



THE MEMPHIS DEPOT TENNESSEE

ADMINISTRATIVE RECORD COVER SHEET

AR File Number 670

Part II of II

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	17420	--	--	--	--	--	--
SDev	48.96714	--	--	--	--	--	--
%RSD	.2811017	--	--	--	--	--	--
#1	17454	--	--	--	--	--	--
#2	17385	--	--	--	--	--	--

Method: METTRA Sample Name: DGTM5

Operator: RJG

Run Time: 08/21/00 13:18:02

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00177	96.371	.05838	.46364	.00837	23.672	.00356
SDev	.00009	.106	.00025	.00067	.00003	.046	.00043
%RSD	5.0798	.11022	.43203	.14367	.34885	.19440	12.139
#1	.00170	96.296	.05821	.46411	.00835	23.704	.00325
#2	.00183	96.446	.05856	.46317	.00840	23.639	.00386
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	.13428	.15116	.21935	287.16	38.663	7.5317	.00083
SDev	.00028	.00004	.00043	.30	.067	.0052	.00027
%RSD	.20509	.02429	.19535	.10307	.17283	.06943	32.468
#1	.13409	.15119	.21965	286.95	38.710	7.5280	.00102
#2	.13448	.15114	.21905	287.37	38.616	7.5354	.00064
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	.19381	.17837	.18462	.18254	-.00114	-.00035	-.00061
SDev	.00212	.00049	.00065	.00027	.00008	.00068	.00042
%RSD	1.0914	.27592	.35287	.14827	7.4334	195.29	69.459
#1	.19530	.17872	.18416	.18235	-.00108	-.00083	-.00091
#2	.19231	.17802	.18508	.18273	-.00120	.00013	-.00031
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	-.00398	.00520	.00214	-.00293	.20825	.62211	
SDev	.00164	.00157	.00050	.00055	.00105	.00013	
%RSD	41.169	30.177	23.376	18.697	.50371	.02127	
#1	-.00282	.00409	.00179	-.00254	.20899	.62202	
#2	-.00514	.00630	.00249	-.00331	.20751	.62221	
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	17365	--	--	--	--	--	--
SDev	13.43503	--	--	--	--	--	--
%RSD	.0773673	--	--	--	--	--	--
#1	17375	--	--	--	--	--	--
#2	17356	--	--	--	--	--	--

Method: METTRA Sample Name: DGTMA

Operator: RJG

Run Time: 08/21/00 13:22:11

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00153	115.77	.07190	.45267	.00835	174.82	.00457
SDev	.00025	.45	.00072	.00125	.00009	.65	.00047
%RSD	16.381	.39224	1.0012	.27529	1.0366	.36983	10.302

#1	.00135	115.45	.07139	.45178	.00841	175.28	.00424
#2	.00171	116.09	.07241	.45355	.00829	174.37	.00490

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	.17321	.17276	.34343	270.49	70.877	4.2116	.00309
SDev	.00034	.00003	.00151	.41	.052	.0027	.00107
%RSD	.19331	.01500	.44003	.15140	.07274	.06402	34.752

#1	.17297	.17278	.34236	270.78	70.914	4.2135	.00385
#2	.17345	.17274	.34450	270.20	70.841	4.2097	.00233

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	.25907	.11899	.13119	.12713	-.00117	.00136	.00052
SDev	.00238	.00222	.00018	.00086	.00254	.00005	.00081
%RSD	.91889	1.8664	.13684	.67593	217.54	3.4772	156.35

#1	.26075	.12056	.13132	.12773	-.00296	.00140	-.00005
#2	.25739	.11742	.13106	.12652	.00063	.00133	.00110

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	-.00472	-.00196	-.00288	-.00092	.19511	.75884
SDev	.00318	.00021	.00092	.00210	.00126	.00307
%RSD	67.326	10.598	31.911	229.16	.64335	.40449

#1	-.00697	-.00182	-.00353	.00057	.19600	.76101
#2	-.00247	-.00211	-.00223	-.00240	.19422	.75667

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	17552	--	--	--	--	--	--
SDev	19.26866	--	--	--	--	--	--
%RSD	.1097809	--	--	--	--	--	--
#1	17566	--	--	--	--	--	--
#2	17538	--	--	--	--	--	--

Method: METTRA Sample Name: DGTMF

Operator: RJG

Run Time: 08/21/00 13:26:20

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00179	115.71	.07776	.57576	.00861	169.89	.00375
SDev	.00021	.07	.00051	.00100	.00004	1.39	.00061
%RSD	11.757	.05950	.65451	.17312	.43077	.82063	16.159
#1	.00194	115.76	.07740	.57646	.00863	170.87	.00332
#2	.00164	115.66	.07812	.57505	.00858	168.90	.00418
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	.11361	.18150	.32100	278.69	105.21	5.7144	.00415
SDev	.00030	.00073	.00071	1.68	.52	.0285	.00041
%RSD	.26242	.40334	.21975	.60196	.49256	.49865	9.8977
#1	.11340	.18202	.32150	279.87	105.57	5.7346	.00444
#2	.11382	.18098	.32050	277.50	104.84	5.6943	.00386
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	.27866	.11202	.12748	.12233	.00144	.00032	.00069
SDev	.00351	.00135	.00095	.00108	.00027	.00026	.00026
%RSD	1.2599	1.2048	.74445	.88483	18.625	81.437	37.821
#1	.28114	.11297	.12815	.12310	.00125	.00013	.00051
#2	.27618	.11107	.12681	.12157	.00163	.00050	.00088
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00539	-.00112	-.00254	.00036	.19494	.76378	
SDev	.00056	.00176	.00136	.00161	.00014	.00554	
%RSD	10.331	156.84	53.372	446.55	.07300	.72530	
#1	-.00579	-.00236	-.00350	.00149	.19504	.76769	
#2	-.00500	.00012	-.00158	-.00078	.19484	.75986	
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	17519	--	--	--	--	--	--
SDev	14.63794	--	--	--	--	--	--
%RSD	.0835530	--	--	--	--	--	--
#1	17509	--	--	--	--	--	--
#2	17530	--	--	--	--	--	--

Method: METTRA Sample Name: DGTMN

Operator: RJG

Run Time: 08/21/00 13:30:29

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00162	93.638	.05827	.38566	.00709	158.37	.00361
SDev	.00042	.809	.00022	.00234	.00016	.78	.00026
%RSD	25.817	.86377	.37080	.60779	2.3024	.49497	7.2127
#1	.00132	93.067	.05812	.38400	.00721	157.81	.00342
#2	.00191	94.210	.05843	.38731	.00697	158.92	.00379
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	.11625	.14452	.28527	229.20	65.420	5.7376	.00204
SDev	.00059	.00169	.00303	1.69	.438	.0426	.00045
%RSD	.50395	1.1667	1.0634	.73918	.66916	.74202	22.092
#1	.11583	.14333	.28313	228.01	65.110	5.7075	.00235
#2	.11666	.14571	.28742	230.40	65.729	5.7677	.00172
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	.26541	.10492	.11587	.11222	-.00123	-.00073	-.00089
SDev	.00289	.00498	.00237	.00324	.00038	.00031	.00008
%RSD	1.0874	4.7477	2.0421	2.8844	30.708	43.189	9.4174
#1	.26746	.10140	.11419	.10993	-.00096	-.00095	-.00095
#2	.26337	.10845	.11754	.11451	-.00149	-.00051	-.00083
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00391	-.00083	-.00185	-.00278	.16539	.62224	
SDev	.00014	.00145	.00102	.00326	.00079	.00400	
%RSD	3.6877	175.79	54.850	117.30	.47505	.64317	
#1	-.00401	-.00185	-.00257	-.00508	.16484	.61941	
#2	-.00381	.00020	-.00113	-.00047	.16595	.62507	
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	17371	--	--	--	--	--	--
SDev	111.3348	--	--	--	--	--	--
%RSD	.6409390	--	--	--	--	--	--
#1	17449	--	--	--	--	--	--
#2	17292	--	--	--	--	--	--

Method: METTRA Sample Name: DGTNO

Operator: RJG

Run Time: 08/21/00 13:34:39

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00131	116.83	.09052	.61783	.00865	157.53	.00468
SDev	.00021	.34	.00072	.00310	.00004	1.12	.00014
%RSD	16.257	.28682	.79561	.50170	.41228	.71160	3.0246
#1	.00146	117.07	.09001	.62002	.00863	158.33	.00458
#2	.00116	116.59	.09103	.61563	.00868	156.74	.00478
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	.12508	.18121	.36407	290.83	74.181	3.7130	.00225
SDev	.00084	.00080	.00138	1.11	.401	.0148	.00013
%RSD	.66952	.44362	.37893	.38063	.54087	.39730	5.5445
#1	.12568	.18178	.36504	291.62	74.465	3.7234	.00216
#2	.12449	.18065	.36309	290.05	73.897	3.7026	.00233
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	.29238	.13317	.14773	.14288	.00231	.00016	.00087
SDev	.00223	.00297	.00151	.00002	.00134	.00020	.00058
%RSD	.76218	2.2293	1.0228	.01348	58.269	124.94	66.346
#1	.29395	.13527	.14667	.14287	.00136	.00002	.00046
#2	.29080	.13107	.14880	.14290	.00326	.00030	.00128
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	-.00303	-.00046	-.00131	-.00285	.20253	.72590	
SDev	.00027	.00102	.00077	.00282	.00361	.00301	
%RSD	8.9296	224.08	58.783	98.964	1.7822	.41463	
#1	-.00284	.00027	-.00077	-.00485	.20508	.72803	
#2	-.00322	-.00118	-.00186	-.00086	.19998	.72377	
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	17498	--	--	--	--	--	--
SDev	42.32006	--	--	--	--	--	--
%RSD	.2418611	--	--	--	--	--	--
#1	17468	--	--	--	--	--	--
#2	17528	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-2

Operator: RJG

Run Time: 08/21/00 13:38:48

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0425	24.151	.51568	2.0018	2.0287	50.498	.49787
SDev	.0013	.003	.00119	.0013	.0055	.189	.00088
%RSD	.12128	.01159	.23163	.06309	.27346	.37501	.17693
#1	1.0434	24.149	.51652	2.0009	2.0326	50.632	.49850
#2	1.0416	24.153	.51483	2.0027	2.0248	50.364	.49725
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0198	2.0247	1.9577	25.184	49.272	1.9984	2.0381
SDev	.0008	.0032	.0010	.006	.085	.0023	.0057
%RSD	.04097	.15622	.05121	.02271	.17212	.11454	.28082
#1	2.0204	2.0269	1.9570	25.180	49.332	2.0001	2.0340
#2	2.0192	2.0224	1.9584	25.188	49.212	1.9968	2.0421
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9981	.51821	.51524	.51623	.51699	.51328	.51452
SDev	.0082	.00127	.00223	.00106	.00155	.00112	.00126
%RSD	.41259	.24444	.43242	.20616	.30084	.21777	.24556
#1	2.0040	.51731	.51681	.51698	.51589	.51249	.51363
#2	1.9923	.51911	.51366	.51548	.51809	.51407	.51541
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.52057	.51940	.51979	1.0501	2.0109	2.0445	
SDev	.00009	.00283	.00192	.0033	.0043	.0066	
%RSD	.01718	.54513	.36905	.31099	.21470	.32242	
#1	.52050	.51739	.51843	1.0524	2.0139	2.0491	
#2	.52063	.52140	.52114	1.0478	2.0078	2.0398	
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

08/21/00 01:42:54 PM

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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	16042	--	--	--	--	--	--
SDev	5.515295	--	--	--	--	--	--
%RSD	.0343802	--	--	--	--	--	--
#1	16038	--	--	--	--	--	--
#2	16046	--	--	--	--	--	--

Method: METTRA Sample Name: CCB2

Operator: RJG

Run Time: 08/21/00 13:42:57

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	.00026	-.00843	.00001	.00065	.00081	.02793	.00016
SDev	.00024	.00009	.00029	.00027	.00001	.00600	.00024
%RSD	90.019	1.0276	3931.8	41.806	1.1261	21.485	148.04

#1	.00010	-.00837	.00021	.00045	.00082	.02369	-.00001
#2	.00043	-.00849	-.00020	.00084	.00081	.03217	.00034

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	.00061	.00060	.00109	.03443	.02023	.00103	.00440
SDev	.00068	.00038	.00047	.01693	.00583	.00022	.00110
%RSD	111.36	63.614	43.340	49.162	28.818	21.801	25.084

#1	.00013	.00033	.00076	.02246	.01611	.00087	.00518
#2	.00109	.00088	.00143	.04640	.02435	.00119	.00362

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	.00140	-.00005	-.00147	-.00099	-.00261	.00035	-.00064
SDev	.00108	.00212	.00113	.00004	.00008	.00002	.00004
%RSD	76.977	4523.0	76.825	4.5039	2.8772	6.0892	6.1394

#1	.00064	.00145	-.00226	-.00103	-.00266	.00033	-.00066
#2	.00217	-.00155	-.00067	-.00096	-.00256	.00036	-.00061

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00148	.00251	.00118	-.00052	.00001	.00100
SDev	.00196	.00327	.00153	.00209	.00001	.00040
%RSD	132.95	130.46	129.43	403.63	49.162	40.000

#1	-.00009	.00019	.00010	-.00200	.00001	.00072
#2	-.00287	.00482	.00226	.00096	.00002	.00129

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High			.00500	.01000	.05000	.02000
Low			-.00500	-.01000	-.05000	-.02000

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16092	--	--	--	--	--	--
SDev	177.5549	--	--	--	--	--	--
%RSD	1.103388	--	--	--	--	--	--
#1	16217	--	--	--	--	--	--
#2	15966	--	--	--	--	--	--

Method: METTRA Sample Name: DGXLL

Operator: RJG

Run Time: 08/21/00 13:47:06

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00312	96.029	.05790	.40705	.00702	102.61	.00443
SDev	.00013	.976	.00252	.00311	.00002	.76	.00035
%RSD	4.1278	1.0164	4.3552	.76337	.24940	.73905	7.9418
#1	.00321	95.339	.05612	.40485	.00701	102.07	.00418
#2	.00303	96.720	.05968	.40924	.00703	103.14	.00468
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	.11544	.15947	.26345	247.22	52.757	5.4156	.00217
SDev	.00081	.00076	.00174	2.20	.405	.0496	.00019
%RSD	.70485	.47717	.65979	.88876	.76809	.91648	8.9533
#1	.11487	.15893	.26222	245.67	52.470	5.3805	.00230
#2	.11602	.16001	.26468	248.78	53.043	5.4507	.00203
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	.23445	.20572	.20816	.20735	-.00230	.00146	.00021
SDev	.00014	.00109	.00361	.00205	.00296	.00057	.00137
%RSD	.05872	.53177	1.7361	.98685	128.82	39.090	655.11
#1	.23436	.20650	.20561	.20590	-.00440	.00106	-.00076
#2	.23455	.20495	.21072	.20880	-.00021	.00187	.00118
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	-.00594	.00330	.00022	-.00718	.19094	.67670	
SDev	.00002	.00219	.00147	.00107	.00102	.00488	
%RSD	.38609	66.563	665.50	14.869	.53225	.72168	
#1	-.00596	.00175	-.00082	-.00643	.19166	.67324	
#2	-.00592	.00485	.00126	-.00794	.19022	.68015	
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	16867	--	--	--	--	--	--
SDev	64.13403	--	--	--	--	--	--
%RSD	.3802439	--	--	--	--	--	--
#1	16912	--	--	--	--	--	--
#2	16821	--	--	--	--	--	--

Method: METTRA Sample Name: DGXLN

Operator: RJG

Run Time: 08/21/00 13:51:15

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	.00145	112.14	.07578	.43090	.00819	158.09	.00495
SDev	.00012	.61	.00083	.00137	.00014	.50	.00042
%RSD	7.8893	.54624	1.0967	.31734	1.7023	.31370	8.5899
#1	.00137	111.71	.07520	.42993	.00829	158.44	.00465
#2	.00153	112.58	.07637	.43187	.00809	157.74	.00525
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	.11990	.17566	.36466	281.37	72.276	4.4761	.00435
SDev	.00037	.00065	.00147	.50	.039	.0046	.00025
%RSD	.30972	.36836	.40453	.17826	.05338	.10306	5.7419
#1	.11964	.17520	.36362	281.01	72.249	4.4729	.00453
#2	.12016	.17612	.36570	281.72	72.303	4.4794	.00417
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	.27661	.11823	.13626	.13026	.00054	.00024	.00034
SDev	.00389	.00348	.00050	.00082	.00208	.00210	.00070
%RSD	1.4049	2.9404	.36575	.63353	386.93	863.73	206.53
#1	.27936	.11577	.13661	.12967	.00201	-.00124	-.00016
#2	.27387	.12069	.13591	.13084	-.00093	.00172	.00084
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	-.00822	.00155	-.00170	-.00434	.19276	.78548	
SDev	.00019	.00064	.00037	.00241	.00231	.00019	
%RSD	2.2692	41.286	21.445	55.638	1.1996	.02403	
#1	-.00809	.00110	-.00196	-.00263	.19440	.78534	
#2	-.00835	.00200	-.00144	-.00604	.19113	.78561	
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	17247	--	--	--	--	--	--
SDev	65.08835	--	--	--	--	--	--
%RSD	.3773932	--	--	--	--	--	--
#1	17293	--	--	--	--	--	--
#2	17201	--	--	--	--	--	--

Method: METTRA Sample Name: DGXLNP5 Operator: RJG
Run Time: 08/21/00 13:55:24
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	.00028	22.585	.01701	.09132	.00225	34.423	.00079
SDev	.00030	.065	.00097	.00002	.00013	.102	.00018
%RSD	108.41	.28682	5.7263	.01953	5.8201	.29691	22.873

#1	.00007	22.539	.01770	.09131	.00235	34.495	.00066
#2	.00049	22.631	.01632	.09133	.00216	34.351	.00092

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02597	.03858	.07389	60.084	15.033	.95450	.00061
SDev	.00014	.00062	.00005	.102	.003	.00008	.00059
%RSD	.52019	1.5953	.06243	.16948	.01930	.00828	96.656

#1	.02587	.03815	.07386	60.012	15.035	.95444	.00019
#2	.02606	.03902	.07393	60.156	15.031	.95455	.00102

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06100	.02399	.03003	.02802	-.00020	-.00042	-.00035
SDev	.00073	.00255	.00126	.00001	.00138	.00089	.00105
%RSD	1.1960	10.616	4.1800	.03783	682.09	209.63	300.44

#1	.06049	.02219	.03092	.02801	.00077	.00020	.00039
#2	.06152	.02579	.02915	.02803	-.00118	-.00105	-.00109

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00083	.00325	.00189	-.00003	.04346	.17160
SDev	.00051	.00086	.00040	.00013	.00011	.00007
%RSD	62.053	26.556	21.391	449.93	.25851	.03819

#1	-.00119	.00386	.00218	.00006	.04338	.17155
#2	-.00046	.00264	.00160	-.00012	.04354	.17164

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16395	--	--	--	--	--	--
SDev	56.00299	--	--	--	--	--	--
%RSD	.3415879	--	--	--	--	--	--
#1	16434	--	--	--	--	--	--
#2	16355	--	--	--	--	--	--

Method: METTRA Sample Name: DGXLNS

Operator: RJG

Run Time: 08/21/00 13:59:33

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	.04542	108.22	1.9153	2.2707	.05413	164.23	.04903
SDev	.00019	.38	.0073	.0050	.00001	.12	.00056
%RSD	.42060	.35421	.38055	.21917	.02440	.07284	1.1396
#1	.04555	107.95	1.9102	2.2672	.05412	164.15	.04864
#2	.04528	108.50	1.9205	2.2742	.05414	164.32	.04943
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	.58484	.34910	.57743	261.75	66.986	4.9643	.00340
SDev	.00061	.00034	.00128	.72	.070	.0150	.00042
%RSD	.10465	.09730	.22249	.27675	.10482	.30281	12.263
#1	.58441	.34886	.57653	261.24	66.936	4.9537	.00369
#2	.58527	.34934	.57834	262.27	67.036	4.9749	.00310
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	.73124	.60484	.59755	.59998	-.00117	.00146	.00059
SDev	.00048	.00343	.00624	.00302	.00318	.00300	.00094
%RSD	.06600	.56642	1.0440	.50340	270.94	204.79	160.63
#1	.73158	.60726	.59314	.59784	-.00342	.00359	.00125
#2	.73089	.60242	.60196	.60211	.00108	-.00066	-.00008
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.8284	1.8518	1.8440	1.9405	.63829	1.2210	
SDev	.0030	.0060	.0050	.0037	.00024	.0002	
%RSD	.16314	.32305	.27025	.19163	.03764	.02015	
#1	1.8263	1.8476	1.8405	1.9379	.63846	1.2209	
#2	1.8306	1.8561	1.8476	1.9432	.63812	1.2212	
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	17192	--	--	--	--	--	--
SDev	9.899495	--	--	--	--	--	--
%RSD	.0575815	--	--	--	--	--	--
#1	17185	--	--	--	--	--	--
#2	17199	--	--	--	--	--	--

Method: METTRA Sample Name: DGXLND

Operator: RJG

Run Time: 08/21/00 14:03:43

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04479	119.65	1.9074	2.2720	.05459	168.23	.04911
SDev	.00029	.54	.0008	.0048	.00018	.50	.00112
%RSD	.63978	.44816	.04030	.21319	.33420	.29817	2.2728
#1	.04459	119.28	1.9069	2.2685	.05446	167.87	.04832
#2	.04499	120.03	1.9079	2.2754	.05472	168.58	.04990
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	.58370	.36831	.59553	287.84	75.858	5.1515	.00352
SDev	.00267	.00181	.00076	.93	.142	.0224	.00047
%RSD	.45733	.49072	.12745	.32178	.18741	.43470	13.360
#1	.58181	.36703	.59499	287.19	75.758	5.1357	.00319
#2	.58558	.36958	.59606	288.50	75.959	5.1674	.00385
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	.74550	.60408	.60174	.60252	-.00136	.00218	.00100
SDev	.00076	.00015	.00257	.00176	.00189	.00130	.00024
%RSD	.10145	.02489	.42657	.29246	138.35	59.850	24.093
#1	.74603	.60419	.60356	.60377	-.00270	.00310	.00117
#2	.74496	.60398	.59993	.60128	-.00003	.00125	.00083
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.8041	1.8410	1.8287	1.9229	.64779	1.2674	
SDev	.0106	.0005	.0039	.0029	.00554	.0029	
%RSD	.58501	.02880	.21152	.15343	.85485	.23010	
#1	1.7967	1.8407	1.8260	1.9208	.64388	1.2653	
#2	1.8116	1.8414	1.8315	1.9249	.65171	1.2695	
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	17552	--	--	--	--	--	--
SDev	6.434395	--	--	--	--	--	--
%RSD	.0366589	--	--	--	--	--	--
#1	17548	--	--	--	--	--	--
#2	17557	--	--	--	--	--	--

Method: METTRA Sample Name: DGXLQ

Operator: RJG

Run Time: 08/21/00 14:07:52

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00184	114.10	.07510	.43827	.00828	183.11	.00508
SDev	.00015	.74	.00037	.00158	.00004	.18	.00040
%RSD	8.2601	.64779	.49169	.35928	.46124	.10058	7.8545
#1	.00194	113.58	.07536	.43716	.00831	182.98	.00480
#2	.00173	114.62	.07484	.43939	.00826	183.24	.00536
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	.13166	.17774	.36017	283.95	73.094	5.0895	.00375
SDev	.00046	.00098	.00250	1.01	.210	.0221	.00051
%RSD	.35163	.55048	.69338	.35455	.28737	.43410	13.462
#1	.13133	.17705	.35840	283.24	72.945	5.0739	.00411
#2	.13198	.17844	.36194	284.66	73.242	5.1052	.00339
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	.29500	.12438	.13977	.13464	-.00068	-.00010	-.00029
SDev	.00175	.00215	.00184	.00051	.00156	.00002	.00051
%RSD	.59259	1.7282	1.3129	.37744	231.05	19.269	174.66
#1	.29623	.12286	.14106	.13500	.00043	-.00011	.00007
#2	.29376	.12590	.13847	.13428	-.00178	-.00008	-.00065
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	-.00963	.00183	-.00199	-.00064	.19653	.78057	
SDev	.00294	.00124	.00180	.00332	.00090	.00109	
%RSD	30.560	67.695	90.758	515.19	.45704	.13985	
#1	-.01171	.00095	-.00326	.00170	.19716	.77980	
#2	-.00755	.00270	-.00071	-.00299	.19589	.78134	
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	17297	--	--	--	--	--	--
SDev	124.3444	--	--	--	--	--	--
%RSD	.7188964	--	--	--	--	--	--
#1	17384	--	--	--	--	--	--
#2	17209	--	--	--	--	--	--

Method: METTRA Sample Name: DGXLR Operator: RJG
Run Time: 08/21/00 14:12:02
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00155	110.91	.07585	.44980	.00815	147.96	.00496
SDev	.00029	.28	.00006	.00061	.00001	.01	.00042
%RSD	18.476	.25127	.07666	.13562	.09117	.00831	8.4433
#1	.00175	110.71	.07581	.44936	.00815	147.95	.00466
#2	.00135	111.10	.07589	.45023	.00814	147.97	.00525
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	.13580	.17343	.36889	276.95	72.828	4.9463	.00449
SDev	.00102	.00073	.00110	.53	.095	.0112	.00006
%RSD	.75277	.42010	.29797	.19072	.12982	.22604	1.3848
#1	.13508	.17291	.36812	276.58	72.761	4.9384	.00454
#2	.13653	.17394	.36967	277.32	72.895	4.9542	.00445
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	.27495	.12616	.13720	.13352	-.00044	.00090	.00045
SDev	.00177	.00101	.00356	.00204	.00215	.00105	.00002
%RSD	.64391	.79671	2.5958	1.5284	492.46	116.99	3.7123
#1	.27620	.12687	.13468	.13208	-.00196	.00164	.00044
#2	.27370	.12545	.13972	.13497	.00108	.00015	.00046
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	-.00665	.00017	-.00210	-.00194	.19293	.76644
SDev	.00006	.00032	.00019	.00011	.00008	.00023
%RSD	.85452	185.15	9.2570	5.9106	.04107	.02973
#1	-.00661	-.00005	-.00224	-.00186	.19299	.76628
#2	-.00669	.00040	-.00196	-.00202	.19287	.76660
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	17257	--	--	--	--	--	--
SDev	16.44023	--	--	--	--	--	--
%RSD	.0952697	--	--	--	--	--	--
#1	17268	--	--	--	--	--	--
#2	17245	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-3

Operator: RJG

Run Time: 08/21/00 14:16:12

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0340	23.952	.51054	1.9813	2.0157	50.158	.49288
SDev	.0024	.032	.00037	.0029	.0075	.210	.00113
%RSD	.22896	.13486	.07252	.14613	.37421	.41846	.23010
#1	1.0356	23.975	.51028	1.9834	2.0211	50.306	.49368
#2	1.0323	23.929	.51080	1.9793	2.0104	50.010	.49208
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	2.0002	2.0062	1.9419	24.967	49.091	1.9832	2.0190
SDev	.0032	.0043	.0047	.028	.154	.0040	.0048
%RSD	.16120	.21420	.24018	.11113	.31430	.20275	.23726
#1	2.0025	2.0092	1.9452	24.987	49.200	1.9860	2.0156
#2	1.9980	2.0031	1.9386	24.947	48.982	1.9803	2.0223
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	1.9712	.51329	.51087	.51168	.51566	.50764	.51031
SDev	.0115	.00124	.00628	.00460	.00602	.00123	.00119
%RSD	.58527	.24087	1.2282	.89839	1.1672	.24184	.23230
#1	1.9794	.51417	.51531	.51493	.51992	.50677	.51115
#2	1.9630	.51242	.50643	.50843	.51141	.50851	.50948
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	.51189	.51552	.51431	1.0399	1.9947	2.0196	
SDev	.00291	.00805	.00440	.0078	.0079	.0082	
%RSD	.56762	1.5606	.85523	.74838	.39642	.40810	
#1	.50984	.52121	.51742	1.0454	2.0003	2.0254	
#2	.51395	.50983	.51120	1.0344	1.9891	2.0138	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16240	--	--	--	--	--	--
SDev	25.98617	--	--	--	--	--	--
%RSD	.1600146	--	--	--	--	--	--
#1	16222	--	--	--	--	--	--
#2	16258	--	--	--	--	--	--

Method: METTRA Sample Name: CCB3 Operator: RJG
Run Time: 08/21/00 14:20:21
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00048	.00195	.00018	.00058	.00061	.02564	.00029
SDev	.00001	.00816	.00011	.00006	.00037	.00149	.00003
%RSD	2.2525	418.73	58.979	11.273	59.708	5.7975	9.9586
#1	.00047	.00772	.00011	.00053	.00035	.02459	.00031
#2	.00049	-.00382	.00026	.00062	.00087	.02669	.00027
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	.00143	.00091	.00105	.02485	.01956	.00096	.00475
SDev	.00043	.00014	.00010	.00353	.00177	.00007	.00111
%RSD	30.070	15.436	9.1912	14.203	9.0543	7.0551	23.350
#1	.00113	.00101	.00098	.02236	.01831	.00091	.00553
#2	.00174	.00081	.00112	.02735	.02081	.00101	.00396
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	.00141	-.00014	-.00005	-.00008	-.00067	-.00081	-.00076
SDev	.00029	.00095	.00062	.00010	.00069	.00173	.00093
%RSD	20.408	690.92	1267.2	125.63	103.68	213.38	121.11
#1	.00161	-.00081	.00039	-.00001	-.00116	.00041	-.00011
#2	.00120	.00053	-.00049	-.00015	-.00018	-.00204	-.00142
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	.00192	-.00013	.00055	.00318	.00001	.00146	
SDev	.00182	.00235	.00218	.00268	.00000	.00007	
%RSD	94.627	1791.6	393.87	84.090	14.203	4.9778	
#1	.00064	-.00180	-.00099	.00508	.00001	.00141	
#2	.00321	.00153	.00209	.00129	.00001	.00151	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16043	--	--	--	--	--	--
SDev	171.8270	--	--	--	--	--	--
%RSD	1.071063	--	--	--	--	--	--
#1	15921	--	--	--	--	--	--
#2	16164	--	--	--	--	--	--

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Method: METTRA Sample Name: DJ361B

Operator: RJG

Run Time: 08/21/00 14:24:30

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC, Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00045	.01232	.00020	.00058	.00016	.64100	.00022
SDev	.00046	.00372	.00065	.00002	.00013	.00510	.00002
%RSD	102.00	30.173	326.93	3.3195	81.303	.79501	10.808
#1	.00013	.01495	-.00026	.00056	.00025	.63740	.00020
#2	.00078	.00969	.00066	.00059	.00007	.64460	.00023
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	.00032	.00058	.00135	.02830	.01419	.00058	.00224
SDev	.00021	.00006	.00002	.00000	.00216	.00001	.00006
%RSD	65.987	9.5832	1.7984	.00896	15.203	2.3639	2.7190
#1	.00017	.00054	.00137	.02830	.01266	.00059	.00228
#2	.00047	.00062	.00134	.02830	.01571	.00057	.00220
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00100	.00489	-.00183	.00041	-.00383	.00039	-.00101
SDev	.00088	.00154	.00081	.00105	.00018	.00036	.00030
%RSD	87.419	31.426	44.309	255.95	4.7671	91.999	29.634
#1	.00038	.00381	-.00240	-.00033	-.00395	.00014	-.00123
#2	.00163	.00598	-.00125	.00115	-.00370	.00064	-.00080
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	-.00824	.00554	.00095	-.00440	.00001	H.04366	
SDev	.00310	.00283	.00085	.00033	.00000	.00005	
%RSD	37.650	51.069	89.696	7.4665	.00896	.10633	
#1	-.01044	.00755	.00156	-.00417	.00001	H.04363	
#2	-.00605	.00354	.00035	-.00463	.00001	H.04369	
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	15840	--	--	--	--	--	--
SDev	48.82628	--	--	--	--	--	--
%RSD	.3082501	--	--	--	--	--	--
#1	15874	--	--	--	--	--	--
#2	15805	--	--	--	--	--	--

Method: METTRA Sample Name: DJ361C

Operator: RJG

Run Time: 08/21/00 14:28:40

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04659	1.8289	2.0451	1.9997	.05229	L.18511	.05194
SDev	.00021	.0017	.0006	.0058	.00008	.00096	.00003
%RSD	.45769	.09308	.02936	.29153	.15041	.51642	.06527
#1	.04644	1.8301	2.0447	1.9956	.05235	L.18579	.05197
#2	.04674	1.8277	2.0456	2.0039	.05224	L.18444	.05192
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	.52522	.21103	.24674	1.0455	L.02289	.51134	L.00112
SDev	.00186	.00092	.00112	.0039	.00092	.00231	.00000
%RSD	.35435	.43660	.45370	.37627	4.0349	.45162	.01739
#1	.52390	.21038	.24595	1.0427	L.02354	.50970	L.00112
#2	.52653	.21168	.24753	1.0483	L.02223	.51297	L.00112
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	.51545	.51937	.51248	.51478	-.00211	.00009	L-.00065
SDev	.00057	.00212	.00229	.00082	.00097	.00111	.00042
%RSD	.11144	.40782	.44612	.15922	45.632	1279.9	65.214
#1	.51504	.52087	.51087	.51420	-.00143	-.00070	L-.00094
#2	.51585	.51788	.51410	.51536	-.00280	.00087	L-.00035
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	1.9854	2.0000	1.9952	2.0667	.51319	.54312	
SDev	.0021	.0179	.0113	.0044	.00235	.00095	
%RSD	.10628	.89607	.56392	.21331	.45727	.17480	
#1	1.9869	1.9873	1.9872	2.0635	.51485	.54245	
#2	1.9839	2.0127	2.0031	2.0698	.51153	.54379	
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	15870	--	--	--	--	--	--
SDev	.9191007	--	--	--	--	--	--
%RSD	.0057916	--	--	--	--	--	--
#1	15869	--	--	--	--	--	--
#2	15870	--	--	--	--	--	--

Method: METTRA Sample Name: DJ0QL

Operator: RJG

Run Time: 08/21/00 14:32:49

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03531	295.73	.07050	7.0204	.00756	H1099.6	.04918
SDev	.00015	.95	.00030	.0376	.00008	16.4	.00013
%RSD	.40961	.32151	.42734	.53561	1.0299	1.4877	.26374
#1	.03541	296.40	.07072	7.0470	.00750	H1111.1	.04909
#2	.03520	295.06	.07029	6.9938	.00761	H1088.0	.04927
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	.06345	1.5494	8.3446	235.19	23.030	4.5677	.02271
SDev	.00047	.0118	.0380	1.92	.198	.0405	.00019
%RSD	.73327	.76116	.45579	.81791	.86082	.88566	.82068
#1	.06378	1.5577	8.3715	236.55	23.170	4.5963	.02284
#2	.06312	1.5410	8.3177	233.83	22.889	4.5391	.02258
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	.31248	20.241	19.090	H19.474	.85805	.85096	.85332
SDev	.00708	.154	.218	.197	.01081	.00442	.00655
%RSD	2.2669	.76200	1.1420	1.0105	1.2601	.51914	.76726
#1	.31749	20.350	19.245	H19.613	.86569	.85409	.85795
#2	.30747	20.132	18.936	H19.334	.85040	.84784	.84869
Errors	LC Pass	NOCHECK	NOCHECK	LC High	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	-.00276	-.00201	-.00226	.00226	.22236	H15.173	
SDev	.00323	.00058	.00069	.00192	.00473	.214	
%RSD	116.90	28.611	30.544	84.771	2.1252	1.4099	
#1	-.00504	-.00160	-.00275	.00362	.22570	H15.324	
#2	-.00048	-.00242	-.00177	.00091	.21902	H15.022	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC High	
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	16140	--	--	--	--	--	--
SDev	73.04399	--	--	--	--	--	--
%RSD	.4525692	--	--	--	--	--	--
#1	16088	--	--	--	--	--	--
#2	16192	--	--	--	--	--	--

Method: METTRA Sample Name: DJ0QLP5 Operator: RJG
Run Time: 08/21/00 14:36:59
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	.00718	61.022	.01483	1.5173	.00183	272.75	.01119
SDev	.00013	.131	.00039	.0075	.00003	1.71	.00011
%RSD	1.7624	.21537	2.6142	.49378	1.8309	.62726	.95222

#1	.00709	61.115	.01455	1.5226	.00185	273.96	.01112
#2	.00726	60.929	.01510	1.5120	.00180	271.54	.01127

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.01430	.33674	1.6694	49.670	4.8797	.96406	.00456
SDev	.00007	.00020	.0072	.110	.0216	.00257	.00020
%RSD	.48111	.06093	.43140	.22194	.44241	.26646	4.3373

#1	.01425	.33689	1.6745	49.748	4.8950	.96588	.00470
#2	.01435	.33660	1.6643	49.592	4.8645	.96224	.00442

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.06938	4.2943	4.1947	4.2278	.18200	.18149	.18166
SDev	.00004	.0088	.0093	.0032	.00303	.00029	.00081
%RSD	.05315	.20593	.22075	.07643	1.6637	.16112	.44765

#1	.06935	4.2880	4.2012	4.2301	.18414	.18129	.18224
#2	.06940	4.3005	4.1881	4.2255	.17986	.18170	.18109

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00261	.00233	.00068	.00228	.04967	4.3357
SDev	.00243	.00241	.00079	.00253	.00031	.0141
%RSD	93.217	103.42	116.44	110.83	.62607	.32441

#1	-.00433	.00403	.00124	.00049	.04989	4.3456
#2	-.00089	.00063	.00012	.00407	.04945	4.3257

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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	16096	--	--	--	--	--	--
SDev	54.02323	--	--	--	--	--	--
%RSD	.3356273	--	--	--	--	--	--
#1	16134	--	--	--	--	--	--
#2	16058	--	--	--	--	--	--

Method: METTRA Sample Name: DJ0QLS Operator: RJG
Run Time: 08/21/00 14:41:08
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.07284	348.42	1.8599	7.8706	.05308	H1012.1	.08712
SDev	.00024	2.51	.0137	.0555	.00052	3.7	.00091
%RSD	.32353	.72162	.73722	.70500	.97720	.36848	1.0437
#1	.07268	346.64	1.8502	7.8313	.05271	H1009.5	.08648
#2	.07301	350.20	1.8696	7.9098	.05344	H1014.8	.08776
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	.50433	1.6266	H10.814	250.85	29.745	5.5434	.03011
SDev	.00406	.0109	.083	1.45	.170	.0386	.00226
%RSD	.80558	.66826	.76984	.57716	.57020	.69722	7.5117
#1	.50146	1.6189	H10.756	249.83	29.625	5.5161	.02851
#2	.50721	1.6343	H10.873	251.88	29.865	5.5707	.03171
Errors	LC Pass	LC Pass	LC High	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	.83703	23.568	21.966	H22.500	1.0389	1.0540	1.0490
SDev	.00718	.067	.003	.025	.0002	.0002	.0001
%RSD	.85757	.28495	.01524	.10932	.01608	.02040	.00837
#1	.83195	23.521	21.964	H22.482	1.0388	1.0542	1.0491
#2	.84210	23.616	21.969	H22.517	1.0390	1.0539	1.0489
Errors	LC Pass	NOCHECK	NOCHECK	LC High	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	1.7464	1.7517	1.7500	1.8964	.70326	H16.091	
SDev	.0074	.0097	.0040	.0047	.00439	.018	
%RSD	.42471	.55573	.22990	.24731	.62399	.11087	
#1	1.7412	1.7586	1.7528	1.8931	.70016	H16.078	
#2	1.7517	1.7448	1.7471	1.8997	.70636	H16.104	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC High	
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	16127	--	--	--	--	--	--
SDev	7.849299	--	--	--	--	--	--
%RSD	.0486715	--	--	--	--	--	--
#1	16122	--	--	--	--	--	--
#2	16133	--	--	--	--	--	--

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Method: METTRA Sample Name: DJ0QLD

Operator: RJG

Run Time: 08/21/00 14:45:17

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	.07810	398.32	1.8916	9.1800	.05136	H1151.5	.08671
SDev	.00028	.75	.0098	.0455	.00015	3.4	.00020
%RSD	.35655	.18716	.51923	.49608	.30198	.29822	.22585
#1	.07791	398.85	1.8986	9.2122	.05147	H1153.9	.08657
#2	.07830	397.79	1.8847	9.1477	.05125	H1149.1	.08685
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	.50774	1.6790	H13.260	232.76	24.145	4.9892	.03431
SDev	.00027	.0009	.060	.34	.099	.0050	.00036
%RSD	.05298	.05401	.44991	.14781	.41200	.10024	1.0381
#1	.50793	1.6796	H13.302	233.00	24.216	4.9928	.03406
#2	.50755	1.6783	H13.218	232.52	24.075	4.9857	.03456
Errors	LC Pass	LC Pass	LC High	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	.84752	26.341	24.625	H25.196	.82892	.81841	.82191
SDev	.00354	.055	.020	.031	.00090	.00337	.00255
%RSD	.41819	.20718	.08098	.12491	.10878	.41193	.31012
#1	.85003	26.380	24.639	H25.218	.82956	.82080	.82372
#2	.84501	26.302	24.610	H25.174	.82829	.81603	.82011
Errors	LC Pass	NOCHECK	NOCHECK	LC High	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	1.7688	1.8169	1.8009	1.9449	.68234	H15.245
SDev	.0047	.0034	.0039	.0130	.00499	.031
%RSD	.26378	.18951	.21380	.66654	.73171	.20575
#1	1.7721	1.8193	1.8036	1.9540	.68587	H15.267
#2	1.7655	1.8144	1.7981	1.9357	.67881	H15.223
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC High
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	16036	--	--	--	--	--	--
SDev	38.18377	--	--	--	--	--	--
%RSD	.2381150	--	--	--	--	--	--
#1	16009	--	--	--	--	--	--
#2	16063	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-4

Operator: RJG

Run Time: 08/21/00 14:49:26

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	1.0548	24.361	.52142	2.0053	2.0781	51.866	.50667
SDev	.0023	.006	.00151	.0090	.0120	.121	.00030
%RSD	.21645	.02462	.28946	.44971	.57701	.23250	.05970
#1	1.0564	24.356	.52249	2.0117	2.0865	51.951	.50689
#2	1.0532	24.365	.52035	1.9990	2.0696	51.781	.50646
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	2.0509	2.0609	1.9759	25.642	50.439	2.0363	2.0589
SDev	.0010	.0041	.0071	.069	.225	.0047	.0110
%RSD	.04805	.19957	.35843	.26967	.44700	.23280	.53538
#1	2.0516	2.0638	1.9809	25.691	50.599	2.0397	2.0511
#2	2.0502	2.0580	1.9709	25.593	50.280	2.0330	2.0667
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	2.0252	.53312	.52872	.53019	.52809	.51856	.52173
SDev	.0157	.00360	.00376	.00370	.00227	.00135	.00165
%RSD	.77667	.67533	.71031	.69859	.42958	.25973	.31697
#1	2.0363	.53057	.52607	.52757	.52649	.51760	.52056
#2	2.0140	.53567	.53138	.53281	.52970	.51951	.52290
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	.52291	.52919	.52710	1.0667	2.0441	2.0674	
SDev	.00122	.00209	.00098	.0049	.0118	.0040	
%RSD	.23427	.39428	.18663	.46142	.57780	.19167	
#1	.52377	.52771	.52640	1.0702	2.0525	2.0702	
#2	.52204	.53066	.52779	1.0633	2.0358	2.0646	
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	16097	--	--	--	--	--	--
SDev	61.94297	--	--	--	--	--	--
%RSD	.3848202	--	--	--	--	--	--
#1	16140	--	--	--	--	--	--
#2	16053	--	--	--	--	--	--

Method: METTRA Sample Name: CCB4

Operator: RJG

Run Time: 08/21/00 14:53:36

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	.00026	.02479	.00094	.00115	.00146	.10909	.00026
SDev	.00076	.01285	.00144	.00057	.00026	.04499	.00001
%RSD	294.20	51.841	152.69	50.187	17.669	41.238	2.7257
#1	-.00028	.01570	.00196	.00074	.00128	.07728	.00027
#2	.00080	.03388	-.00008	.00155	.00165	.14090	.00026
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00089	.00074	.00058	.01780	.01505	.00091	.00601
SDev	.00036	.00070	.00067	.01648	.01220	.00049	.00171
%RSD	40.977	95.058	116.31	92.562	81.083	54.050	28.505
#1	.00063	.00024	.00010	.00615	.00642	.00056	.00723
#2	.00115	.00123	.00105	.02945	.02368	.00126	.00480
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	.00095	.00059	.00222	.00168	.00003	.00021	.00015
SDev	.00033	.00151	.00075	.00001	.00139	.00056	.00084
%RSD	34.650	254.98	33.504	.31139	5433.8	269.29	567.54
#1	.00071	-.00047	.00275	.00168	-.00096	-.00019	-.00045
#2	.00118	.00166	.00170	.00168	.00101	.00061	.00074
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	.00002	.00121	.00081	.00347	.00159	.00547	
SDev	.00172	.00117	.00135	.00166	.00225	.00069	
%RSD	11434.	97.069	166.97	47.887	141.23	12.704	
#1	.00123	.00204	.00177	.00230	.00000	.00498	
#2	-.00120	.00038	-.00015	.00465	.00319	.00596	
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	16409	--	--	--	--	--	--
SDev	36.41669	--	--	--	--	--	--
%RSD	.2219285	--	--	--	--	--	--
#1	16435	--	--	--	--	--	--
#2	16383	--	--	--	--	--	--

Method: METTRA Sample Name: DHV6NB

Operator: RJG

Run Time: 08/21/00 14:57:45

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	.00069	.02067	.00018	.00057	.00016	.13579	.00024
SDev	.00004	.00395	.00103	.00003	.00015	.00592	.00005
%RSD	6.4310	19.106	562.07	5.1076	92.706	4.3583	19.153
#1	.00065	.02346	.00091	.00059	.00006	.13997	.00027
#2	.00072	.01788	-.00054	.00055	.00027	.13160	.00021
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00020	.00150	.00203	.02357	.00939	.00075	.00293
SDev	.00019	.00013	.00008	.00258	.00031	.00002	.00105
%RSD	95.544	8.4718	3.7653	10.943	3.3461	2.3550	35.941
#1	-.00006	.00159	.00208	.02540	.00917	.00076	.00368
#2	-.00033	.00141	.00197	.02175	.00961	.00073	.00219
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	.00214	.00526	-.00083	.00120	-.00530	.00078	-.00124
SDev	.00034	.00001	.00018	.00011	.00029	.00048	.00023
%RSD	15.825	.25515	21.349	9.4557	5.4282	61.888	18.209
#1	.00238	.00525	-.00070	.00128	-.00510	.00044	-.00141
#2	.00190	.00527	-.00095	.00112	-.00551	.00112	-.00108
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	-.00750	.00692	.00212	-.00307	.00001	.00949	
SDev	.00051	.00040	.00043	.00253	.00000	.00015	
%RSD	6.7541	5.7509	20.518	82.372	10.943	1.5312	
#1	-.00714	.00720	.00242	-.00128	.00001	.00959	
#2	-.00786	.00664	.00181	-.00485	.00001	.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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Method: METTRA Sample Name: DHV6NC

Operator: RJG

Run Time: 08/21/00 15:01:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05000	1.8528	2.0489	2.0123	.05216	L.74080	.05168
SDev	.00048	.0006	.0011	.0076	.00012	.00534	.00004
%RSD	.95591	.03361	.05442	.37802	.22013	.72155	.07902
#1	.05034	1.8524	2.0481	2.0177	.05225	L.74458	.05170
#2	.04967	1.8533	2.0497	2.0070	.05208	L.73702	.05165
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	.52457	.21460	.24933	1.0503	L.02947	.51451	L.00119
SDev	.00071	.00038	.00049	.0178	.00090	.00100	.00037
%RSD	.13477	.17641	.19444	1.6941	3.0666	.19442	31.080
#1	.52507	.21487	.24967	1.0377	L.03010	.51522	L.00145
#2	.52407	.21434	.24898	1.0629	L.02883	.51380	L.00093
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	.52538	.52142	.51260	.51553	-.00309	-.00067	L-.00148
SDev	.00304	.00265	.00496	.00242	.00229	.00215	.00067
%RSD	.57947	.50890	.96722	.47007	74.197	320.49	45.223
#1	.52753	.52329	.50909	.51382	-.00471	.00085	L-.00100
#2	.52323	.51954	.51610	.51725	-.00147	-.00219	L-.00195
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	1.9633	1.9953	1.9847	2.0696	.51714	.56423	
SDev	.0138	.0106	.0117	.0017	.00039	.00087	
%RSD	.70513	.53119	.58849	.07976	.07613	.15363	
#1	1.9535	1.9878	1.9764	2.0708	.51686	.56485	
#2	1.9731	2.0028	1.9929	2.0685	.51742	.56362	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			2.4000	2.4000	.60000	.60000	
Low			1.6000	1.6000	.40000	.40000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	15835	--	--	--	--	--	--
SDev	18.27844	--	--	--	--	--	--
%RSD	.1154304	--	--	--	--	--	--
#1	15822	--	--	--	--	--	--
#2	15848	--	--	--	--	--	--

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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	15816	--	--	--	--	--	--
SDev	23.72399	--	--	--	--	--	--
%RSD	.1500039	--	--	--	--	--	--
#1	15832	--	--	--	--	--	--
#2	15799	--	--	--	--	--	--

Method: METTRA Sample Name: DHRLN

Operator: RJG

Run Time: 08/21/00 15:06:04

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	.00039	19.770	.00996	.96097	.00345	27.219	.00010
SDev	.00025	.027	.00035	.00383	.00005	.001	.00008
%RSD	62.727	.13824	3.5219	.39828	1.5136	.00242	81.077
#1	.00022	19.790	.00971	.96367	.00341	27.218	.00004
#2	.00057	19.751	.01020	.95826	.00348	27.219	.00016
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02599	.01079	.02741	14.659	7.8540	.17439	.00113
SDev	.00028	.00010	.00049	.007	.0056	.00013	.00073
%RSD	1.0758	.91914	1.7810	.04665	.07135	.07577	64.115
#1	.02619	.01072	.02707	14.664	7.8579	.17429	.00062
#2	.02579	.01086	.02776	14.654	7.8500	.17448	.00165
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	.03655	.00492	.00440	.00457	.00316	.00138	.00014
SDev	.00099	.00417	.00075	.00089	.00106	.00094	.00098
%RSD	2.7142	84.761	17.096	19.397	33.591	68.531	726.41
#1	.03585	.00197	.00493	.00394	.00241	.00204	.00056
#2	.03725	.00786	.00386	.00520	.00391	.00071	.00083
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00450	.00517	.00195	.00225	.01375	.03076	
SDev	.00200	.00125	.00017	.00076	.00056	.00012	
%RSD	44.346	24.162	8.6029	33.628	4.1055	.37447	
#1	.00592	.00605	.00206	.00171	.01336	.03068	
#2	.00309	.00428	.00183	.00278	.01415	.03084	
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	16316	--	--	--	--	--	--
SDev	6.399869	--	--	--	--	--	--
%RSD	.0392237	--	--	--	--	--	--
#1	16321	--	--	--	--	--	--
#2	16312	--	--	--	--	--	--

Method: METTRA Sample Name: DHRLNP5 Operator: RJG
Run Time: 08/21/00 15:10:14
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	-.00037	3.7426	.00098	.18875	.00170	5.3607	.00020
SDev	.00070	.1038	.00142	.00442	.00064	.1385	.00016
%RSD	189.66	2.7744	144.43	2.3398	37.426	2.5838	80.535
#1	-.00087	3.6692	-.00002	.18563	.00216	5.2628	.00009
#2	.00013	3.8160	.00199	.19188	.00125	5.4586	.00032
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00538	.00209	.00417	2.8657	1.5254	.03433	-.00043
SDev	.00067	.00077	.00164	.0767	.0464	.00102	.00119
%RSD	12.350	36.902	39.238	2.6776	3.0385	2.9662	276.37
#1	.00491	.00154	.00301	2.8114	1.4926	.03361	-.00127
#2	.00585	.00263	.00533	2.9200	1.5582	.03505	.00041
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00752	-.00211	.00189	.00056	.00019	-.00205	-.00131
SDev	.00105	.00456	.00149	.00053	.00419	.00225	.00010
%RSD	13.984	215.57	78.680	94.477	2253.7	109.47	7.8180
#1	.00678	-.00534	.00294	.00018	.00315	-.00364	-.00138
#2	.00827	.00111	.00084	.00093	-.00278	-.00046	-.00123
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00174	.00187	.00067	-.00165	.00270	.00728	
SDev	.00395	.00330	.00089	.00092	.00099	.00018	
%RSD	226.66	176.25	132.56	55.421	36.705	2.4374	
#1	-.00453	.00421	.00130	-.00230	.00200	.00715	
#2	.00105	-.00046	.00004	-.00101	.00341	.00741	

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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	16673	--	--	--	--	--	--
SDev	453.2907	--	--	--	--	--	--
%RSD	2.718658	--	--	--	--	--	--
#1	16994	--	--	--	--	--	--
#2	16353	--	--	--	--	--	--

Method: METTRA Sample Name: DHRLNS Operator: RJG
Run Time: 08/21/00 15:14:24
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	.04260	22.265	1.8295	2.7358	.05072	27.528	.04499
SDev	.00056	.330	.0347	.0465	.00075	.500	.00074
%RSD	1.3143	1.4803	1.8964	1.7008	1.4752	1.8168	1.6436
#1	.04300	22.498	1.8540	2.7687	.05125	27.882	.04552
#2	.04221	22.032	1.8050	2.7029	.05019	27.175	.04447
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49616	.19602	.24518	16.207	8.3913	.62584	.00081
SDev	.00716	.00283	.00354	.255	.1437	.00995	.00066
%RSD	1.4432	1.4452	1.4447	1.5735	1.7120	1.5904	81.451
#1	.50123	.19803	.24768	16.387	8.4929	.63288	.00127
#2	.49110	.19402	.24267	16.027	8.2897	.61880	.00034
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	.49751	.45995	.45891	.45926	-.00155	-.00125	-.00135
SDev	.01077	.00708	.00306	.00440	.00014	.00011	.00003
%RSD	2.1642	1.5395	.66766	.95844	8.8666	8.8836	2.0773
#1	.50513	.46495	.46108	.46237	-.00145	-.00132	-.00137
#2	.48990	.45494	.45675	.45615	-.00165	-.00117	-.00133
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	1.8556	1.8774	1.8701	1.7020	.45993	.50648
SDev	.0163	.0143	.0150	.0245	.00925	.00904
%RSD	.87755	.76310	.80091	1.4423	2.0105	1.7848
#1	1.8671	1.8875	1.8807	1.7193	.46646	.51288
#2	1.8441	1.8672	1.8595	1.6846	.45339	.50009
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	16709	--	--	--	--	--	--
SDev	100.6218	--	--	--	--	--	--
%RSD	.6022015	--	--	--	--	--	--
#1	16638	--	--	--	--	--	--
#2	16780	--	--	--	--	--	--

Method: METTRA Sample Name: DHRLND Operator: RJG
Run Time: 08/21/00 15:18:33
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04454	19.052	1.8457	2.7687	.05141	31.908	.04609
SDev	.00065	.292	.0240	.0344	.00013	.374	.00104
%RSD	1.4705	1.5316	1.3012	1.2422	.25284	1.1706	2.2471
#1	.04407	18.845	1.8288	2.7444	.05132	31.643	.04536
#2	.04500	19.258	1.8627	2.7930	.05150	32.172	.04683
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	.49366	.19787	.25199	16.426	8.0588	.63318	.00090
SDev	.00861	.00328	.00344	.261	.1010	.00929	.00011
%RSD	1.7439	1.6591	1.3638	1.5901	1.2534	1.4666	11.876
#1	.48757	.19554	.24956	16.242	7.9874	.62662	.00098
#2	.49974	.20019	.25442	16.611	8.1303	.63975	.00083
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50099	.47374	.46456	.46762	-.00110	-.00149	-.00136
SDev	.00586	.00525	.00824	.00725	.00290	.00111	.00023
%RSD	1.1690	1.1075	1.7746	1.5495	264.55	74.766	16.625
#1	.49685	.47003	.45873	.46249	.00096	-.00227	-.00120
#2	.50513	.47745	.47039	.47274	-.00315	-.00070	-.00152
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	1.8062	1.8243	1.8183	1.7744	.47309	.50257
SDev	.0262	.0237	.0245	.0297	.00182	.00661
%RSD	1.4493	1.3012	1.3502	1.6766	.38428	1.3161
#1	1.7877	1.8075	1.8009	1.7534	.47180	.49790
#2	1.8247	1.8411	1.8356	1.7954	.47437	.50725
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	16449	--	--	--	--	--	--
SDev	191.9795	--	--	--	--	--	--
%RSD	1.167102	--	--	--	--	--	--
#1	16585	--	--	--	--	--	--
#2	16314	--	--	--	--	--	--

Method: METTRA Sample Name: DHRM3

Operator: RJG

Run Time: 08/21/00 15:22:43

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00104	22.544	.01433	.48025	.01047	101.83	.00108
SDev	.00025	.163	.00046	.00210	.00017	.24	.00016
%RSD	24.440	.72399	3.2163	.43778	1.6389	.23083	14.514
#1	.00086	22.428	.01400	.47877	.01059	101.66	.00097
#2	.00122	22.659	.01465	.48174	.01035	101.99	.00119
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	.05052	.07884	.26364	61.686	22.558	6.9282	.00199
SDev	.00025	.00078	.00111	.233	.086	.0312	.00046
%RSD	.50151	.98458	.42268	.37796	.38104	.45025	23.171
#1	.05070	.07829	.26285	61.521	22.497	6.9062	.00231
#2	.05034	.07939	.26442	61.851	22.618	6.9503	.00166
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	.10831	.02847	.03116	.03026	.00319	-.00094	.00043
SDev	.00162	.00367	.00239	.00037	.00496	.00264	.00011
%RSD	1.4974	12.884	7.6695	1.2299	155.39	279.77	25.333
#1	.10716	.02588	.03285	.03053	.00670	-.00281	.00036
#2	.10946	.03107	.02947	.03000	-.00032	.00092	.00051
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	-.00702	.00561	.00141	.00468	.09352	.21001	
SDev	.00011	.00076	.00047	.00405	.00010	.00047	
%RSD	1.5867	13.545	33.448	86.409	.10929	.22318	
#1	-.00710	.00615	.00174	.00755	.09345	.20968	
#2	-.00695	.00508	.00107	.00182	.09360	.21034	
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	16775	--	--	--	--	--	--
SDev	132.6184	--	--	--	--	--	--
%RSD	.7905942	--	--	--	--	--	--
#1	16868	--	--	--	--	--	--
#2	16681	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-5 Operator: RJG
Run Time: 08/21/00 15:26:52
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0359	23.954	.51092	1.9874	2.0419	50.618	.49430
SDev	.0010	.011	.00308	.0022	.0036	.094	.00070
%RSD	.09865	.04598	.60261	.10819	.17660	.18526	.14201
#1	1.0352	23.946	.51310	1.9889	2.0445	50.684	.49380
#2	1.0367	23.962	.50874	1.9859	2.0394	50.552	.49480
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.0005	2.0100	1.9511	25.079	49.789	1.9967	2.0148
SDev	.0027	.0018	.0001	.018	.039	.0014	.0111
%RSD	.13529	.09173	.00703	.07033	.07904	.06896	.54891
#1	1.9986	2.0087	1.9510	25.092	49.817	1.9957	2.0070
#2	2.0024	2.0113	1.9512	25.067	49.761	1.9977	2.0227
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9829	.51507	.51180	.51289	.51755	.50781	.51106
SDev	.0073	.00230	.00258	.00096	.00058	.00403	.00249
%RSD	.36950	.44631	.50411	.18628	.11286	.79273	.48734
#1	1.9881	.51344	.51362	.51356	.51796	.50497	.50929
#2	1.9777	.51669	.50997	.51221	.51714	.51066	.51282
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.51126	.52097	.51774	1.0447	2.0104	2.0226	
SDev	.00225	.00344	.00304	.0009	.0047	.0014	
%RSD	.43916	.66082	.58793	.08255	.23401	.06886	
#1	.50968	.51853	.51558	1.0441	2.0138	2.0236	
#2	.51285	.52340	.51989	1.0453	2.0071	2.0216	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.55000	1.1000	2.2000	2.2000	
Low			.45000	.90000	1.8000	1.8000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16271	--	--	--	--	--	--
SDev	24.60718	--	--	--	--	--	--
%RSD	.1512366	--	--	--	--	--	--
#1	16288	--	--	--	--	--	--
#2	16253	--	--	--	--	--	--

Method: METTRA Sample Name: CCB5

Operator: RJG

Run Time: 08/21/00 15:31:02

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00050	.03930	.00057	.00074	.00079	.01688	.00028
SDev	.00011	.00066	.00221	.00027	.00017	.00437	.00013
%RSD	21.579	1.6873	384.81	36.069	21.322	25.866	46.176
#1	.00042	.03883	-.00099	.00055	.00091	.01379	.00019
#2	.00058	.03977	.00214	.00093	.00067	.01997	.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
Avge	-.00029	.00093	-.00031	.00241	.01742	.00095	.00561
SDev	.00008	.00047	.00062	.00581	.00427	.00026	.00121
%RSD	28.414	50.172	199.68	241.72	24.508	27.065	21.513
#1	-.00023	.00060	-.00075	-.00171	.01440	.00077	.00646
#2	-.00035	.00127	.00013	.00652	.02044	.00114	.00476
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	-.00001	.00196	-.00047	.00034	-.00144	-.00013	-.00057
SDev	.00027	.00177	.00064	.00016	.00164	.00073	.00104
%RSD	4550.0	90.333	136.61	47.339	114.03	564.72	182.98
#1	-.00020	.00071	-.00002	.00023	-.00028	.00039	.00017
#2	.00019	.00321	-.00093	.00045	-.00260	-.00065	-.00130
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	.04000			.00300			.06000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V__	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00193	.00232	.00219	.00229	.00000	.00139	
SDev	.00266	.00285	.00102	.00147	.00000	.00025	
%RSD	137.77	122.73	46.369	64.109	241.72	17.998	
#1	.00381	.00031	.00147	.00332	-.00000	.00121	
#2	.00005	.00434	.00291	.00125	.00000	.00157	
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	16172	--	--	--	--	--	--
SDev	229.3505	--	--	--	--	--	--
%RSD	1.418224	--	--	--	--	--	--
#1	16334	--	--	--	--	--	--
#2	16010	--	--	--	--	--	--

Method: METTRA Sample Name: DHLLWB Operator: RJG
 Run Time: 08/21/00 15:44:45
 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	-.00020	.04267	.00050	.00013	.00046	.02481	.00006
SDev	.00024	.00631	.00027	.00001	.00010	.00000	.00007
%RSD	121.46	14.798	54.189	8.6972	21.621	.01800	111.51
#1	-.00003	.04714	.00070	.00012	.00039	.02480	.00001
#2	-.00037	.03821	.00031	.00013	.00053	.02481	.00011
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00005	.00014	-.00087	-.00688	.00144	.00014	.00017
SDev	.00005	.00030	.00006	.00506	.00331	.00003	.00051
%RSD	97.157	216.44	7.4969	73.633	230.33	22.223	300.31
#1	-.00002	.00035	-.00091	-.01046	.00377	.00012	.00053
#2	-.00009	-.00007	-.00082	-.00330	-.00090	.00017	-.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	.00078	.00046	.00001	.00016	-.00196	.00066	-.00021
SDev	.00059	.00453	.00069	.00104	.00162	.00115	.00022
%RSD	75.890	991.43	5850.0	652.67	82.739	173.40	104.88
#1	.00036	.00366	-.00048	.00090	-.00311	.00147	-.00006
#2	.00119	-.00275	.00050	-.00058	-.00081	-.00015	-.00037
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	-.00290	.00091	-.00036	-.00105	-.00000	.01143	
SDev	.00394	.00081	.00077	.00283	.00000	.00008	
%RSD	135.58	89.021	214.68	270.40	73.633	.72728	
#1	-.00012	.00034	.00019	.00096	-.00000	.01149	
#2	-.00569	.00149	-.00090	-.00305	-.00000	.01137	
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	16242	--	--	--	--	--	--
SDev	.6007646	--	--	--	--	--	--
%RSD	.0036989	--	--	--	--	--	--
#1	16242	--	--	--	--	--	--
#2	16241	--	--	--	--	--	--

Method: METTRA Sample Name: DHLLWC

Operator: RJG

Run Time: 08/21/00 15:48:55

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05007	1.8234	2.0106	1.9470	.05074	L.10251	.05017
SDev	.00025	.0005	.0006	.0056	.00014	.01665	.00011
%RSD	.49141	.02828	.02750	.28739	.28466	16.243	.20918
#1	.04990	1.8238	2.0110	1.9509	.05084	L.09074	.05009
#2	.05024	1.8231	2.0102	1.9430	.05063	L.11428	.05024
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	.50779	.20443	.23660	.99836	L.01916	.49686	L.00015
SDev	.00161	.00035	.00006	.00142	.00246	.00061	.00001
%RSD	.31798	.17236	.02747	.14266	12.848	.12317	6.2786
#1	.50665	.20418	.23655	.99735	L.01742	.49643	L.00015
#2	.50893	.20468	.23664	.99936	L.02090	.49729	L.00016
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	.50343	.50318	.50011	.50113	-.00304	-.00031	L-.00122
SDev	.00222	.00469	.00401	.00424	.00013	.00205	.00141
%RSD	.44088	.93124	.80194	.84518	4.1837	669.57	115.86
#1	.50500	.49987	.49728	.49814	-.00295	.00114	L-.00022
#2	.50186	.50649	.50295	.50413	-.00313	-.00175	L-.00221
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	1.9898	2.0117	2.0044	2.0096	.49979	.55184	
SDev	.0081	.0086	.0085	.0010	.00009	.00249	
%RSD	.40912	.42834	.42199	.04960	.01822	.45129	
#1	1.9840	2.0056	1.9984	2.0089	.49985	.55008	
#2	1.9956	2.0178	2.0104	2.0103	.49972	.55361	
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	15995	--	--	--	--	--	--
SDev	64.59462	--	--	--	--	--	--
%RSD	.4038306	--	--	--	--	--	--
#1	16041	--	--	--	--	--	--
#2	15950	--	--	--	--	--	--

Method: METTRA Sample Name: DHKHX

Operator: RJG

Run Time: 08/21/00 15:53:05

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00062	.21052	.00179	.18899	.00045	26.398	.00011
SDev	.00022	.00034	.00139	.00195	.00021	.308	.00011
%RSD	35.862	.16346	77.501	1.0338	47.919	1.1664	93.818
#1	.00046	.21076	.00081	.18761	.00060	26.181	.00004
#2	.00078	.21028	.00277	.19037	.00030	26.616	.00019
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00122	.05872	.01224	2.5915	15.345	.07928	.01867
SDev	.00063	.00104	.00079	.0445	.158	.00088	.00063
%RSD	51.200	1.7725	6.4581	1.7183	1.0270	1.1155	3.3973
#1	.00078	.05799	.01168	2.5600	15.234	.07865	.01823
#2	.00166	.05946	.01280	2.6229	15.456	.07990	.01912
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	.03967	.00307	-.00007	.00098	-.00094	.00057	.00007
SDev	.00012	.00146	.00094	.00014	.00096	.00085	.00025
%RSD	.31234	47.594	1395.8	14.252	102.01	148.47	362.02
#1	.03958	.00410	-.00073	.00088	-.00162	.00117	.00024
#2	.03976	.00204	.00060	.00108	-.00026	-.00003	-.00011
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00216	.00035	.00095	.00351	.00184	.02444	
SDev	.00029	.00399	.00276	.00301	.00059	.00028	
%RSD	13.612	1150.2	290.62	85.622	31.989	1.1400	
#1	.00195	-.00247	-.00100	.00564	.00142	.02424	
#2	.00236	.00317	.00290	.00139	.00225	.02464	
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	16334	--	--	--	--	--	--
SDev	155.4924	--	--	--	--	--	--
%RSD	.9519669	--	--	--	--	--	--
#1	16444	--	--	--	--	--	--
#2	16224	--	--	--	--	--	--

Method: METTRA Sample Name: DHKJ2

Operator: RJG

Run Time: 08/21/00 15:57:14

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00040	.32359	.00135	.32008	-.00006	38.067	.00040
SDev	.00007	.01043	.00035	.00165	.00019	.268	.00013
%RSD	18.322	3.2234	25.635	.51691	320.61	.70458	33.377
#1	.00035	.33096	.00160	.32125	-.00019	38.257	.00031
#2	.00045	.31621	.00111	.31891	.00008	37.877	.00050
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00142	.02529	.01042	4.3883	19.198	.10982	.01143
SDev	.00003	.00009	.00020	.0101	.099	.00046	.00019
%RSD	1.9593	.34958	1.9303	.22978	.51408	.41682	1.6669
#1	.00140	.02522	.01056	4.3954	19.268	.11014	.01157
#2	.00144	.02535	.01027	4.3812	19.128	.10950	.01130
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	.02148	.00171	.00097	.00121	-.00013	.00044	.00025
SDev	.00007	.00004	.00089	.00058	.00099	.00023	.00048
%RSD	.32238	2.1755	91.973	47.813	744.57	52.206	193.61
#1	.02153	.00169	.00160	.00163	.00057	.00060	.00059
#2	.02143	.00174	.00034	.00080	-.00083	.00028	-.00009
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	-.00096	-.00010	-.00038	.00003	.00153	.02209	
SDev	.00249	.00111	.00157	.00144	.00000	.00010	
%RSD	259.74	1157.5	409.55	5371.8	.22978	.42876	
#1	-.00272	-.00088	-.00149	-.00099	.00153	.02216	
#2	.00080	.00069	.00073	.00104	.00153	.02202	
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	16035	--	--	--	--	--	--
SDev	50.16936	--	--	--	--	--	--
%RSD	.3128834	--	--	--	--	--	--
#1	15999	--	--	--	--	--	--
#2	16070	--	--	--	--	--	--

Method: METTRA Sample Name: DHKJC

Operator: RJG

Run Time: 08/21/00 16:01:24

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	-.00003	.05315	.00009	.00017	.00027	.09536	.00018
SDev	.00005	.00282	.00125	.00012	.00008	.00004	.00001
%RSD	152.78	5.3028	1333.0	68.103	30.245	.04553	5.6707
#1	-.00007	.05514	-.00079	.00009	.00021	.09533	.00017
#2	.00000	.05116	.00097	.00025	.00032	.09539	.00019
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00041	.00086	-.00091	.01777	.00396	.00031	-.00055
SDev	.00045	.00004	.00013	.00765	.00271	.00005	.00022
%RSD	109.83	4.7696	14.670	43.077	68.495	15.310	40.084
#1	.00009	.00083	-.00101	.02318	.00588	.00028	-.00070
#2	.00073	.00089	-.00082	.01235	.00204	.00035	-.00039
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	.00152	-.00045	.00011	-.00008	-.00156	-.00050	-.00086
SDev	.00007	.00133	.00109	.00028	.00147	.00091	.00110
%RSD	4.3621	293.83	983.27	369.72	94.356	181.26	128.50
#1	.00148	-.00140	.00088	.00012	-.00052	.00014	-.00008
#2	.00157	.00049	-.00066	-.00028	-.00260	-.00115	-.00163
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	-.00378	.00438	.00166	-.00127	.00001	.00424	
SDev	.00109	.00267	.00142	.00133	.00000	.00000	
%RSD	28.765	60.963	85.351	104.92	43.077	.03510	
#1	-.00455	.00627	.00267	-.00221	.00001	.00424	
#2	-.00301	.00249	.00066	-.00033	.00000	.00424	
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	16204	--	--	--	--	--	--
SDev	3.677093	--	--	--	--	--	--
%RSD	.0226921	--	--	--	--	--	--
#1	16207	--	--	--	--	--	--
#2	16202	--	--	--	--	--	--

Method: METTRA Sample Name: DHKJF

Operator: RJG

Run Time: 08/21/00 16:05:34

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00004	.28505	.00023	.10853	.00014	26.301	.00010
SDev	.00023	.01565	.00010	.00036	.00020	.198	.00003
%RSD	529.27	5.4906	45.060	.33402	140.94	.75285	31.653
#1	.00021	.29611	.00016	.10879	.00000	26.441	.00012
#2	-.00012	.27398	.00030	.10827	.00028	26.161	.00007
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00138	.03788	.01530	1.2512	12.760	.06379	.01300
SDev	.00002	.00024	.00033	.0192	.081	.00029	.00033
%RSD	1.7413	.64799	2.1289	1.5351	.63425	.45740	2.5585
#1	.00140	.03805	.01553	1.2648	12.817	.06399	.01324
#2	.00136	.03770	.01507	1.2376	12.703	.06358	.01277
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	.02808	.00258	-.00038	.00061	-.00050	.00033	.00006
SDev	.00078	.00070	.00022	.00038	.00112	.00199	.00096
%RSD	2.7807	27.222	59.057	63.056	223.60	597.39	1717.1
#1	.02753	.00209	-.00054	.00034	-.00129	.00174	.00073
#2	.02863	.00308	-.00022	.00088	.00029	-.00107	-.00062
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	.00064	.00239	.00180	-.00067	.00152	.01750	
SDev	.00321	.00258	.00065	.00223	.00040	.00032	
%RSD	504.46	108.04	36.000	333.64	26.099	1.8046	
#1	-.00164	.00421	.00226	.00091	.00180	.01772	
#2	.00291	.00056	.00135	-.00225	.00124	.01728	
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	16091	--	--	--	--	--	--
SDev	117.8748	--	--	--	--	--	--
%RSD	.7325673	--	--	--	--	--	--
#1	16007	--	--	--	--	--	--
#2	16174	--	--	--	--	--	--

Method: METTRA Sample Name: DHKJH

Operator: RJG

Run Time: 08/21/00 16:09:43

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00022	.80475	.00701	.08091	.00038	14.859	.00016
SDev	.00019	.00801	.00093	.00020	.00001	.000	.00005
%RSD	86.271	.99552	13.239	.24707	2.3831	.00209	32.278
#1	.00009	.81042	.00635	.08105	.00038	14.859	.00013
#2	.00035	.79909	.00766	.08077	.00037	14.859	.00020
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00103	.04354	.01716	1.2884	15.708	.05372	.01092
SDev	.00021	.00007	.00040	.0006	.000	.00003	.00003
%RSD	20.592	.15995	2.3504	.04408	.00282	.04650	.23396
#1	.00118	.04349	.01687	1.2888	15.708	.05371	.01090
#2	.00088	.04359	.01744	1.2880	15.708	.05374	.01094
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	.05629	.00044	.00127	.00099	.00099	.00046	.00063
SDev	.00122	.00052	.00056	.00020	.00049	.00169	.00097
%RSD	2.1685	120.59	44.413	20.286	49.150	369.45	152.32
#1	.05543	.00081	.00087	.00085	.00064	.00165	.00132
#2	.05715	.00006	.00167	.00113	.00133	-.00074	-.00005
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	-.00061	.00106	.00051	.00450	.00138	.02905	
SDev	.00091	.00023	.00015	.00036	.00019	.00016	
%RSD	150.39	21.381	30.125	7.9009	13.741	.54012	
#1	.00004	.00090	.00061	.00476	.00125	.02894	
#2	-.00125	.00122	.00040	.00425	.00152	.02916	
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	16281	--	--	--	--	--	--
SDev	31.57190	--	--	--	--	--	--
%RSD	.1939190	--	--	--	--	--	--
#1	16303	--	--	--	--	--	--
#2	16259	--	--	--	--	--	--

