	692.80
#1	.00276	-.00151	-.00376	-.00375	-.00664	-.01760	-.02135
#2	.03034	-.00050	-.00376	.00579	-.00578	.02908	.01062
#3	.01379	-.00050	.00125	-.00511	.00716	-.02545	-.00002
#4	.01103	-.00151	.00125	-.00057	-.00247	.02911	.02124
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	-.04546	-.00000	.00576	-.00007	-.00084	.01486	-.00034
SDev	.02199	.03477	.02196	.00033	.00051	.05962	.00445
%RSD	48.366	806330.	381.43	499.50	60.000	401.32	1316.9
#1	-.01284	-.03006	.02235	-.00044	-.00127	.09548	.00243
#2	-.05237	.03014	-.01717	.00009	-.00059	.01183	.00368

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#3	-.05632	.03008	.02662	-.00022	-.00025	-.04786	-.00123
#4	-.06029	-.03017	-.00877	.00031	-.00127	-.00002	-.00623
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 .00073
SDev .00187
%RSD 254.24

#1 .00129
#2 -.00084
#3 .00313
#4 -.00065

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: DH0CKC

Operator: MTW

Run Time: 07/29/00 08:55:20

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05207	2.0561	2.1265	1.0037	2.0059	.05148	L.03752
SDev	.00192	.0096	.0415	.0209	.0201	.00035	.00383
%RSD	3.6803	.46662	1.9501	2.0843	1.0001	.67945	10.207

#1	.04985	2.0602	2.1681	1.0351	2.0356	.05194	L.03258
#2	.05430	2.0676	2.1482	.99323	1.9983	.05154	L.03803
#3	.05282	2.0491	2.0730	.99324	1.9913	.05115	L.04192
#4	.05133	2.0473	2.1166	.99325	1.9985	.05128	L.03754

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	.05131	.52253	.20943	.25484	1.1071	L-.33677	.97310
SDev	.00129	.00482	.00263	.00150	.0042	.45309	.02022
%RSD	2.5196	.92249	1.2568	.58678	.38211	134.54	2.0777

#1	.05203	.51537	.20751	.25667	1.1079	L-.97315	1.0024
#2	.05005	.52396	.21081	.25484	1.1018	L.08529	.97080
#3	.05275	.52539	.21245	.25301	1.1065	L-.15964	.96000
#4	.05040	.52539	.20697	.25484	1.1120	L-.29960	.95923

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-.00207	.52235	-.00484	L.00465	.52696	.52851	L.02035
SDev	.02117	.00096	.00630	.00381	.00874	.02344	.01597
%RSD	1023.4	.18440	130.12	81.819	1.6596	4.4346	78.459

#1	L-.03310	.52310	-.01361	L.00307	.52120	.50884	L.00707
#2	L.01379	.52110	.00142	L.01033	.53935	.50910	L.02839
#3	L.00828	.52210	-.00359	L.00216	.52043	.55582	L.00700
#4	L.00276	.52311	-.00359	L.00307	.52684	.54029	L.03894

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	2.0486	.00644	.00239	1.0098	-.00000	2.1159	.50426
SDev	.0820	.03475	.01193	.0091	.00064	.0521	.00013
%RSD	4.0019	539.99	498.44	.90474	748e6	2.4623	.02471

#1	2.0862	.03653	-.00654	1.0233	-.00093	2.1936	.50408
#2	1.9477	.03653	.00399	1.0051	.00042	2.0861	.50438

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#3	2.1376	-.02366	-.00654	1.0035	.00042	2.0980	.50429
#4	2.0229	-.02366	.01866	1.0072	.00008	2.0860	.50428
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	.52727
SDev	.00185
%RSD	.35098

#1	.52990
#2	.52583
#3	.52613
#4	.52721

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DGX1R

Operator: MTW

Run Time: 07/29/00 08:58:33

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

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Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00076	.07518	.04003	-.00052	.01895	.00007	.75520
SDev	.00255	.01016	.03130	.00483	.00026	.00007	.00373
%RSD	334.35	13.512	78.178	932.04	1.3492	96.514	.49353

#1	-.00036	.08485	.05275	-.00303	.01907	.00002	.75984
#2	-.00338	.06085	.05312	-.00098	.01856	.00005	.75225
#3	-.00187	.07751	.06083	-.00447	.01907	.00004	.75211
#4	.00258	.07749	-.00658	.00641	.01907	.00017	.75658

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	-.00088	-.00036	-.00014	.02341	.02309	-.09185	.00070
SDev	.00091	.00137	.00161	.00053	.00171	.24193	.00055
%RSD	102.89	376.43	1180.3	2.2627	7.4130	263.40	78.234

#1	-.00088	.00071	-.00014	.02387	.02223	.00656	.00099
#2	-.00182	.00071	-.00068	.02295	.02223	-.39582	.00003
#3	.00035	-.00072	-.00178	.02295	.02223	-.15089	.00051
#4	-.00117	-.00215	.00206	.02387	.02565	.17276	.00128

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	.03793	.09008	-.00125	9.9066	.00206	.01550	.00003
SDev	.01377	.00082	.00289	.0345	.00536	.00392	.00006
%RSD	36.303	.91314	231.57	.34791	260.44	25.263	203.79

#1	.03034	.09008	.00126	9.8765	.00708	.01358	.00010
#2	.03586	.09109	.00126	9.9555	.00596	.02138	.00003
#3	.02758	.08907	-.00375	9.9037	-.00072	.01354	.00002
#4	.05793	.09008	-.00375	9.8906	-.00410	.01351	-.00004

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	-.01279	.97804	-.00260	.00713	-.00042	.01521	-.00127
SDev	.01549	.03014	.00660	.00016	.00059	.01504	.00408
%RSD	121.07	3.0813	253.61	2.2319	138.56	98.848	320.41

#1	.00302	.99315	-.01096	.00700	-.00025	.01219	.00378
#2	-.01675	.93284	.00366	.00700	-.00127	.01227	-.00623

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#3	-.03257	.99309	.00157	.00722	-.00025	.03612	-.00133
#4	-.00488	.99309	-.00469	.00731	.00008	.00027	-.00132
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	.01816
SDev	.00157
%RSD	8.6345

#1	.01856
#2	.01584
#3	.01912
#4	.01913

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGX1RP5

Operator: MTW

Run Time: 07/29/00 09:01:42

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00075	.01160	-.00404	-.00799	.00381	-.00006	.15020
SDev	.00223	.00751	.01601	.00117	.00015	.00007	.00388
%RSD	296.54	64.707	396.12	14.639	3.9448	105.17	2.5844
#1	-.00186	.01067	.01778	-.00799	.00374	-.00010	.14748
#2	-.00335	.00139	-.01783	-.00799	.00374	-.00010	.14695
#3	.00110	.01627	-.01399	-.00655	.00374	-.00010	.15099
#4	.00110	.01809	-.00211	-.00942	.00404	.00004	.15536
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	-.00000	.00000	.00436	.00376	-.34115	-.00010
SDev	.00078	.00143	.00164	.00088	.00244	.39122	.00053
%RSD	273.18	2192200.	154220.	20.164	64.782	114.68	533.25
#1	-.00143	-.00071	.00041	.00367	.00239	-.57077	-.00085
#2	.00030	-.00072	-.00233	.00367	.00102	-.74571	-.00009
#3	-.00014	.00214	.00041	.00459	.00581	-.16839	.00023
#4	.00012	-.00072	.00151	.00551	.00581	.12028	.00031
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	-.00621	.01761	.00125	1.9650	-.00131	-.01166	.01861
SDev	.01157	.00000	.00000	.0194	.00942	.00743	.01583
%RSD	186.37	.00318	.02907	.98492	719.20	63.734	85.059
#1	-.02207	.01761	.00125	1.9785	.00069	-.00196	.01069
#2	-.00552	.01761	.00125	1.9839	.01025	-.01753	.00014
#3	.00552	.01761	.00125	1.9435	-.01238	-.01742	.03178
#4	-.00276	.01761	.00125	1.9540	-.00380	-.00972	.03181
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	-.01383	.20011	-.01139	.00154	-.00068	.02396	-.00123
SDev	.02200	.00757	.01813	.00028	.00043	.02583	.00000
%RSD	159.01	3.7847	159.13	17.856	62.915	107.83	.26482
#1	-.04053	.19861	-.03179	.00165	-.00059	.02398	-.00123
#2	-.02076	.19259	-.01931	.00116	-.00127	.05983	-.00123

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#3	.01089	.21064	-.00455	.00181	-.00025	.00003	-.00123
#4	-.00493	.19861	.01007	.00154	-.00059	.01200	-.00122
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	.00258
SDev	.00127
%RSD	49.263

#1	.00068
#2	.00310
#3	.00340
#4	.00313

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGX1RS

Operator: MTW

Run Time: 07/29/00 09:04:50

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

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Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.05207	2.1247	2.1090	1.0093	2.0345	.05200	.66459
SDev	.00149	.0027	.0821	.0177	.0050	.00013	.00539
%RSD	2.8672	.12759	3.8947	1.7542	.24436	.24537	.81075
#1	.05431	2.1288	2.0167	.99471	2.0371	.05219	.67042
#2	.05132	2.1234	2.0645	1.0246	2.0399	.05194	.66346
#3	.05134	2.1234	2.1913	.99328	2.0286	.05193	.66677
#4	.05132	2.1233	2.1636	1.0246	2.0325	.05194	.65772
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	.05053	.52609	.20930	.25806	1.1283	-.00000	.98203
SDev	.00295	.00297	.00094	.00159	.0020	.28366	.00146
%RSD	5.8434	.56536	.44749	.61714	.17412	317e6	.14835
#1	.05471	.52536	.20971	.25852	1.1271	-.00219	.98205
#2	.04835	.52966	.21026	.25944	1.1312	.07654	.98307
#3	.05050	.52681	.20916	.25852	1.1278	.30397	.97996
#4	.04854	.52252	.20806	.25576	1.1271	-.37832	.98302
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	.02896	.61495	-.00108	10.089	.54128	.53050	.01249
SDev	.00730	.00127	.00647	.046	.00428	.05518	.01836
%RSD	25.198	.20609	596.78	.45190	.78975	10.401	147.00
#1	.02207	.61671	.00643	10.075	.53788	.49355	.03898
#2	.03862	.61470	-.00359	10.130	.54110	.52475	.00719
#3	.03034	.61469	-.00860	10.030	.53878	.61026	-.00344
#4	.02483	.61369	.00142	10.119	.54736	.49343	.00723
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0724	.93487	.01176	1.0229	-.00034	2.0744	.50683
SDev	.0732	.00577	.00972	.0028	.00032	.0585	.00289
%RSD	3.5346	.61771	82.660	.27039	95.743	2.8199	.57038
#1	1.9913	.93942	.01867	1.0246	-.00025	2.0027	.50948
#2	2.1456	.92732	.00808	1.0257	-.00059	2.1460	.50428

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#3	2.0309	.93340	.02055	1.0195	.00008	2.0743	.50918
#4	2.1218	.93935	-.00027	1.0219	-.00059	2.0744	.50437
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	.53177
SDev	.00590
%RSD	1.1086

#1	.53947
#2	.53329
#3	.52717
#4	.52714

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGX1RD

Operator: MTW

Run Time: 07/29/00 09:07:58

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05203	2.0909	2.0916	.99398	2.0087	.05130	.64828
SDev	.00192	.0163	.0476	.00083	.0081	.00018	.00989
%RSD	3.6932	.78006	2.2750	.08347	.40124	.35172	1.5262

#1	.05278	2.0974	2.0925	.99326	2.0014	.05129	.65719
#2	.04980	2.0825	2.1125	.99469	2.0126	.05143	.64362
#3	.05426	2.1103	2.1360	.99471	2.0182	.05143	.65573
#4	.05126	2.0733	2.0254	.99327	2.0026	.05104	.63657

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	.04843	.51861	.20532	.25277	1.1137	.05686	.97247
SDev	.00365	.00575	.00269	.00088	.0069	.52782	.00679
%RSD	7.5326	1.1098	1.3091	.34723	.62351	928.31	.69769

#1	.05161	.52682	.20862	.25209	1.1202	.62762	.96303
#2	.04323	.51540	.20532	.25300	1.1059	.09403	.97865
#3	.04883	.51824	.20533	.25392	1.1189	.15527	.97242
#4	.05004	.51396	.20203	.25208	1.1100	-.64949	.97576

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	.03241	.60513	-.00234	10.011	.52406	.51478	.03360
SDev	.01449	.00313	.00752	.053	.00592	.00985	.01371
%RSD	44.698	.51769	321.41	.53078	1.1299	1.9143	40.795

#1	.04138	.60664	.00142	9.9342	.52824	.51693	.01773
#2	.03586	.60362	-.00860	10.055	.52375	.51667	.04959
#3	.04138	.60866	.00643	10.030	.52846	.52449	.03885
#4	.01103	.60161	-.00860	10.026	.51580	.50104	.02824

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	2.0476	.93777	-.00172	1.0096	.00000	2.1283	.49804
SDev	.0166	.00304	.01904	.0038	.00042	.0987	.00259
%RSD	.80930	.32443	1107.6	.37948	3896e6	4.6370	.51979

#1	2.0229	.93929	-.02319	1.0060	.00042	2.2297	.49937
#2	2.0585	.93929	-.00634	1.0110	-.00059	2.0269	.49917

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#3	2.0546	.93929	.02284	1.0143	.00008	2.0626	.49946
#4	2.0545	.93321	-.00018	1.0070	.00008	2.1941	.49417
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	.52202
SDev	.00277
%RSD	.53085

#1	.52286
#2	.51806
#3	.52261
#4	.52453

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DH0J3B

Operator: MTW

Run Time: 07/29/00 09:11:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00186	-.00318	.01986	-.00100	-.00011	.00000	.01171
SDev	.00210	.01099	.02303	.01081	.00034	.00013	.00326
%RSD	112.94	346.14	115.96	1080.0	320.18	3540.2	27.854
#1	-.00334	-.00221	.04562	.01253	-.00005	.00017	.01211
#2	-.00334	-.01898	.01800	-.00941	-.00056	-.00010	.00720
#3	.00111	.00331	.02575	-.01002	-.00005	.00004	.01498
#4	-.00186	.00518	-.00995	.00290	.00025	-.00010	.01255
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	-.00248	.00072	-.00110	-.00046	.01351	-.11153	.00006
SDev	.00080	.00117	.00144	.00159	.00197	.30001	.00074
%RSD	32.166	161.58	131.35	347.72	14.558	269.00	1166.0
#1	-.00267	.00072	.00096	.00092	.01334	-.05467	.00051
#2	-.00144	-.00071	-.00123	-.00184	.01128	-.47455	.00040
#3	-.00244	.00072	-.00178	.00092	.01334	.25149	.00040
#4	-.00337	.00215	-.00233	-.00183	.01607	-.16839	-.00105
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	-.00965	-.00050	-.00501	.01169	-.00668	.00002	.00266
SDev	.00657	.00000	.00250	.00604	.00853	.01167	.01820
%RSD	68.014	.19102	50.021	51.618	127.78	54857.	684.20
#1	-.00552	-.00050	-.00877	.01351	.00168	.01367	.02132
#2	-.01931	-.00050	-.00376	.01306	-.01725	.00582	-.00010
#3	-.00552	-.00050	-.00376	.01714	-.00142	-.00970	.01069
#4	-.00828	-.00050	-.00376	.00307	-.00973	-.00971	-.02128
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	.01190	.03008	-.01094	-.00008	-.00110	-.00014	-.00135
SDev	.03424	.00000	.00728	.00028	.00044	.02386	.00005
%RSD	287.69	.00194	66.498	358.28	39.723	17251.	3.3858
#1	-.00491	.03008	-.00042	.00031	-.00127	-.01208	-.00142
#2	-.02073	.03008	-.01304	-.00033	-.00161	-.01205	-.00133

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#3	.01487	.03008	-.01717	-.00022	-.00093	-.01208	-.00133
#4	.05838	.03008	-.01314	-.00007	-.00059	.03566	-.00133
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	.00088
SDev	.00250
%RSD	283.09

#1	-.00167
#2	-.00081
#3	.00259
#4	.00342

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DH0J3C

Operator: MTW

Run Time: 07/29/00 09:14:14

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04753	1.9526	1.9492	.93850	1.9292	.04868	50.602
SDev	.00192	.0133	.0874	.00136	.0190	.00029	.340
%RSD	4.0330	.67865	4.4814	.14536	.98334	.58688	.67193

#1	.04530	1.9642	1.8798	.93744	1.9552	.04908	50.231
#2	.04976	1.9345	2.0307	.94029	1.9096	.04842	51.051
#3	.04679	1.9605	1.8679	.93886	1.9254	.04855	50.606
#4	.04827	1.9511	2.0186	.93743	1.9268	.04868	50.518

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	.04394	.48601	.19602	.24103	1.0372	48.515	.96802
SDev	.00499	.00490	.00230	.00198	.0023	.208	.01699
%RSD	11.365	1.0081	1.1748	.82193	.22487	.42832	1.7553

#1	.04065	.48385	.19355	.24378	1.0401	48.642	.98905
#2	L.03940	.49246	.19903	.23920	1.0380	48.598	.94744
#3	.04532	.48672	.19630	.24103	1.0353	48.616	.96751
#4	.05038	.48099	.19520	.24011	1.0353	48.205	.96808

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	49.707	.48643	.97586	49.178	.48621	.50488	.49721
SDev	.280	.00097	.00647	.631	.00780	.01013	.01019
%RSD	.56366	.19829	.66278	1.2832	1.6043	2.0055	2.0494

#1	50.087	.48718	.96834	49.952	.47706	.49315	.50520
#2	49.411	.48719	.98337	48.408	.48240	.51675	.50513
#3	49.670	.48517	.97335	49.213	.49245	.50100	.49462
#4	49.659	.48618	.97836	49.139	.49294	.50861	.48386

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	1.9545	9.9087	1.9349	.97314	.96142	1.9526	.48816
SDev	.0288	.0403	.0277	.00766	.00278	.0977	.00013
%RSD	1.4721	.40708	1.4305	.78729	.28916	5.0055	.02640

#1	1.9436	9.9493	1.9089	.98350	.96497	1.8600	.48801
#2	1.9950	9.8530	1.9235	.96505	.95821	1.9555	.48831

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#3	1.9278	9.9192	1.9339	.97254	.96091	1.9078	.48811
#4	1.9515	9.9132	1.9735	.97147	.96159	2.0870	.48821
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	.49421
SDev	.00299
%RSD	.60571

#1	.49386
#2	.49812
#3	.49082
#4	.49406

Errors	LC Pass
High	.60000
Low	.40000

Method: ~~QUANMET~~ ^{355 350} Sample Name: CCV2-1 0014-195-2 Operator: MTW
 Run Time: 07/29/00 09:17:22
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99852	50.162	5.0612	4.9665	4.9098	4.9490	51.241
SDev	.00257	.175	.0943	.0245	.0222	.0208	.210
%RSD	.25704	.34856	1.8633	.49252	.45198	.42016	.40926
#1	.99511	50.222	4.9976	4.9589	4.9300	4.9570	50.938
#2	.99825	50.309	5.1865	5.0024	4.9210	4.9658	51.330
#3	.99956	49.908	4.9802	4.9471	4.8791	4.9187	51.417
#4	1.0012	50.208	5.0805	4.9578	4.9092	4.9547	51.278
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	5.0503	4.9879	4.9786	4.9152	51.913	49.902	4.9025
SDev	.0114	.0074	.0101	.0206	.114	.147	.0446
%RSD	.22629	.14821	.20260	.41953	.21904	.29506	.90974
#1	5.0453	4.9793	4.9638	4.9308	51.777	49.884	4.9542
#2	5.0365	4.9964	4.9808	4.9244	52.026	49.893	4.9096
#3	5.0585	4.9907	4.9841	4.8849	51.863	50.094	4.8456
#4	5.0607	4.9850	4.9858	4.9207	51.985	49.735	4.9005
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	50.256	4.9754	4.9965	50.027	4.9876	5.0104	5.0731
SDev	.170	.0094	.0133	.297	.0374	.0295	.0238
%RSD	.33836	.18848	.26535	.59434	.75030	.58885	.46890
#1	50.282	4.9626	4.9890	50.338	4.9530	4.9809	5.0649
#2	50.412	4.9848	4.9840	50.101	4.9998	5.0514	5.0654
#3	50.015	4.9757	4.9990	49.624	4.9628	5.0048	5.0542
#4	50.315	4.9787	5.0140	50.046	5.0349	5.0045	5.1079
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	5.1022	5.0907	4.9898	4.9181	4.9531	9.9135	4.9722
SDev	.0878	.0211	.0191	.0190	.0127	.0573	.0120
%RSD	1.7203	.41515	.38362	.38708	.25691	.57777	.24097
#1	5.0672	5.0590	5.0069	4.9340	4.9546	9.9180	4.9642
#2	5.1272	5.1014	4.9652	4.9289	4.9624	9.9630	4.9867

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#3	5.0042	5.1011	5.0028	4.8913	4.9347	9.9410	4.9607
#4	5.2101	5.1013	4.9842	4.9180	4.9607	9.8322	4.9773
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 4.9823
SDev .0187
%RSD .37582

#1 4.9561
#2 4.9955
#3 4.9961
#4 4.9816

Errors LC Pass
High 5.5000
Low 4.5000

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Method: QUANMET Sample Name: CCB1

Operator: MTW

Run Time: 07/29/00 09:20:30

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT:JA61E

Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00074	.00324	.00989	-.00092	.00026	.00030	-.00071
SDev	.00254	.00923	.03286	.00878	.00058	.00028	.00502
%RSD	343.22	284.64	332.29	960.07	227.80	95.655	711.70

#1	-.00186	-.00978	.02588	-.00798	-.00035	.00004	-.00778
#2	.00111	.00329	-.00199	-.00451	-.00005	.00017	-.00034
#3	.00410	.00883	.04548	.01189	.00046	.00029	.00146
#4	-.00038	.01064	-.02981	-.00306	.00097	.00070	.00384

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00082	-.00143	-.00014	.00023	.00239	-.10497	.00065
SDev	.00234	.00339	.00185	.00138	.00340	.43517	.00060
%RSD	285.49	237.90	1345.6	604.30	141.97	414.57	92.231

#1	-.00381	-.00642	-.00233	-.00184	-.00035	-.75446	-.00017
#2	-.00121	-.00071	-.00069	.00092	.00034	.07654	.00060
#3	-.00001	.00071	.00041	.00092	.00240	.08529	.00119
#4	.00175	.00071	.00206	.00092	.00718	.17276	.00099

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00069	.00025	-.00125	-.00318	-.00344	-.00393	.00261
SDev	.01849	.00097	.00501	.01324	.00918	.02728	.02356
%RSD	2680.8	383.55	400.15	416.56	266.38	694.29	904.36

#1	-.02483	-.00050	-.00376	-.02237	-.01086	-.01771	-.02136
#2	.00276	-.00050	-.00376	.00079	.00560	-.01755	-.01056
#3	.00552	.00050	-.00376	.00806	.00330	-.01745	.03187
#4	.01931	.00151	.00626	.00079	-.01183	.03699	.01046

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02275	.01354	.00993	.00007	-.00008	-.05077	-.00034
SDev	.06911	.00905	.01688	.00056	.00085	.05012	.00185
%RSD	303.84	66.829	169.95	843.02	1006.6	98.702	547.82

#1	-.06822	.00600	.00356	-.00044	-.00127	-.04772	-.00133
#2	.04252	.00600	-.00057	-.00022	.00008	.00001	-.00132

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#3	.01879	.02411	.03512	.00009	.00076	-.03588	.00243
#4	.09790	.01804	.00162	.00085	.00008	-.11951	-.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	.00013
SDev	.00075
%RSD	590.15

#1	-.00083
#2	-.00011
#3	.00071
#4	.00074

Errors	LC Pass
High	.02000
Low	-.02000

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Method: QUANMET Sample Name: DGXN4

Operator: MTW

Run Time: 07/29/00 09:23:38

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00037	.01578	.01870	-.00533	.00018	.00000	.05023
SDev	.00000	.01014	.02280	.00326	.00021	.00007	.00160
%RSD	.18477	64.260	121.94	61.093	116.57	1998.2	3.1941
#1	-.00037	.02914	.00570	-.00445	-.00005	.00004	.05140
#2	-.00037	.00697	.02175	-.01000	.00016	-.00010	.04853
#3	-.00037	.01809	-.00213	-.00241	.00016	.00004	.04921
#4	-.00037	.00891	.04949	-.00447	.00046	.00004	.05179
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	-.00098	-.00071	.00110	.00046	.02326	.17495	.00008
SDev	.00189	.00350	.00181	.00053	.00131	.26927	.00060
%RSD	193.24	490.87	165.03	115.35	5.6372	153.91	771.60
#1	-.00263	-.00357	-.00013	.00092	.02497	.27773	.00023
#2	.00172	.00071	.00096	.00000	.02223	.19900	-.00006
#3	-.00122	-.00357	-.00014	-.00000	.02224	-.20338	-.00065
#4	-.00177	.00358	.00370	.00092	.02360	.42643	.00079
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	.00483	.00026	.00000	.01101	-.00406	-.00003	-.00005
SDev	.00414	.00050	.00480	.00537	.00589	.03001	.02298
%RSD	85.714	195.31	137890.	48.734	144.92	88268.	47407.
#1	.00276	.00051	.00627	.01851	.00469	.04462	-.00002
#2	.00828	.00051	.00126	.00942	-.00734	-.01753	-.02135
#3	.00828	.00051	-.00375	.01033	-.00593	-.01764	-.01067
#4	.00000	-.00050	-.00375	.00579	-.00767	-.00960	.03184
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	.01291	.10832	-.00261	-.00015	.00051	-.03307	-.00125
SDev	.01663	.00695	.00503	.00031	.00042	.04509	.00009
%RSD	128.73	6.4163	193.04	212.03	83.887	136.35	7.2844
#1	.03072	.11434	.00157	-.00033	.00110	-.00022	-.00113
#2	.01884	.10230	.00147	-.00022	.00008	.01172	-.00122

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#3	-.00884	.10230	-.00474	-.00033	.00042	-.07186	-.00132
#4	.01094	.11434	-.00872	.00031	.00042	-.07193	-.00132
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 .00816
SDev .00116
%RSD 14.228

#1 .00793
#2 .00743
#3 .00742
#4 .00987

Errors LC Pass
High 100.00
Low -.02000

Analysis Report

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Method: QUANMET Sample Name: DGXN4P5 Operator: MTW
 Run Time: 07/29/00 09:26:47
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00149	.00462	.04256	-.00675	.00008	.00010	.01184
SDev	.00075	.00280	.03277	.00235	.00026	.00008	.00263
%RSD	50.342	60.659	77.003	34.798	340.00	80.019	22.183

#1	.00111	.00881	.05347	-.00654	-.00005	.00004	.00890
#2	.00113	.00320	-.00604	-.00593	-.00005	.00016	.01498
#3	.00262	.00316	.06533	-.00450	-.00005	.00002	.01070
#4	.00111	.00329	.05748	-.01003	.00046	.00017	.01279

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	-.00172	-.00214	-.00014	-.00023	.00445	.01531	.00046
SDev	.00256	.00116	.00045	.00116	.00079	.14195	.00056
%RSD	148.63	54.261	323.27	500.13	17.768	927.29	120.73

#1	L-.00544	-.00356	-.00069	-.00184	.00513	-.17713	-.00026
#2	-.00078	-.00214	-.00014	-.00000	.00376	.05030	.00099
#3	-.00104	-.00214	-.00014	.00092	.00376	.16401	.00079
#4	.00038	-.00072	.00041	-.00000	.00513	.02406	.00031

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	-.00621	.00025	-.00250	.00397	-.00862	-.00202	-.00540
SDev	.00760	.00050	.00250	.00134	.00886	.01904	.01363
%RSD	122.39	199.76	100.02	33.645	102.79	944.76	252.46

#1	-.01379	.00050	-.00376	.00307	-.02048	.00575	.01045
#2	-.00276	.00050	-.00376	.00261	-.01029	-.01758	-.01077
#3	-.01103	.00050	.00125	.00488	-.00143	.02131	-.02118
#4	.00276	-.00050	-.00376	.00534	-.00227	-.01753	-.00009

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

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00592	.02860	.00728	-.00012	-.00025	-.00899	.00120
SDev	.02246	.00303	.03461	.00032	.00028	.05881	.00292
%RSD	379.35	10.596	475.10	258.60	108.87	653.78	242.64

#1	.01880	.03008	.00370	.00020	-.00025	-.09557	-.00132
#2	.00693	.03014	.03075	-.00044	.00008	.01190	.00368

Analysis Report

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#3	-.02866	.03014	-.04029	.00009	-.00059	.01190	.00378
#4	-.02075	.02406	.03497	-.00033	-.00025	.03579	-.00132
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 .00149
SDev .00141
%RSD 94.368

#1 .00078
#2 -.00003
#3 .00317
#4 .00205

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET

Sample Name: DGXN4S

Operator: MTW

Run Time: 07/29/00 09:29:56

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04902	1.9624	2.0344	.93804	1.9292	.04862	50.377
SDev	.00192	.0069	.0461	.00210	.0151	.00017	.303
%RSD	3.9085	.35328	2.2639	.22388	.78485	.35066	.60099
#1	.04976	1.9550	2.1019	.93747	1.9138	.04855	50.385
#2	.04828	1.9623	1.9987	.93891	1.9334	.04868	50.390
#3	.04679	1.9606	2.0225	.94034	1.9484	.04881	49.996
#4	.05124	1.9717	2.0145	.93542	1.9214	.04842	50.737
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	.04315	.48566	.19739	.24080	1.0599	48.248	.95887
SDev	.00306	.00136	.00195	.00217	.0031	.280	.01525
%RSD	7.0938	.28028	.98847	.90102	.29449	.58072	1.5910
#1	.04547	.48388	.20014	.23920	1.0558	48.485	.94773
#2	.04253	.48673	.19575	.23920	1.0634	48.406	.95643
#3	.03907	.48672	.19630	.24379	1.0606	48.248	.98109
#4	.04553	.48530	.19739	.24103	1.0599	47.855	.95025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.145	.48819	.96960	48.628	.48364	.53209	.49187
SDev	.225	.00164	.00630	.564	.00730	.02919	.04850
%RSD	.45711	.33685	.65023	1.1600	1.5091	5.4865	9.8603
#1	48.895	.48618	.96333	48.140	.47604	.49307	.44142
#2	49.270	.48820	.97837	48.759	.49357	.53210	.48402
#3	49.389	.48819	.96834	49.371	.48309	.53989	.48394
#4	49.027	.49021	.96834	48.243	.48186	.56329	.55810
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	1.9071	9.8937	1.9475	.97341	.95737	1.9912	.48804
SDev	.0401	.0446	.0592	.00689	.00453	.1041	.00012
%RSD	2.1042	.45084	3.0399	.70828	.47318	5.2300	.02431
#1	1.8764	9.8530	1.9044	.96585	.95111	2.0510	.48793
#2	1.9635	9.9433	1.9171	.97548	.95787	2.0509	.48821

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#3	1.8804	9.9192	1.9338	.98190	.96193	1.8359	.48802
#4	1.9081	9.8590	2.0344	.97040	.95855	2.0270	.48802
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	.48819
SDev	.00248
%RSD	.50798

#1	.48742
#2	.48547
#3	.48847
#4	.49141

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGXN4D Operator: MTW
 Run Time: 07/29/00 09:33:04
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04827	1.9488	2.0207	.93854	1.9171	.04865	49.916
SDev	.00121	.0089	.1132	.00071	.0076	.00030	.154
%RSD	2.5144	.45511	5.6015	.07541	.39581	.61505	.30853
#1	.04825	1.9530	2.0028	.93748	1.9260	.04909	49.833
#2	.04827	1.9381	2.1179	.93890	1.9206	.04855	49.817
#3	.04976	1.9585	2.0939	.93889	1.9106	.04855	50.145
#4	.04679	1.9457	1.8680	.93890	1.9109	.04842	49.869
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	.04394	.48102	.19410	.24057	1.0526	47.426	.95318
SDev	.00343	.00584	.00078	.00092	.0042	.205	.00522
%RSD	7.8045	1.2146	.40049	.38096	.39515	.43124	.54810
#1	.04602	.47815	.19410	.24194	1.0572	47.654	.95745
#2	.04207	.47674	.19465	.24011	1.0476	47.321	.95736
#3	.04014	.48961	.19300	.24012	1.0544	47.531	.94668
#4	.04754	.47959	.19465	.24011	1.0510	47.199	.95121
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	48.550	.48618	.97586	48.033	.48028	.50668	.49187
SDev	.090	.00083	.01446	.239	.00935	.02140	.01812
%RSD	.18608	.17005	1.4821	.49722	1.9460	4.2233	3.6843
#1	48.683	.48618	.97836	48.299	.48859	.53192	.51582
#2	48.509	.48618	.97335	48.134	.47247	.48514	.47340
#3	48.481	.48719	.99339	47.743	.47192	.49329	.49440
#4	48.528	.48517	.95832	47.957	.48816	.51636	.48387
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	1.9634	9.8545	1.9219	.96745	.95323	1.9495	.48691
SDev	.1022	.0103	.0733	.00311	.00188	.0842	.00248
%RSD	5.2035	.10437	3.8157	.32167	.19714	4.3173	.51017
#1	2.0663	9.8530	1.9236	.97120	.95551	1.9435	.48320
#2	2.0030	9.8651	1.8315	.96879	.95382	1.8600	.48811

Analysis Report

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#3	1.8250	9.8591	1.9214	.96531	.95247	1.9315	.48849
#4	1.9595	9.8410	2.0111	.96451	.95111	2.0630	.48782
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	.49616
SDev	.00088
%RSD	.17742

#1	.49617
#2	.49491
#3	.49681
#4	.49675

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGXNE

Operator: MTW

Run Time: 07/29/00 09:36:13

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

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Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00073	1.6609	.05143	.06243	.08488	.00016	19.219
SDev	.00191	.0032	.05022	.00300	.00048	.00011	.116
%RSD	260.22	.19074	97.646	4.8052	.56987	66.662	.60587
#1	-.00295	1.6604	.07717	.06380	.08482	.00029	19.166
#2	-.00149	1.6623	.08914	.05827	.08524	.00017	19.097
#3	.00148	1.6642	.06137	.06523	.08422	.00017	19.244
#4	.00002	1.6567	-.02194	.06239	.08524	.00002	19.369
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	-.00272	.00125	.00178	.00293	2.1650	6.0838	.00101
SDev	.00271	.00184	.00354	.00168	.0085	.5449	.00042
%RSD	99.641	147.41	198.74	57.266	.39268	8.9564	41.701
#1	L-.00561	.00054	.00480	.00476	2.1604	6.4009	.00128
#2	-.00442	-.00089	-.00288	.00109	2.1631	5.2987	.00099
#3	-.00090	.00196	.00096	.00201	2.1590	6.1385	.00136
#4	.00003	.00338	.00425	.00385	2.1775	6.4971	.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	3.1294	.71086	-.00469	137.26	-.00290	.00046	.00516
SDev	.0136	.00151	.00250	.88	.00239	.03211	.01375
%RSD	.43481	.21250	53.428	.64476	82.429	6954.1	266.41
#1	3.1445	.70961	-.00343	137.27	-.00388	.02769	.01034
#2	3.1308	.70961	-.00343	138.49	-.00135	-.03463	-.00013
#3	3.1114	.71162	-.00343	136.47	-.00057	-.01895	.02122
#4	3.1308	.71263	-.00844	136.80	-.00579	.02774	-.01079
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	-.01901	8.2308	-.00146	.12963	.08998	-.04226	.00116
SDev	.05510	.0301	.03672	.00039	.00159	.04686	.00287
%RSD	289.78	.36589	2521.2	.30085	1.7617	110.88	246.37
#1	-.08230	8.2157	.04346	.12964	.08931	.00555	.00369
#2	-.04670	8.2157	.00165	.13018	.08897	-.05416	-.00132

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#3	.01656	8.2157	-.04627	.12933	.08931	-.01829	-.00131
#4	.03639	8.2759	-.00467	.12937	.09235	-.10213	.00360
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 .04038
SDev .00180
%RSD 4.4559

#1 .04126
#2 .03778
#3 .04069
#4 .04182

Errors LC Pass
High 100.00
Low -.02000

Analysis Report

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Method: QUANMET

Sample Name: DGXNH

Operator: MTW

Run Time: 07/29/00 09:39:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00035	.08165	.00695	.06847	.01652	.00003	10.353
SDev	.00193	.00713	.06897	.00636	.00000	.00010	.049
%RSD	543.67	8.7349	992.26	9.2933	.00000	309.20	.47225
#1	.00260	.08851	.02071	.06509	.01652	.00015	10.362
#2	.00109	.08116	.08033	.07801	.01652	.00004	10.393
#3	-.00188	.07195	-.08613	.06509	.01652	-.00010	10.282
#4	-.00039	.08498	.01289	.06571	.01652	.00004	10.373
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	-.00050	-.00072	-.00000	.00048	.26920	8.3078	.00196
SDev	.00113	.00117	.00302	.00159	.00148	.4171	.00068
%RSD	224.86	160.97	887930.	331.39	.54870	5.0210	34.624
#1	-.00145	.00071	.00261	.00186	.26784	8.7452	.00235
#2	-.00120	-.00215	-.00233	.00094	.26920	8.2991	.00272
#3	.00107	-.00073	-.00288	-.00182	.26852	7.7480	.00139
#4	-.00044	-.00072	.00260	.00094	.27126	8.4390	.00139
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	1.4564	.40163	-.00121	54.323	-.00071	-.00788	.02390
SDev	.0023	.00130	.00647	.653	.00418	.01479	.03510
%RSD	.15464	.32335	533.53	1.2017	588.16	187.59	146.84
#1	1.4564	.40013	.00630	53.453	.00465	.01361	.06378
#2	1.4564	.40314	.00129	54.394	-.00380	-.01763	.04241
#3	1.4537	.40113	-.00372	55.036	-.00424	-.01765	-.01063
#4	1.4592	.40214	-.00873	54.408	.00054	-.00986	.00004
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.03488	1.6672	.00642	.04666	.00194	-.02440	-.00002
SDev	.03673	.0000	.01681	.00044	.00070	.04573	.00260
%RSD	105.30	.00192	261.88	.94367	36.203	187.40	11112.
#1	-.03588	1.6673	.00190	.04601	.00279	.03529	.00388
#2	-.07147	1.6672	.03104	.04686	.00211	-.06021	-.00123

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#3	-.04774	1.6672	-.00052	.04697	.00110	-.01244	-.00133
#4	.01555	1.6672	-.00674	.04681	.00177	-.06024	-.00141
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 .00520
SDev .00120
%RSD 23.001

#1 .00635
#2 .00447
#3 .00606
#4 .00390

Errors LC Pass
High 100.00
Low -.02000

Analysis Report

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Method: QUANMET Sample Name: DGXNN

Operator: MTW

Run Time: 07/29/00 09:42:29

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

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Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00111	.02273	.00574	.00190	.00013	.00003	.06382
SDev	.00150	.00614	.02568	.00914	.00040	.00001	.00203
%RSD	135.15	27.037	447.69	481.56	313.92	38.218	3.1785

#1	-.00188	.02187	.02964	-.00056	-.00035	.00005	.06414
#2	-.00183	.02174	-.01018	.00907	.00046	.00002	.06234
#3	-.00186	.01624	-.02194	.00907	-.00005	.00004	.06224
#4	.00114	.03106	.02543	-.01000	.00046	.00002	.06657

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

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00154	-.00285	-.00137	-.00023	.02446	-.23837	-.00067
SDev	.00297	.00143	.00238	.00157	.00103	.50224	.00030
%RSD	192.84	50.027	173.71	681.70	4.1956	210.70	45.005

#1	-.00025	-.00357	-.00343	-.00184	.02566	-.75446	-.00094
#2	L-.00565	-.00356	-.00233	-.00000	.02497	-.39582	-.00026
#3	.00126	-.00358	-.00178	-.00092	.02360	-.24711	-.00065
#4	-.00151	-.00071	.00205	.00184	.02361	.44393	-.00085

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	-.00276	-.00050	-.00375	.00658	-.00321	-.01955	.00534
SDev	.02373	.00000	.00000	.01043	.00858	.01725	.03302
%RSD	860.23	.06789	.00409	158.41	266.92	88.253	617.87

#1	-.03310	-.00050	-.00375	.00397	-.00598	-.02537	.03194
#2	.00000	-.00050	-.00375	.01079	-.01414	-.03316	.02122
#3	-.00276	-.00050	-.00375	-.00647	.00343	-.02539	.01065
#4	.02483	-.00050	-.00375	.01805	.00383	.00574	-.04243

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	.01292	.08727	-.01615	-.00024	.00042	-.00620	-.00008
SDev	.02915	.00346	.02081	.00019	.00055	.01539	.00479
%RSD	225.66	3.9612	128.83	78.688	130.64	248.03	6369.6

#1	.01094	.09020	-.03795	.00004	.00042	-.01214	-.00633
#2	-.02070	.08431	-.02130	-.00033	.00042	-.00026	.00367

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#3	.05049	.08425	.01206	-.00033	-.00025	-.02410	-.00133
#4	.01094	.09033	-.01742	-.00033	.00110	.01168	.00368
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 .00275
SDev .00031
%RSD 11.288

#1 .00260
#2 .00321
#3 .00259
#4 .00259

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET

Sample Name: CCV2-2

Operator: MTW

Run Time: 07/29/00 09:45:37

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

666 796

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0060	50.547	5.1238	5.0103	4.9522	5.0095	51.858
SDev	.0028	.188	.0884	.0312	.0231	.0192	.158
%RSD	.27591	.37154	1.7247	.62371	.46618	.38316	.30390

#1	1.0044	50.374	5.1532	4.9742	4.9241	5.0002	51.922
#2	1.0030	50.719	5.1543	5.0477	4.9737	5.0237	51.626
#3	1.0074	50.396	4.9943	4.9989	4.9429	4.9869	51.908
#4	1.0091	50.700	5.1935	5.0202	4.9683	5.0271	51.976

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	5.0924	5.0516	5.0358	4.9559	52.471	50.319	4.9198
SDev	.0138	.0071	.0065	.0270	.104	.156	.0431
%RSD	.27105	.14058	.12927	.54464	.19771	.30947	.87680

#1	5.1055	5.0505	5.0329	4.9263	52.387	50.208	4.8799
#2	5.0731	5.0463	5.0329	4.9851	52.445	50.470	4.9723
#3	5.0933	5.0477	5.0318	4.9410	52.428	50.435	4.8895
#4	5.0977	5.0619	5.0455	4.9713	52.622	50.164	4.9376

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	50.646	5.0280	5.0517	50.423	5.0384	5.1344	5.1155
SDev	.163	.0070	.0150	.301	.0467	.0699	.0348
%RSD	.32273	.13966	.29776	.59676	.92771	1.3622	.67965

#1	50.437	5.0242	5.0391	50.135	5.0309	5.1306	5.1181
#2	50.726	5.0232	5.0392	50.797	5.0744	5.0368	5.0656
#3	50.608	5.0262	5.0592	50.229	4.9752	5.1850	5.1389
#4	50.815	5.0383	5.0692	50.529	5.0731	5.1852	5.1395

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	5.1432	5.0613	5.0661	4.9668	5.0002	10.071	5.0290
SDev	.0723	.0270	.0635	.0198	.0132	.182	.0116
%RSD	1.4060	.53410	1.2530	.39832	.26331	1.8095	.23090

#1	5.0530	5.0477	5.1136	4.9435	4.9854	9.9827	5.0204
#2	5.1718	5.1019	4.9922	4.9868	5.0084	10.030	5.0229

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#3	5.2232	5.0477	5.0344	4.9577	4.9932	9.9345	5.0270
#4	5.1248	5.0480	5.1241	4.9791	5.0138	10.338	5.0460
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	5.0460
SDev	.0112
%RSD	.22249

#1	5.0520
#2	5.0350
#3	5.0384
#4	5.0588

Errors	LC Pass
High	5.5000
Low	4.5000

Analysis Report

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Method: QUANMET Sample Name: CCB2

Operator: MTW

Run Time: 07/29/00 09:48:45

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

666 798

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00037	-.00047	.00496	.00195	.00013	.00020	.00557
SDev	.00257	.01112	.02504	.00887	.00040	.00023	.00374
%RSD	693.68	2358.1	504.78	454.18	313.92	114.21	67.162
#1	.00113	.00883	-.00608	.01188	-.00005	.00016	.00870
#2	.00259	.00875	-.01393	.00637	-.00035	-.00010	.00399
#3	.00111	-.00599	-.00191	-.00245	.00046	.00030	.00856
#4	-.00335	-.01347	.04176	-.00798	.00046	.00043	.00102
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	-.00040	-.00214	.00055	-.00023	.00102	.00219	.00012
SDev	.00103	.00350	.00212	.00157	.00148	.49123	.00080
%RSD	257.50	163.39	386.50	678.90	144.10	22464.	662.56
#1	.00018	.00214	.00205	.00184	-.00103	.66261	.00128
#2	.00076	-.00500	-.00178	-.00184	.00103	-.22087	.00003
#3	-.00121	-.00071	.00261	-.00000	.00239	.05030	-.00045
#4	-.00133	-.00500	-.00069	-.00092	.00170	-.48329	-.00037
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	-.00759	.00050	-.00250	-.00159	-.00509	.00190	.01061
SDev	.02044	.00000	.00250	.00709	.00372	.02335	.01735
%RSD	269.48	.18309	100.01	445.92	73.050	1227.8	163.43
#1	.01379	.00050	-.00376	.00170	-.00143	.01366	-.01063
#2	-.03310	.00050	.00125	-.00011	-.01020	.02908	.03186
#3	.00276	.00050	-.00376	.00397	-.00367	-.01751	.01062
#4	-.01379	.00050	-.00376	-.01192	-.00508	-.01762	.01060
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	.00791	.00301	-.01248	.00012	-.00042	-.01194	-.00005
SDev	.03601	.00349	.01775	.00031	.00080	.06397	.00249
%RSD	455.12	116.10	142.29	253.07	190.44	535.94	5257.8
#1	.04647	.00607	.00569	.00020	.00008	-.08364	.00368
#2	-.02472	-.00002	-.03587	-.00033	.00008	.03587	-.00123

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#3	.03066	.00600	-.01509	.00031	-.00025	.04777	-.00132
#4	-.02076	-.00002	-.00464	.00031	-.00161	-.04774	-.00132
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 -.00067
SDev .00048
%RSD 70.670

#1 -.00085
#2 -.00004
#3 -.00062
#4 -.00117

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: DH0CFBT

Operator: MTW

Run Time: 07/29/00 09:51:54

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

666 800

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00038	.00462	-.02381	.01216	-.00020	-.00003	.01887
SDev	.00210	.01087	.02710	.01224	.00032	.00008	.00293
%RSD	556.72	235.06	113.82	100.65	157.25	257.93	15.520
#1	.00259	.01809	.00185	.03035	.00016	.00004	.02023
#2	-.00038	.00133	-.03369	.00494	-.00035	-.00010	.01454
#3	-.00186	.00696	-.00598	.00843	-.00056	-.00010	.02096
#4	-.00186	-.00789	-.05741	.00492	-.00005	.00004	.01974
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK
High	.50000		.50000		10.000		
Low	-.50000		-.50000		-10.000		
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00098	-.00464	-.00137	-.00115	.00308	-.40894	-.00062
SDev	.00184	.00316	.00028	.00088	.00158	.29452	.00060
%RSD	187.15	68.185	20.063	76.500	51.382	72.021	96.688
#1	-.00127	-.00357	-.00123	-.00000	.00445	-.40457	.00014
#2	-.00182	-.00785	-.00123	-.00184	.00171	-.81569	-.00094
#3	-.00252	-.00642	-.00178	-.00184	.00444	-.29085	-.00122
#4	.00167	-.00072	-.00123	-.00092	.00171	-.12465	-.00045
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.10000		.50000				
Low	-.10000		-.50000				
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.01793	-.00000	-.00376	-.00647	-.00416	-.01568	.00794
SDev	.01397	.00058	.00409	.00814	.00701	.04045	.01021
%RSD	77.942	130150.	108.88	125.79	168.31	257.92	128.60
#1	-.00552	.00050	-.00376	-.00148	.00139	.01351	.00006
#2	-.03586	.00050	-.00376	-.01692	-.01317	-.07220	-.00016
#3	-.02207	-.00050	-.00877	.00125	-.00627	-.01768	.01056
#4	-.00828	-.00050	.00125	-.00874	.00140	.01363	.02129
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						.50000	
Low						-.50000	
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.05141	.03008	.00265	-.00017	-.00051	-.00596	-.00133
SDev	.01659	.00000	.01847	.00019	.00043	.04418	.00008
%RSD	32.266	.00337	697.35	110.69	83.887	741.53	5.9940
#1	-.05635	.03008	-.01722	-.00007	.00008	-.02389	-.00133
#2	-.05240	.03008	.01618	-.00033	-.00059	.03589	-.00133

Analysis Report

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#3	-.02866	.03008	.02041	-.00033	-.00059	.02390	-.00142
#4	-.06822	.03008	-.00877	.00004	-.00093	-.05973	-.00123

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						

Elem	ZN
Units	ppm
Avge	.00618
SDev	.00168
%RSD	27.251

#1	.00795
#2	.00430
#3	.00720
#4	.00528

Errors	NOCHECK
High	
Low	

Method: **QUANMET** Sample Name: DGWD8BT

Operator: MTW

Run Time: 07/29/00 09:55:02

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

666 802

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00000	.00000	.17446	.00494	.00205	.00000	.11021
SDev	.00254	.01302	.08942	.00692	.00043	.00006	.00460
%RSD	2094800.	345600.	51.253	139.88	21.051	5911.8	4.1730

#1	-.00038	-.00232	.16857	.00987	.00199	.00004	.10610
#2	.00113	.00698	.29923	.01191	.00250	.00002	.11636
#3	-.00334	-.01721	.08936	-.00100	.00148	.00004	.11101
#4	.00259	.01257	.14067	-.00100	.00220	-.00010	.10737

Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK
High	.50000		.50000		10.000		
Low	-.50000		-.50000		-10.000		

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00307	-.00321	-.00165	.00092	.00906	-.04811	-.00067
SDev	.00204	.00180	.00122	.00130	.00086	.30322	.00085
%RSD	66.708	56.159	73.768	141.93	9.5200	630.25	126.24

#1	-.00314	-.00499	-.00123	-.00000	.00923	-.32584	-.00113
#2	-.00591	-.00070	-.00014	.00275	.00992	.38270	-.00065
#3	-.00132	-.00357	-.00233	.00092	.00786	-.15089	-.00142
#4	-.00189	-.00357	-.00288	-.00000	.00924	-.09841	.00051

Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.10000		.50000				
Low	-.10000		-.50000				

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01241	-.00025	-.00501	S901.36	-.00507	-.01174	.02123
SDev	.01944	.00050	.00480	1803.0	.00532	.03140	.00866
%RSD	156.61	200.38	95.766	200.03	104.91	267.56	40.774

#1	.00000	-.00050	-.00376	S-.14225	.00280	-.05653	.02127
#2	.04138	-.00050	-.00877	S3605.9	-.00683	.00582	.01065
#3	.00552	-.00050	.00125	S-.14225	-.00739	-.00979	.02115
#4	.00276	.00050	-.00877	S-.14225	-.00886	.01355	.03185

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						.50000	
Low						-.50000	

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02568	.03009	.00689	.00109	-.00051	.03577	-.00041
SDev	.02709	.00003	.00975	.00028	.00070	.04774	.00273
%RSD	105.48	.11572	141.47	25.854	137.44	133.47	661.19

#1	-.00096	.03006	.01002	.00085	-.00093	.01190	-.00258
#2	-.00492	.03014	-.00673	.00127	.00008	.10738	.00358

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666 803

#3	-.04052	.03008	.01629	.00085	-.00127	.01190	-.00123
#4	-.05633	.03008	.00798	.00138	.00008	.01189	-.00143
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						

Elem	ZN
Units	ppm
Avge	.00691
SDev	.00109
%RSD	15.844

#1	.00739
#2	.00775
#3	.00719
#4	.00530

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DH0CFCT

Operator: MTW

Run Time: 07/29/00 09:58:10

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

666 804

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04974	1.9742	2.3486	.94759	1.9150	.04803	L.13252
SDev	.00121	.0075	.0726	.01648	.0078	.00028	.00383
%RSD	2.4370	.37987	3.0898	1.7386	.40669	.58119	2.8909

#1	.05122	1.9821	2.3198	.93888	1.9091	.04790	L.13737
#2	.04825	1.9710	H2.4388	.97228	1.9195	.04803	L.12876
#3	.04974	1.9653	2.3675	.93888	1.9078	.04777	L.13027
#4	.04976	1.9783	2.2682	.94031	1.9236	.04841	L.13367

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	.04475	.49259	.20026	.24701	1.0510	L.32365	.96225
SDev	.00522	.00451	.00144	.00191	.0043	.40882	.00732
%RSD	11.665	.91549	.72038	.77432	.40606	126.31	.76031

#1	.05118	.49114	.20149	.24471	1.0498	L.82881	.95881
#2	.04441	.49544	.19875	.24655	1.0484	L-.15964	.97318
#3	L.03840	.48689	.19930	.24746	1.0484	L.23399	.95770
#4	.04500	.49687	.20149	.24931	1.0573	L.39144	.95932

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.02758	.49642	.00016	S-.14225	.48766	.47131	L.00389
SDev	.01032	.00175	.00480	.00000	.00293	.03559	.02802
%RSD	37.417	.35159	3052.5	.00000	.59981	7.5507	719.68

#1	L.04138	.49592	-.00360	S-.14225	.48971	.50826	L.02790
#2	L.02483	.49592	-.00360	S-.14225	.48703	.43057	L.02784
#3	L.01655	.49492	.00141	S-.14225	.49011	.45363	L-.01474
#4	L.02758	.49894	.00642	S-.14225	.48378	.49278	L-.02542

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	2.2650	.06488	.00753	.97194	-.00042	1.9584	.48558
SDev	.0591	.03313	.01937	.00388	.00034	.0745	.00258
%RSD	2.6110	51.055	257.41	.39975	80.000	3.8020	.53207

#1	2.1770	.03627	-.02107	.96977	.00008	1.8599	.48426
#2	2.2838	.03627	.01234	.97276	-.00059	1.9794	.48425

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						666	805
#3	2.2996	.09044	.02049	.96821	-.00059	1.9555	.48435
#4	2.2996	.09653	.01835	.97704	-.00059	2.0390	.48945
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	.51728
SDev	.00607
%RSD	1.1741

#1	.52059
#2	.50822
#3	.51948
#4	.52085

Errors	LC Pass
High	.60000
Low	.40000

Method: **QUANMET** Sample Name: DGQCPT Operator: MTW
 Run Time: 07/29/00 10:01:23
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E **666 806**
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00284	2.8020	.23950	.00369	.15296	.00012	328.98
SDev	.00141	.0067	.03096	.00072	.00073	.00006	.76
%RSD	49.480	.23841	12.929	19.472	.47876	53.667	.23046
#1	-.00174	2.8033	.28414	.00333	.15221	.00002	328.40
#2	-.00174	2.7960	.21680	.00333	.15293	.00016	328.41
#3	-.00469	2.7978	.23652	.00476	.15272	.00014	330.01
#4	-.00320	2.8108	.22055	.00332	.15396	.00014	329.10
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	-.00344	-.00157	-.00055	.00118	.45080	.70198	.00069
SDev	.00096	.00297	.00069	.00116	.00141	.27932	.00083
%RSD	27.984	189.81	124.64	97.940	.31248	39.791	119.26
#1	-.00442	-.00514	-.00124	.00003	.44927	.32147	-.00017
#2	-.00405	-.00228	-.00069	.00095	.44995	.70635	.00176
#3	-.00294	-.00085	-.00069	.00095	.45200	.98627	.00031
#4	-.00235	.00200	.00041	.00279	.45200	.79382	.00088
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.4913	.07505	-.00119	S1802.9	-.00386	.01180	.02645
SDev	.0220	.00000	.00289	2082.0	.00461	.01904	.02031
%RSD	.48972	.00134	244.07	115.48	119.54	161.36	76.793
#1	4.4989	.07505	.00132	S-.14225	-.00956	.03507	.04228
#2	4.4630	.07505	-.00369	S3605.3	-.00007	-.00376	.04245
#3	4.5155	.07505	.00132	S3606.6	-.00016	-.00378	-.00007
#4	4.4879	.07505	-.00369	S-.14225	-.00563	.01967	.02116
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	-.00079	4.3216	.02041	.64277	.04191	-.01024	.00623
SDev	.03251	.0344	.00985	.00230	.00064	.07948	.00289
%RSD	4116.5	.79636	48.241	.35720	1.5266	776.45	46.389
#1	.01206	4.3396	.03510	.64398	.04233	-.07587	.00377
#2	.02788	4.2794	.01631	.63943	.04233	-.05201	.00368

666

807

#3	.00416	4.3096	.01403	.64317	.04098	-.01625	.00878
#4	-.04726	4.3577	.01621	.64451	.04199	.10318	.00868
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 .01418
SDev .00080
%RSD 5.6710

#1 .01522
#2 .01431
#3 .01331
#4 .01387

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET

Sample Name: DGQCPP5T

Operator: MTW

Run Time: 07/29/00 10:04:36

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

666 808

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00003	.57065	.07654	-.00238	.03208	.00003	67.649
SDev	.00187	.00438	.04229	.00209	.00031	.00001	.079
%RSD	5744.3	.76810	55.257	88.176	.95752	25.995	.11679
#1	-.00036	.57124	.05677	.00060	.03216	.00004	67.744
#2	.00264	.56743	.05275	-.00289	.03237	.00002	67.679
#3	-.00182	.57663	.13991	-.00432	.03216	.00002	67.609
#4	-.00033	.56731	.05671	-.00289	.03165	.00002	67.564
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	.00018	.00104	-.00096	.00047	.09837	.14652	-.00019
SDev	.00043	.00270	.00071	.00119	.00152	.20036	.00044
%RSD	242.35	259.58	73.572	253.75	1.5444	136.75	230.27
#1	.00040	.00068	-.00179	.00001	.09888	-.08966	-.00065
#2	-.00047	.00497	-.00124	.00185	.10025	.40019	.00031
#3	.00039	-.00074	-.00014	-.00091	.09683	.14652	-.00045
#4	.00039	-.00074	-.00069	.00093	.09751	.12902	.00003
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	.95302	.01536	-.00500	278.89	-.00513	-.01006	.00793
SDev	.01020	.00050	.00630	1.98	.00612	.02102	.01019
%RSD	1.0700	3.2710	126.20	.70952	119.36	208.99	128.45
#1	.94336	.01561	-.01376	278.74	-.00486	-.01783	.02124
#2	.95716	.01461	-.00374	277.19	-.00922	-.02551	.01056
#3	.94612	.01561	-.00374	281.71	.00343	.02101	.00011
#4	.96543	.01562	.00127	277.94	-.00986	-.01790	-.00019
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	-.02743	.80355	.01464	.13476	.00794	-.01290	.00240
SDev	.06347	.00349	.02896	.00077	.00070	.04572	.00262
%RSD	231.43	.43476	197.78	.56959	8.7726	354.47	108.86
#1	-.06401	.80049	.02253	.13430	.00786	.02296	-.00152
#2	-.09169	.80657	.01830	.13441	.00887	.02287	.00368

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#3	-.00469	.80657	-.02558	.13590	.00718	-.07260	.00368
#4	.05068	.80055	.04331	.13441	.00786	-.02483	.00377
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	.00256
SDev	.00146
%RSD	57.140

#1	.00205
#2	.00105
#3	.00260
#4	.00453

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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Method: ~~QUANMET~~ Sample Name: DGQCPST Operator: MTW
 Run Time: 07/29/00 10:07:45
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

666 810

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.96943	2.8034	5.3416	.00268	46.576	.00018	322.81
SDev	.00307	.0213	.0805	.00238	.572	.00007	1.52
%RSD	.31672	.76156	1.5076	88.877	1.2291	38.583	.47029

#1	.96608	2.7886	5.2961	.00335	46.104	.00029	322.24
#2	.96907	2.8089	5.3038	-.00075	46.717	.00014	321.82
#3	.97352	2.8312	5.4622	.00478	47.327	.00014	322.10
#4	.96904	2.7848	5.3041	.00335	46.155	.00016	325.07

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	.99839	-.00338	4.6550	.00118	.45970	.73915	.00025
SDev	.00628	.00057	.0168	.00046	.00152	.36140	.00041
%RSD	.62869	16.902	.36118	38.829	.33027	48.893	167.02

#1	.99042	-.00384	4.6420	.00095	.46021	.91629	.00043
#2	.99712	-.00274	4.6459	.00095	.46158	.53140	.00011
#3	1.0053	-.00307	4.6530	.00095	.45816	.35646	-.00026
#4	1.0007	-.00389	4.6793	.00187	.45884	1.1525	.00071

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.4706	.07405	-.00369	S-.14225	-.00379	4.8027	.02019
SDev	.0309	.00000	.00409	.00000	.00956	.0706	.02823
%RSD	.69144	.00188	110.89	.00000	252.34	1.4692	139.85

#1	4.4658	.07405	-.00870	S-.14225	-.00970	4.7152	.05751
#2	4.4465	.07405	-.00369	S-.14225	.00907	4.8163	.02564
#3	4.5155	.07405	-.00369	S-.14225	-.01226	4.7929	-.00634
#4	4.4548	.07405	.00132	S-.14225	-.00227	4.8863	.00394

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

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.1392	4.2778	-.01041	.64097	.04216	.00163	.00539
SDev	.0233	.0666	.03693	.00681	.00044	.03716	.00288
%RSD	2.0441	1.5563	354.76	1.0620	1.0349	2278.8	53.398

#1	1.1076	4.2733	-.02955	.63488	.04233	.01956	.00276
#2	1.1630	4.2734	.01623	.64264	.04267	-.05216	.00787

666 811

#3	1.1392	4.3636	-.05281	.64986	.04199	.03149	.00788
#4	1.1471	4.2011	.02449	.63649	.04165	.00763	.00303
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	.01587
SDev	.00130
%RSD	8.1985

#1	.01734
#2	.01462
#3	.01658
#4	.01494

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET

Sample Name: DGQCPDT

Operator: MTW

Run Time: 07/29/00 10:10:53

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

666 812

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97203	2.7209	5.4324	.00331	46.376	.00024	320.66
SDev	.00271	.0228	.0404	.00000	.432	.00007	.27
%RSD	.27884	.83856	.74416	.07892	.93070	27.267	.08444
#1	.97055	2.7144	5.4394	.00331	45.999	.00028	320.73
#2	.97500	2.7439	5.4035	.00331	46.596	.00028	321.00
#3	.97352	2.7332	5.4868	.00331	46.876	.00014	320.37
#4	.96907	2.6920	5.3999	.00331	46.032	.00028	320.54
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	.99365	-.00255	4.6812	.00348	.43951	1.3996	.00150
SDev	.00193	.00171	.0091	.00115	.00141	.1967	.00102
%RSD	.19375	66.968	.19485	33.209	.32088	14.053	68.218
#1	.99428	-.00094	4.6766	.00371	.44105	1.5024	.00128
#2	.99282	-.00123	4.6925	.00187	.43968	1.2574	.00014
#3	.99599	-.00424	4.6843	.00370	.43967	1.2137	.00232
#4	.99152	-.00380	4.6716	.00462	.43763	1.6248	.00224
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	4.4258	.07304	.00132	S1803.1	-.00552	4.8436	.03589
SDev	.0160	.00000	.00709	2082.2	.00268	.0149	.02601
%RSD	.36163	.00264	537.47	115.48	48.609	.30735	72.463
#1	4.4106	.07303	-.00870	S-.14225	-.00452	4.8398	.00408
#2	4.4299	.07304	.00633	S-.14225	-.00767	4.8553	.03574
#3	4.4465	.07304	.00633	S3606.6	-.00218	4.8553	.03595
#4	4.4162	.07304	.00132	S3605.9	-.00772	4.8242	.06779
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1244	4.1439	-.01190	.63127	.03954	-.02507	.00804
SDev	.0482	.0424	.02628	.00520	.00112	.08687	.00015
%RSD	4.2829	1.0236	220.92	.82352	2.8240	346.57	1.8484
#1	1.0838	4.1169	-.00057	.62605	.04064	-.01614	.00783
#2	1.1510	4.1831	-.00459	.63381	.03895	.09138	.00816