Method: METTRA Sample Name: DHKJK

Operator: RJG

Run Time: 08/21/00 16:13:53

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00032	.85135	.00607	.08231	.00040	15.061	.00032
SDev	.00014	.01627	.00013	.00184	.00042	.289	.00019
%RSD	44.497	1.9115	2.1578	2.2406	107.62	1.9164	60.469
#1	.00022	.83985	.00616	.08101	.00070	14.857	.00018
#2	.00042	.86286	.00598	.08362	.00009	15.265	.00046
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00122	.04280	.02482	1.3423	15.722	.05888	.01111
SDev	.00036	.00101	.00121	.0271	.333	.00123	.00023
%RSD	29.457	2.3516	4.8886	2.0186	2.1192	2.0974	2.0584
#1	.00097	.04209	.02396	1.3231	15.486	.05801	.01095
#2	.00147	.04352	.02568	1.3615	15.957	.05975	.01127
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	.05963	.00270	.00075	.00140	.00103	.00064	.00077
SDev	.00071	.00194	.00147	.00033	.00127	.00187	.00082
%RSD	1.1835	72.087	194.80	23.776	123.52	291.21	106.69
#1	.05914	.00407	-.00028	.00117	.00013	.00196	.00135
#2	.06013	.00132	.00179	.00164	.00193	-.00068	.00019
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	.00038	-.00077	-.00039	.00090	.00220	.02847	
SDev	.00278	.00217	.00237	.00158	.00060	.00048	
%RSD	728.44	282.46	615.76	175.12	27.393	1.6777	
#1	.00235	.00077	.00129	.00202	.00178	.02813	
#2	-.00158	-.00230	-.00206	-.00021	.00263	.02881	
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	16302	--	--	--	--	--	--
SDev	278.9536	--	--	--	--	--	--
%RSD	1.711162	--	--	--	--	--	--
#1	16499	--	--	--	--	--	--
#2	16105	--	--	--	--	--	--

Method: METTRA Sample Name: DHKJL

Operator: RJG

Run Time: 08/21/00 16:18:02

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00057	.17096	.00092	.09899	.00042	17.232	.00035
SDev	.00023	.00526	.00066	.00006	.00017	.040	.00011
%RSD	39.536	3.0743	71.568	.05621	40.677	.23477	32.116
#1	.00041	.17468	.00046	.09903	.00054	17.203	.00027
#2	.00073	.16725	.00139	.09895	.00030	17.260	.00043
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	.00174	.02846	.01853	.79587	14.457	.06329	.00929
SDev	.00026	.00011	.00045	.01660	.031	.00023	.00017
%RSD	15.115	.38228	2.4356	2.0861	.21745	.36817	1.8563
#1	.00155	.02838	.01821	.78413	14.435	.06312	.00942
#2	.00192	.02853	.01885	.80761	14.479	.06345	.00917
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	.04703	.00169	-.00046	.00025	-.00092	.00033	-.00008
SDev	.00038	.00009	.00062	.00044	.00038	.00160	.00094
%RSD	.81316	5.1094	133.78	175.60	41.887	479.76	1118.8
#1	.04676	.00163	-.00090	-.00006	-.00119	.00146	.00058
#2	.04730	.00175	-.00003	.00057	-.00065	-.00080	-.00075
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V__	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00087	.00071	.00076	.00066	.00200	.03330	
SDev	.00148	.00193	.00178	.00443	.00055	.00023	
%RSD	171.23	272.11	233.89	669.64	27.501	.69584	
#1	-.00018	-.00066	-.00050	-.00247	.00239	.03313	
#2	.00192	.00207	.00202	.00380	.00161	.03346	
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	16320	--	--	--	--	--	--
SDev	63.92204	--	--	--	--	--	--
%RSD	.3916720	--	--	--	--	--	--
#1	16366	--	--	--	--	--	--
#2	16275	--	--	--	--	--	--

Method: METTRA Sample Name: DHKJLP5 Operator: RJG
 Run Time: 08/21/00 16:22:12
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00013	.08580	-.00038	.01980	.00032	3.4146	.00007
SDev	.00029	.01087	.00181	.00006	.00009	.0123	.00006
%RSD	223.01	12.671	476.76	.27840	29.607	.36024	79.684

#1	.00008	.09349	.00090	.01984	.00025	3.4233	.00003
#2	-.00034	.07812	-.00166	.01976	.00038	3.4059	.00011

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00003	.00594	.00220	.14694	2.8075	.01253	.00192
SDev	.00023	.00009	.00003	.00325	.0114	.00001	.00021
%RSD	731.26	1.4300	1.3679	2.2111	.40651	.05681	10.982

#1	.00013	.00588	.00218	.14924	2.8156	.01252	.00177
#2	-.00020	.00600	.00222	.14464	2.7995	.01253	.00206

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00955	.00000	-.00080	-.00053	-.00102	.00108	.00038
SDev	.00018	.00247	.00042	.00054	.00188	.00035	.00086
%RSD	1.8434	138960.	52.932	101.16	183.51	32.107	226.30

#1	.00943	.00175	-.00110	-.00015	-.00235	.00083	-.00023
#2	.00968	-.00174	-.00050	-.00091	.00030	.00132	.00098

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00156	.00091	.00008	.00041	.00032	.00739
SDev	.00043	.00122	.00096	.00107	.00038	.00001
%RSD	27.376	135.06	1149.4	258.34	118.97	.17568

#1	-.00187	.00004	-.00059	-.00034	.00059	.00738
#2	-.00126	.00177	.00076	.00117	.00005	.00740

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16274	--	--	--	--	--	--
SDev	31.53669	--	--	--	--	--	--
%RSD	.1937827	--	--	--	--	--	--
#1	16252	--	--	--	--	--	--
#2	16297	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-6 Operator: RJG
 Run Time: 08/21/00 16:26:22
 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	1.0299	23.833	.50880	1.9774	2.0528	50.811	.49402
SDev	.0074	.167	.00186	.0093	.0125	.321	.00528
%RSD	.71727	.69903	.36659	.46792	.61097	.63196	1.0684
#1	1.0247	23.715	.50748	1.9709	2.0440	50.584	.49028
#2	1.0351	23.951	.51012	1.9840	2.0617	51.038	.49775
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	1.9926	2.0038	1.9396	25.061	49.913	2.0015	2.0083
SDev	.0178	.0179	.0111	.207	.313	.0159	.0276
%RSD	.89343	.89373	.57084	.82508	.62698	.79420	1.3740
#1	1.9800	1.9911	1.9318	24.915	49.691	1.9902	1.9888
#2	2.0051	2.0165	1.9474	25.207	50.134	2.0127	2.0278
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	1.9834	.51483	.50961	.51135	.51942	.50870	.51227
SDev	.0047	.00159	.00813	.00595	.00562	.00390	.00447
%RSD	.23682	.30860	1.5957	1.1641	1.0814	.76586	.87239
#1	1.9801	.51371	.50386	.50714	.51545	.50595	.50911
#2	1.9867	.51596	.51536	.51556	.52339	.51146	.51543
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	.51154	.52231	.51872	1.0396	2.0066	2.0181	
SDev	.00769	.01017	.00935	.0059	.0086	.0130	
%RSD	1.5028	1.9479	1.8017	.56788	.42637	.64493	
#1	.50611	.51511	.51211	1.0354	2.0006	2.0089	
#2	.51698	.52950	.52533	1.0438	2.0127	2.0274	
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	16169	--	--	--	--	--	--
SDev	99.34850	--	--	--	--	--	--
%RSD	.6144552	--	--	--	--	--	--
#1	16239	--	--	--	--	--	--
#2	16098	--	--	--	--	--	--

Method: METTRA Sample Name: CCB6

Operator: RJG

Run Time: 08/21/00 16:30:32

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	.00034	.06700	.00054	.00056	.00106	.03768	.00028
SDev	.00036	.00617	.00004	.00004	.00009	.00390	.00006
%RSD	105.81	9.2136	6.7012	6.5676	8.2935	10.362	23.139
#1	.00059	.07137	.00051	.00059	.00100	.03492	.00033
#2	.00009	.06264	.00056	.00053	.00113	.04044	.00023
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	.00093	-.00147	-.00018	.01440	.00051	.00509
SDev	.00027	.00016	.00018	.00503	.00119	.00011	.00114
%RSD	180.62	17.430	11.978	2783.2	8.2622	22.065	22.379
#1	.00004	.00104	-.00160	.00338	.01524	.00043	.00590
#2	-.00033	.00081	-.00135	-.00374	.01356	.00059	.00429
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	.00154	.00027	.00038	.00034	-.00020	.00058	.00032
SDev	.00013	.00249	.00050	.00117	.00023	.00233	.00163
%RSD	8.1365	914.18	133.71	340.94	116.28	399.40	504.64
#1	.00163	-.00149	.00002	-.00048	-.00004	.00223	.00148
#2	.00145	.00204	.00073	.00117	-.00036	-.00107	-.00083
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	.00087	.00037	.00054	.00101	-.00000	.00152	
SDev	.00123	.00143	.00137	.00062	.00000	.00024	
%RSD	141.02	384.69	253.19	61.263	2783.2	15.840	
#1	.00175	.00139	.00151	.00145	.00000	.00135	
#2	.00000	-.00064	-.00043	.00057	-.00000	.00169	
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	16414	--	--	--	--	--	--
SDev	33.16359	--	--	--	--	--	--
%RSD	.2020506	--	--	--	--	--	--
#1	16437	--	--	--	--	--	--
#2	16390	--	--	--	--	--	--

Method: METTRA Sample Name: DHKJLS Operator: RJG
Run Time: 08/21/00 16:34:41
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	.05100	2.3007	1.9793	2.0256	.04987	17.330	.04827
SDev	.00022	.0311	.0192	.0249	.00041	.219	.00084
%RSD	.42734	1.3509	.97081	1.2298	.82686	1.2634	1.7418
#1	.05116	2.3227	1.9929	2.0432	.05016	17.485	.04886
#2	.05085	2.2788	1.9657	2.0079	.04958	17.175	.04767
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	.49678	.22172	.26681	1.8068	14.598	.55432	.01026
SDev	.00484	.00230	.00276	.0119	.176	.00595	.00022
%RSD	.97474	1.0373	1.0349	.65922	1.2068	1.0729	2.1436
#1	.50021	.22335	.26876	1.8152	14.722	.55852	.01011
#2	.49336	.22010	.26485	1.7983	14.473	.55011	.01042
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	.54221	.52583	.50687	.51318	.00036	.00028	.00031
SDev	.00632	.00248	.00662	.00524	.00109	.00080	.00017
%RSD	1.1660	.47262	1.3062	1.0218	300.29	283.56	54.455
#1	.54668	.52758	.51155	.51689	-.00041	.00084	.00043
#2	.53774	.52407	.50219	.50947	.00114	-.00028	.00019
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	1.9953	2.0049	2.0017	2.1902	.49541	.54491	
SDev	.0177	.0182	.0180	.0235	.00526	.00614	
%RSD	.88571	.90642	.89954	1.0724	1.0611	1.1264	
#1	2.0078	2.0178	2.0144	2.2068	.49913	.54925	
#2	1.9828	1.9921	1.9890	2.1736	.49169	.54057	
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	16130	--	--	--	--	--	--
SDev	189.8229	--	--	--	--	--	--
%RSD	1.176859	--	--	--	--	--	--
#1	15995	--	--	--	--	--	--
#2	16264	--	--	--	--	--	--

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Method: METTRA Sample Name: DHKJLD

Operator: RJG

Run Time: 08/21/00 16:38:51

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.03746	1.7435	1.4633	1.5218	.03714	17.200	.03550
SDev	.00016	.0109	.0009	.0059	.00018	.043	.00011
%RSD	.43517	.62249	.06092	.38673	.49574	.25184	.30178
#1	.03734	1.7511	1.4640	1.5259	.03728	17.231	.03558
#2	.03757	1.7358	1.4627	1.5176	.03701	17.169	.03543
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	.36557	.16756	.22567	1.4914	14.413	.42278	.00905
SDev	.00006	.00027	.00015	.0054	.027	.00044	.00001
%RSD	.01711	.16207	.06724	.35905	.18786	.10377	.11276
#1	.36562	.16737	.22577	1.4876	14.432	.42309	.00904
#2	.36553	.16775	.22556	1.4951	14.394	.42247	.00906
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	.48170	.38725	.37247	.37739	.00005	.00082	.00056
SDev	.00176	.00052	.00062	.00059	.00041	.00039	.00012
%RSD	.36598	.13296	.16669	.15516	783.72	47.326	21.425
#1	.48294	.38688	.37204	.37698	-.00024	.00109	.00065
#2	.48045	.38761	.37291	.37781	.00034	.00054	.00048
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	1.4747	1.4900	1.4849	1.6197	.36311	.42852	
SDev	.0113	.0020	.0024	.0072	.00060	.00119	
%RSD	.76386	.13238	.16401	.44670	.16601	.27689	
#1	1.4667	1.4914	1.4831	1.6248	.36353	.42935	
#2	1.4826	1.4886	1.4866	1.6146	.36268	.42768	
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	16448	--	--	--	--	--	--
SDev	14.84924	--	--	--	--	--	--
%RSD	.0902786	--	--	--	--	--	--
#1	16459	--	--	--	--	--	--
#2	16438	--	--	--	--	--	--

Method: METTRA Sample Name: DHKJP

Operator: RJG

Run Time: 08/21/00 16:43:01

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	.00052	.14610	-.00007	.09903	.00037	17.181	.00012
SDev	.00026	.00512	.00000	.00006	.00004	.005	.00009
%RSD	49.603	3.5018	5.7717	.06140	9.8479	.02918	70.973
#1	.00034	.14972	-.00007	.09907	.00040	17.184	.00006
#2	.00071	.14249	-.00008	.09899	.00035	17.177	.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	.00161	.02135	.01085	.57437	16.903	.05156	.01009
SDev	.00003	.00015	.00037	.00293	.010	.00017	.00052
%RSD	1.6237	.70805	3.3833	.51057	.05701	.32302	5.1193
#1	.00159	.02124	.01059	.57229	16.896	.05145	.00972
#2	.00163	.02146	.01111	.57644	16.909	.05168	.01045
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	.02600	.00240	-.00027	.00062	-.00054	-.00025	-.00035
SDev	.00024	.00097	.00009	.00039	.00022	.00013	.00016
%RSD	.92149	40.513	34.468	62.270	41.401	50.091	45.603
#1	.02617	.00171	-.00034	.00035	-.00038	-.00016	-.00024
#2	.02583	.00309	-.00020	.00089	-.00070	-.00034	-.00046
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00050	.00156	.00121	.00380	.00192	.02117	
SDev	.00041	.00120	.00067	.00504	.00018	.00004	
%RSD	82.466	77.092	55.230	132.66	9.6227	.20378	
#1	.00021	.00241	.00168	.00736	.00205	.02114	
#2	.00079	.00071	.00074	.00024	.00179	.02120	
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	

Method: METTRA Sample Name: DHKHXF Operator: RJG
 Run Time: 08/21/00 16:47:11
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00013	.08313	.00064	.15395	.00035	25.429	.00012
SDev	.00063	.00616	.00021	.00022	.00003	.105	.00021
%RSD	478.24	7.4069	32.882	.14203	10.185	.41329	184.58
#1	.00058	.08749	.00079	.15380	.00032	25.503	.00027
#2	-.00031	.07878	.00049	.15410	.00037	25.355	-.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	.00046	.00072	.00122	-.01704	15.464	.03603	.01151
SDev	.00013	.00043	.00005	.00307	.009	.00010	.00013
%RSD	28.623	60.289	3.6843	18.046	.06058	.26308	1.1595
#1	.00055	.00103	.00125	-.01921	15.470	.03610	.01141
#2	.00036	.00041	.00118	-.01486	15.457	.03597	.01160
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	.00381	-.00080	-.00023	-.00042	.00236	.00221	.00226
SDev	.00006	.00338	.00080	.00166	.00018	.00014	.00015
%RSD	1.6068	423.00	346.42	395.04	7.6997	6.3132	6.7957
#1	.00377	.00159	.00033	.00075	.00223	.00211	.00215
#2	.00386	-.00319	-.00079	-.00159	.00249	.00231	.00237
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	-.00072	.00011	-.00017	.00021	.00079	.01004	
SDev	.00251	.00036	.00060	.00054	.00038	.00026	
%RSD	347.04	333.95	352.51	260.01	47.436	2.5622	
#1	.00105	-.00015	.00025	-.00017	.00106	.00986	
#2	-.00250	.00036	-.00059	.00059	.00053	.01022	
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	16361	--	--	--	--	--	--
SDev	12.51593	--	--	--	--	--	--
%RSD	.0764979	--	--	--	--	--	--
#1	16370	--	--	--	--	--	--
#2	16352	--	--	--	--	--	--

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16313	--	--	--	--	--	--
SDev	14.00058	--	--	--	--	--	--
%RSD	.0858252	--	--	--	--	--	--
#1	16303	--	--	--	--	--	--
#2	16323	--	--	--	--	--	--

Method: METTRA Sample Name: DHKJ2F

Operator: RJG

Run Time: 08/21/00 16:51:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00044	.08332	.00132	.13930	.00054	31.683	.00002
SDev	.00018	.00790	.00042	.00005	.00004	.072	.00004
%RSD	41.104	9.4817	32.004	.03681	6.6575	.22707	199.94
#1	-.00057	.08891	.00102	.13934	.00056	31.734	.00005
#2	-.00031	.07774	.00161	.13926	.00051	31.632	-.00001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00059	.00067	.00567	-.03259	18.217	.04229	.00918
SDev	.00005	.00009	.00023	.00547	.032	.00003	.00001
%RSD	8.6870	14.063	4.1297	16.795	.17318	.07241	.08962
#1	.00063	.00074	.00583	-.02872	18.239	.04231	.00919
#2	.00056	.00060	.00550	-.03646	18.195	.04226	.00918
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	.00374	.00088	.00018	.00041	.00188	.00247	.00227
SDev	.00104	.00086	.00059	.00011	.00035	.00007	.00016
%RSD	27.801	97.318	334.63	26.058	18.690	2.8114	7.1751
#1	.00448	.00028	.00059	.00049	.00163	.00242	.00216
#2	.00301	.00149	-.00024	.00034	.00213	.00252	.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	-.00145	.00166	.00062	.00305	.00091	.00527	
SDev	.00130	.00119	.00122	.00187	.00018	.00011	
%RSD	89.373	71.537	196.73	61.289	20.174	2.0477	
#1	-.00237	.00082	-.00024	.00438	.00078	.00520	
#2	-.00053	.00250	.00149	.00173	.00104	.00535	
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	16409	--	--	--	--	--	--
SDev	11.80813	--	--	--	--	--	--
%RSD	.0719613	--	--	--	--	--	--
#1	16401	--	--	--	--	--	--
#2	16417	--	--	--	--	--	--

Method: METTRA Sample Name: DHKJCF Operator: RJG
Run Time: 08/21/00 16:55:31
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
Avg	.00052	.08820	.00065	.00035	.00028	.11457	.00022
SDev	.00007	.00512	.00124	.00005	.00006	.00433	.00011
%RSD	13.797	5.8021	190.48	14.378	22.152	3.7828	48.493
#1	.00057	.09182	-.00023	.00032	.00032	.11150	.00030
#2	.00046	.08458	.00152	.00039	.00023	.11763	.00015
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00047	.00124	.00161	.01363	.02582	.00048	-.00005
SDev	.00003	.00028	.00041	.00450	.00064	.00003	.00081
%RSD	7.0793	22.723	25.382	33.044	2.4590	7.1386	1715.4
#1	-.00045	.00144	.00132	.01044	.02537	.00045	-.00062
#2	-.00050	.00104	.00190	.01681	.02627	.00050	.00052
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	.00307	-.00077	-.00002	-.00027	.00217	.00288	.00265
SDev	.00008	.00070	.00171	.00137	.00219	.00012	.00065
%RSD	2.5127	91.613	7425.8	507.89	100.95	4.0053	24.686
#1	.00302	-.00126	-.00123	-.00124	.00372	.00280	.00311
#2	.00313	-.00027	.00119	.00070	.00062	.00297	.00218
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	-.00103	-.00109	-.00107	-.00025	.00000	.00723	
SDev	.00008	.00067	.00042	.00052	.00000	.00058	
%RSD	8.1965	61.589	39.310	202.09	33.044	8.0020	
#1	-.00108	-.00062	-.00077	-.00062	.00000	.00682	
#2	-.00097	-.00157	-.00137	.00011	.00001	.00764	
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	16329	--	--	--	--	--	--
SDev	52.82032	--	--	--	--	--	--
%RSD	.3234666	--	--	--	--	--	--
#1	16367	--	--	--	--	--	--
#2	16292	--	--	--	--	--	--

Method: METTRA Sample Name: DHKJFF Operator: RJG
Run Time: 08/21/00 16:59:41
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	.00011	.09425	.00072	.08298	.00031	23.467	.00001
SDev	.00013	.00191	.00015	.00004	.00002	.005	.00024
%RSD	123.31	2.0254	20.750	.04754	5.6796	.01999	3714.8

#1	.00001	.09560	.00082	.08301	.00032	23.464	-.00016
#2	.00020	.09290	.00061	.08295	.00030	23.471	.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	.00077	.00209	.00148	-.01969	12.020	.03289	.00908
SDev	.00026	.00003	.00040	.00086	.002	.00011	.00032
%RSD	33.960	1.5028	26.713	4.3532	.01581	.32751	3.5550

#1	.00058	.00206	.00120	-.02029	12.022	.03281	.00885
#2	.00095	.00211	.00176	-.01908	12.019	.03296	.00931

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	.00397	-.00010	-.00155	-.00106	.00487	.00347	.00394
SDev	.00028	.00072	.00064	.00018	.00029	.00050	.00023
%RSD	6.9221	722.16	41.133	17.332	5.8807	14.302	5.9841

#1	.00377	.00041	-.00200	-.00119	.00467	.00382	.00410
#2	.00416	-.00061	-.00110	-.00093	.00507	.00312	.00377

Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000

Elem	SE/1	SE/2	SE	TL	V_	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00082	.00210	.00167	.00336	.00093	.00724
SDev	.00080	.00156	.00077	.00351	.00019	.00004
%RSD	98.358	74.307	46.230	104.32	20.658	.50268

#1	.00138	.00099	.00112	.00088	.00079	.00726
#2	.00025	.00320	.00222	.00584	.00106	.00721

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	16262	--	--	--	--	--	--
SDev	45.00693	--	--	--	--	--	--
%RSD	.2767669	--	--	--	--	--	--
#1	16294	--	--	--	--	--	--
#2	16230	--	--	--	--	--	--

Method: METTRA Sample Name: DHKJHF Operator: RJG
 Run Time: 08/21/00 17:03:51
 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	.00023	.09706	.00606	.05740	.00049	11.530	.00004
SDev	.00018	.01006	.00017	.00023	.00003	.022	.00002
%RSD	77.278	10.368	2.8362	.41002	5.1653	.19503	49.504
#1	.00011	.10418	.00593	.05723	.00051	11.545	.00005
#2	.00036	.08994	.00618	.05756	.00047	11.514	.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00069	.00077	.00058	-.01659	14.862	.00788	.00644
SDev	.00002	.00028	.00038	.01160	.033	.00003	.00085
%RSD	3.3042	37.056	65.023	69.907	.22140	.34911	13.285
#1	-.00070	.00097	.00031	-.00839	14.839	.00786	.00704
#2	-.00067	.00056	.00085	-.02480	14.886	.00790	.00583
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	.00402	.00044	-.00065	-.00028	.00277	.00211	.00233
SDev	.00053	.00217	.00140	.00021	.00076	.00014	.00035
%RSD	13.075	494.60	216.86	74.179	27.583	6.5905	14.905
#1	.00365	-.00110	.00034	-.00014	.00331	.00221	.00257
#2	.00440	.00197	-.00163	-.00043	.00223	.00201	.00208
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00118	-.00096	-.00025	.00044	.00185	.00378	
SDev	.00119	.00185	.00163	.00228	.00000	.00010	
%RSD	100.39	191.74	653.40	518.38	.07551	2.7087	
#1	.00202	.00034	.00090	-.00117	.00185	.00385	
#2	.00034	-.00227	-.00140	.00205	.00185	.00371	
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	16380	--	--	--	--	--	--
SDev	23.47608	--	--	--	--	--	--
%RSD	.1433190	--	--	--	--	--	--
#1	16397	--	--	--	--	--	--
#2	16364	--	--	--	--	--	--

Method: METTRA Sample Name: DHKJKE Operator: RJG
Run Time: 08/21/00 17:08:01
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
Avg	.00033	.10902	.00677	.05840	.00028	11.408	.00019
SDev	.00012	.00402	.00028	.00003	.00008	.024	.00005
%RSD	37.818	3.6859	4.1012	.04346	26.711	.21431	25.016
#1	.00041	.11187	.00657	.05839	.00023	11.425	.00023
#2	.00024	.10618	.00697	.05842	.00034	11.390	.00016
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00028	.00094	.00019	.00591	14.846	.00828	.00605
SDev	.00005	.00004	.00000	.00861	.002	.00003	.00007
%RSD	18.914	4.3519	1.7705	145.66	.01507	.37254	1.2238
#1	-.00024	.00097	.00020	-.00018	14.848	.00826	.00610
#2	-.00031	.00091	.00019	.01200	14.845	.00830	.00599
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	.00642	.00106	-.00216	-.00108	.00329	.00284	.00299
SDev	.00007	.00046	.00048	.00047	.00123	.00019	.00029
%RSD	1.0341	43.328	22.064	43.412	37.461	6.5486	9.5807
#1	.00647	.00074	-.00249	-.00142	.00417	.00271	.00320
#2	.00637	.00139	-.00182	-.00075	.00242	.00297	.00279
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	-.00082	.00012	-.00019	-.00232	.00187	.01097	
SDev	.00134	.00013	.00036	.00114	.00000	.00021	
%RSD	163.69	111.48	185.21	49.009	.14771	1.9284	
#1	-.00177	.00021	-.00045	-.00312	.00187	.01082	
#2	.00013	.00003	.00006	-.00152	.00187	.01112	
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	16248	--	--	--	--	--	--
SDev	2.121320	--	--	--	--	--	--
%RSD	.0130561	--	--	--	--	--	--
#1	16246	--	--	--	--	--	--
#2	16249	--	--	--	--	--	--

Method: METTRA

Sample Name: DHKJLF

Operator: RJG

Run Time: 08/21/00 17:12:11

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00018	.11885	.00088	.07207	.00001	12.451	.00014
SDev	.00025	.00585	.00018	.00043	.00014	.003	.00018
%RSD	139.59	4.9197	20.220	.59614	2455.0	.02040	129.61
#1	.00035	.12299	.00076	.07177	-.00009	12.453	.00026
#2	.00000	.11472	.00101	.07238	.00010	12.449	.00001
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00102	.00356	.00085	-.01933	14.633	.02012	.00772
SDev	.00016	.00018	.00016	.00723	.026	.00004	.00002
%RSD	15.752	5.1848	18.206	37.426	.18035	.17782	.28330
#1	.00091	.00369	.00074	-.02444	14.614	.02010	.00774
#2	.00114	.00343	.00096	-.01421	14.652	.02015	.00771
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	.00555	.00172	.00009	.00063	.00127	.00208	.00181
SDev	.00034	.00026	.00034	.00031	.00174	.00077	.00109
%RSD	6.1905	14.981	370.83	49.045	136.59	37.137	60.409
#1	.00579	.00154	-.00015	.00041	.00004	.00153	.00104
#2	.00530	.00190	.00033	.00085	.00250	.00263	.00258
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	-.00005	.00070	.00045	-.00042	.00161	.00748	
SDev	.00095	.00064	.00074	.00052	.00038	.00001	
%RSD	1791.7	91.125	164.81	123.73	23.612	.19278	
#1	-.00072	.00025	-.00007	-.00078	.00134	.00749	
#2	.00062	.00116	.00098	-.00005	.00187	.00747	
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	16123	--	--	--	--	--	--
SDev	35.35534	--	--	--	--	--	--
%RSD	.2192797	--	--	--	--	--	--
#1	16098	--	--	--	--	--	--
#2	16148	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-7 Operator: RJG
Run Time: 08/21/00 17:16:21
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0281	23.826	.50859	1.9772	2.0541	50.841	.49180
SDev	.0067	.129	.00306	.0069	.0099	.219	.00269
%RSD	.65399	.54196	.60138	.34765	.47974	.43090	.54639
#1	1.0233	23.734	.50643	1.9723	2.0471	50.687	.48990
#2	1.0328	23.917	.51075	1.9820	2.0610	50.996	.49370
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9822	1.9971	1.9381	25.022	50.038	1.9984	2.0035
SDev	.0151	.0153	.0098	.136	.293	.0132	.0278
%RSD	.76114	.76407	.50503	.54234	.58486	.65879	1.3880
#1	1.9716	1.9863	1.9311	24.926	49.832	1.9891	1.9839
#2	1.9929	2.0079	1.9450	25.118	50.245	2.0078	2.0232
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9747	.51084	.50498	.50693	.51928	.50670	.51089
SDev	.0065	.00580	.00496	.00524	.00258	.00306	.00290
%RSD	.33013	1.1346	.98145	1.0329	.49759	.60468	.56843
#1	1.9701	.50674	.50148	.50323	.51745	.50453	.50883
#2	1.9793	.51493	.50849	.51063	.52111	.50886	.51294
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.50950	.51691	.51444	1.0374	1.9986	2.0115	
SDev	.00640	.00590	.00607	.0007	.0087	.0100	
%RSD	1.2555	1.1424	1.1797	.06574	.43590	.49775	
#1	.50498	.51273	.51015	1.0379	1.9924	2.0044	
#2	.51402	.52108	.51873	1.0369	2.0047	2.0186	
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	16245	--	--	--	--	--	--
SDev	135.4462	--	--	--	--	--	--
%RSD	.8337830	--	--	--	--	--	--
#1	16341	--	--	--	--	--	--
#2	16149	--	--	--	--	--	--

Method: METTRA Sample Name: CCB7

Operator: RJG

Run Time: 08/21/00 17:20:31

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
Avg	.00026	.10614	.00003	.00053	.00085	.01339	.00030
SDev	.00007	.00447	.00102	.00015	.00020	.00262	.00007
%RSD	27.978	4.2115	3706.4	28.886	23.890	19.569	24.928
#1	.00031	.10930	-.00069	.00042	.00071	.01154	.00025
#2	.00021	.10298	.00075	.00064	.00100	.01524	.00035
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	.00040	.00083	-.00223	-.00539	.01249	.00054	.00530
SDev	.00042	.00008	.00031	.00512	.00270	.00017	.00095
%RSD	105.25	9.8394	14.013	94.947	21.597	32.481	17.985
#1	.00070	.00089	-.00245	-.00901	.01059	.00041	.00598
#2	.00010	.00077	-.00201	-.00177	.01440	.00066	.00463
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.05000	.01000	.02500	.10000	5.0000	.01500	.04000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00003	.00142	-.00114	-.00029	.00092	.00030	.00050
SDev	.00046	.00053	.00152	.00119	.00033	.00004	.00013
%RSD	1350.5	37.646	133.36	414.19	35.916	12.097	26.576
#1	.00036	.00104	-.00222	-.00113	.00115	.00032	.00060
#2	-.00029	.00180	-.00007	.00056	.00068	.00027	.00041
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	.00005	.00050	.00035	.00137	-.00000	.00093	
SDev	.00054	.00010	.00024	.00398	.00000	.00013	
%RSD	983.41	19.217	69.537	290.90	94.947	14.389	
#1	.00043	.00056	.00052	-.00145	-.00000	.00084	
#2	-.00033	.00043	.00018	.00418	-.00000	.00103	
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	16298	--	--	--	--	--	--
SDev	18.63199	--	--	--	--	--	--
%RSD	.1143219	--	--	--	--	--	--
#1	16285	--	--	--	--	--	--
#2	16311	--	--	--	--	--	--

Method: METTRA Sample Name: DHKJLP5F

Operator: RJG

Run Time: 08/21/00 17:24:40

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00026	.10900	.00049	.01434	.00058	2.4241	.00002
SDev	.00054	.01026	.00120	.00010	.00025	.0407	.00009
%RSD	206.80	9.4126	244.38	.70304	42.659	1.6797	432.62
#1	-.00012	.11625	.00134	.01441	.00041	2.4529	.00009
#2	.00064	.10175	-.00036	.01427	.00076	2.3953	-.00004
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00060	.00103	-.00215	.00017	2.8029	.00416	.00201
SDev	.00056	.00034	.00004	.01446	.0377	.00007	.00041
%RSD	93.660	32.502	1.6515	8501.6	1.3463	1.6161	20.189
#1	.00020	.00079	-.00218	.01039	2.8296	.00411	.00230
#2	.00100	.00127	-.00213	-.01005	2.7762	.00421	.00172
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00100	-.00117	-.00076	-.00089	-.00150	.00012	-.00042
SDev	.00038	.00367	.00135	.00032	.00292	.00086	.00040
%RSD	37.527	314.38	178.42	35.662	194.53	708.25	95.022
#1	.00073	-.00376	.00020	-.00112	.00056	-.00049	-.00014
#2	.00126	.00143	-.00172	-.00067	-.00356	.00073	-.00070
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	.00091	.00136	.00121	.00160	.00211	.00211	
SDev	.00101	.00232	.00188	.00295	.00223	.00004	
%RSD	111.00	169.86	155.19	183.94	105.38	1.8106	
#1	.00020	-.00027	-.00012	-.00048	.00054	.00208	
#2	.00162	.00300	.00254	.00369	.00369	.00214	

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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	16316	--	--	--	--	--	--
SDev	163.0233	--	--	--	--	--	--
%RSD	.9991547	--	--	--	--	--	--
#1	16201	--	--	--	--	--	--
#2	16431	--	--	--	--	--	--

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Method: METTRA Sample Name: DHKJLSF Operator: RJG
 Run Time: 08/21/00 17:28:50
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.05168	2.2605	1.9900	2.0276	.05070	12.162	.04862
SDev	.00056	.0001	.0008	.0015	.00004	.023	.00007
%RSD	1.0920	.00613	.04021	.07512	.08635	.19241	.13519
#1	.05208	2.2605	1.9906	2.0266	.05073	12.178	.04858
#2	.05128	2.2606	1.9895	2.0287	.05067	12.145	.04867
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.49899	.20320	.25564	1.0017	14.291	.51656	.00780
SDev	.00007	.00073	.00072	.0193	.000	.00010	.00024
%RSD	.01473	.35936	.28189	1.9269	.00167	.01981	3.0697
#1	.49904	.20371	.25513	1.0154	14.291	.51649	.00797
#2	.49894	.20268	.25615	.98808	14.290	.51663	.00763
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	.51645	.53073	.50850	.51590	-.00027	.00184	.00114
SDev	.00083	.00599	.00057	.00237	.00026	.00064	.00034
%RSD	.16155	1.1279	.11231	.46023	95.055	34.581	29.807
#1	.51586	.52650	.50809	.51422	-.00045	.00229	.00138
#2	.51704	.53497	.50890	.51758	-.00009	.00139	.00090
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	1.9954	2.0276	2.0169	2.2134	.49918	.53159	
SDev	.0091	.0018	.0018	.0017	.00066	.00006	
%RSD	.45699	.09014	.09012	.07852	.13147	.01097	
#1	1.9889	2.0288	2.0156	2.2146	.49964	.53163	
#2	2.0018	2.0263	2.0181	2.2121	.49871	.53154	
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	16246	--	--	--	--	--	--
SDev	33.44601	--	--	--	--	--	--
%RSD	.2058786	--	--	--	--	--	--
#1	16222	--	--	--	--	--	--
#2	16269	--	--	--	--	--	--

Method: METTRA Sample Name: DHKJLDF Operator: RJG
 Run Time: 08/21/00 17:33:01
 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	.05114	2.2475	1.9844	2.0054	.05045	12.236	.04810
SDev	.00027	.0020	.0007	.0002	.00013	.007	.00059
%RSD	.52029	.08839	.03427	.00850	.25038	.05458	1.2209
#1	.05095	2.2489	1.9839	2.0055	.05054	12.241	.04851
#2	.05133	2.2461	1.9848	2.0053	.05036	12.232	.04768
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	.49702	.20218	.24895	1.0054	14.358	.51335	.00822
SDev	.00114	.00043	.00035	.0034	.008	.00014	.00079
%RSD	.22896	.21373	.13974	.33512	.05592	.02760	9.6288
#1	.49622	.20249	.24870	1.0030	14.364	.51325	.00766
#2	.49783	.20188	.24920	1.0078	14.352	.51345	.00878
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	.50212	.52442	.50965	.51457	-.00020	.00104	.00063
SDev	.00152	.00085	.00028	.00047	.00095	.00162	.00139
%RSD	.30196	.16110	.05568	.09145	486.64	154.96	221.32
#1	.50320	.52502	.50985	.51490	.00048	.00218	.00162
#2	.50105	.52382	.50945	.51424	-.00087	-.00010	-.00036
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	1.9807	2.0214	2.0078	2.1958	.49498	.52468	
SDev	.0002	.0106	.0070	.0104	.00071	.00021	
%RSD	.00784	.52395	.34926	.47326	.14416	.03918	
#1	1.9808	2.0139	2.0029	2.1884	.49548	.52482	
#2	1.9805	2.0289	2.0128	2.2031	.49448	.52453	
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	16230	--	--	--	--	--	--
SDev	17.25368	--	--	--	--	--	--
%RSD	.1063077	--	--	--	--	--	--
#1	16218	--	--	--	--	--	--
#2	16242	--	--	--	--	--	--

Method: METTRA Sample Name: DHKJPF

Operator: RJG

Run Time: 08/21/00 17:37:11

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00042	.12183	.00056	.07456	.00057	11.927	.00004
SDev	.00007	.00869	.00135	.00017	.00014	.029	.00000
%RSD	15.823	7.1295	241.36	.22556	23.990	.24038	5.7291
#1	-.00047	.12797	-.00039	.07468	.00047	11.948	.00004
#2	-.00037	.11569	.00151	.07444	.00066	11.907	.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	-.00047	.00080	-.00168	-.02720	17.509	.01856	.00798
SDev	.00012	.00015	.00008	.00940	.034	.00002	.00055
%RSD	26.743	18.505	4.7777	34.544	.19432	.10933	6.9001
#1	-.00038	.00091	-.00174	-.02055	17.533	.01857	.00759
#2	-.00056	.00070	-.00163	-.03384	17.485	.01854	.00837
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	.00375	-.00262	-.00031	-.00108	.00332	.00187	.00235
SDev	.00040	.00166	.00029	.00075	.00064	.00090	.00081
%RSD	10.717	63.158	94.692	69.170	19.412	48.113	34.618
#1	.00404	-.00379	-.00052	-.00161	.00377	.00250	.00292
#2	.00347	-.00145	-.00010	-.00055	.00286	.00123	.00177
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	.00002	.00295	.00198	.00277	.00158	.01393	
SDev	.00103	.00010	.00041	.00047	.00037	.00017	
%RSD	5294.6	3.4007	20.756	17.073	23.234	1.1941	
#1	.00075	.00303	.00227	.00243	.00132	.01405	
#2	-.00071	.00288	.00169	.00310	.00184	.01381	
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	16363	--	--	--	--	--	--
SDev	45.22031	--	--	--	--	--	--
%RSD	.2763617	--	--	--	--	--	--
#1	16331	--	--	--	--	--	--
#2	16395	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-8

Operator: RJG

Run Time: 08/21/00 17:41:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0296	23.793	.50970	1.9759	2.0644	50.939	.49271
SDev	.0007	.005	.00217	.0010	.0004	.072	.00074
%RSD	.06322	.01930	.42614	.05126	.02111	.14189	.14996
#1	1.0291	23.790	.51124	1.9766	2.0647	50.990	.49219
#2	1.0300	23.797	.50817	1.9752	2.0641	50.888	.49324
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	1.9826	1.9950	1.9407	25.016	50.191	1.9996	2.0078
SDev	.0030	.0024	.0000	.005	.025	.0017	.0127
%RSD	.15027	.11907	.00070	.02079	.04964	.08441	.63385
#1	1.9805	1.9933	1.9407	25.013	50.209	1.9984	1.9988
#2	1.9847	1.9966	1.9407	25.020	50.174	2.0008	2.0168
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	1.9773	.51340	.50734	.50936	.52173	.50829	.51277
SDev	.0044	.00249	.00115	.00160	.00111	.00230	.00190
%RSD	.22053	.48430	.22756	.31373	.21306	.45205	.37107
#1	1.9804	.51164	.50652	.50823	.52094	.50667	.51142
#2	1.9742	.51516	.50815	.51049	.52252	.50992	.51411
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	.51584	.51942	.51822	1.0378	1.9991	2.0142	
SDev	.00025	.00523	.00340	.0013	.0043	.0006	
%RSD	.04901	1.0061	.65638	.12478	.21541	.02991	
#1	.51602	.51572	.51582	1.0387	2.0021	2.0147	
#2	.51566	.52311	.52063	1.0369	1.9960	2.0138	
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	16214	--	--	--	--	--	--
SDev	1.873419	--	--	--	--	--	--
%RSD	.0115543	--	--	--	--	--	--
#1	16215	--	--	--	--	--	--
#2	16213	--	--	--	--	--	--

Method: METTRA Sample Name: CCB8

Operator: RJG

Run Time: 08/21/00 17:45:31

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
Avg	.00047	.12423	-.00106	.00077	.00107	.12323	.00025
SDev	.00024	.01141	.00067	.00021	.00041	.00668	.00005
%RSD	51.389	9.1819	63.284	26.633	38.699	5.4247	20.264
#1	.00030	.13229	-.00059	.00063	.00077	.11850	.00028
#2	.00064	.11616	-.00154	.00092	.00136	.12796	.00021
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.01000	.20000	.01000	.20000	.00500	5.0000	.00500
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00009	.00113	-.00284	.00511	.01796	.00072	.00505
SDev	.00007	.00055	.00030	.00037	.00623	.00028	.00128
%RSD	72.319	48.805	10.755	7.2414	34.669	38.585	25.286
#1	.00014	.00074	-.00305	.00537	.01356	.00052	.00596
#2	.00005	.00151	-.00262	.00485	.02236	.00092	.00415
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	.00158	-.00170	-.00072	-.00105	-.00164	-.00010	-.00062
SDev	.00148	.00001	.00045	.00030	.00072	.00124	.00107
%RSD	93.250	.36963	62.700	28.641	43.621	1194.7	173.54
#1	.00054	-.00170	-.00040	-.00083	-.00113	.00078	.00014
#2	.00263	-.00169	-.00104	-.00126	-.00214	-.00098	-.00137
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	-.00020	.00127	.00078	.00248	.00000	.00367	
SDev	.00255	.00099	.00151	.00051	.00000	.00018	
%RSD	1275.0	77.885	192.92	20.580	7.2414	5.0061	
#1	-.00200	.00057	-.00029	.00212	.00000	.00354	
#2	.00160	.00197	.00185	.00284	.00000	.00380	
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	16404	--	--	--	--	--	--
SDev	112.0412	--	--	--	--	--	--
%RSD	.6830292	--	--	--	--	--	--
#1	16324	--	--	--	--	--	--
#2	16483	--	--	--	--	--	--

Method: METTRA Sample Name: DJ329BW Operator: RJG
Run Time: 08/21/00 17:49:41
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	-.00015	.13412	-.00075	.00031	.00015	.24386	.00013
SDev	.00080	.00274	.00195	.00012	.00007	.00862	.00021
%RSD	546.90	2.0392	261.35	38.057	49.564	3.5350	158.80
#1	-.00071	.13606	-.00212	.00023	.00020	.23776	-.00002
#2	.00042	.13219	.00063	.00040	.00010	.24995	.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	.00014	.00109	-.00271	.02246	.00736	.00057	.00107
SDev	.00050	.00066	.00062	.00200	.00875	.00025	.00002
%RSD	356.15	60.828	22.967	8.8856	118.89	43.351	1.9502
#1	-.00021	.00062	-.00314	.02105	.00117	.00040	.00106
#2	.00049	.00156	-.00227	.02387	.01354	.00074	.00109
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	.00041	-.00081	.00069	.00019	-.00016	-.00056	-.00043
SDev	.00046	.00437	.00302	.00056	.00275	.00230	.00062
%RSD	109.99	537.10	439.01	297.79	1672.7	407.09	142.70
#1	.00074	-.00390	.00282	.00058	.00178	-.00219	-.00087
#2	.00009	.00227	-.00145	-.00021	-.00211	.00106	.00000
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	-.00229	.00440	.00217	-.00081	.00001	.00846	
SDev	.00213	.00056	.00108	.00045	.00000	.00027	
%RSD	92.705	12.768	49.837	56.042	8.8856	3.1550	
#1	-.00380	.00401	.00141	-.00113	.00001	.00827	
#2	-.00079	.00480	.00294	-.00049	.00001	.00864	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16107	--	--	--	--	--	--
SDev	101.3987	--	--	--	--	--	--
%RSD	.6295475	--	--	--	--	--	--
#1	16178	--	--	--	--	--	--
#2	16035	--	--	--	--	--	--

Method: METTRA Sample Name: DJ1AWBW Operator: RJG
 Run Time: 08/21/00 17:53:51
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00029	.15157	-.00094	.00125	.00045	.34676	.00011
SDev	.00039	.00867	.00090	.00005	.00016	.00297	.00009
%RSD	134.58	5.7187	95.551	3.7964	34.533	.85596	77.193
#1	.00057	.15770	-.00157	.00128	.00034	.34886	.00005
#2	.00001	.14544	-.00030	.00121	.00057	.34466	.00017
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	.00101	.00054	-.00207	.03343	.03004	.00138	.00031
SDev	.00040	.00019	.00004	.00761	.00183	.00000	.00030
%RSD	39.022	34.820	1.9899	22.765	6.1025	.30742	95.801
#1	.00073	.00068	-.00204	.03881	.03134	.00138	.00052
#2	.00129	.00041	-.00210	.02805	.02875	.00137	.00010
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	.00118	.00310	-.00086	.00046	-.00029	.00088	.00049
SDev	.00052	.00201	.00011	.00060	.00150	.00074	.00099
%RSD	44.374	64.664	12.834	128.56	524.14	83.339	200.24
#1	.00155	.00452	-.00093	.00088	.00077	.00140	.00119
#2	.00081	.00168	-.00078	.00004	-.00134	.00036	-.00021
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	-.00230	.00380	.00177	-.00173	.00001	.01018	
SDev	.00244	.00209	.00221	.00356	.00000	.00007	
%RSD	106.07	54.984	124.69	206.16	22.765	.73086	
#1	-.00403	.00232	.00021	.00079	.00001	.01023	
#2	-.00058	.00528	.00333	-.00425	.00001	.01013	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16340	--	--	--	--	--	--
SDev	42.17851	--	--	--	--	--	--
%RSD	.2581355	--	--	--	--	--	--
#1	16310	--	--	--	--	--	--
#2	16370	--	--	--	--	--	--

Method: METTRA Sample Name: DJ329CW Operator: RJG
 Run Time: 08/21/00 17:58:01
 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
Avg	.04588	1.9274	1.9843	1.9293	.05101	L.41554	.04988
SDev	.00010	.0173	.0154	.0165	.00039	.00246	.00020
%RSD	.20957	.89806	.77724	.85685	.76435	.59289	.41005

#1	.04595	1.9397	1.9952	1.9410	.05128	L.41728	.05002
#2	.04581	1.9152	1.9734	1.9176	.05073	L.41379	.04973

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
Avg	.49797	.20100	.23460	1.0193	L.04858	.49309	L.00106
SDev	.00334	.00076	.00177	.0149	.00016	.00348	.00002
%RSD	.67178	.37838	.75479	1.4573	.33887	.70665	1.5032

#1	.50034	.20153	.23586	1.0298	L.04870	.49555	L.00107
#2	.49561	.20046	.23335	1.0088	L.04846	.49062	L.00105

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
Avg	.49673	.49756	.49436	.49542	-.00065	.00015	L-.00011
SDev	.00450	.00371	.00108	.00196	.00071	.00013	.00032
%RSD	.90628	.74577	.21847	.39481	108.92	86.938	282.83

#1	.49991	.50018	.49512	.49681	-.00015	.00025	L.00011
#2	.49354	.49493	.49360	.49404	-.00115	.00006	L-.00034

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
Avg	1.9441	1.9837	1.9705	2.0154	.49396	.52596
SDev	.0055	.0090	.0078	.0167	.00656	.00461
%RSD	.28443	.45248	.39727	.82678	1.3272	.87706

#1	1.9480	1.9900	1.9760	2.0272	.49860	.52923
#2	1.9402	1.9773	1.9650	2.0037	.48933	.52270

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	16163	--	--	--	--	--	--
SDev	77.85218	--	--	--	--	--	--
%RSD	.4816691	--	--	--	--	--	--
#1	16108	--	--	--	--	--	--
#2	16218	--	--	--	--	--	--

Method: METTRA Sample Name: DHVGGW Operator: RJG
Run Time: 08/21/00 18:02:12
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	3.7151	.00272	.02264	.00036	12.723	.00007
SDev	.00044	.0024	.00003	.00000	.00013	.001	.00019
%RSD	1121.9	.06512	1.2950	.01261	36.552	.00541	269.57

#1	-.00027	3.7168	.00269	.02264	.00045	12.723	-.00006
#2	.00035	3.7134	.00274	.02264	.00027	12.724	.00020

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00006	.00771	.00417	3.1906	1.2940	.01806	.00146
SDev	.00015	.00009	.00030	.0078	.0002	.00000	.00001
%RSD	269.36	1.1575	7.1414	.24335	.01891	.01617	.70607

#1	-.00005	.00778	.00396	3.1852	1.2938	.01806	.00145
#2	.00017	.00765	.00438	3.1961	1.2942	.01807	.00147

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	.00490	.00495	.00391	.00426	-.00091	.00020	-.00017
SDev	.00002	.00143	.00123	.00034	.00143	.00035	.00024
%RSD	.31706	28.867	31.399	8.0600	156.78	171.18	145.05

#1	.00489	.00394	.00478	.00450	-.00193	.00045	-.00034
#2	.00491	.00596	.00304	.00401	.00010	-.00004	.00000

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	-.00271	.00385	.00166	-.00134	.01313	.04208
SDev	.00211	.00160	.00036	.00292	.00041	.00007
%RSD	77.859	41.587	21.923	217.12	3.1507	.17065

#1	-.00420	.00498	.00192	.00072	.01284	.04213
#2	-.00122	.00271	.00141	-.00341	.01343	.04203

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	16235	--	--	--	--	--	--
SDev	45.07806	--	--	--	--	--	--
%RSD	.2776644	--	--	--	--	--	--
#1	16267	--	--	--	--	--	--
#2	16203	--	--	--	--	--	--

Method: METTRA Sample Name: DHVGGP5W Operator: RJG
Run Time: 08/21/00 18:06:22
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00039	.82918	-.00070	.00448	.00011	2.5344	.00005
SDev	.00018	.00356	.00011	.00005	.00021	.0085	.00007
%RSD	46.940	.42931	15.364	1.0365	185.96	.33581	120.82

#1	.00026	.83170	-.00062	.00445	.00026	2.5404	.00001
#2	.00052	.82666	-.00077	.00451	-.00004	2.5284	.00010

Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00069	.00211	-.00176	.63648	.25778	.00370	-.00003
SDev	.00048	.00044	.00049	.00505	.00282	.00006	.00080
%RSD	69.093	20.842	27.944	.79384	1.0949	1.4812	2923.9

#1	.00035	.00180	-.00210	.63291	.25579	.00366	.00054
#2	.00102	.00242	-.00141	.64006	.25978	.00374	-.00059

Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00143	.00160	.00092	.00114	-.00089	-.00055	-.00066
SDev	.00073	.00152	.00051	.00017	.00126	.00062	.00083
%RSD	50.681	94.882	55.062	14.743	141.35	112.58	125.48

#1	.00092	.00053	.00127	.00102	-.00000	-.00011	-.00007
#2	.00195	.00267	.00056	.00126	-.00178	-.00098	-.00125

Elem	SE/1	SE/2	SE	TL	V	ZN
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00209	.00204	.00206	-.00213	.00438	.00948
SDev	.00053	.00219	.00128	.00061	.00018	.00004
%RSD	25.144	107.23	62.400	28.667	4.1315	.45088

#1	.00172	.00359	.00297	-.00256	.00451	.00951
#2	.00247	.00049	.00115	-.00170	.00425	.00945

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16172	--	--	--	--	--	--
SDev	27.04684	--	--	--	--	--	--
%RSD	.1672451	--	--	--	--	--	--
#1	16191	--	--	--	--	--	--
#2	16153	--	--	--	--	--	--

Method: METTRA Sample Name: DHVGGSW Operator: RJG
Run Time: 08/21/00 18:10:32
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04651	5.5188	2.0023	1.9824	.05186	12.527	.04938
SDev	.00035	.0104	.0002	.0006	.00040	.041	.00001
%RSD	.74987	.18870	.00828	.03015	.77116	.32434	.01540
#1	.04626	5.5114	2.0022	1.9819	.05214	12.555	.04937
#2	.04675	5.5261	2.0024	1.9828	.05157	12.498	.04939
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	.50082	.20839	.24924	4.1137	1.2880	.51405	.00249
SDev	.00112	.00074	.00024	.0092	.0052	.00053	.00014
%RSD	.22427	.35435	.09628	.22244	.40343	.10398	5.5344
#1	.50002	.20787	.24907	4.1202	1.2843	.51367	.00258
#2	.50161	.20891	.24941	4.1072	1.2916	.51443	.00239
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	.50276	.51127	.50223	.50524	.00126	-.00034	.00019
SDev	.00011	.00408	.00128	.00221	.00428	.00094	.00080
%RSD	.02266	.79870	.25493	.43817	338.95	274.77	414.46
#1	.50284	.50838	.50132	.50367	.00428	-.00100	.00076
#2	.50268	.51416	.50313	.50681	-.00176	.00032	-.00037
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.9796	2.0028	1.9951	2.0727	.50888	.55664	
SDev	.0100	.0151	.0134	.0063	.00026	.00064	
%RSD	.50263	.75324	.67043	.30406	.05123	.11439	
#1	1.9726	1.9921	1.9856	2.0682	.50906	.55709	
#2	1.9866	2.0134	2.0045	2.0772	.50869	.55619	
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	16260	--	--	--	--	--	--
SDev	28.00115	--	--	--	--	--	--
%RSD	.1722067	--	--	--	--	--	--
#1	16280	--	--	--	--	--	--
#2	16240	--	--	--	--	--	--

Method: METTRA Sample Name: DHVGGDW

Operator: RJG

Run Time: 08/21/00 18:14:42

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	.04676	5.4396	2.0263	2.0108	.05290	14.935	.04987
SDev	.00034	.0089	.0064	.0023	.00028	.066	.00007
%RSD	.73209	.16271	.31454	.11434	.52712	.44115	.14786
#1	.04700	5.4334	2.0308	2.0092	.05309	14.982	.04993
#2	.04652	5.4459	2.0218	2.0124	.05270	14.888	.04982
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	.50814	.21159	.25124	4.0775	1.2896	.52244	.00266
SDev	.00040	.00093	.00060	.0051	.0072	.00076	.00000
%RSD	.07891	.44051	.23833	.12482	.55454	.14464	.13092
#1	.50843	.21225	.25082	4.0811	1.2946	.52297	.00266
#2	.50786	.21093	.25167	4.0739	1.2845	.52190	.00266
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	.51185	.51317	.51323	.51321	-.00066	-.00062	-.00063
SDev	.00263	.00088	.00085	.00027	.00041	.00182	.00135
%RSD	.51307	.17117	.16541	.05333	62.398	293.98	213.13
#1	.51370	.51379	.51263	.51302	-.00096	-.00190	-.00159
#2	.50999	.51255	.51383	.51340	-.00037	.00067	.00032
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	100.00			5.0000			10.000
Low	-.04000			-.00300			-.06000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avge	1.9872	2.0232	2.0112	2.1097	.51629	.62877	
SDev	.0072	.0057	.0062	.0006	.00095	.00137	
%RSD	.36029	.28080	.30696	.02802	.18367	.21771	
#1	1.9822	2.0192	2.0069	2.1102	.51696	.62974	
#2	1.9923	2.0272	2.0156	2.1093	.51561	.62781	
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	16367	--	--	--	--	--	--
SDev	11.59683	--	--	--	--	--	--
%RSD	.0708554	--	--	--	--	--	--
#1	16375	--	--	--	--	--	--
#2	16359	--	--	--	--	--	--

Method: METTRA Sample Name: DHVGLW

Operator: RJG

Run Time: 08/21/00 18:18:52

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00040	7.1387	.00513	.04103	.00068	14.720	.00009
SDev	.00025	.1035	.00039	.00051	.00026	.188	.00003
%RSD	61.759	1.4505	7.5897	1.2395	37.943	1.2750	36.509
#1	.00023	7.0655	.00485	.04067	.00087	14.588	.00007
#2	.00058	7.2119	.00540	.04139	.00050	14.853	.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	.00163	.01260	.00289	6.2804	1.7119	.03934	.00189
SDev	.00005	.00002	.00064	.1107	.0231	.00059	.00002
%RSD	3.1312	.13323	22.178	1.7633	1.3519	1.4984	.91524
#1	.00159	.01262	.00244	6.2021	1.6955	.03892	.00190
#2	.00166	.01259	.00334	6.3587	1.7283	.03976	.00188
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	.03928	.00797	.00451	.00566	-.00007	-.00038	-.00028
SDev	.00060	.00111	.00051	.00003	.00113	.00065	.00005
%RSD	1.5160	13.863	11.302	.49821	1516.2	172.11	19.713
#1	.03886	.00875	.00415	.00568	-.00088	.00008	-.00024
#2	.03970	.00719	.00487	.00564	.00073	-.00083	-.00031
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	-.00104	.00226	.00116	.00149	.02075	.05592	
SDev	.00432	.00215	.00001	.00350	.00066	.00078	
%RSD	413.79	95.148	.48441	235.11	3.1806	1.4017	
#1	.00201	.00074	.00116	.00396	.02028	.05536	
#2	-.00410	.00378	.00115	-.00099	.02121	.05647	
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	16362	--	--	--	--	--	--
SDev	217.0000	--	--	--	--	--	--
%RSD	1.328248	--	--	--	--	--	--
#1	16516	--	--	--	--	--	--
#2	16208	--	--	--	--	--	--

Method: METTRA Sample Name: DHVGNW Operator: RJG
Run Time: 08/21/00 18:23:02
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00004	3.2062	.00425	.02331	.00021	13.838	.00005
SDev	.00027	.0054	.00011	.00002	.00003	.003	.00015
%RSD	696.86	.16822	2.5726	.07219	14.045	.02357	289.12
#1	-.00015	3.2024	.00417	.02332	.00023	13.835	-.00005
#2	.00023	3.2100	.00433	.02330	.00019	13.840	.00016
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	10.000	10.000	10.000	600.00	5.0000
Low	-.01000	-.20000	-.01000	-.20000	-.00500	-5.0000	-.00500
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00001	.00591	.00131	2.6621	1.2630	.01384	.00090
SDev	.00024	.00046	.00015	.0068	.0066	.00003	.00022
%RSD	4735.0	7.6958	11.307	.25632	.52292	.18697	24.053
#1	-.00017	.00559	.00120	2.6669	1.2583	.01382	.00106
#2	.00016	.00623	.00141	2.6573	1.2676	.01386	.00075
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	10.000	500.00	600.00	10.000	20.000
Low	-.05000	-.01000	-.02500	-.10000	-5.0000	-.01500	-.04000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00399	.00356	.00340	.00346	.00111	-.00078	-.00015
SDev	.00027	.00371	.00453	.00178	.00328	.00255	.00061
%RSD	6.6760	104.36	132.97	51.576	296.72	327.35	402.17
#1	.00380	.00093	.00660	.00472	.00342	-.00258	-.00058
#2	.00418	.00618	.00020	.00220	-.00121	.00102	.00028
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	-.00207	.00336	.00155	.00139	.01259	.03511	
SDev	.00296	.00178	.00020	.00129	.00057	.00040	
%RSD	142.79	53.116	13.122	92.156	4.5620	1.1375	
#1	-.00417	.00462	.00169	.00049	.01218	.03482	
#2	.00002	.00210	.00140	.00230	.01299	.03539	
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	--	--	--	677	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16179	--	--	--	--	--	--
SDev	11.27849	--	--	--	--	--	--
%RSD	.0697095	--	--	--	--	--	--
#1	16187	--	--	--	--	--	--
#2	16171	--	--	--	--	--	--

Method: METTRA Sample Name: CCV3-9 Operator: RJG
Run Time: 08/21/00 18:27:13
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT TRACEICP
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	BA	BE	CA	CD
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0184	23.536	.50279	1.9611	2.0527	50.559	.48672
SDev	.0030	.102	.00290	.0106	.0049	.162	.00017
%RSD	.29429	.43521	.57617	.53924	.23797	.32070	.03454
#1	1.0205	23.608	.50484	1.9686	2.0561	50.673	.48684
#2	1.0163	23.463	.50074	1.9537	2.0492	50.444	.48660
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	27.500	.55000	2.2000	2.2000	55.000	.55000
Low	.90000	22.500	.45000	1.8000	1.8000	45.000	.45000
Elem	CO	CR	CU	FE	MG	MN	MO
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9545	1.9704	1.9261	24.743	49.913	1.9771	1.9807
SDev	.0037	.0056	.0098	.073	.195	.0047	.0094
%RSD	.18928	.28408	.50724	.29467	.39049	.23951	.47454
#1	1.9571	1.9744	1.9330	24.794	50.050	1.9805	1.9741
#2	1.9519	1.9665	1.9192	24.691	49.775	1.9738	1.9874
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.2000	2.2000	2.2000	27.500	55.000	2.2000	2.2000
Low	1.8000	1.8000	1.8000	22.500	45.000	1.8000	1.8000
Elem	NI	PB/1	PB/2	PB	SB/1	SB/2	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9651	.50348	.50330	.50336	.51835	.50200	.50744
SDev	.0121	.00122	.00009	.00034	.00037	.00371	.00260
%RSD	.61435	.24199	.01801	.06858	.07093	.73937	.51200
#1	1.9736	.50261	.50336	.50311	.51809	.49937	.50561
#2	1.9566	.50434	.50324	.50360	.51861	.50462	.50928
Errors	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK	NOCHECK	LC Pass
High	2.2000			.55000			.55000
Low	1.8000			.45000			.45000
Elem	SE/1	SE/2	SE	TL	V_	ZN	
Units	ppm	ppm	ppm	ppm	ppm	ppm	
Avg	.50589	.52053	.51566	1.0256	1.9815	1.9946	
SDev	.00278	.00150	.00008	.0078	.0068	.0057	
%RSD	.54871	.28802	.01466	.76126	.34497	.28818	
#1	.50393	.52159	.51571	1.0311	1.9864	1.9987	
#2	.50786	.51947	.51560	1.0200	1.9767	1.9905	
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	

08/21/00 06:31:19 PM

Analysis Report

	1	2	3	4	5	6	7
IntStd	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Mode	Y	--	--	--	--	--	--
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16398	--	--	--	--	--	--
SDev	10.21714	--	--	--	--	--	--
%RSD	.0623066	--	--	--	--	--	--
#1	16405	--	--	--	--	--	--
#2	16391	--	--	--	--	--	--

Method: METTRA Sample Name: CCB9

Operator: RJG

Run Time: 08/21/00 18:31:23

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	.00062	.15508	.00108	.00074	.00083	.01938	.00015
SDev	.00054	.00544	.00033	.00033	.00046	.00996	.00002
%RSD	86.824	3.5074	30.440	45.052	55.485	51.401	12.343
#1	.00024	.15893	.00131	.00050	.00051	.01233	.00013
#2	.00100	.15124	.00085	.00097	.00116	.02642	.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
Avge	.00101	.00098	-.00321	.01017	.01734	.00068	.00491
SDev	.00003	.00060	.00035	.01326	.00778	.00028	.00116
%RSD	3.2566	60.434	10.771	130.29	44.852	40.768	23.570
#1	.00099	.00056	-.00346	.00080	.01184	.00049	.00573
#2	.00103	.00140	-.00297	.01955	.02284	.00088	.00409
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	.00119	.00024	-.00183	-.00114	.00034	.00169	.00124
SDev	.00011	.00056	.00005	.00022	.00196	.00088	.00007
%RSD	9.5841	237.29	2.9978	19.631	582.92	52.007	5.5464
#1	.00111	.00063	-.00179	-.00098	.00172	.00107	.00128
#2	.00127	-.00016	-.00187	-.00130	-.00105	.00231	.00119
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	.00195	.00063	.00107	.00342	.00000	.00140	
SDev	.00137	.00177	.00163	.00366	.00001	.00036	
%RSD	70.278	279.97	152.76	106.85	130.29	26.076	
#1	.00292	.00188	.00223	.00601	.00000	.00114	
#2	.00098	-.00062	-.00009	.00084	.00001	.00165	
Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	
High			.00500	.01000	.05000	.02000	
Low			-.00500	-.01000	-.05000	-.02000	

Analysis Report

08/21/00 06:35:29 PM

page 2

IntStd	1	2	3	4	5	6	7
Mode	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	16268	--	--	--	--	--	--
SDev	146.7599	--	--	--	--	--	--
%RSD	.9021148	--	--	--	--	--	--
#1	16165	--	--	--	--	--	--
#2	16372	--	--	--	--	--	--

Metals Preparation Log



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

Submitted to Your Success

Method: 30508 Matrix: Soils Start Time: 0900 SDG: Balance# C94817 Reagents: 10ml 1:1 HNO3 0057-020-C
5ml conc HNO3 0057-020-C
10ml 30% H2O2 0057-020-C
10ml conc HCl 0057-020-C

Analyst: M. M. Mahan Date: 8-18-00 Lot Number: C04170113 Lab Lot No. (book, page, line) C014-162-6
Reviewed By: Date: 8-18-00 MS

Sample ID Init Wt/Vol g/mL Final Vol mL Comments Color Pre Post Clarity Pre Post Texture Pre Post Artifacts Artifact Codes

1. D50G1 1.0g 100ml + 1ml MS. BLEV MS-818EV
2. D50G1 1.0g 100ml + 1ml MS. BLEV MS-818EV
3. D50G1 1.0g 100ml + 1ml MS. BLEV MS-818EV
4. D50G1 1.0g 100ml + 1ml MS. BLEV MS-818EV
5. D50G1 1.0g 100ml + 1ml MS. BLEV MS-818EV
6. D50G1 1.0g 100ml + 1ml MS. BLEV MS-818EV
7. D50G1 1.0g 100ml + 1ml MS. BLEV MS-818EV
8. D50G1 1.0g 100ml + 1ml MS. BLEV MS-818EV
9. D50G1 1.0g 100ml + 1ml MS. BLEV MS-818EV
10. D50G1 1.0g 100ml + 1ml MS. BLEV MS-818EV

1. D50G1 1.0g 100ml + 1ml MS. BLEV MS-818EV
2. D50G1 1.0g 100ml + 1ml MS. BLEV MS-818EV
3. D50G1 1.0g 100ml + 1ml MS. BLEV MS-818EV
4. D50G1 1.0g 100ml + 1ml MS. BLEV MS-818EV
5. D50G1 1.0g 100ml + 1ml MS. BLEV MS-818EV
6. D50G1 1.0g 100ml + 1ml MS. BLEV MS-818EV
7. D50G1 1.0g 100ml + 1ml MS. BLEV MS-818EV
8. D50G1 1.0g 100ml + 1ml MS. BLEV MS-818EV
9. D50G1 1.0g 100ml + 1ml MS. BLEV MS-818EV
10. D50G1 1.0g 100ml + 1ml MS. BLEV MS-818EV

Digestate(s) Date Time Analyst Location Date Time Analyst Location Hot plate /Block Temp Correction Factor Color

Digestate(s) Date Time Analyst Location Date Time Analyst Location Hot plate /Block Temp Correction Factor Color
1. D50G1 8-16-00 1:30 M. M. Mahan MS-818EV MS-818EV 85°C 1:1, 0°C R=Red
2. D50G1 8-16-00 1:30 M. M. Mahan MS-818EV MS-818EV 85°C 1:1, 0°C BL=Blue
3. D50G1 8-16-00 1:30 M. M. Mahan MS-818EV MS-818EV 85°C 1:1, 0°C BR=Brown
4. D50G1 8-16-00 1:30 M. M. Mahan MS-818EV MS-818EV 85°C 1:1, 0°C BLK=Black
5. D50G1 8-16-00 1:30 M. M. Mahan MS-818EV MS-818EV 85°C 1:1, 0°C Y=Yellow
6. D50G1 8-16-00 1:30 M. M. Mahan MS-818EV MS-818EV 85°C 1:1, 0°C GN=Green
7. D50G1 8-16-00 1:30 M. M. Mahan MS-818EV MS-818EV 85°C 1:1, 0°C C=Colorless

PSR024 8/18/00 5:53:25 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: MAHANM

METHOD: QM Inductively Coupled Plasma (6010B 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>
1E CLP1	DJOQL	_____	260190	399411	A-46-QM	COH170113	001		SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

Alex

Melissa Mahan

8-18-00 0830

Melissa Mahan

Alex

8-18-00 1100

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

670 676

**TCLP
METALS DATA**

STL-Pittsburgh**Cover Page - Inorganic Analysis Data Package****Client ID**DF/S1/0228/GRAB/006**Lab Sample ID:**DJ0QLT

Comments: UXB DUNN FIELD
C0H170113
6010B, 7470A-TCLP

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

Signature: _____

Name: _____

Date: _____

Title: _____

REVIEWED BY: mtw
DATE: 8-23-00

670 678

**TCLP
METALS
RESULTS**

STL-Pittsburgh
Metals Data Reporting Form

Sample Results

Lab Sample ID: DJ0QLT **Client ID:** DF/S1/0228/GRAB/006
Matrix: TCLP **Units:** mg/L **Prep Date:** 8/21/00 **Prep Batch:** 0234102
Weight: NA **Volume:** 100 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.00035		1	CVAA	8/21/00	11:08

Comments: _____

670 680

STL-Pittsburgh

Metals Data Reporting Form

Sample Results

Lab Sample ID: DJ0QLT Client ID: DF/S1/0228/GRAB/006
Matrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234110
Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.7	0.030	0.50	0.19	B	1	ICP	8/22/00	8:54
Barium	493.41	0.00041	10.0	2.4	B	1	ICP	8/22/00	8:54
Cadmium	228.80	0.0028	0.10	0.070	B	1	ICP	8/22/00	8:54
Chromium	267.72	0.0038	0.50	0.040	B	1	ICP	8/22/00	8:54
Lead	220.35	0.025	0.50	16.8		1	ICP	8/22/00	8:54
Selenium	196.03	0.067	0.25	0.067	U	1	ICP	8/22/00	8:54
Silver	328.07	0.0031	0.50	0.0031	U	1	ICP	8/22/00	8:54

Comments: C0H170113001

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 1 Equivalent

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: CVAAUnits: ug/LChart Number: 0821HGA.PRNAcceptable Range: 90% - 110%Standard Source: UltraStandard ID: 0057-031-11

Element	WL/ Mass	True Conc	ICV5-1 8/21/00 9:57 AM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	2.5	2.55	102.0								

STL-Pittsburgh

670 682

Metals Data Reporting Form

Initial Calibration Verification Standard

Instrument: ICP

Units: ug/L

Chart Number: J00822A.ARC

Acceptable Range: 90% - 110%

Standard Source: Inorganic Ventures

Standard ID: 0057-005-2

Element	WL/ Mass	True Conc	ICV2-1 8/22/00 8:04 AM									
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	1000.0	1003.38	100.3								
Barium	493.409	1000.0	1006.31	100.6								
Cadmium	228.802	1000.0	1019.81	102.0								
Chromium	267.716	1000.0	1021.49	102.1								
Lead	220.353	1000.0	1015.27	101.5								
Selenium	196.026	1000.0	1008.32	100.8								
Silver	328.068	500.0	509.39	101.9								

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: CVAAUnits: ug/LChart Number: 0821HGA.PRNAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0057-031-12

Element	WL/ Mass	True Conc	CCV5-1 8/21/00 10:01 AM		CCV5-2 8/21/00 10:22 AM		CCV5-3 8/21/00 10:41 AM		CCV5-4 8/21/00 11:01 AM		CCV5-5 8/21/00 11:23 AM	
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Mercury	253.7	5.0	5.04	100.8	5.17	103.4	5.18	103.6	5.22	104.4	5.20	104.0

STL-Pittsburgh

670 684

Metals Data Reporting Form

Continuing Calibration Verification

Instrument: ICP

Units: ug/L

Chart Number: J00822A.ARC

Acceptable Range: 90% - 110%

Standard Source: Inorganic Ventures

Standard ID: 0057-025-5

Element	WL/ Mass	True Conc	CCV2-1 8/22/00 8:44 AM		CCV2-2 8/22/00 9:06 AM							
			Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
Arsenic	193.696	5000.0	5061.22	101.2	5194.62	103.9						
Barium	493.409	5000.0	4929.99	98.6	5016.38	100.3						
Cadmium	228.802	5000.0	5105.94	102.1	5132.37	102.6						
Chromium	267.716	5000.0	5006.71	100.1	5056.15	101.1						
Lead	220.353	5000.0	5059.53	101.2	5081.47	101.6						
Selenium	196.026	5000.0	5184.66	103.7	5277.43	105.5						
Silver	328.068	1000.0	1001.52	100.2	1008.72	100.9						

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0821HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 8/21/00 9:59 AM							
			Found	Q	Found	Q	Found	Q	Found	Q
Mercury	253.7	0.2	0.0	U						

670 686

STL-Pittsburgh

Metals Data Reporting Form

Initial Calibration Blank Results

Instrument: ICPUnits: ug/LChart Number: J00822A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	ICB1 8/22/00 8:07 AM							
			Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	193.696	500	30.3	U						
Barium	493.409	10000	0.4	U						
Cadmium	228.802	100	2.8	U						
Chromium	267.716	500	3.9	B						
Lead	220.353	500	24.6	U						
Selenium	196.026	250	67.4	U						
Silver	328.068	500	3.1	U						

STL-Pittsburgh

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: CVAAUnits: ug/LChart Number: 0821HGA.PRN

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 8/21/00 10:02 AM	CCB2 8/21/00 10:23 AM	CCB3 8/21/00 10:42 AM	CCB4 8/21/00 11:03 AM	CCB5 8/21/00 11:25 AM
			Found Q	Found Q	Found Q	Found Q	Found Q
Mercury	253.7	0.2	0.0 U	0.0 U	0.0 U	0.0 U	0.0 U

STL-Pittsburgh

670 688

Metals Data Reporting Form

Continuing Calibration Blank Results

Instrument: ICP

Units: ug/L

Chart Number: J00822A.ARC

Standard Source: _____

Standard ID: _____

Element	WL/ Mass	Report Limit	CCB1 8/22/00 8:47 AM		CCB2 8/22/00 9:09 AM					
			Found	Q	Found	Q	Found	Q	Found	Q
Arsenic	193.696	500	30.3	U	30.3	U				
Barium	493.409	10000	0.6	B	0.4	U				
Cadmium	228.802	100	2.8	U	3.2	B				
Chromium	267.716	500	3.8	U	3.8	U				
Lead	220.353	500	24.6	U	24.6	U				
Selenium	196.026	250	67.4	U	67.4	U				
Silver	328.068	500	3.1	U	3.1	U				

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DJ3ACBTMatrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234102Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000070	B	1	CVAA	8/21/00	10:54

Comments: _____

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-Pittsburgh

670 690

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DJ5H9BT

Matrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234102

Weight: NA Volume: 100 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Mercury	253.7	0.000045	0.00020	0.000062	B	1	CVAA	8/21/00	10:51

Comments: _____

Version 4.10.2

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

STL-Pittsburgh
Metals Data Reporting Form

Preparation Blank Results
Lab Sample ID: DJ3ACBT
Matrix: TCLP **Units:** mg/L **Prep Date:** 8/21/00 **Prep Batch:** 0234110
Weight: NA **Volume:** 50 **Percent Moisture:** NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.696	0.030	0.50	0.16	B	1	ICP	8/22/00	8:22
Barium	493.409	0.00041	10.0	0.0020	B	1	ICP	8/22/00	8:22
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	8/22/00	8:22
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	8/22/00	8:22
Lead	220.353	0.025	0.50	0.025	U	1	ICP	8/22/00	8:22
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	8/22/00	8:22
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	8/22/00	8:22

Comments: _____

670 692

STL-Pittsburgh

Metals Data Reporting Form

Preparation Blank Results

Lab Sample ID: DJ5HPBTMatrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234110Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	MDL	Report Limit	Conc	Q	DF	Instr	Anal Date	Anal Time
Arsenic	193.696	0.030	0.50	0.030	U	1	ICP	8/22/00	8:19
Barium	493.409	0.00041	10.0	0.00041	U	1	ICP	8/22/00	8:19
Cadmium	228.802	0.0028	0.10	0.0028	U	1	ICP	8/22/00	8:19
Chromium	267.716	0.0038	0.50	0.0038	U	1	ICP	8/22/00	8:19
Lead	220.353	0.025	0.50	0.025	U	1	ICP	8/22/00	8:19
Selenium	196.026	0.067	0.25	0.067	U	1	ICP	8/22/00	8:19
Silver	328.068	0.0031	0.50	0.0031	U	1	ICP	8/22/00	8:19

Comments: _____

Version 4.10 2

U Result is less than the MDL

B Result is between MDL and RL

Form 3 Equivalent

Metals Data Reporting Form

Interference Check Standard A

Instrument: ICPUnits: ug/LChart Number: J00822A.ARCAcceptable Range: 0% - 0%Standard Source: Inorganic VenturesStandard ID: 0057-011-1

Element	WL/ Mass	Reporting Limit	True Conc	ICSA 8/22/00 8:10 AM	Found	Found	Found	Found
				Found				
Arsenic	193.696	500		-190				
Barium	493.409	10000		2				
Cadmium	228.802	100		-2				
Chromium	267.716	500		2				
Lead	220.353	500		81				
Selenium	196.026	250		29				
Silver	328.068	500		0				

670 694

STL-Pittsburgh

Metals Data Reporting Form

Interference Check Standard AB

Instrument: ICPUnits: ug/LChart Number: J00822A.ARCAcceptable Range: 80% - 120%Standard Source: Inorganic VenturesStandard ID: 0014-187-1

Element	WL/ Mass	True Conc	ICSAB 8/22/00 8:14 AM		Found	% Rec	Found	% Rec	Found	% Rec	Found	% Rec
			Found	Rec								
Arsenic	193.696	1000	874.4	87.4								
Barium	493.409	500	467.7	93.5								
Cadmium	228.802	1000	956.0	95.6								
Chromium	267.716	500	446.4	89.3								
Lead	220.353	1000	985.5	98.6								
Selenium	196.026	1000	970.1	97.0								
Silver	328.068	1000	948.4	94.8								

- STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DJ5H9CTMatrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234102Weight: 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	0.0025	0.0027	108.0		80-120	1	CVAA	8/21/00	10:53

Comments: _____

Version 4.10.2

U Result is less than the MDL

Form 7 Equivalent

B Result is between MDL and RL

670 696

STL-Pittsburgh

Metals Data Reporting Form

Laboratory Control Sample Results

Lab Sample ID: DJ5HPCTMatrix: TCLP Units: mg/L Prep Date: 8/21/00 Prep Batch: 0234110Weight: NA Volume: 50 Percent Moisture: NA

Element	WL/ Mass	Spike Level	Conc	Percent Recovery	Q	Range	DF	Instr	Anal Date	Anal Time
Arsenic	193.696	2.0	2.1	104.6		80-120	1	ICP	8/22/00	8:25
Barium	493.409	2.0	2.1	103.9	B	80-120	1	ICP	8/22/00	8:25
Cadmium	228.802	0.050	0.048	95.7	B	80-120	1	ICP	8/22/00	8:25
Chromium	267.716	0.20	0.21	106.3	B	80-120	1	ICP	8/22/00	8:25
Lead	220.353	0.50	0.51	101.6		80-120	1	ICP	8/22/00	8:25
Selenium	196.026	2.0	2.1	103.1		80-120	1	ICP	8/22/00	8:25
Silver	328.068	0.050	0.047	93.3	B	80-120	1	ICP	8/22/00	8:25

Comments: _____

Version 4.10.2

U Result is less than the MDL

Form 7 Equivalent

B Result is between MDL and RL

STL-Pittsburgh

Metals Data Reporting Form

Instrument Detection Limits

Instrument: CVAAUnits: ppb

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

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STL-Pittsburgh

Metals Data Reporting Form

Instrument Detection Limits

Instrument: ICPUnits: ppb

Element	Wavelength /Mass	Reporting Limit	MDL	Date of MDL
Arsenic	193.70	500	30.3	4/1/00
Barium	493.41	10000	0.41	4/1/00
Cadmium	228.80	100	2.8	4/1/00
Chromium	267.72	500	3.8	4/1/00
Lead	220.35	500	24.6	4/1/00
Selenium	196.03	250	67.4	4/1/00
Silver	328.07	500	3.1	4/1/00

Metals Data Reporting Form

Inter-Element Correction Factors

Instrument: ICP Date 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)

670 700

STL-Pittsburgh
Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: CVAA

Units: ppb

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

STL-Pittsburgh
Metals Data Reporting Form

Linear Dynamic Ranges

Instrument: ICP

Units: ppb

Element	Wavelength /Mass	Linear Range	Date of Linear Range
Arsenic	193.70	100000	4/5/00
Barium	493.41	100000	4/5/00
Cadmium	228.80	100000	4/5/00
Chromium	267.72	100000	4/5/00
Lead	220.35	100000	4/5/00
Selenium	196.03	100000	4/5/00
Silver	328.07	2000	4/5/00

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STL-Pittsburgh

Metals Data Reporting Form

Preparation Log

Preparation Batch: 0234102 Instrument: CVAA Matrix: TCLP

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DJ3ACBT	8/21/00	NA	100	NA
DJ5H9BT	8/21/00	NA	100	NA
DJ5H9CT	8/21/00	NA	100	NA
DJ0QLT	8/21/00	NA	100	NA

Metals Data Reporting Form

Preparation LogPreparation Batch: 0234110 Instrument: ICP Matrix: TCLP

Sample ID	Prep Date	Weight (g)	Volume (ml)	% Moisture
DJ3ACBT	8/21/00	NA	50	NA
DJ5HPBT	8/21/00	NA	50	NA
DJ5HPCT	8/21/00	NA	50	NA
DJ0QLT	8/21/00	NA	50	NA

STL-Pittsburgh

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Metals Data Reporting Form

Instrument Runlog

Instrument: CVAAChart Number: 0821HGA.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
Std1Rep1		8/21/00	9:46
Std2Rep1		8/21/00	9:48
Std3Rep1		8/21/00	9:50
Std4Rep1		8/21/00	9:51
Std5Rep1		8/21/00	9:53
Std6Rep1		8/21/00	9:54
ICV5-1		8/21/00	9:57
ICB1		8/21/00	9:59
CCV5-1		8/21/00	10:01
CCB1		8/21/00	10:02
ZZZZZZ		8/21/00	10:05
ZZZZZZ		8/21/00	10:06
ZZZZZZ		8/21/00	10:08
ZZZZZZ		8/21/00	10:10
ZZZZZZ		8/21/00	10:11
ZZZZZZ		8/21/00	10:14
ZZZZZZ		8/21/00	10:15
ZZZZZZ		8/21/00	10:17
ZZZZZZ		8/21/00	10:18
ZZZZZZ		8/21/00	10:20
CCV5-2		8/21/00	10:22
CCB2		8/21/00	10:23
ZZZZZZ		8/21/00	10:25
ZZZZZZ		8/21/00	10:26
ZZZZZZ		8/21/00	10:28
ZZZZZZ		8/21/00	10:29
ZZZZZZ		8/21/00	10:31
ZZZZZZ		8/21/00	10:33
ZZZZZZ		8/21/00	10:34
ZZZZZZ		8/21/00	10:36
ZZZZZZ		8/21/00	10:37
ZZZZZZ		8/21/00	10:39
CCV5-3		8/21/00	10:41
CCB3		8/21/00	10:42
ZZZZZZ		8/21/00	10:44
ZZZZZZ		8/21/00	10:46
ZZZZZZ		8/21/00	10:48
ZZZZZZ		8/21/00	10:49
DJ5H9BT		8/21/00	10:51

Metals Data Reporting Form

Instrument Runlog

Instrument: CVAAChart Number: 0821HGA.PRN

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
DJ5H9CT		8/21/00	10:53
DJ3ACBT		8/21/00	10:54
ZZZZZZ		8/21/00	10:56
ZZZZZZ		8/21/00	10:58
ZZZZZZ		8/21/00	11:00
CCV5-4		8/21/00	11:01
CCB4		8/21/00	11:03
ZZZZZZ		8/21/00	11:05
ZZZZZZ		8/21/00	11:06
DJ0QLT	DF/S1/0228/GRAB/006	8/21/00	11:08
ZZZZZZ		8/21/00	11:10
ZZZZZZ		8/21/00	11:12
ZZZZZZ		8/21/00	11:13
ZZZZZZ		8/21/00	11:15
ZZZZZZ		8/21/00	11:17
ZZZZZZ		8/21/00	11:18
ZZZZZZ		8/21/00	11:20
CCV5-5		8/21/00	11:23
CCB5		8/21/00	11:25

STL-Pittsburgh

670 706

Metals Data Reporting Form

Instrument Runlog

Instrument: ICP

Chart Number: J00822A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/22/00	7:40
ZZZZZZ		8/22/00	7:43
ZZZZZZ		8/22/00	7:46
ZZZZZZ		8/22/00	7:49
STD1		8/22/00	7:55
STD5A		8/22/00	7:58
STD5B		8/22/00	8:01
ICV2-1		8/22/00	8:04
ICB1		8/22/00	8:07
ICSA		8/22/00	8:10
ICSAB		8/22/00	8:14
DJ5HPBT		8/22/00	8:19
DJ3ACBT		8/22/00	8:22
DJ5HPCT		8/22/00	8:25
ZZZZZZ		8/22/00	8:28
ZZZZZZ		8/22/00	8:32
ZZZZZZ		8/22/00	8:35
ZZZZZZ		8/22/00	8:38
ZZZZZZ		8/22/00	8:41
CCV2-1		8/22/00	8:44
CCB1		8/22/00	8:47
ZZZZZZ		8/22/00	8:51
DJ0QLT	DF/S1/0228/GRAB/006	8/22/00	8:54
ZZZZZZ		8/22/00	8:57
ZZZZZZ		8/22/00	9:00
ZZZZZZ		8/22/00	9:03
CCV2-2		8/22/00	9:06
CCB2		8/22/00	9:09
ZZZZZZ		8/22/00	9:13
ZZZZZZ		8/22/00	9:16
ZZZZZZ		8/22/00	9:19
ZZZZZZ		8/22/00	9:22
ZZZZZZ		8/22/00	9:26
ZZZZZZ		8/22/00	9:29
ZZZZZZ		8/22/00	9:45
ZZZZZZ		8/22/00	9:48
ZZZZZZ		8/22/00	9:51
ZZZZZZ		8/22/00	9:55
ZZZZZZ		8/22/00	9:58

STL-Pittsburgh
Metals Data Reporting Form

670 707

Instrument Runlog

Instrument: ICP

Chart Number: J00822A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/22/00	10:01
ZZZZZZ		8/22/00	10:04
ZZZZZZ		8/22/00	10:07
ZZZZZZ		8/22/00	10:10
ZZZZZZ		8/22/00	10:13
ZZZZZZ		8/22/00	10:17
ZZZZZZ		8/22/00	10:20
ZZZZZZ		8/22/00	10:23
ZZZZZZ		8/22/00	10:26
ZZZZZZ		8/22/00	10:29
ZZZZZZ		8/22/00	10:32
ZZZZZZ		8/22/00	10:35
ZZZZZZ		8/22/00	10:39
ZZZZZZ		8/22/00	10:42
ZZZZZZ		8/22/00	10:45
ZZZZZZ		8/22/00	10:48
ZZZZZZ		8/22/00	10:51
ZZZZZZ		8/22/00	10:54
ZZZZZZ		8/22/00	10:57
ZZZZZZ		8/22/00	11:01
ZZZZZZ		8/22/00	11:04
ZZZZZZ		8/22/00	11:07
ZZZZZZ		8/22/00	11:10
ZZZZZZ		8/22/00	11:13
ZZZZZZ		8/22/00	11:16
ZZZZZZ		8/22/00	11:19
ZZZZZZ		8/22/00	11:23
ZZZZZZ		8/22/00	11:26
ZZZZZZ		8/22/00	11:29
ZZZZZZ		8/22/00	11:32
ZZZZZZ		8/22/00	11:35
ZZZZZZ		8/22/00	11:38
ZZZZZZ		8/22/00	11:41
ZZZZZZ		8/22/00	11:44
ZZZZZZ		8/22/00	11:48
ZZZZZZ		8/22/00	11:51
ZZZZZZ		8/22/00	11:54
ZZZZZZ		8/22/00	11:57
ZZZZZZ		8/22/00	12:00

STL-Pittsburgh

670 708

Metals Data Reporting Form

Instrument Runlog

Instrument: ICP

Chart Number: J00822A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/22/00	12:03
ZZZZZZ		8/22/00	12:07
ZZZZZZ		8/22/00	12:10
ZZZZZZ		8/22/00	12:13
ZZZZZZ		8/22/00	12:16
ZZZZZZ		8/22/00	12:19
ZZZZZZ		8/22/00	12:22
ZZZZZZ		8/22/00	12:25
ZZZZZZ		8/22/00	12:28
ZZZZZZ		8/22/00	12:32
ZZZZZZ		8/22/00	12:35
ZZZZZZ		8/22/00	12:38
ZZZZZZ		8/22/00	12:41
ZZZZZZ		8/22/00	12:44
ZZZZZZ		8/22/00	12:47
ZZZZZZ		8/22/00	12:50
ZZZZZZ		8/22/00	12:54
ZZZZZZ		8/22/00	12:57
ZZZZZZ		8/22/00	13:06
ZZZZZZ		8/22/00	13:09
ZZZZZZ		8/22/00	13:12
ZZZZZZ		8/22/00	13:15
ZZZZZZ		8/22/00	13:18
ZZZZZZ		8/22/00	13:21
ZZZZZZ		8/22/00	13:25
ZZZZZZ		8/22/00	13:28
ZZZZZZ		8/22/00	13:31
ZZZZZZ		8/22/00	13:34
ZZZZZZ		8/22/00	13:37
ZZZZZZ		8/22/00	13:41
ZZZZZZ		8/22/00	13:44
ZZZZZZ		8/22/00	13:47
ZZZZZZ		8/22/00	13:50
ZZZZZZ		8/22/00	13:53
ZZZZZZ		8/22/00	13:57
ZZZZZZ		8/22/00	14:00
ZZZZZZ		8/22/00	14:03
ZZZZZZ		8/22/00	14:06
ZZZZZZ		8/22/00	14:09

Metals Data Reporting Form

Instrument Runlog

Instrument: ICPChart Number: J00822A.ARC

Lab Sample Name	Client Sample Name	Date of Analysis	Time of Analysis
ZZZZZZ		8/22/00	14:12
ZZZZZZ		8/22/00	14:16
ZZZZZZ		8/22/00	14:19
ZZZZZZ		8/22/00	14:22
ZZZZZZ		8/22/00	14:25
ZZZZZZ		8/22/00	14:36
ZZZZZZ		8/22/00	14:39
ZZZZZZ		8/22/00	14:42
ZZZZZZ		8/22/00	14:45
ZZZZZZ		8/22/00	14:48
ZZZZZZ		8/22/00	14:52
ZZZZZZ		8/22/00	14:55
ZZZZZZ		8/22/00	14:58
ZZZZZZ		8/22/00	15:01
ZZZZZZ		8/22/00	15:04
ZZZZZZ		8/22/00	15:07
ZZZZZZ		8/22/00	15:10
ZZZZZZ		8/22/00	15:14
ZZZZZZ		8/22/00	15:19
ZZZZZZ		8/22/00	15:22
ZZZZZZ		8/22/00	15:25
ZZZZZZ		8/22/00	15:31
ZZZZZZ		8/22/00	15:35
ZZZZZZ		8/22/00	15:38
ZZZZZZ		8/22/00	15:41
ZZZZZZ		8/22/00	15:44
ZZZZZZ		8/22/00	15:47
ZZZZZZ		8/22/00	15:51

670 710

**TCLP
METALS
RAW DATA**

Michael T. Wernke 8-23-00

#	Sample Name	AG	AS	BA	CD	CR	PB
1	STD1	-.0008	.00034	0	-.00002	-.00035	.00044
2	STD5A	.27254	.52749	3.97987	.91879	3.76179	.2563
3	STD5B						
4	ICV2-1 0057-005-2	.50939	1.0034	1.0063	1.0198	1.0215	1.0153
5	ICB1	-.00035	-.00189	.00005	-.00010	.00385	-.00373
6	ICSA 0057-011-1	-.00042	-.18484	.00150	-.00218	.00186	.08054
7	ICSAB 0014-187-1	.94840	.87439	.46767	.95603	.44641	.98554
8	DJ5HPBT	-.00177	-.01545	.00025	-.00060	.00265	.00950
9	DJ3ACBT	.00144	.15798	.00201	-.00065	.00345	-.01514
10	DJ5HPCT	.04665	2.0913	2.0786	.04786	.21267	.50790
11	DHX40T	-.00064	.11993	.97933	.00097	.00345	.00728
12	DHX40P5T	.00073	.01276	.20593	-.00105	.00186	-.01715
13	DHX40ST	.96049	5.2127	47.352	.99671	4.6829	4.8208
14	DHX40DT	.95583	5.1745	47.353	.99635	4.6703	4.7525
15	DHX47T	-.00217	.13204	1.0341	-.00100	.00292	.01419
16	CCV2-1 0057-025-5	1.0015	5.0612	4.9300	5.1059	5.0067	5.0595
17	CCB1	.00072	.01827	.00062	.00044	.00185	.00188
18	DHX4AT	-.00129	.14565	.94660	.00004	.00584	.16265
19	DJ0QLT	-.00182	.18491	2.3461	.07006	.04001	16.830
20	DHWJHBT	-.00070	.01151	.00000	-.00003	.00279	-.02279
21	DHV0KBT	.00108	.14161	.00055	-.00223	.00212	.01138
22	DHWJHCT	.04832	2.2662	2.0222	.04403	.20139	.47697
23	CCV2-2	1.0087	5.1946	5.0164	5.1324	5.0561	5.0815
24	CCB2	.00071	-.01841	.00017	.00316	.00305	.00572
25	DHKQ4T	-.00166	.42034	.82329	-.00214	.00052	.01708
26	DHKQ4P5T	-.00139	.10969	.16876	-.00010	-.00066	.00954
27	DHKQ4ST	.90486	5.3692	38.658	.95256	4.5387	3.8309
28	DHKQ4DT	.92557	5.4608	48.932	.96404	4.6192	4.7186
29	CCV2-3	1.0051	5.0901	4.9928	5.1411	5.0479	5.0797
30	CCB3	-.00035	.02125	.00005	.00173	.00053	-.00190
31	DJ32CBE	.00214	-.01262	-.00002	.00124	.00372	-.01514
32	DJ32CCE	.04585	1.9851	1.9868	.04596	.19995	.50994
33	DHXM9E	-.00005	-.00745	.07114	.00185	.00265	-.01633
34	DHXM9P5E	.00007	-.03575	.01417	.00072	.00212	.00164
35	DHXM9SE	.04363	1.9723	2.0342	.04794	.19981	.49338
36	DHXM9DE	.04433	1.9588	2.0197	.04659	.19955	.49145
37	DHXM9DE	-.00044	.01284	.07639	-.00016	.00251	-.01590
38	DHXM9FE	.00062	-.01276	.09717	.00036	.00464	-.01399
39	CCV2-4	1.0025	5.1255	5.0056	5.1695	5.0344	5.0832
40	CCB4	.00142	-.00205	.00037	.00067	.00319	-.01134
41	DHV6DB	.00072	-.00399	.00005	.00215	.00225	-.00568
42	DHV6DC	.04725	1.9525	1.9791	.04809	.19966	.50727
43	DHM8P	.00000	-.01965	.06518	-.00039	.00199	.04407
44	DHM8V	.00187	-.04867	.03666	.00251	.01129	.16026
45	DHM8X	.00040	-.01142	.11204	-.00063	.01249	.01074
46	DHM91	.00076	-.01772	.03721	-.00086	.00664	-.00188
47	DHM94	-.00018	-.00676	.04030	.00067	.00677	.00053
48	DHM94P5	-.00066	-.01548	.00854	.00121	.00332	.00885
49	DHM94S	.04674	1.9715	2.0115	.04725	.20378	.53816
50	DHM94D	.04618	1.9871	1.9741	.04660	.20073	.51543
51	CCV2-5	1.0056	5.0612	5.0089	5.2243	5.0615	5.1313
52	CCB5	.00215	-.01079	.00030	.00243	.00252	-.01319
53	DHM99	-.00032	-.02128	.07508	.00174	.02112	.00849

#	Sample Name	AG	AS	BA	CD	CR	PB
54	DHM9C	-.00022	.00166	.03910	.00144	.00359	-.00299
55	DHM9D	.00102	-.00651	.03882	.00283	.00318	.00661
56	DHM9E	.00107	-.02379	.01171	.00090	.00252	.01314
57	DHP5X	-.00057	-.03318	.01399	.00200	.00159	-.00980
58	DHP61	.00023	-.01301	.01503	.00084	.00133	-.00287
59	DHP63	-.00013	-.01128	.05105	.00086	.00358	.00860
60	DHP65	.00106	-.00469	.05399	.00108	.00226	.01663
61	DHP69	.00079	-.00576	.03357	.00192	.00199	.00936
62	DHP6D	.00042	-.02806	.03314	.00019	.00199	.01321
63	CCV2-6	1.0137	5.2228	5.0133	5.2877	5.1109	5.1518
64	CCB6	.00179	-.00303	.00055	.00091	.00332	-.00373
65	DHP6H	.00010	-.02493	.03319	.00369	.00199	.00355
66	DHP6L	.00038	-.01098	.01020	-.00097	.00132	-.01351
67	CCV2-7	1.0076	5.2067	5.0372	5.2828	5.1008	5.1079
68	CCB7	.00107	-.01844	.00025	.00176	.00172	-.00186
69	DHV64EF	.00035	-.00103	-.00014	-.00031	.00172	-.02843
70	DHV64CF	.05094	2.0730	2.0198	.04959	.21267	.53303
71	DHM8PF	.00003	-.02644	.05867	.00059	.00106	.01889
72	DHM8VF	.00001	-.01759	.03206	.00176	.00106	-.00568
73	DHM8XE	-.00123	-.01670	.05824	.00209	.00212	.00508
74	DHM91F	.00002	.00551	.02917	.00024	.00159	.01142
75	DHM94F	.00035	-.02145	.03086	-.00095	.00159	.00954
76	DHM94P5F	.00071	-.00101	.00586	-.00044	.00172	-.02466
77	DHM94SF	.04876	2.0021	2.0576	.04382	.20377	.52658
78	DHM94DF	.04875	2.0242	2.0603	.04812	.20364	.52282
79	CCV2-8	1.0095	5.2399	5.0584	5.2827	5.1072	5.1138
80	CCB8	.00001	.01723	.00050	.00188	.00199	-.00187
81	DHM99F	.00000	.01047	.02985	-.00076	.00106	-.02465
82	DHM9CF	.00000	-.00980	.03646	-.00063	.00172	-.00759
83	DHM9DF	.00001	-.05524	.03576	.00201	.00225	-.00186
84	DHM9EF	.00144	-.00334	.12572	-.00198	.00265	-.00382
85	DHP5XF	.00076	-.02275	.00929	.00191	.00185	.00382
86	DHP61F	.00070	-.00789	.00970	-.00027	.00066	.00945
87	DHP63F	-.00056	-.00189	.04530	-.00203	.00079	-.00961
88	DHP65F	.00001	-.01754	.05304	.00107	.00199	.00003
89	DHP69F	-.00033	.00560	.03301	.00279	-.00026	-.00571
90	DHP6DF	-.00068	.00456	.03332	-.00014	.00185	.00189
91	CCV2-9	1.0128	5.2208	5.0362	5.3334	5.1416	5.1150
92	CCB9	.00036	-.01943	.00030	.00228	.00252	-.02277
93	DHP6HF	-.00035	-.00691	.03108	.00095	.00199	-.00756
94	DHP6LF	.00003	-.01062	.01040	.00284	.00199	-.00967
95	DHM9E RAW	.00107	-.00459	.01198	.00005	.00292	-.01139
96	DHM9EF RAW	.00036	.10389	.12785	-.00116	.00239	.01329
97	CCV2-10	.99686	5.1666	4.9971	5.2505	5.0565	5.0125
98	CCB10	.00035	-.01843	.00010	.00052	.00146	.01515
99	DHP2EB	.00035	.01720	.00012	.00156	.00252	-.00755
100	DHP2EC	.04725	1.9718	1.9723	.04740	.20208	.48693
101	DHMJE	.00078	.07273	.03307	.00128	.00753	-.00428
102	DHMJEP5	.00100	-.00294	.00693	.00012	.00889	.03966
103	DHMJES	.04800	2.0936	1.9520	.04641	.20192	.51312
104	DHMJED	.04656	2.0851	1.9521	.04402	.20006	.53007
105	DHMJT	-.00161	.05093	.05701	.00101	.01837	-.01246
106	DHMK5	-.00051	.06251	.01105	-.00256	.00481	.02402
107	DHMK9	.00091	.05858	.01060	-.00071	.00454	.00894

#	Sample Name	AG	AS	BA	CD	CR	PB
108	DHMKE	-.00064	.07124	.56852	.00000	.09777	.17719
109	CCV2-11	1.0128	5.2210	5.0783	5.3479	5.1486	5.1299
110	CCB11	.00143	-.02139	.00028	.00209	.00305	-.00374
111	DHMJEF	-.00026	.04785	.00256	.00121	.00476	.00002
112	DHMJEP5F	.00216	.01282	.00062	-.00014	.00610	-.01704
113	DHMJESF	.04620	2.0664	1.9039	.04212	.19741	.50592
114	DHMJEDF	.04662	2.1064	1.9441	.04101	.20153	.49095
115	DHMJTF	.00036	.04186	.00073	.00173	.00509	.02289
116	DHMK5F	-.00009	.04055	.00535	-.00057	.00680	.03785
117	DHMK9F	-.00047	.05140	.00389	-.00238	.00560	-.00575
118	DHMKEF	-.00004	.00367	.01146	-.00102	.00890	-.00065
119	DHMJE/2 NA	.00162	.00293	.01698	-.00136	.00489	.01298
120	DHMJEP10 NA	-.00002	-.00686	.00344	-.00002	.00079	-.02667
121	CCV2-12	1.0132	5.2679	5.1151	5.3420	5.1493	5.1417
122	CCB12	.00070	-.00880	.00025	.00029	.00252	.00951
123	DHMJES/2 NA	.02439	1.0663	1.0016	.02330	.10501	.26813
124	DHJED/2 NA	.02547	1.1038	1.0075	.02169	.10527	.25866
125	DHMJT/2 NA	-.00009	.00867	.02932	-.00033	.00905	-.00441
126	DHMKE/2 CA,NA	-.00077	.06330	.29623	.00003	.05367	.08115
127	DHMJEF/2 NA	-.00029	.00737	.00130	.00144	.00477	-.01135
128	DHMJEP10F NA	.00215	-.00143	.00048	.00275	.00252	.02663
129	DHMJESF/2 NA	.02420	1.0454	.98835	.02211	.10449	.26642
130	DHMJEDF/2 NA	.02531	1.0412	1.0007	.02144	.10581	.29126
131	DHMJTF/2 NA	-.00055	.01895	.00025	.00064	.00427	-.00566
132	DHMKEF/2 NA	-.00018	.02442	.00597	-.00004	.00584	.02815
133	CCV2-13	1.0179	5.3003	5.1287	5.3572	5.1586	5.1379
134	CCB13	.00144	-.00414	.00030	.00125	.00279	.02279
135	DHMJE(RAW) ZN	-.00066	.33843	.03520	-.00246	.00633	-.01197
136	DHMJEF(RAW) ZN	.00082	.43648	.00263	-.00459	.00595	-.00943
137	DHMK5(RAW) ZN	.00043	1.0695	.01005	L-.01144	.00839	.00911
138	DHMK5F(RAW) ZN	-.00117	1.0018	.00402	L-.00926	.00640	.02840
139	DHMJKE(RAW) CA	-.00079	1.3995	.33857	L-.01810	.03825	.08734
140	CCV2-14	.98956	5.2084	5.0688	5.1792	5.0095	4.9735
141	CCB14	.00107	-.00979	.00019	.00032	.00159	.00188

#	Sample Name	SE
1	STD1	.00025
2	STD5A	.51074
3	STD5B	
4	ICV2-1 0057-005-2	1.0083
5	ICB1	-.00293
6	ICSA 0057-011-1	.02845
7	ICSAB 0014-187-1	.97011
8	DJ5HPBT	-.01460
9	DJ3ACBT	-.02245
10	DJ5HPCT	2.0627
11	DHX40T	-.01005
12	DHX40P5T	-.02140
13	DHX40ST	1.0545
14	DHX40DT	1.0260
15	DHX47T	-.01513
16	CCV2-1 0057-025-5	5.1847

#	Sample Name	SE
17	CCB1	.00294
18	DHX4AT	-.01216
19	DJ0QLT	-.02750
20	DHWJHBT	.00105
21	DHV0KBT	-.03522
22	DHWJHCT	2.2477
23	CCV2-2	5.2774
24	CCB2	.00587
25	DHKQ4T	-.00385
26	DHKQ4P5T	-.03896
27	DHKQ4ST	.97153
28	DHKQ4DT	1.0970
29	CCV2-3	5.1597
30	CCB3	.01371
31	DJ32CBE	-.03524
32	DJ32CCE	1.9842
33	DHXN9E	-.00192
34	DHXN9P5E	.01175
35	DHXN9SE	2.0135
36	DHXN9DE	1.9871
37	DHXNDE	.03235
38	DHXNFE	.01085
39	CCV2-4	5.1329
40	CCB4	-.05386
41	DHV6DE	-.01958
42	DHV6DC	1.9773
43	DHM8P	-.00732
44	DHM8V	-.00109
45	DHM8X	-.02522
46	DHM91	-.01727
47	DHM94	-.00814
48	DHM94F5	-.02881
49	DHM94S	2.0149
50	DHM94D	1.9702
51	CCV2-5	5.1276
52	CCB5	-.02252
53	DHM99	.00238
54	DHM9C	.00265
55	DHM9D	-.00245
56	DHM9E	-.01367
57	DHP5X	.00617
58	DHP61	.00186
59	DHP63	.00217
60	DHP65	.02055
61	DHP69	-.01009
62	DHP6D	.01524
63	CCV2-6	5.1814
64	CCB6	-.00096
65	DHP6H	.00094
66	DHP6L	-.02530
67	CCV2-7	5.1598
68	CCB7	.00587
69	DHV64BF	.01469
70	DHV64CF	2.0872

#	Sample Name	SE
71	DHM8PF	.00256
72	DHM8VF	-.01352
73	DHM8XE*	-.02947
74	DHM91F	.00321
75	DHM94F	.02157
76	DHM94P5F	-.00881
77	DHM94SF	2.0420
78	DHM94DF	2.0136
79	CCV2-8	5.1082
80	CCB8	-.01272
81	DHM99F	.00100
82	DHM9CF	-.01267
83	DHM9DF	.01279
84	DHM9EF	-.00972
85	DHP5XF	-.00879
86	DHP61F	-.02151
87	DHP63F	-.00803
88	DHP65F	-.01368
89	DHP69F	-.01955
90	DHP6DF	-.00778
91	CCV2-9	5.1132
92	CCB9	-.01469
93	DHP6HF	-.05580
94	DHP6LF	-.01263
95	DHM9E RAW	-.01858
96	DHM9EF RAW	-.00686
97	CCV2-10	5.0269
98	CCB10	-.03917
99	DHP2EB	-.00292
100	DHP2EC	1.9724
101	DHMJE	.00816
102	DHMJEP5	-.01931
103	DHMJES	2.0432
104	DHMJED	2.0471
105	DHMJT	-.00259
106	DHMK5	.01319
107	DHMK9	-.00252
108	DHMKE	-.14123
109	CCV2-11	5.1591
110	CCB11	.01078
111	DHMJEF	-.00972
112	DHMJEP5F	.01470
113	DHMJESF	1.9958
114	DHMJEDF	2.0360
115	DHMJTF	-.00283
116	DHMK5F	.01235
117	DHMK9F	-.02185
118	DHMKEF	-.02389
119	DHMJE/2 NA	-.00226
120	DHMJEP10 NA	-.00964
121	CCV2-12	5.0974
122	CCB12	.01273
123	DHMJES/2 NA	1.0256
124	DHJED/2 NA	1.0246

#	Sample Name	SE
125	DHMJT/2 NA	.00194
126	DHMKE/2 CA,NA	-.09534
127	DHMJEF/2 NA	-.02444
128	DHMJEF10F NA	-.00979
129	DHMJESF/2 NA	.99061
130	DHMJEDF/2 NA	1.0661
131	DHMJTF/2 NA	-.00190
132	DHMKEF/2 NA	.01255
133	CCV2-13	5.0172
134	CCB13	-.01370
135	DHMJE(RAW) ZN	-.00533
136	DHMJEF(RAW) ZN	.00002
137	DHMK5(RAW) ZN	-.02449
138	DHMK5F(RAW) ZN	-.03771
139	DHMJKE(RAW) CA	-.08538
140	CCV2-14	5.1595
141	CCB14	.00097

MTW 823-00

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
1	STD1	J00822A	QUANMET	08/22/00	07:55		X	IR
2	STD5A	J00822A	QUANMET	08/22/00	07:58		X	IR
3	STD5B	J00822A	QUANMET	08/22/00	08:01		X	IR
4	ICV2-1 0057-005-2	J00822A	QUANMET	08/22/00	08:04	MTW	S	CONC
5	ICB1	J00822A	QUANMET	08/22/00	08:07	MTW	S	CONC
6	ICSA 0057-011-1	J00822A	QUANMET	08/22/00	08:10	MTW	Q	CONC
7	ICSAB 0014-187-1	J00822A	QUANMET	08/22/00	08:14	MTW	Q	CONC
8	DJ5HPBT	J00822A	QUANMET	08/22/00	08:19	MTW	S	CONC
9	DJ3ACBT	J00822A	QUANMET	08/22/00	08:22	MTW	S	CONC
10	DJ5HPCT	J00822A	QUANMET	08/22/00	08:25	MTW	S	CONC
11	DHX40T	J00822A	QUANMET	08/22/00	08:28	MTW	S	CONC
12	DHX40P5T	J00822A	QUANMET	08/22/00	08:32	MTW	S	CONC
13	DHX40ST	J00822A	QUANMET	08/22/00	08:35	MTW	S	CONC
14	DHX40DT	J00822A	QUANMET	08/22/00	08:38	MTW	S	CONC
15	DHX47T	J00822A	QUANMET	08/22/00	08:41	MTW	S	CONC
16	CCV2-1 0057-025-5	J00822A	QUANMET	08/22/00	08:44	MTW	S	CONC
17	CCB1	J00822A	QUANMET	08/22/00	08:47	MTW	S	CONC
18	DHX4AT	J00822A	QUANMET	08/22/00	08:51	MTW	S	CONC
19	DJ0QLT	J00822A	QUANMET	08/22/00	08:54	MTW	S	CONC
20	DHWJHBT	J00822A	QUANMET	08/22/00	08:57	MTW	S	CONC
21	DHV0KBT	J00822A	QUANMET	08/22/00	09:00	MTW	S	CONC
22	DHWJHCT	J00822A	QUANMET	08/22/00	09:03	MTW	S	CONC
23	CCV2-2	J00822A	QUANMET	08/22/00	09:06	MTW	S	CONC
24	CCB2	J00822A	QUANMET	08/22/00	09:09	MTW	S	CONC
25	DHKQ4T	J00822A	QUANMET	08/22/00	09:13	MTW	S	CONC
26	DHKQ4P5T	J00822A	QUANMET	08/22/00	09:16	MTW	S	CONC
27	DHKQ4ST	J00822A	QUANMET	08/22/00	09:19	MTW	S	CONC
28	DHKQ4DT	J00822A	QUANMET	08/22/00	09:22	MTW	S	CONC
29	CCV2-3	J00822A	QUANMET	08/22/00	09:26	MTW	S	CONC
30	CCB3	J00822A	QUANMET	08/22/00	09:29	MTW	S	CONC
31	DJ32CBE	J00822A	QUANMET	08/22/00	09:45	MTW	S	CONC
32	DJ32CCE	J00822A	QUANMET	08/22/00	09:48	MTW	S	CONC
33	DHXN9E	J00822A	QUANMET	08/22/00	09:51	MTW	S	CONC
34	DHXN9P5E	J00822A	QUANMET	08/22/00	09:55	MTW	S	CONC
35	DHXN9SE	J00822A	QUANMET	08/22/00	09:58	MTW	S	CONC
36	DHXN9DE	J00822A	QUANMET	08/22/00	10:01	MTW	S	CONC
37	DHXNDE	J00822A	QUANMET	08/22/00	10:04	MTW	S	CONC
38	DHXNFE	J00822A	QUANMET	08/22/00	10:07	MTW	S	CONC
39	CCV2-4	J00822A	QUANMET	08/22/00	10:10	MTW	S	CONC
40	CCB4	J00822A	QUANMET	08/22/00	10:13	MTW	S	CONC
41	DHV6DB	J00822A	QUANMET	08/22/00	10:17	MTW	S	CONC
42	DHV6DC	J00822A	QUANMET	08/22/00	10:20	MTW	S	CONC
43	DHM8P	J00822A	QUANMET	08/22/00	10:23	MTW	S	CONC
44	DHM8V	J00822A	QUANMET	08/22/00	10:26	MTW	S	CONC
45	DHM8X	J00822A	QUANMET	08/22/00	10:29	MTW	S	CONC
46	DHM91	J00822A	QUANMET	08/22/00	10:32	MTW	S	CONC
47	DHM94	J00822A	QUANMET	08/22/00	10:35	MTW	S	CONC
48	DHM94P5	J00822A	QUANMET	08/22/00	10:39	MTW	S	CONC
49	DHM94S	J00822A	QUANMET	08/22/00	10:42	MTW	S	CONC
50	DHM94D	J00822A	QUANMET	08/22/00	10:45	MTW	S	CONC
51	CCV2-5	J00822A	QUANMET	08/22/00	10:48	MTW	S	CONC
52	CCB5	J00822A	QUANMET	08/22/00	10:51	MTW	S	CONC
53	DHM99	J00822A	QUANMET	08/22/00	10:54	MTW	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
54	DHM9C	J00822A	QUANMET	08/22/00	10:57	MTW	S	CONC
55	DHM9D	J00822A	QUANMET	08/22/00	11:01	MTW	S	CONC
56	DHM9E	J00822A	QUANMET	08/22/00	11:04	MTW	S	CONC
57	DHP5X	J00822A	QUANMET	08/22/00	11:07	MTW	S	CONC
58	DHP61	J00822A	QUANMET	08/22/00	11:10	MTW	S	CONC
59	DHP63	J00822A	QUANMET	08/22/00	11:13	MTW	S	CONC
60	DHP65	J00822A	QUANMET	08/22/00	11:16	MTW	S	CONC
61	DHP69	J00822A	QUANMET	08/22/00	11:19	MTW	S	CONC
62	DHP6D	J00822A	QUANMET	08/22/00	11:23	MTW	S	CONC
63	CCV2-6	J00822A	QUANMET	08/22/00	11:26	MTW	S	CONC
64	CCB6	J00822A	QUANMET	08/22/00	11:29	MTW	S	CONC
65	DHP6H	J00822A	QUANMET	08/22/00	11:32	MTW	S	CONC
66	DHP6L	J00822A	QUANMET	08/22/00	11:35	MTW	S	CONC
67	CCV2-7	J00822A	QUANMET	08/22/00	11:38	MTW	S	CONC
68	CCB7	J00822A	QUANMET	08/22/00	11:41	MTW	S	CONC
69	DHV64EF	J00822A	QUANMET	08/22/00	11:44	MTW	S	CONC
70	DHV64CF	J00822A	QUANMET	08/22/00	11:48	MTW	S	CONC
71	DHM8PF	J00822A	QUANMET	08/22/00	11:51	MTW	S	CONC
72	DHM8VF	J00822A	QUANMET	08/22/00	11:54	MTW	S	CONC
73	DHM8XE	J00822A	QUANMET	08/22/00	11:57	MTW	S	CONC
74	DHM91F	J00822A	QUANMET	08/22/00	12:00	MTW	S	CONC
75	DHM94F	J00822A	QUANMET	08/22/00	12:03	MTW	S	CONC
76	DHM94P5F	J00822A	QUANMET	08/22/00	12:07	MTW	S	CONC
77	DHM94SF	J00822A	QUANMET	08/22/00	12:10	MTW	S	CONC
78	DHM94DF	J00822A	QUANMET	08/22/00	12:13	MTW	S	CONC
79	CCV2-8	J00822A	QUANMET	08/22/00	12:16	MTW	S	CONC
80	CCB8	J00822A	QUANMET	08/22/00	12:19	MTW	S	CONC
81	DHM99F	J00822A	QUANMET	08/22/00	12:22	MTW	S	CONC
82	DHM9CF	J00822A	QUANMET	08/22/00	12:25	MTW	S	CONC
83	DHM9DF	J00822A	QUANMET	08/22/00	12:28	MTW	S	CONC
84	DHM9EF	J00822A	QUANMET	08/22/00	12:32	MTW	S	CONC
85	DHP5XF	J00822A	QUANMET	08/22/00	12:35	MTW	S	CONC
86	DHP61F	J00822A	QUANMET	08/22/00	12:38	MTW	S	CONC
87	DHP63F	J00822A	QUANMET	08/22/00	12:41	MTW	S	CONC
88	DHP65F	J00822A	QUANMET	08/22/00	12:44	MTW	S	CONC
89	DHP69F	J00822A	QUANMET	08/22/00	12:47	MTW	S	CONC
90	DHP6DF	J00822A	QUANMET	08/22/00	12:50	MTW	S	CONC
91	CCV2-9	J00822A	QUANMET	08/22/00	12:54	MTW	S	CONC
92	CCB9	J00822A	QUANMET	08/22/00	12:57	MTW	S	CONC
93	DHP6HF	J00822A	QUANMET	08/22/00	13:06	MTW	S	CONC
94	DHP6LF	J00822A	QUANMET	08/22/00	13:09	MTW	S	CONC
95	DHM9E RAW	J00822A	QUANMET	08/22/00	13:12	MTW	S	CONC
96	DHM9EF RAW	J00822A	QUANMET	08/22/00	13:15	MTW	S	CONC
97	CCV2-10	J00822A	QUANMET	08/22/00	13:18	MTW	S	CONC
98	CCB10	J00822A	QUANMET	08/22/00	13:21	MTW	S	CONC
99	DHP2EB	J00822A	QUANMET	08/22/00	13:25	MTW	S	CONC
100	DHP2EC	J00822A	QUANMET	08/22/00	13:28	MTW	S	CONC
101	DHMJE	J00822A	QUANMET	08/22/00	13:31	MTW	S	CONC
102	DHMJEP5	J00822A	QUANMET	08/22/00	13:34	MTW	S	CONC
103	DHMJES	J00822A	QUANMET	08/22/00	13:37	MTW	S	CONC
104	DHMJED	J00822A	QUANMET	08/22/00	13:41	MTW	S	CONC
105	DHMJT	J00822A	QUANMET	08/22/00	13:44	MTW	S	CONC
106	DHMK5	J00822A	QUANMET	08/22/00	13:47	MTW	S	CONC
107	DHMK9	J00822A	QUANMET	08/22/00	13:50	MTW	S	CONC

#	Sample Name	File	Method	Date	Time	OpID	Type	Mode
108	DHMKE	J00822A	QUANMET	08/22/00	13:53	MTW	S	CONC
109	CCV2-11	J00822A	QUANMET	08/22/00	13:57	MTW	S	CONC
110	CCB11	J00822A	QUANMET	08/22/00	14:00	MTW	S	CONC
111	DHMJEF	J00822A	QUANMET	08/22/00	14:03	MTW	S	CONC
112	DHMJEP5F	J00822A	QUANMET	08/22/00	14:06	MTW	S	CONC
113	DHMJESF	J00822A	QUANMET	08/22/00	14:09	MTW	S	CONC
114	DHMJEDF	J00822A	QUANMET	08/22/00	14:12	MTW	S	CONC
115	DHMJTf	J00822A	QUANMET	08/22/00	14:16	MTW	S	CONC
116	DHMK5F	J00822A	QUANMET	08/22/00	14:19	MTW	S	CONC
117	DHMK9F	J00822A	QUANMET	08/22/00	14:22	MTW	S	CONC
118	DHMKEF	J00822A	QUANMET	08/22/00	14:25	MTW	S	CONC
119	DHMJE/2 NA	J00822A	QUANMET	08/22/00	14:36	MTW	S	CONC
120	DHMJEP10 NA	J00822A	QUANMET	08/22/00	14:39	MTW	S	CONC
121	CCV2-12	J00822A	QUANMET	08/22/00	14:42	MTW	S	CONC
122	CCB12	J00822A	QUANMET	08/22/00	14:45	MTW	S	CONC
123	DHMJES/2 NA	J00822A	QUANMET	08/22/00	14:48	MTW	S	CONC
124	DHJED/2 NA	J00822A	QUANMET	08/22/00	14:52	MTW	S	CONC
125	DHMJT/2 NA	J00822A	QUANMET	08/22/00	14:55	MTW	S	CONC
126	DHMKE/2 CA,NA	J00822A	QUANMET	08/22/00	14:58	MTW	S	CONC
127	DHMJEF/2 NA	J00822A	QUANMET	08/22/00	15:01	MTW	S	CONC
128	DHMJEP10F NA	J00822A	QUANMET	08/22/00	15:04	MTW	S	CONC
129	DHMJESF/2 NA	J00822A	QUANMET	08/22/00	15:07	MTW	S	CONC
130	DHMJEDF/2 NA	J00822A	QUANMET	08/22/00	15:10	MTW	S	CONC
131	DHMJTf/2 NA	J00822A	QUANMET	08/22/00	15:14	MTW	S	CONC
132	DHMKEF/2 NA	J00822A	QUANMET	08/22/00	15:19	MTW	S	CONC
133	CCV2-13	J00822A	QUANMET	08/22/00	15:22	MTW	S	CONC
134	CCB13	J00822A	QUANMET	08/22/00	15:25	MTW	S	CONC
135	DHMJE(RAW) ZN	J00822A	QUANMET	08/22/00	15:31	MTW	S	CONC
136	DHMJEF(RAW) ZN	J00822A	QUANMET	08/22/00	15:35	MTW	S	CONC
137	DHMK5(RAW) ZN	J00822A	QUANMET	08/22/00	15:38	MTW	S	CONC
138	DHMK5F(RAW) ZN	J00822A	QUANMET	08/22/00	15:41	MTW	S	CONC
139	DHMJKE(RAW) CA	J00822A	QUANMET	08/22/00	15:44	MTW	S	CONC
140	CCV2-14	J00822A	QUANMET	08/22/00	15:47	MTW	S	CONC
141	CCB14	J00822A	QUANMET	08/22/00	15:51	MTW	S	CONC

Method: QUANMET Standard: STD1
Run Time: 08/22/00 07:55:11

Elem	AG	AL	AS	B	BA	BE	CA
Avge	-.00080	.00825	.00035	.00034	.00000	.00245	-.00028
SDev	.00028	.00070	.00092	.00044	.00000	.00010	.00077
%RSD	35.355	8.4848	261.34	129.17	.00000	4.0816	276.58

#1	-.00040	.00900	-.00060	-.00008	.00000	.00240	.00002
#2	-.00100	.00800	-.00020	.00094	.00000	.00240	-.00126
#3	-.00100	.00740	.00140	.00012	.00000	.00240	-.00045
#4	-.00080	.00860	.00080	.00040	.00000	.00260	.00056

Elem	CD	CO	CR	CU	FE	K	LI
Avge	-.00003	.00005	-.00035	.00020	.00075	-.04650	.00032
SDev	.00009	.00034	.00060	.00016	.00030	.00878	.00024
%RSD	303.76	683.13	170.63	81.650	40.000	18.874	74.751

#1	.00008	.00040	-.00060	.00040	.00100	-.03780	.00044
#2	-.00008	-.00040	-.00020	.00000	.00040	-.05680	.00016
#3	-.00012	.00000	-.00100	.00020	.00100	-.05060	.00008
#4	.00000	.00020	.00040	.00020	.00060	-.04080	.00060

Elem	MG	MN	MO	NA	NI	PB	SB
Avge	-.00005	.00000	-.00005	.06070	-.00028	.00045	-.00020
SDev	.00077	.00000	.00025	.00262	.00055	.00079	.00037
%RSD	1544.9	.00000	503.32	4.3170	196.00	175.45	182.57

#1	.00100	.00000	.00000	.06400	-.00011	-.00020	-.00040
#2	-.00040	.00000	-.00040	.05840	.00004	.00080	.00000
#3	-.00080	.00000	.00000	.05880	-.00111	-.00020	.00020
#4	.00000	.00000	.00020	.06160	.00005	.00140	-.00060

Elem	SE	SI	SN	SR	TI	TL	V
Avge	.00025	.00195	.00025	.00021	.00210	-.00010	.00000
SDev	.00161	.00019	.00125	.00016	.00020	.00096	.00000
%RSD	644.57	9.8198	499.07	78.655	9.5238	959.17	.00000

#1	-.00080	.00200	.00060	.00024	.00200	-.00100	.00000
#2	-.00080	.00180	.00100	.00020	.00200	-.00060	.00000
#3	.00000	.00180	-.00160	.00040	.00240	.00000	.00000
#4	.00260	.00220	.00100	.00000	.00200	.00120	.00000

Elem	ZN
Avge	.00017
SDev	.00014
%RSD	82.711

#1	.00032
#2	.00024
#3	.00000
#4	.00012

Method: QUANMET Standard: STD5A 004-155-1
Run Time: 08/22/00 07:58:20

Elem	AG	AS	B	BA	BE	CD	CO
Avge	.27255	.52750	.58641	3.9799	15.691	.91880	1.4395
SDev	.00076	.00498	.00231	.0145	.064	.00271	.0015
%RSD	.27701	.94432	.39377	.36313	.41085	.29468	.10233

#1	.27240	.53000	.58960	3.9999	15.784	.91655	1.4406
#2	.27280	.52020	.58494	3.9776	15.638	.91896	1.4386
#3	.27340	.53120	.58660	3.9766	15.674	.92255	1.4410
#4	.27160	.52860	.58451	3.9654	15.666	.91712	1.4380

Elem	CR	CU	LI	MN	MO	NI	PB
Avge	3.7618	2.2666	4.2716	2.0326	.40600	1.7166	.25630
SDev	.0055	.0080	.0177	.0040	.00103	.0049	.00074
%RSD	.14560	.35517	.41390	.19719	.25438	.28386	.28848

#1	3.7642	2.2786	4.2970	2.0362	.40720	1.7155	.25600
#2	3.7554	2.2624	4.2689	2.0314	.40560	1.7140	.25580
#3	3.7680	2.2642	4.2634	2.0352	.40640	1.7238	.25600
#4	3.7596	2.2614	4.2569	2.0274	.40480	1.7132	.25740

Elem	SB	SE	SI	SN	SR	TI	TL
Avge	.19150	.51075	.34290	.97270	7.6559	6.1067	.34405
SDev	.00035	.00299	.00081	.00669	.0270	.0178	.00407
%RSD	.18089	.58552	.23572	.68781	.35239	.29093	1.1841

#1	.19120	.50980	.34180	.96620	7.6920	6.1306	.33880
#2	.19140	.50900	.34280	.98020	7.6527	6.1016	.34300
#3	.19200	.51520	.34360	.96800	7.6523	6.1066	.34640
#4	.19140	.50900	.34340	.97640	7.6266	6.0880	.34800

Elem	V	ZN
Avge	1.6059	1.5240
SDev	.0044	.0019
%RSD	.27671	.12439

#1	1.6114	1.5260
#2	1.6026	1.5220
#3	1.6076	1.5252
#4	1.6020	1.5227

Method: QUANMET Standard: STD5B 0014-155-2

Run Time: 08/22/00 08:01:29

Elem	AL	CA	FE	K	MG	NA
Avge	11.188	25.404	30.044	2.3735	7.4689	44.806
SDev	.045	.173	.111	.0106	.0298	.400
%RSD	.40622	.68196	.36957	.44480	.39887	.89280
#1	11.141	25.563	30.066	2.3648	7.4574	44.323
#2	11.246	25.339	30.094	2.3880	7.5066	45.299
#3	11.166	25.189	29.882	2.3666	7.4362	44.846
#4	11.199	25.525	30.133	2.3744	7.4752	44.754

Standardization

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Method: QUANMET

Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
AG	328.068	STD5A	STD1	7.13856	.005711	08/22/00 08:01:29
AL	308.215	STD5B	STD1	8.94458	-.073793	08/22/00 08:01:29
AS	193.696	STD5A	STD1	19.2970	-.006754	08/22/00 08:01:29
B	249.600	STD5A	STD1	17.0972	-.005883	08/22/00 08:01:29
BA	493.409	STD5A	STD1	2.51264	.000000	08/22/00 08:01:29
BE	313.042	STD5A	STD1	.639115	-.001566	08/22/00 08:01:29
CA	317.933	STD5B	STD1	3.93636	.001100	08/22/00 08:01:29
CD	228.802	STD5A	STD1	11.0465	.000325	08/22/00 08:01:29
CO	228.616	STD5A	STD1	6.98004	-.000349	08/22/00 08:01:29
CR	267.716	STD5A	STD1	2.65879	.000931	08/22/00 08:01:29
CU	324.754	STD5A	STD1	4.40817	-.000882	08/22/00 08:01:29
FE	259.940	STD5B	STD1	3.32858	-.002496	08/22/00 08:01:29
K	766.491	STD5B	STD1	41.3232	1.92153	08/22/00 08:01:29
LI	670.789	STD5A	STD1	2.34124	-.000751	08/22/00 08:01:29
MG	279.079	STD5B	STD1	13.3889	.000669	08/22/00 08:01:29
MN	257.610	STD5A	STD1	4.91830	.000000	08/22/00 08:01:29
MO	202.030	STD5A	STD1	24.6275	.001231	08/22/00 08:01:29
NA	588.995	STD5B	STD1	2.23489	-.135658	08/22/00 08:01:29
NI	231.604	STD5A	STD1	5.82186	.001644	08/22/00 08:01:29
PB	220.353	STD5A	STD1	37.9355	-.017071	08/22/00 08:01:29
SB	206.838	STD5A	STD1	52.2253	.010445	08/22/00 08:01:29
SE	196.026	STD5A	STD1	19.5886	-.004897	08/22/00 08:01:29
SI	288.158	STD5A	STD1	28.9555	-.056463	08/22/00 08:01:29
SN	189.989	STD5A	STD1	10.2726	-.002568	08/22/00 08:01:29
SR	409.552	STD5A	STD1	1.30622	-.000273	08/22/00 08:01:29
TI	334.941	STD5A	STD1	1.63811	-.003440	08/22/00 08:01:29
TL	190.864	STD5A	STD1	58.3866	.005839	08/22/00 08:01:29
V	292.402	STD5A	STD1	6.09442	.000000	08/22/00 08:01:29
ZN	213.856	STD5A	STD1	6.58509	-.001104	08/22/00 08:01:29

Method: QUANMET Sample Name: ICV2-1 0057-005-2 Operator: MTW
Run Time: 08/22/00 08:04:38
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61H
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.50940	25.385	1.0034	1.0144	1.0063	.98603	25.573
SDev	.00263	.061	.0174	.0214	.0035	.00170	.119
%RSD	.51715	.23937	1.7384	2.1118	.34599	.17220	.46678
#1	.51226	25.456	1.0172	.99513	1.0098	.98769	25.665
#2	.50793	25.359	1.0143	1.0340	1.0040	.98450	25.518
#3	.50652	25.316	1.0031	1.0319	1.0027	.98462	25.431
#4	.51087	25.411	.97887	.99660	1.0088	.98729	25.678
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	1.0198	1.0108	1.0215	.99926	26.208	24.769	1.0113
SDev	.0097	.0050	.0064	.00162	.084	.164	.0026
%RSD	.95058	.49424	.62386	.16219	.32065	.66147	.26091
#1	1.0124	1.0139	1.0222	1.0002	26.263	24.608	1.0147
#2	1.0194	1.0097	1.0200	.99838	26.164	24.691	1.0118
#3	1.0138	1.0042	1.0142	.99749	26.113	24.790	1.0104
#4	1.0336	1.0153	1.0296	1.0010	26.293	24.988	1.0084
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	25.431	1.0139	1.0026	25.072	1.0212	1.0153	1.0225
SDev	.095	.0037	.0085	.077	.0081	.0262	.0121
%RSD	.37326	.36854	.85200	.30732	.79801	2.5851	1.1796
#1	25.536	1.0176	1.0050	25.183	1.0252	1.0381	1.0330
#2	25.356	1.0107	1.0050	25.019	1.0172	1.0228	1.0120
#3	25.346	1.0107	.99024	25.021	1.0121	1.0228	1.0329
#4	25.488	1.0166	1.0100	25.065	1.0304	.97742	1.0121
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	1.0083	1.0233	1.0175	1.0007	.99425	5.0594	1.0014
SDev	.0317	.0322	.0179	.0029	.00381	.1157	.0040
%RSD	3.1427	3.1510	1.7603	.29301	.38369	2.2867	.40257
#1	1.0046	1.0393	1.0144	1.0032	.99777	5.1902	1.0014
#2	.96511	.97549	1.0020	.99911	.99220	5.1212	.99654

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#3	1.0355	1.0335	1.0432	.99728	.98991	4.9816	1.0011
#4	1.0281	1.0451	1.0102	1.0030	.99712	4.9447	1.0064
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	1.1000	1.1000	1.1000	1.1000	5.5000	1.1000
Low	.90000	.90000	.90000	.90000	.90000	4.5000	.90000

Elem	ZN
Units	ppm
Avge	1.0136
SDev	.0045
%RSD	.43918

#1	1.0117
#2	1.0097
#3	1.0131
#4	1.0199

Errors	LC Pass
High	1.1000
Low	.90000

Method: QUANMET Sample Name: ICB1

Operator: MTW

Run Time: 08/22/00 08:07:46

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00036	-.00448	-.00189	.01096	.00005	.00003	.00080
SDev	.00180	.00776	.02752	.01747	.00010	.00007	.00190
%RSD	503.35	173.22	1452.6	159.41	200.00	230.94	237.68

#1	-.00000	-.01118	.00106	-.00448	.00000	-.00003	.00054
#2	-.00000	-.00581	.02031	-.00247	.00021	.00010	.00082
#3	.00143	.00667	.01249	.03173	.00000	.00010	.00323
#4	-.00285	-.00760	-.04143	.01906	.00000	-.00003	-.00140

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	-.00010	.00105	.00386	.00044	-.00017	.18182	.00007
SDev	.00281	.00001	.00153	.00051	.00176	.10245	.00071
%RSD	2679.4	.72107	39.808	115.25	1056.4	56.347	1024.7

#1	.00253	.00104	.00572	.00000	-.00116	.16116	-.00028
#2	-.00211	.00105	.00412	.00000	-.00183	.25207	-.00036
#3	-.00293	.00105	.00359	.00088	.00017	.26860	.00112
#4	.00209	.00104	.00199	.00088	.00216	.04546	-.00020

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	.00268	.00000	.00246	-.00089	-.00167	-.00373	.02082
SDev	.00594	.00000	.00246	.00725	.00538	.02090	.02695
%RSD	221.74	103.61	100.00	810.87	322.43	560.11	129.41

#1	.00067	.00000	.00123	-.01050	-.00477	.00580	.05214
#2	-.00469	-.00000	.00123	.00693	.00637	-.01705	-.01047
#3	.00602	.00000	.00616	.00112	-.00464	-.02459	.03125
#4	.00870	.00000	.00123	-.00112	-.00363	.02091	.01037

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	-.00294	-.01013	.00523	-.00030	-.00008	-.00293	.00006
SDev	.04321	.03101	.01356	.00025	.00016	.04987	.00005
%RSD	1470.3	305.95	259.04	81.434	200.00	1704.2	85.723

#1	-.00882	.00145	-.00233	-.00027	.00016	-.01751	.00004
#2	.04211	.00724	.02204	-.00049	-.00016	-.06421	.00003

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#3	.01469	.00724	-.00859	-.00049	-.00016	.01751	.00013
#4	-.05974	-.05646	.00981	.00003	-.00016	.05252	.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00000
SDev	.00066
%RSD	18123.

#1	-.00031
#2	-.00035
#3	-.00032
#4	.00100

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: ICESA 0057-011-1 Operator: MTW
Run Time: 08/22/00 08:10:55
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	-.00042	491.77	-.18485	-.03539	.00151	.00002	484.05
SDev	.00139	.69	.15226	.00275	.00041	.00008	1.35
%RSD	329.33	.14036	82.368	7.7822	27.217	361.37	.27807

#1	-.00153	492.71	-.10056	-.03943	.00101	-.00004	482.03
#2	-.00008	491.80	-.20913	-.03367	.00151	.00009	484.58
#3	.00140	491.09	-.04157	-.03485	.00151	-.00005	484.75
#4	-.00148	491.49	-.38813	-.03360	.00201	.00008	484.82

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	-.00219	.01051	.00186	-.00656	185.15	.37811	.00196
SDev	.00258	.00134	.00276	.00085	.12	.28996	.00062
%RSD	118.08	12.747	148.33	12.992	.06585	76.687	31.602

#1	-.00268	.00947	-.00067	-.00723	184.99	.06198	.00242
#2	-.00289	.01226	-.00013	-.00722	185.16	.23554	.00112
#3	-.00463	.01087	.00518	-.00545	185.28	.49175	.00244
#4	.00146	.00945	.00306	-.00634	185.19	.72316	.00187

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK
Value					200.00		
Range					20.000		

Elem	MG	MN	MO	NA	NI	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	485.24	.00438	.00552	.01050	-.01376	.08054	-.02347
SDev	.29	.00093	.00741	.00203	.01468	.03036	.01006
%RSD	.06023	21.362	134.08	19.345	106.71	37.699	42.862

#1	485.60	.00505	-.00558	.01006	-.01056	.06481	-.02079
#2	485.10	.00315	.00922	.01184	-.03022	.12609	-.03142
#3	484.92	.00517	.00923	.01229	-.01892	.06576	-.03130
#4	485.33	.00415	.00922	.00782	.00465	.06552	-.01036

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	.02846	.04348	-.04909	.01374	-.02138	.48188	.00407
SDev	.08464	.01593	.03535	.00005	.00031	.08623	.00179
%RSD	297.44	36.635	72.023	.39150	1.4673	17.894	43.932

#1	-.01900	.02467	-.02702	.01382	-.02179	.51281	.00477
#2	.04022	.05937	-.06813	.01371	-.02113	.49935	.00140

#3	.14239	.05363	-.08865	.01371	-.02113	.35800	.00506
#4	-.04979	.03626	-.01255	.01371	-.02146	.55737	.00506

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							
Range							

Elem	ZN
Units	ppm
Avge	.00204
SDev	.00180
%RSD	88.539

#1	.00395
#2	.00320
#3	.00053
#4	.00046

Errors	NOCHECK
Value	
Range	

Method: QUANMET Sample Name: ICSAB 0014-187-1 Operator: MTW
 Run Time: 08/22/00 08:14:03
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61H
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.94840	489.58	.87439	.93963	.46768	.45700	478.12
SDev	.00366	2.01	.11126	.01151	.00251	.00152	2.64
%RSD	.38571	.41133	12.724	1.2254	.53651	.33238	.55231
#1	.94677	487.05	.86578	.93929	.46448	.45509	476.36
#2	.94401	488.87	.80825	.92729	.46700	.45649	476.26
#3	.95151	490.98	Q.78951	.93690	.46901	.45839	481.91
#4	.95132	491.40	1.0340	.95505	.47022	.45802	477.94
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	.95603	.45298	.44642	.47820	183.83	10.087	1.0064
SDev	.00690	.00461	.00343	.00258	.80	.303	.0063
%RSD	.72179	1.0179	.76817	.53893	.43595	3.0045	.62159
#1	.96015	.44634	.44229	.47614	183.01	10.426	1.0014
#2	.95630	.45612	.44496	.47618	183.37	9.6903	1.0060
#3	.96147	.45610	.44974	.47894	184.81	10.087	1.0029
#4	.94622	.45335	.44868	.48153	184.10	10.145	1.0153
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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	480.72	.45584	.91038	10.036	.89430	.98555	.97586
SDev	1.93	.00277	.01209	.064	.01364	.01665	.01347
%RSD	.40252	.60830	1.3277	.63913	1.5257	1.6891	1.3801
#1	478.45	.45344	.89549	9.9651	.88652	.99276	.96023
#2	479.81	.45351	.92509	10.021	.91399	.96911	.98123
#3	482.57	.45880	.91053	10.036	.89277	1.0054	.99143
#4	482.07	.45760	.91043	10.120	.88392	.97489	.97052
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	.97011	1.0482	.86012	.93776	.89072	9.6581	.45849
SDev	.13470	.0229	.02101	.00390	.00238	.2120	.00246
%RSD	13.885	2.1823	2.4427	.41589	.26756	2.1948	.53555
#1	.80636	1.0671	.85117	.93268	.88769	9.4739	.45697
#2	.95227	1.0207	.84311	.93675	.88998	9.4818	.45755

#3	.98741	1.0671	.89067	.94041	.89293	9.8873	.46215
#4	1.1344	1.0381	.85552	.94119	.89228	9.7895	.45727
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 .93248
SDev .00630
%RSD .67504

#1 .92507
#2 .92944
#3 .93806
#4 .93735

Errors QC Pass
Value 1.0000
Range 20.000

Method: QUANMET Sample Name: DJ5HPBT Operator: MTW
 Run Time: 08/22/00 08:19:26
 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	-.00178	-.00267	-.01546	.00710	.00025	-.00006	.01445
SDev	.00180	.00946	.02348	.01297	.00029	.00006	.00368
%RSD	101.11	353.87	151.93	182.61	115.47	100.00	25.482
#1	-.00142	-.01663	.00492	.00826	.00000	-.00003	.01022
#2	.00001	-.00046	-.04924	-.00099	.00050	-.00003	.01559
#3	-.00142	.00315	-.01068	.02495	.00000	-.00016	.01309
#4	-.00428	.00324	-.00682	-.00381	.00050	-.00003	.01888
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	-.00060	.00070	.00266	.00022	.03262	.33472	.00014
SDev	.00173	.00209	.00186	.00044	.00220	.15013	.00071
%RSD	287.03	299.13	70.001	197.64	6.7483	44.854	517.52
#1	-.00194	-.00174	.00465	.00000	.03012	.16116	.00019
#2	.00127	-.00035	.00199	.00000	.03212	.48348	-.00028
#3	.00046	.00244	.00040	.00000	.03278	.26034	-.00048
#4	-.00219	.00245	.00359	.00089	.03545	.43389	.00112
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	.00669	.00050	.00000	.00000	.00196	.00951	.00782
SDev	.01489	.00057	.00620	.00345	.00318	.02272	.01565
%RSD	222.41	113.07	127060.	67e6	162.40	238.90	200.29
#1	-.00469	.00001	.00616	-.00380	.00501	.03603	.02080
#2	.02209	.00099	.00124	.00246	.00377	.02085	.00001
#3	-.00736	.00001	.00124	.00335	.00123	-.00944	-.01046
#4	.01674	.00099	-.00861	-.00201	-.00218	-.00940	.02091
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	-.01461	.01158	.00775	-.00012	-.00025	.04053	.00001
SDev	.03511	.00290	.01520	.00025	.00068	.02523	.00012
%RSD	240.40	25.000	196.11	207.26	274.87	62.245	2238.1
#1	-.02441	.01303	.02630	-.00001	-.00082	.05225	.00013
#2	.00694	.00724	-.00256	.00003	.00016	.04055	.00003

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#3	.01870	.01303	.01383	-.00001	-.00082	.00548	.00002
#4	-.05965	.01303	-.00657	-.00049	.00049	.06385	-.00016

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

Elem	ZN
Units	ppm
Avge	.00084
SDev	.00026
%RSD	31.479

#1	.00097
#2	.00097
#3	.00098
#4	.00044

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DJ3ACBT Operator: MTW
Run Time: 08/22/00 08:22:34
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	.00145	.02189	.15798	.01392	.00201	-.00004	.21883
SDev	.00232	.00888	.03284	.01533	.00024	.00001	.00442
%RSD	160.54	40.545	20.788	110.09	12.007	17.178	2.0211
#1	.00146	.02098	.11260	.01508	.00171	-.00005	.22381
#2	-.00140	.01200	.18986	.00302	.00231	-.00004	.21589
#3	.00143	.02101	.17058	.00242	.00201	-.00003	.21440
#4	.00430	.03359	.15888	.03519	.00201	-.00004	.22121
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	-.00066	.00174	.00346	.00243	.02580	.45662	-.00012
SDev	.00184	.00419	.00176	.00111	.00116	.26199	.00097
%RSD	280.11	240.07	50.869	45.822	4.4931	57.376	779.45
#1	.00130	.00523	.00518	.00353	.02680	.69836	.00074
#2	.00041	-.00035	.00146	.00265	.02480	.35125	-.00133
#3	-.00160	-.00314	.00252	.00088	.02480	.13637	-.00048
#4	-.00273	.00523	.00465	.00265	.02681	.64051	.00057
Errors	LC Pass	NOCHECK	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.10000		.50000				
Low	-.10000		-.50000				

Elem	MG	MN	MO	NA	NI	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.03615	.00124	.00124	S-.13566	-.00171	-.01514	.00252
SDev	.01205	.00049	.00402	.00000	.00615	.01304	.01972
%RSD	33.333	39.764	325.59	.00000	359.22	86.097	784.08
#1	.04351	.00099	.00616	S-.13566	-.00014	-.00177	-.00010
#2	.03548	.00099	.00124	S-.13566	-.00336	-.03228	-.01047
#3	.01941	.00099	-.00369	S-.13566	-.00903	-.01713	.03117
#4	.04619	.00197	.00124	S-.13566	.00568	-.00938	-.01054
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	-.02246	.03623	.02621	.00082	.00156	.04350	.00277
SDev	.04574	.00003	.02282	.00015	.00241	.05255	.00258
%RSD	203.67	.08984	87.077	18.839	155.06	120.82	92.849
#1	-.00874	.03626	.02414	.00066	.00115	.01717	.00500
#2	-.02442	.03626	-.00261	.00082	-.00016	.12233	.00490

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#3	.02651	.03619	.03045	.00103	.00016	.01729	-.00007
#4	-.08318	.03621	.05284	.00077	.00508	.01720	.00125

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

Elem	ZN
Units	ppm
Avge	.01128
SDev	.00062
%RSD	5.5081

#1	.01153
#2	.01077
#3	.01077
#4	.01204

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DJ5HPCT Operator: MTW
Run Time: 08/22/00 08:25:42
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	.04666	2.0356	2.0913	1.0183	2.0786	.05175	L.08325
SDev	.00178	.0037	.0347	.0255	.0173	.00028	.00364
%RSD	3.8217	.18153	1.6588	2.5078	.83145	.53331	4.3665

#1	.04844	2.0306	2.0933	1.0361	2.0718	.05166	L.08159
#2	.04702	2.0360	2.0469	.98140	2.0643	.05153	L.08367
#3	.04699	2.0361	2.0933	1.0210	2.0746	.05167	L.08812
#4	.04419	2.0396	2.1317	1.0347	2.1037	.05216	L.07964

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	.04786	.51849	.21268	.25954	1.1106	L.25414	1.0183
SDev	.00273	.00181	.00153	.00151	.0054	.17354	.0148
%RSD	5.7000	.34911	.71932	.57973	.48694	68.286	1.4537

#1	.05151	.51778	.21228	.25888	1.1059	L.38431	1.0100
#2	.04581	.52059	.21175	.25800	1.1059	L.40910	1.0094
#3	.04839	.51918	.21494	.25976	1.1159	L.17769	1.0135
#4	.04574	.51639	.21174	.26152	1.1146	L.04546	1.0404

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.01741	.52236	.00386	L.02771	.52734	.50791	L.00179
SDev	.00256	.00094	.00492	.00274	.00519	.02360	.01803
%RSD	14.730	.18052	127.59	9.8989	.98474	4.6471	1005.4

#1	L.01674	.52162	.00632	L.02794	.52848	.51927	L-.00342
#2	L.01941	.52162	.00632	L.02749	.53403	.48139	L-.01379
#3	L.01941	.52359	.00632	L.03106	.52487	.53452	L.02783
#4	L.01406	.52260	-.00353	L.02436	.52198	.49646	L-.00345

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	2.0627	.02246	-.00338	1.0435	.00049	2.0214	.51243
SDev	.0516	.01105	.01195	.0078	.00046	.0548	.00390
%RSD	2.5006	49.174	353.81	.74599	94.281	2.7118	.76126

#1	2.1253	.01957	-.01059	1.0401	.00049	2.0682	.51247
#2	2.0000	.03115	-.01475	1.0371	.00082	2.0682	.51247