666 813

#3	1.1787	4.1771	-.05052	.63729	.03827	-.11165	..00814
#4	1.0838	4.0988	.00808	.62793	.04030	-.06386	.00802
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	.01572
SDev	.00164
%RSD	10.444

#1	.01812
#2	.01467
#3	.01464
#4	.01545

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DH0CMBT

Operator: MTW

Run Time: 07/29/00 10:14:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

666 814

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	.00325	.05947	-.00660	.00593	.00004	.05782
SDev	.00148	.00787	.02973	.00250	.00281	.00000	.02174
%RSD	406.33	241.75	49.990	37.810	47.419	.40927	37.607
#1	-.00038	.00143	.08526	-.00450	.00834	.00004	.07440
#2	.00259	.01438	.08119	-.00942	.00813	.00004	.07800
#3	-.00038	.00139	.02182	-.00799	.00476	.00004	.04493
#4	-.00038	-.00418	.04962	-.00450	.00250	.00004	.03394
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK
High	.50000		.50000		10.000		
Low	-.50000		-.50000		-10.000		
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00210	-.00143	.00027	-.00023	.00273	.16401	-.00012
SDev	.00215	.00143	.00094	.00046	.00131	.30361	.00062
%RSD	102.26	100.48	341.17	198.85	47.922	185.11	513.85
#1	-.00219	-.00071	.00041	-.00000	.00376	-.17713	-.00065
#2	-.00479	-.00071	-.00068	-.00092	.00376	.55765	.00051
#3	-.00188	-.00071	.00151	-.00000	.00239	.09403	-.00065
#4	.00046	-.00357	-.00014	-.00000	.00102	.18151	.00031
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.10000		.50000				
Low	-.10000		-.50000				
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00345	-.00050	-.00125	.18063	.00055	-.00585	.02125
SDev	.00911	.00000	.00289	.08533	.01004	.01003	.01936
%RSD	264.32	.19923	231.02	47.240	1809.7	171.47	91.120
#1	.00276	-.00050	-.00376	.24511	-.00367	-.00197	-.00006
#2	.01655	-.00050	.00125	.25555	.01539	.00582	.01076
#3	-.00276	-.00050	.00125	.14520	-.00675	-.01747	.04238
#4	-.00276	-.00050	-.00376	.07663	-.00275	-.00978	.03192
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						.50000	
Low						-.50000	
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03461	.02707	.00637	-.00004	-.00059	.01791	-.00127
SDev	.03522	.00602	.01961	.00034	.00048	.03962	.00006
%RSD	101.77	22.237	308.03	873.53	80.812	221.26	4.4128
#1	-.01680	.03008	.01827	.00031	-.00093	.05970	-.00132
#2	.05044	.03008	.00162	.00020	.00008	-.03586	-.00123

						666	815
#3	.04252	.03008	.02473	-.00033	-.00093	.02388	-.00122
#4	.06229	.01804	-.01916	-.00033	-.00059	.02391	-.00132
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						

Elem	ZN
Units	ppm
Avge	.00234
SDev	.00079
%RSD	33.794

#1	.00316
#2	.00255
#3	.00238
#4	.00126

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DH0CMCT

Operator: MTW

Run Time: 07/29/00 10:17:15

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

666 816

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04867	1.9641	2.0541	.98037	1.9835	.05009	L.05574
SDev	.00373	.0146	.0699	.00137	.0062	.00023	.00635
%RSD	7.6698	.74220	3.4020	.13967	.31153	.45742	11.389

#1	.04383	1.9450	2.0583	.97929	1.9924	.05040	L.04887
#2	.04828	1.9674	2.0621	.98072	1.9819	.05000	L.05762
#3	.05279	1.9803	2.1331	.98216	1.9817	.05010	L.06360
#4	.04979	1.9636	1.9629	.97930	1.9781	.04985	L.05286

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
Avg	.04446	.50291	.20423	.24908	1.0785	L.06779	.95879
SDev	.00188	.00673	.00307	.00138	.0057	.52226	.01138
%RSD	4.2233	1.3391	1.5027	.55373	.52595	770.39	1.1873

#1	.04322	.49827	.20149	.25023	1.0744	L-.45705	.97372
#2	.04547	.50255	.20204	.24748	1.0751	L-.13340	.95717
#3	.04658	.51255	.20807	.25024	1.0867	L.77633	.94603
#4	.04258	.49828	.20532	.24839	1.0778	L.08529	.95824

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
Avg	L-.00345	.50373	-.00360	L.04360	.50659	.50077	L.00149
SDev	.01320	.00252	.00409	.00461	.01135	.04081	.00619
%RSD	382.97	.49987	113.76	10.567	2.2412	8.1501	415.03

#1	L-.01931	.50096	-.00360	L.04802	.48962	.44618	L-.00394
#2	L-.00828	.50297	-.00360	L.04666	.51220	.53190	L.00687
#3	L.01103	.50700	.00142	L.03803	.51108	.53216	L.00684
#4	L.00276	.50398	-.00861	L.04167	.51346	.49286	L-.00380

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
Avg	1.9506	.03639	-.00396	1.0031	-.00068	1.9611	.49302
SDev	.0441	.00006	.01733	.0024	.00128	.0842	.00483
%RSD	2.2602	.16937	437.43	.23558	188.75	4.2941	.97951

#1	1.9912	.03634	-.02329	1.0064	-.00228	1.9193	.48926
#2	1.8883	.03634	-.00864	1.0030	-.00025	2.0865	.48926

Analysis Report

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#3	1.9675	.03647	-.00237	1.0023	.00076	1.9310	.49937
#4	1.9556	.03640	.01846	1.0007	-.00093	1.9073	.49417
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	.49754
SDev	.00353
%RSD	.70861

#1	.49749
#2	.49719
#3	.50204
#4	.49342

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DGDJ0T Operator: MTW
 Run Time: 07/29/00 10:20:28
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 818
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00317	7.8388	.19037	.10035	.08779	.00034	H777.11
SDev	.00142	.0157	.03238	.00000	.00017	.00013	2.18
%RSD	44.771	.19982	17.012	.00291	.19579	38.854	.28006
#1	-.00503	7.8472	.16453	.10035	.08779	.00041	H774.82
#2	-.00355	7.8434	.20024	.10035	.08758	.00041	H777.68
#3	-.00206	7.8490	.23191	.10036	.08800	.00014	H776.08
#4	-.00206	7.8155	.16478	.10035	.08779	.00041	H779.87
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
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	-.00495	.00119	-.00549	.00093	.16634	8.6162	.02656
SDev	.00259	.00083	.00221	.00130	.00125	.4159	.00098
%RSD	52.353	69.641	40.261	139.28	.75152	4.8266	3.6733
#1	L-.00665	.00191	-.00673	.00001	.16565	8.5615	.02520
#2	-.00174	.00046	-.00289	.00001	.16498	8.6402	.02704
#3	L-.00741	.00048	-.00453	.00093	.16771	8.1241	.02744
#4	-.00399	.00190	-.00782	.00277	.16703	9.1388	.02656
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	5.0458	1.4396	.00002	S901.33	-.00073	.02640	.02635
SDev	.0134	.0030	.00480	1803.0	.00154	.01169	.01372
%RSD	.26548	.20593	19284.	200.03	211.30	44.278	52.080
#1	5.0423	1.4355	-.00373	S3605.8	.00013	.01666	.01039
#2	5.0589	1.4396	-.00373	S-.14225	-.00289	.01664	.02102
#3	5.0285	1.4406	.00128	S-.14225	-.00070	.04001	.04226
#4	5.0533	1.4426	.00629	S-.14225	.00056	.03227	.03173
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	.03307	H142.36	.03779	1.2846	.12817	-.01458	.00874
SDev	.03618	.32	.02300	.0025	.00073	.04294	.00009
%RSD	109.41	.22191	60.870	.19796	.56961	294.45	1.0316
#1	.03900	H141.91	.06173	1.2841	.12716	-.00564	.00867
#2	-.01637	H142.38	.03463	1.2846	.12851	.04218	.00868

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#3	.03900	H142.60	.04726	1.2880	.12885	-.05340	.00877
#4	.07064	H142.55	.00754	1.2818	.12817	-.04145	.00886
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 .01060
SDev .00237
%RSD 22.325

#1 .00909
#2 .00989
#3 .00932
#4 .01412

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-3

Run Time: 07/29/00 10:23:42

Operator: MTW

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

666 820

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99611	49.832	5.2079	4.9588	4.8653	4.9867	51.728
SDev	.00202	.233	.0902	.0464	.0326	.0254	.166
%RSD	.20263	.46829	1.7312	.93565	.66975	.50884	.32064
#1	.99529	49.904	5.0985	4.9606	4.8805	4.9951	51.497
#2	.99381	49.552	5.2956	4.9026	4.8272	4.9592	51.873
#3	.99681	49.765	5.2660	4.9558	4.8518	4.9749	51.725
#4	.99851	50.106	5.1712	5.0161	4.9017	5.0177	51.817
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	5.0542	5.0261	5.0095	4.8923	52.072	49.119	4.8049
SDev	.0147	.0182	.0188	.0335	.172	.147	.0517
%RSD	.29017	.36238	.37486	.68575	.33107	.29959	1.0761
#1	5.0395	5.0050	4.9835	4.9116	51.939	49.088	4.8528
#2	5.0539	5.0222	5.0159	4.8547	51.993	48.974	4.7452
#3	5.0492	5.0279	5.0104	4.8749	52.032	49.088	4.7784
#4	5.0743	5.0492	5.0280	4.9282	52.324	49.324	4.8431
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	50.025	4.9919	5.0153	49.271	5.0024	5.0427	5.0571
SDev	.281	.0145	.0372	.400	.0220	.0662	.0572
%RSD	.56205	.28960	.74077	.81097	.43882	1.3124	1.1307
#1	50.156	4.9777	4.9739	49.601	4.9805	4.9586	5.1292
#2	49.753	4.9888	5.0140	48.829	4.9986	5.0914	5.0013
#3	49.836	4.9888	5.0090	49.037	5.0329	5.0214	5.0228
#4	50.357	5.0121	5.0642	49.618	4.9974	5.0996	5.0753
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	5.2094	5.1558	5.0158	4.9034	4.9549	9.9921	5.0017
SDev	.0952	.0470	.0574	.0296	.0201	.1307	.0162
%RSD	1.8280	.91189	1.1444	.60412	.40595	1.3078	.32392
#1	5.1744	5.1015	4.9592	4.9157	4.9577	9.8921	4.9940
#2	5.1034	5.1315	4.9775	4.8707	4.9350	9.9990	4.9911

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#3	5.3289	5.1918	5.0444	4.8891	4.9452	9.9029	4.9960
#4	5.2308	5.1982	5.0821	4.9381	4.9817	10.174	5.0258
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 5.0003
SDev .0216
%RSD .43268

#1 4.9706
#2 5.0039
#3 5.0039
#4 5.0226

Errors LC Pass
High 5.5000
Low 4.5000

Analysis Report

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Method: QUANMET Sample Name: CCB3

Run Time: 07/29/00 10:26:50

Operator: MTW

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

666 822

Elem Units	AG ppm	AL ppm	AS ppm	B ppm	BA ppm	BE ppm	CA ppm
Avge	.00150	.01150	.04842	.00854	.00120	.00138	.02982
SDev	.00075	.01338	.05366	.01587	.00038	.00022	.00413
%RSD	49.751	116.38	110.83	185.83	31.844	15.921	13.851
#1	.00114	.00490	.05340	-.00099	.00148	.00161	.02689
#2	.00114	.00874	-.02196	.03037	.00148	.00148	.02957
#3	.00111	.00130	.05353	-.00510	.00067	.00109	.02709
#4	.00262	.03105	.10870	.00987	.00118	.00134	.03574
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 Units	CD ppm	CO ppm	CR ppm	CU ppm	FE ppm	K ppm	LI ppm
Avge	.00283	-.00144	.00165	.00138	.01437	-.13777	.00121
SDev	.00216	.00273	.00113	.00053	.00309	.15656	.00081
%RSD	76.434	189.81	68.591	38.558	21.477	113.64	66.749
#1	.00266	-.00358	.00096	.00183	.01471	-.01093	.00224
#2	.00258	-.00072	.00260	.00092	.01608	-.22087	.00147
#3	.00040	-.00357	.00041	.00092	.00992	-.31709	.00051
#4	H.00566	.00213	.00260	.00184	.01677	-.00219	.00062
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 Units	MG ppm	MN ppm	MO ppm	NA ppm	NI ppm	PB ppm	SB ppm
Avge	.00621	.00126	.00501	.02974	-.00205	.01942	.01323
SDev	.00883	.00050	.00480	.00719	.00995	.02651	.02660
%RSD	142.29	39.859	95.698	24.184	485.07	136.49	201.07
#1	.01379	.00152	.01127	.02623	.00070	-.01756	.04241
#2	.00000	.00151	.00125	.02804	-.00894	.04475	.02119
#3	-.00276	.00051	.00626	.02441	-.01079	.02127	-.02144
#4	.01379	.00151	.00126	.04030	.01082	.02923	.01076
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 Units	SE ppm	SI ppm	SN ppm	SR ppm	TI ppm	TL ppm	V ppm
Avge	-.02073	.03013	-.00046	.00142	.00101	-.02404	.00260
SDev	.02260	.00003	.01731	.00040	.00042	.04246	.00249
%RSD	109.06	.10539	3754.4	28.290	41.944	176.65	95.657
#1	-.03259	.03014	.01846	.00170	.00110	-.00014	.00397
#2	-.04445	.03014	-.01295	.00170	.00110	.01177	.00378

						666	823
#3	-.01283	.03008	.00982	.00085	.00042	-.08368	-.00113
#4	.00697	.03014	-.01718	.00143	.00144	-.02410	.00378
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	.00161
SDev	.00109
%RSD	67.547

#1	.00127
#2	.00319
#3	.00073
#4	.00123

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DGDJ0P5T

Operator: MTW

Run Time: 07/29/00 10:29:59

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00034	1.5768	.04765	.00582	.01833	.00022	161.77
SDev	.00086	.0128	.03512	.00126	.00021	.00008	1.03
%RSD	251.65	.80912	73.706	21.729	1.1475	36.860	.63640
#1	.00108	1.5953	.04455	.00397	.01856	.00029	163.26
#2	-.00040	1.5749	.03678	.00665	.01805	.00029	161.31
#3	.00111	1.5692	.01295	.00664	.01835	.00014	160.92
#4	-.00041	1.5677	.09632	.00601	.01835	.00016	161.60
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	-.00267	-.00112	-.00261	.00115	.03892	1.7429	.00473
SDev	.00159	.00317	.00255	.00046	.00141	.1566	.00037
%RSD	59.785	283.35	97.928	39.864	3.6239	8.9826	7.8075
#1	-.00041	-.00220	-.00508	.00092	.03875	1.5811	.00496
#2	-.00392	-.00361	-.00014	.00092	.04080	1.7123	.00513
#3	-.00364	-.00219	-.00069	.00184	.03738	1.9572	.00437
#4	-.00269	.00353	-.00453	.00092	.03875	1.7210	.00448
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	1.0820	.30920	.00126	276.75	-.00309	-.00876	.01324
SDev	.0099	.00172	.00818	1.30	.00489	.02499	.01332
%RSD	.91625	.55541	650.17	.46977	158.43	285.19	100.61
#1	1.0951	.31146	.00126	278.62	.00385	-.02632	.01066
#2	1.0730	.30845	.00126	276.32	-.00740	-.01856	.01051
#3	1.0758	.30744	.01128	275.63	-.00352	-.01849	.03178
#4	1.0840	.30945	-.00876	276.42	-.00529	.02831	.00002
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	-.01077	H28.641	.00102	.26847	.02687	.00729	.00502
SDev	.01662	.209	.00109	.00154	.00017	.05297	.00263
%RSD	154.30	.72963	106.98	.57239	.62893	727.01	52.463
#1	.01098	H28.945	.00153	.27074	.02678	.02523	.00377
#2	-.00879	H28.589	.00153	.26753	.02678	-.04646	.00378

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#3	-.01671	H28.469	.00162	.26753	.02678	-.02259	.00897
#4	-.02857	H28.559	-.00061	.26807	.02712	.07296	.00357
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	.00497
SDev	.00126
%RSD	25.363

#1	.00504
#2	.00555
#3	.00319
#4	.00609

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGDJOST

Operator: MTW

Run Time: 07/29/00 10:33:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

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Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.95279	7.8875	5.2991	.10037	45.082	.00042	H781.13
SDev	.00253	.0296	.0830	.00000	.202	.00011	3.62
%RSD	.26602	.37488	1.5665	.00269	.44875	25.521	.46302
#1	.94945	7.8810	5.3031	.10037	45.177	.00055	H779.27
#2	.95242	7.8494	5.1804	.10037	44.822	.00042	H781.12
#3	.95390	7.9014	5.3545	.10037	45.292	.00029	H777.95
#4	.95538	7.9181	5.3583	.10037	45.035	.00042	H786.20
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
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	.97793	-.00486	4.4905	.00047	.16789	8.7605	.02653
SDev	.01443	.00209	.0162	.00092	.00117	.3287	.00050
%RSD	1.4756	42.990	.36138	195.95	.69373	3.7524	1.8770
#1	.95779	-.00486	4.4791	.00001	.16840	8.6665	.02645
#2	.99212	-.00191	4.4763	.00001	.16908	8.8327	.02588
#3	.98112	-.00640	4.4950	.00001	.16771	8.3778	.02704
#4	.98068	-.00628	4.5114	.00184	.16635	9.1651	.02676
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	5.0830	1.4466	.00003	S2704.1	.00644	4.6692	.01869
SDev	.0126	.0046	.00480	1802.8	.00662	.0258	.02801
%RSD	.24819	.31616	19107.	66.670	102.83	.55162	149.89
#1	5.0975	1.4476	.00128	S3605.0	.00757	4.6730	-.00518
#2	5.0699	1.4426	.00629	S3606.1	.00971	4.6498	.05866
#3	5.0892	1.4436	-.00373	S-.14225	-.00317	4.6496	.01594
#4	5.0754	1.4526	-.00373	S3605.6	.01166	4.7041	.00533
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0643	H144.75	.03358	1.2871	.12952	-.02044	.00263
SDev	.0444	.33	.01742	.0052	.00114	.06924	.00007
%RSD	4.1754	.22710	51.897	.40251	.87841	338.75	2.5639
#1	1.0436	H144.81	.05539	1.2891	.12885	-.11301	.00263
#2	1.0950	H144.27	.03899	1.2804	.12885	-.00557	.00273

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#3	1.1068	H144.98	.02417	1.2926	.12919	-.01746	.00257
#4	1.0119	H144.95	.01576	1.2863	.13121	.05428	.00260
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	.00841
SDev	.00033
%RSD	3.9329

#1	.00793
#2	.00848
#3	.00852
#4	.00870

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

07/29/00 10:39:31 AM

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Method: QUANMET

Sample Name: DGDJ0DT

Operator: MTW

Run Time: 07/29/00 10:36:26

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.95762	7.8996	5.3951	.10037	45.382	.00048	H783.71
SDev	.00192	.0338	.0759	.00001	.251	.00008	1.06
%RSD	.20035	.42740	1.4069	.00567	.55284	16.343	.13566
#1	.95838	7.8550	5.3151	.10037	45.048	.00041	H783.70
#2	.95687	7.9293	5.3939	.10037	45.652	.00055	H782.31
#3	.95984	7.8922	5.4973	.10037	45.379	.00042	H784.88
#4	.95538	7.9218	5.3741	.10036	45.448	.00055	H783.96
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High
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	.98018	-.00323	4.5283	.00093	.16789	8.9070	.02643
SDev	.01473	.00173	.0063	.00130	.00117	.0908	.00028
%RSD	1.5023	53.514	.13864	139.71	.69632	1.0190	1.0526
#1	.98887	-.00487	4.5295	.00276	.16908	8.9464	.02636
#2	.98214	-.00373	4.5191	.00001	.16840	8.7714	.02684
#3	.95881	-.00353	4.5317	.00093	.16772	8.9639	.02628
#4	.99088	-.00079	4.5328	.00001	.16635	8.9464	.02625
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	5.0885	1.4499	-.00248	S2704.3	-.00202	4.6867	.03427
SDev	.0346	.0029	.00630	1803.0	.00829	.0300	.00526
%RSD	.68048	.19932	254.20	66.670	409.65	.64059	15.358
#1	5.0395	1.4456	-.00373	S3605.8	.00302	4.6887	.03694
#2	5.1168	1.4516	-.00373	S-.14225	-.01119	4.7276	.02638
#3	5.1085	1.4516	-.00874	S3606.2	.00668	4.6576	.03705
#4	5.0892	1.4506	.00629	S3605.5	-.00661	4.6732	.03670
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1167	H144.72	.03521	1.2912	.12986	-.01149	.00422
SDev	.0688	.41	.03675	.0062	.00028	.04079	.00235
%RSD	6.1646	.28385	104.37	.48249	.21249	355.10	55.594
#1	1.0198	H144.14	.05141	1.2827	.12986	.00638	.00764
#2	1.1385	H145.08	-.00293	1.2975	.13020	-.06523	.00387

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#3	1.1820	H144.73	.01383	1.2913	.12986	-.01743	.00255
#4	1.1266	H144.93	.07855	1.2932	.12952	.03033	.00284
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	.00992
SDev	.00123
%RSD	12.398

#1	.01119
#2	.01068
#3	.00927
#4	.00853

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

07/29/00 10:42:45 AM

page 1.

Method: QUANMET Sample Name: DGF39T Operator: MTW
 Run Time: 07/29/00 10:39:39
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 830
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00229	2.7510	.19789	.09362	.57686	.00079	364.20
SDev	.00142	.0079	.03089	.00391	.00159	.00006	1.51
%RSD	61.833	.28887	15.610	4.1745	.27568	7.8507	.41393

#1	-.00191	2.7495	.24147	.09865	.57671	.00082	364.56
#2	-.00342	2.7403	.19802	.08963	.57641	.00070	366.18
#3	-.00339	2.7570	.17797	.09168	.57905	.00082	363.17
#4	-.00045	2.7571	.17409	.09455	.57527	.00083	362.89

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	-.00279	-.00168	-.00343	.00207	.02148	2.1693	.00106
SDev	.00259	.00143	.00142	.00046	.00148	.4064	.00061
%RSD	92.748	84.898	41.275	22.241	6.8786	18.733	57.635

#1	.00097	-.00097	-.00288	.00275	.02148	2.7008	.00108
#2	-.00479	-.00382	-.00507	.00183	.01942	1.7210	.00020
#3	-.00323	-.00096	-.00178	.00184	.02284	2.0622	.00136
#4	-.00412	-.00096	-.00398	.00184	.02216	2.1934	.00159

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	1.7805	.38088	.00126	S3606.0	.00050	-.01920	.02131
SDev	.0150	.00142	.00409	.5	.00591	.00004	.01735
%RSD	.84380	.37396	325.76	.01504	1177.4	.21323	81.434

#1	1.7847	.38189	.00627	S3605.5	.00378	-.01921	.00004
#2	1.7985	.38188	.00126	S3606.8	.00702	-.01926	.02140
#3	1.7764	.38088	.00126	S3605.9	-.00570	-.01919	.02126
#4	1.7626	.37886	-.00375	S3605.9	-.00309	-.01916	.04254

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	-.05432	H22.000	.00488	.51807	-.02095	-.02793	.00127
SDev	.04039	.065	.01199	.00107	.00043	.03163	.00295
%RSD	74.360	.29327	245.91	.20574	2.0295	113.24	232.40

#1	-.10376	H21.975	.01417	.51855	-.02087	-.06976	.00387
#2	-.00489	H22.077	-.01078	.51754	-.02087	.00199	-.00124

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#3	-.05234	H22.023	.00175	.51930	-.02155	-.03394	.00377
#4	-.05630	H21.927	.01437	.51690	-.02053	-.01002	-.00133

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	.03221
SDev	.00111
%RSD	3.4441

#1	.03128
#2	.03125
#3	.03289
#4	.03341

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

07/29/00 10:45:58 AM

page 1

Method: QUANMET Sample Name: DGF39P5T

Operator: MTW

Run Time: 07/29/00 10:42:52

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00076	.56044	.07380	.01303	.12438	.00017	76.027
SDev	.00253	.01557	.02628	.00759	.00242	.00001	1.609
%RSD	333.49	2.7790	35.611	58.249	1.9455	4.4020	2.1165
#1	-.00039	.56554	.06883	.01293	.12737	.00017	78.021
#2	-.00189	.56003	.05700	.00800	.12482	.00017	76.230
#3	.00258	.57668	.11233	.02379	.12379	.00017	75.746
#4	-.00334	.53951	.05705	.00739	.12154	.00016	74.111
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	-.00409	-.00219	-.00261	-.00023	.00357	.22306	-.00055
SDev	.00150	.00202	.00071	.00046	.00171	.16293	.00055
%RSD	36.550	92.333	27.125	198.57	47.861	73.042	100.41
#1	L-.00561	-.00504	-.00233	-.00000	.00374	.13777	-.00094
#2	-.00281	-.00219	-.00288	-.00092	.00169	.04155	-.00094
#3	L-.00515	-.00076	-.00343	-.00000	.00306	.40019	.00023
#4	-.00281	-.00076	-.00179	-.00000	.00580	.31272	-.00054
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	.38135	.08251	-.00626	280.04	-.00115	-.02762	.01601
SDev	.00569	.00209	.00289	5.77	.00611	.02323	.01067
%RSD	1.4912	2.5378	46.194	2.0601	530.06	84.101	66.626
#1	.38617	.08503	-.00877	287.21	.00590	-.01796	.02143
#2	.37514	.08201	-.00877	281.54	-.00219	-.03345	.02130
#3	.38617	.08302	-.00376	277.79	.00048	-.00229	.02131
#4	.37790	.08000	-.00376	273.62	-.00881	-.05677	.00001
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	-.01878	4.5006	-.00774	.11096	-.00507	-.03240	-.00013
SDev	.02249	.1143	.01512	.00223	.00032	.06638	.00275
%RSD	119.78	2.5400	195.45	2.0073	6.3828	204.87	2178.1
#1	-.04448	4.6285	-.02546	.11364	-.00532	-.13090	-.00142
#2	-.02867	4.5502	.00377	.11150	-.00532	.00048	-.00268

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#3	-.00889	4.4600	.00586	.11043	-.00465	-.01150	-.00008
#4	.00694	4.3637	-.01512	.10829	-.00498	.01232	.00368

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	.00771
SDev	.00068
%RSD	8.8279

#1	.00715
#2	.00796
#3	.00717
#4	.00856

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGF39ST

Operator: MTW

Run Time: 07/29/00 10:46:00

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

						666	834
Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.95184	2.6711	5.2401	.09482	46.313	.00082	350.51
SDev	.00308	.0202	.0425	.00199	.190	.00001	2.41
%RSD	.32381	.75646	.81199	2.1029	.40986	1.1669	.68837
#1	.94814	2.6420	5.1987	.09311	46.425	.00082	347.52
#2	.95554	2.6828	5.2538	.09655	46.031	.00081	353.36
#3	.95260	2.6734	5.2936	.09655	46.428	.00082	351.02
#4	.95109	2.6864	5.2143	.09308	46.367	.00083	350.14
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	.97997	-.00525	4.5957	.00206	.01960	2.4012	.00110
SDev	.00527	.00487	.0245	.00046	.00342	.4461	.00072
%RSD	.53814	92.755	.53297	22.441	17.433	18.579	65.638
#1	.97888	-.00387	4.5619	.00183	.01738	2.0972	.00116
#2	.98771	.00059	4.6168	.00276	.02422	3.0594	.00184
#3	.97687	-.00672	4.6102	.00183	.01669	2.2896	.00128
#4	.97641	-.01098	4.5937	.00183	.02011	2.1584	.00011
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	1.7474	.36880	.00000	S3606.6	-.00273	4.7172	.03398
SDev	.0222	.00082	.00250	.9	.00452	.0373	.03281
%RSD	1.2726	.22312	85465.	.02583	165.59	.79159	96.562
#1	1.7350	.36779	-.00375	S3607.3	-.00395	4.6997	.00503
#2	1.7736	.36981	.00126	S3606.7	.00396	4.7310	.07909
#3	1.7571	.36880	.00126	S3607.2	-.00520	4.7619	.03649
#4	1.7240	.36880	.00126	S3605.3	-.00571	4.6761	.01529
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1213	H21.296	.01641	.50570	-.01943	.01384	.00253
SDev	.0491	.077	.00873	.00158	.00064	.04874	.00361
%RSD	4.3805	.36290	53.217	.31305	3.2921	352.12	142.65
#1	1.1934	H21.228	.02045	.50667	-.01986	-.05782	.00270
#2	1.1104	H21.252	.00827	.50352	-.01850	.04956	.00666

666 835

#3	1.0867	H21.403	.01016	.50705	-.01986	.03777	.00289
#4	1.0946	H21.300	.02677	.50555	-.01952	.02586	-.00214

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	.02827
SDev	.00060
%RSD	2.1308

#1	.02886
#2	.02861
#3	.02808
#4	.02751

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGF39DT

Operator: MTW

Run Time: 07/29/00 10:49:14

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

						666	836
Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.95147	2.7162	5.3240	.09467	45.879	.00076	357.75
SDev	.00306	.0031	.0488	.00474	.249	.00007	1.36
%RSD	.32171	.11592	.91718	5.0102	.54322	9.8769	.37923
#1	.94815	2.7124	5.2655	.09308	45.639	.00069	356.60
#2	.95408	2.7163	5.3766	.10003	45.934	.00082	358.70
#3	.94960	2.7162	5.3489	.08897	46.205	.00070	356.57
#4	.95408	2.7201	5.3052	.09659	45.739	.00082	359.13
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	.98366	-.00146	4.5990	.00230	.02473	2.4099	.00140
SDev	.00885	.00477	.0153	.00053	.00152	.3899	.00073
%RSD	.90008	325.71	.33236	23.163	6.1346	16.180	52.200
#1	.98264	-.00491	4.5844	.00275	.02627	2.5171	.00176
#2	.99218	-.00080	4.6135	.00184	.02422	2.5083	.00224
#3	.97174	-.00517	4.5872	.00183	.02285	1.8523	.00091
#4	.98808	.00503	4.6107	.00276	.02559	2.7620	.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	1.7633	.37509	-.00125	S3606.4	-.00519	4.7134	.02599
SDev	.0161	.00223	.00647	.7	.00726	.0452	.02290
%RSD	.91550	.59437	517.93	.01969	139.85	.95956	88.123
#1	1.7709	.37182	.00627	S3606.7	.00357	4.6529	.00489
#2	1.7543	.37585	-.00375	S3606.8	-.00219	4.7153	.02593
#3	1.7461	.37585	.00126	S3606.9	-.01232	4.7230	.01530
#4	1.7819	.37685	-.00876	S3605.4	-.00984	4.7622	.05783
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1242	H21.660	.00907	.51045	-.01926	.01082	.00095
SDev	.0448	.069	.01458	.00236	.00032	.03824	.00218
%RSD	3.9853	.31868	160.78	.46307	1.6797	353.35	229.67
#1	1.1816	H21.595	.00166	.50823	-.01884	.02573	.00294
#2	1.1381	H21.734	.00176	.51101	-.01952	-.04592	.00155

666

837

#3	1.0906	H21.704	.03094	.51353	-.01918	.02583	-.00215
#4	1.0867	H21.607	.00191	.50903	-.01952	.03764	.00145
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	.03162
SDev	.00124
%RSD	3.9294

#1	.03152
#2	.02996
#3	.03210
#4	.03289

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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Method: ~~QUANMET~~ Sample Name: DGW22BT

Operator: MTW

Run Time: 07/29/00 10:52:27

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

666 838

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00074	.01165	.05346	.00334	.00598	.00010	.08032
SDev	.00223	.00866	.03887	.00933	.00459	.00008	.03605
%RSD	302.61	74.372	72.711	279.69	76.746	74.233	44.886

#1	-.00186	.00327	.03766	.00841	.01089	.00017	.12079
#2	.00259	.01816	.08512	-.00450	.00885	.00004	.10051
#3	.00259	.02003	.00581	-.00451	.00271	.00004	.05261
#4	-.00038	.00514	.08523	.01394	.00148	.00017	.04736

Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK
High	.50000		.50000		10.000		
Low	-.50000		-.50000		-10.000		

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00009	-.00072	.00165	.00069	.00171	.30616	.00034
SDev	.00289	.00203	.00137	.00046	.00168	.11938	.00076
%RSD	3095.8	282.26	83.360	66.459	98.109	38.992	222.46

#1	.00418	-.00216	.00315	.00092	.00034	.43518	.00040
#2	-.00219	-.00214	.00206	.00092	.00376	.35646	.00043
#3	-.00168	.00215	-.00014	.00000	.00240	.15527	.00119
#4	.00007	-.00071	.00151	.00092	.00034	.27773	-.00065

Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.10000		.50000				
Low	-.10000		-.50000				

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00759	-.00025	-.00501	.17506	-.00371	-.00196	.00528
SDev	.01178	.00050	.00250	.12930	.00526	.01422	.02207
%RSD	155.35	199.02	49.998	73.862	141.76	724.01	418.25

#1	.01655	-.00050	-.00376	.31005	-.00859	.01357	.01050
#2	-.00828	-.00051	-.00877	.25873	-.00711	-.00975	.03182
#3	.00552	.00050	-.00376	.08844	-.00213	.00588	.00001
#4	.01655	-.00050	-.00376	.04303	.00300	-.01756	-.02122

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						.50000	
Low						-.50000	

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00988	.03008	.00524	.00006	-.00008	.00597	-.00134
SDev	.02446	.00000	.00933	.00028	.00059	.08584	.00005
%RSD	247.53	.00203	177.83	511.84	692.82	1438.2	3.5655

#1	-.02076	.03008	.01414	.00020	-.00059	-.05970	-.00132
#2	.02671	.03008	.01215	.00031	.00042	-.01196	-.00142

Analysis Report

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#3	-.02471	.03008	-.00052	.00004	.00042	.13136	-.00132
#4	-.02076	.03008	-.00479	-.00033	-.00059	-.03583	-.00132
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						

Elem	ZN
Units	ppm
Avge	.00182
SDev	.00109
%RSD	60.141

#1	.00049
#2	.00317
#3	.00181
#4	.00179

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DGW22CT

Operator: MTW

Run Time: 07/29/00 10:55:36

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

666 840

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04865	1.9441	2.0226	.95669	1.9637	.05007	L.03186
SDev	.00142	.0129	.0320	.01991	.0072	.00018	.00326
%RSD	2.9273	.66462	1.5823	2.0815	.36692	.35368	10.234

#1	.04825	1.9303	2.0704	.97027	1.9664	.05028	L.02859
#2	.04977	1.9487	2.0067	.94035	1.9542	.04987	L.03637
#3	.04977	1.9599	2.0106	.93891	1.9631	.05000	L.03146
#4	.04680	1.9377	2.0028	.97724	1.9712	.05013	L.03102

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	.04343	.49828	.19957	.24587	1.0749	L.01093	.94359
SDev	.00315	.00369	.00114	.00046	.0010	.20706	.00655
%RSD	7.2610	.74000	.57187	.18632	.09548	1893.7	.69438

#1	.04084	.49972	.19930	.24564	1.0758	L-.27336	.95133
#2	.04698	.49399	.19820	.24563	1.0737	L.08529	.93678
#3	.04071	.49686	.19984	.24655	1.0744	L.01531	.93979
#4	.04520	.50256	.20094	.24564	1.0758	L.21650	.94645

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-.00690	.49643	-.00485	L.06119	.50626	.50651	L.01747
SDev	.00915	.00193	.00250	.01269	.00553	.01837	.01508
%RSD	132.66	.38813	51.656	20.735	1.0931	3.6269	86.317

#1	L-.01931	.49492	-.00360	L.05711	.50242	.53182	L-.00390
#2	L-.00828	.49492	-.00360	L.07936	.50061	.50835	L.02802
#3	L.00000	.49895	-.00360	L.04984	.51094	.49286	L.02817
#4	L.00000	.49693	-.00861	L.05847	.51108	.49302	L.01760

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	2.0347	.03632	-.01589	.99484	-.00068	1.8954	.48767
SDev	.0375	.00004	.02135	.00306	.00032	.0577	.00311
%RSD	1.8439	.10929	134.37	.30788	47.871	3.0435	.63787

#1	1.9872	.03626	.00802	.99682	-.00093	1.8118	.48300
#2	2.0703	.03634	-.00436	.99040	-.00059	1.9193	.48925

Analysis Report

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#3	2.0584	.03634	-.02941	.99521	-.00093	1.9074	.48926
#4	2.0228	.03634	-.03781	.99693	-.00025	1.9432	.48916
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	.48622
SDev	.00515
%RSD	1.0588

#1	.48995
#2	.48250
#3	.48112
#4	.49129

Errors	LC Pass
High	.60000
Low	.40000

Analysis Report

07/29/00 11:01:55 AM

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Method: QUANMET Sample Name: DGQ5LT

Operator: MTW

Run Time: 07/29/00 10:58:49

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

666 842

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00223	.05524	.06792	.05579	.03819	.00010	1.2752
SDev	.00142	.00924	.03760	.00729	.00069	.00007	.0062
%RSD	63.759	16.737	55.359	13.059	1.8189	74.265	.48678

#1	.00408	.06267	.08868	.04990	.03901	.00004	1.2715
#2	.00112	.06079	.07283	.05072	.03850	.00017	1.2712
#3	.00112	.04219	.01351	.06567	.03748	.00004	1.2739
#4	.00261	.05529	.09665	.05687	.03778	.00017	1.2844

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	.00021	-.00038	.00302	.92302	.04327	.55983	.00245
SDev	.00125	.00137	.00164	.00607	.00180	.07836	.00068
%RSD	597.78	362.97	54.278	.65724	4.1586	13.997	27.850

#1	-.00125	-.00073	.00480	.91521	.04344	.47017	.00323
#2	.00117	-.00217	.00096	.92439	.04481	.52266	.00159
#3	-.00040	.00070	.00261	.92256	.04070	.60138	.00264
#4	.00132	.00069	.00370	.92990	.04413	.64512	.00235

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	.17171	.01158	-.00250	3.9625	.09878	-.01173	-.00182
SDev	.01413	.00000	.00630	.0317	.00485	.01163	.01021
%RSD	8.2305	.01530	252.30	.80097	4.9115	99.165	560.39

#1	.17378	.01158	-.00375	3.9189	.10012	-.01756	.01146
#2	.16550	.01158	-.00375	3.9743	.09161	.00572	-.00985
#3	.15723	.01159	.00627	3.9630	.10208	-.01754	-.00982
#4	.19033	.01158	-.00876	3.9938	.10131	-.01753	.00092

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	-.00878	11.639	.02036	.00547	-.00000	-.01232	-.00098
SDev	.03696	.147	.00722	.00053	.00032	.06169	.00055
%RSD	420.74	1.2649	35.460	9.7743	414e6	500.91	56.423

#1	.01099	11.478	.02250	.00620	.00042	-.03620	-.00131
#2	-.05228	11.550	.02241	.00555	-.00025	.05935	-.00132

660 843

#3	-.02461	11.761	.02658	.00513	-.00025	.01159	-.00112
#4	.03077	11.767	.00993	.00502	.00008	-.08401	-.00016
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	.19201
SDev	.00182
%RSD	.94607

#1	.19017
#2	.19283
#3	.19415
#4	.19089

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-4

Operator: MTW

Run Time: 07/29/00 11:01:57

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

666 844

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99233	49.750	5.2018	4.9670	4.8592	5.0192	51.659
SDev	.00352	.170	.0820	.0257	.0263	.0185	.214
%RSD	.35480	.34162	1.5764	.51707	.54169	.36815	.41511

#1	.98937	49.808	5.1944	5.0001	4.8674	5.0310	51.635
#2	.98920	49.545	5.2012	4.9634	4.8308	4.9971	51.415
#3	.99535	49.700	5.3061	4.9375	4.8468	5.0112	51.938
#4	.99541	49.947	5.1057	4.9669	4.8916	5.0375	51.646

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	5.0869	5.0225	5.0051	4.8953	51.942	49.145	4.7858
SDev	.0209	.0143	.0227	.0224	.155	.353	.0374
%RSD	.41069	.28433	.45448	.45755	.29906	.71912	.78177

#1	5.0833	5.0150	5.0027	4.9070	51.948	49.490	4.7971
#2	5.0632	5.0079	4.9742	4.8730	51.720	48.694	4.7652
#3	5.1140	5.0406	5.0263	4.8804	52.043	49.351	4.7480
#4	5.0870	5.0263	5.0170	4.9208	52.056	49.044	4.8329

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	50.076	4.9823	4.9927	49.156	5.0206	5.0389	5.0893
SDev	.133	.0153	.0279	.296	.0248	.0518	.0217
%RSD	.26594	.30714	.55840	.60217	.49464	1.0286	.42625

#1	50.109	4.9838	4.9940	49.286	5.0471	5.0678	5.0869
#2	49.880	4.9605	4.9539	48.903	4.9934	4.9666	5.0656
#3	50.164	4.9959	5.0191	48.922	5.0352	5.0375	5.1182
#4	50.153	4.9888	5.0040	49.513	5.0067	5.0836	5.0865

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	5.1408	H9.3989	5.0363	4.9081	4.9403	9.9158	4.9950
SDev	.0779	.4623	.0604	.0236	.0187	.1737	.0164
%RSD	1.5153	4.9185	1.1985	.48043	.37848	1.7514	.32806

#1	5.1428	H9.7842	5.0342	4.9182	4.9469	10.011	4.9957
#2	5.0433	H9.7177	4.9883	4.8791	4.9137	9.6555	4.9723

Analysis Report

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#3	5.1430	H9.3148	5.1221	4.9011	4.9435	9.9983	5.0012
#4	5.2340	H8.7792	5.0008	4.9341	4.9573	9.9981	5.0109
Errors	LC Pass	LC High	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	4.9836
SDev	.0121
%RSD	.24247

#1	4.9806
#2	4.9677
#3	4.9926
#4	4.9934

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB4

Operator: MTW

Run Time: 07/29/00 11:05:11

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 846

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00187	.03244	.03536	-.00461	.00317	.00280	.03349
SDev	.00086	.00749	.03310	.00220	.00034	.00022	.00311
%RSD	45.756	23.087	93.612	47.750	10.622	7.7433	9.2796
#1	.00262	.03656	.01745	-.00651	.00271	.00280	.02888
#2	.00260	.04037	.08094	-.00241	.00323	.00307	.03521
#3	.00114	.02920	.00561	-.00650	.00323	.00280	.03438
#4	.00112	.02361	.03745	-.00303	.00353	.00254	.03550
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	.00095	.00106	.00261	.00299	.02823	-.01312	.00272
SDev	.00063	.00180	.00100	.00046	.00239	.25775	.00069
%RSD	66.764	168.99	38.425	15.333	8.4854	1964.4	25.487
#1	.00081	.00071	.00206	.00276	.02703	.09403	.00349
#2	.00051	.00357	.00371	.00276	.03113	.04155	.00309
#3	.00187	-.00072	.00315	.00367	.02908	-.38707	.00235
#4	.00059	.00071	.00151	.00276	.02566	.19900	.00196
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	.01931	.00278	.00376	.04541	-.00489	.00390	-.00007
SDev	.01032	.00096	.00501	.00435	.00828	.02047	.01504
%RSD	53.452	34.727	133.18	9.5699	169.40	525.53	21184.
#1	.03034	.00353	.00627	.03939	-.01225	.01362	.01052
#2	.02207	.00353	.00627	.04757	-.00458	.00592	.01050
#3	.00552	.00252	-.00375	.04939	.00659	.02136	.00008
#4	.01931	.00152	.00627	.04530	-.00931	-.02532	-.02139
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	-.01278	H.55375	-.00418	.00274	.00186	.04450	.00164
SDev	.04235	.04963	.01399	.00020	.00032	.06499	.00252
%RSD	331.42	8.9631	334.97	7.2969	17.408	146.05	153.82
#1	-.04442	H.60795	-.01927	.00277	.00211	.04749	.00388
#2	.03469	H.58381	.01414	.00272	.00211	.02357	-.00112

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#3	-.05233	H.51165	-.00887	.00299	.00177	-.02420	.00369
#4	.01094	H.51160	-.00271	.00250	.00144	.13113	.00012
Errors	LC Pass	LC High	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	.00302
SDev	.00158
%RSD	52.153

#1	.00319
#2	.00504
#3	.00124
#4	.00262

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DGQ5LP5T

Operator: MTW

Run Time: 07/29/00 11:08:24

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 848

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00150	.01900	.02952	.00633	.00772	.00055	.27091
SDev	.00075	.00750	.04602	.00315	.00034	.00010	.00515
%RSD	49.778	39.448	155.86	49.831	4.4351	18.439	1.8991
#1	.00114	.01994	.07311	.01089	.00783	.00068	.27391
#2	.00262	.02920	-.01420	.00597	.00813	.00055	.27493
#3	.00111	.01443	-.00606	.00393	.00732	.00043	.26356
#4	.00114	.01246	.06524	.00454	.00762	.00055	.27124
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	.00150	.00035	.00110	.18497	.01522	.45486	.00080
SDev	.00190	.00317	.00113	.00118	.00065	.33358	.00046
%RSD	126.89	908.69	103.24	.63913	4.3026	73.336	57.105
#1	.00249	.00356	.00206	.18360	.01608	.88130	.00119
#2	.00120	.00213	.00206	.18451	.01471	.46142	.00031
#3	.00334	-.00358	-.00014	.18634	.01471	.06779	.00051
#4	-.00103	-.00072	.00041	.18543	.01539	.40894	.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	.03655	.00353	-.00125	.79391	.01549	.02335	.01077
SDev	.00725	.00000	.00501	.00547	.00385	.02149	.00004
%RSD	19.849	.04853	400.73	.68878	24.829	92.032	.38065
#1	.03586	.00353	.00125	.78687	.01933	.04484	.01079
#2	.04689	.00353	.00125	.79232	.01082	.03702	.01071
#3	.03310	.00352	-.00877	.79777	.01398	.01352	.01080
#4	.03034	.00353	.00125	.79868	.01785	-.00196	.01078
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	.00795	2.7371	.00475	.00139	.00042	.00880	.00248
SDev	.02709	.0173	.00497	.00020	.00028	.04292	.00260
%RSD	340.76	.63182	104.63	14.334	65.320	487.72	104.86
#1	.00301	2.7266	.00788	.00165	.00042	.03563	.00378
#2	-.00095	2.7627	.00788	.00138	.00076	-.04795	.00378

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#3	-.01677	2.7325	-.00256	.00116	.00008	-.00009	-.00142
#4	.04651	2.7266	.00579	.00138	.00042	.04762	.00378
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	.04042
SDev	.00089
%RSD	2.2064

#1	.04056
#2	.04058
#3	.03920
#4	.04134

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET

Sample Name: DGQ5LST

Operator: MTW

Run Time: 07/29/00 11:11:33

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 850

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.96374	.04082	5.0543	.05662	49.468	.00017	1.2554
SDev	.00549	.01267	.0431	.00605	.127	.00011	.0088
%RSD	.56942	31.036	.85241	10.684	.25659	63.869	.70043
#1	.96596	.04970	5.0176	.05830	49.396	.00030	1.2573
#2	.95557	.02734	5.0177	.06323	49.394	.00004	1.2434
#3	.96745	.03287	5.0811	.05626	49.657	.00017	1.2565
#4	.96596	.05339	5.1008	.04867	49.424	.00017	1.2645
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	.97759	-.00222	4.9805	.92901	.04464	.59701	.00057
SDev	.00646	.00251	.0210	.00168	.00152	.20170	.00030
%RSD	.66057	112.72	.42129	.18030	3.4007	33.784	53.091
#1	.97234	.00033	4.9921	.92717	.04550	.86380	.00088
#2	.97193	-.00253	4.9493	.92809	.04413	.40894	.00031
#3	.98475	-.00555	4.9932	.92992	.04276	.47892	.00031
#4	.98136	-.00114	4.9877	.93084	.04618	.63637	.00079
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	.15378	.01133	-.00125	3.9827	.09898	4.8611	.00783
SDev	.01849	.00050	.00289	.0087	.00490	.0384	.01388
%RSD	12.022	4.4343	232.16	.21962	4.9512	.78908	177.20
#1	.16826	.01158	-.00375	3.9716	.09927	4.8806	-.00820
#2	.12964	.01058	.00126	3.9825	.10576	4.8183	.02405
#3	.16826	.01159	.00126	3.9929	.09618	4.9038	.00236
#4	.14895	.01158	-.00375	3.9839	.09471	4.8417	.01312
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	1.0027	11.973	-.00205	.00493	.00110	.01158	-.00142
SDev	.0367	.129	.01519	.00026	.00039	.05428	.00005
%RSD	3.6632	1.0816	742.14	5.2001	35.529	468.96	3.4870
#1	.99181	11.869	.00362	.00513	.00144	.04738	-.00145
#2	.95622	11.863	.01212	.00459	.00076	-.06009	-.00144

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#3	1.0234	12.031	-.00051	.00486	.00076	-.00032	-.00135
#4	1.0393	12.128	-.02342	.00513	.00144	.05933	-.00146

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 .19813
SDev .00287
%RSD 1.4502

#1 .19705
#2 .19679
#3 .20241
#4 .19626

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DGQ5LDT 666 852 Operator: MTW
 Run Time: 07/29/00 11:14:42
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.97042	.04453	4.9839	.05903	49.439	.00017	1.3156
SDev	.00528	.00490	.0574	.00234	.221	.00001	.0088
%RSD	.54386	11.008	1.1516	3.9564	.44744	2.8820	.66823
#1	.96598	.04221	4.9660	.05626	49.185	.00016	1.3071
#2	.96597	.04409	5.0335	.06180	49.323	.00017	1.3133
#3	.97339	.04030	4.9106	.05975	49.636	.00017	1.3141
#4	.97636	.05150	5.0255	.05831	49.612	.00017	1.3279
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	.97637	-.00113	5.0126	.97146	.04840	.73915	.00022
SDev	.00676	.00110	.0200	.00413	.00065	.20754	.00093
%RSD	.69197	96.616	.39914	.42527	1.3530	28.078	421.07
#1	.97158	-.00099	4.9959	.96664	.04892	.45268	-.00045
#2	.97083	-.00249	5.0036	.96940	.04823	.72385	-.00065
#3	.97765	-.00124	5.0096	.97491	.04892	.91629	.00071
#4	.98541	.00018	5.0414	.97491	.04755	.86380	.00128
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	.17240	.01234	.00001	4.1710	.11073	4.9429	.02095
SDev	.00356	.00050	.00480	.0390	.00698	.0354	.02008
%RSD	2.0656	4.0843	66268.	.93545	6.3042	.71666	95.875
#1	.17102	.01259	-.00375	4.1505	.10047	4.9039	-.00824
#2	.16826	.01159	-.00375	4.1283	.11603	4.9429	.03443
#3	.17378	.01260	.00627	4.2155	.11370	4.9351	.02367
#4	.17654	.01259	.00126	4.1896	.11272	4.9896	.03394
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	1.0027	13.924	.00480	.00499	.00084	-.05118	-.00040
SDev	.0487	.116	.02858	.00011	.00032	.03565	.00181
%RSD	4.8562	.83094	595.15	2.1142	38.297	69.657	454.07
#1	1.0393	13.789	.02032	.00491	.00110	-.01239	.00231
#2	.93250	13.915	-.02123	.00513	.00042	-.09596	-.00143

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#3	1.0076	13.921	-.01711	.00491	.00076	-.06014	-.00122
#4	1.0314	14.072	.03722	.00502	.00110	-.03625	-.00125
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	.20367
SDev	.00214
%RSD	1.0505

#1	.20066
#2	.20563
#3	.20380
#4	.20459

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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Method: QUANMET Sample Name: DH0CRBT

Operator: MTW

Run Time: 07/29/00 11:17:50

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

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Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	.00557	.01979	-.00907	.04341	.00000	.02503
SDev	.00192	.00181	.02163	.00230	.01017	.00013	.00213
%RSD	519.55	32.489	109.34	25.359	23.425	13738.	8.5263
#1	-.00186	.00508	.01386	-.00942	.05742	.00017	.02441
#2	.00259	.00322	.01784	-.00594	.04310	.00004	.02626
#3	.00113	.00693	-.00210	-.00943	.03974	-.00011	.02713
#4	-.00038	.00706	.04955	-.01148	.03339	-.00009	.02232
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK
High	.50000		.50000		10.000		
Low	-.50000		-.50000		-10.000		
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00057	-.00145	.00329	-.00000	.00102	-.15308	-.00052
SDev	.00275	.00084	.00192	.00075	.00097	.17236	.00048
%RSD	484.61	57.545	58.384	60432.	94.470	112.59	91.147
#1	.00219	-.00218	.00535	.00092	.00171	-.13340	-.00026
#2	.00308	-.00217	.00425	-.00000	.00171	.05904	-.00045
#3	.00012	-.00073	.00260	-.00092	-.00034	-.17713	-.00017
#4	-.00311	-.00072	.00096	-.00000	.00102	-.36083	-.00122
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.10000		.50000				
Low	-.10000		-.50000				
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01103	-.00050	-.00250	.01419	-.00451	-.01948	.01322
SDev	.01254	.00000	.00480	.00541	.00555	.04279	.01328
%RSD	113.65	.35105	191.50	38.088	122.90	219.67	100.44
#1	-.00828	-.00050	.00125	.01169	-.01104	-.05643	.03168
#2	.00276	-.00050	.00125	.01669	-.00676	.02135	.01052
#3	-.02758	-.00050	-.00376	.02032	-.00185	.01360	.00002
#4	-.01103	-.00051	-.00877	.00806	.00160	-.05643	.01066
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						.50000	
Low						-.50000	
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01087	1.0262	.00476	-.00023	-.00068	-.02389	-.00035
SDev	.01897	.0607	.01417	.00030	.00017	.00974	.00278
%RSD	174.45	5.9130	297.54	133.30	25.000	40.772	783.63
#1	.01484	1.0894	.02259	-.00044	-.00059	-.02388	-.00122
#2	-.02076	1.0653	-.00047	-.00022	-.00093	-.02388	-.00122

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#3	-.02867	.98714	-.01096	.00020	-.00059	-.01196	.00368
#4	-.00890	.96298	.00788	-.00044	-.00059	-.03582	-.00267

Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						

Elem	ZN
Units	ppm
Avge	.00236
SDev	.00137
%RSD	58.177

#1	.00263
#2	.00262
#3	.00373
#4	.00046

Errors	NOCHECK
High	
Low	

Method: ⁷²⁰QUANMET ⁰⁰⁰ Sample Name: DGWEXBT

Operator: MTW

Run Time: 07/29/00 11:20:58

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 856

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00038	.03247	.18506	.00896	.03963	.00013	.44380
SDev	.00086	.00860	.02330	.00102	.00078	.00006	.00449
%RSD	224.82	26.475	12.590	11.354	1.9697	48.050	1.0128

#1	.00114	.04032	.15621	.00947	.03974	.00016	.43876
#2	-.00037	.02184	.21196	.00946	.04004	.00004	.44138
#3	.00111	.03851	.19200	.00743	.04025	.00017	.44839
#4	-.00035	.02920	.18009	.00946	.03850	.00016	.44668

Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK
High	.50000		.50000		10.000		
Low	-.50000		-.50000		-10.000		

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00285	-.00180	.00178	.00229	.01796	.40019	-.00061
SDev	.00095	.00357	.00071	.00053	.00152	.15858	.00018
%RSD	33.311	198.79	39.783	23.176	8.4564	39.627	30.023

#1	-.00206	-.00216	.00205	.00275	.01881	.41769	-.00065
#2	-.00401	-.00072	.00261	.00184	.01744	.17276	-.00045
#3	-.00208	-.00645	.00096	.00183	.01950	.53140	-.00085
#4	-.00324	.00213	.00151	.00276	.01607	.47892	-.00048

Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.10000		.50000				
Low	-.10000		-.50000				

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.10137	.00051	-.00375	S-.14225	-.00703	-.01953	-.00008
SDev	.01200	.00000	.00409	.00000	.00521	.03505	.02287
%RSD	11.835	.20282	108.94	.00000	74.149	179.51	30242.