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#3	2.0705	.03109	-.00017	1.0418	.00082	1.9864	.50760
#4	2.0548	.00805	.01201	1.0548	-.00016	1.9630	.51716

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	.51592
SDev	.00381
%RSD	.73951

#1	.51528
#2	.51078
#3	.51868
#4	.51895

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DHX40T

Operator: MTW

Run Time: 08/22/00 08:28:55

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	-.00064	.39304	.11993	.10748	.97933	.00034	128.44
SDev	.00273	.00957	.05354	.00146	.00646	.00000	.58
%RSD	426.02	2.4355	44.641	1.3558	.65972	.03560	.45411
#1	.00150	.39841	.03981	.10888	.97993	.00034	128.12
#2	-.00421	.37874	.14417	.10748	.98617	.00034	127.99
#3	.00150	.39839	.15173	.10809	.98064	.00034	129.28
#4	-.00136	.39661	.14403	.10547	.97059	.00034	128.37
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00097	-.00084	.00345	.00729	.27094	1.0455	.00508
SDev	.00202	.00198	.00235	.00111	.00100	.3216	.00057
%RSD	208.11	234.47	68.126	15.219	.36830	30.759	11.277
#1	-.00011	.00055	.00199	.00708	.27044	1.1529	.00534
#2	-.00128	.00056	.00093	.00708	.27177	.58266	.00440
#3	.00214	-.00085	.00571	.00884	.27177	1.3265	.00572
#4	.00313	-.00364	.00518	.00619	.26977	1.1199	.00487
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	16.089	.08589	.00004	S-.13566	.01095	.00729	.01838
SDev	.087	.00049	.00246	.00000	.00355	.01997	.02153
%RSD	.54069	.57332	6078.8	.00000	32.380	274.08	117.15
#1	16.070	.08565	.00127	S-.13566	.00802	-.00975	.02098
#2	16.148	.08663	.00127	S-.13566	.00775	.03579	.02098
#3	16.164	.08565	.00127	S-.13566	.01376	-.00224	-.01033
#4	15.974	.08565	-.00365	S-.13566	.01427	.00535	.04189
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	-.01006	4.8762	-.00448	.58803	-.00238	.02393	.00488
SDev	.04529	.0434	.00540	.00346	.00077	.06205	.00005
%RSD	450.24	.89072	120.64	.58758	32.592	259.27	.93137
#1	-.06295	4.8545	-.00652	.58836	-.00180	.09691	.00490
#2	-.03161	4.8545	-.00241	.59175	-.00344	.02684	.00490

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#3	.01933	4.9413	-.01078	.58862	-.00180	.02684	.00491
#4	.03499	4.8545	.00180	.58339	-.00246	-.05486	.00482
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 .04788
SDev .00101
%RSD 2.1078

#1	.04702
#2	.04888
#3	.04862
#4	.04700

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHX40P5T Operator: MTW
 Run Time: 08/22/00 08:32:03
 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	.00073	.08134	.01276	.01268	.20593	-.00000	26.831
SDev	.00083	.00446	.03850	.00095	.00140	.00006	.145
%RSD	113.84	5.4823	301.60	7.4647	.68205	1765.6	.54111
#1	.00001	.07997	.00025	.01133	.20666	-.00003	27.002
#2	.00001	.08713	-.00366	.01273	.20686	-.00003	26.901
#3	.00144	.08181	-.01520	.01333	.20636	-.00003	26.706
#4	.00146	.07644	.06967	.01333	.20385	.00008	26.715
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	-.00105	-.00080	.00186	.00111	.05592	.40290	.00061
SDev	.00092	.00209	.00196	.00085	.00137	.21268	.00024
%RSD	87.834	262.26	105.23	76.434	2.4557	52.788	40.380
#1	.00031	-.00185	.00200	.00177	.05608	.50001	.00093
#2	-.00146	-.00185	.00200	.00088	.05609	.22728	.00065
#3	-.00172	-.00184	-.00066	.00000	.05409	.22728	.00038
#4	-.00135	.00234	.00412	.00177	.05742	.65704	.00046
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	3.4142	.01846	.00370	281.42	.00526	-.01716	-.00259
SDev	.0214	.00049	.00284	2.17	.00742	.01076	.01787
%RSD	.62540	2.6612	76.807	.77143	141.10	62.709	689.85
#1	3.4336	.01772	.00617	282.30	-.00384	-.01720	-.01055
#2	3.4309	.01871	.00617	282.83	.00527	-.03236	.00000
#3	3.3907	.01870	.00124	282.37	.00526	-.00963	-.02081
#4	3.4014	.01870	.00124	278.19	.01432	-.00945	.02099
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	-.02140	.97437	-.00308	.12378	-.00041	-.00923	.00129
SDev	.05690	.00948	.01097	.00086	.00056	.04405	.00241
%RSD	265.88	.97317	356.11	.69192	136.63	477.01	186.19
#1	-.04393	.97435	.00562	.12462	-.00115	.02873	.00012
#2	.05793	.97435	-.00667	.12420	-.00016	-.04133	.00012

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#3	-.07527	.96277	-.01703	.12368	-.00049	-.05299	.00002
#4	-.02433	.98600	.00576	.12263	.00016	.02865	.00491
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	.00887
SDev	.00095
%RSD	10.709

#1	.00966
#2	.00886
#3	.00941
#4	.00753

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHX40ST Operator: MTW
 Run Time: 08/22/00 08:35:11
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.96050	.36625	5.2127	.10400	47.352	.00044	122.66
SDev	.00294	.00835	.0451	.00000	.291	.00006	.34
%RSD	.30639	2.2797	.86574	.00387	.61559	13.584	.28121

#1	.96227	.36272	5.1462	.10400	47.521	.00035	122.17
#2	.95799	.35734	5.2466	.10400	47.283	.00048	122.69
#3	.96372	.37693	5.2309	.10401	47.632	.00047	122.88
#4	.95801	.36802	5.2271	.10400	46.974	.00047	122.91

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	.99672	.00031	4.6829	.00729	.24115	1.0393	.00499
SDev	.00585	.00276	.0095	.00044	.00231	.1710	.00080
%RSD	.58712	888.84	.20236	6.0523	.95666	16.457	16.040

#1	.98901	-.00185	4.6703	.00707	.23782	.97109	.00393
#2	.99817	.00383	4.6831	.00708	.24315	.97109	.00487
#3	1.0031	-.00194	4.6932	.00707	.24181	.92151	.00534
#4	.99656	.00120	4.6852	.00796	.24182	1.2934	.00580

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	15.267	.08220	.00127	S2664.1	.00922	4.8208	.01123
SDev	.055	.00057	.00402	1776.2	.00553	.0388	.01788
%RSD	.36117	.69257	317.33	66.670	60.004	.80497	159.15

#1	15.293	.08170	-.00366	S3552.2	.00678	4.8340	.00345
#2	15.229	.08269	.00619	S3552.2	.00871	4.7659	.03476
#3	15.331	.08269	.00127	S-.13566	.00431	4.8264	-.00715
#4	15.213	.08171	.00127	S3552.4	.01706	4.8568	.01389

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	1.0545	4.6632	.00319	.55798	-.00180	.02715	.00167
SDev	.0538	.0116	.01948	.00310	.00038	.03693	.00253
%RSD	5.0979	.24787	611.33	.55466	20.995	136.02	151.12

#1	1.0026	4.6690	.02421	.55919	-.00213	.05057	-.00058
#2	1.1084	4.6690	-.01879	.55747	-.00147	.01544	-.00037

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#3	1.0927	4.6690	-.00666	.56128	-.00213	-.01955	.00322
#4	1.0143	4.6459	.01398	.55396	-.00147	.06215	.00442
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 .04607
SDev .00143
%RSD 3.1005

#1 .04437
#2 .04777
#3 .04648
#4 .04567

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHX40DT Operator: MTW
Run Time: 08/22/00 08:38:23
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	.95584	.32600	5.1745	.10443	47.353	.00042	120.58
SDev	.00340	.01295	.0668	.00100	.486	.00007	.64
%RSD	.35559	3.9716	1.2904	.96031	1.0260	17.734	.53478
#1	.96083	.33584	5.1928	.10393	47.992	.00048	120.20
#2	.95512	.31979	5.1041	.10393	46.922	.00048	121.24
#3	.95369	.31076	5.2586	.10594	47.463	.00035	119.88
#4	.95369	.33763	5.1426	.10393	47.033	.00035	121.00
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	.99636	-.00178	4.6703	.00729	.20237	.95457	.00400
SDev	.01079	.00236	.0135	.00111	.00354	.39086	.00080
%RSD	1.0834	132.25	.28953	15.225	1.7486	40.947	19.966
#1	.99030	-.00209	4.6687	.00619	.20320	.67357	.00280
#2	1.0058	-.00159	4.6868	.00883	.20387	1.5248	.00440
#3	.98423	-.00460	4.6538	.00706	.19721	.73142	.00440
#4	1.0051	.00115	4.6719	.00707	.20520	.88845	.00440
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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	14.980	.08022	.00126	S3552.1	.01344	4.7525	.02443
SDev	.067	.00057	.00402	.8	.01203	.0352	.02958
%RSD	.44748	.70877	318.77	.02246	89.534	.74143	121.08
#1	15.077	.07973	.00126	S3550.9	.01336	4.7657	.00350
#2	14.975	.08071	-.00366	S3552.6	.00207	4.7961	.02425
#3	14.932	.07973	.00126	S3552.5	.00822	4.7277	.00365
#4	14.937	.08071	.00619	S3552.3	.03010	4.7204	.06631
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	1.0260	4.4692	-.00087	.55209	-.00254	.01882	-.00049
SDev	.0219	.0290	.01707	.00478	.00062	.06207	.00007
%RSD	2.1367	.64790	1972.1	.86504	24.425	329.88	14.381
#1	1.0338	4.4836	.02010	.55836	-.00344	-.00747	-.00049
#2	1.0299	4.4836	-.01474	.54780	-.00213	-.05418	-.00055

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#3	1.0456	4.4836	-.01483	.55318	-.00246	.05100	-.00052
#4	.99466	4.4257	.00601	.54900	-.00213	.08591	-.00039

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	.04572
SDev	.00158
%RSD	3.4439

#1	.04699
#2	.04515
#3	.04700
#4	.04375

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHX47T

Operator: MTW

Run Time: 08/22/00 08:41:36

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	-.00218	1.2473	.13205	.16078	1.0341	.00037	145.66
SDev	.00073	.0094	.02719	.00002	.0051	.00006	.64
%RSD	33.346	.75648	20.592	.00925	.49744	15.705	.44014
#1	-.00254	1.2428	.13597	.16076	1.0347	.00034	145.12
#2	-.00254	1.2393	.10125	.16078	1.0311	.00034	146.55
#3	-.00254	1.2463	.12435	.16079	1.0411	.00034	145.28
#4	-.00109	1.2608	.16661	.16077	1.0296	.00045	145.68
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	-.00100	.00188	.00292	.01157	1.3175	1.8761	.00412
SDev	.00135	.00302	.00323	.00161	.0061	.5772	.00109
%RSD	135.05	160.27	110.56	13.932	.46207	30.767	26.478
#1	-.00114	.00188	-.00014	.00980	1.3097	1.7893	.00468
#2	-.00257	.00328	.00571	.01245	1.3224	2.0620	.00385
#3	-.00103	-.00231	.00040	.01068	1.3224	1.1364	.00272
#4	.00074	.00467	.00571	.01333	1.3157	2.5166	.00523
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	15.893	.11052	-.00103	S2663.7	.00924	.01419	.02878
SDev	.026	.00081	.00493	1775.9	.00462	.02589	.01972
%RSD	.16565	.72805	476.21	66.670	49.951	182.42	68.536
#1	15.877	.10954	.00143	S3552.3	.00611	.00473	.04177
#2	15.928	.11151	.00143	S3552.1	.00885	.03512	.04183
#3	15.899	.11053	.00143	S-.13566	.00611	-.01816	.03139
#4	15.869	.11052	-.00842	S3550.4	.01589	.03509	.00012
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	-.01514	7.5835	.00081	.55448	.02441	.07454	.00608
SDev	.01449	.0358	.02027	.00268	.00046	.01650	.00235
%RSD	95.697	.47227	2503.0	.48412	1.8983	22.137	38.589
#1	-.02887	7.5531	.02039	.55381	.02375	.07462	.00490
#2	-.00925	7.6342	-.01454	.55329	.02474	.08617	.00491

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#3	-.02492	7.5647	-.01870	.55841	.02474	.05118	.00490
#4	.00249	7.5821	.01608	.55240	.02441	.08619	.00960
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	.11945
SDev	.00270
%RSD	2.2643

#1	.11826
#2	.11801
#3	.11803
#4	.12350

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-1 0057-025-5 Operator: MTW
Run Time: 08/22/00 08:44:49
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0015	49.842	5.0612	4.9896	4.9300	4.9947	51.232
SDev	.0027	.074	.0409	.0106	.0065	.0072	.094
%RSD	.27197	.14863	.80767	.21255	.13084	.14344	.18415
#1	1.0033	49.876	5.0744	4.9843	4.9293	5.0014	51.257
#2	.99759	49.801	5.0713	5.0055	4.9316	4.9889	51.127
#3	1.0034	49.928	5.0969	4.9839	4.9373	5.0003	51.349
#4	1.0018	49.764	5.0023	4.9848	4.9218	4.9881	51.196
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	5.1059	5.0239	5.0067	4.9318	51.877	49.555	4.9250
SDev	.0217	.0135	.0081	.0055	.085	.241	.0111
%RSD	.42424	.26827	.16166	.11232	.16332	.48576	.22497
#1	5.1327	5.0235	5.0162	4.9300	51.892	49.633	4.9229
#2	5.1058	5.0152	4.9965	4.9362	51.820	49.774	4.9406
#3	5.1055	5.0431	5.0082	4.9362	51.991	49.600	4.9217
#4	5.0797	5.0139	5.0061	4.9247	51.806	49.212	4.9145
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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	49.975	5.0160	5.0231	49.288	4.9909	5.0595	5.0415
SDev	.053	.0057	.0166	.063	.0324	.0361	.0521
%RSD	.10594	.11310	.33006	.12715	.64858	.71389	1.0335
#1	49.949	5.0175	5.0281	49.325	5.0158	5.0197	5.0808
#2	50.029	5.0116	5.0034	49.306	4.9742	5.0725	4.9659
#3	50.008	5.0234	5.0182	49.326	4.9535	5.0429	5.0701
#4	49.914	5.0116	5.0428	49.195	5.0200	5.1030	5.0494
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	5.1847	5.0602	5.0664	4.9537	4.9618	10.137	5.0069
SDev	.0602	.0330	.0274	.0084	.0060	.116	.0095
%RSD	1.1606	.65230	.53993	.17021	.12144	1.1466	.18955
#1	5.1661	5.0399	5.0630	4.9546	4.9649	10.306	5.0094
#2	5.1659	5.0457	5.0460	4.9579	4.9600	10.062	5.0077

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#3	5.2721	5.1095	5.0506	4.9606	4.9679	10.060	5.0165
#4	5.1345	5.0455	5.1060	4.9416	4.9541	10.120	4.9938

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	4.9927
SDev	.0016
%RSD	.03170

#1	4.9935
#2	4.9904
#3	4.9929
#4	4.9939

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB1 Operator: MTW
Run Time: 08/22/00 08:47:57
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	.00073	.00175	.01827	.00066	.00063	.00031	.00501
SDev	.00082	.00337	.02994	.00257	.00048	.00029	.00236
%RSD	113.39	192.71	163.87	390.39	76.594	91.470	47.155
#1	.00000	.00133	.02024	-.00104	.00101	.00073	.00587
#2	.00002	-.00049	.05492	-.00106	.00050	.00021	.00369
#3	.00143	-.00048	-.01833	.00035	.00000	.00010	.00258
#4	.00145	.00663	.01626	.00439	.00101	.00021	.00791
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	.00044	-.00070	.00186	-.00022	.00183	.08058	-.00037
SDev	.00184	.00238	.00205	.00044	.00319	.15260	.00013
%RSD	418.71	339.92	110.37	200.22	174.34	189.37	34.941
#1	.00100	-.00035	.00306	.00000	.00616	-.07025	-.00028
#2	.00232	.00244	.00252	.00000	.00017	.26860	-.00028
#3	.00053	-.00175	-.00120	-.00000	-.00117	.13637	-.00056
#4	-.00208	-.00314	.00305	-.00088	.00217	-.01240	-.00036
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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00536	.00049	.00000	.01062	.00307	.00188	.00262
SDev	.01440	.00057	.00246	.00614	.00616	.00757	.00519
%RSD	268.87	115.50	899140.	57.872	200.88	402.26	198.40
#1	.00067	.00099	.00123	.00916	.00439	-.00189	.01040
#2	-.01272	.00000	.00123	.00425	-.00479	-.00183	.00001
#3	.01406	.00098	.00123	.01006	.01014	.01323	.00007
#4	.01941	-.00000	-.00369	.01900	.00253	-.00199	-.00002
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	.00294	.01161	.00617	.00027	.00041	-.02922	.00244
SDev	.03052	.00292	.02045	.00035	.00049	.02694	.00279
%RSD	1036.8	25.112	331.13	127.60	120.00	92.178	114.27
#1	-.01272	.00724	.02213	.00077	.00082	-.00589	.00003
#2	.03036	.01309	-.02311	.00025	.00016	-.00589	.00490

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#3	-.03232	.01303	.00770	.00003	-.00016	-.05252	.00002
#4	.02645	.01309	.01797	.00003	.00082	-.05258	.00481
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	.00014
SDev	.00104
%RSD	755.78

#1	.00097
#2	.00103
#3	-.00036
#4	-.00109

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHX4AT Operator: MTW
 Run Time: 08/22/00 08:51:05
 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	-.00130	.63098	.14566	.37822	.94661	.00038	108.89
SDev	.00203	.01080	.02117	.00001	.00686	.00013	.65
%RSD	156.06	1.7108	14.537	.00169	.72524	33.153	.59690
#1	.00014	.62025	.17272	.37822	.93701	.00047	109.33
#2	.00012	.64348	.14946	.37822	.94656	.00048	108.93
#3	-.00128	.63630	.12241	.37823	.95028	.00021	109.33
#4	-.00417	.62391	.13804	.37821	.95259	.00035	107.95
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00005	.00021	.00585	.02958	.58767	1.7211	.00299
SDev	.00182	.00175	.00580	.00051	.00258	.2032	.00041
%RSD	3900.4	822.31	99.120	1.7241	.43901	11.804	13.657
#1	.00062	.00057	.01422	.03002	.58867	2.0207	.00242
#2	-.00225	-.00222	.00465	.02914	.58668	1.5744	.00300
#3	.00209	.00055	.00359	.02914	.59067	1.6653	.00319
#4	-.00029	.00196	.00093	.03002	.58467	1.6240	.00335
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	16.157	.11451	.00378	S-.13566	.00659	.16265	.03131
SDev	.041	.00094	.00284	.00000	.00792	.00376	.03716
%RSD	.25262	.82349	75.196	.00000	120.16	2.3142	118.69
#1	16.099	.11426	.00132	S-.13566	.01393	.16461	.06271
#2	16.166	.11525	.00624	S-.13566	.01294	.16442	-.01043
#3	16.196	.11525	.00625	S-.13566	-.00011	.15701	.06257
#4	16.166	.11328	.00132	S-.13566	-.00041	.16457	.01038
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	-.01216	5.7043	.00898	.48750	.00369	.03543	.00252
SDev	.03421	.0319	.01540	.00340	.00062	.09678	.00282
%RSD	281.27	.55873	171.56	.69785	16.826	273.17	111.89
#1	-.01118	5.6884	-.01040	.48274	.00377	.14049	.00493
#2	-.05820	5.6883	.00364	.48744	.00410	.05883	.00013

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#3	.02408	5.7521	.02248	.48953	.00410	-.09307	.00500
#4	-.00336	5.6883	.02018	.49031	.00278	.03546	.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	.08803
SDev	.00196
%RSD	2.2269

#1	.08637
#2	.09085
#3	.08774
#4	.08717

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DJ0QLT

Operator: MTW

Run Time: 08/22/00 08:54:13

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	-.00182	8.2403	.18491	.31461	2.3461	.00068	448.37
SDev	.00072	.0126	.03453	.00169	.0037	.00006	2.00
%RSD	39.565	.15314	18.673	.53809	.15904	8.4282	.44675
#1	-.00220	8.2484	.22255	.31374	2.3480	.00059	446.06
#2	-.00217	8.2304	.14154	.31377	2.3437	.00071	448.96
#3	-.00217	8.2286	.17632	.31715	2.3422	.00071	447.69
#4	-.00074	8.2536	.19923	.31379	2.3503	.00071	450.79
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	.07007	.01702	.04001	1.0808	4.4301	3.8431	.01112
SDev	.00507	.00179	.00240	.0011	.0163	.3624	.00041
%RSD	7.2315	10.521	5.9919	.10530	.36714	9.4305	3.7014
#1	.06304	.01495	.03868	1.0821	4.4181	3.3017	.01107
#2	.06968	.01772	.03815	1.0804	4.4354	4.0042	.01123
#3	.07370	.01632	.04347	1.0795	4.4161	4.0703	.01159
#4	.07385	.01910	.03975	1.0813	4.4507	3.9960	.01060
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.8869	2.1057	.01174	S-.13566	.03257	16.830	.15651
SDev	.0113	.0070	.00402	.00000	.00234	.053	.02258
%RSD	.12665	.33387	34.259	.00000	7.1911	.31325	14.428
#1	8.8748	2.1002	.00682	S-.13566	.03173	16.768	.18786
#2	8.8802	2.1032	.01175	S-.13566	.03171	16.829	.15648
#3	8.8935	2.1032	.01174	S-.13566	.03081	16.829	.13557
#4	8.8989	2.1160	.01667	S-.13566	.03602	16.897	.14611
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	-.02751	11.937	.02703	1.2766	.06290	.03307	.00884
SDev	.05351	.031	.01475	.0019	.00112	.04900	.00250
%RSD	194.53	.26288	54.583	.14820	1.7790	148.20	28.324
#1	-.04027	11.914	.02152	1.2772	.06307	.05364	.00508
#2	-.02455	11.925	.04603	1.2759	.06241	-.04000	.01005

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#3	-.08729	11.925	.02950	1.2745	.06176	.05363	.01006
#4	.04209	11.983	.01105	1.2789	.06438	.06500	.01015

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	30.955
SDev	.102
%RSD	.33103

#1	30.871
#2	30.954
#3	30.895
#4	31.099

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHWJHBT Operator: MTW
 Run Time: 08/22/00 08:57:21
 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	-.00071	.00401	.01151	.00273	.00000	.00000	.02700
SDev	.00143	.00470	.02053	.01727	.00024	.00006	.00428
%RSD	201.71	117.34	178.29	633.41	.00000	8047.9	15.835
#1	.00143	.00495	-.01841	-.00784	.00030	-.00003	.03338
#2	-.00142	.01021	.01628	.02837	-.00030	-.00003	.02430
#3	-.00142	.00135	.02021	-.00723	.00000	.00010	.02495
#4	-.00143	-.00047	.02797	-.00240	.00000	-.00003	.02537
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	-.00004	-.00139	.00279	-.00022	.03029	.19215	-.00059
SDev	.00307	.00070	.00053	.00084	.00137	.37135	.00080
%RSD	8029.7	49.840	19.075	385.21	4.5293	193.26	136.55
#1	.00144	-.00035	.00306	.00088	.03012	.73968	-.00012
#2	.00273	-.00175	.00306	.00000	.02879	.06198	-.00036
#3	-.00433	-.00173	.00199	-.00088	.03212	-.08678	-.00177
#4	.00000	-.00175	.00306	-.00088	.03012	.05372	-.00009
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	-.00134	.00025	.00000	.01587	-.00378	-.02279	.01034
SDev	.01057	.00049	.00472	.00787	.00290	.01140	.03074
%RSD	789.51	193.60	104120.	49.597	76.787	50.015	297.37
#1	.01138	.00001	-.00369	.02749	.00009	-.01702	.05210
#2	.00335	.00099	.00616	.01274	-.00575	-.00954	-.00016
#3	-.01004	.00001	-.00369	.01319	-.00624	-.03233	-.02098
#4	-.01004	.00001	.00124	.01006	-.00321	-.03228	.01039
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	.00106	-.02896	.01957	-.00013	-.00074	-.04117	-.00030
SDev	.02686	.03185	.02544	.00011	.00031	.01652	.00060
%RSD	2535.4	109.97	129.99	82.283	42.552	40.124	200.61
#1	-.01657	.00145	.05315	-.00012	-.00049	-.06453	-.00007
#2	.03436	-.05646	.01798	-.00012	-.00082	-.02947	.00013

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#3	-.02440	-.05646	.01583	-.00001	-.00115	-.02951	-.00007
#4	.01085	-.00436	-.00868	-.00027	-.00049	-.04116	-.00119

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

Elem	ZN
Units	ppm
Avge	.00297
SDev	.00113
%RSD	37.900

#1	.00175
#2	.00232
#3	.00419
#4	.00363

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DHV0KBT Operator: MTW
 Run Time: 08/22/00 09:00:29
 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	.00108	.02187	.14162	.02849	.00055	.00006	.15774
SDev	.00136	.00558	.09059	.00774	.00033	.00012	.00249
%RSD	125.96	25.510	63.970	27.181	59.767	192.49	1.5807

#1	.00000	.01740	.21307	.03517	.00050	-.00003	.15967
#2	.00003	.02094	.09718	.02250	.00050	.00021	.15823
#3	.00286	.02995	.03544	.03518	.00101	.00010	.15897
#4	.00143	.01918	.22078	.02110	.00021	-.00003	.15411

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	-.00224	-.00069	.00213	.00198	.01298	.41736	-.00031
SDev	.00230	.00176	.00201	.00085	.00167	.35854	.00076
%RSD	102.75	253.92	94.323	42.620	12.823	85.905	245.91

#1	-.00465	.00106	.00253	.00265	.01282	.66530	-.00141
#2	-.00298	-.00034	.00465	.00265	.01348	.75621	.00008
#3	.00084	-.00035	.00146	.00176	.01481	.26034	.00030
#4	-.00216	-.00314	-.00013	.00088	.01082	-.01240	-.00020

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	.03414	.00099	.00246	.65862	.00241	.01138	.02609
SDev	.00346	.00000	.00246	.00925	.00536	.01684	.03014
%RSD	10.125	.09429	99.921	1.4040	222.40	147.94	115.51

#1	.03548	.00099	.00616	.67069	.00226	.02087	-.01045
#2	.03816	.00099	.00123	.65907	-.00231	.02847	.03120
#3	.03280	.00099	.00123	.65639	.00994	.00569	.02095
#4	.03012	.00099	.00123	.64834	-.00025	-.00950	.06266

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	-.03523	.00002	.00629	.00077	-.00000	.01155	.00127
SDev	.01295	.00557	.02263	.00000	.00019	.03632	.00243
%RSD	36.754	35576.	359.84	.00000	217e6	314.55	190.89

#1	-.05188	.00145	-.01289	.00077	.00016	-.04101	.00012
#2	-.03229	.00730	.03867	.00077	-.00016	.02903	.00491

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#3	-.02053	-.00434	.00370	.00077	.00016	.01737	.00003
#4	-.03621	-.00434	-.00433	.00077	-.00016	.04079	.00002
Errors	LC Pass	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
High	.25000						
Low	-.25000						

Elem	ZN
Units	ppm
Avge	.00268
SDev	.00173
%RSD	64.488

#1	.00306
#2	.00100
#3	.00172
#4	.00493

Errors	NOCHECK
High	
Low	

Method: QUANMET Sample Name: DHWJHCT Operator: MTW
Run Time: 08/22/00 09:03:37
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	FE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04832	1.9434	2.2662	.97589	2.0222	.05098	L.18267
SDev	.00203	.0128	.0433	.00711	.0126	.00024	.00239
%RSD	4.2034	.65913	1.9105	.72837	.62175	.47351	1.3092

#1	.04686	1.9305	2.2953	.96567	2.0094	.05084	L.18083
#2	.04691	1.9392	2.2025	.98138	2.0232	.05094	L.18222
#3	.05119	1.9428	2.2758	.97996	2.0171	.05081	L.18616
#4	.04832	1.9609	2.2911	.97656	2.0391	.05133	L.18148

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	.04403	.49409	.20139	.25004	1.0638	L.33265	.97232
SDev	.00475	.00440	.00159	.00072	.0096	.35939	.00542
%RSD	10.782	.89132	.79145	.28826	.90160	108.04	.55738

#1	L.03936	.48993	.19953	.24915	1.0527	L.05372	.96679
#2	.04796	.49129	.20272	.25092	1.0646	L.45042	.97522
#3	.04052	.49550	.20272	.25004	1.0620	L.78927	.96885
#4	.04829	.49966	.20059	.25004	1.0760	L.03719	.97841

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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.04284	.49677	.00508	L.66946	.49735	.47698	L.01965
SDev	.00962	.00259	.00472	.00539	.01319	.00755	.02309
%RSD	22.462	.52122	92.744	.80559	2.6520	1.5838	117.52

#1	L.03548	.49406	.00139	L.66354	.48665	.48069	L.03785
#2	L.04084	.49505	.00632	L.66667	.51307	.48065	L-.01420
#3	L.05690	.49899	.01124	L.67561	.50343	.46565	L.02750
#4	L.03816	.49899	.00139	L.67203	.48624	.48092	L.02744

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	2.2477	.01928	.02135	1.0174	.00016	1.9375	.48957
SDev	.0471	.00814	.01059	.0060	.00038	.0911	.00467
%RSD	2.0972	42.235	49.580	.59327	230.94	4.6998	.95469

#1	2.2897	.03078	.00808	1.0116	-.00016	1.8121	.48310
#2	2.2624	.01353	.03249	1.0162	.00049	2.0104	.49295

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#3	2.2584	.01932	.02652	1.0160	.00049	1.9988	.49305
#4	2.1801	.01348	.01831	1.0259	-.00016	1.9286	.48920

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	.47283
SDev	.00387
%RSD	.81890

#1	.46816
#2	.47183
#3	.47395
#4	.47740

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: CCV2-2

Operator: MTW

Run Time: 08/22/00 09:06:51

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0087	50.317	5.1946	5.0632	5.0164	5.0814	51.684
SDev	.0015	.197	.0313	.0364	.0298	.0181	.119
%RSD	.15032	.39218	.60185	.71951	.59431	.35529	.23013
#1	1.0094	50.246	5.2126	5.0293	5.0135	5.0841	51.695
#2	1.0095	50.413	5.2263	5.0991	5.0322	5.0947	51.832
#3	1.0065	50.078	5.1836	5.0345	4.9758	5.0552	51.668
#4	1.0095	50.531	5.1561	5.0901	5.0440	5.0917	51.542
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	5.1324	5.0726	5.0562	4.9923	52.514	50.305	4.9653
SDev	.0223	.0202	.0126	.0265	.114	.383	.0343
%RSD	.43365	.39738	.24944	.53012	.21711	.76053	.69022
#1	5.1081	5.0681	5.0624	4.9900	52.525	50.220	4.9681
#2	5.1408	5.0987	5.0709	5.0042	52.638	50.361	4.9709
#3	5.1590	5.0499	5.0454	4.9565	52.361	49.856	4.9197
#4	5.1216	5.0736	5.0459	5.0183	52.531	50.782	5.0027
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	50.483	5.0671	5.0663	50.001	5.0821	5.0815	5.1514
SDev	.143	.0097	.0130	.320	.0176	.0252	.0514
%RSD	.28372	.19241	.25589	.64064	.34564	.49626	.99830
#1	50.434	5.0659	5.0528	49.948	5.0743	5.0815	5.1958
#2	50.581	5.0787	5.0774	50.116	5.1084	5.1124	5.1019
#3	50.303	5.0550	5.0577	49.589	5.0716	5.0506	5.1122
#4	50.613	5.0689	5.0774	50.350	5.0743	5.0814	5.1958
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	5.2774	5.1289	5.1896	5.0313	5.0183	10.191	5.0623
SDev	.0557	.0378	.0403	.0261	.0163	.112	.0141
%RSD	1.0545	.73638	.77689	.51955	.32568	1.0993	.27946
#1	5.3127	5.1159	5.1662	5.0305	5.0213	10.171	5.0612
#2	5.3326	5.1103	5.2500	5.0440	5.0282	10.053	5.0751

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#3	5.2535	5.1851	5.1720	4.9952	4.9944	10.219	5.0430
#4	5.2109	5.1044	5.1703	5.0554	5.0295	10.322	5.0701
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	4.9880
SDev	.0157
%RSD	.31566

#1	4.9952
#2	4.9988
#3	4.9933
#4	4.9646

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB2

Operator: MTW

Run Time: 08/22/00 09:09:59

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00071	.01026	-.01842	.01855	.00018	.00029	.00359
SDev	.00082	.00666	.04197	.00366	.00047	.00007	.00078
%RSD	115.39	64.862	227.89	19.737	267.36	25.660	21.882
#1	.00143	.00318	.03568	.01362	.00021	.00022	.00309
#2	.00000	.01029	-.00684	.01905	.00050	.00022	.00476
#3	.00000	.00842	-.04542	.02248	-.00050	.00035	.00318
#4	.00143	.01917	-.05708	.01906	.00050	.00035	.00332
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	.00316	.00069	.00306	.00066	.00000	.61985	-.00029
SDev	.00317	.00239	.00130	.00044	.00064	.23891	.00042
%RSD	100.26	346.86	42.598	66.827	223830.	38.544	145.97
#1	.00344	.00104	.00252	.00088	-.00050	.47522	-.00028
#2	-.00141	.00384	.00412	.00089	-.00050	.80580	-.00039
#3	H.00524	-.00176	.00146	-.00000	.00016	.35951	.00027
#4	H.00538	-.00036	.00412	.00088	.00083	.83886	-.00075
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	.00536	.00049	.00369	.00291	-.00369	.00573	.01558
SDev	.00987	.00057	.00493	.00533	.00360	.03608	.02489
%RSD	184.28	115.41	133.33	183.33	97.601	630.10	159.70
#1	-.00736	-.00000	-.00369	-.00201	.00166	-.01700	.03133
#2	.01674	.00099	.00616	.00469	-.00610	-.01698	-.01053
#3	.00602	.00000	.00616	-.00067	-.00484	-.00189	.04168
#4	.00602	.00099	.00616	.00961	-.00548	.05878	-.00014
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	.00588	-.01158	.00264	-.00012	.00008	-.02628	.00008
SDev	.03524	.03004	.00976	.00037	.00062	.05984	.00010
%RSD	599.72	259.41	369.64	309.86	757.19	227.72	123.86
#1	-.00882	.00724	.00990	-.00038	.00049	-.08758	-.00007
#2	-.03624	.00145	-.01084	-.00049	.00016	-.05257	.00013

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#3	.02645	.00145	.00174	.00014	-.00082	.05256	.00012
#4	.04212	-.05646	.00976	.00025	.00049	-.01752	.00013

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	.00181
%RSD	270.92

#1	.00020
#2	.00255
#3	-.00163
#4	.00154

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHKQ4T

Operator: MTW

Run Time: 08/22/00 09:13:06

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	-.00166	.06241	.42035	.43256	.82330	.00018	H892.56
SDev	.00073	.00336	.08012	.00000	.00271	.00001	.83
%RSD	43.688	5.3815	19.060	.00029	.32866	3.8139	.09351
#1	-.00275	.06204	.45515	.43256	.82252	.00019	H892.62
#2	-.00130	.06025	.51683	.43256	.81980	.00017	H893.02
#3	-.00130	.06727	.36239	.43256	.82553	.00017	H893.22
#4	-.00130	.06009	.34701	.43256	.82533	.00017	H891.36
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	-.00214	.00421	.00052	.05470	.39658	10.798	.00878
SDev	.00227	.00181	.00067	.00072	.00191	.209	.00026
%RSD	106.19	42.888	127.83	1.3150	.48215	1.9353	2.9873
#1	-.00124	.00212	.00039	.05469	.39408	10.632	.00861
#2	L-.00542	.00632	.00145	.05382	.39874	11.087	.00861
#3	-.00020	.00351	.00039	.05470	.39675	10.814	.00917
#4	-.00171	.00491	-.00014	.05558	.39674	10.657	.00872
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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.5157	.33210	.00252	186.51	.00133	.01709	.02619
SDev	.0197	.00057	.00739	.66	.00519	.02354	.02623
%RSD	.30200	.17097	292.95	.35178	390.38	137.74	100.16
#1	6.5318	.33160	-.00364	186.55	.00438	.03597	.00010
#2	6.4889	.33259	-.00363	185.62	.00706	.02852	.02112
#3	6.5291	.33259	.00622	186.67	-.00328	.02085	.02089
#4	6.5130	.33161	.01114	187.20	-.00285	-.01698	.06266
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	-.00385	H29.018	.04097	.47362	L-.05398	-.01115	.01833
SDev	.02499	.014	.01653	.00112	.00016	.10330	.00252
%RSD	648.61	.04747	40.355	.23564	.30349	926.76	13.746
#1	-.00778	H29.027	.05112	.47342	L-.05389	-.05487	.01456
#2	.03141	H29.027	.01629	.47212	L-.05389	-.06666	.01943

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#3	-.01169	H29.021	.04711	.47447	L-.05389	.14358	.01962
#4	-.02736	H28.998	.04936	.47447	L-.05422	-.06663	.01972

Errors	LC Pass	LC High	LC Pass	LC Pass	LC Low	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	.03257
SDev	.00218
%RSD	6.6876

#1	.03026
#2	.03369
#3	.03504
#4	.03131

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHKQ4P5T Operator: MTW
 Run Time: 08/22/00 09:16:19
 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	-.00140	.01383	.10970	.06628	.16877	.00011	186.25
SDev	.00233	.00637	.05048	.00230	.00658	.00012	7.21
%RSD	166.81	46.042	46.013	3.4736	3.8971	106.56	3.8707

#1	-.00425	.01378	.13189	.06548	.17671	-.00004	194.07
#2	-.00140	.01742	.14730	.06407	.17098	.00008	189.54
#3	.00146	.01921	.03536	.06949	.16595	.00021	184.03
#4	-.00140	.00490	.12425	.06606	.16143	.00021	177.36

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00011	.00273	-.00067	.01125	.08151	2.4443	.00011
SDev	.00190	.00209	.00150	.00085	.00345	.1561	.00084
%RSD	1781.4	76.763	225.45	7.5126	4.2359	6.3879	762.77

#1	-.00205	-.00041	-.00279	.01059	.08400	2.2273	-.00075
#2	-.00078	.00377	-.00067	.01147	.08401	2.4339	-.00028
#3	-.00005	.00377	.00040	.01235	.08135	2.5496	.00027
#4	.00246	.00377	.00040	.01059	.07668	2.5662	.00121

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	1.3550	.07085	.00124	36.992	.00742	.00954	.01054
SDev	.0556	.00311	.00000	1.470	.00567	.03126	.00854
%RSD	4.1025	4.3918	.04152	3.9732	76.434	327.49	81.084

#1	1.4092	.07380	.00124	38.814	.01480	.02842	.01061
#2	1.3931	.07282	.00124	37.450	.00342	-.01700	.00004
#3	1.3262	.06986	.00124	36.270	.00254	.04371	.01054
#4	1.2914	.06691	.00124	35.433	.00891	-.01696	.02096

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	-.03896	5.8650	.01038	.09743	-.01147	.02286	.00490
SDev	.03436	.2261	.01604	.00385	.00068	.04813	.00000
%RSD	88.181	3.8542	154.53	3.9513	5.9476	210.60	.06061

#1	-.05169	6.1169	.01192	.10204	-.01229	.02871	.00489
#2	-.06736	5.9663	.02009	.09891	-.01163	.02867	.00490

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#3	.01099	5.7810	-.01274	.09551	-.01065	.07539	.00490
#4	-.04779	5.5957	.02224	.09327	-.01130	-.04135	.00490
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00732
SDev	.00130
%RSD	17.733

#1	.00803
#2	.00752
#3	.00543
#4	.00828

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHKQ4ST Operator: MTW
Run Time: 08/22/00 09:19:40
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	.90487	.05574	5.3692	.41451	38.658	.00018	H809.10
SDev	.00243	.00237	.0073	.00327	.074	.00001	1.75
%RSD	.26876	4.2473	.13675	.78967	.19171	3.4066	.21656

#1	.90237	.05661	5.3644	.41196	38.624	.00018	H806.77
#2	.90807	.05852	5.3683	.41194	38.734	.00019	H811.02
#3	.90522	.05301	5.3799	.41537	38.571	.00019	H809.41
#4	.90381	.05481	5.3643	.41879	38.703	.00017	H809.18

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
Avg	.95256	.00455	4.5387	.04874	.34984	9.6738	.00794
SDev	.00444	.00236	.0119	.00132	.00275	.2892	.00072
%RSD	.46599	51.923	.26187	2.7163	.78493	2.9898	9.1062

#1	.95437	.00421	4.5235	.04764	.35283	9.3762	.00704
#2	.95173	.00556	4.5522	.05029	.34751	10.046	.00881
#3	.95730	.00144	4.5374	.04764	.34750	9.5333	.00787
#4	.94684	.00698	4.5416	.04941	.35150	9.7399	.00804

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.9326	.29963	.00375	169.33	.01394	3.8309	.04910
SDev	.0380	.00057	.00493	.40	.00500	.0520	.01568
%RSD	.63979	.18919	131.48	.23895	35.823	1.3587	31.941

#1	5.8864	.29914	.00621	169.01	.01777	3.8100	.05713
#2	5.9721	.30011	-.00364	169.69	.00687	3.8480	.05678
#3	5.9185	.29913	.00621	168.95	.01398	3.7720	.02558
#4	5.9534	.30012	.00621	169.67	.01715	3.8936	.05692

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	.97154	H26.352	.02512	.42527	-.04726	.00961	.01545
SDev	.02966	.096	.01603	.00081	.00041	.03878	.00235
%RSD	3.0528	.36438	63.815	.18966	.87231	403.65	15.202

#1	.95196	H26.218	.00204	.42473	-.04669	-.01962	.01516
#2	1.0146	H26.432	.03492	.42614	-.04734	.01548	.01381

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#3	.96761	H26.351	.02655	.42446	-.04767	.06221	.01397
#4	.95195	H26.409	.03697	.42577	-.04734	-.01964	.01886
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	.03184
SDev	.00107
%RSD	3.3593

#1	.03080
#2	.03291
#3	.03104
#4	.03259

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHKQ4DT

Operator: MTW

Run Time: 08/22/00 09:22:53

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	.92557	.05888	5.4608	.41114	48.932	.00015	H820.67
SDev	.00215	.00594	.0240	.00171	.317	.00006	2.53
%RSD	.23181	10.082	.43898	.41531	.64688	41.007	.30797
#1	.92807	.05488	5.4493	.40858	48.951	.00019	H819.50
#2	.92666	.05477	5.4955	.41199	49.215	.00017	H823.59
#3	.92378	.05848	5.4416	.41199	49.077	.00019	H817.83
#4	.92378	.06741	5.4569	.41200	48.486	.00006	H821.78
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	.96405	.00491	4.6192	.04941	.37413	9.9134	.00858
SDev	.00568	.00068	.0142	.00072	.00144	.1366	.00096
%RSD	.58887	13.804	.30716	1.4561	.38495	1.3783	11.131
#1	.97071	.00453	4.6171	.05029	.37547	10.004	.00806
#2	.96173	.00442	4.6395	.04941	.37213	9.7233	.00994
#3	.95754	.00590	4.6065	.04853	.37413	9.9052	.00779
#4	.96620	.00478	4.6139	.04941	.37480	10.021	.00853
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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	6.0230	.30357	.00252	172.60	.00719	4.7186	.03533
SDev	.0460	.00057	.00246	1.44	.00854	.0226	.02255
%RSD	.76318	.18723	97.771	.83521	118.82	.47980	63.834
#1	5.9828	.30406	.00129	172.50	.01311	4.6902	.05635
#2	6.0846	.30406	.00621	173.76	-.00492	4.7281	.03506
#3	6.0310	.30307	.00129	173.53	.00726	4.7433	.00411
#4	5.9935	.30307	.00129	170.60	.01331	4.7129	.04580
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	1.0970	H26.684	.02455	.43745	-.04759	.05317	.01528
SDev	.0413	.054	.02565	.00258	.00068	.04707	.00251
%RSD	3.7681	.20098	104.50	.58893	1.4193	88.538	16.437
#1	1.0460	H26.670	-.00206	.43763	-.04701	.02689	.01404
#2	1.1244	H26.762	.01839	.43946	-.04832	.01522	.01905

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#3	1.1361	H26.641	.02235	.43894	-.04800	.05025	.01401
#4	1.0813	H26.664	.05952	.43376	-.04701	.12031	.01403

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	.03152
SDev	.00170
%RSD	5.4096

#1	.03180
#2	.02956
#3	.03106
#4	.03367

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-3

Operator: MTW

Run Time: 08/22/00 09:26:06

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	1.0051	50.149	5.0901	5.0279	4.9928	5.0640	51.721
SDev	.0012	.063	.0884	.0099	.0108	.0039	.095
%RSD	.11755	.12544	1.7370	.19775	.21688	.07619	.18382
#1	1.0051	50.114	4.9898	5.0141	4.9855	5.0664	51.833
#2	1.0036	50.182	5.0629	5.0270	5.0002	5.0636	51.617
#3	1.0065	50.080	5.1060	5.0351	4.9817	5.0587	51.761
#4	1.0051	50.218	5.2015	5.0352	5.0038	5.0673	51.672
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	5.1411	5.0754	5.0479	4.9713	52.439	49.929	4.9320
SDev	.0179	.0142	.0086	.0082	.049	.025	.0076
%RSD	.34746	.28009	.17089	.16532	.09315	.04943	.15438
#1	5.1581	5.0834	5.0465	4.9627	52.482	49.956	4.9273
#2	5.1165	5.0541	5.0363	4.9724	52.378	49.898	4.9298
#3	5.1490	5.0806	5.0534	4.9680	52.422	49.923	4.9277
#4	5.1408	5.0834	5.0555	4.9821	52.475	49.939	4.9433
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	50.412	5.0622	5.0639	50.108	5.0727	5.0797	5.0888
SDev	.050	.0052	.0352	.084	.0415	.0211	.0051
%RSD	.09871	.10243	.69416	.16678	.81800	.41501	.10064
#1	50.394	5.0649	5.1070	50.036	5.1055	5.1046	5.0916
#2	50.361	5.0550	5.0232	50.159	5.0325	5.0658	5.0914
#3	50.479	5.0669	5.0725	50.038	5.1114	5.0893	5.0812
#4	50.415	5.0620	5.0528	50.199	5.0415	5.0590	5.0912
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	5.1597	5.1332	5.1472	5.0211	5.0028	10.186	5.0550
SDev	.0337	.0288	.0415	.0071	.0025	.262	.0055
%RSD	.65376	.56040	.80656	.14142	.05058	2.5747	.10785
#1	5.1441	5.1101	5.1329	5.0170	5.0026	10.556	5.0610
#2	5.2066	5.1158	5.1287	5.0258	5.0052	10.032	5.0520

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#3	5.1597	5.1737	5.2089	5.0133	4.9993	10.183	5.0579
#4	5.1285	5.1331	5.1185	5.0282	5.0039	9.9728	5.0490
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 4.9647
SDev .0135
%RSD .27278

#1 4.9616
#2 4.9562
#3 4.9847
#4 4.9564

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB3

Operator: MTW

Run Time: 08/22/00 09:29:13

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	-.00036	-.00411	.02126	.00327	.00005	.00026	.00061
SDev	.00137	.00329	.04436	.00463	.00010	.00012	.00380
%RSD	383.87	80.180	208.66	141.54	200.00	47.871	619.18

#1	-.00143	-.00768	-.02985	.00095	.00000	.00010	-.00497
#2	.00000	-.00051	.07430	.00096	.00000	.00022	.00351
#3	-.00143	-.00596	.00487	.01022	.00021	.00035	.00166
#4	.00143	-.00228	.03571	.00096	.00000	.00035	.00226

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	.00174	-.00105	.00053	-.00044	.00017	.24794	-.00032
SDev	.00172	.00180	.00201	.00114	.00224	.32702	.00131
%RSD	98.870	170.99	375.95	258.04	1354.2	131.89	405.57

#1	.00026	-.00174	-.00119	-.00088	-.00250	-.01240	-.00224
#2	.00300	-.00036	.00253	-.00000	-.00050	.60745	.00038
#3	.00025	-.00314	-.00119	-.00177	.00083	-.04546	-.00009
#4	.00344	.00104	.00200	.00088	.00283	.44216	.00065

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	-.00870	.00000	.00739	.00302	.00340	-.00191	.01306
SDev	.01126	.00000	.00246	.00660	.00435	.03670	.01779
%RSD	129.33	44.195	33.334	218.86	127.96	1926.4	136.30

#1	-.00736	.00000	.00616	.00425	.00746	-.03230	-.01039
#2	.00602	.00000	.00616	-.00648	.00062	-.01706	.01048
#3	-.02075	.00000	.01108	.00872	-.00122	-.00954	.02084
#4	-.01272	.00000	.00616	.00559	.00673	.05129	.03130

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	.01371	-.02751	-.00816	-.00020	-.00025	.00001	.00014
SDev	.03610	.03343	.02443	.00034	.00049	.09073	.00005
%RSD	263.25	121.55	299.47	167.99	200.00	1635700.	31.586

#1	.06562	.00145	-.00672	-.00049	-.00082	.02923	.00012
#2	-.01273	.00145	-.03745	-.00049	.00016	.04088	.00012

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#3	.01078	-.05646	-.01069	.00003	-.00049	.06424	.00021
#4	-.00881	-.05646	.02223	.00014	.00016	-.13433	.00012
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 -.00040
SDev .00099
%RSD 249.90

#1 -.00035
#2 .00099
#3 -.00109
#4 -.00113

Errors LC Pass
High .02000
Low -.02000

Method: QUANMET Sample Name: DJ32CBE Operator: MTW
 Run Time: 08/22/00 09:45:41
 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	.00214	.00805	-.01262	.01243	-.00002	.00016	.02108
SDev	.00184	.00472	.06015	.01419	.00027	.00007	.00251
%RSD	85.830	58.610	476.51	114.15	1204.3	47.034	11.911
#1	.00429	.01210	-.02616	.03174	-.00030	.00010	.02245
#2	.00001	.00312	-.08786	-.00245	-.00021	.00009	.01833
#3	.00286	.01208	.05489	.01021	.00021	.00022	.02384
#4	.00143	.00491	.00864	.01023	.00021	.00022	.01972
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	.00125	.00104	.00372	.00022	.00732	.47522	-.00014
SDev	.00250	.00302	.00191	.00084	.00100	.13309	.00080
%RSD	200.26	289.32	51.342	380.12	13.659	28.007	582.50
#1	.00284	.00243	.00465	.00000	.00882	.61572	.00010
#2	.00222	.00104	.00093	-.00088	.00682	.30992	-.00048
#3	-.00248	.00385	.00412	.00089	.00682	.43389	.00085
#4	.00242	-.00315	.00518	.00088	.00682	.54133	-.00103
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	.01205	.00025	.00123	.00469	-.00048	-.01515	.00258
SDev	.00594	.00049	.00402	.00494	.00275	.01905	.01562
%RSD	49.275	198.20	326.31	105.19	574.92	125.78	605.74
#1	.01674	.00099	.00123	.00380	-.00363	.00576	.01039
#2	.00335	.00000	.00123	.00067	.00239	-.01706	-.01041
#3	.01406	.00000	.00616	.01184	-.00184	-.00936	.02080
#4	.01406	.00000	-.00369	.00246	.00116	-.03993	-.01047
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	-.03524	.00580	-.00204	-.00022	.00008	-.00008	.00034
SDev	.04517	.00555	.00742	.00013	.00049	.03090	.00061
%RSD	128.17	95.701	363.48	57.252	600.00	35421.	181.79
#1	-.02838	.00145	-.00868	-.00012	.00082	-.01762	.00003
#2	-.03230	.00725	-.00672	-.00012	-.00016	-.02928	.00124

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#3	.01471	.00145	.00780	-.00038	-.00016	.04077	.00013
#4	-.09499	.01303	-.00056	-.00027	-.00016	.00579	-.00006
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	.00238
SDev	.00099
%RSD	41.635

#1	.00154
#2	.00308
#3	.00339
#4	.00152

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DJ32CCE Operator: MTW
Run Time: 08/22/00 09:48:49
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	.04586	1.9646	1.9851	.97396	1.9868	.05020	50.312
SDev	.00137	.0029	.0519	.00584	.0089	.00030	.290
%RSD	2.9881	.14616	2.6167	.60005	.45022	.58979	.57655
#1	.04548	1.9646	2.0518	.96626	1.9748	.04979	49.989
#2	.04693	1.9611	1.9282	.97653	1.9931	.05042	50.496
#3	.04408	1.9681	1.9667	.97994	1.9851	.05016	50.154
#4	.04693	1.9645	1.9938	.97311	1.9941	.05042	50.611
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04596	.49669	.19995	.24673	1.0561	48.491	.97562
SDev	.00303	.00321	.00286	.00085	.0065	.378	.00499
%RSD	6.6000	.64574	1.4287	.34339	.61252	.77936	.51157
#1	.04303	.49392	.19929	.24563	1.0487	48.113	.97114
#2	.05015	.49946	.19664	.24740	1.0627	48.939	.98070
#3	.04476	.49391	.20035	.24651	1.0527	48.253	.97910
#4	.04591	.49947	.20354	.24740	1.0601	48.658	.97153
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.349	.49808	1.0025	49.028	.49557	.50995	.51689
SDev	.243	.00148	.0062	.180	.00714	.02269	.00847
%RSD	.49154	.29670	.61824	.36789	1.4416	4.4493	1.6396
#1	49.020	.49636	1.0013	48.776	.48735	.51936	.51685
#2	49.547	.49931	.99634	49.199	.49269	.50433	.51690
#3	49.314	.49734	1.0013	49.096	.49831	.48143	.52729
#4	49.515	.49932	1.0111	49.043	.50392	.53467	.50654
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.9842	9.9120	2.0233	1.0022	.98000	2.0134	.49635
SDev	.0569	.0452	.0303	.0042	.00426	.0293	.00246
%RSD	2.8667	.45630	1.4954	.42063	.43449	1.4538	.49515
#1	1.9136	9.8468	2.0099	.99653	.97451	2.0456	.49266
#2	2.0469	9.9453	2.0428	1.0059	.98303	2.0104	.49744

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#3	1.9685	9.9164	2.0531	1.0014	.97877	2.0222	.49754
#4	2.0077	9.9395	1.9873	1.0048	.98368	1.9754	.49774

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	.48610
SDev	.00572
%RSD	1.1769

#1	.47821
#2	.49060
#3	.48555
#4	.49002

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DHXN9E

Operator: MTW

Run Time: 08/22/00 09:51:57

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	-.00005	2.2362	-.00746	.12357	.07114	-.00003	31.186
SDev	.00214	.0030	.02738	.00153	.00048	.00006	.200
%RSD	4278.4	.13608	367.09	1.2350	.67627	201.74	.64194
#1	.00174	2.2376	-.01810	.12549	.07077	.00006	31.460
#2	-.00254	2.2357	.01280	.12407	.07127	-.00007	31.152
#3	.00173	2.2394	-.04124	.12207	.07077	-.00006	31.154
#4	-.00112	2.2323	.01671	.12267	.07177	-.00006	30.978
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	.00186	.00136	.00266	.12541	.01297	34.050	.04441
SDev	.00197	.00133	.00210	.00085	.00100	.103	.00057
%RSD	106.22	98.072	79.031	.67366	7.6993	.30218	1.2867
#1	.00185	.00241	.00571	.12608	.01414	34.121	.04360
#2	.00462	.00240	.00199	.12608	.01214	34.013	.04442
#3	.00081	.00101	.00093	.12431	.01347	33.922	.04481
#4	.00015	-.00038	.00199	.12519	.01214	34.145	.04481
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	.11983	.00098	.10713	38.743	.04550	-.01633	.12011
SDev	.01125	.00000	.00636	.299	.00540	.00381	.01352
%RSD	9.3926	.21630	5.9355	.77127	11.862	23.312	11.256
#1	.13188	.00098	.10959	38.354	.04998	-.01822	.10444
#2	.12385	.00098	.11452	38.733	.04341	-.01062	.11480
#3	.11849	.00098	.10467	38.805	.04979	-.01822	.13583
#4	.10510	.00098	.09974	39.079	.03882	-.01827	.12536
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	-.00192	3.7983	.00622	.67257	-.00197	.01111	.05997
SDev	.02202	.0488	.01633	.00260	.00042	.02781	.00082
%RSD	1144.0	1.2847	262.59	.38631	21.517	250.36	1.3640
#1	.00298	3.8533	.00820	.66930	-.00147	.00525	.06063
#2	-.02445	3.7491	.02263	.67180	-.00180	-.00641	.06072

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#3	.02648	3.7664	.01040	.67400	-.00246	-.00640	.05931
#4	-.01270	3.8243	-.01635	.67520	-.00213	.05201	.05922

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	.00403
SDev	.00073
%RSD	18.166

#1	.00446
#2	.00448
#3	.00423
#4	.00294

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHXN9P5E Operator: MTW
 Run Time: 08/22/00 09:55:05
 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	.00007	.45488	-.03575	.02037	.01417	.00002	6.3897
SDev	.00309	.00494	.02325	.00709	.00012	.00006	.0290
%RSD	4115.5	1.0863	65.039	34.828	.84285	251.38	.45333
#1	.00436	.45707	-.04929	.01806	.01428	.00006	6.4165
#2	-.00278	.45173	-.06082	.01806	.01407	.00006	6.3559
#3	.00007	.44998	-.02219	.03073	.01428	-.00007	6.3755
#4	-.00135	.46075	-.01072	.01463	.01407	.00006	6.4110
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	.00073	-.00036	.00213	.02579	.00083	7.1241	.00873
SDev	.00228	.00255	.00051	.00044	.00144	.2779	.00029
%RSD	313.69	715.32	23.973	1.7157	173.48	3.9014	3.3223
#1	-.00224	.00105	.00253	.02557	.00283	7.3927	.00889
#2	.00320	-.00315	.00252	.02556	.00083	6.8720	.00870
#3	.00148	-.00175	.00146	.02557	.00016	6.8968	.00900
#4	.00046	.00244	.00199	.02645	-.00050	7.3349	.00834
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	.01874	.00074	.02340	7.7024	.00987	.00165	.02609
SDev	.01567	.00049	.00493	.0371	.00951	.02523	.01800
%RSD	83.605	66.838	21.053	.48170	96.350	1531.7	68.999
#1	.03816	.00099	.03078	7.6538	.00201	.03586	.05208
#2	.01406	-.00000	.02093	7.6941	.01343	-.01740	.02091
#3	.00067	.00098	.02093	7.7370	.00234	-.01736	.02081
#4	.02209	.00098	.02093	7.7249	.02172	.00549	.01055
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	.01176	.77764	.00783	.13503	-.00074	-.00887	.01478
SDev	.04402	.00001	.00376	.00016	.00041	.03485	.00065
%RSD	374.47	.00106	48.027	.12235	55.925	393.14	4.3870
#1	.03037	.77765	.01000	.13487	-.00016	.00570	.01523
#2	-.00489	.77765	.00370	.13491	-.00115	-.05264	.01504

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#3	-.04016	.77763	.00575	.13517	-.00082	-.01760	.01382
#4	.06170	.77765	.01187	.13517	-.00082	.02908	.01503
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	.00156
SDev	.00056
%RSD	35.810

#1	.00147
#2	.00221
#3	.00170
#4	.00086

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHXN9SE Operator: MTW
 Run Time: 08/22/00 09:58:14
 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	.04364	4.1568	1.9723	1.1261	2.0342	.04983	80.983
SDev	.00143	.0114	.0619	.0033	.0104	.00024	.215
%RSD	3.2649	.27519	3.1364	.29101	.51021	.48496	.26586
#1	.04433	4.1582	2.0023	1.1270	2.0275	.04965	81.150
#2	.04436	4.1493	1.8826	1.1236	2.0313	.04989	81.140
#3	.04436	4.1474	2.0216	1.1236	2.0285	.04963	80.951
#4	.04150	4.1725	1.9828	1.1304	2.0496	.05014	80.690
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	.04794	.49008	.19982	.36751	1.0530	82.256	1.0179
SDev	.00248	.00563	.00044	.00232	.0029	.136	.0090
%RSD	5.1685	1.1485	.21788	.63025	.28000	.16558	.88624
#1	.05098	.48973	.19982	.36729	1.0540	82.328	1.0099
#2	.04848	.49811	.20035	.36642	1.0566	82.196	1.0163
#3	.04503	.48695	.19929	.36552	1.0513	82.097	1.0144
#4	.04729	.48553	.19982	.37081	1.0500	82.403	1.0308
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	48.851	.49314	1.0739	87.330	.54296	.49339	.61128
SDev	.137	.00124	.0074	.664	.02024	.01438	.01689
%RSD	.27981	.25133	.68801	.76054	3.7272	2.9145	2.7635
#1	48.766	.49339	1.0801	86.790	.52973	.47254	.63189
#2	48.787	.49438	1.0801	87.124	.56732	.50310	.61151
#3	48.795	.49142	1.0702	87.106	.52328	.50279	.61118
#4	49.055	.49338	1.0653	88.299	.55149	.49512	.59052
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	2.0135	13.345	1.9673	1.6505	.95002	1.9255	.55136
SDev	.0418	.029	.0313	.0077	.00170	.0970	.00236
%RSD	2.0740	.21530	1.5914	.46886	.17892	5.0364	.42830
#1	2.0116	13.386	2.0126	1.6439	.94896	2.0569	.54782
#2	1.9568	13.322	1.9591	1.6493	.94928	1.8465	.55269

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#3	2.0547	13.345	1.9406	1.6473	.94928	1.8583	.55250
#4	2.0312	13.328	1.9569	1.6617	.95256	1.9401	.55241
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	.48319
SDev	.00396
%RSD	.82051

#1	.48093
#2	.48897
#3	.48253
#4	.48032

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHXN9DE Operator: MTW
Run Time: 08/22/00 10:01:22
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	.04433	4.1688	1.9588	1.1184	2.0197	.04945	81.464
SDev	.00117	.0039	.0380	.0194	.0070	.00007	.087
%RSD	2.6312	.09309	1.9394	1.7381	.34435	.14937	.10653
#1	.04290	4.1688	1.9289	1.1270	2.0213	.04939	81.389
#2	.04576	4.1742	1.9790	1.1270	2.0248	.04939	81.485
#3	.04433	4.1651	2.0022	1.0894	2.0233	.04952	81.404
#4	.04433	4.1671	1.9250	1.1304	2.0095	.04952	81.578
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	.04660	.48868	.19955	.36641	1.0487	82.634	1.0101
SDev	.00560	.00368	.00219	.00102	.0017	.180	.0091
%RSD	12.028	.75239	1.0987	.27855	.16426	.21805	.90285
#1	.04439	.48555	.19770	.36552	1.0467	82.725	1.0181
#2	.04166	.49393	.20088	.36729	1.0493	82.766	1.0151
#3	.05461	.48691	.19769	.36552	1.0507	82.675	1.0099
#4	.04574	.48835	.20195	.36729	1.0480	82.369	.99742
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	48.973	.49167	1.0912	87.840	.54005	.49146	.61891
SDev	.094	.00049	.0102	.336	.01061	.00445	.03671
%RSD	.19282	.10043	.93060	.38252	1.9644	.90648	5.9310
#1	48.953	.49142	1.0850	87.940	.55064	.48764	.66347
#2	49.071	.49241	1.0998	88.041	.54665	.49541	.63205
#3	49.017	.49143	1.0998	88.037	.52731	.48756	.57957
#4	48.851	.49142	1.0801	87.341	.53561	.49522	.60056
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	1.9871	13.457	1.9874	1.6477	.95707	1.9635	.54803
SDev	.0394	.028	.0275	.0049	.00269	.0890	.00019
%RSD	1.9807	.20900	1.3854	.29646	.28142	4.5310	.03557
#1	1.9606	13.415	1.9737	1.6487	.95747	2.0803	.54791
#2	1.9528	13.473	1.9592	1.6515	.95944	1.8700	.54820

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#3	2.0390	13.473	1.9939	1.6499	.95813	1.9752	.54819
#4	1.9959	13.467	2.0227	1.6405	.95322	1.9285	.54782
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	.48156
SDev	.00419
%RSD	.86937

#1	.47560
#2	.48483
#3	.48172
#4	.48409

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHXNDE

Operator: MTW

Run Time: 08/22/00 10:04:30

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BIE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00044	1.4065	.01285	.14957	.07639	.00002	26.063
SDev	.00184	.0121	.03474	.02066	.00057	.00007	.064
%RSD	415.31	.85774	270.38	13.813	.74926	357.76	.24419

#1	-.00117	1.4222	-.01908	.15969	.07709	-.00004	26.129
#2	.00026	1.3954	.00044	.16169	.07609	.00009	26.023
#3	-.00257	1.3990	.06208	.15827	.07659	.00008	26.104
#4	.00171	1.4096	.00796	.11865	.07579	-.00005	25.996

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00016	.00066	.00252	.08288	.01314	23.691	.03046
SDev	.00321	.00209	.00168	.00000	.00128	.213	.00024
%RSD	1969.9	315.47	66.864	.00219	9.7102	.89804	.77559

#1	.00185	-.00039	.00305	.08287	.01414	23.633	.03046
#2	.00294	.00240	.00465	.08288	.01281	23.963	.03046
#3	-.00126	.00241	.00092	.08288	.01148	23.715	.03018
#4	-.00418	-.00177	.00145	.08287	.01414	23.451	.03076

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	.13523	.00123	.07635	26.742	.03630	-.01590	.08101
SDev	.00457	.00049	.00472	.178	.00472	.00956	.00522
%RSD	3.3818	39.949	6.1769	.66586	13.000	60.121	6.4484

#1	.12920	.00197	.07512	26.957	.03922	-.01783	.08364
#2	.13991	.00099	.08004	26.637	.03120	-.02533	.08353
#3	.13456	.00098	.07019	26.812	.03353	-.00257	.08369
#4	.13724	.00099	.08004	26.560	.04127	-.01788	.07317

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	.03236	3.5781	.00604	.53063	-.00164	-.00051	.05267
SDev	.02425	.0058	.01184	.00325	.00042	.03502	.00279
%RSD	74.961	.16125	196.15	.61295	25.820	6359.2	5.2888

#1	.01081	3.5810	.00399	.53468	-.00147	-.04136	.05021
#2	.06566	3.5810	.00810	.52841	-.00180	-.01802	.05031

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#3	.03431	3.5811	-.00833	.53180	-.00213	.02867	.05499
#4	.01865	3.5695	.02038	.52763	-.00115	.02867	.05518
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	.00368
SDev	.00078
%RSD	21.090

#1	.00465
#2	.00336
#3	.00283
#4	.00389

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHXNFE

Operator: MTW

Run Time: 08/22/00 10:07:38

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	.00063	1.7115	-.01276	.12491	.09717	.00006	21.797
SDev	.00071	.0040	.02564	.00199	.00059	.00007	.099
%RSD	113.61	.23086	200.91	1.5907	.60860	127.70	.45207

#1	.00029	1.7155	.00162	.12753	.09669	-.00005	21.783
#2	.00026	1.7067	-.04454	.12269	.09669	.00009	21.670
#3	.00169	1.7138	-.02144	.12471	.09740	.00009	21.906
#4	.00026	1.7101	.01332	.12471	.09790	.00009	21.830

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00036	.00309	.00465	.09258	.02979	30.383	.03603
SDev	.00137	.00081	.00087	.00072	.00176	.148	.00071
%RSD	379.52	26.022	18.635	.77704	5.9149	.48628	1.9662

#1	.00072	.00239	.00571	.09258	.03012	30.410	.03627
#2	.00215	.00379	.00465	.09170	.02812	30.443	.03608
#3	-.00071	.00379	.00465	.09258	.03212	30.170	.03506
#4	-.00071	.00240	.00359	.09346	.02879	30.509	.03674

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	.12586	.00221	.08251	34.057	.03368	-.01400	.17755
SDev	.00507	.00049	.00492	.100	.00547	.02275	.01481
%RSD	4.0276	22.171	5.9697	.29298	16.251	162.56	8.3434

#1	.12920	.00197	.08004	33.975	.03618	-.02540	.17763
#2	.11849	.00295	.08004	34.071	.03960	-.02534	.18810
#3	.12652	.00197	.08004	33.991	.02692	.02013	.15658
#4	.12920	.00197	.08989	34.193	.03200	-.02538	.18791

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	.01085	3.7012	.00546	.52644	-.00139	-.00361	.05158
SDev	.03017	.0318	.01776	.00148	.00016	.08439	.00241
%RSD	278.04	.86010	325.22	.28127	11.765	2339.4	4.6708

#1	.03044	3.6737	-.00995	.52527	-.00147	.12190	.05519
#2	.03827	3.6736	-.00990	.52527	-.00147	-.05321	.05031

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#3	-.02832	3.7316	.02077	.52684	-.00115	-.05326	.05031
#4	.00301	3.7258	.02092	.52836	-.00147	-.02986	.05050
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	.00864
SDev	.00045
%RSD	5.2262

#1	.00913
#2	.00879
#3	.00805
#4	.00857

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-4

Operator: MTW

Run Time: 08/22/00 10:10:46

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	1.0025	50.101	5.1255	5.0457	5.0056	5.0726	51.630
SDev	.0022	.121	.0650	.0253	.0150	.0123	.169
%RSD	.21799	.24224	1.2688	.50227	.29888	.24320	.32827

#1	1.0037	50.171	5.1516	5.0351	5.0090	5.0793	51.683
#2	1.0050	50.008	5.0297	5.0321	4.9889	5.0622	51.846
#3	1.0006	49.989	5.1461	5.0320	5.0002	5.0622	51.501
#4	1.0008	50.236	5.1745	5.0837	5.0243	5.0866	51.488

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	5.1695	5.0652	5.0344	4.9720	52.315	49.683	4.9343
SDev	.0211	.0080	.0156	.0196	.070	.154	.0396
%RSD	.40850	.15702	.31066	.39397	.13472	.31062	.80176

#1	5.1403	5.0653	5.0454	4.9786	52.381	49.575	4.9422
#2	5.1877	5.0749	5.0496	4.9495	52.328	49.906	4.8902
#3	5.1683	5.0555	5.0172	4.9644	52.215	49.584	4.9206
#4	5.1818	5.0651	5.0252	4.9953	52.335	49.666	4.9843

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	50.490	5.0548	5.0626	50.406	5.0863	5.0833	5.0916
SDev	.120	.0094	.0231	.269	.0202	.0381	.0519
%RSD	.23707	.18592	.45645	.53321	.39701	.74890	1.0187

#1	50.581	5.0570	5.0823	50.483	5.0984	5.0812	5.0499
#2	50.378	5.0668	5.0823	50.111	5.0824	5.1348	5.0599
#3	50.396	5.0452	5.0478	50.292	5.1050	5.0432	5.0921
#4	50.605	5.0501	5.0380	50.739	5.0596	5.0738	5.1646

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	5.1329	5.1331	5.1642	5.0173	4.9870	10.083	5.0476
SDev	.0542	.0106	.0604	.0134	.0087	.145	.0125
%RSD	1.0555	.20724	1.1698	.26761	.17409	1.4347	.24713

#1	5.1752	5.1275	5.1204	5.0230	4.9908	10.289	5.0605
#2	5.1202	5.1447	5.2191	5.0047	4.9859	10.044	5.0495

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#3	5.1748	5.1213	5.1042	5.0080	4.9754	10.046	5.0305
#4	5.0615	5.1389	5.2134	5.0335	4.9957	9.9509	5.0498
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	4.9715
SDev	.0105
%RSD	.21218

#1	4.9781
#2	4.9745
#3	4.9559
#4	4.9776

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB4

Operator: MTW

Run Time: 08/22/00 10:13:54

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	.00143	.01474	-.00205	.00307	.00038	.00048	.00763
SDev	.00165	.01072	.05098	.00758	.00025	.00010	.00393
%RSD	115.40	72.720	2482.8	246.75	66.667	21.773	51.483
#1	.00000	.00307	.06269	-.00387	.00000	.00035	.00323
#2	.00286	.01748	-.05321	-.00045	.00050	.00048	.00652
#3	.00000	.01023	-.03000	.00297	.00050	.00048	.00809
#4	.00286	.02818	.01231	.01364	.00050	.00061	.01268
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	.00068	.00104	.00319	.00088	.00300	.51034	-.00037
SDev	.00278	.00197	.00205	.00102	.00246	.16983	.00065
%RSD	411.63	188.98	64.347	115.40	81.925	33.277	174.49
#1	-.00259	-.00034	.00093	-.00000	.00017	.26860	-.00103
#2	.00093	.00384	.00465	.00177	.00283	.56613	.00019
#3	.00417	-.00036	.00519	.00176	.00283	.66530	.00019
#4	.00019	.00104	.00199	.00000	.00616	.54133	-.00083
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	-.00335	.00049	.00369	.01162	.00384	-.01135	.00781
SDev	.00708	.00057	.00284	.00842	.00436	.01143	.01976
%RSD	211.66	115.13	76.964	72.467	113.68	100.75	252.87
#1	-.00201	.00000	.00616	.00067	.00376	-.01711	-.02091
#2	.00602	.00000	.00123	.01542	.00131	.00580	.01049
#3	-.01004	.00099	.00616	.01006	.01001	-.01706	.02087
#4	-.00736	.00099	.00123	.02034	.00028	-.01703	.02081
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	-.05386	.01882	.00466	.00023	.00041	-.00004	.00008
SDev	.05300	.00819	.02354	.00045	.00056	.04317	.00006
%RSD	98.396	43.514	505.33	193.19	136.63	116870.	70.512
#1	-.08325	.01882	.00350	-.00027	-.00016	.00584	.00012
#2	-.05974	.01303	-.02717	.00040	.00049	-.05261	.00003

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#3	.02253	.01303	.01397	.00003	.00016	-.00586	.00013
#4	-.09499	.03040	.02834	.00077	.00115	.05248	.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00025
SDev	.00088
%RSD	346.20

#1	.00020
#2	.00152
#3	-.00037
#4	-.00033

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHV6DB

Operator: MTW

Run Time: 08/22/00 10:17:01

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	.00072	.01429	-.00400	.00609	.00005	.00009	.05124
SDev	.00185	.00893	.03211	.03165	.00033	.00001	.00434
%RSD	257.30	62.480	803.04	519.91	640.36	7.6074	8.4793

#1	.00143	.01579	-.01076	-.03666	.00000	.00009	.05010
#2	-.00001	.01917	-.02619	.02832	.00000	.00010	.05413
#3	.00288	.02094	.04316	.03173	.00050	.00008	.05514
#4	-.00143	.00129	-.02220	.00097	-.00030	.00010	.04560

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	.00216	.00069	.00226	.00022	.00250	.57439	-.00075
SDev	.00176	.00384	.00181	.00182	.00067	.42769	.00075
%RSD	81.666	555.14	80.279	823.05	26.673	74.460	99.332