#1	.09103	.00051	-.00375	S-.14225	-.01260	-.06426	.02107
#2	.09103	.00051	-.00375	S-.14225	-.00606	-.01753	.01058
#3	.11309	.00051	-.00876	S-.14225	-.00031	-.01776	-.03183
#4	.11033	.00051	.00125	S-.14225	-.00916	.02144	-.00013

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK
High						.50000	
Low						-.50000	

Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.03159	.80052	.00731	.00177	-.00017	-.00615	.00118
SDev	.01089	.00004	.02738	.00016	.00051	.03713	.00294
%RSD	34.473	.00460	374.57	9.0997	300.00	603.84	249.20

#1	-.02071	.80055	.03716	.00192	.00008	-.04798	.00368
#2	-.02467	.80049	-.00255	.00181	-.00059	.01178	-.00132

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#3	-.04444	.80049	-.02572	.00181	.00042	-.02403	-.00142
#4	-.03654	.80055	.02036	.00154	-.00059	.03563	.00378
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						

Elem	ZN
Units	ppm
Avge	.02104
SDev	.00078
%RSD	3.7303

#1	.02085
#2	.02136
#3	.02190
#4	.02005

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DH0CRCT

Operator: MTW

Run Time: 07/29/00 11:24:07

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 858

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04825	1.9644	2.3130	.98607	1.9174	.04850	L.55986
SDev	.00122	.0054	.0428	.00735	.0127	.00031	.00584
%RSD	2.5361	.27565	1.8509	.74529	.66372	.64299	1.0428

#1	.04674	1.9597	2.2527	.98068	1.9018	.04831	L.55216
#2	.04825	1.9597	2.3517	.97925	1.9134	.04829	L.55862
#3	.04974	1.9692	2.3159	.99462	1.9233	.04843	L.56514
#4	.04825	1.9691	2.3318	.98973	1.9312	.04896	L.56353

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	.04375	.48652	.19779	.24493	1.0429	L.42206	.93939
SDev	.00393	.00587	.00339	.00230	.0091	.17044	.00388
%RSD	8.9873	1.2058	1.7150	.93868	.87195	40.383	.41272

#1	.04283	.47974	.19381	.24194	1.0313	L.37395	.93469
#2	.04535	.48544	.19710	.24470	1.0409	L.35646	.93934
#3	.04804	.49400	.19820	.24563	1.0470	L.28648	.93936
#4	L.03879	.48688	.20204	.24746	1.0525	L.67136	.94418

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.10827	.48686	-.00235	S1802.6	.49035	.50423	L.00659
SDev	.00522	.00339	.00250	2081.6	.01159	.04105	.02303
%RSD	4.8229	.69638	106.63	115.48	2.3637	8.1410	349.59

#1	L.10482	.48283	-.00360	S3604.7	.47654	.46901	L-.00421
#2	L.10482	.48586	.00141	S3605.9	.50434	.46922	L.03858
#3	L.10758	.48787	-.00360	S-.14225	.49314	.54723	L.00663
#4	L.11585	.49089	-.00360	S-.14225	.48737	.53144	L-.01465

Errors	LC Low	LC Pass	NOCHECK	LC High	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	2.2323	.70435	.00284	.96409	-.00051	1.9078	.48302
SDev	.0746	.01203	.02096	.00576	.00043	.0524	.00252
%RSD	3.3432	1.7076	737.82	.59749	83.887	2.7482	.52227

#1	2.2363	.71032	.02054	.95712	-.00093	1.8482	.47924
#2	2.1255	.71038	.00821	.96198	-.00059	1.9317	.48435

Analysis Report

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#3	2.2838	.71038	.01015	.96706	.00008	1.9674	.48425
#4	2.2838	.68631	-.02753	.97022	-.00059	1.8838	.48426
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	.52236
SDev	.00469
%RSD	.89758

#1	.51684
#2	.52212
#3	.52215
#4	.52831

Errors	LC Pass
High	.60000
Low	.40000

Analysis Report

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Method: QUANMET Sample Name: DGH CET

Operator: MTW

Run Time: 07/29/00 11:27:20

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00109	2.0288	.21443	.06104	.36589	.00063	124.56
SDev	.00150	.0069	.02500	.00203	.00141	.00013	.72
%RSD	137.76	.33916	11.660	3.3288	.38436	19.972	.58074
#1	-.00184	2.0204	.25119	.06144	.36553	.00057	123.52
#2	-.00184	2.0353	.20349	.06062	.36625	.00057	124.66
#3	.00116	2.0260	.20744	.06349	.36421	.00082	125.18
#4	-.00184	2.0334	.19557	.05859	.36757	.00057	124.87
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	-.00260	.00018	-.00014	.00323	.18692	2.3246	.00094
SDev	.00067	.00180	.00134	.00119	.00188	.3354	.00093
%RSD	25.896	982.47	967.45	36.758	1.0083	14.427	98.666
#1	-.00178	.00054	.00096	.00277	.18573	2.2109	.00099
#2	-.00258	.00054	-.00069	.00369	.18504	2.2196	.00031
#3	-.00261	.00197	.00096	.00461	.18778	2.8145	.00224
#4	-.00343	-.00232	-.00178	.00185	.18915	2.0534	.00023
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	2.9887	.08757	-.00623	S3607.0	-.00356	-.01097	.01857
SDev	.0197	.00058	.00289	.2	.00773	.01907	.02195
%RSD	.65911	.66471	46.395	.00459	216.98	173.82	118.24
#1	2.9735	.08807	-.00373	S3606.8	-.00101	-.03434	-.01068
#2	3.0177	.08706	-.00874	S3607.2	-.01463	-.01875	.02116
#3	2.9818	.08807	-.00373	S3607.1	.00331	.00467	.04259
#4	2.9818	.08707	-.00874	S3606.9	-.00191	.00452	.02120
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	-.02620	8.3195	.01996	.23889	-.00237	-.03130	-.00012
SDev	.05616	.0057	.01826	.00111	.00043	.00691	.00254
%RSD	214.33	.06893	91.485	.46650	17.976	22.082	2100.1
#1	-.03214	8.3240	.02453	.23880	-.00228	-.03725	-.00132
#2	.01927	8.3180	.01006	.23971	-.00296	-.02530	-.00142

Analysis Report

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#3	.01137	8.3120	.00181	.23735	-.00194	-.03732	.00368
#4	-.10332	8.3240	.04346	.23971	-.00228	-.02532	-.00142
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	.04075
SDev	.00108
%RSD	2.6486

#1	.04088
#2	.04013
#3	.04222
#4	.03978

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGHCR7

Operator: MTW

Run Time: 07/29/00 11:30:34

Comment: STL PITTSBURGH ICP METALS ANALYSIS INSTRUMENT JA61E 666 862

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00038	2.3159	.21873	.20346	.30188	.00068	128.83
SDev	.00210	.0197	.03823	.00474	.00215	.00000	.79
%RSD	551.48	.85192	17.478	2.3319	.71185	.01982	.61514
#1	-.00335	2.2987	.22879	.20885	.30162	.00068	127.70
#2	.00110	2.3006	.26842	.19777	.29906	.00068	129.13
#3	-.00038	2.3247	.18496	.20535	.30418	.00068	128.97
#4	.00110	2.3395	.19277	.20187	.30264	.00068	129.54
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	-.00212	-.00087	.00219	.00485	.40056	2.1059	.00220
SDev	.00082	.00233	.00164	.00088	.00148	.4144	.00020
%RSD	38.817	268.07	74.775	18.157	.37048	19.679	9.0935
#1	-.00155	-.00373	.00041	.00370	.40056	1.4936	.00196
#2	-.00158	-.00087	.00260	.00554	.39919	2.3421	.00215
#3	-.00330	-.00087	.00151	.00462	.39988	2.2109	.00224
#4	-.00204	.00198	.00425	.00554	.40263	2.3771	.00244
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	2.9570	.61524	-.00245	S3607.2	-.00806	.00434	.02116
SDev	.0279	.00438	.00251	.2	.00267	.01678	.00006
%RSD	.94212	.71153	102.46	.00462	33.189	386.58	.29042
#1	2.9459	.60945	-.00370	S3607.3	-.00985	.00427	.02111
#2	2.9239	.61448	-.00370	S3607.2	-.00556	.01991	.02123
#3	2.9708	.61750	-.00370	S3607.3	-.01084	.01212	.02118
#4	2.9873	.61952	.00131	S3607.0	-.00599	-.01894	.02110
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	.00204	11.153	.01268	.25585	.00482	-.05444	.00371
SDev	.03301	.078	.02125	.00153	.00210	.04829	.00005
%RSD	1615.1	.69670	167.50	.59726	43.637	88.695	1.3790
#1	.01193	11.099	.03096	.25570	.00313	-.02459	.00368
#2	-.00389	11.087	-.00871	.25378	.00380	-.06040	.00369

666 863

#3	-.03948	11.255	-.00245	.25731	.00448	-.01261	.00368
#4	.03962	11.171	.03094	.25661	.00786	-.12016	.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	.06188
SDev	.00159
%RSD	2.5630

#1	.05966
#2	.06342
#3	.06210
#4	.06232

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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Method: QUANMET Sample Name: DGHCVT

Run Time: 07/29/00 11:33:48

Operator: MTW

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

666 864

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00059	2.2581	.17677	.11403	.16929	.00093	34.360
SDev	.00121	.0099	.05600	.00102	.00069	.00007	.125
%RSD	205.53	.43929	31.678	.89637	.40948	7.1358	.36447
#1	.00059	2.2489	.24921	.11453	.16908	.00096	34.342
#2	-.00089	2.2506	.18178	.11250	.17032	.00083	34.190
#3	.00059	2.2692	.11423	.11454	.16899	.00096	34.464
#4	.00207	2.2637	.16185	.11455	.16878	.00096	34.444
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	-.00211	.01419	.00096	.00807	.30891	9.0973	.00193
SDev	.00172	.00248	.00110	.00088	.00256	.1252	.00012
%RSD	81.442	17.471	114.06	10.872	.82913	1.3764	6.2391
#1	-.00393	.01777	.00151	.00738	.30548	9.1388	.00204
#2	-.00228	.01205	-.00068	.00922	.30891	8.9114	.00196
#3	-.00244	.01348	.00151	.00830	.30960	9.1826	.00176
#4	.00021	.01347	.00151	.00738	.31164	9.1563	.00196
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	4.6720	2.9383	.00130	S3607.5	.00431	-.00299	.00801
SDev	.0197	.0054	.00409	.1	.00526	.01801	.01335
%RSD	.42129	.18342	315.00	.00236	122.14	602.57	166.61
#1	4.6699	2.9322	-.00371	S3607.5	.01047	.01268	.01077
#2	4.6561	2.9352	.00631	S3607.4	.00210	.01254	.02127
#3	4.6617	2.9433	.00130	S3607.4	-.00170	-.01858	.01057
#4	4.7003	2.9423	.00130	S3607.6	.00638	-.01860	-.01056
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	.00477	3.4352	.00789	.03743	.00972	.01923	-.00122
SDev	.03920	.0400	.01038	.00013	.00142	.05387	.00008
%RSD	822.10	1.1655	131.61	.35737	14.620	280.05	6.3154
#1	-.03973	3.4006	.00791	.03749	.00820	.02518	-.00132
#2	.04333	3.4668	.00168	.03749	.01124	.06104	-.00113

						666	865
#3	.03147	3.4006	.02251	.03749	.01056	.04912	-.00122
#4	-.01599	3.4728	-.00054	.03723	.00887	-.05841	-.00122
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 .11261
SDev .00224
%RSD 1.9904

#1 .11372
#2 .11161
#3 .11509
#4 .11002

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DGHCWT

Operator: MTW

Run Time: 07/29/00 11:37:01

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00109	27.803	.28452	.15493	.28329	.00144	270.02
SDev	.00185	.142	.03599	.00306	.00160	.00006	1.27
%RSD	169.92	.51043	12.648	1.9740	.56405	4.1287	.47045
#1	.00149	27.705	.29236	.15327	.28189	.00141	268.99
#2	-.00146	27.953	.25457	.15343	.28424	.00141	269.00
#3	-.00293	27.662	.33220	.15952	.28198	.00153	270.49
#4	-.00145	27.894	.25896	.15352	.28505	.00141	271.61
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	-.00330	.00716	.01095	.01817	14.768	12.021	.01717
SDev	.00134	.00116	.00187	.00092	.055	.253	.00077
%RSD	40.643	16.216	17.045	5.0530	.37142	2.1044	4.5117
#1	-.00488	.00717	.01356	.01771	14.701	12.078	.01817
#2	-.00393	.00574	.00917	.01771	14.783	11.702	.01689
#3	-.00213	.00858	.01081	.01955	14.755	12.314	.01633
#4	-.00224	.00716	.01027	.01772	14.832	11.990	.01729
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	9.2695	1.5498	-.00531	S2705.0	.06741	.02069	.02666
SDev	.0576	.0054	.00251	1803.5	.00833	.00782	.01070
%RSD	.62159	.35013	47.326	66.670	12.358	37.775	40.125
#1	9.2185	1.5440	-.00657	S3606.7	.06363	.02465	.02133
#2	9.3123	1.5490	-.00656	S3606.8	.06251	.02444	.02127
#3	9.2212	1.5490	-.00656	S3606.8	.06363	.02470	.02135
#4	9.3261	1.5571	-.00154	S-.14225	.07989	.00897	.04271
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	-.00756	H70.943	.01318	.64404	.34160	.04410	.02993
SDev	.03682	.307	.01470	.00336	.00268	.04650	.00248
%RSD	486.94	.43238	111.56	.52153	.78528	105.46	8.3026
#1	.00215	H70.607	.00114	.64135	.33940	.05969	.02866
#2	-.04905	H71.125	.03456	.64750	.34041	.07083	.02865

Analysis Report

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						666	867
#3	.03789	H70.770	.00739	.64097	.34548	.07106	.03366
#4	-.02123	H71.269	.00961	.64632	.34109	-.02520	.02875
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	.29868
SDev	.00246
%RSD	.82427

#1	.29502
#2	.30006
#3	.30015
#4	.29952

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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Method: QUANMET Sample Name: CCV2-5

Operator: MTW

Run Time: 07/29/00 11:40:15

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 863

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0014	50.464	5.2632	5.0213	4.9723	5.1238	52.429
SDev	.0095	.621	.0803	.0858	.0819	.0656	.305
%RSD	.94382	1.2305	1.5265	1.7090	1.6462	1.2799	.58197
#1	.98791	49.537	5.2045	4.8933	4.8512	5.0257	52.030
#2	1.0080	50.781	5.2430	5.0693	5.0147	5.1594	52.479
#3	1.0079	50.694	5.2239	5.0512	4.9951	5.1493	52.772
#4	1.0020	50.844	5.3814	5.0714	5.0281	5.1608	52.435
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1369	5.0922	5.0769	4.9787	52.630	50.052	4.8524
SDev	.0398	.0395	.0392	.0800	.515	.636	.0889
%RSD	.77510	.77643	.77287	1.6078	.97853	1.2700	1.8329
#1	5.0815	5.0336	5.0192	4.8602	51.859	49.141	4.7221
#2	5.1449	5.1146	5.0910	5.0228	52.842	50.094	4.9044
#3	5.1765	5.1174	5.1070	5.0008	52.930	50.479	4.8692
#4	5.1447	5.1031	5.0905	5.0311	52.889	50.496	4.9139
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	50.782	5.0481	5.0692	50.290	5.1462	5.0870	5.1455
SDev	.616	.0445	.0674	.887	.0408	.0791	.1099
%RSD	1.2133	.88159	1.3299	1.7633	.79184	1.5558	2.1359
#1	49.863	4.9817	4.9689	49.005	5.1231	4.9905	4.9813
#2	51.135	5.0666	5.0943	50.825	5.1400	5.1555	5.1933
#3	50.991	5.0767	5.0993	50.398	5.2054	5.1479	5.1935
#4	51.137	5.0676	5.1144	50.930	5.1162	5.0540	5.2139
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	55.000	5.5000	5.5000	55.000	5.5000	5.5000	5.5000
Low	45.000	4.5000	4.5000	45.000	4.5000	4.5000	4.5000

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.2553	5.4336	5.1262	5.0208	5.0174	10.123	5.0798
SDev	.0674	.0636	.0499	.0744	.0623	.217	.0498
%RSD	1.2821	1.1710	.97320	1.4826	1.2415	2.1430	.98072
#1	5.1900	5.3544	5.0943	4.9104	4.9242	9.8329	5.0052
#2	5.3073	5.4099	5.0742	5.0598	5.0476	10.144	5.1091

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#3	5.2047	5.4881	5.1577	5.0431	5.0435	10.359	5.1029
#4	5.3193	5.4821	5.1787	5.0699	5.0543	10.156	5.1020
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 5.0192
SDev .0436
%RSD .86874

#1 4.9549
#2 5.0426
#3 5.0491
#4 5.0303

Errors LC Pass
High 5.5000
Low 4.5000

Analysis Report

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Method: QUANMET Sample Name: CCB5

Operator: MTW

Run Time: 07/29/00 11:43:23

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

666 870

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00038	.01063	.05941	-.00603	.00038	.00056	.00349
SDev	.00121	.01183	.00686	.00316	.00031	.00011	.00302
%RSD	322.29	111.27	11.550	52.385	80.113	19.137	86.713
#1	.00111	.02175	.06526	-.00655	.00046	.00056	.00263
#2	-.00038	.01427	.06136	-.00511	-.00005	.00043	.00049
#3	-.00186	-.00607	.06153	-.01003	.00067	.00070	.00316
#4	-.00038	.01257	.04948	-.00244	.00046	.00057	.00768
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00079	-.00321	.00082	.00092	.00479	.31053	.00067
SDev	.00293	.00294	.00181	.00075	.00303	.22703	.00100
%RSD	372.42	91.472	219.90	82.075	63.378	73.108	147.76
#1	.00255	-.00072	.00206	.00092	.00582	.49641	.00003
#2	-.00421	-.00499	-.00178	-.00000	.00171	-.01968	.00003
#3	-.00196	-.00642	.00206	.00091	.00308	.36520	.00213
#4	.00047	-.00072	.00096	.00184	.00855	.40019	.00051
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01103	.00050	.00125	.00840	-.00691	-.00787	.00523
SDev	.01170	.00000	.00579	.00874	.00804	.01941	.01054
%RSD	106.07	.30511	461.60	104.01	116.39	246.61	201.64
#1	.01931	.00051	.00626	.01714	-.00578	-.01753	.01058
#2	-.00552	.00051	.00626	-.00284	-.01513	-.01764	.01038
#3	.01103	.00050	-.00376	.00624	-.01042	.02124	.01055
#4	.01931	.00050	-.00376	.01306	.00370	-.01755	-.01059
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.01581	.21064	-.00311	.00043	-.00017	-.00001	-.00122
SDev	.02223	.00983	.02449	.00015	.00032	.06086	.00011
%RSD	140.64	4.6661	788.46	35.135	191.49	483870.	9.0016
#1	-.02866	.22268	-.02553	.00047	.00008	-.00004	-.00113
#2	-.04053	.21064	.03084	.00031	-.00025	-.05969	-.00113

Analysis Report

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#3	.00297	.19861	-.01508	.00031	-.00059	-.02386	-.00132
#4	.00299	.21064	-.00266	.00063	.00008	.08354	-.00132
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	-.00099
SDev	.00137
%RSD	137.69

#1	.00103
#2	-.00161
#3	-.00195
#4	-.00145

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DGHCXT

Operator: MTW

Run Time: 07/29/00 11:46:32

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 872

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00089	6.6187	.15282	.10600	.12946	.00085	48.249
SDev	.00143	.0135	.06444	.00594	.00021	.00007	.389
%RSD	159.77	.20349	42.169	5.5995	.16371	8.0811	.80541
#1	-.00201	6.6132	.19949	.11490	.12942	.00095	48.022
#2	-.00050	6.6354	.08421	.10309	.12921	.00081	48.771
#3	-.00201	6.6039	.21543	.10296	.12951	.00081	47.895
#4	.00096	6.6224	.11216	.10304	.12972	.00082	48.309
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	-.00185	.00016	.00384	.00551	5.8255	2.2087	.00257
SDev	.00144	.00071	.00053	.00053	.0281	.1157	.00009
%RSD	77.647	440.51	13.734	9.6386	.48164	5.2379	3.6647
#1	-.00326	.00052	.00425	.00597	5.8183	2.1147	.00244
#2	-.00198	.00052	.00315	.00598	5.8587	2.2809	.00264
#3	.00014	.00051	.00370	.00505	5.7916	2.3334	.00264
#4	-.00229	-.00091	.00425	.00506	5.8333	2.1059	.00255
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	2.9949	.39807	-.00414	S2704.6	.00472	-.01705	.01848
SDev	.0079	.00291	.00250	1803.2	.00477	.01168	.01020
%RSD	.26454	.73163	60.444	66.670	101.01	68.519	55.216
#1	3.0011	.39757	-.00289	S-.14225	.00864	-.02287	.02118
#2	2.9928	.40160	-.00789	S3606.7	-.00148	-.02288	.03178
#3	2.9846	.39454	-.00289	S3606.1	.00343	.00047	.01043
#4	3.0011	.39858	-.00289	S3605.8	.00829	-.02293	.01053
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	-.01135	8.2579	.01864	.11915	.08238	.02566	.00493
SDev	.02009	.0496	.01913	.00011	.00171	.09894	.00172
%RSD	177.07	.60118	102.61	.09244	2.0785	385.50	34.930
#1	-.00543	8.2157	.01083	.11899	.08153	-.11759	.00370
#2	.01445	8.3121	.00252	.11921	.08491	.04921	.00736

Analysis Report

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#3	-.02923	8.2158	.04626	.11921	.08187	.06183	.00495
#4	-.02517	8.2880	.01496	.11921	.08120	.10922	.00370
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	.07063
SDev	.00132
%RSD	1.8702

#1	.06978
#2	.07117
#3	.06934
#4	.07223

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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Method: ~~QUANMET~~ ^{878 890}

Sample Name: DGKTKT

Operator: MTW

Run Time: 07/29/00 11:49:45

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

666 874

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00071	.41656	.20955	.00658	.28329	.00046	38.819
SDev	.00074	.00280	.05440	.00137	.00152	.00006	.295
%RSD	104.03	.67201	25.962	20.851	.53752	14.206	.75993
#1	-.00034	.41518	.12926	.00765	.28117	.00055	38.438
#2	-.00182	.41508	.24821	.00480	.28454	.00042	39.054
#3	-.00033	.41522	.22442	.00621	.28322	.00042	38.733
#4	-.00035	.42076	.23633	.00767	.28424	.00043	39.050
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00312	-.00193	.00164	.00345	.14384	4.6099	.00064
SDev	.00324	.00317	.00113	.00046	.00264	.1680	.00041
%RSD	103.96	164.81	68.791	13.281	1.8372	3.6446	64.038
#1	-.00043	-.00086	.00260	.00276	.14128	4.5377	.00079
#2	-.00403	-.00514	.00260	.00368	.14401	4.7564	.00031
#3	L-.00732	.00202	.00096	.00369	.14265	4.7389	.00116
#4	-.00070	-.00372	.00041	.00368	.14744	4.4065	.00031
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	4.1176	.08155	-.00248	S3606.5	-.00483	.02886	.01324
SDev	.0208	.00058	.00250	.6	.00488	.01278	.02189
%RSD	.50540	.71381	100.87	.01696	101.04	44.287	165.32
#1	4.1072	.08105	-.00374	S3606.7	-.00915	.02892	.03181
#2	4.1486	.08206	.00127	S3607.0	-.00888	.01319	-.00008
#3	4.1045	.08105	-.00374	S3605.6	.00019	.04450	-.01062
#4	4.1100	.08206	-.00374	S3606.6	-.00148	.02883	.03184
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	.01125	3.3284	.00269	.07703	.00245	-.01596	.00277
SDev	.02815	.0322	.01590	.00061	.00028	.08007	.00189
%RSD	250.14	.96747	591.11	.78774	11.262	501.66	68.405
#1	-.02830	3.3164	.00382	.07619	.00245	.04676	.00368
#2	.02708	3.3104	-.01929	.07742	.00211	.02288	.00378

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#3	.03498	3.3104	.00780	.07699	.00245	-.13245	.00368
#4	.01126	3.3766	.01843	.07753	.00279	-.00103	-.00007

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	.03033
SDev	.00115
%RSD	3.7909

#1	.03155
#2	.03076
#3	.03017
#4	.02882

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DGKTLT

Operator: MTW

Run Time: 07/29/00 11:52:59

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00058	2.7730	.20894	.11413	.14470	.00065	32.993
SDev	.00187	.0143	.04671	.00105	.00111	.00007	.289
%RSD	321.06	.51554	22.357	.92399	.76672	10.246	.87466
#1	.00021	2.7592	.22591	.11364	.14424	.00069	33.200
#2	.00318	2.7739	.25751	.11361	.14373	.00068	32.957
#3	.00022	2.7924	.20578	.11571	.14629	.00068	33.217
#4	-.00128	2.7665	.14657	.11357	.14454	.00055	32.599
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	-.00375	.01023	.00288	.00369	3.0267	4.6995	.00154
SDev	.00109	.00180	.00071	.00046	.0209	.0841	.00009
%RSD	29.132	17.588	24.584	12.459	.68958	1.7886	6.0855
#1	-.00360	.01202	.00315	.00393	3.0386	4.8089	.00147
#2	L-.00529	.01058	.00260	.00392	3.0215	4.6252	.00167
#3	-.00340	.00773	.00370	.00392	3.0468	4.6427	.00156
#4	-.00272	.01058	.00206	.00300	2.9996	4.7214	.00147
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.6980	.78053	-.00205	S3607.5	.00468	-.00796	-.00000
SDev	.0448	.00461	.00479	.2	.00232	.00779	.00868
%RSD	.66945	.59028	233.60	.00596	49.614	97.834	530940.
#1	6.7028	.78330	-.00831	S3607.7	.00673	-.01181	-.01054
#2	6.7084	.77827	.00170	S3607.3	.00160	.00372	-.00011
#3	6.7442	.78532	-.00330	S3607.3	.00420	-.01194	-.00007
#4	6.6366	.77524	.00170	S3607.6	.00618	-.01182	.01072
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	-.02762	4.7880	.00616	.09505	.04225	-.00307	.00340
SDev	.03545	.0475	.03156	.00067	.00194	.03508	.00071
%RSD	128.36	.99256	512.02	.70829	4.5898	1142.3	20.761
#1	-.05626	4.7489	-.00849	.09491	.04064	.00876	.00235
#2	.00302	4.8091	.03329	.09491	.04503	-.05081	.00379

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#3	.00308	4.8452	.03122	.09598	.04132	.03260	.00369
#4	-.06032	4.7489	-.03137	.09438	.04199	-.00283	.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	.04464
SDev	.00096
%RSD	2.1524

#1	.04515
#2	.04573
#3	.04383
#4	.04383

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGKTPT

Operator: MTW

Run Time: 07/29/00 11:56:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 878

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00071	.91813	.21548	.11316	.13742	.00029	114.53
SDev	.00143	.00397	.08326	.00205	.00087	.00001	.30
%RSD	200.09	.43193	38.641	1.8093	.63253	2.3096	.26212
#1	-.00034	.92177	.11729	.11419	.13709	.00029	114.68
#2	.00115	.92001	.20057	.11009	.13657	.00029	114.87
#3	-.00182	.91813	.22438	.11418	.13862	.00029	114.37
#4	-.00185	.91261	.31967	.11419	.13739	.00030	114.21
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
Avg	-.00297	.00066	-.00124	.00253	.11116	9.7533	.00024
SDev	.00236	.00260	.00173	.00046	.00244	.1773	.00058
%RSD	79.306	395.65	140.14	18.073	2.1916	1.8180	240.43
#1	-.00481	-.00219	.00096	.00276	.10910	9.8386	.00088
#2	.00012	.00208	-.00069	.00185	.11458	9.9348	.00051
#3	-.00240	.00351	-.00233	.00277	.11116	9.7161	.00003
#4	-.00481	-.00077	-.00288	.00276	.10979	9.5237	-.00045
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	7.5552	.05058	-.00625	S3607.0	-.00242	-.00637	.02391
SDev	.0452	.00050	.00289	.1	.00477	.01849	.01818
%RSD	.59843	.99464	46.308	.00206	197.32	290.16	76.038
#1	7.5386	.05084	-.00374	S3606.9	-.00373	.02080	.03182
#2	7.5414	.04983	-.00875	S3607.0	.00317	-.01020	.04261
#3	7.6214	.05084	-.00374	S3606.9	-.00093	-.01800	-.00002
#4	7.5193	.05083	-.00875	S3607.0	-.00817	-.01808	.02124
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	-.00267	5.6532	.02154	.19105	-.00321	.03196	.00238
SDev	.02512	.0519	.01375	.00083	.00043	.04816	.00254
%RSD	939.68	.91764	63.799	.43344	13.245	150.67	106.64
#1	-.03630	5.6216	.02889	.19059	-.00330	.03498	.00368
#2	.00722	5.6397	.01223	.19032	-.00262	.07072	.00358

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#3	.02303	5.7300	.03709	.19219	-.00330	-.03675	.00367
#4	-.00465	5.6216	.00796	.19112	-.00363	.05889	-.00143
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 .03194
SDev .00070
%RSD 2.1898

#1 .03130
#2 .03152
#3 .03287
#4 .03208

Errors LC Pass
High 100.00
Low -.02000

Analysis Report

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Method: QUANMET Sample Name: DGKTQT

Operator: MTW

Run Time: 07/29/00 11:59:26

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 660 880

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00038	.30155	.16995	.05516	.09572	.00010	44.424
SDev	.00086	.01209	.05377	.00435	.00051	.00008	.188
%RSD	225.54	4.0093	31.642	7.8865	.53413	74.370	.42359
#1	.00112	.29086	.23744	.05496	.09546	.00004	44.360
#2	.00112	.31876	.11430	.05988	.09649	.00017	44.567
#3	-.00036	.30014	.14220	.05639	.09546	.00004	44.186
#4	-.00036	.29644	.18585	.04942	.09546	.00017	44.582
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	-.00338	-.00433	-.00014	.00138	.11100	1.0016	-.00031
SDev	.00160	.00083	.00100	.00053	.00103	.1846	.00048
%RSD	47.427	19.068	726.27	38.410	.92448	18.436	155.17
#1	-.00125	-.00505	-.00123	.00092	.11049	.82881	-.00026
#2	-.00385	-.00361	.00096	.00184	.11254	1.0300	-.00045
#3	L-.00510	-.00504	-.00069	.00092	.11048	.89879	-.00085
#4	-.00332	-.00361	.00041	.00184	.11049	1.2487	.00031
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.2563	.05362	-.00499	S3607.3	-.00446	.02109	.01055
SDev	.0170	.00050	.00250	.1	.00332	.00003	.00869
%RSD	.75360	.93818	50.163	.00394	74.536	.14055	82.354
#1	2.2591	.05387	-.00374	S3607.2	-.00459	.02106	-.00009
#2	2.2757	.05387	-.00875	S3607.1	-.00065	.02110	.01054
#3	2.2343	.05286	-.00374	S3607.4	-.00873	.02107	.01055
#4	2.2563	.05387	-.00374	S3607.3	-.00388	.02112	.02119
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	-.02937	1.1014	.02147	.02017	.00076	.02010	-.00135
SDev	.03947	.0177	.01909	.00013	.00048	.03290	.00005
%RSD	134.38	1.6087	88.921	.66303	62.854	163.68	3.4859
#1	-.08771	1.1135	.02455	.02011	.00110	.05893	-.00133
#2	-.00069	1.1195	.04548	.02037	.00076	-.01276	-.00142

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#3	-.01256	1.0834	-.00045	.02011	.00008	-.00079	-.00132
#4	-.01652	1.0894	.01630	.02011	.00110	.03503	-.00132
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	.02886
SDev	.00087
%RSD	3.0211

#1	.02995
#2	.02883
#3	.02886
#4	.02781

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGKTQP5T

Operator: MTW

Run Time: 07/29/00 12:02:39

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00074	.06821	.04899	.00635	.01994	.00007	9.2443
SDev	.00076	.00401	.03086	.00463	.00017	.00011	.0491
%RSD	103.26	5.8854	62.983	72.847	.85655	171.76	.53102
#1	-.00035	.06446	.01327	.01091	.01989	.00016	9.2569
#2	-.00035	.07378	.07663	.00947	.02019	.00016	9.3073
#3	-.00188	.06820	.03324	.00395	.01980	-.00008	9.1951
#4	-.00037	.06640	.07282	.00107	.01989	.00004	9.2180
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	-.00179	-.00143	-.00028	.00023	.02274	.25586	-.00012
SDev	.00158	.00444	.00181	.00088	.00066	.32982	.00025
%RSD	88.224	309.72	657.52	383.61	2.8883	128.91	209.02
#1	-.00046	-.00072	-.00069	.00092	.02292	.48767	.00003
#2	-.00208	.00214	.00205	.00092	.02360	.55765	.00011
#3	-.00390	-.00786	-.00233	-.00092	.02223	-.15089	-.00045
#4	-.00071	.00071	-.00014	.00000	.02223	.12902	-.00017
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	.47651	.01107	-.00375	266.31	-.00673	-.02146	.01595
SDev	.01661	.00058	.00000	1.16	.00504	.03841	.01840
%RSD	3.4853	5.2468	.00262	.43382	74.862	178.94	115.41
#1	.46892	.01158	-.00375	265.17	-.01231	-.01755	.02127
#2	.49927	.01057	-.00375	266.12	-.00008	.02144	.02131
#3	.46065	.01057	-.00375	267.92	-.00746	-.01773	.03184
#4	.47720	.01158	-.00375	266.01	-.00705	-.07202	-.01063
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	-.00884	.27386	-.01819	.00416	-.00068	-.01509	-.00007
SDev	.02977	.03460	.01236	.00042	.00058	.04809	.00479
%RSD	336.84	12.633	67.945	10.218	85.391	318.65	6557.9
#1	.02280	.29497	-.03591	.00437	-.00059	.03564	.00368
#2	-.02070	.29497	-.00877	.00437	.00008	.01172	.00368

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#3	-.04443	.28280	-.01080	.00437	-.00093	-.07173	-.00633
#4	.00698	.22268	-.01727	.00352	-.00127	-.03599	-.00132
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 .00524
SDev .00190
%RSD 36.201

#1 .00265
#2 .00584
#3 .00717
#4 .00530

Errors LC Pass
High 100.00
Low -.02000

Method: 388.1170
QUANMET

Sample Name: DGKTQST

Operator: MTW

Run Time: 07/29/00 12:05:48

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 884

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.78229	.25462	4.4258	.03522	40.752	.00016	33.959
SDev	.00371	.01998	.0584	.01620	.156	.00011	.032
%RSD	.47447	7.8480	1.3203	46.004	.38165	67.200	.09460
#1	.78192	.25547	4.3852	.04444	40.894	.00003	33.913
#2	.77747	.22777	4.3735	.04095	40.664	.00029	33.968
#3	.78637	.27593	4.5000	.01104	40.577	.00016	33.988
#4	.78340	.25932	4.4446	.04444	40.871	.00016	33.968
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	.79085	-.00340	3.9861	.00138	.08278	1.0650	.00040
SDev	.00420	.00165	.0050	.00053	.00309	.3339	.00065
%RSD	.53118	48.641	.12638	38.494	3.7308	31.348	162.67
#1	.79552	-.00491	3.9792	.00092	.08039	.68886	.00014
#2	.78623	-.00192	3.9864	.00184	.08108	1.3799	-.00037
#3	.79304	-.00475	3.9913	.00092	.08724	.88130	.00111
#4	.78862	-.00202	3.9875	.00184	.08244	1.3099	.00071
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.7598	.04204	.00001	S3611.6	-.00291	3.8039	.02300
SDev	.0192	.00050	.00480	.2	.00944	.0498	.01591
%RSD	1.0934	1.1948	38747.	.00479	324.65	1.3085	69.188
#1	1.7405	.04179	.00627	S3611.4	.00371	3.7824	.00978
#2	1.7764	.04178	-.00375	S3611.8	-.00226	3.8448	.00970
#3	1.7461	.04179	.00127	S3611.6	.00338	3.8447	.04158
#4	1.7764	.04279	-.00375	S3611.5	-.01646	3.7436	.03092
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	.93160	.90876	.01891	.01706	.00203	-.00658	.00163
SDev	.04050	.02823	.01705	.00026	.00139	.01541	.00009
%RSD	4.3477	3.1065	90.198	1.4920	68.550	234.35	5.3325
#1	.93654	.89673	.01833	.01743	.00110	-.00057	.00174
#2	.95236	.89071	.03502	.01690	.00245	-.02449	.00156

666 885

#3	.87328	.95090	.02682	.01701	.00380	.01130	.00167
#4	.96423	.89673	-.00454	.01690	.00076	-.01255	.00157
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	.02357
SDev	.00077
%RSD	3.2703

#1	.02347
#2	.02270
#3	.02458
#4	.02353

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET00 Sample Name: DGKTQDT

Operator: MTW

Run Time: 07/29/00 12:09:02

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

666 886

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.76928	.23707	4.3963	.04081	40.654	.00011	32.829
SDev	.00354	.00150	.0578	.00143	.183	.00008	.250
%RSD	.46053	.63041	1.3157	3.4959	.44971	76.437	.76015
#1	.76705	.23709	4.4171	.04239	40.398	.00017	32.676
#2	.76557	.23524	4.4251	.04096	40.720	.00017	32.563
#3	.77150	.23705	4.3101	.03892	40.828	.00004	32.989
#4	.77301	.23891	4.4329	.04096	40.669	.00003	33.088
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	.78325	-.00369	3.9269	.00069	.08346	.52266	-.00027
SDev	.01113	.00302	.0245	.00046	.00163	.19985	.00091
%RSD	1.4210	81.914	.62331	66.557	1.9522	38.238	338.43
#1	.77898	-.00033	3.9134	.00092	.08312	.73259	-.00017
#2	.76983	-.00618	3.8991	.00092	.08244	.40894	-.00133
#3	.78918	-.00629	3.9463	.00000	.08586	.30397	.00088
#4	.79500	-.00194	3.9485	.00092	.08244	.64512	-.00045
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	1.6902	.04027	-.00375	S3612.1	.00132	3.7474	.01025
SDev	.0128	.00058	.00409	.0	.00063	.0257	.01498
%RSD	.75819	1.4395	109.23	.00112	47.249	.68666	146.15
#1	1.6854	.03977	.00126	S3612.1	.00146	3.7280	-.00029
#2	1.6992	.04078	-.00876	S3612.1	.00062	3.7512	.01050
#3	1.6743	.03977	-.00374	S3612.1	.00111	3.7824	-.00056
#4	1.7019	.04078	-.00375	S3612.0	.00211	3.7281	.03135
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	.90491	.89675	.01467	.01679	.00101	-.00955	-.00231
SDev	.02142	.00002	.00525	.00016	.00032	.02986	.00253
%RSD	2.3669	.00192	35.792	.97810	31.914	312.71	109.76
#1	.88909	.89676	.01410	.01674	.00076	-.04839	-.00349
#2	.93654	.89676	.00789	.01694	.00110	-.01249	-.00371

666

887

#3	.89700	.89676	.01619	.01658	.00144	-.00059	-.00352
#4	.89699	.89673	.02052	.01690	.00076	.02327	.00149
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	.02488
SDev	.00135
%RSD	5.4285

#1	.02456
#2	.02346
#3	.02480
#4	.02671

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGMVNT

Operator: MTW

Run Time: 07/29/00 12:12:16

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

666 888

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00110	.79094	.20374	.04666	.08194	.00017	30.701
SDev	.00210	.00619	.07644	.00165	.00137	.00000	.066
%RSD	191.65	.78328	37.519	3.5284	1.6775	.19609	.21498

#1	-.00187	.78632	.24144	.04645	.08349	.00017	30.713
#2	.00258	.78623	.22558	.04788	.08268	.00017	30.781
#3	.00258	.79935	.25720	.04789	.08064	.00017	30.688
#4	.00110	.79185	.09072	.04441	.08094	.00017	30.621

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	-.00163	-.00289	.00069	.00207	.06123	1.8107	-.00000
SDev	.00168	.00143	.00203	.00088	.00148	.2626	.00057
%RSD	102.97	49.475	295.31	42.472	2.4137	14.500	3906e6

#1	-.00169	-.00218	-.00178	.00092	.06054	1.7648	.00011
#2	-.00151	-.00218	.00316	.00276	.05986	2.1409	-.00065
#3	-.00372	-.00217	.00041	.00184	.06328	1.5024	.00071
#4	.00039	-.00504	.00096	.00275	.06123	1.8348	-.00017

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	1.5481	.13058	.00251	S3607.1	-.00370	-.00834	.01321
SDev	.0085	.00050	.00630	.1	.00303	.03721	.01021
%RSD	.55157	.38508	250.74	.00221	81.757	446.34	77.287

#1	1.5557	.13134	.00126	S3607.1	-.00789	-.02583	.01051
#2	1.5364	.13034	.01128	S3607.2	-.00198	.00532	.02119
#3	1.5474	.13033	-.00375	S3607.1	-.00106	-.04917	.02124
#4	1.5530	.13033	.00126	S3607.2	-.00389	.03633	-.00010

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	-.01862	.82456	.00373	.02345	-.00042	-.02077	-.00120
SDev	.02673	.00491	.01903	.00015	.00044	.05463	.00012
%RSD	143.51	.59599	510.43	.65861	103.28	263.05	10.374

#1	-.02456	.82456	.02042	.02332	-.00093	-.05958	-.00123
#2	-.05224	.81854	-.02338	.02358	.00008	.05986	-.00103

						666	889
#3	-.00873	.83058	.00585	.02358	-.00025	-.03573	-.00132
#4	.01104	.82456	.01202	.02332	-.00059	-.04763	-.00122
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	.02860
SDev	.00191
%RSD	6.6651

#1	.03130
#2	.02726
#3	.02860
#4	.02726

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET³ Sample Name: DGMVWT Operator: MTW
 Run Time: 07/29/00 12:15:29
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

660 890

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00075	.91718	.25719	.07145	.08552	.00023	30.177
SDev	.00186	.00829	.06917	.01822	.00021	.00008	.244
%RSD	247.46	.90370	26.893	25.505	.24597	34.290	.80926

#1	-.00183	.90878	.18087	.06330	.08554	.00016	29.913
#2	.00111	.91249	.31970	.09876	.08524	.00030	30.269
#3	.00111	.92746	.31165	.06187	.08575	.00017	30.470
#4	.00261	.91997	.21653	.06186	.08554	.00030	30.056

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	-.00345	-.00182	.00123	.00230	.08244	2.0688	.00008
SDev	.00099	.00317	.00165	.00092	.00280	.3981	.00083
%RSD	28.609	173.86	133.55	40.023	3.3899	19.242	1062.0

#1	-.00328	-.00504	.00041	.00184	.07970	1.7735	-.00054
#2	-.00483	-.00360	.00041	.00184	.08038	2.0709	-.00057
#3	-.00247	-.00075	.00041	.00184	.08517	1.7998	.00023
#4	-.00325	.00211	.00370	.00368	.08449	2.6308	.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	1.6992	.05863	-.00375	S3607.3	-.00752	.01107	.01852
SDev	.0161	.00050	.00579	.0	.00335	.02327	.02930
%RSD	.94658	.85582	154.47	.00106	44.603	210.20	158.23

#1	1.6854	.05888	-.00876	S3607.2	-.00811	.00511	-.01072
#2	1.7102	.05888	.00126	S3607.3	-.00372	.00524	.05309
#3	1.6854	.05888	-.00875	S3607.3	-.01175	-.01029	.03184
#4	1.7157	.05788	.00127	S3607.3	-.00649	.04423	-.00014

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	.01307	1.2053	.00950	.01485	.00051	-.00051	.00024
SDev	.02986	.0133	.01653	.00013	.00070	.03520	.00232
%RSD	228.48	1.1048	174.07	.85209	137.44	6924.0	955.01

#1	-.02846	1.1858	.02450	.01476	-.00025	.03536	.00358
#2	.01900	1.2098	-.00026	.01502	.00042	-.00046	-.00123

668 891
#3 .01901 1.2158 -.00871 .01476 .00042 .01141 -.00142
#4 .04274 1.2098 .02245 .01487 .00144 -.04834 .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 .03692
SDev .00123
%RSD 3.3448

#1 .03558
#2 .03664
#3 .03856
#4 .03689

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-6

Operator: MTW

Run Time: 07/29/00 12:18:43

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

666 892

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99312	49.391	5.1679	4.9179	4.8282	5.0104	52.334
SDev	.00256	.156	.0162	.0126	.0211	.0222	.090
%RSD	.25745	.31549	.31375	.25529	.43738	.44292	.17275

#1	.99393	49.507	5.1608	4.9249	4.8360	5.0302	52.361
#2	.99386	49.381	5.1501	4.9249	4.8308	5.0142	52.396
#3	.98941	49.500	5.1730	4.9228	4.8476	5.0186	52.201
#4	.99527	49.174	5.1878	4.8992	4.7983	4.9787	52.380

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

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1321	5.0460	5.0278	4.8368	51.832	48.675	4.6641
SDev	.0194	.0065	.0122	.0233	.085	.214	.0403
%RSD	.37855	.12833	.24247	.48264	.16390	.44004	.86464

#1	5.1575	5.0534	5.0400	4.8473	51.895	48.843	4.6792
#2	5.1356	5.0492	5.0362	4.8400	51.892	48.869	4.6645
#3	5.1122	5.0392	5.0148	4.8565	51.826	48.546	4.7039
#4	5.1232	5.0421	5.0203	4.8033	51.714	48.441	4.6087

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.748	4.9883	4.9902	48.848	5.0873	5.0261	5.0768
SDev	.146	.0057	.0155	.280	.0255	.0161	.0610
%RSD	.29250	.11514	.31090	.57251	.50110	.32075	1.2020

#1	49.885	4.9918	4.9990	48.886	5.1164	5.0303	5.1622
#2	49.767	4.9908	5.0040	48.894	5.1009	5.0223	5.0447
#3	49.797	4.9908	4.9689	49.144	5.0687	5.0453	5.0769
#4	49.543	4.9797	4.9889	48.469	5.0634	5.0066	5.0234

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

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.1850	5.0581	4.9685	4.9045	4.9164	9.9257	5.0094
SDev	.0617	.0292	.0705	.0189	.0135	.0882	.0079
%RSD	1.1896	.57636	1.4192	.38523	.27519	.88861	.15756

#1	5.2336	5.0416	4.9010	4.9161	4.9232	9.8682	5.0196
#2	5.2020	5.0415	5.0466	4.9063	4.9225	10.012	5.0072

668 893

#3	5.2097	5.0475	4.9173	4.9183	4.9239	9.8332	5.0102
#4	5.0947	5.1016	5.0090	4.8772	4.8962	9.9896	5.0006
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 4.9701
SDev .0112
%RSD .22604

#1 4.9673
#2 4.9867
#3 4.9645
#4 4.9620

Errors LC Pass
High 5.5000
Low 4.5000

Analysis Report

07/29/00 12:24:57 PM

page 1

Method: QUANMET Sample Name: CCB6

Operator: MTW

Run Time: 07/29/00 12:21:51

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

666 894

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00185	.01066	.07824	-.00536	.00059	.00073	.00133
SDev	.00086	.00981	.02972	.00103	.00031	.00013	.00223
%RSD	46.355	91.958	37.983	19.231	51.718	17.317	168.47
#1	.00111	.01251	.11689	-.00592	.00067	.00083	.00301
#2	.00111	.00514	.08126	-.00450	.00016	.00070	-.00165
#3	.00259	.00137	.04560	-.00449	.00067	.00057	.00088
#4	.00259	.02363	.06921	-.00653	.00088	.00083	.00306
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00007	-.00322	-.00151	-.00023	.00650	-.17495	-.00028
SDev	.00163	.00214	.00095	.00088	.00345	.23519	.00064
%RSD	2358.8	66.560	62.957	378.69	52.998	134.44	230.01
#1	-.00071	-.00500	-.00233	.00091	.00581	.04155	-.00085
#2	.00011	-.00071	-.00069	-.00092	.00308	-.24711	-.00054
#3	-.00177	-.00500	-.00069	-.00092	.00581	-.01968	-.00034
#4	.00209	-.00215	-.00233	-.00000	.01129	-.47455	.00062
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00552	.00050	-.00250	.02361	-.00731	-.01370	.01325
SDev	.00747	.00000	.00251	.00473	.00683	.00449	.01814
%RSD	135.40	.32051	100.06	20.008	93.430	32.809	136.87
#1	-.01103	.00050	-.00376	.01987	.00266	-.00985	.02131
#2	.00552	.00050	-.00376	.02078	-.00923	-.00977	-.01065
#3	-.00828	.00050	-.00376	.02350	-.00986	-.01763	.01055
#4	-.00828	.00051	.00125	.03031	-.01280	-.01754	.03180
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01683	.00299	-.01038	.00074	.00008	-.02093	-.00130
SDev	.01841	.03127	.00794	.00013	.00048	.03570	.00005
%RSD	109.41	1045.0	76.505	18.066	565.69	170.53	3.6365
#1	-.00888	-.02409	-.00460	.00089	-.00025	.02388	-.00133
#2	.03461	.03008	-.02145	.00063	.00008	-.03585	-.00132

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#3	.01880	.03008	-.00465	.00063	-.00025	-.01195	-.00132
#4	.02277	-.02409	-.01081	.00080	.00076	-.05981	-.00123
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	.00061
SDev	.00175
%RSD	287.07

#1	-.00144
#2	-.00005
#3	.00263
#4	.00130

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DH0CHB

Operator: MTW

Run Time: 07/29/00 12:26:24

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

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Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00037	.00929	.03761	-.00465	.00026	.00013	.02310
SDev	.00191	.00954	.06311	.00185	.00025	.00007	.00338
%RSD	519.51	102.68	167.82	39.729	97.666	48.965	14.629

#1	.00257	.02001	.12482	-.00307	.00046	.00018	.02660
#2	.00111	.01442	.02171	-.00307	.00046	.00017	.02519
#3	-.00035	.00316	-.02587	-.00655	.00016	.00016	.02130
#4	-.00186	-.00042	.02976	-.00593	-.00005	.00004	.01930

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	-.00119	-.00143	-.00069	.00046	.00342	.29960	-.00038
SDev	.00140	.00185	.00190	.00092	.00131	.33336	.00022
%RSD	117.56	129.49	277.29	200.74	38.344	111.27	58.483

#1	-.00037	.00072	.00096	.00092	.00513	.40894	-.00006
#2	-.00281	-.00071	-.00014	.00092	.00239	.67136	-.00057
#3	-.00188	-.00214	-.00014	.00092	.00376	.24274	-.00045
#4	.00028	-.00357	-.00343	-.00092	.00239	-.12465	-.00045

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	.00069	-.00025	-.00250	.01294	-.00644	.02917	.02654
SDev	.01089	.00050	.00480	.00442	.00733	.01103	.01372
%RSD	1579.0	199.40	191.53	34.184	113.81	37.822	51.678

#1	.00552	-.00050	.00125	.01306	.00105	.02922	.02123
#2	.01379	-.00050	-.00376	.00670	-.00155	.04476	.03186
#3	-.00828	-.00050	.00125	.01669	-.01111	.02140	.04248
#4	-.00828	.00050	-.00877	.01533	-.01415	.02131	.01060

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	-.01482	.06469	-.00561	-.00033	-.00059	.01790	-.00099
SDev	.01462	.03658	.01759	.00009	.00028	.04415	.00360
%RSD	98.648	56.540	313.24	26.896	46.657	246.66	364.60

#1	-.00098	.09624	.00375	-.00033	-.00025	-.03586	-.00498
#2	-.02076	.03610	.01424	-.00044	-.00059	.01193	-.00132

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897

#3	-.03262	.09635	-.02329	-.00022	-.00059	.07162	.00378
#4	-.00494	.03008	-.01717	-.00033	-.00093	.02391	-.00143
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	.00026
%RSD	9.2782

#1	.00257
#2	.00315
#3	.00289
#4	.00264

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DH0CHC

Operator: MTW

Run Time: 07/29/00 12:29:33

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

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Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04755	1.9442	2.0265	.93742	1.9175	.04999	51.686
SDev	.00148	.0040	.0418	.00001	.0076	.00021	.262
%RSD	3.1220	.20699	2.0613	.00075	.39704	.42077	.50704
#1	.04681	1.9401	1.9988	.93742	1.9157	.04999	51.667
#2	.04679	1.9419	1.9870	.93742	1.9128	.05000	51.496
#3	.04684	1.9492	2.0423	.93743	1.9287	.05024	52.063
#4	.04978	1.9456	2.0781	.93742	1.9126	.04972	51.519
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	.04740	.49065	.19959	.24150	1.0403	48.021	.92690
SDev	.00230	.00243	.00205	.00119	.0059	.232	.00340
%RSD	4.8495	.49540	1.0282	.49164	.56796	.48263	.36704
#1	.04478	.48958	.19959	.24012	1.0381	47.863	.92581
#2	.04943	.48815	.20013	.24103	1.0360	48.257	.92400
#3	.04923	.49384	.20178	.24288	1.0490	48.178	.93182
#4	.04616	.49102	.19685	.24195	1.0380	47.785	.92596
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	49.537	.49171	.98212	48.247	.49568	.49726	.51836
SDev	.282	.00254	.01033	.230	.00641	.00785	.02349
%RSD	.56834	.51576	1.0517	.47606	1.2927	1.5795	4.5321
#1	49.521	.49121	.96834	48.173	.49394	.49335	.52651
#2	49.383	.49121	.98337	48.175	.50335	.49326	.48389
#3	49.938	.49524	.99339	48.581	.49739	.50904	.53674
#4	49.306	.48920	.98337	48.058	.48804	.49339	.52631
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	2.0336	9.9509	2.0081	.97712	.96075	1.9167	.49329
SDev	.0512	.0519	.0554	.00393	.00413	.0460	.00417
%RSD	2.5170	.52165	2.7584	.40220	.43036	2.4024	.84502
#1	2.0860	9.9374	1.9570	.97631	.96024	1.8839	.49303
#2	2.0583	9.9192	1.9881	.97531	.95889	1.8720	.48831

Analysis Report

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						666	899
#3	1.9674	10.028	2.0865	.98284	.96666	1.9673	.49852
#4	2.0227	9.9193	2.0009	.97402	.95720	1.9436	.49331
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	.48983
SDev	.00169
%RSD	.34419

#1	.49085
#2	.48811
#3	.48872
#4	.49165

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DGXL3

Operator: MTW

Run Time: 07/29/00 12:32:42

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

666 900

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00233	.37567	.03111	.10998	.11975	.00012	34.468
SDev	.00141	.00653	.04424	.00323	.00054	.00007	.135
%RSD	60.418	1.7389	142.19	2.9390	.45043	54.740	.39206
#1	.00123	.38363	.03797	.10864	.11949	.00002	34.477
#2	.00417	.36872	.05800	.10783	.12051	.00017	34.275
#3	.00123	.37235	.06184	.10866	.11970	.00015	34.562
#4	.00271	.37797	-.03336	.11480	.11928	.00015	34.560
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	-.00020	-.00043	.04760	.01885	.42777	4.1528	.00589
SDev	.00212	.00294	.00215	.00119	.00188	.3459	.00068
%RSD	1046.1	684.28	4.5161	6.2999	.43971	8.3302	11.488
#1	.00196	.00206	.04540	.01931	.42658	4.1091	.00581
#2	-.00188	-.00364	.04815	.01747	.42588	3.8117	.00669
#3	.00126	-.00222	.04650	.01839	.42999	4.0566	.00505
#4	-.00215	.00208	.05034	.02023	.42862	4.6339	.00601
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	9.0626	.04339	.00758	S3612.8	.00409	-.01194	.03414
SDev	.0311	.00058	.00480	.1	.01765	.01325	.01324
%RSD	.34301	1.3375	63.293	.00148	431.08	110.99	38.788
#1	9.0282	.04389	.00132	S3612.8	.01392	-.02550	.03159
#2	9.0861	.04289	.00633	S3612.8	-.00113	-.01008	.03146
#3	9.0916	.04289	.01134	S3612.8	-.01821	.00555	.05254
#4	9.0447	.04390	.01134	S3612.7	.02179	-.01772	.02096
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	-.01667	8.4791	.00543	.18569	.00786	-.00120	.00274
SDev	.02690	.0320	.01780	.00088	.00203	.08526	.00252
%RSD	161.37	.37765	327.77	.47144	25.806	7089.4	91.851
#1	-.04337	8.4866	.02263	.18566	.01090	-.09976	.00387
#2	-.03546	8.4324	-.01702	.18577	.00684	.09144	-.00103

666 901

#3	.00014	8.4926	-.00022	.18673	.00684	.04357	.00406
#4	.01201	8.5047	.01633	.18459	.00684	-.04006	.00407
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 .06732
SDev .00175
%RSD 2.6035

#1 .06731
#2 .06491
#3 .06900
#4 .06807

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET

Sample Name: DGXL3P5

Operator: MTW

Run Time: 07/29/00 12:35:56

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 902

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00076	.08072	.06072	.00735	.02465	.00010	7.1498
SDev	.00187	.01096	.00717	.00298	.00043	.00013	.0273
%RSD	247.24	13.576	11.808	40.545	1.7468	129.16	.38242
#1	.00261	.09232	.06856	.01104	.02521	.00030	7.1878
#2	.00113	.08489	.05673	.00406	.02449	.00004	7.1497
#3	.00113	.07930	.06470	.00817	.02470	.00004	7.1244
#4	-.00184	.06636	.05291	.00611	.02419	.00004	7.1373
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	-.00291	-.00072	.01125	.00437	.08877	1.0453	.00096
SDev	.00103	.00117	.00270	.00046	.00197	.1450	.00057
%RSD	35.472	162.09	24.019	10.490	2.2146	13.875	59.965
#1	-.00426	-.00072	.01523	.00460	.09133	1.1787	.00088
#2	-.00227	-.00072	.01029	.00460	.08723	1.0125	.00040
#3	-.00196	-.00215	.01029	.00459	.08723	1.1350	.00176
#4	-.00314	.00071	.00919	.00368	.08928	.85506	.00079
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	1.8654	.00883	.00127	200.53	-.00266	-.00394	.02646
SDev	.0079	.00050	.00000	1.15	.00571	.02728	.00617
%RSD	.42474	5.7024	.02322	.57421	214.76	692.68	23.317
#1	1.8757	.00959	.00127	200.88	-.00415	.00579	.03172
#2	1.8674	.00858	.00127	200.29	-.01006	-.01757	.02109
#3	1.8591	.00858	.00127	199.09	.00098	-.03317	.02114
#4	1.8591	.00858	.00127	201.85	.00260	.02919	.03188
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	-.00669	1.6838	-.00613	.03839	.00076	.02304	-.00120
SDev	.04538	.0090	.01488	.00013	.00028	.02178	.00001
%RSD	678.68	.53620	242.95	.32961	36.289	94.564	.44446
#1	.01903	1.6973	-.00245	.03841	.00110	.04690	-.00120
#2	-.06799	1.6792	-.01085	.03830	.00076	.01111	-.00121

666 903

#3	-.01262	1.6792	.01212	.03830	.00042	-.00083	-.00121
#4	.03484	1.6792	-.02332	.03856	.00076	.03496	-.00121

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 .01471
SDev .00089
%RSD 6.0542

#1 .01464
#2 .01387
#3 .01439
#4 .01596

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DGXL3S

Operator: MTW

Run Time: 07/29/00 12:39:04

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 904

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04606	2.3453	1.9994	1.0462	1.9008	.04760	83.725
SDev	.00193	.0186	.0390	.0070	.0115	.00017	.513
%RSD	4.1840	.79420	1.9483	.66575	.60372	.35476	.61329
#1	.04531	2.3224	1.9560	1.0358	1.8899	.04740	83.338
#2	.04382	2.3671	2.0429	1.0497	1.9162	.04780	83.706
#3	.04679	2.3412	1.9797	1.0497	1.8947	.04753	83.399
#4	.04830	2.3504	2.0191	1.0497	1.9024	.04765	84.456
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	.04551	.46965	.23402	.24793	1.4079	52.222	.89656
SDev	.00489	.00648	.00094	.00159	.0046	.313	.00743
%RSD	10.745	1.3804	.40078	.64157	.32408	.60028	.82837
#1	.04702	.46109	.23361	.24746	1.4025	52.027	.89378
#2	.03970	.47108	.23416	.25023	1.4067	52.570	.90739
#3	.04400	.46966	.23305	.24655	1.4087	51.896	.89455
#4	.05129	.47677	.23525	.24748	1.4135	52.395	.89052
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	55.674	.50966	.94585	S3612.4	.46261	.49442	.51013
SDev	.211	.00277	.00868	.1	.01264	.01486	.01065
%RSD	.37868	.54417	.91745	.00176	2.7315	3.0064	2.0886
#1	55.399	.50639	.94836	S3612.5	.47411	.48449	.52611
#2	55.835	.51143	.94836	S3612.4	.44492	.49249	.50475
#3	55.617	.50840	.93333	S3612.4	.46841	.48469	.50486
#4	55.843	.51244	.95337	S3612.4	.46299	.51600	.50481
Errors	LC Pass	LC Pass	LC Pass	LC High	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9634	18.172	1.9169	1.0937	.92146	1.7819	.47390
SDev	.0730	.070	.0386	.0055	.00444	.0328	.00260
%RSD	3.7192	.38289	2.0120	.50605	.48230	1.8433	.54927
#1	2.0316	18.099	1.9301	1.0882	.91563	1.7492	.47270
#2	1.9525	18.243	1.8652	1.1011	.92475	1.8207	.47270

						666	905
#3	1.8655	18.129	1.9571	1.0912	.92036	1.7610	.47241
#4	2.0039	18.219	1.9153	1.0941	.92509	1.7967	.47780
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 .54346
SDev .00373
%RSD .68706

#1 .54088
#2 .54553
#3 .53980
#4 .54764

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DGXL3D

Operator: MTW

Run Time: 07/29/00 12:42:18

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 906

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04758	2.3716	2.0218	1.0576	1.9221	.04810	85.088
SDev	.00086	.0183	.0543	.0157	.0065	.00034	.562
%RSD	1.8165	.77250	2.6868	1.4826	.33743	.71367	.66056
#1	.04685	2.3927	2.0662	1.0497	1.9252	.04843	85.543
#2	.04833	2.3762	2.0148	1.0811	1.9295	.04830	85.292
#3	.04833	2.3689	2.0585	1.0497	1.9190	.04803	85.251
#4	.04682	2.3486	1.9478	1.0497	1.9149	.04765	84.268
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	.04559	.47712	.23704	.25184	1.4335	53.140	.90880
SDev	.00134	.00317	.00151	.00046	.0087	.376	.00276
%RSD	2.9328	.66476	.63815	.18190	.60627	.70703	.30371
#1	.04398	.47248	.23800	.25207	1.4416	52.727	.91161
#2	.04724	.47818	.23854	.25207	1.4327	53.610	.91048
#3	.04541	.47820	.23525	.25115	1.4382	53.234	.90555
#4	.04573	.47964	.23635	.25207	1.4217	52.989	.90756
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	56.543	.51697	.96089	S3612.2	.48358	.50045	.51548
SDev	.232	.00240	.00959	.1	.01022	.00647	.02455
%RSD	.41106	.46399	.99848	.00258	2.1138	1.2928	4.7631
#1	56.654	.51748	.97341	S3612.1	.49182	.49250	.49423
#2	56.754	.51848	.96339	S3612.3	.49301	.50045	.49420
#3	56.547	.51848	.95337	S3612.3	.47419	.50050	.53666
#4	56.218	.51344	.95337	S3612.3	.47531	.50834	.53682
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	1.9832	18.440	1.9561	1.1057	.93117	1.7965	.48170
SDev	.1261	.120	.0370	.0045	.00454	.0899	.00260
%RSD	6.3581	.65044	1.8941	.40388	.48784	5.0044	.54049
#1	2.0238	18.454	1.9403	1.1085	.93422	1.8920	.48320
#2	2.0949	18.532	1.9904	1.1098	.93455	1.8443	.48300

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#3	2.0119	18.508	1.9823	1.1047	.93117	1.6889	.48280
#4	1.8022	18.267	1.9113	1.0999	.92475	1.7608	.47780
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 .55178
SDev .00306
%RSD .55487

#1 .55558
#2 .55290
#3 .54973
#4 .54892

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET

Sample Name: DGXL3/5 NA

Operator: MTW

Run Time: 07/29/00 12:47:25

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

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Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00001	.07238	.03205	.00596	.02450	.00004	7.0513
SDev	.00187	.00753	.02033	.00031	.00025	.00000	.0430
%RSD	16869.	10.402	63.423	5.1908	1.0192	4.2542	.60996
#1	-.00036	.06815	.00532	.00612	.02419	.00004	7.0889
#2	-.00185	.06633	.05293	.00611	.02470	.00004	6.9893
#3	-.00036	.07193	.04097	.00612	.02470	.00004	7.0624
#4	.00261	.08312	.02899	.00550	.02440	.00004	7.0645
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	-.00144	.00864	.00322	.08705	.71728	.00037
SDev	.00117	.00248	.00134	.00053	.00188	.29641	.00092
%RSD	101.11	172.02	15.548	16.518	2.1659	41.324	250.05
#1	.00003	-.00359	.01029	.00276	.08517	.91629	-.00045
#2	-.00050	-.00215	.00700	.00276	.08585	.31272	-.00026
#3	-.00263	-.00215	.00864	.00368	.08791	.96002	.00156
#4	-.00154	.00213	.00864	.00368	.08928	.68011	.00062
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	1.8585	.00858	-.00124	200.63	-.00232	-.01176	.00520
SDev	.0143	.00000	.00289	1.10	.00417	.02325	.01067
%RSD	.77004	.00668	233.34	.54701	179.77	197.61	204.98
#1	1.8757	.00858	.00127	200.14	-.00347	-.03324	-.01080
#2	1.8647	.00858	.00127	202.17	-.00501	-.01761	.01051
#3	1.8481	.00858	-.00374	199.63	-.00465	.02130	.01047
#4	1.8454	.00858	-.00374	200.59	.00385	-.01750	.01063
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	.01506	1.6913	.00630	.03828	.00051	-.02770	-.00157
SDev	.04416	.0098	.01409	.00018	.00058	.04295	.00060
%RSD	293.20	.58153	223.51	.46546	113.86	155.02	38.028
#1	.07438	1.6913	.00988	.03830	.00042	.03504	-.00121
#2	-.02054	1.6792	-.00254	.03841	-.00025	-.04858	-.00246

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#3	-.01658	1.6913	.02459	.03803	.00076	-.06056	-.00131
#4	.02298	1.7033	-.00672	.03841	.00110	-.03671	-.00131
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	.01277
SDev	.00099
%RSD	7.7201

#1	.01275
#2	.01173
#3	.01409
#4	.01249

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET

Sample Name: DGXL3P25 NA

Operator: MTW

Run Time: 07/29/00 12:50:34

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

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Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00037	.02180	.03452	-.00339	.00489	.00004	1.4384
SDev	.00192	.00657	.04992	.00293	.00026	.00000	.0044
%RSD	520.51	30.118	144.60	86.327	5.2308	.56041	.30872
#1	.00111	.02189	-.01405	.00044	.00527	.00004	1.4444
#2	.00259	.03100	-.00223	-.00447	.00476	.00004	1.4337
#3	-.00186	.01622	.08512	-.00651	.00476	.00004	1.4377
#4	-.00037	.01811	.06925	-.00304	.00476	.00004	1.4376
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	-.00117	-.00357	.00082	-.00000	.01710	.10278	-.00047
SDev	.00166	.00261	.00094	.00075	.00142	.12494	.00100
%RSD	142.35	73.041	113.77	39714.	8.3299	121.56	209.69
#1	-.00014	-.00072	.00206	-.00092	.01744	.26898	-.00065
#2	.00010	-.00643	-.00014	-.00000	.01539	.11153	.00003
#3	-.00354	-.00499	.00041	.00091	.01881	.05904	-.00179
#4	-.00108	-.00214	.00096	-.00000	.01676	-.02843	.00051
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	.36962	.00176	-.00375	40.316	-.00196	-.00399	.01062
SDev	.01032	.00050	.00409	.170	.00930	.01165	.01730
%RSD	2.7923	28.460	108.94	.42069	473.67	291.86	162.85
#1	.38341	.00252	-.00876	40.538	.00765	.00582	.01080
#2	.35859	.00151	.00125	40.302	.00096	.00562	-.01066
#3	.36962	.00151	-.00375	40.125	-.01456	-.00984	.03172
#4	.36686	.00151	-.00376	40.301	-.00191	-.01757	.01063
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	-.03852	.35660	-.00621	.00780	-.00059	.02675	-.00132
SDev	.02750	.03657	.02113	.00000	.00028	.02038	.00008
%RSD	71.394	10.255	340.39	.00000	46.657	76.196	5.8463
#1	-.06422	.39121	-.03387	.00780	-.00093	.02374	-.00142
#2	-.06027	.32500	.00152	.00780	-.00059	-.00009	-.00123

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#3	-.01280	.38519	.01633	.00780	-.00025	.04764	-.00132
#4	-.01676	.32500	-.00882	.00780	-.00059	.03570	-.00132
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	.00307
SDev	.00128
%RSD	41.787

#1	.00123
#2	.00393
#3	.00398
#4	.00315

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET

Sample Name: DGXL3S/5 NA

Operator: MTW

Run Time: 07/29/00 12:53:43

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 912

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01133	.48081	.43116	.21105	.40129	.01010	17.376
SDev	.00086	.00706	.01561	.00367	.00063	.00013	.035
%RSD	7.5629	1.4676	3.6214	1.7375	.15617	1.2530	.20134
#1	.01059	.48223	.44403	.21397	.40132	.01020	17.344
#2	.01207	.48966	.43604	.20638	.40050	.00993	17.374
#3	.01059	.47282	.40842	.21399	.40132	.01020	17.425
#4	.01207	.47853	.43613	.20987	.40204	.01007	17.360
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	.00892	.09876	.05089	.05244	.29637	10.606	.18305
SDev	.00433	.00421	.00045	.00075	.00103	.213	.00113
%RSD	48.481	4.2675	.88029	1.4244	.34672	2.0048	.61497
#1	.00509	.09878	.05144	.05244	.29518	10.801	.18337
#2	.00653	.10306	.05089	.05244	.29723	10.521	.18184
#3	.01490	.09303	.05089	.05335	.29723	10.346	.18445
#4	.00917	.10019	.05034	.05152	.29586	10.757	.18252
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	11.700	.10758	.19919	207.53	.10079	.11145	.09460
SDev	.014	.00050	.00289	.60	.00390	.01607	.01229
%RSD	.11788	.46832	1.4522	.29108	3.8654	14.423	12.986
#1	11.684	.10732	.19669	208.00	.10016	.09393	.08399
#2	11.696	.10833	.20170	206.71	.10263	.10963	.10518
#3	11.718	.10733	.20170	207.46	.10473	.10934	.08394
#4	11.701	.10732	.19669	207.97	.09567	.13290	.10530
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.40220	3.7270	.38500	.23066	.19222	.39319	.10273
SDev	.04772	.0354	.02987	.00053	.00081	.07453	.00006
%RSD	11.865	.95085	7.7597	.23194	.41855	18.956	.05440
#1	.42692	3.7029	.37921	.23093	.19171	.39022	.10269
#2	.45461	3.6909	.41480	.22986	.19340	.29461	.10278

666 913

#3	.37947	3.7631	.40009	.23093	.19171	.41413	.10278
#4	.34782	3.7510	.34590	.23093	.19205	.47381	.10269
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 .11256
SDev .00219
%RSD 1.9456

#1 .10966
#2 .11399
#3 .11209
#4 .11449

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DGXL3D/5 NA

Operator: MTW

Run Time: 07/29/00 12:56:52

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

666 914

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01096	.48453	.43807	.21009	.40393	.01007	17.437
SDev	.00186	.00619	.03392	.00319	.00323	.00000	.049
%RSD	17.023	1.2781	7.7429	1.5171	.80011	.02282	.28112
#1	.01355	.48035	.44406	.20640	.40081	.01007	17.498
#2	.01058	.48792	.45987	.20988	.40613	.01007	17.412
#3	.00911	.47838	.45992	.21419	.40724	.01007	17.386
#4	.01059	.49148	.38844	.20988	.40153	.01007	17.451
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	.00791	.09805	.04828	.05221	.29980	10.536	.18483
SDev	.00235	.00247	.00187	.00116	.00141	.458	.00195
%RSD	29.760	2.5233	3.8674	2.2156	.46999	4.3449	1.0558
#1	.00774	.09591	.04815	.05244	.30133	10.958	.18309
#2	.00532	.10020	.04759	.05244	.29860	10.320	.18638
#3	.00756	.09591	.04650	.05060	.29860	9.9961	.18666
#4	.01104	.10019	.05089	.05336	.30065	10.871	.18320
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	11.760	.10808	.19794	208.77	.10135	.10950	.11320
SDev	.035	.00050	.00856	2.12	.00543	.02764	.02011
%RSD	.29570	.46552	4.3226	1.0163	5.3567	25.240	17.762
#1	11.748	.10733	.19669	206.66	.09786	.13281	.12641
#2	11.767	.10833	.18667	209.93	.09596	.10958	.12649
#3	11.803	.10833	.20671	211.15	.10775	.12497	.08397
#4	11.720	.10833	.20170	207.33	.10383	.07065	.11594
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	.41902	3.7390	.39761	.23207	.19272	.38421	.10208
SDev	.04308	.0255	.02543	.00153	.00039	.06507	.00087
%RSD	10.281	.68305	6.3961	.66134	.20249	16.937	.84932
#1	.40716	3.7570	.41699	.23066	.19239	.44991	.10143
#2	.43088	3.7089	.41072	.23280	.19306	.40213	.10124

666

915

#3	.47043	3.7270	.40217	.23387	.19306	.39021	.10287
#4	.36761	3.7631	.36057	.23093	.19239	.29460	.10278
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 .11275
SDev .00113
%RSD .99953

#1 .11234
#2 .11290
#3 .11154
#4 .11422

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-7

Operator: MTW

Run Time: 07/29/00 13:00:01

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 916

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.98925	49.297	5.1574	4.9173	4.8168	5.0125	52.091
SDev	.00350	.112	.0636	.0162	.0116	.0117	.161
%RSD	.35384	.22638	1.2325	.32912	.24042	.23248	.30852
#1	.99226	49.255	5.0882	4.9035	4.8090	5.0092	52.228
#2	.98619	49.278	5.2274	4.9207	4.8167	5.0051	51.870
#3	.98626	49.200	5.1920	4.9388	4.8082	5.0061	52.076
#4	.99231	49.457	5.1221	4.9062	4.8332	5.0298	52.188
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	5.1417	5.0271	5.0106	4.8321	51.602	48.642	4.6533
SDev	.0150	.0100	.0150	.0137	.108	.212	.0159
%RSD	.29258	.19940	.29877	.28347	.20930	.43632	.34118
#1	5.1597	5.0335	5.0176	4.8207	51.617	48.747	4.6370
#2	5.1378	5.0192	4.9934	4.8298	51.467	48.861	4.6620
#3	5.1237	5.0178	5.0038	4.8262	51.596	48.589	4.6432
#4	5.1457	5.0377	5.0274	4.8519	51.730	48.371	4.6709
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	49.805	4.9686	4.9726	48.807	5.1092	5.0374	5.0689
SDev	.120	.0093	.0075	.131	.0248	.0200	.0161
%RSD	.24188	.18702	.15141	.26866	.48568	.39693	.31665
#1	49.767	4.9716	4.9789	48.687	5.1000	5.0142	5.0554
#2	49.736	4.9565	4.9639	48.850	5.0842	5.0605	5.0557
#3	49.733	4.9676	4.9689	48.719	5.1096	5.0294	5.0771
#4	49.984	4.9787	4.9789	48.973	5.1429	5.0454	5.0876
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	5.0697	5.0142	5.0630	4.8872	4.8912	9.8386	4.9893
SDev	.0198	.0078	.0625	.0096	.0085	.1117	.0114
%RSD	.39057	.15629	1.2339	.19568	.17283	1.1353	.22795
#1	5.0589	5.0233	5.1094	4.8848	4.8897	9.9310	4.9954
#2	5.0545	5.0050	5.0050	4.8852	4.8837	9.9207	4.9763

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#3	5.0984	5.0171	5.0134	4.8779	4.8880	9.6925	4.9839
#4	5.0671	5.0113	5.1241	4.9006	4.9033	9.8103	5.0017
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 4.9610
SDev .0174
%RSD .35058

#1 4.9779
#2 4.9411
#3 4.9520
#4 4.9731

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB7

Operator: MTW

Run Time: 07/29/00 13:03:09

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

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Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00000	.01899	.00976	-.00122	.00038	.00059	.01028
SDev	.00187	.00927	.03367	.00435	.00031	.00025	.00564
%RSD	194710.	48.832	345.20	355.80	80.113	42.608	54.793

#1	-.00038	.01806	.04944	-.00246	-.00005	.00043	.00477
#2	-.00035	.00864	-.02194	-.00101	.00046	.00042	.00690
#3	-.00186	.01804	.02564	-.00593	.00046	.00056	.01211
#4	.00259	.03120	-.01412	.00451	.00067	.00096	.01736

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	-.00088	-.00071	-.00014	.00161	.00342	.40457	.00013
SDev	.00338	.00535	.00142	.00116	.00356	.25297	.00091
%RSD	382.08	751.27	1038.5	72.141	103.99	62.529	711.23

#1	L-.00537	.00073	-.00068	.00184	-.00034	.37395	-.00014
#2	.00216	-.00786	-.00178	-.00001	.00171	.08529	-.00045
#3	-.00152	-.00071	.00041	.00275	.00444	.69760	-.00037
#4	.00120	.00500	.00151	.00184	.00787	.46142	.00147

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	.00414	.00050	.00251	.01975	-.00560	.00192	.00789
SDev	.01115	.00082	.00480	.01249	.00599	.01842	.02350
%RSD	269.43	162.74	191.43	63.218	106.93	957.46	297.76

#1	.01103	-.00050	.00626	.02441	-.01035	-.00972	-.00012
#2	-.01103	.00050	.00125	.00942	-.01118	.02123	.04235
#3	.01379	.00051	.00626	.00988	-.00107	.01359	-.00008
#4	.00276	.00151	-.00376	.03531	.00019	-.01741	-.01059

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	.00001	.02408	.00630	.00051	-.00025	.03581	.00005
SDev	.05435	.00693	.01557	.00021	.00073	.04467	.00248
%RSD	603110.	28.789	247.14	40.548	288.03	124.75	5161.4

#1	.07415	.03008	-.00470	.00063	-.00025	.04778	-.00113
#2	-.01285	.01810	.02682	.00020	-.00059	.03585	.00377

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#3	-.05635	.01804	.00992	.00058	-.00093	-.02392	-.00113
#4	-.00492	.03008	-.00684	.00063	.00076	.08351	-.00132
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	.00119
SDev	.00102
%RSD	85.401

#1	.00073
#2	-.00003
#3	.00203
#4	.00203

Errors	LC Pass
High	.02000
Low	-.02000

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Method: QUANMET Sample Name: DGW34B

Operator: MTW

Run Time: 07/29/00 13:09:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 920

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00036	.00836	.00491	-.00267	.00000	.00014	.05310
SDev	.00192	.00715	.03812	.00904	.00038	.00007	.00135
%RSD	525.64	85.515	776.13	339.05	5200e6	48.806	2.5400
#1	.00111	.01621	-.01002	-.01005	-.00035	.00017	.05432
#2	.00259	.01257	-.02189	-.00451	.00046	.00017	.05422
#3	-.00038	.00145	.06147	.01045	.00016	.00017	.05198
#4	-.00186	.00322	-.00992	-.00656	-.00026	.00004	.05188
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	-.00119	-.00035	-.00041	-.00000	-.00103	.28429	-.00064
SDev	.00214	.00136	.00071	.00075	.00202	.26468	.00052
%RSD	180.27	386.66	172.39	185830.	195.90	93.103	81.160
#1	-.00205	.00072	-.00013	.00000	-.00308	-.09841	-.00045
#2	-.00099	-.00071	.00041	-.00000	.00171	.45268	-.00026
#3	.00167	.00071	-.00069	.00092	-.00103	.47017	-.00142
#4	-.00338	-.00213	-.00123	-.00092	-.00171	.31272	-.00045
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	-.00690	-.00050	-.00000	.01056	-.00514	.00390	.01588
SDev	.00657	.00000	.00480	.00269	.00689	.02142	.02538
%RSD	95.219	.20947	3125500.	25.446	134.01	549.49	159.84
#1	-.01655	-.00050	.00626	.00897	-.01416	.02916	-.02143
#2	-.00276	-.00050	-.00376	.01442	-.00606	.01362	.02118
#3	-.00552	-.00050	-.00376	.00851	-.00253	-.00967	.03192
#4	-.00276	-.00050	.00125	.01033	.00218	-.01753	.03185
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	-.02077	.03008	.00791	-.00021	-.00076	-.03283	-.00125
SDev	.03462	.00000	.01609	.00011	.00044	.05197	.00009
%RSD	166.74	.00392	203.56	51.808	57.378	158.30	7.3910
#1	.01482	.03008	.00356	-.00033	-.00127	.01198	-.00113
#2	-.04844	.03008	.01837	-.00007	-.00025	-.10751	-.00132

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#3	-.05241	.03008	-.01290	-.00022	-.00059	-.01193	-.00132
#4	.00296	.03008	.02260	-.00022	-.00093	-.02385	-.00123
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	.00188
SDev	.00072
%RSD	38.461

#1	.00264
#2	.00127
#3	.00236
#4	.00125

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DGW34C

Operator: MTW

Run Time: 07/29/00 13:12:31

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 922

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04793	1.9178	1.9831	.93743	1.9508	.05019	L.05198
SDev	.00187	.0099	.0319	.00001	.0055	.00017	.00151
%RSD	3.8976	.51879	1.6064	.00106	.28399	.34013	2.9054

#1	.04830	1.9289	1.9949	.93742	1.9524	.05038	L.05412
#2	.04533	1.9085	2.0030	.93744	1.9567	.05025	L.05169
#3	.04978	1.9234	1.9989	.93743	1.9434	.05012	L.05154
#4	.04830	1.9103	1.9356	.93744	1.9506	.04999	L.05057

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	.04385	.49349	.20014	.24471	1.0478	L.30178	.92172
SDev	.00344	.00180	.00100	.00075	.0040	.27303	.00395
%RSD	7.8546	.36501	.50064	.30583	.38640	90.472	.42876

#1	L.03899	.49386	.19959	.24471	1.0429	L.52266	.92193
#2	.04381	.49098	.20069	.24563	1.0504	L.29522	.92454
#3	.04615	.49527	.19904	.24471	1.0463	L.47017	.91606
#4	.04645	.49383	.20124	.24379	1.0518	L-.08091	.92434

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-.02896	.49222	.98337	L.02044	.50360	.49538	.49991
SDev	.01244	.00184	.00409	.00341	.01624	.02235	.01364
%RSD	42.945	.37350	.41599	16.667	3.2248	4.5118	2.7291

#1	L-.01103	.49021	.98337	L.01578	.48753	.49343	.49450
#2	L-.03862	.49423	.97836	L.02078	.49372	.49338	.50516
#3	L-.03034	.49121	.98337	L.02123	.52360	.52459	.48415
#4	L-.03586	.49323	.98838	L.02395	.50955	.47012	.51582

Errors	LC Low	LC Pass	NOCHECK	LC Low	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	1.9871	9.7417	1.9683	.99116	.96759	1.9524	.49332
SDev	.0116	.0151	.0168	.00218	.00205	.1074	.00008
%RSD	.58561	.15549	.85210	.21972	.21222	5.5023	.01611

#1	1.9871	9.7207	1.9485	.99214	.96598	1.8599	.49332
#2	1.9832	9.7568	1.9631	.99332	.96936	1.8718	.49322

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						666	923
#3	2.0030	9.7448	1.9735	.98824	.96565	2.0868	.49331
#4	1.9753	9.7448	1.9882	.99092	.96936	1.9912	.49342
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	.48021						
SDev	.00266						
%RSD	.55386						
#1	.48147						
#2	.47742						
#3	.47867						
#4	.48329						
Errors	LC Pass						
High	.60000						
Low	.40000						

Analysis Report

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Method: QUANMET Sample Name: DGQ5L

Operator: MTW

Run Time: 07/29/00 13:15:44

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 924

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00001	.04224	.05412	.00988	.00517	.00014	.87679
SDev	.00223	.00677	.01046	.00144	.00012	.00007	.00236
%RSD	25555.	16.021	19.335	14.615	2.3531	48.695	.26870
#1	.00261	.04967	.05306	.00957	.00527	.00017	.87878
#2	-.00185	.04594	.04516	.01018	.00506	.00017	.87406
#3	-.00185	.03486	.06905	.01162	.00527	.00017	.87557
#4	.00112	.03850	.04919	.00814	.00506	.00004	.87873
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	.00000	-.00072	-.00055	1.0768	.07286	.61888	-.00011
SDev	.00225	.00261	.00144	.0070	.00000	.15680	.00094
%RSD	132890.	364.39	263.22	.64905	.00228	25.337	831.91
#1	.00049	.00214	.00041	1.0694	.07286	.68011	.00043
#2	-.00261	.00072	.00096	1.0722	.07286	.76758	-.00017
#3	-.00064	-.00214	-.00178	1.0832	.07285	.62762	-.00142
#4	.00277	-.00358	-.00178	1.0823	.07286	.40019	.00071
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.09447	.01034	-.00249	1.3655	.10955	.02526	.02223
SDev	.01221	.00050	.00480	.0086	.00199	.00449	.01504
%RSD	12.921	4.8614	192.32	.62945	1.8151	17.765	67.659
#1	.10206	.01059	.00126	1.3595	.10900	.02147	.04348
#2	.10758	.00958	.00126	1.3582	.11152	.02917	.01158
#3	.08551	.01058	-.00876	1.3677	.11068	.02911	.02229
#4	.08275	.01059	-.00375	1.3768	.10702	.02128	.01157
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	-.01068	H26.299	.01734	.00380	-.00025	-.03353	-.00130
SDev	.03455	.633	.00597	.00018	.00048	.03142	.00010
%RSD	323.41	2.4069	34.417	4.6893	188.56	93.725	7.3265
#1	-.04826	H27.079	.01222	.00368	.00008	-.06042	-.00123
#2	-.02057	H26.519	.02251	.00406	.00008	-.03653	-.00122

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925

#3	.03480	H25.953	.01213	.00379	-.00093	.01128	-.00142
#4	-.00871	H25.646	.02251	.00368	-.00025	-.04843	-.00133
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 .21719
SDev .00123
%RSD .56872

#1 .21756
#2 .21777
#3 .21536
#4 .21806

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DGT5K

Operator: MTW

Run Time: 07/29/00 13:18:58

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

666 926

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00037	.09000	.03197	.28255	.01928	.00004	.99743
SDev	.00121	.00488	.04087	.00165	.00025	.00000	.00713
%RSD	326.56	5.4197	127.82	.58426	1.2951	.67641	.71461

#1	-.00037	.09232	.04087	.28132	.01907	.00004	.99826
#2	-.00037	.08304	.04492	.28276	.01959	.00004	.99548
#3	.00111	.09417	.06861	.28480	.01938	.00004	1.0066
#4	-.00186	.09048	-.02651	.28131	.01907	.00004	.98941

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	.00133	-.00251	.00151	3.8020	.03181	.72822	.00377
SDev	.00045	.00270	.00100	.0251	.00216	.24414	.00037
%RSD	33.792	107.63	66.407	.65899	6.8075	33.526	9.8416

#1	.00068	-.00073	.00261	3.7793	.03249	.92503	.00388
#2	.00153	-.00644	.00096	3.7866	.02976	.61888	.00408
#3	.00170	-.00073	.00041	3.8068	.03455	.93378	.00388
#4	.00142	-.00215	.00206	3.8353	.03044	.43518	.00323

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	.09861	.00605	-.00250	.83898	.26151	.01934	.01028
SDev	.00264	.00058	.00480	.01210	.00833	.02493	.01344
%RSD	2.6781	9.6067	191.86	1.4418	3.1868	128.91	130.73

#1	.09654	.00554	.00126	.82184	.26770	.02913	.02364
#2	.09654	.00655	-.00876	.83909	.25954	.02897	.01292
#3	.10206	.00655	.00126	.84772	.26826	.03690	.01297
#4	.09930	.00554	-.00375	.84727	.25053	-.01764	-.00841

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	.01096	17.629	.02615	.00519	-.00042	-.00325	-.00130
SDev	.07082	.120	.01335	.00013	.00070	.04615	.00009
%RSD	646.17	.67998	51.039	2.5758	166.53	1419.4	7.1825

#1	-.04836	17.503	.01003	.00539	-.00025	-.04807	-.00122
#2	-.00882	17.557	.03713	.00513	-.00059	.04757	-.00142

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#3	-.01276	17.762	.03712	.00513	.00042	.02358	-.00123
#4	.11378	17.695	.02033	.00513	-.00127	-.03609	-.00132
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	.22222
SDev	.00213
%RSD	.95925

#1	.22050
#2	.22372
#3	.22439
#4	.22029

Errors	LC Pass
High	100.00
Low	-.02000

Method: ~~QUANMET~~ Sample Name: DGT81

Operator: MTW

Run Time: 07/29/00 13:22:07

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 928

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00076	1.5129	.03631	.11154	.01209	.00010	.51122
SDev	.00074	.0094	.04476	.00691	.00026	.00008	.00401
%RSD	98.055	.62448	123.27	6.1939	2.1144	74.629	.78522
#1	.00113	1.5195	.07690	.11764	.01222	.00017	.51384
#2	.00113	1.5100	.07302	.10165	.01222	.00004	.50528
#3	.00113	1.5213	.00155	.11415	.01222	.00017	.51345
#4	-.00036	1.5008	-.00622	.11272	.01171	.00004	.51233
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	.00678	.00069	.00357	.92646	.09372	.82444	.00008
SDev	.00303	.00233	.00130	.00563	.00181	.30137	.00020
%RSD	44.723	337.50	36.359	.60736	1.9316	36.555	259.47
#1	.00793	.00354	.00370	.92257	.09544	.90754	.00003
#2	.00303	-.00216	.00261	.92623	.09133	.48767	.00014
#3	.00598	.00069	.00261	.93450	.09338	.70635	.00031
#4	.01018	.00068	.00535	.92256	.09475	1.1962	-.00017
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	.15033	.00754	-.00249	1.7590	.09893	.05745	.00616
SDev	.00942	.00000	.00480	.0115	.00940	.02326	.01054
%RSD	6.2673	.02010	192.56	.65154	9.5035	40.491	171.02
#1	.14619	.00754	-.00875	1.7641	.10729	.09058	-.00965
#2	.14068	.00754	.00127	1.7569	.08754	.05155	.01131
#3	.15171	.00754	-.00374	1.7709	.10596	.05162	.01156
#4	.16274	.00755	.00127	1.7442	.09492	.03607	.01142
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	H22.157	.01518	.00183	.00051	.01401	-.00129
SDev	.02214	.232	.01201	.00011	.00017	.02822	.00009
%RSD	90.463	1.0468	79.131	5.7528	33.333	201.47	7.2138
#1	-.01656	H21.933	.00780	.00192	.00076	.03487	-.00141
#2	-.00470	H21.981	.03295	.00170	.00042	.03496	-.00122

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#3	-.05611	H22.360	.01207	.00192	.00042	-.02481	-.00132
#4	-.02051	H22.354	.00790	.00181	.00042	.01101	-.00122
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	.51646
SDev	.00321
%RSD	.62155

#1	.51864
#2	.51175
#3	.51835
#4	.51711

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DGT81P5

Operator: MTW

Run Time: 07/29/00 13:25:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

666 930

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00111	.32387	.03308	.00829	.00246	.00014	.20426
SDev	.00210	.01386	.03592	.00104	.00030	.00013	.00469
%RSD	188.97	4.2798	108.58	12.586	12.006	93.305	2.2957

#1	.00111	.32989	-.01257	.00886	.00220	.00004	.20122
#2	.00259	.33556	.03100	.00741	.00271	.00030	.21041
#3	-.00186	.30391	.07487	.00742	.00220	.00017	.20005
#4	.00260	.32611	.03901	.00948	.00271	.00004	.20535

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	-.00023	-.00071	-.00014	.18864	.02018	.35646	.00006
SDev	.00118	.00350	.00119	.00119	.00148	.28110	.00069
%RSD	504.41	489.97	859.75	.62926	7.3278	78.859	1212.4

#1	.00117	-.00072	.00096	.18818	.02223	.33896	.00003
#2	-.00155	.00357	-.00014	.18911	.02018	.75009	.00099
#3	.00020	-.00071	.00041	.19002	.01881	.09403	-.00065
#4	-.00075	-.00500	-.00178	.18726	.01950	.24274	-.00014

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.02414	.00226	-.00501	.37487	.01853	-.00216	.00816
SDev	.01134	.00050	.00250	.00715	.00701	.00906	.01014
%RSD	47.006	22.233	50.030	1.9087	37.840	420.30	124.33

#1	.02758	.00251	-.00375	.38044	.00906	.00564	.02138
#2	.03862	.00251	-.00876	.37090	.01975	.00574	.01083
#3	.01379	.00151	-.00375	.36681	.01932	-.00994	.00020
#4	.01655	.00251	-.00375	.38134	.02600	-.01007	.00021

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

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.04048	6.4823	.00370	.00051	-.00034	-.03004	-.00135
SDev	.05546	.1340	.01484	.00014	.00064	.06209	.00005
%RSD	137.00	2.0665	401.34	27.218	189.30	206.67	3.5956

#1	-.03652	6.5846	-.01294	.00053	-.00025	.01174	-.00132
#2	.03070	6.5605	.01623	.00063	.00008	-.11966	-.00142

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#3	-.10377	6.4943	-.00469	.00058	-.00127	-.02406	-.00132
#4	-.05235	6.2897	.01618	.00031	.00008	.01181	-.00133

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	.11072
SDev	.00301
%RSD	2.7222

#1	.11369
#2	.10885
#3	.10750
#4	.11286

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET

Sample Name: DGT81S

Operator: MTW

Run Time: 07/29/00 13:28:30

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

660 932

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04682	3.3574	1.9556	1.0491	1.9281	.04931	.61633
SDev	.00121	.0221	.0308	.0000	.0073	.00013	.00291
%RSD	2.5897	.65866	1.5738	.00108	.37957	.25430	.47155
#1	.04532	3.3356	1.9598	1.0491	1.9278	.04947	.61216
#2	.04681	3.3412	1.9161	1.0491	1.9196	.04921	.61654
#3	.04683	3.3764	1.9554	1.0491	1.9375	.04933	.61848
#4	.04829	3.3766	1.9912	1.0491	1.9278	.04921	.61814
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	.05131	.49136	.20329	1.1269	1.1376	1.1940	.90221
SDev	.00309	.00486	.00285	.0042	.0035	.1110	.00683
%RSD	6.0251	.99000	1.4004	.37046	.30496	9.2933	.75678
#1	.04886	.48958	.20343	1.1278	1.1324	1.2050	.90776
#2	.05570	.48671	.20123	1.1214	1.1399	1.0912	.89293
#3	.05118	.49099	.20123	1.1315	1.1393	1.3449	.90691
#4	.04948	.49815	.20727	1.1269	1.1386	1.1350	.90124
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	.13792	.49397	.97086	1.7956	.60576	.52555	.49296
SDev	.02137	.00151	.00289	.0057	.01645	.02998	.03397
%RSD	15.492	.30560	.29791	.31882	2.7158	5.7050	6.8908
#1	.14619	.49322	.97337	1.7927	.60839	.54685	.44260
#2	.10758	.49221	.96836	1.7936	.58226	.50794	.50599
#3	.15723	.49523	.97337	1.8041	.62038	.55474	.51703
#4	.14068	.49523	.96836	1.7918	.61200	.49267	.50622
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	1.9379	H32.514	1.9485	.97769	.95154	1.8202	.48933
SDev	.0284	.087	.0431	.00295	.00255	.0179	.00253
%RSD	1.4671	.26902	2.2113	.30174	.26795	.98583	.51721
#1	1.9162	H32.538	1.8899	.97759	.94976	1.8352	.48813
#2	1.9320	H32.508	1.9716	.97406	.94909	1.8112	.48803

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#3	1.9795	H32.400	1.9445	.98129	.95449	1.8351	.49313
#4	1.9241	H32.610	1.9883	.97781	.95280	1.7992	.48804
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 .94954
SDev .00580
%RSD .61082

#1 .94214
#2 .94871
#3 .95605
#4 .95127

Errors LC Pass
High 100.00
Low -.02000

Analysis Report

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Method: QUANMET

Sample Name: DGT81D

Operator: MTW

Run Time: 07/29/00 13:31:43

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

666 934

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04983	3.4125	2.0215	1.0691	1.9630	.05014	.54340
SDev	.00120	.0203	.0517	.0232	.0132	.00029	.00348
%RSD	2.4154	.59581	2.5555	2.1684	.67373	.57561	.64135
#1	.04983	3.4022	1.9472	1.0491	1.9521	.04997	.53917
#2	.05131	3.3950	2.0504	1.0491	1.9510	.04984	.54724
#3	.04983	3.4413	2.0619	1.0874	1.9753	.05024	.54496
#4	.04836	3.4116	2.0264	1.0909	1.9735	.05049	.54224
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	.05200	.49989	.20562	1.1547	1.1340	.93597	.92150
SDev	.00437	.00513	.00119	.0083	.0046	.25546	.00812
%RSD	8.4117	1.0269	.57625	.72122	.40866	27.294	.88144
#1	.05538	.49239	.20398	1.1489	1.1297	.73259	.91759
#2	.05561	.50239	.20562	1.1462	1.1311	1.1525	.91192
#3	.05055	.50095	.20672	1.1609	1.1400	.69760	.92794
#4	.04645	.50382	.20617	1.1627	1.1352	1.1612	.92854
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	.13930	.50278	.98464	1.7602	.60995	.55300	.50624
SDev	.01502	.00240	.00751	.0100	.00579	.00745	.01737
%RSD	10.786	.47687	.76325	.57009	.94988	1.3469	3.4314
#1	.14344	.50027	.98840	1.7641	.60820	.55472	.48501
#2	.15723	.50127	.97337	1.7455	.60899	.54728	.52756
#3	.13516	.50430	.98840	1.7682	.60448	.54718	.50611
#4	.12137	.50530	.98840	1.7628	.61812	.56284	.50626
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	2.0160	H41.132	1.9454	.99497	.96852	1.8530	.49929
SDev	.0234	.356	.0252	.00617	.00475	.0605	.00193
%RSD	1.1596	.86638	1.2972	.61995	.49060	3.2657	.38647
#1	2.0071	H41.663	1.9088	.99027	.96362	1.8710	.49842
#2	1.9874	H40.989	1.9487	.98904	.96531	1.8112	.49814

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#3	2.0309	H40.898	1.9611	1.0008	.97308	1.9305	.49843
#4	2.0388	H40.977	1.9631	.99974	.97207	1.7991	.50218
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 .95829
SDev .00340
%RSD .35462

#1 .95738
#2 .95447
#3 .95867
#4 .96266

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-8

Operator: MTW

Run Time: 07/29/00 13:34:57

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 936

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99926	49.752	5.2178	4.9647	4.8676	5.0512	52.640
SDev	.00449	.072	.0871	.0128	.0058	.0090	.111
%RSD	.44904	.14398	1.6693	.25712	.11884	.17751	.21006
#1	1.0015	49.858	5.2525	4.9685	4.8751	5.0579	52.728
#2	1.0015	49.734	5.1741	4.9810	4.8611	5.0526	52.697
#3	.99253	49.702	5.1232	4.9525	4.8680	5.0563	52.480
#4	1.0015	49.716	5.3212	4.9570	4.8662	5.0382	52.654
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	5.1961	5.0858	5.0592	4.8719	52.068	48.968	4.6841
SDev	.0226	.0109	.0112	.0044	.071	.249	.0146
%RSD	.43412	.21428	.22167	.09001	.13562	.50869	.31268
#1	5.1970	5.0818	5.0664	4.8740	52.126	49.106	4.6951
#2	5.2106	5.0861	5.0664	4.8667	52.087	49.228	4.6698
#3	5.2129	5.0747	5.0428	4.8767	51.965	48.668	4.6982
#4	5.1640	5.1005	5.0614	4.8704	52.093	48.869	4.6731
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	50.283	5.0140	5.0115	49.150	5.1344	5.0601	5.1247
SDev	.075	.0038	.0145	.063	.0024	.0357	.0136
%RSD	.15006	.07547	.28855	.12747	.04688	.70646	.26554
#1	50.321	5.0180	5.0090	49.177	5.1345	5.0774	5.1405
#2	50.227	5.0150	5.0291	49.101	5.1370	5.0854	5.1299
#3	50.371	5.0089	5.0140	49.225	5.1351	5.0073	5.1088
#4	50.213	5.0140	4.9940	49.095	5.1312	5.0702	5.1195
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	5.1451	H7.9475	5.0851	4.9361	4.9355	10.000	5.0402
SDev	.1343	.1311	.0283	.0063	.0046	.119	.0078
%RSD	2.6105	1.6502	.55587	.12770	.09246	1.1949	.15420
#1	5.1393	H8.1055	5.1180	4.9451	4.9414	10.033	5.0424
#2	5.3053	H8.0033	5.0888	4.9311	4.9367	10.153	5.0502

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937

#3	5.1587	H7.8586	5.0845	4.9326	4.9313	9.8792	5.0349
#4	4.9771	H7.8225	5.0491	4.9354	4.9327	9.9374	5.0333
Errors	LC Pass	LC High	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 5.0003
SDev .0182
%RSD .36322

#1 5.0151
#2 4.9868
#3 5.0168
#4 4.9825

Errors LC Pass
High 5.5000
Low 4.5000

Analysis Report

07/29/00 01:41:17 PM

page 1

Method: QUANMET Sample Name: CCB8

Operator: MTW

Run Time: 07/29/00 13:38:11

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 938

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00074	.01205	.02369	-.00024	.00051	.00063	1.1428
SDev	.00075	.00746	.04031	.01137	.00011	.00013	.0076
%RSD	100.66	61.916	170.19	4737.3	20.588	21.403	.66367
#1	-.00038	.01997	-.01402	-.00593	.00046	.00057	1.1379
#2	-.00186	.00879	.06933	-.00593	.00046	.00083	1.1425
#3	-.00035	.01617	-.00615	-.00593	.00067	.00055	1.1536
#4	-.00038	.00329	.04559	.01682	.00046	.00057	1.1371
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.30000	.20000	.20000	.00500	5.0000
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00018	-.00214	-.00082	-.00023	.00616	.12465	-.00055
SDev	.00173	.00117	.00113	.00088	.00088	.31005	.00063
%RSD	948.68	54.431	137.20	380.15	14.343	248.74	113.48
#1	.00210	-.00215	-.00178	-.00000	.00513	.15527	-.00017
#2	-.00202	-.00214	-.00178	-.00092	.00718	-.29960	-.00122
#3	-.00078	-.00357	-.00014	.00092	.00650	.44393	-.00094
#4	-.00002	-.00071	.00041	-.00092	.00581	.19900	.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
Avg	-.00276	.00050	-.00250	.01544	-.00447	.00576	-.00267
SDev	.00712	.00082	.00251	.00227	.00383	.02106	.01596
%RSD	258.20	162.91	100.04	14.681	85.744	365.36	597.10
#1	-.01103	.00050	-.00376	.01578	-.01021	-.00200	.01061
#2	.00000	-.00050	.00125	.01396	-.00249	-.00982	-.02132
#3	.00552	.00151	-.00376	.01851	-.00247	.03687	.01063
#4	-.00552	.00050	-.00376	.01351	-.00269	-.00198	-.01062
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.0000	.01500	.04000	5.0000	.04000	.10000	.06000
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00394	H1.2895	-.00523	.00157	-.00017	.04773	-.00005
SDev	.05587	.0849	.01589	.00022	.00043	.03235	.00249
%RSD	1418.6	6.5827	303.75	13.935	251.66	67.767	4971.9
#1	.00693	H1.3843	-.02344	.00138	-.00025	.03581	-.00133
#2	.05440	H1.3121	.01400	.00138	-.00059	.03578	-.00123

666 939

#3	.00298	H1.2821	-.00047	.00181	.00042	.02383	.00368
#4	-.08007	H1.1797	-.01101	.00170	-.00025	.09551	-.00132

Errors	LC Pass	LC High	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	.01072
SDev	.00100
%RSD	9.3124

#1	.00933
#2	.01065
#3	.01145
#4	.01144

Errors	LC Pass
High	.02000
Low	-.02000

Method: **QUANMET** Sample Name: **DGW3AB** **666 940** Operator: **MTW**
 Run Time: 07/29/00 13:41:25
 Comment: **STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E**
 Mode: **CONC** Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00001	.00786	.02672	-.00251	-.00020	.00010	.05011
SDev	.00074	.00827	.04457	.00782	.00017	.00008	.00229
%RSD	11699.	105.13	166.79	312.05	85.533	74.259	4.5712

#1	-.00038	-.00051	.00994	-.00655	-.00035	.00004	.04809
#2	-.00038	.00320	.04559	.00903	-.00035	.00017	.04970
#3	-.00038	.01062	.07725	-.00799	-.00005	.00017	.05339
#4	.00111	.01814	-.02589	-.00450	-.00005	.00004	.04926

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	-.00211	-.00285	-.00192	.00023	-.00035	.10278	-.00067
SDev	.00098	.00143	.00144	.00046	.00056	.29248	.00077
%RSD	46.602	50.111	75.176	202.90	161.63	284.57	114.56

#1	-.00322	-.00356	-.00398	-.00000	-.00035	-.24711	-.00142
#2	-.00083	-.00357	-.00068	-.00000	-.00035	.25149	-.00113
#3	-.00210	-.00071	-.00123	.00092	.00034	.41769	.00031
#4	-.00228	-.00357	-.00178	-.00000	-.00103	-.01093	-.00045

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	-.00552	-.00050	-.00000	.01056	-.00282	.01161	.01591
SDev	.00596	.00000	.00630	.00215	.00354	.02048	.00615
%RSD	108.01	.46340	12e6	20.326	125.22	176.44	38.620

#1	-.01379	-.00050	.00125	.00897	.00027	.01355	.02130
#2	-.00276	-.00050	.00125	.01079	-.00606	.02910	.01056
#3	.00000	-.00050	.00626	.01351	-.00570	.02140	.02117
#4	-.00552	-.00051	-.00877	.00897	.00020	-.01760	.01062

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	-.01978	H.88024	.00373	-.00015	-.00093	.00302	-.00125
SDev	.01947	.01657	.01560	.00009	.00062	.06424	.00012
%RSD	98.477	1.8830	418.20	62.416	66.391	2128.3	9.7297

#1	-.01681	H.89679	-.01294	-.00007	-.00127	.08365	-.00123
#2	-.02076	H.87271	-.00047	-.00007	-.00161	-.05969	-.00123

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#3	-.04449	H.89077	.00375	-.00022	-.00059	-.03583	-.00113
#4	.00296	H.86068	.02458	-.00022	-.00025	.02394	-.00142
Errors	LC Pass	LC High	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	.00241
SDev	.00144
%RSD	59.858

#1	.00047
#2	.00262
#3	.00395
#4	.00259

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DGW3AC 666 942 Operator: MTW
 Run Time: 07/29/00 13:44:39
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04792	1.8863	1.9844	.93742	1.9224	.04963	L.06973
SDev	.00186	.0033	.0620	.00001	.0077	.00012	.00315
%RSD	3.8796	.17748	3.1266	.00063	.40248	.24447	4.5229

#1	.04976	1.8845	1.9795	.93742	1.9112	.04947	L.06842
#2	.04533	1.8882	2.0706	.93742	1.9288	.04972	L.06783
#3	.04830	1.8825	1.9636	.93743	1.9257	.04959	L.06822
#4	.04829	1.8899	1.9239	.93742	1.9239	.04973	L.07445

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
Avg	.04250	.49174	.19945	.24058	1.0403	L.23837	.90628
SDev	.00167	.00184	.00181	.00119	.0025	.38366	.00443
%RSD	3.9329	.37465	.90912	.49317	.23737	160.95	.48837

#1	.04142	.49104	.19685	.24012	1.0367	L.21650	.90373
#2	.04401	.49387	.19959	.24104	1.0408	L.07654	.91221
#3	.04385	.48959	.20068	.23920	1.0421	L-.11590	.90699
#4	.04073	.49245	.20069	.24196	1.0415	L.77633	.90220

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
Avg	L-.02483	.48794	.97586	L.01748	.50702	.49148	.51330
SDev	.00812	.00191	.00868	.00661	.01150	.00394	.01016
%RSD	32.710	.39095	.88925	37.782	2.2687	.80077	1.9793

#1	L-.03310	.48517	.96834	L.01533	.49654	.49341	.51593
#2	L-.01931	.48920	.97335	L.01533	.51004	.49347	.50541
#3	L-.03034	.48819	.97335	L.02713	.49956	.48558	.50528
#4	L-.01655	.48920	.98838	L.01215	.52193	.49346	.52657

Errors	LC Low	LC Pass	NOCHECK	LC Low	LC Pass	LC Pass	LC Pass
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000

Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9258	10.479	1.9617	.97684	.95669	1.8958	.49161
SDev	.0574	.041	.0195	.00365	.00329	.0798	.00244
%RSD	2.9829	.38702	.99422	.37367	.34432	4.2094	.49533

#1	1.9871	10.419	1.9570	.97170	.95213	1.8122	.48802
#2	1.9041	10.503	1.9486	.98033	.95686	2.0032	.49312

666 943

#3	1.9555	10.503	1.9506	.97781	.95787	1.8719	.49312
#4	1.8566	10.491	1.9904	.97754	.95990	1.8957	.49216
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	.48139
SDev	.00185
%RSD	.38371

#1	.47954
#2	.48007
#3	.48303
#4	.48294

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET 00 Sample Name: DGDFK

Operator: MTW

Run Time: 07/29/00 13:47:53

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

666 944

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00078	.01395	.02927	.24710	.49632	.00007	159.44
SDev	.00074	.00633	.02050	.02867	.00144	.00013	.36
%RSD	95.062	45.365	70.015	11.602	.29055	182.07	.22719
#1	-.00190	.01445	.05306	.23059	.49500	.00004	159.53
#2	-.00041	.01627	.00547	.29004	.49837	-.00010	158.91
#3	-.00041	.01998	.02128	.23390	.49611	.00017	159.72
#4	-.00041	.00511	.03728	.23387	.49581	.00017	159.60
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	-.00020	.00155	-.00343	.00603	3.6206	5.2462	.00799
SDev	.00227	.00180	.00110	.00138	.0071	.4189	.00028
%RSD	1149.2	116.28	32.016	22.865	.19638	7.9848	3.5300
#1	.00189	.00190	-.00398	.00488	3.6186	5.3162	.00765
#2	.00149	-.00096	-.00398	.00488	3.6145	4.6514	.00785
#3	-.00134	.00191	-.00178	.00764	3.6309	5.6311	.00822
#4	-.00283	.00334	-.00398	.00672	3.6186	5.3862	.00822
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	38.597	4.4559	.00054	40.162	-.00184	-.01054	.01865
SDev	.079	.0034	.00480	.187	.00522	.02292	.00527
%RSD	.20568	.07609	886.01	.46563	284.25	217.47	28.271
#1	38.626	4.4569	-.00322	40.135	-.00331	.01282	.02130
#2	38.675	4.4509	-.00322	40.429	-.00008	-.02617	.02137
#3	38.488	4.4579	.00180	39.997	-.00817	.00503	.02119
#4	38.601	4.4579	.00680	40.088	.00421	-.03384	.01074
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.01547	11.400	-.01015	.42747	-.00904	.11313	-.00125
SDev	.03087	.029	.01628	.00093	.00028	.07590	.00009
%RSD	199.54	.25137	160.31	.21678	3.0523	67.087	7.4651
#1	-.02705	11.442	-.00179	.42667	-.00904	.08330	-.00132
#2	.04017	11.382	-.02267	.42881	-.00904	.22666	-.00132

666 945

#3	.03626	11.394	.00865	.42720	-.00870	.07123	-.00122
#4	.01250	11.382	-.02480	.42720	-.00938	.07134	-.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	.01308
SDev	.00087
%RSD	6.6456

#1	.01216
#2	.01294
#3	.01295
#4	.01426

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGDFKP5

Operator: MTW

Run Time: 07/29/00 13:51:02

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 946

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00001	.13644	.02081	.04887	.10198	.00010	33.078
SDev	.00142	.01277	.03862	.00596	.00064	.00008	.180
%RSD	9962.4	9.3591	185.59	12.186	.63082	74.345	.54501
#1	.00110	.14992	.05936	.05620	.10211	.00017	33.327
#2	-.00187	.14236	-.00402	.04842	.10211	.00004	33.084
#3	.00110	.12026	.04771	.04923	.10262	.00004	32.909
#4	-.00039	.13320	-.01980	.04163	.10109	.00017	32.994
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	-.00201	-.00040	-.00110	.00144	.76295	1.0869	.00146
SDev	.00296	.00317	.00094	.00119	.00313	.3218	.00038
%RSD	147.72	792.33	85.317	82.548	.41005	29.604	26.363
#1	-.00226	.00210	-.00069	.00098	.76517	1.0737	.00102
#2	-.00118	-.00505	-.00233	.00006	.76449	.68886	.00139
#3	L-.00586	.00068	-.00124	.00190	.76380	1.1087	.00147
#4	.00128	.00066	-.00014	.00282	.75833	1.4761	.00196
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	7.9386	.94197	-.00364	8.0332	-.00706	-.01778	.00795
SDev	.0478	.00406	.00409	.0419	.00360	.00629	.00532
%RSD	.60249	.43081	112.28	.52108	51.026	35.386	66.897
#1	7.9938	.94675	-.00364	8.0387	-.00641	-.01771	.01065
#2	7.9551	.94373	.00137	8.0709	-.00226	-.01012	.01065
#3	7.9248	.93970	-.00865	8.0496	-.01035	-.02553	-.00003
#4	7.8807	.93769	-.00364	7.9737	-.00922	-.01774	.01053
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	-.02271	2.6468	-.00660	.08766	-.00211	-.04735	-.00132
SDev	.02117	.0331	.01746	.00027	.00020	.04508	.00008
%RSD	93.225	1.2507	264.76	.30710	9.2376	95.200	5.9074
#1	-.04643	2.6964	-.01911	.08742	-.00194	-.03841	-.00132
#2	-.00688	2.6302	-.02120	.08801	-.00228	-.11003	-.00123

						666	947
#3	-.03457	2.6302	-.00246	.08774	-.00228	-.03842	-.00142
#4	-.00295	2.6302	.01638	.08747	-.00194	-.00254	-.00132
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	.08034
SDev	.00221
%RSD	2.7552

#1	.08349
#2	.07891
#3	.07869
#4	.08026

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGDFKS

Operator: MTW

Run Time: 07/29/00 13:54:11

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 948

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04597	1.9148	1.9870	1.2160	2.3862	.04923	159.31
SDev	.00192	.0057	.0939	.0050	.0164	.00028	.47
%RSD	4.1738	.29976	4.7274	.41173	.68749	.57203	.29552
#1	.04820	1.9069	1.8562	1.2092	2.3708	.04909	158.77
#2	.04521	1.9143	1.9831	1.2211	2.3840	.04897	159.21
#3	.04375	1.9181	2.0662	1.2162	2.4093	.04962	159.34
#4	.04672	1.9199	2.0424	1.2176	2.3805	.04922	159.91
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	.04258	.47940	.19108	.23672	4.6333	5.6005	.92936
SDev	.00396	.00117	.00221	.00130	.0182	.2408	.00790
%RSD	9.3094	.24381	1.1592	.54911	.39373	4.2992	.84988
#1	.04288	.47942	.19135	.23580	4.6138	5.8760	.92369
#2	.04597	.47797	.18917	.23580	4.6282	5.6399	.92814
#3	.03694	.47939	.19410	.23856	4.6576	5.5961	.94087
#4	.04451	.48083	.18971	.23673	4.6336	5.2900	.92477
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	38.608	4.9355	.94884	40.100	.49447	.49417	.52938
SDev	.219	.0190	.00709	.348	.01191	.00386	.00522
%RSD	.56731	.38447	.74667	.86826	2.4081	.78162	.98618
#1	38.441	4.9134	.94383	39.868	.49943	.49223	.52681
#2	38.474	4.9285	.95886	39.983	.50048	.49996	.52671
#3	38.921	4.9577	.94383	40.618	.50133	.49222	.52680
#4	38.595	4.9426	.94884	39.934	.47665	.49227	.53721
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	1.9106	H20.765	1.9317	1.3868	.92839	1.8152	.48138
SDev	.0246	.106	.0044	.0091	.00527	.0746	.00237
%RSD	1.2889	.50927	.22557	.65508	.56738	4.1099	.49333
#1	1.9333	H20.657	1.9307	1.3785	.92239	1.8959	.48253
#2	1.9254	H20.735	1.9369	1.3851	.92779	1.8362	.47782

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#3	1.8780	H20.910	1.9265	1.3998	.93523	1.7165	.48254
#4	1.9056	H20.759	1.9328	1.3840	.92813	1.8122	.48263
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 .47359
SDev .00286
%RSD .60297

#1 .46956
#2 .47624
#3 .47466
#4 .47389

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DGDFKD

Operator: MTW

Run Time: 07/29/00 13:57:25

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 950

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04561	1.9295	1.9977	1.2320	2.4113	.04945	161.48
SDev	.00143	.0049	.0189	.0174	.0141	.00015	.27
%RSD	3.1366	.25472	.94719	1.4155	.58615	.31415	.16426
#1	.04521	1.9330	1.9710	1.2232	2.3915	.04924	161.80
#2	.04675	1.9252	2.0145	1.2581	2.4229	.04961	161.61
#3	.04376	1.9254	1.9987	1.2232	2.4111	.04949	161.24
#4	.04673	1.9345	2.0066	1.2232	2.4198	.04949	161.29
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	.04098	.48331	.19163	.23949	4.6892	5.7077	.94454
SDev	.00349	.00245	.00171	.00075	.0071	.3859	.00721
%RSD	8.5300	.50776	.89057	.31231	.15159	6.7611	.76355
#1	.03804	.48655	.19355	.23857	4.6802	6.2609	.93429
#2	.03884	.48080	.19246	.24040	4.6973	5.6836	.95042
#3	.04581	.48365	.18971	.23949	4.6884	5.4387	.94489
#4	.04121	.48223	.19080	.23949	4.6911	5.4474	.94858
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	39.230	4.9972	.96638	40.878	.48589	.50976	.48146
SDev	.120	.0070	.01043	.313	.02046	.01476	.01809
%RSD	.30494	.13995	1.0793	.76568	4.2103	2.8961	3.7572
#1	39.100	4.9939	.95386	40.450	.49827	.53122	.46313
#2	39.373	5.0070	.96889	41.123	.45644	.50773	.47318
#3	39.172	4.9909	.96388	40.840	.48774	.50007	.50532
#4	39.276	4.9970	.97891	41.100	.50110	.50000	.48420
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	1.9809	H20.989	1.8913	1.4024	.93760	1.8179	.48297
SDev	.0790	.036	.0384	.0073	.00359	.0441	.00421
%RSD	3.9873	.17276	2.0284	.51721	.38261	2.4265	.87060
#1	1.8741	H20.988	1.8448	1.3924	.93320	1.7643	.47773
#2	2.0640	H21.024	1.9011	1.4093	.94165	1.8119	.48802

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#3	1.9849	H20.940	1.9368	1.4020	.93658	1.8716	.48292
#4	2.0007	H21.006	1.8824	1.4057	.93895	1.8239	.48321
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 .47802
SDev .00329
%RSD .68864

#1 .48159
#2 .47987
#3 .47439
#4 .47624

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DGDFKP5 RERUN ZN Operator: MTW
 Run Time: 07/29/00 14:05:44
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

666 952

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00147	.01069	.00002	.04528	.10165	.00010	33.071
SDev	.00142	.00821	.02943	.00521	.00054	.00008	.040
%RSD	96.578	76.814	155490.	11.496	.52780	74.467	.12242
#1	-.00038	.00134	.02487	.04575	.10211	.00004	33.122
#2	.00258	.01436	-.03867	.04369	.10211	.00004	33.055
#3	.00258	.02007	-.00699	.05207	.10109	.00017	33.080
#4	.00110	.00700	.02086	.03959	.10130	.00017	33.026
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	-.00211	-.00111	-.00165	.00144	.75850	1.2006	.00169
SDev	.00369	.00441	.00176	.00119	.00264	.5786	.00063
%RSD	175.13	396.32	106.75	82.636	.34814	48.192	36.981
#1	-.00375	-.00361	-.00014	.00189	.76106	1.6686	.00176
#2	-.00439	-.00504	-.00288	.00097	.75696	.59263	.00167
#3	.00341	.00494	-.00014	.00282	.75559	1.7210	.00244
#4	-.00370	-.00075	-.00343	.00006	.76038	.82007	.00091
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	7.9407	.93442	-.00239	8.0397	-.00577	-.00022	.00264
SDev	.0188	.00050	.00251	.0122	.01009	.02582	.00533
%RSD	.23624	.05384	104.75	.15215	175.08	11947.	202.04
#1	7.9607	.93467	.00137	8.0473	.00730	-.01778	.01063
#2	7.9276	.93467	-.00364	8.0505	-.01689	-.01784	-.00008
#3	7.9524	.93467	-.00364	8.0232	-.00888	.03691	-.00004
#4	7.9220	.93367	-.00364	8.0378	-.00459	-.00215	.00003
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	-.02371	2.4090	-.00453	.08758	-.00228	.03926	-.00130
SDev	.03729	.0058	.01878	.00018	.00068	.06050	.00005
%RSD	157.27	.23921	414.22	.20747	29.630	154.11	3.8824
#1	-.03853	2.4075	.02056	.08774	-.00330	.11689	-.00122
#2	-.01086	2.4135	-.02334	.08742	-.00194	-.01445	-.00133

Analysis Report

07/29/00 02:08:50 PM

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						668	953
#3	.02078	2.4135	-.00246	.08774	-.00194	-.00257	-.00132
#4	-.06622	2.4015	-.01290	.08742	-.00194	.05715	-.00133
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	.00214
SDev	.00121
%RSD	56.802

#1	.00249
#2	.00044
#3	.00333
#4	.00230

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-9

Operator: MTW

Run Time: 07/29/00 14:08:53

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

666 954

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.99086	49.799	5.1044	4.9557	4.9029	5.0451	51.773
SDev	.00434	.241	.0717	.0248	.0360	.0266	.263
%RSD	.43775	.48394	1.4054	.50089	.73343	.52794	.50727
#1	.99396	49.865	5.1697	4.9601	4.9069	5.0619	52.074
#2	.98470	49.493	5.0393	4.9212	4.8640	5.0126	51.606
#3	.99094	50.073	5.0454	4.9805	4.9498	5.0713	51.507
#4	.99384	49.763	5.1631	4.9608	4.8910	5.0348	51.905
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	5.0987	5.0210	5.0073	4.9060	51.671	48.961	4.7497
SDev	.0319	.0187	.0126	.0377	.184	.158	.0506
%RSD	.62585	.37236	.25108	.76751	.35561	.32241	1.0650
#1	5.1255	5.0448	5.0219	4.9070	51.840	49.149	4.7444
#2	5.0765	5.0008	4.9934	4.8665	51.423	48.948	4.7079
#3	5.0661	5.0135	5.0011	4.9565	51.776	48.983	4.8222
#4	5.1266	5.0249	5.0126	4.8941	51.647	48.764	4.7243
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	50.282	4.9613	4.9802	49.742	5.0869	5.0272	5.0741
SDev	.271	.0200	.0469	.406	.0557	.0292	.0282
%RSD	.53819	.40222	.94199	.81558	1.0952	.58079	.55535
#1	50.371	4.9817	5.0240	49.600	5.1671	5.0064	5.0985
#2	49.943	4.9353	4.9138	49.463	5.0397	5.0677	5.0768
#3	50.589	4.9575	4.9890	50.344	5.0630	5.0053	5.0340
#4	50.227	4.9706	4.9939	49.560	5.0778	5.0293	5.0873
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	5.0758	5.1679	5.0144	4.9605	4.9246	9.8408	5.0098
SDev	.0891	.0317	.0331	.0312	.0220	.0876	.0230
%RSD	1.7560	.61348	.65930	.62870	.44705	.89034	.45972
#1	5.0397	5.1982	5.0573	4.9703	4.9374	9.8209	5.0288
#2	4.9832	5.1374	4.9883	4.9251	4.8955	9.8854	4.9766

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#3	5.0870	5.1921	5.0235	4.9983	4.9452	9.9292	5.0206
#4	5.1934	5.1439	4.9883	4.9485	4.9202	9.7275	5.0132
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 4.9643
SDev .0179
%RSD .36121

#1 4.9806
#2 4.9421
#3 4.9576
#4 4.9771

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB9

Operator: MTW

Run Time: 07/29/00 14:12:02

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

666 956

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00037	.00649	.01381	.00816	.00038	.00049	.11766
SDev	.00193	.00232	.02605	.01614	.00023	.00017	.01406
%RSD	514.24	35.752	188.61	197.85	59.560	34.242	11.947
#1	-.00036	.00879	.04548	.00985	.00046	.00042	.13338
#2	.00262	.00691	.00979	-.00307	.00025	.00055	.12555
#3	-.00187	.00326	-.01783	.03034	.00016	.00030	.10742
#4	.00111	.00702	.01780	-.00450	.00067	.00070	.10430
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	-.00007	-.00107	.00027	.00069	.00256	.18369	.00024
SDev	.00216	.00137	.00176	.00088	.00323	.36908	.00048
%RSD	3295.8	127.94	642.06	127.70	125.86	200.92	200.92
#1	-.00136	-.00214	.00205	.00183	.00171	-.08091	.00088
#2	.00317	-.00215	.00151	-.00000	.00171	.70635	.00031
#3	-.00104	-.00071	-.00123	.00092	-.00035	-.07217	.00003
#4	-.00104	.00072	-.00123	.00000	.00718	.18151	-.00026
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	.01034	.00025	-.00250	.00488	-.00348	-.01559	.00268
SDev	.01241	.00050	.00250	.00123	.00692	.04854	.02015
%RSD	120.00	200.05	100.00	25.191	199.00	311.27	752.97
#1	.00000	.00050	-.00376	.00579	-.00865	-.01753	.03193
#2	.01103	.00050	-.00376	.00534	.00547	.03690	.00013
#3	.02758	-.00050	.00125	.00307	-.00150	-.07980	-.01064
#4	.00276	.00050	-.00376	.00534	-.00923	-.00195	-.01071
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	.01088	.08277	-.01773	.00085	-.00017	.02088	.00058
SDev	.02759	.02966	.02562	.00000	.00058	.01499	.00295
%RSD	253.49	35.835	144.48	.00000	341.56	71.802	510.28
#1	-.00098	.12643	-.04839	.00085	.00042	.02387	.00243
#2	.05043	.07227	-.02766	.00085	-.00025	.02386	.00368

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#3	.00692	.06016	-.00474	.00085	-.00093	.00002	-.00248
#4	-.01283	.07221	.00987	.00085	.00008	.03577	-.00133
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 .00169
SDev .00193
%RSD 114.24

#1 .00318
#2 .00315
#3 -.00088
#4 .00128

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: DH0EEB

Operator: MTW

Run Time: 07/29/00 14:17:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 660 953

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00001	.00788	-.00104	.00698	-.00002	.00007	.05173
SDev	.00223	.01216	.03189	.01045	.00024	.00007	.00280
%RSD	44303.	154.21	3068.3	149.66	1072.2	95.397	5.4043
#1	-.00335	-.00789	-.02173	-.00102	-.00035	.00004	.04858
#2	.00111	.01440	.04550	.01601	-.00005	.00017	.05154
#3	.00111	.01990	-.00610	-.00306	.00016	.00004	.05539
#4	.00111	.00512	-.02183	.01600	.00016	.00004	.05140
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	-.00053	-.00143	-.00027	.00092	.00530	.39582	-.00038
SDev	.00090	.00083	.00181	.00075	.00141	.19145	.00042
%RSD	170.22	57.875	662.67	81.679	26.650	48.367	110.45
#1	-.00006	-.00071	-.00123	-.00000	.00376	.19026	-.00074
#2	.00050	-.00214	.00151	.00183	.00650	.27773	.00023
#3	-.00117	-.00071	.00096	.00092	.00650	.53140	-.00045
#4	-.00139	-.00214	-.00233	.00092	.00444	.58389	-.00057
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	.00138	-.00025	.00000	.03258	-.00766	.00970	.01315
SDev	.00694	.00050	.00480	.00671	.00447	.03209	.01019
%RSD	503.32	200.71	605120.	20.578	58.352	330.85	77.482
#1	-.00828	-.00050	.00125	.02395	-.01028	-.01753	-.00016
#2	.00828	-.00050	-.00376	.03258	-.01225	-.01756	.01051
#3	.00276	-.00050	.00626	.04030	-.00577	.02918	.02109
#4	.00276	.00050	-.00376	.03349	-.00233	.04471	.02117
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	.02275	.12638	.02721	-.00022	-.00059	-.00899	-.00125
SDev	.02306	.00000	.01735	.00000	.00062	.02041	.00009
%RSD	101.34	.00095	63.784	.00000	104.33	226.95	7.4955
#1	.02671	.12638	.02871	-.00022	-.00127	-.01197	-.00123
#2	-.00888	.12638	.00370	-.00022	.00008	-.00004	-.00132

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#3	.02671	.12638	.03090	-.00022	-.00025	-.03589	-.00113
#4	.04648	.12638	.04551	-.00022	-.00093	.01193	-.00133
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	.00530
SDev	.00111
%RSD	20.897

#1	.00665
#2	.00531
#3	.00529
#4	.00394

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET

Sample Name: DH0EEC

Operator: MTW

Run Time: 07/29/00 14:20:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 960

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05055	1.9943	2.0696	1.0490	1.9420	.04991	L.15937
SDev	.00086	.0174	.0302	.0000	.0167	.00027	.00250
%RSD	1.7079	.87333	1.4614	.00067	.85766	.53721	1.5664
#1	.04979	1.9716	2.0937	1.0490	1.9224	.04959	L.15881
#2	.04982	2.0105	2.0972	1.0490	1.9617	.05024	L.15609
#3	.05130	1.9900	2.0498	1.0490	1.9475	.04997	L.16095
#4	.05130	2.0050	2.0378	1.0490	1.9365	.04984	L.16163
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	.04689	.50419	.20494	.24449	1.0711	L.33459	.91080
SDev	.00253	.00293	.00247	.00230	.0055	.34656	.00915
%RSD	5.3988	.58020	1.2032	.93957	.51655	103.58	1.0045
#1	.04339	.50101	.20343	.24105	1.0647	L.71510	.90093
#2	.04696	.50810	.20288	.24565	1.0757	L-.10716	.92301
#3	.04787	.50382	.20836	.24564	1.0757	L.46142	.91059
#4	.04934	.50383	.20508	.24564	1.0682	L.26898	.90867
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-.02896	.49978	.99841	L.14225	.51443	.49367	.49438
SDev	.01068	.00193	.01082	.00300	.00832	.00008	.01488
%RSD	36.886	.38644	1.0841	2.1095	1.6178	.01623	3.0096
#1	L-.02758	.49726	.98839	L.13839	.51621	.49357	.47334
#2	L-.04413	.50129	.99841	L.14203	.51742	.49377	.49437
#3	L-.02483	.50129	1.0134	L.14293	.50244	.49368	.50472
#4	L-.01931	.49927	.99340	L.14566	.52164	.49367	.50507
Errors	LC Low	LC Pass	NOCHECK	LC Low	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	2.0080	4.8470	2.0737	.98904	.97317	1.9461	.49768
SDev	.0574	.0143	.0451	.00713	.00633	.0857	.00290
%RSD	2.8598	.29404	2.1769	.72069	.65056	4.4053	.58186
#1	2.0584	4.8274	2.0069	.98075	.96463	1.8358	.49342
#2	1.9437	4.8455	2.1029	.99760	.97916	1.9311	.49986

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#3	1.9753	4.8575	2.0988	.99118	.97646	2.0387	.49892
#4	2.0544	4.8575	2.0863	.98664	.97241	1.9790	.49852
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	.49887
SDev	.00395
%RSD	.79104