#1	.00137	.00523	.00412	.00177	.00349	.76448	-.00048
#2	.00464	-.00176	-.00013	-.00088	.00216	.49175	-.00075
#3	.00206	.00244	.00306	.00177	.00216	1.0207	-.00001
#4	.00056	-.00314	.00199	-.00177	.00216	.02066	-.00177

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	.00268	.00025	.00123	.00592	-.00259	-.00568	-.00268
SDev	.01144	.00049	.00697	.00518	.00589	.00976	.01005
%RSD	427.20	199.71	565.51	87.446	227.70	171.73	374.42

#1	-.00469	-.00000	-.00862	-.00112	-.00904	-.01694	-.00006
#2	.00067	.00099	.00616	.00827	-.00562	-.00197	-.01060
#3	.01941	.00000	.00616	.01095	.00013	.00573	-.01051
#4	-.00469	.00000	.00123	.00559	.00418	-.00956	.01044

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	-.01958	.00291	.01386	-.00004	-.00016	-.03215	.00125
SDev	.01820	.00732	.00930	.00005	.00046	.04412	.00265
%RSD	92.953	251.31	67.109	140.00	282.84	137.24	212.75

#1	-.00097	.00146	.00771	-.00012	-.00016	-.08766	.00106
#2	-.02056	.00143	.02615	-.00001	.00016	-.01751	-.00110

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#3	-.04407	.01309	.01587	-.00001	.00016	-.04095	.00500
#4	-.01273	-.00434	.00570	-.00001	-.00082	.01752	.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00106
SDev	.00140
%RSD	131.97

#1	.00101
#2	.00178
#3	.00232
#4	-.00088

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHV6DC

Operator: MTW

Run Time: 08/22/00 10:20:09

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	.04725	1.9505	1.9525	.96782	1.9791	.04980	50.709
SDev	.00138	.0047	.0256	.00929	.0118	.00015	.367
%RSD	2.9226	.23983	1.3108	.95981	.59426	.29847	.72367
#1	.04831	1.9483	1.9632	.96084	1.9698	.04968	50.689
#2	.04543	1.9501	1.9826	.98134	1.9958	.04995	50.204
#3	.04693	1.9465	1.9245	.96284	1.9786	.04991	51.047
#4	.04834	1.9572	1.9399	.96626	1.9721	.04966	50.895
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass
High	.06000	2.4000	2.4000		2.4000	.06000	60.000
Low	.04000	1.6000	1.6000		1.6000	.04000	40.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.04810	.49236	.19966	.24430	1.0485	43.445	.97324
SDev	.00245	.00417	.00374	.00114	.0053	.332	.01237
%RSD	5.0928	.84626	1.8740	.46612	.50101	.58585	1.2711
#1	.04752	.49132	.20059	.24386	1.0513	43.484	.96626
#2	.04508	.48713	.19475	.24474	1.0413	43.013	.99144
#3	.04888	.49690	.20378	.24563	1.0533	43.823	.97048
#4	.05091	.49410	.19953	.24298	1.0480	43.460	.96478
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	49.583	.49603	.00016	49.442	.49899	.50727	L.01977
SDev	.148	.00254	.00472	.352	.00901	.02676	.02737
%RSD	.29938	.51249	3007.9	.71178	1.8056	5.2746	138.45
#1	49.489	.49504	-.00354	49.228	.50137	.48069	L.01712
#2	49.711	.49307	-.00354	49.967	.50732	.48814	L.00681
#3	49.708	.49898	.00139	49.316	.48618	.53401	L.05880
#4	49.424	.49701	.00631	49.255	.50109	.52625	L-.00366
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	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	1.9773	.02363	-.00638	.99818	-.00188	1.9464	.49039
SDev	.0262	.00875	.02579	.00489	.00056	.0664	.00636
%RSD	1.3274	37.024	404.36	.48969	29.701	3.4133	1.2975
#1	1.9646	.01926	.02032	.99412	-.00180	1.8705	.48788
#2	2.0155	.01919	-.01260	1.0049	-.00246	1.9757	.48300

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#3	1.9724	.03676	.00613	.99856	-.00213	1.9171	.49774
#4	1.9567	.01932	-.03936	.99511	-.00115	2.0223	.49295

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	.48818
SDev	.00098
%RSD	.20148

#1	.48714
#2	.48787
#3	.48823
#4	.48949

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DHM8P

Operator: MTW

Run Time: 08/22/00 10:23:22

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	.00000	.55095	-.01966	-.00147	.06519	.00010	85.976
SDev	.00270	.00447	.01194	.00907	.00042	.00000	.396
%RSD	88218.	.81136	60.718	618.06	.64913	.00000	.46089
#1	-.00178	.54871	-.01288	-.01506	.06474	.00010	85.845
#2	-.00178	.55766	-.02068	.00307	.06524	.00010	85.475
#3	-.00035	.54873	-.00905	.00310	.06574	.00010	86.330
#4	.00393	.54871	-.03603	.00303	.06503	.00010	86.254
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00040	-.00003	.00200	.19367	4.6560	3.1468	.00132
SDev	.00186	.00134	.00137	.00084	.0157	.3688	.00089
%RSD	466.21	3937.9	68.846	.43556	.33617	11.719	67.407
#1	.00193	.00101	.00253	.19257	4.6462	3.2769	.00112
#2	-.00059	-.00178	.00146	.19433	4.6615	2.6819	.00030
#3	-.00032	-.00038	.00040	.19345	4.6755	3.0703	.00140
#4	-.00261	.00102	.00359	.19433	4.6409	3.5579	.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	31.310	.18601	.00439	9.3892	.00353	.04408	.00263
SDev	.123	.00148	.00284	.0795	.00541	.00958	.04381
%RSD	.39164	.79495	64.723	.84652	153.41	21.739	1663.6
#1	31.189	.18527	.00685	9.3523	.00686	.05743	.03138
#2	31.440	.18528	.00193	9.4855	-.00304	.04204	L-.06266
#3	31.387	.18823	.00193	9.4167	.00138	.03460	.02095
#4	31.223	.18527	.00685	9.3023	.00891	.04224	.02087
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	-.00732	4.4896	-.01503	.13245	.00123	.04931	.00009
SDev	.04198	.0170	.02198	.00104	.00049	.01461	.00006
%RSD	573.38	.37974	146.23	.78724	40.000	29.621	64.598
#1	.03869	4.4780	-.01798	.13215	.00147	.05232	.00014
#2	-.06313	4.4722	-.02869	.13335	.00082	.06386	.00004

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#3	-.00433	4.5069	-.03035	.13319	.00082	.05204	.00004
#4	-.00051	4.5011	.01690	.13110	.00180	.02902	.00014
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	.03092
SDev	.00205
%RSD	6.6410

#1	.02913
#2	.02915
#3	.03255
#4	.03284

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM8V

Operator: MTW

Run Time: 08/22/00 10:26:30

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	.00188	.39078	-.04867	.00272	.03667	.00021	83.571
SDev	.00179	.00470	.01140	.00102	.00015	.00000	.447
%RSD	95.647	1.2032	23.420	37.597	.40306	.06123	.53465
#1	.00223	.38764	-.03318	.00323	.03660	.00021	82.988
#2	-.00062	.38588	-.04865	.00391	.03660	.00021	83.960
#3	.00367	.39480	-.05258	.00189	.03660	.00021	83.878
#4	.00223	.39481	-.06028	.00185	.03689	.00021	83.457
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	.00252	.00102	.01130	1.1808	3.3013	4.3534	.00106
SDev	.00238	.00114	.00092	.0037	.0195	.1272	.00059
%RSD	94.819	111.39	8.1551	.31686	.59009	2.9221	55.359
#1	-.00101	.00103	.01050	1.1764	3.2775	4.4092	.00151
#2	.00358	-.00038	.01050	1.1843	3.3194	4.1695	.00038
#3	.00324	.00102	.01210	1.1834	3.3148	4.3761	.00076
#4	.00425	.00241	.01210	1.1790	3.2935	4.4588	.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
Avge	14.089	.03316	.00542	15.215	.00701	.16026	.02071
SDev	.077	.00049	.00246	.046	.00468	.01807	.02251
%RSD	.54983	1.4748	45.412	.30504	66.692	11.276	108.69
#1	14.040	.03340	.00665	15.162	.00247	.13370	.01027
#2	14.204	.03341	.00173	15.269	.00679	.16402	.02068
#3	14.070	.03243	.00665	15.235	.00530	.17168	.05199
#4	14.043	.03340	.00665	15.196	.01349	.17165	-.00010
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	-.00110	5.0470	.06185	.11112	-.00025	.01568	.00500
SDev	.03060	.0336	.01998	.00058	.00049	.07960	.00005
%RSD	2790.8	.66495	32.313	.52130	200.00	507.59	.97185
#1	-.00410	5.0108	.04125	.11040	-.00082	.12394	.00502
#2	.00385	5.0919	.08445	.11171	-.00049	-.06331	.00493

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#3	.03518	5.0456	.07227	.11145	.00016	-.01657	.00503
#4	-.03932	5.0398	.04942	.11093	.00016	.01867	.00503
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	.09495
SDev	.00296
%RSD	3.1178

#1	.09452
#2	.09183
#3	.09897
#4	.09447

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM8X Operator: MTW
 Run Time: 08/22/00 10:29:38
 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	.00041	6.7065	-.01142	.01377	.11205	.00055	90.197
SDev	.00070	.0203	.01808	.00242	.00065	.00006	.572
%RSD	173.39	.30214	158.23	17.573	.58379	11.323	.63366
#1	.00002	6.6900	-.00922	.01116	.11198	.00058	89.480
#2	.00008	6.7078	.00578	.01290	.11177	.00057	90.871
#3	.00146	6.6937	-.00546	.01410	.11147	.00045	90.150
#4	.00006	6.7347	-.03680	.01692	.11298	.00058	90.288
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	-.00064	.00715	.01249	.04864	18.306	9.0932	.01014
SDev	.00150	.00081	.00153	.00114	.084	.3388	.00085
%RSD	236.63	11.294	12.215	2.3492	.45800	3.7263	8.4270
#1	.00109	.00785	.01156	.04819	18.204	8.9878	.00919
#2	-.00220	.00646	.01475	.04997	18.377	9.5167	.01115
#3	-.00154	.00786	.01209	.04731	18.269	8.7068	.00974
#4	.00011	.00645	.01156	.04908	18.372	9.1613	.01049
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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	45.746	.45836	.01259	5.2484	.02607	.01074	.01566
SDev	.159	.00220	.00620	.0292	.00580	.03361	.02173
%RSD	.34675	.48112	49.278	.55605	22.246	312.84	138.77
#1	45.590	.45563	.01380	5.2531	.02007	.04303	.01032
#2	45.769	.46060	.01383	5.2218	.02379	.03540	.04179
#3	45.667	.45761	.00396	5.2312	.02664	-.01012	-.01037
#4	45.957	.45961	.01876	5.2875	.03378	-.02534	.02089
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	-.02523	12.929	.00688	.07459	.07462	.02070	.01124
SDev	.01943	.051	.02228	.00013	.00143	.05327	.00246
%RSD	77.019	.39126	323.97	.17511	1.9097	257.40	21.887
#1	-.00395	12.869	.03354	.07440	.07355	.06552	.01004
#2	-.05051	12.968	-.01765	.07466	.07584	-.05303	.01492

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#3	-.02728	12.904	-.00352	.07466	.07322	.05319	.00985
#4	-.01918	12.974	.01513	.07466	.07584	.01711	.01014
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 .37844
SDev .00457
%RSD 1.2077

#1 .37827
#2 .38453
#3 .37747
#4 .37348

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHM91

Operator: MTW

Run Time: 08/22/00 10:32:46

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	.00076	2.1721	-.01773	-.00676	.03722	.00023	74.413
SDev	.00072	.0128	.01707	.00114	.00036	.00006	.345
%RSD	94.586	.58994	96.288	16.918	.95313	27.886	.46322
#1	.00112	2.1766	-.02551	-.00571	.03739	.00033	74.441
#2	-.00032	2.1532	.00177	-.00583	.03668	.00020	73.920
#3	.00112	2.1819	-.03710	-.00778	.03739	.00020	74.599
#4	.00112	2.1766	-.01008	-.00771	.03739	.00020	74.693
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	-.00087	.00135	.00664	.02267	10.543	2.6529	.00496
SDev	.00470	.00069	.00153	.00111	.032	.3491	.00030
%RSD	542.48	51.305	22.974	4.8988	.30063	13.159	5.9667
#1	.00228	.00239	.00624	.02289	10.568	2.7810	.00459
#2	L-.00726	.00102	.00465	.02288	10.502	2.1777	.00514
#3	-.00149	.00100	.00784	.02112	10.535	2.6488	.00525
#4	.00301	.00099	.00784	.02377	10.568	3.0042	.00487
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.474	.09841	.00527	2.3255	-.00022	-.00188	.01555
SDev	.027	.00081	.00635	.0086	.00281	.02515	.03465
%RSD	.13676	.82188	120.56	.37183	1304.2	1335.9	222.79
#1	19.479	.09842	.00281	2.3267	-.00295	-.02087	-.01062
#2	19.484	.09742	.01265	2.3361	.00308	.00189	-.01052
#3	19.436	.09841	.00773	2.3151	.00112	-.02080	.06256
#4	19.498	.09940	-.00211	2.3241	-.00211	.03225	.02078
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	-.01728	7.0262	.01793	.07699	.01810	.03173	.00987
SDev	.03617	.0415	.01841	.00025	.00031	.05541	.00012
%RSD	209.36	.59053	102.68	.32471	1.7329	174.63	1.2238
#1	-.02407	7.0493	.04247	.07706	.01786	.03731	.00982
#2	.02277	6.9856	-.00069	.07675	.01818	.10806	.01000

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#3	-.00456	7.0725	.00993	.07686	.01786	-.00905	.00992
#4	-.06324	6.9972	.02002	.07732	.01851	-.00939	.00973
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	.02171
SDev	.00158
%RSD	7.2826

#1	.01943
#2	.02228
#3	.02307
#4	.02205

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM94

Operator: MTW

Run Time: 08/22/00 10:35:54

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	-.00019	2.2583	-.00677	.00995	.04031	.00026	84.904
SDev	.00083	.0084	.03837	.00071	.00012	.00007	.345
%RSD	436.13	.37315	567.12	7.1732	.29641	28.261	.40693

#1	-.00091	2.2463	-.00375	.00956	.04020	.00033	84.579
#2	.00053	2.2606	-.03864	.00962	.04020	.00033	85.392
#3	.00052	2.2659	.04624	.00960	.04041	.00020	84.839
#4	-.00090	2.2606	-.03092	.01102	.04041	.00020	84.806

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	.00068	.00065	.00678	.03216	8.0610	2.7439	.00695
SDev	.00117	.00070	.00115	.00044	.0132	.2405	.00051
%RSD	172.66	107.48	16.959	1.3756	.16430	8.7660	7.3124

#1	.00064	-.00040	.00571	.03150	8.0421	2.6571	.00768
#2	.00195	.00099	.00624	.03239	8.0714	3.0455	.00655
#3	.00100	.00100	.00837	.03238	8.0620	2.7976	.00693
#4	-.00087	.00100	.00678	.03239	8.0687	2.4753	.00666

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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.978	.10532	.00613	8.7248	.00341	.00054	.01560
SDev	.046	.00049	.00247	.0152	.00709	.01894	.02482
%RSD	.42080	.46667	40.200	.17434	207.58	3527.2	159.16

#1	10.910	.10556	.00243	8.7149	-.00281	.00238	-.01051
#2	10.993	.10557	.00736	8.7154	.01096	.02518	.00000
#3	11.014	.10458	.00736	8.7217	.00796	-.00513	.03125
#4	10.993	.10556	.00736	8.7471	-.00245	-.02029	.04164

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	-.00815	7.0783	.01027	.10995	.01712	.01946	.00988
SDev	.03391	.0000	.01292	.00013	.00062	.05579	.00005
%RSD	416.30	.00000	125.79	.11881	3.6229	286.72	.49629

#1	.00846	7.0783	-.00526	.10988	.01622	-.05332	.00981
#2	.00070	7.0783	.00712	.11014	.01753	.06314	.00991

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#3	-.05809	7.0783	.02575	.10988	.01753	.06323	.00991
#4	.01636	7.0783	.01348	.10988	.01720	.00478	.00991
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	.07364
SDev	.00058
%RSD	.78746

#1	.07332
#2	.07435
#3	.07305
#4	.07386

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM94P5 Operator: MTW
Run Time: 08/22/00 10:39:02
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	-.00067	.47091	-.01548	-.00171	.00854	.00009	17.812
SDev	.00137	.00989	.03295	.00211	.00000	.00000	.374
%RSD	205.36	2.1013	212.84	123.36	.00000	1.8861	2.1011
#1	.00041	.47724	-.00497	.00028	.00854	.00010	18.316
#2	-.00102	.48077	-.03583	-.00120	.00854	.00010	17.854
#3	-.00246	.45924	-.04721	-.00123	.00854	.00010	17.628
#4	.00040	.46640	.02607	-.00470	.00854	.00009	17.450
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	.00122	.00208	.00332	.00719	1.7022	.95043	.00112
SDev	.00249	.00210	.00141	.00000	.0350	.29302	.00065
%RSD	204.45	100.72	42.312	.06101	2.0564	30.830	58.548
#1	-.00175	.00383	.00306	.00720	1.7470	.60745	.00093
#2	.00301	.00382	.00412	.00719	1.7084	1.1860	.00195
#3	.00351	-.00037	.00146	.00719	1.6898	.80580	.00038
#4	.00010	.00104	.00465	.00719	1.6638	1.2025	.00121
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	2.2795	.02261	.00518	1.7923	.00207	.00885	.00258
SDev	.0526	.00058	.00246	.0391	.00303	.02276	.00522
%RSD	2.3060	2.5459	47.457	2.1821	146.19	257.11	202.59
#1	2.3410	.02312	.00149	1.8453	.00068	-.01767	-.00005
#2	2.2982	.02311	.00641	1.7971	.00370	.02786	-.00005
#3	2.2607	.02212	.00641	1.7694	-.00143	-.00258	.01041
#4	2.2179	.02211	.00641	1.7573	.00534	.02780	-.00000
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	-.02882	1.4565	-.00019	.02255	.00319	-.00287	.00041
SDev	.04843	.0379	.01330	.00061	.00031	.00616	.00063
%RSD	168.05	2.6047	7010.3	2.6925	9.8198	214.28	152.80
#1	.04280	1.5129	.01213	.02324	.00344	-.01210	.00003
#2	-.04349	1.4319	.01007	.02272	.00344	-.00003	.00013

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#3	-.05138	1.4376	-.01454	.02246	.00278	.00019	.00013
#4	-.06320	1.4434	-.00843	.02178	.00311	.00044	.00135
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	.01666
SDev	.00103
%RSD	6.1665

#1	.01581
#2	.01790
#3	.01582
#4	.01713

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DHM94S Operator: MTW
 Run Time: 08/22/00 10:42:10
 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	.04674	3.9786	1.9715	.97081	2.0115	.05052	135.33
SDev	.00187	.0047	.0238	.00201	.0068	.00012	.29
%RSD	3.9938	.11732	1.2083	.20729	.33871	.24213	.21329
#1	.04602	3.9732	2.0063	.97180	2.0096	.05043	135.10
#2	.04890	3.9804	1.9637	.97182	2.0040	.05042	135.73
#3	.04457	3.9841	1.9523	.97182	2.0123	.05057	135.15
#4	.04747	3.9769	1.9638	.96779	2.0203	.05067	135.33
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	.04725	.49198	.20378	.27583	9.3870	51.030	.98894
SDev	.00529	.00464	.00304	.00088	.0067	.070	.00548
%RSD	11.204	.94278	1.4915	.31945	.07102	.13806	.55400
#1	.04771	.49128	.20538	.27539	9.3802	51.055	.98488
#2	.04120	.49828	.20697	.27539	9.3961	51.038	.98359
#3	.04608	.48709	.20006	.27538	9.3861	50.931	.99425
#4	.05403	.49125	.20271	.27715	9.3855	51.096	.99304
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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	60.593	.59946	.00264	58.544	.49659	.53816	.00666
SDev	.099	.00049	.00899	.249	.00822	.01869	.02694
%RSD	.16275	.08189	341.27	.42565	1.6561	3.4727	404.63
#1	60.553	.59872	.01249	58.360	.50596	.55334	.01708
#2	60.518	.59971	.00756	58.308	.50069	.55355	.03799
#3	60.561	.59970	-.00229	58.690	.49177	.53042	-.00387
#4	60.738	.59970	-.00722	58.818	.48793	.51534	-.02457
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	2.0149	6.7196	-.01981	1.1042	.01409	2.0594	.49410
SDev	.0631	.0116	.03171	.0031	.00057	.0364	.00468
%RSD	3.1326	.17284	160.06	.27691	4.0280	1.7687	.94624
#1	2.0257	6.7138	-.00692	1.1033	.01392	2.0886	.49308
#2	2.0022	6.7371	-.00888	1.1007	.01491	2.0066	.49786

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#3	2.0923	6.7138	.00326	1.1049	.01360	2.0770	.48791
#4	1.9395	6.7139	-.06669	1.1080	.01392	2.0652	.49757

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	.53679
SDev	.00432
%RSD	.80501

#1	.53678
#2	.54231
#3	.53176
#4	.53630

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DHM94D

Operator: MTW

Run Time: 08/22/00 10:45:18

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04619	3.8319	1.9871	.97026	1.9741	.04975	134.75
SDev	.00137	.0293	.0581	.00224	.0070	.00027	.73
%RSD	2.9578	.76542	2.9221	.23068	.35321	.53711	.53853
#1	.04725	3.8426	2.0585	.97265	1.9809	.05007	134.88
#2	.04439	3.7890	1.9702	.97057	1.9648	.04943	134.31
#3	.04725	3.8408	1.9196	.97059	1.9774	.04982	134.10
#4	.04585	3.8552	2.0004	.96724	1.9731	.04968	135.72
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	.04660	.48327	.20073	.27004	8.7512	50.582	.96942
SDev	.00215	.00563	.00334	.00124	.0260	.359	.00815
%RSD	4.6058	1.1647	1.6665	.46068	.29687	.71000	.84100
#1	.04848	.48012	.20326	.27180	8.7604	50.766	.97354
#2	.04806	.48292	.19900	.26915	8.7271	50.451	.96323
#3	.04379	.47874	.19688	.27003	8.7337	50.146	.97888
#4	.04608	.49130	.20379	.26917	8.7837	50.964	.96202
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	60.099	.58649	.00623	58.055	.49473	.51544	.03268
SDev	.245	.00233	.00246	.262	.00896	.02408	.01994
%RSD	.40849	.39756	39.532	.45184	1.8114	4.6721	61.026
#1	60.285	.58674	.00747	58.170	.48734	.50778	.04819
#2	59.742	.58477	.00746	57.712	.49541	.53819	.00660
#3	60.138	.58477	.00254	58.326	.48906	.48498	.04837
#4	60.229	.58970	.00747	58.011	.50713	.53081	.02756
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	1.9702	6.5588	-.01775	1.0853	.01384	1.8821	.48441
SDev	.0735	.0346	.01804	.0040	.00049	.0792	.00246
%RSD	3.7303	.52716	101.61	.36623	3.5503	4.2106	.50746
#1	2.0750	6.5400	.00132	1.0890	.01425	1.8265	.48322
#2	1.9299	6.5342	-.02764	1.0798	.01327	1.8035	.48322

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#3	1.9104	6.5516	-.03772	1.0872	.01425	1.9319	.48312
#4	1.9654	6.6095	-.00698	1.0850	.01360	1.9663	.48810
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	.52615
SDev	.00330
%RSD	.62747

#1	.52339
#2	.52338
#3	.52789
#4	.52994

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-5

Operator: MTW

Run Time: 08/22/00 10:48:26

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	1.0056	50.213	5.0612	5.0660	5.0089	5.0963	52.108
SDev	.0032	.193	.0444	.0478	.0249	.0241	.195
%RSD	.32264	.38384	.87767	.94345	.49801	.47209	.37464
#1	1.0036	50.044	5.0833	5.0310	4.9928	5.0844	51.880
#2	1.0096	50.484	5.1097	5.1313	5.0458	5.1306	52.018
#3	1.0067	50.209	5.0426	5.0723	5.0023	5.0943	52.312
#4	1.0023	50.116	5.0089	5.0296	4.9948	5.0759	52.221
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	5.2243	5.0898	5.0615	4.9656	52.531	49.768	4.9021
SDev	.0227	.0154	.0130	.0314	.143	.214	.0409
%RSD	.43438	.30263	.25762	.63151	.27280	.43100	.83387
#1	5.1948	5.0679	5.0438	4.9512	52.339	49.683	4.8899
#2	5.2195	5.0943	5.0645	5.0112	52.661	50.063	4.9626
#3	5.2357	5.1041	5.0752	4.9592	52.617	49.559	4.8825
#4	5.2472	5.0929	5.0624	4.9407	52.507	49.765	4.8735
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	50.621	5.0760	5.0700	50.496	5.1595	5.1313	5.1314
SDev	.192	.0124	.0124	.300	.0106	.0315	.0198
%RSD	.37911	.24407	.24486	.59423	.20583	.61405	.38546
#1	50.471	5.0580	5.0528	50.333	5.1440	5.0967	5.1446
#2	50.897	5.0846	5.0725	50.945	5.1684	5.1274	5.1341
#3	50.600	5.0836	5.0824	50.361	5.1625	5.1278	5.1027
#4	50.514	5.0777	5.0725	50.343	5.1630	5.1732	5.1443
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	5.1276	5.1015	5.1367	5.0298	4.9984	10.100	5.0722
SDev	.0448	.0431	.0509	.0227	.0173	.111	.0138
%RSD	.87402	.84528	.99074	.45067	.34547	1.0940	.27292
#1	5.0850	5.0405	5.0921	5.0140	4.9780	10.126	5.0538
#2	5.1603	5.1394	5.1310	5.0629	5.0193	10.087	5.0859

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#3	5.1719	5.1219	5.1145	5.0260	5.0026	10.228	5.0788
#4	5.0933	5.1044	5.2092	5.0162	4.9934	9.9606	5.0701

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	4.9866
SDev	.0101
%RSD	.20328

#1	4.9809
#2	4.9983
#3	4.9915
#4	4.9759

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB5

Operator: MTW

Run Time: 08/22/00 10:51:34

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	.00215	.01645	-.01079	.00181	.00030	.00028	.00588
SDev	.00275	.01386	.01849	.00206	.00024	.00013	.00227
%RSD	127.47	84.244	171.29	113.97	80.991	47.143	38.603
#1	.00431	.02272	-.01474	.00437	.00050	.00021	.00680
#2	.00431	.03161	-.02254	.00237	.00021	.00021	.00860
#3	.00143	.01197	-.02229	.00095	.00000	.00022	.00462
#4	-.00143	-.00049	.01640	-.00046	.00050	.00048	.00351
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	.00244	.00244	.00253	.00066	.00133	.72522	-.00032
SDev	.00198	.00114	.00115	.00084	.00167	.25396	.00030
%RSD	81.073	46.863	45.397	127.14	125.04	35.018	91.267
#1	.00401	.00243	.00412	.00177	-.00050	1.0042	-.00048
#2	.00370	.00104	.00146	.00088	.00350	.85539	-.00036
#3	-.00033	.00244	.00200	.00000	.00083	.60745	-.00056
#4	.00236	.00383	.00253	.00000	.00150	.43389	.00010
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	.00736	.00099	.01108	.00782	.00009	-.01319	.01823
SDev	.01769	.00000	.00402	.00688	.00336	.00757	.01000
%RSD	240.29	.16444	36.289	87.908	3579.8	57.343	54.844
#1	.02745	.00099	.00616	.00425	.00411	-.01700	.01045
#2	.01674	.00099	.01108	.01810	-.00396	-.00185	.03131
#3	-.01004	.00099	.01601	.00514	-.00068	-.01700	.01037
#4	-.00469	.00099	.01108	.00380	.00090	-.01694	.02081
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	-.02252	.01161	-.00865	.00004	.00016	-.02340	.00266
SDev	.06417	.00292	.01451	.00040	.00053	.04318	.00276
%RSD	284.92	25.117	167.75	1034.0	326.60	184.51	103.92
#1	.05779	.01309	-.00457	-.00027	.00016	-.01756	.00500
#2	-.04407	.01309	-.02708	.00014	.00082	-.02927	.00509

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#3	-.00881	.01303	-.01074	-.00027	-.00049	.02917	.00031
#4	-.09500	.00724	.00780	.00056	.00016	-.07594	.00022
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	.00107
SDev	.00093
%RSD	86.903

#1	.00153
#2	.00156
#3	-.00033
#4	.00153

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHM99

Operator: MTW

Run Time: 08/22/00 10:54:42

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	-.00033	13.866	-.02129	-.00422	.07508	.00199	101.92
SDev	.00072	.094	.02070	.00019	.00078	.00008	.74
%RSD	219.75	.68075	97.233	4.4491	1.0342	3.8887	.72853
#1	.00001	13.790	-.01192	-.00435	.07458	.00205	101.74
#2	-.00141	13.931	-.01309	-.00420	.07609	.00206	101.35
#3	.00007	13.962	-.05216	-.00396	.07529	.00192	103.01
#4	.00001	13.779	-.00798	-.00436	.07437	.00193	101.59
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	.00175	.00844	.02112	.02654	17.632	6.0848	.03857
SDev	.00221	.00180	.00376	.00113	.096	.4519	.00026
%RSD	126.38	21.280	17.806	4.2633	.54661	7.4264	.66612
#1	.00017	.00776	.02591	.02786	17.561	6.6654	.03842
#2	-.00019	.00914	.02006	.02611	17.641	6.1861	.03833
#3	.00244	.00635	.01686	.02523	17.765	5.6158	.03891
#4	.00456	.01052	.02165	.02698	17.562	5.8720	.03861
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.989	.29818	.00387	4.5849	.02011	.00849	.01295
SDev	.088	.00189	.00401	.0451	.00443	.02552	.01977
%RSD	.67383	.63286	103.78	.98437	22.053	300.45	152.59
#1	12.891	.29693	.00386	4.5308	.02172	.02371	.01026
#2	13.036	.29793	.00879	4.6340	.02550	-.02943	.04169
#3	13.084	.30092	-.00104	4.6068	.01781	.02350	-.00001
#4	12.942	.29693	.00386	4.5679	.01541	.01619	-.00013
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	.00238	H24.074	-.00226	.13314	.14727	.06745	.03242
SDev	.01675	.172	.02243	.00127	.00364	.05244	.00204
%RSD	703.63	.71480	992.70	.95523	2.4706	77.746	6.2863
#1	.01395	H23.890	.02701	.13204	.14268	.12949	.03304
#2	.00240	H24.087	.00044	.13413	.14792	.02358	.02946

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#3	.01448	H24.301	-.02643	.13434	.14694	.09237	.03414
#4	-.02131	H24.018	-.01005	.13204	.15153	.02437	.03303
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 .05876
SDev .00130
%RSD 2.2177

#1 .06035
#2 .05900
#3 .05850
#4 .05720

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHM9C Operator: MTW
Run Time: 08/22/00 10:57:55
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	-.00023	.45121	.00167	.00210	.03910	.00019	103.57
SDev	.00137	.00662	.02686	.00133	.00014	.00006	.48
%RSD	610.66	1.4675	1612.6	63.253	.35661	32.720	.46696
#1	.00084	.45208	.02003	.00244	.03920	.00022	103.78
#2	.00087	.45029	.00836	.00106	.03920	.00021	104.11
#3	-.00058	.45929	-.03797	.00106	.03911	.00022	103.40
#4	-.00202	.44317	.01625	.00384	.03890	.00010	102.99
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00144	.00137	.00359	.01594	3.6100	2.6612	.00374
SDev	.00128	.00288	.00298	.00085	.0125	.3232	.00085
%RSD	88.589	209.52	82.889	5.3159	.34745	12.146	22.649
#1	.00204	-.00037	.00306	.01528	3.6024	2.5662	.00393
#2	.00167	.00382	.00784	.01704	3.6203	3.0455	.00476
#3	-.00041	.00382	.00253	.01616	3.6210	2.7563	.00355
#4	.00247	-.00177	.00093	.01527	3.5964	2.2769	.00272
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	15.542	.11858	.00547	3.7660	.00098	-.00299	-.00006
SDev	.022	.00057	.00246	.0096	.00435	.01865	.00852
%RSD	.14441	.47971	45.086	.25492	445.79	622.86	13519.
#1	15.545	.11907	.00670	3.7535	.00732	-.01823	-.01044
#2	15.529	.11907	.00670	3.7642	-.00123	.00466	-.00015
#3	15.521	.11809	.00670	3.7705	-.00233	.01983	-.00009
#4	15.572	.11808	.00177	3.7758	.00014	-.01823	.01043
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	.00266	5.1888	.01096	.12470	-.00147	.07138	.00164
SDev	.04675	.0397	.01523	.00029	.00046	.02602	.00233
%RSD	1761.0	.76468	138.87	.23153	31.427	36.451	142.66
#1	-.00716	5.2019	.00013	.12436	-.00082	.06273	.00014
#2	.07124	5.2251	.03100	.12457	-.00147	.05080	.00502

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#3	-.03062	5.1324	.01456	.12494	-.00180	.06249	.00135
#4	-.02285	5.1961	-.00183	.12494	-.00180	.10951	.00004

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

Elem	ZN
Units	ppm
Avge	.01296
SDev	.00095
%RSD	7.3004

#1	.01216
#2	.01298
#3	.01429
#4	.01242

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM9D

Operator: MTW

Run Time: 08/22/00 11:01:04

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	.00103	.50484	-.00652	.00052	.03883	.00015	103.34
SDev	.00137	.00227	.02206	.00069	.00030	.00007	.29
%RSD	133.05	.45047	338.36	132.49	.77765	50.290	.28441
#1	.00210	.50748	.01276	.00087	.03890	.00008	103.55
#2	.00210	.50220	.00508	.00088	.03890	.00008	103.26
#3	-.00076	.50394	-.00652	-.00052	.03911	.00021	103.59
#4	.00067	.50573	-.03739	.00086	.03840	.00021	102.96
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00283	-.00038	.00319	.01323	2.7860	2.7934	.00350
SDev	.00165	.00000	.00159	.00044	.0060	.1081	.00044
%RSD	58.184	1.2059	49.794	3.3354	.21402	3.8688	12.621
#1	.00158	-.00037	.00359	.01345	2.7835	2.7315	.00349
#2	.00218	-.00037	.00465	.01345	2.7875	2.9546	.00412
#3	.00231	-.00037	.00359	.01345	2.7935	2.7315	.00319
#4	.00525	-.00038	.00093	.01256	2.7795	2.7563	.00319
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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.546	.09768	.00165	3.7085	.00202	.00662	.00784
SDev	.040	.00057	.00402	.0150	.01006	.01297	.02320
%RSD	.25524	.58317	244.02	.40437	497.29	196.06	295.76
#1	15.510	.09818	.00657	3.6923	.01583	.01232	.02104
#2	15.521	.09719	-.00328	3.7012	-.00814	.00475	.03128
#3	15.599	.09818	.00165	3.7267	-.00111	-.01049	-.02095
#4	15.553	.09719	.00165	3.7137	.00151	.01988	.00000
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	-.00245	5.2946	-.00354	.12437	-.00049	.01846	.00491
SDev	.02626	.0125	.01672	.00054	.00027	.04903	.00008
%RSD	1070.1	.23628	472.09	.43299	54.433	265.61	1.5648
#1	-.00540	5.2946	-.02454	.12405	-.00049	-.03406	.00501
#2	.03379	5.2830	-.00805	.12383	-.00049	.04763	.00482

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#3	-.00929	5.3120	.01430	.12503	-.00082	.07093	.00491
#4	-.02892	5.2888	.00412	.12457	-.00016	-.01067	.00491
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	.00989
SDev	.00186
%RSD	18.779

#1	.01116
#2	.01124
#3	.00990
#4	.00726

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM9E

Operator: MTW

Run Time: 08/22/00 11:04:12

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	.00107	.07685	-.02379	-.00228	.01171	.00003	4.4186
SDev	.00071	.00518	.02239	.00313	.00010	.00007	.0215
%RSD	66.502	6.7365	94.104	137.20	.88328	230.94	.48651
#1	.00143	.07636	-.01896	-.00384	.01177	.00010	4.3900
#2	.00143	.07640	.00033	-.00585	.01177	-.00003	4.4158
#3	.00143	.07101	-.02278	.00099	.01177	-.00003	4.4286
#4	.00000	.08362	-.05376	-.00042	.01156	.00010	4.4400
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	.00090	-.00315	.00253	.00881	.01431	.58886	-.00008
SDev	.00075	.00114	.00043	.00102	.00206	.12395	.00045
%RSD	83.569	36.195	17.138	11.558	14.402	21.049	545.27
#1	.00143	-.00455	.00253	.00793	.01148	.41736	-.00017
#2	.00161	-.00175	.00200	.00970	.01614	.65704	.00057
#3	.00057	-.00315	.00253	.00793	.01548	.58266	-.00045
#4	.00000	-.00315	.00306	.00970	.01414	.69836	-.00028
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	.74375	.00123	.00370	.26215	.00014	.01314	-.00006
SDev	.01321	.00049	.00493	.00419	.00389	.03559	.02088
%RSD	1.7760	39.735	133.26	1.5995	2840.7	270.82	37376.
#1	.72902	.00099	.00616	.26305	-.00020	-.00205	.01032
#2	.75848	.00099	.00616	.26752	.00088	-.00962	-.03138
#3	.73706	.00099	.00616	.25768	.00466	-.00201	.01037
#4	.75045	.00197	-.00369	.26036	-.00479	.06626	.01046
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	-.01367	.48066	.00154	.01231	-.00041	.01448	.00008
SDev	.02107	.00869	.02584	.00012	.00016	.03357	.00009
%RSD	154.08	1.8072	1672.3	1.0007	40.000	231.82	123.62
#1	-.01662	.47632	.02214	.01231	-.00049	.04079	.00012
#2	-.01661	.48790	-.00271	.01222	-.00049	-.02934	.00012

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#3	.01473	.47053	.02008	.01222	-.00016	.00571	.00012
#4	-.03620	.48790	-.03333	.01248	-.00049	.04076	-.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 .00846
SDev .00117
%RSD 13.867

#1 .00808
#2 .00807
#3 .00752
#4 .01018

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHP5X

Operator: MTW

Run Time: 08/22/00 11:07:20

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BI	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00058	.32450	-.03319	.00123	.01400	.00005	80.032
SDev	.00273	.01272	.01574	.00271	.00015	.00006	.858
%RSD	475.38	3.9205	47.436	219.52	1.0560	126.84	1.0723
#1	.00157	.33391	-.03713	.00471	.01378	.00008	80.175
#2	-.00415	.30700	-.04462	-.00154	.01407	-.00005	78.842
#3	.00157	.33393	-.04099	-.00012	.01407	.00008	80.216
#4	-.00129	.32317	-.01002	.00188	.01407	.00008	80.892
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	-.00070	.00160	.00026	.48429	1.9401	.00356
SDev	.00241	.00366	.00133	.00044	.00526	.2939	.00076
%RSD	119.94	520.97	83.328	169.14	1.0852	15.150	21.465
#1	.00205	-.00036	.00146	.00004	.48679	2.0620	.00432
#2	-.00140	-.00593	-.00013	.00091	.47680	1.5000	.00261
#3	.00341	.00104	.00199	.00004	.48879	2.0951	.00330
#4	.00397	.00243	.00306	.00004	.48479	2.1033	.00401
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.010	.01465	.01239	5.1126	-.00090	-.00980	.01039
SDev	.074	.00049	.00246	.0168	.00453	.01068	.01483
%RSD	.52838	3.3682	19.883	.32847	501.27	108.98	142.73
#1	14.043	.01489	.01116	5.1159	-.00624	.00535	-.01059
#2	13.930	.01391	.01115	5.1168	-.00260	-.00993	.01042
#3	13.971	.01489	.01116	5.0891	.00426	-.01733	.02085
#4	14.096	.01489	.01608	5.1288	.00097	-.01729	.02087
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	.00617	3.5457	-.00549	.16470	-.00434	-.00495	.00512
SDev	.03452	.0211	.02257	.00052	.00094	.02232	.00005
%RSD	559.18	.59640	410.75	.31724	21.678	451.00	.96794
#1	-.00361	3.5688	.01598	.16443	-.00377	.02422	.00509
#2	.04729	3.5225	-.02501	.16443	-.00573	-.02235	.00509

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#3	.01598	3.5341	.01202	.16443	-.00377	.00083	.00509
#4	-.03496	3.5572	-.02496	.16548	-.00410	-.02249	.00519
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	.00453
SDev	.00224
%RSD	49.386

#1	.00548
#2	.00151
#3	.00676
#4	.00437

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP61

Operator: MTW

Run Time: 08/22/00 11:10:28

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61H

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00024	.05500	-.01302	.00225	.01503	.00010	40.263
SDev	.00083	.00884	.05025	.00072	.00029	.00000	.165
%RSD	346.48	16.079	386.00	32.171	1.9302	.00000	.41004

#1	-.00048	.04429	.03435	.00189	.01528	.00010	40.304
#2	.00096	.06565	.02643	.00334	.01478	.00010	40.313
#3	.00095	.05322	-.05836	.00191	.01528	.00010	40.411
#4	-.00048	.05684	-.05450	.00187	.01478	.00010	40.027

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	.00084	.00139	.00133	.01179	4.0537	2.0352	-.00003
SDev	.00168	.00070	.00091	.00072	.0135	.2706	.00070
%RSD	199.65	50.473	68.213	6.1039	.33307	13.298	2543.5

#1	-.00121	.00244	.00253	.01179	4.0524	2.1943	-.00075
#2	.00017	.00104	.00040	.01091	4.0690	1.7232	-.00009
#3	.00243	.00104	.00146	.01267	4.0570	2.3182	-.00020
#4	.00198	.00104	.00093	.01179	4.0364	1.9050	.00093

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	16.857	.07396	.00307	2.5496	-.00083	-.00287	-.00779
SDev	.104	.00081	.00620	.0117	.01272	.00003	.01010
%RSD	.61775	1.0937	202.01	.45840	1541.4	1.0143	129.69

#1	16.739	.07396	.00184	2.5355	-.00000	-.00284	-.01037
#2	16.948	.07495	.01169	2.5623	-.01371	-.00291	-.02100
#3	16.940	.07396	.00184	2.5453	.01630	-.00287	.00017
#4	16.798	.07297	-.00309	2.5551	-.00589	-.00287	.00005

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	.00187	2.2556	-.03213	.03507	-.00238	.03445	.00006
SDev	.05791	.0099	.01272	.00021	.00016	.05724	.00012
%RSD	3104.8	.43846	39.596	.60714	6.8965	166.15	192.21

#1	.00970	2.2426	-.04293	.03489	-.00246	.08116	.00004
#2	-.00593	2.2658	-.03270	.03526	-.00246	-.03577	.00023

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#3	-.06865	2.2542	-.01412	.03526	-.00213	.08113	.00004
#4	.07234	2.2600	-.03877	.03489	-.00246	.01127	-.00006

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	.00924
SDev	.00182
%RSD	19.680

#1	.00790
#2	.00980
#3	.01156
#4	.00769

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP63

Operator: MTW

Run Time: 08/22/00 11:13:36

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	-.00014	.68553	-.01128	-.00145	.05106	.00005	108.02
SDev	.00247	.00105	.01917	.00001	.00024	.00013	.36
%RSD	1774.8	.15337	169.92	.59809	.48063	254.41	.33750

#1	-.00083	.68460	-.02292	-.00144	.05076	-.00006	108.31
#2	.00342	.68652	-.00355	-.00145	.05126	.00021	108.31
#3	-.00229	.68465	-.03055	-.00146	.05096	-.00004	107.55
#4	-.00086	.68637	.01188	-.00144	.05126	.00008	107.92

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	.00087	.00241	.00359	.00812	2.3115	3.2790	.00130
SDev	.00259	.00301	.00130	.00072	.0040	.4895	.00035
%RSD	298.61	124.73	36.305	8.8948	.17442	14.929	26.910

#1	-.00153	.00242	.00465	.00812	2.3142	3.2935	.00156
#2	.00437	.00659	.00306	.00901	2.3129	3.8637	.00085
#3	-.00055	.00102	.00199	.00812	2.3055	2.6653	.00159
#4	.00118	-.00038	.00465	.00724	2.3135	3.2935	.00121

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	23.493	.04000	.00281	2.5227	.00518	.00860	.01309
SDev	.132	.00000	.00246	.0251	.00385	.02661	.01564
%RSD	.56197	.00403	87.699	.99489	74.309	309.38	119.53

#1	23.562	.04000	.00158	2.5274	.00952	.02755	.00008
#2	23.348	.04000	.00158	2.4961	.00029	-.01782	.03130
#3	23.423	.04000	.00158	2.5122	.00631	.03513	.02097
#4	23.640	.04000	.00650	2.5551	.00459	-.01046	.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	.00217	5.4307	.00050	.10421	.00082	.00257	.00616
SDev	.01612	.0100	.01526	.00049	.00046	.08381	.00242
%RSD	742.18	.18481	3068.5	.46555	56.569	3264.2	39.374

#1	.00512	5.4336	.00403	.10455	.00082	.05214	.00979
#2	.00120	5.4162	.02061	.10361	.00147	.04048	.00491

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#3	-.01841	5.4394	-.01231	.10403	.00049	-.12288	.00491
#4	.02079	5.4336	-.01035	.10466	.00049	.04053	.00501
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	-.750000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .02214
SDev .00091
%RSD 4.1246

#1 .02103
#2 .02313
#3 .02257
#4 .02181

Errors LC Pass
High 100.00
Low -.02000

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Method: QUANMET Sample Name: DHP65

Operator: MTW

Run Time: 08/22/00 11:16:44

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	.00107	.24055	-.00470	-.00133	.05400	-.00000	105.11

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#3	.00684	4.9471	.01416	.24533	-.00410	.01397	.00500
#4	.01075	4.9413	-.02067	.24533	-.00311	.09580	.00013
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.06477
SDev	.00151
%RSD	2.3246

#1	.06480
#2	.06397
#3	.06687
#4	.06345

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP69

Operator: MTW

Run Time: 08/22/00 11:19:52

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	.00079	.07105	-.00577	.00442	.03357	.00012	91.842
SDev	.00083	.00634	.03030	.00286	.00024	.00006	.195
%RSD	105.18	8.9240	525.31	64.692	.73094	52.547	.21198
#1	.00008	.07642	.03083	.00225	.03337	.00008	91.612
#2	.00151	.07461	-.01161	.00487	.03337	.00008	91.864
#3	.00006	.06215	.00015	.00227	.03388	.00010	92.085
#4	.00151	.07103	-.04245	.00829	.03367	.00021	91.809
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	.00192	-.00071	.00199	.01038	.25845	2.4649	.00147
SDev	.00129	.00175	.00137	.00085	.00196	.1557	.00062
%RSD	66.969	246.32	68.897	8.1395	.75791	6.3166	42.451
#1	.00168	.00103	.00252	.01060	.25645	2.6323	.00140
#2	.00229	-.00036	.00146	.00972	.25778	2.3678	.00065
#3	.00032	-.00315	.00040	.00972	.26111	2.3017	.00167
#4	.00340	-.00037	.00359	.01148	.25845	2.5579	.00214
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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	11.919	.01729	.00004	7.7577	.00192	.00936	.00263
SDev	.051	.00057	.00246	.0572	.00739	.02805	.01775
%RSD	.42524	3.2848	6371.6	.73726	384.98	299.57	674.83
#1	11.874	.01778	.00127	7.6963	.00123	.04355	-.00000
#2	11.877	.01778	.00127	7.7262	.01232	.01313	-.02073
#3	11.954	.01679	-.00366	7.8232	-.00493	.00552	.01040
#4	11.970	.01680	.00127	7.7852	-.00095	-.02474	.02085
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	-.01009	4.2913	.00059	.11636	-.00483	.01784	.00366
SDev	.02870	.0128	.01312	.00085	.00041	.08757	.00249
%RSD	284.38	.29896	2214.4	.72982	8.5309	490.76	67.938
#1	-.00422	4.2753	.00777	.11537	-.00475	-.00843	.00491
#2	-.05123	4.2869	-.01903	.11604	-.00475	.02660	.00490

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#3	-.00029	4.2984	.00577	.11735	-.00541	-.07848	-.00007
#4	.01537	4.3043	.00787	.11667	-.00442	.13168	.00491

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	.01626
SDev	.00061
%RSD	3.7766

#1	.01619
#2	.01670
#3	.01674
#4	.01542

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP6D Operator: MTW
Run Time: 08/22/00 11:23:00
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	.00042	.09116	-.02806	.00478	.03314	.00009	90.393
SDev	.00215	.00512	.02859	.00253	.00046	.00001	.401
%RSD	508.24	5.6174	101.88	52.966	1.3862	7.6066	.44411

#1	-.00138	.08357	-.03469	.00477	.03367	.00010	89.914
#2	.00150	.09426	-.06574	.00397	.03266	.00008	90.890
#3	-.00136	.09256	-.00397	.00216	.03337	.00008	90.326
#4	.00293	.09424	-.00785	.00820	.03287	.00008	90.441

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	.00019	.00034	.00199	.00663	.20885	2.5558	.00194
SDev	.00272	.00081	.00115	.00051	.00207	.2129	.00101
%RSD	1402.1	237.81	57.572	7.6764	.99141	8.3299	52.096

#1	-.00149	-.00035	.00040	.00707	.20585	2.4422	.00065
#2	.00237	.00103	.00306	.00707	.20919	2.6819	.00225
#3	-.00274	.00105	.00199	.00619	.21052	2.3182	.00178
#4	.00263	-.00037	.00252	.00619	.20985	2.7810	.00308

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	11.826	.01432	.00373	7.8275	.00453	.01321	.02353
SDev	.012	.00057	.00492	.0414	.00945	.01636	.02310
%RSD	.09848	3.9728	132.21	.52883	208.58	123.81	98.172

#1	11.842	.01383	.00619	7.8304	.01328	.03592	-.01031
#2	11.815	.01482	.00619	7.7843	.00728	.01326	.04180
#3	11.828	.01383	-.00366	7.8827	-.00889	.00566	.03126
#4	11.820	.01482	.00619	7.8125	.00645	-.00197	.03135

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	.01524	4.3072	.00119	.11518	-.00467	-.02254	.00373
SDev	.01662	.0034	.01377	.00050	.00031	.07590	.00241
%RSD	109.05	.07804	1153.3	.43067	6.7188	336.73	64.563

#1	.01523	4.3042	-.01899	.11500	-.00508	-.03124	.00012
#2	.02700	4.3043	.00590	.11474	-.00442	.08546	.00500

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#3	.02700	4.3101	.01202	.11589	-.00475	-.05469	.00481
#4	-.00826	4.3101	.00585	.11510	-.00442	-.08970	.00500
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 .01372
SDev .00088
%RSD 6.3949

#1	.01484
#2	.01279
#3	.01393
#4	.01334

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-6

Operator: MTW

Run Time: 08/22/00 11:26:08

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	1.0137	50.259	5.2228	5.1038	5.0133	5.1331	52.782
SDev	.0030	.120	.0871	.0298	.0143	.0090	.182
%RSD	.29469	.23900	1.6669	.58370	.28478	.17532	.34572
#1	1.0111	50.176	5.3319	5.0767	5.0009	5.1265	52.612
#2	1.0112	50.343	5.2492	5.1240	5.0257	5.1394	52.695
#3	1.0169	50.380	5.1329	5.1345	5.0255	5.1422	52.786
#4	1.0155	50.137	5.1774	5.0798	5.0009	5.1243	53.034
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	5.2877	5.1458	5.1109	4.9650	52.881	49.914	4.8544
SDev	.0275	.0132	.0130	.0152	.100	.491	.0345
%RSD	.51966	.25626	.25370	.30597	.18939	.98329	.71085
#1	5.2540	5.1306	5.0922	4.9566	52.736	50.187	4.8460
#2	5.2796	5.1430	5.1129	4.9778	52.905	50.468	4.8929
#3	5.3184	5.1471	5.1172	4.9778	52.921	49.509	4.8674
#4	5.2987	5.1625	5.1214	4.9479	52.963	49.493	4.8114
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	50.785	5.1199	5.1366	50.456	5.1955	5.1518	5.1625
SDev	.114	.0087	.0213	.240	.0338	.0249	.1049
%RSD	.22541	.16903	.41427	.47505	.64971	.48257	2.0328
#1	50.680	5.1073	5.1366	50.384	5.1832	5.1210	5.0918
#2	50.945	5.1221	5.1267	50.683	5.2222	5.1819	5.0715
#3	50.782	5.1231	5.1661	50.606	5.1533	5.1517	5.1854
#4	50.734	5.1270	5.1169	50.151	5.2233	5.1525	5.3012
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	5.1814	5.1295	5.2000	5.0501	5.0199	10.298	5.1059
SDev	.1057	.0030	.0479	.0127	.0085	.331	.0068
%RSD	2.0405	.05772	.92041	.25190	.16863	3.2166	.13369
#1	5.2976	5.1279	5.2500	5.0393	5.0085	10.005	5.0970
#2	5.0787	5.1280	5.1349	5.0609	5.0239	10.680	5.1054

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#3	5.2432	5.1339	5.2052	5.0614	5.0282	10.038	5.1134
#4	5.1062	5.1281	5.2099	5.0389	5.0190	10.469	5.1076
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 5.0200
SDev .0218
%RSD .43389

#1 4.9909
#2 5.0276
#3 5.0186
#4 5.0428

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB6

Operator: MTW

Run Time: 08/22/00 11:29:16

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	.00179	.01431	-.00304	.00483	.00055	.00057	.00961
SDev	.00215	.00613	.02465	.00823	.00042	.00026	.00220
%RSD	119.76	42.831	811.98	170.43	76.346	45.627	22.905
#1	.00288	.01925	-.02243	.00035	.00000	.00034	.00656
#2	-.00002	.01213	.01637	.00236	.00050	.00036	.01166
#3	.00428	.01925	.02010	.01705	.00071	.00073	.00957
#4	.00002	.00662	-.02618	-.00044	.00101	.00085	.01064
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	.00092	.00279	.00332	.00066	.00383	.58059	.00012
SDev	.00127	.00209	.00165	.00084	.00280	.22848	.00063
%RSD	138.65	75.041	49.681	127.10	73.104	39.352	534.31
#1	.00280	.00383	.00571	.00177	.00216	.81407	.00074
#2	.00015	.00105	.00306	.00088	.00083	.72316	.00019
#3	.00012	.00523	.00253	.00001	.00549	.46695	.00030
#4	.00061	.00104	.00199	.00000	.00682	.31819	-.00075
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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00803	.00099	.00246	.01587	.00027	-.00373	-.00524
SDev	.01034	.00000	.00472	.00439	.00674	.01566	.00607
%RSD	128.74	.23345	191.45	27.696	2482.1	419.71	115.80
#1	.01406	.00098	-.00369	.01497	.00158	-.01697	-.00001
#2	.00067	.00098	.00123	.01006	.00397	-.01706	-.01046
#3	-.00201	.00099	.00616	.01989	.00514	.01341	.00004
#4	.01941	.00099	.00616	.01855	-.00959	.00570	-.01055
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	-.00097	.01160	-.00105	.00052	.00016	.01745	.00127
SDev	.04146	.00291	.01214	.00037	.00027	.02526	.00384
%RSD	4277.5	25.060	1154.8	70.678	163.30	144.74	301.38
#1	-.02448	.01309	.01387	.00003	.00016	.01743	.00482
#2	.00686	.01298	.00355	.00056	-.00016	.04089	-.00363

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#3	-.04014	.00724	-.01284	.00056	.00049	-.01761	.00012
#4	.05389	.01308	-.00878	.00093	.00016	.02909	.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	.00112
SDev	.00089
%RSD	79.133

#1	.00022
#2	.00095
#3	.00097
#4	.00235

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHP6H

Operator: MTW

Run Time: 08/22/00 11:32:24

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00010	.15999	-.02494	.00506	.03320	.00009	86.478
SDev	.00117	.00529	.02365	.00283	.00024	.00001	.462
%RSD	1153.5	3.3067	94.863	55.960	.71608	7.6666	.53458
#1	.00008	.15871	-.00846	.00848	.03317	.00010	85.962
#2	.00011	.15332	-.04323	.00164	.03287	.00008	86.295
#3	.00154	.16220	-.04717	.00567	.03337	.00008	87.048
#4	-.00132	.16573	-.00089	.00447	.03337	.00008	86.608
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	.00370	-.00177	.00199	.00466	.35715	2.3100	.00140
SDev	.00238	.00115	.00184	.00111	.00390	.3629	.00058
%RSD	64.539	64.838	92.334	23.840	1.0909	15.710	41.768
#1	.00134	-.00036	-.00066	.00444	.35498	2.2769	.00187
#2	.00653	-.00317	.00252	.00355	.35299	2.1612	.00054
#3	.00216	-.00176	.00359	.00620	.35898	2.8224	.00159
#4	.00476	-.00177	.00253	.00444	.36164	1.9794	.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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.008	.01609	.00498	7.7008	.00467	.00356	-.00521
SDev	.012	.00049	.00620	.0408	.00359	.02180	.00600
%RSD	.10138	3.0613	124.49	.52997	76.748	612.79	115.15
#1	11.992	.01584	.00621	7.6686	.00260	-.00969	-.01050
#2	12.016	.01584	-.00364	7.7258	.00774	-.00976	-.01031
#3	12.005	.01682	.00621	7.6637	.00068	.03581	.00001
#4	12.019	.01584	.01114	7.7450	.00767	-.00213	-.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	.00094	4.3897	-.00149	.11358	-.00287	.00223	.00376
SDev	.03554	.0192	.02497	.00058	.00031	.03933	.00243
%RSD	3777.0	.43656	1679.0	.50969	10.942	1765.1	64.639
#1	-.03530	4.3621	.02212	.11328	-.00311	.06065	.00012
#2	-.02356	4.4027	-.02308	.11406	-.00278	-.02108	.00481

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#3	.03523	4.4027	-.02304	.11291	-.00246	-.00947	.00500
#4	.02740	4.3912	.01806	.11406	-.00311	-.02118	.00510
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem ZN
Units ppm
Avge .01009
SDev .00054
%RSD 5.3163

#1 .01014
#2 .01069
#3 .00939
#4 .01015

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHP6L

Operator: MTW

Run Time: 08/22/00 11:35:32

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	.00039	.38941	-.01099	.00067	.01021	.00005	78.024
SDev	.00178	.00526	.02993	.00201	.00010	.00006	.363
%RSD	459.37	1.3499	272.39	300.25	1.0138	106.18	.46578
#1	-.00139	.39118	-.01006	.00368	.01005	.00008	78.554
#2	.00004	.38226	-.04858	-.00034	.01026	.00008	77.735
#3	.00004	.38943	.02469	-.00034	.01026	.00008	77.865
#4	.00287	.39476	-.01001	-.00032	.01026	-.00003	77.944
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	-.00034	.00133	.00022	.06023	1.9835	.00136
SDev	.00256	.00197	.00243	.00151	.00239	.2710	.00018
%RSD	261.11	573.49	182.85	670.16	3.9730	13.661	13.107
#1	-.00397	.00106	.00253	.00089	.06073	1.9629	.00121
#2	-.00134	-.00034	-.00120	.00000	.05807	1.9629	.00159
#3	.00226	.00104	.00412	.00177	.05873	2.3348	.00140
#4	-.00087	-.00314	-.00013	-.00176	.06340	1.6736	.00123
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	15.132	.01009	.00863	7.0812	.00641	.01351	.01830
SDev	.084	.00049	.00284	.0466	.00715	.00982	.01004
%RSD	.55592	4.8827	32.961	.65870	111.45	72.693	54.864
#1	15.229	.00985	.01109	7.0795	.00329	-.00210	.01033
#2	15.151	.00985	.00617	7.1318	.01302	-.02489	.02105
#3	15.122	.00985	.00617	7.0942	-.00218	-.00966	.03136
#4	15.026	.01083	.01109	7.0196	.01151	-.01740	.01049
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	-.02531	3.6079	-.00348	.11479	-.00442	.01109	.00383
SDev	.03816	.0304	.03234	.00060	.00027	.02432	.00241
%RSD	150.81	.84265	928.59	.52257	6.0481	219.36	62.949
#1	.00702	3.6267	.04065	.11500	-.00475	-.01813	.00509
#2	-.02433	3.6152	-.01682	.11537	-.00442	.04029	.00499

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#3	-.00474	3.5630	-.03527	.11484	-.00442	.01692	.00500
#4	-.07917	3.6267	-.00249	.11395	-.00410	.00527	.00021

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	.00421
SDev	.00099
%RSD	23.508

#1	.00308
#2	.00414
#3	.00550
#4	.00413

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-7

Operator: MTW

Run Time: 08/22/00 11:38:41

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	1.0076	50.347	5.2067	5.0962	5.0372	5.1586	52.557
SDev	.0037	.141	.0874	.0148	.0219	.0136	.299
%RSD	.36557	.27979	1.6782	.28953	.43499	.26374	.56826
#1	1.0113	50.402	5.2675	5.0920	5.0281	5.1612	52.930
#2	1.0084	50.450	5.1515	5.1180	5.0483	5.1681	52.618
#3	1.0082	50.398	5.1140	5.0864	5.0610	5.1664	52.215
#4	1.0025	50.139	5.2937	5.0884	5.0114	5.1386	52.466
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	5.2828	5.1360	5.1008	4.9943	52.858	50.057	4.8969
SDev	.0390	.0275	.0213	.0181	.141	.213	.0361
%RSD	.73818	.53513	.41773	.36207	.26742	.42510	.73730
#1	5.3323	5.1652	5.1230	4.9866	53.014	49.790	4.8780
#2	5.2954	5.1513	5.1134	5.0069	52.941	50.270	4.9087
#3	5.2484	5.1040	5.0762	5.0113	52.730	49.989	4.9415
#4	5.2551	5.1236	5.0906	4.9725	52.748	50.179	4.8592
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	50.939	5.1110	5.1427	50.911	5.2245	5.1079	5.2099
SDev	.215	.0177	.0307	.242	.0393	.0512	.0404
%RSD	.42250	.34607	.59785	.47558	.75179	1.0015	.77555
#1	51.055	5.1330	5.1711	50.760	5.2754	5.1370	5.1864
#2	51.125	5.1172	5.1612	51.104	5.2274	5.1519	5.2700
#3	50.937	5.0935	5.1021	51.130	5.1804	5.0368	5.1965
#4	50.637	5.1004	5.1366	50.650	5.2150	5.1058	5.1864
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	5.1598	5.1281	5.1499	5.0729	5.0256	10.237	5.1093
SDev	.0648	.0124	.0870	.0183	.0121	.058	.0170
%RSD	1.2549	.24232	1.6890	.36059	.24032	.56347	.33206
#1	5.1455	5.1283	5.2319	5.0700	5.0328	10.305	5.1257
#2	5.1101	5.1167	5.0515	5.0857	5.0367	10.166	5.1219

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#3	5.2545	5.1453	5.2135	5.0878	5.0236	10.227	5.0975
#4	5.1292	5.1221	5.1025	5.0482	5.0095	10.250	5.0921

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	5.5000	11.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	4.5000	9.0000	4.5000

Elem	ZN
Units	ppm
Avge	5.0056
SDev	.0169
%RSD	.33739

#1	5.0296
#2	4.9995
#3	4.9901
#4	5.0031

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB7

Operator: MTW

Run Time: 08/22/00 11:41:49

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	.00107	.01430	-.01845	.00352	.00025	.00035	.00542
SDev	.00138	.01121	.01798	.00102	.00029	.00018	.00277
%RSD	128.88	78.373	97.456	28.946	115.47	50.130	51.089
#1	-.00000	.00136	-.02992	.00296	.00000	.00022	.00323
#2	.00143	.02458	-.00309	.00438	.00050	.00022	.00842
#3	-.00002	.00855	-.03764	.00437	.00000	.00036	.00291
#4	.00287	.02272	-.00314	.00236	.00050	.00060	.00712
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	.00177	.00104	.00173	.00110	.00067	.61778	-.00005
SDev	.00221	.00114	.00182	.00044	.00084	.19410	.00067
%RSD	125.34	109.76	105.04	39.965	125.77	31.419	1392.3
#1	.00158	.00244	.00093	.00088	-.00050	.50827	.00019
#2	.00477	-.00036	-.00013	.00088	.00083	.90498	-.00009
#3	-.00056	.00105	.00200	.00176	.00083	.49175	-.00094
#4	.00127	.00104	.00412	.00088	.00150	.56613	.00065
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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00736	.00098	.00246	.00749	-.00058	-.00187	.00518
SDev	.01208	.00000	.00246	.00683	.00772	.04797	.01802
%RSD	163.97	.08850	99.999	91.244	1330.8	2566.8	347.79
#1	.02209	.00098	.00123	.00872	.00582	-.01700	.00006
#2	.00602	.00098	.00123	.00022	.00020	.04359	-.01049
#3	-.00736	.00098	.00123	.00469	-.01163	.02852	.03117
#4	.00870	.00099	.00616	.01631	.00329	-.06258	-.00002
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	.00588	.01593	.00465	-.00010	.00016	.02626	.00005
SDev	.02956	.00576	.01132	.00050	.00046	.06493	.00303
%RSD	502.83	36.167	243.60	520.84	282.84	247.23	5934.3
#1	-.02840	.01303	-.00668	-.00049	.00016	-.00585	.00003
#2	.03428	.01303	.01793	-.00049	.00049	.12261	.00002

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#3	-.00881	.02457	.00991	.00003	-.00049	-.01750	-.00363
#4	.02645	.01308	-.00257	.00056	.00049	.00579	.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	.00118
SDev	.00121
%RSD	102.56

#1	-.00035
#2	.00153
#3	.00255
#4	.00099

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHV64BF Operator: MTW
Run Time: 08/22/00 11:44:58
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	.00036	.00757	-.00104	-.00306	-.00015	.00022	.02982
SDev	.00072	.00516	.02033	.00146	.00017	.00000	.00101
%RSD	199.52	68.255	1963.9	47.594	115.47	.79801	3.3887

#1	.00000	.00129	.01639	-.00507	-.00030	.00022	.02889
#2	.00000	.00669	-.02225	-.00307	.00000	.00022	.02902
#3	.00144	.01381	-.01461	-.00246	.00000	.00022	.03055
#4	.00000	.00848	.01633	-.00165	-.00030	.00022	.03083

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	-.00031	.00000	.00173	.00044	.00233	.48141	-.00079
SDev	.00145	.00238	.00111	.00051	.00064	.15200	.00071
%RSD	460.68	139760.	64.054	115.16	27.409	31.574	89.290

#1	-.00078	-.00314	.00040	.00088	.00150	.32645	-.00169
#2	-.00202	.00245	.00306	.00000	.00283	.46695	-.00017
#3	.00140	.00104	.00200	.00088	.00216	.69010	-.00103
#4	.00014	-.00035	.00146	-.00000	.00283	.44216	-.00028

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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00201	.00000	.00369	.01587	.00305	-.02844	.01305
SDev	.00847	.00000	.00284	.00520	.00441	.01317	.02613
%RSD	421.64	54.471	76.974	32.770	144.56	46.324	200.32

#1	-.01272	.00000	.00123	.00961	.00610	-.03232	.01046
#2	.00335	.00000	.00616	.01363	-.00350	-.03980	-.02098
#3	.00602	.00000	.00616	.01944	.00468	-.00941	.04171
#4	-.00469	.00000	.00123	.02078	.00494	-.03223	.02099

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	.01470	-.02461	.00212	-.00020	-.00049	.02041	.00038
SDev	.03944	.00579	.02550	.00015	.00027	.04987	.00064
%RSD	268.32	23.545	1204.0	78.431	54.433	244.36	169.49

#1	.06954	-.03330	.00776	-.00027	-.00082	-.01751	.00002
#2	.00686	-.02172	.00145	.00003	-.00049	.08753	.00012

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#3	-.02448	-.02170	.03050	-.00027	-.00049	-.01756	.00134
#4	.00686	-.02172	-.03123	-.00027	-.00016	.02917	.00003
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00210
SDev	.00131
%RSD	62.223

#1	.00282
#2	.00232
#3	.00307
#4	.00020

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHV64CF Operator: MTW
 Run Time: 08/22/00 11:48:06
 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	.05095	2.0322	2.0730	1.0347	2.0198	.05415	L.04885
SDev	.00138	.0097	.0684	.0000	.0127	.00021	.00135
%RSD	2.7129	.47826	3.2988	.00069	.62754	.39256	2.7554

#1	.05277	2.0452	1.9849	1.0347	2.0216	.05419	L.04986
#2	.04987	2.0291	2.1512	1.0347	2.0275	.05421	L.04982
#3	.05127	2.0219	2.0703	1.0347	2.0013	.05384	L.04871
#4	.04988	2.0327	2.0855	1.0347	2.0287	.05434	L.04699

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	.04960	.53561	.21268	.25669	1.1139	L.44629	.95291
SDev	.00360	.00330	.00279	.00210	.0042	.18226	.00332
%RSD	7.2541	.61631	1.3136	.81794	.37481	40.839	.34856

#1	.04839	.54015	.21440	.25802	1.1152	L.20248	.95299
#2	.04782	.53596	.21334	.25537	1.1186	L.54960	.95607
#3	.05495	.53317	.21441	.25448	1.1086	L.61572	.94831
#4	.04723	.53317	.20856	.25889	1.1132	L.41736	.95428

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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.00402	.53170	.00263	L.02727	.55898	.53303	L-.00043
SDev	.01011	.00246	.00472	.00293	.00707	.02003	.01004
%RSD	251.66	.46270	179.35	10.750	1.2654	3.7573	2314.5

#1	L.01674	.53244	.00140	L.02972	.56075	.55023	L.00745
#2	L.00602	.53441	.00632	L.02838	.56753	.54254	L.00742
#3	L.00067	.52851	.00632	L.02302	.55704	.50451	L-.01353
#4	L-.00736	.53146	-.00353	L.02794	.55061	.53486	L-.00307

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	2.0872	-.02240	-.01058	1.0252	-.00025	2.1556	.51362
SDev	.0541	.00552	.01314	.0057	.00016	.0748	.00550
%RSD	2.5936	24.629	124.28	.55413	66.667	3.4688	1.0708

#1	2.0392	-.02665	-.00848	1.0261	-.00049	2.0913	.52092
#2	2.0940	-.02676	.00179	1.0282	-.00016	2.2081	.51248

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#3	2.0548	-.02103	-.02913	1.0170	-.00016	2.0915	.50760
#4	2.1606	-.01516	-.00648	1.0296	-.00016	2.2315	.51350

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	.52808
SDev	.00115
%RSD	.21814

#1	.52808
#2	.52648
#3	.52859
#4	.52916

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DHM8PF

Operator: MTW

Run Time: 08/22/00 11:51:19

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	.00003	.01200	-.02645	-.00544	.05868	.00009	85.596
SDev	.00201	.01058	.01756	.00000	.00039	.00001	.312
%RSD	6445.4	88.138	66.386	.04171	.67212	6.6911	.36450
#1	.00002	.01201	-.02642	-.00544	.05850	.00010	85.159
#2	.00288	.02637	-.04584	-.00544	.05900	.00010	85.601
#3	-.00138	.00840	-.00332	-.00544	.05900	.00008	85.873
#4	-.00140	.00122	-.03022	-.00545	.05820	.00009	85.751
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	.00059	-.00072	.00106	.00134	.22899	3.3554	.00087
SDev	.00102	.00070	.00164	.00051	.00084	.1651	.00004
%RSD	172.38	96.877	154.61	37.959	.36621	4.9199	4.7622
#1	-.00029	-.00037	-.00119	.00090	.22916	3.1199	.00085
#2	-.00007	-.00037	.00093	.00178	.22982	3.4257	.00085
#3	.00076	-.00177	.00252	.00178	.22916	3.5001	.00093
#4	.00197	-.00037	.00200	.00090	.22782	3.3761	.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	31.026	.15721	.00496	9.3273	-.00094	.01889	.00518
SDev	.130	.00049	.00472	.0308	.00962	.02727	.01348
%RSD	.42043	.31204	95.079	.32976	1024.0	144.34	260.43
#1	30.835	.15745	.00619	9.2813	-.00890	-.01714	-.00016
#2	31.076	.15745	.00127	9.3398	-.00254	.04353	-.01046
#3	31.130	.15745	.00127	9.3443	.01295	.01318	.01057
#4	31.063	.15647	.01112	9.3438	-.00526	.03600	.02076
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	.00256	3.6745	.00574	.13243	-.00508	-.02776	.00162
SDev	.03140	.0029	.01600	.00041	.00027	.08223	.00228
%RSD	1225.7	.07845	279.02	.31187	5.2677	296.25	140.73
#1	-.02780	3.6730	.02831	.13182	-.00508	-.03067	.00012
#2	.04664	3.6788	-.00667	.13256	-.00475	.06274	.00003

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#3	-.00429	3.6731	-.00451	.13276	-.00508	-.13579	.00490
#4	-.00430	3.6730	.00581	.13256	-.00541	-.00732	.00144
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	.03114
SDev	.00163
%RSD	5.2335

#1	.03051
#2	.03234
#3	.02914
#4	.03259

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM8VF

Operator: MTW

Run Time: 08/22/00 11:54:27

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61H

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00002	.01833	-.01760	.00164	.03207	.00006	87.594
SDev	.00000	.00231	.04112	.00160	.00024	.00006	.299
%RSD	1.1165	12.590	233.66	97.461	.76530	100.000	.34166

#1	.00002	.01740	-.01856	.00370	.03187	.00010	87.319
#2	.00002	.01924	-.05717	-.00011	.03237	-.00003	87.412
#3	.00002	.01568	-.03398	.00189	.03187	.00010	87.655
#4	.00002	.02102	.03931	.00109	.03216	.00010	87.989

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	.00176	.00069	.00106	.00353	.06971	3.6757	.00036
SDev	.00141	.00176	.00201	.00072	.00159	.3285	.00014
%RSD	80.180	256.21	188.74	20.403	2.2743	8.9363	39.909

#1	.00145	.00104	.00146	.00441	.06872	3.9629	.00049
#2	.00278	-.00176	-.00120	.00265	.07205	3.2025	.00030
#3	.00293	.00243	.00359	.00353	.06938	3.7645	.00019
#4	-.00011	.00104	.00040	.00353	.06872	3.7728	.00046

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	13.497	.00641	.00124	15.441	.00290	-.00568	.01049
SDev	.049	.00057	.00402	.103	.00304	.02520	.00852
%RSD	.36631	8.8663	323.84	.66467	104.75	443.25	81.218

#1	13.435	.00691	.00617	15.320	.00686	.02848	.02091
#2	13.556	.00592	-.00368	15.550	.00055	-.03231	.01049
#3	13.494	.00691	.00124	15.497	.00370	-.00944	.00004
#4	13.505	.00592	.00124	15.397	.00048	-.00947	.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
Avg	-.01353	4.3795	-.01019	.11027	-.00541	.02267	.00003
SDev	.04595	.0125	.01780	.00078	.00027	.03503	.00008
%RSD	339.66	.28566	174.62	.71072	4.9485	154.55	306.22