#1	.49345
#2	.49905
#3	.50019
#4	.50281

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET⁷ Sample Name: DGQ67

Operator: MTW

Run Time: 07/29/00 14:23:35

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 962

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01490	3.4422	.03391	.03025	.19762	.00002	10.518
SDev	.00143	.0102	.04772	.01579	.00075	.00001	.061
%RSD	9.6052	.29709	140.75	52.208	.37676	41.940	.58276
#1	.01602	3.4287	.02210	.03790	.19669	.00001	10.483
#2	.01304	3.4510	-.01768	.03796	.19844	.00002	10.465
#3	.01452	3.4399	.09740	.00657	.19793	.00002	10.520
#4	.01602	3.4492	.03381	.03858	.19741	.00001	10.603
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	.00805	.00265	.17625	.58136	6.4142	3.3240	.00405
SDev	.00064	.00247	.00158	.00230	.0155	.3694	.00052
%RSD	7.9288	93.207	.89872	.39481	.24090	11.114	12.729
#1	.00742	.00194	.17488	.57883	6.3928	3.6280	.00437
#2	.00826	.00051	.17488	.58434	6.4229	2.7882	.00332
#3	.00885	.00623	.17763	.58159	6.4134	3.4005	.00408
#4	.00768	.00194	.17762	.58067	6.4277	3.4793	.00445
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	1.7826	.11274	.00722	13.583	.07462	.60163	.02022
SDev	.0138	.00097	.00409	.067	.00429	.00009	.05277
%RSD	.77241	.85645	56.632	.49121	5.7551	.01490	260.97
#1	1.7626	.11198	.00722	13.525	.07263	.60162	.02023
#2	1.7929	.11198	.00722	13.677	.08070	.60151	-.02224
#3	1.7847	.11299	.01223	13.582	.07431	.60169	-.01171
#4	1.7902	.11400	.00221	13.548	.07084	.60170	.09460
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	-.00090	18.509	.07890	.05428	.05019	-.01789	.00643
SDev	.04814	.118	.00713	.00013	.00042	.03098	.00253
%RSD	5361.1	.63733	9.0335	.24641	.84734	173.20	39.379
#1	.03958	18.346	.07368	.05408	.05078	.01815	.00924
#2	-.05526	18.568	.07349	.05435	.05010	-.02989	.00424

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#3	-.02760	18.508	.07980	.05435	.04977	-.00594	.00434
#4	.03968	18.616	.08865	.05435	.05010	-.05386	.00790
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 8.7028
SDev .0468
%RSD .53831

#1 8.6469
#2 8.6884
#3 8.7184
#4 8.7577

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DGQ67P5

Operator: MTW

Run Time: 07/29/00 14:26:44

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

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Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00329	.72233	.01735	.00024	.04070	.00003	2.2422
SDev	.00141	.00865	.01807	.00410	.00017	.00001	.0165
%RSD	42.917	1.1978	104.15	1725.4	.42664	19.380	.73456
#1	.00439	.73073	.02623	.00444	.04055	.00004	2.2499
#2	.00145	.71583	.02230	.00096	.04085	.00002	2.2307
#3	.00439	.72879	.03021	-.00540	.04055	.00004	2.2617
#4	.00291	.71397	-.00932	.00095	.04085	.00004	2.2266
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	-.00128	-.00039	.03580	.12059	1.3508	.73915	.00075
SDev	.00290	.00136	.00145	.00088	.0026	.20003	.00051
%RSD	227.65	348.99	4.0563	.72843	.18947	27.062	68.169
#1	-.00054	.00068	.03662	.11944	1.3508	.69760	.00023
#2	L-.00556	-.00216	.03552	.12128	1.3535	.68886	.00119
#3	.00075	.00068	.03717	.12128	1.3515	1.0213	.00119
#4	.00025	-.00075	.03388	.12036	1.3474	.54890	.00040
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	.37514	.02377	-.00105	2.8007	.00796	.12379	.02362
SDev	.00812	.00050	.00647	.0168	.00634	.03001	.02656
%RSD	2.1646	2.1195	615.68	.60009	79.707	24.244	112.45
#1	.37790	.02302	-.00356	2.7968	.00894	.10636	.06345
#2	.38341	.02402	-.00857	2.8245	.00203	.16847	.01036
#3	.36411	.02403	.00646	2.7850	.01644	.11407	.01033
#4	.37514	.02402	.00145	2.7963	.00442	.10626	.01031
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	-.03105	4.0702	.03061	.01101	.00955	.02799	.00005
SDev	.02449	.0142	.01621	.00000	.00028	.01545	.00241
%RSD	78.890	.34979	52.979	.00000	2.8903	55.170	4853.9
#1	-.01720	4.0807	.05010	.01101	.00955	.01007	-.00125
#2	-.00929	4.0808	.01436	.01101	.00921	.02198	.00366

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#3	-.03302	4.0507	.03733	.01101	.00989	.03396	-.00105
#4	-.06467	4.0687	.02063	.01101	.00955	.04596	-.00116
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	1.8567
SDev	.0054
%RSD	.29230

#1	1.8588
#2	1.8554
#3	1.8628
#4	1.8500

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGQ67S

Operator: MTW

Run Time: 07/29/00 14:29:54

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

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Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06176	5.5424	1.9518	.96677	2.1533	.05072	11.190
SDev	.00120	.0301	.0438	.00274	.0154	.00016	.057
%RSD	1.9459	.54352	2.2436	.28320	.71552	.32299	.50727
#1	.06173	5.5012	1.9344	.96269	2.1368	.05053	11.135
#2	.06178	5.5456	1.9220	.96836	2.1651	.05078	11.221
#3	.06029	5.5735	2.0170	.96835	2.1677	.05091	11.150
#4	.06323	5.5494	1.9340	.96769	2.1436	.05066	11.253
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	.04895	.48546	.39381	.90021	7.8307	3.2737	.92845
SDev	.00242	.00472	.00262	.00483	.0323	.1892	.00890
%RSD	4.9420	.97232	.66407	.53650	.41236	5.7784	.95863
#1	.05158	.48225	.39216	.89608	7.7842	3.4705	.92128
#2	.04949	.48794	.39655	.90527	7.8574	3.2256	.93344
#3	.04574	.48081	.39106	.90342	7.8458	3.0332	.93846
#4	.04898	.49082	.39546	.89609	7.8355	3.3656	.92063
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	1.8598	.60178	.96936	14.144	.60026	1.1237	.47793
SDev	.0132	.00218	.01227	.095	.00570	.0479	.02527
%RSD	.70999	.36313	1.2662	.66864	.94944	4.2629	5.2870
#1	1.8536	.59875	.95933	14.060	.59512	1.1042	.49383
#2	1.8591	.60380	.97437	14.171	.60305	1.1588	.46187
#3	1.8481	.60178	.95934	14.266	.59594	1.0652	.45150
#4	1.8785	.60280	.98439	14.080	.60694	1.1667	.50451
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	1.9625	18.376	1.9642	1.0432	1.0016	1.9159	.49093
SDev	.0210	.092	.0428	.0060	.0043	.0556	.00284
%RSD	1.0723	.50332	2.1765	.57766	.42901	2.9008	.57885
#1	1.9456	18.237	1.9893	1.0369	.99606	1.9343	.48823
#2	1.9458	18.418	2.0059	1.0478	1.0052	1.9813	.49353

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#3	1.9695	18.430	1.9098	1.0489	1.0048	1.8979	.49323
#4	1.9892	18.418	1.9518	1.0392	1.0005	1.8502	.48872
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 9.9591
SDev .0583
%RSD .58514

#1 9.8782
#2 9.9844
#3 9.9598
#4 10.014

Errors LC Pass
High 100.00
Low -.02000

Method: ~~QUANMET~~ Sample Name: DGQ67D

Operator: MTW

Run Time: 07/29/00 14:33:03

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06514	5.9339	2.0398	.98198	2.1664	.05054	11.859
SDev	.00210	.0220	.0294	.00343	.0090	.00019	.045
%RSD	3.2277	.37146	1.4400	.34924	.41623	.38582	.37958
#1	.06512	5.9150	2.0559	.97775	2.1644	.05065	11.806
#2	.06217	5.9223	2.0003	.98470	2.1615	.05037	11.852
#3	.06665	5.9650	2.0672	.98484	2.1796	.05076	11.916
#4	.06661	5.9334	2.0359	.98064	2.1600	.05038	11.863
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	.05097	.49863	.41795	.93134	9.4656	3.7920	.92814
SDev	.00345	.00298	.00366	.00362	.0327	.2520	.00568
%RSD	6.7722	.59655	.87677	.38909	.34557	6.6468	.61184
#1	.04772	.49507	.41685	.93294	9.4453	4.1178	.93421
#2	.04838	.50222	.41795	.92836	9.4426	3.6455	.92581
#3	.05306	.49789	.42289	.93570	9.5130	3.5492	.93114
#4	.05473	.49934	.41412	.92836	9.4617	3.8554	.92139
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	2.0171	.63068	.98714	14.393	.69063	1.1351	.48373
SDev	.0140	.00266	.00959	.053	.01761	.0230	.02876
%RSD	.69169	.42112	.97181	.36842	2.5500	2.0230	5.9464
#1	2.0329	.62841	.97461	14.407	.69370	1.1195	.46257
#2	2.0136	.62942	.99465	14.361	.70200	1.1586	.47316
#3	2.0219	.63447	.98464	14.461	.70195	1.1118	.52624
#4	1.9998	.63043	.99465	14.342	.66487	1.1507	.47298
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	1.9708	13.874	1.9947	1.0485	1.0203	1.9618	.49632
SDev	.0414	.076	.0412	.0044	.0043	.0798	.00310
%RSD	2.1020	.55004	2.0667	.41688	.42105	4.0658	.62486
#1	2.0172	13.807	1.9936	1.0481	1.0167	1.9769	.49358
#2	1.9222	13.814	2.0082	1.0473	1.0184	2.0127	.49772

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#3	1.9897	13.964	2.0377	1.0545	1.0265	1.8448	.50003
#4	1.9539	13.910	1.9393	1.0441	1.0197	2.0126	.49396
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 10.296
SDev .031
%RSD .29738

#1 10.256
#2 10.297
#3 10.330
#4 10.302

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DGT5C

Operator: MTW

Run Time: 07/29/00 14:36:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

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Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03202	13.229	.10423	.15344	.42530	.00064	27.972
SDev	.00142	.086	.03215	.00013	.00462	.00010	.177
%RSD	4.4474	.65050	30.845	.08334	1.0863	15.927	.63356
#1	.03314	13.154	.05923	.15337	.41993	.00077	28.202
#2	.03016	13.271	.13364	.15350	.42862	.00065	27.850
#3	.03165	13.331	.10535	.15359	.42965	.00052	28.021
#4	.03313	13.162	.11870	.15331	.42300	.00064	27.816
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	.04270	.01504	1.0573	2.2276	15.868	8.2378	.02578
SDev	.00254	.00445	.0030	.0241	.065	.3734	.00044
%RSD	5.9417	29.551	.27923	1.0838	.41151	4.5325	1.6855
#1	.04280	.02147	1.0582	2.1989	15.835	8.7189	.02577
#2	.04193	.01147	1.0555	2.2466	15.896	7.8180	.02636
#3	.04000	.01433	1.0610	2.2485	15.944	8.1416	.02531
#4	.04608	.01289	1.0544	2.2163	15.797	8.2728	.02568
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	17.080	.32762	.02617	14.116	.55109	.60802	.04087
SDev	.102	.00128	.00647	.182	.00760	.02740	.02358
%RSD	.59922	.39146	24.712	1.2903	1.3783	4.5059	57.705
#1	17.027	.32787	.03368	13.880	.54134	.64911	.04869
#2	17.141	.32788	.01866	14.260	.55935	.59431	.07021
#3	17.187	.32890	.02869	14.259	.55391	.59429	.02761
#4	16.964	.32584	.02365	14.066	.54976	.59437	.01698
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	-.01949	16.802	.11257	.11059	.21266	-.04282	.01885
SDev	.02212	.091	.01894	.00130	.00083	.07802	.00294
%RSD	113.45	.54427	16.826	1.1747	.38927	182.23	15.613
#1	-.03441	16.678	.13348	.10947	.21233	.00523	.02150
#2	-.03030	16.865	.11479	.11172	.21334	-.10278	.01620

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#3	.01333	16.877	.08746	.11172	.21334	-.11524	.01641
#4	-.02660	16.787	.11453	.10947	.21165	.04153	.02130
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	15.831
SDev	.054
%RSD	.33904

#1	15.802
#2	15.832
#3	15.906
#4	15.784

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DGT8W

Operator: MTW

Run Time: 07/29/00 14:39:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

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Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00150	3.0325	.12868	.06079	2.0006	.00050	6.1301
SDev	.00073	.0084	.02768	.00236	.0024	.00006	.0282
%RSD	48.818	.27639	21.511	3.8818	.12028	12.425	.46052
#1	.00186	3.0204	.13279	.06283	2.0009	.00047	6.0918
#2	.00186	3.0335	.14061	.05875	1.9990	.00047	6.1533
#3	.00188	3.0372	.08895	.06284	2.0038	.00046	6.1259
#4	.00040	3.0390	.15237	.05875	1.9985	.00059	6.1493
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	-.00220	.02874	.05457	.21365	2.4361	1.2071	.00473
SDev	.00188	.00179	.00053	.00053	.0059	.3687	.00064
%RSD	85.415	6.2383	.96367	.24830	.24107	30.540	13.475
#1	-.00474	.02625	.05416	.21319	2.4282	.82007	.00380
#2	-.00123	.02910	.05526	.21411	2.4398	1.5723	.00522
#3	-.00238	.02910	.05416	.21411	2.4350	.96877	.00485
#4	-.00043	.03052	.05471	.21319	2.4412	1.4674	.00505
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	1.2895	.03914	.01289	7.9483	.08447	.05291	.02902
SDev	.0166	.00051	.00480	.0114	.00734	.02727	.02018
%RSD	1.2894	1.2898	37.214	.14287	8.6854	51.530	69.531
#1	1.2744	.03939	.01665	7.9506	.08698	.01978	.03161
#2	1.3130	.03939	.01164	7.9351	.08171	.08212	.04232
#3	1.2826	.03838	.00663	7.9624	.09318	.04321	.04241
#4	1.2882	.03939	.01665	7.9451	.07600	.06654	-.00028
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	.04300	H46.127	.03316	.18851	.37708	.03729	.03662
SDev	.01977	.445	.01912	.00046	.00059	.04905	.00286
%RSD	45.984	.96561	57.654	.24235	.15523	131.55	7.8124
#1	.04496	H45.575	.05509	.18791	.37658	-.02530	.03419
#2	.06872	H46.002	.01339	.18871	.37658	.08206	.03410

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#3	.03707	H46.315	.04261	.18898	.37759	.02234	.03900
#4	.02126	H46.616	.02154	.18845	.37759	.07005	.03919
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
Avg	.82971
SDev	.00620
%RSD	.74671

#1	.82210
#2	.82724
#3	.83526
#4	.83422

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DGT9H

Operator: MTW

Run Time: 07/29/00 14:42:35

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E 666 974.

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01029	5.9084	.06048	.04714	.24328	.00009	11.421
SDev	.00186	.0232	.04083	.00002	.00102	.00008	.017
%RSD	18.133	.39279	67.506	.03919	.42019	87.565	.14885
#1	.00992	5.9340	.11380	.04715	.24415	.00015	11.422
#2	.00992	5.9061	.06248	.04714	.24394	.00002	11.427
#3	.00843	5.9153	.05051	.04715	.24313	.00002	11.438
#4	.01288	5.8782	.01515	.04711	.24189	.00015	11.398
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	.00627	.00255	.26239	6.0274	5.7619	1.8872	.00215
SDev	.00076	.00184	.00318	.0179	.0109	.2025	.00030
%RSD	12.188	72.444	1.2132	.29705	.18911	10.731	14.069
#1	.00720	.00326	.26541	6.0489	5.7698	2.1672	.00232
#2	.00565	.00469	.26486	6.0352	5.7650	1.6948	.00207
#3	.00658	.00183	.25938	6.0140	5.7671	1.8872	.00176
#4	.00563	.00040	.25992	6.0113	5.7459	1.7998	.00244
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	1.5916	.08457	.00963	3.9967	.14770	.15094	.01476
SDev	.0183	.00000	.00289	.0138	.00786	.01166	.01061
%RSD	1.1496	.00387	30.047	.34618	5.3196	7.7250	71.902
#1	1.6164	.08457	.00713	4.0156	.15504	.15677	.00956
#2	1.5888	.08457	.01213	3.9916	.13669	.14127	.00930
#3	1.5888	.08458	.01213	3.9966	.15083	.14118	.00950
#4	1.5723	.08457	.00712	3.9829	.14823	.16454	.03068
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	-.03129	17.921	.07281	.05399	.10570	-.00831	.00446
SDev	.01230	.172	.02135	.00043	.00034	.02639	.00006
%RSD	39.324	.95801	29.331	.79192	.31974	317.65	1.2481
#1	-.02534	18.147	.04825	.05435	.10621	.02445	.00441
#2	-.01744	17.924	.07957	.05435	.10553	-.02329	.00451

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#3	-.04512	17.882	.06496	.05376	.10553	.00060	.00450
#4	-.03726	17.732	.09846	.05350	.10553	-.03500	.00440
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge 2.5399
SDev .0087
%RSD .34233

#1 2.5316
#2 2.5465
#3 2.5332
#4 2.5482

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-10

Operator: MTW

Run Time: 07/29/00 14:45:44

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

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Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0148	50.488	5.2735	5.0477	4.9468	5.1395	53.807
SDev	.0050	.175	.0313	.0281	.0228	.0170	.207
%RSD	.49549	.34718	.59350	.55673	.46110	.33110	.38463
#1	1.0156	50.518	5.3037	5.0520	4.9444	5.1543	54.009
#2	1.0156	50.674	5.2668	5.0623	4.9757	5.1524	53.834
#3	1.0200	50.511	5.2326	5.0695	4.9472	5.1328	53.868
#4	1.0079	50.251	5.2910	5.0069	4.9200	5.1186	53.518
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	5.2787	5.1854	5.1728	4.9421	52.993	49.434	4.7116
SDev	.0396	.0163	.0174	.0200	.147	.261	.0211
%RSD	.74984	.31416	.33594	.40476	.27689	.52740	.44800
#1	5.3375	5.1884	5.1887	4.9421	53.101	49.508	4.7093
#2	5.2582	5.1972	5.1755	4.9697	53.054	49.744	4.7409
#3	5.2663	5.1943	5.1788	4.9339	53.042	49.359	4.7057
#4	5.2530	5.1616	5.1481	4.9228	52.776	49.123	4.6906
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	50.965	5.1094	5.1194	49.896	5.2683	5.1985	5.1937
SDev	.229	.0147	.0130	.215	.0313	.0077	.0192
%RSD	.44852	.28869	.25300	.43060	.59445	.14851	.36945
#1	51.110	5.1200	5.1244	49.790	5.2949	5.2044	5.1831
#2	51.171	5.1200	5.1144	50.197	5.2619	5.2046	5.2149
#3	50.917	5.1089	5.1344	49.893	5.2266	5.1968	5.2039
#4	50.663	5.0887	5.1043	49.704	5.2897	5.1883	5.1728
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	5.1297	H9.2051	5.2330	5.0190	5.0228	10.214	5.1344
SDev	.0686	.1429	.0218	.0200	.0158	.231	.0187
%RSD	1.3371	1.5519	.41697	.39913	.31543	2.2662	.36365
#1	5.1972	H9.3166	5.2622	5.0210	5.0249	10.081	5.1461
#2	5.1773	H9.3286	5.2372	5.0426	5.0405	10.548	5.1459

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#3	5.0903	H9.1420	5.2163	5.0187	5.0239	10.189	5.1388
#4	5.0540	H9.0332	5.2162	4.9937	5.0019	10.037	5.1069
Errors	LC Pass	LC High	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 5.1029
SDev .0126
%RSD .24715

#1 5.1152
#2 5.1120
#3 5.0946
#4 5.0897

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB10

Operator: MTW

Run Time: 07/29/00 14:48:59

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

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Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00075	.00187	.03866	-.00609	.00036	.00070	.24007
SDev	.00281	.01599	.02754	.00220	.00030	.00011	.00500
%RSD	375.82	855.80	71.237	36.119	83.991	15.446	2.0818

#1	-.00038	-.00232	.00995	-.00450	.00046	.00057	.23720
#2	.00111	.01444	.02171	-.00389	.00037	.00070	.24513
#3	.00111	.01435	.06929	-.00798	.00067	.00083	.24338
#4	-.00483	-.01900	.05370	-.00798	-.00005	.00070	.23457

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	-.00181	-.00107	-.00055	.00023	.00410	-.01531	-.00011
SDev	.00135	.00393	.00144	.00088	.00323	.28232	.00113
%RSD	74.983	368.78	263.44	385.55	78.790	1844.3	1062.5

#1	-.00004	-.00357	-.00178	-.00000	-.00034	.20775	.00031
#2	-.00146	.00358	.00096	.00092	.00650	-.11590	.00011
#3	-.00294	.00072	.00041	.00092	.00650	.21650	.00088
#4	-.00279	-.00499	-.00178	-.00092	.00376	-.36958	-.00173

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	-.01310	.00101	-.00125	.01101	-.00070	-.02530	.01594
SDev	.01764	.00058	.00647	.00548	.00569	.01108	.02527
%RSD	134.67	57.745	516.67	49.770	817.11	43.792	158.51

#1	-.01103	.00151	-.00376	.00534	-.00836	-.01754	.05310
#2	.00000	.00051	.00125	.01396	.00462	-.01742	-.00002
#3	-.00276	.00151	.00626	.01714	.00238	-.02527	.01064
#4	-.03862	.00050	-.00877	.00761	-.00142	-.04098	.00005

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	-.02668	H1.2850	.00008	.00052	-.00017	.00297	-.00128
SDev	.05560	.0936	.01723	.00026	.00032	.00595	.00013
%RSD	208.37	7.2814	22726.	49.934	191.49	200.47	9.9823

#1	.00297	H1.4084	-.00027	.00063	-.00025	.00005	-.00133
#2	.03067	H1.3061	.02453	.00031	.00008	-.00008	-.00122

Analysis Report

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#3	-.04448	H1.2218	-.01300	.00085	.00008	.01189	-.00113
#4	-.09590	H1.2037	-.01096	.00031	-.00059	.00001	-.00142

Errors	LC Pass	LC High	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	.00421
SDev	.00032
%RSD	7.6572

#1	.00451
#2	.00447
#3	.00392
#4	.00394

Errors	LC Pass
High	.02000
Low	-.02000

CG 10101
Remarked 73000

#	Sample Name	AG	AS	CD	CR	PB	SB
1	STD1	.00012	-.01072	.00217	.00251		
2	STD6	12.4924	6.43046	16.4138			
3	STD7				14.3445		
4	ICV3-1 0014-183-4	.50603	.25494	.25015	1.0209	.25274	.25286
5	ICB1	.00001	.00003	-.00025	.00006	-.00038	.00040
6	CRA-1 0014-101-1	.00020	.01054	.00213	.00972	.00300	.06210
7	ICSA 0014-170-1	.00016	.00138	.00009	.00277	.00145	.00064
8	ICSAB 0014-136-3	1.1080	1.0159	.92538	.50571	1.0059	1.0386
9	DCNR5B	-.00028	-.00034	-.00002	-.00051	.00092	.00156
10	DCNR5C	.04954	1.9720	.04741	.19994	.49774	.49261
11	DGCCW	.00007	.00109	-.00014	.00062	.00026	.00071
12	DGCCWP5	.00052	-.00007	.00003	.00014	-.00001	.00135
13	DGCCWS	.05011	1.9791	.04764	.20164	.49918	.49407
14	DGCCWD	.05006	1.9585	.04719	.19954	.49620	.47923
15	DGCD2	-.00004	.00132	.00003	.00112	.00167	.00081
16	CCV3-1 0014-183-1	1.0327	.51286	.49557	2.0420	.51232	.51402
17	CCB1	-.00002	.00049	.00000	-.00022	-.00025	.00150
18	DGCD5	.00040	.00068	.00225	.02225	.00927	.00093
19	DH0J3B	.00000	.00080	-.00004	-.00047	-.00049	-.00002
20	DH0J3C	.04901	1.9394	.04664	.19577	.48902	.48363
21	DGXN4	.00036	.00007	-.00004	.00027	.00000	.00169
22	DGXN4P5	-.00001	.00069	-.00006	-.00024	.00020	.00061
23	DGXN4S	.04940	1.9505	.04701	.19793	.49452	.48308
24	DGXN4D	.04945	1.9523	.04712	.19798	.49528	.48624
25	DGXNE	-.00009	.00185	-.00011	.00239	.00206	.00170
26	DGXNH	.00008	.00107	.00008	.00050	.00022	.00004
27	DGXNN	.00089	-.00008	-.00005	.00049	.00000	.00139
28	CCV3-2	1.0115	.50324	.48635	2.0017	.50548	.50624
29	CCB2	-.00019	-.00042	.00002	-.00051	-.00055	.00074
30	DH0CHB	.00008	.00012	.00006	.00020	.00039	.00059
31	DH0CHC	.04963	1.9822	.04715	.19969	.49512	.49418
32	DGXL3	.00157	.00417	.00077	.04920	.00031	.01211
33	DGXL3P5	-.00002	.00230	.00009	.00929	-.00016	.00401
34	DGXL3S	.05244	1.9677	.04586	.24394	.50332	.51086
35	DGXL3D	.05276	1.9918	.04611	.24507	.50770	.51667
36	DH0CCBW	.00018	.00121	-.00012	-.00014	-.00007	.00106
37	DGQ95BW	-.00012	.00092	.00002	.00023	.00008	.00117
38	DH0CCCW	.05065	2.0060	.04800	.20285	.50501	.50604
39	DS05C02CSW	.00063	.00261	-.00012	.01031	.00574	.00104
40	CCV3-3	1.0093	.50248	.48428	1.9962	.50322	.50683
41	CCB3	.00024	.00021	-.00006	-.00005	-.00039	.00250
42	DS05C02CSP5W	.00008	.00098	-.00011	.00210	.00018	.00162
43	DS05C02CSSW	.04899	1.9487	.04637	.20603	.49571	.49128
44	DS05C02CSDW	.05044	1.9934	.04754	.21384	.50658	.49802
45	DH0JRB	-.00014	.00012	.00023	.00023	H.00544	.00103
46	DH0JRC	.04713	1.9756	.04818	.19735	.48381	L.00120
47	DGXPH	.00057	.14228	.00300	9.6917	1.2454	.00830
48	DGXPHP5	.00025	.03120	.00072	2.1953	.27904	.00339
49	DGXPHS	.05011	1.9965	.04753	9.4755	1.8683	.00777
50	DGXPHD	.05160	2.0378	.05006	11.305	2.8832	.00800
51	DH0GKB	.00061	.00126	.00013	.00311	.00075	.00139
52	CCV3-4	1.0190	.50992	.49107	2.0272	.50839	.51368
53	CCB4	.00027	-.00001	.00000	.00066	.00034	.00081

#	Sample Name	AG	AS	CD	CR	PB	SB
54	DH0GKC	.04990	2.0142	.04998	.20722	.50438	.49925
55	DGFPG	.00050	.01844	.00118	.03614	.07694	.00310
56	DGFPGP5	-.00017	.00350	.00020	.00693	.01538	.00175
57	DGFPGS	.04842	1.9206	.04873	.24563	.56002	.43094
58	DGFPGD	.04744	1.9039	.04861	.23958	.54264	.42296
59	DGFPJ	-.00007	.00925	.00020	.03164	.03319	.00322
60	DGFFPM	-.00047	.00882	.00186	.02128	.08038	.00266
61	DGFFPN	.00002	.01515	.00029	.05234	.07591	.00347
62	DGFPP	-.00033	.02139	-.00002	.07835	.04924	.00308
63	DGFPR	-.00015	.00613	.00155	.01786	.04908	.00074
64	CCV3-5	1.0067	.50262	.48442	2.0015	.50011	.50734
65	CCB5	.00001	.00131	.00009	-.00010	.00025	.00124
66	DGRVEB	-.00007	-.00015	.00000	-.00032	.00003	.00073
67	DGRVEC	.04404	1.7883	.04443	.18469	.44528	L.00131
68	DGDJO	.00022	.01504	.00017	.15101	.02630	.00244
69	DGDJOP5	.00013	.00382	.00001	.03940	.00628	.00148
70	DGDJOS	.02295	.82114	.01792	.10960	.19038	.00180
71	DGDJOD	.02240	.81130	.01765	.10476	.19767	.00224
72	DGDJT	.00035	.03187	.00085	.08604	.07527	.00212
73	DGDK2	.00098	.02022	.00030	.07668	.03823	.00344
74	DGDK5	L-.26245	L-.10393	L-.00847	L-.19164	.51372	.21150

#	Sample Name	SE	TL	666	981
1	STD1		-.04841		
2	STD6		4.79359		
3	STD7				
4	ICV3-1 0014-183-4	.25450	.51825		
5	ICB1	-.00083	-.00021		
6	CRA-1 0014-101-1	.00459	-.00045		
7	ICSA 0014-170-1	-.00785	.00094		
8	ICSAB 0014-136-3	1.0277	1.0637		
9	DCNR5B	-.00019	-.00105		
10	DCNR5C	1.9845	2.0612		
11	DGCCW	-.00024	.00073		
12	DGCCWP5	-.00092	-.00048		
13	DGCCWS	1.9877	2.0547		
14	DGCCWD	1.9813	2.0360		
15	DGCD2	.00023	.00192		
16	CCV3-1 0014-183-1	.52377	1.0388		
17	CCB1	-.00111	.00177		
18	DGCD5	.00144	.00913		
19	DH0J3B	-.00001	.00122		
20	DH0J3C	1.9675	2.0055		
21	DGXN4	-.00119	.00126		
22	DGXN4P5	-.00114	.00061		
23	DGXN4S	1.9843	2.0256		
24	DGXN4D	1.9849	2.0279		
25	DGXNE	-.00019	.00297		
26	DGXNH	.00054	-.00040		
27	DGXNN	-.00022	-.00250		
28	CCV3-2	.51518	1.0182		
29	CCB2	-.00073	.00136		

#	Sample Name	SE	TL	666	982
30	DH0CHB	-.00107	.00129		
31	DH0CHC	2.0088	2.0546		
32	DGXL3	.00080	.00793		
33	DGXL3P5	.00020	.00351		
34	DGXL3S	2.0526	2.1355		
35	DGXL3D	2.0750	2.1619		
36	DH0CCBW	.00031	.00362		
37	DGQ95BW	-.00013	.00355		
38	DH0CCCW	2.0408	2.0736		
39	DS05C02CSW	.00040	.00026		
40	CCV3-3	.51390	1.0177		
41	CCB3	-.00166	.00269		
42	DS05C02CSP5W	-.00066	.00050		
43	DS05C02CSSW	1.9856	2.0286		
44	DS05C02CSDW	2.0116	2.0828		
45	DH0JRB	.00080	.00408		
46	DH0JRC	2.0577	1.9356		
47	DGXPB	-.00389	.01621		
48	DGXPBP5	-.00052	.00537		
49	DGXPBS	1.8833	1.9283		
50	DGXPBD	1.9445	1.9420		
51	DH0GKB	-.00100	.00343		
52	CCV3-4	.52186	1.0345		
53	CCB4	.00002	.00283		
54	DH0GKC	2.0431	2.0082		
55	DGFPG	.00075	.00331		
56	DGFPGP5	-.00022	.00092		
57	DGFPGS	1.9240	1.9639		
58	DGFPGD	1.9001	1.9413		
59	DGFPJ	.00120	.00348		
60	DGFPM	.00074	.00005		
61	DGFPN	.00010	-.00036		
62	DGFPP	-.00073	.00274		
63	DGFPR	.00147	.00333		
64	CCV3-5	.51365	1.0237		
65	CCB5	-.00140	-.00025		
66	DGRVEB	-.00084	.00291		
67	DGRVEC	1.7645	1.7822		
68	DGDJO	-.00003	.02233		
69	DGDJOP5	-.00221	.01106		
70	DGDJOS	.74505	.84251		
71	DGDJOD	.75509	.83369		
72	DGDJT	-.00361	.01451		
73	DGDK2	-.00357	.02482		
74	DGDK5	.15860	L-.72266		

R6 73000 666 983

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	T00730A	METTRA	07/30/00	11:03		X	IR
2	STD6	T00730A	METTRA	07/30/00	11:07		X	IR
3	STD7	T00730A	METTRA	07/30/00	11:11		X	IR
4	ICV3-1 0014-183-4	T00730A	METTRA	07/30/00	11:15	RJG	S	CONC
5	ICB1	T00730A	METTRA	07/30/00	11:19	RJG	S	CONC
6	CRA-1 0014-101-1	T00730A	METTRA	07/30/00	11:23	RJG	S	CONC
7	ICSA 0014-170-1	T00730A	METTRA	07/30/00	11:27	RJG	Q	CONC
8	ICSAB 0014-136-3	T00730A	METTRA	07/30/00	11:31	RJG	Q	CONC
9	DCNR5B	T00730A	METTRA	07/30/00	11:38	RJG	S	CONC
10	DCNR5C	T00730A	METTRA	07/30/00	11:42	RJG	S	CONC
11	DGCCW	T00730A	METTRA	07/30/00	11:46	RJG	S	CONC
12	DGCCWP5	T00730A	METTRA	07/30/00	11:50	RJG	S	CONC
13	DGCCWS	T00730A	METTRA	07/30/00	11:54	RJG	S	CONC
14	DGCCWD	T00730A	METTRA	07/30/00	11:58	RJG	S	CONC
15	DGCD2	T00730A	METTRA	07/30/00	12:03	RJG	S	CONC
16	CCV3-1 0014-183-1	T00730A	METTRA	07/30/00	12:07	RJG	S	CONC
17	CCB1	T00730A	METTRA	07/30/00	12:11	RJG	S	CONC
18	DGCD5	T00730A	METTRA	07/30/00	12:15	RJG	S	CONC
19	DH0J3B	T00730A	METTRA	07/30/00	12:19	RJG	S	CONC
20	DH0J3C	T00730A	METTRA	07/30/00	12:23	RJG	S	CONC
21	DGXN4	T00730A	METTRA	07/30/00	12:27	RJG	S	CONC
22	DGXN4P5	T00730A	METTRA	07/30/00	12:32	RJG	S	CONC
23	DGXN4S	T00730A	METTRA	07/30/00	12:36	RJG	S	CONC
24	DGXN4D	T00730A	METTRA	07/30/00	12:40	RJG	S	CONC
25	DGXNE	T00730A	METTRA	07/30/00	12:44	RJG	S	CONC
26	DGXNH	T00730A	METTRA	07/30/00	12:48	RJG	S	CONC
27	DGXNN	T00730A	METTRA	07/30/00	12:52	RJG	S	CONC
28	CCV3-2	T00730A	METTRA	07/30/00	12:56	RJG	S	CONC
29	CCB2	T00730A	METTRA	07/30/00	13:01	RJG	S	CONC
30	DH0CHB	T00730A	METTRA	07/30/00	13:05	RJG	S	CONC
31	DH0CHC	T00730A	METTRA	07/30/00	13:09	RJG	S	CONC
32	DGXL3	T00730A	METTRA	07/30/00	13:13	RJG	S	CONC
33	DGXL3P5	T00730A	METTRA	07/30/00	13:17	RJG	S	CONC
34	DGXL3S	T00730A	METTRA	07/30/00	13:21	RJG	S	CONC
35	DGXL3D	T00730A	METTRA	07/30/00	13:26	RJG	S	CONC
36	DH0CCBW	T00730A	METTRA	07/30/00	13:30	RJG	S	CONC
37	DGQ95BW	T00730A	METTRA	07/30/00	13:34	RJG	S	CONC
38	DH0CCCW	T00730A	METTRA	07/30/00	13:38	RJG	S	CONC
39	DS05C02CSW	T00730A	METTRA	07/30/00	13:42	RJG	S	CONC
40	CCV3-3	T00730A	METTRA	07/30/00	13:46	RJG	S	CONC
41	CCB3	T00730A	METTRA	07/30/00	13:50	RJG	S	CONC
42	DS05C02CSP5W	T00730A	METTRA	07/30/00	13:55	RJG	S	CONC
43	DS05C02CSSW	T00730A	METTRA	07/30/00	13:59	RJG	S	CONC
44	DS05C02CSDW	T00730A	METTRA	07/30/00	14:03	RJG	S	CONC
45	DH0JRB	T00730A	METTRA	07/30/00	14:07	RJG	S	CONC
46	DH0JRC	T00730A	METTRA	07/30/00	14:11	RJG	S	CONC
47	DGXPH	T00730A	METTRA	07/30/00	14:15	RJG	S	CONC
48	DGXPHP5	T00730A	METTRA	07/30/00	14:19	RJG	S	CONC
49	DGXPHS	T00730A	METTRA	07/30/00	14:24	RJG	S	CONC
50	DGXPHD	T00730A	METTRA	07/30/00	14:28	RJG	S	CONC
51	DH0GKB	T00730A	METTRA	07/30/00	14:32	RJG	S	CONC
52	CCV3-4	T00730A	METTRA	07/30/00	14:36	RJG	S	CONC
53	CCB4	T00730A	METTRA	07/30/00	14:40	RJG	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	DH0GKC	T00730A	METTRA	07/30/00	14:44	RJG	S	CONC
55	DGFPG	T00730A	METTRA	07/30/00	14:49	RJG	S	CONC
56	DGFPGP5	T00730A	METTRA	07/30/00	14:53	RJG	S	CONC
57	DGFPGS	T00730A	METTRA	07/30/00	14:57	RJG	S	CONC
58	DGFPGD	T00730A	METTRA	07/30/00	15:01	RJG	S	CONC
59	DGF PJ	T00730A	METTRA	07/30/00	15:05	RJG	S	CONC
60	DGFPM	T00730A	METTRA	07/30/00	15:09	RJG	S	CONC
61	DGF PN	T00730A	METTRA	07/30/00	15:13	RJG	S	CONC
62	DGFPP	T00730A	METTRA	07/30/00	15:18	RJG	S	CONC
63	DGFPR	T00730A	METTRA	07/30/00	15:22	RJG	S	CONC
64	CCV3-5	T00730A	METTRA	07/30/00	15:26	RJG	S	CONC
65	CCB5	T00730A	METTRA	07/30/00	15:30	RJG	S	CONC
66	DGRVEB	T00730A	METTRA	07/30/00	15:40	RJG	S	CONC
67	DGRVEC	T00730A	METTRA	07/30/00	15:44	RJG	S	CONC
68	DGDJ0	T00730A	METTRA	07/30/00	15:48	RJG	S	CONC
69	DGDJ0P5	T00730A	METTRA	07/30/00	15:52	RJG	S	CONC
70	DGDJ0S	T00730A	METTRA	07/30/00	15:57	RJG	S	CONC
71	DGDJ0D	T00730A	METTRA	07/30/00	16:01	RJG	S	CONC
72	DGDJT	T00730A	METTRA	07/30/00	16:05	RJG	S	CONC
73	DGDK2	T00730A	METTRA	07/30/00	16:09	RJG	S	CONC
74	DGDK5	T00730A	METTRA	07/30/00	16:13	RJG	S	CONC

666 984

Method: METTRA Standard: STD1

Run Time: 07/30/00 11:03:04

666 985

Elem	AG	AL	AS	BA	BE	CA	CD
Avg	.00013	.11940	-.01073	.00118	-.07684	.00449	.00217
SDev	.00407	.01091	.01046	.00019	.00080	.00024	.00641
%RSD	3175.8	9.1376	97.444	15.843	1.0346	5.2920	294.98
#1	.00301	.12711	-.00334	.00105	-.07628	.00432	.00671
#2	-.00275	.11168	-.01812	.00131	-.07740	.00465	-.00236
Elem	CO	CR	CU	FE	MG	MN	MO
Avg	-.00102	.00252	.01590	-.00075	-.00000	.00203	.00196
SDev	.00023	.00199	.00199	.00051	.00065	.00018	.00055
%RSD	22.937	78.886	12.510	67.535	152900.	8.9937	28.159
#1	-.00085	.00393	.01449	-.00111	.00046	.00216	.00236
#2	-.00118	.00111	.01730	-.00039	-.00046	.00190	.00157
Elem	NI	PB/1	PB/2	SB/1	SB/2	SE/1	SE/2
Avg	.00036	.03433	-.00284	-.05991	.00619	-.13405	.10395
SDev	.00097	.02936	.00801	.01066	.00274	.01194	.00064
%RSD	270.33	85.525	281.60	17.800	44.265	8.9044	.62076
#1	.00105	.05508	-.00850	-.06745	.00425	-.12561	.10349
#2	-.00033	.01357	.00282	-.05237	.00813	-.14249	.10441
Elem	TL	V_	ZN				
Avg	-.04842	.00046	.00003				
SDev	.00656	.00056	.00005				
%RSD	13.544	121.18	141.42				
#1	-.05306	.00085	.00007				
#2	-.04378	.00007	.00000				

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15272	--	--	--	--	--	--
SDev	19.97577	--	--	--	--	--	--
%RSD	.1308027	--	--	--	--	--	--
#1	15286	--	--	--	--	--	--
#2	15258	--	--	--	--	--	--

668 986

Method: METTRA Standard: STD6
 Run Time: 07/30/00 11:07:14

0014.165.1

666

987

Elem	AG	AS	CD	PB/1	PB/2	SB/1	SB/2
Avge	12.492	6.4305	16.414	6.6214	8.4779	10.970	7.6132
SDev	.008	.0010	.007	.0232	.0512	.067	.0170
%RSD	.06181	.01593	.04046	.35068	.60361	.61309	.22358

#1	12.498	6.4312	16.409	6.6050	8.4417	10.923	7.6012
#2	12.487	6.4297	16.418	6.6379	8.5141	11.018	7.6253

Elem	SE/1	SE/2	TL
Avge	6.2057	6.0140	4.7936
SDev	.0333	.0534	.0127
%RSD	.53713	.88749	.26494

#1	6.1821	5.9762	4.8026
#2	6.2293	6.0517	4.7846

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15327	--	--	--	--	--	--
SDev	57.48764	--	--	--	--	--	--
%RSD	.3750658	--	--	--	--	--	--

#1	15368	--	--	--	--	--	--
#2	15287	--	--	--	--	--	--

Method: METTRA Standard: STD7
 Run Time: 07/30/00 11:11:25

0014-1652

666 988

Elem	AL	BA	BE	CA	CO	CR	CU
Avge	7.9542	15.076	14.193	5.6252	3.6477	14.344	3.9566
SDev	.0286	.069	.019	.0104	.0006	.011	.0126
%RSD	.35959	.45601	.13357	.18472	.01707	.07734	.31897
#1	7.9339	15.028	14.180	5.6178	3.6473	14.337	3.9477
#2	7.9744	15.125	14.207	5.6325	3.6482	14.352	3.9655
Elem	FE	MG	MN	MO	NI	V	ZN
Avge	4.9029	16.421	12.185	2.6796	2.9883	.96884	3.6384
SDev	.0075	.039	.018	.0067	.0019	.00221	.0029
%RSD	.15285	.23680	.14593	.25076	.06440	.22854	.08073
#1	4.8976	16.393	12.172	2.6748	2.9869	.96728	3.6363
#2	4.9082	16.448	12.197	2.6843	2.9896	.97041	3.6405
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15263	--	--	--	--	--	--
SDev	111.0862	--	--	--	--	--	--
%RSD	.7277922	--	--	--	--	--	--
#1	15185	--	--	--	--	--	--
#2	15342	--	--	--	--	--	--

Method: METTRA

Slope = Conc(SIR)/IR

663 989

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD6	STD1	.160099	-.000021	07/30/00 11:11:25
AL	308.215	STD7	STD1	6.39750	-.763842	07/30/00 11:11:25
AS	189.042	STD6	STD1	.155251	.001666	07/30/00 11:11:25
BA	493.409	STD7	STD1	.265337	-.000313	07/30/00 11:11:25
BE	313.042	STD7	STD1	.278097	.021370	07/30/00 11:11:25
CA	317.933	STD7	STD1	17.7914	-.079805	07/30/00 11:11:25
CD	226.502	STD6	STD1	.060933	-.000132	07/30/00 11:11:25
CO	228.616	STD7	STD1	1.09626	.001113	07/30/00 11:11:25
CR	267.716	STD7	STD1	.278764	-.000702	07/30/00 11:11:25
CU	324.753	STD7	STD1	1.01505	-.016136	07/30/00 11:11:25
FE	271.441	STD7	STD1	10.2699	.007730	07/30/00 11:11:25
MG	279.078	STD7	STD1	6.08993	.000003	07/30/00 11:11:25
MN	257.610	STD7	STD1	.328340	-.000666	07/30/00 11:11:25
MO	202.030	STD7	STD1	1.49387	-.002934	07/30/00 11:11:25
NI	231.604	STD7	STD1	1.33784	-.000481	07/30/00 11:11:25
PB/1	220.351	STD6	STD1	.151811	-.005211	07/30/00 11:11:25
PB/2	220.352	STD6	STD1	.117914	.000335	07/30/00 11:11:25
PB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SB/1	206.831	STD6	STD1	.090662	.005431	07/30/00 11:11:25
SB/2	206.832	STD6	STD1	.131457	-.000814	07/30/00 11:11:25
SB	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
SE/1	196.021	STD6	STD1	.157735	.021144	07/30/00 11:11:25
SE/2	196.022	STD6	STD1	.169204	-.017589	07/30/00 11:11:25
SE	220.353	NONE	NONE	.000000	.000000	*NOT STANDARDIZED
TL	190.864	STD6	STD1	.413051	.019999	07/30/00 11:11:25
V	292.402	STD7	STD1	4.11256	-.001884	07/30/00 11:11:25
ZN	213.856	STD7	STD1	1.10630	-.000036	07/30/00 11:11:25

Method: METTRA Sample Name: ICV3-1.0014-183-4 Operator: RJG

Run Time: 07/30/00 11:15:05

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
Ave	.50604	11.936	.25494	.99808	1.0063	25.448	.25016
SDev	.00283	.054	.00352	.00306	.0223	.627	.00327
%RSD	.55974	.45244	1.3798	.30683	2.2183	2.4639	1.3082
#1	.50804	11.974	.25743	1.0002	1.0221	25.891	.25247
#2	.50404	11.898	.25245	.99591	.99054	25.005	.24784
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
Ave	1.0165	1.0209	.97126	12.447	24.171	.99357	1.0239
SDev	.0054	.0051	.00848	.010	.295	.00620	.0046
%RSD	.52645	.49768	.87309	.07960	1.2185	.62358	.44856
#1	1.0203	1.0245	.97725	12.454	24.379	.99795	1.0271
#2	1.0127	1.0173	.96526	12.440	23.962	.98919	1.0206
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
Ave	1.0341	.25514	.25156	.25275	.25680	.25090	.25287
SDev	.0421	.00401	.00658	.00572	.00843	.00029	.00261
%RSD	4.0687	1.5702	2.6164	2.2648	3.2848	.11629	1.0339
#1	1.0639	.25797	.25621	.25680	.26276	.25070	.25472
#2	1.0044	.25231	.24690	.24870	.25083	.25111	.25102
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	
Ave	.25205	.25573	.25451	.51826	1.0153	1.0491	
SDev	.00177	.00443	.00237	.01365	.0278	.0215	
%RSD	.70100	1.7334	.93061	2.6330	2.7351	2.0471	
#1	.25080	.25887	.25618	.52791	1.0349	1.0642	
#2	.25330	.25260	.25283	.50861	.99565	1.0339	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.27500	.55000	1.1000	1.1000	
Low			.22500	.45000	.90000	.90000	

666 990

						666	991
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15418	--	--	--	--	--	--
SDev	19.51587	--	--	--	--	--	--
%RSD	.1265826	--	--	--	--	--	--
#1	15431	--	--	--	--	--	--
#2	15404	--	--	--	--	--	--

Method: METTRA 00 Sample Name: ICB1

Operator: RJG

Run Time: 07/30/00 11:19:15

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

666 992

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00001	-.05186	.00003	.00025	.00001	.00373	-.00026
SDev	.00015	.00722	.00002	.00012	.00023	.00373	.00016
%RSD	1310.1	13.926	66.683	47.574	2776.1	99.886	61.350

#1	.00012	-.04676	.00002	.00017	-.00015	.00110	-.00015
#2	-.00009	-.05697	.00005	.00034	.00017	.00637	-.00037

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00007	.00007	.00158	-.01383	.00280	.00024	.00271
SDev	.00005	.00016	.00003	.01227	.00112	.00012	.00093
%RSD	66.607	235.65	2.0787	88.754	39.928	49.228	34.283

#1	.00010	.00018	.00156	-.00515	.00201	.00016	.00337
#2	.00004	-.00005	.00160	-.02251	.00359	.00032	.00205

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	.00049	.00125	-.00121	-.00039	-.00249	.00185	.00041
SDev	.00063	.00006	.00114	.00078	.00085	.00076	.00022
%RSD	128.51	4.9109	94.463	200.19	34.037	40.982	55.137

#1	.00093	.00129	-.00040	.00016	-.00309	.00239	.00057
#2	.00004	.00120	-.00201	-.00094	-.00189	.00132	.00025

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	.00072	-.00161	-.00083	-.00021	.00001	.00025
SDev	.00246	.00101	.00015	.00071	.00231	.00011
%RSD	341.75	62.584	17.555	334.84	29272.	41.731

#1	-.00102	-.00090	-.00094	-.00072	.00164	.00018
#2	.00246	-.00232	-.00073	.00029	-.00162	.00033

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

						668	993
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15226	--	--	--	--	--	--
SDev	73.04469	--	--	--	--	--	--
%RSD	.4797459	--	--	--	--	--	--
#1	15174	--	--	--	--	--	--
#2	15277	--	--	--	--	--	--

Method: METTRA Sample Name: CRA-1 0014-101-1 Operator: RJG
 Run Time: 07/30/00 11:23:24
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

666 994

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00021	.13626	.01054	.19859	.00496	5.0204	.00213
SDev	.00060	.00458	.00076	.00008	.00006	.0130	.00024
%RSD	291.09	3.3600	7.1720	.04166	1.1581	.25800	11.379
#1	-.00022	.13302	.01108	.19853	.00500	5.0113	.00196
#2	.00063	.13950	.01001	.19865	.00492	5.0296	.00230
Errors	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	LC Pass
High			.01500				.00300
Low			.00500				.00100
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00001	.00972	.02600	.08089	4.7372	.01495	.00038
SDev	.00060	.00053	.00045	.00327	.0150	.00020	.00053
%RSD	9561.8	5.4824	1.7200	4.0474	.31654	1.3102	140.03
#1	-.00042	.00934	.02568	.07858	4.7266	.01481	.00075
#2	.00043	.01010	.02632	.08321	4.7478	.01509	.00000
Errors	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High		.01500					
Low		.00500					
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04321	.00356	.00272	.00300	.06014	.06309	.06210
SDev	.00073	.00055	.00107	.00089	.00211	.00014	.00079
%RSD	1.6807	15.345	39.142	29.749	3.5096	.21539	1.2776
#1	.04269	.00394	.00348	.00363	.05864	.06299	.06154
#2	.04372	.00317	.00197	.00237	.06163	.06318	.06267
Errors	NOCHECK	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High				.00450			.09000
Low				.00150			.03000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00506	.00436	.00460	-.00045	-.00118	.02108	
SDev	.00228	.00143	.00019	.00023	.00020	.00034	
%RSD	44.961	32.759	4.2378	51.731	16.503	1.6306	
#1	.00667	.00335	.00446	-.00029	-.00132	.02084	
#2	.00345	.00537	.00473	-.00062	-.00105	.02132	
Errors	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	
High			.00750				
Low			.00250				

666

995

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15328	--	--	--	--	--	--
SDev	103.0608	--	--	--	--	--	--
%RSD	.6723707	--	--	--	--	--	--
#1	15401	--	--	--	--	--	--
#2	15255	--	--	--	--	--	--

Method: METTRA Sample Name: ICSA 0014-170-1 Operator: RJG

Run Time: 07/30/00 11:27:33

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP 666 996

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00017	514.35	.00138	.00176	-.00112	480.53	.00009
SDev	.00037	3.75	.00131	.00014	.00029	3.83	.00047
%RSD	223.26	.73002	94.755	7.9473	25.867	.79694	501.57

#1	-.00010	511.69	.00231	.00166	-.00091	477.83	-.00024
#2	.00043	517.00	.00046	.00186	-.00132	483.24	.00043

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	.00020	.00278	.00152	201.74	519.26	.00793	-.00233
SDev	.00145	.00109	.00067	1.83	4.17	.00009	.00187
%RSD	716.13	39.365	43.854	.90702	.80338	1.1417	80.254

#1	-.00082	.00200	.00105	200.44	516.31	.00787	-.00101
#2	.00123	.00355	.00200	203.03	522.21	.00800	-.00365

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	.00322	-.02817	.01624	.00145	-.00354	.00273	.00064
SDev	.00061	.00063	.00058	.00017	.00305	.00011	.00109
%RSD	19.074	2.2470	3.5533	11.976	86.102	4.0747	169.17

#1	.00279	-.02862	.01665	.00158	-.00138	.00281	.00141
#2	.00366	-.02772	.01584	.00133	-.00570	.00265	-.00013

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	.00365	-.01360	-.00786	.00095	.00565	.00419
SDev	.00195	.00074	.00016	.00265	.00009	.00000
%RSD	53.464	5.4049	2.0234	279.57	1.6346	.06092

#1	.00227	-.01308	-.00797	-.00093	.00558	.00419
#2	.00503	-.01412	-.00775	.00282	.00572	.00419

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value						
Range						

						660	997
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14645	--	--	--	--	--	--
SDev	127.2440	--	--	--	--	--	--
%RSD	.8688340	--	--	--	--	--	--
#1	14735	--	--	--	--	--	--
#2	14555	--	--	--	--	--	--

Method: METTRA

Sample Name: ICSAB 0014-136-3

Operator: RJG

Run Time: 07/30/00 11:31:43

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

666 998

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.1080	525.21	1.0159	.53148	.49201	488.92	.92538
SDev	.0028	.89	.0018	.00117	.00193	2.40	.00377
%RSD	.24874	.16871	.17395	.22049	.39145	.49181	.40690
#1	1.1100	525.83	1.0172	.53231	.49337	490.62	.92805
#2	1.1061	524.58	1.0147	.53065	.49065	487.22	.92272
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	.49555	.50572	.55305	206.11	528.61	.51169	.98295
SDev	.00134	.00203	.00123	.53	1.75	.00162	.00286
%RSD	.26987	.40161	.22164	.25712	.33065	.31737	.29072
#1	.49649	.50716	.55392	206.49	529.84	.51284	.98093
#2	.49460	.50428	.55218	205.74	527.37	.51054	.98497
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	.99733	1.0033	1.0072	1.0059	1.0351	1.0404	1.0386
SDev	.00416	.0063	.0094	.0084	.0080	.0070	.0073
%RSD	.41670	.62856	.93345	.83218	.77057	.66895	.70267
#1	1.0003	1.0078	1.0138	1.0118	1.0407	1.0453	1.0438
#2	.99439	.99887	1.0005	.99996	1.0295	1.0355	1.0335
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	1.0339	1.0277	1.0637	.51309	1.0596	
SDev	.0069	.0089	.0082	.0076	.00419	.0044	
%RSD	.67985	.85852	.79974	.71431	.81577	.41865	
#1	1.0201	1.0402	1.0335	1.0584	.51604	1.0627	
#2	1.0103	1.0276	1.0219	1.0691	.51013	1.0565	
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	

666

999

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y 377	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	14529	--	--	--	--	--	--
SDev	91.81823	--	--	--	--	--	--
%RSD	.6319685	--	--	--	--	--	--
#1	14464	--	--	--	--	--	--
#2	14594	--	--	--	--	--	--

Method: METTRA⁶ Sample Name: D2NR5B Operator: RJG
 Run Time: 07/30/00 11:38:09 ²⁶¹³⁰⁰
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

666 1000

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00028	-.02785	-.00034	-.00007	-.00022	.04081	-.00003
SDev	.00083	.00555	.00089	.00007	.00011	.00460	.00027
%RSD	295.12	19.937	260.67	93.017	46.842	11.273	1052.9

#1	.00031	-.02392	.00029	-.00003	-.00030	.04406	.00017
#2	-.00087	-.03177	-.00097	-.00012	-.00015	.03756	-.00022

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00063	-.00051	.00102	.00748	.01637	-.00018	.00015
SDev	.00058	.00022	.00012	.00992	.00627	.00002	.00006
%RSD	91.987	43.250	11.351	132.66	38.306	9.3853	38.489

#1	-.00022	-.00035	.00110	.01449	.02080	-.00017	.00011
#2	-.00104	-.00067	.00093	.00046	.01193	-.00019	.00019

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	.00080	.00099	.00093	.00128	.00171	.00157
SDev	.00026	.00052	.00098	.00048	.00030	.00235	.00166
%RSD	17.687	65.281	98.702	51.825	23.342	137.17	106.21

#1	.00163	.00116	.00030	.00059	.00149	.00337	.00274
#2	.00127	.00043	.00168	.00127	.00107	.00005	.00039

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	-.00430	.00186	-.00019	-.00106	-.00013	.00121
SDev	.00008	.00098	.00063	.00437	.00249	.00023
%RSD	1.8652	52.801	329.50	413.98	1985.6	19.320

#1	-.00435	.00255	.00025	-.00415	.00163	.00137
#2	-.00424	.00116	-.00063	.00204	-.00188	.00104

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

666 1001

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15268	--	--	--	--	--	--
SDev	60.84640	--	--	--	--	--	--
%RSD	.3985152	--	--	--	--	--	--
#1	15225	--	--	--	--	--	--
#2	15311	--	--	--	--	--	--

Method: METTRA

Sample Name: D2NR5C

Operator: RJG

Run Time: 07/30/00 11:42:18

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

666 1002

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04955	1.9693	1.9720	1.9741	.04927	50.495	.04741
SDev	.00004	.0081	.0123	.0064	.00028	.289	.00028
%RSD	.07537	.41168	.62385	.32568	.56814	.57250	.58135
#1	.04952	1.9750	1.9807	1.9786	.04947	50.699	.04761
#2	.04957	1.9636	1.9633	1.9695	.04907	50.291	.04722
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	.49977	.19994	.24686	.90688	49.281	.49093	1.0031
SDev	.00270	.00004	.00049	.00361	.208	.00175	.0003
%RSD	.54106	.02019	.19712	.39848	.42138	.35597	.02965
#1	.50168	.19997	.24720	.90943	49.428	.49217	1.0029
#2	.49786	.19992	.24651	.90432	49.134	.48970	1.0034
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	.49956	.50581	.49372	.49775	.48983	.49401	.49262
SDev	.00643	.00057	.00345	.00249	.00259	.00180	.00034
%RSD	1.2876	.11181	.69956	.50067	.52919	.36533	.06914
#1	.50411	.50621	.49617	.49951	.48800	.49529	.49286
#2	.49501	.50541	.49128	.49599	.49166	.49273	.49238
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	1.9756	1.9888	1.9845	2.0612	.49330	.51391	
SDev	.0068	.0071	.0070	.0205	.00191	.00277	
%RSD	.34585	.35800	.35397	.99439	.38619	.53886	
#1	1.9805	1.9939	1.9894	2.0756	.49464	.51587	
#2	1.9708	1.9838	1.9795	2.0467	.49195	.51196	
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	

666 1003

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y1000	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15607	--	--	--	--	--	--
SDev	24.78395	--	--	--	--	--	--
%RSD	.1587985	--	--	--	--	--	--
#1	15590	--	--	--	--	--	--
#2	15625	--	--	--	--	--	--

Method: METTRAC Sample Name: DGCCW

Operator: RJG

Run Time: 07/30/00 11:46:26

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

666 1004

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00007	.24821	.00109	.03701	-.00020	13.250	-.00014
SDev	.00010	.00422	.00037	.00005	.00001	.004	.00008
%RSD	140.84	1.7019	33.684	.14220	7.2931	.03251	54.620

#1	.00000	.25120	.00083	.03698	-.00021	13.253	-.00020
#2	.00015	.24523	.00135	.03705	-.00019	13.247	-.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	.00156	.00062	.00217	.56838	2.5267	.06213	.00207
SDev	.00003	.00018	.00029	.00368	.0011	.00001	.00063
%RSD	1.6698	29.313	13.475	.64781	.04167	.01764	30.345

#1	.00158	.00075	.00196	.56578	2.5274	.06213	.00251
#2	.00154	.00049	.00238	.57099	2.5259	.06212	.00162

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	.00282	.00340	-.00129	.00027	-.00104	.00160	.00072
SDev	.00062	.00040	.00031	.00007	.00232	.00054	.00041
%RSD	21.984	11.688	23.775	26.951	223.57	33.844	57.457

#1	.00326	.00312	-.00108	.00032	.00060	.00121	.00101
#2	.00239	.00368	-.00151	.00022	-.00268	.00198	.00043

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00391	.00158	-.00024	.00073	-.00062	.00696
SDev	.00048	.00027	.00002	.00063	.00000	.00009
%RSD	12.359	17.005	7.6626	85.537	.11357	1.3071

#1	-.00356	.00139	-.00026	.00029	-.00062	.00690
#2	-.00425	.00177	-.00023	.00117	-.00062	.00702

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

666 1005

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15386	--	--	--	--	--	--
SDev	28.56739	--	--	--	--	--	--
%RSD	.1856713	--	--	--	--	--	--
#1	15366	--	--	--	--	--	--
#2	15406	--	--	--	--	--	--

Method: METTRA

Sample Name: DGCCWPS

Operator: RJG

Run Time: 07/30/00 11:50:35

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

666 1006

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00053	.00737	-.00007	.00729	-.00021	2.6388	.00004
SDev	.00111	.01072	.00028	.00002	.00023	.0051	.00003
%RSD	210.42	145.45	387.37	.23870	109.99	.19470	85.890

#1	.00131	.01495	-.00027	.00730	-.00036	2.6424	.00006
#2	-.00026	-.00021	.00013	.00728	-.00005	2.6352	.00001

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00067	.00014	.00111	.11662	.50357	.01230	.00031
SDev	.00047	.00066	.00039	.00973	.00536	.00009	.00018
%RSD	70.583	469.91	35.339	8.3464	1.0654	.70893	58.566

#1	.00101	.00061	.00139	.12350	.50736	.01236	.00018
#2	.00034	-.00033	.00083	.10974	.49977	.01224	.00043

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00204	.00201	-.00103	-.00002	-.00030	.00219	.00136
SDev	.00112	.00236	.00064	.00121	.00041	.00200	.00120
%RSD	55.137	117.26	61.942	6295.7	134.16	91.356	88.183

#1	.00283	.00368	-.00058	.00084	-.00059	.00360	.00220
#2	.00124	.00034	-.00149	-.00088	-.00002	.00077	.00051

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00012	-.00133	-.00093	-.00049	.00083	.00091
SDev	.00164	.00160	.00162	.00037	.00266	.00005
%RSD	1342.8	120.74	174.55	76.657	320.09	5.4659

#1	.00104	-.00019	.00022	-.00075	.00271	.00087
#2	-.00129	-.00246	-.00207	-.00022	-.00105	.00094

						666	1007
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15438	--	--	--	--	--	--
SDev	121.7280	--	--	--	--	--	--
%RSD	.7884871	--	--	--	--	--	--
#1	15352	--	--	--	--	--	--
#2	15524	--	--	--	--	--	--

Method: METTRAC

Sample Name: DGCCWS

Operator: RJG

Run Time: 07/30/00 11:54:44

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

666 1008

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05012	2.4829	1.9791	2.0197	.04951	62.253	.04765
SDev	.00046	.0020	.0012	.0033	.00003	.087	.00032
%RSD	.91877	.07954	.06124	.16449	.06962	.13900	.68195
#1	.04979	2.4843	1.9782	2.0220	.04953	62.192	.04788
#2	.05045	2.4815	1.9800	2.0173	.04948	62.315	.04742
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	.50164	.20165	.24977	1.4843	50.319	.55573	1.0051
SDev	.00022	.00053	.00059	.0042	.043	.00018	.0043
%RSD	.04373	.26202	.23402	.28222	.08630	.03291	.43116
#1	.50148	.20127	.24936	1.4813	50.288	.55560	1.0020
#2	.50179	.20202	.25019	1.4873	50.349	.55586	1.0082
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	.50356	.50566	.49596	.49919	.49441	.49391	.49408
SDev	.00320	.00225	.00042	.00103	.00175	.00254	.00111
%RSD	.63653	.44399	.08535	.20632	.35429	.51526	.22550
#1	.50130	.50408	.49566	.49846	.49565	.49211	.49329
#2	.50583	.50725	.49625	.49992	.49317	.49571	.49486
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	1.9611	2.0009	1.9877	2.0547	.49709	.51870
SDev	.0056	.0033	.0041	.0040	.00130	.00115
%RSD	.28702	.16616	.20586	.19417	.26157	.22185
#1	1.9571	1.9986	1.9848	2.0576	.49617	.51788
#2	1.9651	2.0033	1.9906	2.0519	.49801	.51951
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

666 1009

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15387	--	--	--	--	--	--
SDev	28.42583	--	--	--	--	--	--
%RSD	.1847345	--	--	--	--	--	--
#1	15408	--	--	--	--	--	--
#2	15367	--	--	--	--	--	--

Method: METTRA

Sample Name: DGCCWD

Operator: RJG

Run Time: 07/30/00 11:58:52

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACE ICP 666. 1010

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05006	2.4851	1.9585	1.9946	.04943	62.121	.04719
SDev	.00041	.0053	.0072	.0022	.00018	.307	.00020
%RSD	.82361	.21131	.36627	.10874	.36970	.49494	.42758
#1	.05035	2.4814	1.9636	1.9961	.04956	62.338	.04705
#2	.04977	2.4888	1.9535	1.9930	.04930	61.903	.04733
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	.49644	.19954	.24831	1.4854	50.139	.54906	.97523
SDev	.00061	.00091	.00020	.0001	.155	.00172	.00004
%RSD	.12283	.45543	.08081	.00966	.30963	.31296	.00446
#1	.49687	.20018	.24845	1.4855	50.248	.55028	.97520
#2	.49601	.19890	.24817	1.4853	50.029	.54785	.97526
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	.49824	.49943	.49459	.49621	.48479	.47647	.47924
SDev	.00280	.01206	.00113	.00326	.00304	.00774	.00415
%RSD	.56275	2.4147	.22841	.65746	.62680	1.6240	.86583
#1	.50022	.50796	.49380	.49851	.48264	.48194	.48217
#2	.49626	.49091	.49539	.49390	.48694	.47100	.47631
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	1.9437	2.0001	1.9813	2.0360	.49176	.51841	
SDev	.0276	.0008	.0086	.0053	.00407	.00178	
%RSD	1.4218	.04212	.43611	.26138	.82750	.34421	
#1	1.9633	1.9995	1.9875	2.0397	.49464	.51967	
#2	1.9242	2.0007	1.9752	2.0322	.48888	.51714	
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	

666 1011

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15608	--	--	--	--	--	--
SDev	40.34100	--	--	--	--	--	--
%RSD	.2584623	--	--	--	--	--	--
#1	15580	--	--	--	--	--	--
#2	15637	--	--	--	--	--	--

Method: METTRA3 Sample Name: DGCD2

Operator: RJG

Run Time: 07/30/00 12:03:01

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

666 1012

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00005	.65015	.00132	.04705	.00004	16.350	.00004
SDev	.00043	.00290	.00035	.00010	.00014	.024	.00020
%RSD	946.37	.44650	26.707	.22019	342.65	.14943	526.52
#1	-.00035	.64810	.00107	.04712	.00014	16.367	-.00010
#2	.00026	.65220	.00157	.04698	-.00006	16.333	.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	.00215	.00112	.01163	1.0972	3.0633	.11791	.00168
SDev	.00000	.00053	.00023	.0133	.0034	.00008	.00005
%RSD	.14912	47.383	1.9434	1.2111	.11109	.06796	3.2357
#1	.00214	.00075	.01147	1.0878	3.0657	.11786	.00172
#2	.00215	.00150	.01179	1.1066	3.0609	.11797	.00164
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	.00518	.00201	.00150	.00167	-.00027	.00136	.00081
SDev	.00063	.00096	.00216	.00112	.00002	.00211	.00141
%RSD	12.222	47.575	143.82	67.164	5.5512	155.25	173.25
#1	.00473	.00133	.00303	.00247	-.00028	-.00013	-.00018
#2	.00563	.00269	-.00003	.00088	-.00026	.00285	.00181
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00183	.00127	.00024	.00192	.00024	.01927	
SDev	.00142	.00015	.00058	.00169	.00020	.00005	
%RSD	77.984	12.166	240.77	87.954	83.400	.23965	
#1	-.00283	.00116	-.00017	.00073	.00010	.01930	
#2	-.00082	.00138	.00065	.00312	.00038	.01924	
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	

666 1013

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15372	--	--	--	--	--	--
SDev	47.58815	--	--	--	--	--	--
%RSD	.3095849	--	--	--	--	--	--
#1	15405	--	--	--	--	--	--
#2	15338	--	--	--	--	--	--

Analysis Report

07/30/00 12:11:15 PM

page 1

Method: METTRA

Sample Name: CCV3-1 0014-183-1

Operator: RJG

Run Time: 07/30/00 12:07:09

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

666 1014

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0327	24.247	.51286	2.0052	2.0454	51.088	.49558
SDev	.0043	.068	.00204	.0060	.0098	.294	.00254
%RSD	.41581	.28216	.39700	.29785	.48068	.57611	.51269
#1	1.0358	24.296	.51430	2.0094	2.0523	51.296	.49737
#2	1.0297	24.199	.51142	2.0010	2.0384	50.880	.49378
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.0427	2.0420	1.9649	25.076	49.588	2.0144	2.0471
SDev	.0083	.0091	.0072	.089	.207	.0086	.0000
%RSD	.40871	.44413	.36751	.35616	.41799	.42676	.00194
#1	2.0486	2.0485	1.9700	25.139	49.735	2.0204	2.0470
#2	2.0368	2.0356	1.9598	25.013	49.442	2.0083	2.0471
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	2.0450	.51307	.51196	.51233	.52028	.51091	.51403
SDev	.0142	.00241	.00069	.00035	.00098	.00269	.00147
%RSD	.69391	.47017	.13394	.06751	.18880	.52706	.28578
#1	2.0551	.51136	.51245	.51208	.51959	.51281	.51507
#2	2.0350	.51477	.51148	.51257	.52098	.50900	.51299
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	.51731	.52700	.52377	1.0388	2.0390	2.0726	
SDev	.00091	.00418	.00249	.0014	.0103	.0101	
%RSD	.17510	.79354	.47496	.13482	.50514	.48949	
#1	.51667	.52995	.52553	1.0378	2.0463	2.0797	
#2	.51795	.52404	.52201	1.0398	2.0318	2.0654	
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	

666 1015

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15360	--	--	--	--	--	--
SDev	40.41074	--	--	--	--	--	--
%RSD	.2630878	--	--	--	--	--	--
#1	15332	--	--	--	--	--	--
#2	15389	--	--	--	--	--	--

Method: METTRA Sample Name: CCB1

Operator: RJG

Run Time: 07/30/00 12:11:18

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

666 1016

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00002	-.04845	.00050	.00033	.00059	.00325	.00000
SDev	.00006	.00698	.00016	.00007	.00023	.00291	.00013
%RSD	283.47	14.402	31.863	20.970	38.807	89.501	11775.

#1	.00002	-.04351	.00038	.00028	.00043	.00119	.00009
#2	-.00006	-.05338	.00061	.00038	.00075	.00531	-.00009

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	-.00003	-.00023	.00056	-.00899	.00156	.00016	.00361
SDev	.00013	.00004	.00005	.00692	.00055	.00013	.00090
%RSD	479.58	15.622	9.3896	76.892	34.950	80.223	24.985

#1	-.00012	-.00025	.00053	-.00410	.00117	.00007	.00425
#2	.00006	-.00020	.00060	-.01388	.00194	.00026	.00297

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	.00089	.00123	-.00100	-.00026	.00034	.00209	.00150
SDev	.00001	.00305	.00105	.00031	.00067	.00077	.00029
%RSD	.56110	247.04	104.84	121.06	199.67	36.948	19.279

#1	.00089	-.00092	-.00026	-.00048	.00081	.00154	.00130
#2	.00088	.00339	-.00175	-.00004	-.00014	.00263	.00171

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	.00130	-.00231	-.00111	.00177	-.00110	.00026
SDev	.00061	.00164	.00089	.00167	.00001	.00013
%RSD	47.327	70.991	80.222	94.570	.48608	47.794

#1	.00087	-.00115	-.00048	.00059	-.00109	.00017
#2	.00174	-.00347	-.00174	.00295	-.00110	.00035

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

666 1017

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15636	--	--	--	--	--	--
SDev	57.87642	--	--	--	--	--	--
%RSD	.3701467	--	--	--	--	--	--
#1	15595	--	--	--	--	--	--
#2	15677	--	--	--	--	--	--

Method: METTRA Sample Name: DGCD5

Operator: RJG

Run Time: 07/30/00 12:15:27

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

666 1018

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Ave	.00040	51.392	.00069	.01045	.01058	106.28	.00226
SDev	.00037	.443	.00076	.00015	.00015	.52	.00007
%RSD	91.782	.86146	109.99	1.4123	1.4238	.48543	3.1103
#1	.00014	51.079	.00122	.01035	.01069	105.91	.00221
#2	.00067	51.705	.00015	.01055	.01048	106.64	.00231
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	.14512	.02225	.09623	13.362	38.113	6.2524	-.00087
SDev	.00153	.00030	.00103	.067	.256	.0386	.00011
%RSD	1.0538	1.3546	1.0738	.49808	.67254	.61812	12.409
#1	.14404	.02204	.09550	13.315	37.932	6.2250	-.00080
#2	.14620	.02247	.09696	13.409	38.294	6.2797	-.00095
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	.31533	.00599	.01092	.00928	.00339	-.00030	.00093
SDev	.00301	.00330	.00355	.00127	.00028	.00182	.00130
%RSD	.95585	55.115	32.495	13.673	8.2422	615.18	140.18
#1	.31320	.00365	.01343	.01018	.00319	-.00158	.00001
#2	.31746	.00832	.00841	.00838	.00359	.00099	.00185
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	-.00339	.00387	.00145	.00914	.00056	.56097	
SDev	.00087	.00168	.00083	.00322	.00070	.00377	
%RSD	25.523	43.300	57.156	35.267	124.49	.67135	
#1	-.00401	.00505	.00204	.01142	.00007	.55830	
#2	-.00278	.00268	.00086	.00686	.00106	.56363	
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	

666 1019

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16661	--	--	--	--	--	--
SDev	150.0130	--	--	--	--	--	--
%RSD	.9004042	--	--	--	--	--	--
#1	16767	--	--	--	--	--	--
#2	16555	--	--	--	--	--	--

Method: METTRA

Sample Name: DH0J3B

Operator: RJG

Run Time: 07/30/00 12:19:36

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Ave	.00000	-.03242	.00080	.00021	-.00005	.02950	-.00005
SDev	.00071	.00287	.00081	.00005	.00001	.00750	.00010
%RSD	98612.	8.8459	100.61	23.172	23.372	25.411	218.91

#1	-.00050	-.03445	.00137	.00018	-.00006	.02420	-.00012
#2	.00050	-.03040	.00023	.00025	-.00004	.03480	.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
Ave	-.00042	-.00048	.00071	.00411	-.00079	.00083	-.00007
SDev	.00025	.00048	.00004	.00431	.00616	.00049	.00048
%RSD	59.636	99.904	6.2595	104.99	784.05	58.555	704.45

#1	-.00060	-.00081	.00068	.00716	-.00514	.00049	-.00041
#2	-.00024	-.00014	.00074	.00106	.00357	.00117	.00027

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
Ave	.00087	-.00074	-.00038	-.00050	-.00009	.00000	-.00003
SDev	.00019	.00407	.00314	.00074	.00314	.00209	.00035
%RSD	21.494	549.42	827.83	148.41	3595.8	101580.	1261.3

#1	.00074	-.00362	.00184	.00002	.00214	-.00148	-.00028
#2	.00100	.00214	-.00260	-.00102	-.00231	.00148	.00022

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
Ave	-.00143	.00069	-.00001	.00123	-.00188	.00212
SDev	.00535	.00275	.00005	.00573	.00491	.00000
%RSD	373.41	396.38	346.54	466.53	261.51	.11160

#1	-.00522	.00264	.00002	-.00282	-.00535	.00212
#2	.00235	-.00125	-.00005	.00528	.00160	.00212

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

P901 P10

666 1021

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15382	--	--	--	--	--	--
SDev	19.16232	--	--	--	--	--	--
%RSD	.1245770	--	--	--	--	--	--
#1	15395	--	--	--	--	--	--
#2	15368	--	--	--	--	--	--

Method: METTRA Sample Name: DH0J3C 666 1022 Operator: RJG
 Run Time: 07/30/00 12:23:46
 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	.04902	1.9046	1.9394	1.9190	.04903	49.325	.04665
SDev	.00045	.0034	.0053	.0007	.00025	.218	.00033
%RSD	.91346	.17720	.27118	.03799	.51528	.44103	.70136
#1	.04933	1.9069	1.9432	1.9195	.04921	49.478	.04688
#2	.04870	1.9022	1.9357	1.9185	.04885	49.171	.04642

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	.48842	.19577	.23857	.86286	47.551	.47860	.97563
SDev	.00255	.00082	.00061	.00184	.125	.00124	.00097
%RSD	.52283	.41929	.25483	.21295	.26374	.25882	.09996
#1	.49023	.19635	.23900	.86416	47.640	.47948	.97494
#2	.48662	.19519	.23814	.86156	47.463	.47772	.97632

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	.48822	.49563	.48573	.48903	.48654	.48219	.48364
SDev	.00137	.00137	.00023	.00061	.00219	.00088	.00131
%RSD	.28046	.27735	.04755	.12510	.45043	.18196	.27189
#1	.48919	.49661	.48589	.48946	.48809	.48281	.48457
#2	.48725	.49466	.48556	.48859	.48499	.48157	.48271

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	1.9430	1.9797	1.9675	2.0055	.48651	.51108
SDev	.0019	.0027	.0024	.0028	.00146	.00077
%RSD	.09999	.13529	.12368	.13764	.30104	.15023
#1	1.9444	1.9816	1.9692	2.0036	.48755	.51163
#2	1.9417	1.9778	1.9658	2.0075	.48548	.51054

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

666 1023

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15777	--	--	--	--	--	--
SDev	77.11055	--	--	--	--	--	--
%RSD	.4887428	--	--	--	--	--	--
#1	15723	--	--	--	--	--	--
#2	15832	--	--	--	--	--	--

Method: METTRA Sample Name: DGXN4

Operator: RJG

Run Time: 07/30/00 12:27:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

666 1024

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	-.02079	.00007	.00035	.00007	.05984	-.00005
SDev	.00002	.00404	.00040	.00010	.00007	.00157	.00000
%RSD	5.3182	19.457	544.78	28.165	105.93	2.6248	3.4013
#1	.00035	-.01793	-.00021	.00028	.00002	.05873	-.00005
#2	.00038	-.02364	.00036	.00042	.00012	.06095	-.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
Avg	-.00039	.00027	.00055	.01370	.01179	.00065	.00136
SDev	.00013	.00005	.00020	.00746	.00438	.00002	.00045
%RSD	34.276	16.662	35.505	54.411	37.126	3.3655	33.185
#1	-.00049	.00024	.00069	.00843	.00870	.00063	.00104
#2	-.00030	.00030	.00041	.01897	.01489	.00066	.00168
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	.00073	.00237	-.00117	.00001	-.00092	.00300	.00169
SDev	.00012	.00136	.00000	.00045	.00270	.00049	.00122
%RSD	15.761	57.624	.28537	7717.2	293.31	16.158	72.171
#1	.00065	.00333	-.00117	.00033	-.00283	.00266	.00083
#2	.00081	.00140	-.00117	-.00031	.00099	.00334	.00256
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	-.00067	-.00145	-.00119	.00126	.00184	.00936	
SDev	.00086	.00088	.00087	.00239	.00036	.00006	
%RSD	128.73	60.249	73.068	189.41	19.310	.63991	
#1	-.00128	-.00207	-.00181	.00296	.00159	.00940	
#2	-.00006	-.00083	-.00058	-.00043	.00209	.00931	
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	

666 1025

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15479	--	--	--	--	--	--
SDev	96.16652	--	--	--	--	--	--
%RSD	.6212528	--	--	--	--	--	--
#1	15411	--	--	--	--	--	--
#2	15547	--	--	--	--	--	--

Method: METTRA

Sample Name: DGXN4P5

Operator: RJG

Run Time: 07/30/00 12:32:04

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

666 1026

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00002	-.03827	.00069	.00001	.00023	.01177	-.00007
SDev	.00009	.00658	.00052	.00002	.00003	.00184	.00007
%RSD	622.34	17.184	75.507	144.11	14.098	15.636	107.67

#1	.00005	-.03362	.00032	.00003	.00021	.01047	-.00012
#2	-.00008	-.04292	.00106	-.00000	.00026	.01307	-.00002

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00025	-.00025	-.00001	-.01521	-.00311	.00005	-.00060
SDev	.00044	.00001	.00022	.00353	.00002	.00003	.00100
%RSD	173.11	4.0707	3081.2	23.227	.62585	53.318	167.33

#1	.00006	-.00026	-.00016	-.01271	-.00313	.00003	-.00130
#2	-.00056	-.00024	.00015	-.01771	-.00310	.00007	.00011

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00003	.00303	-.00120	.00021	.00170	.00008	.00062
SDev	.00024	.00097	.00091	.00028	.00025	.00110	.00065
%RSD	759.17	31.946	75.512	135.08	14.771	1401.9	105.21

#1	-.00014	.00371	-.00184	.00001	.00187	-.00070	.00016
#2	.00020	.00234	-.00056	.00041	.00152	.00085	.00108

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00092	-.00217	-.00114	.00062	-.00123	.00175
SDev	.00145	.00190	.00079	.00141	.00018	.00004
%RSD	158.54	87.753	68.822	228.03	14.660	2.1034

#1	-.00011	-.00082	-.00059	.00161	-.00136	.00178
#2	.00194	-.00351	-.00170	-.00038	-.00110	.00173

666 1027

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15638	--	--	--	--	--	--
SDev	97.79273	--	--	--	--	--	--
%RSD	.6253372	--	--	--	--	--	--
#1	15569	--	--	--	--	--	--
#2	15708	--	--	--	--	--	--

Method: METTRA Sample Name: DGXN4S

Operator: RJG

Run Time: 07/30/00 12:36:13

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
Avge	.04941	1.9412	1.9505	1.9325	.04938	49.507	.04701
SDev	.00032	.0081	.0075	.0040	.00003	.141	.00019
%RSD	.65303	.41700	.38698	.20696	.06461	.28401	.39582
#1	.04963	1.9469	1.9558	1.9353	.04940	49.607	.04714
#2	.04918	1.9355	1.9452	1.9296	.04936	49.408	.04688
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	.49354	.19793	.24055	.89536	47.635	.48410	.98176
SDev	.00024	.00105	.00045	.01066	.085	.00147	.00093
%RSD	.04943	.52921	.18736	1.1901	.17895	.30408	.09522
#1	.49371	.19867	.24087	.90289	47.696	.48514	.98242
#2	.49337	.19719	.24023	.88782	47.575	.48306	.98110
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	.49637	.50036	.49161	.49453	.48799	.48063	.48308
SDev	.00047	.00107	.00130	.00122	.00404	.00013	.00126
%RSD	.09501	.21470	.26451	.24773	.82689	.02765	.25980
#1	.49671	.50112	.49253	.49539	.49084	.48054	.48397
#2	.49604	.49960	.49069	.49366	.48514	.48073	.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	1.9502	2.0012	1.9843	2.0256	.48907	.51296
SDev	.0108	.0116	.0113	.0092	.00046	.00021
%RSD	.55574	.57946	.57170	.45204	.09453	.04095
#1	1.9579	2.0094	1.9923	2.0320	.48874	.51311
#2	1.9425	1.9930	1.9762	2.0191	.48939	.51281
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	15603	--	--	--	--	--	--
SDev	14.81403	--	--	--	--	--	--
%RSD	.0949421	--	--	--	--	--	--
#1	15593	--	--	--	--	--	--
#2	15614	--	--	--	--	--	--

Method: METTRA Sample Name: DGXN4D

Operator: RJG

Run Time: 07/30/00 12:40:22

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	.04945	1.9579	1.9523	1.9317	.04930	49.183	.04712
SDev	.00006	.0215	.0157	.0159	.00037	.416	.00016
%RSD	.11450	1.0977	.80275	.82388	.74597	.84624	.33782
#1	.04941	1.9427	1.9412	1.9204	.04904	48.889	.04701
#2	.04949	1.9731	1.9634	1.9429	.04956	49.477	.04723
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	.49305	.19799	.24148	.90033	47.275	.48406	.98496
SDev	.00370	.00140	.00180	.01840	.411	.00418	.01069
%RSD	.75046	.70559	.74539	2.0434	.87023	.86319	1.0848
#1	.49044	.19700	.24021	.88732	46.984	.48110	.97741
#2	.49567	.19898	.24275	.91334	47.566	.48701	.99252
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	.49383	.50295	.49145	.49528	.48925	.48474	.48624
SDev	.00400	.00084	.00175	.00144	.00047	.00217	.00129
%RSD	.81027	.16600	.35540	.29135	.09678	.44800	.26546
#1	.49100	.50236	.49022	.49426	.48959	.48320	.48533
#2	.49666	.50354	.49269	.49630	.48892	.48627	.48715
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	1.9474	2.0036	1.9849	2.0279	.48662	.51449	
SDev	.0049	.0017	.0028	.0156	.00424	.00462	
%RSD	.25241	.08630	.14057	.76953	.87245	.89719	
#1	1.9439	2.0024	1.9829	2.0169	.48362	.51122	
#2	1.9508	2.0048	1.9869	2.0390	.48962	.51775	
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	15547	--	--	--	--	--	--
SDev	93.30288	--	--	--	--	--	--
%RSD	.6001294	--	--	--	--	--	--
#1	15613	--	--	--	--	--	--
#2	15481	--	--	--	--	--	--

Method: METTRA Sample Name: DGXNE

Operator: RJG

Run Time: 07/30/00 12:44:31

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00010	1.6138	.00185	.08529	.00047	18.962	-.00012
SDev	.00052	.0147	.00120	.00050	.00028	.170	.00003
%RSD	522.51	.91341	65.114	.58924	60.393	.89450	27.472

#1	.00027	1.6242	.00270	.08565	.00027	19.082	-.00014
#2	-.00047	1.6034	.00100	.08494	.00066	18.842	-.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	.00344	.00240	.00263	2.0318	3.0209	.70150	.00193
SDev	.00010	.00064	.00055	.0033	.0269	.00584	.00100
%RSD	2.9134	26.660	21.059	.16311	.89099	.83228	51.664

#1	.00351	.00285	.00302	2.0295	3.0399	.70563	.00264
#2	.00337	.00194	.00224	2.0341	3.0018	.69737	.00123

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00320	.00390	.00115	.00207	.00209	.00151	.00171
SDev	.00137	.00103	.00036	.00010	.00040	.00176	.00131
%RSD	42.794	26.397	31.433	4.9269	19.142	116.49	76.746

#1	.00417	.00463	.00089	.00214	.00181	.00027	.00078
#2	.00223	.00317	.00141	.00200	.00238	.00276	.00263

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	-.00058	-.00000	-.00020	.00298	-.00091	.04020
SDev	.00147	.00014	.00058	.00102	.00037	.00040
%RSD	250.69	6766.6	296.22	34.377	40.976	.98787

#1	-.00162	-.00010	-.00061	.00225	-.00065	.04048
#2	.00045	.00010	.00021	.00370	-.00117	.03992

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	15678	--	--	--	--	--	--
SDev	175.3266	--	--	--	--	--	--
%RSD	1.118309	--	--	--	--	--	--
#1	15554	--	--	--	--	--	--
#2	15802	--	--	--	--	--	--

Method: METTRA Sample Name: DGXNH

Operator: RJG

Run Time: 07/30/00 12:48:40

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP **666 1034**

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00009	.05317	.00107	.01645	.00025	10.193	.00009
SDev	.00030	.00283	.00153	.00002	.00014	.018	.00001
%RSD	342.74	5.3304	142.28	.12390	53.464	.17859	6.0663
#1	-.00012	.05518	-.00001	.01643	.00016	10.205	.00009
#2	.00030	.05117	.00215	.01646	.00035	10.180	.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	.00009	.00051	.00045	.24460	1.3920	.39350	.00215
SDev	.00070	.00056	.00003	.00696	.0009	.00079	.00043
%RSD	773.68	111.77	6.3452	2.8449	.06381	.20045	19.820
#1	-.00041	.00011	.00043	.23968	1.3926	.39406	.00245
#2	.00059	.00091	.00048	.24952	1.3914	.39294	.00185
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	.00313	.00200	-.00066	.00023	-.00172	.00092	.00004
SDev	.00072	.00161	.00112	.00021	.00035	.00025	.00005
%RSD	22.894	80.721	169.62	91.458	20.583	26.877	115.96
#1	.00262	.00086	.00013	.00037	-.00147	.00075	.00001
#2	.00363	.00314	-.00145	.00008	-.00197	.00110	.00007
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	-.00176	.00169	.00054	-.00040	-.00061	.00606	
SDev	.00275	.00102	.00160	.00292	.00056	.00003	
%RSD	156.55	60.275	293.75	730.29	91.408	.45688	
#1	-.00370	.00097	-.00059	.00167	-.00101	.00608	
#2	.00019	.00241	.00167	-.00247	-.00022	.00604	
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	

666 1035

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15571	--	--	--	--	--	--
SDev	59.43219	--	--	--	--	--	--
%RSD	.3816968	--	--	--	--	--	--
#1	15528	--	--	--	--	--	--
#2	15613	--	--	--	--	--	--

Method: METTRA Sample Name: DGXNN

Operator: RJG

Run Time: 07/30/00 12:52:49

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP **666 1036**

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00089	-.00396	-.00008	.00019	.00015	.06783	-.00005
SDev	.00021	.00237	.00065	.00003	.00009	.00007	.00002
%RSD	23.750	59.854	778.06	16.061	58.159	.09752	30.472

#1	.00104	-.00229	-.00054	.00017	.00009	.06788	-.00007
#2	.00074	-.00564	.00037	.00021	.00021	.06779	-.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	-.00024	.00050	.00060	.00939	.00470	.00041	.00033
SDev	.00037	.00015	.00002	.01732	.00111	.00003	.00041
%RSD	152.64	30.596	2.6144	184.44	23.601	7.3897	122.73

#1	.00002	.00061	.00059	-.00286	.00549	.00043	.00062
#2	-.00051	.00039	.00061	.02163	.00392	.00039	.00004

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	.00520	.00635	-.00316	.00000	-.00065	.00241	.00139
SDev	.00025	.00462	.00191	.00027	.00208	.00283	.00119
%RSD	4.7357	72.861	60.372	6140.9	320.12	117.38	85.881

#1	.00537	.00962	-.00451	.00019	-.00212	.00441	.00223
#2	.00502	.00308	-.00181	-.00018	.00082	.00041	.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	-.00052	-.00008	-.00022	-.00250	.00156	.00339
SDev	.00181	.00104	.00129	.00074	.00001	.00005
%RSD	351.47	1316.2	577.52	29.553	.28899	1.5611

#1	-.00180	-.00081	-.00114	-.00198	.00156	.00343
#2	.00077	.00065	.00069	-.00303	.00156	.00335

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

666 1037

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15545	--	--	--	--	--	--
SDev	6.965416	--	--	--	--	--	--
%RSD	.0448074	--	--	--	--	--	--
#1	15540	--	--	--	--	--	--
#2	15550	--	--	--	--	--	--

Method: METTRA

Sample Name: CCV3-2

Operator: RJG

Run Time: 07/30/00 12:56:58

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

666 1038

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0115	23.659	.50324	1.9571	2.0072	50.226	.48636
SDev	.0004	.005	.00217	.0004	.0081	.265	.00165
%RSD	.03479	.02148	.43191	.02267	.40488	.52700	.33961
#1	1.0117	23.663	.50478	1.9568	2.0129	50.413	.48752
#2	1.0112	23.656	.50171	1.9574	2.0014	50.039	.48519
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	2.0028	2.0017	1.9179	24.551	48.769	1.9735	2.0083
SDev	.0064	.0069	.0004	.069	.147	.0060	.0065
%RSD	.31729	.34468	.02279	.27956	.30116	.30351	.32310
#1	2.0073	2.0066	1.9182	24.599	48.873	1.9778	2.0037
#2	1.9983	1.9969	1.9176	24.502	48.665	1.9693	2.0129
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	1.9962	.50660	.50493	.50549	.51832	.50022	.50625
SDev	.0058	.00137	.00463	.00263	.00503	.00053	.00203
%RSD	.29080	.27077	.91716	.52072	.97105	.10603	.40096
#1	2.0003	.50563	.50821	.50735	.52188	.50059	.50768
#2	1.9921	.50757	.50166	.50363	.51476	.49984	.50481
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	.50685	.51935	.51519	1.0182	2.0034	2.0260	
SDev	.00295	.00281	.00286	.0025	.0042	.0059	
%RSD	.58252	.54141	.55487	.24312	.21156	.28898	
#1	.50894	.52134	.51721	1.0199	2.0064	2.0301	
#2	.50477	.51736	.51317	1.0164	2.0004	2.0218	
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	

666 1039

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15671	--	--	--	--	--	--
SDev	61.58942	--	--	--	--	--	--
%RSD	.3930127	--	--	--	--	--	--
#1	15715	--	--	--	--	--	--
#2	15628	--	--	--	--	--	--

Method: METTRA

Sample Name: CCB2

Operator: RJG

Run Time: 07/30/00 13:01:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00020	-.02536	-.00042	.00028	.00098	.00040	.00002
SDev	.00024	.00591	.00042	.00022	.00012	.00494	.00004
%RSD	119.51	23.305	98.497	78.722	11.772	1219.6	171.50
#1	-.00037	-.02954	-.00072	.00012	.00090	-.00308	.00005
#2	-.00003	-.02118	-.00013	.00044	.00106	.00389	-.00000
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00005	-.00052	-.00018	-.00007	.00117	.00018	.00323
SDev	.00037	.00049	.00030	.00641	.00438	.00022	.00106
%RSD	695.77	94.705	163.56	9110.0	375.21	125.02	32.882
#1	-.00031	-.00086	-.00040	-.00460	-.00193	.00002	.00398
#2	.00021	-.00017	.00003	.00446	.00426	.00034	.00248
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00028	-.00160	-.00003	-.00055	.00233	-.00005	.00074
SDev	.00084	.00100	.00016	.00023	.00022	.00115	.00069
%RSD	296.40	62.628	459.27	41.021	9.6294	2123.1	93.472
#1	-.00031	-.00089	-.00015	-.00039	.00249	-.00087	.00025
#2	.00088	-.00230	.00008	-.00072	.00217	.00076	.00123
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00100	-.00160	-.00073	.00137	-.00175	.00019	
SDev	.00020	.00048	.00038	.00017	.00019	.00022	
%RSD	19.802	29.967	52.578	12.540	10.675	114.75	
#1	.00086	-.00193	-.00100	.00125	-.00189	.00004	
#2	.00114	-.00126	-.00046	.00149	-.00162	.00035	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

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666 1041

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15750	--	--	--	--	--	--
SDev	27.86028	--	--	--	--	--	--
%RSD	.1768963	--	--	--	--	--	--
#1	15769	--	--	--	--	--	--
#2	15730	--	--	--	--	--	--

Method: (METTRA) 0

Sample Name: DH0CHB

Operator: RJG

Run Time: 07/30/00 13:05:15

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00008	-.00664	.00013	.00011	.00032	.03176	.00007
SDev	.00053	.00169	.00020	.00004	.00018	.00402	.00017
%RSD	622.44	25.455	159.97	36.516	57.043	12.660	247.69
#1	-.00029	-.00784	.00027	.00008	.00044	.02892	-.00005
#2	.00046	-.00545	-.00002	.00014	.00019	.03460	.00019
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00014	.00021	-.00019	.00707	-.00116	-.00008	.00016
SDev	.00032	.00048	.00048	.00090	.00556	.00011	.00057
%RSD	228.53	228.74	252.06	12.793	479.55	132.30	359.49
#1	-.00009	-.00013	-.00053	.00643	-.00509	-.00016	-.00024
#2	.00037	.00055	.00015	.00771	.00277	-.00001	.00056
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	.00026	-.00057	.00087	.00039	.00063	.00058	.00060
SDev	.00104	.00102	.00023	.00019	.00007	.00160	.00105
%RSD	405.33	180.15	26.627	47.164	11.122	276.06	175.07
#1	-.00048	-.00129	.00104	.00026	.00068	-.00055	-.00014
#2	.00100	.00016	.00071	.00052	.00058	.00172	.00134
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	.00052	-.00187	-.00107	.00129	-.00161	.00481	
SDev	.00205	.00080	.00015	.00241	.00038	.00020	
%RSD	397.72	42.644	14.092	187.11	23.426	4.2711	
#1	-.00093	-.00130	-.00118	.00300	-.00188	.00466	
#2	.00196	-.00243	-.00097	-.00042	-.00135	.00495	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

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666 1043

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15471	--	--	--	--	--	--
SDev	106.5252	--	--	--	--	--	--
%RSD	.6885622	--	--	--	--	--	--
#1	15546	--	--	--	--	--	--
#2	15395	--	--	--	--	--	--

Method: METTRA

Sample Name: DH0CHC

Operator: RJG

Run Time: 07/30/00 13:09:24

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	.04963	1.9819	1.9822	1.9496	.05013	50.352	.04715
SDev	.00025	.0026	.0040	.0033	.00002	.035	.00030
%RSD	.51227	.13213	.20315	.16846	.03432	.06943	.64183

#1	.04945	1.9800	1.9850	1.9519	.05014	50.377	.04737
#2	.04981	1.9837	1.9793	1.9472	.05012	50.327	.04694

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	.49825	.19969	.24317	.88820	48.573	.48860	.99617
SDev	.00096	.00001	.00012	.00201	.042	.00036	.00135
%RSD	.19278	.00691	.04729	.22635	.08666	.07477	.13521

#1	.49757	.19970	.24308	.88677	48.603	.48885	.99521
#2	.49893	.19968	.24325	.88962	48.544	.48834	.99712

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	.49750	.50418	.49060	.49512	.49723	.49267	.49419
SDev	.00174	.00195	.00092	.00004	.00333	.00423	.00171
%RSD	.35019	.38688	.18712	.00752	.67052	.85890	.34647

#1	.49873	.50556	.48995	.49515	.49487	.49566	.49540
#2	.49627	.50280	.49125	.49510	.49959	.48967	.49298

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	1.9825	2.0219	2.0088	2.0546	.49546	.51209
SDev	.0015	.0054	.0031	.0035	.00024	.00022
%RSD	.07745	.26878	.15499	.17115	.04791	.04355

#1	1.9835	2.0181	2.0066	2.0522	.49529	.51194
#2	1.9814	2.0258	2.0110	2.0571	.49562	.51225

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

666 1045

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15514	--	--	--	--	--	--
SDev	27.71872	--	--	--	--	--	--
%RSD	.1786656	--	--	--	--	--	--
#1	15495	--	--	--	--	--	--
#2	15534	--	--	--	--	--	--

Method: METTRA

Sample Name: DGXL3

Operator: RJG

Run Time: 07/30/00 13:13:33

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	.00158	.41269	.00418	.12483	.00017	34.099	.00077
SDev	.00044	.00297	.00123	.00036	.00004	.052	.00004
%RSD	28.118	.71982	29.366	.29005	24.109	.15173	5.5215
#1	.00126	.41479	.00331	.12508	.00020	34.135	.00080
#2	.00189	.41059	.00505	.12457	.00014	34.062	.00074
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	.00111	.04920	.01928	.40494	9.2819	.04391	.01165
SDev	.00000	.00001	.00011	.00086	.0068	.00005	.00068
%RSD	.00000	.01876	.56308	.21290	.07353	.12103	5.8000
#1	.00111	.04920	.01936	.40555	9.2867	.04387	.01213
#2	.00111	.04921	.01921	.40433	9.2771	.04394	.01117
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	.00614	.00242	-.00073	.00032	.01173	.01231	.01212
SDev	.00037	.00332	.00139	.00018	.00068	.00098	.00043
%RSD	5.9614	137.00	189.59	56.320	5.8221	7.9643	3.5217
#1	.00588	.00008	.00025	.00019	.01221	.01162	.01182
#2	.00640	.00477	-.00171	.00045	.01124	.01301	.01242
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	.00811	-.00285	.00080	.00793	.00130	.07151	
SDev	.00117	.00312	.00247	.00043	.00019	.00029	
%RSD	14.437	109.50	308.57	5.4103	14.437	.40495	
#1	.00893	-.00064	.00255	.00763	.00116	.07172	
#2	.00728	-.00505	-.00095	.00824	.00143	.07131	
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	

666 1047

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15568	--	--	--	--	--	--
SDev	2.934079	--	--	--	--	--	--
%RSD	.0188463	--	--	--	--	--	--
#1	15571	--	--	--	--	--	--
#2	15566	--	--	--	--	--	--

Method: METTRA

Sample Name: DGXL3P5

Operator: RJG

Run Time: 07/30/00 13:17:42

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00002	.07153	.00230	.02534	.00022	6.8661	.00010
SDev	.00086	.00947	.00107	.00003	.00028	.0362	.00017
%RSD	4042.1	13.239	46.530	.10824	126.01	.52790	177.05

#1	.00059	.07822	.00306	.02535	.00002	6.8917	.00022
#2	-.00063	.06483	.00155	.02532	.00042	6.8405	-.00002

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00003	.00929	.00313	.07781	1.8350	.00857	.00123
SDev	.00031	.00098	.00042	.01137	.0147	.00003	.00065
%RSD	1132.8	10.596	13.511	14.612	.80228	.38103	52.729

#1	.00019	.00999	.00342	.08584	1.8454	.00860	.00169
#2	-.00025	.00860	.00283	.06977	1.8246	.00855	.00077

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00030	-.00228	.00089	-.00017	.00506	.00349	.00401
SDev	.00098	.00284	.00148	.00004	.00272	.00081	.00145
%RSD	330.81	124.49	167.25	26.599	53.862	23.332	36.143

#1	.00099	-.00027	-.00016	-.00020	.00313	.00292	.00299
#2	-.00040	-.00429	.00194	-.00014	.00698	.00407	.00504

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00230	-.00085	.00020	.00351	-.00067	.01421
SDev	.00108	.00378	.00288	.00062	.00095	.00006
%RSD	46.769	447.07	1429.8	17.656	142.44	.45326

#1	.00154	-.00352	-.00183	.00395	.00000	.01416
#2	.00306	.00183	.00224	.00307	-.00134	.01425

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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	15601	--	--	--	--	--	--
SDev	155.6698	--	--	--	--	--	--
%RSD	.9978307	--	--	--	--	--	--
#1	15491	--	--	--	--	--	--
#2	15711	--	--	--	--	--	--

Method: METTRA Sample Name: DGXL3S Operator: RJG
 Run Time: 07/30/00 13:21:51
 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	.05244	2.7567	1.9677	2.0174	.04832	83.025	.04587
SDev	.00095	.0061	.0050	.0029	.00014	.229	.00034
%RSD	1.8065	.22201	.25399	.14619	.29528	.27547	.73323

#1	.05311	2.7610	1.9712	2.0153	.04822	83.186	.04611
#2	.05177	2.7524	1.9642	2.0194	.04842	82.863	.04563

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	.49122	.24395	.27232	1.3391	58.214	.52874	.97180
SDev	.00021	.00092	.00001	.0226	.077	.00034	.00149
%RSD	.04212	.37661	.00220	1.6845	.13171	.06466	.15300

#1	.49136	.24460	.27231	1.3232	58.269	.52899	.97075
#2	.49107	.24330	.27232	1.3551	58.160	.52850	.97285

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	.49739	.51767	.49615	.50332	.51720	.50771	.51087
SDev	.00340	.00748	.00589	.00642	.00453	.00323	.00366
%RSD	.68341	1.4444	1.1863	1.2747	.87601	.63572	.71673

#1	.49979	.52296	.50032	.50786	.52040	.50999	.51346
#2	.49499	.51239	.49199	.49878	.51399	.50542	.50828

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	2.0068	2.0754	2.0526	2.1355	.49103	.58171
SDev	.0030	.0219	.0156	.0002	.00232	.00065
%RSD	.15059	1.0530	.75921	.01159	.47315	.11248

#1	2.0089	2.0908	2.0636	2.1354	.49267	.58217
#2	2.0047	2.0599	2.0415	2.1357	.48939	.58124

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	15504	--	--	--	--	--	--
SDev	79.30230	--	--	--	--	--	--
%RSD	.5114834	--	--	--	--	--	--
#1	15448	--	--	--	--	--	--
#2	15560	--	--	--	--	--	--

Method: METTRA

Sample Name: DGXL3D

Operator: RJG

Run Time: 07/30/00 13:26:01

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05277	2.7876	1.9918	2.0323	.04857	83.543	.04612
SDev	.00016	.0026	.0026	.0010	.00001	.184	.00028
%RSD	.31219	.09214	.13118	.04781	.00942	.22030	.60307
#1	.05289	2.7894	1.9937	2.0330	.04857	83.673	.04631
#2	.05265	2.7858	1.9900	2.0316	.04856	83.413	.04592
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	.49589	.24508	.27446	1.3584	58.750	.53253	.98019
SDev	.00029	.00071	.00037	.0046	.088	.00059	.00102
%RSD	.05905	.29140	.13608	.34210	.14907	.11040	.10352
#1	.49609	.24558	.27472	1.3551	58.812	.53295	.97947
#2	.49568	.24457	.27419	1.3617	58.688	.53212	.98091
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	.50210	.52144	.50084	.50770	.52535	.51234	.51667
SDev	.00309	.00324	.00239	.00267	.00541	.00067	.00136
%RSD	.61498	.62062	.47780	.52664	1.0289	.13032	.26217
#1	.50428	.52373	.50253	.50959	.52917	.51187	.51763
#2	.49991	.51915	.49915	.50581	.52153	.51281	.51572
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	2.0358	2.0946	2.0750	2.1619	.49595	.58805	
SDev	.0055	.0063	.0024	.0126	.00071	.00134	
%RSD	.26846	.30138	.11521	.58107	.14243	.22713	
#1	2.0319	2.0991	2.0767	2.1708	.49645	.58899	
#2	2.0397	2.0901	2.0733	2.1530	.49545	.58710	
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	15508	--	--	--	--	--	--
SDev	16.22824	--	--	--	--	--	--
%RSD	.1046435	--	--	--	--	--	--
#1	15497	--	--	--	--	--	--
#2	15520	--	--	--	--	--	--

Method: METTRA

Sample Name: DH0CCBW

Operator: RJG

Run Time: 07/30/00 13:30:10

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	.00019	.00353	.00122	.00025	-.00014	.03546	-.00012
SDev	.00002	.00532	.00103	.00014	.00004	.00356	.00005
%RSD	8.0928	150.53	84.906	54.174	25.623	10.032	39.899

#1	.00018	-.00023	.00195	.00016	-.00012	.03294	-.00009
#2	.00020	.00729	.00049	.00035	-.00017	.03797	-.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	.00022	-.00015	-.00018	-.01008	.00539	-.00008	.00142
SDev	.00020	.00001	.00025	.00707	.00480	.00001	.00047
%RSD	92.836	8.0709	139.40	70.160	89.138	18.301	33.480

#1	.00007	-.00014	-.00035	-.01508	.00199	-.00007	.00175
#2	.00036	-.00015	-.00000	-.00508	.00878	-.00009	.00108

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	.00009	.00229	-.00125	-.00007	-.00069	.00195	.00107
SDev	.00006	.00120	.00146	.00058	.00198	.00157	.00039
%RSD	71.741	52.236	117.44	826.70	285.96	80.778	36.492

#1	.00004	.00313	-.00228	-.00048	-.00209	.00306	.00134
#2	.00013	.00144	-.00021	.00034	.00071	.00084	.00079

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	.00276	-.00090	.00032	.00363	-.00135	.00367
SDev	.00113	.00089	.00097	.00447	.00000	.00002
%RSD	40.752	97.902	305.31	123.36	.27442	.49787

#1	.00197	-.00153	-.00037	.00046	-.00135	.00369
#2	.00356	-.00028	.00100	.00679	-.00135	.00366

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
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	15282	--	--	--	--	--	--
SDev	35.00178	--	--	--	--	--	--
%RSD	.2290415	--	--	--	--	--	--
#1	15307	--	--	--	--	--	--
#2	15257	--	--	--	--	--	--

Method: METTRA

Sample Name: DGQ95BW

Operator: RJG

Run Time: 07/30/00 13:34:19

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	-.00013	.01859	.00092	.00479	.00021	.38879	.00003
SDev	.00083	.00056	.00090	.00005	.00014	.00008	.00038
%RSD	654.12	3.0338	97.227	1.0087	67.409	.01970	1373.0
#1	-.00071	.01819	.00029	.00476	.00031	.38874	-.00024
#2	.00046	.01899	.00156	.00483	.00011	.38884	.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	.00002	.00024	.00031	.01047	.03088	.00091	-.00004
SDev	.00039	.00082	.00063	.01873	.00494	.00009	.00043
%RSD	2269.5	347.97	199.94	178.96	16.013	9.4361	1089.4
#1	-.00026	-.00034	-.00013	-.00278	.02738	.00085	-.00034
#2	.00029	.00082	.00076	.02371	.03438	.00097	.00026
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	.00090	.00033	-.00004	.00008	.00129	.00112	.00117
SDev	.00011	.00191	.00015	.00053	.00121	.00076	.00091
%RSD	12.446	576.18	353.87	655.15	93.574	67.741	77.187
#1	.00098	-.00102	.00007	-.00030	.00214	.00165	.00181
#2	.00082	.00168	-.00015	.00046	.00044	.00058	.00053
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	-.00137	.00048	-.00014	.00355	-.00121	H.02406	
SDev	.00272	.00101	.00158	.00034	.00095	.00003	
%RSD	198.48	210.30	1149.8	9.6788	78.320	.13642	
#1	-.00329	-.00023	-.00125	.00380	-.00188	H.02408	
#2	.00055	.00119	.00098	.00331	-.00054	H.02404	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC High	
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	15491	--	--	--	--	--	--
SDev	109.9199	--	--	--	--	--	--
%RSD	.7095829	--	--	--	--	--	--
#1	15568	--	--	--	--	--	--
#2	15413	--	--	--	--	--	--

Method: METTRA

Sample Name: DH0CCCW

Operator: RJG

Run Time: 07/30/00 13:38:28

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05065	2.0643	2.0060	1.9740	.05086	51.272	.04800
SDev	.00009	.0016	.0055	.0031	.00007	.207	.00032
%RSD	.18486	.07966	.27275	.15803	.13485	.40450	.65793
#1	.05059	2.0631	2.0099	1.9717	.05091	51.419	.04778
#2	.05072	2.0654	2.0021	1.9762	.05081	51.126	.04823
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	.50514	.20285	.24963	.92626	49.251	.49721	1.0195
SDev	.00177	.00070	.00024	.01533	.085	.00139	.0002
%RSD	.34941	.34424	.09817	1.6545	.17321	.27868	.01730
#1	.50639	.20335	.24946	.93710	49.312	.49819	1.0194
#2	.50389	.20236	.24980	.91542	49.191	.49623	1.0196
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	.50310	.50828	.50338	.50502	.51629	.50093	.50605
SDev	.00348	.00284	.00559	.00279	.00689	.00357	.00009
%RSD	.69091	.55820	1.1108	.55142	1.3349	.71289	.01717
#1	.50556	.50628	.50734	.50698	.52117	.49841	.50598
#2	.50064	.51029	.49943	.50305	.51142	.50346	.50611
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	2.0009	2.0607	2.0408	2.0736	.50054	.54081	
SDev	.0031	.0186	.0114	.0043	.00021	.00183	
%RSD	.15663	.90178	.55621	.20815	.04189	.33795	
#1	1.9987	2.0738	2.0488	2.0705	.50069	.54210	
#2	2.0032	2.0475	2.0328	2.0766	.50039	.53952	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			2.4000	2.4000	.60000	.60000	

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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	15669	--	--	--	--	--	--
SDev	17.96010	--	--	--	--	--	--
%RSD	.1146230	--	--	--	--	--	--
#1	15656	--	--	--	--	--	--
#2	15682	--	--	--	--	--	--

Method: METTRA

Sample Name: DS05C02CSW

Operator: RJG

Run Time: 07/30/00 13:42:38

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00064	5.8081	.00262	.07973	.00059	18.435	-.00012
SDev	.00106	.0015	.00130	.00025	.00018	.035	.00002
%RSD	166.36	.02641	49.484	.30907	31.218	.18846	12.464

#1	.00139	5.8070	.00354	.07956	.00046	18.459	-.00013
#2	-.00011	5.8092	.00170	.07991	.00072	18.410	-.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	.00171	.01032	.00446	4.7453	1.8392	.02482	.00206
SDev	.00085	.00049	.00050	.0196	.0073	.00005	.00124
%RSD	49.544	4.7401	11.213	.41219	.39950	.18543	60.376

#1	.00231	.01066	.00481	4.7592	1.8444	.02485	.00293
#2	.00111	.00997	.00411	4.7315	1.8340	.02479	.00118

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	.00626	.00741	.00492	.00575	.00053	.00130	.00105
SDev	.00057	.00028	.00042	.00038	.00140	.00143	.00049
%RSD	9.1816	3.8470	8.6150	6.5691	266.08	109.32	46.479

#1	.00667	.00721	.00462	.00548	.00151	.00030	.00070
#2	.00586	.00761	.00522	.00601	-.00046	.00231	.00139

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	.00149	-.00013	.00041	.00026	.01430	.04319
SDev	.00194	.00355	.00172	.00067	.00044	.00013
%RSD	130.35	2725.1	420.54	255.93	3.0808	.29265

#1	.00012	.00238	.00163	-.00021	.01461	.04328
#2	.00287	-.00264	-.00081	.00073	.01399	.04310

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	15574	--	--	--	--	--	--
SDev	64.55940	--	--	--	--	--	--
%RSD	.4145279	--	--	--	--	--	--
#1	15529	--	--	--	--	--	--
#2	15620	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-3

Operator: RJG

Run Time: 07/30/00 13:46:47

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	1.0093	23.578	.50249	1.9429	2.0032	50.022	.48429
SDev	.0011	.070	.00030	.0085	.0019	.067	.00002
%RSD	.10777	.29610	.06073	.43776	.09529	.13428	.00429

#1	1.0101	23.627	.50270	1.9489	2.0045	50.069	.48430
#2	1.0086	23.528	.50227	1.9369	2.0018	49.974	.48427

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9972	1.9962	1.9113	24.454	48.714	1.9694	2.0050
SDev	.0029	.0000	.0071	.010	.069	.0020	.0065
%RSD	.14524	.00152	.37099	.03903	.14116	.09989	.32465

#1	1.9992	1.9962	1.9163	24.461	48.763	1.9708	2.0004
#2	1.9951	1.9962	1.9062	24.447	48.666	1.9680	2.0096

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	1.9772	.50796	.50087	.50323	.52046	.50003	.50684
SDev	.0089	.00442	.00136	.00238	.00245	.00153	.00183
%RSD	.45119	.86958	.27212	.47295	.47137	.30491	.36183

#1	1.9835	.50483	.49990	.50154	.52220	.50111	.50813
#2	1.9709	.51108	.50183	.50491	.51873	.49895	.50554

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	.50829	.51671	.51391	1.0177	1.9899	2.0161
SDev	.00216	.00170	.00186	.0038	.0080	.0023
%RSD	.42595	.32976	.36145	.37558	.40193	.11313

#1	.50676	.51550	.51259	1.0204	1.9956	2.0178
#2	.50982	.51791	.51522	1.0150	1.9843	2.0145

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	15648	--	--	--	--	--	--
SDev	58.61874	--	--	--	--	--	--
%RSD	.3746001	--	--	--	--	--	--
#1	15690	--	--	--	--	--	--
#2	15607	--	--	--	--	--	--

Method: METTRA

Sample Name: CCB3

Operator: RJG

Run Time: 07/30/00 13:50:56

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	.00025	.00940	.00021	.00034	.00069	.07131	-.00006
SDev	.00016	.00033	.00022	.00011	.00004	.00402	.00002
%RSD	65.255	3.5199	105.65	31.131	6.4424	5.6423	25.828

#1	.00013	.00963	.00037	.00027	.00072	.06847	-.00005
#2	.00036	.00917	.00005	.00042	.00066	.07416	-.00007

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	.00097	-.00006	-.00102	-.01450	.00374	.00020	.00336
SDev	.00010	.00008	.00012	.00713	.00473	.00021	.00126
%RSD	10.188	142.26	12.286	49.167	126.55	106.67	37.476

#1	.00090	-.00011	-.00110	-.00946	.00039	.00005	.00425
#2	.00104	.00000	-.00093	-.01955	.00708	.00035	.00247

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	-.00009	.00206	-.00162	-.00040	.00060	.00346	.00250
SDev	.00055	.00343	.00103	.00046	.00430	.00085	.00086
%RSD	600.82	166.67	63.136	115.23	721.18	24.650	34.417

#1	-.00048	-.00037	-.00090	-.00072	.00363	.00285	.00311
#2	.00030	.00448	-.00235	-.00007	-.00244	.00406	.00189

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	-.00015	-.00243	-.00167	.00270	-.00083	.00121
SDev	.00361	.00269	.00300	.00024	.00000	.00011
%RSD	2483.2	110.77	179.77	8.8807	.36313	8.7020

#1	-.00270	-.00433	-.00378	.00287	-.00083	.00114
#2	.00241	-.00053	.00045	.00253	-.00083	.00129

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	15542	--	--	--	--	--	--
SDev	80.82217	--	--	--	--	--	--
%RSD	.5200393	--	--	--	--	--	--
#1	15599	--	--	--	--	--	--
#2	15484	--	--	--	--	--	--

Method: METTRA Sample Name: DS05C02CSP5W

Operator: RJG

Run Time: 07/30/00 13:55:05

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	.00008	1.1341	.00099	.01574	.00054	3.6622	-.00012
SDev	.00032	.0179	.00015	.00022	.00032	.0366	.00022
%RSD	378.94	1.5800	15.675	1.4055	58.469	.99830	188.24

#1	-.00014	1.1214	.00109	.01558	.00077	3.6363	-.00027
#2	.00031	1.1468	.00088	.01589	.00032	3.6880	.00004

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00013	.00210	-.00024	.93489	.35981	.00494	.00115
SDev	.00008	.00031	.00065	.00832	.00660	.00014	.00040
%RSD	65.742	14.792	274.91	.89023	1.8340	2.7266	35.256

#1	.00007	.00188	-.00069	.92900	.35514	.00484	.00086
#2	.00019	.00232	.00022	.94077	.36448	.00503	.00143

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00077	.00106	-.00025	.00019	.00110	.00189	.00163
SDev	.00004	.00251	.00193	.00045	.00062	.00287	.00171
%RSD	5.3254	235.86	764.31	244.16	56.809	151.56	104.84

#1	.00079	-.00071	.00111	.00051	.00154	-.00014	.00042
#2	.00074	.00284	-.00162	-.00013	.00066	.00392	.00284

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00203	-.00201	-.00066	.00050	.00201	.00855
SDev	.00102	.00187	.00159	.00051	.00062	.00004
%RSD	50.310	92.730	238.41	102.22	30.807	.44715

#1	.00276	-.00069	.00046	.00014	.00158	.00852
#2	.00131	-.00333	-.00179	.00086	.00245	.00858

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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	15565	--	--	--	--	--	--
SDev	249.5728	--	--	--	--	--	--
%RSD	1.603390	--	--	--	--	--	--
#1	15742	--	--	--	--	--	--
#2	15389	--	--	--	--	--	--

Method: METTRA

Sample Name: DS05C02CSSW

Operator: RJG

Run Time: 07/30/00 13:59:14

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04900	9.1525	1.9487	2.0018	.04975	67.787	.04638
SDev	.00087	.0853	.0152	.0164	.00036	.450	.00008
%RSD	1.7720	.93213	.78186	.81731	.71276	.66379	.17553
#1	.04838	9.0922	1.9379	1.9902	.04950	67.469	.04632
#2	.04961	9.2128	1.9594	2.0133	.05000	68.105	.04643
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	.49063	.20603	.24549	5.1738	50.101	.50559	.98505
SDev	.00384	.00197	.00209	.0418	.379	.00382	.01058
%RSD	.78338	.95546	.84964	.80810	.75685	.75648	1.0740
#1	.48791	.20464	.24402	5.1443	49.833	.50289	.97756
#2	.49335	.20742	.24697	5.2034	50.369	.50830	.99253
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	.49121	.49961	.49377	.49571	.50133	.48627	.49128
SDev	.00068	.00296	.00707	.00373	.00641	.00356	.00024
%RSD	.13791	.59268	1.4327	.75295	1.2781	.73105	.04833
#1	.49073	.49752	.49877	.49835	.50586	.48375	.49111
#2	.49169	.50170	.48876	.49307	.49680	.48878	.49145
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	1.9459	2.0054	1.9856	2.0286	.49875	.54119	
SDev	.0101	.0201	.0100	.0208	.00619	.00348	
%RSD	.51709	1.0005	.50527	1.0240	1.2412	.64394	
#1	1.9388	2.0196	1.9927	2.0139	.49438	.53873	
#2	1.9530	1.9912	1.9785	2.0433	.50313	.54366	
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	15714	--	--	--	--	--	--
SDev	19.65743	--	--	--	--	--	--
%RSD	.1250950	--	--	--	--	--	--
#1	15728	--	--	--	--	--	--
#2	15700	--	--	--	--	--	--

Method: METTRA

Sample Name: DS05C02CSDW

Operator: RJG

Run Time: 07/30/00 14:03:23

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	.05044	10.439	1.9934	2.0449	.05107	69.681	.04754
SDev	.00065	.015	.0027	.0035	.00020	.253	.00012
%RSD	1.2920	.14283	.13723	.17326	.39225	.36274	.24470
#1	.04998	10.450	1.9953	2.0474	.05121	69.860	.04762
#2	.05091	10.429	1.9915	2.0424	.05092	69.502	.04746
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	.50427	.21385	.25160	6.0243	51.129	.52095	1.0081
SDev	.00050	.00006	.00047	.0085	.123	.00094	.0016
%RSD	.09908	.02674	.18852	.14173	.24013	.18034	.15652
#1	.50462	.21381	.25193	6.0303	51.216	.52161	1.0092
#2	.50391	.21389	.25126	6.0182	51.042	.52028	1.0070
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	.50640	.51627	.50175	.50658	.50384	.49512	.49802
SDev	.00200	.00079	.00313	.00183	.00031	.00027	.00028
%RSD	.39449	.15265	.62401	.36043	.06190	.05388	.05658
#1	.50781	.51571	.50396	.50787	.50406	.49531	.49822
#2	.50499	.51682	.49953	.50529	.50361	.49493	.49782
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	1.9832	2.0258	2.0116	2.0828	.51273	.56007
SDev	.0033	.0120	.0069	.0005	.00123	.00086
%RSD	.16437	.59288	.34428	.02630	.23975	.15300
#1	1.9855	2.0173	2.0067	2.0824	.51359	.56067
#2	1.9808	2.0343	2.0165	2.0832	.51186	.55946
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	15612	--	--	--	--	--	--
SDev	31.67825	--	--	--	--	--	--
%RSD	.2029154	--	--	--	--	--	--
#1	15589	--	--	--	--	--	--
#2	15634	--	--	--	--	--	--

Method: METTRA

Sample Name: DH0JRB

Operator: RJG

Run Time: 07/30/00 14:07:32

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	-.00015	.02071	.00013	.00059	.00067	.12065	.00023
SDev	.00005	.00587	.00141	.00010	.00000	.00019	.00001
%RSD	34.358	28.334	1088.5	16.843	.45118	.16014	5.9984

#1	-.00011	.01656	.00112	.00052	.00067	.12079	.00024
#2	-.00018	.02485	-.00087	.00065	.00067	.12052	.00022

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00015	.00023	.01688	-.00236	.00408	.00422	.00145
SDev	.00019	.00009	.00010	.02916	.00136	.00002	.00066
%RSD	132.44	36.871	.59509	1234.4	33.363	.35232	45.532

#1	-.00028	.00029	.01681	-.02298	.00505	.00421	.00192
#2	-.00001	.00017	.01695	.01826	.00312	.00423	.00098

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	.00059	.00606	.00514	H.00545	.00057	.00127	.00104
SDev	.00091	.00484	.00237	.00003	.00475	.00208	.00020
%RSD	154.67	79.988	46.117	.57516	830.77	163.68	18.892

#1	-.00006	.00948	.00347	H.00547	-.00279	.00274	.00090
#2	.00123	.00263	.00682	H.00542	.00393	-.00020	.00118

Errors	LC Pass	NOCHECK	NOCHECK	LC High	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	.00090	.00076	.00081	.00408	-.00136	.01336
SDev	.00225	.00267	.00103	.00402	.00036	.00009
%RSD	250.79	350.92	127.63	98.443	26.436	.68895

#1	.00249	-.00113	.00008	.00124	-.00111	.01343
#2	-.00070	.00265	.00153	.00692	-.00161	.01330

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	15665	--	--	--	--	--	--
SDev	47.65928	--	--	--	--	--	--
%RSD	.3042415	--	--	--	--	--	--
#1	15699	--	--	--	--	--	--
#2	15631	--	--	--	--	--	--