#1	.02663	4.3621	.00578	.10936	-.00541	-.00652	.00012
#2	-.06739	4.3795	-.00249	.11093	-.00508	-.00653	-.00007

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#3	.02271	4.3853	-.00870	.11093	-.00541	.06353	.00003
#4	-.03606	4.3911	-.03536	.10988	-.00573	.04019	.00002
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 .01380
SDev .00092
%RSD 6.6486

#1	.01279
#2	.01336
#3	.01490
#4	.01413

Errors	LC Pass
High	100.00
Low	-.02000

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F mw
8-22-00

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Method: QUANMET Sample Name: DHM8XE Operator: MTW
Run Time: 08/22/00 11:57:36
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	-.00123	.01199	-.01671	.02932	.05825	.00006	83.884
SDev	.00072	.01030	.02001	.00893	.00050	.00006	.531
%RSD	58.157	85.877	119.79	30.439	.86272	102.41	.63244

#1	-.00088	.01025	-.01763	.02198	.05850	-.00003	83.129
#2	-.00088	-.00052	-.00212	.04010	.05850	.00010	84.339
#3	-.00086	.02447	-.00239	.03322	.05750	.00008	84.137
#4	-.00231	.01378	-.04468	.02199	.05850	.00010	83.931

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	.00210	.00032	.00213	.00087	2.5686	7.1489	-.00063
SDev	.00191	.00241	.00231	.00111	.0082	.3262	.00031
%RSD	90.889	748.72	108.68	128.04	.31837	4.5627	48.594

#1	.00099	-.00177	-.00120	-.00068	2.5651	6.6902	-.00103
#2	.00344	.00241	.00306	.00109	2.5778	7.3514	-.00067
#3	.00396	.00241	.00412	.00109	2.5592	7.4092	-.00028
#4	-.00000	-.00177	.00253	.00197	2.5725	7.1448	-.00056

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	42.016	.34330	.00777	5.0104	.00281	.00509	.00782
SDev	.246	.00168	.00472	.0376	.00553	.05295	.01001
%RSD	.58443	.49019	60.676	.75053	196.85	1040.5	128.13

#1	41.972	.34109	.00161	5.0167	-.00260	-.03291	.00003
#2	42.277	.34503	.01147	5.0153	-.00130	-.04038	-.00008
#3	41.699	.34305	.01147	4.9594	.00720	.07343	.01043
#4	42.117	.34404	.00654	5.0502	.00795	.02022	.02089

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	-.02947	3.8974	-.00151	.06835	-.00500	-.00125	.00137
SDev	.02538	.0427	.01317	.00039	.00056	.02783	.00249
%RSD	86.121	1.0945	871.36	.57336	11.199	2231.7	181.27

#1	-.03732	3.8352	-.02055	.06854	-.00573	.02800	.00003
#2	-.01769	3.9278	-.00001	.06854	-.00508	-.03053	.00023

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#3	-.00207	3.9047	.00620	.06776	-.00442	-.01871	.00511
#4	-.06080	3.9220	.00831	.06854	-.00475	.01626	.00013
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.01272
SDev	.00120
%RSD	9.4164

#1	.01183
#2	.01445
#3	.01259
#4	.01201

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM91F

Operator: MTW

Run Time: 08/22/00 12:00:44

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00002	.01566	.00551	-.00382	.02918	.00016	77.296
SDev	.00117	.00822	.01793	.00030	.00024	.00008	.125
%RSD	5251.4	52.537	325.21	7.8302	.81475	49.658	.16205
#1	.00144	.02277	-.00707	-.00367	.02935	.00022	77.109
#2	.00004	.02279	.01215	-.00367	.02885	.00008	77.347
#3	.00002	.00854	.02778	-.00367	.02915	.00022	77.349
#4	-.00141	.00853	-.01081	-.00427	.02935	.00010	77.379
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	.00024	.00209	.00159	.00089	.10666	2.2397	-.00010
SDev	.00381	.00210	.00067	.00072	.00054	.0865	.00064
%RSD	1562.1	100.54	41.918	80.698	.51003	3.8643	659.99
#1	-.00362	.00105	.00146	.00089	.10667	2.2852	.00019
#2	-.00200	.00384	.00146	.00178	.10733	2.3265	.00065
#3	.00172	.00383	.00093	.00001	.10666	2.2191	-.00048
#4	.00487	-.00037	.00252	.00089	.10600	2.1281	-.00075
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.955	.04749	.00125	2.4458	.00396	.01143	.01832
SDev	.047	.00049	.00402	.0175	.00715	.01567	.02318
%RSD	.23330	1.0377	322.43	.71507	180.41	137.08	126.54
#1	19.953	.04823	.00617	2.4622	-.00012	-.00185	.04175
#2	19.894	.04725	.00125	2.4224	-.00095	.02095	.01044
#3	20.006	.04725	.00125	2.4555	.00246	.02851	-.01044
#4	19.966	.04724	-.00368	2.4430	.01447	-.00189	.03152
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	.00322	3.9771	-.00142	.08068	-.00483	.00498	.00125
SDev	.04904	.0332	.01401	.00036	.00031	.04370	.00244
%RSD	1523.2	.83571	988.29	.44054	6.4910	877.62	195.71
#1	-.00853	3.9857	-.00234	.08082	-.00442	-.04171	.00012
#2	-.05946	3.9279	.00779	.08056	-.00475	.00493	.00490

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#3	.05415	3.9973	.00975	.08108	-.00508	-.00670	.00003
#4	.02672	3.9973	-.02087	.08025	-.00508	.06340	-.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 .01348
SDev .00110
%RSD 8.1622

#1	.01283
#2	.01231
#3	.01468
#4	.01410

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM94F

Operator: MTW

Run Time: 08/22/00 12:03:52

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	.00036	.02456	-.02145	.00525	.03086	.00019	84.948
SDev	.00137	.00700	.04633	.00178	.00036	.00006	.212
%RSD	382.89	28.510	215.97	33.894	1.1574	32.993	.24931
#1	.00144	.01742	-.01469	.00781	.03136	.00021	85.199
#2	-.00143	.03348	-.01476	.00378	.03065	.00022	84.798
#3	-.00000	.02094	-.08413	.00500	.03086	.00022	85.046
#4	.00142	.02641	.02776	.00440	.03057	.00010	84.749
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00096	.00139	.00160	.00463	.00980	2.5579	.00179
SDev	.00162	.00134	.00181	.00085	.00038	.2959	.00052
%RSD	168.59	96.099	113.51	18.245	3.9278	11.569	28.737
#1	-.00080	.00244	.00093	.00529	.00947	2.8058	.00140
#2	-.00210	.00244	.00147	.00441	.00947	2.3017	.00148
#3	.00127	.00104	.00412	.00529	.01013	2.8224	.00176
#4	-.00220	-.00035	-.00013	.00353	.01014	2.3017	.00253
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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.434	.03124	.00493	8.8511	-.00237	.00954	.02869
SDev	.037	.00049	.00739	.0452	.00302	.02010	.02311
%RSD	.35212	1.5699	149.96	.51070	127.44	210.59	80.544
#1	10.406	.03148	.00123	8.8021	-.00252	.01336	.02085
#2	10.471	.03148	.01108	8.8946	.00164	-.00185	.00004
#3	10.460	.03050	.01108	8.8839	-.00292	.03612	.05211
#4	10.398	.03148	-.00369	8.8236	-.00567	-.00946	.04176
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	.02157	3.8554	-.00498	.10992	-.00491	.01465	.00101
SDev	.03173	.0100	.02170	.00034	.00042	.03740	.00178
%RSD	147.07	.26051	435.49	.30937	8.6066	255.23	176.31
#1	.04606	3.8642	.01604	.10962	-.00475	-.01748	.00368
#2	.01472	3.8583	-.03542	.10977	-.00541	.04093	.00022

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#3	-.02054	3.8409	-.00025	.11040	-.00508	-.01746	.00022
#4	.04606	3.8583	-.00030	.10988	-.00442	.05262	-.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	.01632
SDev	.00079
%RSD	4.8345

#1	.01524
#2	.01677
#3	.01623
#4	.01703

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM94P5F Operator: MTW
 Run Time: 08/22/00 12:07:01
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00071	.00668	-.00102	-.00397	.00586	.00010	17.316
SDev	.00184	.00910	.01715	.00153	.00025	.00000	.058
%RSD	258.72	136.20	1682.8	38.448	4.2875	.00000	.33639
#1	.00286	.00663	-.00681	-.00447	.00624	.00010	17.394
#2	.00143	.01033	-.02227	-.00588	.00573	.00010	17.289
#3	-.00000	.01558	.00856	-.00306	.00573	.00010	17.258
#4	-.00143	-.00581	.01645	-.00247	.00573	.00010	17.323
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	-.00045	-.00105	.00173	.00110	-.00001	.95043	-.00024
SDev	.00117	.00268	.00102	.00044	.00175	.23047	.00046
%RSD	260.69	255.75	58.963	39.843	32390.	24.249	189.75
#1	-.00052	-.00174	.00306	.00088	.00149	.90498	-.00036
#2	.00019	.00105	.00093	.00088	.00082	.66530	-.00075
#3	.00060	-.00454	.00199	.00176	.00016	1.2190	.00035
#4	-.00207	.00105	.00093	.00088	-.00250	1.0124	-.00020
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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.1094	.00689	.00123	1.7699	-.00116	-.02467	.01563
SDev	.0110	.00000	.00402	.0056	.00253	.02775	.01809
%RSD	.52340	.02154	326.60	.31433	218.21	112.50	115.74
#1	2.1108	.00689	.00616	1.7671	.00192	-.05504	.01037
#2	2.0947	.00688	-.00369	1.7636	-.00342	-.00946	-.00002
#3	2.1108	.00689	.00123	1.7734	-.00012	-.03991	.04174
#4	2.1215	.00689	.00123	1.7756	-.00301	.00574	.01042
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	-.00881	.74416	.00367	.02186	-.00156	.03800	.00003
SDev	.01394	.02428	.00603	.00016	.00049	.07470	.00008
%RSD	158.14	3.2632	164.17	.74632	31.579	196.60	291.90
#1	-.00881	.76008	.01187	.02167	-.00115	-.04083	.00012
#2	-.02057	.75429	.00360	.02178	-.00213	.07593	-.00007

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#3	-.01665	.70796	.00174	.02204	-.00115	.12268	.00003
#4	.01077	.75429	-.00251	.02193	-.00180	-.00578	.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	.00447
SDev	.00124
%RSD	27.718

#1	.00361
#2	.00363
#3	.00625
#4	.00440

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM94SF Operator: MTW
 Run Time: 08/22/00 12:10:09
 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	.04876	1.9917	2.0021	1.0210	2.0576	.05276	84.206
SDev	.00071	.0086	.0643	.0056	.0036	.00016	.394
%RSD	1.4630	.42971	3.2129	.54769	.17467	.31298	.46816
#1	.04841	1.9805	2.0012	1.0142	2.0589	.05269	83.897
#2	.04983	1.9984	1.9161	1.0210	2.0619	.05282	84.335
#3	.04841	1.9894	2.0706	1.0279	2.0536	.05295	84.708
#4	.04841	1.9983	2.0203	1.0210	2.0561	.05256	83.886
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	.04383	.50665	.20377	.25446	1.0773	2.4319	.98263
SDev	.00178	.00228	.00115	.00072	.0033	.3249	.00354
%RSD	4.0737	.44926	.56425	.28252	.30691	13.361	.35994
#1	.04585	.50664	.20377	.25446	1.0746	2.3430	.98687
#2	.04278	.50665	.20218	.25534	1.0773	2.2356	.98229
#3	.04194	.50386	.20431	.25446	1.0819	2.2356	.97825
#4	.04473	.50944	.20484	.25358	1.0753	2.9133	.98312
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	10.361	.53907	.00016	8.7782	.52653	.52658	.00180
SDev	.024	.00203	.00472	.0177	.01268	.01647	.01986
%RSD	.22825	.37627	2927.4	.20221	2.4076	3.1278	1103.3
#1	10.337	.53735	-.00353	8.8043	.52205	.53418	.00699
#2	10.353	.54030	-.00353	8.7704	.54183	.52656	-.01367
#3	10.393	.54129	.00139	8.7731	.53033	.50372	-.01384
#4	10.361	.53735	.00632	8.7650	.51192	.54186	.02772
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	2.0420	3.8561	.00742	1.1379	-.00483	2.0424	.50746
SDev	.0813	.0252	.01034	.0018	.00016	.0683	.00009
%RSD	3.9827	.65462	139.37	.15887	3.3898	3.3453	.01832
#1	2.1213	3.8474	.01412	1.1386	-.00475	1.9636	.50739
#2	1.9490	3.8416	-.00241	1.1400	-.00508	2.0103	.50739

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#3	2.0979	3.8938	-.00036	1.1371	-.00475	2.0804	.50749
#4	1.9999	3.8416	.01833	1.1358	-.00475	2.1154	.50758
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	.50400
SDev	.00446
%RSD	.88465

#1	.49787
#2	.50416
#3	.50552
#4	.50845

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM94DF Operator: MTW
 Run Time: 08/22/00 12:13:17
 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	.04876	1.9935	2.0242	1.0108	2.0603	.05289	84.278
SDev	.00136	.0071	.0245	.0205	.0092	.00016	.279
%RSD	2.7919	.35446	1.2080	2.0290	.44852	.31288	.33104
#1	.04984	2.0037	2.0164	1.0210	2.0705	.05308	83.962
#2	.04840	1.9876	2.0474	1.0210	2.0481	.05270	84.164
#3	.04981	1.9913	2.0398	1.0210	2.0609	.05296	84.375
#4	.04698	1.9912	1.9934	.97999	2.0619	.05282	84.611
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04812	.50664	.20364	.25358	1.0861	2.3823	.98391
SDev	.00304	.00360	.00026	.00144	.0015	.1914	.00548
%RSD	6.3210	.71045	.12948	.56820	.13601	8.0337	.55661
#1	.04477	.50804	.20377	.25534	1.0866	2.2852	.99072
#2	.04844	.50525	.20377	.25181	1.0846	2.6488	.97769
#3	.05207	.51081	.20325	.25358	1.0853	2.2108	.98516
#4	.04722	.50245	.20377	.25357	1.0879	2.3843	.98207
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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	10.406	.53711	.00139	8.8591	.52314	.52282	.03049
SDev	.014	.00094	.00402	.0542	.01402	.02194	.01581
%RSD	.13777	.17531	288.53	.61237	2.6805	4.1975	51.847
#1	10.415	.53637	.00139	8.9089	.50637	.50387	.01728
#2	10.385	.53637	.00139	8.7896	.51767	.54174	.01733
#3	10.415	.53735	.00632	8.8946	.53823	.54192	.03847
#4	10.412	.53833	-.00353	8.8432	.53029	.50377	.04889
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	2.0136	3.8460	.00191	1.1390	-.00475	1.9694	.50596
SDev	.0479	.0029	.01792	.0044	.00046	.0965	.00224
%RSD	2.3804	.07498	939.97	.38700	9.7532	4.9018	.44295
#1	2.0469	3.8474	.00801	1.1439	-.00475	1.9051	.50749
#2	1.9725	3.8474	.02445	1.1332	-.00541	1.8701	.50627

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#3	1.9725	3.8474	-.01038	1.1390	-.00442	2.0336	.50270
#4	2.0626	3.8416	-.01444	1.1397	-.00442	2.0686	.50739

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	.50492
SDev	.00289
%RSD	.57260

#1	.50319
#2	.50711
#3	.50175
#4	.50761

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-8

Operator: MTW

Run Time: 08/22/00 12:16:26

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	1.0095	50.497	5.2399	5.1223	5.0584	5.2150	52.709
SDev	.0048	.203	.1156	.0236	.0271	.0202	.307
%RSD	.47620	.40184	2.2056	.46055	.53576	.38824	.58267
#1	1.0128	50.529	5.2352	5.1190	5.0570	5.2170	53.121
#2	1.0097	50.287	5.1418	5.0904	5.0291	5.1922	52.650
#3	1.0026	50.409	5.1792	5.1363	5.0529	5.2099	52.379
#4	1.0128	50.763	5.4034	5.1435	5.0946	5.2411	52.685
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	5.2827	5.1479	5.1072	5.0210	52.954	50.063	4.9141
SDev	.0137	.0206	.0223	.0307	.193	.612	.0314
%RSD	.25904	.40016	.43605	.61161	.36385	1.2225	.63974
#1	5.2999	5.1736	5.1368	5.0105	53.157	49.741	4.8955
#2	5.2678	5.1403	5.0901	4.9884	52.796	49.790	4.8834
#3	5.2770	5.1249	5.0900	5.0236	52.782	49.741	4.9235
#4	5.2863	5.1527	5.1118	5.0616	53.079	50.980	4.9539
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	51.201	5.1204	5.1255	51.231	5.2608	5.1138	5.2443
SDev	.189	.0190	.0232	.318	.0086	.0488	.0385
%RSD	.36938	.37142	.45356	.62089	.16276	.95389	.73492
#1	51.344	5.1428	5.1416	51.050	5.2561	5.1828	5.2700
#2	50.999	5.1083	5.1415	50.939	5.2513	5.1062	5.2284
#3	51.082	5.1014	5.0922	51.275	5.2663	5.0980	5.1975
#4	51.379	5.1290	5.1268	51.659	5.2696	5.0683	5.2811
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	5.1082	5.1282	5.1367	5.1163	5.0363	10.312	5.1196
SDev	.0840	.0002	.0695	.0264	.0221	.177	.0178
%RSD	1.6438	.00442	1.3539	.51544	.43968	1.7180	.34690
#1	5.2243	5.1285	5.1912	5.1186	5.0508	10.467	5.1398
#2	5.0940	5.1280	5.1767	5.0882	5.0115	10.424	5.1007

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#3	5.0235	5.1281	5.1416	5.1072	5.0242	10.074	5.1095
#4	5.0909	5.1283	5.0371	5.1510	5.0586	10.281	5.1285

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	4.9977
SDev	.0080
%RSD	.15952

#1	4.9979
#2	4.9889
#3	4.9956
#4	5.0082

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB8

Operator: MTW

Run Time: 08/22/00 12:19:34

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	.01070	.01723	.00166	.00050	.00050	.01010
SDev	.00203	.00766	.01063	.00229	.00000	.00019	.00155
%RSD	14030.	71.604	61.697	137.56	.00000	38.538	15.381
#1	.00003	.01380	.02778	.00236	.00050	.00034	.00916
#2	.00143	.00851	.00473	.00096	.00050	.00035	.01027
#3	.00145	.01922	.01230	.00438	.00050	.00059	.01221
#4	-.00285	.00126	.02410	-.00104	.00050	.00073	.00874
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	.00188	.00069	.00199	.00044	.00250	.61158	-.00033
SDev	.00214	.00238	.00226	.00114	.00192	.40519	.00035
%RSD	113.63	343.26	113.16	257.87	76.945	66.253	104.83
#1	.00353	.00383	.00146	.00089	.00083	.99589	-.00048
#2	.00248	-.00036	.00518	.00176	.00083	.83060	.00019
#3	.00278	.00104	.00146	.00000	.00416	.54960	-.00048
#4	-.00126	-.00174	-.00013	-.00088	.00416	.07025	-.00056
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00602	.00098	.00123	.01073	-.00284	-.00188	.00518
SDev	.01177	.00000	.00569	.00315	.00530	.03612	.00601
%RSD	195.42	.20659	461.74	29.364	186.62	1925.0	116.02
#1	.01941	.00099	.00616	.01140	-.00952	.02098	.01032
#2	.01138	.00098	-.00369	.01006	-.00068	.02085	-.00001
#3	-.00736	.00098	-.00369	.01453	-.00410	-.05498	.01045
#4	.00067	.00099	.00616	.00693	.00295	.00564	-.00004
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	-.01273	.01306	.00362	.00036	-.00016	.02331	.00277
SDev	.02351	.01254	.00964	.00025	.00046	.04525	.00250
%RSD	184.73	95.963	266.27	69.261	282.84	194.14	90.220
#1	-.02448	.03047	.01186	.00003	.00016	-.02926	.00500
#2	-.02448	.00725	-.00668	.00030	.00016	.04086	.00116

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#3	-.02447	.01309	-.00252	.00056	-.00016	.00576	.00481
#4	.02254	.00145	.01182	.00056	-.00082	.07588	.00012
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	.00076
SDev	.00132
%RSD	174.42

#1	-.00105
#2	.00099
#3	.00211
#4	.00098

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHM99F Operator: MTW
Run Time: 08/22/00 12:22:42
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	.00001	.01293	.01048	.00610	.02986	.00009	89.048
SDev	.00117	.01433	.01850	.00197	.00058	.00001	.517
%RSD	14861.	110.78	176.58	32.351	1.9436	7.1577	.58029
#1	.00143	.01738	.00853	.00440	.02935	.00010	89.253
#2	.00000	.00855	-.01455	.00439	.03036	.00010	88.704
#3	.00003	.02988	.01992	.00781	.03036	.00008	89.679
#4	-.00143	-.00408	.02800	.00782	.02935	.00010	88.556
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00077	-.00000	.00106	.00154	.00947	2.6984	.00222
SDev	.00125	.00238	.00133	.00084	.00094	.2521	.00103
%RSD	162.89	60258.	124.93	54.605	9.9560	9.3436	46.148
#1	.00075	-.00036	.00093	.00265	.01013	2.7315	.00280
#2	-.00042	.00104	.00146	.00088	.00946	2.6488	.00236
#3	-.00118	.00244	.00252	.00088	.01014	3.0125	.00300
#4	-.00222	-.00314	-.00066	.00176	.00814	2.4009	.00074
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	9.7558	.00418	.00246	4.5814	-.00020	-.02465	.01308
SDev	.0549	.00049	.00472	.0095	.00693	.02973	.01316
%RSD	.56252	11.777	191.38	.20717	3473.0	120.61	100.61
#1	9.8120	.00492	.00616	4.5907	.00419	-.00946	.03137
#2	9.6835	.00394	-.00369	4.5741	-.00425	-.06257	-.00001
#3	9.7799	.00394	.00616	4.5724	.00699	.00575	.01051
#4	9.7478	.00394	.00123	4.5885	-.00773	-.03232	.01045
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	.00100	4.1305	-.01481	.11398	-.00557	.04663	.00127
SDev	.02273	.0067	.01330	.00017	.00068	.04811	.00249
%RSD	2263.4	.16146	89.792	.15109	12.245	103.18	196.16
#1	.03431	4.1363	-.01473	.11395	-.00541	.05247	.00012
#2	-.01663	4.1363	-.00254	.11395	-.00639	.05246	-.00007

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#3	-.00487	4.1248	-.00866	.11380	-.00475	.09912	.00500
#4	-.00879	4.1247	-.03331	.11421	-.00573	-.01755	.00002

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	.00798
SDev	.00026
%RSD	3.3202

#1	.00809
#2	.00758
#3	.00811
#4	.00813

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM9CF Operator: MTW
 Run Time: 08/22/00 12:25:51
 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	.00000	.01561	-.00980	-.00137	.03646	.00016	104.41
SDev	.00202	.00639	.01998	.00122	.00015	.00007	.86
%RSD	44822.	40.889	203.92	89.502	.40535	46.188	.82209
#1	.00000	.01021	-.03388	-.00041	.03639	.00022	103.48
#2	-.00285	.01561	.00853	-.00243	.03639	.00022	103.91
#3	.00143	.02458	.00460	-.00021	.03639	.00010	104.93
#4	.00143	.01206	-.01845	-.00242	.03668	.00010	105.32
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	-.00064	-.00036	.00173	.00176	.02062	2.8203	.00112
SDev	.00089	.00114	.00176	.00125	.00064	.1175	.00086
%RSD	138.65	320.84	102.02	70.607	3.0999	4.1675	76.900
#1	.00031	-.00175	.00359	.00264	.02011	2.7480	.00225
#2	-.00016	.00104	.00200	.00000	.02011	2.7645	.00019
#3	-.00103	-.00036	-.00066	.00176	.02145	2.7728	.00121
#4	-.00168	-.00035	.00199	.00265	.02078	2.9959	.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	15.909	.00394	.00370	3.8483	-.00015	-.00760	.00777
SDev	.077	.00000	.00284	.0142	.00188	.01892	.03755
%RSD	.48148	.02121	76.914	.36998	1245.4	248.96	483.04
#1	15.832	.00394	.00616	3.8389	.00218	.02078	-.02091
#2	15.864	.00394	.00616	3.8523	.00054	-.01707	-.01054
#3	15.936	.00394	.00123	3.8353	-.00182	-.01702	.06264
#4	16.003	.00394	.00123	3.8666	-.00151	-.01709	-.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
Avge	-.01268	4.5706	.01444	.12714	-.00631	-.03230	.00007
SDev	.03199	.0067	.01916	.00036	.00049	.07827	.00006
%RSD	252.31	.14630	132.64	.28364	7.7922	242.31	76.719
#1	.01083	4.5648	-.01086	.12681	-.00672	.07573	.00013
#2	-.03619	4.5648	.03028	.12712	-.00672	-.04107	.00012

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#3	.01867	4.5764	.01008	.12697	-.00573	-.05274	.00002
#4	-.04402	4.5764	.02828	.12764	-.00606	-.11112	.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	.00888
SDev	.00150
%RSD	16.930

#1	.00678
#2	.00966
#3	.01020
#4	.00888

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM9DF Operator: MTW
Run Time: 08/22/00 12:28:59
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
Avg	.00001	.02457	-.05525	-.00126	.03576	.00016	102.63
SDev	.00117	.01036	.02058	.00153	.00044	.00007	.60
%RSD	8999.0	42.148	37.249	121.23	1.2212	45.758	.58345
#1	.00001	.02277	-.03398	-.00182	.03639	.00022	102.91
#2	-.00142	.01202	-.06863	-.00182	.03559	.00010	101.78
#3	.00144	.02637	-.04175	-.00242	.03538	.00009	102.69
#4	.00003	.03712	-.07663	.00100	.03568	.00021	103.15
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00202	.00103	.00226	.00199	.02345	2.6034	.00141
SDev	.00280	.00113	.00102	.00085	.00196	.3134	.00092
%RSD	138.51	109.82	45.003	42.541	8.3645	12.037	65.426
#1	.00331	.00103	.00306	.00265	.02411	2.6075	.00019
#2	-.00203	-.00035	.00093	.00088	.02078	2.2521	.00198
#3	.00430	.00103	.00199	.00177	.02544	2.5414	.00225
#4	.00249	.00243	.00305	.00265	.02344	3.0125	.00123
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	15.552	.00296	.00247	3.7746	-.00009	-.00186	.01825
SDev	.088	.00000	.00472	.0138	.00254	.01861	.01003
%RSD	.56449	.05457	191.21	.36669	2684.3	999.18	54.946
#1	15.607	.00296	.00616	3.7772	.00007	-.01705	.01032
#2	15.467	.00296	.00616	3.7897	.00343	-.01708	.01044
#3	15.489	.00296	.00124	3.7562	-.00211	.00574	.03131
#4	15.647	.00296	-.00369	3.7754	-.00177	.02093	.02092
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	.01279	4.4983	.00782	.12477	-.00606	.02311	.00158
SDev	.02158	.0371	.01796	.00079	.00046	.05436	.00222
%RSD	168.66	.82498	229.82	.63363	7.6444	235.24	140.92
#1	-.00875	4.4838	.03449	.12555	-.00606	.09902	.00013
#2	-.00092	4.4722	.00162	.12420	-.00639	.01732	.00012

#3	.02259	4.4838	-.00034	.12399	-.00541	-.02946	.00125
#4	.03826	4.5533	-.00450	.12534	-.00639	.00556	.00481

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	.04900
SDev	.00098
%RSD	1.9986

#1	.04893
#2	.04893
#3	.05026
#4	.04787

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM9EF

Operator: MTW

Run Time: 08/22/00 12:32:08

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	.00144	.04692	-.00334	.00820	.12572	.00009	47.676
SDev	.00118	.01018	.04307	.00071	.00077	.00001	.129
%RSD	81.490	21.704	1289.0	8.5997	.61164	7.2688	.27121

#1	.00288	.03530	.00828	.00785	.12554	.00008	47.797
#2	.00143	.05855	.05063	.00926	.12475	.00010	47.614
#3	.00145	.04241	-.04964	.00786	.12655	.00009	47.769
#4	.00000	.05144	-.02264	.00785	.12605	.00010	47.524

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

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00198	-.00145	.00266	.06965	.02745	1.3203	.00572
SDev	.00101	.00238	.00140	.00072	.00054	.1792	.00075
%RSD	51.173	164.48	52.550	1.0342	1.9784	13.574	13.165

#1	-.00198	-.00040	.00359	.07053	.02679	1.5744	.00669
#2	-.00337	-.00179	.00146	.06877	.02812	1.1942	.00553
#3	-.00096	-.00459	.00412	.06965	.02745	1.3182	.00580
#4	-.00163	.00099	.00146	.06965	.02745	1.1942	.00487

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.0855	.01181	-.00123	2.6420	.00318	-.00383	.02874
SDev	.0445	.00000	.00284	.0233	.00484	.01999	.02320
%RSD	.55045	.00731	231.72	.88045	152.20	522.33	80.723

#1	8.1063	.01181	-.00369	2.6437	.00825	.01332	.06273
#2	8.0500	.01181	.00124	2.6285	.00631	.01321	.02090
#3	8.1384	.01181	-.00369	2.6740	-.00171	-.02480	.01041
#4	8.0474	.01181	.00124	2.6217	-.00013	-.01705	.02090

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	-.00972	4.7371	.00426	.13411	-.00295	.02021	.00211
SDev	.04355	.0355	.00930	.00078	.00057	.01993	.00246
%RSD	447.97	.75009	218.37	.58168	19.245	98.584	116.41

#1	.05002	4.7618	.01212	.13391	-.00246	.04063	.00481
#2	-.04008	4.7096	.00987	.13339	-.00278	.01731	.00003

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#3	-.04400	4.7734	.00366	.13522	-.00377	-.00605	.00359
#4	-.00482	4.7038	-.00862	.13391	-.00278	.02897	.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	.01114
SDev	.00084
%RSD	7.4958

#1	.01041
#2	.01064
#3	.01122
#4	.01228

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP5XF

Operator: MTW

Run Time: 08/22/00 12:35:16

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	.00076	.04769	-.02275	.00796	.00930	.00013	85.348
SDev	.00143	.00743	.00832	.01856	.00029	.00007	.251
%RSD	186.91	15.575	36.584	233.28	3.1208	55.314	.29445
#1	.00005	.04592	-.01888	-.00245	.00905	.00007	85.113
#2	.00005	.04939	-.03435	-.00105	.00955	.00007	85.443
#3	.00005	.03879	-.02268	.03576	.00905	.00020	85.177
#4	.00291	.05665	-.01511	-.00045	.00955	.00020	85.658
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	.00192	.00174	.00186	.00177	.00714	2.3389	.00433
SDev	.00232	.00241	.00091	.00072	.00067	.2617	.00032
%RSD	120.78	138.41	48.919	40.895	9.3405	11.191	7.4433
#1	.00222	-.00035	.00199	.00088	.00681	2.5166	.00393
#2	-.00058	.00105	.00146	.00176	.00681	2.2191	.00421
#3	.00110	.00105	.00093	.00176	.00680	2.0290	.00459
#4	.00493	.00522	.00306	.00265	.00814	2.5910	.00459
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	P3	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.869	.00836	.00739	6.3737	-.00011	.00383	.01307
SDev	.020	.00057	.00739	.0233	.00668	.01291	.01787
%RSD	.15801	6.7843	99.986	.36606	5860.6	337.13	136.79
#1	12.843	.00885	.00123	6.3768	-.00130	.02084	.01050
#2	12.889	.00788	.01601	6.4032	.00912	-.00186	.03135
#3	12.862	.00787	.00123	6.3469	-.00143	.00572	.02093
#4	12.881	.00886	.01108	6.3679	-.00685	-.00939	-.01051
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	-.00880	3.3908	-.00762	.20122	-.00491	.06411	.00990
SDev	.03199	.0265	.01185	.00056	.00042	.06396	.00014
%RSD	363.65	.78109	155.37	.28046	8.6066	99.767	1.4475
#1	-.02447	3.3720	-.02099	.20070	-.00508	.08749	.00978
#2	-.01663	3.4299	.00787	.20201	-.00475	-.01762	.01006

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#3	.03822	3.3778	-.00861	.20122	-.00541	.13419	.00978
#4	-.03230	3.3836	-.00876	.20096	-.00442	.05240	.00997
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	.00569
SDev	.00086
%RSD	15.179

#1	.00630
#2	.00626
#3	.00575
#4	.00445

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP61F

Operator: MTW

Run Time: 08/22/00 12:38:25

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	.00071	.02057	-.00790	.00148	.00970	.00010	27.323
SDev	.00082	.00513	.03513	.00393	.00010	.00000	.104
%RSD	116.62	24.913	444.74	264.96	1.0663	.00000	.37907
#1	-.00001	.02458	.03163	.00098	.00975	.00010	27.250
#2	.00142	.02461	-.01082	-.00385	.00975	.00010	27.425
#3	.00142	.01389	.00084	.00380	.00955	.00010	27.218
#4	-.00001	.01921	-.05324	.00501	.00975	.00010	27.398
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	-.00027	-.00070	.00066	.00154	.01314	2.1963	-.00075
SDev	.00279	.00070	.00134	.00044	.00159	.2153	.00000
%RSD	1026.6	100.35	201.41	28.553	12.065	9.8047	.00000
#1	-.00276	-.00034	.00040	.00088	.01214	1.9298	-.00075
#2	.00174	-.00175	.00252	.00176	.01148	2.4505	-.00075
#3	.00253	-.00036	-.00067	.00176	.01481	2.1612	-.00075
#4	-.00259	-.00034	.00040	.00176	.01414	2.2438	-.00075
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	P	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	13.140	.05140	-.00123	2.5614	.00062	.00946	.00525
SDev	.065	.00049	.00284	.0236	.00489	.03588	.02495
%RSD	.49174	.95510	231.31	.92175	790.71	379.46	475.35
#1	13.057	.05115	.00123	2.5449	-.00370	-.01711	-.01052
#2	13.143	.05214	-.00369	2.5623	-.00240	.01320	-.01046
#3	13.143	.05115	-.00369	2.5440	.00721	.05883	.04193
#4	13.215	.05115	.00123	2.5945	.00137	-.01710	.00005
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	TU	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02151	1.1481	-.00818	.02548	-.00197	-.02320	-.00002
SDev	.02938	.0000	.01664	.00023	.00033	.02781	.00005
%RSD	136.57	.00000	203.32	.88997	16.667	119.88	242.43
#1	.01081	1.1481	.01383	.02544	-.00213	-.01735	.00002
#2	-.00487	1.1481	-.00466	.02559	-.00213	-.00565	-.00007

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#3	-.04012	1.1481	-.02291	.02518	-.00147	-.00570	-.00007
#4	-.05187	1.1481	-.01899	.02570	-.00213	-.06408	.00002

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	.00690
SDev	.00113
%RSD	16.304

#1	.00626
#2	.00811
#3	.00568
#4	.00756

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DHP63F

Operator: MTW

Run Time: 08/22/00 12:41:33

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	-.00056	.01607	-.00190	-.00460	.04531	.00010	97.074
SDev	.00297	.00982	.04935	.00001	.00025	.00015	.546
%RSD	529.52	61.145	2603.5	.13506	.55456	153.96	.56199
#1	-.00128	.00850	.02712	-.00461	.04493	.00022	97.051
#2	.00301	.02461	-.02704	-.00460	.04543	-.00003	96.331
#3	-.00413	.00667	-.05779	-.00460	.04543	.00022	97.610
#4	.00015	.02449	.05013	-.00460	.04543	-.00003	97.303
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	-.00204	-.00001	.00080	.00027	.66769	2.9422	-.00059
SDev	.00123	.00134	.00329	.00085	.00345	.4484	.00026
%RSD	60.269	17235.	411.83	308.55	.51699	15.239	44.349
#1	-.00256	.00104	.00465	.00094	.66453	3.5497	-.00075
#2	-.00286	-.00175	-.00332	.00005	.66520	2.5001	-.00048
#3	-.00251	.00104	.00146	.00094	.67185	2.9711	-.00086
#4	-.00021	-.00036	.00040	-.00083	.66919	2.7480	-.00028
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	22.962	.03438	.00379	2.4995	.00111	-.00961	.02872
SDev	.120	.00049	.00636	.0232	.01380	.04468	.02746
%RSD	.52425	1.4338	167.61	.92916	1244.7	464.71	95.637
#1	22.922	.03364	.00133	2.4666	-.01936	.02080	.05207
#2	22.839	.03462	-.00359	2.5069	.00680	-.03999	.05234
#3	23.126	.03462	.00626	2.5212	.00616	-.05514	-.00005
#4	22.960	.03462	.01118	2.5033	.01083	.03587	.01050
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	-.00804	4.3650	-.00074	.10089	-.00598	.01373	.00007
SDev	.04706	.0374	.02413	.00048	.00056	.07766	.00013
%RSD	585.69	.85638	3239.8	.47275	9.3579	555.42	167.00
#1	-.01490	4.3274	-.02478	.10037	-.00541	-.08258	.00003
#2	-.05799	4.3390	-.00218	.10063	-.00573	.03421	-.00008

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#3	.05564	4.4027	.03251	.10141	-.00672	.10418	.00012
#4	-.01489	4.3911	-.00853	.10115	-.00606	-.00087	.00022
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	.00508
SDev	.00062
%RSD	12.120

#1	.00416
#2	.00539
#3	.00539
#4	.00539

Errors	LC Pass
High	100.00
Low	-.02000

Analysis Report

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Method: QUANMET Sample Name: DHP65F Operator: MTW
 Run Time: 08/22/00 12:44:41
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00001	.01513	-.01755	-.00059	.05305	.00018	105.21
SDev	.00002	.00641	.03727	.00141	.00030	.00006	.30
%RSD	115.29	42.326	212.40	240.15	.56920	32.301	.28689
#1	.00003	.01016	.01622	-.00044	.05347	.00021	105.61
#2	-.00000	.01204	-.04159	.00097	.05297	.00010	105.24
#3	.00003	.02447	.01224	-.00043	.05277	.00021	105.06
#4	.00000	.01387	-.05705	-.00244	.05297	.00022	104.91
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	.00108	.00103	.00199	.06172	.01046	4.6592	.00675
SDev	.00095	.00197	.00115	.00072	.00207	.1221	.00050
%RSD	88.086	192.13	57.597	1.1637	19.781	2.6205	7.3950
#1	.00016	.00243	.00040	.06084	.01080	4.6654	.00713
#2	.00079	-.00176	.00199	.06260	.00747	4.6406	.00647
#3	.00241	.00242	.00306	.06172	.01213	4.8141	.00721
#4	.00097	.00103	.00253	.06172	.01146	4.5166	.00619
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	15.911	.01181	.00616	7.7068	.00540	.00004	.01571
SDev	.028	.00000	.00569	.0334	.00538	.02001	.01349
%RSD	.17724	.01868	92.355	.43279	99.645	51487.	85.854
#1	15.939	.01181	.01108	7.7432	.00721	.02096	.03138
#2	15.917	.01181	.00123	7.7267	.01089	-.01713	.00007
#3	15.917	.01181	.01108	7.6748	-.00191	.01334	.01043
#4	15.872	.01181	.00123	7.6824	.00542	-.01702	.02095
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	-.01368	4.5764	-.00915	.24761	-.00606	.07000	.00256
SDev	.03075	.0000	.01302	.00039	.00027	.05600	.00292
%RSD	224.70	.00078	142.36	.15826	4.4135	80.008	114.19
#1	-.03621	4.5765	-.00445	.24794	-.00639	.02909	.00509
#2	-.04405	4.5764	.00567	.24794	-.00606	.09926	.00003

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#3	.01472	4.5765	-.02509	.24716	-.00606	.13418	.00510
#4	.01080	4.5764	-.01272	.24742	-.00573	.01746	.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	.05916
SDev	.00146
%RSD	2.4613

#1	.05865
#2	.05807
#3	.06131
#4	.05863

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP69F

Operator: MTW

Run Time: 08/22/00 12:47:50

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61H

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00033	.01112	.00560	.00249	.03302	.00012	92.744
SDev	.00137	.00536	.02717	.00196	.00041	.00006	.338
%RSD	410.19	48.219	484.85	78.736	1.2405	54.890	.36417

#1	.00002	.00661	.00467	.00441	.03266	.00008	92.397
#2	.00145	.01741	.03546	.00159	.03266	.00021	93.208
#3	-.00140	.01374	-.03012	.00380	.03337	.00008	92.685
#4	-.00141	.00671	.01241	.00017	.03337	.00009	92.685

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

Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00279	-.00036	-.00027	.00705	.01413	2.3596	.00070
SDev	.00293	.00113	.00165	.00072	.00172	.1388	.00082
%RSD	104.89	312.48	612.76	10.199	12.176	5.8819	118.04

#1	-.00156	-.00175	-.00120	.00705	.01479	2.2191	.00167
#2	.00434	-.00037	.00199	.00794	.01612	2.2934	.00093
#3	.00469	-.00037	-.00173	.00705	.01213	2.5414	.00046
#4	.00370	.00103	-.00014	.00617	.01346	2.3843	-.00028

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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.025	.01648	.00000	7.8725	-.00374	-.00572	-.00521
SDev	.073	.00049	.00472	.0685	.00299	.00981	.01348
%RSD	.60480	2.9875	223260.	.87032	79.990	171.57	258.92

#1	11.925	.01673	.00123	7.7848	-.00480	-.01716	-.02087
#2	12.019	.01574	-.00369	7.8514	-.00390	-.00191	.01046
#3	12.080	.01673	.00616	7.9238	.00041	.00565	-.01042
#4	12.077	.01672	-.00369	7.9301	-.00664	-.00946	.00000

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	-.01955	4.2058	-.00976	.11732	-.00614	-.03511	.00457
SDev	.03205	.0000	.00522	.00061	.00056	.04317	.00066
%RSD	163.93	.00018	53.449	.51981	9.1084	122.94	14.465

#1	-.01661	4.2059	-.01702	.11667	-.00639	-.06431	.00490
#2	.01865	4.2059	-.00866	.11698	-.00541	-.01763	.00481

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#3	-.02054	4.2059	-.00876	.11761	-.00606	.01745	.00499
#4	-.05971	4.2058	-.00460	.11802	-.00672	-.07598	.00359
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	.01646
SDev	.00150
%RSD	9.1279

#1	.01811
#2	.01493
#3	.01732
#4	.01548

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHP6DF

Operator: MTW

Run Time: 08/22/00 12:50:58

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00069	.01958	.00456	.00255	.03332	.00011	92.201
SDev	.00082	.00673	.05130	.00233	.00042	.00006	.517
%RSD	119.94	34.357	1124.9	91.425	1.2699	55.789	.56023
#1	.00003	.01734	.07791	-.00042	.03287	.00021	91.726
#2	-.00140	.01202	-.04169	.00441	.03388	.00008	92.082
#3	.00003	.02805	-.01095	.00179	.03337	.00008	92.061
#4	-.00140	.02092	-.00703	.00441	.03317	.00008	92.937
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	-.00015	-.00001	.00186	.00926	.01779	2.4153	.00073
SDev	.00137	.00133	.00170	.00051	.00128	.2029	.00048
%RSD	919.85	18195.	91.516	5.4935	7.1650	8.4018	65.460
#1	-.00186	-.00175	.00306	.00970	.01679	2.5166	.00104
#2	.00041	.00104	.00359	.00970	.01812	2.6488	.00027
#3	.00136	-.00036	.00040	.00882	.01679	2.2108	.00123
#4	-.00050	.00104	.00040	.00882	.01945	2.2852	.00038
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.103	.01230	.00370	8.0047	.00175	.00190	.01307
SDev	.069	.00057	.00284	.0182	.00205	.01583	.03002
%RSD	.57255	4.6242	76.926	.22755	116.80	833.39	229.63
#1	12.056	.01181	.00123	7.9850	-.00026	-.00193	.02087
#2	12.139	.01181	.00123	8.0275	.00122	-.01709	-.03134
#3	12.035	.01279	.00616	7.9967	.00145	.00570	.03134
#4	12.182	.01279	.00616	8.0096	.00460	.02092	.03143
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	-.00779	4.2985	-.00454	.11774	-.00557	.02029	.00495
SDev	.01643	.0000	.01521	.00054	.00042	.01994	.00005
%RSD	210.90	.00000	335.15	.46163	7.5941	98.285	1.0423
#1	.01474	4.2985	.00372	.11698	-.00573	-.00597	.00491
#2	-.02444	4.2985	.00553	.11813	-.00606	.02903	.00491

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#3	-.00877	4.2985	-.00035	.11772	-.00508	.04074	.00500
#4	-.01268	4.2985	-.02705	.11813	-.00541	.01734	.00500
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	.01262
SDev	.00102
%RSD	8.0671

#1	.01336
#2	.01204
#3	.01359
#4	.01149

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-9

Operator: MTW

Run Time: 08/22/00 12:54:07

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0128	50.430	5.2208	5.0947	5.0362	5.2281	53.315
SDev	.0037	.412	.0244	.0474	.0585	.0436	.168
%RSD	.36584	.81660	.46670	.93021	1.1611	.83447	.31468
#1	1.0143	50.670	5.2223	5.1264	5.0673	5.2567	53.240
#2	1.0097	50.009	5.1982	5.0312	4.9822	5.1842	53.119
#3	1.0173	50.879	5.2085	5.1351	5.1029	5.2734	53.492
#4	1.0098	50.162	5.2542	5.0863	4.9923	5.1979	53.410
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	5.3335	5.1914	5.1416	4.9995	53.020	49.968	4.8445
SDev	.0299	.0189	.0225	.0555	.313	.314	.0795
%RSD	.56057	.36457	.43764	1.1102	.59061	.62917	1.6420
#1	5.3405	5.1916	5.1469	5.0343	53.122	50.071	4.8900
#2	5.2989	5.1779	5.1113	4.9487	52.671	50.121	4.7768
#3	5.3703	5.2180	5.1655	5.0590	53.400	50.179	4.9332
#4	5.3242	5.1778	5.1427	4.9558	52.888	49.501	4.7778
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	51.258	5.1381	5.1415	50.953	5.3325	5.1150	5.2237
SDev	.500	.0269	.0134	.674	.0273	.0269	.0604
%RSD	.97587	.52372	.26023	1.3235	.51173	.52538	1.1556
#1	51.467	5.1468	5.1366	51.347	5.3276	5.0922	5.2706
#2	50.790	5.1073	5.1316	50.391	5.3390	5.1528	5.1353
#3	51.864	5.1704	5.1613	51.700	5.3646	5.1003	5.2500
#4	50.910	5.1280	5.1366	50.375	5.2987	5.1149	5.2389
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	5.1132	5.1371	5.2275	5.1253	5.0336	10.360	5.1343
SDev	.0602	.0260	.0599	.0546	.0387	.193	.0295
%RSD	1.1770	.50578	1.1449	1.0661	.76934	1.8647	.57530
#1	5.1302	5.1286	5.2693	5.1535	5.0534	10.105	5.1519
#2	5.0428	5.1164	5.1599	5.0737	4.9938	10.379	5.0994

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#3	5.1857	5.1751	5.1952	5.1881	5.0776	10.382	5.1646
#4	5.0943	5.1282	5.2857	5.0860	5.0095	10.575	5.1215

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	5.0129
SDev	.0225
%RSD	.44785

#1	5.0082
#2	4.9904
#3	5.0440
#4	5.0090

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB9

Operator: MTW

Run Time: 08/22/00 12:57:15

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA6113

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00037	.01154	-.01943	.00216	.00030	.00041	.00985
SDev	.00137	.00393	.02804	.00268	.00024	.00016	.00260
%RSD	371.05	34.061	144.27	123.93	80.991	40.459	26.358

#1	.00003	.01729	.01618	.00437	.00000	.00021	.00777
#2	-.00143	.01023	-.01070	.00096	.00050	.00035	.00791
#3	.00143	.01025	-.03771	-.00105	.00050	.00048	.01045
#4	.00145	.00840	-.04550	.00438	.00021	.00059	.01328

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	.00229	-.00070	.00253	.00110	.00033	.66117	-.00115
SDev	.00194	.00134	.00157	.00044	.00220	.05503	.00042
%RSD	84.685	189.78	61.983	40.105	662.92	8.3229	36.926

#1	.00365	.00104	.00412	.00176	-.00250	.63224	-.00103
#2	.00044	-.00035	.00306	.00088	.00083	.61572	-.00067
#3	.00424	-.00176	.00040	.00088	.00016	.65704	-.00169
#4	.00082	-.00175	.00252	.00088	.00283	.73968	-.00122

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	-.00201	.00049	.00493	.01151	-.00508	-.02277	.01036
SDev	.00953	.00057	.00472	.00529	.00154	.04816	.01206
%RSD	474.54	115.04	95.736	45.991	30.396	211.48	116.43

#1	.00602	.00000	.01108	.01587	-.00548	-.00946	-.00011
#2	-.00201	.00099	.00616	.00514	-.00348	.03605	.02078
#3	-.01540	.00098	.00123	.00916	-.00432	-.03989	-.00007
#4	.00335	.00000	.00123	.01587	-.00705	-.07779	.02082

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	-.01469	.00148	.00005	.00003	-.00033	.05253	.00254
SDev	.02250	.02366	.00701	.00043	.00042	.05311	.00285
%RSD	153.16	1598.8	14133.	1233.8	129.10	101.09	112.12

#1	.01860	.00730	-.00873	-.00049	.00016	.08756	.00510
#2	-.02057	-.03330	.00575	.00003	-.00049	.04087	.00012

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#3	-.02840	.01882	.00565	.00003	-.00082	.09927	.00002
#4	-.02840	.01309	-.00247	.00056	-.00016	-.01757	.00490
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	.00113
SDev	.00089
%RSD	78.882

#1	.00048
#2	.00045
#3	.00123
#4	.00235

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHP6HF

Operator: MTW

Run Time: 08/22/00 13:06:13

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	-.00035	.01560	-.00691	.00555	.03108	.00012	83.538
SDev	.00072	.00925	.03819	.00296	.00030	.00007	.755
%RSD	204.92	59.274	552.38	53.426	.97141	53.272	.90438
#1	-.00000	.00484	-.04926	.00781	.03065	.00010	82.669
#2	.00000	.01917	-.01464	.00500	.03116	.00010	84.450
#3	.00003	.02635	-.00706	.00781	.03136	.00008	83.766
#4	-.00143	.01205	.04331	.00157	.03116	.00022	83.266
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00096	.00069	.00199	.00331	.00930	2.4029	.00079
SDev	.00068	.00209	.00137	.00085	.00191	.3123	.00092
%RSD	70.501	304.19	68.749	25.573	20.573	12.998	115.88
#1	.00087	-.00175	.00146	.00264	.00680	1.9629	-.00028
#2	.00010	-.00036	.00040	.00265	.01080	2.4009	.00112
#3	.00172	.00243	.00359	.00441	.01080	2.6488	.00187
#4	.00115	.00243	.00253	.00353	.00880	2.5992	.00046
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	11.663	.01156	.00493	7.4871	.00273	-.00757	.00780
SDev	.064	.00049	.00246	.0237	.00822	.00954	.01978
%RSD	.54506	4.2519	49.983	.31714	301.51	126.00	253.47
#1	11.590	.01181	.00616	7.4549	-.00479	-.00951	.02078
#2	11.724	.01181	.00616	7.5117	-.00225	.00569	.02083
#3	11.630	.01181	.00123	7.4875	.01363	-.00942	.01057
#4	11.708	.01082	.00616	7.4943	.00431	-.01704	-.02097
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	-.05580	4.0335	.01136	.10973	-.00491	.02915	.00132
SDev	.02073	.0318	.01722	.00069	.00063	.03932	.00239
%RSD	37.151	.78955	151.65	.63112	12.766	134.90	181.51
#1	-.07540	4.0031	.00782	.10873	-.00541	.05256	.00012
#2	-.05188	4.0784	.00371	.11030	-.00475	.05250	.00012

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#3	-.06755	4.0263	-.00250	.11003	-.00410	.04077	.00491
#4	-.02838	4.0263	.03639	.10988	-.00541	-.02924	.00012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00664
SDev	.00091
%RSD	13.712

#1	.00603
#2	.00571
#3	.00730
#4	.00754

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DHP6LF

Operator: MTW

Run Time: 08/22/00 13:09:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA613

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00003	.34465	-.01062	.00405	.01041	.00015	76.286
SDev	.00233	.00525	.03328	.00283	.00017	.00007	.461
%RSD	7056.2	1.5234	313.27	70.013	1.6402	50.555	.60414
#1	.00003	.34290	-.00579	.00365	.01055	.00021	76.238
#2	.00289	.33928	-.01348	.00787	.01026	.00008	76.334
#3	-.00282	.34465	.02894	.00364	.01026	.00021	75.724
#4	.00003	.35178	-.05217	.00103	.01055	.00008	76.849
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	.00285	-.00000	.00199	.00111	.03776	2.1199	.00102
SDev	.00186	.00070	.00189	.00084	.00207	.1455	.00058
%RSD	65.318	13986.	94.904	76.390	5.4843	6.8643	56.537
#1	.00038	-.00035	.00199	.00177	.03943	2.2273	.00074
#2	.00268	-.00035	.00359	.00177	.03876	2.1777	.00159
#3	.00481	-.00036	-.00066	.00000	.03476	1.9050	.00035
#4	.00352	.00104	.00306	.00089	.03810	2.1695	.00140
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	14.845	.00886	.01109	7.0599	.00008	-.00968	.01563
SDev	.046	.00080	.00402	.0459	.00642	.01640	.01809
%RSD	.31122	9.0756	36.270	.65041	8503.2	169.42	115.79
#1	14.860	.00886	.00616	7.0634	-.00774	-.02488	-.00011
#2	14.777	.00886	.01109	7.0075	.00132	-.00966	.03127
#3	14.865	.00788	.01109	7.1188	-.00108	-.01726	.03132
#4	14.878	.00985	.01601	7.0500	.00781	.01309	.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	-.01263	3.5544	-.00555	.11368	-.00475	.02882	.00509
SDev	.03460	.0075	.01094	.00047	.00060	.06674	.00008
%RSD	273.91	.21034	196.95	.41289	12.591	231.61	1.5438
#1	.01088	3.5630	.00568	.11369	-.00508	.02880	.00500
#2	.02263	3.5515	.00171	.11302	-.00410	-.05293	.00510

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#3	-.03615	3.5457	-.01267	.11395	-.00541	.02885	.00509
#4	-.04789	3.5572	-.01693	.11406	-.00442	.11055	.00519
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	.00358
SDev	.00135
%RSD	37.655

#1	.00234
#2	.00549
#3	.00310
#4	.00338

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHM9E RAW Operator: MTW
Run Time: 08/22/00 13:12:30
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61H
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00107	.08899	-.00459	-.00265	.01199	.00016	5.1199
SDev	.00214	.00816	.02768	.00124	.00015	.00007	.0160
%RSD	199.50	9.1674	602.84	46.605	1.2330	45.835	.31208

#1	-.00143	.08000	-.01513	-.00445	.01177	.00010	5.1366
#2	.00286	.08902	.02339	-.00245	.01206	.00010	5.1171
#3	.00286	.09974	.01171	-.00185	.01206	.00022	5.1268
#4	.00000	.08719	-.03834	-.00185	.01206	.00022	5.0991

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	.00006	.00104	.00293	.00992	.00882	.68803	-.00075
SDev	.00186	.00279	.00176	.00085	.00122	.29238	.00000
%RSD	3307.0	267.95	60.049	8.5145	13.793	42.496	.00000

#1	-.00082	-.00314	.00093	.00970	.00815	.30166	-.00075
#2	-.00123	.00244	.00465	.01058	.00948	.72316	-.00075
#3	.00281	.00243	.00412	.01058	.01015	1.0124	-.00075
#4	-.00054	.00244	.00200	.00882	.00749	.71489	-.00075

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	.82877	.00148	.00246	.29568	.00267	-.01140	.00520
SDev	.00857	.00057	.00246	.00348	.00594	.02513	.01352
%RSD	1.0344	38.423	99.941	1.1775	222.08	220.45	259.83

#1	.82007	.00197	.00123	.29389	.00014	-.03995	.01045
#2	.82274	.00099	.00123	.29880	-.00213	-.01707	-.01049
#3	.83613	.00197	.00123	.29836	.01131	.02090	.02091
#4	.83613	.00099	.00616	.29165	.00137	-.00947	-.00006

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	-.01859	.49804	.00516	.01318	-.00033	.00575	.00036
SDev	.04345	.00989	.01624	.00015	.00057	.03440	.00060
%RSD	233.79	1.9860	314.45	1.1443	173.21	598.82	166.65

#1	-.01271	.48790	-.01279	.01331	-.00049	.04082	.00003
#2	-.01663	.49369	-.00261	.01305	-.00082	.01740	.00003

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#3	.03039	.49950	.02424	.01305	.00049	-.04099	.00125
#4	-.07540	.51106	.01182	.01331	-.00049	.00575	.00012
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.00911
SDev	.00032
%RSD	3.5617

#1	.00939
#2	.00939
#3	.00881
#4	.00884

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DHM9EF RAW Operator: MTW
 Run Time: 08/22/00 13:15:38
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00036	.03483	.10390	.00452	.12786	.00012	51.941
SDev	.00072	.00644	.02898	.00058	.00124	.00007	.558
%RSD	200.21	18.493	27.893	12.844	.97239	54.094	1.0737
#1	-.00000	.03354	.12806	.00437	.12877	.00022	52.081
#2	-.00000	.04423	.08937	.00376	.12806	.00010	52.576
#3	.00000	.03170	.12805	.00498	.12605	.00009	51.229
#4	.00145	.02986	.07011	.00497	.12856	.00008	51.879
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	.00099	.00239	.07053	-.00168	1.5042	.00477
SDev	.00306	.00228	.00101	.00125	.00064	.2779	.00060
%RSD	263.40	230.06	42.094	1.7703	38.022	18.478	12.473
#1	.00240	.00098	.00306	.07141	-.00118	1.2934	.00553
#2	-.00196	.00379	.00306	.07142	-.00118	1.9133	.00495
#3	-.00021	-.00180	.00093	.06877	-.00184	1.4174	.00421
#4	-.00488	.00100	.00252	.07053	-.00251	1.3926	.00440
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.6499	.01279	.00493	2.7272	-.00145	.01330	.00780
SDev	.0852	.00000	.00472	.0168	.00297	.02705	.04462
%RSD	.98449	.01156	95.748	.61513	204.68	203.46	572.02
#1	8.6874	.01279	.00123	2.7375	-.00425	-.00190	-.01045
#2	8.6766	.01279	.01108	2.7165	.00236	.03620	.06261
#3	8.5240	.01279	.00123	2.7098	-.00061	-.01711	.02091
#4	8.7115	.01279	.00616	2.7451	-.00331	.03599	-.04185
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	-.00686	5.1121	-.00560	.13797	-.00369	.04970	.00162
SDev	.03819	.0445	.01581	.00116	.00016	.06207	.00231
%RSD	556.62	.87016	282.27	.84257	4.4444	124.90	142.47
#1	.00685	5.1382	-.02315	.13831	-.00377	.06430	.00003
#2	.01861	5.1324	.00801	.13763	-.00344	-.04082	.00022

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#3	.01077	5.0455	-.01478	.13659	-.00377	.07600	.00124
#4	-.06367	5.1324	.00752	.13935	-.00377	.09931	.00500
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 .00753
SDev .00135
%RSD 17.888

#1 .00780
#2 .00933
#3 .00649
#4 .00650

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: CCV2-10 Operator: MTW
Run Time: 08/22/00 13:18:47
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	.99687	49.885	5.1666	5.0514	4.9971	5.1832	52.292
SDev	.00670	.133	.0607	.0387	.0126	.0074	.443
%RSD	.67237	.26645	1.1758	.76604	.25238	.14202	.84759
#1	.99353	49.753	5.2329	5.0377	4.9824	5.1810	52.012
#2	.99213	49.863	5.2010	5.0364	5.0005	5.1797	52.002
#3	1.0068	50.070	5.1014	5.1086	5.0124	5.1941	52.941
#4	.99506	49.854	5.1313	5.0229	4.9930	5.1781	52.214
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	5.2505	5.1086	5.0565	4.9674	52.235	49.532	4.8137
SDev	.0102	.0291	.0298	.0031	.261	.539	.0084
%RSD	.19352	.57001	.58858	.06267	.49888	1.0884	.17461
#1	5.2476	5.0818	5.0411	4.9689	52.066	49.666	4.8207
#2	5.2468	5.1013	5.0332	4.9636	52.078	48.914	4.8134
#3	5.2654	5.1501	5.0996	4.9707	52.618	50.195	4.8020
#4	5.2423	5.1014	5.0523	4.9662	52.176	49.352	4.8187
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	50.710	5.0572	5.0355	50.698	5.2748	5.0125	5.0884
SDev	.178	.0290	.0283	.033	.0639	.0813	.0108
%RSD	.35072	.57360	.56249	.06500	1.2120	1.6210	.21282
#1	50.586	5.0363	5.0330	50.671	5.1976	4.9607	5.0825
#2	50.616	5.0402	5.0330	50.720	5.2492	5.0067	5.0831
#3	50.972	5.0994	5.0725	50.669	5.3398	5.1292	5.0833
#4	50.664	5.0530	5.0035	50.733	5.3127	4.9536	5.1046
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	5.0269	5.0550	5.1396	5.0936	4.9688	10.176	5.0593
SDev	.0558	.0332	.0542	.0136	.0193	.258	.0236
%RSD	1.1103	.65722	1.0547	.26677	.38812	2.5376	.46562
#1	5.0490	5.0345	5.0980	5.0804	4.9554	10.152	5.0412
#2	5.0608	5.0404	5.1165	5.0926	4.9597	9.8832	5.0461

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#3	5.0544	5.1047	5.2192	5.1125	4.9974	10.157	5.0933
#4	4.9435	5.0405	5.1248	5.0890	4.9627	10.513	5.0565
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 4.9197
SDev .0256
%RSD .52071

#1 4.9063
#2 4.9079
#3 4.9581
#4 4.9065

Errors LC Pass
High 5.5000
Low 4.5000

Method: QUANMET Sample Name: CCB10

Operator: MTW

Run Time: 08/22/00 13:21:55

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	.00036	.01248	-.01843	.00513	.00010	.00032	.00151
SDev	.00137	.00806	.05850	.00760	.00012	.00012	.00415
%RSD	383.30	64.557	317.35	148.26	115.47	38.297	276.02

#1	-.00000	.01204	.03561	.00438	.00021	.00022	-.00196
#2	-.00143	.00307	-.04537	.01564	.00021	.00022	-.00038
#3	.00143	.01203	-.08790	.00297	.00000	.00035	.00087
#4	.00143	.02276	.02393	-.00247	.00000	.00048	.00749

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	-.00000	.00146	-.00022	-.00034	.57026	-.00115
SDev	.00155	.00349	.00578	.00084	.00157	.26657	.00069
%RSD	293.51	935450.	394.61	382.58	469.44	46.745	60.389

#1	-.00140	-.00453	-.00013	-.00000	-.00250	.20248	-.00216
#2	.00213	-.00035	.00519	-.00088	-.00050	.69010	-.00094
#3	.00001	.00105	.00678	.00088	.00083	.82233	-.00056
#4	.00137	.00384	-.00598	-.00088	.00083	.56613	-.00094

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00201	.00049	.00493	.00648	.00191	.01516	-.00783
SDev	.00901	.00057	.00620	.00487	.00636	.02726	.01562
%RSD	448.87	115.51	125.84	75.127	332.00	179.82	199.64

#1	-.01272	-.00000	-.00369	.00335	-.00001	.02069	-.03126
#2	-.00469	.00000	.00616	.00246	-.00473	.03603	-.00009
#3	.00067	.00099	.00616	.00693	.00192	-.02463	-.00008
#4	.00870	.00099	.01108	.01319	.01048	.02854	.00012

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	-.03918	.00579	-.01287	.00008	-.00066	.05839	.00010
SDev	.03638	.00290	.01358	.00012	.00019	.06773	.00012
%RSD	92.858	50.000	105.51	152.64	28.868	116.00	120.39

#1	.00685	.00724	-.02942	-.00001	-.00082	.01758	-.00007
#2	-.02840	.00145	-.01489	.00003	-.00049	-.00583	.00013

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#3	-.07541	.00724	.00360	.00003	-.00082	.14596	.00013
#4	-.05974	.00724	-.01078	.00025	-.00049	.07587	.00020
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	.00112
SDev	.00067
%RSD	59.950

#1	.00099
#2	.00023
#3	.00175
#4	.00150

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHP2EB Operator: MTW
Run Time: 08/22/00 13:25:04
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	.00036	.01922	.01720	.01047	.00013	.00013	.14600
SDev	.00137	.00527	.01949	.01609	.00025	.00006	.00365
%RSD	381.12	27.420	113.29	153.65	200.00	50.000	2.5001
#1	-.00143	.01380	-.00687	-.00447	.00000	.00010	.14091
#2	.00143	.02460	.03935	.03174	.00050	.00010	.14823
#3	.00000	.01570	.02399	.00096	.00000	.00010	.14587
#4	.00143	.02277	.01235	.01364	.00000	.00022	.14901
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	.00157	.00139	.00253	.00154	.00632	.82853	-.00124
SDev	.00205	.00175	.00217	.00085	.00227	.02646	.00097
%RSD	130.66	125.90	85.912	54.688	35.864	3.1936	78.218
#1	.00040	-.00035	.00040	.00088	.00349	.78927	-.00149
#2	.00340	.00104	.00093	.00088	.00815	.83886	.00019
#3	.00319	.00383	.00412	.00177	.00549	.83886	-.00196
#4	-.00072	.00105	.00465	.00265	.00816	.84712	-.00169
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	.00602	.00025	.00370	.01721	-.00051	-.00756	.00259
SDev	.01467	.00049	.00284	.00587	.00956	.02430	.01320
%RSD	243.43	197.76	76.958	34.131	1864.4	321.58	510.12
#1	.01138	.00000	.00616	.01721	-.00521	-.02468	.00000
#2	.00335	.00099	.00123	.01497	.00898	.02849	.02093
#3	-.01272	.00000	.00123	.01140	-.01158	-.01699	-.01055
#4	.02209	.00000	.00616	.02525	.00575	-.01705	-.00003
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	-.00292	.03619	-.00718	-.00035	-.00057	-.00883	.00008
SDev	.04575	.00000	.02401	.00005	.00056	.03737	.00006
%RSD	1565.7	.00000	334.63	15.217	97.590	423.04	72.142
#1	-.03623	.03619	-.03954	-.00038	-.00115	-.04090	.00012
#2	.04214	.03619	.01397	-.00038	-.00049	-.04096	.00003

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#3	.03038	.03619	-.01083	-.00027	-.00082	.01743	.00003
#4	-.04797	.03619	.00771	-.00038	.00016	.02910	.00013

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	.00580
SDev	.00040
%RSD	6.9422

#1	.00549
#2	.00599
#3	.00628
#4	.00545

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHP2EC

Operator: MTW

Run Time: 08/22/00 13:28:13

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	.04726	1.9486	1.9718	.97821	1.9723	.05184	51.702
SDev	.00137	.0105	.0480	.00198	.0087	.00017	.197
%RSD	2.9103	.53867	2.4360	.20238	.44046	.32748	.38073
#1	.04546	1.9522	1.9941	.97650	1.9664	.05172	51.800
#2	.04691	1.9344	1.9092	.97649	1.9704	.05184	51.729
#3	.04831	1.9484	2.0211	.97992	1.9671	.05172	51.418
#4	.04836	1.9593	1.9630	.97992	1.9850	.05208	51.860
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	.49566	.20208	.24563	1.0416	48.805	.95552
SDev	.00420	.00648	.00247	.00125	.0044	.462	.00631
%RSD	8.8697	1.3066	1.2220	.50854	.41954	.94572	.66044
#1	.04979	.49531	.20301	.24387	1.0401	48.129	.95227
#2	.04505	.50230	.20195	.24652	1.0447	48.939	.94927
#3	.04282	.48696	.19876	.24562	1.0361	49.170	.95676
#4	.05196	.49808	.20461	.24651	1.0454	48.980	.96379
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK
High	.06000	.60000	.24000	.30000	1.2000	60.000	
Low	.04000	.40000	.16000	.20000	.80000	40.000	
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	50.405	.49562	1.0013	50.257	.52244	.48694	L.34218
SDev	.163	.00294	.0106	.228	.00464	.02500	.02316
%RSD	.32292	.59221	1.0626	.45325	.88885	5.1353	6.7693
#1	50.388	.49636	1.0013	50.071	.52767	.51914	L.31866
#2	50.230	.49439	.99634	50.152	.51884	.48142	L.32918
#3	50.378	.49243	1.0160	50.220	.52502	.48863	L.37094
#4	50.624	.49931	.99141	50.586	.51823	.45856	L.34994
Errors	LC Pass	LC Pass	NOCHECK	LC Pass	LC Pass	LC Pass	LC Low
High	60.000	.60000		60.000	.60000	.60000	.60000
Low	40.000	.40000		40.000	.40000	.40000	.40000
Elem	SE	SI	SN	SR	TI	TL	V
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9724	9.8685	2.0148	1.0108	.97205	2.0223	.49176
SDev	.0951	.0497	.0403	.0038	.00336	.1392	.00421
%RSD	4.8197	.50390	2.0025	.37660	.34537	6.8852	.85595
#1	1.9959	9.8526	2.0357	1.0089	.97156	2.0924	.48901
#2	2.0547	9.8584	2.0029	1.0098	.97091	1.8237	.49257

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#3	1.8352	9.8236	1.9641	1.0082	.96894	2.1392	.48807
#4	2.0037	9.9395	2.0564	1.0164	.97680	2.0339	.49736

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	.48481
SDev	.00297
%RSD	.61296

#1	.48256
#2	.48205
#3	.48651
#4	.48812

Errors	LC Pass
High	.60000
Low	.40000

Method: QUANMET Sample Name: DHMJE

Operator: MTW

Run Time: 08/22/00 13:31:26

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61H

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00078	.75165	.07273	.66015	.03307	.00033	23.571
SDev	.00071	.00948	.02650	.01710	.00024	.00001	.132
%RSD	91.285	1.2615	36.429	2.5904	.74204	1.9451	.56006
#1	.00114	.74050	.03421	.65161	.03317	.00033	23.631
#2	.00113	.75127	.07667	.65158	.03287	.00034	23.374
#3	.00115	.75115	.09201	.68580	.03337	.00033	23.627
#4	-.00029	.76369	.08805	.65161	.03287	.00033	23.652
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	.00172	.00754	.05162	.49764	432.15	.02922
SDev	.00280	.00180	.00134	.00051	.00472	3.73	.00000
%RSD	217.67	104.67	17.780	.98722	.94792	.86202	.00000
#1	.00257	.00241	.00567	.05118	.50080	434.19	.02922
#2	.00261	.00381	.00887	.05206	.49082	428.17	.02922
#3	-.00290	-.00037	.00780	.05117	.49814	429.98	.02922
#4	.00287	.00101	.00780	.05206	.50080	436.26	.02922
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	18.435	5.8753	.15276	H627.89	.02857	-.00429	.02339
SDev	.151	.0372	.00246	5.84	.00728	.03299	.01569
%RSD	.82086	.63377	1.6119	.92958	25.498	769.78	67.099
#1	18.483	5.8943	.14907	H630.64	.03377	-.01756	.01042
#2	18.231	5.8244	.15400	H621.78	.01822	-.03269	.01023
#3	18.434	5.8726	.15400	H624.49	.02871	-.01002	.03118
#4	18.592	5.9100	.15400	H634.66	.03358	.04313	.04174
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	.00817	16.082	.00019	.28005	.00508	.02102	.15289
SDev	.02458	.094	.01302	.00244	.00071	.05052	.00242
%RSD	300.92	.58414	7026.3	.86968	13.937	240.37	1.5833
#1	-.01141	16.149	.00372	.28143	.00410	-.00228	.15403
#2	-.01144	15.958	-.00450	.27751	.00573	.02081	.14926

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#3	.01600	16.062	.01614	.27855	.00541	-.02570	.15413
#4	.03952	16.161	-.01462	.28273	.00508	.09124	.15413
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 .01923
 SDev .00151
 %RSD 7.8488

#1 .01926
 #2 .02029
 #3 .02028
 #4 .01708

Errors LC Pass
 High 100.00
 Low -.02000

Method: QUANMET Sample Name: DHMJEP5 Operator: MTW
 Run Time: 08/22/00 13:34:40
 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	.00101	.16655	-.00295	.11862	.00694	.00024	4.8237
SDev	.00294	.00591	.02629	.00162	.00014	.00006	.0251
%RSD	292.55	3.5489	891.54	1.3693	2.0094	26.495	.51962
#1	.00422	.17244	-.03965	.11882	.00695	.00027	4.8534
#2	.00137	.16348	-.00101	.11741	.00704	.00027	4.8345
#3	-.00292	.15981	.00676	.11742	.00704	.00014	4.7980
#4	.00136	.17046	.02211	.12085	.00674	.00027	4.8087
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	.00013	-.00175	.00890	.01081	.10236	86.436	.00085
SDev	.00232	.00342	.00257	.00084	.00139	.330	.00032
%RSD	1833.7	195.53	28.865	7.8116	1.3546	.38127	37.363
#1	.00208	.00104	.00518	.01147	.10269	86.361	.00104
#2	-.00317	.00105	.01103	.01059	.10069	86.882	.00038
#3	.00024	-.00315	.00943	.00970	.10202	86.089	.00093
#4	.00136	-.00594	.00997	.01146	.10402	86.411	.00104
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	3.8232	1.2055	.03449	126.54	.01327	.03966	-.00007
SDev	.0191	.0046	.00472	.25	.00603	.01323	.03722
%RSD	.50019	.37968	13.672	.19420	45.446	33.345	51113.
#1	3.8245	1.2099	.03080	126.43	.01522	.05874	.03132
#2	3.8486	1.2090	.03080	126.89	.01007	.03595	-.00006
#3	3.8165	1.2011	.03573	126.32	.00703	.02818	-.05237
#4	3.8031	1.2021	.04065	126.53	.02076	.03578	.02082
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	-.01932	3.1927	.01183	.05810	.00066	.02305	.03024
SDev	.04236	.0082	.00940	.00024	.00042	.02522	.00057
%RSD	219.28	.25672	79.470	.41108	64.550	109.43	1.8866
#1	.01888	3.1927	.02225	.05835	.00115	.04641	.02986
#2	-.01639	3.2043	-.00050	.05825	.00049	-.01197	.03109

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#3	-.07907	3.1869	.01159	.05798	.00016	.02304	.02996
#4	-.00071	3.1869	.01398	.05783	.00082	.03472	.03006
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	.00544
SDev	.00054
%RSD	9.9193

#1	.00496
#2	.00576
#3	.00500
#4	.00602

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJES Operator: MTW
Run Time: 08/22/00 13:37:49
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	.04801	2.8514	2.0936	1.6321	1.9520	.05106	75.822
SDev	.00117	.0144	.0721	.0086	.0095	.00018	.371
%RSD	2.4456	.50459	3.4455	.52569	.48834	.34807	.48894
#1	.04657	2.8344	2.0031	1.6243	1.9427	.05082	75.279
#2	.04799	2.8453	2.0725	1.6286	1.9470	.05120	76.087
#3	.04802	2.8595	2.1302	1.6314	1.9646	.05119	76.025
#4	.04945	2.8666	2.1687	1.6442	1.9536	.05106	75.896
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	.04641	.49637	.20192	.29791	1.5384	493.65	.98409
SDev	.00117	.00606	.00234	.00196	.0103	2.15	.00609
%RSD	2.5295	1.2211	1.1577	.65822	.66988	.43566	.61939
#1	.04616	.48836	.19926	.29503	1.5240	491.38	.98100
#2	.04814	.49532	.20458	.29857	1.5440	492.50	.97819
#3	.04570	.50229	.20298	.29945	1.5474	496.25	.99224
#4	.04565	.49951	.20086	.29857	1.5380	494.46	.98494
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	68.393	6.4022	1.1516	H698.14	.53209	.51312	.54818
SDev	.295	.0288	.0094	3.88	.00749	.03934	.02256
%RSD	.43146	.44931	.81906	.55536	1.4081	.76678	4.1146
#1	67.981	6.3601	1.1442	H695.15	.53668	.49583	.53779
#2	68.538	6.4162	1.1442	H695.24	.53612	.54911	.52732
#3	68.659	6.4241	1.1540	H703.36	.52093	.46586	.54809
#4	68.394	6.4083	1.1639	H698.80	.53464	.54169	.57954
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	2.0432	H26.901	2.0446	1.2750	.97214	1.9326	.63940
SDev	.0390	.151	.0116	.0054	.00421	.0707	.00298
%RSD	1.9079	.56214	.56597	.42244	.43279	3.6603	.46617
#1	2.0128	H26.707	2.0533	1.2688	.96665	1.9209	.63682
#2	2.0207	H26.956	2.0532	1.2734	.97189	2.0027	.63683

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#3	2.0991	H27.066	2.0430	1.2817	.97680	1.8392	.64189
#4	2.0403	H26.875	2.0288	1.2760	.97320	1.9677	.64207

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	.50282
SDev	.00415
%RSD	.82559

#1	.49794
#2	.50343
#3	.50799
#4	.50191

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJED Operator: MTW
 Run Time: 08/22/00 13:41:02
 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	.04657	2.8390	2.0851	1.6092	1.9521	.05101	75.145
SDev	.00202	.0251	.0210	.0256	.0172	.00033	.338
%RSD	4.3430	.88304	1.0062	1.5938	.88047	.64887	.45009
#1	.04370	2.8327	2.1151	1.5964	1.9508	.05083	74.816
#2	.04799	2.8115	2.0690	1.5964	1.9309	.05070	74.966
#3	.04800	2.8399	2.0725	1.5964	1.9537	.05107	75.591
#4	.04658	2.8720	2.0838	1.6477	1.9730	.05145	75.207
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	.04402	.49255	.20006	.30672	1.5353	489.15	.98566
SDev	.00462	.00601	.00069	.00490	.0052	4.31	.01223
%RSD	10.495	1.2209	.34382	1.5990	.33913	.88069	1.2411
#1	.03864	.48419	.19926	.30473	1.5353	488.60	.98596
#2	.04453	.49257	.19979	.30209	1.5280	483.95	.97285
#3	.04985	.49811	.20033	.30650	1.5387	489.59	.98174
#4	.04307	.49532	.20086	.31355	1.5394	494.45	1.0021
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	67.875	6.3252	1.1454	H692.55	.52969	53008	.53515
SDev	.465	.0304	.0152	7.31	.01205	.01300	.02738
%RSD	.68531	.48016	1.3313	1.0556	2.2750	2.4528	5.1160
#1	67.713	6.3031	1.1442	H692.80	.51997	54125	.54816
#2	67.325	6.2952	1.1245	H684.10	.52200	54142	.49610
#3	68.045	6.3542	1.1540	H691.39	.54647	51885	.53779
#4	68.415	6.3483	1.1590	H701.91	.53031	51878	.55855
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	2.0471	H26.591	2.0369	1.2709	.96567	1.9031	.63440
SDev	.0426	.138	.0353	.0099	.00669	.1090	.00307
%RSD	2.0810	.51888	1.7330	.78138	.69254	5.7266	.48352
#1	2.0599	H26.481	2.0061	1.2699	.96337	1.8622	.63194
#2	2.0481	H26.475	2.0100	1.2583	.95780	1.7804	.63156

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#3	2.0912	H26.649	2.0800	1.2732	.96796	2.0375	.63701
#4	1.9894	H26.759	2.0513	1.2823	.97353	1.9323	.63710
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	.51053
SDev	.00739
%RSD	1.4485

#1	.50792
#2	.50266
#3	.51126
#4	.52027

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJT

Operator: MTW

Run Time: 08/22/00 13:44:16

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61H

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00161	4.3297	.05093	.51272	.05701	.00034	61.341
SDev	.00143	.0181	.01787	.00070	.00034	.00016	.161
%RSD	88.746	.41762	35.084	.13674	.58716	48.210	.26284
#1	-.00232	4.3091	.03474	.51300	.05679	.00028	61.210
#2	-.00233	4.3235	.07317	.51167	.05750	.00053	61.542
#3	-.00233	4.3342	.03834	.51309	.05679	.00015	61.400
#4	.00053	4.3520	.05748	.51311	.05699	.00041	61.210
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	.00101	.00539	.01838	.07752	10.166	609.01	.03884
SDev	.00205	.00176	.00320	.00102	.026	2.21	.00055
%RSD	202.13	32.623	17.422	1.3163	.25907	.36247	1.4141
#1	.00252	.00364	.01426	.07663	10.127	606.86	.03814
#2	.00119	.00783	.02117	.07840	10.172	608.02	.03878
#3	-.00193	.00504	.01745	.07664	10.177	609.14	.03900
#4	.00227	.00503	.02064	.07840	10.187	612.01	.03946
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	25.194	17.202	.16652	H541.29	.03182	.01246	.02002
SDev	.056	.042	.00247	2.82	.00947	.01896	.02703
%RSD	.22351	.24537	1.4802	.52016	29.757	152.14	135.00
#1	25.137	17.139	.16529	H539.16	.04323	.01598	.03055
#2	25.265	17.227	.16529	H539.04	.02082	.02192	-.01142
#3	25.209	17.226	.16529	H541.95	.02865	.02192	.05139
#4	25.164	17.217	.17022	H545.00	.03459	.02199	.00958
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	-.00260	15.790	-.00399	.48013	.10181	.01214	.02763
SDev	.03261	.052	.01906	.00185	.00056	.03853	.00005
%RSD	1254.4	.32719	477.30	.38506	.54958	317.39	.18425
#1	.04529	15.713	.02173	.47859	.10107	-.01408	.02760
#2	-.00944	15.806	-.00311	.47874	.10173	-.02575	.02761

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#3	-.02118	15.817	-.02336	.48068	.10205	.05595	.02761
#4	-.02507	15.823	-.01123	.48251	.10238	.03245	.02771
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	.11695
SDev	.00102
%RSD	.86894

#1	.11738
#2	.11558
#3	.11797
#4	.11685

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMK5

Operator: MTW

Run Time: 08/22/00 13:47:29

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	-.00051	.36623	.06252	.44872	.01106	.00018	61.600
SDev	.00144	.00943	.03215	.00407	.00041	.00006	.364
%RSD	280.85	2.5755	51.432	.90730	3.7114	31.847	.59030
#1	-.00124	.35824	.02309	.44322	.01106	.00010	61.126
#2	-.00121	.35808	.09244	.45008	.01106	.00020	61.829
#3	-.00124	.37614	.08469	.44868	.01055	.00022	61.510
#4	.00165	.37243	.04986	.45291	.01156	.00020	61.934
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	-.00256	-.00106	.00481	.01027	1.6607	609.52	.03978
SDev	.00115	.00267	.00424	.00051	.0090	1.85	.00094
%RSD	44.728	251.37	88.127	4.9541	.54120	.30284	2.3559
#1	-.00169	.00103	.00734	.00983	1.6498	607.90	.04029
#2	-.00339	-.00176	.00096	.00983	1.6598	607.99	.03842
#3	-.00370	-.00455	.00149	.01071	1.6612	610.73	.03993
#4	-.00147	.00103	.00946	.01071	1.6718	611.47	.04048
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	41.319	1.0941	.09999	390.49	.00845	.02403	.00991
SDev	.100	.0040	.00697	1.36	.00192	.03637	.01909
%RSD	.24197	.37009	6.9667	.34955	22.711	151.38	192.60
#1	41.201	1.0894	.09999	389.77	.00624	-.02521	.02036
#2	41.295	1.0943	.10492	388.92	.01029	.04300	.03086
#3	41.337	1.0933	.09014	391.70	.00746	.02010	-.01094
#4	41.442	1.0993	.10492	391.57	.00979	.05821	-.00063
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	.01319	11.387	-.00584	.31595	.01016	-.04896	.00499
SDev	.05936	.044	.01974	.00127	.00042	.05822	.00363
%RSD	450.03	.38762	338.18	.40154	4.1645	118.91	72.777
#1	.07780	11.323	-.02479	.31471	.00966	-.13353	.00195
#2	.03474	11.410	-.01653	.31523	.01032	-.04021	.00812

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#3	-.06320	11.393	-.00234	.31628	.01065	-.01681	.00174
#4	.00343	11.422	.02031	.31758	.00999	-.00530	.00814
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	.03168
SDev	.00093
%RSD	2.9204

#1	.03215
#2	.03216
#3	.03214
#4	.03030

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMK9

Operator: MTW

Run Time: 08/22/00 13:50:38

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61H:

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00092	.37381	.05859	.44708	.01060	.00014	60.485
SDev	.00082	.00591	.02568	.00857	.00010	.00007	.337
%RSD	89.510	1.5810	43.828	1.9176	.97561	52.189	.55688
#1	.00163	.36704	.07312	.45405	.01055	.00021	59.997
#2	.00163	.37256	.02290	.43495	.01055	.00021	60.546
#3	.00021	.38137	.05755	.45206	.01076	.00008	60.758
#4	.00021	.37426	.08077	.44724	.01055	.00008	60.641
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	-.00071	.00138	.00455	.01556	1.6430	600.43	.04069
SDev	.00224	.00133	.00254	.00153	.0068	2.74	.00048
%RSD	313.19	96.797	55.969	9.8107	.41634	.45623	1.1809
#1	.00179	.00102	.00521	.01776	1.6339	598.17	.04103
#2	-.00077	.00242	.00787	.01512	1.6419	598.18	.04103
#3	-.00024	.00242	.00255	.01512	1.6492	603.73	.04068
#4	-.00363	-.00036	.00255	.01424	1.6472	601.64	.04001
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	40.888	1.0975	.10368	379.47	.02667	.00895	.03094
SDev	.176	.0043	.00739	1.67	.01122	.03127	.01215
%RSD	.43032	.38991	7.1258	.43965	42.065	349.51	39.284
#1	40.716	1.0914	.10984	378.12	.03721	.03551	.04147
#2	40.807	1.0983	.09506	378.00	.01083	-.02518	.02037
#3	41.126	1.1012	.10984	381.34	.02843	-.01001	.02046
#4	40.904	1.0992	.09999	380.40	.03022	.03546	.04147
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	-.00253	11.243	.00505	.31123	.00942	.00667	.00689
SDev	.02341	.069	.01342	.00142	.00031	.06396	.00014
%RSD	926.21	.61142	266.05	.45656	3.3302	958.44	2.0350
#1	-.03193	11.161	-.00826	.31012	.00934	-.01662	.00701
#2	.02293	11.236	.00808	.31038	.00966	.01836	.00673

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#3	.00728	.11.248	.02246	.31325	.00966	-.06344	.00700
#4	-.00839	11.329	-.00209	.31116	.00901	.08840	.00681

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	.03244
SDev	.00081
%RSD	2.5078

#1	.03226
#2	.03213
#3	.03362
#4	.03176

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMKE

Operator: MTW

Run Time: 08/22/00 13:53:47

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA613

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00064	47.247	.07124	.77388	.56852	.00292	H609.43
SDev	.00185	.057	.06438	.00359	.00153	.00001	4.52
%RSD	287.82	.12087	90.367	.46387	.26959	.43721	.74104
#1	-.00146	47.177	.11187	.77618	.56930	.00293	H605.14
#2	.00000	47.299	-.01665	.77245	.57010	.00293	H605.97
#3	-.00269	47.224	.12602	.77738	.56659	.00290	H612.68
#4	.00159	47.288	.06372	.76951	.56809	.00291	H613.92
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	.00001	.04441	.09778	.20989	88.403	191.84	.10362
SDev	.00214	.00209	.00165	.00070	.352	.52	.00145
%RSD	40404.	4.7118	1.6838	.33292	.39761	.27255	1.3971
#1	.00138	.04267	.09551	.21074	88.029	191.74	.10290
#2	.00062	.04267	.09764	.20987	88.181	192.59	.10579
#3	-.00316	.04547	.09924	.20903	88.653	191.68	.10298
#4	.00119	.04685	.09871	.20992	88.748	191.36	.10281
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	149.68	1.5908	.04031	H592.42	.09968	.17719	.01475
SDev	.25	.0071	.00846	2.54	.00478	.04382	.03461
%RSD	.16733	.44763	20.984	.42841	4.7982	24.730	234.61
#1	149.34	1.5825	.02917	H593.07	.09495	.16972	.04080
#2	149.76	1.5875	.03905	H595.72	.09656	.18469	-.03219
#3	149.68	1.5945	.04897	H590.13	.10529	.23032	.04091
#4	149.94	1.5985	.04406	H590.76	.10192	.12404	.00949
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	-.14123	H68.580	.03284	5.0209	.83634	.20411	.14114
SDev	.05808	.208	.03524	.0076	.00238	.12331	.00481
%RSD	41.124	.30370	107.30	.15040	.28496	60.413	3.4100
#1	-.16866	H68.332	.07091	5.0155	.83396	.27218	.13727
#2	-.19569	H68.495	-.00954	5.0304	.83527	.27064	.13746

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#3	-.06124	H68.692	.01965	5.0142	.83658	.25404	.14741
#4	-.13934	H68.802	.05033	5.0234	.83953	.01956	.14244

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	1.3602
SDev	.0072
%RSD	.52997

#1	1.3511
#2	1.3609
#3	1.3687
#4	1.3600

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-11 Operator: MTW
 Run Time: 08/22/00 13:57:00
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0128	50.630	5.2210	5.1052	5.0783	5.2698	53.295
SDev	.0036	.148	.0660	.0225	.0059	.0220	.320
%RSD	.35772	.29282	1.2644	.44121	.11636	.41654	.60085
#1	1.0114	50.602	5.1537	5.1158	5.0765	5.2649	53.332
#2	1.0158	50.804	5.2790	5.0888	5.0870	5.2945	53.523
#3	1.0158	50.665	5.2763	5.1319	5.0740	5.2773	53.494
#4	1.0083	50.447	5.1750	5.0845	5.0758	5.2423	52.832
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	1.1000	55.000	5.5000	5.5000	5.5000	5.5000	55.000
Low	.90000	45.000	4.5000	4.5000	4.5000	4.5000	45.000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.3479	5.1836	5.1486	5.0479	52.950	50.307	4.8616
SDev	.0192	.0208	.0296	.0085	.220	.332	.0163
%RSD	.35879	.40102	.57454	.16924	.41518	.66049	.33448
#1	5.3459	5.1763	5.1570	5.0369	52.926	50.708	4.8554
#2	5.3431	5.2056	5.1693	5.0572	53.153	50.055	4.8647
#3	5.3742	5.1944	5.1634	5.0466	53.069	50.451	4.8440
#4	5.3282	5.1582	5.1049	5.0510	52.651	50.013	4.8824
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	51.574	5.1236	5.1267	51.441	5.3940	5.1299	5.2295
SDev	.138	.0237	.0282	.103	.0438	.0497	.0306
%RSD	.26686	.46278	.54972	.20006	.81234	.96962	.58487
#1	51.473	5.1260	5.1267	51.378	5.4262	5.1904	5.2401
#2	51.698	5.1428	5.1416	51.572	5.3710	5.1304	5.2604
#3	51.687	5.1359	5.1514	51.343	5.4349	5.1302	5.2296
#4	51.438	5.0896	5.0873	51.472	5.3438	5.0686	5.1878
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	5.1591	5.1749	5.2424	5.1905	5.0422	10.162	5.1472
SDev	.1058	.0438	.0394	.0073	.0153	.182	.0169
%RSD	2.0504	.84626	.75120	.14155	.30298	1.7896	.32781
#1	5.1140	5.1923	5.2712	5.1873	5.0396	10.236	5.1493
#2	5.2948	5.2097	5.2507	5.2008	5.0596	10.116	5.1557

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#3	5.1810	5.1866	5.2629	5.1901	5.0465	10.362	5.1608
#4	5.0467	5.1109	5.1847	5.1838	5.0229	9.9349	5.1229
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 5.0001
SDev .0166
%RSD .33124

#1 4.9975
#2 5.0218
#3 4.9995
#4 4.9816

Errors LC Pass
High 5.5000
Low 4.5000

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Method: QUANMET Sample Name: CCB11

Operator: MTW

Run Time: 08/22/00 14:00:09

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA611E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00143	.02010	-.02140	.00232	.00028	.00057	.01637
SDev	.00118	.01150	.03158	.00234	.00015	.00029	.00258
%RSD	82.726	57.242	147.60	101.24	52.631	50.447	15.760
#1	.00143	.00669	.01249	.00296	.00021	.00048	.01485
#2	.00288	.03344	-.03027	.00438	.00021	.00047	.01949
#3	.00143	.02456	-.00695	-.00106	.00021	.00035	.01374
#4	-.00002	.01570	-.06086	.00298	.00050	.00100	.01740
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	.00209	.00139	.00306	.00088	.00300	.63431	-.00070
SDev	.00097	.00070	.00328	.00072	.00362	.20616	.00041
%RSD	46.481	50.170	107.12	81.491	120.89	32.502	58.813
#1	.00279	.00244	.00253	.00088	.00083	.60745	-.00028
#2	.00067	.00104	.00784	.00176	.00283	.73142	-.00122
#3	.00261	.00104	.00093	.00088	.00017	.83886	-.00083
#4	.00230	.00104	.00093	.00000	.00815	.35951	-.00048
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.00500	.05000	.01000	.02500	.10000	5.0000	.05000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00536	.00099	.00493	.01821	.00057	.00374	.01822
SDev	.01205	.00000	.00246	.00886	.00605	.02656	.01790
%RSD	225.00	.03632	49.985	48.643	1055.3	709.89	98.245
#1	-.00469	.00099	.00616	.01408	.00404	.03610	-.00009
#2	-.00201	.00099	.00616	.02704	.00337	.01703	.02082
#3	.02209	.00099	.00616	.00782	-.00849	.01704	.01033
#4	.00602	.00099	.00123	.02391	.00337	.01700	.04182
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	.01078	.01159	.00779	.00027	-.00008	.01456	.00041
SDev	.03838	.00993	.02161	.00028	.00068	.07591	.00354
%RSD	355.98	85.738	277.36	101.04	824.62	521.43	872.77
#1	.04212	.00724	.03647	.00014	-.00082	.00582	.00012
#2	-.03623	.02468	.00985	.00025	.00082	.08751	.00501

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#3	.04212	.01303	-.00046	.00003	-.00016	.05254	.00012
#4	-.00488	.00140	-.01470	.00066	-.00016	-.08764	-.00363

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	.00098
SDev	.00045
%RSD	45.907

#1	.00043
#2	.00153
#3	.00101
#4	.00096

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHMJEF

Operator: MTW

Run Time: 08/22/00 14:03:18

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA611E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00026	.02940	.04786	.65070	.00256	.00036	20.820
SDev	.00244	.01659	.03951	.00000	.00033	.00008	.055
%RSD	933.28	56.411	82.563	.00036	12.918	21.873	.26445
#1	.00296	.05216	.07949	.65070	.00302	.00029	20.868
#2	-.00275	.03074	-.00910	.65070	.00251	.00042	20.823
#3	.00008	.02013	.05282	.65070	.00222	.00043	20.845
#4	-.00132	.01458	.06822	.65070	.00251	.00029	20.742
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00122	.00035	.00476	.01389	.02796	431.23	.02701
SDev	.00181	.00180	.00223	.00044	.00148	1.88	.00026
%RSD	148.55	519.08	46.847	3.1643	5.2851	43589	.94718
#1	.00165	.00244	.00782	.01323	.02946	428.46	.02737
#2	.00172	-.00035	.00463	.01411	.02612	432.53	.02699
#3	.00286	.00104	.00250	.01411	.02879	432.22	.02679
#4	-.00136	-.00174	.00410	.01411	.02746	431.72	.02688
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	2000.0	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	17.999	2.5455	.14654	H604.75	.02126	.00003	.03106
SDev	.051	.0056	.00636	4.20	.00674	.04218	.01199
%RSD	.28186	.21938	4.3394	.69477	31.678	141960.	38.601
#1	17.950	2.5418	.15393	H598.52	.01721	.01337	.04138
#2	18.035	2.5487	.14407	H606.56	.02420	.02848	.04152
#3	18.049	2.5517	.13915	H607.67	.02926	.06255	.02077
#4	17.960	2.5399	.14900	H606.25	.01439	.02083	.02058
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	-.00972	12.562	.01300	.25071	-.00115	-.01599	.11863
SDev	.04175	.064	.01907	.00080	.00046	.02518	.00254
%RSD	429.54	.51092	146.75	.32032	40.406	157.47	2.1386
#1	.03828	12.529	.03050	.24960	-.00049	.00730	.12000
#2	-.00875	12.610	.02845	.25101	-.00147	-.01596	.11981

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#3	-.06359	12.622	-.00246	.25149	-.00115	-.05098	.11483
#4	-.00482	12.489	-.00452	.25075	-.00147	-.00433	.11990

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	.16615
SDev	.00139
%RSD	.83513

#1	.16634
#2	.16415
#3	.16728
#4	.16681

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DHMJEP5F Operator: MTW
 Run Time: 08/22/00 14:06:32
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA611E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00217	.02756	.01283	.11843	.00063	.00025	4.3423
SDev	.00184	.01253	.02288	.00162	.00025	.00007	.0425
%RSD	84.703	45.478	178.35	1.3672	40.000	27.264	.97918
#1	.00145	.03831	-.01136	.11863	.00050	.00029	4.3913
#2	.00004	.00959	.04284	.11723	.00050	.00015	4.2894
#3	.00431	.03298	.00412	.11722	.00101	.00029	4.3337
#4	.00288	.02937	.01571	.12065	.00050	.00028	4.3546
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	-.00014	.00035	.00611	.00353	.00549	86.775	.00397
SDev	.00111	.00403	.00448	.00125	.00211	.556	.00042
%RSD	769.33	1151.6	73.302	35.446	38.380	.64061	10.689
#1	-.00176	-.00034	.01103	.00353	.00482	86.320	.00338
#2	.00073	-.00454	.00092	.00176	.00283	87.312	.00393
#3	.00030	.00523	.00412	.00441	.00682	86.270	.00423
#4	.00015	.00105	.00837	.00441	.00749	87.196	.00432
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	3.7596	.52971	.03202	122.09	.00655	-.01704	.02341
SDev	.0178	.00345	.00246	1.25	.00424	.04928	.01792
%RSD	.47379	.65209	7.6925	1.0253	64.789	289.15	76.543
#1	3.7656	.53316	.03079	120.73	.00425	-.05503	-.00020
#2	3.7736	.52627	.03078	123.51	.00213	-.06270	.02077
#3	3.7335	.52726	.03571	121.41	.00810	.03621	.03130
#4	3.7656	.53217	.03079	122.70	.01173	.01335	.04177
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	.01471	2.5108	.00679	.05198	-.00049	.01150	.02623
SDev	.02695	.0269	.01811	.00015	.00060	.07652	.00170
%RSD	183.26	1.0709	266.70	.29797	121.72	655.63	6.4647
#1	-.00488	2.5093	.02620	.05182	-.00082	.10204	.02499
#2	.05388	2.4746	.01808	.05198	-.00115	.00861	.02863

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#3	-.00096	2.5209	-.00653	.05193	-.00016	.02020	.02508
#4	.01079	2.5383	-.01059	.05219	.00016	-.08485	.02621

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	.03558
SDev	.00153
%RSD	4.3007

#1	.03454
#2	.03403
#3	.03661
#4	.03715

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJESF

Operator: MTW

Run Time: 08/22/00 14:09:40

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61H

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04620	1.9658	2.0664	1.5532	1.9039	.05042	71.033
SDev	.00143	.0111	.0378	.0204	.0096	.00030	.615
%RSD	3.1004	.56471	1.8298	1.3131	.50609	.59872	.86528
#1	.04689	1.9569	2.1197	1.5441	1.8906	.05005	70.583
#2	.04693	1.9819	2.0537	1.5837	1.9084	.05066	71.024
#3	.04693	1.9640	2.0616	1.5421	1.9036	.05066	71.905
#4	.04405	1.9605	2.0308	1.5427	1.9129	.05029	70.621
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	.04212	.48807	.19742	.25686	1.0238	473.63	.97416
SDev	.00229	.00562	.00309	.00182	.0056	2.74	.00738
%RSD	5.4347	1.1515	1.5626	.70939	.54379	.57746	.75744
#1	.04442	.48006	.19502	.25443	1.0200	470.19	.96737
#2	.03896	.49122	.19609	.25885	1.0227	476.05	.97758
#3	.04238	.49260	.20193	.25709	1.0320	472.68	.96877
#4	.04272	.48842	.19662	.25708	1.0207	475.59	.98290
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	66.312	2.9637	1.1158	H646.46	.52358	.50592	.51703
SDev	.234	.0184	.0047	4.65	.01029	.04748	.03613
%RSD	.35352	.62185	.42270	.71893	1.9645	9.3857	6.9883
#1	65.976	2.9428	1.1096	H641.66	.53777	.44313	.52754
#2	66.514	2.9713	1.1195	H649.58	.51763	.54964	.52756
#3	66.409	2.9851	1.1195	H643.39	.51463	.53454	.54818
#4	66.350	2.9555	1.1145	H651.21	.52431	.49638	.46483
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	1.9958	H22.154	1.9674	1.2256	.94732	1.8606	.59391
SDev	.0878	.118	.0409	.0059	.00505	.0991	.00424
%RSD	4.3987	.53126	2.0772	.47984	.53354	5.3246	.71445
#1	1.9175	H22.027	1.9998	1.2170	.94077	1.7205	.58860
#2	1.9488	H22.230	1.9115	1.2288	.94961	1.8606	.59733

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#3	2.1173	H22.276	1.9958	1.2267	.95256	1.9306	.59734
#4	1.9998	H22.085	1.9625	1.2298	.94634	1.9306	.59236

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	.62982
SDev	.00700
%RSD	1.1115

#1	.61936
#2	.63261
#3	.63317
#4	.63413

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJEDF Operator: MTW
Run Time: 08/22/00 14:12:54
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA611E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.04662	2.0009	2.1064	1.5963	1.9441	.05159	72.900
SDev	.00244	.0156	.0515	.0010	.0166	.00039	.293
%RSD	5.2426	.77725	2.4453	.06341	.85365	.75395	.40206
#1	.04410	1.9907	2.1114	1.5974	1.9338	.05129	72.479
#2	.04983	2.0014	2.0611	1.5954	1.9300	.05153	73.141
#3	.04699	1.9888	2.1769	1.5968	1.9456	.05140	72.936
#4	.04557	2.0227	2.0763	1.5954	1.9669	.05216	73.045
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	.04101	.49570	.20153	.26260	1.0434	486.57	.99392
SDev	.00626	.00349	.00176	.00232	.0063	4.68	.01450
%RSD	15.263	.70455	.87221	.88351	.60692	.96148	1.4586
#1	.04844	.49116	.20353	.26061	1.0347	483.35	.98590
#2	.04060	.49955	.20193	.26150	1.0474	483.34	.98037
#3	.03317	.49537	.19927	.26238	1.0427	486.31	.99604
#4	.04185	.49672	.20140	.26591	1.0487	493.26	1.0134
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	67.912	3.0419	1.1343	H664.51	.52462	.49096	.53502
SDev	.477	.0142	.0080	7.65	.01614	.04090	.03129
%RSD	.70272	.46529	.70920	1.1514	3.0763	8.3317	5.8487
#1	67.518	3.0234	1.1244	H660.08	.51351	.44337	.49567
#2	67.649	3.0441	1.1343	H658.41	.52592	.54226	.52725
#3	67.890	3.0421	1.1343	H664.15	.51209	.48149	.54815
#4	68.589	3.0579	1.1441	H675.40	.54696	.49671	.56902
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	2.0360	H22.700	2.0583	1.2532	.96681	1.9482	.60829
SDev	.0479	.175	.0547	.0108	.00616	.0742	.00452
%RSD	2.3534	.77300	2.6575	.86440	.63728	3.8066	.74299
#1	2.0586	H22.542	2.1003	1.2450	.96042	1.9191	.60231
#2	2.0664	H22.606	2.0429	1.2450	.96501	1.9073	.60738

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#3	1.9645	H22.710	1.9875	1.2550	.96665	1.9074	.61103
#4	2.0547	H22.942	2.1026	1.2678	.97517	2.0592	.61244

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	.64105
SDev	.00527
%RSD	.82223

#1	.63659
#2	.63789
#3	.64135
#4	.64835

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJTF

Operator: MTW

Run Time: 08/22/00 14:16:08

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	.00036	.02880	.04187	.52505	.00073	.00024	20.873
SDev	.00082	.00596	.03912	.00328	.00004	.00007	.118
%RSD	228.13	20.689	93.430	.62451	6.0605	30.767	.56292
#1	-.00035	.02477	.05058	.52420	.00080	.00030	20.940
#2	-.00035	.02291	-.01502	.52762	.00071	.00018	20.724
#3	.00107	.03198	.05825	.52077	.00071	.00018	20.840
#4	.00107	.03554	.07365	.52762	.00071	.00030	20.990
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	.00174	.00453	.00509	.02778	.03927	589.47	.03141
SDev	.00323	.00180	.00214	.00114	.00191	3.14	.00010
%RSD	186.18	39.777	42.092	4.0928	4.8708	53239	.33099
#1	.00549	.00243	.00735	.02910	.03877	586.47	.03156
#2	-.00169	.00384	.00257	.02734	.04077	590.42	.03139
#3	.00322	.00662	.00416	.02646	.03678	593.46	.03131
#4	-.00008	.00524	.00629	.02822	.04077	587.55	.03139
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	15.192	2.2499	.16624	H579.34	.02172	.02290	.02537
SDev	.057	.0070	.00493	3.93	.01096	.01898	.00608
%RSD	.37345	.30984	2.9629	.67784	50.441	82.902	23.963
#1	15.114	2.2546	.16378	H575.94	.00631	.02853	.01993
#2	15.194	2.2399	.17363	H581.55	.02275	.02099	.03059
#3	15.248	2.2507	.16378	H583.75	.02590	.04382	.03069
#4	15.213	2.2546	.16378	H576.13	.03193	-.00175	.02029
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	-.00283	7.9934	.00732	.24017	-.00115	.01503	.01785
SDev	.02251	.0134	.02169	.00089	.00053	.09929	.00009
%RSD	793.91	.16732	296.32	.37153	46.657	660.78	.51469
#1	-.02047	7.9818	.03863	.23926	-.00180	.15812	.01781
#2	.02655	7.9818	.00375	.24030	-.00115	-.05219	.01799

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#3	.00304	8.0049	-.00241	.24135	-.00115	.00628	.01780
#4	-.02046	8.0049	-.01068	.23978	-.00049	-.05211	.01780
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	.02583
SDev	.00173
%RSD	6.6928

#1	.02802
#2	.02457
#3	.02433
#4	.02639

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMK5F

Operator: MTW

Run Time: 08/22/00 14:19:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61F

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00010	.06707	.04056	.44864	.00535	.00027	58.587
SDev	.00002	.00923	.02101	.00386	.00013	.00007	.258
%RSD	21.244	13.761	51.813	.86035	2.3440	27.109	.44037
#1	-.00010	.07383	.06173	.44391	.00553	.00033	58.357
#2	-.00007	.07369	.04235	.44854	.00523	.00019	58.763
#3	-.00010	.06657	.01162	.45336	.00532	.00033	58.853
#4	-.00012	.05419	.04654	.44873	.00532	.00022	58.375
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	-.00057	.00035	.00680	.00332	.22884	598.82	.03984
SDev	.00171	.00180	.00137	.00044	.00086	2.52	.00051
%RSD	299.52	519.68	20.154	13.221	.37575	.42118	1.2827
#1	-.00217	.00105	.00627	.00355	.22984	601.11	.04048
#2	-.00014	-.00175	.00840	.00354	.22918	595.65	.03924
#3	-.00162	-.00035	.00734	.00354	.22784	597.95	.03990
#4	.00165	.00244	.00521	.00267	.22851	600.57	.03974
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	40.921	.91441	.09485	387.55	.01545	.03786	.00214
SDev	.072	.00234	.00402	2.08	.00963	.02861	.02140
%RSD	.17481	.25616	4.2399	.53591	62.360	75.567	1000.9
#1	40.842	.91392	.08992	388.94	.01082	.02838	-.00050
#2	40.880	.91293	.09485	385.16	.01959	.07383	-.00046
#3	40.973	.91785	.09978	386.51	.00474	.00563	.03070
#4	40.989	.91293	.09485	389.60	.02663	.04358	-.02119
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	.01236	11.021	.01443	.30032	.00074	.01733	.00672
SDev	.01612	.035	.02098	.00097	.00041	.05423	.00398
%RSD	130.42	.31314	145.40	.32158	55.925	312.87	59.277
#1	.02313	11.039	.02418	.30071	.00082	-.00312	.00663
#2	.02705	10.970	.02418	.29941	.00115	.09029	.01160

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#3	.00746	11.045	.02638	.29967	.00082	.02029	.00682
#4	-.00821	11.028	-.01701	.30150	.00016	-.03812	.00184
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 .18570
 SDev .00243
 %RSD 1.3061

#1 .18269
 #2 .18795
 #3 .18480
 #4 .18735

Errors LC Pass
 High 100.00
 Low -.02000

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Method: QUANMET Sample Name: DHMK9F

Operator: MTW

Run Time: 08/22/00 14:22:30

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00048	.03938	.05140	.43365	.00389	.00018	55.213
SDev	.00139	.00906	.02943	.00167	.00025	.00006	.191
%RSD	291.47	23.018	57.251	.38494	6.4516	32.355	.34612
#1	-.00013	.05062	.01566	.43230	.00402	.00022	55.366
#2	-.00156	.03627	.04279	.43572	.00352	.00010	55.005
#3	-.00155	.02910	.06212	.43229	.00402	.00022	55.098
#4	.00134	.04153	.08503	.43430	.00402	.00019	55.384
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	-.00238	.00000	.00561	.00333	.25580	568.64	.03705
SDev	.00248	.00070	.00320	.00151	.00122	1.70	.00047
%RSD	103.98	26031.	57.047	45.277	.47603	.29814	1.2652
#1	-.00257	-.00035	.00574	.00355	.25714	566.70	.03704
#2	.00116	-.00036	.00415	.00178	.25647	568.11	.03654
#3	-.00439	-.00034	.00255	.00267	.25514	570.75	.03693
#4	-.00372	.00105	.00999	.00531	.25447	568.99	.03767
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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	38.177	1.0081	.09362	374.15	.01612	-.00576	.01004
SDev	.064	.0017	.00246	1.93	.01242	.03366	.02256
%RSD	.16691	.16661	2.6304	.51542	77.071	584.59	224.66
#1	38.121	1.0084	.08993	371.82	.00987	-.01716	.00999
#2	38.143	1.0064	.09485	374.50	.01420	-.01711	.04137
#3	38.266	1.0074	.09485	376.49	.00630	-.03235	-.01092
#4	38.178	1.0103	.09485	373.80	.03411	.04358	-.00027
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	-.02185	10.385	-.01121	.27322	.00098	.00301	.00456
SDev	.04321	.036	.00714	.00082	.00078	.05759	.00473
%RSD	197.74	.34390	63.665	.30021	79.349	1916.2	103.72
#1	-.04731	10.414	-.00864	.27217	.00213	.06724	.00175
#2	-.03948	10.333	-.01877	.27302	.00082	-.02618	.00184

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#3	.04279	10.396	-.01490	.27406	.00049	-.06120	.00306
#4	-.04340	10.397	-.00252	.27363	.00049	.03217	.01160
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 .01271
SDev .00161
%RSD 12.633

#1	.01332
#2	.01385
#3	.01334
#4	.01033

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMKEF

Operator: MTW

Run Time: 08/22/00 14:25:39

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
Avge	-.00004	.65240	.00368	.66518	.01146	.00018	57.198
SDev	.00137	.00444	.03513	.00204	.00024	.00006	.147
%RSD	3187.3	.68108	955.90	.30736	2.1410	35.884	.25707

#1	-.00111	.65415	-.00598	.66407	.01126	.00008	57.175
#2	.00031	.64878	-.01752	.66689	.01156	.00021	57.199
#3	-.00111	.64878	-.01753	.66691	.01126	.00021	57.387
#4	.00174	.65787	.05574	.66286	.01177	.00021	57.029

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	-.00102	.00207	.00891	.00430	1.3381	246.21	.03496
SDev	.00172	.00209	.00184	.00085	.0051	1.30	.00055
%RSD	167.87	101.08	20.673	19.661	.38194	.52869	1.5790

#1	-.00267	.00103	.00625	.00363	1.3343	246.62	.03533
#2	-.00216	.00102	.00944	.00363	1.3370	245.41	.03459
#3	-.00034	.00102	.00944	.00540	1.3456	247.85	.03440
#4	.00107	.00520	.01050	.00452	1.3356	244.95	.03552

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

Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	40.977	.15333	.00882	H523.96	.00878	.00065	-.00001
SDev	.185	.00127	.00493	3.02	.00710	.03301	.02838
%RSD	.45169	.82971	55.849	.57732	80.791	5052.9	555910.

#1	41.072	.15383	.01128	H526.09	.01718	.03296	-.02084
#2	40.917	.15284	.01128	H521.88	.00321	.01776	-.01059
#3	41.171	.15481	.01128	H526.99	.00260	.04293	-.01053
#4	40.748	.15186	.00143	H520.89	.01214	.00518	.04194

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	-.02390	17.469	-.01572	.40353	.01384	.01911	.00506
SDev	.00870	.086	.02920	.00219	.00031	.04201	.00009
%RSD	36.391	.49049	185.79	.54308	2.2661	219.89	1.8387

#1	-.02097	17.502	-.00657	.40475	.01360	.05127	.00511
#2	-.02880	17.456	.01402	.40177	.01392	.03956	.00511

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#3	-.01311	17.560	-.01474	.40601	.01425	-.04226	.00511
#4	-.03272	17.357	-.05559	.40161	.01360	.02786	.00492

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	.05967
SDev	.00134
%RSD	2.2441

#1	.05852
#2	.05857
#3	.06120
#4	.06039

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJE/2 NA Operator: MTW
Run Time: 08/22/00 14:36:17
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	FE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00163	.39363	.00293	.32337	.01699	.00037	12.057
SDev	.00073	.00762	.01185	.00100	.00040	.00006	.050
%RSD	44.813	1.9344	404.22	.31056	2.3488	16.557	.41239
#1	.00126	.39503	-.00380	.32287	.01679	.00041	12.040
#2	.00126	.39857	.00389	.32288	.01679	.00041	12.087
#3	.00272	.39846	.01922	.32488	.01679	.00039	12.106
#4	.00126	.38248	-.00757	.32287	.01759	.00028	11.995
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	-.00136	-.00036	.00490	.02669	.25415	219.31	.01279
SDev	.00309	.00197	.00153	.00132	.00139	.64	.00077
%RSD	226.11	549.22	31.321	4.9605	.54542	.29327	6.0187
#1	-.00184	-.00036	.00517	.02559	.25248	218.59	.01275
#2	L-.00545	-.00314	.00304	.02558	.25381	219.49	.01247
#3	.00011	.00103	.00676	.02823	.25448	219.06	.01388
#4	.00171	.00103	.00464	.02735	.25581	220.10	.01208
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	9.5382	3.0054	.08377	319.72	.00814	.01298	.00769
SDev	.0259	.0056	.00472	1.32	.00416	.02231	.02318
%RSD	.27158	.18777	5.6295	.41157	51.168	171.85	301.25
#1	9.5175	3.0062	.08008	319.01	.01179	.03577	.03120
#2	9.5175	3.0081	.08008	320.08	.01130	.02048	-.00008
#3	9.5710	3.0101	.08993	318.39	.00636	.01298	-.02109
#4	9.5469	2.9973	.08500	321.39	.00309	-.01731	.02076
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	-.00227	8.1172	-.01328	.14578	.00246	.03420	.07628
SDev	.04102	.0099	.01944	.00052	.00065	.05172	.00313
%RSD	1808.3	.12180	146.42	.35842	26.667	151.23	4.1021
#1	.03495	8.1042	.00789	.14552	.00213	.08970	.07469
#2	.03103	8.1215	-.01896	.14552	.00213	.06637	.07469

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#3	-.04340	8.1158	-.00469	.14552	.00344	-.00377	.08098
#4	-.03165	8.1273	-.03736	.14656	.00213	-.01549	.07478
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	.00952
SDev	.00066
%RSD	6.9167

#1	.00959
#2	.00928
#3	.01039
#4	.00883

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJEP10 NA Operator: MTW
 Run Time: 08/22/00 14:39:26
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61H
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00003	.08953	-.00686	.06347	.00344	.00021	2.4685
SDev	.00002	.00792	.03041	.00430	.00015	.00006	.0099
%RSD	57.848	8.8483	443.05	6.7749	4.2918	27.807	.40158
#1	-.00004	.08151	-.02701	.05920	.00322	.00019	2.4540
#2	-.00001	.08504	-.01943	.06261	.00352	.00030	2.4756
#3	-.00004	.09936	.03844	.06262	.00352	.00018	2.4705
#4	-.00002	.09221	-.01946	.06945	.00352	.00017	2.4739
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	-.00003	-.00140	.00079	.00551	.05509	44.030	.00108
SDev	.00277	.00287	.00080	.00085	.00115	.299	.00073
%RSD	10424.	205.57	100.50	15.333	2.0949	67852	67.903
#1	-.00199	-.00453	.00039	.00441	.05409	43.650	.00057
#2	-.00075	.00105	.00146	.00530	.05609	44.377	.00074
#3	-.00142	-.00314	-.00014	.00617	.05409	44.079	.00217
#4	.00405	.00103	.00146	.00618	.05609	44.013	.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	1.9414	.61604	.01478	64.985	.00462	.02667	-.00784
SDev	.0059	.00148	.00246	.210	.00497	.02933	.01782
%RSD	.30584	.23959	16.658	.32292	107.55	109.97	227.38
#1	1.9367	.61481	.01109	65.065	.00397	-.02486	-.01046
#2	1.9501	.61776	.01602	65.242	.00596	-.05504	.00005
#3	1.9394	.61677	.01602	64.850	.01026	-.04003	-.03132
#4	1.9394	.61481	.01602	64.782	-.00171	.01325	.01038
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	-.00965	1.6087	.00460	.02979	-.00025	.01739	.01674
SDev	.01408	.0474	.01063	.00013	.00041	.04710	.00294
%RSD	145.90	2.9450	231.30	.43848	167.77	270.83	17.539
#1	-.01651	1.6115	.00767	.02972	-.00016	.06707	.01362
#2	-.02042	1.5479	-.01077	.02999	-.00016	.04362	.01981

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#3	.01092	1.6637	.01374	.02972	-.00082	-.00300	.01494
#4	-.01258	1.6116	.00776	.02972	.00016	-.03813	.01860
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	.00444
SDev	.00063
%RSD	14.139

#1	.00419
#2	.00498
#3	.00494
#4	.00368

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-12 Operator: MTW
 Run Time: 08/22/00 14:42:34
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0132	50.885	5.2679	5.1213	5.1151	5.3247	53.216
SDev	.0023	.202	.0452	.0197	.0203	.0256	.188
%RSD	.22521	.39686	.85740	.38383	.39726	.48054	.35318
#1	1.0113	50.701	5.3191	5.0952	5.0883	5.3088	53.187
#2	1.0144	51.094	5.2918	5.1284	5.1360	5.3530	53.326
#3	1.0113	50.724	5.2225	5.1194	5.1122	5.2982	52.963
#4	1.0159	51.023	5.2384	5.1420	5.1237	5.3390	53.386
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	5.3420	5.2042	5.1493	5.0949	52.965	50.441	4.8903
SDev	.0200	.0225	.0210	.0196	.194	.177	.0198
%RSD	.37470	.43149	.40760	.38371	.36697	.35023	.40520
#1	5.3323	5.1833	5.1384	5.0695	52.830	50.352	4.8617
#2	5.3484	5.2125	5.1714	5.1145	53.149	50.608	4.9027
#3	5.3206	5.1889	5.1256	5.0907	52.768	50.237	4.9045
#4	5.3667	5.2320	5.1618	5.1049	53.115	50.567	4.8922
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	51.903	5.1219	5.1341	51.938	5.4457	5.1417	5.2456
SDev	.210	.0193	.0316	.228	.0247	.0297	.0277
%RSD	.40452	.37602	.61484	.43847	.45306	.57860	.52739
#1	51.735	5.1122	5.1021	51.646	5.4239	5.1375	5.2404
#2	52.030	5.1369	5.1613	52.138	5.4759	5.1152	5.2090
#3	51.714	5.0994	5.1119	51.872	5.4272	5.1301	5.2718
#4	52.132	5.1389	5.1612	52.098	5.4557	5.1841	5.2612
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	5.0974	5.1577	5.2742	5.2601	5.0604	10.314	5.1595
SDev	.0906	.0444	.0265	.0174	.0171	.047	.0207
%RSD	1.7772	.86019	.50206	.33023	.33866	.45734	.40173
#1	5.1882	5.1285	5.2547	5.2390	5.0465	10.318	5.1427
#2	5.0989	5.1927	5.2915	5.2773	5.0754	10.361	5.1781

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#3	5.1292	5.1111	5.2487	5.2531	5.0446	10.249	5.1405
#4	4.9734	5.1984	5.3020	5.2709	5.0750	10.326	5.1768

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	4.9887
SDev	.0199
%RSD	.39818

#1	4.9744
#2	5.0094
#3	4.9692
#4	5.0018

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB12

Operator: MTW

Run Time: 08/22/00 14:45:43

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	.00071	.01611	-.00880	.00302	.00025	.00071	.00714
SDev	.00185	.00173	.01681	.00507	.00021	.00007	.00323
%RSD	260.07	10.732	190.96	167.81	82.911	9.3094	45.178
#1	-.00143	.01568	.00470	.00980	.00030	.00073	.00809
#2	.00286	.01384	-.03002	-.00247	.00050	.00061	.00772
#3	-.00002	.01745	-.01455	.00237	.00000	.00074	.00258
#4	.00143	.01747	.00468	.00237	.00021	.00073	.01018
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	.00030	.00140	.00253	.00110	.00216	.96490	-.00075
SDev	.00198	.00209	.00097	.00132	.00180	.27164	.00056
%RSD	667.95	149.79	38.398	120.02	83.441	28.152	74.908
#1	-.00063	.00245	.00359	.00177	.00150	.89671	-.00141
#2	.00067	.00244	.00306	.00177	.00083	1.3595	-.00094
#3	-.00173	-.00174	.00146	-.00088	.00150	.73968	-.00056
#4	.00288	.00243	.00199	.00177	.00483	.86365	-.00009
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	.01004	.00098	.00246	.01654	.00647	.00951	-.00259
SDev	.01037	.00000	.00246	.00391	.00713	.01449	.01314
%RSD	103.28	.07473	99.981	23.613	110.23	152.36	506.86
#1	.01138	.00098	.00123	.01363	.00603	-.00942	.00009
#2	.01941	.00099	.00616	.01631	.01466	.02093	.00005
#3	-.00469	.00098	.00123	.01408	.00787	.02078	-.02089
#4	.01406	.00099	.00123	.02213	-.00267	.00576	.01039
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	.01274	.01012	.00307	.00044	-.00025	.05837	-.00086
SDev	.01767	.00336	.01943	.00026	.00056	.05087	.00185
%RSD	138.69	33.162	632.60	59.943	227.71	87.160	214.27
#1	.03428	.00724	-.02517	.00066	-.00049	.02916	.00003
#2	-.00881	.01303	.01593	.00014	-.00082	.04085	.00012

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#3	.01470	.00719	.01583	.00030	-.00016	.02922	-.00363
#4	.01079	.01303	.00570	.00066	.00049	.13423	.00003

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

Elem	ZN
Units	ppm
Avge	.00109
SDev	.00044
%RSD	40.564

#1	.00173
#2	.00093
#3	.00072
#4	.00099

Errors	LC Pass
High	.02000
Low	-.02000

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Method: QUANMET Sample Name: DHMJES/2 NA Operator: MTW
 Run Time: 08/22/00 14:48:52
 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	.02439	1.4402	1.0663	.82774	1.0016	.02655	38.518
SDev	.00137	.0043	.0228	.00342	.0059	.00007	.358
%RSD	5.6007	.29906	2.1378	.41304	.58668	.24691	.92981
#1	.02261	1.4357	1.0596	.82261	.99829	.02645	38.254
#2	.02402	1.4375	1.0635	.82946	1.0091	.02659	38.169
#3	.02546	1.4428	1.0981	.82945	1.0033	.02658	38.777
#4	.02546	1.4448	1.0441	.82944	.99586	.02658	38.873
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	.02331	.25549	.10501	.15128	.78311	248.02	.48763
SDev	.00262	.00501	.00205	.00221	.00333	1.48	.00651
%RSD	11.219	1.9622	1.9552	1.4590	.42568	.59770	1.3342
#1	.02391	.25095	.10355	.14841	.77877	246.71	.48529
#2	.01946	.25235	.10302	.15105	.78411	249.79	.49636
#3	.02481	.25653	.10621	.15370	.78677	248.69	.48794
#4	.02506	.26211	.10727	.15194	.78278	246.89	.48091
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	35.055	3.2632	.58625	351.14	.27843	.26813	.27411
SDev	.122	.0175	.00472	2.84	.01164	.04320	.01343
%RSD	.34695	.53646	.80447	.80943	4.1809	16.112	4.8998
#1	34.876	3.2445	.58256	349.81	.27176	.25471	.25843
#2	35.146	3.2524	.58748	355.00	.26827	.23201	.27913
#3	35.087	3.2809	.59241	351.33	.27917	.25490	.28977
#4	35.109	3.2750	.58256	348.40	.29450	.33090	.26911
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	1.0256	13.568	1.0402	.65780	.49594	.0160	.32753
SDev	.0324	.072	.0281	.00310	.00152	.0853	.00182
%RSD	3.1579	.52732	2.7021	.47145	.30690	8.3967	.55487
#1	1.0471	13.464	1.0284	.65499	.49389	.96930	.32837
#2	1.0040	13.597	1.0819	.66152	.49586	.92259	.32481

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#3	1.0589	13.626	1.0306	.65917	.49749	1.1095	.32856
#4	.99227	13.586	1.0202	.65551	.49651	1.0628	.32838
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	.25530
SDev	.00175
%RSD	.68424

#1	.25554
#2	.25343
#3	.25758
#4	.25467

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHJED/2 NA Operator: MTW
 Run Time: 08/22/00 14:52:00
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02547	1.4509	1.1038	.82827	1.0075	.02677	38.799
SDev	.00002	.0055	.0337	.00230	.0040	.00007	.299
%RSD	.07095	.37829	3.0548	.27727	.40001	.25068	.77122

#1	.02547	1.4500	1.1019	.82948	1.0023	.02671	38.653
#2	.02545	1.4483	1.1406	.82605	1.0078	.02672	38.828
#3	.02549	1.4588	1.1133	.83088	1.0076	.02682	39.204
#4	.02547	1.4464	1.0595	.82665	1.0122	.02683	38.512

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	.02169	.25618	.10528	.15172	.79576	246.72	.48842
SDev	.00196	.00385	.00140	.00151	.00346	.96	.00491
%RSD	9.0346	1.5016	1.3287	.99466	.43513	.38899	1.0058

#1	.02345	.25234	.10408	.15105	.79542	245.53	.48540
#2	.02264	.25374	.10621	.15017	.79343	246.79	.48708
#3	.01894	.26072	.10674	.15371	.80076	246.67	.48551
#4	.02174	.25793	.10408	.15194	.79343	247.88	.49570

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	35.057	3.2647	.58872	349.30	.28271	.25866	.27671
SDev	.103	.0156	.01092	2.23	.01295	.02814	.01302
%RSD	.29389	.47743	1.8552	.63783	4.5797	10.877	4.7045

#1	34.905	3.2524	.58256	347.47	.27273	.23959	.27927
#2	35.079	3.2691	.57763	349.50	.29422	.24719	.25860
#3	35.130	3.2848	.60226	347.86	.29355	.30051	.27934
#4	35.112	3.2524	.59241	352.37	.27033	.24735	.28962

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	1.0246	13.568	1.0587	.66025	.49708	1.0013	.32880
SDev	.0595	.053	.0118	.00236	.00147	.0598	.00370
%RSD	5.8098	.39292	1.1184	.35746	.29659	5.9760	1.1249

#1	1.0863	13.510	1.0531	.65708	.49586	1.0626	.32837
#2	.98838	13.574	1.0448	.66100	.49782	1.0277	.32462

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#3	.96097	13.638	1.0675	.66021	.49880	.92247	.33363
#4	1.0628	13.551	1.0696	.66272	.49586	.99249	.32856
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.00	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avg	.25932
SDev	.00199
%RSD	.76689

#1	.25738
#2	.26070
#3	.25786
#4	.26133

Errors	LC Pass
High	100.00
Low	-.02000

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Method: QUANMET Sample Name: DHMJT/2 NA Operator: MTW
 Run Time: 08/22/00 14:55:09
 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	-.00010	2.1959	.00867	.27594	.02932	.00031	31.260
SDev	.00138	.0192	.03040	.00200	.00013	.00010	.241
%RSD	1421.2	.87658	350.45	.72599	.42769	31.510	.76945
#1	-.00046	2.1704	.00799	.27418	.02935	.00032	31.045
#2	.00098	2.2169	-.03113	.27770	.02915	.00044	31.494
#3	-.00189	2.1955	.04249	.27423	.02944	.00019	31.061
#4	.00098	2.2007	.01534	.27766	.02935	.00031	31.441
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	-.00033	.00130	.00906	.04031	5.1984	306.11	.01836
SDev	.00229	.00239	.00080	.00044	.0224	1.84	.00022
%RSD	689.36	184.06	8.8011	1.1006	.43169	60034	1.2246
#1	.00093	-.00185	.00946	.04009	5.1690	304.99	.01809
#2	-.00355	.00375	.00946	.04098	5.2236	306.37	.01836
#3	-.00035	.00234	.00946	.04009	5.1996	308.59	.01864
#4	.00163	.00094	.00786	.04009	5.2016	304.48	.01836
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.945	8.7676	.08821	273.61	.01555	.00441	.01520
SDev	.084	.0400	.00636	2.18	.00848	.01240	.03007
%RSD	.64779	.45566	7.2118	.79720	54.544	281.20	197.84
#1	12.838	8.7197	.08081	273.06	.01898	.00448	.00999
#2	12.996	8.8102	.09067	273.23	.01835	.01959	-.02129
#3	13.025	8.7521	.08574	276.66	.02186	.01080	.02048
#4	12.921	8.7885	.09559	271.48	.00304	.00438	.05162
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	.00194	7.9065	-.00272	.24638	.05160	.01607	.01391
SDev	.02900	.0116	.01455	.00119	.00027	.05434	.00292
%RSD	1492.7	.14675	534.19	.48399	.51841	338.19	21.023
#1	.04006	7.8891	.01266	.24553	.05127	.05686	.01133
#2	.00887	7.9123	-.02241	.24657	.05193	.06867	.01640

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#3	-.01862	7.9122	.00038	.24799	.05160	.03639	.01143
#4	-.02253	7.9123	-.00153	.24542	.05160	.02487	.01649
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	.06135
SDev	.00137
%RSD	2.2369

#1	.06164
#2	.05933
#3	.06217
#4	.06226

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMKE/2 CA,NA Operator: MTW
 Run Time: 08/22/00 14:58:18
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00077	24.114	.06331	.38278	.29623	.00165	317.65
SDev	.00186	.075	.01533	.00198	.00144	.00006	.97
%RSD	240.14	.31138	24.216	.51855	.48726	3.6222	.30558

#1	.00140	24.113	.05833	.38447	.29611	.00168	318.93
#2	-.00148	24.219	.05374	.38240	.29812	.00169	316.68
#3	-.00009	24.079	.05503	.38013	.29460	.00156	317.81
#4	-.00292	24.045	.08612	.38411	.29611	.00168	317.17

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

Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00003	.02391	.05367	.10713	46.710	97.128	.05084
SDev	.00346	.00113	.00176	.00045	.095	.603	.00076
%RSD	10410.	4.7457	3.2722	.41717	.20422	.62049	1.5021

#1	.00361	.02530	.05354	.10780	46.808	97.081	.05070
#2	-.00467	.02392	.05141	.10691	46.776	97.957	.05164
#3	.00012	.02252	.05567	.10690	46.638	96.519	.05117
#4	.00107	.02391	.05407	.10690	46.620	96.957	.04985

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	78.026	.83236	.02053	301.15	.06257	.08115	.03877
SDev	.248	.00214	.00286	1.83	.00772	.01900	.02318
%RSD	.31845	.25753	13.920	.60892	12.340	23.408	59.792

#1	78.090	.83534	.02301	300.23	.06304	.08689	.06233
#2	78.339	.83140	.02300	303.83	.05639	.05643	.05174
#3	77.913	.83234	.01806	299.78	.07330	.10201	.03102
#4	77.760	.83037	.01805	300.76	.05754	.07928	.00998

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	-.09535	H35.124	.02288	2.6339	.43656	.07630	.07607
SDev	.04381	.125	.01769	.0097	.00209	.07896	.00282
%RSD	45.949	.35548	77.307	.36636	.47858	103.48	3.7013

#1	-.05395	H35.154	-.00113	2.6343	.43656	.11031	.07856
#2	-.06188	H35.288	.03168	2.6473	.43950	.15738	.07368

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#3	-.14059	H35.015	.02130	2.6255	.43525	.06540	.07359
#4	-.12497	H35.039	.03969	2.6285	.43492	-.02789	.07846
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	.70139
SDev	.00216
%RSD	.30771

#1	.69881
#2	.70409
#3	.70118
#4	.70149

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJEF/2 NA Operator: MTW
 Run Time: 08/22/00 15:01:32
 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	-.00030	.02495	.00737	.31949	.00131	.00025	10.747
SDev	.00215	.01619	.04980	.00701	.00024	.00007	.074
%RSD	728.40	64.870	675.29	2.1938	18.761	27.889	.69058
#1	.00150	.04284	.08053	.31074	.00151	.00031	10.844
#2	.00150	.03207	-.00815	.32583	.00151	.00031	10.763
#3	-.00279	.00527	-.01177	.31698	.00121	.00018	10.704
#4	-.00138	.01963	-.03111	.32442	.00101	.00019	10.676
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	.00145	.00104	.00477	.00728	.01431	217.60	.01222
SDev	.00254	.00197	.00201	.00151	.00257	1.68	.00106
%RSD	175.48	189.00	42.079	20.717	17.991	77252	8.6948
#1	.00203	.00383	.00623	.00882	.01614	215.55	.01264
#2	-.00179	.00105	.00623	.00794	.01681	216.94	.01247
#3	.00435	-.00036	.00198	.00529	.01281	219.23	.01068
#4	.00119	-.00035	.00464	.00705	.01148	218.68	.01310
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	15.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	9.2912	1.3029	.07265	306.45	.01209	.01136	.00775
SDev	.0430	.0026	.00284	3.83	.00469	.01144	.01968
%RSD	.46263	.19978	3.9146	1.2490	38.804	100.70	254.01
#1	9.2524	1.3044	.07512	301.89	.00604	.00580	.02068
#2	9.2711	1.3024	.07512	304.75	.01343	.01703	.02080
#3	9.3514	1.3053	.07019	310.15	.01158	.01707	.01036
#4	9.2899	1.2994	.07019	309.01	.01732	.01712	-.02085
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	600.00	100.00	50.000	400.00	100.00	100.00	100.00
Low	-5.0000	-.01500	-.04000	-5.0000	-.04000	-.10000	-.06000
Elem	SE	SI	SN	SR	TI	TL	V_
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.02445	6.3377	-.00869	.12970	-.00115	.02133	.06327
SDev	.05007	.0000	.02779	.00102	.00096	.03483	.00235
%RSD	204.79	.00047	319.89	.78549	84.112	163.29	3.7153
#1	-.05579	6.3377	.01808	.12847	-.00049	.05924	.06485
#2	-.04011	6.3377	-.01274	.12926	-.00016	.03589	.06485

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#3	.04998	6.3377	.00571	.13056	-.00213	-.02242	.06352
#4	-.05188	6.3377	-.04580	.13052	-.00180	.01262	.05987
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	.08576
SDev	.00156
%RSD	1.8215

#1	.08737
#2	.08680
#3	.08418
#4	.08468

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJEP10F NA Operator: MTW
Run Time: 08/22/00 15:04:41
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	.00216	.02788	-.00143	.06778	.00048	.00028	2.2296
SDev	.00082	.00602	.03958	.00141	.00034	.00013	.0024
%RSD	37.943	21.597	2760.9	2.0765	69.691	44.814	.10939
#1	.00145	.02072	-.01876	.06592	.00071	.00018	2.2264
#2	.00286	.02967	.05070	.06934	.00050	.00045	2.2305
#3	.00145	.02609	.00436	.06793	.00000	.00018	2.2294
#4	.00288	.03503	-.04203	.06793	.00071	.00031	2.2322
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	.00276	.00313	.00252	.00265	.00150	43.701	.00114
SDev	.00359	.00139	.00075	.00125	.00094	.189	.00040
%RSD	130.21	44.255	29.769	47.066	62.997	.43246	35.216
#1	.00275	.00244	.00359	.00441	.00150	43.873	.00101
#2	.00016	.00244	.00199	.00265	.00283	43.435	.00132
#3	.00028	.00244	.00199	.00177	.00083	43.782	.00065
#4	.00784	.00521	.00252	.00177	.00083	43.716	.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	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.9052	.26904	.01847	61.221	.00386	.02663	.00519
SDev	.0013	.00098	.00284	.259	.00303	.00731	.01045
%RSD	.07027	.36591	15.396	.42286	78.683	27.436	201.10
#1	1.9046	.26854	.01601	61.033	.00534	.02092	-.00005
#2	1.9072	.27051	.02093	61.042	.00514	.02091	-.00003
#3	1.9046	.26854	.01601	61.587	-.00068	.02850	-.00000
#4	1.9046	.26855	.02093	61.224	.00563	.03619	.02086
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	-.00979	1.2829	.00054	.02631	-.00025	.00429	.01407
SDev	.02485	.0285	.01649	.00007	.00056	.04708	.00180
%RSD	253.87	2.2218	3058.9	.28612	227.71	1096.3	12.774
#1	-.00098	1.2583	.02003	.02637	-.00049	.03056	.01494
#2	-.01664	1.3104	-.00462	.02628	.00049	.05394	.01138

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#3	-.04015	1.2583	-.01900	.02622	-.00082	-.05117	.01494
#4	.01861	1.3046	.00575	.02637	-.00016	-.01616	.01504
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	.01894
SDev	.00149
%RSD	7.8637

#1	.02077
#2	.01945
#3	.01817
#4	.01738

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJESF/2 NA Operator: MTW
 Run Time: 08/22/00 15:07:50
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61H
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02421	1.0071	1.0454	.79563	.98835	.02651	36.481
SDev	.00203	.0061	.0369	.02025	.00897	.00018	.085
%RSD	8.3680	.60275	3.5269	2.5453	.90707	.68203	.23209
#1	.02135	1.0066	1.0753	.77768	.99657	.02677	36.470
#2	.02566	1.0156	1.0791	.77907	.99435	.02650	36.374
#3	.02420	1.0049	1.0175	.80846	.98552	.02639	36.578
#4	.02563	1.0014	1.0098	.81730	.97697	.02639	36.503
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	.02212	.25097	.10449	.13207	.52812	241.51	.49125
SDev	.00347	.00360	.00176	.00088	.00138	1.87	.00634
%RSD	15.664	1.4351	1.6820	.66811	.26175	.77572	1.2914
#1	.01709	.24678	.10356	.13251	.52779	243.51	.49851
#2	.02371	.25515	.10250	.13252	.52645	242.61	.49430
#3	.02489	.24957	.10569	.13075	.52978	240.50	.48774
#4	.02278	.25237	.10622	.13252	.52844	239.43	.48444
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	34.400	1.5245	.57636	330.13	.27299	.26643	.26884
SDev	.220	.0052	.00246	3.83	.00352	.02583	.03074
%RSD	.63911	.33942	.42728	1.1616	1.2887	9.6962	11.434
#1	34.654	1.5319	.57759	334.46	.27778	.27765	.23748
#2	34.434	1.5220	.57759	331.97	.26936	.23238	.25843
#3	34.394	1.5240	.57759	328.26	.27197	.29295	.26885
#4	34.118	1.5201	.57267	325.83	.27288	.26273	.31059
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	.99062	11.323	1.0289	.63981	.48947	.97112	.30509
SDev	.02315	.067	.0199	.00521	.00247	.03069	.00245
%RSD	2.3372	.59406	1.9346	.81359	.50534	3.1606	.80349
#1	.96025	11.414	1.0447	.64532	.49258	.97413	.30390
#2	.98767	11.310	1.0160	.64271	.48996	.99734	.30877

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#3	1.0151	11.315	1.0078	.63749	.48865	.92733	.30390
#4	.99943	11.252	1.0471	.63372	.48668	.98569	.30381
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	.32107
SDev	.00318
%RSD	.98970

#1	.32430
#2	.32326
#3	.31875
#4	.31796

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJEDF/2 NA Operator: MTW
 Run Time: 08/22/00 15:10:59
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.02532	1.0276	1.0412	.81942	1.0007	.02703	37.586
SDev	.00137	.0088	.0401	.00861	.0021	.00006	.127
%RSD	5.4012	.85832	3.8508	1.0502	.20648	.23538	.33914
#1	.02425	1.0405	.98998	.82696	1.0004	.02700	37.699
#2	.02568	1.0208	1.0750	.82556	1.0034	.02713	37.542
#3	.02710	1.0244	1.0287	.80846	1.0006	.02700	37.675
#4	.02425	1.0246	1.0712	.81671	.99837	.02700	37.425
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	.02144	.25723	.10582	.13451	.53846	245.96	.49481
SDev	.00422	.00181	.00266	.00085	.00163	.68	.00159
%RSD	19.691	.70205	2.5098	.62809	.30356	.27701	.32147
#1	.01641	.25934	.10781	.13429	.53913	245.87	.49251
#2	.01985	.25653	.10303	.13517	.54047	246.93	.49617
#3	.02610	.25792	.10835	.13517	.53713	245.65	.49523
#4	.02341	.25514	.10409	.13340	.53713	245.38	.49532
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	35.090	1.5710	.58868	335.90	.28235	.29127	.28707
SDev	.078	.0040	.01415	1.18	.01244	.02800	.01568
%RSD	.22129	.25268	2.4033	.35166	4.4045	9.6149	5.4624
#1	35.136	1.5742	.59237	335.18	.27986	.32358	.29998
#2	35.165	1.5712	.59730	337.63	.26951	.29314	.27915
#3	35.066	1.5732	.59730	335.69	.28067	.29316	.26884
#4	34.991	1.5653	.56774	335.10	.29938	.25519	.30033
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	1.0661	11.602	1.0675	.65016	.49807	1.0062	.31386
SDev	.0490	.057	.0481	.00122	.00137	.0635	.00028
%RSD	4.5997	.48993	4.5043	.18703	.27583	6.3116	.08770
#1	1.1131	11.605	1.1107	.64976	.49848	.93904	.31394
#2	1.0112	11.605	1.0428	.65159	.49946	1.0908	.31403

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#3	1.1013	11.669	1.0119	.65055	.49815	.98578	.31404
#4	1.0386	11.530	1.1045	.64872	.49618	1.0091	.31346
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	.32874
SDev	.00372
%RSD	1.1310

#1	.32348
#2	.33141
#3	.32874
#4	.33132

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJTF/2 NA Operator: MTW
 Run Time: 08/22/00 15:14:07
 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	-.00055	.02606	.01895	.26826	.00025	.00024	10.828
SDev	.00071	.00781	.02621	.00918	.00029	.00006	.051
%RSD	128.62	29.951	138.31	3.4211	115.47	26.879	.47395
#1	-.00020	.02926	.00832	.25744	.00000	.00033	10.841
#2	-.00020	.03273	.01986	.27797	.00000	.00021	10.880
#3	-.00163	.01483	-.00701	.26430	.00050	.00021	10.835
#4	-.00020	.02741	.05464	.27333	.00050	.00021	10.757
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	.00064	.00105	.00427	.01455	.01930	309.04	.01490
SDev	.00257	.00302	.00118	.00088	.00175	.93	.00044
%RSD	400.73	288.29	27.586	6.0765	9.0745	29954	2.9163
#1	.00155	.00244	.00520	.01499	.01747	310.16	.01434
#2	-.00301	.00106	.00467	.01499	.02080	308.40	.01536
#3	.00299	-.00315	.00255	.01322	.02080	309.44	.01481
#4	.00104	.00384	.00467	.01499	.01814	308.18	.01509
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	8.0454	1.1686	.08127	305.20	.01547	.00567	.01013
SDev	.0209	.0031	.00472	1.00	.00420	.01462	.02563
%RSD	.25977	.26614	5.8025	.32636	27.146	258.11	253.11
#1	8.0634	1.1706	.07512	305.80	.01611	.00181	.03103
#2	8.0500	1.1716	.08497	304.10	.01020	.01709	-.02126
#3	8.0527	1.1676	.08004	306.25	.01514	.01717	-.00035
#4	8.0152	1.1647	.08497	304.65	.02042	.01341	.03109
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	-.00191	4.1132	-.00816	.12802	-.00098	.02969	.00645
SDev	.02606	.0000	.01523	.00054	.00042	.05434	.00009
%RSD	1365.9	.00000	186.55	.42070	43.033	183.04	1.4106
#1	-.03228	4.1132	.00375	.12847	-.00147	-.02284	.00634
#2	.00299	4.1132	-.01704	.12743	-.00049	.07056	.00653

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#3	-.00876	4.1132	.00566	.12847	-.00115	-.01117	.00643
#4	.03041	4.1132	-.02502	.12769	-.00082	.08220	.00653
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 .01486
SDev .00148
%RSD 9.9957

#1 .01383
#2 .01672
#3 .01539
#4 .01351

Errors LC Pass
High 100.00
Low -.02000

Method: QUANMET Sample Name: DHMKEF/2 NA Operator: MTW
 Run Time: 08/22/00 15:19:02
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA611E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00019	.33084	.02442	.35616	.00598	.00034	28.660
SDev	.00071	.01056	.03559	.00198	.00010	.00000	.039
%RSD	384.74	3.1907	145.71	.55542	1.7305	.07132	.13750
#1	-.00126	.31609	-.00633	.35445	.00582	.00034	28.656
#2	.00017	.33395	.05527	.35787	.00603	.00034	28.618
#3	.00017	.34109	.05522	.35445	.00603	.00034	28.653
#4	.00017	.33223	-.00646	.35788	.00603	.00034	28.713
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00005	.00138	.00585	.00292	.67539	124.32	.01633
SDev	.00377	.00071	.00027	.00044	.00274	.45	.00071
%RSD	7555.3	51.163	4.5415	15.091	.40555	35829	4.3712
#1	.00263	.00103	.00625	.00270	.67189	123.92	.01602
#2	L-.00559	.00244	.00572	.00270	.67722	124.11	.01677
#3	.00195	.00103	.00572	.00270	.67456	124.30	.01704
#4	.00082	.00103	.00571	.00358	.67789	124.95	.01547
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.887	.07667	.00749	266.10	.00619	.02815	.01565
SDev	.044	.00049	.00472	1.15	.01081	.01516	.01347
%RSD	.20856	.64003	62.967	.43221	174.65	53.855	86.069
#1	20.877	.07691	.00626	265.41	.00097	.03575	.02082
#2	20.831	.07593	.01118	265.06	-.00643	.00541	.01037
#3	20.911	.07692	.01118	266.29	.01664	.03570	.00006
#4	20.930	.07691	.00133	267.64	.01358	.03575	.03136
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	.01255	8.7403	-.00188	.20759	.00622	.01535	.00503
SDev	.04467	.0426	.02550	.00075	.00033	.02213	.00009
%RSD	355.88	.48689	1359.6	.36066	5.2632	144.17	1.8087
#1	-.01096	8.6882	.00380	.20702	.00573	-.00071	.00501
#2	.04390	8.7403	-.03529	.20728	.00639	-.01246	.00510

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#3	-.03838	8.7403	-.00246	.20739	.00639	-.00074	.00510
#4	.05565	8.7924	.02645	.20869	.00639	-.04748	.00491
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	.03318
SDev	.00058
%RSD	1.7470

#1	.03331
#2	.03388
#3	.03249
#4	.03303

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: CCV2-13 Operator: MTW
 Run Time: 08/22/00 15:22:12
 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	1.0179	51.156	5.3003	5.1208	5.1287	5.3578	53.546
SDev	.0018	.091	.0803	.0272	.0126	.0083	.098
%RSD	.17885	.17871	1.5145	.53043	.24524	.15489	.18364

#1	1.0200	51.149	5.2879	5.1398	5.1292	5.3577	53.530
#2	1.0186	51.039	5.1923	5.1260	5.1123	5.3476	53.563
#3	1.0158	51.261	5.3487	5.0810	5.1430	5.3679	53.426
#4	1.0173	51.175	5.3722	5.1364	5.1302	5.3580	53.664

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	5.3572	5.2080	5.1586	5.1205	52.989	50.724	4.8828
SDev	.0254	.0080	.0117	.0122	.047	.244	.0188
%RSD	.47472	.15285	.22679	.23792	.08879	.48132	.38443

#1	5.3377	5.1986	5.1437	5.1242	52.990	50.501	4.8792
#2	5.3812	5.2083	5.1570	5.1039	52.931	50.914	4.8623
#3	5.3329	5.2070	5.1618	5.1330	52.987	50.956	4.9078
#4	5.3770	5.2180	5.1719	5.1207	53.046	50.526	4.8820

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	52.101	5.1238	5.1378	52.185	5.4816	5.1379	5.2640
SDev	.106	.0046	.0123	.176	.0073	.0452	.0355
%RSD	.20345	.08944	.23967	.33673	.13283	.88024	.67535

#1	52.204	5.1241	5.1563	52.180	5.4721	5.0770	5.2926
#2	51.960	5.1191	5.1317	51.945	5.4892	5.1304	5.2929
#3	52.156	5.1221	5.1317	52.358	5.4803	5.1681	5.2511
#4	52.083	5.1300	5.1317	52.255	5.4846	5.1760	5.2195

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	5.0172	5.1911	5.3292	5.2952	5.0694	5.0328	5.1709
SDev	.0442	.0190	.0426	.0107	.0052	.112	.0081
%RSD	.88060	.36674	.79866	.20168	.10196	2.0847	.15680

#1	4.9966	5.2156	5.3453	5.2971	5.0681	5.0410	5.1633
#2	5.0317	5.1867	5.3289	5.2810	5.0626	5.0352	5.1689

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#3	4.9692	5.1925	5.2711	5.3068	5.0731	10.386	5.1689
#4	5.0712	5.1695	5.3717	5.2959	5.0737	10.164	5.1824

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	4.9838
SDev	.0091
%RSD	.18295

#1	4.9903
#2	4.9864
#3	4.9703
#4	4.9880

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB13

Operator: MTW

Run Time: 08/22/00 15:25:21

Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E

Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00144	.03040	-.00415	.00397	.00030	.00076	.01063
SDev	.00117	.00790	.02578	.00762	.00054	.00035	.00618
%RSD	80.973	25.975	621.50	191.67	176.76	45.988	58.150
#1	.00143	.02282	-.04167	-.00105	-.00030	.00035	.00392
#2	.00002	.02460	.00068	.00296	.00030	.00059	.00791
#3	.00288	.03887	.01600	.01504	.00101	.00111	.01833
#4	.00143	.03532	.00839	-.00105	.00021	.00099	.01235
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	.00125	.00139	.00279	.00132	.00216	1.1426	-.00089
SDev	.00158	.00310	.00236	.00153	.00326	.2285	.00091
%RSD	126.51	222.24	84.477	115.50	150.83	19.996	102.65
#1	.00208	-.00175	.00040	-.00088	-.00050	.88018	-.00177
#2	.00164	.00523	.00359	.00177	-.00050	1.3761	-.00094
#3	.00236	.00243	.00571	.00265	.00616	1.2852	.00038
#4	-.00108	-.00035	.00146	.00176	.00350	1.0289	-.00122
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	.01406	.00074	.00000	.02257	.00454	.02279	.00785
SDev	.02435	.00049	.00246	.00578	.00533	.02184	.01316
%RSD	173.18	66.688	760840.	25.615	117.44	95.830	167.63
#1	-.01807	.00098	-.00369	.01766	.00877	-.00953	.01049
#2	.01941	-.00000	.00123	.01810	.00774	.03618	.01045
#3	.04084	.00099	.00123	.02972	.00467	.02853	.02092
#4	.01406	.00098	.00123	.02481	-.00302	.03599	-.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
Avge	-.01371	.01161	.00723	.00030	.00008	.02039	.00244
SDev	.03539	.00287	.02180	.00049	.00073	.03734	.00285
%RSD	258.20	24.754	301.57	164.76	886.94	183.13	116.52
#1	.01077	.01303	.02008	-.00038	-.00016	-.00581	-.00007
#2	-.04408	.01309	.03036	.00025	-.00082	.00577	.00491

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#3	.02254	.00730	-.00453	.00066	.00082	.07579	.00491
#4	-.04407	.01303	-.01700	.00066	.00049	.00581	.00003

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

Elem	ZN
Units	ppm
Avge	.00059
SDev	.00133
%RSD	225.92

#1	-.00113
#2	.00043
#3	.00098
#4	.00207

Errors	LC Pass
High	.02000
Low	-.02000

Method: QUANMET Sample Name: DHMJE(RAW) ZN Operator: MTW
Run Time: 08/22/00 15:31:50
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00067	.90430	.33844	.70646	.03521	.00055	26.203
SDev	.00180	.01295	.04931	.01479	.00024	.00001	.062
%RSD	270.50	1.4325	14.571	2.0930	.67520	1.3859	.23628
#1	-.00030	.92084	.31028	.68836	.03538	.00054	26.236
#2	-.00318	.89404	.37618	.72458	.03538	.00056	26.271
#3	-.00029	.89391	.28348	.70646	.03518	.00054	26.174
#4	.00111	.90840	.38380	.70645	.03488	.00056	26.133
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	-.00247	.00241	.00634	.04920	.57823	465.57	.02731
SDev	.00114	.00114	.00147	.00151	.00581	1.98	.00047
%RSD	46.306	47.372	23.131	3.0614	1.0052	42504	1.7183
#1	-.00404	.00101	.00460	.04942	.57807	468.29	.02679
#2	-.00257	.00241	.00567	.04854	.58604	465.75	.02734
#3	-.00152	.00380	.00727	.05118	.57673	464.34	.02792
#4	-.00174	.00241	.00780	.04766	.57206	463.91	.02718
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	20.234	6.4154	.16878	H670.91	.02592	-.01197	.02069
SDev	.076	.0217	.00697	3.68	.00685	.00383	.02254
%RSD	.37665	.33857	4.1270	.54815	26.437	31.969	108.91
#1	20.320	6.4402	.16386	H675.42	.02720	-.01771	.02073
#2	20.250	6.4245	.16879	H672.03	.01879	-.01004	.04153
#3	20.231	6.4068	.17864	H669.33	.03481	-.01001	.03114
#4	20.135	6.3901	.16386	H666.85	.02287	-.01012	-.01062
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	-.00533	16.385	.00631	.30523	.01540	-.03234	.16660
SDev	.07607	.184	.01472	.00157	.00257	.04800	.00287
%RSD	1426.5	1.1238	233.05	.51296	16.708	148.42	1.7236
#1	-.01513	16.537	.01401	.30740	.01917	-.03513	.16894
#2	.05541	16.520	-.00026	.30531	.01360	-.09366	.16416

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#3	-.10916	16.340	.02229	.30437	.01491	.02306	.16923
#4	.04754	16.143	-.01078	.30385	.01392	-.02365	.16407
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	.00917
SDev	.00161
%RSD	17.536

#1	.00982
#2	.00828
#3	.01110
#4	.00749

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJEF(RAW) ZN Operator: MTW
 Run Time: 08/22/00 15:35:04
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA611E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00082	.03372	.43649	.70367	.00264	.00049	22.741
SDev	.00082	.00464	.07513	.00342	.00035	.00006	.129
%RSD	100.36	13.761	17.213	.48611	13.206	13.039	.56524
#1	.00153	.03419	.50016	.69854	.00281	.00052	22.882
#2	.00011	.02710	.42689	.70538	.00222	.00039	22.571
#3	.00011	.03770	.48470	.70538	.00302	.00052	22.742
#4	.00154	.03589	.33419	.70537	.00251	.00052	22.768
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	-.00459	.00176	.00595	.01521	.01098	455.16	.02681
SDev	.00324	.00081	.00177	.00044	.00084	3.05	.00060
%RSD	70.479	45.792	29.654	2.8950	7.6297	67001	2.2228
#1	L-.00748	.00246	.00781	.01499	.01082	452.53	.02754
#2	-.00186	.00105	.00356	.01499	.01214	458.18	.02633
#3	L-.00731	.00107	.00622	.01587	.01014	457.39	.02633
#4	-.00172	.00245	.00622	.01499	.01081	452.53	.02707
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	45.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	19.314	2.7452	.15023	H632.62	.02345	-.00944	.01286
SDev	.070	.0068	.00841	5.87	.00930	.01387	.01575
%RSD	.36198	.24716	5.5993	.92716	39.669	146.96	122.52
#1	19.302	2.7543	.14900	H627.22	.03330	-.00181	.03127
#2	19.340	2.7405	.13915	H639.65	.01267	-.02465	-.00032
#3	19.390	2.7464	.15392	H635.21	.01912	.00573	.02067
#4	19.224	2.7396	.15885	H628.40	.02870	-.01702	-.00020
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	.00003	13.550	-.00301	.26764	-.00147	.03777	.12968
SDev	.05470	.048	.03098	.00145	.00060	.04721	.00016
%RSD	189090.	.35650	1027.8	.54273	40.572	125.01	.12699
#1	-.06363	13.560	-.02707	.26706	-.00082	.10204	.12966
#2	.00297	13.583	.04058	.26941	-.00180	.00854	.12946

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#3	.06957	13.577	-.02301	.26810	-.00213	-.00308	.12975
#4	-.00879	13.479	-.00256	.26601	-.00115	.04357	.12984

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	.15526
SDev	.00150
%RSD	.96678

#1	.15602
#2	.15477
#3	.15684
#4	.15341

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMK5(RAW)ZN Operator: MTW
Run Time: 08/22/00 15:38:18
Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61E
Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	EE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.00043	.23974	1.0695	.44762	.01005	.00027	62.759
SDev	.00137	.01713	.1149	.00003	.00000	.00007	.438
%RSD	316.09	7.1457	10.746	.00712	.00000	27.330	.69775
#1	.00151	.26514	1.2092	.44767	.01005	.00033	63.401
#2	.00008	.22941	1.0744	.44761	.01005	.00021	62.656
#3	.00150	.23488	1.0667	.44760	.01005	.00021	62.547
#4	-.00135	.22951	.92780	.44760	.01005	.00033	62.432
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K_	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.01145	-.00034	.00840	.00604	1.1129	604.26	.04174
SDev	.00344	.00197	.00043	.00084	.0146	1.78	.00045
%RSD	30.060	586.13	5.1703	13.970	1.3093	.29401	1.0740
#1	L-.01371	-.00312	.00893	.00714	1.1346	603.17	.04139
#2	L-.00647	-.00035	.00787	.00538	1.1086	604.22	.04186
#3	L-.01379	.00107	.00840	.00538	1.1039	602.88	.04139
#4	L-.01183	.00106	.00840	.00626	1.1046	606.79	.04233
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	FB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	40.436	1.1092	.09006	389.49	.01182	.00912	.03869
SDev	.076	.0059	.00569	1.18	.01319	.03124	.02309
%RSD	.18819	.52949	6.3171	.30173	111.66	342.52	59.673
#1	40.448	1.1178	.09499	388.37	.00837	.02798	.03082
#2	40.395	1.1079	.09498	389.86	.01057	-.01741	.05165
#3	40.363	1.1060	.08513	388.75	-.00162	-.01736	.06218
#4	40.537	1.1050	.08513	390.97	.02994	.04327	.01010
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	-.02449	11.184	.00345	.33416	.00786	.03266	.00663
SDev	.09884	.051	.03192	.00116	.00068	.03355	.00011
%RSD	403.57	.45338	926.59	.34660	8.6736	102.71	1.6572
#1	-.14295	11.259	-.01662	.33576	.00868	.02375	.00673
#2	-.00589	11.161	.03073	.33394	.00803	.08233	.00673

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#3	-.04508	11.167	-.03086	.33300	.00704	.01229	.00654
#4	.09596	11.149	.03053	.33394	.00770	.01228	.00654
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	.00772
SDev	.00133
%RSD	17.256

#1	.00852
#2	.00875
#3	.00778
#4	.00582

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMK5F(RAW) ZN Operator: MTW
 Run Time: 08/22/00 15:41:31
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA611E
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.00118	.03720	1.0018	.44649	.00402	.00030	57.698
SDev	.00137	.00750	.2730	.00317	.00101	.00006	.384
%RSD	116.16	20.165	27.253	.70982	25.000	21.107	.66628
#1	-.00011	.04703	1.3703	.44584	.00352	.00033	57.862
#2	-.00153	.03457	.96521	.44986	.00553	.00033	57.865
#3	-.00296	.02916	.71054	.44784	.00352	.00021	57.124
#4	-.00011	.03806	.96132	.44242	.00352	.00033	57.941
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	2.0000	600.00	100.00	100.00	100.00	15.000	600.00
Low	-.01000	-.20000	-.30000	-.20000	-.20000	-.00500	-5.0000
Elem	CD	CO	CR	CU	FE	K	LI
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.00926	-.00068	.00640	.00244	.18307	586.89	.03981
SDev	.00380	.00134	.00140	.00111	.00346	3.01	.00047
%RSD	41.010	199.20	21.859	45.515	1.8872	51202	1.1749
#1	L-.01241	-.00032	.00733	.00266	.18457	587.74	.03990
#2	L-.01267	.00108	.00520	.00266	.18457	584.52	.03924
#3	L-.00634	-.00173	.00520	.00089	.17791	590.78	.04037
#4	L-.00563	-.00173	.00786	.00354	.18523	584.53	.03971
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	39.265	.90849	.08253	382.81	.01529	.02841	.02830
SDev	.093	.00326	.00284	2.82	.01586	.03095	.01008
%RSD	.23770	.35925	3.4461	.73794	103.77	108.93	35.618
#1	39.345	.91193	.08499	383.45	.01879	.05119	.04134
#2	39.131	.90898	.08007	381.00	.03351	.01706	.03115
#3	39.302	.90406	.08007	386.53	-.00492	.03596	.02033
#4	39.284	.90898	.08499	380.27	.01378	.04354	.02036
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	-.03772	10.643	.02482	.31043	-.00033	.01195	.00648
SDev	.08045	.026	.02196	.00170	.00042	.09971	.00006
%RSD	213.31	.24537	88.465	.54873	129.10	834.71	.88975
#1	-.14937	10.622	.03464	.31225	-.00049	.04936	.00653
#2	.00342	10.628	.00378	.30938	.00016	.14913	.00643

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#3	-.03969	10.680	.00989	.31147	-.00082	.02074	.00643
#4	.03477	10.640	.05098	.30864	-.00016	-.07273	.00653

Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	20.000	100.000	50.000	50.000	100.00	100.00
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-2.0000	-.05000

Elem	ZN
Units	ppm
Avge	.17248
SDev	.00200
%RSD	1.1577

#1	.17136
#2	.17023
#3	.17408
#4	.17424

Errors	LC Pass
High	100.00
Low	-.02000

Method: QUANMET Sample Name: DHMJKE(RAW) CA Operator: MTW
 Run Time: 08/22/00 15:44:45
 Comment: STL PITTSBURGH ICP METALS ANALYSIS-INSTRUMENT JA61H
 Mode: CONC Corr. Factor: 1

Elem	AG	AL	AS	B_	BA	BE	CA
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00079	8.5266	1.3995	.71498	.33857	.00151	H616.03
SDev	.00316	.0205	.2256	.00304	.00168	.00006	3.08
%RSD	398.86	.24055	16.118	.42557	.49479	4.2261	.49960
#1	-.00400	8.5016	1.6457	.71753	.34083	.00161	H612.39
#2	.00315	8.5517	1.5140	.71755	.33882	.00147	H617.71
#3	.00024	8.5248	1.3022	.71332	.33752	.00149	H614.72
#4	-.00256	8.5285	1.1360	.71153	.33711	.00147	H619.29
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
Avg	L-.01811	.00777	.03826	.04097	18.895	176.96	.04357
SDev	.00399	.00321	.00200	.00112	.055	.30	.00021
%RSD	22.037	41.364	5.2414	2.7226	.29242	17085	.48244
#1	L-.02406	.00500	.04025	.04119	18.909	177.00	.04365
#2	L-.01593	.01054	.03865	.04208	18.925	177.35	.04365
#3	L-.01671	.00498	.03547	.03942	18.813	176.62	.04373
#4	L-.01573	.01057	.03865	.04120	18.931	176.88	.04326
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	100.00	100.00	100.00	100.00	400.00	1000.0	20.000
Low	-.00500	-.05000	-.01000	-.02500	-.10000	-5.0000	-.05000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	134.38	1.1780	.00898	H574.99	.02946	.08734	.04705
SDev	.53	.0033	.00402	1.38	.00404	.02139	.02769
%RSD	.39419	.27689	44.707	.24084	13.705	24.491	58.860
#1	133.66	1.1758	.00406	H576.48	.03201	.08728	.05242
#2	134.77	1.1798	.00899	H575.81	.03378	.10255	.03136
#3	134.30	1.1748	.01390	H574.13	.02597	.10242	.02080
#4	134.79	1.1817	.00899	H573.53	.02606	.05711	.08360
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	-.08538	H23.919	-.01240	5.6537	.07953	.00082	.05723
SDev	.15530	.048	.03942	.0212	.00667	.07170	.00226
%RSD	181.90	.19976	317.91	.37447	8.3911	8759.2	3.9508
#1	L-.31551	H23.925	-.06682	5.6829	.07879	.06198	.05745
#2	-.00989	H23.972	.01113	5.6547	.08862	.00340	.05876

Analysis Report

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#3	-.03760	H23.856	.02137	5.6342	.07814	-.10049	.05397
#4	.02147	H23.925	-.01528	5.6433	.07257	.03838	.05876

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	1.0274
SDev	.0015
%RSD	.14667

#1	1.0279
#2	1.0258
#3	1.0293
#4	1.0266

Errors	LC Pass
High	100.00
Low	-.02000

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Analysis Report

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Method: QUANMET Sample Name: CCV2-14 Operator: MTW
 Run Time: 08/22/00 15:47:59
 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	.98957	50.193	5.2084	5.0499	5.0688	5.2816	51.554
SDev	.00217	.148	.0648	.0153	.0218	.0179	.094
%RSD	.21920	.29542	1.2450	.30244	.42913	.33897	.18153
#1	.98631	50.068	5.1344	5.0396	5.0547	5.2760	51.448
#2	.99063	50.147	5.2918	5.0536	5.0665	5.2662	51.640
#3	.99060	50.147	5.1954	5.0364	5.0537	5.2766	51.625
#4	.99073	50.408	5.2121	5.0699	5.1002	5.3074	51.503
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	5.1792	5.0694	5.0095	5.0786	51.636	50.088	4.8702
SDev	.0033	.0112	.0055	.0245	.109	.088	.0344
%RSD	.06279	.22115	.10987	.48264	.21167	.17669	.70536
#1	5.1835	5.0694	5.0012	5.0684	51.502	50.187	4.8531
#2	5.1791	5.0805	5.0124	5.0676	51.664	50.022	4.8606
#3	5.1755	5.0540	5.0119	5.0631	51.612	50.005	4.8461
#4	5.1787	5.0735	5.0124	5.1152	51.764	50.137	4.9209
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	5.5000	5.5000	5.5000	5.5000	55.000	55.000	5.5000
Low	4.5000	4.5000	4.5000	4.5000	45.000	45.000	4.5000
Elem	MG	MN	MO	NA	NI	PB	SB
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	51.156	4.9746	4.9886	51.782	5.3470	4.9735	5.1627
SDev	.128	.0109	.0180	.303	.0165	.0607	.0499
%RSD	.25043	.21998	.36079	.58550	.30850	.12212	.96626
#1	51.114	4.9603	4.9689	51.685	5.3677	4.9982	5.1057
#2	51.079	4.9810	5.0083	51.703	5.3280	4.9910	5.1989
#3	51.084	4.9722	4.9788	51.520	5.3497	5.0205	5.1364
#4	51.347	4.9850	4.9985	52.220	5.3425	4.8844	5.2097
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	5.1595	5.0622	5.1286	5.2293	4.9665	10.072	5.0519
SDev	.0365	.0281	.0567	.0196	.0143	.144	.0081
%RSD	.70815	.55498	1.1058	.37526	.28806	.14340	.16088
#1	5.1886	5.0462	5.1021	5.2168	4.9535	10.064	5.0497
#2	5.1655	5.1041	5.1580	5.2264	4.9636	9.9106	5.0492

Analysis Report

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page 2

#3	5.1066	5.0520	5.1906	5.2163	4.9620	10.262	5.0450
#4	5.1775	5.0464	5.0635	5.2579	4.9869	10.050	5.0637

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 4.8268
SDev .0173
%RSD .35932

#1	4.8017
#2	4.8355
#3	4.8294
#4	4.8406

Errors	LC Pass
High	5.5000
Low	4.5000

Method: QUANMET Sample Name: CCB14

Operator: MTW

Run Time: 08/22/00 15:51:08

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	.00107	.01785	-.00979	.00790	.00020	.00045	.01252
SDev	.00071	.00820	.04834	.01433	.00014	.00006	.00487
%RSD	66.676	45.916	493.63	181.47	69.881	14.286	38.937

#1	.00143	.02995	-.01471	.02932	.00021	.00048	.01444
#2	.00143	.01566	.02400	.00035	.00000	.00035	.00638
#3	-.00000	.01206	-.07632	.00236	.00030	.00048	.01138
#4	.00143	.01374	.02786	-.00045	.00030	.00048	.01786

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	.00033	-.00105	.00160	-.00022	-.00033	.79960	-.00114
SDev	.00167	.00080	.00140	.00084	.00148	.12987	.00077
%RSD	509.45	76.655	87.592	381.41	441.20	16.241	67.879

#1	.00139	-.00035	.00359	.00088	.00017	.78101	-.00229
#2	-.00216	-.00174	.00093	-.00088	-.00183	.62398	-.00075
#3	.00117	-.00035	.00146	-.00088	-.00117	.91324	-.00075
#4	.00091	-.00175	.00040	-.00000	.00150	.88018	-.00075

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	-.00268	.00025	.00246	.01509	-.00004	.00189	.02085
SDev	.00962	.00049	.00620	.00561	.00536	.02515	.02254
%RSD	359.40	199.05	251.67	37.195	12770.	1333.2	108.08

#1	.01138	-.00000	.00123	.02257	-.00299	-.01703	.05213
#2	-.00736	.00098	-.00369	.00961	-.00041	-.01711	.01047
#3	-.00469	-.00000	.00123	.01229	-.00438	.00567	-.00006
#4	-.01004	.00000	.01108	.01587	.00761	.03601	.02087

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	.00098	-.04343	.00318	-.00023	-.00057	.03505	.00005
SDev	.03872	.02606	.00784	.00008	.00056	.07538	.00012
%RSD	3956.5	60.000	246.32	32.787	97.590	215.08	234.29

#1	-.03624	-.05646	.01206	-.00027	.00016	.05255	.00003
#2	-.01666	-.05646	-.00662	-.00027	-.00115	.07594	-.00007

Analysis Report

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#3	.05387	-.05646	.00154	-.00012	-.00082	-.07589	.00003
#4	.00294	-.00434	.00575	-.00027	-.00049	.08758	.00021
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	.25000	.50000	.10000	.05000	.05000	.30000	.05000
Low	-.25000	-.50000	-.10000	-.05000	-.05000	-.30000	-.05000

Elem	ZN
Units	ppm
Avge	.00198
SDev	.00162
%RSD	81.924

#1	.00309
#2	.00099
#3	.00023
#4	.00360

Errors	LC Pass
High	.02000
Low	-.02000

6701000

STL-Pittsburgh Atomic Absorption Data for Mercury

Instrument: PS200HG

Analyst Name: William A. Hoyle

Date of Analysis: 8-21-00

File ID: 0821HGA

Matrix: WATER

Lot Number/SDG

Method

COH180213

7470A

COH100270

COH160154

TCLP

COH170113



COH160223

SPLP

09:46:17 21 Aug 2000

Folder: 0B21HGA
Protocol: HGMET

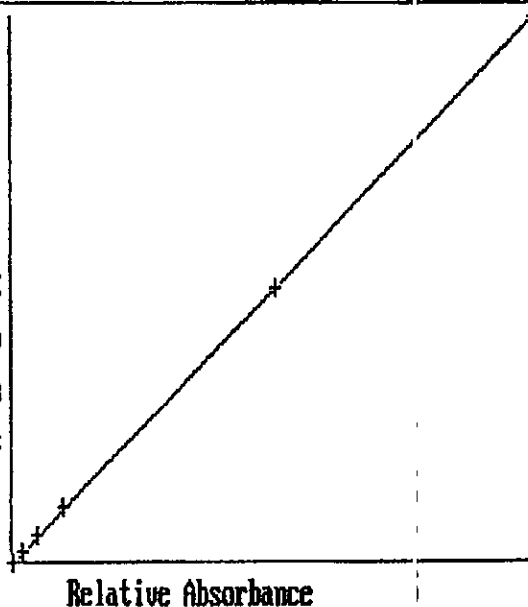
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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Standard: 1 Rep: 1				Seq: 0	09:46:17 21 Aug 2000 HG			
Hg	.000	ppb	4037					
*** Standard: 2 Rep: 1				Seq: 1	09:48:28 21 Aug 2000 HG			
Hg	.200	ppb	23272		0057-031-6			
*** Standard: 3 Rep: 1				Seq: 2	09:50:05 21 Aug 2000 HG			
Hg	.500	ppb	52381		0057-031-7			
*** Standard: 4 Rep: 1				Seq: 3	09:51:32 21 Aug 2000 HG			
Hg	1.00	ppb	103935		0057-031-8			
*** Standard: 5 Rep: 1				Seq: 4	09:53:12 21 Aug 2000 HG			
Hg	5.00	ppb	533550		0057-031-9			
*** Standard: 6 Rep: 1				Seq: 5	09:54:49 21 Aug 2000 HG			
Hg	10.0	ppb	1059674		0057-031-10			

RunProt: HGMET STL-PITTSBURGH METALS ANALYSIS
 RunFold: 0021HGA Seq: 6 Batch:
 Prnt: R/T On Pump: On
 Rev: 4.2 09:55:11 21 Aug 2000 Xmit: Off Gas: 0.30 LPM
 State: Idle User: WAH A/S: On

CALIBRATION: Line proto: HGMET

	Hg	Accepted
	Conc. Calc. Dev. ->linear	
S1	.000 .026 .026	Quadratic
S2	.200 .207 .007	Wtdlinear
S3	.500 .402 -.018	C
S4	1.00 .969 -.031	Accept o
S5	5.00 5.02 .025	n
S6	10.0 9.99 -.009	c
A	.0000000 r .999983	
B	9.44031e-6 C -1.23354e-2	



	Mean	0 SD	4037
S1	4037	0 %RSD	4037
S2	23272	0 %RSD	23272
S3	52381	0 %RSD	52381
S4	103935	0 %RSD	103935
S5	533550	0 %RSD	533550
S6	1059674	0 %RSD	1059674

New cal coefficients stored

09:57:19 21 Aug 2000

Folder: 0821HGA

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Protocol: HGMET

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: ICV5-1				Seq: 6	09:57:19 21 Aug 2000 HG			
Hg	2.55	ppb	271584	0057-031-11				
*** Sample ID: ICB1				Seq: 7	09:59:38 21 Aug 2000 HG			
Hg	.038	ppb	5330					
*** Sample ID: CCV5-1				Seq: 8	10:01:12 21 Aug 2000 HG			
Hg	5.04	ppb	535362	0057-031-12				
*** Sample ID: CCB1				Seq: 9	10:02:42 21 Aug 2000 HG			
Hg	.010	ppb	2411					
*** Sample ID: DJ5H1B				Seq: 10	10:05:00 21 Aug 2000 HG			
Hg	.031	ppb	4602					
*** Sample ID: DJ5H1C				Seq: 11	10:06:30 21 Aug 2000 HG			
Hg	2.49	ppb	265382	0057-031-13				
*** Sample ID: DJ401				Seq: 12	10:08:31 21 Aug 2000 HG			
Hg	.036	ppb	5082					
*** Sample ID: DJ40H				Seq: 13	10:10:16 21 Aug 2000 HG			
Hg	.133	ppb	15382					
*** Sample ID: DJ430				Seq: 14	10:11:47 21 Aug 2000 HG			
Hg	.094	ppb	11306					
*** Sample ID: DJ430S				Seq: 15	10:14:03 21 Aug 2000 HG			
Hg	1.16	ppb	124267	SP.REC. 107%				
*** Sample ID: DJ430D				Seq: 16	10:15:38 21 Aug 2000 HG			
Hg	1.14	ppb	121912	SP.REC. 105%				
*** Sample ID: DJ43R				Seq: 17	10:17:13 21 Aug 2000 HG			
Hg	.078	ppb	9544					

6701004

Folder: 0821HGA
Protocol: HGMET

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10:18:50 21 Aug 2000

Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DJ44A				Seq: 18	10:18:50 21 Aug 2000	HG		
Hg	1.15	ppb	123532					
*** Sample ID: DJ45E				Seq: 19	10:20:18 21 Aug 2000	HG		
Hg	1.46	ppb	155832					
*** Sample ID: CCV5-2				Seq: 20	10:22:03 21 Aug 2000	HG		
Hg	5.17	ppb	549015					
*** Sample ID: CCB2				Seq: 21	10:23:29 21 Aug 2000	HG		
Hg	.016	ppb	2978					
*** Sample ID: DJ5H6B				Seq: 22	10:25:14 21 Aug 2000	HG		
Hg	.032	ppb	4653					
*** Sample ID: DJ5H6C				Seq: 23	10:26:42 21 Aug 2000	HG		
Hg	2.48	ppb	264071	0057-031-14				
*** Sample ID: DHN80				Seq: 24	10:28:17 21 Aug 2000	HG		
Hg	.049	ppb	6454					
*** Sample ID: DHN88				Seq: 25	10:29:42 21 Aug 2000	HG		
Hg	.078	ppb	9565					
*** Sample ID: DHN88S				Seq: 26	10:31:07 21 Aug 2000	HG		
Hg	1.05	ppb	112945					SP. REC. 97%
*** Sample ID: DHN88D				Seq: 27	10:33:07 21 Aug 2000	HG		
Hg	1.07	ppb	114159					SP. REC. 99%
*** Sample ID: DHN89				Seq: 28	10:34:42 21 Aug 2000	HG		
Hg	.153	ppb	17560					
*** Sample ID: DHN8C				Seq: 29	10:36:06 21 Aug 2000	HG		
Hg	.303	ppb	33439					

10:37:32 21 Aug 2000

Folder: 0821HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DHN8H				Seq: 30	10:37:32 21 Aug 2000	HG		
Hg	.318	ppb	34984					
*** Sample ID: DHN8P				Seq: 31	10:39:38 21 Aug 2000	HG		
Hg	.048	ppb	6444					
*** Sample ID: CCV5-3				Seq: 32	10:41:03 21 Aug 2000	HG		
Hg	5.18	ppb	549519					
*** Sample ID: CCB3				Seq: 33	10:42:52 21 Aug 2000	HG		
Hg	.025	ppb	3970					
*** Sample ID: DHNBV				Seq: 34	10:44:32 21 Aug 2000	HG		
Hg	.029	ppb	4404					
*** Sample ID: DHN90				Seq: 35	10:46:43 21 Aug 2000	HG		
Hg	.064	ppb	8040					
*** Sample ID: DHN93				Seq: 36	10:48:20 21 Aug 2000	HG		
Hg	.021	ppb	3489					
*** Sample ID: DHN94				Seq: 37	10:49:45 21 Aug 2000	HG		
Hg	.047	ppb	6257					
*** Sample ID: DJ5H9BT				Seq: 38	10:51:37 21 Aug 2000	HG		
Hg	.062	ppb	7914					
*** Sample ID: DJ5H9CT				Seq: 39	10:53:27 21 Aug 2000	HG		
Hg	2.70	ppb	287145	0057-031-15				
*** Sample ID: DJ3ACBT				Seq: 40	10:54:58 21 Aug 2000	HG		
Hg	.070	ppb	8685					
*** Sample ID: DHX40T				Seq: 41	10:56:28 21 Aug 2000	HG		
Hg	.097	ppb	11554					

6701006

10:58:06 21 Aug 2000

Folder: 0821HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DHX40ST				Seq: 42	10:58:06 21 Aug 2000	HG		
Hg	5.27	ppb	559903					SP.REC. 103%
*** Sample ID: DHX40DT				Seq: 43	11:00:22 21 Aug 2000	HG		
Hg	5.10	ppb	541302					SP.REC. 100%
*** Sample ID: CCV5-4				Seq: 44	11:01:59 21 Aug 2000	HG		
Hg	5.22	ppb	554120					
*** Sample ID: CCB4				Seq: 45	11:03:44 21 Aug 2000	HG		
Hg	.043	ppb	5881					
*** Sample ID: DHX47T				Seq: 46	11:05:12 21 Aug 2000	HG		
Hg	.029	ppb	4383					
*** Sample ID: DHX4AT				Seq: 47	11:06:53 21 Aug 2000	HG		
Hg	.067	ppb	8380					
*** Sample ID: DJOQLT				Seq: 48	11:08:43 21 Aug 2000	HG		
Hg	.351	ppb	38452					
*** Sample ID: DJ5HDBE				Seq: 49	11:10:20 21 Aug 2000	HG		
Hg	.079	ppb	9698					
*** Sample ID: DJ5HDCE				Seq: 50	11:12:26 21 Aug 2000	HG		
Hg	2.50	ppb	266441					
*** Sample ID: DHXN9E				Seq: 51	11:13:55 21 Aug 2000	HG		
Hg	.035	ppb	4995					
*** Sample ID: DHXN9SE				Seq: 52	11:15:20 21 Aug 2000	HG		
Hg	1.05	ppb	112739					SP.REC. 105%
*** Sample ID: DHXN9DE				Seq: 53	11:17:08 21 Aug 2000	HG		
Hg	1.05	ppb	112513					SP.REC. 105%

0057-031-16

11:18:33 21 Aug 2000

Folder: 0821HGA
Protocol: HGMET

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Line	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: DHXNDE								
				Seq: 54	11:18:33 21 Aug 2000 HG			
Hg	.037	ppb	5229					
*** Sample ID: DHXNFE								
				Seq: 55	11:20:05 21 Aug 2000 HG			
Hg	.041	ppb	5646					
*** Sample ID: CCV5-5								
				Seq: 56	11:23:21 21 Aug 2000 HG			
Hg	5.20	ppb	552048					
*** Sample ID: CCB5								
				Seq: 57	11:25:29 21 Aug 2000 HG			
Hg	.024	ppb	3892					

END OF ANALYSIS

WAH
8-21-00

6701008

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS		
RunFold: 0821HGA	Seq: 0	Batch:	
	Prnt: R/T On	Pump: Off	
	Rev: 4.2	08:49:01 21 Aug 2000	Xmit: Off Gas: LPM
State: Idle		User: WAH	A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1

cup ID	Extended id	Weight	Volume	Macro	check macros
1	ICV5-1	1.0000	1.0000		
2	ICB1	1.0000	1.0000		
3	CCV5-1	1.0000	1.0000		
4	CCB1	1.0000	1.0000		
5	DJ5H1B	1.0000	1.0000		
6	DJ5H1C	1.0000	1.0000		
7	DJ401	1.0000	1.0000		
8	DJ40H	1.0000	1.0000		
9	DJ430	1.0000	1.0000		
10	DJ430S	1.0000	1.0000		
11	DJ430D	1.0000	1.0000		
12	DJ43R	1.0000	1.0000		
13	DJ44A	1.0000	1.0000		
14	DJ45E	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: 0821HGA Seq: 0 Batch:
Print: R/T On Pump: Off
Rev: 4.2 08:49:03 21 Aug 2000 Xmit: Off Gas: LPM
State: Idle User: WAH A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1 PgUp
cup ID Extended id Weight Volume Macro check macros
16 CCB2 1.0000 1.0000
17 DJ5H6B 1.0000 1.0000
18 DJ5H6C 1.0000 1.0000
19 DHN80 1.0000 1.0000
20 DHN88 1.0000 1.0000
21 DHN88S 1.0000 1.0000
22 DHN88D 1.0000 1.0000
23 DHN89 1.0000 1.0000
24 DHN8C 1.0000 1.0000
25 DHN8H 1.0000 1.0000
26 DHN8P 1.0000 1.0000
27 CCV5-3 1.0000 1.0000
28 CCB3 1.0000 1.0000
29 DHN8V 1.0000 1.0000
30 DHN90 1.0000 1.0000

PgDn

Cup 16 ID: CCB2

Cell down mode Ins to switch

6701010

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS		
RunFold: 0821HGA	Seq: 0	Batch:	
	Prnt: R/T On	Pump: Off	
	Rev: 4.2	08:49:04 21 Aug 2000	Xmit: Off Gas: LPM
State: Idle		User: WAH	A/S: On

AUTOSAMPLER: Rack Edit rack: RACK1				PgUp
cup ID	Extended id	Weight	Volume Macro	check macros
31 DHN93		1.0000	1.0000	
32 DHN94		1.0000	1.0000	
33 DJ5H9BT		1.0000	1.0000	
34 DJ5H9CT		1.0000	1.0000	
35 DJ3ACBT		1.0000	1.0000	
36 DHX40T		1.0000	1.0000	
37 DHX40ST		1.0000	1.0000	
38 DHX40DT		1.0000	1.0000	
39 CCV5-4		1.0000	1.0000	
40 CCB4		1.0000	1.0000	
41 DHX47T		1.0000	1.0000	
42 DHX4AT		1.0000	1.0000	
43 DJOQLT		1.0000	1.0000	
44 DJ5HDBE		1.0000	1.0000	

PgDn

Cup 31 ID: DHN93

Cell down mode Ins to switch

RunProt: HGMET	STL-PITTSBURGH METALS ANALYSIS		
RunFold: 0821HGA	Seq: 0	Batch:	
	Prnt: R/T On	Pump: Off	
	Rev: 4.2	08:52:27 21 Aug 2000	Xmit: Off Gas: LPM
State: Idle		User: WAH	A/S: On

AUTOSAMPLER: Rack Edit		rack: RACK2	Range 1-44	Clear seQ	Undo exit
cup ID	Extended id	Weight	Volume	Macro	check macros
1	DJ5HDCE	1.0000	1.0000		
2	DHXN9E	1.0000	1.0000		
3	DHXN9SE	1.0000	1.0000		
4	DHXN9DE	1.0000	1.0000		
5	DHXNDE	1.0000	1.0000		
6	DHXNFE	1.0000	1.0000		
7	CCV5-5	1.0000	1.0000		
8	CCB5	1.0000	1.0000		
9		1.0000	1.0000		
10		1.0000	1.0000		
11		1.0000	1.0000		
12		1.0000	1.0000		
13		1.0000	1.0000		
14		1.0000	1.0000		
15		1.0000	1.0000		

PgDn

Cup 14 ID:

Cell down mode Ins to switch

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

Way
5238

Method:		Matrix:		Sugr. Plug:		Balance#		Reagents:	
Analyst:		Date:		Lot Number:		Lab Lot No. (book, page, line)		Sample:	
Revised By:		Date:		COH160154		COH14-162-6		COH14-154-2	
Sample ID		Init Wt/Vol		Final Vol		Comments		Color	
		g/mL		mL				Pre Post Pre Post	
1. DHX40	50mL	50mL							
2. DHX40 S									
3. DHX40 D									
4. DHX42									
5. DHX4H									
6. D300L									
7. D33AC8									
8. D35HP8									
9. D35HEC									
10.									
11.									
12.									
13.									
14.									
15.									
16.									
17.									
18.									
19.									
20.									
21.									
22.									
23.									

Digestate(s)		Digestate(s) Received		Digestate(s) Relinquished		Hot plate		Correction		Color	
Date	Time	Analyst	Location	Date	Time	Analyst	Location	/Block Temp	Factor	R=Red	V=Violet
								95°	-0.16	BL=Blue	P=Pink
										BR=Brown	W=White
										BLK=Black	GY=Gray
										Y=Yellow	GN=Green
										O=Orange	C=Colorless
8-21-00	1115	Analyst	Location	8-21-00	1115	Analyst	Location				
8-22-00	0715	Analyst	Location	8-22-00	0715	Analyst	Location				

TCLP (Method 1311)

Quanterra Incorporated
450 William Pitt Way
Pittsburgh, Pennsylvania 15238
412/826-5477 FAX: 412/826-5571



QUA-4181

File Lot # 8320101W

Serial Number 085 Log Book Number 96-MT-526

By Janeel Murphy Date 8-17-00 Checked by Eric S. Faust Date 8-18-00 pH Instrument Accumant Mat 6005 Probe SN0054457 Balance 694817

Project Number Con W0154, COH D0413 Lot Number Con W0154 Client Codes 804497-12 Solution Number 1 - Log Book Number 804497-12 Solution Number 2 - Log Book Number 804497-12

Fluid Determination

TCLP Extraction

Sample ID	Wgt/Vol	Ini. pH	Final pH	Extract Fluid #1, or #2	Conc. HNO ₃ to Acidify (for Metals)	Sample ID	Wgt (g) We/Dry	Fluid Vol.	Glass	Final pH After Tumbling
DHX45	500g/46.5ml	5.49	1.91	Soln #1	100ml	1 DB-TCLP	100.0g	2000ml	1	4.93
DHX47		5.51	1.96			2 DHX45				5.05
DHX4A		5.51	1.47			3 DHX47				5.08
DJ002L		5.75	1.79			4 DHX47				5.29
						5 DHX4A				5.04
						6 DJ002L				5.53
						7				
						8				
						9				
						10				
						11				
						12				
						13				

Extract(s)	Record line number from above	Date	Time	Analyst	Location	Date	Time	Analyst	Location
All above	8-15-00	11:00	Janeel Murphy	Mt. St. Joseph	8-18-00	11:30		Alan	17E

Extract(s) Received	Extract(s) Relinquished
---------------------	-------------------------

* = Sample determined to have free-liquid. % solid determination was performed.

<5 = Extraction Fluid No. 1 5.7 mL Glacial Acetic Acid dil 500 mL + 64.3 mL of 1N Na OH dil to 1L (pH 4.93 ± 0.05)

>5 = Extraction Fluid No. 2 5.7 mL Glacial Acetic Acid dil to 1L (pH 2.88 ± 0.05)

Room Temp = 21° pH E.F. = 4.98

Date/Time On	Date/Time Off	Agitation Apparatus RPMs
8-17-00 1:00	8-18-00	30 ± 2 J.M. 8-17-00

Date	pH Calibration	(4.0)	(7.0)	(10.0)
8-17-00		4.01	7.02	10.05

Date	Comments
8-18-00	4.00 7.02 10.05

Hg Digestion Log

Quanterra Incorporated
450 William Pitt Way
Pittsburgh, Pennsylvania 15238
412/826-5477 FAX: 412/826-5571



QUA-4169

Serial Number 055 Log Book Number 96-MT-580 Start Time 08:15 → 08:30

Sample ID	Date Rec'd	Prep Date	Prepared By	Wt/Vol	Sample Type	Run Date	Comments
1. STD0	N/A	8-21-00	WAH	100mL	WATER	8-21-00	N/A
2. STD1							0057-031-6
3. STD2							0057-031-7
4. STD3							0057-031-8
5. STD4							0057-031-9
6. STD5							0057-031-10
7. ICV							0057-031-11
8. ICB							N/A
9. CCV							0057-031-12
10. CCB							N/A
11. DJS418							0057-031-13
12. DJS41C							N/A
13. DJ401	8-18-00						
14. DJ404							
15. DJ430							
16. DJ430S							+1mL 0057-031-4
17. DJ430D							N/A
18. DJ43R							
19. DJ44A							
20. DJ45E							
21. DJS468	N/A						
22. DJS46C							0057-031-4
23. DH480	8-18-00						N/A
24. DH488							
25. DH488S							+1mL 0057-031-4
Reagents		Vol (mL)					Method
HNO3	2.5mL						7470A AUTOCALVE 150°C
H2SO4	5.0mL						50°C ± 0.057-031-3
KMNO4	15.0mL						0057-031-8
K2S2O4	8.0mL						0057-031-6
Extract(s)							WAH 8-21-00
(Record line number from above)	Date	Time	Analyst	Location	Date	Time	Analyst
			WAH 8-21-00				

6701015

Quanterra Incorporated
450 William Pitt Way
Pittsburgh, Pennsylvania 15238
412/826-5477 FAX: 412/826-5571

STL Pittsburgh

6101049

PSR024 8/19/00 8:25:36 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: HOYLEM

METHOD: 08 Mercury (7470A, Cold Vapor) - Liquid

STORAGE LOCATION	WORK ORDER #	PICKED		CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
		CNTR#									RCVD	REQD
1A,B CLP1	DHX40	---	---	260311	399411	A-0M-08	COH160154	001	SOLID	TCLP	0	3 1
1A,B CLP1	DHX47	---	---	260312	399411	A-0M-08	COH160154	002	SOLID	LEACHATE	0	3 1
1A,B CLP1	DHX4A	---	---	260313	399411	A-0M-08	COH160154	003	SOLID		0	3 1
1E CLP1	DJ00L DJ3ACB	---	---	260314	399411	A-0M-08	COH170113	001	SOLID		0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

<u>William A. Hoyle</u>	<u>William A. Hoyle</u>	<u>8-21-00 06:30</u>
<u>William A. Hoyle</u>	<u>William A. Hoyle</u>	<u>8-21-00 07:20</u>

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

PSR024 8/21/00 2:42:28 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 003

REQUESTED BY: FAUSTG

METHOD: QO Inductively Coupled Plasma (6010B)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
1A,B CLP1	DHX40	___	260365	399411	A-34-QO	COH160154	001		SOLID	0	3 1
1A,B CLP1	DHX47	___	260366	399411	A-34-QO	COH160154	002		SOLID	0	3 1
1A,B CLP1	DHX4A	___	260367	399411	A-34-QO	COH160154	003		SOLID	0	3 1
1E CLP1	DJ0QL	___	260368	399411	A-34-QO	COH170113	001		SOLID	0	3 1
2B CLP1	DJ401	___	260389	378644	I-05-QO	COH180213	001		WATER	0	5 1
2B CLP1	DJ40H	___	260390	378644	I-05-QO	COH180213	002		WATER	0	4 1
2B CLP1	DJ40M	___	260391	378644	I-05-QO	COH180213	003		WATER	0	1 1
2B CLP1	DJ412	___	260392	378644	A-46-QO	COH180213	004		SOLID	0	16 1
2B CLP1	DJ417	___	260393	378644	A-46-QO	COH180213	005		SOLID	0	10 1
2B CLP1	DJ430	___	260394	378644	I-05-QO	COH180213	007		WATER	0	12 1
2B CLP1	DJ43Q	___	260395	378644	I-05-QO	COH180213	008		WATER	0	1 1
2B CLP1	DJ43R	___	260396	378644	I-05-QO	COH180213	009		WATER	0	7 1
2B CLP1	DJ43X	___	260397	378644	I-05-QO	COH180213	010		WATER	0	1 1
2B CLP1	DJ44A	___	260398	378644	I-05-QO	COH180213	012		WATER	0	4 1
2B CLP1	DJ44J	___	260399	378644	I-05-QO	COH180213	013		WATER	0	1 1
2B CLP1	DJ45E	___	260400	378644	I-05-QO	COH180213	014		WATER	0	7 1
2B CLP1	DJ45M	___	260401	378644	I-05-QO	COH180213	015		WATER	0	1 1

6701018

PSR024

8/21/00

2:42:28 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 004

REQUESTED BY: FWUSTG

METHOD: QO Inductively Coupled Plasma (6010B)

<u>STORAGE LOCATION</u>	<u>WORK ORDER #</u>	<u>PICKED</u> <u>CNTR#</u>	<u>CONTROL #</u>	<u>CLIENT #</u>	<u>ANALYSIS</u>	<u>LOTID</u>	<u>SMP#</u>	<u>SFX</u>	<u>MATRIX</u> <u>DESCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
-------------------------	---------------------	-------------------------------	------------------	-----------------	-----------------	--------------	-------------	------------	-------------------------------------	---------------------------	---------------------------

RELINQUISHED BY

RECEIVED BY

DATE/TIME

Jeffrey O. Grant
Jeffrey O. Grant

Jeffrey O. Grant
Jeffrey O. Grant

8-21-00 0455

8-21-00 0625

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

GENERAL CHEMISTRY DATA

6701020

UXB INTERNATIONAL

Client Sample ID: DF/S1/0228/GRAB/006

General Chemistry

Lot-Sample #...: C0H170113-001 Work Order #...: DJ00L Matrix.....: SOLID
Date Sampled...: 08/16/00 Date Received...: 08/17/00
% Moisture.....: 20

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
pH	7.6		No Units	SW846 9045C	08/17/00	0230492
		Dilution Factor: 1		MS Run #.....: 0230219		
Ignitability	NO	--	No Units	SW846 SECTION 7.1	08/21/00	0234115
		Dilution Factor: 1		MS Run #.....: 0234016		
Percent Solids	80.2		%	MCAWW 160.3 MOD	08/17-08/18/00	0230171
		Dilution Factor: 1		MS Run #.....: 0230010		
Reactive Cyanide	ND	200	mg/kg	SW846 7.3.3	08/22/00	0235467
		Dilution Factor: 1		MS Run #.....: 0235216		
Reactive Sulfide	ND	200	mg/kg	SW846 7.3.4	08/22/00	0235465
		Dilution Factor: 1		MS Run #.....: 0235215		

METHOD BLANK REPORT

General Chemistry

Client Lot #...: C0H170113

Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Reactive Cyanide	ND	Work Order #: DJ8WM101 200	mg/kg	MB Lot-Sample #: SW846 7.3.3	A0H220000-467 08/22/00	0235467
		Dilution Factor: 1				
Reactive Sulfide	ND	Work Order #: DJ8WL101 200	mg/kg	MB Lot-Sample #: SW846 7.3.4	A0H220000-465 08/22/00	0235465
		Dilution Factor: 1				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

6701022

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: C0H170113

Matrix.....: SOLID

<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 #: DJ3X0101 (85 - 115)	LCS Lot-Sample#: C0H170000-492 SW846 9045C	08/17/00	0230492
		Dilution Factor: 1			

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

6701024

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: C0H170113

Work Order #...: DJ17R-SMP
DJ17R-DUP

Matrix.....: SOLID

Date Sampled...: 08/16/00

Date Received...: 08/17/00

% Moisture.....: 11

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Reactive Cyanide						SD Lot-Sample #:	A0H170161-008	
ND		ND	mg/kg	0	(0-20)	SW846 7.3.3	08/22/00	0235467

Dilution Factor: 1

Prep Date.....: 0235216

Analysis Date...:

Prep Batch #....

Reactive Sulfide

SD Lot-Sample #:

ND

ND

mg/kg

43

(0-20)

SW846 7.3.4

08/22/00

0235465

Dilution Factor: 1

Prep Date.....: 0235215

Analysis Date...:

Prep Batch #....

STL - Pittsburgh WATER CONTENT SHEET

IEET NUM 0008013
 TESTED. CLL 8/17/00
 CHECKED: *19 8.18.00*

CREATED: 8/17/00 11:06:25 AM

REVISED: 8/17/00 11:17:36 AM

COMMENTS:

C0H150122 C0H160135 C0H160137 C0H160182 C0H160154 C0H150128 C0H150133 C0H150136 C0H170113

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.		TARE NO.	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.
C0H150122	001	SMP	1551	1 11	6 03	4.82	10:45	5:00	1.21	24.593 <i>RPD 4.20</i>	75.407
C0H150122	001D	SMP	361	1 12	6.19	4.89	10:45	5:00	1.3	25.641	74.359
C0H150122	002	SMP	HB	1.15	6.21	4.94	10:45	5:00	1.27	25.099	74.901
C0H160135	001	SMP	42	1.13	6.96	6 21	10:45	5:00	0.75	12.864	87 136
C0H160135	002	SMP	123	1.14	6.38	5 69	10:45	5:00	0.69	13.168	86 832
C0H160137	001	SMP	231	1.12	6.59	5.91	10:45	5:00	0 68	12.431	87.569
C0H160137	001D	SMP	12	1.12	6.46	5.83	10:45	5:00	0.63	11.798 <i>RPD 5.20</i>	88.202
C0H160182	001	SMP	29	1 11	6 34	5 62	10:45	5 00	0.72	13.767	86.233
C0H160182	002	SMP	149	1.12	8.01	6.94	10:45	5:00	1.07	15.53	84.47
C0H160182	003	SMP	141	1.18	6.19	5.29	10:45	5:00	0 9	17.964	82.036
C0H160182	004	SMP	1241	1.11	9.26	8 14	10:45	5:00	1.12	13.742	86 258
C0H160182	005	SMP	AB	1 11	7.12	6.15	10:45	5:00	0.97	16 14	83.86
C0H160182	006	SMP	171	1.13	8.44	7.36	10:45	5:00	1 08	14 774	85.226
C0H160182	007	SMP	64	1.12	6.18	5.03	10:45	5:00	1.15	22 727	77 273
C0H160182	008	SMP	1151	1.11	5.95	5.1	10:45	5:00	0.85	17.562	82.438
C0H160182	009	SMP	48	1.12	6 07	5.21	10:45	5:00	0.86	17 374	82 626
C0H160182	010	SMP	38	1.14	6.72	5.41	10:45	5:00	1 31	23 477	76.523
C0H160182	011	SMP	150	1.24	6 58	5 74	10:45	5:00	0 84	15.73	84.27

6701026

STL - Pittsburgh WATER CONTENT SHEET

IET NUM 0008013
 TESTED CL 8/17/00
 CHECKED: 198.8.300
 COMMENTS:
 C0H150122 C0H160135 C0H160137 C0H160182 C0H160154 C0H150128 C0H150133 C0H150136 C0H170113

CREATE D: 8/17/00 11 06 25 AM
 REVISED: 8/17/00 11.17 36 AM

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.	TARE NO.	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC	SOLIDS CONTENT CALC.
C0H160182	012	SMP	28	1.09	6.36	5.6	10:45	5:00	0.76	14.421 ✓ 85.579
C0H160154	001	SMP	25	1.12	6.04	5.04	10:45	5:00	1	20.325 ✓ 79.675
C0H160154	002	SMP	PU	1.13	6.17	5.11	10:45	5:00	1.06	21.032 ✓ 78.968
C0H160154	003	SMP	47	1.14	6.47	5.67	10:45	5:00	0.8	15.009 ✓ 84.991
C0H150128	001	SMP	148	1.21	6.19	5.26	10:45	5:00	0.93	18.675 ✓ 81.325
C0H150128	002	SMP	158	1.13	6.65	5.67	10:45	5:00	0.98	17.754 ✓ 82.246
150128	003	SMP	104	1.18	6.4	5.34	10:45	5:00	1.06	20.307 ✓ 79.693
C0H150128	004	SMP	174	1.12	6.33	5.17	10:45	5:00	1.16	22.265 ✓ 77.735
C0H150133	001	SMP	81	1.13	6.41	5.42	10:45	5:00	0.99	18.75 ✓ 81.25
C0H150133	002	SMP	120	1.13	6.24	5.2	10:45	5:00	1.04	20.352 ✓ 79.648
C0H150136	001	SMP	1108	1.14	6.17	5.29	10:45	5:00	0.88	17.495 ✓ 82.505
C0H150136	002	SMP	101	1.11	6.54	5.96	10:45	5:00	0.58	10.681 ✓ 89.319
C0H150136	003	SMP	1291	1.14	6.77	5.78	10:45	5:00	0.99	17.584 ✓ 82.416
C0H150136	004	SMP	145	1.14	6.46	5.87	10:45	5:00	0.59	11.09 ✓ 88.91
C0H150136	004D	SMP	157	1.14	6.39	5.81	10:45	5:00	0.58	11.048 ✓ 88.952
C0H150136	005	SMP	135	1.14	7.06	6.11	10:45	5:00	0.95	16.047 ✓ 83.953
C0H150136	006	SMP	119	1.13	6.46	5.83	10:45	5:00	0.63	11.82 ✓ 88.18
C0H150136	007	SMP	66	1.14	6.65	6.1	10:45	5:00	0.55	9.982 ✓ 90.018

STL - Pittsburgh WATER CONTENT SHEET

TEST NUM 0008013
 TESTED: CLL 8/17/00
 CHECKED: *pg* 81800
 COMMENTS

CREATED: 8/17/00 11:06:25 AM

REVISED: 8/17/00 11:17:36 AM

C0H150122 C0H150135 C0H160137 C0H160182 C0H160154 C0H150128 C0H150133 C0H150136 C0H170113

CLIENT SAMPLE IDENTIFICATION	LAB SAMP IDENT.	TARE NO.	WEIGHT TARE	WEIGHT TARE + WET SMP	WEIGHT TARE + DRY SAMP	TIME IN	TIME OUT	WEIGHT WATER	WATER CONTENT CALC.	SOLIDS CONTENT CALC.
C0H150136	008	SMP C	1 13	6.47	5.53	10:45	5:00	0.94	17.603	82.397
C0H150136	009	SMP 181	1 12	6.86	6.24	10:45	5:00	0.62	10.801	89.199
C0H150136	010	SMP 1651	1 12	6.74	5.78	10:45	5:00	0.96	17.082	82.918
C0H150136	011	SMP BB	1 13	6.53	5.91	10:45	5:00	0.62	11.481	88.519
C0H170113	001	SMP V	1.12	6.33	5.3	11:00	5:00	1.03	19.77	80.23
C0H170113	001D	SMP 111	1.14	6.63	5.53	11:00	5:00	1.1	20.036	79.964

6701028

STL Pittsburgh
TOTAL SOLIDS/PERCENT MOISTURE LOG SHEET

Lot No.	Lot No.	Lot No.	Batch No.	Analyst: <u>CLLOHEYDE</u>
<u>COH150122</u>	<u>COH150128</u>	<u>/</u>	<u>0230161</u>	In: Date <u>8-17-00</u> Time <u>1045</u>
<u>COH160135</u>	<u>COH150133</u>	<u>/</u>	<u>0230162</u>	Out: Date <u>8-18-00</u> Time <u>0500</u>
<u>COH160137</u>	<u>COH150136</u>	<u>/</u>	<u>0230166</u>	Balance ID #: <u>C94817</u>
<u>COH160182</u>	<u>COH170113</u>	<u>/</u>	<u>0230171</u>	Oven Temp: <u>103°C ± 2°C</u>
<u>COH160154</u>				

SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE	SAMPLE ID	TARE NO.	TARE	SAMPLE + TARE	DRIED SAMPLE + TARE
COH150122-001	1551	1.11	6.03	4.82	COH150136-008	C	1.13	6.47	5.53
-001D	361	1.12	6.19	4.89	-009	181	1.12	6.86	6.24
-002	HB	1.15	6.21	4.94	-010	1651	1.12	6.74	5.78
COH160135-001	42	1.13	6.96	6.21	-011	BB	1.13	6.53	5.91
-002	123	1.14	6.38	5.69	COH170113-001	V	1.12	6.33	5.30
COH160137-001	231	1.12	6.59	5.91	-001D	111	1.14	6.63	5.53
-001D	12	1.12	6.46	5.83					
COH160182-001	29	1.11	6.34	5.62					
-002	149	1.12	8.01	6.94					
-003	141	1.18	6.19	5.29					
-004	1241	1.11	9.26	8.14					
-005	AB	1.11	7.12	6.15					
-006	171	1.13	8.44	7.36					
-007	64	1.12	6.18	5.03					
-008	1151	1.11	5.95	5.10					
-009	48	1.12	6.07	5.21					
-010	38	1.14	6.72	5.41					
-011	150	1.24	6.58	5.74					
-012	28	1.09	6.36	5.60					
COH160154-001	25	1.12	6.04	5.04					
-002	PL	1.13	6.17	5.11					
-003	47	1.14	6.47	5.67					
COH150128-001	148	1.21	6.19	5.26					
-002	158	1.13	6.65	5.67					
-003	104	1.18	6.40	5.34					
-004	174	1.12	6.33	5.17					
COH150133-001	81	1.13	6.41	5.42					
-002	120	1.13	6.24	5.20					
COH150136-001	1108	1.14	6.17	5.29					
-002	101	1.11	6.54	5.96					
-003	1291	1.14	6.77	5.78					
-004	145	1.14	6.46	5.87					
-004D	157	1.14	6.39	5.81					
-005	135	1.14	7.06	6.11					
-006	119	1.13	6.46	5.83					
-007	66	1.14	6.65	6.10					

STL PT/Aug-00/96-003/TSLOG.DOC

STL Pittsburgh

401
7010

REQUESTED BY: LOHEYDEC

400: OV Moisture, Percent (CLP)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
										RCVD	REQD
22C	DHV1N-1-01	— — —	259861	419371	A-88-OV COH150122	001			SOLID	1	1
22C	DHV1P-1-01	— — —	259862	419371	A-88-OV COH150122	002			SOLID	1	1

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8-17-00 0830
8-17-00 1100

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

REQUESTED BY: LOHEYDEC

MOD: WM Moisture, Percent (160.3)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
1A	DHWVE-1-01	---	259863	413462	A-88-WM	COH160135	002		SOLID	1	1
1A	DHWVQ-1-01	---	259864	413462	A-88-WM	COH160137	001		SOLID	1	1
1A	DHWV1-1-01	---	259865	413462	A-88-WM	COH160135	001		SOLID	1	1
1A,B CLP1	DHXAA-1-02	---	259866	094490	A-88-WM	COH160182	005		SOLID	4	1
1A,B CLP1	DHXAC-1-02	---	259867	094490	A-88-WM	COH160182	006		SOLID	4	1
1A,B CLP1	DHXAE-1-02	---	259868	094490	A-88-WM	COH160182	007		SOLID	4	1
1A,B CLP1	DHXAF-1-02	---	259869	094490	A-88-WM	COH160182	008		SOLID	4	1
1A,B CLP1	DHXAK-1-02	---	259870	094490	A-88-WM	COH160182	009		SOLID	4	1
1A,B CLP1	DHXAT-1-02	---	259871	094490	A-88-WM	COH160182	010		SOLID	4	1
1A,B CLP1	DHXAX-1-02	---	259872	094490	A-88-WM	COH160182	011		SOLID	4	1
1A,B CLP1	DHXA5-1-02	---	259873	094490	A-88-WM	COH160182	002		SOLID	4	1
1A,B CLP1	DHXA7-1-02	---	259874	094490	A-88-WM	COH160182	003		SOLID	4	1
1A,B CLP1	DHXA8-1-02	---	259875	094490	A-88-WM	COH160182	004		SOLID	4	1
1A,B CLP1	DHXC4-1-02	---	259876	094490	A-88-WM	COH160182	012		SOLID	4	1
1A,B CLP1	DHX9X-1-02	---	259877	094490	A-88-WM	COH160182	001		SOLID	4	1

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8-17-00 0830

8-17-00 1100

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

REQUESTED BY: LOHEYDEC

MOD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY RCVD	QTY REQD
S13D,S14E	DJ0FR-1-01	— — —	259921	131369	A-88-SM FOH160319	005			SOLID	6	1
1A,B	DHXEC-1-01	— — —	259903	051465	A-88-SM COH160192	001			SOLID	1	1
1A,B	DHXEJ-1-01	— — —	259904	051465	A-88-SM COH160192	002			SOLID	1	1
1A,B	DHXET-1-01	— — —	259905	051465	A-88-SM COH160192	003			SOLID	1	1
1A,B	DHXFA-1-01	— — —	259906	051465	A-88-SM COH160192	009			SOLID	1	1
1A,B	DHXFC-1-01	— — —	259907	051465	A-88-SM COH160192	010			SOLID	1	1
1A,B	DHXFE-1-01	— — —	259908	051465	A-88-SM COH160192	011			SOLID	1	1
1A,B	DHXFF-1-01	— — —	259909	051465	A-88-SM COH160192	012			SOLID	1	1
1A,B	DHXFH-1-01	— — —	259910	051465	A-88-SM COH160192	013			SOLID	1	1
1A,B	DHXFJ-1-01	— — —	259911	051465	A-88-SM COH160192	014			SOLID	1	1
1A,B	DHXFL-1-01	— — —	259912	051465	A-88-SM COH160192	015			SOLID	1	1
1A,B	DHXFO-1-01	— — —	259913	051465	A-88-SM COH160192	004			SOLID	1	1
1A,B	DHXF1-1-01	— — —	259914	051465	A-88-SM COH160192	005			SOLID	1	1
1A,B	DHXF3-1-01	— — —	259915	051465	A-88-SM COH160192	006			SOLID	1	1
1A,B	DHXF4-1-01	— — —	259916	051465	A-88-SM COH160192	007			SOLID	1	1
1A,B	DHXF6-1-01	— — —	259917	051465	A-88-SM COH160192	008			SOLID	1	1
1A,B CLP1	DHXDA-1-01	— — —	259895	051465	A-88-SM COH160189	001			SOLID	3	1
1A,B CLP1	DHXDG-1-01	— — —	259896	051465	A-88-SM COH160189	002			SOLID	3	1
1A,B CLP1	DHXDH-1-01	— — —	259897	051465	A-88-SM COH160189	003			SOLID	3	1
1A,B CLP1	DHXDL-1-01	— — —	259898	051465	A-88-SM COH160189	004			SOLID	3	1
1A,B CLP1	DHXDP-1-01	— — —	259899	051465	A-88-SM COH160189	005			SOLID	3	1
1A,B CLP1	DHXDT-1-01	— — —	259900	051465	A-88-SM COH160189	006			SOLID	3	1
1A,B CLP1	DHXDV-1-01	— — —	259901	051465	A-88-SM COH160189	007			SOLID	3	1
B CLP1	DHXDX-1-01	— — —	259902	051465	A-88-SM COH160189	008			SOLID	3	1
1A,B CLP1	DHX4A-1-01	— — —	259918	399411	A-88-SM COH160154	003			SOLID	3	1
1A,B CLP1	DHX40-1-01	— — —	259919	399411	A-88-SM COH160154	001			SOLID	3	1

REQUESTED BY: LONEYDEC

MOD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DISCRIPTION	QTY RCVD	QTY REQD
1A,B CLP1	DHX47-1-01	— — —	259920	399411	A-88-SM COH160154	002			SOLID	3	1
22C CLP1	DHV24-1-02	— — —	259878	375241	A-88-SM COH150128	001			SOLID	2	1
22C CLP1	DHV3Q-1-02	— — —	259879	375241	A-88-SM COH150128	002			SOLID	2	1
22C CLP1	DHV3R-1-02	— — —	259880	375241	A-88-SM COH150128	003			SOLID	2	1
22C CLP1	DHV3T-1-02	— — —	259881	375241	A-88-SM COH150128	004			SOLID	2	1
22C CLP1	DHV4G-1-02	— — —	259882	375241	A-88-SM COH150133	001			SOLID	2	1
22C CLP1	DHV4J-1-02	— — —	259883	375241	A-88-SM COH150133	002			SOLID	2	1
22C,D CLP1	DHV4Q-1-01	— — —	259884	051465	A-88-SM COH150136	001			SOLID	3	1
22C,D CLP1	DHV5C-1-01	— — —	259885	051465	A-88-SM COH150136	003			SOLID	3	1
22C,D CLP1	DHV5E-1-01	— — —	259886	051465	A-88-SM COH150136	004			SOLID	9	1
22C,D CLP1	DHV5J-1-01	— — —	259887	051465	A-88-SM COH150136	005			SOLID	3	1
22C,D CLP1	DHV5K-1-01	— — —	259888	051465	A-88-SM COH150136	006			SOLID	3	1
22C,D CLP1	DHV5M-1-01	— — —	259889	051465	A-88-SM COH150136	007			SOLID	3	1
22C,D CLP1	DHV5Q-1-01	— — —	259890	051465	A-88-SM COH150136	008			SOLID	3	1
22C,D CLP1	DHV5T-1-01	— — —	259891	051465	A-88-SM COH150136	009			SOLID	3	1
22C,D CLP1	DHV5X-1-01	— — —	259892	051465	A-88-SM COH150136	010			SOLID	3	1
22C,D CLP1	DHV58-1-01	— — —	259893	051465	A-88-SM COH150136	002			SOLID	3	1
22C,D CLP1	DHV60-1-01	— — —	259894	051465	A-88-SM COH150136	011			SOLID	3	1

REQUESTED BY: LOHEYDEC

MOD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
										RCVD	REQD

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DATE/TIME

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8/17-00 0830
8-17-00 1100

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

REQUESTED BY: LOHEYDEC

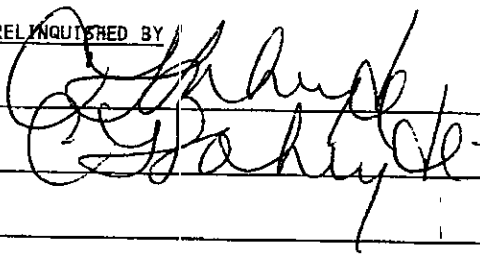
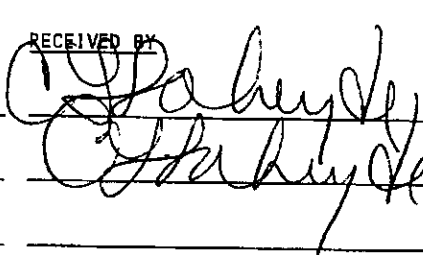
'OD: SM Solids, Percent (as TS - 160.3 MOD) - Solids

<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>DISCRIPTION</u>	<u>QTY</u> <u>RCVD</u>	<u>QTY</u> <u>REQD</u>
1E CLP1	DJOQL-1-01	— — —	259936	399411	A-88-SM	COH170113	001		SOLID	3	1

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DATE/TIME

		8-17-00 1100
		8-17-00 1115

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

Analyst: CM BAETSCH
Date: 8-17-00
Start Time: 2030

Reading	Buffer	Manf. Lot No.	Rec'd	Expire
4.00	4.0	Lab Chem 9/167-08	549-00	6-25-01
7.03	7.0	↓ 002-04	↓	3-1-02
10.05	10.0	↓ 0047-16	↓	3-8-02

Relative Percent Difference = 0.5%

$$\frac{\frac{|X_1 - X_2|}{X_1 + X_2}}{2} \times 100$$
[illegible]

6701036

PSR024 8/17/00 16:53:26 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 004

REQUESTED BY: BRITSCMC

MET. NO: 02 pH (9045C) - Non-Aqueous

STORAGE LOCATION	WORK ORDER #	PICKED	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
		CNTR#								RCVD	REQD
1E CLP1	0J0QL-1-0F	— — —	260059	399411	A-88-OZ	COH170113	001		SOLID	0	3 1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

8-17-00 1845

8-17-00 2030

Ignitability

Method: IGNITABILITY (SW 7.1.2)STL Pittsburgh
450 William Pitt Way
Pittsburgh, PA 15238ANALYST: Eric L. WesoloskiDATE: 8-21-00BATCH: 0234115TIME: 07:00

SAMPLE ID

RESULT

COH170113 - 001

NO

↓ - 001 Dup

NO

COH180278 - 001

NO

E.L.W.
8-21-00

Reviewed by

[Signature]

Date

8/21/00 - 8-21-00

WC-00-0060

Page 8 of 100

Eric L. Wesoloski 8/21/00

6701038

PSR024 8/21/00 4:53:05 MT

SAMPLE CUSTODIAN REMOVAL REQUEST

PAGE 001

REQUESTED BY: MESOLOSE

METHOD: IQ Ignitability (SW7.1 2)

STORAGE LOCATION	WORK ORDER #	PICKED CNTR#	CONTROL #	CLIENT #	ANALYSIS	LOTID	SMP#	SFX	MATRIX DESCRIPTION	QTY	QTY
										RCVD	REQD
1E CLP1	DJ0QL-1-0G	---	260547	399411	A-88-IQ	COH170113	001		SOLID	3	1
2C CLP1	DJ4M4-1-0H	---	260548	051465	A-88-IQ	COH180278	001		SOLID	4	1

RELINQUISHED BY

RECEIVED BY

DATE/TIME

E. I. Wadby
E. I. Wadby

E. I. Wadby
E. I. Wadby

8/21/00 (06:55)
8/21/00 (07:15)

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

TITRIMETRIC LOGSHEET

6701039

Analysis

Sulfide Precipitate

Prep/ Anal. Date

8/22/00

Analyst

TAR/SAR

Batch Number

0235465

LCS Number

—

LCS Prep Date

—

RL

200 mg/kg

Titrant Name

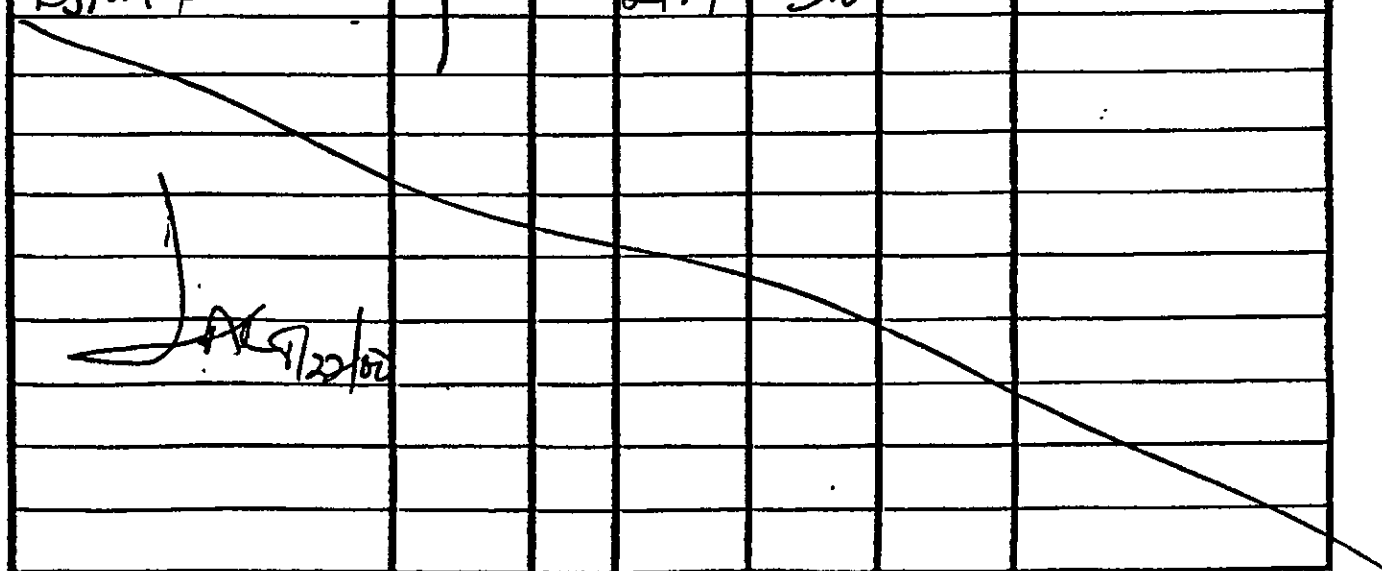
NaOH solution

Titrant Normality

0.025N

Titrant Standardization Date/ Initials

TAR8/22/00

Sample Number	Sample Volume	Dil.	Titrant Vol (mL)	Final Conc.	Units	QC Calculations and Comments
Bh	100mL		21.2	5.2		
DH7C3			21.7	3.2		
DJ17R			19.7	11.2		
DJ17R (dup)			20.4	7.2		
DJ186			22.0	2.0		
DJ188			19.2	13.2		
DJ180			20.6	7.6		
DJ182			21.1	5.76		
DJ44R			20.9	4.0		
DJ09L			21.5	4.0		
DJ184			21.7	3.2		
						

6701040

QUANTERRA NORTH CANTON
TITRIMETRIC LOGSHEET

Analysis

CN-React

Prep/ Anal. Date

8/22/00

Analyst

JOK

Batch Number C1235467

LCS Number

LCS Prep Date

RL

200 mg/kg

Titrant Name

Silver Nitrate

Titrant Normality

0.0192N

Titrant Standardization Date/ Initials

T

Sample Number	Sample Volume	Dil.	Titrant Vol (mL)	Final Conc.	Units	QC Calculations and Comments
Ble.	100 mL		0.005	ND		
DH123			0.005	ND		
DJ17R			0.005	ND		
DJ17R (dup)			0.005	ND		
DJ186			0.005	ND		
DJ188			0.005	ND		
DJ18L			0.005	ND		
DJ1mN			0.005	ND		
DJ44R			0.005	ND		
DJ00L			0.005	ND		
DJ4m4			0.005	ND		
JOK 8/22/00						

FINAL PAGE

ADMINISTRATIVE RECORD

FINAL PAGE