Method: METTRA

Sample Name: DH0JRC

Operator: RJG

Run Time: 07/30/00 14:11:41

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	.04713	1.7247	1.9756	1.8445	.05029	L.10635	.04818
SDev	.00004	.0052	.0053	.0043	.00014	.00073	.00028
%RSD	.08909	.30311	.27059	.23533	.27730	.68308	.57385
#1	.04710	1.7210	1.9718	1.8414	.05038	L.10686	.04799
#2	.04716	1.7284	1.9794	1.8476	.05019	L.10583	.04838
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49651	.19736	.21962	.95522	L.00265	.48003	L-.00122
SDev	.00005	.00013	.00007	.00105	.00107	.00018	.00020
%RSD	.00943	.06674	.03158	.11045	40.394	.03846	16.198
#1	.49654	.19726	.21958	.95597	L.00189	.47990	L-.00136
#2	.49647	.19745	.21967	.95447	L.00341	.48017	L-.00108
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Low
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49185	.48536	.48305	.48382	-.00068	.00215	L.00121
SDev	.00074	.00136	.00095	.00108	.00070	.00030	.00043
%RSD	.14973	.28061	.19577	.22411	102.48	14.093	35.972
#1	.49237	.48440	.48238	.48305	-.00117	.00193	L.00090
#2	.49132	.48632	.48372	.48459	-.00019	.00236	L.00151
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Low
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	2.0414	2.0659	2.0577	1.9356	.47944	.51266	
SDev	.0029	.0085	.0067	.0040	.00004	.00065	
%RSD	.14378	.41228	.32359	.20811	.00823	.12609	
#1	2.0393	2.0599	2.0530	1.9328	.47946	.51312	
#2	2.0434	2.0719	2.0624	1.9385	.47941	.51220	
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	16104	--	--	--	--	--	--
SDev	4.737063	--	--	--	--	--	--
%RSD	.0294146	--	--	--	--	--	--
#1	16108	--	--	--	--	--	--
#2	16101	--	--	--	--	--	--

Method: METTRA Sample Name: DGXPB

Operator: RJG

Run Time: 07/30/00 14:15:50

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	.00058	49.734	.14229	.40802	.00698	186.41	.00301
SDev	.00015	.060	.00133	.00085	.00006	.28	.00009
%RSD	26.031	.12072	.93171	.20715	.93605	.14821	2.8731
#1	.00047	49.691	.14135	.40861	.00702	186.22	.00307
#2	.00068	49.776	.14322	.40742	.00693	186.61	.00295
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	.19760	9.6917	1.0345	362.78	43.620	4.6106	.01081
SDev	.00070	.0206	.0016	.88	.068	.0071	.00020
%RSD	.35648	.21272	.15632	.24374	.15611	.15355	1.8210
#1	.19710	9.6771	1.0356	362.15	43.572	4.6056	.01095
#2	.19810	9.7062	1.0333	363.40	43.669	4.6156	.01067
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	.28476	1.2666	1.2348	1.2454	.01477	.00508	.00831
SDev	.00165	.0062	.0032	.0042	.00031	.00066	.00034
%RSD	.57839	.48595	.25539	.33347	2.0813	12.987	4.0655
#1	.28360	1.2623	1.2326	1.2425	.01455	.00555	.00855
#2	.28593	1.2710	1.2370	1.2483	.01499	.00461	.00807
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	.00341	-.00754	-.00389	.01621	.30663	1.8936	
SDev	.00292	.00122	.00016	.00173	.00160	.0014	
%RSD	85.539	16.233	3.9984	10.659	.52129	.07586	
#1	.00547	-.00840	-.00378	.01499	.30776	1.8926	
#2	.00135	-.00667	-.00400	.01743	.30550	1.8946	
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	17606	--	--	--	--	--	--
SDev	55.22476	--	--	--	--	--	--
%RSD	.3136746	--	--	--	--	--	--
#1	17645	--	--	--	--	--	--
#2	17567	--	--	--	--	--	--

Method: METTRA Sample Name: DGXPHP5

Operator: RJG

Run Time: 07/30/00 14:19:59

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	.00025	10.208	.03120	.08831	.00222	42.056	.00072
SDev	.00090	.001	.00096	.00006	.00008	.030	.00012
%RSD	359.57	.01274	3.0785	.06497	3.6148	.07021	16.918

#1	-.00039	10.207	.03053	.08827	.00227	42.077	.00064
#2	.00089	10.209	.03188	.08835	.00216	42.035	.00081

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04497	2.1953	.21374	80.319	9.3691	1.0109	.00215
SDev	.00049	.0007	.00053	.036	.0059	.0004	.00038
%RSD	1.0786	.03308	.24587	.04436	.06321	.04347	17.893

#1	.04463	2.1958	.21411	80.293	9.3733	1.0112	.00188
#2	.04531	2.1947	.21337	80.344	9.3649	1.0106	.00242

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06389	.27899	.27907	.27904	.00538	.00240	.00339
SDev	.00020	.00316	.00149	.00006	.00081	.00083	.00083
%RSD	.30604	1.1334	.53313	.02172	15.017	34.820	24.352

#1	.06375	.28123	.27802	.27909	.00481	.00181	.00281
#2	.06403	.27676	.28012	.27900	.00595	.00299	.00397

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00271	-.00214	-.00053	.00537	.06788	.43079
SDev	.00068	.00064	.00020	.00053	.00005	.00118
%RSD	25.253	30.054	38.301	9.8042	.07469	.27427

#1	.00223	-.00169	-.00038	.00575	.06792	.43162
#2	.00320	-.00260	-.00067	.00500	.06785	.42995

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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	16166	--	--	--	--	--	--
SDev	24.46631	--	--	--	--	--	--
%RSD	.1513456	--	--	--	--	--	--
#1	16149	--	--	--	--	--	--
#2	16183	--	--	--	--	--	--

Method: METTRA Sample Name: DGXPHS Operator: RJG
 Run Time: 07/30/00 14:24:08
 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
Avg	.05011	46.687	1.9965	2.2572	.05204	208.84	.04753
SDev	.00012	.029	.0036	.0006	.00013	.38	.00006
%RSD	.24229	.06205	.17825	.02652	.25125	.18049	.12346
#1	.05003	46.666	1.9991	2.2568	.05213	209.11	.04757
#2	.05020	46.707	1.9940	2.2577	.05195	208.57	.04749
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	.54805	9.4755	.49958	182.61	31.993	H10.163	.01058
SDev	.00043	.0057	.00067	.02	.016	.001	.00005
%RSD	.07915	.06017	.13364	.01263	.05142	.00557	.48800
#1	.54836	9.4795	.49911	182.59	32.005	H10.163	.01062
#2	.54775	9.4714	.50005	182.63	31.982	H10.164	.01054
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC High	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	.72472	1.8969	1.8541	1.8683	.01591	.00371	.00777
SDev	.00402	.0121	.0021	.0026	.00094	.00031	.00052
%RSD	.55438	.63655	.11541	.13882	5.8954	8.3569	6.6793
#1	.72756	1.8884	1.8556	1.8665	.01657	.00393	.00814
#2	.72188	1.9054	1.8526	1.8702	.01525	.00349	.00741
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	1.8335	1.9082	1.8833	1.9283	.96324	2.9541	
SDev	.0104	.0039	.0009	.0013	.00069	.0046	
%RSD	.56634	.20219	.04695	.06873	.07217	.15621	
#1	1.8261	1.9110	1.8827	1.9293	.96373	2.9574	
#2	1.8408	1.9055	1.8840	1.9274	.96275	2.9508	
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	15917	--	--	--	--	--	--
SDev	60.81118	--	--	--	--	--	--
%RSD	.3820614	--	--	--	--	--	--
#1	15874	--	--	--	--	--	--
#2	15960	--	--	--	--	--	--

Method: METTRAC

Sample Name: DGXPHD

Operator: RJG

Run Time: 07/30/00 14:28:17

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	.05161	56.789	2.0378	2.3148	.05384	212.10	.05007
SDev	.00028	.124	.0063	.0023	.00038	.92	.00047
%RSD	.53192	.21917	.30761	.09889	.70137	.43346	.92928
#1	.05142	56.701	2.0422	2.3132	.05411	212.75	.04974
#2	.05180	56.877	2.0334	2.3164	.05357	211.45	.05040
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	.56073	11.305	.55353	153.18	41.671	9.2577	.00953
SDev	.00101	.030	.00051	.27	.084	.0188	.00089
%RSD	.18037	.26240	.09205	.17937	.20212	.20294	9.3303
#1	.56145	11.326	.55317	153.37	41.730	9.2710	.00890
#2	.56002	11.284	.55389	152.98	41.611	9.2444	.01016
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	.75897	2.9155	2.8670	2.8832	.01669	.00367	.00801
SDev	.00470	.0062	.0070	.0067	.00352	.00251	.00050
%RSD	.61969	.21159	.24261	.23217	21.099	68.266	6.2453
#1	.76229	2.9199	2.8719	2.8879	.01918	.00190	.00765
#2	.75564	2.9112	2.8621	2.8784	.01420	.00545	.00836
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	1.8924	1.9705	1.9445	1.9420	.80522	4.3334	
SDev	.0028	.0021	.0024	.0044	.00216	.0114	
%RSD	.15057	.10881	.12235	.22908	.26838	.26214	
#1	1.8944	1.9720	1.9462	1.9452	.80675	4.3414	
#2	1.8903	1.9690	1.9428	1.9389	.80369	4.3254	
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	

666 1083

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16120	--	--	--	--	--	--
SDev	48.43681	--	--	--	--	--	--
%RSD	.3004737	--	--	--	--	--	--
#1	16154	--	--	--	--	--	--
#2	16086	--	--	--	--	--	--

Method: METTRA Sample Name: DH0GKB

Operator: RJG

Run Time: 07/30/00 14:32:27

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00061	.04262	.00126	.00076	.00054	.08892	.00014
SDev	.00004	.01024	.00083	.00003	.00019	.00459	.00009
%RSD	6.7232	24.032	65.836	4.4243	34.322	5.1597	61.709

#1	.00064	.03538	.00067	.00074	.00067	.08567	.00008
#2	.00058	.04987	.00185	.00078	.00041	.09216	.00020

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	.00047	.00312	-.00144	.07265	.00797	.00189	.00017
SDev	.00037	.00035	.00002	.01503	.00135	.00010	.00035
%RSD	79.217	11.321	1.3216	20.687	16.908	5.1601	208.38

#1	.00020	.00287	-.00142	.06202	.00893	.00182	-.00008
#2	.00073	.00337	-.00145	.08327	.00702	.00196	.00041

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	.00268	.00328	-.00050	.00076	-.00021	.00220	.00140
SDev	.00001	.00283	.00108	.00022	.00261	.00062	.00045
%RSD	.40821	86.143	216.26	28.807	1229.3	28.391	32.377

#1	.00267	.00529	-.00127	.00091	-.00206	.00264	.00108
#2	.00269	.00128	.00027	.00060	.00163	.00176	.00172

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	.00363	-.00332	-.00101	.00344	-.00055	.00529
SDev	.00064	.00216	.00123	.00015	.00036	.00001
%RSD	17.741	65.034	121.62	4.3176	66.281	.16684

#1	.00408	-.00485	-.00188	.00354	-.00029	.00530
#2	.00317	-.00180	-.00014	.00333	-.00080	.00529

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

666 1085

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15660	--	--	--	--	--	--
SDev	52.99779	--	--	--	--	--	--
%RSD	.3384326	--	--	--	--	--	--
#1	15697	--	--	--	--	--	--
#2	15622	--	--	--	--	--	--

Method: METTRA

Sample Name: CCV3-4

Operator: RJG

Run Time: 07/30/00 14:36:36

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0190	23.632	.50993	1.9531	2.0365	50.836	.49108
SDev	.0039	.104	.00314	.0061	.0085	.185	.00244
%RSD	.38416	.43943	.61654	.31349	.41657	.36356	.49590
#1	1.0163	23.558	.50771	1.9487	2.0305	50.705	.48936
#2	1.0218	23.705	.51215	1.9574	2.0425	50.967	.49280
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	2.0199	2.0272	1.9251	24.767	49.422	1.9874	2.0331
SDev	.0104	.0094	.0062	.113	.201	.0093	.0182
%RSD	.51412	.46292	.32383	.45625	.40609	.46770	.89568
#1	2.0126	2.0206	1.9206	24.687	49.280	1.9809	2.0202
#2	2.0272	2.0338	1.9295	24.847	49.564	1.9940	2.0459
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	2.0097	.51339	.50590	.50840	.52562	.50773	.51369
SDev	.0019	.00085	.00497	.00360	.00839	.00476	.00597
%RSD	.09392	.16627	.98186	.70760	1.5965	.93671	1.1615
#1	2.0084	.51279	.50239	.50586	.51969	.50437	.50947
#2	2.0110	.51400	.50942	.51094	.53156	.51109	.51791
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	.51541	.52510	.52187	1.0345	2.0211	2.0368	
SDev	.00218	.00192	.00055	.0059	.0059	.0101	
%RSD	.42334	.36504	.10576	.57471	.29361	.49489	
#1	.51695	.52374	.52148	1.0303	2.0169	2.0296	
#2	.51386	.52645	.52226	1.0387	2.0253	2.0439	
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	

Analysis Report

07/30/00 02:40:41 PM

page 2

666 1087

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15516	--	--	--	--	--	--
SDev	98.81818	--	--	--	--	--	--
%RSD	.6368986	--	--	--	--	--	--
#1	15585	--	--	--	--	--	--
#2	15446	--	--	--	--	--	--

Method: METTRA

Sample Name: CCB4

Operator: RJG

Run Time: 07/30/00 14:40:45

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	.00028	.03874	-.00002	.00040	.00117	.00912	-.00000
SDev	.00093	.00278	.00017	.00017	.00027	.00632	.00002
%RSD	331.81	7.1715	1063.8	41.589	22.817	69.315	1135.0
#1	-.00038	.04071	.00010	.00028	.00136	.00465	.00001
#2	.00093	.03678	-.00013	.00052	.00098	.01359	-.00001
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	.00033	.00067	-.00221	.00902	.00410	.00056	.00286
SDev	.00017	.00046	.00002	.00184	.00743	.00023	.00036
%RSD	50.655	69.434	.92746	20.384	181.19	41.557	12.455
#1	.00021	.00034	-.00223	.00772	-.00115	.00039	.00312
#2	.00045	.00099	-.00220	.01032	.00936	.00072	.00261
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	.00076	.00042	.00030	.00034	.00032	.00106	.00081
SDev	.00067	.00559	.00507	.00152	.00444	.00062	.00106
%RSD	88.860	1334.3	1682.7	447.43	1409.9	58.671	130.75
#1	.00028	-.00353	.00389	.00142	.00346	.00062	.00157
#2	.00123	.00437	-.00329	-.00074	-.00283	.00150	.00006
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	.00242	-.00117	.00002	.00283	-.00096	.00072	
SDev	.00294	.00005	.00094	.00088	.00093	.00023	
%RSD	121.61	4.2907	4320.3	31.132	97.196	31.626	
#1	.00034	-.00114	-.00065	.00346	-.00162	.00056	
#2	.00449	-.00121	.00069	.00221	-.00030	.00088	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

666 1089

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15711	--	--	--	--	--	--
SDev	126.2545	--	--	--	--	--	--
%RSD	.8036273	--	--	--	--	--	--
#1	15800	--	--	--	--	--	--
#2	15621	--	--	--	--	--	--

Method: METTRA

Sample Name: DH0GKC

Operator: RJG

Run Time: 07/30/00 14:44:54

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	.04990	1.9304	2.0142	1.9155	.05209	L.09885	.04998
SDev	.00022	.0193	.0211	.0184	.00067	.00016	.00061
%RSD	.45080	.99829	1.0497	.96135	1.2937	.16325	1.2158
#1	.04974	1.9440	2.0291	1.9286	.05256	L.09873	.05041
#2	.05006	1.9168	1.9992	1.9025	.05161	L.09896	.04955
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.51892	.20722	.23729	1.0032	L.00716	.49810	1.0329
SDev	.00399	.00109	.00173	.0047	.00247	.00409	.0033
%RSD	.76905	.52707	.73013	.46459	34.472	.82194	.31887
#1	.52174	.20800	.23851	1.0065	L.00542	.50099	1.0352
#2	.51610	.20645	.23606	.99990	L.00891	.49520	1.0306
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	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	.51655	.50505	.50406	.50439	.51187	.49295	.49925
SDev	.00687	.00209	.00367	.00314	.00251	.00059	.00123
%RSD	1.3301	.41406	.72731	.62286	.49011	.12013	.24645
#1	.52141	.50653	.50665	.50661	.51364	.49337	.50012
#2	.51169	.50357	.50146	.50217	.51009	.49254	.49838
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	1.9906	2.0694	2.0431	2.0083	.49990	.52884	
SDev	.0020	.0020	.0020	.0148	.00454	.00515	
%RSD	.09837	.09568	.09656	.73652	.90793	.97473	
#1	1.9920	2.0708	2.0445	2.0187	.50311	.53248	
#2	1.9892	2.0680	2.0417	1.9978	.49669	.52519	
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	

666 1091

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15735	--	--	--	--	--	--
SDev	14.21326	--	--	--	--	--	--
%RSD	.0903298	--	--	--	--	--	--
#1	15745	--	--	--	--	--	--
#2	15725	--	--	--	--	--	--

Method: METTRA

Sample Name: DGFPG

Operator: RJG

Run Time: 07/30/00 14:49:04

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00050	23.496	.01844	.05580	.00156	2.0364	.00119
SDev	.00004	.043	.00034	.00014	.00003	.0024	.00002
%RSD	7.1843	.18104	1.8160	.24903	1.9411	.11577	1.7091
#1	.00053	23.526	.01821	.05590	.00158	2.0381	.00118
#2	.00048	23.466	.01868	.05571	.00153	2.0348	.00120
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	.00387	.03614	.01788	21.164	.88169	.11454	.00306
SDev	.00042	.00037	.00010	.027	.00114	.00003	.00020
%RSD	10.745	1.0321	.57650	.12752	.12888	.02361	6.6099
#1	.00357	.03588	.01796	21.183	.88249	.11456	.00321
#2	.00416	.03641	.01781	21.144	.88089	.11452	.00292
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	.01111	.08211	.07437	.07694	.00071	.00430	.00311
SDev	.00023	.00045	.00136	.00106	.00260	.00136	.00004
%RSD	2.1181	.54830	1.8276	1.3730	368.43	31.549	1.2966
#1	.01095	.08179	.07341	.07620	-.00113	.00527	.00313
#2	.01128	.08242	.07533	.07769	.00254	.00334	.00308
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	-.00055	.00140	.00075	.00331	.05310	.67776	
SDev	.00045	.00204	.00121	.00273	.00003	.00084	
%RSD	81.568	145.45	161.11	82.379	.05021	.12361	
#1	-.00023	-.00004	-.00010	.00524	.05312	.67836	
#2	-.00087	.00284	.00161	.00138	.05308	.67717	
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	

666 1093

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15814	--	--	--	--	--	--
SDev	5.727979	--	--	--	--	--	--
%RSD	.0362213	--	--	--	--	--	--
#1	15810	--	--	--	--	--	--
#2	15818	--	--	--	--	--	--

Method: METTRA

Sample Name: DGFPGP5

Operator: RJG

Run Time: 07/30/00 14:53:13

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
Avge	-.00017	4.6099	.00351	.01108	.00130	.39722	.00020
SDev	.00048	.0224	.00226	.00002	.00002	.00042	.00007
%RSD	281.92	.48612	64.334	.18602	1.5271	.10541	37.127

#1	.00017	4.5941	.00191	.01109	.00132	.39751	.00015
#2	-.00051	4.6258	.00511	.01106	.00129	.39692	.00026

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00127	.00694	.00109	4.2054	.17075	.02274	-.00026
SDev	.00012	.00011	.00008	.0270	.00013	.00001	.00060
%RSD	9.5996	1.5103	7.0269	.64272	.07801	.04806	231.03

#1	.00135	.00687	.00115	4.1863	.17066	.02275	.00016
#2	.00118	.00701	.00104	4.2245	.17084	.02273	-.00068

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00217	.01341	.01636	.01538	.00337	.00095	.00176
SDev	.00113	.00167	.00214	.00087	.00002	.00093	.00063
%RSD	52.172	12.415	13.091	5.6846	.58217	97.868	35.654

#1	.00137	.01459	.01485	.01476	.00336	.00029	.00131
#2	.00297	.01224	.01788	.01600	.00339	.00161	.00220

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00107	.00020	-.00023	.00092	.00928	.13651
SDev	.00075	.00088	.00083	.00095	.00053	.00022
%RSD	70.014	449.31	370.73	103.02	5.7269	.16199

#1	-.00160	-.00043	-.00082	.00159	.00966	.13636
#2	-.00054	-.00082	.00036	.00025	.00890	.13667

666 1095

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15907	--	--	--	--	--	--
SDev	12.40959	--	--	--	--	--	--
%RSD	.0780128	--	--	--	--	--	--
#1	15916	--	--	--	--	--	--
#2	15898	--	--	--	--	--	--

Method: METTRA

Sample Name: DGFPGS

Operator: RJG

Run Time: 07/30/00 14:57:22

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	.04842	43.133	1.9206	1.9306	.05139	1.7984	.04873
SDev	.00018	.387	.0132	.0164	.00018	.0041	.00030
%RSD	.36490	.89624	.68907	.84929	.35844	.22537	.61777
#1	.04855	42.859	1.9112	1.9190	.05126	1.7955	.04852
#2	.04830	43.406	1.9300	1.9422	.05152	1.8012	.04895
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	.50442	.24564	.25737	21.243	1.4192	.58941	.99557
SDev	.00247	.00097	.00189	.130	.0078	.00340	.00705
%RSD	.48950	.39565	.73299	.61037	.55295	.57753	.70839
#1	.50267	.24495	.25603	21.151	1.4137	.58700	.99058
#2	.50616	.24632	.25870	21.335	1.4248	.59181	1.0006
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	.51801	.56679	.55665	.56003	.43540	.42873	.43095
SDev	.00063	.00087	.00040	.00056	.00388	.00181	.00250
%RSD	.12166	.15293	.07180	.09915	.89187	.42240	.58034
#1	.51757	.56618	.55637	.55963	.43265	.42745	.42918
#2	.51846	.56740	.55693	.56042	.43814	.43001	.43272
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	1.8796	1.9462	1.9240	1.9639	.54716	1.1105	
SDev	.0081	.0094	.0090	.0096	.00150	.0029	
%RSD	.42833	.48317	.46533	.48632	.27469	.26062	
#1	1.8739	1.9395	1.9177	1.9571	.54609	1.1084	
#2	1.8853	1.9528	1.9303	1.9706	.54822	1.1125	
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	

666 1097

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15535	--	--	--	--	--	--
SDev	87.04457	--	--	--	--	--	--
%RSD	.5603036	--	--	--	--	--	--
#1	15474	--	--	--	--	--	--
#2	15597	--	--	--	--	--	--

Method: METTRAC

Sample Name: DGFPGD

Operator: RJG

Run Time: 07/30/00 15:01:31

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	.04744	41.421	1.9039	1.9085	.05119	1.7735	.04861
SDev	.00019	.094	.0132	.0048	.00027	.0162	.00046
%RSD	.40252	.22754	.69266	.25254	.52394	.91381	.94420
#1	.04758	41.488	1.9132	1.9119	.05138	1.7849	.04894
#2	.04731	41.355	1.8945	1.9051	.05100	1.7620	.04829
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	.49875	.23958	.25161	20.114	1.3682	.57675	.97860
SDev	.00267	.00153	.00029	.065	.0082	.00248	.00438
%RSD	.53537	.63748	.11556	.32397	.59764	.43015	.44715
#1	.50064	.24066	.25181	20.160	1.3739	.57851	.98169
#2	.49686	.23850	.25140	20.068	1.3624	.57500	.97551
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	.51339	.54776	.54008	.54264	.43300	.41795	.42296
SDev	.00646	.00514	.00278	.00357	.00113	.00266	.00215
%RSD	1.2577	.93914	.51460	.65731	.26168	.63575	.50823
#1	.51796	.55140	.54205	.54516	.43381	.41983	.42448
#2	.50882	.54413	.53812	.54012	.43220	.41607	.42144
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	1.8589	1.9206	1.9001	1.9413	.53910	1.1318	
SDev	.0087	.0099	.0095	.0120	.00585	.0082	
%RSD	.47047	.51309	.49920	.61632	1.0844	.72503	
#1	1.8651	1.9276	1.9068	1.9497	.54324	1.1376	
#2	1.8528	1.9136	1.8933	1.9328	.53497	1.1260	
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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	1	2	3	4	5	6	7
IntStd	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Mode	Y	--	--	--	--	--	--
Elem	371.030	--	--	--	--	--	--
Wavlen	15740	--	--	--	--	--	--
Avge	144.4266	--	--	--	--	--	--
SDev	.9175897	--	--	--	--	--	--
%RSD							
#1	15638	--	--	--	--	--	--
#2	15842	--	--	--	--	--	--

666 1099

Method: METTRA

Sample Name: DGFPJ

Operator: RJG

Run Time: 07/30/00 15:05:41

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	-.00007	24.468	.00925	.03277	.00152	.67744	.00020
SDev	.00014	.034	.00175	.00005	.00014	.00385	.00006
%RSD	202.25	.13701	18.928	.14467	9.3905	.56824	30.921
#1	.00003	24.444	.01049	.03273	.00142	.68016	.00016
#2	-.00017	24.492	.00802	.03280	.00162	.67472	.00025
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00349	.03165	.00977	23.542	.53440	.03951	.00241
SDev	.00014	.00030	.00032	.044	.00025	.00011	.00051
%RSD	4.0052	.93246	3.3009	.18514	.04674	.28432	20.997
#1	.00359	.03185	.01000	23.572	.53423	.03959	.00277
#2	.00339	.03144	.00955	23.511	.53458	.03943	.00206
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	.00863	.03497	.03232	.03320	.00313	.00327	.00322
SDev	.00096	.00008	.00073	.00046	.00157	.00111	.00126
%RSD	11.169	.23345	2.2731	1.3940	50.001	33.887	39.102
#1	.00932	.03503	.03180	.03287	.00424	.00405	.00412
#2	.00795	.03491	.03284	.03353	.00203	.00249	.00233
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	.00059	.00151	.00120	.00348	.05635	.04352	
SDev	.00237	.00141	.00173	.00288	.00038	.00008	
%RSD	403.61	93.054	143.45	82.871	.66498	.17721	
#1	.00226	.00251	.00242	.00144	.05661	.04358	
#2	-.00109	.00052	-.00002	.00552	.05608	.04347	
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	15789	--	--	--	--	--	--
SDev	113.4906	--	--	--	--	--	--
%RSD	.7188001	--	--	--	--	--	--
#1	15709	--	--	--	--	--	--
#2	15869	--	--	--	--	--	--

Method: METTRA Sample Name: DGFPM

Operator: RJG

Run Time: 07/30/00 15:09:50

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	-.00048	17.181	.00882	.04798	.00161	.68637	.00187
SDev	.00028	.071	.00026	.00027	.00002	.00376	.00003
%RSD	57.386	.41106	2.8885	.55951	1.3364	.54709	1.8680
#1	-.00029	17.231	.00864	.04817	.00160	.68903	.00184
#2	-.00067	17.131	.00900	.04779	.00163	.68372	.00189
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	.00290	.02129	.01152	14.918	.34924	.03537	.00136
SDev	.00033	.00015	.00016	.095	.00307	.00023	.00003
%RSD	11.480	.71074	1.4218	.63773	.87928	.65057	2.3757
#1	.00313	.02140	.01141	14.985	.35141	.03554	.00134
#2	.00266	.02118	.01164	14.850	.34707	.03521	.00138
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	.00705	.08232	.07942	.08039	.00391	.00204	.00266
SDev	.00078	.00077	.00124	.00109	.00011	.00012	.00012
%RSD	11.037	.93216	1.5655	1.3495	2.8744	5.7785	4.3594
#1	.00760	.08286	.08030	.08115	.00383	.00196	.00258
#2	.00650	.08178	.07854	.07962	.00398	.00212	.00274
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	-.00083	.00153	.00074	.00005	.03867	.05036	
SDev	.00265	.00101	.00156	.00355	.00032	.00026	
%RSD	317.94	66.078	209.76	6843.0	.81836	.50691	
#1	-.00271	.00081	-.00036	.00256	.03889	.05054	
#2	.00104	.00224	.00184	-.00246	.03844	.05018	
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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666 1103

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15825	--	--	--	--	--	--
SDev	126.8200	--	--	--	--	--	--
%RSD	.8013688	--	--	--	--	--	--
#1	15736	--	--	--	--	--	--
#2	15915	--	--	--	--	--	--

Method: METTRA Sample Name: DGFPN

Operator: RJG

Run Time: 07/30/00 15:13:59

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	.00002	35.131	.01515	.05957	.00186	.59189	.00030
SDev	.00016	.007	.00052	.00004	.00007	.00074	.00014
%RSD	780.53	.02060	3.4646	.06908	3.6593	.12500	48.499
#1	.00013	35.126	.01552	.05954	.00181	.59241	.00020
#2	-.00009	35.136	.01478	.05960	.00190	.59137	.00040
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00390	.05234	.02273	39.786	.63420	.05369	.00221
SDev	.00011	.00008	.00000	.032	.00079	.00013	.00022
%RSD	2.8908	.16121	.00533	.08042	.12490	.24174	9.8753
#1	.00382	.05240	.02273	39.809	.63364	.05378	.00236
#2	.00398	.05228	.02273	39.764	.63476	.05359	.00205
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	.01033	.08247	.07265	.07592	.00240	.00402	.00348
SDev	.00032	.00288	.00145	.00192	.00186	.00052	.00097
%RSD	3.1062	3.4902	1.9909	2.5332	77.795	12.889	27.779
#1	.01011	.08450	.07367	.07728	.00108	.00365	.00280
#2	.01056	.08043	.07163	.07456	.00372	.00439	.00416
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	-.00138	.00084	.00010	-.00036	.09042	.04161	
SDev	.00078	.00225	.00176	.00061	.00028	.00014	
%RSD	56.629	266.73	1730.7	168.49	.31297	.32877	
#1	-.00194	-.00075	-.00114	-.00080	.09062	.04151	
#2	-.00083	.00243	.00135	.00007	.09022	.04171	
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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666 1105

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15840	--	--	--	--	--	--
SDev	54.90712	--	--	--	--	--	--
%RSD	.3466462	--	--	--	--	--	--
#1	15801	--	--	--	--	--	--
#2	15878	--	--	--	--	--	--

Method: METTRA

Sample Name: DGFPP

Operator: RJG

Run Time: 07/30/00 15:18:09

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	- .00034	47.483	.02140	.05399	.00245	2.7775	- .00002
SDev	.00011	.671	.00026	.00086	.00030	.0530	.00009
%RSD	33.281	1.4128	1.2125	1.5896	12.238	1.9073	413.58
#1	- .00026	47.957	.02121	.05460	.00224	2.8150	.00004
#2	- .00042	47.008	.02158	.05338	.00266	2.7401	- .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
Avg	.00573	.07836	.02503	60.558	.84593	.06261	.00164
SDev	.00009	.00168	.00071	.901	.01541	.00104	.00044
%RSD	1.5594	2.1428	2.8265	1.4886	1.8211	1.6602	26.943
#1	.00567	.07955	.02553	61.196	.85682	.06334	.00133
#2	.00579	.07717	.02453	59.921	.83504	.06187	.00195
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	.01428	.05194	.04789	.04924	.00347	.00289	.00308
SDev	.00022	.00140	.00010	.00053	.00085	.00026	.00011
%RSD	1.5277	2.6987	.20754	1.0826	24.513	9.0452	3.5252
#1	.01412	.05294	.04796	.04962	.00287	.00308	.00301
#2	.01443	.05095	.04782	.04887	.00407	.00271	.00316
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	- .00356	.00067	- .00074	.00275	.13610	.03802	
SDev	.00256	.00085	.00028	.00264	.00422	.00060	
%RSD	71.921	127.12	38.377	96.104	3.1010	1.5821	
#1	- .00537	.00127	- .00094	.00088	.13908	.03844	
#2	- .00175	.00007	- .00054	.00461	.13311	.03759	
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	16319	--	--	--	--	--	--
SDev	271.7410	--	--	--	--	--	--
%RSD	1.665156	--	--	--	--	--	--
#1	16127	--	--	--	--	--	--
#2	16511	--	--	--	--	--	--

Method: METTRA

Sample Name: DGFPR

Operator: RJG

Run Time: 07/30/00 15:22:18

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00016	12.574	.00613	.03165	.00162	.64464	.00156
SDev	.00006	.000	.00053	.00003	.00006	.00210	.00015
%RSD	41.117	.00068	8.6394	.07814	3.4449	.32578	9.4858
#1	-.00011	12.574	.00576	.03167	.00166	.64612	.00145
#2	-.00020	12.574	.00651	.03163	.00158	.64315	.00166
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	.00283	.01787	.01022	10.872	.37567	.03309	.00057
SDev	.00000	.00021	.00034	.003	.00174	.00003	.00006
%RSD	.15324	1.1582	3.2843	.03139	.46364	.09293	10.080
#1	.00282	.01772	.00999	10.870	.37691	.03311	.00061
#2	.00283	.01801	.01046	10.874	.37444	.03307	.00053
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	.00500	.05013	.04857	.04909	.00244	-.00011	.00074
SDev	.00076	.00395	.00060	.00091	.00218	.00019	.00060
%RSD	15.105	7.8730	1.2378	1.8604	89.312	174.61	81.173
#1	.00553	.05292	.04814	.04973	.00090	.00002	.00032
#2	.00446	.04734	.04899	.04844	.00398	-.00024	.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	.00296	.00074	.00148	.00333	.03430	.05202	
SDev	.00262	.00212	.00054	.00001	.00064	.00013	
%RSD	88.547	286.09	36.609	.34505	1.8775	.25114	
#1	.00481	-.00076	.00110	.00332	.03475	.05211	
#2	.00111	.00224	.00186	.00334	.03384	.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	

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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	16000	--	--	--	--	--	--
SDev	40.44596	--	--	--	--	--	--
%RSD	.2527880	--	--	--	--	--	--
#1	16029	--	--	--	--	--	--
#2	15971	--	--	--	--	--	--

Method: METTRA

Sample Name: CCV3-5

Operator: RJG

Run Time: 07/30/00 15:26:27

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0067	23.254	.50263	1.9271	2.0145	50.177	.48443
SDev	.0008	.046	.00125	.0019	.0007	.029	.00025
%RSD	.07912	.19789	.24771	.09733	.03236	.05684	.05074
#1	1.0062	23.222	.50175	1.9257	2.0140	50.197	.48425
#2	1.0073	23.287	.50351	1.9284	2.0149	50.157	.48460
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9925	2.0015	1.9038	24.375	48.973	1.9692	2.0088
SDev	.0011	.0026	.0011	.027	.030	.0023	.0081
%RSD	.05392	.13070	.05873	.11256	.06066	.11589	.40174
#1	1.9917	1.9997	1.9030	24.356	48.952	1.9675	2.0031
#2	1.9933	2.0034	1.9045	24.394	48.994	1.9708	2.0146
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	1.9783	.50159	.49937	.50011	.52227	.49990	.50735
SDev	.0039	.00293	.00336	.00126	.00251	.00220	.00063
%RSD	.19878	.58334	.67216	.25284	.48077	.44043	.12465
#1	1.9811	.49953	.50174	.50100	.52405	.49834	.50690
#2	1.9755	.50366	.49700	.49922	.52050	.50146	.50780
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	.50709	.51693	.51365	1.0237	1.9974	2.0103	
SDev	.00286	.00407	.00176	.0003	.0028	.0003	
%RSD	.56355	.78672	.34283	.02683	.14074	.01439	
#1	.50507	.51981	.51490	1.0239	1.9994	2.0101	
#2	.50911	.51406	.51241	1.0235	1.9954	2.0105	
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	15828	--	--	--	--	--	--
SDev	6.787949	--	--	--	--	--	--
%RSD	.0428846	--	--	--	--	--	--
#1	15833	--	--	--	--	--	--
#2	15824	--	--	--	--	--	--

Method: METTRA

Sample Name: CCB5

Operator: RJG

Run Time: 07/30/00 15:30:37

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	.00001	.06200	.00131	.00030	.00164	-.00147	.00009
SDev	.00004	.00081	.00034	.00010	.00022	.00377	.00007
%RSD	239.83	1.3077	26.322	32.591	13.421	256.91	75.761
#1	-.00001	.06257	.00107	.00023	.00148	-.00414	.00004
#2	.00004	.06142	.00156	.00038	.00179	.00120	.00014
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	.00045	-.00010	-.00308	.00087	.00463	.00021	.00322
SDev	.00040	.00000	.00001	.00324	.00326	.00017	.00015
%RSD	87.233	1.5546	.32940	372.17	70.468	84.125	4.6765
#1	.00017	-.00010	-.00309	.00316	.00232	.00008	.00332
#2	.00073	-.00010	-.00307	-.00142	.00693	.00033	.00311
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	.00058	.00002	.00036	.00025	.00185	.00095	.00125
SDev	.00030	.00245	.00079	.00134	.00139	.00063	.00004
%RSD	51.356	10542.	217.91	536.93	75.191	66.215	3.3493
#1	.00037	-.00171	-.00020	-.00070	.00283	.00051	.00128
#2	.00079	.00175	.00092	.00120	.00086	.00140	.00122
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	.00015	-.00218	-.00140	-.00026	-.00097	.00056	
SDev	.00002	.00216	.00144	.00342	.00055	.00000	
%RSD	13.901	99.262	102.33	1327.8	56.493	.46587	
#1	.00014	-.00065	-.00039	-.00268	-.00136	.00056	
#2	.00017	-.00371	-.00242	.00216	-.00058	.00055	
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	15784	--	--	--	--	--	--
SDev	42.70884	--	--	--	--	--	--
%RSD	.2705908	--	--	--	--	--	--
#1	15753	--	--	--	--	--	--
#2	15814	--	--	--	--	--	--

Method: METTRA Sample Name: DGRVEB

Operator: RJG

Run Time: 07/30/00 15:40:28

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	-.00008	.07628	-.00015	.00012	.00269	.24061	-.00001
SDev	.00012	.06844	.00060	.00003	.00064	.00186	.00008
%RSD	156.46	89.728	394.12	30.373	23.880	.77387	792.58
#1	-.00016	.12468	-.00058	.00009	.00315	.24193	-.00006
#2	.00001	.02788	.00027	.00014	.00224	.23929	.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	-.00028	-.00033	-.00529	-.00729	-.00328	-.00010	-.00052
SDev	.00006	.00048	.00210	.00310	.00001	.00000	.00001
%RSD	22.988	148.42	39.693	42.523	.35885	2.1118	1.6619
#1	-.00033	-.00067	-.00678	-.00510	-.00327	-.00010	-.00053
#2	-.00024	.00002	-.00381	-.00949	-.00329	-.00010	-.00051
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	.00020	.00227	-.00108	.00004	-.00012	.00116	.00073
SDev	.00028	.00065	.00139	.00071	.00235	.00243	.00084
%RSD	142.92	28.553	128.50	1855.0	1888.5	210.19	114.90
#1	-.00000	.00181	-.00010	.00054	.00154	-.00056	.00014
#2	.00040	.00273	-.00206	-.00046	-.00179	.00288	.00132
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	.00439	-.00346	-.00085	.00292	-.00164	.00959	
SDev	.00071	.00150	.00124	.00132	.00000	.00029	
%RSD	16.117	43.482	146.48	45.196	.01223	3.0648	
#1	.00489	-.00239	.00003	.00198	-.00164	.00980	
#2	.00389	-.00452	-.00172	.00385	-.00164	.00939	
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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	1	2	3	4	5	6	7
IntStd	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Mode	Y	--	--	--	--	--	--
Elem	371.030	--	--	--	--	--	--
Wavlen	16713	--	--	--	--	--	--
Avge	59.92730	--	--	--	--	--	--
SDev	.3585632	--	--	--	--	--	--
%RSD							
#1	16756	--	--	--	--	--	--
#2	16671	--	--	--	--	--	--

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Method: METTRA Sample Name: DGRVEC

Operator: RJG

Run Time: 07/30/00 15:44:38

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04405	1.6060	1.7883	1.7177	.04810	L.17521	.04443
SDev	.00065	.0088	.0073	.0078	.00005	.00094	.00009
%RSD	1.4729	.54836	.41093	.45397	.09587	.53628	.20565
#1	.04451	L1.5997	1.7831	1.7122	.04806	L.17587	.04437
#2	.04359	1.6122	1.7935	1.7232	.04813	L.17454	.04450
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass
High	.06000	2.4000	2.4000	2.4000	.06000	60.000	.06000
Low	.04000	1.6000	1.6000	1.6000	.04000	40.000	.04000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.46186	.18470	.21021	.91177	L.00110	.44753	L-.00034
SDev	.00131	.00015	.00061	.00169	.00155	.00141	.00000
%RSD	.28354	.07988	.28899	.18493	141.09	.31478	.55613
#1	.46094	.18459	.20978	.91297	L.00219	.44653	L-.00034
#2	.46279	.18480	.21064	.91058	L.00000	.44852	L-.00034
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Low
High	.60000	.24000	.30000	1.2000	60.000	.60000	1.2000
Low	.40000	.16000	.20000	.80000	40.000	.40000	.80000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.46005	.44938	.44324	.44528	.00003	.00196	L.00132
SDev	.00011	.00218	.00148	.00026	.00158	.00075	.00003
%RSD	.02383	.48418	.33379	.05890	4702.8	38.213	1.9103
#1	.46012	.45092	.44219	.44510	-.00108	.00249	L.00130
#2	.45997	.44784	.44428	.44547	.00115	.00143	L.00134
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Low
High	.60000			.60000			.60000
Low	.40000			.40000			.40000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.7254	1.7840	1.7645	1.7822	.44897	.46888	
SDev	.0064	.0116	.0056	.0041	.00054	.00193	
%RSD	.37031	.65053	.31812	.22904	.12022	.41084	
#1	1.7300	1.7758	1.7606	1.7793	.44859	.46752	
#2	1.7209	1.7922	1.7685	1.7851	.44935	.47024	
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	

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	16709	--	--	--	--	--	--
SDev	12.23350	--	--	--	--	--	--
%RSD	.0732144	--	--	--	--	--	--
#1	16700	--	--	--	--	--	--
#2	16718	--	--	--	--	--	--

Method: METTRA Sample Name: DGDJ0

Operator: RJG

Run Time: 07/30/00 15:48:47

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
Avg	.00022	120.84	.01505	.94576	.02445	H1011.2	.00018
SDev	.00005	.54	.00001	.00220	.00004	2.6	.00010
%RSD	21.195	.44326	.04836	.23219	.14585	.25849	56.987
#1	.00026	120.46	.01505	.94421	.02448	H1013.1	.00025
#2	.00019	121.22	.01504	.94731	.02443	H1009.4	.00011
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	.01170	.15102	.00904	20.559	13.433	4.6265	.00127
SDev	.00023	.00034	.00002	.089	.024	.0090	.00010
%RSD	1.9464	.22855	.20280	.43380	.17885	.19520	8.2277
#1	.01154	.15078	.00905	20.496	13.416	4.6201	.00119
#2	.01186	.15126	.00902	20.622	13.450	4.6328	.00134
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	.06468	.01982	.02954	.02631	.00458	.00137	.00244
SDev	.00008	.00397	.00067	.00088	.00202	.00160	.00039
%RSD	.12966	20.038	2.2628	3.3329	44.104	116.39	16.109
#1	.06462	.02263	.02907	.02693	.00315	.00250	.00272
#2	.06474	.01701	.03002	.02569	.00601	.00024	.00216
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	.01119	-.00564	-.00004	.02234	.03148	.13152	
SDev	.00293	.00050	.00131	.00113	.00151	.00020	
%RSD	26.215	8.8721	3544.8	5.0805	4.7841	.15366	
#1	.01326	-.00529	.00089	.02314	.03254	.13137	
#2	.00912	-.00600	-.00096	.02153	.03041	.13166	
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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						666	1119
IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	28983	--	--	--	--	--	--
SDev	35.35534	--	--	--	--	--	--
%RSD	.1219865	--	--	--	--	--	--
#1	28958	--	--	--	--	--	--
#2	29008	--	--	--	--	--	--

Method: METTRA Sample Name: DGDJ0P5

Operator: RJG

Run Time: 07/30/00 15:52:57

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00013	29.240	.00382	.23917	.01113	331.10	.00002
SDev	.00005	.286	.00059	.00166	.00007	1.26	.00000
%RSD	37.672	.97899	15.398	.69515	.62850	.38151	17.179

#1	.00010	29.038	.00424	.23799	.01118	330.21	.00002
#2	.00017	29.443	.00341	.24034	.01108	332.00	.00002

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00364	.03940	-.00314	5.2302	3.4136	1.1589	-.00094
SDev	.00010	.00022	.00012	.0552	.0231	.0088	.00040
%RSD	2.7020	.57191	3.7339	1.0551	.67798	.76291	42.966

#1	.00357	.03924	-.00322	5.1912	3.3973	1.1526	-.00066
#2	.00371	.03956	-.00306	5.2692	3.4300	1.1652	-.00123

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01745	.00528	.00678	.00628	.00176	.00135	.00149
SDev	.00014	.00052	.00121	.00064	.00017	.00019	.00018
%RSD	.79228	9.8283	17.860	10.112	9.8130	13.933	12.307

#1	.01736	.00564	.00593	.00583	.00189	.00148	.00162
#2	.01755	.00491	.00764	.00673	.00164	.00122	.00136

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00937	-.00800	-.00222	.01106	.00687	.03389
SDev	.00084	.00212	.00170	.00086	.00146	.00013
%RSD	8.9841	26.536	76.506	7.7986	21.185	.37851

#1	.00997	-.00650	-.00102	.01045	.00584	.03380
#2	.00877	-.00951	-.00342	.01167	.00790	.03398

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	22867	--	--	--	--	--	--
SDev	123.4965	--	--	--	--	--	--
%RSD	.5400683	--	--	--	--	--	--
#1	22954	--	--	--	--	--	--
#2	22780	--	--	--	--	--	--

Method: METTRA

Sample Name: DGDJ0S

Operator: RJG

Run Time: 07/30/00 15:57:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02295	103.45	.82114	1.5932	.04308	H851.28	.01792
SDev	.00068	9.61	.05745	.1080	.00116	43.50	.00084
%RSD	2.9638	9.2938	6.9970	6.7809	2.6925	5.1098	4.7076
#1	.02247	96.651	.78051	1.5168	.04226	H820.52	.01732
#2	.02343	110.25	.86177	1.6696	.04390	H882.04	.01852
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
Avge	.19676	.10961	.10717	13.631	13.199	3.6917	.00347
SDev	.01510	.00772	.00966	1.270	.975	.3044	.00692
%RSD	7.6724	7.0413	9.0126	9.3153	7.3873	8.2461	199.43
#1	.18609	.10415	.10034	12.733	12.510	3.4764	.00836
#2	.20744	.11506	.11400	14.529	13.889	3.9069	-.00142
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	.20630	.23457	.16832	.19038	-.02520	.01528	.00180
SDev	.00692	.01912	.08653	.05135	.05016	.02441	.00042
%RSD	3.3521	8.1499	51.407	26.971	199.01	159.69	23.564
#1	.20141	.24809	.10713	.15407	-.06067	.03254	.00150
#2	.21119	.22105	.22950	.22669	.01026	-.00197	.00210
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.84534	.69499	.74506	.84251	.22642	.29122	
SDev	.00667	.26992	.18226	.10300	.01117	.02163	
%RSD	.78899	38.838	24.462	12.225	4.9319	7.4264	
#1	.84062	.50413	.61618	.76968	.21852	.27593	
#2	.85006	.88585	.87393	.91534	.23431	.30651	
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	33637	--	--	--	--	--	--
SDev	1444.480	--	--	--	--	--	--
%RSD	4.294286	--	--	--	--	--	--
#1	34659	--	--	--	--	--	--
#2	32616	--	--	--	--	--	--

Method: METTRA

Sample Name: DGDJ0D

Operator: RJG

Run Time: 07/30/00 16:01:16

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	.02241	101.65	.81131	1.5498	.04279	H840.88	.01766
SDev	.00044	4.55	.02013	.0469	.00028	7.58	.00011
%RSD	1.9623	4.4725	2.4807	3.0238	.65693	.90092	.62502
#1	.02272	98.432	.79708	1.5166	.04259	H835.52	.01758
#2	.02210	104.86	.82554	1.5829	.04299	H846.24	.01774
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
Avge	.19450	.10476	.10635	14.551	10.970	3.9829	.00204
SDev	.00539	.00223	.00413	.590	.307	.1386	.00481
%RSD	2.7726	2.1319	3.8810	4.0551	2.7961	3.4794	236.08
#1	.19069	.10318	.10343	14.134	10.753	3.8849	.00544
#2	.19831	.10634	.10927	14.968	11.187	4.0808	-.00136
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	.20332	.23116	.18096	.19768	-.01783	.01227	.00225
SDev	.00036	.01589	.05201	.02940	.03218	.01576	.00020
%RSD	.17926	6.8748	28.741	14.872	180.50	128.44	9.0177
#1	.20358	.24240	.14418	.17689	-.04059	.02342	.00211
#2	.20306	.21992	.21774	.21846	.00493	.00113	.00239
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	.82941	.71800	.75510	.83370	.22203	.29784	
SDev	.00623	.16620	.10878	.05160	.00162	.00805	
%RSD	.75091	23.148	14.407	6.1897	.73209	2.7045	
#1	.83381	.60048	.67818	.79721	.22088	.29215	
#2	.82500	.83552	.83202	.87019	.22318	.30354	
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	

	1	2	3	4	5	6	7
IntStd	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Mode	Y	--	--	--	--	--	--
Elem	371.030	--	--	--	--	--	--
Wavlen	33509	--	--	--	--	--	--
Avge	297.0898	--	--	--	--	--	--
SDev	.8865911	--	--	--	--	--	--
%RSD							
#1	33719	--	--	--	--	--	--
#2	33299	--	--	--	--	--	--

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Method: METTRA Sample Name: DGDJT

Operator: RJG

Run Time: 07/30/00 16:05:26

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00035	67.233	.03188	.79404	.01715	10.002	.00086
SDev	.00056	3.584	.00036	.03061	.00020	.283	.00026
%RSD	157.50	5.3310	1.1129	3.8552	1.1550	2.8318	29.679
#1	.00075	64.699	.03213	.77239	.01729	9.8020	.00104
#2	-.00004	69.767	.03163	.81569	.01701	10.203	.00068
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	.04909	.08605	.03715	158.88	2.3832	4.5276	.00224
SDev	.00173	.00312	.00215	8.40	.0879	.2147	.00256
%RSD	3.5345	3.6224	5.7766	5.2851	3.6867	4.7423	114.49
#1	.04787	.08385	.03563	152.95	2.3211	4.3758	.00405
#2	.05032	.08825	.03866	164.82	2.4454	4.6794	.00043
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	.05806	.09015	.06785	.07527	-.00943	.00789	.00212
SDev	.00289	.00806	.02191	.01193	.01717	.00776	.00054
%RSD	4.9726	8.9426	32.295	15.850	181.97	98.392	25.450
#1	.06010	.09585	.05235	.06684	-.02157	.01338	.00174
#2	.05602	.08445	.08334	.08371	.00271	.00240	.00250
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	.01690	-.01386	-.00362	.01452	.15366	.17295	
SDev	.01950	.01285	.00208	.00166	.00157	.00723	
%RSD	115.39	92.676	57.359	11.449	1.0212	4.1795	
#1	.03069	-.02295	L-.00509	.01334	.15477	.16784	
#2	.00311	-.00478	-.00215	.01569	.15255	.17806	
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	24952	--	--	--	--	--	--
SDev	708.4851	--	--	--	--	--	--
%RSD	2.839429	--	--	--	--	--	--
#1	25453	--	--	--	--	--	--
#2	24451	--	--	--	--	--	--

Method: METTRA Sample Name: DGDK2

Operator: RJG

Run Time: 07/30/00 16:09:35

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
Avg	.00098	140.45	.02023	1.0684	.02406	H891.89	.00030
SDev	.00059	3.83	.00266	.0195	.00005	14.88	.00011
%RSD	59.618	2.7257	13.168	1.8278	.20843	1.6687	37.230
#1	.00140	137.74	.02211	1.0546	.02403	H881.37	.00038
#2	.00057	143.16	.01834	1.0822	.02410	H902.42	.00022
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	.02148	.07668	.02098	51.406	19.716	5.7736	.00488
SDev	.00007	.00111	.00070	1.443	.446	.1494	.00406
%RSD	.31936	1.4515	3.3188	2.8078	2.2596	2.5878	83.136
#1	.02144	.07590	.02049	50.386	19.401	5.6679	.00775
#2	.02153	.07747	.02148	52.427	20.031	5.8792	.00201
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	.04417	.04702	.03384	.03823	-.01032	.01032	.00345
SDev	.00142	.01511	.01709	.00637	.02515	.01155	.00067
%RSD	3.2109	32.134	50.510	16.662	243.70	111.88	19.477
#1	.04518	.05771	.02176	.03373	-.02810	.01849	.00297
#2	.04317	.03634	.04593	.04274	.00746	.00216	.00392
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	.02530	-.01800	-.00358	.02483	.07388	.20811	
SDev	.02293	.00933	.00142	.00207	.00115	.00479	
%RSD	90.615	51.817	39.541	8.3234	1.5505	2.3029	
#1	.04152	-.02459	-.00258	.02336	.07469	.20472	
#2	.00909	-.01140	-.00458	.02629	.07307	.21150	
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	30473	--	--	--	--	--	--
SDev	388.0248	--	--	--	--	--	--
%RSD	1.273347	--	--	--	--	--	--
#1	30747	--	--	--	--	--	--
#2	30198	--	--	--	--	--	--

Method: METTRA

Sample Name: DGDK5

Operator: RJG

Run Time: 07/30/00 16:13:45

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	L-.26245	53.150	L-.10393	.27553	L-.17941	341.67	L-.00847
SDev	.39877	52.236	.20383	.54959	.27847	601.31	.01535
%RSD	151.94	98.281	196.11	199.47	155.21	175.99	181.17

#1	.01952	90.087	.04019	.66415	.01750	H766.86	.00238
#2	L-.54442	16.213	L-.24806	-.11309	L-.37632	L-83.521	L-.01933

Errors	LC Low	LC Pass	LC Low	LC Pass	LC Low	LC Pass	LC Low
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	L-.25918	L-.19165	L-.03767	26.159	4.1714	1.8579	.08531
SDev	.40547	.37597	.08450	32.916	11.558	2.5903	.09211
%RSD	156.44	196.18	224.33	125.83	277.09	139.42	107.96

#1	.02753	.07421	.02208	49.435	12.344	3.6896	.02018
#2	L-.54589	L-.45750	L-.09742	2.8838	-4.0016	.02630	.15044

Errors	LC Low	LC Low	LC Low	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	L-.09749	.61139	.46496	.51372	.50258	.06618	.21150
SDev	.24404	.60886	.77309	.71840	.88269	.00196	.29524
%RSD	250.32	99.586	166.27	139.84	175.63	2.9591	139.59

#1	.07507	.18086	-.08169	.00574	-.12158	.06480	.00273
#2	L-.27006	1.0419	1.0116	1.0217	1.1267	.06757	.42027

Errors	LC Low	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	-1.8268	1.1498	.15860	L-.72267	L-.11410	L-.07237
SDev	2.7383	1.7194	.23501	1.06963	.29370	.32371
%RSD	149.90	149.54	148.18	148.01	257.42	447.33

#1	.10952	-.06603	L-.00757	.03368	.09358	.15653
#2	-3.7631	2.3656	.32478	L-1.4790	L-.32177	L-.30127

Errors	NOCHECK	NOCHECK	LC Pass	LC Low	LC Low	LC Low
High			10.000	10.000	50.000	5.0000
Low			-.00500	-.01000	-.05000	-.02000

666 1131

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	11980	--	--	--	--	--	--
SDev	16597.71	--	--	--	--	--	--
%RSD	138.5469	--	--	--	--	--	--
#1	23716	--	--	--	--	--	--
#2	244	--	--	--	--	--	--

666 1131

2C1T999

Metals Preparation Log



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

Method:

3010A

Matrix:

Wt %

Start Time:

0545

SDG:

Balance#

Reagents:

Analyst:

D. Stewart

Date:

7-28-00

Lot Number:

COG270302

Lab Lot No. (book, page, line)

0014-188-12

3ml conc. HNO₃

5ml 10% HCl

LABSAC/elli:adv:vt

2014-190.4

Sample ID

1. DGLXLS

2. DGLXLS

3. DGLXLS

4. DGLXLS

5. DGLXLS

6. DGLXLS

7. DGLXLS

8. DGLXLS

9. DGLXLS

10. DGLXLS

11. DGLXLS

12. DGLXLS

13. DGLXLS

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16. DGLXLS

17. DGLXLS

18. DGLXLS

19. DGLXLS

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21. DGLXLS

22. DGLXLS

23. DGLXLS

24. DGLXLS

25. DGLXLS

26. DGLXLS

Init Wt/Vol

50.1

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Final Vol

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Comments

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Artifact Codes

S=Stones

O=Organic

(plant mat)

W=free H₂O

G=Glass

M=Metal Fragments

R=Rubber/Plastic

C=Cloth

P=Paper

I=Insects

Digestate(s)

7-28-00

7-28-00

7-28-00

7-28-00

7-28-00

7-28-00

Date

7-28-00

7-28-00

7-28-00

7-28-00

7-28-00

7-28-00

Time

11:35

11:35

11:35

11:35

11:35

11:35

Analyst

D. Stewart

D. Stewart

D. Stewart

D. Stewart

D. Stewart

D. Stewart

Location

Met 186

Met 186

Met 186

Met 186

Met 186

Met 186

Date

7-28-00

7-28-00

7-28-00

7-28-00

7-28-00

7-28-00

Time

11:35

11:35

11:35

11:35

11:35

11:35

Analyst

D. Stewart

D. Stewart

D. Stewart

D. Stewart

D. Stewart

D. Stewart

Location

Met 186

Met 186

Met 186

Met 186

Met 186

Met 186

Hot plate

95°C

95°C

95°C

95°C

95°C

95°C

Correction

Factor

Factor

Factor

Factor

Factor

Factor

Color

R=Red

BL=Blue

BR=Brown

BLK=Black

Y=Yellow

O=Orange

V=Violet

P=Pink

W=White

GY=Gray

GN=Green

C=Colorless

ESTD 100
666 1133

PSR024 7/28/00 2:32:14 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 005

REQUESTED BY: FAUSTG

METHOD: QM Inductively Coupled Plasma (60108 Trace)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
12D CLP1	DGXL3	_____	253702	399411	I-05-QM	COG270302	001		WATER	0	13 1

RELINQUISHED BY

Jeffrey D. Braust
Jeffrey D. Braust

RECEIVED BY

Jeffrey D. Braust
Jeffrey D. Braust

DATE/TIME

7-28-00 0440
7-28-00 0545

STL Pittsburgh

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

6449

666 1134
0815 400

STL-Pittsburgh Atomic Absorption Data for Mercury

Instrument: PS200HG

Analyst Name: William A. Hoyle

Date of Analysis: 7-28-00

File ID: 0728HGA

Matrix: WATER

Lot Number/SDG

Method

<u>COG250174</u>	<u>(TCLP)</u>	<u>7470A</u>
<u>COG200137</u>		
<u>COG210158</u>		
<u>COG220116</u>		
<u>COG250147</u>	↓	
<u>COG250147</u>		
<u>COG260136</u>		
<u>COG260145</u>		
<u>COG180165</u>		
<u>COG180137</u>	<u>(SPLP)</u>	
<u>COG270302</u>		↓

William A. Hoyle 7-28-00

666 1135

Page 73

10:07:02 28 Jul 2000

Folder: 0728HGA
Protocol: HGMET

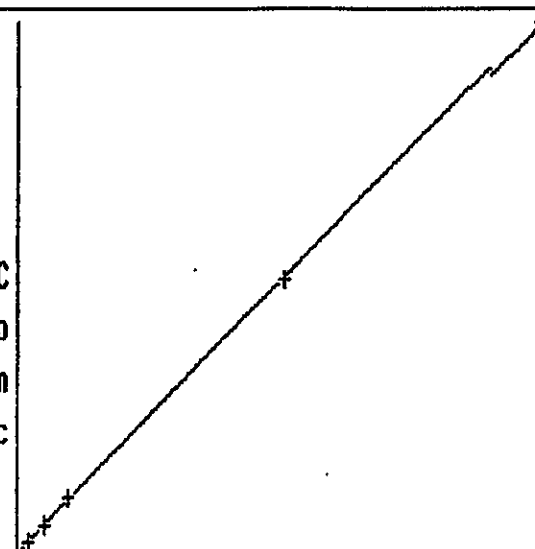
Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 0		10:07:02 28 Jul 2000 HG		
Hg	.000	ppb	-13653					
*** Standard: 2 Rep: 1				Seq: 1		10:08:32 28 Jul 2000 HG		
Hg	.200	ppb	24254		0014-197-10			
*** Standard: 3 Rep: 1				Seq: 2		10:10:41 28 Jul 2000 HG		
Hg	.500	ppb	61145		0014-198-1			
*** Standard: 4 Rep: 1				Seq: 3		10:12:50 28 Jul 2000 HG		
Hg	1.00	ppb	112276		0014-198-2			
*** Standard: 5 Rep: 1				Seq: 4		10:15:10 28 Jul 2000 HG		
Hg	5.00	ppb	574814		0014-198-3			
*** Standard: 6 Rep: 1				Seq: 5		10:16:46 28 Jul 2000 HG		
Hg	10.0	ppb	1131233		0014-198-4			

666 1136
0811 400

Killam & Hoyle 7-28-00

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0720HGA Seq: 6 Batch:
Prnt: R/T On Pump: On
Rev: 4.2 10:18:34 28 Jul 2000 Xmit: Off Gas: 0.30 LPM
State: Idle User: WAH A/S: On

CALIBRATION: Line proto: HGMET
ng naccepten
Conc. Calc. Dev. ->linear
S1 .000 -.107 -.107 Quadratic
S2 .200 .227 .027 Wtdlinear
S3 .500 .551 .051 C
S4 1.00 1.00 .001 Accept o
S5 5.00 5.07 .060 n
S6 10.0 9.96 -.039 c
A .0000000 r .999069
B 8.79355e-6 C 1.32632e-2



Mean
S1 -13653 0 SD -13653
S2 24254 0 %RSD 24254
S3 61145 0 %RSD 61145
S4 112276 0 %RSD 112276
S5 574814 0 %RSD 574814
S6 1131233 0 %RSD 1131233

New cal coefficients stored

10:21:03 28 Jul 2000

Folder: 072BHGA
 Protocol: HGMET

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: ICV5-1				Seq: 6	10:21:03 28 Jul 2000 HG			
Hg	2.63	ppb	297082	0014-198-5				
*** Sample ID: ICB1				Seq: 7	10:22:27 28 Jul 2000 HG			
Hg	.078	ppb	7399					
*** Sample ID: CCV5-1				Seq: 8	10:23:51 28 Jul 2000 HG			
Hg	5.16	ppb	585496	0014-198-6				
*** Sample ID: CCB1				Seq: 9	10:25:21 28 Jul 2000 HG			
Hg	.038	ppb	2855					
*** Sample ID: DHOAVBT				Seq: 10	10:26:49 28 Jul 2000 HG			
Hg	.076	ppb	7097					
*** Sample ID: DHOAVCT				Seq: 11	10:28:38 28 Jul 2000 HG			
Hg	2.72	ppb	308227	0014-198-7				
*** Sample ID: DGWD8BT				Seq: 12	10:30:03 28 Jul 2000 HG			
Hg	.091	ppb	8804					
*** Sample ID: DGQCPT				Seq: 13	10:31:33 28 Jul 2000 HG			
Hg	.102	ppb	10102					
*** Sample ID: DGQCPST				Seq: 14	10:32:59 28 Jul 2000 HG			
Hg	5.31	ppb	602391					
*** Sample ID: DGQCPDT				Seq: 15	10:34:36 28 Jul 2000 HG			
Hg	5.30	ppb	601104					
*** Sample ID: DHOC1BT				Seq: 16	10:36:44 28 Jul 2000 HG			
Hg	.075	ppb	7042					
*** Sample ID: DHOC1CT				Seq: 17	10:40:04 28 Jul 2000 HG			
Hg	2.82	ppb	319064	0014-198-8				

SP. REC.
104%

SP. REC.
104%

666 1138
7811 100

10:41:33 28 Jul 2000

Folder: 0728HGA
Protocol: HGMET

Page 75

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DGWEXBT				Seq: 18		10:41:33 28 Jul 2000	HG	
Hg	.141	ppb	14481					
*** Sample ID: DGH CET				Seq: 19		10:42:58 28 Jul 2000	HG	
Hg	.109	ppb	10845					
*** Sample ID: CCV5-2				Seq: 20		10:44:27 28 Jul 2000	HG	
Hg	5.36	ppb	607657					
*** Sample ID: CCB2				Seq: 21		10:46:02 28 Jul 2000	HG	
Hg	.061	ppb	5380					
*** Sample ID: DGH CRT				Seq: 22		10:47:27 28 Jul 2000	HG	
Hg	.089	ppb	8631					
*** Sample ID: DGH CVT				Seq: 23		10:49:25 28 Jul 2000	HG	
Hg	.101	ppb	9946					
*** Sample ID: DGH CWT				Seq: 24		10:51:15 28 Jul 2000	HG	
Hg	.175	ppb	18365					
*** Sample ID: DGH CXT				Seq: 25		10:52:44 28 Jul 2000	HG	
Hg	.107	ppb	10706					
*** Sample ID: DGK TKT				Seq: 26		10:54:52 28 Jul 2000	HG	
Hg	.106	ppb	10570					
*** Sample ID: DGK TLT				Seq: 27		10:56:28 28 Jul 2000	HG	
Hg	.161	ppb	16762					
*** Sample ID: DGK TPT				Seq: 28		10:57:53 28 Jul 2000	HG	
Hg	.094	ppb	9211					
*** Sample ID: DGK TQT				Seq: 29		10:59:32 28 Jul 2000	HG	
Hg	.124	ppb	12648					

11:01:09 28 Jul 2000

Folder: 0728HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DGKTQST					Seq: 30	11:01:09 28 Jul 2000 HG		
Hg	5.46	ppb	619518					
*** Sample ID: DGKTQDT					Seq: 31	11:03:15 28 Jul 2000 HG		
Hg	5.44	ppb	616764					
*** Sample ID: CCV5-3					Seq: 32	11:05:23 28 Jul 2000 HG		
Hg	5.40	ppb	612577					
*** Sample ID: CCB3					Seq: 33	11:06:49 28 Jul 2000 HG		
Hg	.051	ppb	4343					
*** Sample ID: DGMVNT					Seq: 34	11:10:08 28 Jul 2000 HG		
Hg	.112	ppb	11263					
*** Sample ID: DGMVWT					Seq: 35	11:11:37 28 Jul 2000 HG		
Hg	.058	ppb	5063					
*** Sample ID: DGG5LT					Seq: 36	11:13:14 28 Jul 2000 HG		
Hg	.126	ppb	12805					
*** Sample ID: DHOC3B					Seq: 37	11:16:13 28 Jul 2000 HG		
Hg	.073	ppb	6806					
*** Sample ID: DHOC3C					Seq: 38	11:17:42 28 Jul 2000 HG		
Hg	2.67	ppb	302505					
*** Sample ID: DGG5L					Seq: 39	11:19:19 28 Jul 2000 HG		
Hg	.184	ppb	19465					
*** Sample ID: DGT5K					Seq: 40	11:21:44 28 Jul 2000 HG		
Hg	.148	ppb	15368					
*** Sample ID: DGT81					Seq: 41	11:23:23 28 Jul 2000 HG		
Hg	2.41	ppb	272054					

SP.REC.
107%SP.REC.
106%

0014-198-9

0800 00666 1140

11:25:12 28 Jul 2000

Folder: 0728HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DGT81S				Seq: 42		11:25:12 28 Jul 2000	HG	
Hg	3.40	ppb	384870					SP.REC. 99%
*** Sample ID: DGT81D				Seq: 43		11:26:38 28 Jul 2000	HG	
Hg	3.45	ppb	391045					SP.REC. 104%
*** Sample ID: CCV5-4				Seq: 44		11:28:29 28 Jul 2000	HG	
Hg	5.41	ppb	613924					
*** Sample ID: CCB4				Seq: 45		11:29:58 28 Jul 2000	HG	
Hg	.060	ppb	5270					
*** Sample ID: DHOC5BF				Seq: 46		11:31:25 28 Jul 2000	HG	
Hg	.031	ppb	2016					
*** Sample ID: DHOC5CF				Seq: 47		11:33:31 28 Jul 2000	HG	
Hg	2.73	ppb	308876					
*** Sample ID: DGDFKF				Seq: 48		11:35:59 28 Jul 2000	HG	
Hg	.111	ppb	11066					
*** Sample ID: DGDFKSF				Seq: 49		11:38:01 28 Jul 2000	HG	
Hg	1.15	ppb	129116					SP.REC. 104%
*** Sample ID: DGDFKDF				Seq: 50		11:39:31 28 Jul 2000	HG	
Hg	1.15	ppb	129571					SP.REC. 104%
*** Sample ID: DHOC7BE				Seq: 51		11:41:06 28 Jul 2000	HG	
Hg	.068	ppb	6257					
*** Sample ID: DHOC7CE				Seq: 52		11:44:17 28 Jul 2000	HG	
Hg	2.66	ppb	300785					
*** Sample ID: DGD7JE				Seq: 53		11:45:43 28 Jul 2000	HG	
Hg	.047	ppb	3873					

11:47:10 28 Jul 2000

666 1141

Folder: 0728HGA
Protocol: HGMET

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11:47:10 28 Jul 2000

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DGD7JSE				Seq: 54	11:47:10 28 Jul 2000 HG			
Hg	1.18	ppb	132683	SP. REC. 113%				
*** Sample ID: DGD7JDE				Seq: 55	11:49:07 28 Jul 2000 HG			
Hg	1.18	ppb	132890	SP. REC. 113%				
*** Sample ID: CCV5--5				Seq: 56	11:50:57 28 Jul 2000 HG			
Hg	5.37	ppb	609686					
*** Sample ID: CCB5				Seq: 57	11:53:05 28 Jul 2000 HG			
Hg	.051	ppb	4263					
*** Sample ID: DGD7LE				Seq: 58	11:54:33 28 Jul 2000 HG			
Hg	.049	ppb	4105					
*** Sample ID: DGD7NE				Seq: 59	11:56:01 28 Jul 2000 HG			
Hg	.068	ppb	6265					
*** Sample ID: DH0C9B				Seq: 60	11:58:00 28 Jul 2000 HG			
Hg	.084	ppb	8020					
*** Sample ID: DH0C9C				Seq: 61	11:59:57 28 Jul 2000 HG			
Hg	2.79	ppb	315260	0014-198-12				
*** Sample ID: DH0C9L				Seq: 62	12:01:37 28 Jul 2000 HG			
Hg	2.83	ppb	320033	0014-198-13				
*** Sample ID: DGXL3				Seq: 63	12:03:03 28 Jul 2000 HG			
Hg	.404	ppb	44491					
*** Sample ID: CCV5-6				Seq: 64	12:04:52 28 Jul 2000 HG			
Hg	5.37	ppb	608687					
*** Sample ID: CCB6				Seq: 65	12:06:18 28 Jul 2000 HG			
Hg	.068	ppb	6253					

SP. REC.
113%

SP. REC.
113%

END OF ANALYSIS

WAH

7-28-00

1011 000

666 1142

William a Hoyle 7-28-00

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS		
RunFold: 0728HGA	Seq: 0	Batch:	
	Prnt: R/T On	Pump: Off	
State: Idle	Rev: 4.2	09:35:19 28 Jul 2000	Xmit: Off Gas: LPM
		User: WAH	A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1

cup ID	Extended id	Weight	Volume	Macro	check macros
1	ICV5-1	1.0000	1.0000		
2	ICB1	1.0000	1.0000		
3	CCV5-1	1.0000	1.0000		
4	CCB1	1.0000	1.0000		
5	DH0AVBT	1.0000	1.0000		
6	DH0AVCT	1.0000	1.0000		
7	DGWD8BT	1.0000	1.0000		
8	DGQCPT	1.0000	1.0000		
9	DGQCPST	1.0000	1.0000		
10	DGQCPDT	1.0000	1.0000		
11	DHOC1BT	1.0000	1.0000		
12	DHOC1CT	1.0000	1.0000		
13	DGWEXBT	1.0000	1.0000		
14	DGHCET	1.0000	1.0000		
15	CCV5-2	1.0000	1.0000		

PgDn

Cup 1 ID: ICV5-1	Cell down mode Ins to switch

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS		
RunFold: 0728HGA	Seq: 0	Batch:	
	Prnt: R/T On	Pump: Off	
	Rev: 4.2	09:35:21 28 Jul 2000	Xmit: Off Gas: LPM
State: Idle		User: WAH	A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1					PgUp
cup ID	Extended id	Weight	Volume	Macro	check macros
16 CCB2		1.0000	1.0000		
17 DGHCRT		1.0000	1.0000		
18 DGHCVT		1.0000	1.0000		
19 DGHCWT		1.0000	1.0000		
20 DGHCXT		1.0000	1.0000		
21 DGKTKT		1.0000	1.0000		
22 DGKTLT		1.0000	1.0000		
23 DGKTPT		1.0000	1.0000		
24 DGKTQT		1.0000	1.0000		
25 DGKTQST		1.0000	1.0000		
26 DGKTQDT		1.0000	1.0000		
27 CCV5-3		1.0000	1.0000		
28 CCB3		1.0000	1.0000		
29 DGMVNT		1.0000	1.0000		
30 DGMVWT		1.0000	1.0000		

PgDn

Cup 16 ID: CCB2	Cell down mode Ins to switch

666 1144

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 072BHGA Seq: 0 Batch:
Prnt: R/T On Pump: Off
Rev: 4.2 09:35:23 28 Jul 2000 Xmit: Off Gas: LPM
State: Idle User: WAH A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1 PgUp
cup ID Extended id Weight Volume Macro checkK macros
31 D6Q5LT 1.0000 1.0000
32 DHOC3B 1.0000 1.0000
33 DHOC3C 1.0000 1.0000
34 D6Q5L 1.0000 1.0000
35 DGT5K 1.0000 1.0000
36 DGT81 1.0000 1.0000
37 DGT81S 1.0000 1.0000
38 DGT81D 1.0000 1.0000
39 CCV5-4 1.0000 1.0000
40 CCB4 1.0000 1.0000
41 DHOC5BF 1.0000 1.0000
42 DHOC5CF 1.0000 1.0000
43 DGDFKF 1.0000 1.0000
44 DGDFKSF 1.0000 1.0000

PgDn

Cup 31 ID: D6Q5LT

Cell down mode Ins to switch

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
RunFold: 0728HGA Seq: 0 Batch:
Prnt: R/T On Pump: Off
Rev: 4.2 09:49:31 28 Jul 2000 Xmit: Off Gas: LPM
State: Idle User: WAH A/S: On

AUTOSAMPLER: Rack Edit rack: RACK2
cup ID Extended id Weight Volume Macro checkK macros
1 DGDFKDF 1.0000 1.0000
2 DHOC7BE 1.0000 1.0000
3 DHOC7CE 1.0000 1.0000
4 DGD7JE 1.0000 1.0000
5 DGD7JSE 1.0000 1.0000
6 DGD7JDE 1.0000 1.0000
7 CCV5--5 1.0000 1.0000
8 CCB5 1.0000 1.0000
9 DGD7LE 1.0000 1.0000
10 DGD7NE 1.0000 1.0000
11 DHOC9B 1.0000 1.0000
12 DHOC9C 1.0000 1.0000
13 DHOC9L 1.0000 1.0000
14 DGXL3 1.0000 1.0000
15 CCV5-6 1.0000 1.0000

PgDn

Cup 1 ID: DGDFKDF

Cell down mode Ins to switch

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS		
RunFold: 072BHGA	Seq: 0	Batch:	
	Prnt: R/T On	Pump: Off	
State: Idle	Rev: 4.2	09:49:33 28 Jul 2000	Xmit: Off Gas: LPM
		User: WAH	A/S: On

AUTOSAMPLER: Rack Edit rack: RACK2				PgUp
cup ID	Extended id	Weight	Volume	Macro
16 CCB6		1.0000	1.0000	check macros
17		1.0000	1.0000	
18		1.0000	1.0000	
19		1.0000	1.0000	
20		1.0000	1.0000	
21		1.0000	1.0000	
22		1.0000	1.0000	
23		1.0000	1.0000	
24		1.0000	1.0000	
25		1.0000	1.0000	
26		1.0000	1.0000	
27		1.0000	1.0000	
28		1.0000	1.0000	
29		1.0000	1.0000	
30		1.0000	1.0000	

PgDn

Cup 16 ID: CCB6	Cell down mode Ins to switch

4711999

Hg Digestion Log

Quanterra Incorporated
450 William Pitt Way
Pittsburgh, Pennsylvania 15238
412/826-5477 FAX: 412/826-5571



QUA-4169

Serial Number

092 96-MI-579

Start Time

08.25.2005

Log Book Number

Sample ID

Date Rec'd

Prep Date

Prepared By

WVVol

Sample Type

Run Date

Comments

1.	STD0	N/A	7-28-00	WAA	100ml	WATER	7-28-00	N/A	0014-197-10
2.	STD1								0014-198-1
3.	STD2								0014-198-2
4.	STD3								0014-198-3
5.	STD4								0014-198-4
6.	STD5								0014-198-5
7.	ICV ~~STD6~~ WAA 7-28-00								N/A
8.	ICB								0014-198-6
9.	CCV								N/A
10.	CCB								0014-198-7
11.	DH0AVBT								N/A
12.	DH0AUCT								N/A
13.	DGW08BT	↓							0014-198-8
14.	DGQCPT	7-25-00							45ml 0014-197-8
15.	DGRCPT								45ml 0014-197-8
16.	DGQCPT	↓							N/A
17.	DH0CCT	N/A							0014-198-8
18.	DH0CCT	↓							N/A
19.	DGWEXBT	N/A							N/A
20.	DH0CCT	7-20-00							N/A
21.	DH0CCT								N/A
22.	DH0CCT								N/A
23.	DH0CCT								N/A
24.	DH0CCT	↓							N/A
25.	DH0CCT	7-21-00							N/A

Reagents

Vol (ml)

Ref Number

Method

Extract(s)

Extract(s) Received

Location

Date

Time

Analyst

Location

(Record line number from above)

1.	HNO3	2.5ml	MAHUCKRODT 6623	TOPAOS	7470A	AUTOCLAVE	15PSI	120°C
2.	H2SO4	5.0ml	MAHUCKRODT 5657	NALAL3	5ACLO	= 0014-189-8		
3.	KMNO4	15.0ml	0014-196-7		MAH-NH4OH	= 0014-185-1		
4.	K2S2O4	8.0ml	0014-194-2		MAH 7-28-00			

Pittsburgh

8711999

Hg Digestion Log

Quanterra Incorporated
450 William Pitt Way
Pittsburgh, Pennsylvania 15238
412/826-5477 FAX: 412/826-5571



QUA-4189

Serial Number 093 Log Book Number 96-MT-579 Start Time 08:25-202.40

Sample ID	Date Rec'd	Prep Date	Prepared By	WVVol	Sample Type	Run Date	Comments
1. DGLTIT	7-21-00	7-28-00	WAT	100ml	WATER	7-28-00	N/A
2. DGLTPT							N/A
3. DGLTQT							N/A
4. DGLTQST							+5ml 0014-197-8
5. DGLTQDT							+5ml 0014-197-8
6. DGLVWT	7-22-00						N/A
7. DGLVWT							N/A
8. DGLVLT	7-25-00						N/A
9. DGLC3B	N/A						0014-198-9
10. DGLC3C							N/A
11. DGLC3L	7-25-00						N/A
12. DGLC3K	7-26-00						N/A
13. DGLT81							N/A
14. DGLT85							+1ml 0014-197-8
15. DGLT8D							+1ml 0014-197-8
16. DGLC3BF	N/A						N/A
17. DGLC3CF							0014-198-10
18. DGLC3FE	7-18-00						N/A
19. DGLC3KF							+1ml 0014-197-8
20. DGLC3KF							+1ml 0014-197-8
21. DGLC3BE	N/A						N/A
22. DGLC3CE							0014-198-11
23. DGLC3JE	7-18-00						N/A
24. DGLC3JE							+1ml 0014-197-8
25. DGLC3DE							+1ml 0014-197-8
Reagents		Vol (mL)				Ref. Number	Method
HNO3	2.5ml					mail/wckRBDT 6633 TOSR05	7470A AUTOCLAVE 15Psi 120°C
H2SO4	5.0ml					mail/wckRBDT 5557 N31A13	SACLS = 0014-189-2
KMNO4	15.0ml					0014-196-9	ALCL-NH2OH = 0014-185-1
K2S2O4	8.0ml					0014-194-2	WAT 7-28-00
Extract(s)			Extract(s) Received				Extract(s) Relinquished
(Record line number from above)	Date	Time	Analyst	Location	Date	Time	Analyst
			WAT 7-28-00				

Hg Digestion Log



Serial Number	094	Log Book Number	96-M1-579	Start Time	08:35-08:40

[illegible]

REQUESTED BY: HOYLEW

METHOD: 08 Mercury (7470A, Cold Vapor) - Liquid

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
12D CLP1	DGXL3	___	253716	399411	I-19-08	COG270302	001		WATER	0	13 -1

RELINQUISHED BYRECEIVED BYDATE/TIMEWilliam A Hoyle William A Hoyle 7-28-00 05:50William A Hoyle William A Hoyle 7-28-00 07:55

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

666 1151

666 1151

GENERAL CHEMISTRY DATA

666 1152

UXB INTERNATIONAL

666 1152

Client Sample ID: DF/S1/0208/IDW/002

General Chemistry

Lot-Sample #....: COG270302-001

Work Order #....: DGXL3

Matrix.....: WATER

Date Sampled....: 07/26/00

Date Received...: 07/27/00

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.0		No Units	SW846 9040	07/27/00	0209627
		Dilution Factor: 1		MS Run #.....: 0209343		
Cyanide, Total	ND	10.0	ug/L	SW846 9012A	07/31-08/01/00	0213204
		Dilution Factor: 1		MS Run #.....: 0213071		
Flashpoint	>200		deg F	SW846 1010	07/31/00	0214091
		Dilution Factor: 1		MS Run #.....: 0214003		
Total Sulfide	ND	1.0	mg/L	MCAWW 376.1	07/31/00	0213187
		Dilution Factor: 1		MS Run #.....:		

METHOD BLANK REPORT

666 1153

General Chemistry

Client Lot #...: C0G270302

Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Cyanide, Total	.	Work Order #:	DH3L4101	MB Lot-Sample #:	C0G310000-204	
	ND	10.0	ug/L	SW846 9012A	07/31-08/01/00	0213204
		Dilution Factor: 1				
Total Sulfide		Work Order #:	DH3JT101	MB Lot-Sample #:	C0G310000-187	
	ND	1.0	mg/L	MCAWW 376.1	07/31/00	0213187
		Dilution Factor: 1				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

666 1154

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Lot-Sample #...: C0G270302

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>RPD</u>	<u>RPD LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Total Sulfide		WO#:DH3JT102-LCS/DH3JT103-LCSD			LCS Lot-Sample#:	C0G310000-187	
	106	(85 - 115)			MCAWW 376.1	07/31/00	0213187
	98	(85 - 115)	7.4	(0-25)	MCAWW 376.1	07/31/00	0213187
		Dilution Factor: 1					

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

666 1155

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #....: C0G270302

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 #: DH09N101 (85 - 115)	LCS Lot-Sample#: C0G270000-627 SW846 9040	07/27/00	0209627
		Dilution Factor: 1			
Cyanide, Total	104	Work Order #: DH3L4102 (85 - 145)	LCS Lot-Sample#: C0G310000-204 SW846 9012A	07/31-08/01/00	0213204
		Dilution Factor: 1			
Flashpoint	100	Work Order #: DH4MX101 (85 - 115)	LCS Lot-Sample#: C0H010000-091 SW846 1010	07/31/00	0214091
		Dilution Factor: 1			

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

0718 082
666 1156

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C0G270302

Matrix.....: WATER

Date Sampled...: 07/26/00

Date Received...: 07/27/00

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Cyanide, Total			WO#: DGXL312M-MS/DGXL312N-MSD		MS Lot-Sample #: C0G270302-001		
	0.0 N	(75 - 125)			SW846 9012A	07/31-08/01/00	0213204
	0.0 N	(75 - 125)	0.0	(0-20)	SW846 9012A	07/31-08/01/00	0213204
			Dilution Factor: 1				
			MS Run #:.....: 0213071				

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

SAMPLE DUPLICATE EVALUATION REPORT

666 1157

General Chemistry

Client Lot #....: COG270302

Work Order #....: DGXL3-SMP

Matrix.....: WATER

DGXL3-DUP

Date Sampled....: 07/26/00

Date Received...: 07/27/00

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Flashpoint	>200	>200	deg F	0.0	(0-20)	SD Lot-Sample #: COG270302-001 SW846 1010	07/31/00	0214091
Dilution Factor: 1								
			Prep Date.....: 0214003	Analysis Date...:		Prep Batch #....:		
pH	7.0	7.1	No Units	0.57	(0-20)	SD Lot-Sample #: COG270302-001 SW846 9040	07/27/00	0209627
Dilution Factor: 1								
			Prep Date.....: 0209343	Analysis Date...:		Prep Batch #....:		

STL Pittsburgh
pH LOG SHEET

Page ____ of ____

Lot No.	Batch No.	SDG No.
006270302	0209627	006270302

Analyst: CM BRITISH
Date: 7-27-00
Start Time: 2200

pH Meter Calibration

Reading	Buffer	Manf. Lot No.	Rec'd	Expire
4.00	4.0	Label 0062-07	5-19-00	3-1-02
7.00	7.0	9167-05	↓	6-25-01
10.00	10.0	0910-07	2-24-00	1-11-01

LCS ID No.: 75

Range = $\pm .05$ pH units

Relative Percent Difference = 0.6%

$$\frac{|X_1 - X_2|}{\left(\frac{X_1 + X_2}{2}\right)} \times 100$$

X₁ =Original Result

X₂ = Duplicate

pH Liquid

Sample ID	pH Reading
LCS	7.05
COG 270302-001	7.04
-001 Dup	7.08
LCS	7.02

COG 270302-001
7-27-00

pH Solid

[illegible]

PSR024 7/27/00 19:07:46 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

0028 688
666 1159

PAGE 001

REQUESTED BY: BRITSCHC

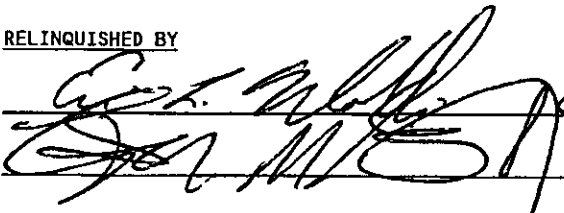
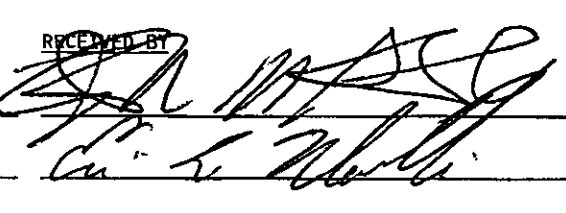
ME J: FJ pH (9040) - Aqueous

<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>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
12D CLP1	DGXL3-1-11	___	253658	399411	I-88-FJ	COG270302	001		WATER	0	13 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

		7-27-00 1900
		7-27-00 2245

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

STL Pittsburgh

7009

666 1160
0211 008

Quanterra Environmental Services
SULFIDE LOG SHEET

Lot No. 006270237 Batch No. 0213187 SDG No. 7-31-00
TOTAL 006270302
DISSOLVED 006270237 0213189

Includes attachment(s) _____
Analyst: Eric L. Wesolowski
Date: 7-31-00
Start Time: 09:00

Stock Std. ID No.: 0071-009-03 True Value 200 ppm
Prep 7-31-00 Exp 8-7-00

LCS 5 mL of 200 ppm (ID No.: 0071-009-03) = 200 ppm
Range +/- 25%

Calculations:

Sulfide mg / L = $\frac{[(20 \text{ mL of Iodine} \times N \text{ Iodine}) - (\text{mL Na}_2\text{S}_2\text{O}_3 \times N \text{ Na}_2\text{S}_2\text{O}_3)]}{\text{mL Sample}} \times 16,000$

Iodine Standardization ID No.: 0071-008-10
0.0240 N Iodine = $\frac{(\text{mL Na}_2\text{S}_2\text{O}_3)(N \text{ of Na}_2\text{S}_2\text{O}_3)}{20.0 \text{ mL of Iodine Solution}}$

Sodium Thiosulfate Standardization
ID No. 0071-008-12

Relative Percent Difference = $\frac{\text{Total LCS} / \text{LCSD} = 7.5\%}{\text{Disc. LCS} / \text{LCSD} = 8\%}$
 $\frac{|X_1 - X_2|}{\frac{X_1 + X_2}{2}} \times 100$ $X_1 = \text{Original Result}$
 $X_2 = \text{Duplicate}$

Titration	mLs	Normality
1	<u>10.35</u>	<u>0.0242</u>
2	<u>10.35</u>	<u>0.0242</u>

Avg. = 0.0242 N

$(10 \text{ mL of KH(IO}_3)_2) (0.025 \text{ N KH(IO}_3)_2)$
mL of $\text{Na}_2\text{S}_2\text{O}_3$

Concentration of Sample in Spike:

MS Percent Recovery:

Orig. Smp. Conc. $\left(\frac{\text{Vol. of Smp. in Spike}}{\text{Orig. Smp. Vol.}} \right) =$ 100 x 7-31-00
Observed Conc. of MS $\left(\frac{\text{Conc. of Smp. in Spike}}{\text{True Spike Conc.}} \right) =$

Sample ID: _____

Sample ID: _____

666 1161

Observed Conc. of Smp.
of MSD *E. coli* in Spike
7-31-00
True Spike Conc.

[illegible]

7011

REQUESTED BY: MESOLOSE

666 1162

OD: CT Sulfide (376.1)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
										RCVD	REQD
DGX1R-1-0A		— — —	254500	059184	I-88-CT	COG270237	001		WATER	11	1
12D CLP1	DGXL3-1-10	— — —	254499	399411	I-88-CT	COG270302	001		WATER	13	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

E. Z. Newberry
E. Z. Newberry

E. Z. Newberry
E. Z. Newberry

7/31/00 (08:15)
7/31/00 (09:45)

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

REQUESTED BY: MESOLOSE

4825 000
666 1163

OO: CT Dissolved Sulfide

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
12C	DGX1R-1-0C	_____	254501	059184	1-87-CT	COG270237	001		WATER	11	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

E. L. Whalley
*E. L. Whalley**E. L. Whalley*
*E. L. Whalley**7/31/00 (08:15)*
7/31/00 (09:45)

my anide

666 1164

DATE 000

CO6220344 } Total
Solid 0210171

CO6220349 } Total
Solid 0211100

CO6220108 } Total
CO6270356 } Solid 0213198
CO6290133 }

CO6220110 } Total
CO6290136 } Water 0213199

CO6220302 } Total
Water 0213204

Results: C:\FLOW_4\080100A.RST
Results completed: 12:53 August 01, 2000.
Operator: P.JOHNSON

666 1165

1011 080

P. Johnson 9.1.00

CYANIDE

Time	Cup	Name	Height	Calc.	Flags
----- User request: Start Data Collect -----					
08:54	0	CARRYOVER	576	0.001564	
08:55	0	CARRYOVER	70	0.000333	
		Mean & RSD:	323	0.000949	NORS
08:56	0	READ BASELIN	0	0.000162	BL
08:57	301	0.500 PPM ST	201260	0.490046	
08:59	301	0.500 PPM ST	203471	0.495428	
09:00	301	0.500 PPM ST	204956	0.499042	
		Mean & RSD:	203229	0.494838	.915%
09:01	302	0.400 PPM ST	164811	0.401325	
09:02	302	0.400 PPM ST	167654	0.408246	
09:03	302	0.400 PPM ST	165937	0.404067	
		Mean & RSD:	166134	0.404546	.862%
09:04	303	0.300 ppm ST	125242	0.305012	
09:06	303	0.300 ppm ST	125736	0.306214	
09:07	303	0.300 ppm ST	124672	0.303624	
		Mean & RSD:	125217	0.304950	.425%
09:08	304	0.200 PPM ST	83222	0.202732	
09:09	304	0.200 PPM ST	82561	0.201123	
09:10	304	0.200 PPM ST	83498	0.203404	
		Mean & RSD:	83094	0.202420	.58%
09:11	305	0.100 PPM ST	41200	0.100447	
09:13	305	0.100 PPM ST	41019	0.100005	
09:14	305	0.100 PPM ST	41037	0.100049	
		Mean & RSD:	41085	0.100167	.243%
09:15	306	0.050 PPM ST	20467	0.049980	
09:16	306	0.050 PPM ST	20454	0.049949	
09:17	306	0.050 PPM ST	20476	0.050002	
		Mean & RSD:	20466	0.049977	.0541
09:18	307	0.010 PPM ST	4257	0.010523	
09:20	307	0.010 PPM ST	4484	0.011076	OL
09:21	307	0.010 PPM ST	4192	0.010365	
		Mean & RSD:	4224	0.010444	3.63%
09:22	0	0.000 PPM ST	-1	0.000159	
09:23	0	0.000 PPM ST	25	0.000224	
09:24	0	0.000 PPM ST	90	0.000382	OL
		Mean & RSD:	12	0.000192	389%
09:25	0	BLANK	-14	0.000129	
09:27	2	CCV 7211102	42797	0.104333	104.39.
09:28	0	CCB	3	0.000169	
09:29	0	BASELINE	0	0.000162	BL
09:30	101	.05 7211014	20682	0.050503	101.09.
09:31	102	.40 7211015	160673	0.391253	92.89.
09:32	0	BLANK	5	0.000173	

Page #1
Run Results Report

Results: C:\FLOW_4\080100A.RST
Results completed: 12:53 August 01, 2000.
Operator: P. JOHNSON

666 1166

CYANIDE

Time	Cup	Name	Height	Calc.	Flags
09:34	2	CCV 7211102	42757	0.104235	104.29.
09:35	0	CCB	0	0.000162	
09:36	0	BASELINE	0	0.000162	BL
09:37	103	ICV	65420	0.159400	99.69.
09:38	0	ICB	-47	0.000047	
09:39	0	BLANK	-4	0.000153	
09:41	2	CCV 7211102	42910	0.104609	104.69.
09:42	0	CCB	-5	0.000151	
09:43	0	BASELINE	0	0.000162	BL
09:44	104	DH0J8101B	1406	0.179272	mg/kg
09:45	105	DH0J8102C	68023	82.867783	TU. BLS
09:46	106	DGXX110W	2248	0.281722	Range 51.6-148 10049
09:48	107	DGXX112RX	1947	0.245006	P. OT. RAS
09:49	108	DGXX112QS	39159	4.773908	95.59.
09:50	109	DGXX710W	2435	0.304438	
09:51	110	DGXX810W	3368	0.417962	
09:52	111	DGXXA10W	2348	0.293817	mg/kg
09:53	0	BLANK	4	0.000173	
09:55	2	CCV 7211102	43202	0.105320	105.34.
09:56	0	CCB	1	0.000164	
09:57	0	BASELINE	0	0.000162	BL
09:58	112	DGXXG10W	2259	0.282978	mg/kg
09:59	113	DGXXK10W	2455	0.306846	
10:00	114	DGXXM10W	2619	0.326830	
10:02	115	DGXXQ10W	2760	0.344024	
10:03	116	DGXXT10W	1981	0.249198	
10:04	117	DGXXW10W	1947	0.245047	
10:05	118	DH00010W	3335	0.414039	
10:06	119	DH00110W	2309	0.289110	mg/kg
10:07	0	BLANK	45	0.000272	
10:09	2	CCV 7211102	43569	0.106212	106.24.
10:10	0	CCB	2	0.000166	
10:11	0	BASELINE	0	0.000162	BL
10:12	120	DH00310W	1855	0.233840	mg/kg
10:13	121	DH00510W	1567	0.198822	
10:14	122	DH00810W	1670	0.211408	
10:16	123	DH00A10W	2223	0.278690	
10:17	124	DH00C10W	1654	0.209429	
10:18	125	DH00E10W	2770	0.345233	
10:19	126	DH00F10W	2076	0.260801	
10:20	127	DH00G10W	2127	0.266964	mg/kg
10:21	0	BLANK	32	0.000240	
10:23	2	CCV 7211102	43603	0.106295	106.34.
10:24	0	CCB	1	0.000163	

Page #2
Run Results Report

Results: C:\FLOW_4\080100A.RST
Results completed: 12:53 August 01, 2000.
Operator: P.JOHNSON

666 1167

1001 000

CYANIDE

Time	Cup	Name	Height	Calc.	Flags
10:25	0	BASELINE	0	0.000162	BL
10:26	128	ICV	66337	0.161632	101.09.
10:27	0	ICB	-33	0.000082	
10:28	0	BLANK	5	0.000174	
10:30	2	CCV 7211102	43914	0.107053	102.17.
10:31	0	CCB	-58	0.000020	
10:32	0	BASELINE	0	0.000162	BL
10:33	129	DH2H2101B	1496	0.190188	mg/kg
10:34	130	DH2H2102C	63976	77.941971	TJ: 82.5
10:35	131	DH00T10W	1504	0.191090	Range 51.6-149 94.59.
10:37	132	DH00X10W	1654	0.209379	
10:38	133	DH01010W	1306	0.167070	
10:39	134	DH01110W	1517	0.192739	
10:40	135	DH01210W	1646	0.208397	
10:41	136	DH01310W	1765	0.222899	mg/kg
10:42	0	BLANK	4	0.000173	
10:44	2	CCV 7211102	44131	0.107582	102.67.
10:45	0	CCB	-15	0.000126	
10:46	0	BASELINE	0	0.000162	BL
10:47	137	DH01410W	1700	0.215004	mg/kg
10:48	138	DH01610W	2052	0.257817	
10:49	139	DH01710W	1932	0.243286	
10:51	140	DH01810W	3363	0.417343	
10:52	141	DH01910W	1837	0.231665	
~~10:53~~	~~142~~	~~DH01A10W~~	~~15650~~	~~1.912744~~	~~mg/kg~~
10:54	143	DH01C10W	2318	0.290265	Air Spiker Saw Action
10:55	144	DH01D10W	1713	0.216588	mg/kg
10:56	0	BLANK	-24	0.000103	
10:58	2	CCV 7211102	44284	0.107954	108.07.
10:59	0	CCB	-31	0.000087	
11:00	0	BASELINE	0	0.000162	BL
11:01	145	DH01E10W	2644	0.329903	mg/kg
11:02	146	DH01G10W	2644	0.329887	
11:03	147	DH01H10W	1799	0.227060	
11:05	148	DH01L10W	5204	0.641452	
11:06	149	DH01L12PX	4187	0.517715	21.27. 81.5
11:07	150	DH01L12NS	44547	5.429606	95.87.
11:08	151	DH01P10W	3754	0.464985	
11:09	152	DH01R10W	2756	0.343545	mg/kg
11:10	0	BLANK	-60	0.000016	
11:12	2	CCV 7211102	43947	0.107132	102.17.
11:13	0	CCB	-25	0.000101	
11:14	0	BASELINE	0	0.000162	BL
11:15	153	ICV	68095	0.165911	103.79.

Page #3
Run Results Report

Results: C:\FLOW 4\080100A.RST
Results completed: 12:53 August 01, 2000.
Operator: P. JOHNSON

666 1168

P. Johnson 8:100

CYANIDE

Time	Cup	Name	Height	Calc.	Flags
11:16	0	ICB	31	0.000237	
11:17	0	BLANK	13	0.000193	
11:19	2	CCV 7211102	43685	0.106494	102.59.
11:20	0	CCB	-22	0.000107	
11:21	0	BASELINE	0	0.000162	BL
11:22	154	DH3KV101B	1342	0.171376	mg/Kg
11:23	155	DH3KV102C	66457	80.962265	TU: 82.5
11:24	156	DGVXE102	3009	0.374267	Range SI. 6.148 98.19.
11:26	157	DGVXE10XX	3036	0.377628	0.07. RPS
11:27	158	DGVXE10WS	19046	2.326090	44.59.
11:28	159	DH01W10W	2323	0.290792	
11:29	160	DH02010W	3581	0.443907	
11:30	161	DH02012UX	3475	0.431031	mg/Kg
11:31	0	BLANK	-21	0.000111	0.07. RPS
11:33	2	CCV 7211102	44471	0.108408	108.49.
11:34	0	CCB	-36	0.000074	
11:35	0	BASELINE	0	0.000162	BL
11:36	162	DH02012QS	45725	5.573011	mg/Kg
11:37	163	DH02110W	5102	0.629096	111.59.
11:38	164	DH02410W	24854	3.032934	Air Spikes: See below
11:40	165	DH02910W	3707	0.459212	
11:41	166	DH02E10W	2500	0.312355	
11:42	167	DH02H10W	2137	0.268194	
11:43	168	DH02K10W	1235	0.158441	
11:44	169	DH02N10W	3024	0.376147	mg/Kg
11:45	0	BLANK	-54	0.000030	
11:47	2	CCV 7211102	44902	0.109458	109.39.
11:48	0	CCB	-39	0.000068	
11:49	0	BASELINE	0	0.000162	BL
11:50	170	DH02V10W	2399	0.300102	mg/Kg
11:51	171	DH02W10W	1208	0.155147	
11:52	172	DH03010W	1629	0.206422	
11:54	173	DH2MM10W	1370	0.174814	
11:55	174	DH2N310W	1141	0.146937	
11:56	175	DH2N410W	1532	0.194559	
11:57	176	DH2N510W	1315	0.168172	
11:58	177	DH2N610W	1497	0.190323	mg/Kg
11:59	0	BLANK	-26	0.000099	
12:01	2	CCV 7211102	44555	0.108613	108.69.
12:02	0	CCB	-39	0.000067	
12:03	0	BASELINE	0	0.000162	BL
12:04	178	DH3L3102C	67971	0.165609	103.59.
12:05	0	ICB	8	0.000182	
12:06	0	BLANK	13	0.000194	

Page #4
Run Results Report

Results: C:\FLOW 4\080100A.RST
 Results completed: 12:53 August 01, 2000
 Operator: P. JOHNSON

666 1169

P. Johnson 8.1.00

CYANIDE

Time	Cup	Name	Height	Calc.	Flags
12:08	2	CCV 7211102	44565	0.108638	108.6%
12:09	0	CCB	-1	0.000159	
12:10	0	BASELINE	0	0.000162	BL
12:11	179	DH3L3101B	1081	0.002793	
12:12	180	DGW09101	108215	0.263567	
12:13	181	DGW09103X	104665	0.254925	3.4% R+D
12:15	182	DGW09102S	150416	0.366288	102.7%
12:16	183	DH2NN10V	7752	0.019031	
12:17	184	DH2NQ10V	2235	0.005603	
12:18	0	BLANK	-1	0.000159	
12:19	2	CCV 7211102	44001	0.107264	107.3%
12:20	0	CCB	-15	0.000127	
12:22	0	BASELINE	0	0.000162	BL
12:23	185	DH3L4101B	1270	0.003254	
12:24	186	DH3L4102C	68303	0.166416	104.0%
~~12:25~~	~~187~~	~~DGXL310W~~	~~28180~~	~~0.068754~~	~~6.9%~~ Air Spikes: Saw Run
12:26	188	DGXL312MS	1550	0.003936	0.0%
12:27	189	DGXL312ND	1968	0.004951	0.0% 0.0% R+D
12:29	0	BLANK	-18	0.000118	
12:30	2	CCV 7211102	42929	0.104654	104.7%
12:31	0	CCB	8	0.000181	
12:32	0	BASELINE	0	0.000162	BL
12:38	142	DH01A10W	1953	0.245854	mg/kg
12:40	164	DH02410W	4391	0.542492	mg/kg
12:41	187	DGXL310W	1655	0.004190	mg/kg
12:42	*190	DGVXE10WA	10800	1.322519	mg/kg 94.9%
12:43	0	BLANK	7	0.000180	
12:44	2	CCV 7211102	44317	0.108032	108.0%
12:45	0	CCB	9	0.000185	
12:47	0	BASELINE	0	0.000162	BL

* Analytical Spikes
 0.5 me of 1.0 ppm Std To 2.5 me with Sample
 C66270108.001 TV: .0241 me (1.0 mg/kg)

$$\frac{1.323 \text{ mg/kg} - 0.374 \text{ mg/kg}}{1.0 \text{ mg/kg}} = 94.9\%$$

File name: C:\FLOW\4\080100A.RST

Date: August 01, 2000

666 1170

Operator: P. JOHNSON

P. Johnson 8.1.00

* Name	Conc	Height
* 0.500 PPM STD	0.500000	201260.062500
* 0.500 PPM STD	0.500000	203471.312500
* 0.500 PPM STD	0.500000	204955.828125
* 0.400 PPM STD	0.400000	164810.859375
* 0.400 PPM STD	0.400000	167653.968750
* 0.400 PPM STD	0.400000	165937.187500
* 0.300 ppm STD	0.300000	125242.367188
* 0.300 ppm STD	0.300000	125736.031250
* 0.300 ppm STD	0.300000	124672.109375
* 0.200 PPM STD	0.200000	83222.273438
* 0.200 PPM STD	0.200000	82561.062500
* 0.200 PPM STD	0.200000	83498.492188
* 0.100 PPM STD	0.100000	41200.183594
* 0.100 PPM STD	0.100000	41018.832031
* 0.100 PPM STD	0.100000	41036.589844
* 0.050 PPM STD	0.050000	20466.609375
* 0.050 PPM STD	0.050000	20453.966797
* 0.050 PPM STD	0.050000	20476.021484
* 0.010 PPM STD	0.010000	4256.639648
* 0.010 PPM STD	0.010000	4483.700684
* 0.010 PPM STD	0.010000	4191.653809
* 0.000 PPM STD	0.000000	-1.117571
* 0.000 PPM STD	0.000000	25.300264
* 0.000 PPM STD	0.000000	90.330284

Calib Coef:

y=bx+a

a: (intercept) -6.6615e+01

b: 4.1083e+05

Corr Coef: 0.999810

Carryover: 0.15%

No Drift Peaks

6661171

CYANIDE: Calibration, Peak 5-197

2 400
2 200
2 000
1 800
1 600
1 400
1 200
1 000
0 800
0 600
0 400
0 200
0 000
-0 200
-0 400

STL Pittsburgh

Height (E+05)

7021

-0.1

0.0

0.1

0.2

0.3

0.4

0.5

0.6

Conc

■

■

■

■

■

■

■

■

0210171 Total 44344

Cyanide Distillation Worksheet

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



Sample ID		Distillation		Reagent /Std Book ID:		Sample Description (CLP Samples Only)	
Date:		Date:		Date:		Date:	
Initial		Final		Before Distillation		After Distillation	
Expiry Date		Expiry Date		Expiry Date		Expiry Date	
1. TUV	5.000	5.000	5.000	NA	NA	NA	NA
2. TUV	6.000	6.000	6.000	NA	NA	NA	NA
3. TUV	7.000	7.000	7.000	NA	NA	NA	NA
4. TUV	8.000	8.000	8.000	NA	NA	NA	NA
5. TUV	9.000	9.000	9.000	NA	NA	NA	NA
6. TUV	10.000	10.000	10.000	NA	NA	NA	NA
7. TUV	11.000	11.000	11.000	NA	NA	NA	NA
8. TUV	12.000	12.000	12.000	NA	NA	NA	NA
9. TUV	13.000	13.000	13.000	NA	NA	NA	NA
10. TUV	14.000	14.000	14.000	NA	NA	NA	NA
11. TUV	15.000	15.000	15.000	NA	NA	NA	NA
12. TUV	16.000	16.000	16.000	NA	NA	NA	NA
13. TUV	17.000	17.000	17.000	NA	NA	NA	NA
14. TUV	18.000	18.000	18.000	NA	NA	NA	NA
15. TUV	19.000	19.000	19.000	NA	NA	NA	NA
16. TUV	20.000	20.000	20.000	NA	NA	NA	NA
17. TUV	21.000	21.000	21.000	NA	NA	NA	NA
18. TUV	22.000	22.000	22.000	NA	NA	NA	NA
19. TUV	23.000	23.000	23.000	NA	NA	NA	NA
20. TUV	24.000	24.000	24.000	NA	NA	NA	NA
21. TUV	25.000	25.000	25.000	NA	NA	NA	NA
22. TUV	26.000	26.000	26.000	NA	NA	NA	NA
23. TUV	27.000	27.000	27.000	NA	NA	NA	NA
24. TUV	28.000	28.000	28.000	NA	NA	NA	NA
25. TUV	29.000	29.000	29.000	NA	NA	NA	NA
26. TUV	30.000	30.000	30.000	NA	NA	NA	NA

Comments: TUV: 11.000 kg 72.110.01 LHS: 32.500 kg 72.110.02

Revised by: 0.500 kg 72.110.01 LHS: 11.000 kg 72.110.02

Revised by: 0.500 kg 72.110.01 LHS: 11.000 kg 72.110.02

Cyanide Distillation
Worksheet

C06270349 Total 021100

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

Distilled by:

Reagent / Std Book ID:

Date:

Sample ID
1. Johnson Start 0945 2.23.00 347113734715216 Balance 6270323

Sample Description (CLP Samples Only)

1.	Initial	Final	Before Distillation	After Distillation	Expiration Date
2. 112421211	30.00	30.00	NA	NA	NA
3. 112421212	0.00	0.00	NA	NA	NA
4. 112421213	0.00	0.00	power medium	power medium	8.8.00
5. 112421214	0.00	0.00	power medium	power medium	
6. 112421215	0.00	0.00	power medium	power medium	
7. 112421216	0.00	0.00	power medium	power medium	
8. 112421217	0.00	0.00	power medium	power medium	
9. 112421218	0.00	0.00	power medium	power medium	
10. 112421219	0.00	0.00	power medium	power medium	
11. 112421220	0.00	0.00	power medium	power medium	
12. 112421221	0.00	0.00	power medium	power medium	
13. 112421222	0.00	0.00	power medium	power medium	
14. 112421223	0.00	0.00	power medium	power medium	
15. 112421224	0.00	0.00	power medium	power medium	
16. 112421225	0.00	0.00	power medium	power medium	
17. 112421226	0.00	0.00	power medium	power medium	
18. 112421227	0.00	0.00	power medium	power medium	
19. 112421228	0.00	0.00	power medium	power medium	
20. 112421229	0.00	0.00	power medium	power medium	
21. 112421230	0.00	0.00	power medium	power medium	
22. 112421231	0.00	0.00	power medium	power medium	
23. 112421232	0.00	0.00	power medium	power medium	
24. 112421233	0.00	0.00	power medium	power medium	
25. 112421234	0.00	0.00	power medium	power medium	
26. 112421235	0.00	0.00	power medium	power medium	

Distillate(s)

Distillate(s) Received

Distillate(s) Relinquished

(Record line number from	Date	Time	Analyst	Location	Date	Time	Analyst	Location
1.23	7.29.00	11.00	P. Johnson	Ref 3	7.29.00	11.30	P. Johnson	Ref 3
1.23	8.1.00	07.33	P. Johnson	Ref 3	8.1.00	11.30	P. Johnson	Ref 3

Comments: 112421211 112421212 112421213 112421214 112421215 112421216 112421217 112421218 112421219 112421220 112421221 112421222 112421223 112421224 112421225 112421226 112421227 112421228 112421229 112421230 112421231 112421232 112421233 112421234 112421235

Reviewed by: 112421211 112421212 112421213 112421214 112421215 112421216 112421217 112421218 112421219 112421220 112421221 112421222 112421223 112421224 112421225 112421226 112421227 112421228 112421229 112421230 112421231 112421232 112421233 112421234 112421235

Cyanide Distillation
Worksheet

6661174

606270108
606270356
606290133

Total 0213198



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

Distilled by:		Reagent (Std Book ID):		Date:		Sample Description (CLP Samples Only)	
P. Johnson		302127342157.6		3-31-00		Balance 626383	
Sample ID		Distillation		Before Distillation		After Distillation	
Initial		Final		NA		NA	
1. TCU	5.000	5.000	5.000	NA	NA	NA	NA
2. H3K1011	5.000	5.000	5.000	NA	NA	NA	NA
3. H3K1012	5.000	5.000	5.000	NA	NA	NA	NA
4. CUXE101	5.000	5.000	5.000	NA	NA	NA	NA
5. CUXE102	5.000	5.000	5.000	NA	NA	NA	NA
6. CUXE103	5.000	5.000	5.000	NA	NA	NA	NA
7. H010100	5.000	5.000	5.000	NA	NA	NA	NA
8. H020100	5.000	5.000	5.000	NA	NA	NA	NA
9. H020100	5.000	5.000	5.000	NA	NA	NA	NA
10. H020100	5.000	5.000	5.000	NA	NA	NA	NA
11. H020100	5.000	5.000	5.000	NA	NA	NA	NA
12. H020100	5.000	5.000	5.000	NA	NA	NA	NA
13. H020100	5.000	5.000	5.000	NA	NA	NA	NA
14. H020100	5.000	5.000	5.000	NA	NA	NA	NA
15. H020100	5.000	5.000	5.000	NA	NA	NA	NA
16. H020100	5.000	5.000	5.000	NA	NA	NA	NA
17. H020100	5.000	5.000	5.000	NA	NA	NA	NA
18. H020100	5.000	5.000	5.000	NA	NA	NA	NA
19. H020100	5.000	5.000	5.000	NA	NA	NA	NA
20. H020100	5.000	5.000	5.000	NA	NA	NA	NA
21. H020100	5.000	5.000	5.000	NA	NA	NA	NA
22. H020100	5.000	5.000	5.000	NA	NA	NA	NA
23. H020100	5.000	5.000	5.000	NA	NA	NA	NA
24. H020100	5.000	5.000	5.000	NA	NA	NA	NA
25. H020100	5.000	5.000	5.000	NA	NA	NA	NA
26. H020100	5.000	5.000	5.000	NA	NA	NA	NA

Distillate(s) Received		Distillate(s) Relinquished	
Record line number from	Date	Time	Analyst
1. 353	3-31-00	12:35	Johnson
2. 353	3-31-00	12:35	Johnson
Total: 30.00		3-31-00	Johnson
Reviewed by:		Date:	3-31-00

Cyanide Distillation Worksheet

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

31 Committed To Your Success

206270302 Totals 0213204

[illegible]

REQUESTED BY: JOHNSONP

666 1177

METHOD: OU Cyanide, Total (CLP)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
13C,D, CLP1	DGXXA-1-OW	___	254006	414853	A-06-OU	C0G270344	004		SOLID	3	1
13C,D, CLP1	DGXXG-1-OW	___	254007	414853	A-06-OU	C0G270344	005		SOLID	3	1
13C,D, CLP1	DGXXK-1-OW	___	254008	414853	A-06-OU	C0G270344	006		SOLID	3	1
13C,D, CLP1	DGXXM-1-OW	___	254009	414853	A-06-OU	C0G270344	007		SOLID	3	1
13C,D, CLP1	DGXXQ-1-OW	___	254010	414853	A-06-OU	C0G270344	008		SOLID	3	1
13C,D, CLP1	DGXXT-1-OW	___	254011	414853	A-06-OU	C0G270344	009		SOLID	3	1
13C,D, CLP1	DGXXW-1-OW	___	254012	414853	A-06-OU	C0G270344	010		SOLID	3	1
13C,D, CLP1	DGXX1-1-OW	___	254013	414853	A-06-OU	C0G270344	001		SOLID	9	1
13C,D, CLP1	DGXX7-1-OW	___	254014	414853	A-06-OU	C0G270344	002		SOLID	3	1
13C,D, CLP1	DGXX8-1-OW	___	254015	414853	A-06-OU	C0G270344	003		SOLID	3	1
13C,D, CLP1	DH00A-1-OW	___	254016	414853	A-06-OU	C0G270344	016		SOLID	3	1
13C,D, CLP1	DH00C-1-OW	___	254017	414853	A-06-OU	C0G270344	017		SOLID	3	1
13C,D, CLP1	DH00E-1-OW	___	254018	414853	A-06-OU	C0G270344	018		SOLID	3	1
13C,D, CLP1	DH00F-1-OW	___	254019	414853	A-06-OU	C0G270344	019		SOLID	3	1
13C,D, CLP1	DH00G-1-OW	___	254020	414853	A-06-OU	C0G270344	020		SOLID	3	1
13C,D, CLP1	DH000-1-OW	___	254021	414853	A-06-OU	C0G270344	011		SOLID	3	1
13C,D, CLP1	DH001-1-OW	___	254022	414853	A-06-OU	C0G270344	012		SOLID	3	1
13C,D, CLP1	DH003-1-OW	___	254023	414853	A-06-OU	C0G270344	013		SOLID	3	1
13C,D, CLP1	DH005-1-OW	___	254024	414853	A-06-OU	C0G270344	014		SOLID	3	1
13C,D, CLP1	DH008-1-OW	___	254025	414853	A-06-OU	C0G270344	015		SOLID	3	1

REQUESTED BY: JOHNSONP 666 1178

METHOD: OU Cyanide, Total (CLP)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<u>P. Johnson</u>	<u>P. Johnson</u>	<u>7-28-00/085</u>
<u>P. Johnson</u>	<u>P. Johnson</u>	<u>7-28-00/091</u>

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

REQUESTED BY: JOHNSONP

666 1179

METHOD: OU Cyanide, Total (CLP)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
13C,D,CLP1	DH00T-1-OW	___	254240	414853	A-06-OU	COG270349	001		SOLID	3	1
13C,D,CLP1	DH00X-1-OW	___	254241	414853	A-06-OU	COG270349	002		SOLID	3	1
13C,D,CLP1	DH01A-1-OW	___	254242	414853	A-06-OU	COG270349	012		SOLID	3	1
13C,D,CLP1	DH01C-1-OW	___	254243	414853	A-06-OU	COG270349	013		SOLID	3	1
13C,D,CLP1	DH01D-1-OW	___	254244	414853	A-06-OU	COG270349	014		SOLID	3	1
13C,D,CLP1	DH01E-1-OW	___	254245	414853	A-06-OU	COG270349	015		SOLID	3	1
13C,D,CLP1	DH01G-1-OW	___	254246	414853	A-06-OU	COG270349	016		SOLID	3	1
13C,D,CLP1	DH01H-1-OW	___	254247	414853	A-06-OU	COG270349	017		SOLID	3	1
13C,D,CLP1	DH01L-1-2M	___	254248	414853	A-06-OU	COG270349	018		SOLID	9	1
13C,D,CLP1	DH01P-1-OW	___	254249	414853	A-06-OU	COG270349	019		SOLID	3	1
13C,D,CLP1	DH01R-1-OW	___	254250	414853	A-06-OU	COG270349	020		SOLID	3	1
13C,D,CLP1	DH010-1-OW	___	254251	414853	A-06-OU	COG270349	003		SOLID	3	1
13C,D,CLP1	DH011-1-OW	___	254252	414853	A-06-OU	COG270349	004		SOLID	3	1
13C,D,CLP1	DH012-1-OW	___	254253	414853	A-06-OU	COG270349	005		SOLID	3	1
13C,D,CLP1	DH013-1-OW	___	254254	414853	A-06-OU	COG270349	006		SOLID	3	1
13C,D,CLP1	DH014-1-OW	___	254255	414853	A-06-OU	COG270349	007		SOLID	3	1
13C,D,CLP1	DH016-1-OW	___	254256	414853	A-06-OU	COG270349	008		SOLID	3	1
13C,D,CLP1	DH017-1-OW	___	254257	414853	A-06-OU	COG270349	009		SOLID	3	1
13C,D,CLP1	DH018-1-OW	___	254258	414853	A-06-OU	COG270349	010		SOLID	3	1
13C,D,CLP1	DH019-1-OW	___	254259	414853	A-06-OU	COG270349	011		SOLID	3	1

PSR024

7/29/00

5:43:14 MT

666 1180

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 002

REQUESTED BY: JOHNSONP

METHOD: OU Cyanide, Total (CLP)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>

RELINQUISHED BYRECEIVED BYDATE/TIME

P. Johnson
P. Johnson

P. Johnson
P. Johnson

7-29-00/0800
7-29-00/1040

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

REQUESTED BY: GOODR

METHOD: OU Cyanide, Total (CLP)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
ERIN	DGVXE-1-02		253379	000180	A-06-OU	COG270108	001		SOLID	0	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<i>B Spade</i>	<i>Eum Faust</i>	<i>11:30 7/27/00</i>
<i>Eum Faust</i>	<i>J. G Johnson</i>	<i>7:31:00/0800</i>
<i>J. G Johnson</i>	<i>Eum Faust</i>	<i>7:31:00/1500</i>

REQUESTED BY: JOHNSONP

666 1182

METHOD: OU Cyanide, Total (CLP)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
13C,D,E CLP1	DH01W-1-OW	___	254585	414853	A-06-OU	COG270356	001		SOLID	3	1
13C,D,E CLP1	DH02E-1-OW	___	254586	414853	A-06-OU	COG270356	006		SOLID	3	1
13C,D,E CLP1	DH02H-1-OW	___	254587	414853	A-06-OU	COG270356	007		SOLID	3	1
13C,D,E CLP1	DH02K-1-OW	___	254588	414853	A-06-OU	COG270356	008		SOLID	3	1
13C,D,E CLP1	DH02N-1-OW	___	254589	414853	A-06-OU	COG270356	009		SOLID	3	1
13C,D,E CLP1	DH02V-1-OW	___	254590	414853	A-06-OU	COG270356	010		SOLID	3	1
13C,D,E CLP1	DH02W-1-OW	___	254591	414853	A-06-OU	COG270356	011		SOLID	3	1
13C,D,E CLP1	DH020-1-OW	___	254592	414853	A-06-OU	COG270356	002		SOLID	9	1
13C,D,E CLP1	DH021-1-OW	___	254593	414853	A-06-OU	COG270356	003		SOLID	3	1
13C,D,E CLP1	DH024-1-OW	___	254594	414853	A-06-OU	COG270356	004		SOLID	3	1
13C,D,E CLP1	DH029-1-OW	___	254595	414853	A-06-OU	COG270356	005		SOLID	3	1
13C,D,E CLP1	DH030-1-OW	___	254596	414853	A-06-OU	COG270356	012		SOLID	3	1
15A CLP1	DH2MM-1-OW	___	254597	414853	A-06-OU	COG290133	001		SOLID	3	1
15A CLP1	DH2N3-1-OW	___	254598	414853	A-06-OU	COG290133	002		SOLID	3	1
15A CLP1	DH2N4-1-OW	___	254599	414853	A-06-OU	COG290133	003		SOLID	3	1
15A CLP1	DH2N5-1-OW	___	254600	414853	A-06-OU	COG290133	004		SOLID	3	1
15A CLP1	DH2N6-1-OW	___	254601	414853	A-06-OU	COG290133	005		SOLID	3	1

000 00666 1183

REQUESTED BY: JOHNSONP

METHOD: OU Cyanide, Total (CLP)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<i>P. Johnson</i>	<i>P. Johnson</i>	7-31-00/0830
<i>P. Johnson</i>	<i>P. Johnson</i>	7-31-00/1500

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

8811 000666 1184

PSR024 7/27/00 9:32:30 MT SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 005

REQUESTED BY: GOODR

METHOD: OU Cyanide, Total (CLP)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
										RCVD	REQD
ERIN	DGW09-1-01		253385	000180	1-06-OU	COG270110	007		WATER	0	1 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

B Spada	Eum Faust	11:30 7/27/00
Eum Faust	J. Johnson	7:31.00/0800
J. Johnson	Eum Faust	7:31.00/1500

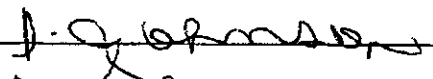
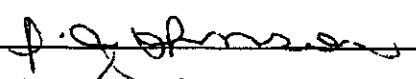
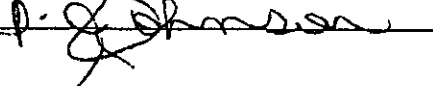
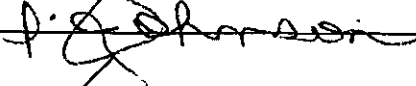
REQUESTED BY: JOHNSONP

666 1185

METHOD: OU Cyanide, Total (CLP)

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
		CNTR#								RCVD	REQD
15A CLP1	DH2NN-1-0V	___	254602	414853	I-06-OU	COG290136	001		WATER	9	1
15A CLP1	DH2NQ-1-0V	___	254603	414853	I-06-OU	COG290136	002		WATER	9	1

RELINQUISHED BYRECEIVED BYDATE/TIME

		7-31-00/0830
		7-31-00/1500

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

REQUESTED BY: JOHNSONP

666 1186

METHOD: QP Cyanide, Total

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
12D CLP1	DGXL3-1-0W	_____	254604	399411	1-06-QP	COG270302	001		WATER	13	1

RELINQUISHED BYRECEIVED BYDATE/TIME

J. G. Johnson
J. G. Johnson

J. G. Johnson
J. G. Johnson

7-31-00/0830
7-31-00/1500

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

Method: FLASHPOINT
(CLOSED Cup)

ANALYST: ERIC L. WESLOSKI DATE: 7-31-00
BATCH: 0214091 TIME: 12:40

EXCEPT FOR LOT C06250149 > 0214094

SAMPLE ID	RESULT
P- Xylene	81°F
C06270302 -001	>200°F
↓ -001 Dup	>200°F
C06250147 -001	~~163°F~~ ⁷⁻³¹⁻⁰⁰ >200°F
C06250149 -002	163°F
C06260136 -001	>200°F
C06260145 -001	>200°F
C06270267 -001	>200°F
C06270272 -001	>200°F
C06270275 -001	>200°F
P- Xylene	81°F

Reviewed by Esa M Faust Date 7-31-00

REQUESTED BY: MESOLOSE

666 1188

METHOD: AE Flash Point (1010, Closed Cup)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
10E CLP1	DGQ5L-1-0T	— — —	254744	416241	I-88-AE	COG250147	001		WATER	19	1
10E CLP1	DGQ67-1-06	— — —	254745	416241	N-88-AE	COG250149	002		WASTE	10	1
11D CLP1	DGT5K-1-0T	— — —	254746	416241	I-88-AE	COG260136	001		WATER	18	1
11D CLP1	DGT81-1-0T	— — —	254747	416241	I-88-AE	COG260145	001		WATER	20	1
12D CLP1	DGXL3-1-0X	— — —	254751	399411	I-88-AE	COG270302	001		WATER	13	1
13A CLP1	DGXEK-1-0T	— — —	254749	416241	I-88-AE	COG270272	001		WATER	20	1
13A, CLP1	DGXCX-1-0T	— — —	254748	416241	I-88-AE	COG270267	001		WATER	22	1
13A, CLP1	DGXF1-1-0T	— — —	254750	416241	I-88-AE	COG270275	001		WATER	21	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

E. L. Mesolose
E. L. Mesolose

E. L. Mesolose
E. L. Mesolose

7/31/00 (12:15)
7/31/00 (16:40)

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

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE